

OL-300 USER GUIDE





QL-300 User Guide

Part Number 22834690-EN-E Revision 1.0 1/2019

QuickLabel, An AstroNova™ Division

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QL-300 Limited Warranty

QuickLabel, An AstroNova Division, warrants all components of this product, except wear parts and consumables, against defects in materials or workmanship for a period of one (1) year from the date of original purchase. Wear parts include the transfer belt unit, fuser unit, waste toner box and other items specified as periodic replacement parts. Consumables include toner cartridges and labels, which are covered under a separate warranty. If the customer discovers a defect, this defect must be reported promptly to QuickLabel. QuickLabel will, at its option, repair the printer or repair or replace its defective component(s) at no additional charge under our QuickSwap[™] Parts Service. Repair parts and replacement parts will be furnished on an exchange basis and will be either reconditioned or new. The customer is responsible for freight to return the printer or component to our factory. We will ship the repaired or replaced printer or component back to you via standard ground freight service. All replaced parts become the property of QuickLabel. Travel, freight and other expenses related to warranty repairs are not covered.

In the first year of product ownership, you may be covered by a separate Customer Support Agreement purchased from or issued by QuickLabel or an authorized QuickLabel dealer. In such a case, you would be entitled to an on-site installation and/or training visit. Otherwise, Customer Support Agreements and renewals are available for purchase and provide on-site support and/or QuickSwap Parts Service.

This warranty is void if the product has been damaged by accident, abuse, neglect or misapplication or by the use of non-AstroNova certified supplies or parts, or if the product has been improperly installed, or if the product has been modified without the express written permission of AstroNova or QuickLabel. QuickLabel is not responsible for products lost or damaged in transit.

QuickLabel makes no warranty, either express or implied, with respect to this product's merchantability or fitness for a particular purpose. In no event shall QuickLabel be held liable for any direct, indirect, special, incidental, or consequential damages, whether based on a contract, tort, or any other legal theory and whether advised of the possibility of such damages.

Toner Limited Warranty

This warranty covers QuickLabel QL-300 toner cartridges sold by QuickLabel.

Each QL-300 toner cartridge is warranted to be free from defects in materials and workmanship for up to 24 months from the date of manufacture if in original unopened packaging, or up to 6 months after installation, whichever occurs first. This warranty applies only to the toner cartridges as used in the QuickLabel QL-300 printing system.

If the customer suspects a defect in a QL-300 toner cartridge, the customer must notify QuickLabel within the warranty period. Upon return of the toner cartridge to the QuickLabel factory and QuickLabel's verification of the defect, QuickLabel will, at its option, either:

1. Replace the defective toner cartridge; or,

2. If the customer has used the toner, pro-rate the price of a new toner based upon the estimated life remaining for the toner, as reported by the QL-300 system. The QL-300 provides the estimated life remaining, and QuickLabel may obtain this information from the system remotely or request the customer to furnish this information.

This warranty does not cover QL-300 toner cartridges that have been emptied, refilled, remanufactured, modified, refurbished, misused, or tampered with, or that have expired, or when used to print on label or tag media that is not compatible with the QL-300.

This warranty is void if the QL-300 toner cartridge has been damaged by accident, abuse, neglect or misapplication, if the product has been improperly installed or maintained, if the product has been used outside of its environmental specifications, or if the product has been modified without the express written permission of QuickLabel.

QuickLabel makes no warranty, either express or implied, with respect to this product's merchantability or fitness for a particular purpose. In no event shall QuickLabel be held liable for any direct, indirect, special, incidental, or consequential damages, whether based on a contract, tort, or any other legal theory and whether advised of the possibility of such damages.

ICC Profile

ICC Profile Powered by X-Rite Incorporated

Obtaining Service

To obtain warranted service, please contact QuickLabel Technical Support through one of the Factory Sales and Service Centers.

Contact Information

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Ownership Information

Congratulations and thank you for your business. Your purchase of a QuickLabel digital label printer is an investment in production flexibility and packaging efficiency. Please record the model number and serial number of your product.

FCC Part 15 Compliance

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

CAUTION: Changes or modifications to this equipment not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

RoHS2 Compliance

The QL-300 Label Printer does not contain the substances specified within ANNEX II of "Directive 2011/65/EU of the European Parliament and of the Council of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment (RoHS)", that is, lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls (PBB) and polybrominated diphenyl ethers (PBDE) exceeding their specified maximum concentration values tolerated by weight in homogeneous materials, except for the exemptions set in ANNEX III of the Directive and its amendments.

This information is offered in good faith to the best of our knowledge, but is subject to revision as new information becomes available.

California Proposition 65 Warning

This Product contains chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm.

Declaration of Conformity Declaration de Conformité Ubereinstimmungserklärung Dichiarazione di Conformità	
ID	DoC-22834690
Manufacturer's name and address Nom et adresse du fabricant Hersteller Nome del costruttore	AstroNova, Inc. 600 East Greenwich Avenue West Warwick, RI 02893 USA
Brand Name(s) Nom(s) de marque(s) Markenname(n) Nome/i dei marchi	QuickLabel ®
Model No. Modele No. Model Nr. Modello No.	QL-300, QL-300s
Description of Products Description des produits Produktbeschreibungen Descrizione dei Prodotti	LED Color Printer
Standards to which conformity is declared Standards auquel la conformité appartient Normen für welche Übereinstimmung erklärt wird Norme per le quali si dichiara la conformità	EN 55032:2015 EN 61000-6-1:2007 EN 61000-3-2:2014 EN 61000-3-3:2013 EN 60950-1:2006+A11:2009+A1:2010+A12:2011+A2:2013 EN 62311:2008 EN 50581:2012 FCC 47CFR Part 15 Subpart B CAN ICES-3(A)/NMB-3(A)
Application of Council Directives Application des Decisions du Conseil Anwendbar fur die Richtlinien Applicazione delle Direttive del Comitato	2014/30/EU 2006/42/EC 2011/65/EU
I, the undersigned, hereby declare that the equipment specified above co Je, Soussigné, déclare que l'équipment spécifié ci-dessus est en conform Ich, der unterzeichnende erkläre hiermit, daß das oben beschriebene Ge Il sottoscritto dichiara che l'apparecchio sopra specificato è conforme alle	ité avec la directive et le standard ci-dessus. rät den vorgenannten Richtlinien und Normen entspricht.
Steven Holbrook Quality Assurance Manager AstroNova, Inc. CE Label First Affixed Date: 19	Steven & Holbook Date of issue: <u>1/23/2019</u> Place of issue: <u>West Warwick, RI</u>
European Contact: Your local AstroNova, Inc. Sales and Service Office. FRANCE - Parc Euclide, ZA la Clef de St Pierre, 10A Rue Blaise Pascal 7 Tel: (+33) 1 34 82 09 00, Fax: (+33) 1 34 82 05 71 GERMANY - Waldstraße 70, D-63128 Dietzenbach Tel. +49 (0) 6074 31 025-00, Fax: +49 (0) 6074 31 025-99	78990 Elancourt
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Installation

1

Checking the Product

Open the packing box and confirm its contents.

Printer

Printer



• Print cartridges (One each of yellow, magenta, cyan, black, and white^{*1})



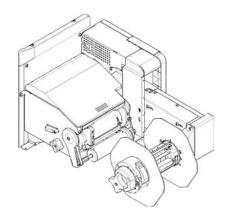
- *1: QL-300s only
- Power cord

Note: The package does not include a LAN cable, USB cable, or hub. Procure them separately.

Note: The packing box and packing materials are needed to transport the machine. Keep them and do not throw them away.

Unwinder

• Unwinder



• Mounting screws (x3)



• Cable clamps (x3)



Choosing an Installation Location

For safe and comfortable operations, install the product in a location that satisfies the conditions in the following sections.

- "Precautions Related to Installation" on page 15
- "Choosing an Installation Location" on page 15
- "Installation Space" on page 17

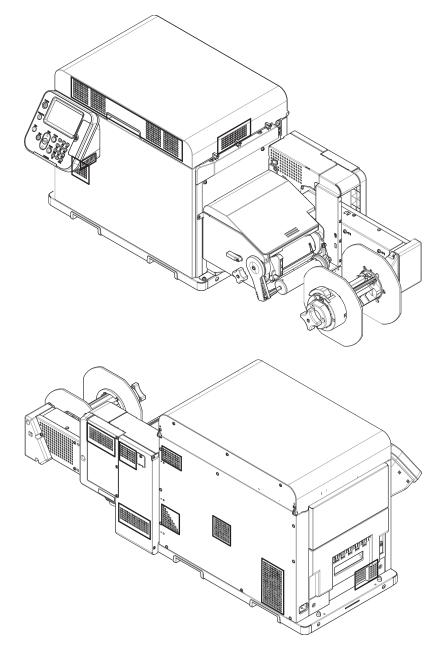
Be sure to read these sections before starting installation work.

Precautions Related to Installation

Warnings

- Do not install the equipment in a location that is near open flame or may become very hot.
- Do not install the equipment in a location prone to chemical reactions (laboratory, etc.).
- Do not install the equipment in a location that is near flammable liquids, such as alcohol or paint thinner.

- Do not install the equipment in a location that is accessible by small children.
- Do not install the equipment in a location that is unstable (on a wobbly table or inclined place).
- Do not install the equipment in direct sunlight or in a very dusty or humid location.
- Do not install the equipment in an environment subject to salt air, NOx, SOx or corrosive gases.
- Do not install the equipment in a location that is subject to excessive vibration.
- Do not install the equipment in a location where the machine's vents are blocked. Check the positions of the vents in the following illustrations.



Cautions

- Do not install the equipment on a thick-piled carpet or rug.
- Do not install the equipment in a location that is poorly ventilated or stuffy.
- Pay attention to ventilation when operating the equipment continuously for a long period in a small room.
- Install the equipment away from sources of strong magnetic or electric noise.
- Install the equipment away from monitors or televisions.
- Remember to use ventilation when printing large volumes or operating the equipment continuously for a long period.

Installation Environment

Consider the following environment conditions when you select the installation location.

Use a location that is within the following ranges for temperature and humidity.

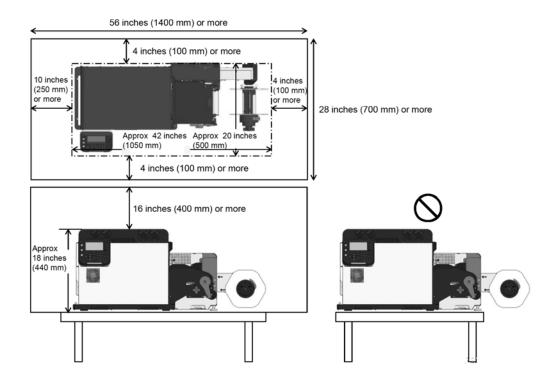
Temperature and Humidity	Specification
Temperature range	10 to 30 ° C
Humidity range	20 to 70% RH (relative humidity)
Maximum wet-bulb temperature	25 ° C

- Be careful that condensation does not form.
- If you install the equipment in a location where the humidity is in a range of less than 30%, use a humidifier or anti-static mat.
- The equipment satisfies the certification standards relevant to emissions for Eco-mark No. 155 printers in regard to dust, ozone, styrene, benzene, TVOC, and dispersion of ultrafine particles. (Testing has been done based on the testing methods in the Blue Angel RAL UZ-171: 2012 appendix S-M as regards to black and white and color printing by using toner in a genuine QuickLabel print cartridge.)

Installation Space

- Select an installation location that is level and can support the weight of the machine (weight of equipment is about 95 lbs (43 kg)* for the printer and about 42 lbs (19 kg) for the unwinder).
 - * Including the print cartridge and other wear items.
- Install the machine near a power socket. Also, install the equipment so the power socket is within easy reach so the power plug can be pulled out in an emergency.
- Do not place things around the machine.

To install the printer and the unwinder on a stand, the stand must be at least 42 inches (1050 mm) wide and 20 inches (500 mm) deep. If you install the printer and the unwinder on a stand that is too small, they may fall off if they are hanging over the edge of the stand.



Install the equipment according to the equipment installation space shown in the diagrams.

Unpacking

Unpacking Precautions

Cautions

- Be sure to use two people to lift the equipment because it weighs about 95 lbs (43 kg).
- Hold the handles on the equipment when lifting it.
- Do not hold the control panel while lifting. There is a risk of injury if you hold the control panel, because the control panel may come off and you could drop the equipment.
- Place the equipment on the floor to remove the packing materials and the plastic bag.

There is a risk of dropping the equipment and causing injury if you hold the equipment while working.

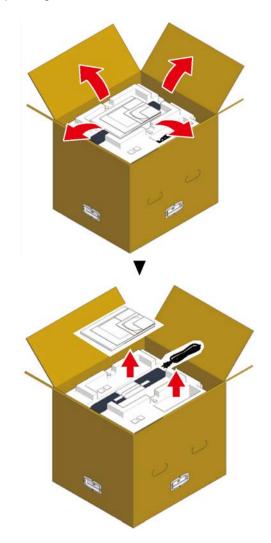
- Be careful about handling the plastic bag.
- Dispose of the desiccant appropriately.

Unpacking the Printer

This section describes how to unpack the printer.

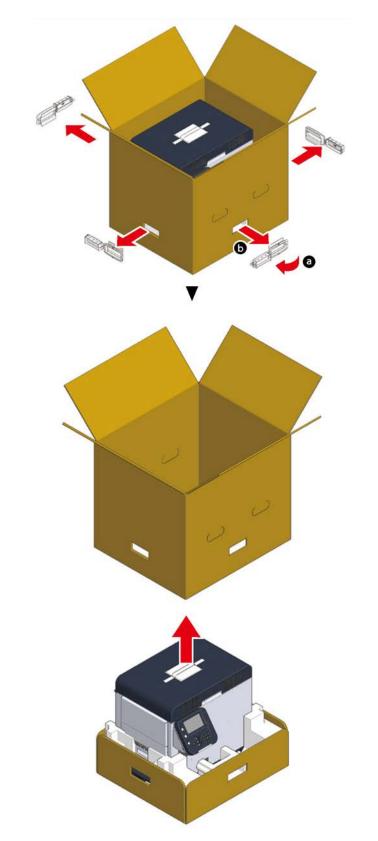
Note: The packing box and packing materials are needed to transport the machine. Keep them and do not throw them away.

1 Open the top of the packing box and remove the machine's accessories.



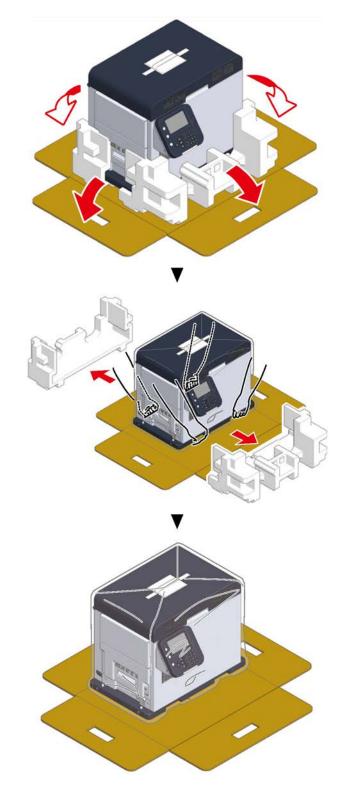
2 Remove the top layer of packing materials.



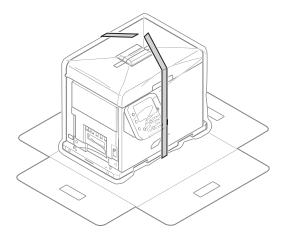


3 Remove the handles (4 pieces), and then remove the top of the packing box.

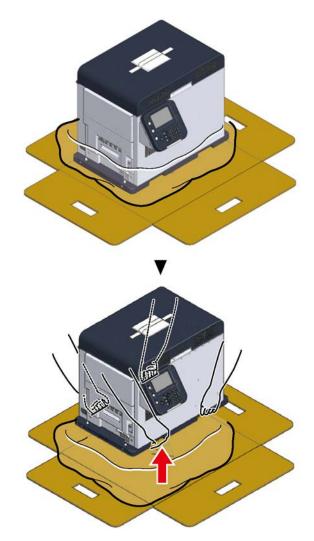
4 Open out the bottom part of the box, place your hands on the printer's handles (2 in front/2 in back) and support the printer as you remove the front and back packing materials on the bottom.



5 Cut and remove the bands that secure the printer.



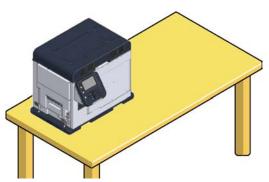
6 Remove the plastic bag.



7 Remove the desiccant.



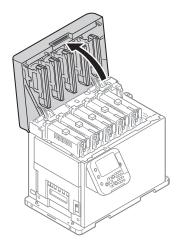
8 Place the printer in the installation space that you have confirmed in advance.



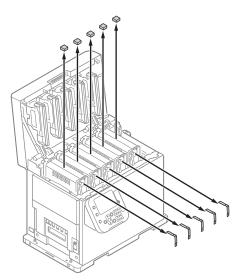
Allow enough space to work when installing the unwinder.

The weight of the equipment, including wear items, is about 95 lbs (43 kg). Install it on a stand that is strong enough.

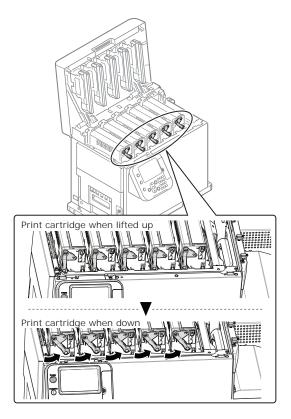
9 Grasp the top cover open lever and open the top cover.



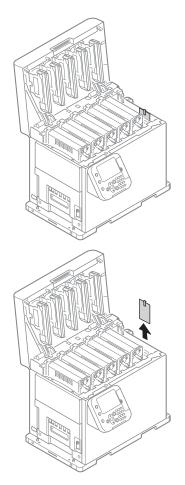
10 Remove the Pad-TC from the top of the print cartridge, and then remove the tape that is securing the lift up lever.



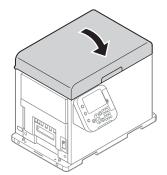
11 The print cartridges lift up, so turn the lift up lever to lower the print cartridges.



12 Pull out the sheet-protection.



13 Close the top cover.



Caution: When closing the top cover, there is a risk of pinching your fingers or hands in the top cover or the top cover's support. Press on the top of the top cover to close it.

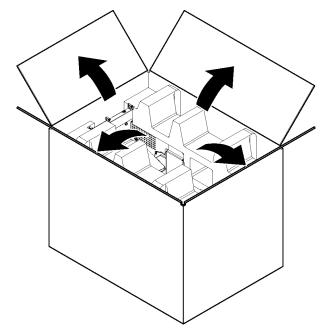
Caution: There is a risk of pinching your fingers or hands if you hold the LED head while closing the top cover. Press on the top of the top cover to close it.

Unpacking the Unwinder

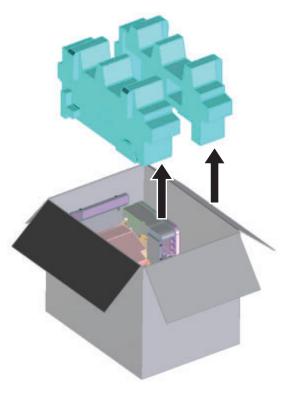
This section describes how to unpack the unwinder.

Note: The packing box and packing materials are needed to transport the unwinder. Keep them and do not throw them away.

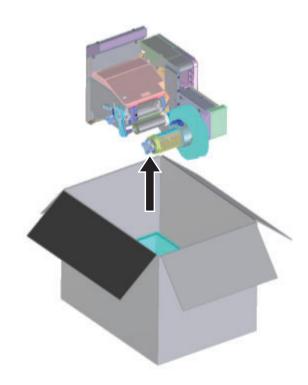
1 Open the top of the packing box.



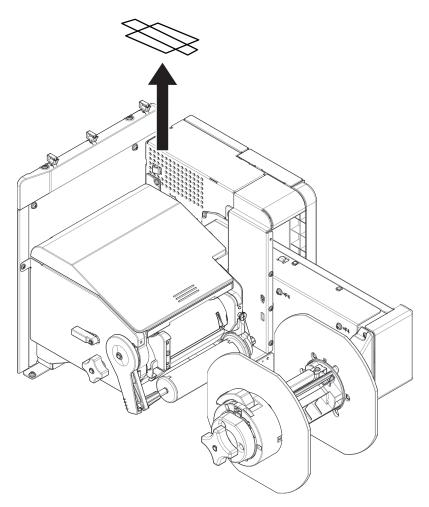
2 Remove the top layer of packing materials.



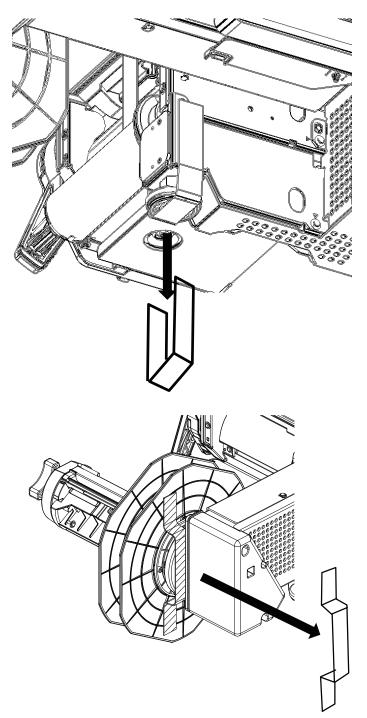
3 Remove the unwinder.



4 Remove the plastic bag from the unwinder, and then remove the accessories.



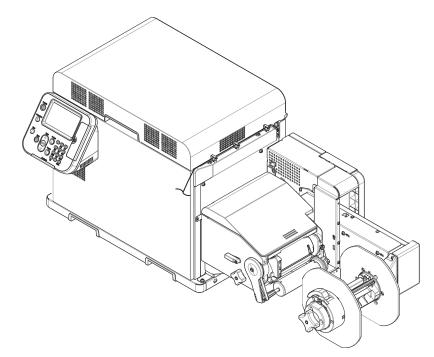
5 Peel off the tape from two locations.



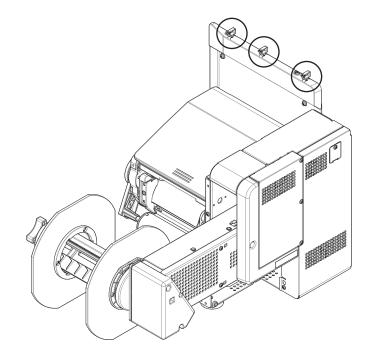
Installation

Installing Cable Clamps

Cable clamps are provided with the unwinder. Use them to run the cable connected to the printer's interface along the front.



1 Install cable clamps (x 3 pieces).



Installing the Unwinder on the Printer

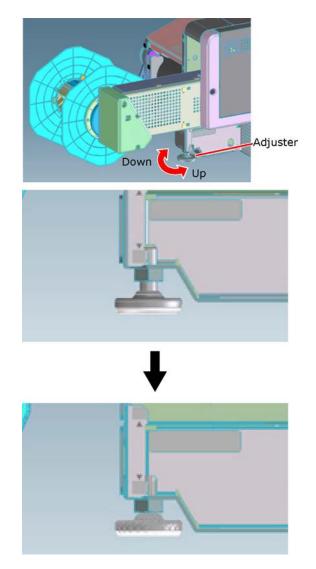
After unpacking the unwinder, install it to the printer.

Caution: Be careful that you do not drop the unwinder.

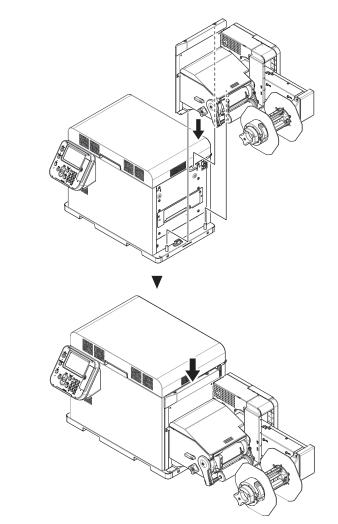
Caution: Be careful that you do not pinch your hands or fingers between the unwinder and the printer.

Caution: Securely tighten the three screws. If they are loose, there is a risk that the unwinder may fall off or the print quality may be degraded.

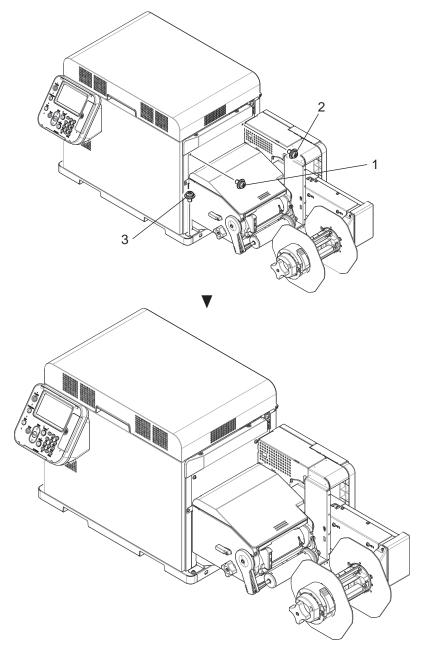
1 Check whether the adjuster on the unwinder is raised up. If the adjuster is not raised, before you mount it on the printer, rotate it to the up position.



2 Hold the unwinder close to the mounting pins and mounting hole, and then press it against the right side of the printer and lower it.



3 Use three screws to secure the unwinder to the printer.



Tighten the screws in order 1, 2, then 3, as shown in the following diagram.

4 Extend the adjuster so it contacts the stand. Be careful not to extend the adjuster too far.

Power

Precautions about the Electric Power

Symbol	Warning
Reference to the second s	Be sure to turn off the power switch before attaching or removing the power cord or ground wire. Leaving the power turned on could result in a fire or electric shock.
Ð	Be sure to connect the ground wire to a dedicated ground terminal. Using the equipment without a ground wire connected could result in a fire or electric shock.
	If you cannot connect to ground, contact the dealer where you bought the equipment.
\bigcirc	Never connect a ground wire to a water pipe, gas pipe, telephone wire ground, lightning rod, or anything similar. Fire, electric shock, or gas explosion could result.
0	Always hold the power cord by the plug when you plug or unplug it. Pulling on the power cord could damage the power cord and result in a fire or electric shock.
0	Plug the power plug securely all the way into the power socket. Not plugging it all the way in could result in a fire or electric shock.
	Do not plug or unplug the power plug if your hands are wet. Electric shock could result.
\bigcirc	Do not step on or place objects on the power cord. The cord could be damaged and result in a fire or electric shock.
\bigcirc	Do not use the power cord while it is tied or bundled up. The cord could overheat, be damaged and result in a fire or electric shock.
\bigcirc	Do not use a damaged power cord. Fire or electric shock could result.

Symbol	Warning
\bigcirc	Do not plug too many power cords into a single power socket. Fire or electric shock could result.
\bigcirc	Do not connect other electronic products to the same power socket as the machine. The machine may malfunction due to the electronic noise particularly if you connect an air conditioner, copier, shredder, or other device at the same time. If you must connect them to the same power socket, use a commercially available noise filter or noise cut transformer.
\bigcirc	Do not use extension cords. If you use an extension cord, the drop in AC voltage may cause the machine to not operate correctly. If you must use one, use one that is rated for at least 100 V at 15 A. Fire or electric shock could result if you use one that is outside the specified range.
\bigcirc	Do not turn off the power or unplug the power plug while printing. Damage or electric shock could result.
8=\$	If the equipment will not be used for a long period, such as during an extended holiday or vacation, unplug the power cord to be safe.
0	Use the power cord provided with the machine. Do not use a power cord from a different product. Electric shock or fire could result.
\bigcirc	The power cord provided with the machine is for the machine only. Do not use it for a different product. Electric shock or fire could result.
\Diamond	Operations are not guaranteed when using a UPS (uninterruptible power source) or inverter. Do not use an uninterruptible power source or inverter. There is a risk of fire.

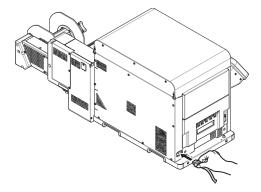
The following conditions are required for the power source.

Voltage:	110 - 127 VAC (Range 99 - 140 VAC)
	220 - 240 VAC (Range 198 - 264 VAC)
Frequency:	50/60 Hz ± 2%

- If the power source is unstable, use a voltage regulator.
- The machine's maximum power consumption is 1200 W. Be sure that the power source has sufficient capacity.
- Operations are not guaranteed when using a UPS (uninterruptible power source) or inverter. Do not use uninterruptible power source or inverters.

Connecting a Power Cord

1 Securely insert the power cord provided into the power connector on the machine.

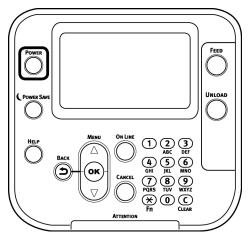


2 Plug the power plug into the power socket.

Turning on the Power

1 Press and hold the **POWER** button for approximately 1 second.

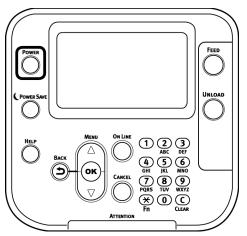
When the power is turned on, the LED lamp on the **POWER** button turns on.



When the machine starts, the startup screen appears on the LCD on the control panel. After a short time, the idle display appears and printing is possible.

Turning off the Power

1 Press and hold the **POWER** button for approximately 1 second.



The message "Shutting down. Please wait. Printer will turn off automatically." appears on the control panel and the LED lamp on the **POWER** button flashes at one second intervals.

Wait a moment, and the machine's power automatically turns off and the LED lamp on the **POWER** button turns off.

Pressing the **POWER** button for five seconds or longer forces the power to turn off. Do this only if some trouble occurs. See "Troubleshooting" on page 252.

Warning: Do not touch the power plug or power socket if your hands are wet. There is a risk of electric shock.

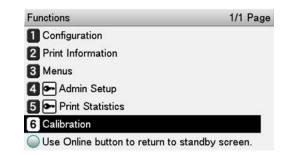
Warning: Do not insert any metal objects, such as a screw driver, into the power socket. There is a risk of electric shock.

Test Printing

Adjusting Density and Test Printing

- 1 Set a roll of paper on the unwinder. Use continuous paper that is 5.12" (130mm) wide. See "Loading Media" on page 91.
- 2 Press the **POWER** button on the control panel to turn on the printer's power.

3 Press the scroll button ▼ several times to select **Calibration**, and then press the **OK** button.



4 Press the scroll button ▼ several times to select Adjust Density, and then press the OK button.

Calibration	1/2 Page
1 Auto Density Mode	Π
2 Adjust Density	
3 Adjust Registration	
4 Color Density	
5 Print Color Tuning Pattern	
6 Base Color Tuning	
78↑/↓ Page	

5 Check that **Execute** has been selected, and press the **OK** button.

Calibration	Adjust Density	1/1 Page
1 Auto Density	1 Execute	
2 Adjust Densit		
3 Adjust Regist		
4 Color Density		
5 Print Color Tu		
6 Base Color T		
781/JPa	Use Online button	to return to s

6 Press the scroll button ▼ several times, and when **Print Information** appears, press the **OK** button.

Functions 1/1 P	
1 Configuration	
2 Print Information	
3 Menus	3
4 🖛 Admin Setup	
5 - Print Statistics	
6 Calibration	
Use Online button to return to st	andby screen.

7 Press the scroll button ▼ to select **DEMO Page**, and then press the **OK** button.

Print Information	1/2 Page
1 Configuration	Π
2 Demo Page	
3 File List	
4 Usage Report	
5 Error Log	
6 Color Profile List	
7 8 ↑ / ↓ Page	

8 Check that **DEMO1** has been selected, and press the **OK** button.

Demo Page	1/1 Page
1 DEMO1	
Use Online button to retu	rn to standby screen.

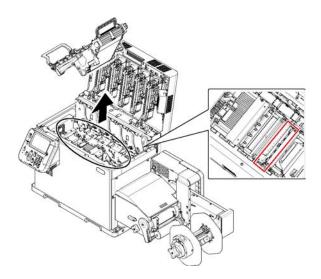
Paper feeds and a demo page is printed.

If the paper does not feed well or there are printing issues, confirm that the printer is installed correctly.

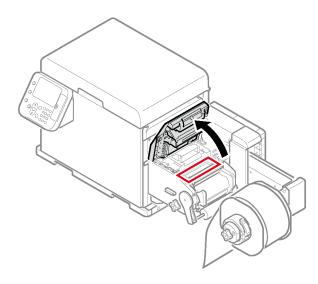
Adjusting the Position of the Sensor

You need to adjust the positions of the unwinder's black mark/gap sensors and the printer, according to the media you are using. See "Calibrating the Sensor" on page 103.

Printer Black mark/Gap sensor:



Unwinder Black mark/Gap sensor:



PC Connection

Driver Installation Process Overview

This section describes how to connect the printer to a computer and how to install the printer driver.

Connecting to a PC with a Network Connection

- 1 Turn on the printer.
- 2 Set the printer's IP address.
- 3 Connect the cable.
- 4 Turn on the computer.
- 5 On the computer, set the IP address and configure other settings.
- 6 Install the printer driver.

Connecting to a PC with a USB Connection

- 1 Connect the cable.
- 2 Turn on the printer.
- **3** Turn on the computer.
- 4 Install the printer driver.

Operating Environment

This printer supports the operating systems (OS) listed below.

- Windows 10/Windows 10 (64-bit version)
- Windows 8.1/Windows 8.1 (64-bit version)
- Windows 8/Windows 8 (64-bit version)
- Windows Server 2016
- Windows Server 2012 R2
- Windows Server 2012
- Windows 7/Windows 7 (64-bit version)
- Windows Server 2008 R2
- Windows Server 2008/Windows Server 2008 (x64 version)

With Windows 10, Windows 8.1 and Windows 8, only the desktop mode is supported.

Connecting Cables

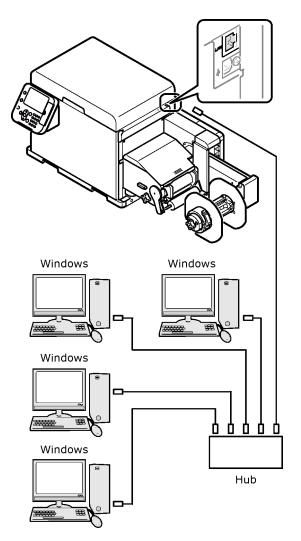
This printer can connect to a computer or a network.

It comes with a LAN (network) interface connector and a USB interface connector as standard. A LAN cable can be used to connect to a network, while a USB cable can be used to connect to a computer.

Connecting a LAN Cable

When the printer is connected to a LAN (Ethernet) or other network, it can be shared by the computers on the network.

This printer is equipped with a network interface compatible with 10BASE-T/100BASE -TX/1000BASE-T as standard.



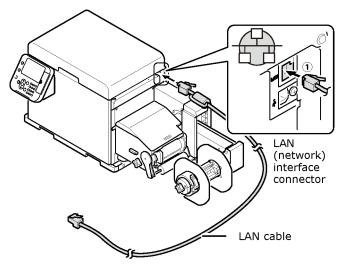
If the cable is routed in front of the device, use the cable clamps attached to the unwinder. Passing the cable through the clamps avoids problems with unwinder operation.

1 Prepare a LAN cable and hub.

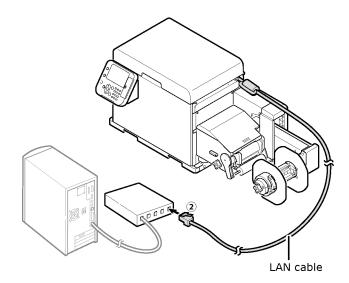
Note: The printer does not come with a LAN cable or hub. If you need a LAN cable (Category 5e or higher, twisted cable, straight) and hub, it is up to you to prepare them.

Note: The initial factory default setting of the Admin Setup is "Gigabit network: Disabled." This setting needs to be changed in order to use a 1000BASE-T connection. Setting Procedure: On the control panel, input your password in **Admin Setup**, and then select **Network Setup > Gigabit Network > Enable**.

2 Connect the LAN cable to the printer's LAN (network) interface connector (1).



3 Connect the other end of the LAN cable to a hub connector (2).



Connecting a USB Cable

Use this connector when connecting the printer to a computer with a USB cable.

Note: Do not connect the USB cable until prompted during the installation process. See "Installing the Printer Driver (USB)" on page 58.

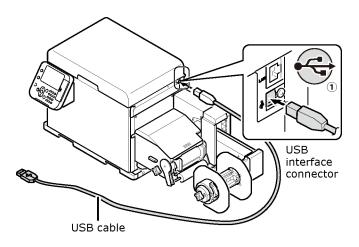
1 Prepare a USB cable.

Note: The printer does not come with a USB cable. You need to prepare a USB 2.0 cable that is no longer than two meters.

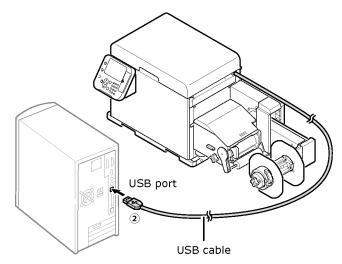
Note: If you are planning to connect using the USB 2.0 Hi-Speed mode, you need to prepare a Hi-Speed USB 2.0 cable.

Note: USB 3.0 is not supported.

2 Taking care to orient the connector correctly, connect the square end of the USB cable to the printer (1).



3 Connect the other (flat) end of the USB cable to the computer (2).



Note: Do not plug the USB cable into the printer's LAN (network) interface connector. Doing so can cause malfunction of the printer.

Note: Do not plug or unplug the USB cable while the computer or printer is turned on. Doing so can cause malfunction of the printer.

Network Connection

To connect the printer to a computer over a network connection, you first need to set the printer's IP address. Next, install the printer driver on the computer.

If there is no DHCP server or BOOTP server on the network, you need to manually set IP addresses for the computer and printer.

Fixed IP address settings specified by enterprise network administrators, providers, or router manufacturers must also be set manually.

Network Setup Flow

- 1 Turn on the printer.
- 2 Set the printer's IP address.
- 3 Turn on the computer.
- 4 On the computer, set the IP address and configure other settings.

5 Install the printer driver.

Note: A wrong IP address can cause a network to go down and make it impossible to connect to the internet. Check with your enterprise network administrator or internet service provider for the IP address you need to set on the printer, etc.

Note: Servers (DHCP, etc.) existing on a network depend on the network environment. For detailed information, check with your enterprise network administrator, internet service provider, or router manufacturer.

Note: PC administrator privileges are required for the setup.

Setting the Printer's IP Address on the Control Panel

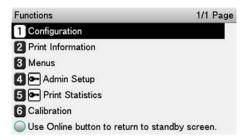
When configuring a small-scale network to connect the printer to a single computer, set an IP address as shown below (RFC1918 compliant).

- Computer
 - IP address: Any address from 192.168.0.1 to 254
 - Subnet mask: 255.255.255.0
 - Default gateway: Not used
 - DNS server: Not used
- Printer
 - IP address specification: Manual 192.168.0.1 to 254 (Use an address different from that of the computer.)
 - Subnet mask: 255.255.255.0
 - Default gateway: 0.0.0.0
 - Network scale: Small

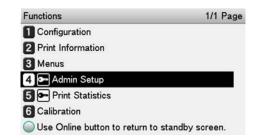
For this example, we show how to configure the settings below.

IP address:	192.168.0.3 (computer)
	192.168.0.2 (printer)
Subnet mask:	255.255.255.0
Gateway address:	192.168.0.1

1 Press either the scroll button ▲ or ▼ on the control panel to display the **Functions** screen.



2 Press the scroll button ▼ several times to select Admin Setup, and then press the OK button.



3 Use the numeric keypad to input the administrator password.

The factory default password is 999999. Press the **OK** button after inputting each character.

(6 - 12 digit	s)	

- 4 Press the **OK** button.
- 5 Check that **Network Setup** is selected, and then press the **OK** button.

Admin Setup	1/2 Page
1 Network Setup	
2 USB Setup	
3 Print Setup	
4 PS Setup	
5 PCL Setup	
6 Color Setup	
78 1 / ↓ Page	

6 Press the scroll button ▼ several times to select **IP Address Set**, and then press the **OK** button.

Network Setup	1/2 Page
TCP/IP	Γ
2 NetBIOS over TCP	
3 IP Address Set	
4 Web	
5 Telnet	
6 FTP	
7 8 ↑ / ↓ Page	

7 Choose whether to set the IP address manually or obtain an IP address automatically.

• To set the IP address manually, press the scroll button ▼ to select **Manual**, and then press the **OK** button.

Go to step 8.

Network Setup	IP Address Set	1/1 Page
TCP/IP	1 Auto	
2 NetBIOS ove	2 ✔Manual	
3 IP Address S		
4 Web		
5 Telnet		
6 FTP		
781/1Pa	Use Online button t	o return to s

• When obtaining an IP address automatically, confirm that **Auto** is selected, and then press the **OK** button.

Go to step 14.

Network Setup	IP Address Set	1/1 Page
TCP/IP	1 ✔Auto	
2 NetBIOS ove	2 Manual	
3 IP Address S		
4 Web		
5 Telnet		
6 FTP		
781/1Pa	Use Online button	to return to s

8 Press the scroll button ▼ several times to select **IPv4 Address**, and then press the **OK** button.

Network Setup	1/3 Page
TCP/IP	Π
2 NetBIOS over TCP	
3 IP Address Set	
4 IPv4 Address	
5 Subnet Mask	
6 Gateway Address	
7 8↑/↓ Page	

9 Press the scroll buttons ▲ and ▼ or the numeric keypad to input the first three digits of the IP address, and then press the OK button. Use the same operation to input the next three digits. After input is complete, press the BACK button.

To move to the next box, press the **OK** button.

Network Setup	IPv4 Address
TCP/IP	✓ 192. 168. 0. 2
2 NetBIOS ove	_
3 IP Address S	
4 IPv4 Address	
5 Subnet Mask	
6 Gateway Add	
781/JPa	Use Online button to return to s

Note: The IP address in the screen is an example. Check with your enterprise network administrator for the value to actually input.

10 Press the scroll button **▼** to select **Subnet Mask**, and then press the **OK** button.



11 Input the subnet mask the same way as the IP address. After input is complete, press the **BACK** button.



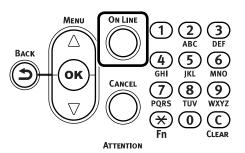
12 Press the scroll button ▼ to select Gateway Address, and then press the OK button.

Network Setup	1/3 Page
TCP/IP	Π
2 NetBIOS over TCP	
3 IP Address Set	
4 IPv4 Address	
5 Subnet Mask	
6 Gateway Address	
7 8 ↑ / ↓ Page	

13 Input the gateway address the same way as the IP address. After input is complete, press the **BACK** button.

Network Setup	Gateway Address
1 TCP/IP	✓ 192. 168. 0. 1
2 NetBIOS ove	_
3 IP Address S	
4 IPv4 Address	
5 Subnet Mask	
6 Gateway Add	
781/JPa	Use Online button to return to s

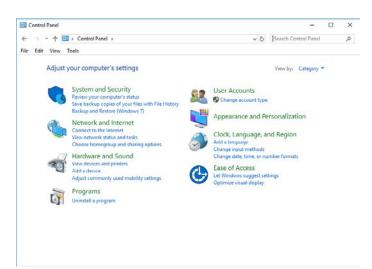
14 Press the **ON LINE** button to exit the network setup.



Configuring the IP Address and Other Settings on the Computer

If your computer already has an IP address and other settings configured, or if an IP address is obtained automatically, advance to *"Installing the Printer Driver (Network)" on page 54.*

- **1** Turn on the computer.
- 2 Click Start, and then select Control panel in Windows.
- 3 Click View network status and tasks.



4 Click Change adapter settings.

Network and Sharing Center					
• 🔿 • 🛧 🔽 « Network	and internet >	Network and Sharing Center	~ Ū	Search Control Panel	
e Edit View Tools					
Control Panel Home	View ye	our basic network inform	ation and set up conne	ctions	
Change adapter settings	View you	r active networks			
Change advanced sharing settings		e ntified network c network	Access type: Connections	No network access	
	Change y	our networking settings			
	2	Set up a new connection or networks Set up a broadband, dial-up, or the set up a broadband, dial-up, o		outer or access point.	
		Troubleshoot problems Diagnose and repair network pro	oblems, or get troubleshootin	g information.	
See also					
See also HomeGroup					
Infrared					
Internet Options					
Windows Defender Firewall					

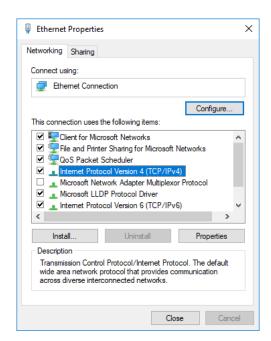
5 Click the icon showing the name of the Network adapter.

Vetwork Connections			-		>
← → - ↑ 😨 > Control Panel > Network and Internet > Network Connections	~ Ō	Search Networ	k Conn	ections	۵,
File Edit View Advanced Tools					
Organize •			§: •		
Ethernet Unidentified network Intell(R) Ethernet Connectio					

6 On the "Ethernet Status" screen, click **Properties**.

Ethernet Status			
eneral			
Connection			
IPv4 Connectivi	ity:	No netw	ork access
IPv6 Connectivi	ity:	No netw	ork access
Media State:			Enabled
Duration:			00:26:22
Speed:		1	00.0 Mbps
Details			
activity —			
Activity —	Sent —	-	Received
Activity ——— Packets:	Sent —		Received 0
Activity Packets:		Diagnose	

7 Select Internet Protocol Version 4(TCP/IPv4), and then click Properties.



8 Input the IP address, subnet mask, default gateway, and DNS server, and then click **OK**.

Internet Protocol Version 4 (TCP/IPv4)	Properties	×
General		
You can get IP settings assigned auton this capability. Otherwise, you need to for the appropriate IP settings.		
Obtain an IP address automatical	У	
• Use the following IP address:		
IP address:	192.168.0.3	
Subnet mask:	255.255.255.0	
Default gateway:	192.168.0.1	
Obtain DNS server address autom	natically	
• Use the following DNS server add	resses:	
Preferred DNS server:		
Alternate DNS server:		
Validate settings upon exit	Advanced	
	OK Cancel	

Note: When obtaining an IP address automatically from a DHCP server, select **Obtain an** *IP* address automatically without inputting an IP address.

Note: If a default gateway or DNS server is not to be used, do not input its address.

9 Exit the "Ethernet Properties" screen.

Installing the Printer Driver (Network)

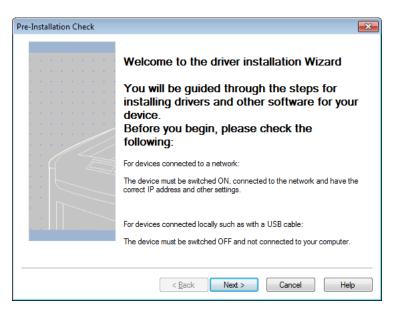
- 1 Ensure the QL-300 is powered on and connected to the network via a LAN cable. See "Connecting a LAN Cable" on page 43.
- 2 Start the driver installation software. You can obtain the software from www.QuickLabel.com/downloads.
- 3 When the language selection window is displayed, select a language. Then click **OK**.

Select Language	×
Please select your language.	
English (United States)	•
OK Cancel	

4 Read the Software License Agreement, and then click Accept.

R	License Agreement	×
	To proceed you must agree with the following :	
	Software License Agreement	*
	IMPORTANT If you do not agree to the terms of this Software License Agreement ("Agreement"), you may not use this software.	ш
	Please read this Agreement carefully before using the software and accompanying documentation contained in the storage media ("Licensed Software"). By installing the Licensed Software, you are indicating your acceptance of these terms and conditions and this Agreement is deemed effective between you ("Licensee") and AstroNova, Inc. ("Licensor").	
	 Scope of the license Licensor grants, and Licensee accepts, a non-exclusive license to install the Licensed Software on multiple computers which are directly or through network connected to Licensor's printer product or MFP purchased by Licensee ("Product") and to use the Licensed Software solely in conjunction with Product. Licensee may make one copy of the Licensed Software only for backup purpose. Any copies of the Licensed Software that Licensee is permitted to make herein must contain the same copyright and other proprietary notices that appear on or in Licensed Software. Other than that, Licensee agrees not to make copies, reproduce, or allow anyone to make copies or reproduce, the Licensed Software, in whole or in part. 	4
	Accept Disagree	

5 Verify the pre-installation check items, and then click **Next**.



6 Click Easy Installation (Network).

Choose installation type		×
	Please choose an installation type.	
	Easy Installation (Local)	
	Custom Installation	
	< Back Next > Cancel H	elp

7 The driver searches for printers. After supported printers are detected, select the printer from the device list.

Installation settings			— ×-
	Review your in Click "Next".	stallation s	settings.
	Device	IP Address	Printer name
	QuickLabel QL-300s	172.16.2.236	QL-300s-91F5F9
	QuickLabel QL-300	os PCL6	earch settings Search Range Printer name/IP Address 255.255.255 Regtart search S <u>N</u> MP Setting
	< Back	<u>N</u> ext >	Cancel Help

8 Select the driver version that matches your printer model. For example, select QuickLabel QL-300s if you are using a QL-300s printer. Then click **Next**.

tion settings			
	Review your in Click "Next".	istallation se	ttings.
	Device	IP Address	Printer name
	QuickLabel QL-300s	172.16.2.236	QL-300s-91F5F9
	QuickLabel QL-30	Os PCL6	ch settings Search Range Printer name/IP Address 5.255.255.255
			Restart search SNMP Setting

9 When you are prompted to create a port, select **IP Address (Recommended)**. Then click **OK**.

Creating a port	×
Select a port to create from the following.	
IP Address(Recommended) Use the IP address.	
Printer Name Use the printer name.	
ОК	Cancel

10 The printer driver will be installed. After installation is complete, click Finish.

		In	stallatio	n complet	te.To end click "Finish".	
			istaliatio	in compice		
		· .				
				ne derauit print ng the driver Pro	ter from the list below or change the defa roperties	JUIT
			unge by operm	ig the arrest free		_
			QuickLabel	QL-300s PCL6	6 Success	
		~				
$\sim c$						
1		~				
				Pro	roperty settings	

USB Connection

USB Setup Flow

Note: Confirm that the printer is turned off.

Note: PC administrator privileges are required for the setup.

- 1 Turn on the printer.
- 2 Turn on the computer.
- 3 Install the printer driver.

Installing the Printer Driver (USB)

1 Ensure the QL-300 is powered off and **not** connected to your PC via the USB cable.

Note: Do not connect the USB cable until prompted later in this procedure.

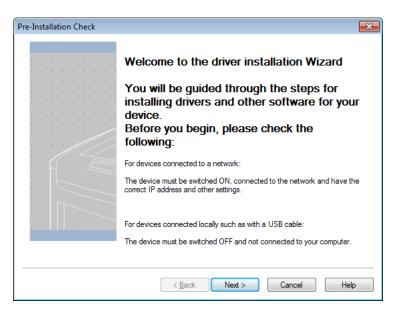
- 2 Start the driver installation software. You can obtain the software from www.QuickLabel.com/downloads.
- 3 When the language selection window is displayed, select a language. Then click **OK**.

Select Language	×
Please select your language.	
English (United States)	•
OK Cancel	

4 Read the Software License Agreement, and then click **Accept**.

💥 License Agreement	×
To proceed you must agree with the following :	
Software License Agreement	*
IMPORTANT If you do not agree to the terms of this Software License Agreement ("Agreement"), you may not use this software.	ш
Please read this Agreement carefully before using the software and accompanying documentation contained in the storage media ("Licensed Software"). By installing the Licensed Software, you are indicating your acceptance of these terms and conditions and this Agreement is deemed effective between you ("Licensee") and AstroNova, Inc. ("Licensor").	
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Accept Disagree	

5 Verify the pre-installation check items, and then click **Next**.



6 Click Easy Installation (Local).

Choose installation type		×
	Please choose an installation type.	
	Easy Installation (Local)	
	Custom Installation	
	< Back Next > Cancel H	elp

7 Select the driver version that matches your printer model. For example, select QuickLabel QL-300s if you are using a QL-300s printer. Then click **Next**.

Installation settings		×
	Review your installation settings.	
	QuickLabel QL-300 PCL6	
]
	< <u>B</u> ack Next > Cancel H	lelp

8 When prompted, connect the QL-300 to your PC with a USB cable. Then power on the QL-300. The installation will continue.

Installing	
	Installing drivers and applications
	Step 1. With the device powered off, connect your device to your computer.
	Step 2. Switch on your device.
	If the screen does not change when you connect the device, click "Install using another port", and continue with the installation.
	Install using another port
	< Back Next > Cancel Help

9 The printer driver will be installed. After installation is complete, click **Finish**.

Installation complete	8
	Installation complete. To end click "Finish".
	You can change the default printer from the list below or change the default settings by opening the driver Properties.
	This screen will close automatically in 27 seconds.
	QuickLabel QL-300s PCL6 Success
	Property settings
	< Back Finish Cancel Help

Dealing with Setup Problems

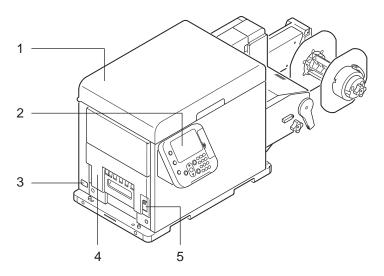
If you run into problems while setting up a network connection or USB connection, refer to *"Troubleshooting" on page 252.*

This section describes possible problems that may occur while operating the printer, and recommended steps to resolve them.

3

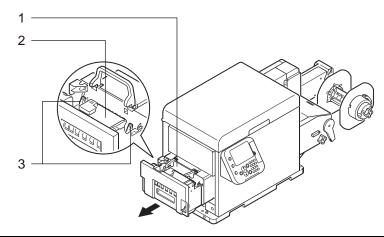
Part Names and Functions

Printer Front/Left Side



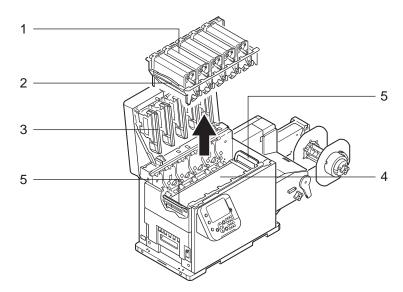
#	Part	Description
1	Top Cover	Open when replacing the print car- tridge, belt unit, 2nd transfer roller, or waste toner box, or when clear- ing a paper jam.
2	Control Panel	Displays the printer status and menus, and is used when configur- ing function settings. See "Control Panel" on page 69.
3	Power Connector	Connect the supplied power cord here.
4	Fuser and Exit Unit	Remove when replacing the fuser and exit unit or when clearing a paper jam. The fuser and exit unit are wear items.
5	Fuser and Exit Unit Locking Lever	Use when removing or installing the fuser and exit unit.

Printer Exit



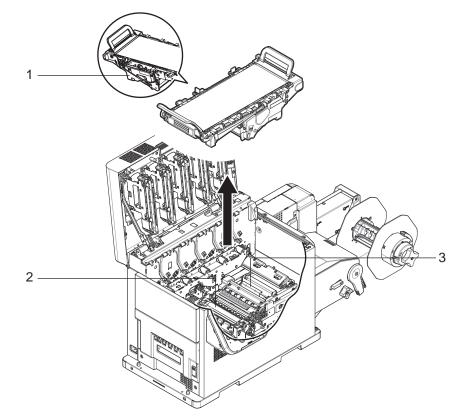
#	Part	Description
1	Fuser and Exit Unit Handle	Pull upwards when removing the fuser and exit unit.
2	Exit Feed Cover	Open when clearing a paper jam.
3	Release Lever	Press downwards when opening the exit feed cover.

Printer Interior 1



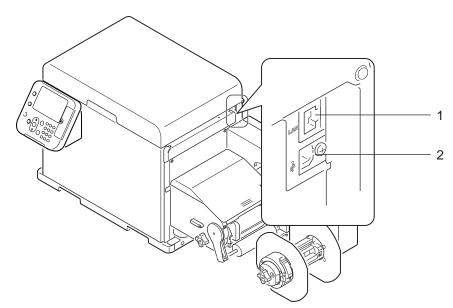
#	Part	Description
1	Print Cartridge	Develop the image with toner drawn by the LED head, and transfer the toner image onto the belt unit.
		The remaining life of the print cartridge is always displayed while the "Sup- plies Life" is specified for the standby screen of the control panel.
		The print cartridge is a wear item.
2	Print Cartridge Set	Remove when replacing the belt unit, 2nd transfer roller, or waste toner box, or when clearing a paper jam.
3	LED Head	Draws the image being printed onto the print cartridge.
4	Belt Unit	Transfers toner to the paper.
		The belt unit is a wear item.
5	Belt Unit Handle	Grasp when removing the belt unit.

Printer Interior 2



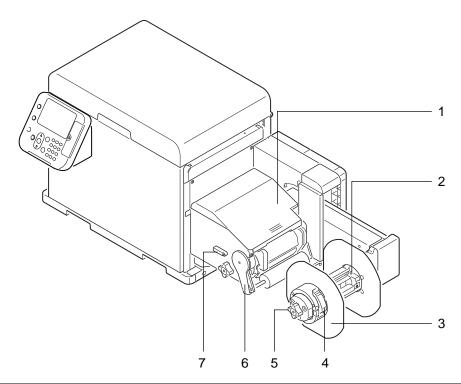
#	Part	Description
1	Waste Toner Box	Stores waste toner.
		A message appears on the control panel when the box is full of waste toner.
		The waste toner box is a wear item.
2	2nd Transfer Roller	Transfers toner to the paper.
		The 2nd transfer roller is a wear item.
		The 2nd transfer roller is included with the belt unit.
3	Paper Guide	Remove when a paper jam occurs in the paper transport path or when cleaning the paper transfer roller.
		The Paper Guide is a periodically replaced part.

Interface Connectors



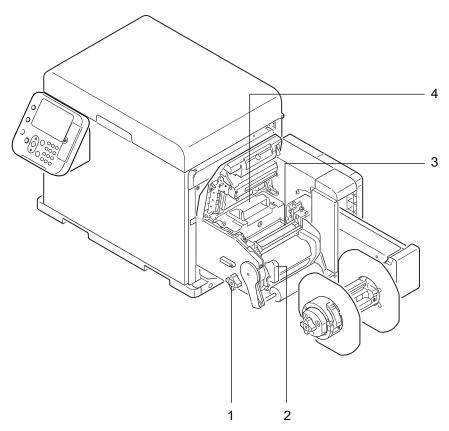
#	Part	Description
1	LAN (Network) Interface Connector	For connection of a LAN cable. Use this connector when connecting the printer on a network.
2	USB 2.0 Interface Connector	For connection of a USB 2.0 cable. Use this connector when using a USB cable to connect the printer directly to a computer.

Unwinder



#	Part	Description
1	Unwinder Cover	Open this when setting paper or clear- ing paper jams.
2	Roll Paper Holder	Sets the paper to be printed.
3	Flange	Fixes roll paper to the roll paper holder so the roll paper set on the roll paper holder feeds straight.
4	Flange Locking Lever	Use when removing/mounting the flange.
5	Roll Paper Holder Knob	Use when securing the core of a roll paper that has been placed on the roll paper holder.
6	Tension Bar Open Lever	Keeps roll paper that has been set from sagging.
7	Unwinder Cover Open Lever	Lower to open the unwinder cover.

Unwinder Interior



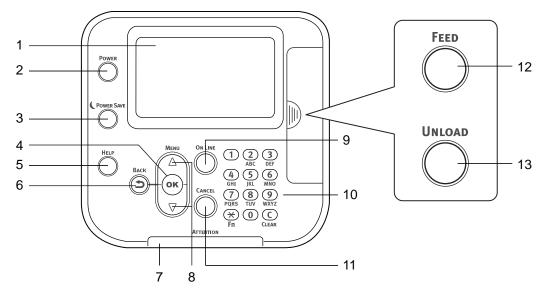
#	Part	Description
1	Roll Paper Guide Adjustment Knob	Rotate the knob to adjust the roll paper guide to the width of the paper to be printed.
2	Roll Paper Guide	Align the roll paper guide along the edge of paper to be printed.
3	F0 Roller Unit	The F0 roller unit is a roller for feeding roll paper. The F0 roller unit is a periodically replaced part.
4	Cutter Unit	Cuts the roll paper to a specified length. The cutter unit is a periodically replaced part.

Control Panel

Control Panel Overview

The control panel can be used to check the current status of the printer and to access various functions available with the printer.

With this printer, print cartridges etc. can be replaced while monitoring the LCD on the control panel. If a paper jam or some other problem occurs on the printer, corrective action can be taken while monitoring messages that appear on the LCD.

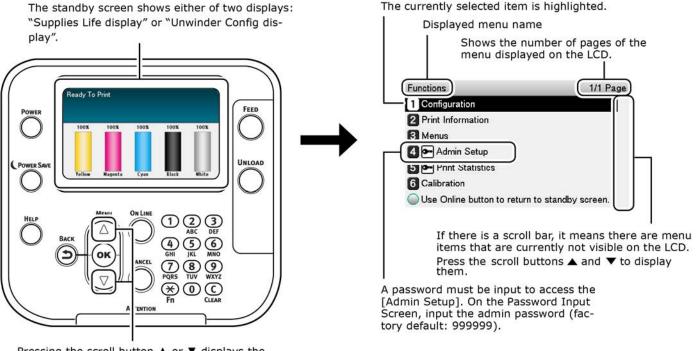


#	Part	Description
1	Display screen	 Shows the printer's status and menus.
		 The standby screen shows either of two displays: "Supplies Life display" or "Unwinder Config display".
2	POWER button	Turns the main power supply of the printer on or off.
		 Pressing this button while in the off mode turns on the main power supply.
3	POWER SAVE button	Enters or exits the Power Save Mode.
		This button is lit green in the Power Save Mode.

#	Part	Description
4	OK button (menu button)	Executes the currently selected menu item or applies the setting being configured.
5	HELP button	 Displays the Help Screen. This button lights orange when you can refer to help messages describing the error that has occurred and providing information about how to clear the error.
6	BACK button	Goes back to the previous screen.
7	ATTENTION lamp	Indicates the printer's status. This lamp is unlit when the status is
		normal. An error causes this lamp to light or flash orange.
8	Scroll buttons ▲ and ▼ (menu but- tons)	 Use these buttons to select menu screen items, and to scroll menu pages forward or back. On a value input screen, these buttons are used when inputting values.
9	ON LINE button	 Switches between online and offline. This button is lit green while the printer is online and unlit when offline.
10	Numeric keypad (1 to 0, *, C)	 The numeric keypad is used when inputting numeric values or passwords. Pressing the * (Fn) key while the standby screen is displayed displays the "Function Number Input" screen for inputting a number that directly accesses menu items.
11	CANCEL button	Cancels an ongoing print job or setting operation.
12	FEED button	Feeds paper.
13	UNLOAD button	Unloads paper.

Using the Control Panel

This section describes the main operations that can be performed using the control panel, and provides information about interpreting LCD contents.



Pressing the scroll button \blacktriangle or \blacktriangledown displays the [Functions] menu screen shown to the right.

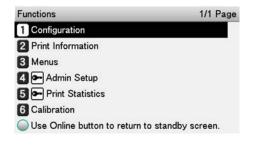
- When a menu item represents a next-level menu or a selection of setting options, selecting the item and then pressing the **OK** button displays the applicable screen.
- While a setting is displayed, pressing the **OK** button applies it. (A check mark appears to the left of the value.)

Standby Screen

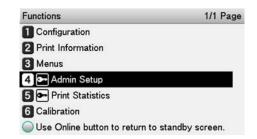
The standby screen shows either of two displays: "Supplies Life display" or "Unwinder Config display".

Use the procedure below to switch between the two standby screen displays.

1 Press either the scroll button \blacktriangle or \blacktriangledown to display the **Functions** screen.



2 Press the scroll button ▼ several times to select Admin Setup, and then press the OK button.



3 Use the numeric keypad to input the administrator password.

The factory default password is 999999. Press the **OK** button after inputting each character.

(6 - 12 digi	ts)	

- 4 Press the **OK** button.
- 5 Press the scroll button ▼ several times to select **Panel Setup**, and then press the **OK** button.

Admin Setup	2/2 Pag	
1 Panel Setup		
2 Time Setup		
3 Power Setup		
4 Others Setup		
5 Settings		
6 Change Password		
7 8 ↑ / ↓ Page		

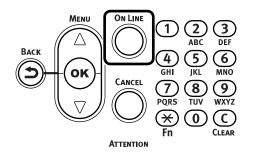
6 Press the scroll button ▼ several times to select Idle Display, and then press the OK button.

Panel Setup	1/1 Page
1 Idle Display	
2 Panel Brightness During Operating	
3 Panel Brightness While Power Save	
4 Panel Backlight Timer	
_	
Use Online button to return to standby	y screen.

7 To show the Supplies Life display, select **Supplies Life**, and then press the **OK** button.

If you want to display the Unwinder Config display, select **Unwinder Config**, and then press the **OK** button.

8 Press the **ON LINE** button to return to the standby screen.



Error Screen

When a problem occurs on the printer, the ATTENTION lamp lights or flashes, and a message appears on the LCD.

Depending on the error, information about how to clear the error or an animation also appears in addition to the message.

Pressing a control panel button while an error screen is displayed changes the status of the printer as described below.

Button	Action
POWER SAVE	Puts the printer into the Power Save Mode.
	Pressing the POWER SAVE button while the printer is in the Power Save mode returns to the standby screen.
HELP	If the HELP button is lit, pressing it displays help information about the displayed error.
ОК	If the error message indicates a clearable error, pressing the OK button returns to the standby screen.
ON LINE	If the error message indicates a clearable error, pressing the ON LINE button returns to the standby screen.

Button	Action
CANCEL	The errors listed below can be canceled with the CANCEL button.
	Press the UNLOAD button and replace paper.
	There is no paper on the unwinder.
	Restart printing from the page below.
	Cut the paper and start printing.
	Insufficient memory. Print data is too large.

Help Screen

Press the **HELP** button to display the Help Screen. If the **HELP** button is lit, pressing it displays help information about the displayed error.

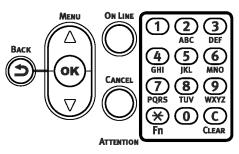
Help (Error Code:333)	1/3 Page
[Context]	Π
The fuser and exit unit has not be	en connected.

While a help screen is displayed, pressing the scroll button \blacktriangle scrolls to the previous page. Pressing the scroll button \blacktriangledown scrolls to the next page. Long pressing the scroll button \blacktriangle or \blacktriangledown scrolls the page for approximately 0.5 seconds.

To exit the help screen, press the **HELP** button again. The help screen can also be closed by pressing the **BACK** button, **ON LINE** button, or **CANCEL** button.

Using the Numeric Keypad

The numeric keypad is used when inputting numeric values or alphabetic characters.



Each press of a key cycles through the characters assigned to it as shown below.

Key	Characters
1	1

Кеу	Characters
2	Cycles with each press (2 \rightarrow a \rightarrow b \rightarrow c)
3	Cycles with each press $(3 \rightarrow d \rightarrow e \rightarrow f)$
4	Cycles with each press (4 \rightarrow g \rightarrow h \rightarrow i)
5	Cycles with each press (5 \rightarrow j \rightarrow k \rightarrow l)
6	Cycles with each press (6 \rightarrow m \rightarrow n \rightarrow o)
7	Cycles with each press (7 \rightarrow p \rightarrow q \rightarrow r \rightarrow s)
8	Cycles with each press (8 \rightarrow t \rightarrow u \rightarrow v)
9	Cycles with each press $(9 \rightarrow w \rightarrow x \rightarrow y \rightarrow z)$
0	0

For example, to input "abc" press the following: $2 \rightarrow 2 \rightarrow OK \rightarrow 2 \rightarrow 2 \rightarrow OK \rightarrow 2 \rightarrow 2 \rightarrow 2 \rightarrow 2 \rightarrow 2 \rightarrow 0K$.

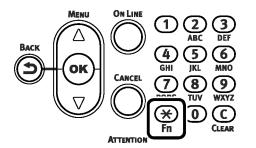
The numeric keypad also has two other keys, whose functions are described below.

Кеу	Description
Fn	Pressing this key displays a shortcut to the function number. (Enabled when standby screen is displayed.) When inputting a value, this key is used to cycle through symbols.
CLEAR	When inputting a password, pressing this key deletes a single charac- ter.

Function Number Input Screen

While "Ready to print" is displayed on the standby screen, pressing the **Fn** key and then inputting a number displays the corresponding menu.

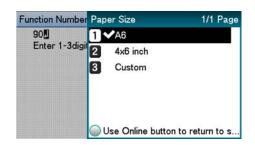
1 Press the **Fn** key.



2 On the function number input screen that appears, use the numeric keypad to input a twoor three-digit number, and then press the **OK** button.

I		
G Enter 1-3dig	it Number	
Litter 1-5ulg		

3 On the menu that appears, you can check the current setting and change it, if you want.



Function Number List

Function Num- ber	Function Number Menu Item
90	Paper Size
91	X Dimension *1
92	Y Dimension *1
93	Media Type
94	Media Weight
100	Print Information (Configuration)
102	Print Information (Usage Report)
103	Print Information (Error Log)
200	Power Save Time
202	Auto Power Off Time
210	Error Report
220	Print Position Adjust

Function Num- ber	Function Number Menu Item
230	Media Transfer Setting Black
231	Media Transfer Setting Color
234	SMR Setting
235	BG Setting
236	Drum Cleaning
237	Hex Dump
238	Transfer Roller Cleaning
300	Adjust Density
301	Adjust Registration
302	Print Color Tuning Pattern
310	Cyan Density
311	Magenta Density
312	Yellow Density
313	Black Density
314	White Density
890	Unwinder Config
891	Media Form
892	Adjust Cut Position
893	Sensor Calibration
894	Check Media Pitch
895	Cut Mode

*1: Enabled only if the paper size is set to Custom.

5

Paper Settings

Usable Media Types

For high-quality printing it is necessary to use paper that satisfies conditions regarding quality, thickness, paper finish, etc. Only print on media recommended by QuickLabel.

If using a (paper) medium that is curled or wrinkled before printing, print quality and paper traveling performance cannot be assured.

Paper Types, Size, and Thickness

Roll Paper Specifications

Media Form	Description
Continuous Paper	Paper wound on a roll
Continuous Paper (Black Mark)	Paper wound in a roll with black marks printed on the back surface
Die-cut Label (Gap)	Paper that is die-cut into a label shape
Die-cut Label (Black Mark)	Paper that is die-cut into a label shape with black marks printed on the back surface
Continuous Label	Paper that is not die-cut into a label shape, with the entire surface covered with label paper
Continuous Label (Black Mark)	Paper that is not die-cut into a label shape, with the entire surface covered with label paper and black marks printed on the back surface

Media Type	Description
Plain	Wood-free Paper
Plain Labels	Label paper made of wood-free paper
Glossy Labels	Label paper made of glossy paper
Film Labels	Label media made of film
Film	Film

Roll Paper Size	Specification
Roll Outside Diameter	No greater than 203.2 mm (8 inches)
Paper Width	25.4 to 130 mm (1 to 5.12 inches)
Paper Thickness	0.07 mm to 0.25 mm (0.003 to 0.0098 inches)
	When there is backing paper, total thickness includes backing paper.
Roll Core Width	Same as roll paper
Roll Core Inner Diameter	76.2 mm

• Using metal foil paper or conductive paper creates the risk of defective printing due to electrical discharge, and device malfunction.

Use of metal foil paper and conductive paper is prohibited.

- Using ink jet paper or label paper will cause device malfunction. Use of ink jet paper or label paper is prohibited.
- Use paper that has black marks printed on its back surface (non-printing surface). Black marks printed on the front surface cannot be detected.
- Use paper with black marks printed with carbon ink.
- Thermal paper will become discolored and deformed by heat used for fusing. Do not use it.
- Use film that can withstand heat up to 230°C. Use of film that is not heat resistant creates the risk of film deformation by heat used for fusing, paper jams, and device malfunction.
- Do not use a liner on which glue is smeared. It will not feed correctly in the equipment. In the worst case, it could damage the equipment.
- Cast-coated paper is not recommended. Printing quality cannot be guaranteed when it is used.
- If the paper length, label length, or black Mark Interval for a single sheet is less than 4 inches, blank sheets may be printed to satisfy the paper length that can be fed.
- Use of the types of paper below is not supported.

Paper whose roll surfaces are not cut cleanly

Paper that is connected part way through by tape, etc.

Label paper without backing paper with paste on the front surface

Paper whose labels are easy to peel or are peeling

- Paper with paste squeezing out onto the base paper area or affixed to the label surface
- Paper that is folded or bent
- Paper that has holes in it
- Paper that is notched
- Paper that has perforations
- Paper with different size labels on a single roll

Paper with different paper widths on a single roll

Setting the Paper Weight

Set the printer and printer driver paper weight according to the weight of the paper to be used.

Paper Weight (Total thickness including backing paper)	Setting Value of the Media Weight
76 to 95 μm	Light
96 to 140 μm	Medium Light

Paper Weight (Total thickness including backing paper)	Setting Value of the Media Weight
141 to 159 μm	Medium
160 to 180 μm	Medium Heavy
181 to 199 µm	Heavy
200 to 214 µm	Ultra Heavy1
215 to 229 µm	Ultra Heavy2
230 to 249 µm	Ultra Heavy3

Storing Media

Improper paper storage can cause absorption of moisture, discoloration, and warping. Note that printing on such paper can adversely affect print quality, feeding, etc. Leave packages of media unopened until you are actually ready to use them.

Store media in locations like the ones described below:

- On a flat shelf in a location that is dark and where there is little moisture
- On a flat table
- An environment with a temperature of 73°F ±1.8°F (23°C ±1°C) and humidity of 50%RH ±2%

Avoid locations like the ones described below:

- Directly on the floor
- In direct sunlight
- Near the inside surface of an external wall
- On a surface that is uneven or curved
- In a location where electrostatic charge is generated
- In a location subjected to very high temperatures or sudden temperature changes
- Next to a photocopying machine, air conditioning equipment, heater, or duct

Note: Proper printing may not be possible on paper that has been stored for a long time.

Note: Leaving roll paper in an environment where it is exposed to high temperatures and high humidity for long periods can cause it to become deformed. Do not use deformed roll paper. Store roll paper in an environment where the temperature and humidity are appropriate.

Note: We recommend putting partially used label paper back into the vinyl bag it was packaged in, to prevent the paper from absorbing moisture.

Registering a Desired Paper Size with the Printer Driver

- 1 Click Start and select Control Panel in Windows.
- 2 Click View devices and printers.
- 3 Right-click the QL-300 icon, and then select Printing preferences.
- 4 On the Setup tab, click User-defined paper.

1	Current setting(De	fault setting)	Management.
-	current setting(be	addr setting) - <u>S</u> ave	<u>m</u> anagement.
2	Paper se <u>t</u> tings:	Continuous 4.000 x 6.000in \sim	User- <u>d</u> efined paper
3		Format: Continuous Paper	
3		Media Type: Plain	
4		Media Weight: Medium Light (96-140 μm)	
5	Orientation :	● Portrait ◯ Landscape □ 1 <u>8</u> 0°	Mirror Print
_	C <u>o</u> pies:	1 🗘 🖸 Co <u>l</u> late	Print in reverse ord
6		To prioritize collation specified by application	
7	Cut Mode:	Only cut at the end of job	
8			
9	Quality:	Fine / Detail (1200 x 1200) 🗸	Photo Enhance
		Scree <u>n</u> : Prioritize resolution ~	

- 5 Input information about the paper you want to register.
 - a) Use Registered user-defined paper to select New Paper.
 - b) In the **Paper Name** box, enter a paper name.
 - c) Select a Media Form to match the paper.
 - d) Select a Media Type to match the paper.
 - e) Select a Media Weight to match the paper thickness.

If you are unsure of the paper thickness, select **Medium Light**.

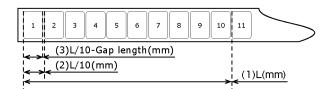
f) Enter paper size information.

aper <u>N</u> ame:	<new paper=""></new>				Paper Infor	rmation					
egistered use	r-defined paper:				Media Fo <u>r</u>	m:	Die-cut Lab	el (Black M	ark)		~
Continuous A	.000 x 6.000in .6 105.0 x 148.0mm Size 4.000 x 6.000in			<u>A</u> dd Overwrit <u>e</u>	Media <u>T</u> yp Media <u>W</u> e		Plain label Medium Lig	ght (96-140	μm)		~
				<u>D</u> elete	Sensor set	t <u>i</u> ngs:	1. User setti	ngs 1			~
								Sens	sor Adjust	ment	
								Printer in	for <u>m</u> ation	acquisition	
position:		2.0 2.0]]]		Cabel	ooard widt	9 2 th []	11.3 • 7.6 • .0 • 01.6 • .12 .0 •	 [12.7 [25.4 [2.0 [29.4 [3.0 	1320.8 126.0 25.4 130.0	

Input the label length and gap for media that has gaps and the black mark interval for black mark media.

Use a ruler to measure, as accurately as possible, the actual size of the media, and then input those values.

If the label length or the black mark interval is less than 4 inches, use the following method to measure the media, and then input values to the first decimal place to be accurate.



How to Measure the Actual Size of Paper

(1) Measure the length from the leading edge of the first label (or black mark leading edge) to the leading edge of the 11th label (or black mark leading edge). Use this as L (mm).

(2) Divide the length you measured in (1) by 10 to calculate the length from the leading edge of the first label (or black mark leading edge) to the leading edge of the 2nd label (or black mark leading edge) to the first decimal place.

(3) Subtract the length of the gap from the length you calculated in (2) to calculate the length of one label to the first decimal place.

For media that has gaps, input the value calculated in (3) in **Label length** and input the gap length in **Gap**.

For media that has black marks, input the value calculated in (2) in **Black Mark Interval**.

- 6 Enter other information as required.
 - a) If you performed sensor adjustment, select the sensor setting that was registered to the device from **Sensor settings**.

For information about adjusting the sensor, refer to *"Calibrating the Sensor"* on page 103.

- b) If you want to fine-tune the image position, enter the position shift amount into **Print position correction**.
- c) If you want to fine-tune the paper cut position, enter the position shift amount into **Cut position correction**.

ser-defined pape	r								
Paper <u>N</u> ame:	Label BM1 120x10	00			Paper Information Media Form:	Die-cut Labe	al (Gan)		~
Registered user-defined paper: New paper Continuous 4.000 x 6.000in Continuous A6 105.0 x 148.0mm User Defined Size 4.000 x 6.000in Label BM1 120x100 97.6 x 101.6mm			<u>A</u> dd Overwrit <u>e</u> <u>D</u> elete	Media <u>T</u> ype: Media <u>W</u> eight: Sensor sett <u>i</u> ngs:	lia <u>T</u> ype: Plain label lia <u>W</u> eight: Medium Light (96-140 μm)			~ ~ ~	
ize							Sensor Adjust Printer infor <u>m</u> ation		
ize <u>U</u> nit			_		Z Label length(Y)	10	01.6 븆 [12.7	1320.8	
 millimeters Print position co) inch				Label width(X)		7.6 🗘 [25.4	126.0	
X position: 0.0		2.0	Papa		Right gap	2.	0 📫 [2.0	25.4	
			Fee		······ Cardboard widt	th 10	01.6 🚔 [29.4	130.0	
Y p <u>o</u> sition: 0.0	0 🚔 [-2.0	2.0] d Dire	\leftrightarrow	······ Margin	2.	12		
Cut position cor			-		Gap	3.	0 🖨 [3.0	10.0	
Y Po <u>s</u> ition: 0.0) 🗼 [-0.5	0.5]						
							<u>C</u> lose	<u>H</u> elp	,

7 When all the input is complete, click **Add**.

Using the Printer Driver to Fine-tune the Print Position

- 1 Click Start and select Control Panel in Windows.
- 2 Click View devices and printers.
- 3 Right-click the QL-300 icon, and then select Printing preferences.

4 On the **Setup** tab, click **User-defined paper**.

xample	<u>Favorites</u>		
	Current setting(De	fault setting)	e <u>M</u> anagement
2	Paper se <u>t</u> tings:	Continuous 4.000 x 6.000in ~	VUser- <u>d</u> efined paper
Pape 3		Format: Continuous Paper	
rFee		Media Type: Plain Media Weight: Medium Light (96-140 μm)	
Paper Feed Direction		Media Weight. Mediam Light (50-140 µm)	
5	Orientation :	● Portrait ◯ Landscape □ 1 <u>8</u> 0°	Mirror Print
6	C <u>o</u> pies:	1 🗘 🖸 Collate	Print in reverse order
Ŭ		To prioritize collation specified by application	
7	<u>C</u> ut Mode:	Only cut at the end of job \sim	•
8			
9	Quality:	Fine / Detail (1200 x 1200)	✓ P <u>h</u> oto Enhance
		Scree <u>n</u> : Vrioritize resolution V	

5 Use the **Registered user-defined paper** list to select the paper whose print position you want to correct.

If the paper you want to use is not in the list, select **New paper** and add it. See "Registering a Desired Paper Size with the Printer Driver" on page 82.

Paper <u>N</u> ame:	User Defined Size				Paper Information		
Registered user	-defined paper:				Media Form:	Continuous Paper	
	000 x 6.000in 5 105.0 x 148.0mm ize 4.000 x 6.000in			<u>A</u> dd Overwrit <u>e</u> <u>D</u> elete	Media <u>T</u> ype: Media <u>W</u> eight:	Plain Medium Light (96-140 µm)	
ize <u>U</u> nit ○ millimeters	() inch				Paper length()	Printer information acquisi	
Print position of X position:	correction 1.000 € [-0.079 1.000 € [-0.079		Paper Feed Direction		Paper width(<u>X</u> Top/Bottom n Left/Right mai	nargin 0.083 Extended Prir	
	.000 🚔 [-0.020	- 0.020	-				

6 In **Print position correction**, set the values for the print start positions vertically and horizontally on the paper.

7 Click Overwrite.

User-defined pap	ber							×
Paper <u>N</u> ame:	User Defined Size		Pape	er Information				_
Registered user	r-de <u>f</u> ined paper:		Med	lia Fo <u>r</u> m:	Continuou	is Paper		\sim
New paper Continuous 4. Continuous A	.000 x 6.000in 6 105.0 x 148.0mm	Add	Med	lia <u>T</u> ype:	Plain			\sim
*User Defined	Size 4.000 x 6.000in	Overwrit		lia <u>W</u> eight:	Medium I	ight (96-140 μm)		\sim
				lia <u>w</u> eight:	meananne	igne (so ino pin)		-
		Delete						
						Printer information	acquisition	
Size								
<u>U</u> nit				Paper length(Y) [6.000 🗘 [0.500	52.000	1
O millimeters	s 💿 inch		·····					1
Print position of	correction		4	Paper width(X)		4.000 🗧 [1.000	5.118	1
· -				Top/Bottom m	argin	0.083 Exten	ded Printing	
X <u>p</u> osition: (0.000 🔹 [-0.079 0.079]	per		L-6/01-14	F	0.083		
Y p <u>o</u> sition:	0.000 🚖 [-0.079 0.079]	Paper Feed Direction	ώ	Left/Right mar	gin	0.083		
Cut position co	orrection	≗ Ψ						
Y Position: 0	0.000 📫 [-0.020 0.020]							
						Char		
						Close	<u>H</u> elp	

- 8 Click **OK** or **Close** as many times as necessary to exit the "Printing preferences" screen.
- 9 Open the file to be printed.
- **10** Specify the paper size, and then print.

Using the Printer Driver to Fine-tune the Cut Position

- 1 Click Start and select Control Panel in Windows.
- 2 Click View devices and printers.
- 3 Right-click the QL-300 icon, and then select Printing preferences.

4 On the **Setup** tab, click **User-defined paper**.

	<u>F</u> avorites		
	Current setting(De	fault setting)	e <u>M</u> anagement
2	Paper se <u>t</u> tings:	Continuous 4.000 x 6.000in	✓ User- <u>d</u> efined paper
Paper Feed Direction		Format: Continuous Paper Media Type: Plain	
Feed		Media Weight: Medium Light (96-140 µm)	
Direc 4			
5	Orientation :	● Portrait ◯ Landscape □ 1 <u>8</u> 0°	Mirror Print
E	C <u>o</u> pies:	1 Co <u>l</u> late	Print in reverse order
6		To prioritize collation specified by application	
7	<u>C</u> ut Mode:	Only cut at the end of job	~
8			
9	Quality:	Fine / Detail (1200 x 1200)	V Photo Enhance
		Scree <u>n</u> : Prioritize resolution ~	

5 Use the **Registered user-defined paper** list to select the paper whose cut position you want to correct.

Note: If the paper you want to use is not in the list, select **New paper** and add it. See "Registering a Desired Paper Size with the Printer Driver" on page 82.

aper <u>N</u> ame:	User Defined Size			Paper Information	
egistered user	r-defined paper:			Media Fo <u>r</u> m:	Continuous Paper
	000 x 6.000in 6 105.0 x 148.0mm iize 4.000 x 6.000in		<u>A</u> dd Overwrit <u>e</u> <u>D</u> elete	Media <u>T</u> ype: Media <u>W</u> eight:	Plain Medium Light (96-140 µm)
re Init Ə millimeters	() inch			Paper length(Printer information acquisition
rint position o	correction 0.000 € [-0.079 0.1 0.000 € [-0.079 0.1	Fe		Paper width(2)	margin 0.083 Extended Printing
	.000 🚔 [-0.020 0.0		·····	-	

6 Use **Cut position correction** to specify an adjustment value for distance from the print completion position to the cut position.

7 Click Overwrite.

User-defined pap	er						×
Paper <u>N</u> ame:	User Defined Size			Paper Information			
Registered user	r-de <u>f</u> ined paper:			Media Fo <u>r</u> m:	Continuous Paper		\sim
New paper Continuous 4.	000 x 6.000in 6 105.0 x 148.0mm		Add	Media <u>T</u> ype:	Plain		\sim
	Size 4.000 x 6.000in		Overwrit <u>e</u>		Medium Light (96-14	10 um)	~
			D	Media <u>W</u> eight:	Weatan Eight (50-14	io µiii)	•
			<u>D</u> elete				
					Printer	infor <u>m</u> ation acquisition	
Size							
Unit				Citi Danas las ath 00	6.000	[0.500 52.000	
O millimeters	() inch	▲ [1	Paper length(Y)		-	
Print position o	correction			Paper width(X)	4.000	[1.000 5.118	1
· · ·	0.000 🗣 [-0.079 0.079]	Pe	·	····· Top/Bottom ma	argin 0.083	Extended Printing	
		ē -		······ Left/Right marg	gin 0.083]	
Y position:	0.000 🚔 [-0.079 0.079]	ed Dii	↔			1	
Cut position co	rection	Paper Feed Direction					
· _		3	······				
Y Position: 0	.000 🚔 [-0.020 0.020]						
					<u>C</u> I	ose <u>H</u> e	р

- 8 Click **OK** as many times as necessary to exit the "Printing preferences" screen.
- 9 Open the file to be printed.
- **10** Specify the paper size, and then print.

Printing

Preparing Paper

This section describes how to load paper onto the holder of the unwinder. For paper sizes and types that can be loaded onto the unwinder, see *"Paper Types, Size, and Thickness" on page 79*.

- 1 Remove the paper from the packaging.
- 2 Take care of the tape that is holding the leading edge of the paper.

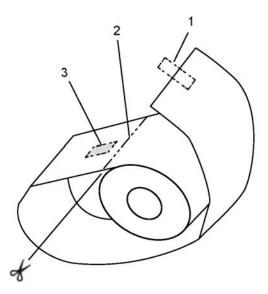
If there is no tape holding the leading edge of the paper, you can just load it as is.

a) Remove the tape [1] that is holding the leading edge.

Caution: Remove the tape that is holding the leading edge of the paper before you use it. Do not load paper while the tape is still attached and feed it into the equipment. There is a risk of damaging the equipment.

b) Cut off the part of the paper [2] on which there is leftover adhesive [3].

Caution: There is a risk of adhesive being left over after removing the tape. If paper that still has adhesive on it is fed into the equipment, the adhesive may stick to the feed path and damage the equipment.



3 Check the leading edge of the paper and cut it off straight.

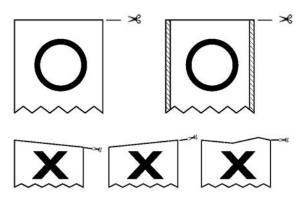
If the leading edge of the paper is cut straight, you can just load it as is.

Be particularly careful when replacing paper and after removing and reloading jammed paper.

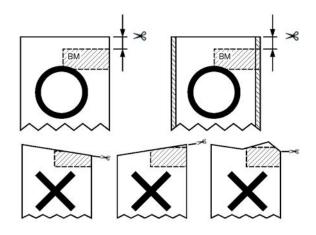
When loading paper, cut the leading edge of the paper straight before loading it.

Caution: Do not cut at an angle, do not cut black marks, and do not cut labels. Depending on the size and shape of the leading edge, there is a risk of skewing the print position, not being able to print, or damaging the equipment.

• Standard media and continuous labels (dry edge)

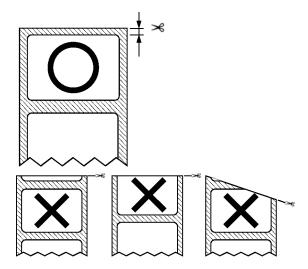


Standard media (with black marks) and continuous labels (dry edge)
 1.2 to 4.0 mm (0.0472 to 0.1575 inches) Length of leading margin when paper is loaded



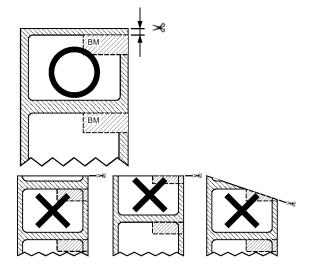
• Die-cut label paper (no black marks)

1.2 to 6.5 mm (0.0472 to 0.2559 inches) Length of leading liner when paper is loaded



• Die-cut label paper (with black marks)

1.2 to 4.0 mm (0.0472 to 0.1575 inches) Length of leading margin when paper is loaded



Loading Media

Load the paper onto the Unwinder. For paper sizes and types that can be loaded on the Unwinder, see *"Paper Types, Size, and Thickness" on page 79.*

Note: When setting roll paper, be careful not to drop it. As roll paper is heavy, when you drop it, there is a risk of injury.

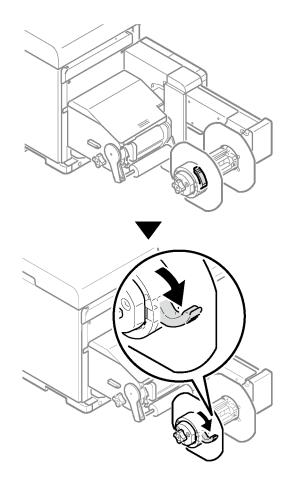
Note: If you drop roll paper, it may roll on the floor and cause injury to the people around.

Note: To prevent roll paper from dropping, store it horizontally on a desk, etc.

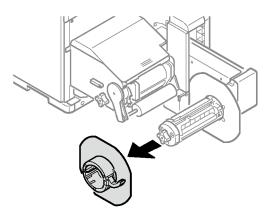
Note: Do not use any roll paper that is not specified by the Roll Paper Specifications.

If the printer is turned OFF, press the **POWER** button to turn it on.

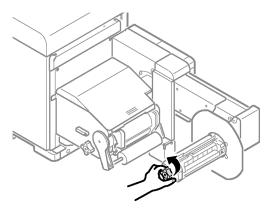
1 Open the Flange Locking Lever.



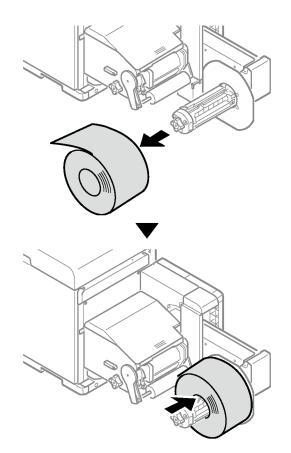
2 Remove the flange.



3 Rotate the Roll Paper Holder Knob to contract the Roll Paper Holder shaft.



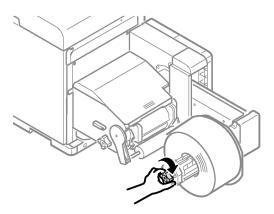
4 Slide roll paper onto the Roll Paper Holder shaft as far as it will go.



Note: Make sure to slide the roll paper as far as it will go. Insufficiently sliding the roll paper can adversely affect print position accuracy.

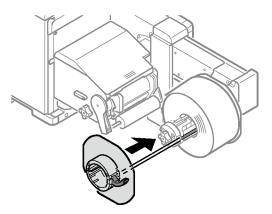
Note: Take care to avoid pinching your fingers or hands when sliding the roll paper.

5 Rotate the Roll Paper Holder Knob to fix the roll paper core in place.

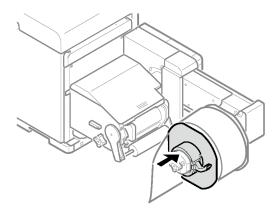


Note: Rotate the Roll Paper Holder Knob until it clicks.

6 Aligning the Flange with the Roll Paper Holder shaft as shown in the illustration, attach the Flange.



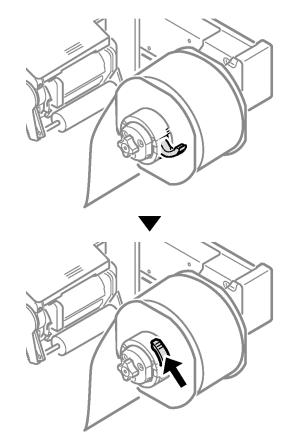
7 Slide the Flange as far as it will go in accordance with the roll paper width.



Note: Slide the Flange up to the side of the loaded roll paper.

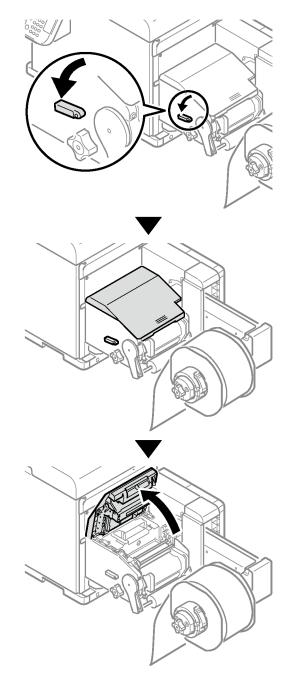
Note: Take care to avoid pinching your fingers or hands when attaching the Flange.

8 Close the Flange Locking Lever.



Caution: After loading roll paper, take care not to rest your body weight on the top of the Roll Paper Holder shaft. Doing so risks causing injury due to the device falling.

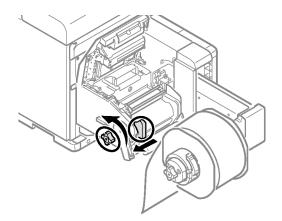
9 Lower the Unwinder Cover Open Lever to open the Unwinder Cover.



Open the Unwinder Cover manually in the direction indicated by the arrow until it locks.

Note: Open the Unwinder Cover until it locks securely.

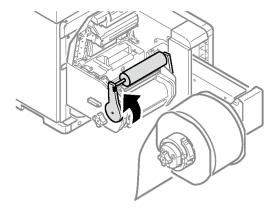
10 Before loading the paper, rotate the Roll Paper Guide Adjustment Knob counterclockwise and move the Roll Paper Guide towards you.



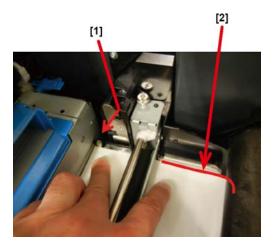
11 Pull up the F0 Roller Release Lever.

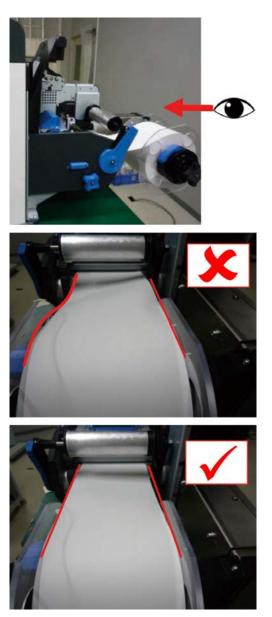


12 Press the Tension Bar Open Lever upwards until it clicks.



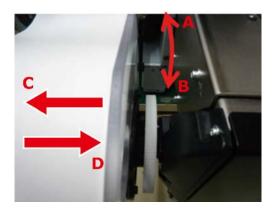
13 Pass paper below the Tension Bar and F0 Roller, and align the leading edge of the paper with the Roll Paper Guide [1] and Paper Guide [2].





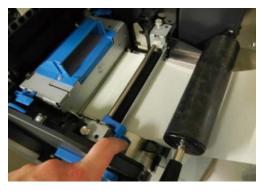
14 Check the paper status from the direction indicated by the arrow.

15 Rotate the Roll Paper Guide Adjustment Knob to adjust the paper until it is straight.



If you rotate the Roll Paper Guide Adjustment Knob in:

- Direction A the roll paper moves in the direction C
- Direction B the roll paper moves in the direction D
- **16** Lower the F0 Roller Release Lever to fix the roller in place.



17 Press down on the Tension Bar Open Lever until it clicks.

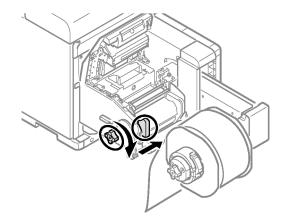


18 After loading the paper, rotate the Roll Paper Guide Adjustment Knob clockwise and align the Roll Paper Guide to the width of the paper.

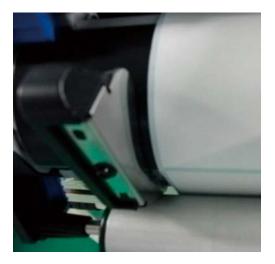
Note: Set the Paper Guide correctly. If the Paper Guide is not set correctly, the width of the paper cannot be detected correctly.

Note: Be careful that the Roll Paper Guide does not press too strongly on the paper. Doing so could damage the paper.

Note: Do not allow too much of a gap between the paper and the Roll Paper Guide. Doing so could allow the paper to twist and the print position to shift.



• In the following example, the gap is too large.



• In the following example, the Roll Paper Guide is aligned to the width of the paper.

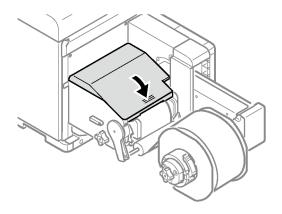


• In the following example, the Paper Guide is too tight.



19 Close the Unwinder Cover.

Caution: When closing the Unwinder Cover, there is a risk of pinching your fingers or hands. Press the top of the Unwinder Cover to close it.



Calibrating the Sensor

Check the position of the sensor each time you load paper. Check the position of the sensor in the following cases especially.

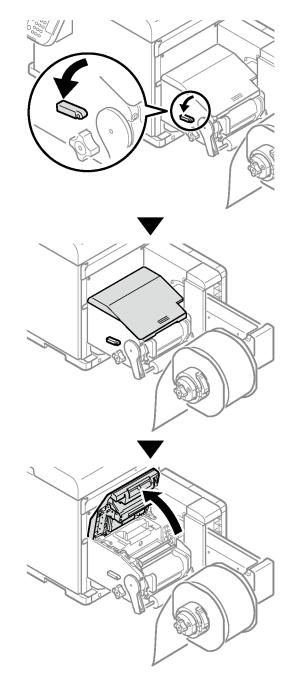
- When you load a different type of paper
- When you switch the type of sensor from black mark sensor to gap sensor
- When you switch the type of sensor from gap sensor to black mark sensor

If the sensor position settings do not match, paper feed jams may occur, you cannot adjust the black mark sensor or the gap sensor, and the skew in the adjusted values may cause the print position to skew.

Confirming the Unwinder Sensor Position

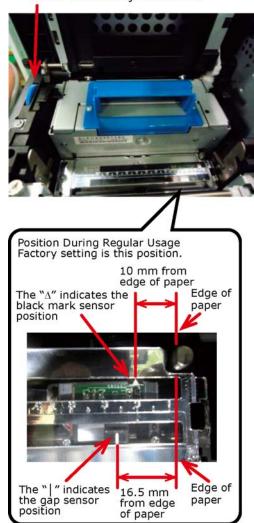
1 Lower the Unwinder Cover Open Lever to open the Unwinder Cover.

Open the Unwinder Cover manually in the direction indicated by the arrow until it locks.



Note: Open the Unwinder Cover until it locks securely.

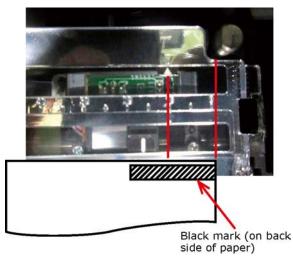
2 Confirm the sensor position.



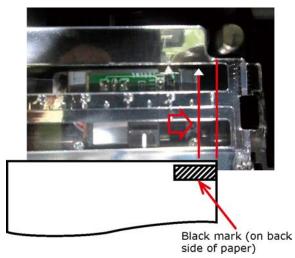
Sensor Position Adjustment Dial

a) Check the black mark sensor position

Align the paper, and check the actual position of the black mark and the black mark sensor position.



If the position of the black mark and the black mark sensor position do not align, rotate the Sensor Position Adjustment Dial to adjust the position (go to step 3).



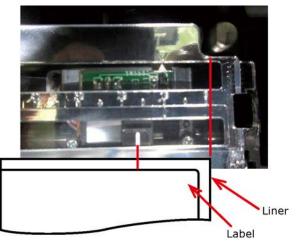
The black mark sensor position is set 10 mm from the edge of the paper.

If the black mark is about 15 mm from the edge of the paper, you do not need to adjust it.

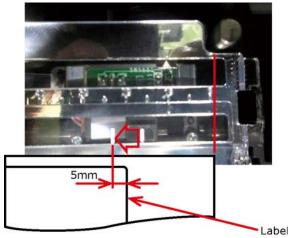
If the black mark is 15 mm or less from the edge of the paper, adjust the position of the Δ so it is in the center of the black mark.

b) Check the gap sensor position

Align the paper, and check the actual position of the label and the gap sensor position.



If the position of the label and the gap sensor position do not align in relation to the regular usage position, rotate the Sensor Position Adjustment Dial to adjust the position (go to step 3).



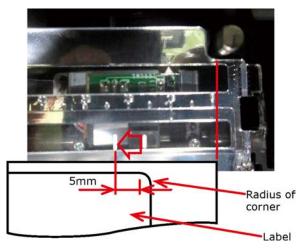
The gap sensor position is set 16.5 mm from the edge of the paper.

If there is 10 mm or less on the right and left edges of the liner, then adjustments are not necessary.

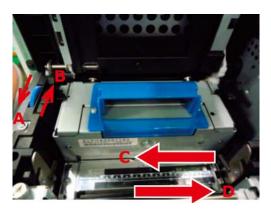
If there is 10 mm or more on the right and left edges of the liner, then adjust the gap sensor using the above positions as a rough estimate.

If the corners of the label are rounded, then consider the position of the radius of the corner.

Refer to the following example of adjusting the position.



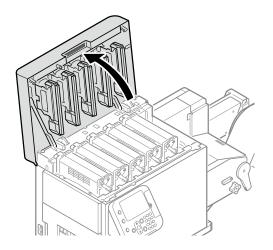
3 Rotate the Sensor Position Adjustment Dial to adjust the sensor position.



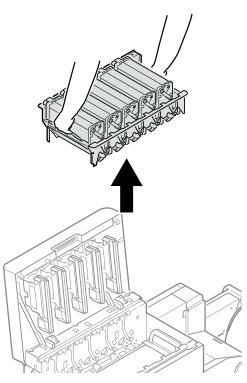
- If you rotate the Sensor Position Adjustment Dial in direction A, the sensor position moves in the direction C.
- If you rotate the Sensor Position Adjustment Dial in direction B, the sensor position moves in the direction D.

Confirming the Printer Sensor Position

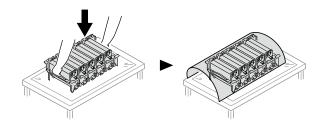
1 Grasp the top cover open lever and open the top cover.



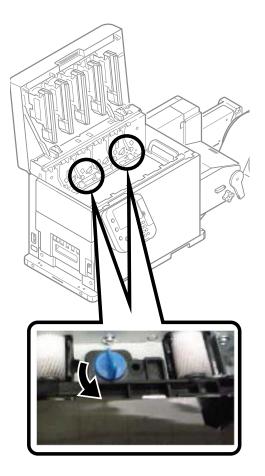
2 Remove the print cartridge set.



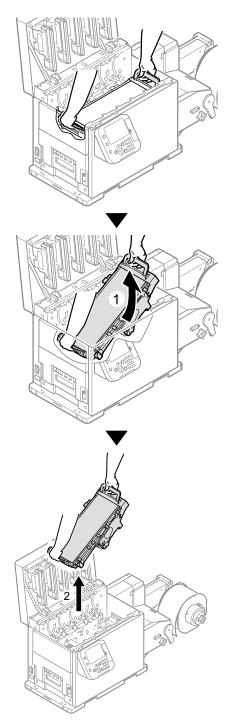
3 Place the removed print cartridge set on a flat surface covered with newspaper or something similar, and cover it with paper so it is not exposed to direct light.



4 Turn the two belt locking keys counterclockwise to release the lock.



5 Hold the belt unit handles (blue) on the left and right, and remove the belt unit at an angle.

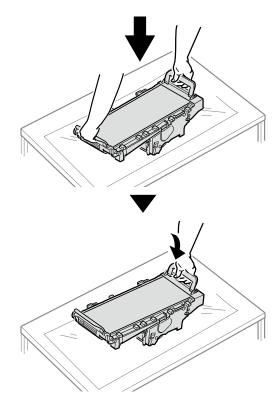


Caution: Be careful not to spill waste toner while removing the belt unit.

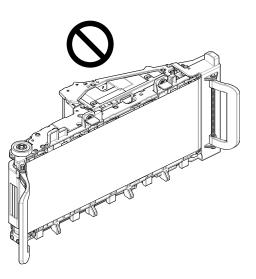
Caution: Be careful to not pinch your hands or fingers between the handle and the machine while removing the belt unit.

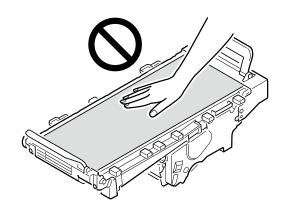
Caution: When removing the belt unit, do not tilt it further than is needed to remove it.

6 Place the belt unit with the right side down on a flat surface covered with paper.



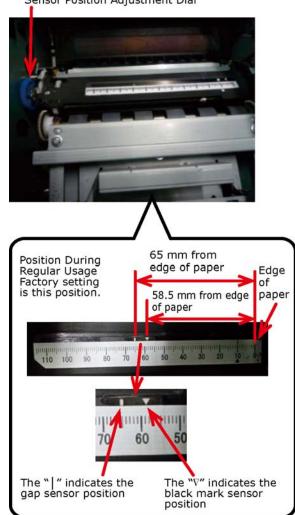
Caution: Place the belt unit on a flat surface, as shown in the diagram above. Do not stand it on its side.





Caution: Do not touch the belt surface or damage the belt.

7 Confirm the sensor position.



Sensor Position Adjustment Dial

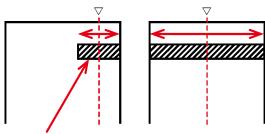
a) Check the black mark sensor position

Align the paper, and check the actual position of the black mark and the black mark sensor position.

If the position of the black mark and the black mark sensor position do not align, rotate the Sensor Position Adjustment Dial to adjust the position (go to step 8).

The black mark sensor position is set, at the factory, to 58.5 mm from the right edge of the label liner.

Adjust the position of the arrow so it is in the center of the black mark of the media you are using.



Black mark (on back side or paper)

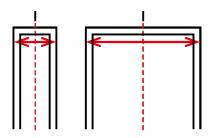
b) Check the gap sensor position

Align the paper, and check the actual position of the label and the gap sensor position.

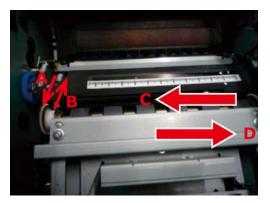
If the position of the label and the gap sensor position do not align, rotate the Sensor Position Adjustment Dial to adjust the position (go to step 8).

The gap sensor position is set, at the factory, to 65 mm from the right edge of the label liner.

Adjust the position of the arrow so it is in the center of the labels of the media you are using.

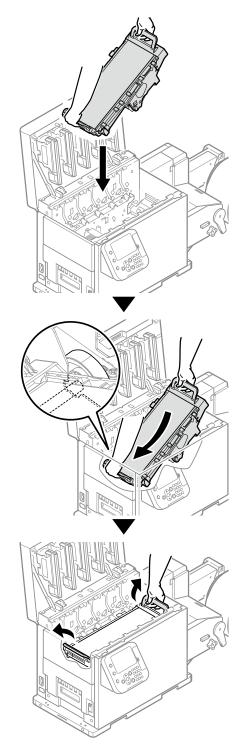


8 Rotate the Sensor Position Adjustment Dial to adjust the sensor position.



- If you rotate the Sensor Position Adjustment Dial in direction A, the sensor position moves in the direction C.
- If you rotate the Sensor Position Adjustment Dial in direction B, the sensor position moves in the direction D.

9 Tilt the belt unit and align the arrow labels (red) on the belt unit and printer to position it, and then open the belt unit handles (blue) on the left and right.

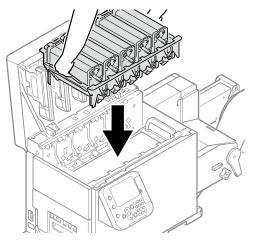


Caution: Be careful to not pinch your hands or fingers between the handle and the machine while installing the belt unit.

10 Turn the two belt unit locking keys clockwise to lock it.

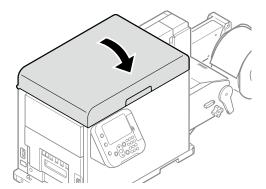


11 Put the print cartridge set back into the printer.



Caution: There is a risk of pinching your fingers or hands when repositioning the print cartridge set. Hold the handle parts of the basket for this operation.

12 Close the top cover.



Caution: When closing the top cover, there is a risk of pinching your fingers or hands in the top cover or the top cover's support. Press on the top of the top cover to close it.

Caution: There is a risk of pinching your fingers or hands if you hold the LED head while closing the top cover. Press on the top of the top cover to close it.

Sensor Calibration

- 1 Click Start and select Control Panel in Windows.
- 2 Click View devices and printers.
- 3 Right-click the **QL-300** icon, and then select **Printing preferences**.
- 4 On the Setup tab, click User-defined paper.

<u> </u>	<u>F</u> avorites		
1	Current setting(De	fault setting)	<u>M</u> anagement
2	Paper se <u>t</u> tings:	Continuous 4.000 x 6.000in ~	User- <u>d</u> efined paper
3		Format: Continuous Paper Media Type: Plain	
4		Media Weight: Medium Light (96-140 μm)	
5	Orientation :	Portrait Clandscape 180°	Mirror Print
	C <u>o</u> pies:	Collate	Print in reverse order
6		✓ To prioritize collation specified by application	
7	<u>C</u> ut Mode:	Only cut at the end of job $\qquad \lor$	
8			
9	<u>Q</u> uality:	Fine / Detail (1200 x 1200) ~	P <u>h</u> oto Enhance
Ħ		Scree <u>n</u> : Prioritize resolution ~	

- 5 Input information about the paper you want to register. To adjust settings that are already registered, select the names of the paper from the list in **Registered user-defined paper**.
- 6 Click Sensor Adjustment.

Paper Name: New paper Paper Information Registered user-defined paper: Add Media Fogm: Die-cut Label (Black Mark) New paper Add Overwrite: Plain label Continuous A6 105.0.x 148.0mm Overwrite: Media Type: Plain label Decomposition Size 4.000 x 6.000in Overwrite: Media Weight: Media Weight: Delete Sensor settings: 1. User settings 1 Size Sensor Adjustment Printer information acquisition Size Sensor settings: 111.3 © [12.7 - 1320.8 @ millimeters O inch Image: Size 4.000 © [-2.0 - 2.0] Image: Size 4.000 © [2.0 - 2.54 Y position: 0.0 © [-2.0 - 2.0] Image: Size 4.000 © [2.0 - 2.54 Size 4.000 © [2.0 - 2.54 Y position: 0.0 © [-2.0 - 2.0] Image: Size 4.000 © [2.0 - 2.54 Size 6.000 © [2.0 - 2.54 Y position: 0.0 © [-2.0 - 2.0] Image: Size 6.000 © [2.0 - 2.54 Size 6.000 © [2.0 - 2.54 Y position: 0.0 © [-0.5 - 0.5] Image: Size 6.000 © [3.0 - 10.0 Size 6.000 © [3.0 - 10.0	er-defined pape										
New paper Continuous 4.000 x 6.000in Overwrite Delete Media Lype: Media Weight: Mediaum Light (96-140 µm) Sensor settings: 1. User settings 1 Sensor settings: 1. User settings 1 Size Sensor Adjustment Printer information acquisition Size Label length(2) 111.3 © [12.7 - 1320.8] Print position correction Print position correction Right gap 2.0 © [2.5 4 - 126.0] Y position: 0.0 © [-2.0 - 2.0] Page region Gardboard width 101.6 © [29.4 - 130.0] Margin 2.12 Gap 3.0 © [3.0 - 10.0]	Paper <u>N</u> ame:	<new paper=""></new>					Paper Informatio	n			
Continuous 4.000 k6.000in Continuous 4.000 x 6.000in User Defined Size 4.000 x 6.000in User Defined Size 4.000 x 6.000in Media Upe: Plain label Media Weight: Mediau Light (96-140 µm) Sensor settings: 1. User settings 1 Sensor Adjustment Printer information acquisition Size Unit Image: Solution correction Image: Solution correction X position: 0.0 ⊕ [-2.0 - 2.0] Y position: 0.0 ⊕ [-2.0 - 2.0] Y position: 0.0 ⊕ [-2.0 - 2.0] Generation Generation Gardboard width 101.6 ⊕ [29.4 - 130.0 Margin 2.12 Cut position correction 3.0 ⊕ [3.0 - 10.0	Registered user-	de <u>f</u> ined paper:					Media Fo <u>r</u> m:	Die-c	ut Label (Black Mark)		~
Delete Sensor settings: 1. User settings 1 Sensor settings: 1. User settings 1 Sensor Adjustment Printer information acquisition Stre Internet of the settings 1 Image: Sensor Adjustment Printer information acquisition Stre Internet of the settings 1 Image: Sensor Adjustment Printer information acquisition Image: Sensor Adjustment Printer information acquisitio	Continuous 4.0 Continuous A6	105.0 x 148.0mm									``
Printer information acquisition Size Unit millimeters millimeters millimeters millimeters millimeters millimeters millime					<u>D</u> e	lete		1. Use	er settings 1		``
Size Unit									-		
Gap 3.0 - 10.0	Unit millimeters Print position cc X position: 0.	orrection 0 🚔 [-2.0] Paper Feed		****	Label width Right gap Cardboard v	X	97.6 • [25.4 2.0 • [2.0 101.6 • [29.4	126.0 25.4	
		rrection	0.5			¥	-			10.0	

Sensor Adjustment appears if the following conditions are met.

- The Media Form is one of the following: Continuous Paper (Black Mark), Die-cut Label (Gap), Die-cut Label (Black Mark), Continuous Label (Black Mark)
- The Ports of the printer driver is USB or standard TCP/IP port

Before performing Sensor Adjustment, make sure that the printer is "online".

7 Click Next.

Sensor Adjustment		×
Starts Black Mark	sensor adjustment.	
Information of th	e paper to be adjusted is as follows.	
Paper Name	: Label BM1 120x100	
Paper form	: Die-cut Label (Black Mark)	
Label length	: 111.3mm	
Label width	: 97.6mm	
Gap	: 3.0mm	
Set applicable pa	per to the printer, and click [Next].	
	<bac<u>k <u>N</u>ext> C</bac<u>	ancle

- Before performing the next steps of this procedure, make sure that paper is loaded.
- If there are no paper size settings configured on the control panel, it may cause a paper size mismatch on the device. Pressing the **OK** button on the control panel overwrites the device paper size setting with the paper size setting in the printer driver.
- 8 Select a registration location for the adjustment, and then enter a registration name.

Sensor Adjustment						
		-	ı destination. destination for adjı	ustment values from t	the following list.	
	No.	Status	Registered nar	me		
	2 U 3 U 5 U 7 U 9 U 10 U	nregistered nregistered nregistered nregistered nregistered nregistered nregistered nregistered nregistered	User settings 1 User settings 3 User settings 4 User settings 5 User settings 6 User settings 7 User settings 8 User settings 9 User settings 10)		
	Registered	l	190MM ime, and click [Nex < <u>B</u> ack	t]. <u>N</u> ext>	Cancel	

You can enter up to eight alphanumeric English characters for the registration name.

	Selects the registration destination. Select the registration destination for adju:	stment values from the following list.
A	No. Status Registered nam 1 Unregistered User settings 2 2 Unregistered User settings 3 4 Unregistered User settings 4 5 Unregistered User settings 5 6 Unregistered User settings 4 7 Unregistered User settings 6 9 Unregistered User settings 6 9 Unegistered User settings 10 10 Unregistered User settings 10	
	Registered name: 190MM Input the registered name, and click [Next]]. Next> Cancel
ensor Adjustment		
	Sensor being adjusted.	
	Wait for a while until sensor adjustment is	complete.

9 Click **Next**. This starts the sensor adjustment and displays a wait message.

10 When the completion screen appears, click Complete.

	adjustment con ered with the foll		
No.	Status	Registered name	
1 2 3 4 5 6 7 8 9 10	Registered Unregistered Unregistered Unregistered Unregistered Unregistered Unregistered Unregistered Unregistered	190MM User settings 2 User settings 3 User settings 4 User settings 6 User settings 7 User settings 7 User settings 8 User settings 9 User settings 10	

The results of adjusting the sensor are registered on the printer. In **Sensor settings** in **User-defined paper** in the printer driver, you can specify the number registered in the printer for the adjustment results and whether to apply it when printing. By standardizing the registration numbers of the sensor adjustment results, you can get the same print results by specifying the same number in **Sensor settings** in the printer driver for any printer. This is useful when printing on the same media on multiple printers.

- 11 To register new settings, click **Add** or click **Overwrite** to select paper that is already registered.
- 12 Click **OK** as many times as necessary to exit the "Printing preferences" screen.

- **13** Open the file to be printed.
- **14** Specify a registered paper size, and then print.

If You Cannot Set the Sensors from the Printer Driver

If you cannot set the sensors from the printer driver, then set them from the control panel.

Black mark sensor

- 1 Confirm the sensor position
- 2 Configure the sensor type

Media form = Continuous Paper (Black Mark), Die-cut Label (Black Mark), or Continuous Label (Black Mark)

3 Configure the paper size

Paper Size = Custom

X Dimension = Input the "label width"

For die-cut labels (black marks):

- Paper length = Input the "label length"
- Gap Length = Input the "gap length"

Otherwise:

- Black mark interval = Input the "length between black marks"
- 4 Execute sensor calibration

Sensor calibration \rightarrow Execute

Gap sensor

- 1 Confirm the sensor position
- 2 Configure the sensor type

Media form = Die-cut Label (Gap)

3 Configure the paper size

Paper Size = Custom

X Dimension = Input the "label width"

Y Dimension = Input the "label length"

Gap Length = Input the "gap length"

4 Execute sensor calibration

Sensor calibration \rightarrow Execute

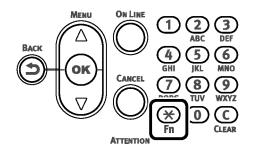
Calibrating the Black Mark Sensor

You can adjust the black marks on roll paper using the black mark sensor.

Here, we will show the method when Continuous Label (Black Mark) are used.

1 Press the Fn key.

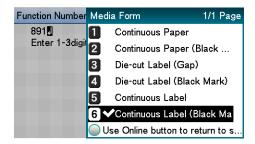
The numerical values input screen will be displayed.



2 Press 8, 9, 1 (function numbers), and then press the OK button.

Function Number	
891. Enter 1-3digit Number	

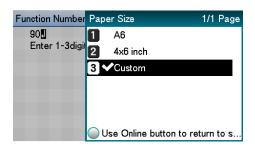
3 Select 6. Continuous Label (Black Mark), and then press the OK button.



- 4 Press the **ON LINE** button to return to the standby screen.
- 5 Press the **Fn** key, and then press the following buttons: **9**, **0**, **OK**.

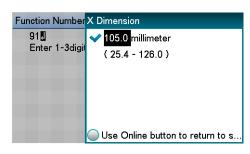
Function Number	
90	
Enter 1-3digit Number	

6 On the Paper Size menu, select **Custom**, press the **OK** button, and then press the **ON LINE** button. The display will return to the standby screen.



7 Press the **Fn** key, and then press the following buttons: **9**, **1**, **OK**.

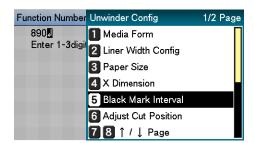
8 Use the numeric keypad to enter the label width, press the **OK** button, and then press the **ON LINE** button. The display will return to the standby screen.



9 Press the **Fn** key, and then press the following buttons: **8**, **9**, **0**, **OK**.

Func	tion Num	ber			
8	90				
E	nter 1-3o	ligit Num	ber		

10 Select Black Mark Interval from Unwinder Config, and then press the OK button.



11 Use the numeric keypad to enter the Black Mark Interval, press the **OK** button, and then press the **ON LINE** button.

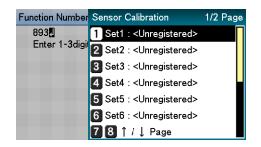
The display will return to the standby screen.

	Black Mark Interval
890 <mark>.</mark> Enter 1-3digi	✓ 151.2 millimeter
	(15.9 - 1324.0)
	Use Online button to return to s

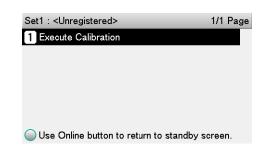
12 Press the **Fn** key, and then press the following buttons: **8**, **9**, **3**, **OK**.

Function Number	
893.	
Enter 1-3digit Number	

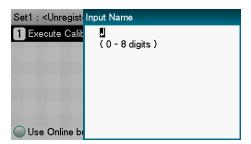
13 Select the setting number of the sensor to be configured, and then press the **OK** button.



14 Select Execute Calibration, and then press the OK button.

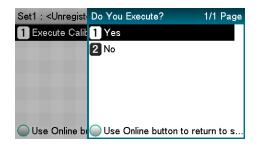


15 Enter the sensor calibration name, and then press the **OK** button.



You can leave the name blank, if you want.

16 If an execution confirmation screen appears, select Yes.



17 This executes sensor calibration.



18 After sensor calibration is complete, press the OK button.

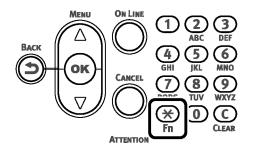


Calibrating the Gap Sensor

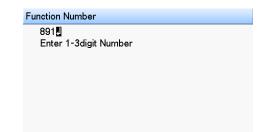
You can adjust the distance between die cut labels using the gap sensor.

1 Press the Fn key.

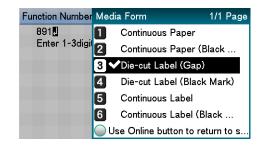
The numerical values input screen will be displayed.



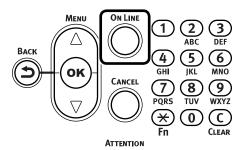
2 Press 8, 9, 1 (function numbers), and then press the OK button.



3 Select 3. Die-cut Label (Gap), and then press the OK button.



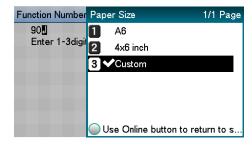
4 Press the **ON LINE** button to return to the standby screen.



5 Press the **Fn** key, and then press the following buttons: **9**, **0**, **OK**.

Function Number	
90 <mark>1.</mark> Enter 1-3digit Number	

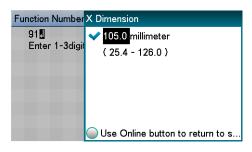
6 On the Paper Size menu, select **Custom**, press the **OK** button, and then press the **ON LINE** button. The display will return to the standby screen.



7 Press the **Fn** key, and then press the following buttons: **9**, **1**, **OK**.

Function Number	
91	
Enter 1-3digit Number	

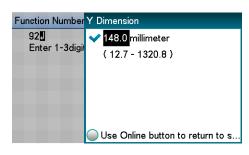
8 Use the numeric keypad to enter the label width, press the **OK** button, and then press the **ON LINE** button. The display will return to the standby screen.



9 Press the **Fn** key, and then press the following buttons: 9, 2, OK.

Function Number	
92.	
Enter 1-3digit Number	

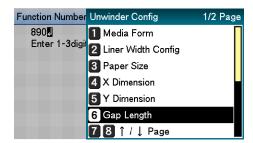
10 Use the numeric keypad to enter the label length, press the **OK** button, and then press the **ON LINE** button. The display will return to the standby screen.



11 Press 8, 9, 0 (function numbers), and then press the OK button.

Fund	tion Num	ber			
	90				
E	Enter 1-3	digit Num	ber		

12 Select Gap Length from Unwinder Config, and then press the OK button.



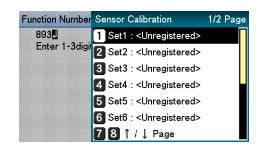
13 Use the numeric keypad to enter the gap length, press the **OK** button, and then press the **ON LINE** button. The display will return to the standby screen.

Function Number	Gap Length
890 0	✓ 3.0 millimeter
Enter 1-3digi	(3.0 - 10.0)
	Use Online button to return to s

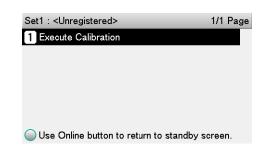
14 Press the **Fn** key, and then press the following buttons: **8**, **9**, **3**, **OK**.

Function Number	
893 0 Enter 1-3digit Number	

15 Select the setting number of the sensor to be configured, and then press the **OK** button.



16 Select Execute Calibration, and then press the OK button.

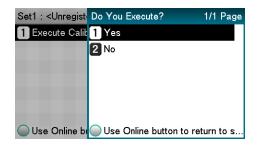


17 Enter the sensor calibration name, and then press the **OK** button.

Set1 : <unregist< th=""><th>Input Name</th></unregist<>	Input Name
Execute Calit	
	(0 - 8 digits)
🔵 Use Online bi	

You can leave the name blank, if you want.

18 If an execution confirmation screen appears, select **Yes**.



19 This executes sensor calibration.



20 After sensor calibration is complete, press the OK button.

Sensor Calibration Succ	ess	
Press OK Button		

Detecting the Interval between Pages

Detecting the Interval between Pages with the Printer Driver

You can use the following procedure, from the printer driver, to register the paper gap and black mark interval on the device. Registering these settings improves your printing results. However, it does waste approximately 10 sheets of paper.

- 1 Click Start and select Control Panel in Windows.
- 2 Click View devices and printers.
- 3 Right-click the QL-300 icon, and then select Printing preferences.
- 4 On the Setup tab, click User-defined paper.
- 5 After confirming that the paper name you entered in the "Paper Name" box is shown under **Registered user-defined paper**, click **Close**.

User-defined paper				×
Paper <u>N</u> ame: Label BM1 120x100 Registered user-defined paper:		Paper Information Media Fo <u>r</u> m:	Die-cut Label (Gap)	~
New paper Continuous A6.000 x 6.000in Continuous A6 105.0 x 148.0mm User Defined Size 4.000 x 6.000in	<u>A</u> dd Overwrit <u>e</u>	Media <u>T</u> ype:	Plain label Medium Light (96-140 μm)	~
Label BM1 120x100 97.6 x 101.6mm	<u>D</u> elete	Media <u>W</u> eight: Sensor sett <u>i</u> ngs:	1. User settings 1	~
			Sensor Adjustme Printer infor <u>m</u> ation ac	
Size Unit millimeters inch Print position correction X gosition: 0.0 I -2.0 2.0] Y pgsition: 0.0 I -2.0 2.0] Cut position correction Y Pogition: 0.0 I -0.5 0.5]		Label length(Y) Label width(2) Right gap Cardboard widt Margin Gap	97.6 ♥ [25.4 · 2.0 ♥ [2.0 · h 101.6 ♥ [29.4 ·	1320.8] 126.0] 25.4] 130.0]
			Close	<u>H</u> elp

6 For **Paper settings**, select the paper settings you registered, and then click **Paper interval** detection.

Setup (Color O	verlays Extend				
Examp	ole	<u>F</u> avorites				
•	1	Current setting		~	<u>S</u> ave	<u>M</u> anagement
	2	Paper se <u>t</u> tings:	Label BM1 120x	100 97.6 x 101.6mm	~	User- <u>d</u> efined paper
Paper F	3		Format: Media Type:	Die-cut Label (Gap) Plain label		Paper interval detection
Paper Feed Direction	4		Media Weight: Sensor Setting:	Medium Light (96-14 1. User settings 1	0 μm)	
tion	5	Orientation :	Portrait	Landscape	180°	Mirror Print

Paper interval detection is displayed if the following conditions are met.

The Media Form is one of the following:

- Continuous Paper (Black Mark)
- Die-cut Label (Gap)
- Die-cut Label (Black Mark)
- Continuous Label (Black Mark)

If Paper interval detection does not appear, return to step 4 of this procedure.

7 Confirm the displayed paper information, and then click Measure.

Check Media Gap			×
	Check media gap. The information of the a	idjust paper is as follows.	
	Paper Name :	Label BM1 120x100	
	Paper form :	Die-cut Label (Gap)	
	Label length :	101.6mm	
	Label width :	97.6mm	
	Gap :	3.0mm	
	Please set the coinciden	t paper in printer then push [Calculate] button.	
		Measur <u>e</u> Cancle <u>H</u> elp	

This starts checking the media pitch and closes the dialog box.

Note: If you change to another type of paper or restart the printer, you should configure this setting again.

- 8 Click OK as many times as necessary to exit the **Printing preferences** screen.
- 9 Open the file to be printed.
- **10** Specify a registered paper size, and then print.

Detecting the Interval between Pages with the Control Panel

Detect the paper gap and black mark interval from the control panel.

1 For black mark media, execute steps 1 to 11 in "Calibrating the Black Mark Sensor" on page 122.

For gap media, execute steps 1 to 13 in "Calibrating the Gap Sensor" on page 126.

- 2 Press the Fn key.
- 3 Press 8, 9, 4 (function numbers) and then press the OK button.

Function	Number			
894 Enter	·1-3digit N	lumber		
Chiel	-Sugit N	umber		

4 Select **Execute**, and then press the **OK** button to start paper interval detection and close the dialog box.

Function Number	Check Media Pitch	1/1 Page
894	1 Execute	
Enter 1-3digi		
	Use Online button	to return to s

Printing

After loading the paper, use the computer to open the file you want to print. Next, use the printer driver to select the **Paper Size** and **Paper Weight**, and then print.

Note: When printing on label paper for the first time, execute **Sensor Adjustment** before printing.

Printing from the Windows PCL Printer Driver

Here, we will show how to print an open WordPad file as an example.

- 1 Select Page Setup in the File menu.
- 2 Select the paper size and print orientation, and then click OK.

- 3 On the File menu, click Print > Print.
- 4 Click Preferences.
- 5 On the Setup tab, configure Paper settings.

	1	<u>F</u> avorites		
T	-	Current setting(De	fault setting) V <u>S</u> ave <u>M</u> ana	agement
т	2	Paper se <u>t</u> tings:	Continuous 4.000 x 6.000in Ver-defin	ed paper
Pap	3		Format: Continuous Paper	
er Fe	3		Media Type: Plain	
Paper Feed Direction	4		Media Weight: Medium Light (96-140 μm)	
ction	5	Orientation :	Portrait Clandscape 180° Mirror Pri	nt
	6	Copies:	1 🖨 🗌 Collate 🗌 Print in rg	verse order
	•		To prioritize collation specified by application	
	7	Cut Mode:	Only cut at the end of job \checkmark	
	8			
	9	Quality:	Fine / Detail (1200 x 1200)	hance
			Scree <u>n</u> : Prioritize resolution ~	

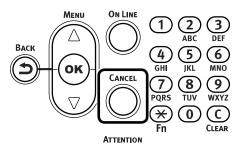
Configure the Cut Mode setting on the Setup tab as required.

- 6 When the settings are complete, click **OK** in the "Setup" screen.
- 7 Click **Print** in the "Print" screen to print.

Canceling a Print Job

Use the procedure below to cancel a print job from the printer's control panel.

1 On the control panel, press the **CANCEL** button.



2 If a verification message appears, select **Yes**, and then press the **OK** button.

Print Function Settings

Printer Driver Functions Table

This section explains the convenient functions when printing from a PC.

Explanation of Functions

Windows PCL Printer Driver Functions S

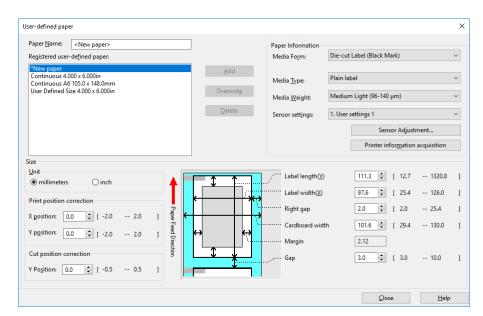
Setup	Tab
-------	-----

۱ 🔺	1	<u>F</u> avorites		
T	•	Current setting	✓ <u>Save</u>	Management
	2	Paper se <u>t</u> tings:	Label TX 101.6 x 76.2mm 🛛 🗸	User- <u>d</u> efined paper
Paper Feed Direction	3		Format: Continuous Paper (Black Mark) Media Type: Plain label	Paper interval detection
ed Direct	4		Media Weight: Medium Light (96-140 μm) Sensor Setting: 1. User settings 1	
10n	5	Orientation :	Portrait Candscape 180°	Mirror Print
	6	C <u>o</u> pies:	1 Collate	Print in reverse order
	7	<u>C</u> ut Mode:	Only cut at the end of job	
	8			
	9	Quality:	Fine / Detail (1200 x 1200) ~	Photo Enhance
			Scree <u>n</u> : Prioritize resolution ~	

Item	Description
Example	Shows what printing results will be based on current settings. This example is just an approximation and does not indicate the exact actual number of print pages and cut positions.
Paper settings	Specifies, from among registered paper set- tings, which one should be applied for print- ing.
Orientation	Specifies the print orientation.
Copies	Specifies the quantity to be printed.
Cut Mode	Specifies the timing to cut roll paper when cutting and printing on it.

Item	Description
Quality	Specifies the resolution during printing.
Screen	Specifies the halftoning available with the device.
User-defined paper	Click when using the driver to register paper settings to be used for printing.
Paper interval detection	Before printing to black mark or die-cut labels, click to execute learning on the device to improve the print position before starting.
	Note that executing this function will cause some paper to be used.
About	Displays the printer driver version informa- tion.
Default	Restores default settings.

User-defined paper



Item	Description
Paper Name	Enter the name of the paper settings you want to register.
Registered user-defined paper	Shows a list of paper settings that have been registered

Item	Description
Size	Specifies either millimeters or inches as the unit for input values.
Print position correction	Adjusts the print start position on the paper edge.
Cut position correction	Adjusts the cut position when cutting and printing roll paper
Media Form	Specifies the paper setting type to be regis- tered.
	Size input items change in accordance with this setting.
Media Type	Specifies the paper type.
Media Weight	Specifies the paper thickness.
Sensor settings	Specifies the settings, from among those registered on the device, to be used for printing.
Sensor Adjustment	Click to calibrate the gap of black mark or die-cut labels, and register the results as device sensor settings.
	This button is not displayed for media forms that do not require calibration.
Printer information acquisition	Obtains, from devices, the names of set- tings registered as sensor settings and the names of user types registered as paper types, and reflects them in the sensor set- tings and paper type list on the printer driver.

Color Tab

1	<u>F</u> avorites				
-	Current setting		~	<u>S</u> ave	<u>M</u> anagemer
2	Color Mode:	Color			
3		Automatic		~	Detai <u>l</u>
_		Always create 100%	<u>b</u> lack (K) toner		
4		O Monochrome			
5		Ma <u>n</u> ual settings			
6	Spot Color:	💋 Do not use		\sim	
7		Sp <u>o</u> t color toner	quantity adjustment		
8		Off			
9	<u>T</u> oner Saving:	Uff		~	
		Do not save 100% b	blac <u>k</u> toner		

Item	Description
Color Mode	Selects either color printing or monochrome printing.When color is selected, clicking Detail displays the "Detail" dialog box, which can be used to configure detailed color printing settings.
Spot Color	Specifies how white toner should be used for printing. This item available only on the QL-300s.
Toner Saving	Specifies the print density when economiz- ing on toner.

Overlays Tab

Exampl	1	<u>F</u> avorites			
T	•	Current setting		✓ <u>Save</u>	Management
	2	Do not use overlay print	t	~	
Paper Feed Direction	3				
Feed	_	Name	ID	Description	<u>E</u> dit list
Direct	4				Test Print
<u>9</u> .	5				
	6				
	•				
	7				
	8				
	9				
ļ	_				
1	1				

Item	Description
Overlays	Specifies whether or not a form should be overlaid on the document to be printed, or whether the document should be registered as a new form in the device.

Extend Tab

	1	avorites Current setting	~	<u>S</u> ave	Management
	2	<u>W</u> atermarks	You can print data created b	y an application with a v	watermark over it.
^o aper Fe	3				
Paper Feed Direction	4	Fon <u>t</u> s	Makes settings related to Tr	ueType fonts and printer	fonts.
tion	5				
	6				
	7				
	8				
	9				

	Item	Description	
ſ	Watermarks	Sets when implementing stamp printing.	

Item	Description
Fonts	Configures TrueType and printer font set- tings.

Control Panel Menu Functions Table

Device Setup Screen

Item	Description
Configuration	View device information (total number of sheets, remaining wear item quantity, system information, etc.)
Print Information	Print the settings, usage report, error log, color profile list, and user media lists for this machine.
Menus	Used to configure system settings, print position adjustment, color, and other settings.
Admin Setup	Administrator sets the network settings, changes passwords, etc.
Print Statistics	Check the print use status of the user.
Calibration	Used to adjust the color densities and shades, color misalignment, etc.
Boot Menu	Set whether or not to restart the printer when a malfunction occurs in the HDD or file system, etc.

Configuration

Item			Description
Feeder Count	Unwinder	որորոր	Displays the total print quantity for the unwinder. (This is the number of sheets converted into the A6 size paper from the length of paper fed from the unwinder.)

Item			Description
Supplies Life	Cyan Print Cartridge	Remaining nnn%	Shows the remaining service life (%) — of each color's print cartridge.
	Magenta Print Car- tridge	Remaining nnn%	White is displayed with QL-300s only.
	Yellow Print Car- tridge	Remaining nnn%	
	Black Print Cartridge	Remaining nnn%	
	White Print Cartridge	Remaining nnn%	
	Waste Toner Box	Remaining nnn%	Shows the remaining service life (%) of the waste toner box.
	Belt	Remaining nnn%	Shows the remaining service life (%) of the belt unit.
	Fuser	Remaining nnn%	Shows the remaining service life (%) of the fuser unit.

Item			Description
Network	Printer Name	********* ********* *****	Shows the printer name used by the DNS and Network PnP.
	Short Printer Name	****** *****	Displays the short printer name.
	IPv4 Address	xxx.xxx.xxx	Shows the IP address. When TCP/IP is enabled, shows the setup of the fol- lowing control panel setting Admin Setup > Network Setup > IPv4 Address.
	Subnet Mask	xxx.xxx.xxx	Displays the subnet mask. When TCP/IP is enabled, shows the setup of the following control panel setting Admin Setup > Network Setup > Subnet Mask.
	Gateway Address	xxx.xxx.xxx	Displays the gateway address. When TCP/IP is enabled, shows the setup of the following control panel setting Admin Setup > Network Setup > Gateway Address.
	MAC Address	xx:xx:xx: xx:xx:xx	Shows the MAC address.
	Network FW Version	xx.xx	Shows the network firmware version.
	Web Remote Version	xx.xx	Shows the web page version.
	IPv6 Address (Local)	XXXX:XXXX:XXXX:XXXX: XXXX:XXXX:XXXX:XX	Shows the (local) IPv6 address. This menu is not displayed when TCP/IP is disabled or when the IP version is IPv4.
	IPv6 Address (Global)	XXXX:XXXX:XXXX:XXXX: XXXX:XXXX:XXXX:XX	Shows the (global) IPv6 address. This menu is not displayed when TCP/IP is disabled or when the IP version is IPv4.

	Item		Description
System	Serial Number	xxxxxxxxx xxxxxxxxx xxxxxx	Displays the serial number.
	Asset Number	xxxxxxxxx xxxxxxxxx xxxxxxxxxx	Displays the asset number of the printer manager.
	Lot Number	XXXXXXXXXXXX XXXXXXXXXXXX XX	Displays the lot number.
	Firmware Version	xxx.xx_x_x	Shows the version number of Firm- Suite.
	CU Version	XX.XX	Displays the control unit firmware ver- sion.
	PU Version	XX.XX.XX	Displays the printer unit firmware ver- sion.
	RAM	ххМВ	Shows the total availability of all mounted RAM.
	Flash Memory	xxMB[Fxx]	Displays the total availability of all flash memory and flash system versions installed.
	HDD	xx.xxGB [Fxx]	Displays the HDD size and file system version installed.
	Date and Time	mm/dd/yyyy or dd/mm/yyyy	Displays the current date and time.

Print Information

Item			Description
Configuration		Execute	Prints the device setup details.
Demo Page	DEMO1	Execute	Prints the demo pages.

Item		Description
File List	Execute	Prints the file list.
Usage Report	Execute	Prints the total print results.
		Not displayed if Disable is set for the control panel Print Statistics > Usage Report item.
Error Log	Execute	Prints the error log.
Color Profile List	Execute	Prints the color profile list.
User Media List	Execute	Prints the user media list.
		Displayed when the user media is reg- istered.
Test Print-1	Execute	Prints the patterns for analyzing the print quality.
Test Print-2	Execute	Prints the patterns for analyzing the CMYK print quality.
Test Print-3	Execute	Prints the patterns for analyzing the status of the print cartridges.
Test Print-4	Execute	Prints the patterns for analyzing print quality of the spot colors.
		Displayed with QL-300s only.
Cleaning Page	Execute	Prints the toner-free white sheet to remove dirt from the surface of the fuser belt in the fuser unit.

Menus

Unwinder Config

Item	Value	Description
Media Form	Continuous Paper Continuous Paper (Black Mark) Die-cut Label (Gap) Die-cut Label (Black Mark) Continuous Label Continuous Label (Black Mark)	Specifies the shape of the roll paper.

Item		Value	Description
Liner Width Config	Liner Width	Auto	Specifies the mode for set- ting the width of the label's
	Mode	Custom	liner.
			Auto: The width of the liner is set given that the label is in the center of the liner.
			Custom: The width of the liner is input and the left gap is calculated given that the left and right gaps are different.
	Liner	29.4 millimeter	Inputs the width of the liner.
	Width	(1.16 inch)	Appears when the Liner Width Mode is "Custom".
		105.6 millimeter	The initial values vary depending on your operat-
		(4.16 inch)	ing environment.
		109.0 millimeter	
		(4.29 inch)	
		130.0 millimeter	
		(5.12 inch)	
	Right Gap	2.0 millimeter	Specifies the distance from the right edge of the label to
		(0.08 inch)	the right edge of the liner.
		1	
		25.4 millimeter	
		(1.00 inch)	
Paper Size		A6	Sets the size of the paper for the unwinder.
		4x6 inch	The initial values vary
		Custom	depending on your operat- ing environment.

Item	Value	Description
X Dimension	25.4 millimeter (1.00 inch)	Sets the width of the cus- tom paper sizes for the unwinder.
	 101.6 millimeter (4.00 inch) 105.0 millimeter (4.13 inch)	Sets the dimension perpen- dicular to the paper feed direction. * 130.0 mm (5.12 inch) if the Media Form is Continu- ous Paper or Continuous Paper (Black Mark)
	 126.0 millimeter (4.96 inch)*	The initial values vary depending on your operat- ing environment.
Y Dimension	12.7 millimeter (0.50 inch)	Sets the length of the cus- tom paper sizes for the unwinder.
	 101.6 millimeter (4.00 inch) 148.0 millimeter (5.83 inch) 152.4 millimeter (6.00 inch)	Sets the same direction as for the dimension in the paper feed direction. If the setting is 101.6 mm (4.00 inch) or lower, then the set page length is han- dled as a whole-number multiple of the actual length of the page such that it exceeds 101.6 mm (4.00 inch). The initial values vary
	 1320.8 millimeter (52.00 inch)	depending on your operat- ing environment.

Item	Value	Description
Black Mark Interval	15.9 millimeter	Sets the interval of the marks on custom paper for
	(0.63 inch)	the unwinder.
	 101.6 millimeter (4.00 inch)	Sets the same direction as for the dimension in the paper feed direction.
	 151.2 millimeter	If the setting is 104.8 mm (4.13 inch) or lower, then
	(5.95 inch)	the set page length is han- dled as a whole-number
	155.6 millimeter	multiple of the actual length of the page such that it
	(6.13 inch)	exceeds 101.6 mm (4.00 inch).
	1	The initial values vary
	1324.0 millimeter	depending on your operat- ing environment.
	(52.13 inch)	
Gap Length	3.0 millimeter	Sets the interval for labels.
	(0.12 inch)	Sets the same direction as
	1	for the dimension in the paper feed direction.
	10.0 millimeter	
	(0.39 inch)	
Adjust Cut Position	-0.5 millimeter	Specifies the compensa- tion value for the distance
	(-0.02 inch)	from the print completion position to the cut position
		(beginning of next label).
	0.0 millimeter	(Specifies margin on follow- ing edge).
	(0.00 inch)	If you specify a negative value, cutting is done at a
	+0.5 millimeter	short position.
	(+0.02 inch)	

Item	Value	Description
Media Type	Plain	Sets the type of the paper
	Plain Labels	for the unwinder.
	Glossy Labels	USERTYPE 1 to 20 are dis- played when they are regis-
	Film Labels1	tered.
	Film Labels2	
	Film1	
	Film2	
	USERTYPE1	
	USERTYPE2	
	USERTYPE3	
	USERTYPE4	
	USERTYPE5	
	USERTYPE6	
	USERTYPE7	
	USERTYPE8	
	USERTYPE9	
	USERTYPE10	
	USERTYPE11	
	USERTYPE12	
	USERTYPE13	
	USERTYPE14	
	USERTYPE15	
	USERTYPE16	
	USERTYPE17	
	USERTYPE18	
	USERTYPE19	
	USERTYPE20	

	lte	em	Value	Description
Media Weig	yht		Light Medium Light Medium Medium Heavy Heavy Ultra Heavy1 Ultra Heavy2	Sets the thickness of the paper for the unwinder.
Sensor Set	ting		Ultra Heavy3 Set1 : Set2 : Set3 : Set4 : Set5 : Set6 : Set7 : Set8 : Set9 : Set10 :	Sets the sensitivity of the gap sensor or black mark sensor. Only the adjusted sensor setting is displayed. Appears when the Media Form is something other than Continuous Paper or Continuous Label.
Sensor Calibra- tion	Set1 : Set2 : Set3 : Set4 : Set5 : Set6 : Set7 : Set8 : Set9 : Set10 :	Execute Calibration	Execute	Executes calibration of the gap sensor or black mark sensor.

	lte	em		Value	Description
Sensor	Set1 :	Adjust	Reflective	0 - 1023	Fine tunes the sensitivity of
Calibra- tion	Set2 :	Slice Level	Sensor in Unwinder		the reflective sensor in the unwinder that was mea-
	Set3 :				sured during Sensor Cali- bration.
	Set4 :				The default value fluctuates
	Set5 :				according to the results of the calibration.
	Set6 :				Appears when the black
	Set7 :				mark sensor is used.
	Set8 :				
	Set9 :				
	Set10 :				
Sensor	Set1 :	Adjust	Reflective	0 - 1023	Fine tunes the sensitivity of
Calibra- tion	Set2 :	Slice Level	Sensor in Printer		the reflective sensor in the device that was measured
	Set3 :				during Sensor Calibration.
	Set4 :				The default value fluctuates according to the results of
	Set5 :				the calibration.
	Set6 :				Appears when the black mark sensor is used.
	Set7 :				
	Set8 :				
	Set9 :				
	Set10 :				

	Item		Value	Description	
Sensor	Set1 :	Adjust	Transmis-	0 - 1023	Fine tunes the sensitivity of
Calibra- tion	Set2 :	Slice Level	sion Sen- sor in		the transmission sensor in the unwinder that was mea-
	Set3 :		Unwinder		sured during Sensor Cali- bration.
	Set4 :				The default value fluctuates
	Set5 :				according to the results of the calibration.
	Set6 :				Appears when the gap sen-
	Set7 :				sor is used.
	Set8 :				
	Set9 :				
	Set10 :				
Sensor	Set1 :	Adjust Slice	Transmis-	0 - 1023	Fine tunes the sensitivity of
Calibra- tion	Set2 :	Level	sion Sen- sor in		the transmission sensor in the device that was mea-
	Set3 :		Printer		sured during Sensor Cali- bration.
	Set4 :				The default value fluctuates
	Set5 :				according to the results of the calibration.
	Set6 :				
	Set7 :				Appears when the gap sen- sor is used.
	Set8 :				
	Set9 :				
	Set10 :				

	lte	em	Value	Description
Sensor Calibra-	Set1 :	Change Name	Execute	You can change the name of the specified setting
tion	Set2 :			numbers.
	Set3 :			You can use up to eight
	Set4 :			characters of single-byte upper case English and
	Set5 :			numbers.
	Set6 :			
	Set7 :			
	Set8 :			
	Set9 :			
	Set10 :			
Sensor	Set1 :	Reset Setting	Execute	Initializes the content of the
Calibra- tion	Set2 :			specified setting numbers.
	Set3 :			
	Set4 :			
	Set5 :			
	Set6 :			
	Set7 :			
	Set8 :			
	Set9 :			
	Set10 :			
Check Me	dia Pitch		Execute	Measures the intervals on the paper.
				Appears when the Media Form is something other than Continuous Paper or Continuous Label.

Cutter Setup

Item	Value	Description
Cut Mode	Job Collation Specified Interval	Specifies the cutting opera- tion. Job: Cuts at the end of a job. Collation: Cuts at the end of the job and at the end of the job collation. Specified Interval: Cuts in units of the specified num- ber of pages. Cuts at the end of the collation/job.
Cut Interval	1 9999	Sets how many pages are cut each time. Appears when the Cut Mode is "Specified Inter- val".

Bold indicates factory-set values.

System Adjust

Item	Value	Description
Power Save Time	1 minute	Sets the time until the
	2 minutes	printer enters power save mode.
	3 minutes	
	4 minutes	
	5 minutes	
	10 minutes	
	15 minutes	
	30 minutes	
	60 minutes	

Item	Value	Description
Auto Power Off Time	1 hour	Sets the time until the
	2 hours	printer enters OFF mode from stand-by status.
	3 hours	
	4 hours	
	8 hours	
	12 hours	
	18 hours	
	24 hours	
Clearable Warning	ONLINE	Sets the timing until clear-
	Job	able warning display turns OFF.
Timeout InJob	Off	Sets the time from loss of
	5 seconds	the receipt of data until force-printing.
	10 seconds	With PS, the job is can-
	20 seconds	celed without printing.
	30 seconds	
	40 seconds	
	50 seconds	
	60 seconds	
	90 seconds	
	120 seconds	
	150 seconds	
	180 seconds	
	210 seconds	
	240 seconds	
	270 seconds	
	300 seconds	

Item	Value	Description
Timeout Local	0 seconds	Sets the time for each port
	5 seconds	to be kept opened after printing. (Excludes net-
	1	work)
	90 seconds	
	1	
	290 seconds	
	295 seconds	
	300 seconds	
Timeout Network	0 seconds	Sets the time for the net-
	5 seconds	work port to be kept opened after printing.
	1	
	90 seconds	
	1	
	290 seconds	
	295 seconds	
	300 seconds	
Error Report	On	Specifies whether to print
	Off	error reports when an inter- nal PCL or PS error occurs.
Hex Dump	Execute	Prints received data in hexadecimal dump.
		Turn off the power to stop printing the hex dump.

Print Adjust

lte	em	Value	Description
Print Position Adjust	X Adjust	0.00 millimeters +0.1 millimeters +2.00 millimeters -2.00 millimeters -0.1 millimeters	Adjusts the overall image print position perpendicu- larly (horizontally) in the direction of paper feed (0.1 mm intervals).
	Y Adjust	0.00 millimeters +0.1 millimeters +2.00 millimeters -2.00 millimeters -0.1 millimeters	Adjusts the overall image print position in the direc- tion of paper feed (verti- cally) (0.1 mm intervals).

Item	Value	Description
Paper Edge Detect Mode	Mode1 Mode2 Off	Set the action of the con- trols for the leading edge of the media to avoid image skew and detection position skew of the leading edge of labels.
		Mode1: For long leading edges, this setting automat- ically cuts/outputs and then starts printing. For short leading edges, printing just starts. (Applicable for the gap/black mark setting)
		Mode2: For short or long leading edges, this setting automatically cuts/outputs and then starts printing for both situations. (Applicable for the gap/black mark set- ting if the leading edge is long. If the leading edge is short, then only the gap setting is applicable.)
		Off: With this mode, the user straightens the leading edge so paper is not wasted. (Applicable for the gap/black mark setting)

ltem	Value	Description
Roll Paper End Detect Mode	Auto Stop Forced Cut	Sets the control for ejecting the trailing edge of the paper to auto, stop feeding, or forced cut.
		Auto: With this mode, the trailing edge is processed appropriately according to the media.
		Stop: With this mode, feed is forced to stop when the trailing edge of the paper is detected, regardless of the length or type of media.
		Forced Cut: With this mode, the system is forced to cut and eject the paper when the trailing edge of the paper is detected, regardless of the length or type of media.
Media Transfer Setting Black	0	Performs fine adjustment if black is faded or tiny white
	+1	spots appear when printing with the black (K) print car-
	+2	tridge only (when printing
	+3	with the YMCW print car- tridges are raised).
	-3	Lower the setting value if
	-2	there are only fewer white spots, or raise the setting
	-1	value if the high-density portion is thinner.
Media Transfer Setting Color	0	Performs fine adjustment if
	+1	colors are faded or tiny white spots appear when
	+2	printing with two or more print cartridges or just the
	+3	white (W) print cartridge.
	-3	Lower the setting value if there are only fewer white
	-2	spots, or raise the setting
	-1	value if the high-density portion is thinner.

	Item	Value	Description
SMR Setting	Cyan Magenta Yellow Black White	0 +3 6 -1	 Compensates for uneven print density due to temperature and humidity, and printing quantity, using indicated color. Raise the setting value if it is blurred. Lower the setting value if the density darkens partially. Continued use with the setting value raised has a risk of printing stains. Continued use with the setting value lowered has a risk of blurring. White is displayed with QL-300s only.
BG Setting	Cyan Magenta Yellow Black White	0 +1 +2 +3 -3 -2 -1	 Compensates for print results variation due to dif- ferences in the temperature and humidity, using indi- cated color. Lower the set- ting value if the underlay is dark. Continued use with the setting value lowered has a risk of printing stains. White is displayed with QL-300s only.
Drum Cleaning	1	On Off	Sets whether to implement drum cleaning before print- ing. The image quality may be improved.
Transfer Roller Clea	ning	Execute	Implements cleaning of the 2nd transfer roller unit.

	Item	Value	Description
Transfer Setting	Cyan Transfer Setting	0	Lower the setting value if
		+1	lateral-stripe white dots and dark streaks appear for
		+2	cyan, green and blue toner.
		+3	Raise the setting value if the high-density portion of
		-3	cyan, green and blue is thinner.
		-2	
		-1	
Transfer Setting	Magenta Transfer Set-	0	Lower the setting value if
	ting	+1	lateral-stripe white dots and dark streaks appear for
		+2	magenta and/or red toner.
		+3	Raise the setting value if the high-density portion of
		-3	magenta and/or red is thin- ner.
		-2	
		-1	
Transfer Setting	Yellow Transfer Setting	0	Lower the setting value if
		+1	lateral-stripe white dots and dark streaks appear for yel-
		+2	low toner.
		+3	Raise the setting value if the high-density portion of
		-3	yellow is thinner.
		-2	
		-1	
Transfer Setting	Black Transfer Setting	0	Lower the setting value if
		+1	lateral-stripe white dots and dark streaks appear for
		+2	black toner.
		+3	Raise the setting value if the high-density portion of
		-3	black is thinner.
		-2	
		-1	

Ite	em	Value	Description
Transfer Setting	White Transfer Setting	0 +1 +2 +3 -3 -2 -1	Lower the setting value if lateral-stripe white dots and dark streaks appear for white toner. Raise the setting value if the high-density portion of white is thinner. White is displayed with QL-300s only.
DV Roller Cleaning 1		On Off	Adjust the toner disposal threshold. On: Image quality priority Off: Toner life priority
DV Roller Cleaning 2		Mode 1 Mode 2 Off	May be effective against lateral striping caused by variations in ambient tem- perature and/or humidity. Try mode 2 if desired results are not produced by mode 1.

Admin Setup

To enter this menu, it is necessary to enter the password. The factory default setting of the administrator password is 999999.

Network Setup

Item	Value	Description
TCP/IP	Enable Disable	Enables/disables TCP/IP protocols.
NetBIOS over TCP	Enable Disable	Enables/disables NetBIOS over TCP/IP. Appears when Enable is set on the control panel for TCP/IP.

Item	Value	Description
IP Address Set	Auto Manual	Specifies whether to request the IP address from the DHCP server. Appears when Enable is
		set on the control panel for TCP/IP.
IPv4 Address	XXX.XXX.XXX	Sets the IP address. Appears when Enable is set on the control panel for TCP/IP.
		Appears when Manual is set on the control panel for IP Address Set.
Subnet Mask	XXX.XXX.XXX	Sets the subnet mask. Appears when Enable is set on the control panel for TCP/IP. Appears when Manual is
Gateway Address	xxx.xxx.xxx	set on the control panel for IP Address Set. Sets the gateway address. Appears when Enable is set on the control panel for TCP/IP.
		Appears when Manual is set on the control panel for IP Address Set.
Web	Enable Disable	Enables/disables access using web browsers. Appears when Enable is set on the control panel for TCP/IP.
Telnet	Enable Disable	Enables/disables access using Telnet. Appears when Enable is set on the control panel for TCP/IP.

Item	Value	Description
FTP	Enable Disable	Enables/disables access using FTP. Appears when Enable is set on the control panel for TCP/IP.
IPSec	Enable Disable	Enables/disables access using IPsec. Appears when Enable is set on the control panel for TCP/IP.
SNMP	Enable Disable	Enables/disables access using SNMP. Appears when Enable is set on the control panel for TCP/IP.
Network Scale	Normal Small	Normal: Printer operates effectively even if con- nected to a hub with span- ning tree functions. However, printer startup time becomes longer when two or three computers are connected to a small-scale LAN. Small: Covers small scale LANs with 2 or 3 PCs to large scale LANs are cov- ered, but if connected to a hub with spanning tree functions, operations may not be effective.
Gigabit Network	Enable Disable	Sets whether to support a Gigabit network.
Hub Link Setting	Auto Negotiate 100Base-TX Full 100Base-TX Half 10Base-T Full 10Base-T Half	Sets the connection mode to the hub.

Item	Value	Description
Network Factory Defaults	Execute	Restores the settings, such as network, mail server, LDAP server, and secure protocol server, etc., to their default values.

USB Setup

Item	Value	Description
USB	Enable	Enables/disables access using a USB interface.
	Disable	
Speed	480Mbps	Sets the maximum baud
	12Mbps	rate using a USB interface.
Soft Reset	Enable	Enables/disables the soft- ware reset command.
	Disable	ware reset command.
Serial Number	Enable	Enables/disables the USB serial number.
	Disable	
		The USB serial number is used to identify USB
		devices connected to a PC.
Offline Receive	Enable	Sets whether to receive data even if offline or a
	Disable	recoverable error occurs.

Bold indicates factory-set values.

Print Setup

Item	Value	Description
Personality	Auto PCL	Select the print language. Print language switching is automatic when set to Auto.
	PostScript	

	ltem	Value	Description
Copies		1	Sets the copy quantity.
		9999	This setting is ignored in case of local print.
		3333	This setting is disabled unless the Job Copy set- ting is 1.
Job Copy		1	Sets the print quantity.
		999	This setting is ignored in case of local print.
			The settings in the printer driver always overwrite these settings.
			* This setting is enabled only if Collate is checked and 1 is specified as the number of copies in the PCL printer driver.
Edge to Edge		On	Sets the print margin.
		Off	
Resolution		600dpi	Sets the resolution.
		1200dpi	
Toner Save	Toner Save Level	Off	Set the toner save quantity.
		Low	Specifies Off when toner
		Middle	save mode is disabled.
		High	
	Color	All	All: All colors, including
		Except 100%	100% black, comprise all the target colors for toner
		Black	saving.
			Except 100% Black: All col- ors, excluding 100% black, comprise all the target col- ors for toner saving.

Item	Value	Description
Check Unnecessary Print Cartridge	On Off	Set whether to generate an error or continue printing when a print cartridge is detected to be down even though it is not being used as a specified color for the print data.
		On: An error is displayed and the print job is can- celled, to give priority to the service life of the print car- tridge.
		Off: A warning screen is displayed, but printing con- tinues because priority is given to productivity.
Default Orientation	Portrait	Sets the print orientation.
	Landscape	
Trapping	Off	Sets trapping.
	Narrow	Narrow/Choke White,
	Narrow / Choke White	Wide/Choke White, and Choke White are displayed
	Wide	for the QL-300s only.
	Wide / Choke White	
	Choke White	

PS Setup

Item	Value	Description
Network Protocol	ASCII RAW	Specifies the PS communi- cation protocol mode for data from the network.
USB Protocol	ASCII RAW	Specifies the PS communi- cation protocol mode for data from USB.

PCL Setup

Item	Value	Description
Font Source	Resident	Sets the location of the
	Resident2	fonts to be used.
	Downloaded	
Font Number	10	Sets the numbers of the
	C1	fonts to be used.
	S1	
Font Pitch	0.44 CPI	Sets the font width.
	1	Increases and reduces in
	10.00 CPI	0.01 CPI units.
	1	Displayed when the font selected using Font Num-
	99.99 CPI	ber is an outline font with fixed spacing.
Font Height	4.00 points	Sets the font height.
	I	Increases and reduces in
	12.00 points	0.25 point units.
	I	Displayed when the font selected using Font Num-
	999.75 points	ber is an outline font with variable spacing.
Symbol Set	PC-8	Select the symbol set.
	PC-8 Dan/Nor	
	PC-8 Grk	
	PC-8 TK	
	PC-775	
	I	
	PC Ext D/N	
	PC Ext US	
	PC Set1	
	PC Set2 D/N	
	PC Set2 US	

ltem	Value	Description
CR Function	CR	Specifies the operation
	CR+LF	when a CR code is received.
LF Function	LF	Specifies the operation
	LF+CR	when an LF code is received.
Print Margin	Normal	Sets the area of the paper
	1/5 inch	where printing is not possible.
	1/6 inch	
	1/8 inch	
	1/12.5 inch	
True Black	On	Specifies whether to use
	Off	mixed CMYK or black toner only for printing black of image data.
Pen Width Adjust	On	Compensates so that thin
	Off	lines are visible.

Color Setup

Item	Value	Description
Ink Simulation	Off SWOP ISO Coated Japan	Sets the ink simulation. This setting is enabled only for PS language jobs.
UCR	Low Normal High	You can select the black plate (black) amount during color printing. Setting more black plate economizes on the toner of the other three colors.
CMY 100% Density	Enable Disable	Enables/disables 100% output for CMY 100% shade values.

Item	Value	Description
CMYK Conversion	On Off	You can select the method of total toner quantity con- trol for CMYK data. Select Off to disable GCR (Gray Component Replacement). Furthermore, this menu setting is disabled if using the ink simulation function.

Panel Setup

Item	Value	Description
Idle Display	Supplies Life	Sets the information dis-
	Unwinder Config	played in the standby screen.
Panel Brightness During Operation	5	Adjusts the brightness
	1	(backlight luminosity) of the control panel LCD.
	31	The set brightness is
		applied during control panel operations.
Panel Brightness While Power Save	0	Adjusts the brightness
	1	(backlight luminosity) of the control panel LCD.
	1	The set brightness is
	1	applied after the panel backlight timer time has
	31	elapsed from the last oper- ation.
Panel Backlight Timer	10	Adjusts the time (in sec-
	1	onds) from the last opera- tion until Panel Brightness
	30	While Power Save is applied.
	1	
	300	

Time Setup

Item	Value	Description
Date Format	yyyy/mm/dd	Sets the date display mode.
	mm/dd/yyyy	The initial values vary
	dd/mm/yyyy	depending on your operat- ing environment.
Time Zone	-12:00	Sets the time difference from GMT in 15-minute
		units. If the time zone set-
	+0:00	ting is changed, the time differences before and after
	1	the change are reflected in the current time.
	+13:00	
Daylight Saving	On	Sets whether to display
	Off	daylight saving time.
		On: Sets the current time 1 hour forward.
		Off: Sets the current time 1 hour back.
Time Setting	2000/01/01 00 :00	Sets the time.
	1	
	2091/12/31 23 :59	

Bold indicates factory-set values.

Power Setup

Item	Value	Description
Power Save	Enable	Enables/disables power
	Disable	save mode.
Auto Power Off	Enable	Sets auto power off mode.
	Auto Config	
	Disable	

Others Setup

	Item	Value	Description
RAM Setup	Receive Buffer Size	Auto	Sets the incoming buffer
		0.5 MB	size that is assured by the local interface.
		1 MB	
		2 MB	
		4 MB	
		8 MB	
		16 MB	
		32 MB	
	Resource Save	Auto	Sets the resource saving
		Off	area size.
		0.5 MB	
		1 MB	
		2 MB	
		4 MB	
		8 MB	
		16 MB	
		32 MB	
Storage Common Setup	Check File System	Execute	Implements management data (FAT information) recovery, and resolves mis- matches between the actual (free) space in the file system and the free space displayed.
	Check All Sectors	Execute	Recovers defective sector information on the HDD and file system non-confor- mances.
	Enable Initialization	No Yes	Specifies whether or not to authorize setup changes associated with HDD and flash memory initialization.

Item		Value	Description
Language Setup	Select Language	Chinese	Specifies the control panel
		English	display language.
		French	
		German	
		Italian	
		Japanese	
		Russian	
		Spanish	
	Language Initialize	Execute	Deletes the message files that have been down- loaded.
			Also, the Select Lan- guage setting returns to the factory default setting.

Item		Value	Description
Job Cancel Setup	Cancel Key Behavior	Short Long Off	Sets the operations when the device CANCEL button is pressed. Short: Hold down no lon- ger than two seconds to cancel the print job. Long: Hold down for 2 to 5 seconds to cancel a print job. Off: Disables the CANCEL button.
	Inquiry Display	On Off	Sets whether to display the inquiry screen when a job is canceled.
	Focus Position	Yes No	Sets whether to apply Yes or No focus for selection in the job cancellation inquiry screen.
	Display Timeout	60 180 300	Sets the display timeout value for the inquiry screen when a job is canceled.

Ite	Item		Description
Media Operation Setup	Inquiry Display	On Off	Specifies the operation when the FEED button or the UNLOAD button is pressed.
			On: In the cases below, a confirmation screen is displayed before the operation is executed.
			FEED: When the paper changes from a stand-by state to a through paper state
			UNLOAD/CUT: When cut is executed
			Off: Operation is per- formed without displaying a confirmation message.
	Rewinder Distance	600 millimeter (24 inch)	Specifies the amount to be fed when the FEED button
		900 millimeter (36 inch)	is pressed in the stand-by
		1200 millimeter (48 inch)	state, using the output slot as the reference point.
	Feed Distance	150 millimeter (6 inch)	Specifies the amount to be fed when the FEED button
		300 millimeter (12 inch)	is pressed in the through
		450 millimeter (18 inch)	paper state, using the cur- rent position as the refer- ence point.

Settings

Item	Value	Description
Reset Settings	Execute	Restores the user menu settings to the factory set- tings.
Save Settings	Execute	Saves the current menu settings.

Item	Value	Description
Restore Settings	Execute	Changes the saved menu settings. Displayed when Save Set- tings is executed on the control panel.

Change Password

Item	Value	Description
New Password	*****	Sets a new password to be entered in the Admin menu and Boot Menu .
Verify Password	****	Sets a new password to be entered in the Admin menu and Boot Menu for which New Password has been set.

Bold indicates factory-set values.

Print Statistics

To enter this menu, it is necessary to enter the password. The factory default setting of the administrator password is 999999.

Item	Value	Description
Usage Report	Enable Disable	Enables/disables the Usage Report function.
Supplies Report	Enable Disable	Sets whether or not to dis- play the number of wear item replacements. Not displayed if Disable is set for the control panel Print Statistics > Usage Report item.

Ite	Item		Description
Reset Main Counter		Execute	Resets the main counter aggregate value. Not displayed if Disable is set for the control panel Print Statistics > Usage Report item.
Reset Supplies Counter*2		Execute	Resets the number of wear item replacements. Not displayed if Disable is set for the control panel Supplies Report item.
Change Password*1	hange Password*1 New Password		Sets the new password to be entered in Print Statis- tics . Not displayed if Disable is set for the control panel Print Statistics > Usage Report item.
Verify Password		***	Sets a new password to be entered in the Print Statis- tics for which New Pass- word has been set. Not displayed if Disable is set for the control panel Print Statistics > Usage Report item.

Calibration

Item	Value	Description
Auto Density Mode	On Off	Sets whether to automati- cally compensate density and shade.
Adjust Density	Execute	Implements density com- pensation. Implement when the device is in stand-by status.

	Item		Description
Adjust Registration		Execute	Implements auto color mis- alignment compensation operations. Implement when the device is in stand-by status.
Color Density	Cyan Density	-3 	Adjusts the cyan density. This setting is enabled from
		0 	printing after the density compensation has been implemented.
		+3	
Color Density	Magenta Density	-3	Adjusts magenta density.
		I	This setting is enabled from printing after the density
		0	compensation has been implemented.
		+3	
Color Density	Yellow Density	-3	Adjusts yellow density.
			This setting is enabled from
		0	printing after the density compensation has been
		1	implemented.
		+3	
Color Density	Black Density	-3	Adjusts black density.
			This setting is enabled from printing after the density
		0	compensation has been implemented.
		+3	
Color Density	White Density	-3	Adjusts white density.
		I	This setting is enabled from
		0	printing after the density compensation has been implemented.
		 +3	Displayed with QL-300s only.

Item		Value	Description
Print Color Tuning Pattern		Execute	Prints patterns to match the shading characteristics.
Base Color Tuning	Highlight	A-1 A-2 B-1 B-2 O-1	Matches the color balance for the parts displayed as most clear in the highlight area of the printed color tuning pattern. The matching results are reflected in the highlight matching values for cyan, magenta, and yellow matching.
Base Color Tuning	Mid-Tone	O-2 A-1 A-2 B-1 B-2 O-1 O-2	Matches the color balance for the parts displayed as most clear in the mid-tone area of the printed color tuning pattern. The matching results are reflected in the mid-tone matching values for cyan, magenta, and yellow matching.
Base Color Tuning	Dark	A-1 A-2 B-1 B-2 O-1 O-2	Matches the color balance for the parts displayed as most clear in the dark area of the printed color tuning pattern. The matching results are reflected in the dark match- ing values for cyan, magenta, and yellow matching.

Item		Value	Description	
Fine Color Tuning	Cyan Tun-	Highlight	-4	Matches the highlights
	ing		1	(light areas) of the cyan shade characteristics.
			0	
			1	
			+4	
		Mid-Tone	-4	Matches the intermediate areas of the cyan shading
				characteristics.
			0	
			1	
			+4	
		Dark	-4	Matches the dark (dark
				areas) of the cyan shade characteristics.
			0	
			+4	

Ite	em		Value	Description
Fine Color Tuning	Magenta Tuning	Highlight	-4	Matches the highlights (light areas) of the magenta shading characteristics.
			0	
			+4	
		Mid-Tone	-4	Matches the intermediate
			1	areas of the magenta shad- ing characteristics.
			+4	
		Dark	-4	Matches the dark (dark areas) of the magenta
			0	shading characteristics.
			1	
			+4	

Ite	em		Value	Description
Fine Color Tuning	Yellow	Highlight	-4	Matches the highlights
	Tuning		1	(light areas) of the yellow shading characteristics.
			0	
			1	
			+4	
		Mid-Tone	-4	Matches the intermediate areas of the yellow shad-
			1	ing characteristics.
			0	
			1	
			+4	
		Dark	-4	Matches the dark (dark
			1	areas) of the yellow shad- ing characteristics.
			0	
			1	
			+4	

Ite	em		Value	Description
Fine Color Tuning	Black	Highlight	-3	Matches the highlights
	Tuning		1	(light areas) of the black shading characteristics.
			0	
			1	
			+3	
		Mid-Tone	-3	Matches the intermediate
			1	areas of the black shading characteristics.
			0	
			1	
			+3	
		Dark	-3	Matches the dark (dark
			1	areas) of the black shading characteristics.
			0	
			+3	
Reset Color Tuning			Execute	Resets CMYK color match- ing.

Ite	em	Value	Description
White Tuning*1	Highlight	-3 0 	Matches the highlights (light areas) of the white shading characteristics. Displayed with QL-300s only.
		+3	
	Mid-Tone	-3 	Matches the intermediate areas of the white shading characteristics.
		0 	Displayed with QL-300s only.
		+3	
	Dark	-3 	Matches the dark (dark areas) of the white shading characteristics.
		0	Displayed with QL-300s only.
		+3	
Density Adjustment Medi	a	Standard Media	Specifies the operation
		Narrow/Thick Media	speed during a density adjustment operation.
			Standard Media: Density adjustment operation per- formed at normal speed.
			Narrow/Thick Media: Den- sity adjustment operation performed at low speed.

Bold indicates factory-set values.

Boot Menu

This menu is displayed in English only.

Boot Menu

To enter this menu, press and hold the **OK** button while turning ON the power supply. Confirm that **Boot Menu** is selected and then press the **OK** button.

To enter this menu, it is necessary to enter the password. The factory default setting of the administrator password is 999999.

ltem		Value	Description
Storage Common Setup	Check File System	Execute	Executes management data (FAT information) recovery, and resolves mis- matches between the actual (free) space in the file system and the dis- played free space.
	Check All Sectors	Execute	Recovers defective sector information on the HDD and file system non-confor- mances.
Menu Lockout		On Off	Specifies whether or not to display menus on the con- trol panel.
Panel Lockout		Mode1 Mode2 Off	Sets whether to disable the operations buttons on the control panel.

Bold indicates factory-set values.

Troubleshooting

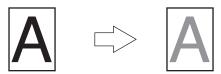
To enter this menu, press and hold the **OK** button while turning ON the power supply. Select **Troubleshooting** and then press the **OK** button.

Item	Value	Description
Sensor Calibration Reset	Execute	This resets all sensor cali- bration results to initial val- ues.

Saving Toner When Printing

Saving Toner When Printing (Toner Save Mode)

You can print by economizing the toner consumption amount by reducing the page print density. Separately enable or disable the toner economy mode for 100% black.



You can suppress the quantity of toner used by selecting one of the following five patterns as necessary to reduce toner density.

- Printer setting: Follows the printer's setup.
- Off: Prints using regular density without economizing the toner.
- Save Level Low: Prints using medium light toner.
- Save Level Middle: Prints using light toner.
- Save Level High: Prints using considerably light toner.

Toner Saving is enabled only if the print quality is specified as Normal or Draft.

The settings on the printer can be changed from **Admin Setup > Print Setup > Toner Save**. However, the printer driver settings are given priority.

Note: Toner save mode is not compatible with Spot Color printing.

- 1 Open the file to be printed.
- 2 Select **Print** in the **File** menu.
- 3 Click Preferences (or Properties).

1	Eavorites Current setting	✓ <u>S</u> ave <u>M</u> anageme
2	<u>C</u> olor Mode:	Color
3		Automatic V Detail
4		✓ Always create 100% black (K) toner ○ Monochrome
5		Ma <u>n</u> ual settings
6	Spot Color:	Do not use
7		Sp <u>o</u> t color toner quantity adjustment
8		
9	<u>T</u> oner Saving:	Off ~
=		Do not save 100% blac <u>k</u> toner

4 On the **Color** tab, use **Toner Saving** to select a toner save quantity.

5 Print.

Printing Using the Specified Print Cartridge Only (Lift Up)

The lifespan of an unused print cartridge can be prolonged by separating it from the belt unit.

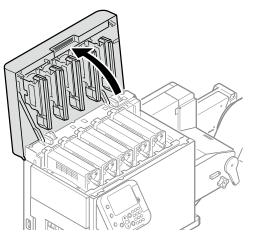
Setting combinations are shown in the table below.

Print Color	Print Cartridge to be Lifted Up
Black (K) only	Cyan, magenta, yellow, white*
White* (W) only	Black, cyan, magenta, yellow
Black + white*	Cyan, magenta, yellow
Black, cyan, magenta, yellow	White*

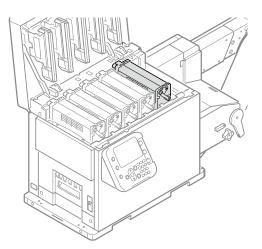
Example: Printing using the CMYK Print Cartridge only

In this example, the White* (W) Print Cartridge is lifted up.

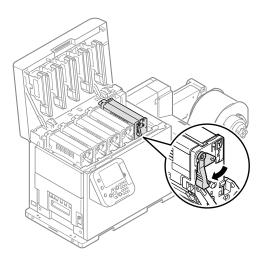
- *: Supported by QL-300s only.
- 1 Grasp the top cover open lever and open the top cover.



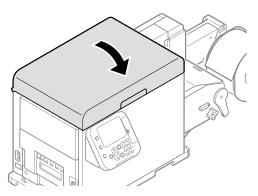
2 Check the position of the unused print cartridge via the label letters and color.



3 Turn the lift up lever on the print cartridge that is not being used clockwise to raise the print cartridge.



4 Close the top cover.



Caution: When closing the top cover, there is a risk of pinching your fingers or hands in the top cover or the top cover's support. Press on the top of the top cover to close it.

Caution: There is a risk of pinching your fingers or hands if you hold the LED head while closing the top cover. Press on the top of the top cover to close it.

Fine Quality Printing

Changing Print Quality (Resolution)

Set **Quality** by aligning to the environment in which it is used.

Selecting Fine/Detail (1200x1200 dpi) prints at the highest quality available with the printer.

- **1** Open the file to be printed.
- 2 Select Print in the File menu.
- 3 Click Preferences (or Properties).

4 On the **Setup** tab, change the **Quality** setting.

1	<u>F</u> avorites	
-	Current setting(De	efault setting) <u>S</u> ave <u>M</u> anagement.
2	Paper se <u>t</u> tings:	Continuous 4.000 x 6.000in Ver-defined paper
3		Format: Continuous Paper
-		Media Type: Plain Media Weight: Medium Light (96-140 μm)
4		Media Weight: Medium Light (90-140 µm)
5	Orientation :	Portrait O Landscape I 180° Mirror Print
6	Copies:	1 Collate Print in reverse on
•		To prioritize collation specified by application
7	<u>C</u> ut Mode:	Only cut at the end of job
8		
9	Quality:	Fine / Detail (1200 x 1200)
		Scree <u>n</u> : Prioritize resolution ~

5 Print.

Making Photograph Printing More Vivid (Photo Enhance)

You can print more natural and vivid images, such as photos, etc.

Note: This function can be used with Windows PCL printer drivers only.

- 1 Open the file to be printed.
- 2 Select Print in the File menu.
- 3 Click Preferences (or Properties).

4 On the Setup tab, select Photo Enhance in the Quality section, and then click OK.

1		fault setting)	
1	Current setting(De	rauit setting) <u>S</u> av	/e <u>M</u> anagement
2	Paper se <u>t</u> tings:	Continuous 4.000 x 6.000in	✓ User- <u>d</u> efined paper
3		Format: Continuous Paper	
		Media Type: Plain	
4		Media Weight: Medium Light (96-140 µm)	
5	Orientation :	Portrait O Landscape 180°	Mirror Print
6	C <u>o</u> pies:	1 Co <u>l</u> late	Print in reverse orde
		To prioritize collation specified by application	
7	Cut Mode:	Only cut at the end of job	~
8			
9	Quality:	Fine / Detail (1200 x 1200)	✓ □ Photo Enhance
Ħ		Scree <u>n</u> : Prioritize resolution ~	

5 Print.

Adjusting Fine Lines

You can prevent misaligned lines being printed when ultra-fine lines are specified from the application. This function is normally ON.

Depending on the application, bar code and other intervals will narrow. In this case, turn OFF the function.

- **1** Open the file to be printed.
- 2 Select Print in the File menu.
- 3 Click Preferences (or Properties).

4 On the **Extend** tab, click **Advanced**.

	- <u>F</u> avorit				
T	1 Curre	nt setting	~	<u>S</u> ave	<u>M</u> anagement
	2	Watermarks	You can print data create	d by an application with a v	watermark over it.
Paper F	3	-	·		
Paper Feed Direction	4	Fon <u>t</u> s	Makes settings related to	TrueType fonts and printer	fonts.
tion	5				
	6				
	7				
	8				
	9				
	_				

5 Select Adjust ultra fine lines. Next, select Off for Settings, and then click OK.

ltem		Setting
Keep page Overprint B		On Off Off Off
Adjust for d	verlapping colors	On
Job Spool	nance cycle before printing	Off Off Printer setting
	Adjust ultra fine lines	
<u>S</u> ettings	On 🗸	
Description		_
Adjustmen bulges whe	t of fine lines remedies the problem that n printed.	the outline of rectangle

6 Print.

Using Printer Fonts

You can print by replacing TrueType fonts with printer built-in fonts.

- The font replacement function stores the document fonts, but font designs cannot be reproduced. If it is necessary to print font designs accurately, disable the font replacement function.
- In some applications, the font replacement function may not work properly.

- **1** Open the file to be printed.
- 2 Select **Print** in the **File** menu.
- 3 Click Preferences (or Properties).

4 Click the **Extend** tab, and then select **Fonts**.

Examp	le <u>F</u> avo	prites			
	1 Cu	irrent setting	~	<u>S</u> ave	Management
	2	Watermarks	You can print data create	d by an application with a	watermark over it.
Paper Fi	3	_	·		
Paper Feed Direction	4	Fon <u>t</u> s	Makes settings related to	TrueType fonts and printe	r fonts.
stion	5				
	6				
	7				
	8				
	9				

5 On the "Font" screen, select the **Font Substitution** check box.

For this printer, this check box is selected as the default setting.

Download as Outline Fon	-	9	
Download as Bitmap Fon	9	¢.	
✓ Font Substitution			
ont Substitution Table			
For IrueType Font:		Use Printer Font:	
I of True type Long			
Arabic Transparent	^	(Not Substituted)	1
	^		,
Arabic Transparent	^	(Not Substituted)	ŕ
Arabic Transparent Arial	^	(Not Substituted) AvantGarde	,
Arabic Transparent Arial Arial Baltic	^	(Not Substituted) AvantGarde Bookman	,
Arabic Transparent Arial Arial Baltic Arial Black Arial CE Arial CYR	^	(Not Substituted) AvantGarde Bookman Helvetica-Narrow NewCenturySchlbk Palatino	,
Arabic Transparent Arial Arial Baltic Arial Black Arial CE Arial CR Arial Greek	^	(Not Substituted) AvantGarde Bookman Helvetica-Narrow NewCenturySchlbk Palatino ZapfChancery	,
Arabic Transparent Arial Arial Baltic Arial Black Arial CE Arial CYR	~	(Not Substituted) AvantGarde Bookman Helvetica-Narrow NewCenturySchlbk Palatino	,

- 6 Use the **Font Substitution Table** to specify which printer fonts should replace the TrueType fonts.
- 7 Print.

Using Computer Fonts

You can output TrueType fonts as they appear on the screen.

Note: Print time may be longer.

- **1** Open the file to be printed.
- 2 Select **Print** in the **File** menu.

- 3 Click Preferences (or Properties).
- 4 On the **Extend** tab, click **Fonts**.
- 5 On the "Font" screen, clear the **Font Substitution** check box.
 - Download as Outline Font The font image is created by the printer.
 - **Download as Bitmap Font** The font information is created by the printer driver.

Download as Bitmap Font Font Substitution		a	
ont Substitution Table For <u>T</u> rueType Font:		Use <u>P</u> rinter Font:	
Arabic Transparent Arial Arial Baltic Arial Black Arial CE Arial CYR Arial Greek Arial TUR Bahnschrift	*	(Not Substituted) AvantGarde Bookman Helvetica-Narrow NewCenturySchlbk Palatino ZapfChancery CourierPS Helvetica	^

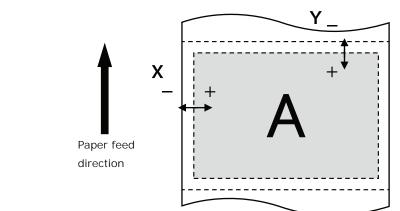
6 Print.

Adjusting the Print Position on the Paper

You can correct the print start position vertically and horizontally on the paper by the printer settings.

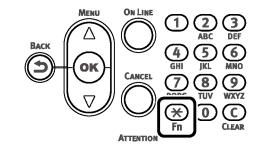
Please refer to the following procedure.

Using the Roll Paper

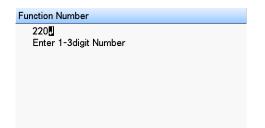


1 Press the **Fn** key.

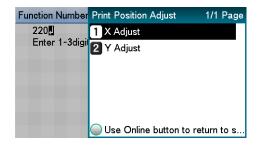
The numerical values input screen will be displayed.



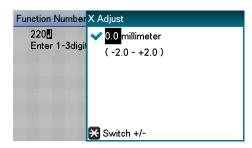
2 Press 2, 2, 0 (function numbers), and then press the OK button.



3 Press the scroll button \blacktriangle or \blacktriangledown to select the item you want to adjust.



4 Press the **OK** button.



5 Press the scroll button ▲ or ▼ to select the amount of the adjustment, and then press the **OK** button. Confirm there is a check mark to the left of the selected value.

Function Number	X Adjust
220 <mark>1</mark> Enter 1-3digit	✓ +0.5 millimeter
	(-2.0 - +2.0)
	🗙 Switch +/-

- Y represents the paper feed direction and X represents the orthogonal position relative to the paper feed direction.
- Set positive [+] numbers to widen the blank space in the X direction, and also set positive [+] numbers to widen the blank space in the Y direction.
- Readjustment might be necessary depending on the usage conditions (temperature, humidity, media type).
- By eliminating the differences between printers and using the same settings on all the printers with this procedure, you can use one computer when you want to get the same print results on multiple printers. See "Using the Printer Driver to Fine-tune the Print Position" on page 84.

Adjusting the Print Start Position

This section explains how to better align the position at which printing starts for die-cut label paper (with black mark), continuous label (with black mark), and die-cut label paper.

This adjustment is unnecessary if your print jobs do not require accurate positioning of where printing starts.

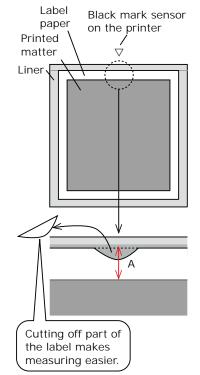
- 1 Adjust the position that printing starts on the first page.
 - a) After setting the size of the media, calibrate the sensor and execute Paper interval detection.
 - b) In the driver's print settings, set **To specify the number of pages per cut** in **Cut Mode** and set 1 in **Cut by collation**.

Note: You may not be able to set **1** in **Cut by collation** if the paper on which you are printing is shorter than 101.6 mm. If this is the case, set the smallest value that you can select.

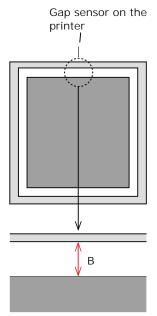
- c) Print five pieces of the media on which you are actually printing.
- d) Measure the distance at A or B, as shown in the diagram, for all five sheets and then calculate the average of these values.
- e) Calculate the difference in the position you want to print and the average value from the previous step.

 Adjust the position using Y Adjust in Menus > Print Adjust > Print Position Adjust.

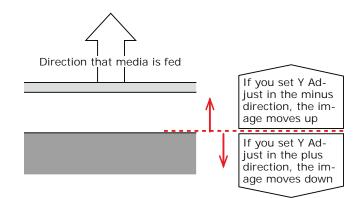
When using a black mark sensor - At the point that the black mark intersects the position of the black mark sensor on the printer, measure the distance at A from the leading edge of the black mark to the printed matter on five sheets.



When using a gap sensor - At the point that the label intersects the position of the gap sensor on the printer, measure the distance at B from the leading edge of the label to the printed matter on five sheets.



The plus and minus directions for print adjustment are illustrated below.



2 If you are actually printing more than two sheets consecutively, then next, do the following adjustment.

(Improve the accuracy of the function for learning the position that printing starts)

- a) In the driver's print settings, set **To specify the number of pages per cut** in **Cut Mode** and set 20 in **Cut by collation**.
- b) Print 20 pieces as a test print.

These printouts are test prints for adjusting positions, so throw them away when you are done.

3 The adjustments are complete when printing is done in the position you want.

Reset the cutter settings, and then start printing.

Other Print Functions

Specifying the Page Order

Extracts by page order when printing documents with multiple pages.

There are two methods.

- Printing documents in page order.
- Printing documents in reverse page order.

- 1 Open the file to be printed.
- 2 Select Print in the File menu.
- 3 Click **Preferences** (or **Properties**).

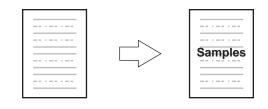
Exam	ple	<u>F</u> avorites			
•	1	Current setting(De	efault setting) V	<u>S</u> ave	<u>M</u> anagement
	2	Paper se <u>t</u> tings:	Continuous 4.000 x 6.000in	~	User- <u>d</u> efined paper
Paper	3		Format: Continuous Paper Media Type: Plain		
Paper Feed Direction	4		Media Type: Plain Media Weight: Medium Light (96-140 μm))	
rection	5	Orientation :	Portrait O Landscape 180°		Mirror Print
	6	C <u>o</u> pies:	1 Collate		Print in reverse order
			To prioritize collation specified by applicat	ion	
	7	<u>C</u> ut Mode:	Only cut at the end of job	~	
	8				
	9	Quality:	Fine / Detail (1200 x 1200)	\sim	Photo Enhance
	Ħ		Scree <u>n</u> : Prioritize resolution ~	•	

4 On the Setup tab, select the Print in reverse order check box in the Copies area.

5 Print.

Overlaying Stamps for Printing (Watermarks)

The details to be printed from the application can be independently printed overlaying Samples, Confidential, etc.



- **1** Open the file to be printed.
- 2 Select Print in the File menu.
- 3 Click Preferences (or Properties).

4 On the **Extend** tab, click **Watermarks**.

xample	<u>F</u> avorites	
Ţ│¹	Current setting	✓ Save Management
2	<u>W</u> atermarks	You can print data created by an application with a watermark over it.
Paper Fe		
Paper Feed Direction	Fon <u>t</u> s	Makes settings related to TrueType fonts and printer fonts.
5		
6		
7		
8		
9		

5 Click New.

(None)	^	
	~	
		10 PK
New Delet	e	<u>E</u> dit
First page <u>o</u> nly		
Job information		
<u>Print job information</u>		Job information settings
<u>First page only</u>		

6 On the Watermarks screen, enter text into **Text**, and configure **Size** and other settings.

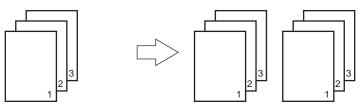
Text secret	
Size: 72 < → Angle: 45 < → -180 0 +180 Eont <u>Color</u>	geor ^{et}
Trim	Position
 None Circle Single Frame Double Frame 	Centre Watermark Adjustment <u>X</u> : 0 + Y: 0 +

- 7 Click the **OK** button.
- 8 Print.

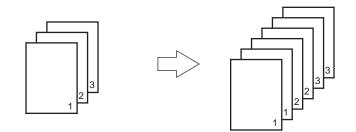
Collating Printed Output (Sorted Printing)

You can store print jobs in the device memory and collate the printing.

• Printing by specifying batches (x2 sets)



• Printing without specifying batches (x2 sets)



Note: This feature is not usable with some applications.

- **1** Open the file to be printed.
- 2 Select Print in the File menu.
- 3 Click Preferences (or Properties).

Examp	ble	<u>F</u> avorites	
1	1	Current setting	✓ <u>Save</u> <u>Management</u>
	2	Paper se <u>t</u> tings:	Continuous 4.000 x 6.000in Vuser-defined paper
Pape	3		Format: Continuous Paper
- Fe	-		Media Type: Plain
Paper Feed Direction	1		Media Weight: Medium Light (96-140 μm)
ction	2	Orientation :	Portrait O Landscape I 180° Mirror Print
	3	Copies:	2 Collate
	1		To prioritize collation specified by application
	1	Cut Mode:	Only cut at the end of job \sim
	2		
	3	<u>Q</u> uality:	Fine / Detail (1200 x 1200)
	\equiv		Scree <u>n</u> : Prioritize resolution ~

4 On the **Setup** tab, enter a value for **Copies**, and then select the **Collate** check box.

5 Print.

Printing a Mirror Image

Print using mirror print when you want to print image to appear normal when the page is viewed from the back.

- 1 Click Start and select Control Panel in Windows.
- 2 Click View devices and printers.
- 3 Right-click the QL-300 icon, and then select **Printer Properties**.
- 4 Select General tab, and then click Preferences.

5 On the Setup tab, select the Mirror Print check box in the Orientation section, and then click OK.

	<u>F</u> avorites			
1	Current setting	~	Save	<u>M</u> anagement.
2	Paper se <u>t</u> tings:	Continuous 4.000 × 6.000in	~	User- <u>d</u> efined paper
ε		Format: Continuous Paper Media Type: Plain		
		Media Type: Plain Media Weight: Medium Light (96-140 µ	m)	
4				
Б	Orientation :	Portrait C Landscape 180)°	Mirror Print
в	Copies:	1 🖨 🗆 Co <u>l</u> late		Print in reverse ord
0		To prioritize collation specified by applic	ation	
7	<u>C</u> ut Mode:	Only cut at the end of job	~	
8				
e	<u>Q</u> uality:	Fine / Detail (1200 x 1200)	~	Photo Enhance
H		Scree <u>n</u> : Prioritize resolution	~	

- 6 Open the file to be printed.
- 7 Select Page Setup in the File menu.
- 8 Select the paper size and print orientation, and then click **OK**.
- 9 Select Print in the File menu.
- 10 For printing onto a color paper with QL-300s: On the Color tab, select Data portion (Excluding white) or Data portion (Including white) for the Spot Color setting, and then click OK.

Examp	le	<u>F</u> avorites	
₽	1	Current setting	✓ Save Management
L	2	<u>C</u> olor Mode:	Color
Paper Feed Direction	ε		Automatic V Detail
Feed			Always create 100% <u>b</u> lack (K) toner
Directi	4		○ Monochrome
3	5		Ma <u>n</u> ual settings
	6	Sgot Color:	Data portion (Excluding white)
	7		Spgt color toner quantity adjustment
	`		sport color tonel quantity adjustment
	8		
	e	Toner Saving:	Off ~
	\square		Do not save 100% black toner
20	2uick		Default

11 Click **OK** to return to the "Print" screen.

12 Click **Print** in the "Print" screen to print.

Printing Registered Forms (Print Overlay)

You can register forms, logos, etc., as forms to the device, and overlay for printing.

To print an overlay, you need to create a form and register it in advance. It is possible to specify a maximum of four forms in one group. Forms are overlaid and printed in the order they are registered. That is to say, the last form you register is printed on top.

Windows PCL Printer Driver

- 1 Click Start and select Control Panel in Windows.
- 2 Click View devices and printers.
- 3 Right-click the QL-300 icon, and then select **Printing Preferences**.
- 4 On the Overlays tab, select Overlay Print.

Т	1	Current setting		✓ Save	Management
L	2	Overlay Print		~	
Paper F	ε				Edit list
Paper Feed Direction	4	Name Test Form	ID 1	Description All pages	
ection	s				<u>T</u> est Print
	6				
	7				
	8				
	6				

- 5 To register a form to the printer, select Register print document as a new form and click Apply > OK. From the application, print the image you want to register as a form, and when the New Form screen appears input the various information and click OK.
- 6 To apply an overlay, select **Overlay Print**. Select the forms you want to use for overlay printing and click **Apply > OK**. Print from the application.

Outputting to a File Without Printing

You can write and save to a file without printing the print data.

- 1 Click Start and select Control Panel in Windows.
- 2 Click View devices and printers.

- 3 Right-click the QL-300 icon, and then select Printer Properties.
- 4 Select the Ports tab.
- 5 In the ports list, select **FILE:**, and then click **OK**.

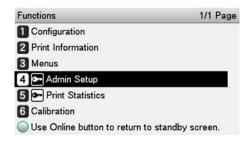
Statu	s	Security		Device Options	
General	Sharing	Ports	Advanced	Color Manag	jemer
s o	uickLabel QL-30	0 PCL6			
Print to the f	ollowing port(s).	Documents wi	II print to the	first free	
Port	Description	Pri	nter		^
	Printer Port				
LPT3:	Printer Port				
	Serial Port				
	Serial Port				
	Serial Port				
FILE:	Print to File				~
Add F	Por <u>t</u>	Delete Por	t	<u>C</u> onfigure Port	
	-	-	τ	<u>Configure Port</u>	
	directional suppo	JIL .			
L E <u>n</u> able pri	inter pooling				
		Г	ОК	Cancel	Арр

- 6 Print.
- 7 Enter the file name, and then click **OK**.

Changing the Check Unnecessary Print Cartridge Setting

You can have an error displayed and cancel the print job to prioritize the service life of a print cartridge that is detected to be down even though it is not being used as a specified color for the print data.

1 Press the scroll button ▼ several times to select Admin Setup, and then press the OK button.



2 Use the numeric keypad to input the administrator password.

The factory default password is 999999. Press the **OK** button after inputting each character.



3 Select **Print Setup**, and then press the **OK** button.

Admin Setup	1/2 Page
1 Network Setup	Π
2 USB Setup	
3 Print Setup	
4 PS Setup	
5 PCL Setup	
6 Color Setup	
7 8 ↑ / ↓ Page	

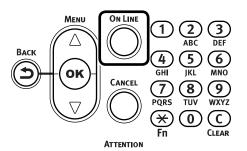
4 Select Check Unnecessary Print Cartridge, and then press the OK button.

Print Setup	2/2 Page
1 Check Unnecessary Print Cartridge	
2 Default Orientation	
3 Trapping	
7 8 ↑ / ↓ Page	

5 If you want an error to be generated when a print cartridge is detected to be down even though it is not being used as a specified color for the print data, select **On**. Select **Off** if you want printing to continue. Then, press the **OK** button.

Print Setup	Check Unnecessary Print1/1 Page
🚺 Check Unnec	1 On
2 Default Orien	2 √ 0 //
3 Trapping	
781↑/JPa	Use Online button to return to s

6 Press the **ON LINE** button to return to the standby screen.



Saving Printer Driver Setups

You can save the details set using the printer drivers.

If you save the changes to the settings for multiple locations, then the next and following times you change the settings, all you have to do is specify the driver settings so that those settings in the multiple locations are automatically changed to the settings that you saved.

Save a Setup

- 1 Click Start and select Control Panel in Windows.
- 2 Click View devices and printers.
- 3 Right-click the QL-300 icon, and then select **Printing Preferences**.
- 4 Change the settings to create the setup you want to save.
- 5 On the Setup tab, click Save.

	<u>F</u> avorites		
1	Current setting(De	fault setting) ~ <u>S</u> ave	<u>M</u> anagement
2	Paper se <u>t</u> tings:	Continuous 4.000 x 6.000in \sim	User- <u>d</u> efined paper
Page 3		Format: Continuous Paper	
ר <u>ה</u> היי היי היי היי היי היי היי היי היי ה		Media Type: Plain	
Paper Feed Direction		Media Weight: Medium Light (96-140 μm)	
5	Orientation :	● Portrait ◯ Landscape □ 1 <u>8</u> 0°	Mirror Print
6	C <u>o</u> pies:	1 🗘 🖸 Co <u>l</u> late	Print in reverse order
U		To prioritize collation specified by application	
7	<u>C</u> ut Mode:	Only cut at the end of job $\qquad \checkmark$	
8			
9	Quality:	Fine / Detail (1200 x 1200) 🗸	P <u>h</u> oto Enhance
Ħ		Scree <u>n</u> : Prioritize resolution \checkmark	

6 Enter the setting name into Save Favorites as, and then click OK.



7 Click **OK** to close the Print Setup dialog box.

Recall a Saved Setup

- 1 Open the file to be printed.
- 2 On the File menu, select Print.
- 3 Click Preferences (or Properties).
- 4 On the **Setup** tab, configure **Favorites**.

🔶 1	Save Favorites	✓ <u>Save</u>	Management
	Default setting Current setting Save Favorites	· · · · · · · · · · · · · · · · · · ·	User- <u>d</u> efined paper
Paper F		Format: Continuous Paper Media Type: Plain	
Paper Feed Direction	1	Media Weight: Medium Light (96-140 μm)	
ction 5	Orientation :	● Portrait ◯ Landscape □ 1 <u>8</u> 0°	Mirror Print
e	Copies:	1 Collate	Print in reverse order
7	Cut Mode:	Only cut at the end of job	
٤	3		
9	Quality:	Fine / Detail (1200 x 1200) Screen: Prioritize resolution	Photo Enhance

5 Print.

Delete a Saved Setup

- 1 Click Start and select Control Panel in Windows.
- 2 Click View devices and printers.
- 3 Right-click the QL-300 icon, and then select **Printing Preferences**.
- 4 On the Setup tab, click Management.

5 Click Delete.

Favorites management		×
<u>I</u> mport	<u>E</u> xport	Delete
	<u>C</u> lose	Help

- 6 Select the setup you want to delete, and then click **Delete**.
- 7 Click Yes.

Importing/Exporting a Printer Driver Print Setup

You can convert printer driver print setup information to a file, and then export/import the file. The file extension for exporting/importing is ".xmn".

Export a Setup

- 1 Click Start and select Control Panel in Windows.
- 2 Click View devices and printers.
- 3 Right-click the QL-300 icon, and then select **Printing Preferences**.
- 4 On the Setup tab, click Management.
- 5 Click Export.

Favorites management		×
<u>I</u> mport	Export	<u>D</u> elete
	<u>C</u> lose	<u>H</u> elp

6 In the List of favorite settings on the "Export" screen, select the checkbox next to the setup you want to export, and then click **Export**.

Export	×
List of favorite settings	
Save Favorites	
	Select <u>A</u> ll
	Unselec <u>t</u>
Dimlaulaulaurantem	
Display by paper form	
☑ Dis <u>p</u> lay all	
Continuous Paper	
Continuous Paper(black mark)	
☑ Die-c <u>u</u> t label(gap)	
Die-cut label(<u>b</u> lack mark)	
✓ <u>F</u> ull Surface label	
Full Surface label(black <u>m</u> ark)	
<u>E</u> xport <u>C</u> lose	<u>H</u> elp

7 Enter a file name, specify where to save it, and then click Save.

Import a Setup

- 1 Click Start and select Control Panel in Windows.
- 2 Click View devices and printers.
- 3 Right-click the QL-300 icon, and then select **Printing Preferences**.
- 4 On the **Setup** tab, click **Management**.
- 5 Click Import.

Favorites management		×
Import	<u>E</u> xport	<u>D</u> elete
	<u>C</u> lose	<u>H</u> elp

6 On the "Import" screen, click **Open the file**.

ist of favorite <u>s</u> ettings	
	Open the <u>f</u> ile
	Select <u>A</u> ll
	Unselec <u>t</u>
Overwrite <u>d</u> uplicate settings	
O <u>v</u> erwrite duplicate paper	
Display by paper form	
✓ Display all	
Continuous Paper	
Continuous Paper(black mark)	
☑ Die-c <u>u</u> t label(gap)	
Die-cut label(<u>b</u> lack mark)	
Eull Surface label	
Full Surface label(black <u>m</u> ark)	

- 7 Specify the file you want to import, and then click **Open**.
- 8 Check the names of the settings in the List of favorite settings, and then click Import.
- 9 When the message "Imported successfully." appears, click **OK**.

Changing Default Printer Driver Settings

It is convenient to set frequently used settings as the default settings.

- 1 Click Start and select Control Panel in Windows.
- 2 Click View devices and printers.

- 3 Right-click the QL-300 icon, and then select Printing Preferences.
- 4 Change the various settings, and then click **OK**.

Deleting or Updating a Printer Driver

Deleting a Printer Driver

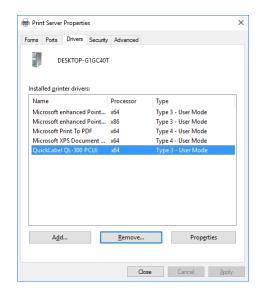
PC administrator privileges are required.

Restart the computer, and then delete the driver.

- 1 Click Start and select Control Panel in Windows.
- 2 Click View devices and printers.
- 3 Right-click the QL-300 icon, and then select Remove device.
- 4 If a verification message is displayed, click **Yes**.

Note: If a message appears while the device is in use, restart the PC, and then perform steps 1 and 2 of this procedure again.

- 5 Select one of the icons in **Devices and Printers**, and click **Print server properties** in the top bar.
- 6 Select the Drivers tab.
- 7 Click Change Driver Settings.
- 8 Select the driver to be deleted, and click **Remove**.



9 If a message asking whether to delete the drivers only, or the drivers and packages from the system, select to delete drivers and packages, and click **OK**.

Remove Driver And Package		
Do you want to remove the driver(s) only, or remove the driver(s) and driver package(s) from your system?		
 <u>Remove driver only.</u> <u>Remove driver and driver package.</u> 		
ОК	Cancel	

- 10 If a verification message is displayed, click Yes.
- 11 If the Remove Driver Package dialog box is displayed, click Delete > OK.

Note: If you cannot cancel, restart the PC, and then perform steps 4 to 10 of this procedure again.

- 12 Click OK in the Print server properties dialog box.
- 13 Restart the PC.

Updating a Printer Driver

PC administrator privileges are required.

- **1** Obtain the printer driver from QuickLabel.
- 2 Double-click the file you downloaded.
- 3 Select the desired language, and then click **OK**.

Note: When the "User Account Control" window is displayed, click Yes.

- 4 Read the "Software License Agreement", and click Accept.
- 5 Follow the instructions that appear on the screen to finish driver installation.
 - Attempting to install an old version driver will cause an update screen to appear. Follow the instructions that appear on the screen.
 - Updating a driver may require restarting of the computer.
- 6 When the Program Compatibility Assistant dialog appears, click **This program installed correctly**.

Adjusting the Color

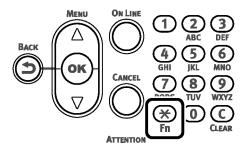
Adjusting Color with the Control Panel

Correcting Color Drift Manually

The printer compensates color drift automatically according to the conditions of use. If the color drift is noticeable, you can also implement compensation manually.

1 Press the **Fn** key.

The numerical values input screen will be displayed.



2 Press 3, 0, 1 (function numbers) and press the OK button.



3 Check that **Execute** has been selected, and press the **OK** button.

Function Numbe	r Adjust Registration	1/1 Page
301		
Enter 1-3dig		
	Use Online button to	o return to s

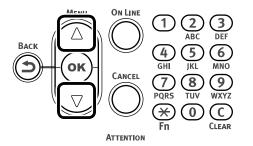
4 The display will return to the standby screen.

Configuring Settings for Auto Adjustment of Density and Gradation

The printer compensates density automatically according to the conditions of use. To compensate automatically, turn **On** the density compensation matching setting.

In the default factory settings, density compensation matching is implemented automatically.

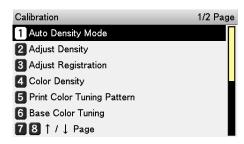
1 Press the scroll button \blacktriangle or \triangledown .



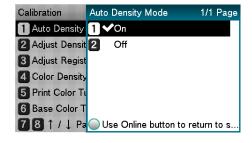
2 Select Calibration, and press the OK button.

Functions	1/1 Page	
1 Configuration		
2 Print Information		
3 Menus		
4 💽 Admin Setup		
5 🗪 Print Statistics		
6 Calibration		
Use Online button to return to standby screen.		

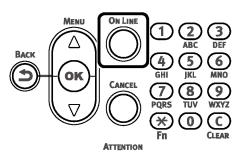
3 Select Auto Density Mode, and then press the OK button.



4 Select **On**, and then press the **OK** button. Confirm there is a check mark to the left of **On**.



5 Press the **ON LINE** button to return to the standby screen.



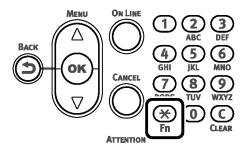
Adjusting Density Manually

The printer can implement compensation periodically using auto density compensation mode, but if the print density is noticeable, it can also be compensated manually.

Density adjustment values are set by specifying Cyan Density, Magenta Density, Yellow Density, Black Density, and White Density* values with the control panel.

- *: This item available only on the QL-300
- 1 Press the Fn key.

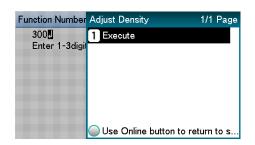
The numerical values input screen will be displayed.



2 Press 3, 0, 0 (function numbers) and press the OK button.

Function Number		
300.		
Enter 1-3digit Number		

3 Check that **Execute** has been selected, and press the **OK** button.



- 4 Execute density adjustment.
- 5 The display will return to the standby screen after density adjustment is complete.

Ready To	Print			
100%	100%	100%	100%	100%
Yellow	Magenta	Cyan	Black	White

Fine Tuning Density Adjustments

You can finely adjust the densities of colors that are used as the references for density compensation.

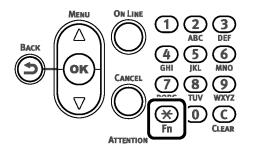
Adjust each color separately for the parts where the density is noticeable from the print results.

This section describes the procedure for adjusting the reference density for cyan. Use the same adjustment procedure also for other colors that you wish to adjust.

Increasing cyan after checking the print results

1 Press the **Fn** key.

The numerical values input screen will be displayed.



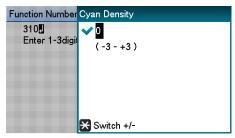
2 Press 3, 1, 0 (function numbers) and press the **OK** button.

Function Number	
310 Enter 1-3digit Number	

For other colors, use the operations below.

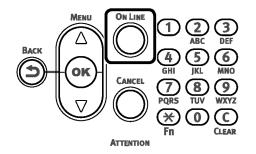
- To tune magenta, press the **Fn** key, and then press the following buttons: **3**, **1**, **1**, **OK**.
- To tune yellow, press the **Fn** key, and then press the following buttons: **3**, **1**, **2**, **OK**.
- To tune black, press the Fn key, and then press the following buttons: 3, 1, 3, OK.
- To tune white, press the **Fn** key, and then press the following buttons: **3**, **1**, **4**, **OK**. This option is only available on the QL-300s.
- 3 Press the scroll button ▲ or ▼ to specify a value that is larger than the current value, and then press the **OK** button.

Confirm there is a check mark to the left of the selected value.



Select +1 to +3 to make density darker, or -1 to -3 to make it lighter.

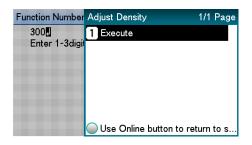
4 Press the **ON LINE** button to return to the standby screen.



5 Press the **Fn** key, and then press **3**, **0**, **0**, **OK**.

Func	tion Numb	er			
3	00				
Е	inter 1-3d	igit Numb	er		
		-			

6 Check that **Execute** has been selected, and press the **OK** button.



- 7 The display will return to the standby screen.
- 8 Print.

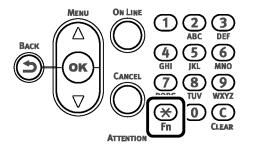
If you are not satisfied with the density, repeat steps 1 to 6 of this procedure.

Adjusting Color Balance (Density)

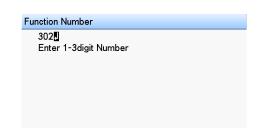
The printer can implement compensation periodically using auto density compensation mode. However, you can implement this adjustment when you want to adjust the gray balance of the halftones, which is not sufficiently adjusted by the auto density compensation.

- The densities of the colors are mutually dependent on each other, so you will need to repeat adjustment several times until the desired color balance is achieved.
- The results of the basic Base Color Tuning are reflected in the settings in Fine Color Tuning. Consequently, if the Fine Color Tuning are adjusted manually, these settings will be reset, so be careful. However, the Black Tuning settings are not reset.
- **1** Print a color tuning pattern.
 - a) Press the **Fn** key.

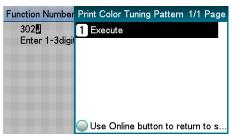
The numerical values input screen will be displayed.



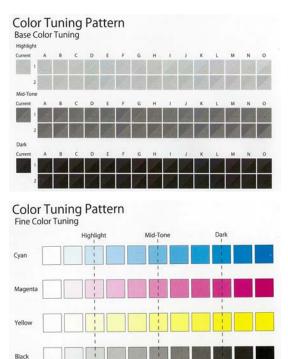
b) Press 3, 0, 2 (function numbers) and press the OK button.



c) Check that **Execute** has been selected, and press the **OK** button.



- d) The color tuning pattern will be printed.
- 2 Use the print results for the color tuning pattern to check the current color balance.



Check the area to be referenced using "Base Color Tuning". Check the "Highlight", "Mid-Tone", and "Dark" areas of the color tuning pattern and note the number (A-1 and 2 to O-1 and 2) of the block whose pattern of mixed CMY part (upper left) is most similar to its single color K part (lower right).

Note: If the pattern that seems most similar to the adjacent CMY mixed colors part and single color K part in the "Highlight", "Mid-Tone", or "Dark" areas matches the "Current" on the left of the color tuning pattern, the color balance is normal and does not require adjustment.

- 3 Use the print results for the color tuning pattern to adjust the color balance.
 - a) Press the scroll button \blacktriangle or \blacktriangledown .
 - b) Select **Calibration**, and press the **OK** button.

Functions	1/1 Page
1 Configuration	
2 Print Information	
3 Menus	
4 🕶 Admin Setup	
5 💽 Print Statistics	
6 Calibration	
Use Online button to return to standby	screen.

c) Select **Base Color Tuning**, and press the **OK** button.

Calibration	1/2 Page
1 Auto Density Mode	
2 Adjust Density	
3 Adjust Registration	
4 Color Density	
5 Print Color Tuning Pattern	
6 Base Color Tuning	
7 8 ↑ / ↓ Page	

d) Specify the number of the desired square in the "Highlight" area of the pattern, and then press the **OK** button.

Calibration	Highlight	1/5 Page
Auto Density	1 A-1	
2 Adjust Densit	2 A-2	
3 Adjust Regist	3 B-1	
4 Color Density	4 B-2	
5 Print Color Ti	5 C-1	
Base Color T	6 C-2	
[7][8] ↑ / ↓ Pa	78 ↑/↓Pag	e 📕

e) Specify the number of the desired square in the "Mid-Tone" area of the pattern, and then press the **OK** button.

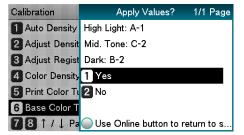
Calibration	Mid-Tone	1/5 Page
Auto Density	1 A-1	
2 Adjust Densi	2 A-2	
3 Adjust Regis	3 B-1	
4 Color Density	4 B-2	
5 Print Color T	5 C-1	
🙃 Base Color T	6 C-2	
781/JP	78 ↑/↓Page	

f) Specify the number of the desired square in the "Dark" area of the pattern, and then press the **OK** button.

Calibration	Dark	1/5 Page
Auto Density	1 A-1	
2 Adjust Densi	2 A-2	
3 Adjust Regis	3 B-1	
4 Color Density	4 B-2	
5 Print Color T	5 C-1	
6 Base Color T	6 C-2	
[7][8] ↑ / ↓ Pa	78 ↑/↓Page	

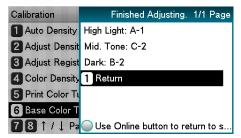
g) The pattern number specified in each area will be displayed.

If the pattern number is correct, select Yes, and press the OK button.



To respecify the pattern number select No to return to the "Calibration" screen.

h) Select **Return**, and press the **OK** button to return to the standby screen.



If the desired color balance is not obtained even after **Base Color Tuning**, adjust the CMY color balance watermarks manually using the procedure under **Adjusting the color balance**. For color balance fine tuning, see *"Fine-tuning Color Balance"* on page 223.

If the overall tone is still too bright or too dark even after implementing **Base Color Tuning**, adjust the black tone manually using **Fine Color Tuning**, and then implement **Basic color Tuning** again. To brighten the overall tone, adjust the black tone in **Fine Color Tuning** in the - direction, and to darken the overall tone, adjust the black tone in **Fine Color Tuning** in the + direction.

- 4 Check the color balance adjustment results.
 - a) Print the color tuning pattern.
 - b) Use the print results for the color tuning pattern to check the adjusted results.

If the pattern that seems most similar to the adjacent CMY mixed colors part and single color K part in the "Highlight", "Mid-Tone", or "Dark" areas matches the "Current" on the left of the color tuning pattern, the color balance adjustment is complete.

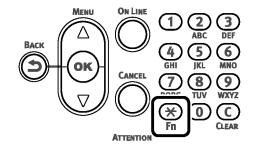
Repeat steps 1 through 3 of this procedure in accordance with the results of your pattern check.

Fine-tuning Color Balance

The printer can implement compensation periodically using auto density compensation mode. However, you can implement this adjustment when you want to finely adjust the gray balance of the halftones, which is not sufficiently adjusted by the auto density compensation.

- The densities of the colors are mutually dependent on each other, so you will need to repeat adjustment several times until the desired color balance is achieved.
- **1** Print a color tuning pattern.
 - a) Press the **Fn** key.

The numerical values input screen will be displayed.



b) Press **3**, **0**, **2** (function numbers) and press the **OK** button.

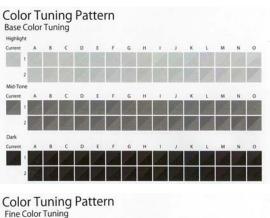
Function Number	
302	
Enter 1-3digit Number	

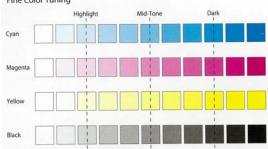
c) Check that **Execute** has been selected, and press the **OK** button.

Function Number	Print Color Tuning Pattern 1/1 Page
302	1 Execute
Enter 1-3digi	
	Use Online button to return to s

d) The color tuning pattern will be printed.

2 Use the print results for the color tuning pattern to check the current color balance.





Check the area to be referenced using "Fine Color Tuning".

The color tuning pattern blocks are arranged in four rows of 11 columns. The four rows are printed with the following colors, from top to bottom: Cyan, Magenta, Yellow and Black.

The 11 columns represent color tone, and vertical broken lines are labeled as Highlight, Mid-Tone, and Dark.

3 Use the print results for the color tuning pattern to adjust the color balance watermarks.

If you are adjusting the color balance, use the control panel to specify the shade (Highlight, Dark, and Mid-Tone) of each color.

This section explains the procedure for slightly darkening the cyan highlights. Adjust the watermarks for colors other than cyan in the same way.

- a) Press the scroll button \blacktriangle or \blacktriangledown .
- b) Select Calibration, and press the OK button.

Functions	1/1 Page
1 Configuration	
2 Print Information	
3 Menus	
4 🔙 Admin Setup	
5 - Print Statistics	
6 Calibration	
Use Online button to return to standby	screen.

c) Select Fine Color Tuning, and press the OK button.



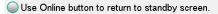
d) Select **Cyan Tuning**, and press the **OK** button.

Fine Color Tuning	1/1 Page
1 Cyan Tuning	
2 Magenta Tuning	
3 Yellow Tuning	
4 Black Tuning	

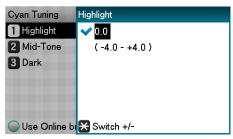
Use Online button to return to standby screen.

e) Select **Highlight**, and press the **OK** button.

Cyan Tuning	1/1 Page
1 Highlight	
2 Mid-Tone	
3 Dark	



f) Specify a larger value than the current set value, and press the **OK** button. Confirm there is a check mark to the left of the specified value.



Select +0.1 to +4.0 to make density slightly darker, or -0.1 to -4.0 to make it slightly lighter. Note, however, that the black adjustment ranges are +0.1 to +3.0 and -0.1 to -3.0.

- g) Press the **ON LINE** button to return to the standby screen.
- 4 Check the color balance adjustment results.
 - a) Print the color tuning pattern.
 - b) Use the print results for the color tuning pattern to check the adjusted results.

Repeat steps 1 through 3 of this procedure in accordance with the results of your pattern check.

Adjusting Color with a Printer Driver

About Color Matching

It is important to manage the work processes from data creation to output based on methods with color consistency. For example, scanners, digital cameras, and monitors, and other devices express the blending ratio to which the light of red, blue, and green (three colors) have been added to black as values over the RGB color space (additive mixture of colors).

Meanwhile, printers express the blending ratio of the four toner colors cyan, magenta, yellow, and black relative to white (white light), with the three reflected colors red, blue, and green excluded as values in the CMYK color space (subtractive mixture of colors).

The RGB color space and CMYK color space are color spaces dependent on the machine used, and so when converting color spaces, the colors will be different from the reproduced colors unless individual machine characteristics are taken into consideration.

To maintain color consistency from data creation to output, it is necessary to consider the color differences by device when converting colors. This process is called "color matching". The program that implements the color matching is called the "color management system" (CMS).

The printer can use either printer driver color matching or application color matching.

Note: Even if you are using color matching, the printed colors may appear dark compared to the colors on the monitor. This is because the range of colors that can be reproduced by the device is narrower than the range of colors that can be reproduced by the monitor, so even if color matching is used, the vivid colors on the monitor cannot be reproduced.

Color Matching (Automatic)

The procedure below performs recommended color matching for general documents. Generally use the settings shown here.

Windows PCL Printer Driver

- 1 Open the file to be printed.
- 2 On the File menu, select Print.
- 3 Click Preferences (or Properties).

mple	<u>F</u> avorites	
1	Current setting	✓ Save Management.
2	Color Mode:	Color
3		Automatic V Detail
3		✓ Always create 100% black (K) toner ○ Monochrome
5		Ma <u>n</u> ual settings
6	Spot Color:	Do not use
7		Sp <u>o</u> t color toner quantity adjustment
8		
9	<u>T</u> oner Saving:	Off v
		Do not save 100% black toner

4 In "Color" on the **Color** tab, select **Automatic**, and then click **OK**.

5 Print.

Simple Color Matching (Simple Adjustment)

Color matching is used on a printer for reproduction of the RGB colors required to print from word processor, spreadsheet, presentation, and other similar software.

Color matching is implemented using a special accelerator (ASIC) that is built into the printer. When converting RGB color space print data to the printer CMYK color space, color matching processing is applied.

 In the case of a Windows PCL printer driver, color matching is not applied even if Automatic or Simple Adjustment is selected for the CMYK color space print data. In this case, select "Graphic Pro".

Setup Items

RGB Color Setting - Specifies the method for expressing the colors processed using color matching.

Monitor - Auto

During color matching, represents color by the most ideal method suited to the document to be printed, emphasizing compatibility with the monitor (color temperature 6500 K). Normally use this setting.

Monitor - Perceptual

During color matching, represents the color by the method emphasizing the gradation suiting the natural image of the photograph and compatibility with the monitor (color temperature 6500K).

Monitor - Vivid

During color matching, represents the color by the method emphasizing the vividness suiting the images and text, and compatibility with the monitor (color temperature 6500K).

• Monitor - light

During color matching, represents the color by the method emphasizing the gradation suiting the natural image of the photograph and compatibility with the monitor (color temperature 9300K).

Adobe RGB

Specify if you are using an input device with AdobeRGB color characteristics.

sRGB

The sRGB colors within the printer's color gamut are printed without any modification. Only colors that fall outside the printer's color gamut are matched with the outer shell. Suitable for matching specific colors.

Black Finish - Sets the black finish when printing in color. Normally use Auto as is.

Windows PCL Printer Driver

- 1 Open the file to be printed.
- 2 On the File menu, select Print.
- 3 Click Preferences (or Properties).
- 4 On the Color tab, click Color, select Automatic or Simple Adjustment, and then click OK.

1	<u>F</u> avorites	
•	Current setting	✓ <u>S</u> ave <u>M</u> anagement
2	<u>C</u> olor Mode:	Color
з		Automatic V Detail
4		Always create 100% <u>b</u> lack (K) toner
4		O Monochrome
5		Ma <u>n</u> ual settings
6	Spot Color:	Do not use
7		Sp <u>o</u> t color toner quantity adjustment
8		
9	<u>T</u> oner Saving:	Off ~
		Do not save 100% blac <u>k</u> toner

5 Print.

Color Matching (Graphic Pro)

Graphic Pro is the optimal choice for use with DTP software. It lets you specify simulation printing for any CMYK output device.

Windows PCL Printer Driver

- 1 Open the file to be printed.
- 2 On the File menu, select Print.
- 3 Click Preferences (or Properties).
- 4 On the Color tab, click Color, then select Graphic Pro, and then click OK.

Examp		<u>F</u> avorites		
Ť	1	Current setting	✓ Save Management	
	2	<u>C</u> olor Mode:	Color	
Paper	3		Carphic Pro	
Paper Feed Direction	4		Simple Adjustment Graphic Pro No Color Matching	
tion	5		Manual settings	_
	6	Spot Color:	Do not use	
	7		Sp <u>o</u> t color toner quantity adjustment	
	8			
	9	<u>T</u> oner Saving:	Off ~	
	\blacksquare		Do not save 100% black toner	
Ø	Ωuick		Default	

5 Print.

Color Matching (No Color Matching)

Prints using the specified colors as is, without implementing color matching using the printer drivers or device.

Select if implementing color matching using an application.

Windows PCL Printer Driver

- 1 Open the file to be printed.
- 2 On the File menu, select Print.
- 3 Click Preferences (or Properties).

1	<u>F</u> avorites	
	Current setting	✓ <u>S</u> ave <u>M</u> anagement
2	Color Mode:	Color
Pape 3		No Color Matching
er Fee		Always create 100% <u>b</u> lack (K) toner
Paper Feed Direction		○ Monochrome
^{ction} 5		Ma <u>n</u> ual settings
6	Spot Color:	Do not use
7		Sp <u>o</u> t color toner quantity adjustment
8		
9	Toner Saving:	Off v
9		Do not save 100% black toner

4 On the Color tab, click Color, then select No Color Matching, and then click OK.

5 Print.

Changing the Black Finish

The finish for the black parts will be changed when printing in color. This can be used when the printer driver's color mode setting is **Simple Adjustment** or **Graphic Pro**.

Setup Items

Black Finish

Auto

Creates black using the optimum methods according to the document to be printed. This setting can be selected only when the color mode is set to **Simple Adjustment**. This setting cannot be configured on the Graphic Pro.

Composite Black (CMYK)

Synthesizes black using cyan, magenta, yellow, and black toner. The black is close to brown. Ideal for photos.

True Black (K)

Prints black using black toner only. Ideal for diagrams and documents. When printing photos, the dark parts are blackish.

Pure Black Text/Graphics (Graphic Pro Only) - If black defined using the RGB color space for text and graphics (R=0, G=0, B=0) or black defined using the CMYK color space (C=0, M=0, Y=0, K=100%) is specified, this setting specifies whether printing should use black (K) toner only.

ON

Prints the text and graphics specified as black using black (K) toner only.

OFF

Text and graphics specified as black are synthesized using either black (K) toner only or CMYK depending on the profile specified by color matching.

Windows PCL Printer Driver

- 1 Open the file to be printed.
- 2 On the File menu, select Print.
- 3 Click **Preferences** (or **Properties**).
- 4 On the Color tab, select Simple Adjustment or Graphic Pro.
- 5 In the **Black Finish** section, select the black finishing method. In the **Graphic Pro** mode, also select ON or OFF for **Pure Black Text/Graphics**, and then click **OK**.

olor Setting Details				;
Color Mode O Au <u>t</u> omatic This color setting is	RGB Color Setting Color matching options Monitor - Auto	14.1	2	
optimum for every document. © Simple Adjustment This color setting is for office documents.	Black Finish O Auto O Composite Black (CMYK)	=		
O <u>G</u> raphic Pro This color setting is for graphic documents.	True Black (K) Adjust Darkness Brightness: 0 0 0 Saturation: 0 0 0		-¢	ŧ
○ No Color Matching This color setting is for color matching in an application.	Saturation:			
Color Swatch	OK	Cancel	Help	Default

6 Print.

Monochrome (Black and White) Printing

The color data is printed using grayscale (shades of black and white) without touching the print data.

Note: If implementing color printing after printing by specifying "Monochrome", a delay may occur depending on the temperature adjustment of the fuser unit.

- Even if the cyan (blue), magenta (red), or yellow print cartridge life has been reached, monochrome printing using only black can be done by specifying "Monochrome".
- Refer to "Printing Using the Specified Print Cartridge Only (Lift Up)" on page 187 regarding printing with black only.

Windows PCL Printer Driver

- 1 Open the file to be printed.
- 2 On the File menu, select Print.
- 3 Click **Preferences** (or **Properties**).

1	Current setting	y ∨ <u>S</u> ave <u>M</u> anagemen
2		
2	Color Mode:	O Color
3		Graphic Pro V Detail
		Always create 100% <u>b</u> lack (K) toner
4		Monochrome
5		Ma <u>n</u> ual settings
6	Spot Color:	Do not use
7		Spot color toner quantity adjustment
8		
U	Toner Saving:	Off v
9		
		Do not save 100% blac <u>k</u> toner

4 On the **Color** tab, select **Monochrome**. Adjust lightness and darkness as required.

5 Print.

Suppressing White Lines Between Text and the Background (Black Overprint)

If you are imaging 100% black text on a colored background, you can print (overprint) by overlaying the text and background parts. Set if there are gaps such as white lines, etc., in the borders between the text and background.

- Not usable with some applications.
- Black overprint cannot be used if the text is not 100% black, the text has been rendered as graphics by extracting the outlines, or if the text is an image.
- If the background color is dark (toner layer thickness exceeds 240%), toner may not be fixed completely. For example, if printing 100% black text on backgrounds of 50% cyan, 50% magenta, and 50% yellow, the toner layer thickness is 50+50+50+100=250%, which exceeds 240%.

Windows PCL Printer Driver

- 1 Open the file to be printed.
- 2 On the File menu, select Print.
- 3 Click Preferences (or Properties).
- 4 On the **Extend** tab, click **Advanced**.

5 Select Overprint Black. Next, for Settings, select On, and then click OK.

Advanced		:	×
ltem		Setting	
	out when resizing document	On Off	
Adjust ultra fir Job Spool	rlapping colors	Off Off On Off Off Printer setting	
	Overprint Black		
Settings	Off	\sim	
Description			_
	ite outlines produced by misregis a colored background.	stration around black	
	OK Cancel	<u>H</u> elp Defa <u>u</u> lt	

6 Print.

Correcting for Print Misalignment (Trapping)

Use if there are white or colored lines between two overlapping objects due to print misalignment.

Windows PCL Printer Driver

- 1 Open the file to be printed.
- 2 On the File menu, select Print.
- 3 Click Preferences (or Properties).
- 4 On the **Extend** tab, click **Advanced**.
- 5 Select **Trapping**. Next, select the misalignment correction method with **Settings**, and then click **OK**.

Advanced					×
Overprint Blac Adjust for over Adjust ultra fir Job Spool	out when resizing k lapping colors			Setti On Off Off Off On Off Off Off Printe	ng :r setting
<u>S</u> ettings	Trapping Printer setting		~		
Description Trapping creat compensates f of an image. T between two c	Narrow / Choke		g ti	color. Th he C, M, Y is or color	and K layers
	ОК	Cancel	<u>H</u> el	p	Defa <u>u</u> lt

Selections that include **Choke White** are only shown for the QL-300s.

6 Print.

Simulating Print Results

The printer adjusts CMYK color data to simulate the characteristics of ink, such as that used in offset printing.

The ICC profiles registered as standard are described below.

RGB Profiles

- sRGB
- AdobeRGB

CMYK Input Profiles

- SWOP
- ISO Coated
- Japan Color
- JMPA

Note: Enabled when Color Mode is set to either Simple Adjustment or Graphic Pro.

Windows PCL Printer Driver

- **1** Open the file to be printed.
- 2 On the File menu, select Print.
- 3 Click Preferences (or Properties).
- 4 On the Color tab, click Detail, and then select Graphic Pro.
- 5 Select **Printer Simulation**, and then use the list under **Simulation Target Profile** to select the ink characteristics you want to simulate.

Color Mode ○ Automatic This color setting is optimum for every document. ○ Disable color matching for profile creat ○ Simple Adjustment □ Disable color matching for profile creat This color setting is for office documents. □ Profile ○ Graphic Pro This color setting is for graphic documents. ○ Disable color matching for profile □ Disable color matching for profile ○ Note ○ Disable color matching for profile	ion Output Profile Printer Profile
This color setting is for office documents.	
Graphic Pro This color setting is for graphic documents.	Resident Profile ~
graphic documents.	
	Rendering Intent Perceptual
This color setting is for ISO Coated	llack Finish Composite Black (CMYK) 🗸 🗸 🗸 🗸
application. JMPA CMYK Source 1	Pure Black Text/Graphics
CMYK Source 2 CMYK Source 3 CMYK Source 4 COlor Swatch CMYK Source 5 DK CR	ancel Help Default

- 6 Click OK.
- 7 Print.

Network Settings

Initializing Network Settings

Implementing this operation will initialize all network settings.

1 Press the scroll button ▼ several times to select Admin Setup, and then press the OK button.

Functions	1/1 Page
1 Configuration	
2 Print Information	
3 Menus	
4 - Admin Setup	
5 - Print Statistics	
6 Calibration	
Use Online button to return to	standby screen.

2 Use the numeric keypad to input the administrator password.

The factory default password is 999999. Press the **OK** button after inputting each character.

(6 - 12 dig	its)	

3 Select Network Setup, and then press the OK button.

Admin Setup	1/2 Page
1 Network Setup	
2 USB Setup	
3 Print Setup	
4 PS Setup	_
5 PCL Setup	
6 Color Setup	
7 8 ↑ / ↓ Page	

4 Select Network Factory Defaults, and then press the OK button.

Network Setup	2/2 Page
1 IPSec	
2 SNMP	
3 Network Scale	
4 Gigabit Network	•
5 Hub Link Setting	
6 Network Factory Defaults	
7 8 ↑ / ↓ Page	

5 When **Execute** appears, press the **OK** button.

Network Setup	Network Factory Defaults 1/1 Page
1 IPSec	1 Execute
2 SNMP	
3 Network Sca	
4 Gigabit Netw	
5 Hub Link Set	
Network Fac	
(7) (8) î / l Pa	Use Online button to return to s…

6 Initialization is executed, and the display returns to the standby screen.

Using DHCP

IP addresses can be acquired from a DHCP server.

PC administrator privileges are required for the setup.

Caution: Incorrectly allocating the IP address may cause major malfunctions such as crashing of the network. Thoroughly consult the network administrator before making the settings.

To use the device in a DHCP environment, select Auto as the IP address setting method.

Also note that **Auto** is the IP address setting method under factory default settings, so performing this procedure is normally not necessary.

1 Press the scroll button ▼ several times to select Admin Setup, and then press the OK button.

Functions	1/1 Page
1 Configuration	
2 Print Information	
3 Menus	
4 🕶 Admin Setup	
5 🕶 Print Statistics	
6 Calibration	
Use Online button to return to	standby screen.

2 Use the numeric keypad to input the administrator password.

The factory default password is 999999. Press the **OK** button after inputting each character.



3 Select Network Setup, and then press the OK button.

Admin Setup	1/2 Page
1 Network Setup	
2 USB Setup	
3 Print Setup	
4 PS Setup	
5 PCL Setup	
6 Color Setup	
7 8 ↑ / ↓ Page	

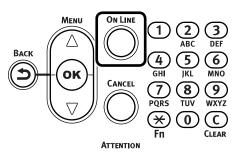
4 Select IP Address Set, and then press the OK button.

Network Setup	1/2 Page
TCP/IP	
2 NetBIOS over TCP	
3 IP Address Set	
4 Web	
5 Telnet	
6 FTP	
7 8 ↑ / ↓ Page	

5 Select Auto, and then press the OK button.

Network Setup	IP Address Set	1/1 Page
TCP/IP	1 ✔Auto	
2 NetBIOS ove	2 Manual	_
IP Address S		
4 Web		
5 Telnet		
6 FTP		
781/ Pa	Use Online button	to return to s

6 Press the **ON LINE** button to return to the standby screen.



Using BOOTP

To use the printer in a BOOTP environment, select **BOOTP** as the IP address setting method.

1 Access the printer web page and log in as an administrator.

See "Web Utility" on page 405.

- 2 Select Admin Setup.
- 3 Select Network Setup > TCP/IP > Change Settings > Get IP address automatically (BOOTP).
- 4 Click Submit.

IPv6

This printer is compatible with IPv6, and the IPv6 address is acquired automatically. IPv6 addresses cannot be set manually.

The device is compatible with the following protocols.

Printing:

- LPR
- IPP
- RAW (Port9100)
- FTP

Setup:

- HTTP
- SNMPv1/v3
- Telnet

Checking the IPv6 Address

IPv6 addresses are allocated automatically.

1 Access the printer web page and select **Device information**.

Note: Refer to "Web Utility" on page 405 regarding the printer web page.

2 Select Network > TCP/IP.

If all the global addresses are displayed as "0", it is possible an error has occurred in the router being used.

Press the scroll buttons to select **Print Information > Configuration** to check the IPv6 address using the configuration report. For reports and information about how to print them, see *"Printing Configuration Information"* on page 241.

Printing Configuration Information

Printable Report List

List Name	Description
Configuration	Prints the table of all menu category items and the current settings. Further, the advanced printer settings are also printed in the page header.
Demo Page	Prints the demo print data stored in the printer.
File List	Prints the file list.
Usage Report	Prints the total print results.
Error Log	Prints the errors detected and saved by the printer.
Color Profile List	Prints the color profile list.
Color Adjustment Pattern	Prints the patterns to match the shading characteristics.
User Media List	Prints the user media list.
Test Print-1	Prints the patterns for analyzing the print quality.
Test Print-2	Prints the patterns for analyzing CYMK print quality.
Test Print-3	Prints the patterns for analyzing the status of the print cartridges.
Test Print-4	Prints the patterns for analyzing print quality of the spot colors.
	Displayed with QL-300 only.
Cleaning Page	Prints the toner-free white sheet to remove dirt from the surface of the fuser belt in the fuser unit.

• Paper is cut at a fixed length when printing a report, so do not use die-cut label paper.

- To attain the full benefit of the report printing function, load paper that is 130 mm wide.
- Printing is canceled if a print cartridge for a color that is required for report printing is not lifted down.

Printing Printer Setup Lists

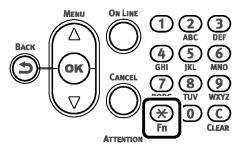
Configuration

Print the device information.

Print to see the remaining quantity of wear items and other set values such as IP addresses and MAC addresses, and to check whether the printer is operating correctly, etc.

1 Press the Fn key.

The numerical values input screen will be displayed.



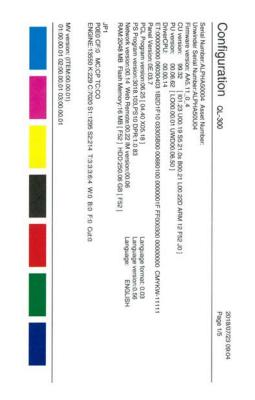
2 Press 1, 0, 0 (function numbers), and then press the OK button.



3 Confirm that **Execute** is selected, and then press the **OK** button.

Function Number	Configuration	1/1 Page
100	1 Execute	
Enter 1-3digi		
	🔵 Use Online butto	n to return to s

Printing result sample:

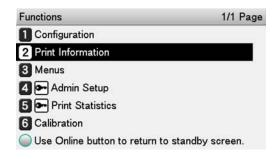


Printing Printer Information Lists

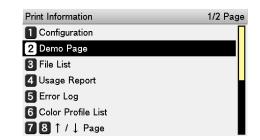
Demo Page

Prints demonstration pages.

1 Press the scroll button ▼ several times, and when **Print Information** appears, press the **OK** button.



2 Select **Demo Page**, and then press the **OK** button.



- 3 When **DEMO1** appears, select one of the items to be printed, and then press the **OK** button.
- 4 Confirm that **Execute** is selected, and then press the **OK** button.

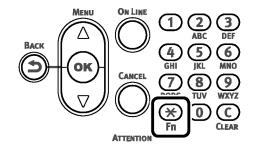
MO1 1/1 Page	Demo Page
Execute	DEMO1
Llas Online hutten to voture to a	
Use Online button to return t	

Error Log

Prints the history of the errors that have occurred in the device.

1 Press the **Fn** key.

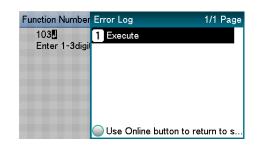
The numerical values input screen will be displayed.



2 Press 1, 0, 3 (function numbers), and then press the OK button.

Function Number	
103	
Enter 1-3digit Number	

3 Confirm that **Execute** is selected, and then press the **OK** button.



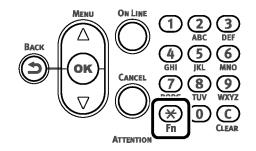
Usage Report

Prints the total print results.

Note: Not displayed if Usage Report of Print Statistics is set to Disable.

1 Press the **Fn** key.

The numerical values input screen will be displayed.



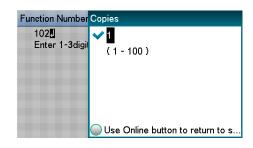
2 Press 1, 0, 2 (function numbers), and then press the OK button.



3 Confirm that **Execute** is selected, and then press the **OK** button.

Function Number	Usage Report	1/1 Page
102	1 Execute	
Enter 1-3digi		
	Olse Online butto	a to roturn to c
	Se Unline buttol	n to return to s

4 Use the numeric keypad or the scroll buttons to specify the number of copies, and then press the **OK** button.



Printing Print Lists

Color Profile List

Prints the table of the ICC profiles registered on the printer.

1 Press the scroll button ▼ several times, and when **Print Information** appears, press the **OK** button.

Functions	1/1 Page
1 Configuration	
2 Print Information	
3 Menus	
4 🔙 Admin Setup	
5 - Print Statistics	
6 Calibration	
Use Online button to return to s	standby screen.

2 Select Color Profile List, and then press the OK button.

Print Information	1/2 Page
1 Configuration	
2 Demo Page	
3 File List	
4 Usage Report	
5 Error Log	
6 Color Profile List	
7 8 ↑ / ↓ Page	

3 Confirm that **Execute** is selected, and then press the **OK** button.



User Media List

Prints the table of the user media registered to the device.

Note: Displayed when the user media is registered.

1 Press the scroll button ▼ several times, and when **Print Information** appears, press the **OK** button.

Functions	1/1 Page
Configuration	
2 Print Information	
3 Menus	
4 💽 Admin Setup	
5 - Print Statistics	
6 Calibration	
Use Online button to return to	o standby screen.

2 Select User Media List, and then press the OK button.

Print Information	2/2 Page
1 User Media List	
2 Test Print-1	
3 Test Print-2	
4 Test Print-3	
5 Test Print-4	
6 Cleaning Page	
7 8↑/↓Page	

3 Confirm that **Execute** is selected, and then press the **OK** button.

Print Information	User Media List	1/1 Page
🚺 User Media L	1 Execute	
2 Test Print-1		
3 Test Print-2		
4 Test Print-3		
5 Test Print-4		
6 Cleaning Pag		
781/JPa	Use Online button	to return to s

Test Print

Prints the print quality lists.

- Test Print-1 Prints the patterns for analyzing the print quality.
- Test Print-2 Prints the patterns for analyzing CMYK print quality.
- Test Print-3 Prints the patterns for analyzing the status of the print cartridges.

- Test Print-4 Prints the patterns for analyzing print quality of the spot colors (white). Displayed with QL-300s only.
- 1 Press the scroll button ▼ several times, and when **Print Information** appears, press the **OK** button.

Functions	1/1 Page
1 Configuration	
2 Print Information	
3 Menus	
4 💁 Admin Setup	
5 ► Print Statistics	
6 Calibration	
Use Online button to return to	o standby screen.

2 Select Test Print-1, Test Print-2, Test Print-3, or Test Print-4, and then press the OK button.

Print Information	2/2 Page
1 User Media List	
2 Test Print-1	
3 Test Print-2	
4 Test Print-3	
5 Test Print-4	
6 Cleaning Page	
7 8↑/↓Page	

3 When **Execute** appears, press the **OK** button.

Print Information	Test Print-1	1/1 Page
1 User Media L	1 Execute	
Pa Test Print-1		
3 Test Print-2		
4 Test Print-3		
5 Test Print-4		
6 Cleaning Pag		
7811↓Pa	🔵 Use Online butto	on to return to s

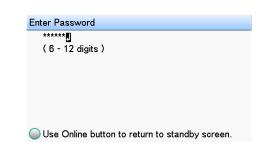
Changing the Administrator Password

Change the administrator password. The factory default setting is 999999.

1 Press the scroll button ▼ several times to select Admin Setup, and then press the OK button.

Functions	1/1 Page
1 Configuration	
2 Print Information	
3 Menus	
4 🕶 Admin Setup	
5 - Print Statistics	
6 Calibration	
Use Online button to return to s	standby screen.

2 Enter the administrator password, and then press the **OK** button.



3 Select Change Password, and then press the OK button.

Admin Setup	2/2 Page
1 Panel Setup	
2 Time Setup	
3 Power Setup	
4 Others Setup	
5 Settings	
6 Change Password	
7 8 ↑ / ↓ Page	

4 Enter the new password, and then press the **OK** button.

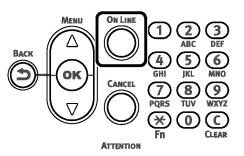
Specify a password that is at least six characters long.



5 Re-enter the new password, and then press the **OK** button.

Admin Setup	Verify Password
Panel Setup	******
2 Time Setup	(6 - 12 digits)
3 Power Setup	
4 Others Setup	
5 Settings	
Change Pass	
781/JP	Use Online button to return to s

6 Press the **ON LINE** button to return to the standby screen.



Checking the Print Count

You can check the quantity of paper printed from the unwinder to date.

1 Press the scroll button ▼ several times to select **Configuration**, and then press the **OK** button.

Functions	1/1 Page
1 Configuration	
2 Print Information	
3 Menus	
4 💽 Admin Setup	
5 💽 Print Statistics	
6 Calibration	
Use Online button to return to standby s	creen.

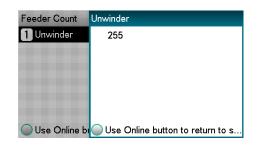
2 Select Feeder Count, and then press the OK button.

Configuration	1/1 Page
1 Feeder Count	
2 Supplies Life	
3 Network	
4 System	
OUse Online button to return to standby	screen.

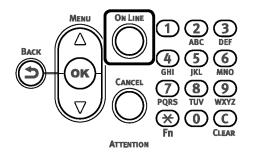
3 Select the feeder you want to check.



4 Press the **OK** button.



5 Press the **ON LINE** button to return to the standby screen.



11

Troubleshooting

Troubleshooting Solutions Procedure

This chapter describes the procedure for solving problems that occur while using the printer.

If you are unable to solve the problem with this procedure, contact Technical Support.

Troubleshooting when an error message is displayed

- 1 If a paper jam error appears, refer to "Paper Jams" on page 252.
- 2 If a message about the replacement schedule or service life of wear items appears, refer to "Messages about Replacing Wear Items" on page 284.
- 3 If other errors appear, refer to "Messages about Other Issues" on page 286.
- 4 If you cannot solve the problem, record the message displayed on the control panel. Contact Technical Support.

Troubleshooting when an error message is not displayed

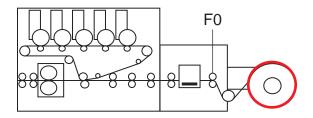
- 1 If trouble occurs, refer to the following pages for solutions.
 - "Unable to Print" on page 294
 - "Printer Driver Malfunctions" on page 299
 - "Print Quality Is Poor" on page 302
 - "Paper Feed Is Poor" on page 315
- 2 If you cannot solve the problem, contact Technical Support.

Paper Jams

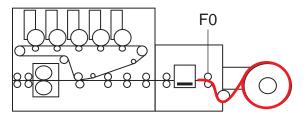
This section describes the procedure when paper is jammed inside the printer, when part of a piece of paper that is being removed is left inside the printer, or when paper is left inside the printer because an error occurred and caused printing to stop.

Condition of paper

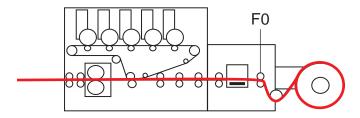
• **Unload** - Indicates that the paper is not set on the F0 roller on the unwinder.



• Stand-by - Indicates that paper is set on F0 roller on the unwinder.



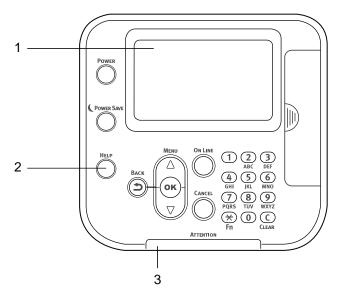
• Through paper - Indicates that paper is passing through the printer from the unwinder.



Checking Messages (if a paper jam occurs)

When paper is jammed inside the printer, or when paper is remaining inside the printer even after removing it, a message notifying paper jam will appear on the display screen of the control panel, and the **ATTENTION** lamp will blink. Or, when an error occurs causing printing to stop and leaves paper inside the printer, an error notification message appears on the display screen on the control panel, and the **ATTENTION** lamp blinks.

When "Please see HELP for details" is shown in the message, pressing the **HELP** button in the control panel will show the troubleshooting procedure, and you can easily solve the process according to the guidance. See "Operating the Help Screen" on page 255.



- 1 Display screen
- 2 HELP button
- 3 ATTENTION lamp

The following table shows the messages. Check the message, and remove the jammed paper according to the procedure described in the reference.

Category	Message displayed on the dis- play screen	Error code displayed after press- ing the HELP button
Paper jam	Open Unwinder Cover	391
(When paper is jammed inside the	Paper Jam	
printer)	Please see HELP for details	
	Open Top Cover	380
	Paper Jam	381
	Please see HELP for details	
	Check Fuser and Exit Unit	382
	Paper Jam	
	Please see HELP for details	
	Remove Paper	389
	Printing Page Lost	
	Please see HELP for details	
	Check Fuser Unit	386
	Paper Feed Jam	
	Please see HELP for details	
Message does not disappear	Open Unwinder Cover	631
(When the message does not dis-	Paper Remain	
appear even after removing the jammed paper)	Please see HELP for details	
	Open Top Cover	637
	Paper Remain	638
	Please see HELP for details	
	Check Fuser and Exit Unit	639
	Paper Remain	
	Please see HELP for details	

Category	Message displayed on the dis- play screen	Error code displayed after press- ing the HELP button	
When paper is left inside the printer	Paper Detection Error	7381	
because an error occurred and the printer stopped	%SENSOR_ERROR%		
	Please see HELP for details		
	Open Unwinder Cover	7311	
	Roll Paper End		
	Please see HELP for details		
	Change Paper in Unwinder	7310	
	Roll Paper End		
	Please see HELP for details		
	Check Installed Paper	7306	
	Mark Detection Error		
	Please see HELP for details		
	Paper Feed Error	7319	
	Please see HELP for details	7372	
	Check Paper	7314	
	Roll Paper Slack Winding Error		
	Please see HELP for details		
	Check Paper	7315	
	Roll Paper Set Sensor Error		
	Please see HELP for details		

Note: Error code 389 may appear when there is no paper left inside. If it appears when there is no paper jam, open and close the top cover to clear it. If error code 389 appears many times, or if it does not clear, contact Technical Support.

Operating the Help Screen

Pressing the **HELP** button in the control panel will display the solution method. You can easily remove the paper according to the guidance.

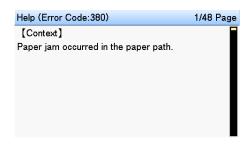
Example: When paper is jammed inside the printer

The following message will appear on the display screen, and the ATTENTION lamp will blink.



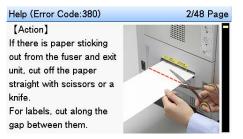
1 Press the HELP button.

The error code will appear and the condition of paper jam will be displayed.



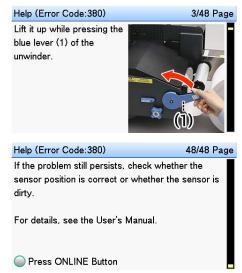
2 Press the scroll button $\mathbf{\nabla}$.

The next page will appear, and solution procedure for paper jam will be displayed.



Press the scroll button \blacktriangle to return to the previous page.

3 Scroll the pages of the Help screen with the scroll buttons, and remove the paper according to the solution procedure for the paper jam displayed on the screen.



Removing the jammed paper will return the display to the Standby screen and the remaining printing will start.

Removing Jammed Paper

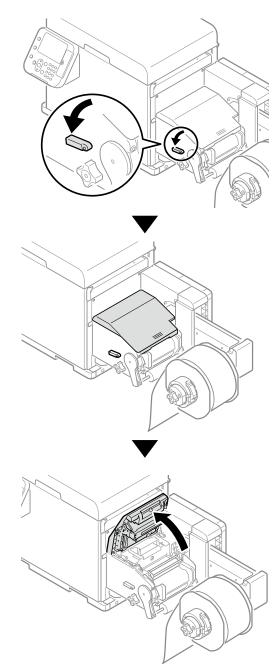
Use the following instructions to remove jammed paper. This procedure can be used to resolve error codes 380, 381, 382, 386, 389, 391, 631, 637, 638, 639, 7381, 7310, 7306, 7319, 7372, 7311, 7314, and 7315.

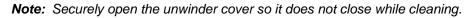
1 Use scissors to cut the jammed paper.



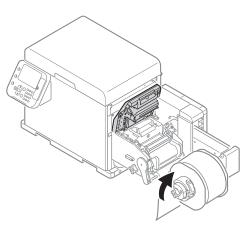
For labels, cut in the space between labels. If the paper is feeding, cut it on the output side too.

2 Lower the unwinder cover open lever to open the unwinder cover.

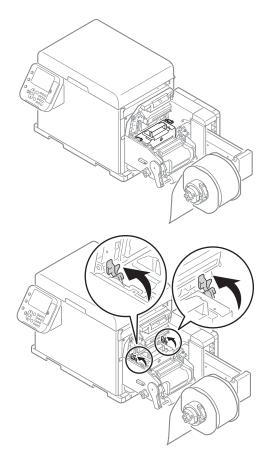




3 Turn the roll paper holder in the direction of the arrow to wind up the roll paper.



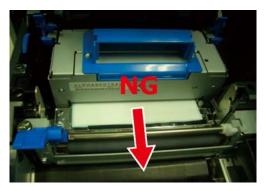
4 Raise the cutter unit lock levers at both ends of the cutter unit.



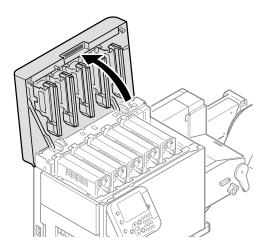
5 Raise the F0 roller release lever.



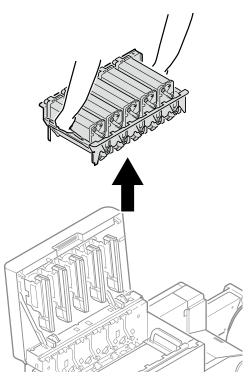
If any paper is left in the printer, do not forcefully remove it.



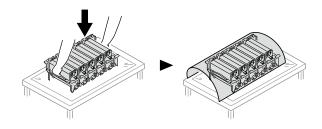
6 Grasp the top cover open lever and open the top cover.



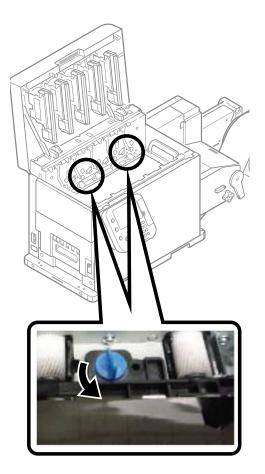
7 Remove the print cartridge set.



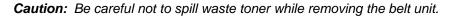
8 Place the removed print cartridge set on a flat surface covered with newspaper or something similar, and cover it with paper so it is not exposed to direct light.



9 Turn the two belt locking keys counterclockwise to release the lock.



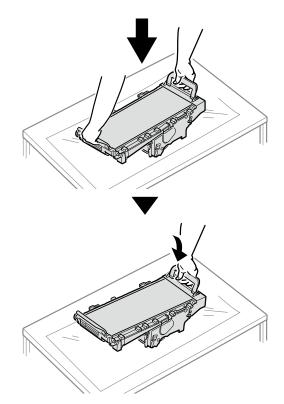
- **10** Hold the belt unit handles (blue) on the left and right, and remove the belt unit at an angle.



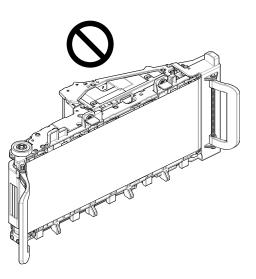
Caution: Be careful to not pinch your hands or fingers between the handle and the machine while removing the belt unit.

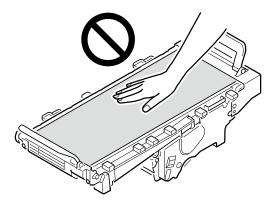
Caution: When removing the belt unit, do not tilt it further than is needed to remove it.

11 Place the belt unit with the right side down on a flat surface covered with paper.



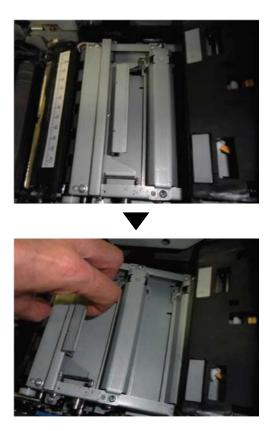
Caution: Place the belt unit on a flat surface, as shown in the diagram above. Do not stand it on its side.





Caution: Do not touch the belt surface or damage the belt.

12 Pull up the paper guide release lever.



13 While the paper guide release lever is lifted, slide the paper guide in the direction of the arrow to remove it.



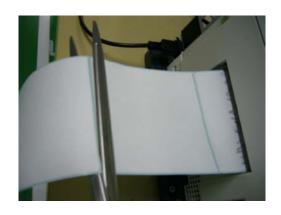
14 If any paper is jammed, pull it out in the direction of the arrow.



There may be some unfused toner on the paper.

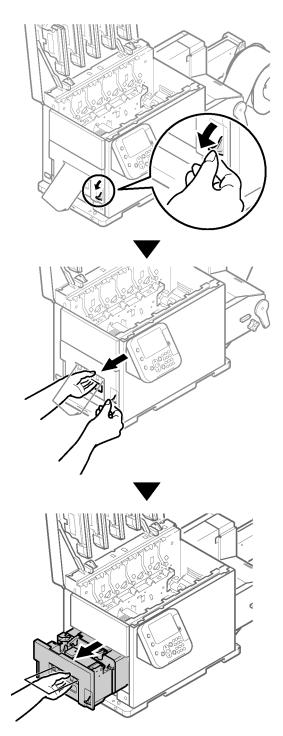


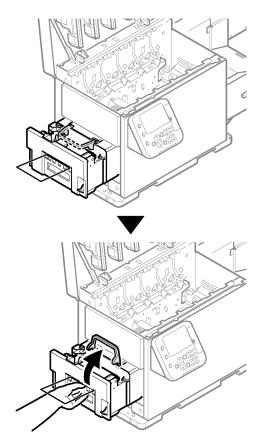
Caution: Be careful, the fuser unit is very hot immediately after printing.



15 If paper is being output from the printer, use scissors to cut it between two labels.

16 While pulling the fuser and exit unit locking lever towards you, pull out the fuser and exit unit.





17 While supporting the fuser and exit unit with one hand, lift up the fuser unit handle.

- **18** Hold the fuser and exit unit with both hands and remove it to a level spot.

Caution: Be careful, the fuser unit is very hot immediately after printing.

19 Slowly pull the paper straight out so it does not overlap.



20 Lower the release lever of the fuser and exit unit, open the exit feed cover and put the fuser unit handle below the exit feed cover.

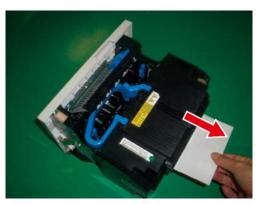








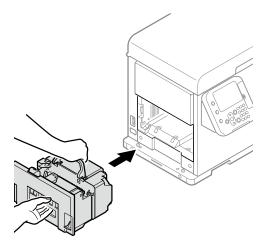
21 Slowly pull out the paper that is left in the fuser and exit unit in the direction of the arrow.



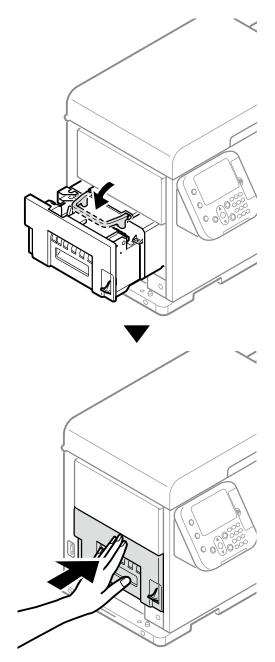
22 Close the exit feed cover.



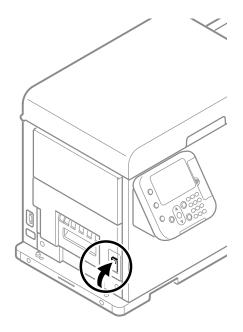
23 Lift the fuser and exit unit with both hands and put it into the printer.

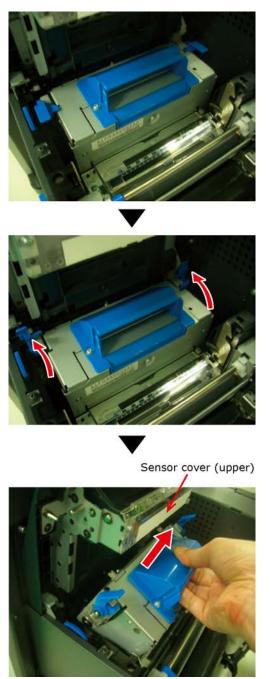


24 Push down the fuser unit handle, and firmly push it inside.



25 Lift up the fuser and exit unit locking lever.

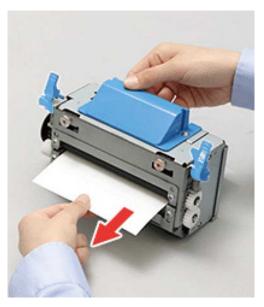




26 Raise the blue lever in the unwinder, and then remove the cutter unit.

Be careful that the cutter unit does not hit the sensor cover (upper) when removing it.

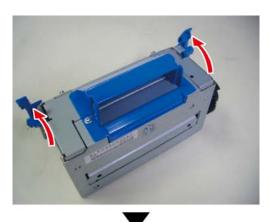
27 Check for any paper or paper dust that has accumulated in the cutter unit, and remove any that has accumulated.

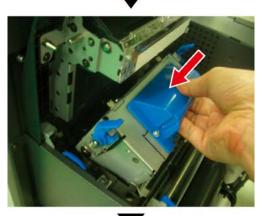


28 Remove any paper that is left in the paper feed path in the unwinder.



29 Raise the blue lever and install the cutter unit.







30 Align the positions of the paper guide's edge (1) and the guide notch on the printer.



Guide notch



Guide notch



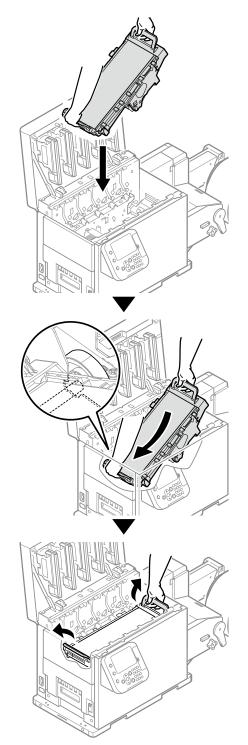
Paper guide's edge (①)

31 Firmly push the paper guide all the way in the direction of the arrow, and then push on the A position to lock it.



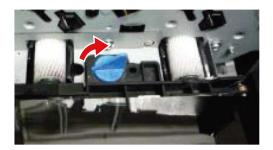


32 Tilt the belt unit and align the arrow labels (red) on the belt unit and printer to position it, and then open the belt unit handles (blue) on the left and right.

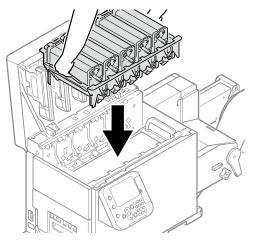


Caution: Be careful to not pinch your hands or fingers between the handle and the machine while installing the belt unit.

33 Turn the two belt unit locking keys clockwise to lock it.

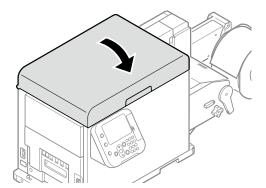


34 Put the print cartridge set back into the printer.



Caution: There is a risk of pinching your fingers or hands when repositioning the print cartridge set. Hold the handle parts of the basket for this operation.

35 Close the top cover.



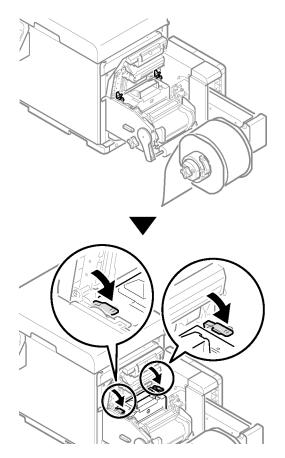
Caution: When closing the top cover, there is a risk of pinching your fingers or hands in the top cover or the top cover's support. Press on the top of the top cover to close it.

Caution: There is a risk of pinching your fingers or hands if you hold the LED head while closing the top cover. Press on the top of the top cover to close it.

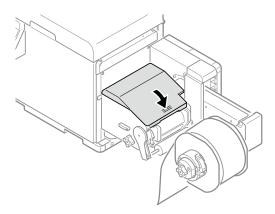
36 Lower the F0 roller release lever.



37 Lower the cutter unit lock levers at both ends of the cutter unit.



38 Close the unwinder cover.



Caution: There is a risk of pinching your fingers or hands while closing the unwinder cover. Press on the top of the unwinder cover to close it.

Frequent Paper Jams

Check the following when paper jam occurs very frequently.

- Are the paper feeding components dirty? See "Cleaning the Inside of the Printer" on page 368.
- Is the roll paper guide set correctly?
- Are you using paper that is compatible with the printer?
- Are there any fragments of paper remaining inside the printer?
- Is there glue on it?
- Are the sensor positions abnormal? See "Calibrating the Sensor" on page 103.

Messages about Paper

When paper type/size set in the unwinder differs from the printer driver specification, messages, such as "Change paper", will appear, and the **ATTENTION** lamp will blink.

Messages related to paper and error codes, cause of errors and their resolutions, and status of the **ATTENTION** lamp is described below.

Besides, when "Please see HELP for details" is shown in the message, pressing the **HELP** button in the control panel will show the solution procedure, and you can easily solve the process according to the guidance. See "Operating the Help Screen" on page 255.

Category	Message displayed on the display screen	Error code	ATTENTION lamp	Causes and Troubleshoot- ing
Change paper	Change paper in Unwinder Press UNLOAD or OK But- ton Please see HELP for details	461	Blinking	The paper settings for the unwinder are different from the print driver specifica- tions. To cancel printing, press the CANCEL button. If multiple errors occur, you may not be able to cancel printing. Press the HELP button, and solve according to the guid- ance shown on the Help screen.
Empty	Install paper in Unwinder Please see HELP for details	491	Blinking	Paper has run out. Load paper that is the size displayed. To cancel printing, press the CANCEL button. If multiple errors occur, you may not be able to cancel printing. Press the HELP button, and solve according to the guid- ance shown on the Help screen.
	Open Unwinder Cover Roll Paper End Please see HELP for details	7311	Blinking	Paper has run out. Open the unwinder cover, and remove the cut paper end. Press the HELP button, and solve according to the guid- ance shown on the Help screen.

Messages about Replacing Wear Items

When the scheduled replacement of wear items approaches, or when the replacement becomes necessary, messages, such as "ABC Near End of Life" and "Install New ABC / ABC Life", will appear, and the **ATTENTION** lamp will start blinking.

Messages related to replacement of wear items and error codes, cause of errors and their resolutions, and status of the **ATTENTION** lamp are described below.

Besides, when "Please see HELP for details" is shown in the message, pressing the **HELP** button in the control panel will show the solution procedure, and you can easily solve the process according to the guidance. See "Operating the Help Screen" on page 255.

Meanings of the symbols used in the error messages are as follows.

• [COLOR]: Either yellow, magenta, cyan, black, or white* appears.

*: White appears only for the QL-300s

Category	Message displayed on the display screen	Error code	ATTENTION lamp	Causes and Troubleshoot- ing
Print cartridges	Install New [COLOR] Print Cartridge Print Cartridge Life Please see HELP for details	4100, 4101, 4102, 4103, 4104, 4140, 4141, 4142, 4143, 4144, 5600, 5601, 5602, 5603, 5604, 6800, 6801, 6802, 6803, 6804	Blinking	The lifespan of the print car- tridge has been reached. Press the HELP button, and solve according to the guid- ance shown on the Help screen. See "Replacing Print Car- tridges" on page 322.
Belt Unit	Install New Belt Unit Belt Unit Life Please see HELP for details	355	Blinking	The lifespan of the belt unit and 2nd transfer roller has been reached. Press the HELP button, and solve according to the guid- ance shown on the Help screen. See "Replacing the Belt Unit and 2nd Transfer Roller" on page 326.

Category	Message displayed on the display screen	Error code	ATTENTION lamp	Causes and Troubleshoot- ing
Fuser and exit unit	Install New Fuser and Exit Unit	354	Blinking	The lifespan of the fuser and exit unit has been reached.
	Fuser and Exit Unit Life Please see HELP for details			Press the HELP button, and solve according to the guid- ance shown on the Help screen. See "Replacing the Fuser and Exit Unit" on page 348.
Waste Toner Box	Install New Waste Toner Box Waste Toner Full Please see HELP for details	357	Blinking	Waste toner is full. If you re-set and use a waste toner box that is already used, there is a risk of the waste toner overflow- ing, so please replace it with a new waste toner box. Press the HELP button, and solve according to the guid- ance shown on the Help screen. See "Replacing Waste Toner Boxes" on page 337.

Messages about Other Issues

Other messages and error codes, cause of errors and their resolutions, and status of the **ATTENTION** lamp are described below.

Besides, when "Please see HELP for details" is shown in the message, pressing the **HELP** button in the control panel will show the solution procedure, and you can easily solve the process according to the guidance. See "Operating the Help Screen" on page 255.

- · Meanings of the symbols used in the error messages are as follows.
 - [COLOR]: Either yellow, magenta, cyan, black, or white* appears.

*: White appears only for the QL-300s

- [MENUCOLOR] : Y,M,C,K (QL-300) / Y,M,C,K,W (QL-300s)
- [COVER]: Either top cover or unwinder cover is displayed.

- [ERRCODE]/ [CODE]: Detailed numbers of the error are displayed.

Message displayed on the display screen	Error code	ATTENTION lamp	Causes and Trouble- shooting
Close Cover [COVER]	310, 589	Blinking	The cover shown in the message is open.
			Close the cover.
Power Off/On	-	Blinking	A fatal error has occurred.
[ERRCODE]:Error			Restart the printer.
Service Call [ERRCODE]:Error	-		If 188 appears in [ERR- CODE], check the condi- tion of the unwinder's installation.
Print Cartridge Not Installed	6940, 6941, 6942, 6943, 6944	Blinking	The print cartridge is not installed properly.
[COLOR]			Press the HELP button,
Please see HELP for details			and solve according to the guidance shown on the Help screen.
Check Print Cartridge	3400, 3401, 3402, 3403, 3404	Blinking	Print cartridge has not been set correctly.
[COLOR]			Install the print cartridge
Please see HELP for details			correctly.
Invalid Print Cartridge Order	7382	Blinking	The print cartridge is not installed in the correct position.
Set to [MENUCOLOR]			Reset in the order that is displayed in the display screen.
Unnecessary Print Car- tridge Error	7390, 7391, 7392, 7393, 7394, 7395, 7396	Blinking	The Lift Up Lever of the print cartridge is not in the
The job was cancelled. Check the position of the print cartridge lift up lever.			correct position. Printing was stopped and the print data was deleted.
To turn off the display, press the OK button			Press the HELP button,
Please see HELP for details			and solve according to the guidance shown on the Help screen.

Message displayed on the display screen	Error code	ATTENTION lamp	Causes and Trouble- shooting
The job was canceled due to a spot color order mismatch To turn off the display, press the OK button	7385	Blinking	Printing was stopped and the data was deleted because the spot color settings were different from those specified in
Please see HELP for details			the printer driver. Press the OK button to delete the display on the display screen.
			Press the HELP button, and solve according to the guidance shown on the Help screen.
The job was canceled due to a paper width mis- match To turn off the display, press the OK button	7386	Blinking	Printing was stopped and the data was deleted because the paper width settings were different from those specified in the printer driver.
Please see HELP for details			Press the OK button to delete the display on the display screen.
			Press the HELP button, and solve according to the guidance shown on the Help screen.
Press the OK Button for Restoration Memory Overflow	420	Blinking	Cannot print. Printing data has exceeded the memory capacity of the printer.
			Select a lower Quality of the printer driver and print once again.
			Press the OK button to delete the display on the display screen.

Message displayed on the display screen	Error code	ATTENTION lamp	Causes and Trouble- shooting
Resume Print from	502	Blinking	Printing can be resumed.
Page xxx/xxx Press the OK Button			Press the OK button to print the rest of the pages.
Please see HELP for details			To cancel printing, press the CANCEL button.
Non Genuine Print Car- tridge[COLOR] Please see HELP for	6840, 6841, 6842, 6843, 6844	Blinking	Print cartridge is not intended for use with this printer model.
details			Use a print cartridge intended for use in this model.
Incompatible Print Car- tridge [COLOR] Please see HELP for	6900, 6901, 6902, 6903, 6904, 7000, 7001, 7002, 7003, 7004, 7040, 7041,	Blinking	Print cartridge is not intended for use with this printer model.
details	7042, 7043, 7044, 6840, 6841, 6842, 6843, 6844, 7100, 7101, 7102, 7103, 7104, 7200, 7201, 7202, 7203, 7204		Use a print cartridge intended for use in this model.
Non Genuine Fuser and Exit Unit	6981	Blinking	Fuser and exit unit is not intended for use with this printer model.
Please see HELP for details			Use a fuser and exit unit intended for use in this model.
Incompatible Fuser and Exit Unit	6982, 6983, 6984, 6985, 6986, 6987	Blinking	Fuser and exit unit is not intended for use with this printer model.
Please see HELP for details			' Use a fuser and exit unit intended for use in this model.
Non Genuine Belt Unit Please see HELP for	6881	Blinking	Belt unit is not intended for use with this printer model.
details			Use a belt unit intended for use in this printer model.

Message displayed on the display screen	Error code	ATTENTION lamp	Causes and Trouble- shooting
Incompatible Belt Unit	6882, 6883, 6884, 6885,	Blinking	Belt unit is not intended
Please see HELP for details	6886		for use with this printer model.
			Use a belt unit intended for use in this printer model.
Receiving Data Timeout	519	Blinking	A data receipt timeout occurred.
Press the OK Button for Restoration			Increase the length of
Please see HELP for details			timeout print setting.
Check Data	-	-	Failed to write the mes-
Message Data Write			sage data to be updated.
Error [CODE]			Check data.
Fuser and Exit Unit Not Installed	699	Blinking	The fuser and exit unit is not installed properly.
Please see HELP for details			Press the HELP button, and solve according to the guidance shown on the Help screen.
Check Fuser and Exit Unit	348, 320	Blinking	The fuser and exit unit is not installed correctly.
Please see HELP for details			Install the fuser and exit unit correctly.
Install Fuser and Exit Unit	333	Blinking	The fuser and exit unit is disconnected.
Please see HELP for details			Press the HELP button, and solve according to the guidance shown on the Help screen.

Message displayed on the display screen	Error code	ATTENTION lamp	Causes and Trouble- shooting
A spot color printing error has occurred. Data will be erased.	459	Blinking	Because of a print request for paper unavail- able to spot color printing, the printing has been
Check the paper and paper settings, and try to print again.			stopped, and the data was deleted.
To turn off the display, press the OK button.			Check the paper and paper settings, and print again.
Please see HELP for details			Press the OK button to delete the display on the display screen.
The data will be deleted due to a spot color order mismatch error.	7380	Blinking	The position of the white print cartridge is different from that specified in the printer driver.
Check the print cartridge position and spot color settings, and try to print again. To turn off the dis- play, press the OK button			Printing has been stopped, and the data was deleted.
Please see HELP for details			Check the order of the print cartridge and the Spot Color setting, then print once again.
			Press the OK button to delete the display on the display screen.
Check Waste Toner Box Please see HELP for	331	Blinking	The waste toner box is not set correctly.
details			Install the waste toner box correctly.
Firmware Update Error Please retry	302	-	Firmware update failed.
If network doesn't work, please try firmware update over USB			Follow the instructions in the message.
Feeder Unit Not Installed	7305	Blinking	The unwinder is not installed.
Shut down and Install Feeder Unit			Turn off the power, and then install the unwinder.

Message displayed on the display screen	Error code	ATTENTION lamp	Causes and Trouble- shooting
Belt Unit Not Installed	689	Blinking	The belt unit is not installed properly.
Please see HELP for details			Press the HELP button, and solve according to the guidance shown on the Help screen.
Check Belt Unit	330	Blinking	The belt unit is not installed correctly.
Please see HELP for details			Install the belt unit cor- rectly.
Unnecessary Print Car- tridge Error	7398, 7399	Blinking	The lift up lever of the print cartridge is not in the correct position.
Check the position of print cartridge lift up lever			Press the HELP button,
Please see HELP for details			and solve according to the guidance shown on the Help screen.
Install Paper Guide	7384	Blinking	The paper guide is not set correctly.
Re-set the Paper Guide Please see HELP for details			Press the HELP button, and solve according to the guidance shown on the Help screen.
Open Cover	7312	Blinking	Paper was forcefully extracted while being fed.
Paper was pulled out			Open the cover and if there are scraps of paper, remove them, and then close the cover.
Check Installed Paper Edge	7308	Blinking	The mark on the leading edge of the paper cannot
Paper Edge Long Error			be detected correctly.
Press the OK Button			Replace the paper, and then press the OK button.
Please see HELP for details			Press the HELP button, and solve according to the guidance shown on the Help screen.

Message displayed on the display screen	Error code	ATTENTION lamp	Causes and Trouble- shooting
Paper Width Error Press the OK Button Please see HELP for	7383	Blinking	The paper currently being used is different from the paper settings in the printer driver.
details			Replace the paper, and then press the OK button.
			Press the HELP button, and solve according to the guidance shown on the Help screen.
Check Installed Paper	7307	Blinking	The mark on the leading edge of the paper cannot
Paper Edge Error			be detected correctly.
Press the OK Button			Replace the paper, and then press the OK button.
Please see HELP for details			Press the HELP button, and solve according to the guidance shown on the Help screen.
Paper Detection Error	7381	Blinking	The paper sensor cannot correctly detect paper.
[SENSOR_ERROR]			Paper setting is incorrect
Press the OK Button [SENSOR_ERROR]: Detailed information of			or the sensors are not set/adjusted. Or, the sen- sor is dirty.
the error will be dis- played.			There is paper left in the printer; remove it.
Wait a Moment	-	Lit	The controller unit is rebooting.
Rebooting %CODE%			lesses ing.
It may take some time to complete this process.			
Shutting down	-	Off	The printer is shutting
Please wait. Printer will turn off automatically			down.
It may take some time to complete this process.			

Printing Problems

This section describes the possible issues that may occur while operating the printer, and their solutions.

Note: If the problem is not solved using the following methods, contact Technical Support.

Note: For problems arising from the applications, contact the application development company.

Unable to Print

Basic Reasons

Cause	Solution Procedure
Power supply of the printer is switched off.	Switch on the power supply.
	See "Turning on the Power" on page 37.
Power supply was switched off due to the auto power off function.	Switch on the power supply. When you do not want to use the auto power off func- tion, disable it with Admin Setup > Power Setup > Auto Power Off in the control panel.
LAN Cable/USB Cable is disconnected.	Check that cables are correctly connected to the printer and the computer. See "Connecting Cables" on page 43.
Cables are defective.	Replace with new cables.
Printer is offline.	Press the ON LINE button on the control panel.
Error message has appeared on the display screen of the control panel.	 Refer to the following information or press the HELP button on the control panel. "Messages about Paper" on page 283 "Messages about Replacing Wear Items" on page 284 "Messages about Other Issues" on page 286
Interface settings are disabled.	From Admin Setup > Network Setup on the control panel, enable the interface you are using.
There is a problem with the print function.	From Printer Information > Configuration > Exe- cute on the control panel, check whether you can print the printer information or not.
This printer is not set as default printer.	Set it to default printer.

Cause	Solution Procedure	
Output port of printer driver is incorrect.	Select the output port where LAN cable/USB cable is connected.	
Printing from other interface is in progress.	Wait until the printing is complete.	

Network Connection Problems

Cause	Solution Procedure	
Cross cable is used.	Arrange straight cable and hub, and connect correctly. See "Network Connection" on page 46.	
Compatibility problem with hub.	Select Admin Setup > Network Setup > Hub Link Setting from the control panel, and change the set- tings.	
There is a problem with hub.	Try inserting the network cable into another port or an empty port on the same hub. If the problem is still not solved, use a different hub.	
Network cable is defective.	Reconnect with a new or a different network cable, and check again.	
Incorrect IP address.	 Check that IP address settings of the printer, and IP address of the printer set in the computer are matching. Check that IP address is not the same as other devices. Check that correct address is set in IP address, Subpot mask, and Cateway address. 	
Duplicate IP address.	Subnet mask, and Gateway address. Set an IP address for the printer that does not dupli- cate any other IP address.	

USB Connection Problems

Cause	Solution Procedure
Cable does not meet the standards.	Use USB cable of USB 2.0 specifications.
USB hub is used.	Directly connect the printer to the computer.
Printer driver is not installed correctly.	Please re-install the printer driver. See "Driver Installa- tion Process Overview" on page 42.
Printer is offline.	Right click the QL-300 icon in the Devices and Printers folder, and then select See what's printing. Select the Printer menu in the dialog displayed, and uncheck Use Printer Offline.

Cause	Solution Procedure
Switch, buffer, extension cable, and USB hub are used.	Directly connect the printer to the computer.
Another printer driver operated through USB connec- tion is installed.	From the computer, remove other printer drivers.

Printer Troubles

Symptom	Cause	Troubleshooting
Nothing is displayed in the display screen panel even after switching	Power supply cord is disconnected.	Switch off the power supply, and firmly insert the power supply cord.
on the power supply.		See "Connecting a Power Cord" on page 37.
	Power outage.	Check if electricity is flowing in the power socket.
Does not function.	Power supply cord is not inserted firmly.	Firmly insert the power supply cord.
		See "Connecting a Power Cord" on page 37.
	Power supply is not switched on.	Switch on the power supply.
		See "Turning on the Power" on page 37.
LED lamp of the POWER button is blinking at high speed at about 0.3 second interval.	The printer has broken down.	Immediately pull the power plug out of the socket, and contact Technical Support.

Symptom	Cause	Troubleshooting
Printing process does not start.	Error is displayed.	Check the error code, and follow the instructions displayed on the display screen.
		 See "Messages about Paper" on page 283.
		• See "Messages about Replacing Wear Items" on page 284.
		See "Messages about Other Issues" on page 286.
	LAN Cable/USB Cable is not con- nected.	Firmly insert LAN Cable/USB Cable.
	LAN Cable/USB Cable is defective.	Use another LAN Cable/USB Cable.
	LAN Cable/USB Cable does not meet the standards.	Use a cable of USB 2.0 specifications.
		Use a cable of LAN Cable 1000 BASE-T Specifications.
	There may be a problem with the print function.	From Print Information > Config- uration > Execute on the control panel, check whether you can print the printer information or not.
	Interface is disabled.	From Admin Setup > Network Setup on the control panel, enable the interface you are using.
	Printer is not selected.	Set the printer as the "Default Printer".
	Output port of printer driver is incorrect.	Specify the output port where LAN cable/USB cable is to be connected.
	The tension bar is not locked.	Lower the tension bar until it clicks. After that, open and close the unwinder cover.
Print data is not sent.	LAN Cable/USB Cable is dam- aged.	Connect a new cable.
	Computer had timed out.	Increase the length of timeout.
Abnormal sound.	Device is tilted.	Install on a stable and a flat sur- face.

Symptom	Cause	Troubleshooting
Resonant sound.	While temperature inside the device has increased, printing is done on a narrow paper or a thick paper.	Device has not broken down. Use the device as it is.
A sound is heard from the cutter unit when cutting the paper.	Glue of the labels accumulated on the cutter blades inside the cutter unit or paper dust may make the blade rubbed and make a sound.	Clean the cutter unit. See "Cleaning the Cutter Unit" on page 392.
Printing does not start immediately.	Device is warming up to return from the power saving mode.	Please wait. When you do not want to use Power Save mode, on the control panel, select Admin Setup > Power Setup > Power Save to disable the mode.
	Cleaning of print cartridge may be in progress.	Please wait.
	Temperature adjustment of the fuser unit is under progress.	Please wait.
	Processing of data from other inter- face is in progress.	Wait until the printing is complete.
	All the print data is being pro- cessed before printing starts.	Please wait.
Printing stops while printing.	Adjusting colors or correcting den- sity during continuous printing.	Please wait.
Not enough memory.	Inadequate memory of the printer due to large printing data.	Lower the print quality in the printer driver, and then print.
		See "Fine Quality Printing" on page 189.
Slow printing.	Printing process is also done at the computer side.	User a computer with fast process- ing speed.
	Complicated print data.	Select simple print data.

Symptom	Cause	Troubleshooting
Failure to calibrate sensor	The sensor is out of position.	Check the position of the sensor.
		See "Confirming the Printer Sensor Position" on page 108.
	The surface of the sensor cover is dirty.	Clean the surface of the sensor cover.
		• See "Cleaning the Surfaces of the Unwinder" on page 357.
		 See "Cleaning the Surfaces of the Printer" on page 367.
	Last of the paper was detected while calibrating the sensor.	Replace the paper with a new roll of paper.
	The information for the paper being used is not registered on the printer.	Correctly register, on the printer, the information for the paper being used.

Trouble with Sensor Calibration

Printer Driver Malfunctions

USB Connection Problems

Symptom	Solution Procedure
Icon of the printer is not created in the Devices and Printers folder.	Printer driver is not installed correctly.
	See "Driver Installation Process Overview" on page 42.
Error message such as "Printer driver installation	Use plug and play. Follow the procedure given below.
failed" appears.	1 Check that the power supply to the printer and computer are turned off.
	2 Connect the USB cable.
	3 Turn on the power supply of the printer.
	4 Turn on the power supply of the computer.
	5 Open the Devices and Printers screen from Control Panel, and then click Add a printer.
	6 Execute the setup according to the on-screen instructions.
	Specify the following location to directly specify the printer driver. \Drivers\PCLXL

Symptom	Solution Procedure
A few seconds of waiting time occurs if you switch from another printer to the QL-300, using the printer settings in an application.	These symptoms occur when there are many types of paper registered in the printer driver. If you want to reduce this waiting time, delete the paper settings that you do not need from the printer driver.
	See "Registering a Desired Paper Size with the Printer Driver" on page 82.
Printing is being done in specified batches, even though they have not been specified.	For some applications, batch copies may be specified automatically if a number of copies have been speci- fied in the print settings on the application.
	To solve this, manually turn off the batch settings that were turned on automatically in the application.
	See "Collating Printed Output (Sorted Printing)" on page 202.
The setting for printing multiple copies does not appear on the control panel of the printer, even though the setting for multiple copies is specified in printer settings in the printer driver or the application.	 When you specify to print multiple copies in the printer driver or application, some applications generate print data for all of the copies to be printed. When this type of data is being printed, the printer cannot recognize that you have specified multiple copies to be printed, so the indicator for printing multiple copies does not appear on the control panel. You can use the printer as it is, because all the copies that you specified will be printed.

Trouble when Setting up Printing

Symptom	Solution Procedure
The final printout is not cut, even though Cut by colla- tion or To specify the number of pages per cut is specified in the Cut Mode settings in the printer driver, although the setting for collate is specified in the printer settings in the printer driver or the application.	 When you specify to collate printouts in the printer driver or application, some applications reorder the pages in collated order, and then generate print data for all of the copies to be printed. When this type of data is being printed, the printer cannot recognize that the printout is being collated, so the indicator for collated printing does not appear on the control panel. In addition, the final printout is not cut, even though Cut by collation or To specify the number of pages per cut is specified in the Cut Mode settings in the printer driver. Even if the application is suitable, when you want to cut collated printouts, specify the pages in To specify the number of pages per cut so they match the pages being collated. Furthermore, if you can only specify a number of pages per cut because the paper is short, you need to edit the print data, such as by adding blank pages, so it has a number of pages that can coincide with the number specified in To specify the number of pages per cut.

Problems Concerning Restrictions of Windows OS

Items	Symptom	Causes and Troubleshooting
Printer driver	The User Account Control dialog appears.	When starting installer or utility, the User Account Control dialog may appear. Click Yes or Go, and run installer or utility as administrator. Clicking No or Cancel will not start installer or utility.
	Images are being printed in an incorrect layout when doing "Print Test Page".	Occurred because Windows OS is creating print information that is larger than the paper settings that are set in the printer driver. Operation is not abnormal.

Print Quality Is Poor

Symptom	Cause	Troubleshooting
White stripe in perpendicular direc- tion.	LED head is unclean.	Wipe LED head with a soft tissue paper.
		See "Cleaning LED Heads" on page 387.
/-1	Low toner.	Replace the print cartridge.
Paper feed direction		See "Replacing Print Cartridges" on page 322.
	Deposit of foreign substances.	Replace the print cartridge.
		See "Replacing Print Cartridges" on page 322.
	Window film on print cartridge is dirty.	Wipe window film with a soft tissue paper.
		See "Cleaning LED Heads" on page 387.
	Print cartridge has not been set correctly.	Please set the print cartridge cor- rectly.
		See "Cleaning LED Heads" on page 387.

Symptom	Cause	Troubleshooting
Printing is blurred in perpendicular direction.	LED head is unclean.	Wipe LED head with a soft tissue paper.
		See "Cleaning LED Heads" on page 387.
Paper feed direction	Low toner.	On the control panel, set +1 to +3 in SMR Setting . If the problem is not rectified after that, replace the print cartridge.
		There is a risk of the printouts being dirty if you continue using the +1 to +3 setting in SMR Setting.
		See "Replacing Print Cartridges" on page 322.
	The toner is clumping.	Shake the print cartridge up and down, and left and right.
		See "Replacing Print Cartridges" on page 322.
	Paper not suitable.	Check the roll paper specifica- tions, and then use paper that is described on the roll paper specifi- cations.
	The temperature and humidity con- trols are not suitable.	On the control panel, set +1 to +3 in SMR Setting .
		There is a risk of the printouts being dirty if you continue using the +1 to +3 setting in SMR Setting .

Symptom	Cause	Troubleshooting
Printing is light.	Print cartridge has not been set correctly.	Re-install the print cartridge. See "Replacing Print Cartridges" on page 322.
	Low toner.	Replace the print cartridge. See "Replacing Print Cartridges" on page 322.
	Paper is moist.	Use paper that has been stored at appropriate temperature and humidity.
	Paper not suitable.	Check the roll paper specifica- tions, and then use paper that is described on the roll paper specifi- cations.
	Paper not suitable. Type and thickness setting of paper is inappropriate.	Correct Media Weight in the con- trol panel to the appropriate value. Or, change Media Weight to a thicker value than the present value.
	Recycled paper is used.	Correct Media Weight in the con- trol panel to the appropriate value. Or, change Media Weight to a thicker value than the present value.

Symptom	Cause	Troubleshooting
Printing is blurred in some parts. White dots appear when printing solid colors.	The paper is too damp or too dry.	Use paper that has been stored at appropriate temperature and humidity.
Α	Transfer Setting is not properly set.	If white dots appear in cyan trans- fer, lower the setting value by selecting Print Adjust > Transfer Setting > Cyan Transfer Setting on the control panel.
		If white dots appear in other colors' transfer, change the transfer set- ting value of the corresponding color.
	Media Transfer Setting Black or Media Transfer Setting Color is not properly set.	On the control panel, change the value in Print Adjust > Media Transfer Setting Black or Media Transfer Setting Color .
	There are scratches, dents or for- eign matter (including glue from labels) on the belt unit.	Replace the belt unit.
		Implement protection against for- eign matter and do daily mainte- nance (cleaning).
		See "Replacing the Belt Unit and 2nd Transfer Roller" on page 326.
Stripes in perpendicular direction.	There are dents on the print car-	Replace the print cartridge.
	tridge.	See "Replacing Print Cartridges" on page 322.
	Low toner.	Replace the print cartridge.
Paper feed direction		See "Replacing Print Cartridges" on page 322.
	The transfer path or the fuser and exit unit are dirty because bits of	Clean the transfer path and the fuser and exit unit.
	paper or glue are on them.	See "Cleaning the Inside of the Printer" on page 368.

Symptom	Cause	Troubleshooting
The front or rear edge of the paper is dirty.	The 2nd transfer roller is dirty.	Run Print Adjust > Transfer Roller Cleaning on the control panel.
		If it is not rectified even after that, replace the 2nd transfer roller.
Paper feed direction		Replacement of the 2nd transfer roller is done together with the belt unit, which is a wear item.
		See "Replacing the Belt Unit and 2nd Transfer Roller" on page 326.
	The area around the 2nd transfer roller or the paper transfer path is dirty.	Wipe the area around the roller on the 2nd transfer roller and the paper transfer path with a soft tis- sue paper.
		See "Cleaning the Inside of the Printer" on page 368.
Image disturbance occurs to the printed portion.	The speed of the fuser unit is incor- rect.	Feed 400 mm of media or longer one time.
A		

Symptom	Cause	Troubleshooting
Stripes or dots appear periodically in horizontal direction.	In the case of a cycle length of about 94 mm, the print cartridge may be scratched or dirty.	Wipe it lightly with a soft tissue paper.
		If there are dents, replace the print cartridge.
		See "Replacing Print Cartridges" on page 322.
Paper feed direction		Set Smooth in Screen for the print quality settings in the printer driver.
	In the case of cycle length of about	Replace the print cartridge.
	31 mm, there is dirt inside the print cartridge.	See "Replacing Print Cartridges" on page 322.
	In the case of cycle length of about	Replace the fuser and exit unit.
	140 mm, there are scratches on the fuser and exit unit.	See "Replacing the Fuser and Exit Unit" on page 348.
	Print cartridge is exposed to light.	Return the print cartridge inside the printer, and do not use the printer for a few hours. If it does not rectify even after that, replace the print cartridge.
		See "Replacing Print Cartridges" on page 322.
	In the case of cycle length of about	Clean the feed roller.
	63 mm, the feed roller is dirty.	See "Cleaning the Inside of the Printer" on page 368.
	In the case of cycle length of about 75 mm, 2nd transfer roller may be dirty.	Run Print Adjust > Transfer Roller Cleaning on the control panel.
		If it is not rectified even after that, replace the 2nd transfer roller.
		Replacement of the 2nd transfer roller is done together with the belt unit, which is a wear item.
		See "Replacing the Belt Unit and 2nd Transfer Roller" on page 326.
	Dirt has deposited on the paper transfer path.	Print a few pages as a test Or, clean the transfer path.
		See "Cleaning the Inside of the Printer" on page 368.

Symptom	Cause	Troubleshooting
Portion of white background is lightly stained.	Paper has static electricity.	Use paper that has been stored at appropriate temperature and humidity.
Δ	Thick paper is used.	Use thinner paper.
	Low toner.	Replace the print cartridge.
		See "Replacing Print Cartridges" on page 322.
Border of characters is blurred.	LED head is unclean.	Wipe LED head with a soft tissue paper.
Α		See "Cleaning LED Heads" on page 387.
	Paper not suitable.	Check the roll paper specifica- tions, and then use paper that is described on the roll paper specifi- cations.
	Paper is moist.	Replace with new paper.
Rubbing paper removes the toner.	Type and thickness setting of paper is inappropriate.	Correct Media Weight in the con- trol panel to the appropriate value. Or, change Media Weight to a thicker value than the present value.
	Recycled paper is used.	Correct Media Weight in the con- trol panel to the appropriate value. Or, change Media Weight to a thicker value than the present value.
Specks appear on glossy papers.	Type and thickness setting of paper is inappropriate.	Correct Media Weight in the con- trol panel to the appropriate value. Or, change Media Weight to a thicker value than the present value.

Symptom	Cause	Troubleshooting
Bold lines appear in horizontal direction.	Type and thickness setting of paper is inappropriate.	If a line is printed from the second page with black & white print, set the Media Weight to an appropri- ate value from the control panel. Or, change Media Weight to a thicker value than the present value.
Paper feed direction	Occurs when the following edge of the paper leaves the F4 roller, if it is 77 mm from the following end of the paper.	Bold lines or thin lines may occur on media similar to cast coated paper (stiff media or media on yel- low separators). Use recom- mended paper.
	Occurs due to the different levels of the gap between labels, if it occurs periodically at labels.	Bold lines or thin lines may occur on media similar to cast coated paper (stiff media or media on yel- low separators). Use recom- mended paper.
	Occurs when paper has been loaded for a long time, at the F0 roller, if it is about 40 mm from the leading edge of the paper.	When media is pinched in F0 roller, streaks appear, stiff media becomes curled, and images may be affected. After printing, remove the paper. Also, always remove the paper if you will not use the equip- ment for a long time.
Lateral-stripe white dots appear at the solid printing portion.	Transfer Setting is not properly set.	If white dots appear in cyan trans- fer, lower the setting value by selecting Print Adjust > Transfer Setting > Cyan Transfer Setting on the control panel.
		If white dots appear in other colors' transfer, lower the transfer setting value of the corresponding color.
	Media Transfer Setting Black or Media Transfer Setting Color is not properly set.	On the control panel, decrease the value set in Print Adjust > Media Transfer Setting Black or Media Transfer Setting Color .
Border of the solid printing portion is lightly stained.	Paper is too dry.	Use paper that has been stored at appropriate temperature and humidity.
A	Media Transfer Setting Black or Media Transfer Setting Color is not properly set.	On the control panel, increase the value set in Print Adjust > Media Transfer Setting Black or Media Transfer Setting Color .

Symptom	Cause	Troubleshooting
The back of the paper is dirty.	The 2nd transfer roller is dirty.	Confirm that the size of the image and the length of the paper match.
		Clean the 2nd transfer roller.
		See "Cleaning the Inside of the Printer" on page 368.
Does not print with color shades as	Low toner.	Replace the print cartridge.
you thought.		See "Replacing Print Cartridges" on page 322.
	Setting of Black Finish is not matching with the application.	In the Black Finish of printer driver, select True Black (K) or Composite Black (CMYK) .
	Change color matching options.	Change to color matching option of the printer driver.
	No color balance.	Select Calibration on the control panel, and then run Adjust Den -sity.
	Misalignment of color.	Open the top cover at once, and the close it again.
		Select Calibration on the control panel, and then run Adjust Regis- tration .
Black spots or white spots appear.	Paper not suitable.	Check the roll paper specifica- tions, and then use paper that is described on the roll paper specifi- cations.
	In the case of a cycle length of about 94 mm, the print cartridge may be scratched or dirty.	Gently wipe the dirt stuck to the brown tube in the print cartridge with a soft tissue paper.
		If there are dents, replace the print cartridge.
		See "Replacing Print Cartridges" on page 322.

Symptom	Cause	Troubleshooting
Stains are printed.	Paper is moist.	Replace with a new paper.
A	Paper not suitable.	Check the roll paper specifica- tions, and then use paper that is described on the roll paper specifi- cations.
	The surface of the roller in the feed path is dirty.	If foreign matter is found on the surface of the roller in the feed path, remove the dirt with a soft cloth or tissue paper.
The entire paper is printed black.	The device might have broken down.	Contact Technical Support.
Nothing is printed.	The device might have broken down.	Contact Technical Support.

Symptom	Cause	Troubleshooting
White spaces occur.	Paper is moist.	Replace with a new paper.
,A	Paper not suitable.	Check the roll paper specifica- tions, and then use paper that is described on the roll paper specifi- cations.
	Scraps of paper from the labels are stuck to the belt unit.	Replace the belt unit. The belt unit is replaced together with the 2nd transfer roller, which is a wear item. See "Replacing the Belt Unit and 2nd Transfer Roller" on page 326. Implement protection against for- eign matter and do daily mainte- nance (cleaning). Or, check the cutting position; if it has shifted, readjust the cutting position.
	If it is near the leading edge of the roll paper, it may be the remains of the tape that has peeled off the roll paper.	Cut off the end part of the paper that has any tape left on it, and do not use that paper.
Afterimages are appearing.	The print quality setting is not appropriate.	Set Smooth in Screen for the print quality settings in the printer driver.
Paper feed direction		

Symptom	Cause	Troubleshooting
Blank pages are being inserted.	An image that is less than 4 inches long is being printed.	When setting User-defined paper in the printer driver, if you set less than 4 inches for the following, then a blank piece of paper will be inserted after cut pages when you print.
		 For continuous paper, Paper length
		• For die-cut labels, die-cut labels with black marks and continuous labels, Label length
		 For continuous paper with black marks and continuous labels with black marks, Black mark interval
		This occurs because an image that is shorter than the length of the paper that can be fed is printed; so it is a limit.
The position that printing starts on the leading edge is misaligned.	The belt has stretched	Adjust the registration and execute paper interval detection before you start printing, and install the printer in a room that has humidity that is as stable as possible.
	The gap interval between labels is different between each label.	Rolls of labels that have different intervals between labels cannot be used. Use rolls of labels that have regular intervals.
	There is a join in the roll paper.	If there is a join in the roll paper, the position that printing starts on the leading edge may be mis- aligned.We cannot recommend media that has joins.
	The paper size specified in the printer driver is different from the paper size that is loaded.	Specify the correct paper size in the printer driver.
	The black mark sensor position or gap sensor position is skewed.	For black marks, adjust the position of the sensor to the center of the black mark. For gaps, adjust the position of the sensor to the center of the label.

Symptom	Cause	Troubleshooting
The position that printing starts on the leading edge is misaligned.	(The first page is misaligned) The paper and media form that you are using have been switched.	Do fine adjustments to the print position. Set Cut Mode-Specified Inter- val-Cut Interval to "1". Then print 5 pages of your content on the media you are actually using and use them to measure the differences in the position you want to print and the actual printed positions, and then calculate the average of these 5 measurements. Use this difference to finely adjust the print position using the print position correction (Y position).
	(The second and following pages are misaligned) Immediately after doing paper interval detection, replacing the roll of paper, or changing the print pat- tern, the print position adjustment (auto) was not done well enough.	Print 20 continuous pages of the actual print pattern you are using (set Cut Mode-Specified Inter- val-Cut Interval to "20") so you can compensate for the position that printing starts.
Printing extends off the trailing edge of the paper.	The paper size specified in the printer driver is different from the paper size that is loaded.	Specify the correct paper size in the printer driver.
	The compensation value specified for the print position correction (Y position) is too large.	Specify a correction value that is within a range that the printing does not extend off the trailing edge of the paper. If the image extends off the trailing edge of the paper, clean the 2nd transfer roller.
Pages are cut on a different page than the specified page.	Last of the paper was detected.	Replace the paper with a new roll of paper. When reprinting, paper is output from the page where the error occurred up to the cut page. So, if you want to justify the num- ber of pages up to the cut, tempo- rarily cancel printing and send print data starting from the page you want to reprint.

Symptom	Cause	Troubleshooting
There is an abnormality in the print results on the Test Page .	You are printing image data that is an inappropriate size.	The layout of the image skews in the printed results when you do the Print Test Page from the printer driver, depending on the type of OS that you are using. This is not a problem with the printer driver or the equipment. It is caused by the OS transmitting the images on A4 or letter size paper, which are paper sizes that the device does not support.

Paper Feed Is Poor

Symptom	Cause	Troubleshooting
Paper jam occurs frequently.	Device is tilted.	Install on a stable and a flat sur- face.
	The paper feed path is dirty.	Clean the paper feed path. See "Cleaning the Inside of the Printer" on page 368.
	Position of the roll paper guide is not aligned.	Align the roll paper guide to the position of the paper size that is set.
	Papers are not set correctly.	Remove the roll paper and reset.
	The position of the roll paper is misaligned.	Remove the roll paper and reset it, and then turn the roll paper position adjustment dial to adjust the posi- tion.
	The leading edge of the paper is curled. Or, the paper that is loaded does not have cuts in the gaps between the labels.	Correctly cut the leading edge of the paper and reset it.

Symptom	Cause	Troubleshooting
Paper jam occurs frequently.	Printer driver sensor settings are not specified correctly.	Specify Sensor settings in Paper settings of the printer driver so it is the same as where the results of the sensor calibration are regis- tered.
		Furthermore, if several of the same model printer are connected to a single computer and if the same paper settings are specified on the printer driver for the various print- ers, then in Sensor settings the same registration number should be specified for all the printers.
		Register the sensor adjustment results from each printer so they match the Sensor settings num- bers that are in the paper settings on the printer driver as the above countermeasures.
	The width of the paper being used and the width of the paper guide do not match. Or, the paper width set	Use paper that is as wide as the paper width that is set in the printer driver.
	in the printer driver and the width of the paper being used do not match.	Align the width of the paper guide to the width of the paper you are using.
	An appropriate paper is not set.	Match the settings of the paper on which you want to print with the settings in the printer driver. Do a sensor calibration for the paper on which you want to print.
	There are traces of sealing tape on the roll paper that is being used.	Do not use the part of the roll paper on which there are traces of seal- ing tape. Feeding may not be nor- mal because of the glue stuck to the paper.

Symptom	Cause	Troubleshooting
Paper jam occurs frequently.	The positions of the machine and the unwinder sensors do not match.	Align the position of the sensor with the paper.
	Labels are missing from the roll of paper that is being used.	Load a suitable roll of paper. If the cause described on the left is correct, there may be toner on the fuser unit, so you should clean it.
	Only when paper feed is started by pressing the FEED button Stiff continuous labels are being used (or, die-cut labels that are lon- ger than 600 mm).	Fold the media about 200 mm from the leading edge of the media (liner) to make a crease that forms a valley in the printed face, and then feed the paper.
	The roll of paper is old so its color or quality has changed.There are large differences in the reflective- ness of the black marks or the transmittance of the liner.	Calibrate the sensor.
Paper is not fed.	The paper settings for the printer are different from the paper set- tings in the printer driver.	Check the message on the display screen, and if there is no problem, press the OK button on the control panel.
	Glue has smeared on the liner.	Do not use a liner on which glue is smeared. It will not feed normally. In the worst case, it could damage the equipment.
Device is not restored even after removing the jammed paper.		Open the top cover at once, and the close it again.
Paper gets curled. Creases appear on the paper.	Paper contains moisture or static electricity.	Use paper that has been stored at appropriate temperature and humidity.
	Thin paper is used.	Correct Media Weight in the con- trol panel to the appropriate value. Or, change Media Weight to a thicker value than the present value.

Symptom	Cause	Troubleshooting
Paper winds around the roller of the fuser and exit unit.	Type and thickness setting of paper is inappropriate.	Correct Media Weight in the con- trol panel to the appropriate value. Or, change Media Weight to a thicker value than the present value.
	Thin paper is used.	Use thicker paper.
The space between labels is not cut; the labels are cut.	The position of the cut is mis- aligned.	Readjust the cutting position.
	The leading edge of the label and the black mark positions are not aligned.	Labels cannot be used if the lead- ing edge of the label and the black mark positions do not align. Use labels whose leading edges align with the black mark.
	The gap interval between labels is different between each label.	Rolls of labels that have different intervals between labels cannot be used. Use rolls of labels that have regular intervals.
	The gap interval between labels is not from 3 to 10 mm.	A gap between labels from 3 to 10 mm can be used. Do not use any others.
	The paper size specified in the printer driver is different from the paper size that is loaded.	Specify the correct paper size in the printer driver.
Paper has stopped feeding.	Last of the paper was detected during warm up while paper was feeding.	Replace the paper with a new roll of paper.
Paper is not fed, even when the FEED button is pressed.	Last of the paper was detected while feeding paper.	Replace the paper with a new roll of paper.
Paper is not unloaded, even when the UNLOAD button is pressed.	Last of the paper was detected while unloading paper.	Replace the paper with a new roll of paper.
The rear edge of the paper is skewed.	Paper is not set on the roll shaft.	Replace the paper with a new roll of paper.

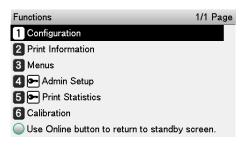
12

Replacing Wear Items

Checking Service Life and Remaining Amounts of Wear Items

You can check the service life and remaining quantities of the print cartridge, belt unit, fuser and exit unit, and waste toner box.

1 Press the scroll button ▼ several times to select **Configuration**, and then press the **OK** button.



2 Select **Supplies Life**, and press the **OK** button.

Configuration	1/1 Page
Feeder Count	
2 Supplies Life	
3 Network	
4 System	

Use Online button to return to standby screen.

3 Select the wear items to check (print cartridge, belt unit, fuser and exit unit, or waste toner box).

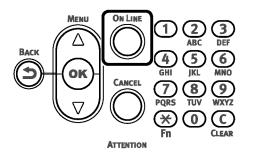
Supplies Life	1/2 Page
1 Cyan Print Cartridge	
2 Magenta Print Cartridge	
3 Yellow Print Cartridge	
4 Black Print Cartridge	
5 White Print Cartridge	
6 Waste Toner Box	
7 8 ↑ / ↓ Page	

4 Press the **OK** button.

Supplies Life	1/2 Page
1 Cyan Print Cartridge	
2 Magenta Print Cartridge	
3 Yellow Print Cartridge	
4 Black Print Cartridge	
5 White Print Cartridge	
6 Waste Toner Box	
7 8 ↑ / ↓ Page	

If you want to continue to check other items, press the **BACK** button to return to the previous step.

5 Press the **ON LINE** button to return to the standby screen.



Replacing Wear Items

This section describes the service life and replacement method of wear items.

About the Service Life of Wear Items

Guidelines for replacement of wear items are as follows. Service life estimates are for reference. The actual service life will vary based on label design, usage status, powering on/off, and adjustment operations.

Wear item	Approximate service life
Print Cartridge (CMYK)	52,200 linear inches at 20% toner density.
	Print quality will decline one year after open- ing the package.
	Monochrome printing (black and white) is possible even if cyan, magenta, or yellow cartridge life has been reached. See "Mono- chrome (Black and White) Printing" on page 232.

Wear item	Approximate service life
Print Cartridge (W)	26,100 linear inches at 20% toner density.
The white print cartridge is for the QL-300s only.	Print quality will decline one year after open- ing the package.
	CMYK printing is possible even if the white cartridge life has been reached. See "Print- ing Using the Specified Print Cartridge Only (Lift Up)" on page 187.
Belt Unit	2,610,000 linear inches at 5% toner density.
2nd Transfer Roller	2,610,000 linear inches at 5% toner density.
	The 2nd transfer roller is included in the belt unit, which is a wear item.
Fuser and Exit Unit	870,000 linear inches.
Waste Toner Box	435,000 linear inches at 5% toner density.
Paper Guide/Feed Unit	5,800,000 linear inches.
Cutter Unit (Unwinder)	1,000,000 cuts.
F0 Roller Unit (Unwinder)	5,800,000 linear inches.

Toner density is the proportion of area having toner on printable area of 1 page.

When the Replacement Period Is Approaching

When the scheduled replacement of wear items approaches, the following message will appear and the **ATTENTION** lamp will blink.

Replace wear items when "Install New..." appears in the message.

Pressing the **HELP** button on the control panel will display the replacement procedure. You can easily replace the wear items according to the guidance. See "Operating the Help Screen" on page 255.

	Message displayed on the display screen	
Item	When the replacement period approaches	When it is time for replacement
Print cartridges	[COLOR]* ¹ Print Cartridge Near	Install New [COLOR]* ¹ Print Car-
See "Replacing Print Cartridges"	End of Life	tridge
on page 322.		Print Cartridge Life
		Please see HELP for details

	Message displayed on the display screen	
Item	When the replacement period approaches	When it is time for replacement
Belt Unit	Belt Unit Near Life	Install New Belt Unit
See "Replacing the Belt Unit and		Belt Unit Life
2nd Transfer Roller" on page 326.		Please see HELP for details
Fuser and exit unit	Fuser Unit Near End of Life	Install New Fuser and Exit Unit
See "Replacing the Fuser and Exit		Fuser and Exit Unit Life
Unit" on page 348.		Please see HELP for details
Waste Toner Box	Waste Toner Near Full	Install New Waste Toner Box
See "Replacing Waste Toner		Waste Toner Full
Boxes" on page 337.		Please see HELP for details

*1: [COLOR]: Either yellow, magenta, cyan, black, or white is displayed. (White appears only for the QL-300s.)

Replacing Print Cartridges

Precautions Related to Print Cartridge Replacement

Symbol	Warning
	Do not put toner or print cartridges in fire. The toner may spray out and cause burns.
\bigcirc	Do not store print cartridges in locations exposed to open flame. They could ignite, burn, and cause burn injuries.
\bigcirc	Do not clean spilled toner with a vacuum cleaner. If cleaning spilled toner with a vacuum cleaner, it may catch fire due to the sparks from electric contact. Toner spilled on the floor should be wiped up with a wet cloth.

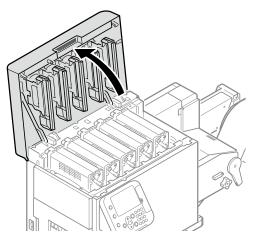
Symbol	Caution
	Some parts inside the machine are very hot. Do not touch the areas near the "High Temperature Warning" labels. Doing so may cause burns.

Symbol	Caution
0	Keep the print cartridges away from children.
0	If toner is ingested, follow the direction from a doctor if necessary.
0	If toner is inhaled, gargle with plenty of water and move to a location where the air is fresh. Follow the direction from a doctor if necessary.
0	If toner gets on your hands or skin, carefully wash it off with soapy water.
0	If toner gets into your eyes, flush them with large amount of water. Fol- low the direction from a doctor if necessary.
0	Be careful to not get toner on your clothes or hands when you are clearing paper jams or replacing the print cartridges. If toner gets on your hands or skin, carefully wash it off with soapy water.
	If it gets on your clothes, rinse it off with cold water. If you wash them with warm water or heat the toner, it will stain the clothes permanently.
	Do not disassemble or forcibly open the print cartridge. It may scatter the toner, which people may inhale or may stain clothes and hands.
0	Store used print cartridges in a bag so that the toner does not scatter around.
0	Toner spilled on the floor should be carefully wiped up with a wet cloth so the toner does not scatter around.
0	Gently wipe the dirt stuck to the brown tube in the print cartridge with a soft tissue paper.
	Do not use alcohol or other solvents to wipe it. If alcohol or some other solvent is used to wipe it, the irregularities left from wiping it will degrade print quality.

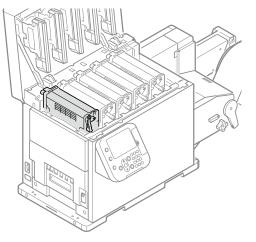
Replacing Print Cartridges

The following example describes how to replace the yellow (Y) print cartridge. Adjust the procedure based on the print cartridge you are replacing.

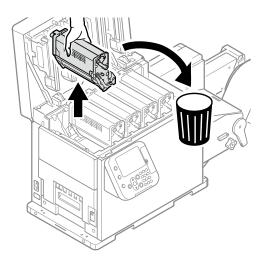
1 Grasp the top cover open lever and open the top cover.



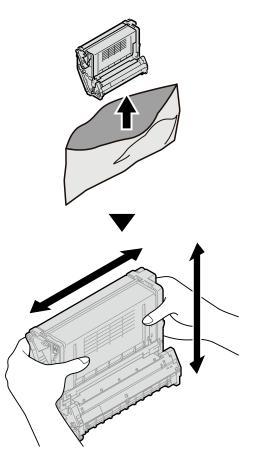
2 Check the position of the print cartridge to replace, by the text and color of the label.



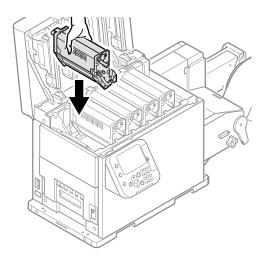
3 Pull out the print cartridge.



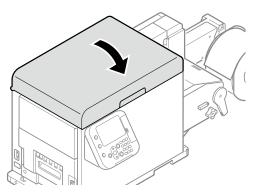
4 Remove the new print cartridge from the packing bag, and then shake it vertically and horizontally.



5 Check the position where a label with the same text and colors has been applied, and firmly and levelly push the print cartridge in as far as it will go.



6 Close the top cover.



Caution: When closing the top cover, there is a risk of pinching your fingers or hands in the top cover or the top cover's support. Press on the top of the top cover to close it.

Caution: There is a risk of pinching your fingers or hands if you hold the LED head while closing the top cover. Press on the top of the top cover to close it.

If the **Print Cartridge Life** message does not disappear even though you have replaced the print cartridge, the print cartridge may not be securely installed. Install it correctly.

If Error709 appears after you replace a print cartridge, refer to "Messages about Other Issues" on page 286.

7 Please support the recycling of used print cartridges.

If you must dispose of a used print cartridge, put it in a plastic bag and be sure to dispose of it according to the local laws and government regulations.

Use the box and packing bag from the new print cartridge to recycle the used print cartridge.

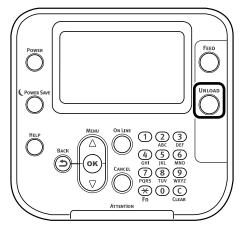
Replacing the Belt Unit and 2nd Transfer Roller

A new 2nd transfer roller is supplied with the new belt unit in the same package.

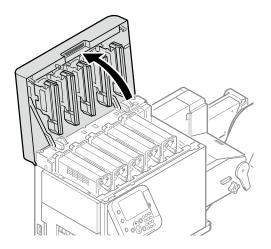
Also, a new waste toner box is mounted inside the belt unit.

1 If roll paper has been fed through the printer, press the **UNLOAD** button to cut the roll paper.

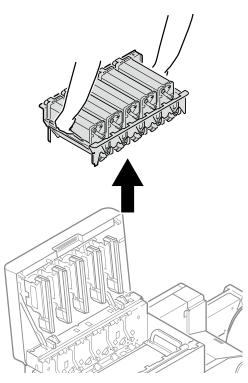
The cut paper will be fed to the supply side and the feeding side.



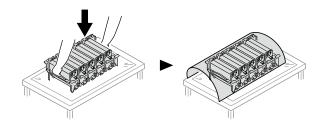
2 Grasp the top cover open lever and open the top cover.



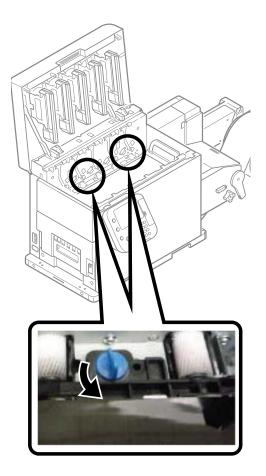
3 Remove the print cartridge set.



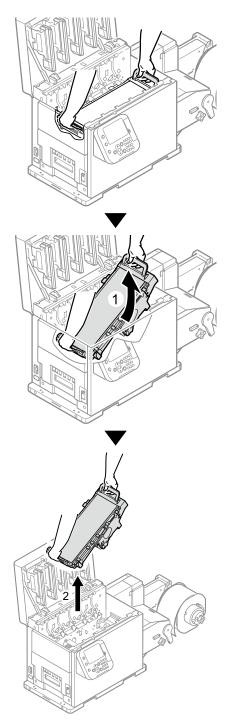
4 Place the removed print cartridge set on a flat surface covered with newspaper or something similar, and cover it with paper so it is not exposed to direct light.



5 Turn the two belt locking keys counterclockwise to release the lock.



6 Hold the belt unit handles (blue) on the left and right, and remove the belt unit at an angle.

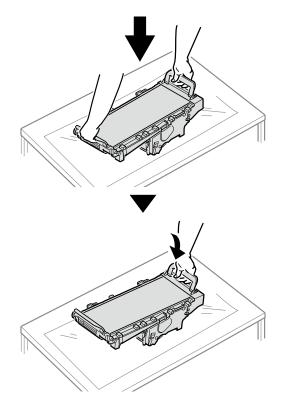


Caution: Be careful not to spill waste toner while removing the belt unit.

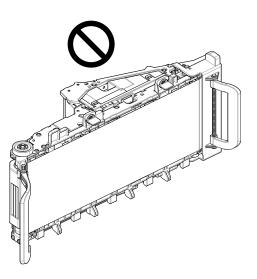
Caution: Be careful to not pinch your hands or fingers between the handle and the machine while removing the belt unit.

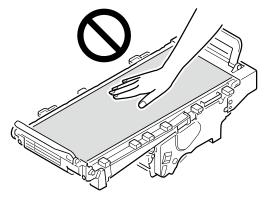
Caution: When removing the belt unit, do not tilt it further than is needed to remove it.

7 Place the belt unit with the right side down on a flat surface covered with paper.



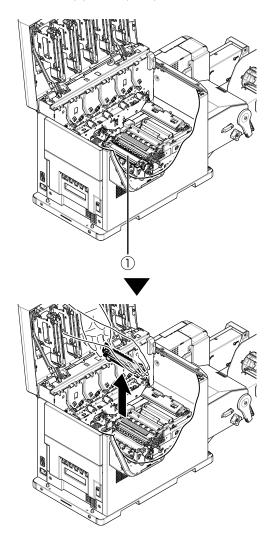
Caution: Place the belt unit on a flat surface, as shown in the diagram above. Do not stand it on its side.





Caution: Do not touch the belt surface or damage the belt.

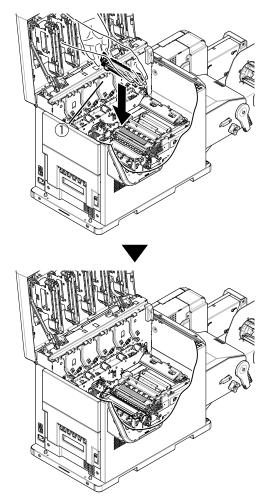
8 Hold the 2nd transfer roller unit (1) knob (blue) and remove it.



9 Remove the 2nd transfer roller from its packaging.



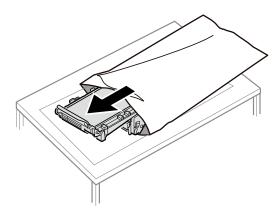
10 Set the new 2nd transfer roller (1) into the printer.



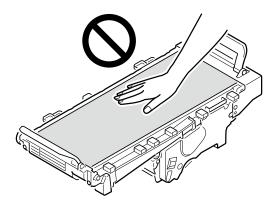
Note: Do not touch the roller part (sponge part) of the 2nd transfer roller. Touching it damages the surface of the roller, which degrades print quality.

Caution: Be careful, the fuser unit is very hot immediately after printing.

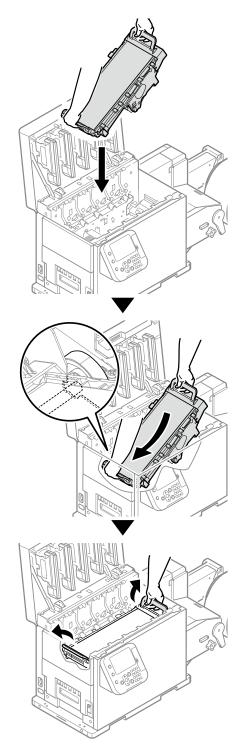
11 Remove the new belt unit from its packaging.



Caution: Do not touch the belt surface or damage the belt.



12 Tilt the belt unit and align the arrow labels (red) on the belt unit and printer to position it, and then open the belt unit handles (blue) on the left and right.



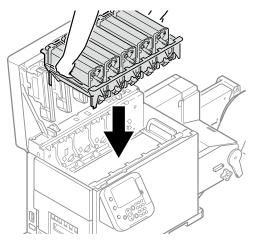
Caution: Be careful to not pinch your hands or fingers between the handle and the machine while installing the belt unit.

Note: When the belt unit is replaced, the waste toner box is also replaced at the same time.

13 Turn the two belt unit locking keys clockwise to lock it.

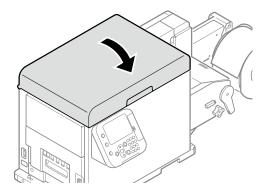


14 Put the print cartridge set back into the printer.



Caution: There is a risk of pinching your fingers or hands when repositioning the print cartridge set. Hold the handle parts of the basket for this operation.

15 Close the top cover.



Caution: When closing the top cover, there is a risk of pinching your fingers or hands in the top cover or the top cover's support. Press on the top of the top cover to close it.

Caution: There is a risk of pinching your fingers or hands if you hold the LED head while closing the top cover. Press on the top of the top cover to close it.

16 Please support the recycling of used belt units and 2nd transfer rollers.

Caution: You cannot clean the belt unit yourself. To protect the equipment against dirt and foreign matter, do daily maintenance (cleaning) as described in "Cleaning Schedule" on page 356. Also, do not use alcohol or other solvents to wipe the surfaces. If alcohol or some other solvent is used to wipe it, the irregularities left from wiping it will degrade print quality.

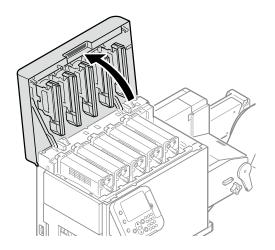
Caution: Do not disassemble the belt unit and the waste toner box, and do not force them open. Doing so may cause toner to spray out, to be inhaled, or to soil your clothing and hands.

If you must dispose of a used belt unit or 2nd transfer roller, put them in a plastic bag and be sure to dispose of them according to the local laws and government regulations.

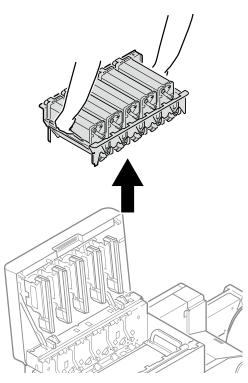
Use the box and packing bag from the new belt unit and 2nd transfer roller for when the used belt unit and 2nd transfer roller are recycled.

Replacing Waste Toner Boxes

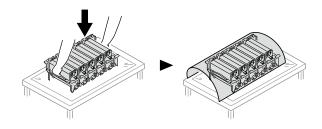
1 Grasp the top cover open lever and open the top cover.



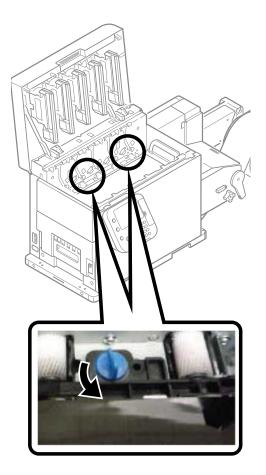
2 Remove the print cartridge set.



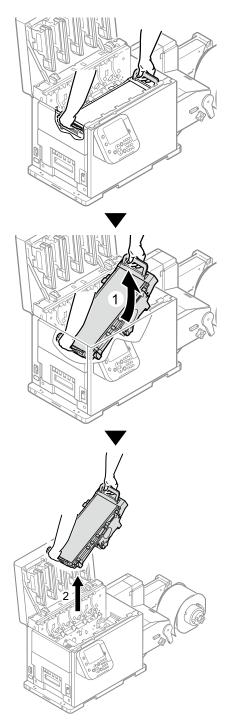
3 Place the removed print cartridge set on a flat surface covered with newspaper or something similar, and cover it with paper so it is not exposed to direct light.



4 Turn the two belt locking keys counterclockwise to release the lock.



5 Hold the belt unit handles (blue) on the left and right, and remove the belt unit at an angle.

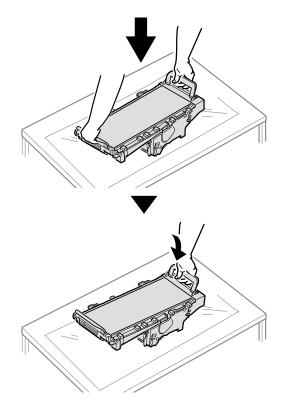


Caution: Be careful not to spill waste toner while removing the belt unit.

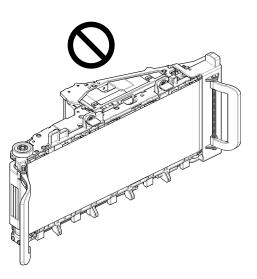
Caution: Be careful to not pinch your hands or fingers between the handle and the machine while removing the belt unit.

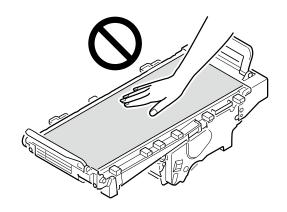
Caution: When removing the belt unit, do not tilt it further than is needed to remove it.

6 Place the belt unit with the right side down on a flat surface covered with paper.



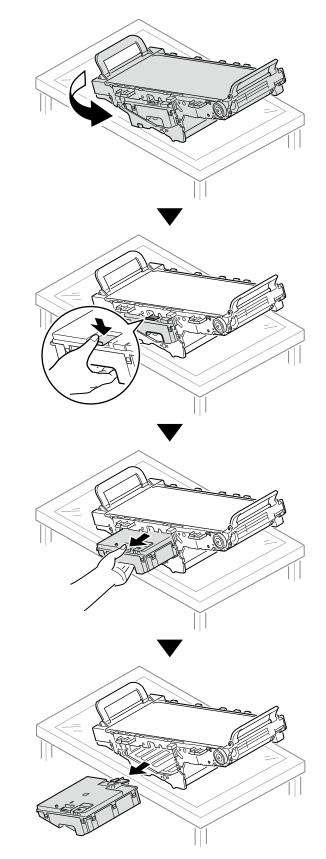
Caution: Place the belt unit on a flat surface, as shown in the diagram above. Do not stand it on its side.





Caution: Do not touch the belt surface or damage the belt.

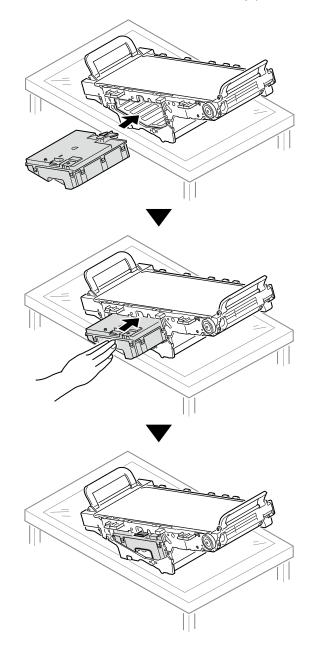
7 Remove the waste toner box from the back of the belt unit.



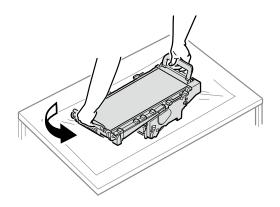
8 Remove the new waste toner box from its packaging.



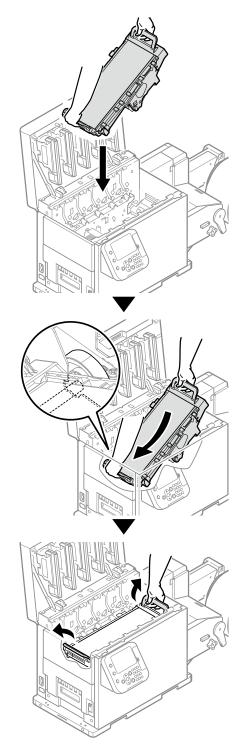
9 Insert the new waste toner box into the belt unit, and firmly push it inside.



10 When facing the belt unit, hold the handles (blue) on its left and right sides.



11 Tilt the belt unit and align the arrow labels (red) on the belt unit and printer to position it, and then open the belt unit handles (blue) on the left and right.

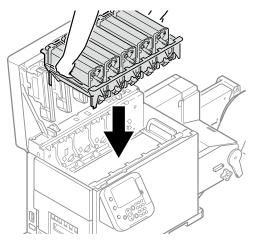


Caution: Be careful to not pinch your hands or fingers between the handle and the machine while installing the belt unit.

12 Turn the two belt unit locking keys clockwise to lock it.

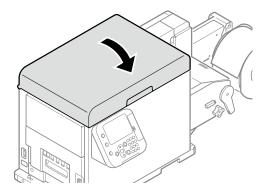


13 Put the print cartridge set back into the printer.



Caution: There is a risk of pinching your fingers or hands when repositioning the print cartridge set. Hold the handle parts of the basket for this operation.

14 Close the top cover.



Caution: When closing the top cover, there is a risk of pinching your fingers or hands in the top cover or the top cover's support. Press on the top of the top cover to close it.

Caution: There is a risk of pinching your fingers or hands if you hold the LED head while closing the top cover. Press on the top of the top cover to close it.

15 Please support recycling of the used waste toner boxes.

Caution: Do not disassemble the waste toner box, and do not force it open. Doing so may cause toner to spray out, to be inhaled, or to soil your clothing and hands.

When disposing of the used waste toner box in unavoidable circumstances, put it in a plastic bag, and ensure to dispose according to the instructions provided by the local municipality.

Use the box and packing bag from the new waste toner box for when the used waste toner box is recycled.

Replacing the Fuser and Exit Unit

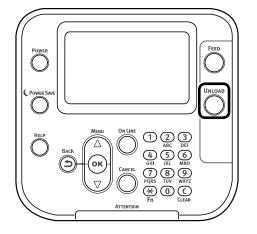


Warning: There is a risk of burns.

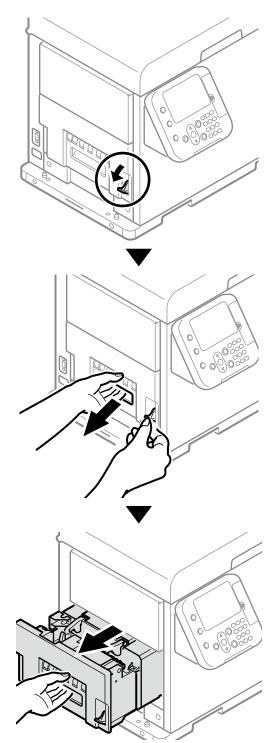
Work carefully because the fuser and exit unit is very hot. Be sure to hold the fuser unit handle when you lift it. When it is hot, wait until it cools down before starting the work.

1 If roll paper has been fed through the printer, press the **UNLOAD** button to cut the roll paper.

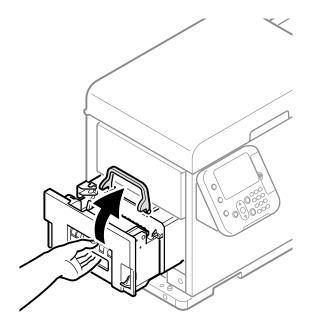
The cut paper will be fed to the supply side and the feeding side.



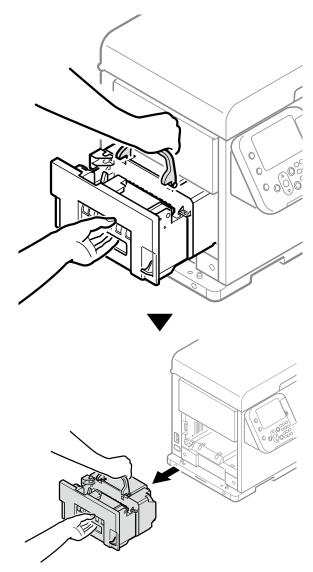
2 While pulling the fuser and exit unit locking lever towards you, pull out the fuser and exit unit.



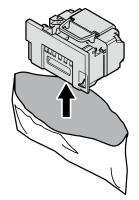
3 While supporting the fuser and exit unit with one hand, lift up the fuser unit handle.



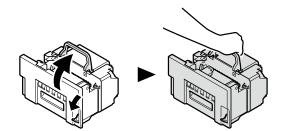
4 Hold the fuser and exit unit with both hands to remove it.



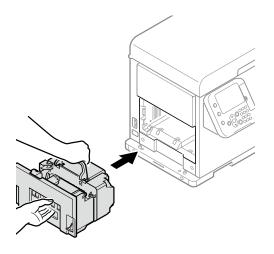
5 Remove the new fuser and exit unit from its packaging.



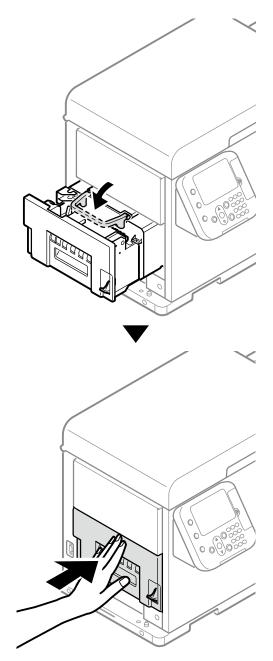
6 Pull the fuser and exit unit locking lever on the new fuser and exit unit towards yourself, and lift the fuser unit handle.



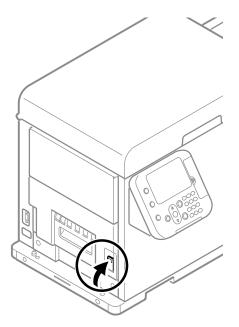
7 Lift the new fuser and exit unit with both hands and put it into the printer.



8 Push down the fuser unit handle, and firmly push it inside.



9 Lift up the fuser and exit unit locking lever.



10 Please support recycling of the used fuser and exit units.

Caution: Do not disassemble the fuser output unit, and do not force it open.

If you must dispose of the used fuser and exit unit, put it in a plastic bag and be sure to dispose of it according to the local laws and government regulations.

Use the box and packing bag from the new fuser and exit unit for when the used fuser and exit unit are recycled.

Cleaning

Required Materials for Cleaning

Prepare the following things for cleaning the various parts of the printer.

- Clean, lint-free cloth
- Cleansing solvent/IPA (isopropyl alcohol)
- Water or neutral cleanser
- Screwdriver
- Tweezers
- Cotton swabs

Cleaning Schedule

Check the condition of the equipment at the start and end of operations, and clean it as needed. Cleaning guidelines are noted below.

		Cleaning schedule	
		Every day	When dirt is noticeable
Unwinder	Surface	No	Yes
	Flange	Yes	Yes
	Side-Guide-8Inch	No	Yes
	Tension Bar	Yes	Yes
	Guide-Side-Roller-F	Yes	Yes
	Paper Guide	Yes	Yes
	Sheet Guide	Yes	Yes
	Roll Paper Guide	Yes	Yes
	F0 Roller Unit	Yes	Yes
	Sensor Cover (Upper)	Yes	Yes
	Sensor Cover (Lower)	Yes	Yes
	F1 Roller Unit	Yes	Yes
	Cutter Unit	Yes	Yes
Printer	Surface	No	Yes
	Paper Guide	Yes	Yes
	Feed Unit	Yes	Yes
	Sensor Cover (Lower)	Yes	Yes
	Sensor Cover (Upper)	Yes	Yes
	Exit Unit	No	Yes
	LED Heads	No	Yes
	Fuser Unit	No	Yes*

* Clean the feed path (including rollers) and fuser unit when changing the width of the roll paper. Streaks may appear when printing, particularly after changing the paper width from narrow to wide, because of the traces (paper dust etc.) left along the width of the paper.

When you change the width of the roll paper, check the conditions of the fuser unit and feed path and clean them, and then restart printing.

Cleaning the Unwinder

This section describes how to clean the various parts of the unwinder.

Cleaning the Surfaces of the Unwinder

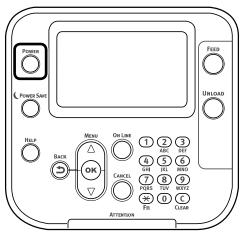
Items to be prepared: Water or neutral washing agent, two sheets of soft, dry cloth

Note: Do not use Benzene or thinner as it may damage plastic parts and coating.

Note: Only use water or neutral washing agent.

Note: It is not necessary to oil the unwinder. Do not oil it.

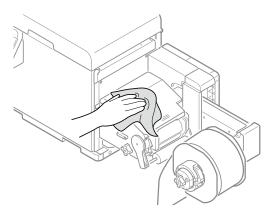
1 Press and hold the **POWER** button for approximately 1 second to switch off the power supply.



Wait a moment, and the LED lamp on the **POWER** button will turn OFF.

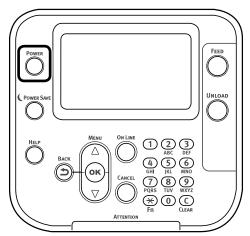
2 Take water or neutral washing agent on one piece of cotton cloth, and wipe with thoroughly squeezed cloth.

Furthermore, wipe off with another dry cotton cloth.



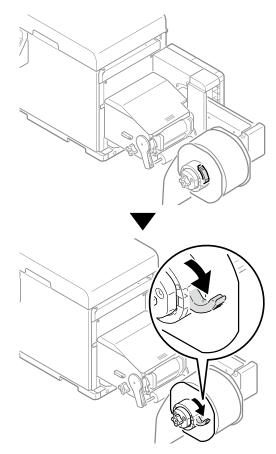
Cleaning the Inside of the Unwinder

1 Press and hold the **POWER** button for approximately 1 second to switch off the power supply.

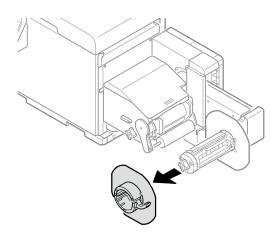


Wait a moment, and the LED lamp on the **POWER** button will turn OFF.

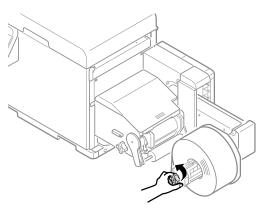
2 Press down the flange locking lever.



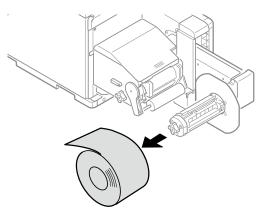
3 Remove the flange.



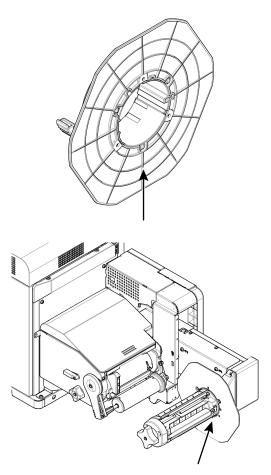
4 Rotate the roll paper holder knob to narrow the axial diameter of the roll paper holder.



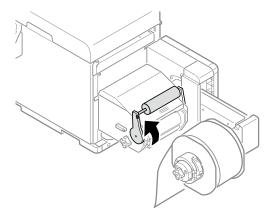
5 Remove the roll paper.



6 Use a clean, lint-free cloth moistened with alcohol to wipe any dirt off the sides of the flange and Side-Guide-8Inch.



- 7 Mount the roll paper.
- 8 Press up on the tension bar open lever until it clicks.

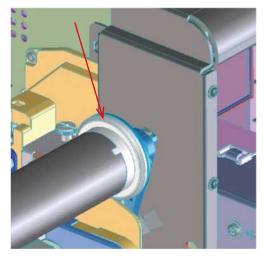


9 While restraining the tension bar with one hand, use a lint-free cloth moistened with alcohol to wipe, in one direction, the dirt off the tension bar (1).



Use the hand that is restraining the tension bar to rotate it (2) as you finish cleaning each side, until the entire tension bar is clean.

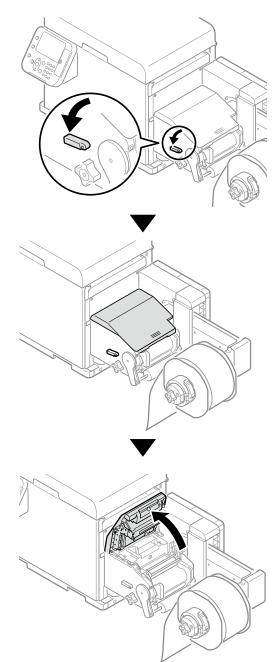
10 While rotating the guide-side-roller-F, use a lint-free cloth moistened with alcohol to wipe any dirt off the sides and corners of the guide-side-roller-F.



11 Press down on the tension bar open lever until it clicks.







Note: Securely open the unwinder cover so it does not close while cleaning.

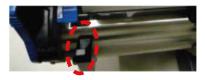
13 If there are scraps of paper or glue from the labels on the sheet guide, use a lint-free cloth moistened with alcohol to wipe it off.



14 Use a lint-free cloth moistened with alcohol to wipe, in one direction, the dirt off the sheet guide.



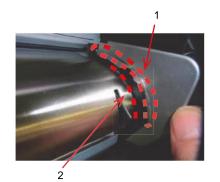
15 Move the roll paper guide to confirm that there is no glue or paper scraps on it. If there are scraps of paper or glue from the labels on it, use a lint-free cloth moistened with alcohol to wipe it off.



16 If there are scraps of paper or glue from labels on the ends of the paper guide, undo the screw and remove the paper guide.



17 Use a lint-free cloth moistened with alcohol to wipe the dirt off the sides of the paper guide (1) and ends of the sheet guide (2).



18 Install the paper guide and secure the screw.



19 Remove the screws, two places, for the F0 roller unit.



20 Remove the F0 roller unit.



21 As you rotate the gears with one hand, use a lint-free cloth moistened with alcohol to clean the top and bottom rollers on the F0 roller unit by wiping in just one direction.

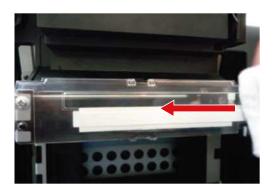


Note: Lower the set lever on the rollers to rotate the top and bottom roller at the same time.

22 Install the F0 roller unit, and fasten the two screws.



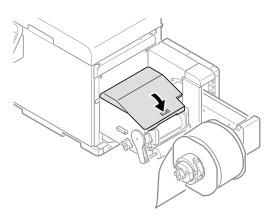
23 Use a lint-free cloth moistened with alcohol to wipe, in one direction, the dirt off the sensor cover (upper).



24 Use a lint-free cloth moistened with alcohol to wipe, in one direction, the dirt off the sensor cover (lower).



25 Close the unwinder cover.



Caution: There is a risk of pinching your fingers or hands while closing the unwinder cover. Press on the top of the unwinder cover to close it.

Cleaning the Printer

This section describes how to clean the various parts of the printer.

Cleaning the Surfaces of the Printer

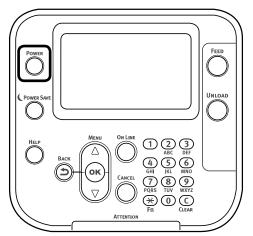
Items to be prepared: Water or neutral washing agent, two sheets of soft, dry cloth

Note: Do not use Benzene or thinner as it may damage plastic parts and coating.

Note: Only use water or neutral washing agent.

Note: It is not necessary to oil the device. Do not oil it.

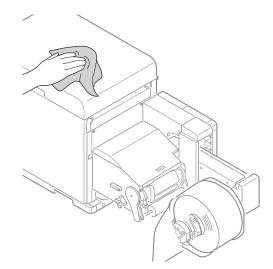
1 Press and hold the **POWER** button for approximately 1 second to switch off the power supply.



Wait a moment, and the LED lamp on the **POWER** button will turn OFF.

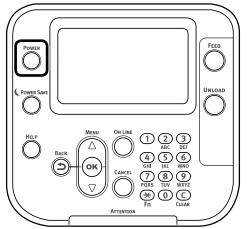
2 Take water or neutral washing agent on one piece of cotton cloth, and wipe with thoroughly squeezed cloth.

Furthermore, wipe off with another dry cotton cloth.



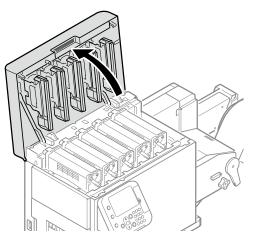
Cleaning the Inside of the Printer

1 Press and hold the **POWER** button for approximately 1 second to switch off the power supply.

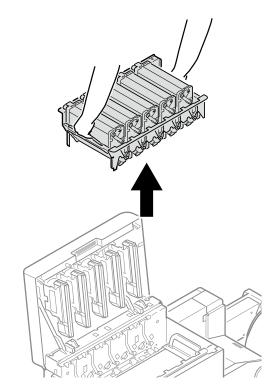


Wait a moment, and the LED lamp on the **POWER** button will turn OFF.

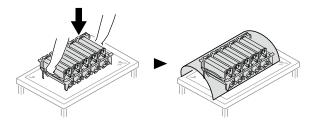
2 Grasp the top cover open lever and open the top cover.



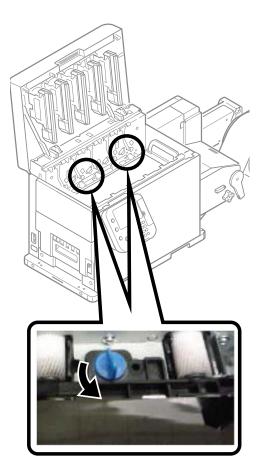
3 Remove the print cartridge set.



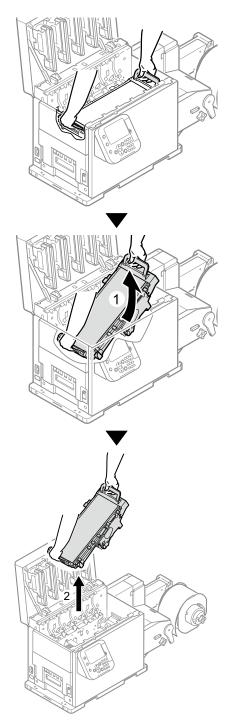
4 Place the removed print cartridge set on a flat surface covered with newspaper or something similar, and cover it with paper so it is not exposed to direct light.



5 Turn the two belt locking keys counterclockwise to release the lock.



6 Hold the belt unit handles (blue) on the left and right, and remove the belt unit at an angle.

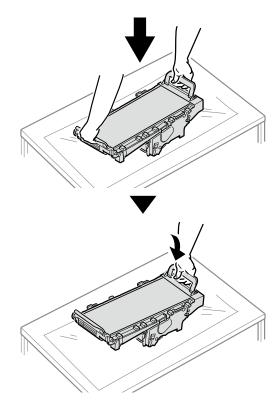


Caution: Be careful not to spill waste toner while removing the belt unit.

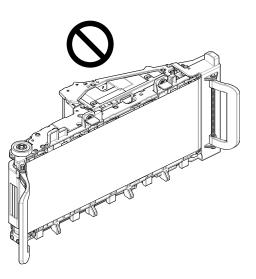
Caution: Be careful to not pinch your hands or fingers between the handle and the machine while removing the belt unit.

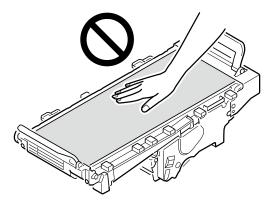
Caution: When removing the belt unit, do not tilt it further than is needed to remove it.

7 Place the belt unit with the right side down on a flat surface covered with paper.



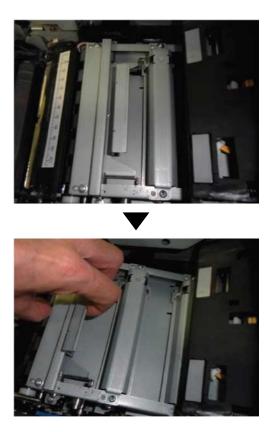
Caution: Place the belt unit on a flat surface, as shown in the diagram above. Do not stand it on its side.





Caution: Do not touch the belt surface or damage the belt.

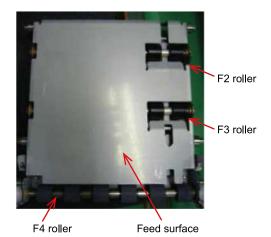
8 Pull up the paper guide release lever.



9 While the paper guide release lever is lifted, slide the paper guide in the direction of the arrow to remove it.



10 Turn the paper guide over.



11 Use a lint-free cloth moistened with alcohol to wipe the dirt off the F4 roller, F3 roller, F2 roller, and feed surface of the paper guide.



Caution: Do not touch the rollers (sponge areas) on the 2nd transfer roller.

Don't Touch!

Caution: Do not allow cloth or cotton swabs moistened with alcohol to touch the rollers (sponge areas) on the 2nd transfer roller.

Caution: Cleaning the rollers (sponge areas) on the 2nd transfer roller is prohibited. Touching or cleaning them could damage the surfaces of the rollers and affect print quality.

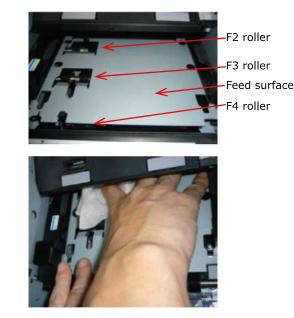
Caution: When you clean the rollers on the 2nd transfer roller, perform the 2nd transfer roller cleaning from the menu screen on the control panel (*Print Adjust > Transfer Roller Cleaning*). See "Menus" on page 145.

Caution: If the area around the 2nd transfer roller is dirty, clean it carefully without touching the rollers.

12 If the rollers and feed surface of the feed unit on the bottom of the paper guide are dirty, gently wipe them clean with a lint-free cloth or cotton swabs moistened with alcohol.

Caution: Do not apply force to the sensor lever.

Caution: Rotate the rollers slowly.



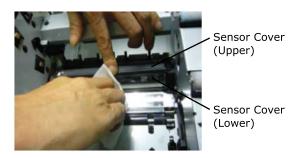
Note: While rotating the F4 roller with one hand, hold a lint-free cloth against the F3 roller and F2 roller to wipe off any dirt on them.

Note: The F2 roller and the F3 roller are positioned in difficult to see locations. Use a mirror to check the insides before you clean them. Also, use a light to brightly illuminate the relevant areas; after checking their conditions, clean them.

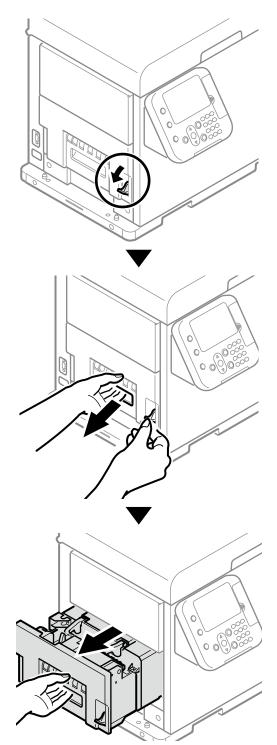
13 Open the sensor cover.



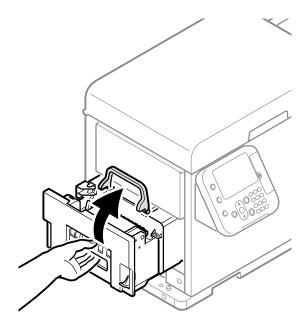
14 Use a lint-free cloth moistened with alcohol to wipe, in one direction, the dirt off the sensor cover (lower and upper).



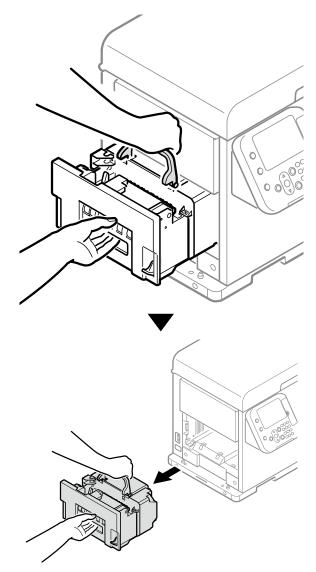
15 While pulling the fuser and exit unit locking lever towards you, pull out the fuser and exit unit.



16 While supporting the fuser and exit unit with one hand, lift up the fuser unit handle.



17 Hold the fuser and exit unit with both hands and remove it to a level spot.



Caution: Be careful, the fuser unit is very hot immediately after printing.

18 Lower the release lever and open the exit feed cover.

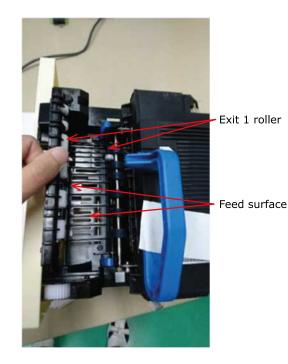


Note: If you take your hand off the exit feed cover, the exit feed cover will close.

Note: Do not remove your hand from the exit feed cover while you are cleaning.

Note: The inlet of the fuser unit may be stained by toner during use. However, this does not particularly affect printing.

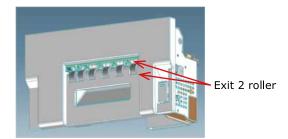
19 Use a lint-free cloth moistened with alcohol to wipe the dirt off exit 1 roller/paper feed surface.



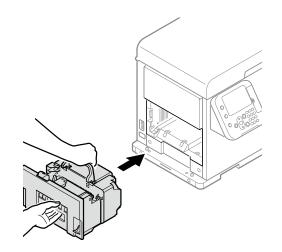
20 Close the exit feed cover.



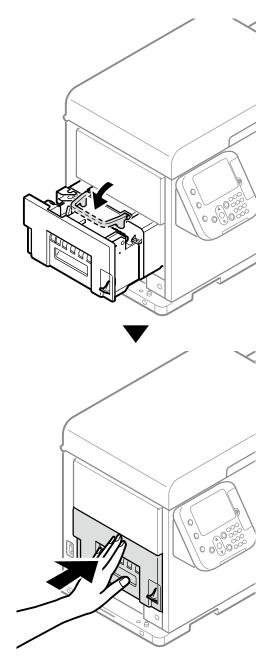
21 Use a lint-free cloth moistened with alcohol to wipe the dirt off exit 2 roller from the outside.



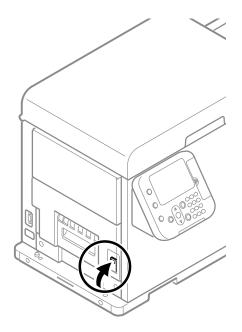
22 Lift the fuser and exit unit with both hands and put it into the printer.



23 Push down the fuser unit handle, and firmly push it inside.



24 Lift up the fuser and exit unit locking lever.



25 Align the positions of the paper guide's edge (1) and the guide notch on the printer.







Guide notch



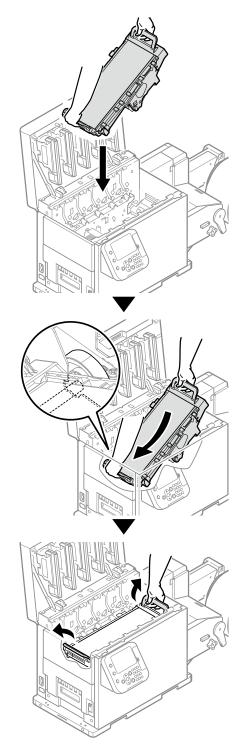
Paper guide's edge (①)

26 Firmly push the paper guide all the way in the direction of the arrow, and then push on the A position to lock it.





27 Tilt the belt unit and align the arrow labels (red) on the belt unit and printer to position it, and then open the belt unit handles (blue) on the left and right.

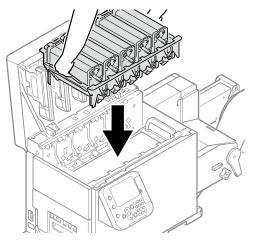


Caution: Be careful to not pinch your hands or fingers between the handle and the machine while installing the belt unit.

28 Turn the two belt unit locking keys clockwise to lock it.

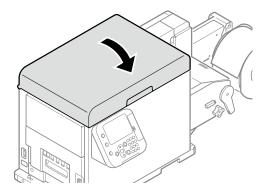


29 Put the print cartridge set back into the printer.



Caution: There is a risk of pinching your fingers or hands when repositioning the print cartridge set. Hold the handle parts of the basket for this operation.

30 Close the top cover.



Caution: When closing the top cover, there is a risk of pinching your fingers or hands in the top cover or the top cover's support. Press on the top of the top cover to close it.

Caution: There is a risk of pinching your fingers or hands if you hold the LED head while closing the top cover. Press on the top of the top cover to close it.

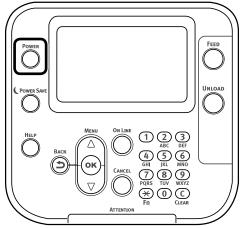
Cleaning LED Heads

Clean the LED heads if the print results are blurry, white stripes appear, or if text is bleeding.

Clean the LED heads if the printed results show lengthwise white lines, if images are omitted lengthwise, or if there is bleeding around text. If the LED heads are dirty, it could cause a paper jam.

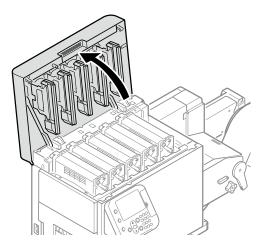
Caution: Do not use methyl alcohol or thinner. Doing so could damage the LED heads.

1 Press and hold the **POWER** button for approximately 1 second to switch off the power supply.

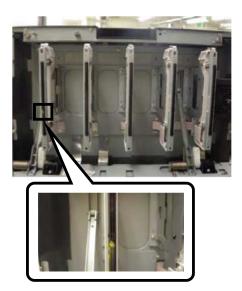


Wait a moment, and the LED lamp on the POWER button will turn OFF.

2 Grasp the top cover open lever and open the top cover.



3 Check if the LED heads are dirty because toner or something is on them.



4 Lightly wipe the lenses of the LED heads with a clean, lint-free cloth.

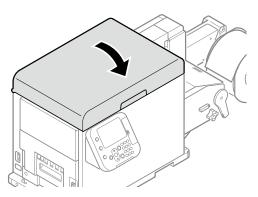


Caution: Do not use methyl alcohol or thinner. Doing so could damage the LED heads.

5 Confirm that the dirt has been removed from the LED heads.



6 Close the top cover.



Caution: When closing the top cover, there is a risk of pinching your fingers or hands in the top cover or the top cover's support. Press on the top of the top cover to close it.

Caution: There is a risk of pinching your fingers or hands if you hold the LED head while closing the top cover. Press on the top of the top cover to close it.

Cleaning the Fuser Unit

This section describes how to clean the various parts of the fuser unit.

This procedure is for cleaning the inside of the fuser unit.

Streaks may appear when printing, particularly after changing the paper width from narrow to wide, because of the traces (paper dust etc.) left along the width of the paper.

When you change the width of the roll paper, check the conditions of the fuser unit and clean it, and then restart printing.

Note: Cleaning requires special cleaning paper. Contact Technical Support.

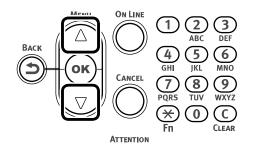
1 Prepare some cleaning paper.



2 Load the cleaning paper onto the printer.



3 Press the scroll button \blacktriangle or \blacktriangledown .



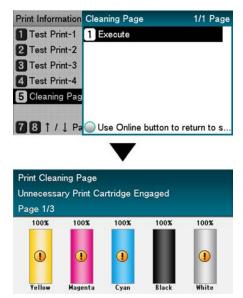
4 Select **Print Information**, and press the **OK** button.

Functions	1/1 Page
1 Configuration	
2 Print Information	
3 Menus	s
4 🗪 Admin Setup	
5 - Print Statistics	
6 Calibration	
Use Online button to return to	standby screen.

5 Select Cleaning Page, and press the OK button.

Print Information	2/2 Page
1) Test Print-1	
2 Test Print-2	
3 Test Print-3	
4 Test Print-4	
5 Cleaning Page	

6 Select **Execute**, and press the **OK** button. The printing for cleaning starts.



You cannot reuse cleaning paper.

Dispose of the cleaning paper that you print.

After cleaning is finished, remove the cleaning paper, load new paper, and start printing.

Cleaning the Cutter Unit

Do not dismantle any parts other than those specified in this procedure. Malfunctions could occur.

You should do daily maintenance to keep the machine in good condition as you use it. Check the condition of the machine when you start and stop using it, and clean it if needed.

Cleaning the Cutter Blades

Glue on the labels gradually accumulates on the cutter's blades while cutting roll paper. This causes problems with cutting and feeding.

Glue is more likely to accumulate on the cutter's blades when using continuous label paper (because the part being cut has glue on it). Clean the cutter's blades periodically to prevent cutting and feeding problems from occurring.

There is no specified frequency for cleaning, it depends on the type of roll paper being used (liner/glue materials). If cutting or feeding problems occur, clean the cutter's blades.

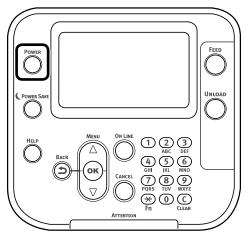
- Always turn off the power to the printer and remove the power cord from the electric outlet before you start work.
- Use the specified tools for cleaning work.
- Do not touch the blades of the cutter with your bare hands. There is a risk of injury.
- Do not use any solvents other than alcohol or isopropyl alcohol.
- After cleaning, wipe the machine dry.

Prepare the following things to clean the cutter's blades.

- Cleaning swab
- Wiping solvent (alcohol-based solvent)
- Flathead screwdriver
- Tweezers
- Soft cloth

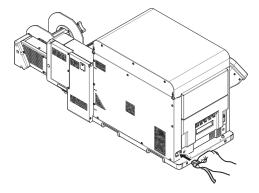
The cleaning swabs and wiping solvent should be the recommended products. Contact Technical Support to purchase the recommended products.

1 Press and hold the **POWER** button for approximately 1 second to switch off the power supply.



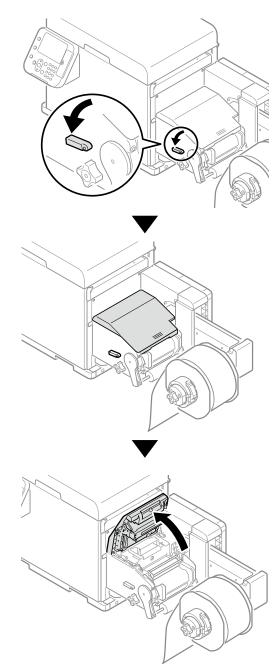
Wait a moment, and the LED lamp on the **POWER** button will turn OFF.

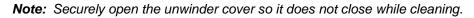
2 Remove the power cord from the printer.



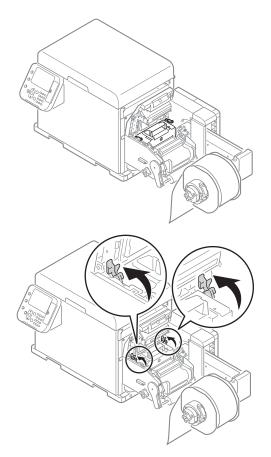
3 Remove the paper that is loaded in the unwinder.

4 Lower the unwinder cover open lever to open the unwinder cover.

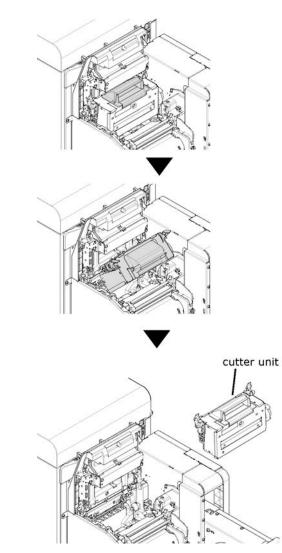




5 Raise the cutter unit lock levers at both ends of the cutter unit.



6 Hold the handle of the cutter to remove the cutter unit.



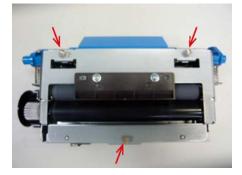
Note: Be careful that the cutter unit does not hit the sensor cover (upper) when removing it.

7 Remove any paper left in the cutter unit.

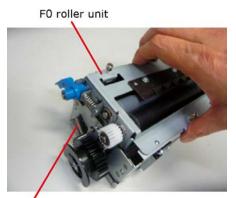


If there is paper left inside the cutter unit after you have removed it, remove that paper.

- 8 Disassemble the cutter unit.
 - a) Use a flathead screwdriver to remove the 3 screws.



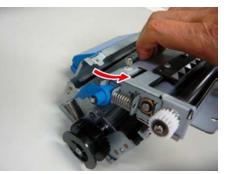
b) Remove the F1 roller unit.



Cutter part Hold the F0 roller unit.



Slide the F0 roller unit in the direction of the arrow.



Slide the F0 roller unit at an angle (arrow direction) and remove it.

Caution: There are blades inside the cutter unit for cutting roll paper. Do not touch the blades of the cutter with your hands. There is a risk of injury.

9 Remove any paper left inside the cutter unit.

Left over paper Tweezers

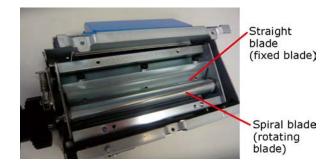
If there is paper left inside the cutter unit after you have disassembled it, use the tweezers to remove that paper.

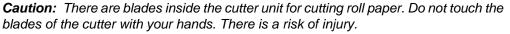
- 10 Clean the blades of the cutter.
 - a) If there is glue stuck to the inside of the cutter unit, use the tweezers to remove as much as possible.



b) Clean the glue off the cutter blades.

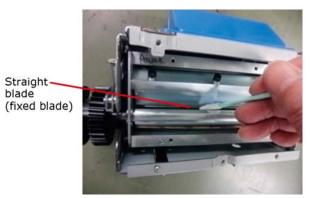
There are two types of cutter blades; the spiral blade (rotating blade) and the straight blade (fixed blade).





c) Clean the fixed blade.

Apply alcohol solvent to a cleaning swab and press it against the straight blade (fixed blade) to remove glue stuck to the blade.



d) Clean the rotating blade.

Apply alcohol solvent to a cleaning swab and press it against the spiral blade (rotating blade) and move it back and forth as you manually turn the gears so the spiral blade faces towards the front so you can remove any glue stuck to the blade.



Spiral blade (rotating blade)

e) After cleaning the blades:

Confirm that there is no glue stuck to the blade of the cutter. If there is any glue remaining, clean the blades of the cutter again in the same way.

Confirm that there are no scraps or threads from the cloth left inside the blades of the cutter or the cutter unit. If there are any left, wipe the machine again.

After cleaning, wipe the machine dry.

11 Clean the F1 roller unit.

The F1 roller unit feeds paper through the cutter unit. When cleaning the cutter blades, check the surfaces of the top and bottom rollers of the F1 roller unit and clean them if there is any glue, paper dust, or scraps of paper on the surfaces of the top and bottom rollers.

Rotate the gears with one hand and use your other hand to clean with a soft cloth to which alcohol-based solvent has been applied.

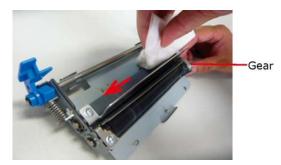
When wiping, wipe in one direction, and never wipe back and forth.

Lower the levers on both sides to rotate both the top and bottom rollers at the same time.

Cleaning the lower roller:



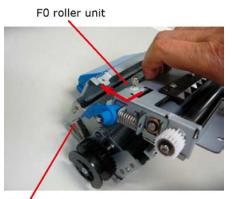
Cleaning the upper roller:



12 Assemble the cleaned cutter unit.

Caution: There are blades inside the cutter unit for cutting roll paper. Do not touch the blades of the cutter with your hands. There is a risk of injury.

a) Assemble the F1 roller unit.



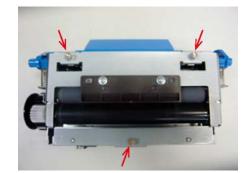
Cutter part Hold the F0 roller unit and insert it at an angle (arrow direction).



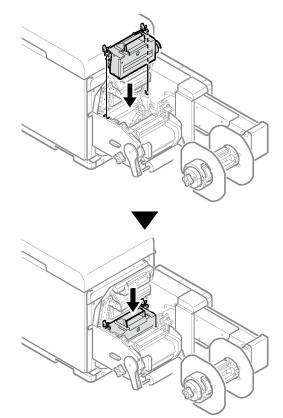
Slide the F0 roller unit in the direction of the arrow.



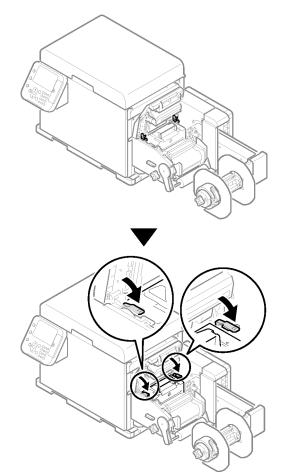
b) Use a flathead screwdriver to tighten the 3 screws.



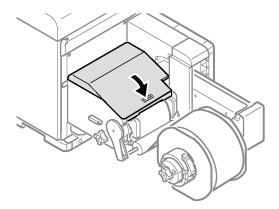
- **13** Put the cutter unit into the unwinder.
 - a) Align the positions of the cutter unit lock levers on both ends of the cutter unit with the notches in the unwinder.



b) Lower the cutter unit lock levers at both ends of the cutter unit.



14 Close the unwinder cover.



14

Web Utility

Operating Environment

Computer with Microsoft Internet Explorer, Safari, Google Chrome, or Firefox installed

Computer running TCP/IP

Note: Check to make sure that the security setting of the web browser is MEDIUM.

Starting Up

- 1 Start up a web browser on your PC.
- 2 In the address bar, enter the following URL then press Enter: http://<printer IP address>/.

This displays the printer status screen.

If the IP address includes a one-digit or two-digit number, do not enter leading zeros. Doing so may cause communication problems.

Example: Correct: http://192.168.0.2/

Incorrect: http://192.168.000.002/

Logging in as an Administrator

To change printer settings using a web browser, you need to log in as a printer administrator.

1 Click Administrator Login.

View Information			Print Cartridg	e Remaining :
🛈 Status			Cyanı 🔚	909
O Feeder Count	Ready To Prin	Refrest	Magenta:	90
O Supplies Life	Ready to Print Reitesi		Yellow:	90
	1		Black:	90
⊕ Network			white: [him	1 80.
🖸 System	Printer Information		Print Service	Enabled
	Printer Name	QuickLabelQL-300s-91F5F	9 LPR	0
Administrator Login	IPv4 Address	172.16.2.236	Port9100	0
	IPv6 Address		FTP	0
	fe80:0000:0	000:0000:0225:36ff:fe91:f5f		0
	0000:0000:000	0:0000:0000:0000:0000:000		Enabled
	MAC Address	00:25:36:91:F5:F9	SNMP	0
	Printer Location		WEB	0
	Serial Number	BETA200003	Telnet	0
	Asset Number			
	Contact Name - Administrator			
	HDD	Installed		
	RAM	2048MB		
	Version Information			
	Firmware Version	AA5.20_0_4		
	CU Version	99.38		
	PU Version	00.06.66		
	Network FW Version	00.14		
	Web Benete Version	00.22		

2 For Username enter "root", for Password enter the current password, and then click OK.

The password is the same as the control panel "Administrator Password". The factory default setting of the administrator password is 999999.

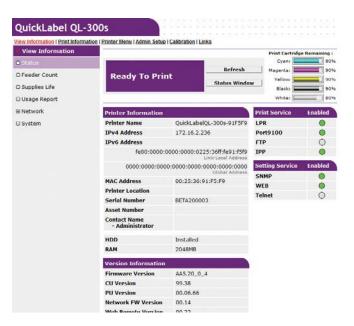
3 Specify the configuration information that can be checked on the network, and then click **OK** or **SKIP**.

Setup Printer			
This is the first login to the fyou would like to perfo "OK". Otherwise press "S	rm basic setup of the de	vice, please complete	the fields, and press
Printer Identification			
Printer Name	QuickLabelQL-300	5-91F (Max.31 characte	<i>r</i> s)
	This is the devices ide Name).	entity on the network (sys	Name, and Printer
Short Printer Name	QL-300s-91F5F9	(Max-15 characters)	
		or WINS. A maximum of characters and "-" are ac	
Printer Location		0	Aax.255 characters}
Asset Number		()	(ax.32 characters)
Contact Name - Administrator		0	(ax.255 characters)
Protocol			
TCP/IP	Enable		
NetBIOS over TCP	Enable •		

Note: You can skip configuring settings by clicking SKIP.

Note: Selecting the **Do not show this page again** checkbox, and then clicking **OK** or **SKIP** will cause this page not to be displayed any more.

4 This will display the screen below.



Item List

Appears for a person logged in as a printer administrator.

View Information

View Information					Print Cartrido	e Remaining :
🖨 Status					Cyan:	909
O Feeder Count	Ready To Prin	1t -	Refresh		Magenta:	90
🖸 Supplies Life	Status Window		w	Yellow:	90	
Usage Report			white:		80	
∋ Network	Printer Information			Dela	t Service	Enabled
	Printer Name	QuickLabelQL-3	000 0105500	LPR		chableu
D System	IPv4 Address	172.16.2.236	008-911-21-9		19100	
	IPv6 Address	1/2.10.2.250		FTP		ŏ
		fe80:0000:0000:0000:0225:36ff:fe91:f5f9		IPP		
	1600.0000.0		Local Address	-		•
	0000:0000:0000:0000:0000:0000:0000 Global Address			Set	ting Service	Enabled
	MAC Address	00:25:36:91:F5:F9		SNI	MP	0
	Printer Location	COLOROTIZATO		WE		0
	Serial Number	BETA200003	TA200003		net	0
	Asset Number					
	Contact Name - Administrator					
	HDD	Installed				
	RAM	2048MB				
	Version Information					
	Firmware Version	AA5.20_0_4				
	CU Version	99.38				
	PU Version	00.06.66				
	Network FW Version	00.14				
	Web Demote Version	00.22				

Item	Description
Status	Shows the current printer status. All warnings and errors gener- ated by the printer are shown as "problem information". You can also check the operational status of each network service, a con- figuration list, and the IP address assigned to the printer.
Tray Count	Shows the print count.
Supplies Life	Shows the remaining life of wear items.
Usage Report	Shows usage reports.
Network	Can be used to check general information, TCP/IP status, mainte- nance information, and other network-related setup information.
System	Shows versions, memory capacity, flash memory capacity, and system related information.

Print Information

	tion Printer Menu Admin Setup Calibration Links				
Print Information	Information Print				
Information Print	Select a appropriate Radio Button and press the Print button to print information page				
	© Configuration				
	Demo Page DEMO1 *				
	© File List				
	💮 Usage Report				
	💮 Error Log				
	Color Profile List				
	Test Print-1				
	Test Print-2				
	Test Print-3				
	Test Print-4				
	Cleaning Page				

Item	Description	
Information Print	Can be used to configure print and check information about the network, the font list, and other printer settings.	

Printer Menu

Printer Menu	General Printer Setti	ings
O General Printer Settings O Unwinder Config	Printer Name	QuickLabelQL-3005-91F (Max.31 characters) This is the devices identity on the network: (systeme, and Printer Narme).
O Cutter Setup	Short Printer Name	QL-300s-91F5F9 (Max.15 characters)
O System Adjust		This is Printer Name for WINS. A maximum of 18 sharacters can be used (alpha/numeric characters and "+" are acceptable).
O Print Adjust Unit of Measurement	Printer Location	(Max:255 characters)
	Asset Number	(Max.32 characters)
	Contact Name - Administrator	(Max:255 characters)

Item	Description
General Printer Set- tings	Can be used to configure the printer name, asset number, instal- lation location, and other printer settings.

Item	Description
Unwinder Config	You can do settings related to the unwinder and the paper loaded in the unwinder.
Cutter Setup	You can set the cutter operations and the cutting interval. Appears when the unwinder is mounted.
System Adjust	Can be used to configure the power save time, and for clearing warnings, timeout printing, and other printer operations.
Print Adjust	Can be used to configure print position adjustment, print quality, and to adjust other settings.
Unit of Measurement	You can set the units that are displayed.

Admin Setup



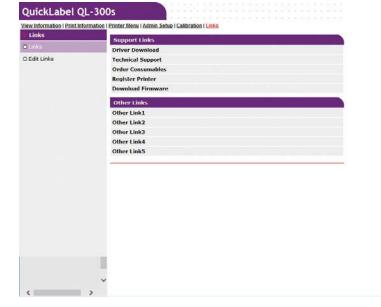
Item	Description
Network Setup	Can be used to configure TCP/IP and other protocol settings.
Print Setup	Can be used to configure toner saving and other printer settings.
PCL Setup	Can be used to configure PCL font and other PCL settings.
Color Setup	Can be used to configure PostScript settings for the CMYK data conversion process and other color settings.
Management	Can be used to configure the power setup, job cancel setup, and other printer settings.

Calibration

Calibration	Normal Setting				
Calibration	Density Adjustment Media	Sta	andard	Media 🔹	
	Color Density :				
	Cyan Density	0	•		
	Magenta Density	0	•		
	Yellow Density	0	•		
	Black Density	0	•		
	White Density	0			
	Customize Menu You can adjust the color detai				
	Charles and the state of the st			tables below. Adjust Color Registration	
	You can adjust the color detai	sity			
	You can adjust the color deta Adjust Color Der	sity ment justes Press	ng the t d	Adjust Color Registration	ter
	You can adjust the color deta Adjust Color Der Automatic Adjust Density is automatically an periodically by the printer, Execute button to initiate adjustment. Auto Density Mode : Or	sity ment puster Press a Den	d sithe sity	Adjust Color Registration Automatic Adjustment Registration is automatically adjusted periodically by the prin Press the Execute button to init	iter iate
	You can adjust the color deta Adjust Color Der Automatic Adjust Density is automatically an periodically by the printer, Execute button to initiate adjustment. Auto Density Mode : Or	sity ment juster Press a Den	d sithe sity	Adjust Color Registration Automatic Adjustment Registration is automatically adjusted periodically by the prin Press the Execute button to init a Registration Adjustment.	iter. iate

Item	Description
Normal Setting	Adjusts the density of each color and other print quality settings.
Customize Menu	Used to perform density and registration adjustment.

Links



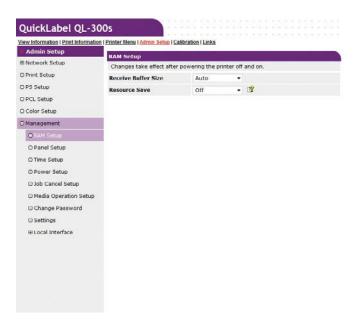
Item	Description
Links	Displays links configured by the administrator and links config- ured by the manufacturer.

Item	Description
Edit Links	Allows administrator to set any URL. Up to five support links and five other links can be registered. Be sure to include http:// when entering the URL.

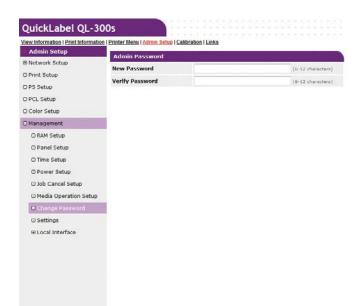
Changing an Administrator Password

You can use the procedure below to change the password for logging in to the printer as an administrator.

1 Click Admin Setup > Management.



2 Click Change Password.



3 In **New Password**, enter the new password. In **Verify Password**, enter the new password again.

Admin Setup	Admin Password		
® Network Setup © Print Setup © PS Setup	New Password Verify Password	•••••	(6-12 characters) (6-12 characters)
© PCL Setup © Color Setup			
 RAM Setup Panel Setup Time Setup Power Setup Job Cancel Setup Media Operation Setup 			
Change Password Settings O Local Interface			

The password will appear on the screen as a series of dots as you enter it.

You can enter from 6 to 12 alphanumeric English characters for a password.

Note that passwords are case-sensitive, so enter upper-case and lower-case letters correctly.

- 4 Click Submit.
- 5 This saves the settings on the printer.

You do not need to re-start the printer. Use the new password the next time you log in as an administrator.

Checking Printer Settings From a Computer

You can use the procedures below to check the printer status from a computer over a network.

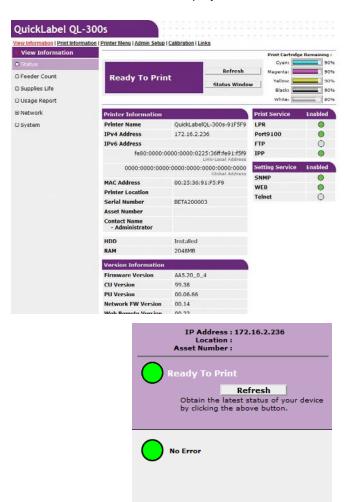
To check using the "Status Screen"

1 Access the printer web page and open the "Status" screen.

		Print Cartrido	e Remaining :
		Cyanı 🔚	909
Ready To Prin	at Refresh	Magenta:	909
Reduy for fin	ic neres		90
			90
		wince: [L	
Printer Information		Print Service	Enabled
Printer Name	QuickLabelQL-300s-91F5F9	LPR	0
IPv4 Address	172.16.2.236	Port9100	0
IPv6 Address	FTP	0	
fe80:0000:0	IPP	0	
0000:0000:000		Setting Service	Enabled
MAC Address		SNMP	0
Printer Location		WEB	0
	BETA200003	Telnet	0
Asset Number			
Contact Name - Administrator			
HDD	Installed		
RAM	2048MB		
Version Information			
Firmware Version	AA5.20_0_4		
	100000		
CU Version	99.38		
CU Version PU Version	99.38 00.06.66		
	Printer Information Printer Name IPv4 Address IPv6 Address Ie80:0000:000 MAC Address Printer Location Serial Number Contact Name - Administrator HDD RAM Version Information	Printer Name QuickLabelQL-3008-91F5F9 IPv4 Address 172.16.2.236 IPv6 Address fe80:0000:0000:0000:0225:36ff:fe91:f59 Outcolstal Address 0000:0000:0000:0000:0000:0000:0000:00	Printer Information Print Refresh Magenta Printer Information Print Service Printer Name QuickLabelQL-3009-91/5/9 IPv6 Address 1/2.16.2.236 IPv6 Address 1/2.16.2.236 IPv6 Address 0000:0000:0000:0000:0000:0000-0000-000

To check using the "Status Window"

1 Click Status Window, which will display the screen shown below.



Information about the printer and its status is displayed in this window. Click **Refresh** to update the window with the latest information.

The color of the printer status icon indicates whether printing is possible.

- Green No error, online
- Yellow Minor malfunction (printing still possible)
- Red Serious malfunction (printing not possible)
- Gray Offline

Changing Printer Settings From a Computer

You can use the procedure below to change printer settings.

1 Access the printer web page and log in as an administrator.

Printer Menu	General Printer Settin	ings
D General Printer Settings D Unwinder Config	Printer Name	QuickLabelQL-3008-91F (Max.31 characters) This is the devices identity on the network (systeme, and Printer Nerme).
O Cutter Setup	Short Printer Name	QL-300s-91F5F9 (Max.15 characters)
🖸 System Adjust		This is Printer Name for WINS. A maximum of 15 characters can be used (alpha/numeric characters and "-" are acceptable).
Print Adjust Unit of Measurement	Printer Location	(Max.255 characters)
	Asset Number	(Max.32 characters)
	Contact Name - Administrator	(Max.255 characters)

2 After changing the settings you want, click **Submit**.

Encrypting Communication (SSL/TLS)

Communication between the computer (client) and printer can be encrypted when configuring settings, performing IPP printing, and when receiving print data with FTP protocol.

(Encryption of SSL/TLS Communication)

Configuring Settings

The procedure below shows how to use the web to create a certificate with the printer.

The two types of certificates below can be created.

• Self-signed certificate

CA certificate (CSR creation)

Note: If the printer's IP address is changed from what it was when a certificate was created, that certificate become invalid. Do not change the printer's IP address after creating a certificate.

- 1 Log in as an administrator. See "Logging in as an Administrator" on page 405.
- 2 Click in the following sequence: Admin Setup > Network Setup > Security.

Protocol Protocol CP/IP Enable O General Network Settings NetBIOS over TCP Enable D General Network Settings NetBIOS over TCP Enable D General Network Settings MetBIOS over TCP Enable D General Network Settings MetBIOS over TCP Enable D General Network Settings Web (Pert Ne. 180) Enable D SMMP Enable If "Clossible", you can net access from your Web breweer, and, you can net prote with WGO pot. D IPP Telnet Disable Inside D IEEEB02.1X FTP Disable Inside O IPP filtering Local Ports Enable Inside O IP Filtering Local Ports Enable Inside O IPSec You can not set port number that is already used. Web 90 (1-9332) O IPSec SMIP 25 (1-9333) Enable 90 (1-9333)	and a second	
DTCP/IP Retors over 1CP Enable • DNGT Service Inable • DNGT Service Inable • DSMP IPP (Peet Ne. 180) Inable • DIPP Telet Disable • DIEEE002.1X FTP Disable • Sexurity SNMP Enable • DIPECE002.1X FTP Disable • Other information SNMP Enable • DIFECE002.1X FTP Disable • Other information SNMP Enable • Other information Incal Ports Enable • Other information Disable • Incal Ports O MAC Address Filtering Local Ports Enable • O SSL/TLS You can not set port number that is already used. O IPFilter You can not set port number that is already used. O Change Network Poil [1-6333]	TCP/IP Enable	
Service Service Defail Web (Pert Ne. 180) Enable * M* Diable*, you can not access from your Web browser. and, you can not print with WSD-port. DSNMP IPP (Pourt Ne. 183) Enable * DIPP Telet Disable * Disable Disable * Disable * Disable Disable * Disable * Disable Disable * Disable * Or procool GN/OFF SNMP Enable * O MCA Address Filtering Local Ports Enable * O SSL/LS You can not set port number that is already used. Optimized O Prof. Number You can not set port number that is already used. Optimized O Change Network Web Optimized Optimized	Settings NetBIOS over TCP Enable *	
ONGT Web (Port No. : 80) Enable • 9 Email © SIMP IPP (Port No. : 633) Enable • 0 IEEE802.1X Teinet Disable • 0 IEEE802.1X FTP Disable • 0 IPItering Local Ports Enable • 0 INAC Address Filtering Local Ports Enable • 0 SSL/TLS You can not set port number that is already used. Uiesauce 0 IPsec You can not set port number that is already used. 00		
DE mail Web (Pert Ne. 180) 11 "Dussiba", you can net setenses from your Web broken. DS SNMP IPP (Pert Ne. 183) Enable * D IPP Tellet Disable * D IEEE002.1XX FTP Dussible * O Decord OK/OFF SNMP Enable * O Drotocol OK/OFF SNTP Disable * O Drotocol OK/OFF SNTP Disable * O Drotocol OK/OFF SNTP Disable * O SSL/TLS Port Number Enable * O IPFS Store frieting Coal Ports D IPFS Web Outer the is already used. O IPFS Web 00_[1+6333]	Service	
IPP (fort Nor, 0.33) Enable • 01EEE002.1X Teinet Disable • 01EEE002.1X FTP Disable • 01EEE002.1X SNP Enable • 01EEE002.1X SNP Enable • 01Fittering Local Ports Enable • 01AC Address Filtering Local Ports Enable • 01SSL/TLS Port Number • 01F96c You can not set port number that is already used. Used. 01C change Network Web 00 (1-63323)	Web (Port No. 1 80) If "Disable", you can not access from your Web bro	nser.
Telnet Disable • DIEDEC002_1X FTP Disable • Security SNNP Enable • OIProtocol ON/OFF SNTP Disable • OIP Filtering Local Ports Enable • O MAC Address Filtering SSL/TLS Fort Number SSL/TLS You can not set port number that is already used. O IPsec Web 00	IPP (Port No. : 631) Enable -	
FTP Disable Discourtey SNNP Discourtey SNNP Discourtey SNNP Discourtey SnnP Discourtey Disable • Discourtey Local Ports Discourtey Enable • DMAC Address Filtering Local Ports DisSL/TLS Port Number DisSec You can not set port number that is already used. DiPSec Web	Teinet Disable -	
Protocol ON/OFF SNTP Enable D IP Filtering Local Ports Enable D MAC Address Filtering SSL/TLS Port Number SSL/TLS You can not set port number that is already used. D IPSec Web 60 (1+65353)	FTP Disable -	
OIP Filtering Local Ports Enable OMAC Address Filtering SSL/TLS Port Number O SSL/TLS You can not set port number that is already used. O IPSec You can not set port number that is already used. O Change Network Web 00 (1+65332)	SNMP Enable •	
OMAC Address Filtering OSSL/TLS Ord Number SSL/TLS You can not set port number that is already used. OLSSE Ochange Network Web OO (1+65333)	Disable +	
O SSL/TLS Port Number D IPSec You can not set port number that is already used. C Change Network Web 60 (1+63333)	Local Ports Enable -	
O SSL/TLS You can not set port number that is already used. O IPSec Web 80 (1+65335)	Filtering	
© IPSec Web 00 (1-65535)	and the second sec	
O Change Network 80 (1-65595)	You can not set port number that is already used.	
8 Maintenance		
int Setup		
r wereip		
CL Setup		

- 3 Click SSL/TLS.
- 4 Select the type of the certificate to create in **Step 1**.

QuickLabel QL-30	Os					
View Information Print Information	Printer Menu Admin	Setup Calibration Links				
Admin Setup	Encryption of "c	Configuration" and "Print"				
O Network Setup		TLS for data encryption.				
© General Network Settings © TCP/IP		pt both Printer Configuration	ria the webpage and Print Data when			
	STEP1. Select Ce	STEP1. Select Certificate type				
O NBT	Using self-si	gned Certificate				
@ Email	Using a Certificate which a Certification Authority signed					
(I) SNMP	Note:Purchase	is required for signed Certifica	te.			
@ IPP		he following information				
	-	e following information "Requir				
O Security	Name	Example Also known as URL, the	Value			
© Protocol ON/OFF © IP Filtering © MAC Address Filtering	1 Common Name	Common Name is the fully qualified domain name (FQDN) used for DNS lookups of your printer.	172.16.2.236			
O SSL/ILS		The organization name (corporation, limited partnership, university,or				
 IPSec Change Network Password 	2 Organization	partnership, university,or government agency) must be registered with some authority at a national state, or oty level.	•			
Maintenance O Print Setup	3 Organizational Unit	(optional) Use this optional field to differentiate between divisions within an organization.				
O PS Setup O PCL Setup	4 Locality	This field usually denotes the city in which the organization is located.	-			
O Color Setup	5 State/Province	Enter the state where the organization operates. Do not abbreviate.	•			
@ Management						

5 Enter information for the Common Name, Organization, and other items.

- If you selected "Use a certificate issued by a certificate authority", perform detailed content input and other certificate issuing procedures in accordance with issuing authority procedures.
- If you selected a self-signed certificate, the printer's IP address will be set for Common Name.

If you want to change the key exchange method and key size, click **Key Exchange method**. (The initial default setting is RSA, 1024 bits. Normally, you should use this setting without modifying it.)

6 Click Submit.

7 Self-signed Certificate

Note: This step applies only to self-signed certificates. To create a CA certificate, proceed to step 8.

a) This displays the input.

Check the contents, and then click **OK**. This creates the certificate.

This completes self-signed certificate creation.

Settings are saved on the printer and the network function is restarted.

- b) Perform steps 1 through 3 of this procedure to display the encryption (SSL/TLS) setup screen, and then configure protocol settings to enable encryption.
- c) Click Submit.

8 CA Certificate

Note: This step applies only to CA certificates.

a) This displays the input.

Check the contents, and then click **OK**.

b) Extract the CSR and send it to the issuing authority. (For a CA certificate)

Copy the contents of the text box from "----- BEGIN CERTIFICATE REQUEST -----" to "----- END CERTIFICATE REQUEST -----". Depending on the CA, sending the CSR may mean pasting it into web page, sending it as a file, attaching it to a mail message, etc.

c) This installs the certificate issued by the CA (using the web). (For a CA certificate)

Perform steps 1 through 3 of this procedure to display the encryption (SSL/TLS) setup screen.

Paste the part of the generated certificate from "----- BEGIN CERTIFICATE -----" to "----- END CERTIFICATE -----" into the text box, and then click **Send**.

This completes CA certificate creation.

Settings are saved on the printer and the network function is restarted.

- d) Perform steps 1 through 3 of this procedure to display the encryption (SSL/TLS) setup screen, and then configure protocol settings to enable encryption.
- e) Click Submit.

Usage Method

1 Start up the web browser, and then enter "https://<printer IP address>" as the address to connect.

Printing with IPP

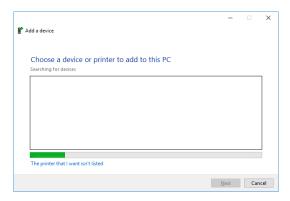
Printing can be performed using IPP.

To enable IPP printing

- 1 Access the printer web page and log in as an administrator.
- 2 Select Admin Setup.
- 3 Select the following: Network Setup > IPP > Setup.
- 4 Follow the instructions that appear on the display to configure the setup.
- 5 Click Submit.

To set up the printer as an IPP printer (Windows)

- 1 Click Start and select Control Panel in Windows.
- 2 Select View devices and printers > Add a printer.
- 3 On the Add a device wizard, select Add a network, wireless or Bluetooth printer.



4 From the list of usable printers, select **The printer that I want isn't listed**.

5 Select Select a shared printer by name.

\leftarrow	🖶 Add Printer	
	Find a printer by other options	
	O My <u>pr</u> inter is a little older. Help me find it.	
	Select a shared printer by name	
	http://192.168.0.2/ipp	Brows
	Example: \\computername\printername or http://computername/printers/printername/.printer	
	○ Add a printer using a TCP/IP address or hostname	
	○ Add a Bluetooth, wireless or network discoverable printer	
	Add a local printer or network printer with manual settings	
		Next C

- 6 Enter "http://<printer IP address>/ipp" or "http://<printer IP address>/ipp/lp", and then click Next.
- 7 Click Have Disk.

Instal	I the printer driver			
\$	Choose your printer t	from th	e list. Click Windows Update to see more models.	
0	To install the driver fr	rom an	installation CD, click Have Disk.	
Manu	facturer	^	Printers	
Broth	er		Brother Color Leg Type1 Class Driver	- 1
Cano	n		Brother Color Type3 Class Driver	
Dell			Rother Color Type4 Class Driver	
Easter	an Kodak Company		Brother Generic Jpeg Type1 Class Driver	
Castri				

- 8 Download the driver installation software. You can obtain the software from www.QuickLabel.com/downloads.
- 9 For **Copy manufacturer's files from**, browse to the appropriate folder, and then click **Find**.

PCL driver: \Drivers\PCLXL

- 10 Select the INF file, and then click Open.
- 11 Click OK.
- 12 Select the printer name, and then click Next.
- 13 Click Next.
- 14 Click Finish.
- **15** A test page is printed after installation is complete.

Encrypting Communication (IPsec)

You can configure the settings in this section to encrypt and prevent tampering with communication between the computer (client) and printer at the network layer level.

The IKE protocol supported by this printer is "IKEv1". The communication mode supported by this printer is "Transport Mode". It does not support "Tunnel Mode". Printer response may slow down while IPsec is enabled, depending on network communication conditions.

Note: IPsec does not operate with the mail send function or SNMP Trap function.

Setup Flow

Configure printer settings before configuring computer settings.

To configure the printer setup

@ Management

The procedure below shows how to use the web to enable IPsec.

- 1 Log in as an administrator. See "Logging in as an Administrator" on page 405.
- 2 Click in the following sequence: Admin Setup > Network Setup > Security.

Admin Setup	Protocol		-
Network Setup	TCP/IP	Enable	
O General Network Settings	NetBIOS over TCP	Enable 🔻	
O TCP/IP	Reserved Mark		
O NBT	Service		
@ Email	Web (Port No. 1 80)	Enable - If "Disable", you can not access from your Web browse and, you can not print with WSD-port.	r.
⊕ SNMP	IPP (Port No. : 631)	Enable 👻	
⊕ IPP	Telnet	Disable 👻	
O IEEE802.1X	FTP	Disable 👻	
O Security	SNMP	Enable •	
Protocol ON/OFF	SNTP	Disable 🔻	
O IP Filtering	Local Ports	Enable 👻	
MAC Address Filtering	2		
O SSL/TLS	Port Number		
O IPSec	You can not set port num	ber that is already used.	
O Change Network	Web	80 (1-65535)	
Password	SMTP	25 (1-65535)	
Maintenance ■ Maintenance ■			
Print Setup			
PS Setup			
D PCL Setup			
Color Setup			

3 Click the **IPsec** tab.

ew Information Print Information	Printer Me	nu Admin Setup Calibra	ation Links	
Admin Setup	IPSec			
Network Setup	STEP1.	IPSec		
General Network Settings	IPSec		Disable •	
O TCP/IP			When this feature is en	abled, the printer will not go to sl
O NBT		IP Address Settings		
@ Email		e: "192.168.0.2 ") e / valid IP Addresses	only. Value of 0.0.0.0 is	an invalid address.
⊕ SNMP		IP Address		IP Address
() IPP	1	0.0.0	26	0.0.0
O IEEE802.1X	2	0.0.0.0	27	0.0.0.0
O Security	3	0.0.0.0	28	0.0.0
© Protocol ON/OFF	4	0.0.0.0	29	0.0.0.0
© IP Filtering	5	0.0.0.0	30	0.0.0.0
-	6	0.0.0.0	31	0.0.0.0
MAC Address Filtering	7	0.0.0.0	32	0.0.0.0
O SSL/TLS	8	0.0.0.0	33	0.0.0.0
IPSec	9	0.0.0.0	34	0.0.0.0
Change Network Password	10	0.0.0.0	35	0.0.0.0
Maintenance	11	0.0.0	36	0.0.0
Print Setup	12	0.0.0.0	37	0.0.0.0
PS Setup	13	0.0.0.0	38	0.0.0
PCL Setup	14	0.0.0.0	39	0.0.0
Color Setup	15	0.0.0.0	40	0.0.0.0
D Color Setup	16	0.0.0.0	41	0.0.0.0

- 4 Under STEP1, enable IPsec.
 - Set Enable for IPsec to encrypt communications from the computer with the IP address you specify in STEP2.
 - The web page will not open if IPsec setup fails because the configured parameters do not match the computer, or because of some other reason. If this happens, use the control panel Network Setup item to disable IPsec, or perform network initialization to disable IPsec.

Admin Setup	IPSec			
O Network Setup	STEP1.	IPSec		
O General Network Settings	Incas		Enable •	
O TCP/IP	IPSec When this feature is enabled, the printer will not go to sleep			
O NBT		IP Address Settings		
@ Email	(Example Complet	e: "192.168.0.2 ") ce / valid IP Addresse:	only. Value of 0.0.0.0	is an invalid address.
@ SNMP		IP Address		IP Address
@ IPP	1	0.0.0.0	26	0.0.0.0
D IFFE802 1X	2	0.0.0.0	27	0.0.0.0
O Security	3	0.0.0.0	28	0.0.0.0
© Protocol ON/OFF	4	0.0.0.0	29	0.0.0.0
© IP Filtering	5	0.0.0.0	30	0.0.0.0
MAC Address Filtering	6	0.0.0.0	31	0.0.0.0
	7	0.0.0.0	32	0.0.0.0
O SSL/TLS	8	0.0.0.0	33	0.0.0
IPSec	9	0.0.0.0	34	0.0.0.0
Change Network Password	10	0.0.0.0	35	0.0.0.0
Maintenance	11	0.0.0.0	36	0.0.0.0
O Print Setup	12	0.0.0.0	37	0.0.0.0
D PS Setup	13	0.0.0.0	38	0.0.0.0
D PCL Setup	14	0.0.0.0	39	0.0.0.0
Color Setup	15	0.0.0.0	40	0.0.0.0
D Management	16	0.0.0.0	41	0.0.0.0

- 5 Under STEP2, enter the host IP address.
 - Use an IP address to specify a host that is allowed to print and configure settings.
 - For the IPv4 address, use single-byte numerals separated by periods (.).

- For the IPv6 address, use single-byte alphanumeric characters separated by colons (:). Abbreviated notation is not supported.
- Entry of IP address 0.0.0.0. is invalid.

Admin Setup	IPSec						
ONetwork Setup	STEP1.	IPSec					
O General Network Settings			Enable •				
O TCP/IP	IPSec When this feature is enabled, the printer will not go to sleep						
ONBT		IP Address Settings					
@ Email	(Example: "192.168.0.2 ") Complete / valid IP Addresses only. Value of 0.0.0.0 is an invalid address.						
(B SNMP		IP Address			IP Address		
	1	192,168.0.0		26	0.0.00		
IPP (IPP)	2	0.0.0.0		27	0.0.0.0		
O IEEE802.1X	3	0.0.0.0		28	0.0.0.0		
O Security	4	0.0.0.0	_	29	0.0.0.0		
O Protocol ON/OFF							
O IP Filtering	5	0.0.0.0		30	0.0.0.0		
MAC Address Filtering	6	0.0.0.0	_	31	0.0.0.0		
© SSL/TLS	7	0.0.0.0		32	0.0.0		
IPSec	8	0.0.0		33	0.0.0		
O Change Network	9	0.0.0.0		34	0.0.0		
Password	10	0.0.0.0		35	0.0.0.0		
Maintenance	11	0.0.00		36	0.0.0		
O Print Setup	12	0.0.0.0		37	0.0.0.0		
D PS Setup	13	0.0.0.0		38	0.0.0.0		
	14	0.0.0.0		39	0.0.0.0		
	15	0.0.0.0		40	0.0.0.0		
O Color Setup	16	0.0.0.0		41	0.0.0.0		

- 6 Under STEP3, configure the settings of the Phase1 Proposal parameters.
 - For IKE Encryption Algorithm, select one of the following settings: AES-CBC 256, AES-CBC 192, AES-CBC 128, 3DES-CBC, DES-CBC.
 - For IKE Hash Algorithm, select SHA-1 or MD5.
 - For Diffie-Hellman Group, select Group2 or Group1.
 - For Lifetime, enter and set a value in the range of 600 (seconds) to 86,400 (seconds).

Admin Setup	18	0.0.0.0		43	0.0.0.0	
O Network Setup	10	0.0.0.0			0.0.0.0	
O General Network Settings				44		
O TCP/IP	20	0.0.0		45	0.0.0.0	
ONBT	21	0.0.0	_	46	0.0.0.0	
@ Email	22	0.0.0.0	_	47	0.0.0.0	
(B SNMP	23	0.0.0.0		48	0.0.0.0	
	24	0.0.0.0		49	0.0.0	
IPP (25	0.0.0.0		50	0.0.0.0	
O IEEE802.1X	STEP3.	Phase1 Proposal Se	ttings			
O Security	IKE Encryption Algorithm		AES-CBC	28 -		
C Protocol ON/OFF	IKE Hash Algorithm Diffie-Hellman Group		SHA-1 ·			
O IP Filtering			Group2 👻			
O MAC Address Filtering	LifeTime	e	28800 sec (600-86400)			
O SSL/TLS	STEP4.	Pre-Shared Key Set	lings			
O IPSec	Dec. Cha	red Kev				
O Change Network			(Max.64 Cha	ractors)		
Password	STEP5.	Key PFS Settings				
Maintenance	Key PFS	•	NOPFS .			
0 Print Setup	Key PFS Group	Diffie Hellman	None 🝷			
D PS Setup	STEP6.	Phase2 Proposal Se	ttings			
D PCL Setup	ESP		Enable			
🗅 Color Setup	ESP End	ryption Algorithm	AES-CBC	128 -		
Management		hentication Algorithm	SUA-1 -			

7 Under **STEP4**, set the pre-shared key.

For **Pre-Shared Key**, enter at least one and no more than 64 single-byte alphanumeric characters. Here, we will show an example where "ipsec" is entered for the character string.

ew Information Print Information	Printer Me	nu Admin Setup Calib	ation Links	100	
Admin Setup	18	0.0.0.0	_	43	0.0.0.0
ONetwork Setup	19	0.0.0.0	_	44	0.0.0.0
O General Network Settings	20	0.0.0.0		45	0.0.0
O TCP/IP	21	0.0.0.0		46	0.0.0.0
O NBT	22	0.0.0.0		47	0.0.0.0
@ Email	23	0.0.0.0		48	0.0.0
(B) SNMP	24	0.0.0		49	0.0.0.0
⊕ IPP	25	0.0.0		50	0.0.0.0
O IEEE802.1X	STEP3.	Phase1 Proposal Se	ttings		
O Security	IKE Enc	ryption Algorithm	AES-CBC	128 -	
C Protocol ON/OFF	IKE Hash Algorithm		SHA-1 ·		
O IP Filtering	Diffie-Hellman Group		Group2		
O MAC Address Filtering	LifeTime	e	28800	sec (600-8	(6400)
O SSL/TLS	STEP4.	Pre-Shared Key Sel	tings		
IPSec	Dre-Sha	red Kev	ipsed		
O Change Network			(Max.54 Ch	aracters)	
Password		Key PFS Settings			
Maintenance	Key PFS		NOPES		
9 Print Setup	Key PFS Group	5 Diffie Hellman	None •		
D PS Setup	STEP6.	Phase2 Proposal Se	ttings		
D PCL Setup	ESP		Enable		
🗅 Color Setup	ESP Enc	ryption Algorithm	AES-CBC	128 -	
Management	ESP Aut	hentication Algorith	n SHA-1 -		

8 Under STEP5, set the Key PFS.

View Information Print Information	Printer Me	nu Admin Setup Calibra	tion Links	12.24		
Admin Setup	18	0.0.0		43	0.0.0	
O Network Setup	19	0.0.0		44	0.0.0.0	1
General Network Settings	20	0.0.0		45	0.0.0	
O TCP/IP	21	0.0.0		46	0.0.0	
O NBT	22	0.0.0		47	0.0.0	1
⊕ Email	23	0.0.0		48	0.0.00	
⊕ SNMP	24	0.0.0		49	0.0.0	
⊕ IPP	25	0.0.0		50	0.0.0.0	
O IEEE802.1X	STEP3.	Phase1 Proposal Set	tings	0		
O Security	IKE Encryption Algorithm		AES-CBC 1	28 -		
C Protocol ON/OFF	IKE Hash Algorithm		SHA-1 ·			
O IP Filtering	Diffie-H	ellman Group	Group2 - 28800 sec (600-86400)			
MAC Address Filtering	LifeTim	e				
O SSL/TLS	STEP4.	Pre-Shared Key Sett	ings			
IPSec	Pre-Sha	red Kev	ipsec			
O Change Network			(Max.64 Char	actors)		
Password	STEP5.	Key PFS Settings				
Maintenance	Key PFS		KEYPFS •			
3 Print Setup	Key PFS Group	5 Diffie-Hellman	None +			
D PS Setup	STEP6.	Phase2 Proposal Set	tings			
D PCL Setup	ESP		Enable			
🗆 Color Setup	ESP End	ryption Algorithm	AES-CBC 1	28 -		
		hentication Algorithm				

a) For Key PFS, select KEYPFS or NOPFS.

- b) If **Key PFS** is selected, select one of the following settings for **Key PFS Diffie-Hellman Group**: Group 2, Group 1, None.
- 9 Under STEP6, configure Phase2 Proposal settings.

To configure ESP settings

- a) For **ESP Encryption Algorithm**, select one of the following settings: AES-CBC 256, AES-CBC 192, AES-CBC 128, 3DES-CBC, DES-CBC.
- b) For **ESP Authentication Algorithm**, select SHA-1, MD5, or OFF. If you select **OFF**, the ESP verification algorithm will not be applied.

To configure AH settings

- a) For AH Authentication Algorithm, select SHA-1 or MD5.
- b) For **LifeTime**, enter and set a value in the range of 600 (seconds) to 86,400 (seconds).
- 10 Click Submit.
- **11** Settings are saved on the printer and the network function is restarted.

To configure computer settings

- 1 Click Start, and then select Control panel in Windows.
- 2 Click System and Security.
- 3 Click Administrative Tools.
- 4 Double-click Local Security Policy.

Quick access OneDrive This PC Desktop Documents Documents Downloads	une ^ Component Services Component Management Defragment and Optimize Drives Disk Cleanup Event Viewer 3/CSI initiator	Date modified 3/19/2017 3:18 AM 3/19/2017 3:18 AM 3/19/2017 3:18 AM 3/19/2017 3:19 AM 3/19/2017 3:18 AM	Type Shortcut Shortcut Shortcut Shortcut	Size 2 KB 2 KB 2 KB 2 KB	
ConeDrive ConeD	Computer Management 9 Defragment and Optimize Drives 9 Disk Cleanup 9 Event Viewer 9 ISCSI Initiator	3/19/2017 3:18 AM 3/19/2017 3:18 AM 3/19/2017 3:19 AM	Shortcut Shortcut Shortcut	2 KB 2 KB	
ConeDrive This PC Desktop Documents Documents Downloads	Computer Management 9 Defragment and Optimize Drives 9 Disk Cleanup 9 Event Viewer 9 ISCSI Initiator	3/19/2017 3:18 AM 3/19/2017 3:18 AM 3/19/2017 3:19 AM	Shortcut Shortcut	2 KB 2 KB	
This PC 2010 Control C	Defragment and Optimize Drives Disk Cleanup Event Viewer SCSI Initiator	3/19/2017 3:19 AM	Shortcut		
Desktop Documents Documents	Disk Cleanup Event Viewer iSCSI Initiator			2 KB	
Documents	ISCSI Initiator	3/19/2017 3:18 AM	Changes .		
- Downloads				2 KB	
		3/19/2017 3:18 AM	Shortcut	2 KB	
h Music	Local Security Policy	3/19/2017 3:19 AM	Shortcut	2 K8	
	ODBC Data Sources	3/19/2017 3:18 AM	Shortcut	2 KB	
E Pictures	Performance Monitor	3/19/2017 3:18 AM	Shortcut	2 KB	
Videos	Print Management	3/19/2017 3:19 AM	Shortcut	2 KB	
	Resource Monitor	3/19/2017 3:18 AM	Shortcut	2 KB	
Eucar Disk (Ci)	Services	3/19/2017 3:18 AM	Shortcut	2 KB	
Local Disk (C:)	System Configuration	3/19/2017 3:18 AM	Shortcut	2 KB	
Network	System Information	3/19/2017 3:18 AM	Shortcut	2 KB	
- INCLINEIR	Task Scheduler	3/19/2017 3:18 AM	Shortcut	2 KB	
2	Windows Firewall with Advanced Security	3/19/2017 3:19 AM	Shortcut	2 KB	
28	Windows Memory Diagnostic	3/19/2017 3:18 AM	Shortcut	2 KB	

5 Select Windows Firewall with Advanced Security - Windows Firewall with Advanced Security - Local Group Policy Object, right-click Connection Security Rules, and then select New Rule.

Security Settings Account Policies Count Policies Count Policies Windows Firewall with Advanc Windows Firewall with Adv Mindows Firewall with Advanc Mindows Firewall with Advance			There are no item	Enabled	Endpoint 1	Endpoin	:2 Au
Cutbound Rules				is to show i	n this view.		
Connection Security 1 Network List Manager Pc Public Key Policies Software Restriction Polic Application Control Polic	New Rule_						
	Filter by Profile Filter by State	2					
IP Security Policies on Lo	View	>					
Advanced Audit Policy C	Refresh Export List						
	Help						

6 Select Custom, and then click Next.

Mew Connection Security	Rule Wizard	×
Rule Type		
Select the type of connection i	security rule to create.	
Steps: Balo Type & Contector I Steps: Balo Type = Endpoints = Registements = Authentication Method = Protocol and Ports = Profile = Name	What type of connection security rule would you like to create? Image: Security rule connections between the specified computers. Security rule connections between the specified computers. Image: Custom rule. Note: Connections rule rules specify how and when authentication occurs, but they do not allow connections. To allow a connection, create an inbound or outbound rule.	
	CBack: Next > Cenc	el

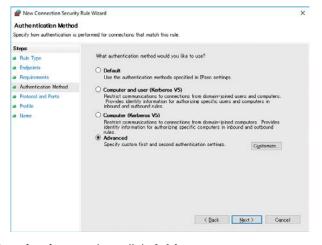
7 Select Endpoint 1 and 2. Configure as required, and then click Next.

Mew Connection Security I	Rule Wizard	>
Endpoints		
ipecify the computers between	which secured connections will be established using IPsec.	
Steps: • Rule Type • Endpoints • Requirements • Authentication Method	Create a secured connection between computers in Endpoint I - Which computers are in Endpoint 1?	and Endpoint 2.
Protocol and Ports Profile Name	Customize the interface types to which this rule applies: Which consistent are in Endocent 27 (a) Any IP address (b) These IP addresses:	Add. Lufit Bornove Castomize
	C Iges / autosos	Add Edit. Pregare Next > Cancel

8 Select Require authentication for inbound connections and request authentication for outbound connections, and then click Next.

Wew Connection Security I	AUE WEATO	>
Requirements		
Specify the authentication requi	rements for connections that match this rule.	
Steps		
Rule Type	When do you want authentication to occur?	
Endpoints		
Requirements	O Request authentication for inbound and outbound connections	
Authentication Method	Authenticate whenever possible but authentication is not required.	
Protocol and Ports	Require authentication for inbound connections and request authentication for outbound connections	
Profile	Inbound connections must be authenticated to be allowed. Outbound connections	
a Name	are authenticated whenever possible but authentication is not required.	
	O Require authentication for inbound and outbound connections	
	Both inbound and outbound connections must be authenticated to be allowed.	
	O Do not authenticate	
	No connections will be authenticated.	
	< Back Next > Cancel	

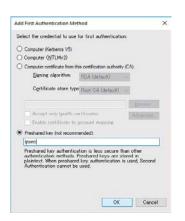
9 Select Advanced, and then click Customize.



10 In the First authentication section, click Add.

	n r authentication methods to use durin	ur IPose	Second authenti Specify user at		vethods or a health c	ertificate
negotiations. Th	ose higher in the list are tried first.	• • • • •	to use during I tried first.	^p sec negotiatio	ns. Those higher in	the list ar
Eirst authenticat	ion methods:		Second authen	lication metho	te:	
Method	Additional Information	2	Method	Add	tional Information	
						_
						100
						1
Add_	Edit		Add_	Edit	Tlesove	-
First authent	ication is optional		Second aut	hentication is a	optional	
-			A second authority	intication cann	ot be specified when suthentication method	a le liet

11 Select Preshared Key and enter the key, and then click OK.



12 Click OK.

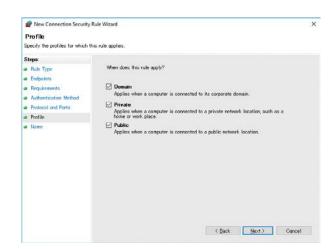
Specify computer authentia	sation methods to use durin	10				
negotiations. Those higher	in the list are tried first.	AL 11.960	Specify user au to use during IP tried first.	hentication m sec negotiatio	ethods or a health i ns. Those higher in	certificate the list are
Eirst authentication metho	ds:		Second authenti	cation method	la:	
Method A	dditional Information		Method	Addr	tional Information	
Preshared key ip	sec					
		-				
						100
		-				100
Add_ Edit_	Bemove		Add_			
First authentication is	optional		Second auth	entication is a	ptional	
			A second author	tication cann	ot be specified whe uthentication metho	na

13 Click Next.

14 Click Next.

Mew Connection Security	Rule Wizard				×
Protocol and Ports					
Specify the protocol and ports t	o which this n	ule applies.			
Steps					
Rule Type	To whit	ch ports and protocol	s does this rule apply?		
Endpoints	4	Protocol type:	Any	~	
Bequirements		Protocol number:	0 (0)		
a Authentication Method			hear an in		
Protocol and Ports		Endpoint 1 port	All Ports		
Profile			Example: 88, 445, 5000-5	5010	
a Name	E	Endpoint 2 port	All Ports	1	
			Example: 80, 445, 5000-5	5010	
			< Bac	k Next >	Cancel

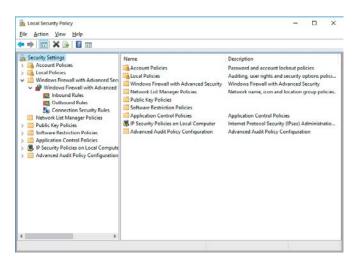
15 After confirming that all of the check boxes are selected, click Next.



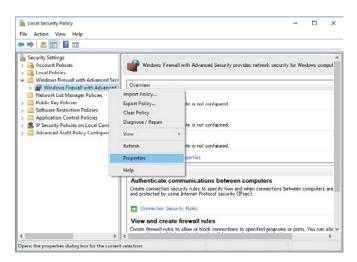
16 Enter a name, and then click Finish.

Wew Connection Security Ri	and a state of	>
Name		
Specify the name and description	of this rule.	
Steps		
Bule Type		
Endpoints		
Requirements	Name	
Authentication Method	New Connection Security	
Protocol and Ports		
Profile	Description (optional):	
Name		
	< Back Einish Can	cel

17 Open the Local Security Policy of the Administrative Tools.



18 Select Windows Firewall with Advanced Security, right-click, and then select Properties.



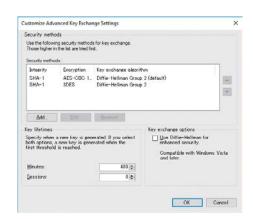
19 Select the IPsec Settings tab. Next, in the IPsec defaults section, click Customize.

Domain Profile	Private Profile	Public Profile	IPseo Settir	it's
IPsec defi	sults			
	pecify settings stablish secure			ustomize_
IPpec exe	mptions			
	Exempting IOMP amplify troubles saues			
i	prempt ICMP fm	om IPsec	Not configu	red v
IPsec ture	nel authorization	n		
ola 1	ipecify the user o establish IPsr computer. () None			
	O Advanced		10	Tayountuk

20 In the Key exchange (Main Mode) section, select Advanced, and then click Customize.

when there are active connection security r	ecured connections ules
When you use the default options, any setti higher precedence are used.	nes in a GPO with a
Key exchange (Main Mode)	
O Default (recommended)	
Advanced	Qustomize_
Data protection (Quick Mode)	
O Default (recommended)	
Adganced	Gugtomize_
Authentication method	
O Default	
 Computer and user (Kerberos V5) 	
Computer (Kerberos V5)	
O User (Kerberos V6)	
Advanced	Customize.

21 Change the Security Methods as required, and then click OK.



22 In the Data protection (Quick Mode) section, select Advanced, and then click Customize.

	×
IPsec will use these settings to establi when there are active connection secur	
When you use the default options, any higher precedence are used.	settings in a GPO with a
Key exchange (Main Mode)	
O Default (recommended)	
Advanced	Qustomize_
Data protection (Quick Mode)	
O Default (recommended)	
Adyanced	Gugtomize_
Authentication method	
O Computer and user (Kerberos V5.)
Computer (Kerberos V5)	
C Liser (Kerberos V5)	
	Customize

23 Configure the settings you want, and then click OK.

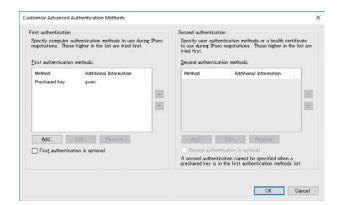
ata integri Protect dar ntegrity al inst.	ty ta from modif	all connection security rules the fication on the network with these see higher in the list are tried as	Data integrit Protect dat the network Those high	a from mod with these er in the list	ification and pr		. 01
Protocol ESP AH	Integrity SHA-1 SHA-1	Key Lifetime (minutes/KB) 50/100,000 80/100,000	Protocol ESP ESP	Integrity SHA-1 SHA-1	Encryption AES-CBC 3DES	Key Lifetime (m_ 66/100,000 60/100,000	
Add_	Edi	1. Bérnave	Add_	Ed	Re Re	micros	

Note: Support is provided only for time indicated by the key lifetime. To disable session-specific (IPsec communication data size) conditions, set the maximum value.

24 In the Authentication method section, select Advanced, and then click Customize.



25 In the First authentication section, click Add.



26 Select Preshared Key and enter the key, and then click OK.

Add First Authentication Me	ethod	>
Select the credential to use	for first authentication	
Computer (Kerberos V5)		
C Computer (NTLMv2)		
Computer certificate from		CAI
Signing algorithms	RSA (default)	
Certificate store by	Root CA (defauit)	
	Proof on the add	1
Accept only bealth o	sertificates:	Advanced
Enable certificate to	account mapping	10.09420823200
Preshared key inst recom	mended)	
		11
ipsec		

27 Click OK.

irst authentication Specify computer authentication methods to use during IPsec negotiations. Those higher in the list are tried first. First authentication methods:	Second authentication Specify user authentication methods or a health certificate to use during Place negotiations. Those higher in the list or tried first. Second authentication methods:
Preshand key poec	Rethod Additional Information
AddTime.com	Add1. Edit. Tempore Second authentication is optimal A second authentication cannot be specified when a preshared by: is in the first authentication methods list.

28 Click OK to exit Customize IPsec Settings.

Customize IPsec Defaults	3
IPsec will use these settings to establish a when there are active connection security r	
When you use the default options, any setti- higher precedence are used.	nes in a GPO with a
Key exchange (Main Mode)	
O Default (recommended)	
Advanced	Qustomize_
Data protection (Quick Mode)	
O Default (recommended)	
Adganced	Gugtomize_
Authentication method O Default	
O Computer and user (Kerberos V5)	
Computer (Kerberos V5)	
O User (Kerberos V5)	
User (Kerberos V5) Advagced	Gustomize_

29 Click OK.

Controlling Access by IP Address (IP Filter)

Access to the printer can be managed using IP addresses.

Note: IP Filtering is set to Disable under the printer initial default settings.

Note: Take care to enter the IP address correctly. An incorrectly entered IP address can make it impossible to access the printer using IP protocol.

- 1 Log in as an administrator. See "Logging in as an Administrator" on page 405.
- 2 Click in the following sequence: Admin Setup > Network Setup > Security.

iew Information Print Information	Printer Menu Admin Setup C	alibration Links	2	
Admin Setup	Protocol			
ONetwork Setup	TCP/IP	Enable		
General Network Settings	NetBIOS over TCP	Enable	*	
O TCP/IP				
O NBT	Service			
@ Email	Web (Port No. 1 80)		sle".	you can not access from your Web browser. not print with WSD-port.
⊕ SNMP	IPP (Port No. : 631)	Enable	•	
(B) IPP	Telnet	Disable		
O IEEE802.1X	FTP	Disable	-	
O Security	SNMP	Enable	•	
Protocol ON/OFF	SNTP	Disable		
O IP Filtering	Local Ports	Enable		
MAC Address Filtering	Selection of the last	. I secondos		
© SSL/TLS	Port Number	and the second second		
O IPSec	You can not set port num	ber that is alr	eady	used.
O Change Network	Web	80	(1-6	5535)
Password	SMTP	25	(1-6	5535)
Maintenance				
Print Setup				
PS Setup				
PCL Setup				
🗅 Color Setup				
Ti Management				

3 Click IP Filtering.

view Information Print Information	Printer Me	nu Admin Setup 9	Calibration Links			
Admin Setup	IP Filte	ring				
Network Setup	and the second second	Select IP Filter	ing Settings.			
General Network Settings	IP Filte	ring	Disable •			
O TCP/IP				ou set IP Filtering to Er		
O NBT			access the print in STEP2.	nter only from hosts at	IP Address	es set
⊕ Email	errea	Set IP Address				
⊕ SNMP				permissions to print to	o or config	ure the
(1) IPP	printer.					ure the
O IEEE802.1X		s can be given to		0.0.0 is an invalid addr when overlapping rai		dresse
	ore use	u.				
O Security	(CAUTTO)	ALL IN				
Security O Protocol ON/OFF	(CAUTIC When d		g"is not marked, you	can not print with WSD	-port.	
and the second	When d	heckbox of "Confi		can not print with WSD I configuration settings		tion.
C Protocol ON/OFF	When d	heckbox of "Confi P Address, if set i Address Range	n STEP 3, overrides a IP Add	I configuration settings ress Range		1
© Protocol ON/OFF © IP Filtering	When d Admin I Priority	heckbox of "Confi P Address, if set i Address Range No.	n STEP 3, overrides al IP Add Start Address	I configuration settings ress Range End Address	in this sed	Config
© Protocol ON/OFF © IP Filtering © MAC Address Filtering	When d	heckbox of "Confi P Address, if set in Address Range No. 1	n STEP 3, overrides a IP Add Start Address 0.0.0.0	I configuration settings ress Range End Address 0.0.0.0	in this sect	Config
© Protocol ON/OFF © IP Filtering © MAC Address Filtering © SSL/TLS © IPSec	When d Admin I Priority	heckbox of "Confi P Address, if set i Address Range No.	n STEP 3, overrides al IP Add Start Address	I configuration settings ress Range End Address	in this sec Printing	Config
© Protocol ON/OFF © IP Filtering © MAC Address Filtering © SSL/TLS	When d Admin I Priority	heckbox of "Confi P Address, if set in Address Range No. 1	n STEP 3, overrides a IP Add Start Address 0.0.0.0	I configuration settings ress Range End Address 0.0.0.0	in this sect	Config
© Protocol ON/OFF © IP Filtering © MAC Address Filtering © SSL/TLS © IPSec © Change Network	When d Admin I Priority	heckbox of "Confi P Address, if set in Address Range No. 1 2	n STEP 3, overrides a IP Add Start Address 0.0.0.0 0.0.0.0	I configuration settings ress Range End Address 0.0.0.0 0.0.0.0	in this sec Printing	Config
© Protocol ON/OFF © IP Filtering © MAC Address Filtering © SSL/TLS © IPSec © Change Network Password ® Maintenance	When d Admin I Priority	heckbox of "Confi P Address, if set i Address Range No. 1 2 3	n STEP 3, overrides al IP Add Start Address 0.0.0.0 0.0.0.0 0.0.0.0	I configuration settings ress Range End Address 0.0.0.0 0.0.0.0 0.0.0.0	In this sed	Config
Protocol ON/OFF Protocol ON/OFF MAC Address Filtering SSL/LS Filtering SSL/LS Filtering Maintenance Print Setup	When d Admin I Priority	heckbox of "Confi P Address, if set in Address Range No. 1 2 3 4	n STEP 3, overnides al IP Add Start Address 0.0.0.0 0.0.0.0 0.0.0.0 0.0.0.0	I configuration settings ress Range 0.0.0.0 0.0.0.0 0.0.0.0 0.0.0.0 0.0.0.0	In this sed	Config
Protocol ON/OFF Protocol ON/OFF AC Address Filtering SSL/LS Filtering Change Network Password Maintenance Print Setup S Sotup	When d Admin I Priority	heckbox of "Confi P Address, if set in Address Range No. 1 2 3 4 5	n STEP 3, overnices al IP Add Start Address 0.0.0.0 0.0.0.0 0.0.0.0 0.0.0.0 0.0.0.0 0.0.0.0	Configuration settings ress Range End Address 0.0.0.0 0.0.0.0 0.0.0.0 0.0.0.0 0.0.0.0 0.0.0.0 0.0.0.0	In this sed Printing	
Protocol ON/OFF UP Fittering MAC Address Fittering SSL/LS IPSec Change Network Password Maintenance Print Setup Stup CFL Setup	When d Admin I Priority	heckbox of "Confi P Address, if set i Address Range No. 1 2 3 4 5 6	n STEP 3, overnides al IP Add Start Address 0.0.0.0 0.0.0.0 0.0.0.0 0.0.0.0 0.0.0.0 0.0.0.0 0.0.0.0 0.0.0.0 0.0.0.0	Configuration settings End Address 0.0.0 0.0.0.0 0.0.0.0 0.0.0.0 0.0.0.0 0.0.0.0 0.0.0.0 0.0.0.0 0.0.0.0 0.0.0.0 0.0.0.0	in this sed Printing	
Protocol ON/OFF IP Fittering MAC Address Filtering SSL/TLS IPSec Change Network Password Maintenance Print Setup OFS Setup	When d Admin I Priority	P Address, if set ii Address Range No. 1 2 3 4 5 6 7	n STEP 3, overrides al IP Add Start Address 0.0.0.0 0.0.0.0 0.0.0.0 0.0.0.0 0.0.0.0 0.0.0.0 0.0.0.0 0.0.0.0	Configuration settings End Address 0.0.0 0.0.0 0.0.0 0.0.0 0.0.0 0.0.0 0.0.0 0.0.0 0.0.0 0.0.0 0.0.0 0.0.0 0.0.0 0.0.0 0.0.0	Printing	

4 Under STEP1, select Enable for IP Filtering.

/iew Information Print Information	Printer Me	enu Admin Setup 9	Calibration Links			
Admin Setup	IP Filte	ring				
Network Setup	STEP1.	Select IP Filter	ing Settings.			
General Network Settings	IP Filte	ring	Enable -			
O TCP/IP				ou set IP Filtering to Er		
O NBT			access the prin in STEP2.	nter only from hosts at	IP Address	es set
@ Email	STEP2.	Set IP Address	range, 😵			
B SNMP	Enter th	ne ranges of the h	nost IP Addresses and	permissions to print to	o, or configu	re the
⊕ IPP	printer.	te / valid TP Addre	esses only. Value of 0	0.0.0 is an invalid addr		
O IEEE802.1X		s can be given to		e when overlapping ra		iresses
O Security						
Security O Protocol ON/OFF	(CAUTIO		g"is not marked, you	can not print with WSD	-port.	
	(CAUTIC When d	DNII) heckbox of "Confi		can not print with WSD I configuration settings		ion.
O Protocol ON/OFF	(CAUTIC When d	DNII) heckbox of "Confi P Address, if set i Address Range	n STEP 3, overrides al IP Add	l configuration settings ress Range	in this sed	
© Protocol ON/OFF © IP Filtering © MAC Address Filtering	(CAUTIC When d Admin I Priority	DNII) heckbox of "Confi P Address, if set i Address Range No.	n STEP 3, overrides al IP Add Start Address	I configuration settings ress Range End Address	in this sect	Config
© Protocol ON/OFF © IP Filtering © MAC Address Filtering © SSL/TLS	(CAUTIC When d	DNII) heckbox of "Confi P Address, if set i Address Range	n STEP 3, overrides al IP Add	l configuration settings ress Range	in this sed	
© Protocol ON/OFF © IP Filtering © MAC Address Filtering © SSL/TLS © IPSec	(CAUTIC When d Admin I Priority	DNII) heckbox of "Confi P Address, if set i Address Range No.	n STEP 3, overrides al IP Add Start Address	I configuration settings ress Range End Address	in this sect	Config
© Protocol ON/OFF © IP Filtering © MAC Address Filtering © SSL/TLS	(CAUTIC When d Admin I Priority	DNII) heckbox of "Confi P Address, if set in Address Range No. 1	n STEP 3, overrides al IP Add Start Address 0.0.0.0	I configuration settings ress Range End Address 0.0.0.0	in this sect Printing	Config
© Protocol ON/OFF © IP Filtering © MAC Address Filtering © SSL/TLS © IPSec © Change Network	(CAUTIC When d Admin I Priority	DNII) heckbox of "Confi P Address, if set i Address Range No. 1 2	n STEP 3, overrides al IP Add Start Address 0.0.0.0 0.0.0.0	I configuration settings ress Range End Address 0.0.0.0 0.0.0.0	in this sect	Config
© Protocol ON/OFF © IP Fittering © MAC Address Filtering © SSL/TLS © IPSec © Change Network Password ® Maintenance	(CAUTIC When d Admin I Priority	DNII) heckbox of "Confi P Address, if set i Address Range No. 1 2 3	n STEP 3, overrides al IP Add Start Address 0.0.0.0 0.0.0.0 0.0.0.0	I configuration settings ress Range 0.0.0.0 0.0.0.0 0.0.0.0 0.0.0.0	in this sect	Config
© Protocol ON/OFF © IP Fittering © MAC Address Filtering © SSL/TLS © IPSec © Change Network Password	(CAUTIC When d Admin I Priority	NII) heckbox of "Confi P Address, if set ii Address Range No. 1 2 3 4	n STEP 3, overndes al IP Add Start Address 0.0.0.0 0.0.0.0 0.0.0.0 0.0.0.0	I configuration settings ress Range 0.0.0.0 0.0.0.0 0.0.0.0 0.0.0.0 0.0.0.0	in this sect	Config
© Protocol ON/OFF © IP Fittering © SSL/TLS © IPSec © Change Network Password @ Maintenance © Print Setup	(CAUTIC When d Admin I Priority	NII) heckbox of "Confi Address, if set i Address Range No. 1 2 3 4 5	n STEP 3, overndes al IP Add Start Address 0.0.0.0 0.0.0.0 0.0.0.0 0.0.0.0 0.0.0.0 0.0.0.0	I configuration settings ress Range End Address 0.0.0.0 0.0.0.0 0.0.0.0 0.0.0.0 0.0.0.0 0.0.0.0	In this sect Printing	Config
Protocol ON/OFF UP Fittering MAC Address Filtering SSL/TLS IPSec Change Network Password Maintenance Print Setup OFS Setup	(CAUTIC When d Admin I Priority	NII) heckbox of "Confi Address, if set ii Address Range No. 1 2 3 4 5 6	n STEP 3, overndes al IP Add Start Address 0.0.0.0 0.0.0.0 0.0.0.0 0.0.0.0 0.0.0.0 0.0.0.0 0.0.0.0 0.0.0.0	Configuration settings End Address 0.0.0 0.0.0 0.0.0 0.0.0 0.0.0 0.0.0 0.0.0 0.0.0 0.0.0 0.0.0 0.0.0 0.0.0 0.0.0	in this sect Printing	

Note: Enabling IP filtering disables all access from hosts that are outside the range of IP addresses specified in STEP2.

- 5 Under STEP2, specify the IP address range.
 - Using IP addresses, enter the range of hosts that are allowed to print and configure settings.
 - For the IP addresses, use single-byte numerals separated by periods (.).
 - Entry of IP address 0.0.0.0. is invalid.
 - When there is overlap of IP addresses, the address range with the highest level set in Priority is given priority.
 - Regardless of what is specified in STEP2, you can use STEP3 to specify administrator addresses for which printing and setting configuration are enabled.

Admin Setup	-	Address Range	IP Add	lress Range		-
Network Setup	Priority	No.	Start Address	End Address	Printing	Config
General Network Settings	Low	1	0.0.0.0	0.0.0.0	<u>pr</u>	- E3
O TCP/IP		2	0.0.0.0	0.0.0.0	E	1
ONBT		3	0.0.0.0	0.0.0	1	1
@ Email		4	0.0.0.0	0.0.0	<u></u>	10
@ SNMP		5	0.0.0.0	0.0.0.0	1	123
@ IPP		6	0.0.0.0	0.0.0.0		
- The second second		7	0.0.0.0	0.0.0.0	E	
O IEEE802.1X		8	0.0.0.0	0.0.0.0	123	- 83
O Security		9	0.0.0.0	0.0.0.0		10
C Protocol ON/OFF	High	10	0.0.0.0	0.0.0		
O IP Filtering	Addre	ss Range Bar	Display/Refresh	PLINDOLLOW	Hide	•
MAC Address Filtering SSL/TLS IPSec Change Network Password	Printing Enable Enable Disable	Config Color	nge Bar Color relation			
Maintenance	STEP3.	Save Administr	ator IP Address.			
) Print Setup) PS Setup) PCL Setup	object f Only on If a pro:	or configuration s e IP Address can	et in STEP2. be registered as adm ss this printer, the pr	ich takes priority over a ninistrator IP Address, oxy address will appea		
Color Setup		o not wish to reg s setting" field bla	nk.	's IP Address, leave "A	dministrato	r's IP
R Management						

6 Click Address Range Bar Display/Refresh.

If you want to modify an IP address range, re-enter the applicable IP addresses, and click **Address Range Bar Display/Refresh** again.

7 Under STEP3, specify the Administrator's IP Address setting.

Even if the wrong settings are configured in **STEP2** due to administrator IP address entry in **Administrator's IP Address setting**, the administrator can re-configure the setting from a host with the IP address specified with **Administrator's IP Address setting**.

- If the printer is being accessed via a proxy, the intermediate device's address will be displayed as **Your Current Local Host/Proxy IP Address**. Consequently, the address shown by **Your Host IP Address** may be different from your actual host address.
- If nothing is registered for the administrator IP address, the setting in **STEP2** may make the printer completely inaccessible.
- If you do not want to register an administrator IP address, leave Administrator's IP Address setting blank.
- 8 Click Submit.
- 9 Settings are saved on the printer and the network function is restarted.

Controlling Access by MAC Address

Access to the printer can be managed using MAC addresses.

Note: Incorrectly entering a MAC address can make it impossible to access the printer using a network. Exercise caution when entering an address.

- 1 Log in as an administrator. See "Logging in as an Administrator" on page 405.
- 2 Click in the following sequence: Admin Setup > Network Setup > Security.

iew Information Print Information	Printer Menu Admin Setup C	alibration I Links
Admin Setup		and doon I Links
ONetwork Setup	Protocol	
	TCP/IP	Enable
General Network Settings	NetBIOS over TCP	Enable 👻
O TCP/IP	A STATE OF COMPANY	
O NBT	Service	
⊕ Email	Web (Port No. 1 80)	Enable - If "Disable", you can not access from your Web browser, and, you can not print with WSD-port.
⊕ SNMP	IPP (Port No. : 631)	Enable -
() IPP	Teinet	Disable 🔻
O IEEE802.1X	FTP	Disable -
O Security	SNMP	Enable •
Protocol ON/OFF	SNTP	Disable 👻
IP Filtering	Local Ports	Enable •
O MAC Address Filtering		
O SSL/TLS	Port Number	
O IPSec	You can not set port num	ber that is already used.
	Web	80 (1-65535)
 Change Network Password 	SMTP	25 (1-65535)
Maintenance		
Print Setup		
PS Setup		
PCL Setup		
) Color Setup		
Management		

3 Click MAC Address Filtering.

View Information Print Information	Printer M	enu Admin Setup Calibr	ation Links		
Admin Setup	MAGA	ddress Filtering			
Network Setup		Select MAC Address	Filtering Setti	ngs	
O General Network Settings			Disable +		
O TCP/IP O NBT	MAC A	ddress Filtering	you will only	be able	MAC Address Filtering to Enable, to access the printer from device set in STEP2 and STEP3.
@ Email	STEP2	. Set Filtering MAC Ad	Idress		
⊕ SNMP		unication from the ing MAC Addresses	Accept -		
⊕ IPP		MAC Address			MAC Address
O IEEE802.1X	1	00:00:00:00:00:00	0	26	00:00:00:00:00
O Security	2	00:00:00:00:00:00)	27	00:00:00:00:00
C Protocol ON/OFF	3	00:00:00:00:00:00	0	28	00:00:00:00:00
O IP Filtering	4	00:00:00:00:00:00)	29	00:00:00:00:00
MAC Address Filtering	5	00:00:00:00:00:00	0	30	00:00:00:00:00
O SSL/TLS	6	00:00:00:00:00:00	2	31	00:00:00:00:00:00
O IPSec	7	00:00:00:00:00:00)	32	00:00:00:00:00:00
O Change Network	8	00:00:00:00:00:00	0	33	00:00:00:00:00
Password	9	00:00:00:00:00:00)	34	00:00:00:00:00
Maintenance	10	00:00:00:00:00:00	0	35	00:00:00:00:00
O Print Setup	11	00:00:00:00:00:00	0	36	00:00:00:00:00
O PS Setup	12	00:00:00:00:00:00)	37	00:00:00:00:00
O PCL Setup	13	00:00:00:00:00:00	2	38	00:00:00:00:00
O Color Setup	14	00:00:00:00:00:00)	39	00:00:00:00:00
() Management	15	00-00-00-00-00-00		40	00-00-00-00-00-00

4 Under STEP1, select Enable for MAC Address Filtering.

New Information Print Information	Printer M	enu <u>Admin Setup</u> <u>Calibr</u>	ation Links		
Admin Setup	MACA	ddress Filtering			
ONetwork Setup	STEP1	. Select MAC Address	Filtering Setti	ngs	
General Network Settings			Enable +		
O TCP/IP	MAC A	ddress Filtering			MAC Address Filtering to Enable,
O NBT					to access the printer from devices set in STEP2 and STEP3.
@ Email	STEP2	. Set Filtering MAC Ac	ldress		
⊕ SNMP		unication from the ing MAC Addresses	Accept -		
⊕ IPP		MAC Address			MAC Address
O IEEE802.1X	1	00:00:00:00:00:00	0	26	00:00:00:00:00
O Security	2	00:00:00:00:00:00	2	27	00:00:00:00:00
Protocol ON/OFF	3	00:00:00:00:00:00	0	28	00:00:00:00:00
O IP Filtering	4	00:00:00:00:00:00)	29	00:00:00:00:00
MAC Address Filtering	5	00:00:00:00:00:00	0	30	00:00:00:00:00
O SSL/TLS	6	00:00:00:00:00:00	2	31	00:00:00:00:00
O IPSec	7	00:00:00:00:00:00)	32	00:00:00:00:00
O Change Network	8	00:00:00:00:00:00	0	33	00:00:00:00:00
Password	9	00:00:00:00:00:00	2	34	00:00:00:00:00
Maintenance	10	00:00:00:00:00:00		35	00:00:00:00:00
3 Print Setup	11	00:00:00:00:00:00)	36	00:00:00:00:00
D PS Setup	12	00:00:00:00:00:00	3	37	00:00:00:00:00
D PCL Setup	13	00:00:00:00:00:00	2	38	00:00:00:00:00
🗆 Color Setup	14	00:00:00:00:00:00)	39	00:00:00:00:00
Ti Management	15	00-00-00-00-00-0		40	00-00-00-00-00-00

5 Under **STEP2**, You can select **Accept** or **Deny** for communication from specific MAC addresses.

Admin Setup	MACA	ddress Filtering			
Network Setup		. Select MAC Address I	Iltering Settin	195	
General Network Settings			Enable +		
O TCP/IP	MAC A	ddress Filtering			MAC Address Filtering to Enable
O NBT					to access the printer from device set in STEP2 and STEP3.
@ Email	STEP2	. Set Filtering MAC Add	lress		
(B SNMP		unication from the ing MAC Addresses	Accept -		
1 IPP		MAC Address	Accept Denv		MAC Address
O IEEE802.1X	1	00:00:00:00:00:00		26	00:00:00:00:00:00
O Security	2	00:00:00:00:00:00		27	00:00:00:00:00:00
Protocol ON/OFF	3	00:00:00:00:00:00		28	00:00:00:00:00:00
O IP Filtering	4	00:00:00:00:00:00		29	00:00:00:00:00:00
MAC Address Filtering	5	00:00:00:00:00:00		30	00:00:00:00:00:00
© SSL/TLS	6	00:00:00:00:00:00		31	00:00:00:00:00:00
O IPSec	7	00:00:00:00:00:00		32	00:00:00:00:00:00
O Change Network	8	00:00:00:00:00:00		33	00:00:00:00:00:00
Password	9	00:00:00:00:00:00		34	00:00:00:00:00
Maintenance	10	00:00:00:00:00:00		35	00:00:00:00:00:00
Print Setup	11	00:00:00:00:00:00		36	00:00:00:00:00
PS Setup	12	00:00:00:00:00:00		37	00:00:00:00:00:00
PCL Setup	13	00:00:00:00:00:00		38	00:00:00:00:00:00
Color Setup	14	00:00:00:00:00:00		39	00:00:00:00:00:00

- Using MAC addresses, enter the range of hosts whose communications are allowed or rejected.
- For the MAC addresses, use single-byte numerals separated by periods (.).
- Regardless of what is specified in **STEP2**, you can use **STEP3** to specify administrator addresses for which communication is enabled.

co mon hin	11	00:00:00:00:00:00	36	00:00:00:0	0:00:00	
O TCP/IP	12	00:00:00:00:00:00	37	00:00:00:0	0:00:00	
O NBT	13	00:00:00:00:00:00	38	00:00:00:0	0:00:00	
⊕ Email	14	00:00:00:00:00:00	39	00:00:00:0	0:00:00	
SNMP	15	00:00:00:00:00:00	40	00:00:00:0	0:00:00	
IPP	16	00:00:00:00:00:00	41	00:00:00:0	0:00:00	
O IEEE802.1X	17	00:00:00:00:00:00	42	00:00:00:0	0:00:00	
Security	18	00:00:00:00:00:00	43	00:00:00:0	0:00:00	
Protocol ON/OFF	19	00:00:00:00:00:00	44	00:00:00:0	0:00:00	
O IP Filtering	20	00:00:00:00:00:00	45	00:00:00:0	0:00:00	
MAC Address Filtering	21	00:00:00:00:00:00	46	00:00:00:0	0:00:00	
O SSL/TLS	22	00:00:00:00:00:00	47	00:00:00:0	0:00:00	
O IPSec	23	00:00:00:00:00:00	48	00:00:00:0	0:00:00	
O Change Network	24	00:00:00:00:00:00	49	00:00:00:0	0:00:00	
Password	25	00:00:00:00:00	50	00:00:00:0	0:00:00	
® Maintenance) Print Setup PS Setup	You Filt	Save Administrator MAC Add J can set an Administrator MAC / ering set in STEP2. Iy one MAC Address can be regin	Address, which t	and the second		
PCL Setup		proxy is used to access this pri ment Host/Proxy MAC Address' b		ddress will a	opear in Your	
Management		ou do not wish to register an Ad dress setting" blank.	dministrator add	ess, leave "A	dministrator's MAC	
	Admini	strator MAC Address that has l	and the second se	00:00:00	0:00:00:00	
		urrent Local Host/Proxy MAC strator's MAC Address setting	Address	34:17:E	3:CD:D7:F7	

6 Under STEP3, specify the Administrator's MAC Address setting.

Even if the wrong settings are configured in **STEP2** due to administrator MAC address entry in **Administrator's MAC Address setting**, the administrator can re-configure the setting from a host with the MAC address specified with **Administrator's MAC Address setting**.

- If the printer is being accessed via a proxy, the intermediate device's address will be displayed as Your Host MAC Address. Consequently, the address shown by Your Host MAC Address may be different from your actual host address.
- If nothing is registered for the administrator MAC address, the setting in **STEP2** may make the printer completely inaccessible.
- If you do not want to register an administrator MAC address, specify 00:00:00:00:00:00:00 for Administrator's MAC Address setting.
- 7 Click Submit.
- 8 Settings are saved on the printer and the network function is restarted.

Sending Error Notifications by Mail

The printer comes with a mail sending function (SMTP) built-in. It can be configured to send a mail message whenever an error occurs. You can select whether to send a periodic mail message about errors, or to send a mail message as soon as an error occurs.

- 1 Log in as an administrator. See "Logging in as an Administrator" on page 405.
- 2 Click: Admin Setup > Network Setup.

Admin Setup	1. A	pration Links
	Protocol Options	
Network Setup	TCP/IP	Enable
General Network Settings	NetBIOS over TCP	Enable +
O TCP/IP		
O NBT	Hub Link	
@ Email	Hub Link Status	OK(100Base-TX Full)
@ SNMP	Gigabit Network	Disable 👻
	Hub Link Setting	Auto Negotiate 👻
⊕ IPP		
O IEEE802.1X	Energy Efficient Ethernet	
Security	Energy Efficient Ethernet	Enable 🔻
Maintenance		
Print Setup		
PS Setup		
PCL Setup		
Color Setup		
Management		

3 Click: Email > Send Settings.

Admin Setup	Email Send Settings	
Network Setup	STEP1, SMTP send setting	15
General Network Settings	Set the protocol for the prin	Contract of the second s
O TCP/IP	If Disable is selected, skip I	the rest of the STEPs.
ONBT	SMTP Send	Disable -
O Email	STEP2. Send Address Set	tings
	Set the SMTP Server Addre	ss where the printer will send Email.
 Send Settings Alert Settings 	SMTP Server	Enter Email Server. (Max.64 characters)
(B SNMP	Send Test	Test
(I) IPP	Set the sender Address (th	is printer's Address).
© IEEE802.1X ⊕ Security	Printer Email Address	May be required to validate Email transmissions. (Max.64 characters)
Maintenance		
2 Print Setup		
PS Setup		
PCL Setup		
O Color Setup		
9 Management		

4 Under STEP1, select Enable for SMTP Send.



- 5 Under STEP2, specify the required addresses.
 - a) For SMTP Server, specify the mail server domain name or IP address.
 - b) For **Printer Email Address**, specify the mail address assigned to the printer.
 - To configure SMTP server settings with a domain name, you need to configure DNS server settings with the TCP/IP setup.
 - The mail server needs to be configured to allow the printer to send mail. For information about mail server settings, consult with your network administrator.
 - Internet Explorer 7 configured with its initial default setup will not perform a send test.

To perform a send test, you need to change the setup of Internet Explorer 7.

Select Tools > Security Level Customization, and then enable Allow websites to prompt for information using scripted windows.

6 To configure more advanced settings from this point, click **Set detail of the SMTP Protocol.** for **STEP3**.



Otherwise, jump to step 16 of this procedure.

7 Click Security Settings.

Set security of th	e SMTP Prot	tocol. 🗳
SMTP Port Num	nber	25 (1-65535)
SMTP-Auth		Disable 🗸

- 8 For SMTP Port Number, specify the mail server port number.
- 9 Select Enable for SMTP-Auth.
 - a) For **User ID**, specify the user ID for connection to the mail server.
 - b) For **Password**, specify the password for connection to the mail server.
- 10 Click OK.

11 Click Configure attached information.

Zerial Number BETA200003 Asset Number Printer Name Printer Name Quidd.abelQL-300s-91FSF9 Finiter Location 1 IP Address 172.16.2.236 MAC Address 00253691F5F9 Short Printer Name QL-300s-91F5F9 Printer URL http://172.16.2.236	Y Serial Number : BETA200003 Asset Number : Printer Name : QuickLabelQL-3005-91F5F9 Printer Location : Y IP Address : 172.16.2.236 MAC-Address : 00253691F5F9 Short Printer Name : 0L-3005-91F5F9
Asset Number : Printer Name <td:quicklabelql-3008-91f5f9< td=""> Printer Location : IP Address : MAC Address : Short Printer Name : Phinter URL : http://172.16.2.236</td:quicklabelql-3008-91f5f9<>	Asset Number : Printer Name <td:quicklabelql-3005-91fsf9< td=""> Printer Location : IP Address <td:172.16.2.236< td=""> MAC Address <td:0253691f5f9< td=""> Short Printer Name <td:ql-3005-91f5f9< td=""></td:ql-3005-91f5f9<></td:0253691f5f9<></td:172.16.2.236<></td:quicklabelql-3005-91fsf9<>
Printer Name Quidd.abelQL-300s-91F5F9 Printer Location : IP Address : 172.16.2.236 MAC Address : 00253691F5F9 Short Printer Name : QL-300s-91F5F9 Printer URL : http://172.16.2.236	Printer Name : QuidkLabelQL-300s-91F5F9 Printer Location : Z IP Address : 172.16.2.236 MAC Address : 00253691F5F9 Short Printer Name : QL-300s-91F5F9
Printer Location : Z IP Address : 172.16.2.236 MAC Address : 00253691F5F9 Short Printer Name : QL-3005-91F5F9 Printer URL : http://172.16.2.236	Printer Location : Ø IP Address : 172.16.2.236 MAC Address : 00253691F3F9 Short Printer Name : 0L-3008-91F5F9
Z IP Address : 172.16.2.236 MAC Address : 00253691F5F9 Short Printer Name : QL-300s-91F5F9 Printer URL : http://172.16.2.236	IP Address : 172.16.2.236 MAC Address : 00253691F3F9 Short Printer Name : QL-300s-91F5F9
MAC Address : 00253691F3F9 Short Printer Name <td: ql-300s-91f3f9<="" td=""> Printer URL : http://172.16.2.236</td:>	MAC Address : 00253691F5F9
Short Printer Name QL-300s-91F5F9 Printer URL http://172.16.2.236	Short Printer Name : QL-300s-91F5F9
Printer URL : http://172.16.2.236	
ent (Max.63 characters per line)	Printer URL : http://172.16.2.236
	nent (Max.63 characters per line)

- 12 Select or enter the information you want to add to the end of the message text.
- 13 Click OK.
- 14 Click Others.
- **15** For **Reply-To Address**, specify the return address for the mail sent from the printer. Normally, specify the mail address of the printer administrator.

Others		
Set the address	to send the e	ror notification Email to, in case of transmission error.
Reply-To Add	ress	(Max.78 characters)
OK	Cancel	

- 16 Click OK.
- 17 Click Submit.
- 18 Settings are saved on the printer and the network function is restarted.

Note: The authentication method is automatically selected from among authentication methods supported by the mail server.

Sending Error Notifications by Periodic Mail

For periodic notification, disable the sleep mode setting.

To send periodic notifications about problems

- 1 Log in as an administrator. See "Logging in as an Administrator" on page 405.
- 2 Click: Admin Setup > Network Setup.

Admin Setup	ation Printer Menu Admin Setup Calit	
	Protocol Options	
ONetwork Setup	TCP/IP	Enable
General Network Set	NetBIOS over TCP	Enable +
O TCP/IP		
O NBT	Hub Link	
@ Email	Hub Link Status	OK(100Base-TX Full)
@ SNMP	Gigabit Network	Disable 🔻
	Hub Link Setting	Auto Negotiate 👻
@ IPP		
O IEEE802.1X	Energy Efficient Ethernet	
() Security	Energy Efficient Ethernet	Enable -
Maintenance		
Print Setup		
PS Setup		
PCL Setup		
O Color Setup		
8 Management		
Management		

3 Click: Email > Alert Settings.

Alert Settings					
You can configu	re this p	rinter to send Em	ail alerts for var.		
You can configure this printer to send Email alerts for var. Email Send Settings must be configured to use this service (Receive Settings have no affect on this service).					
Setting Events Used for Sending Email Alerts					
You can set up	to five a	dresses to which	Email messaries	are sent unon printer	
		adi cosco co miner	Contain Incoordigeo	are serie open printer	
Address1:			54	tting Copy	
Address2:			Se	tting Copy	
Address3:			54	tting Copy	
Address4:			Se	tting Copy	
Address5:				tting Copy	
(Max.78 characters)Example:jsmith@abc_co.com					
View a summa	ry of cu	rent events and	enabled Email ale	erts	
View a Summary of Current Configuration					
The selections	helow all	ow custom events	s to be set for the	5 addresses above.	
The addedanta i	octori di			0 000100000	
		Default +	Address1 -		
Condition	Alert	Default	Address1	2103024303	
	Level	Upon occurrence of an event	Upon occurrence of an event	Description	
Continuable	Warning	Immediate	Immediate	Toner, Image Druma	
	Error			roner, mage cronit	
				Belt Unit, Fuser Unit	
Unic	and the second se			The second second	
Paper Supply				Paper, Transparencies	
	Warning	Disable	Disable		
Printing Paper	Error	2Hours after	2Hours after	Cover Open, Paper Jam	
	affect on this s Setting Events Setting Events Address1: Address2: Address3: Address3: Address3: Address5: (Max.78 charade View a Summa View a Summa View a Summa Condition Condition Consumable Maintenance Unit	affect on this service). Setting Events Used to the service). Address1: Address2: Address2: Address3: Address3: Address4: Address5: (Max.78 sharaten)Baarnp View a summary of cur View a Summary of cur View a Summary of Cur Consumable Consumable Decomposite Uservice	affect on this service). Setting Events Used for Sending Email / You can set up to five addresses to which status changes. Address1: Address2: Address3: Address3: Address3: (Man-78 shareten; Bicample (smith@akc_source View a summary of current events and View a summary of current configuration The selections below allow custom event Default • Condumble Cond	affect on this service). Setting Events Used for Sending Email Alerts You can set up to five addresses to which Email messages status changes. Address1: Address2: Address2: Address3: Address3: Address3: Address4: Address5: Address6: Address5: Add	

4 Enter the mail address of the malfunction notification recipient.

Admin Setup			Calibration Links			
Aumin Secup	Alert Settings					
ONetwork Setup	You can config	re this p	rinter to send Em	ail alerts for var.		
General Network Settings	You can configure this printer to send Email alerts for var. Email Send Settings must be configured to use this service (Receive Settings have n affect on this service).					
O TCP/IP	Setting Events	Used for	r Sending Email	Alerts		
O NBT	You can set up	to five a	ddresses to which	Email messages	are sent upon printer	
OEmail	status change	5.				
O Send Settings	Address1:	user@a	aabbb	3	etting Copy	
Alert Settings	Address2:			S	etting Copy	
@ SNMP	Address3:			5	etting Copy	
() IPP	Address4:	-		3	etting Copy	
O IEEE802.1X	Address5:			5	etting Copy	
Security	(Max.78 characte	ers)Exempl	leijsmith@abc_co.co	im		
w security	View a summary of current events and enabled Email alerts					
Maintenance	View a Summa					
Print Setup	The selections below allow custom events to be set for the 5 addresses above.					
PS Setup			Default •	Address1 •		
rs secup			ooroune	Address1 •		
PCL Setup	Condition	Alert	Default	Address1	Description	
Color Setup		Level	Upon occurrence of an event	Upon occurrence of an event	Description	
	Consumable	Warning	Immediate	Immediate	Toner, Image Druma	
Management		Error	Immediate	Immediate	roner, image bruma	
	Maintenance	Warning	2Hours after	2Hours after	Belt Unit, Fuser Unit	
	Unit	Warning	15Minutes after	15Minutes after	L	
	Paper Supply	Error	Immediate	Immediate	Paper, Transparencies	
		Warning	Disable	Disable		
	Printing Paper	Error	2Hours after	2Hours after	Cover Open, Paper Jam	

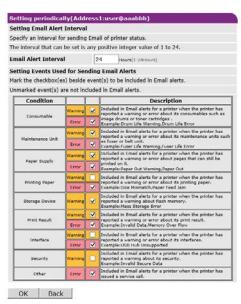
5 Click **Setting** of the mail address you want to specify.

Malfunction notification condition settings can be copied to another addressee by clicking **Copy**. This is useful when sending malfunction notifications to multiple recipients with similar mail addresses.

6 Select the Periodically check box, and then click To STEP2.



7 For **Email Alert Interval**, specify the mail send interval.



Mail is not sent if there are no reportable errors within the period.

- 8 Under Setting Events Used for Sending Email Alerts, select the check boxes of the error types for you to be notified of.
- 9 Click OK.

10 Check the configuration of the malfunction notification conditions.

- To display as a list, click **Show current settings table**. Check the configuration, and then close the window.
- To compare the setting conditions of two recipients, use the list box to select each of the recipients you want to compare. Check the displayed configuration.

You can change notification condition settings by clicking inside the setting condition comparison table.

- 11 Click Submit.
- 12 Settings are saved on the printer and the network function is restarted.

To send alerts when problems occur

1 Click: Email > Alert Settings.

Alort Sottions					
Alert Settings					
You can configu	re this p	rinter to send Em	ail alerts for var.		
You can configure this printer to send Email alerts for var. Email Send Settings must be configured to use this service (Receive Settings have n affect on this service).					
Setting Events	Used fo	r Sending Email	Alerts		
You can set up	to five a	ddresses to which	h Email messages	are sent upon printer	
Address1:				letting Copy	
Address2:			_	etting Copy	
Address3:			1	letting Copy	
Address4:				letting Copy	
Address5:				Letting Copy	
(Max.78 characters)Example.jsmith@abc_co.com					
View a summa	ry of cu	rent events and	enabled Email a	lerts	
View a Summa	ry of Curr	ent Configuration			
The selections below allow custom events to be set for the 5 addresses above.					
		Default •	Address1 -		
	1	Default	Address1		
Condition	Level	Upon occurrence	Upon occurrence	Description	
	Warning	Immediate	Immediate	Toner, Image Drums	
Consumable	Error	Immediate	Immediate	Toher, Image Drums	
Maintenance				Belt Unit, Foser Unit	
Unit	and the second se	111111111111111111111			
Paper Supply	Second			Paper, Transparencies	
	Warning	Disable	Disable		
Printing Paper			STREET.	Cover Open, Paper Jan	
ermonig Paper	Error	2Hours after	2Hours after	Cover open, Paper sam	
	Email Send Set affect on this sy Setting Events You can set up status changes Address1: Address2: Address3: Address4: Address5: (Max-28 charade View a Summa The selections Condition Consumable Mainteance Unit	Email Send Settings mu affect on this service). Setting Levent Used fo You can set up to five a status changes. Address1: Address2: Address3: Address3: Address4: Address5: (Max.72 sharacter)Examp View a Summary of cur The selections below all Consumable Unit Exact Descention Alere Exact Descention Consumable Descention Consumabl	Email Send Settings must be configured 1 affect on this service). Setting (versus Used for Sending Email You can set up to five addresses to which status changes. Address1: Address2: Address3: Address3: Address3: (Max.72 character)/Bioample (symth@abc.co.co. View a Summary of Current Configuration The selections below allow custom event Default Consumable Versity Immediate Maintegances Consumable Versity Immediate Maintegances Umit Warming Immediate Maintegances Umit Warming Immediate Maintegances Umit Warming Immediate Maintegances Umit Warming Immediate Maintegances Umit Warming Immediate Maintegances Umit Warming Immediate Warming Italiantegances	Email Send Settings must be configured to use this service. Setting Levent Used for Sending Email Alerts You can set up to five addresses to which Email messages status changes. Address1: Address2: Address3: Address3: Address4: Address5: Address5: Address5: Address5: Address6: Addres6: Address6: Addres6: Addres6: Addres6: Addres6: Addres6: Addr	

2 Enter the mail address of the malfunction notification recipient.

Contraction of the second second second	Printer Menu Adn	nin setup	Calibration Links				
Admin Setup	Alert Settings						
Network Setup	You can configu	re this p	rinter to send Em	ail alerts for var.			
General Network Settings Trop rp		Email Send Settings must be configured to use this service (Receive Settings have no affect on this service).					
O TCP/IP	Setting Events	Used fo	r Sending Email	Alerts			
O NBT	You can set up to five addresses to which Email messages are sent upon prin				s are sent upon printer		
OEmail	status changes.						
O Send Settings	Address1:	user@a	aabbb		Setting Copy		
Alert Settings	Address2:				Setting Copy		
@ SNMP	Address3:				Setting Copy		
() IPP	Address4:	1		1	Setting Copy		
O IEEE802.1X	Address5:			3	Setting Copy		
D.Comile	(Max.78 sharaste	rs)Examp	leijsmith@abc_co.co	um.			
	View a summa	ry of cu	rent events and	enabled Email a	lerts		
⊕ Maintenance	View a Summa	ry of Curr	ent Configuration				
Print Setup	The selections below allow custom events to be set for the 5 addresses above						
PS Setup	1102 3030000113	CONT ON	Default +	Address1 -	e o outrested doures		
			e en				
PCL Setup	Condition	Alert	Default Upon occurrence	Address1 Upon occurrence	Description		
	Londition	Level	of an event	of an event			
Color Setup	Consumable	Warning	Immediate	Immediate	Toner, Image Drums		
		Lirror.	Immediate	Immediate			
				2Hours after	Belt Unit, Fuser Unit		
	Maintenance	Warning	2Hours after		bert Unit, Poser Unit		
		Warning Error	Immediate	Immediate	Beit Unit, Poser Unit		
	Maintenance	Warning Error Warning	Immediate 15Minutes after	13Minutes after	- Paper, Transparencies		
	Maintenance Unit	Warning Error Warning Error	Immediate 15Ninutes after Immediate	13Minutes after Immediate			
	Maintenance Unit	Warning Error Warning Error Warning	Immediate 15Minutes after Immediate Disable	15Minutes after Immediate Disable			
∋ Color Setup B Management	Maintenance Unit Paper Supply	Warning Error Warning Error	Immediate 15Ninutes after Immediate	13Minutes after Immediate	Paper, Transparencies		

3 Click **Setting** of the mail address you want to specify.

Malfunction notification condition settings can be copied to another addressee by clicking **Copy**. This is useful when sending malfunction notifications to multiple recipients with similar mail addresses.

4 Select the Upon occurrence of an event check box, and then click To STEP2.



5 Under Setting Events Used for Sending Email Alerts, select the check boxes of the error types for you to be notified of.

ting Events Use			t(s) to be included in Email alerts.
	are not in	cinae	d in Email alerts.
Condition			Description
Consumable	Warning	Z	Included in Email alerts for a printer when the printer has reported a warning or error about its consumables such as
Consentative	Error		image drums or toner cartridges . Example:Drum Life Warning.Drum Life Error
Maintenance Unit	Warning		Included in Email alerts for a printer when the printer has reported a warning or error about its maintenance units such
mainsenance onis	Error		as fuser or belt unit. Example:Fuser Life Warning,Fuser Life Error
Paper Supply	Warning		Included in Email alerts for a printer when the printer has reported a warning or error about pages that can still be
Paper Soppry	Error		printed on it. Example:Paper Out Warning.Paper Out
Printing Paper	Warning		Included in Email alerts for a printer when the printer has preported a warning or error about its printing paper.
	Error		Example:Size Mismatch, Paper Feed Jam
Storage Device	Warning		Included in Email alerts for a printer when the printer has reported a warning about flash memory. Example:Mass Storage Error
	Warning		Included in Email alerts for a printer when the printer has reported a warning or error about its print result.
Print Result	Error		Example:Invalid Data,Memory Over Flow
Interface	Warning		Included in Email alerts for a printer when the printer has preported a warning or error about its interfaces.
Lincer race	Error		Example:USB Hub Unsupported
Security	Warning		Included in Email alerts for a printer when the printer has reported a warning or error about its security. Example: Invalid Secure Data
Other	Error		Included in Email alerts for a printer when the printer has issued a service call.

6 Specify the delay after an error occurs until the message is sent, and then click **OK**.

Detail (C	onsumable Error)	
You can co	nfigure parameters used for	or sending Email alerts.
(the time e	entered in "Hours" field is a	ny positive integer value of 0 to 48)
	Setting time	
	lours VMInutes	sent
ОК	Close	

- Setting a delay time makes it possible to send notifications only of errors that are generated only over a long period of time.
- Setting "0 hours, 0 minutes" for the delay time causes the message to be sent immediately after an error occurs.
- 7 Click OK.
- 8 Check the configuration of the malfunction notification conditions.
 - To display as a list, click **Show current settings table**. Check the configuration, and then close the window.
 - To compare the setting conditions of two recipients, use the list box to select each of the recipients you want to compare. Check the displayed configuration.

You can change notification condition settings by clicking inside the setting condition comparison table.

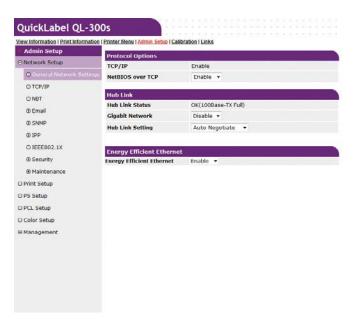
- 9 Click Submit.
- 10 Settings are saved on the printer and the network function is restarted.

Using SNMPv3

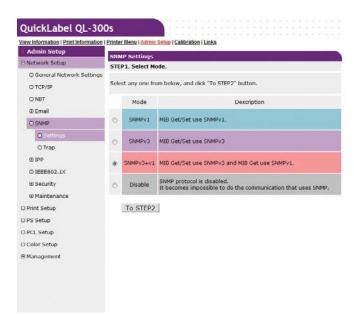
This printer implements an SNMPv3 compatible agent.

You can use an SNMPv3 compatible SNMP manager to encrypt printer administration with SNMP for greater security.

- 1 Log in as an administrator. See "Logging in as an Administrator" on page 405.
- 2 Click: Admin Setup > Network Setup.



3 Click SNMP > Settings.



4 Select the check box of the SNMP version to be used in STEP1, and then click To STEP2.

If **SNMPv3** is selected, you will not be able to view or configure settings with SNMPv1. If **SNMPv3+v1** is selected, you will be able to view settings with either SNMPv1 or SNMPv3, but you can configure settings using SNMPv3 only.

5 In STEP2, enter an SNMPv3 user name for User Name.



6 Enter the passphrase for verification in Passphrase for Authentication Settings.



- 7 Select Algorithm.
- 8 Enter the passphrase for encryption in Passphrase for Privacy (Encryption) Settings.You can select DES only for the encryption algorithm.
- 9 Click Submit.
- 10 Settings are saved on the printer and the network function is restarted.

Note: For the context key of the SNMP manager to be used, specify "v3context".

Using IEEE802.1X

Authentication is in accordance with IEEE802.1X.

IEEE802.1X Setup Flow

To configure IEEE802.1X settings on the printer, first connect the printer and computer via a normal hub for setup. After completing the IEEE802.1X setting configuration procedure, connect the printer to the authentication switch.

- 1 Connect the printer to a computer.
- 2 On the computer, specify an IP address for setting up.
- **3** On the printer, specify an IP address for setting up.
- **4** On the printer, configure IEEE802.1 settings.
- **5** Connect the printer to the authentication switch.

To configure IEEE802.1 settings

- 1 Log in as an administrator. See "Logging in as an Administrator" on page 405.
- 2 Click: Admin Setup > Network Setup.

Admin Setup	The second s	
Network Setup	Protocol Options	Enable
General Network Setting	TCP/IP NetBIOS over TCP	Enable *
O TCP/IP	Metoros over rer	
ONBT	Hub Link	
@ Email	Hub Link Status	OK(100Base-TX Full)
	Gigabit Network	Disable 👻
I SNMP	Hub Link Setting	Auto Negotiate -
⊕ IPP		
O IEEE802.1X	Energy Efficient Ethernet	
Gecurity	Energy Efficient Ethernet	Enable -
Maintenance		
Print Setup		
PS Setup		
PCL Setup		
) Color Setup		
Management		

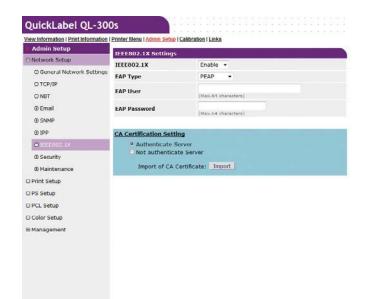
3 Click IEEE802.1X.



If PEAP is to be used, proceed to "To use PEAP". If EAP-TLS is to be used, proceed to "To use EAP-TLS".

To use PEAP

- 1 For the IEEE802.1X setting, select Enable.
- 2 For EAP Type, select PEAP.



- 3 In EAP User, enter the user name.
- 4 In EAP Password, enter the password.
- 5 Select the Authenticate Server check box.
- 6 Click Import of CA Certificate.

Note: If the **Not authenticate Server** check box is selected, import of a CA certificate is not required. If the **Not authenticate Server** check box is selected, there is no confirmation to determine if the connection is to a properly authenticated server.

This displays the "Import of CA Certificate" screen.

- 7 Enter the file name of the CA certificate, and then click **OK**.
 - The imported CA certificate is a certificate of the server certificate issuing authority of the RADIUS server.
 - Supported import file formats are PEM, DER, and PKCS#7.

Import of C	A Certificate		
	e Certificate to import. which can be imported:PLH/	DER/PKCS#7)	
		Browse	
OK	Cancel		

The CA certificate is imported by the printer.

- 8 Click Submit.
- 9 Settings are saved on the printer and the network function is restarted.

When the standby screen appears on the control panel, turn off the printer.

Advance to "To connect the printer to an authentication switch".

To use EAP-TLS

- 1 For the IEEE802.1X setting, select Enable.
- 2 For EAP Type, select EAP-TLS.

Admin Setup	IEEE802.1X Setting				
Network Setup	IEEE802.1X	Enable •			
General Network Settings	EAP Type	EAP-TLS -			
O TCP/IP					
O NBT	EAP User	(Max.64 characters)			
@ Email					
@ SNMP					
() IPP	Client Certificate Se	tting			
 TEEE802.1X 		Certificate for EAP authentication TLS Certificate for EAP authentication			
() Security	and a second of				
Maintenance	Import of Client	Certificate: Import			
Print Setup	CA Certification Set	ting			
PS Setup	• Authenticate				
	O Not authentic	ate Server			
PCL Setup	Import of CA Certificate: Import				
Color Setup	500 C				
Management					

- 3 In EAP User, enter the user name.
- 4 Select the Not use SSL/TLS Certificate for EAP authentication check box.
- 5 Click Import of Client Certificate.

This displays the "Import of Client Certificate" screen.

- 6 Enter the file name of the client certificate.
 - The importable certificate file format is PKCS#12.
- 7 Enter the client certificate password, and then click **OK**.

		ificate to import. ported:PKCS#12)
		Browse
step2. pleas	e input a pass	word required in order to import the select

The client certificate is imported by the printer.

8 Select the Authenticate Server check box.

9 Click Import of CA Certificate.

Note: If the **Not authenticate Server** check box is selected, import of a CA certificate is not required. If the **Not authenticate Server** check box is selected, there is no confirmation to determine if the connection is to the correct authenticated server.

This displays the "Import of CA Certificate" screen.

- **10** Enter the file name of the CA certificate, and then click **OK**.
 - The imported CA certificate is a certificate of the server certificate issuing authority of the RADIUS server.
 - Supported import file formats are PEM, DER, and PKCS#7.



The CA certificate is imported by the printer.

- 11 Click Submit.
- 12 Settings are saved on the printer and the network function is restarted.

When the standby screen appears on the control panel, turn off the printer. Advance to "To connect the printer to an authentication switch".

To connect the printer to an authentication switch

Note: Confirm that the printer is turned off.

- 1 Plug a LAN cable into the printer's LAN (network) interface connector.
- 2 Plug the LAN cable into the authentication switch's authentication port.
- **3** Turn on the power supply of the printer.
- 4 Confirm that the standby screen is displayed on the control panel.
- **5** Configure settings in accordance with the operating environment, such as the printer's IP address, etc.





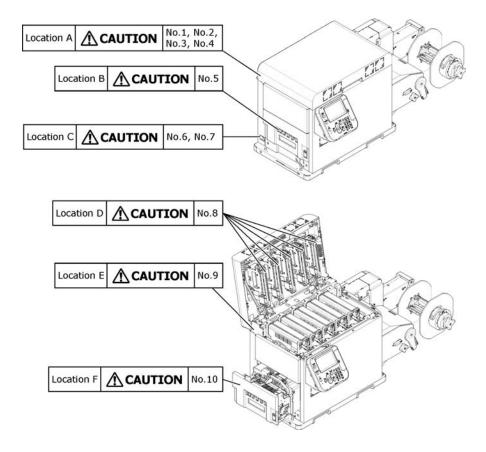
Be sure to carefully read and follow the instructions in this manual before installing the machine.

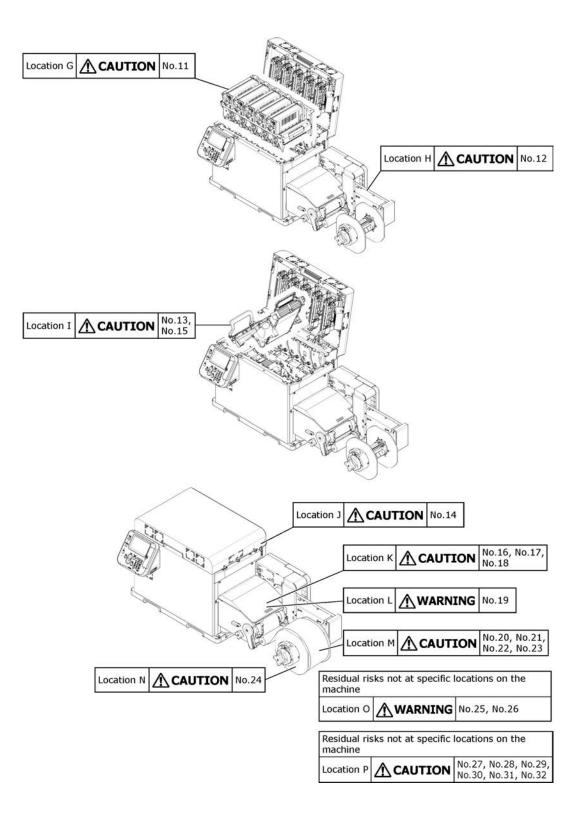
Cautions Related to Safety

Warning	Mishandling due to ignoring this symbol may cause death or serious injury.
Caution	Mishandling due to ignoring this symbol may cause personal injury.

Residual Risk Map

The numbers shown in the diagrams indicate the numbers for the residual risk associated with the relevant locations, as described in the "List of Risks" for the product. For details about the various risks, refer to the "List of Risks".





List of Risks

The letters shown under "Locations on machine" indicate the locations on the machine as indicated by the letters on the "Residual Risk Map" for the product. Refer to the "Residual Risk Map" for the specific location on the machine.

No	Job	Qualifications and training needed for job	Location on machine	Extent of hazard	Description of hazard	Protective measures implemented by machine installer and user
1	Installation / transporta- tion	Carefully read User Guide	A	CAUTION	Because the machine (the printer alone) weighs 43 kg, there is a risk of injury while lift- ing it.	Two or more people are required to lift the machine.
2	Installation / transporta- tion	Carefully read User Guide	A	CAUTION	Because the machine (the printer alone) weighs 43 kg, there is a risk of injury if it falls while workers are holding the OP-Assy.	Workers must hold the machine at the specified hand- holds while working.
3	Installation / transporta- tion	Carefully read User Guide	A	CAUTION	Because the machine (the printer and unwinder) weighs up to 62 kg, there is a risk of injury if the machine is installed on a table that is unstable or unable to bear the load, such that the table overturns or breaks.	The machine must be installed so that the table on which it is installed is sta- ble.The machine must be installed on a table capable of bearing the weight of the machine.

No	Job	Qualifications and training needed for job	Location on machine	Extent of hazard	Description of hazard	Protective measures implemented by machine installer and user
4	Installation / transporta- tion	Carefully read User Guide	A	CAUTION	There is a risk of injury if the machine (printer and unwinder) extend past the edge of the table, such that it could catch on a person and fall off.	The machine must be installed on a table that is large enough to leave empty space around the machine.
5	Usage / maintenance	Carefully read User Guide	В	CAUTION	There is a risk of injury from fin- gers or hair being twisted into the rollers on the fuser and exit unit.	Workers must not touch the output roller area on the fuser and exit unit with their hands while the printer is operat- ing.
						Workers must not put their faces close to or look into the out- put roller area on the fuser and exit unit while the printer is operating.
6	Electrical connections	Carefully read User Guide	С	CAUTION	There is a risk of electric shock from the electric power cord.	Workers must not touch the power plug or power cord if their hands are wet.
7	Electrical connections	Carefully read User Guide	С	CAUTION	There is a risk of electric shock from the electric power connec- tors.	Workers must not insert any metal objects, such as a screwdriver, into the power con- nectors.

No	Job	Qualifications and training needed for job	Location on machine	Extent of hazard	Description of hazard	Protective measures implemented by machine installer and user
8	Usage / maintenance	Carefully read User Guide	D	CAUTION	Workers could pinch their hands if they grip the LED head while clos- ing the top cover.	Workers must press on the top of the top cover.
9	Usage / maintenance	Carefully read User Guide	E	CAUTION	Workers could pinch their fin- gers or hands in the top cover or the top cover's support while closing the top cover.	Workers must press on the top of the top cover.
10	Usage / maintenance	Carefully read User Guide	F	CAUTION	There is a risk of injury if the fuser and exit unit falls while it is being pulled out.	Workers must grip the handle on the fuser unit when lifting the fuser and exit unit.
11	Usage / maintenance	Carefully read User Guide	G	CAUTION	There is a risk of injury if the print cartridge set falls while it is being pulled out.	Workers must grip the handles on the toner car- tridge basket for the print car- tridge set when lifting it.
12	Installation / transporta- tion	Carefully read User Guide	Н	CAUTION	There is a risk of injury if the unwinder falls while it is being lifted.	Workers must hold the machine at the specified hand- holds while working.
13	Usage / maintenance	Carefully read User Guide	1	CAUTION	There is a risk of injury if the belt unit falls while it is being removed.	Workers must grasp the handle on the belt unit when removing the belt unit.

No	Job	Qualifications and training needed for job	Location on machine	Extent of hazard	Description of hazard	Protective measures implemented by machine installer and user
14	Installation / transporta- tion	Carefully read User Guide	J	CAUTION	There is a risk that fingers or hands could be pinched between the unwinder and the printer while installing the unwinder.	Workers must hold the machine at the specified hand- holds while working.
15	Usage / maintenance	Carefully read User Guide	1	CAUTION	There is a risk that hands or fingers could be pinched between the handle and the machine while removing or installing a belt unit.	Confirm the pro- cedures for removing and installing the belt unit.
16	Usage / maintenance	Carefully read User Guide	к	CAUTION	There is a risk that hands could be pinched in the cover of the unwinder.	Workers must press on the cover of the unwinder.
17	Usage / maintenance	Carefully read User Guide	к	CAUTION	There is a risk that hands or fingers could be pinched while removing the cutter unit of the unwinder.	Workers must confirm the pro- cedure for installing and removing the cutter unit.
18	Usage / maintenance	Carefully read User Guide	К	CAUTION	There is a risk of injury if the cut- ter unit of the unwinder falls while it is being removed.	Workers must confirm the pro- cedure for installing and removing the cutter unit.

No	Job	Qualifications and training needed for job	Location on machine	Extent of hazard	Description of hazard	Protective measures implemented by machine installer and user
19	Maintenance	Carefully read User Guide	L	CAUTION	There is a risk that hands may touch the cutter blade and be cut while disman- tling the cutter unit of the unwinder and washing the cut- ter blade.	Confirm the pro- cedure for cleaning before you dismantle the cutter unit and wash the cutter blade.
20	Usage	Carefully read User Guide	Μ	CAUTION	There is a risk of injury if the roll paper is dropped or over- turned.	Workers must wear rubber gloves or simi- lar gloves while installing or removing roll paper. Workers must confirm the stor- age and installa- tion procedures so they do not drop or overturn the roll paper.
21	Usage	Carefully read User Guide	М	CAUTION	There is a risk that hands could be cut on the edge of roll paper.	Workers must wear rubber gloves or simi- lar gloves while handling roll paper.

No	Job	Qualifications and training needed for job	Location on machine	Extent of hazard	Description of hazard	Protective measures implemented by machine installer and user
22	Usage	Carefully read User Guide	Μ	CAUTION	There is a risk that hands or fingers could be pinched by the roll paper and the roll paper holder while loading roll paper onto the roll paper holder.	Workers must confirm the pro- cedure for attaching and removing roll paper. Workers must turn the knob on the roll paper holder so it is sufficiently loose when loading roll paper.
23	Usage / maintenance	Carefully read User Guide	М	CAUTION	There is a risk of injury from fin- gers or hair being twisted into the roll paper or roll paper holder while the machine is oper- ating.	Workers must not touch the shaft of the roll paper holder while the printer is operating. Workers must not put their faces close to or look into the shaft of the roll paper holder while the printer is operating.
24	Usage	Carefully read User Guide	Ν	CAUTION	There is a risk of injury if the roll paper falls off because the roll paper could not be secured to the roll paper holder.	Workers must confirm the pro- cedure for attaching and removing roll paper. Workers must turn the knob on the roll paper holder so it is sufficiently loose when loading roll paper.

No	Job	Qualifications and training needed for job	Location on machine	Extent of hazard	Description of hazard	Protective measures implemented by machine installer and user
25	Maintenance	Maintenance technology	0	WARNING	There is a risk of injury, accident, or reduced per- formance of the product if it is dismantled or assembled by a person who does not have the tools or maintenance technology.	Workers must request repairs from Technical Support.
26	Usage	Carefully read User Guide	0	WARNING	There is a risk of electric shock when printing on metal foil or electrically con- ductive paper if the paper is touched while printing.	Workers must not use metal foil or electrically conductive paper.
27	Usage	Carefully read User Guide	Ρ	CAUTION	There is a risk of injury by step- ping on the cores of roll paper or on rolls of paper that are left on the floor.	Workers must confirm the stor- age and installa- tion procedures so they do not drop or overturn the roll paper.
28	Installation / transporta- tion	Carefully read User Guide	Ρ	CAUTION	There is a risk of injury from the silica gel used in the packing materials.	Workers must be careful when handling the sil- ica gel used in the packing materials.
29	Installation / transporta- tion	Carefully read User Guide	Ρ	CAUTION	There is a risk of injury from the plastic bags used in the packing materi- als.	Workers must be careful when handling the plastic bags used in the packing materi- als.

No	Job	Qualifications and training needed for job	Location on machine	Extent of hazard	Description of hazard	Protective measures implemented by machine installer and user
30	Installation / transporta- tion	Carefully read User Guide	Ρ	CAUTION	There is a risk of injury to fingers and hands from the cardboard used in the packing mate- rial.	Workers must be careful when handling the cardboard used in the packing materials.
31	Installation / transporta- tion	Carefully read User Guide	Ρ	CAUTION	There is a risk of injury from drop- ping the printer while removing the plastic bags and cushioning used in the packing materi- als.	Workers must confirm the pro- cedure for unpacking the machine.
32	Usage	Carefully read User Guide	Ρ	CAUTION	Smoke or fire could occur if the air vents are blocked.	The air vents must not be blocked.

General Warnings and Cautions

Symbol	Warning
	Do not touch the safety switch inside this machine. High voltage may occur, resulting in electric shock. Also, a gear may rotate, resulting in injury.
	Do not use a highly combustible spray near this machine. Some parts inside the machine become very hot, possibly resulting in fire.
0	If the cover becomes extremely hot, the machine emits smoke or odor, or you hear a strange sound, unplug the power plug from the outlet, and contact your dealer. Fire may result.

Symbol	Warning
8=⊊	If liquid such as water gets inside the machine, unplug the power plug from the outlet, and contact your dealer.
	Fire may result.
8=⊊	If you drop a clip or other foreign objects into the machine, unplug the power plug from the outlet, and take the foreign objects out.
	Electric shock, fire, or injury may result.
	Do not perform any operation or disassembly other than instructed in manuals.
	Electric shock, fire, or injury may result.
	There is a risk of explosion if the battery is replaced with the wrong type of battery. The battery in the machine does not need to be replaced. Do not touch the battery.
B=C	If the machine is dropped or the cover is damaged, unplug the power plug from the outlet, and contact your dealer.
	Electric shock, fire, or injury may result.
8=Ç	Unplug the power plug regularly, and clean the bases of and in between the plug blades.
	If the power plug is left plugged into the outlet for an extended period of time, dust adheres on the bases of the plug blades, and a short may occur, possibly resulting in fire.
\bigcirc	Do not connect the power cord, cables, or the ground wire in any way other than instructed in manuals.
	Fire may result.
\bigcirc	Do not put a cup with liquids such as water on the machine. Doing so may cause electric shock and/or fire leading to personal injuries.
\bigcirc	Do not let liquid get inside this machine, or allow this machine to get wet. Electric shock or fire may result.
\bigcirc	Do not insert any object into a vent hole.
	Electric shock, fire, or injury may result.
	Do not throw print cartridges or waste toner boxes into a fire. The toner may ignite, resulting in burns.

Symbol	Warning	
\bigcirc	Do not vacuum spilled toner with an electric vacuum cleaner. Vacuum- ing spilled toner with an electric vacuum cleaner may result in ignition due to sparks from electric contacts or other reasons.	
	If toner spills on the floor or other places, wipe the toner gently with a damp rag or other cloth while using care not to scatter the toner.	
	When the machine cover is opened, do not touch the fuser unit. Burns may result.	
\bigcirc	Operation using an UPS (uninterruptible power supply) or inverter is not guaranteed. Do not use an uninterruptible power supply or inverter.	
	Fire may result.	

Symbol	Caution	
\bigcirc	Do not go near the paper output part when you turn the power on or when printing is in progress. Injury may result.	
	Do not disassemble the print cartridge, or force it open. You may inhale the scattered toner, or the toner may land on your hands or clothes, making them dirty.	

Emergency First Aid

Take care with toner powder:

	If you inhale it	Move to an area with fresh air and rest in a posture that allows you to breath freely.
	If it gets on your skin	Wash with plenty of soap and water.
	If it gets in your eyes	Very carefully wash with water for several minutes. Next, if you are wearing contact lenses and can easily remove them, then remove them. Then, continue washing.
	If you drink it	If you feel bad, contact a physi- cian.

B

Major Specifications

Item	Specification
Model Number	QL-300
	QL-300s
RAM (standard/maximum)	2GB/2GB
Weight	Approx. 62 kg (including unwinder)
Power	110 - 127 VAC (Range 99 - 140 VAC), 50/60 Hz ± 2%
	220 - 240 VAC (Range 198 - 264 VAC), 50/60 Hz ± 2%
Power consumption	When operating: Maximum 1200 W/Average 710 W
	In standby: Average 27 W
	In power conservation modes
	Power save mode: 25 W or less
	Auto power off: 1 W or less
	*This product does not consume power if the main power switch is turned off, even if it is plugged into an electric outlet.
Operating environment	Temperature: 10 to 30 °C, humidity: 20 to 70% RH
	Maximum wet-bulb temperature is 25 °C (to assure high-quality full color printing, temperature should be 17 to 27 °C, and humidity at 50 to 70% RH)
Network connections	1000BASE-T/100BASE-TX/10BASE-T
	(Network Factory Defaults: 100BASE-TX/10BASE-T)

Item		Specification
Local connections		USB 2.0 interface (suitable for Hi-Speed USB)
Supported operating systems		Windows 8.1/Windows 8/Windows 7/Windows Server 2012 R2/Windows Server 2012/Windows Server 2008 R2/Windows Server 2008
		Refer to the operating environment for details.
Printing method		QL-300: Full-color dry-type electrophotographic method using 4 consecutive digital LED heads
		QL-300s: Full-color dry-type electrophotographic method using 5 consecutive digital LED heads
Printable width	Paper width	Roll paper: 25.4 mm (1 inch) - 130 mm (5.1 inches), including liner
	Printable width	Roll paper: 21.16 mm (0.83 inches) - 125.76 mm (4.95 inches)
	Reference position	Right edge facing feed direction
Resolution	Print resolution	1200 × 1200 dpi (2-tone)/600 × 600 dpi (2-tone)
	LED dot-pitch	1200dpi
Print colors		Yellow, magenta, cyan, black, and white*1
Print languages		PCL5c, PCL6(PCLXL), PostScript
Print speed	Color	QL-300 (CMYK) roll paper: 6 ips
		QL-300 (CMYK+W) roll paper: 6 ips
Media Type		Standard Media, die-cut label paper
Feed capacity		Roll diameter: 203.2 mm (8 inches)
		Core size: 3 inches
Assured print range		2.12 mm from edge of paper. 2.12 mm from edge of label for label paper

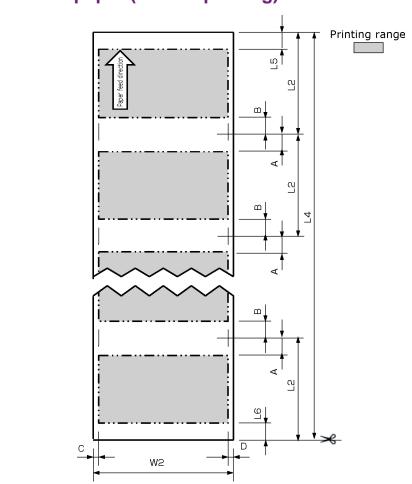
Item	Specification
Print accuracy	± 0.5 mm accuracy at leading edge print start point (2σ N ≥ 20 When using recommended media and recommended operating conditions)
	±0.5 mm accuracy at right edge print start point (When using recommended media and recom- mended operating conditions)
	Image stretching: Less than 0.5% of length of paper (When using recommended media and recommended operating conditions)
Warmup time	Approx. (within) 50 seconds after turning power on (at room temperature of 25 °C and rated voltage)* ²
Wear items and maintenance parts	Wear items: Print cartridge, belt unit (3-piece set of belt, waste toner box, and 2nd transfer roller), waste toner box, fuser and exit unit
	Maintenance products: Cutter unit, F0 roller unit, paper guide, feed unit
Service life of equipment* ³	5 years or 500 km
Storage environment	Temperature: -10 to 43 °C
	Relative humidity: 10 to 90%

*1: QL-300s only.

*2: Not including correction operations.

*3: Equipment service life varies depending on your operating environment.

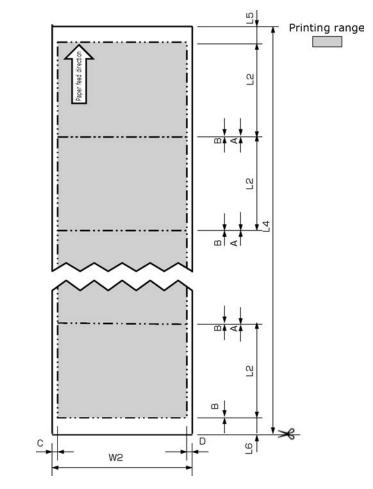
Roll Paper Specifications



Continuous paper (normal printing)

Item	Specification
Paper weight	0.07 to 0.25 mm (0.003 to 0.0098 inches)
Roll core	Inner diameter: 76.2 mm (3 inches)
Outer diameter	203.2 mm (8 inches) or less

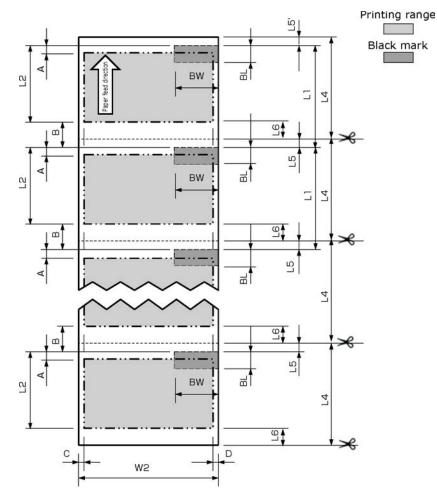
Ite	em	Specification
Other	W2: Paper width	25.4 to 130 mm (1 to 5.12 inches)
	L2: Paper length	12.7 to 1320.8 mm (0.5 to 52 inches)
	L4: Cut size when in cut mode	101.6 mm (4 inches) or more However, if the length of one label is less than 101.6 mm (4 inches), then the shortest length is 101.6 mm (4 inches) as multiple sheets are cut
	L5: Upper edge cutting margin	2.12 mm (0.0835 inches)
	L6: Lower edge cutting margin	2.12 mm (0.0835 inches)
	A: Top margin	2.12 mm (0.0835 inches) or more
	B: Bottom margin	2.12 mm (0.0835 inches) or more
	C: Left margin	2.12 mm (0.0835 inches) or more
	D: Right margin	2.12 mm (0.0835 inches) or more



Continuous paper (printing on large size paper)

Item	Specification
Paper weight	0.07 to 0.25 mm (0.003 to 0.0098 inches)
Roll core	Inner diameter: 76.2 mm (3 inches)
Outer diameter	203.2 mm (8 inches) or less

Ite	em	Specification
Other	W2: Paper width	25.4 to 130 mm (1 to 5.12 inches)
	L2: Paper length	12.7 to 1320.8 mm (0.5 to 52 inches)
	L4: Cut size when in cut mode	101.6 mm (4 inches) or more However, if the length of one label is less than 101.6 mm (4 inches), then the shortest length is 101.6 mm (4 inches) as multiple sheets are cut
	L5: Upper edge cutting margin	2.12 mm (0.0835 inches)
	L6: Lower edge cutting margin	1.5 mm (0.0591 inches)
	A: Top margin	0 mm (0 inches)
	B: Bottom margin	0 mm (0 inches)
	C: Left margin	2.12 mm (0.0835 inches) or more
	D: Right margin	2.12 mm (0.0835 inches) or more

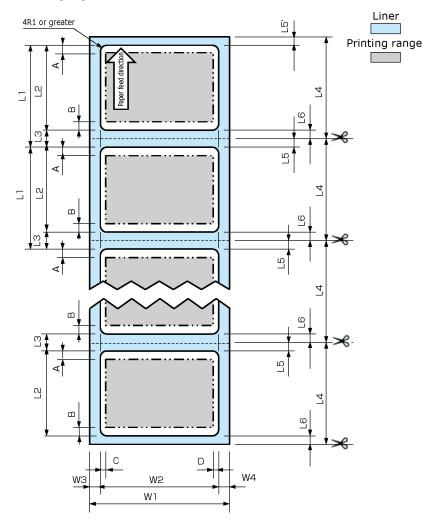


Continuous paper (with black marks)

Item	Specification
Paper weight	0.07 to 0.25 mm (0.003 to 0.0098 inches)
Roll core	Inner diameter: 76.2 mm (3 inches)
Outer diameter	203.2 mm (8 inches) or less

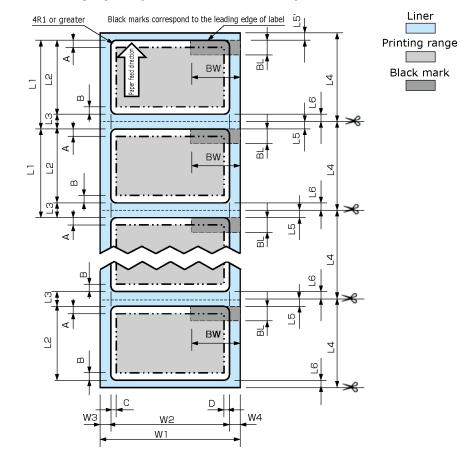
lt	em	Specification
Other	W2: Paper width	25.4 to 130 mm (1 to 5.12 inches)
	L1: Black mark interval	15.9 to 1324.0 mm (0.626 to 52.126 inches)
		* The black marks contain carbon.
	L2: Paper length	12.7 to 1320.8 mm (0.5 to 52 inches)
	L4: Cut size when in cut	101.6 mm (4 inches) or more
	mode	However, if the length of one label is less than 101.6 mm (4 inches), then the shortest length is 101.6 mm (4 inches) as multiple sheets are cut
	L5: Upper edge cutting margin	1.7 mm (0.067 inches)
	L5 ': Position of leading	1.2 to 4.0 mm (0.0472 to 0.1575 inches)
	edge of paper	Length of leading margin when paper is loaded
	L6: Lower edge cutting margin	1.5 mm (0.059 inches)
	BW: Black mark width	More than 5 mm (0.197 inches) from edge of paper;
		maximum is width of paper W1 from edge of paper
	BL: Black mark length	3 mm (0.12 inches)
	A: Top margin	2.12 mm (0.0835 inches)
	B: Bottom margin	3.2 mm (0.126 inches) * In practice, it is the length of the gap
	C: Left margin	2.12 mm (0.0835 inches) or more
	D: Right margin	2.12 mm (0.0835 inches) or more

Die-cut label paper



Item	Specification
Paper weight	0.07 to 0.25 mm (0.003 to 0.0098 inches)
Roll core	Inner diameter: 76.2 mm (3 inches)
Outer diameter	203.2 mm (8 inches) or less

	Item	Specification
Other	W1: Liner width	29.4 to 130 mm (1.1575 to 5.12 inches)
	W2: Label width	25.4 to 126 mm (1 to 4.9606 inches)
	W3: Right liner width	2 to 25.4 mm (0.0787 to 1 inch)
	W4: Left liner width	2 to 25.4 mm (0.0787 to 1 inch)
	L1: Label pitch	15.7 to 1330.8 mm (0.618 to 52.3937 inches)
	L2: Label length	12.7 to 1320.8 mm (0.5 to 52 inches)
	L3: Gap between labels	3 to 10 mm (0.12 to 0.3937 inches)
	L4: Cut size when in cut	101.6 mm (4 inches) or more
	mode	However, if the length of one label is less than 101.6 mm (4 inches), then the shortest length is 101.6 mm (4 inches) as multiple sheets are cut
	L5: Upper edge cutting margin	1.7 mm (0.067 inches)
	L5': Position of leading	1.2 to 6.5 mm (0.0472 to 0.2559 inches)
	edge of paper	Length of leading liner when paper is loaded
	L6: Lower edge cutting margin	1.3 to 8.3 mm (0.051 to 0.3268 inches)
	A: Top margin	2.12 mm (0.0835 inches) or more
	B: Bottom margin	2.12 mm (0.0835 inches) or more
	C: Left margin	2.12 mm (0.0835 inches) or more
	D: Right margin	2.12 mm (0.0835 inches) or more

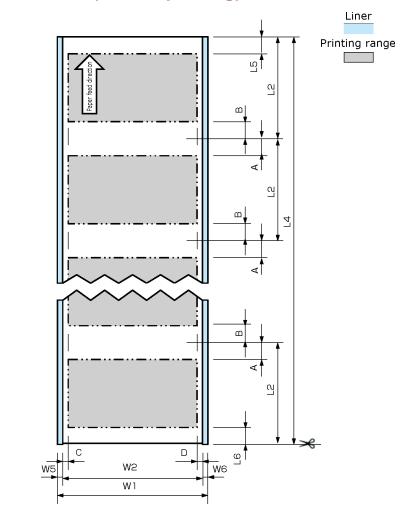


Die-cut label paper (with black marks)

Item	Specification
Paper weight	0.07 to 0.25 mm (0.003 to 0.0098 inches)
Roll core	Inner diameter: 76.2 mm (3 inches)
Outer diameter	203.2 mm (8 inches) or less

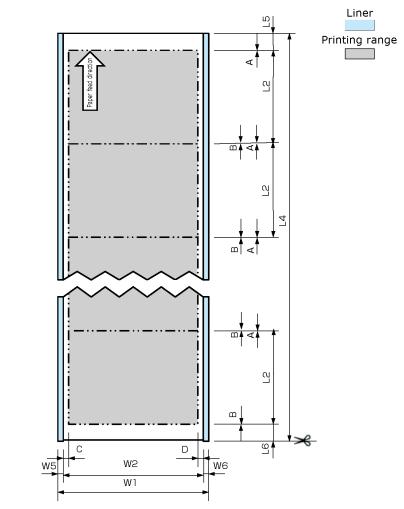
I	tem	Specification
Other	W1: Liner width	29.4 to 130 mm (1.1575 to 5.12 inches)
	W2: Label width	25.4 to 126 mm (1 to 4.9606 inches)
	W3: Right liner width	2 to 25.4 mm (0.0787 to 1 inch)
	W4: Left liner width	2 to 25.4 mm (0.0787 to 1 inch)
	L1: Black mark interval	15.7 to 1330.8 mm (0.618 to 52.3937 inches)
		* The black marks contain carbon.
	L2: Label length	12.7 to 1320.8 mm (0.5 to 52 inches)
	L3: Gap between labels	3 to 10 mm (0.12 to 0.3937 inches)
	L4: Cut size when in cut mode	101.6 mm (4 inches) or more
	mode	However, if the length of one label is less than 101.6 mm (4 inches), then the shortest length is 101.6 mm (4 inches) as multiple sheets are cut
	L5: Upper edge cutting margin	1.7 mm (0.067 inches)
	L5': Position of leading	1.2 to 4.0 mm (0.0472 to 0.1575 inches)
	edge of paper	Length of leading margin when paper is loaded
	L6: Lower edge cutting margin	1.3 to 8.3 mm (0.051 to 0.3268 inches)
	BW: Black mark width	More than 5 mm (0.197 inches) from edge of paper;
		maximum is width of paper W1 from edge of paper
	BL: Black mark length	3 mm (0.12 inches) or more Upper edge is the same as position of leading edge of label
	A: Top margin	2.12 mm (0.0835 inches) or more
	B: Bottom margin	2.12 mm (0.0835 inches) or more
	C: Left margin	2.12 mm (0.0835 inches) or more
	D: Right margin	2.12 mm (0.0835 inches) or more





Item	Specification
Paper weight	0.07 to 0.25 mm (0.003 to 0.0098 inches)
Roll core	Inner diameter: 76.2 mm (3 inches)
Outer diameter	203.2 mm (8 inches) or less

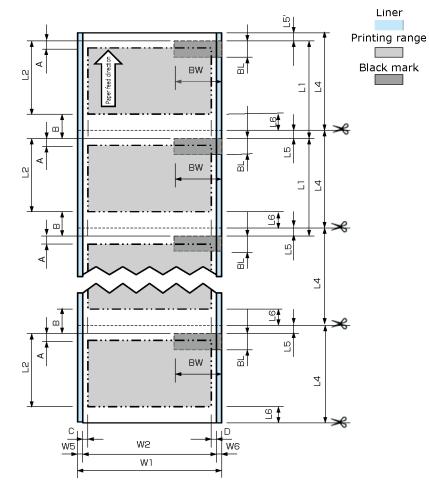
Item		Specification
Other	W1: Liner width	29.4 to 130 mm (1.1575 to 5.12 inches)
	W2: Label width	25.4 to 126 mm (1 to 4.9606 inches)
	W5: Left liner area (dry edge)	2 to 25.4 mm (0.0787 to 1 inch)
	W6: Right liner area (dry edge)	2 to 25.4 mm (0.0787 to 1 inch)
	L2: Paper length	12.7 to 1320.8 mm (0.5 to 52 inches)
	L4: Cut size when in cut mode	101.6 mm (4 inches) or more
	mode	However, if the length of one label is less than 101.6 mm (4 inches), then the shortest length is 101.6 mm (4 inches) as multiple sheets are cut
	L5: Upper edge cutting margin	2.12 mm (0.0835 inches)
	L6: Lower edge cutting margin	2.12 mm (0.0835 inches) or more
	A: Top margin	2.12 mm (0.0835 inches) or more
	B: Bottom margin	2.12 mm (0.0835 inches) or more
	C: Left margin	2.12 mm (0.0835 inches) or more
	D: Right margin	2.12 mm (0.0835 inches) or more



Full-sheet labels (printing on large size paper)

Item	Specification
Paper weight	0.07 to 0.25 mm (0.003 to 0.0098 inches)
Roll core	Inner diameter: 76.2 mm (3 inches)
Outer diameter	203.2 mm (8 inches) or less

Item		Specification
Other	W1: Liner width	29.4 to 130 mm (1.1575 to 5.12 inches)
	W2: Label width	25.4 to 126 mm (1 to 4.9606 inches)
	W5: Left liner area (dry edge)	2 to 25.4 mm (0.0787 to 1 inch)
	W6: Right liner area (dry edge)	2 to 25.4 mm (0.0787 to 1 inch)
	L2: Paper length	12.7 to 1320.8 mm (0.5 to 52 inches)
	L4: Cut size when in cut	101.6 mm (4 inches) or more
	mode	However, if the length of one label is less than 101.6 mm (4 inches), then the shortest length is 101.6 mm (4 inches) as multiple sheets are cut
	L5: Upper edge cutting margin	2.12 mm (0.0835 inches)
	L6: Lower edge cutting margin	1.5 mm (0.0591 inches)
	A: Top margin	0 mm (0 inches)
	B: Bottom margin	0 mm (0 inches)
	C: Left margin	2.12 mm (0.0835 inches) or more
	D: Right margin	2.12 mm (0.0835 inches) or more



Full-sheet label paper (with black marks)

Item	Specification
Paper weight	0.07 to 0.25 mm (0.003 to 0.0098 inches)
Roll core	Inner diameter: 76.2 mm (3 inches)
Outer diameter	203.2 mm (8 inches) or less

ltem		Specification
Other	W1: Liner width	29.4 to 130 mm (1.1575 to 5.12 inches)
	W2: Label width	25.4 to 126 mm (1 to 4.9606 inches)
	W5: Left liner area (dry edge)	2 to 25.4 mm (0.0787 to 1 inch)
	W6: Right liner area (dry edge)	2 to 25.4 mm (0.0787 to 1 inch)
	L1: Black mark interval	15.9 to 1324.0 mm (0.626 to 52.126 inches)
		* The black marks contain carbon.
	L2: Paper length	12.7 to 1320.8 mm (0.5 to 52 inches)
	L4: Cut size when in cut	101.6 mm (4 inches) or more
	mode	However, if the length of one label is less than 101.6 mm (4 inches), then the shortest length is 101.6 mm (4 inches) as multiple sheets are cut
	L5: Upper edge cutting margin	1.7 mm (0.067 inches)
	L5': Position of leading edge of paper	1.2 to 4.0 mm (0.0472 to 0.1575 inches) Length of leading margin when paper is loaded
	L6: Lower edge cutting margin	1.5 mm (0.0591 inches)
	BW: Black mark width	More than 5 mm (0.197 inches) from edge of paper;
		maximum is width of paper W1 from edge of paper
	BL: Black mark length	3 mm (0.12 inches)
	A: Top margin	2.12 mm (0.0835 inches) or more
	B: Bottom margin	3.2 mm (0.126 inches) * In practice, it is the length of the gap
	C: Left margin	2.12 mm (0.0835 inches) or more
	D: Right margin	2.12 mm (0.0835 inches) or more