



QL-240 User Guide

QL-240 User Guide

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QL-240 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 transport unit, maintenance roller, maintenance cartridge, cutter blades and the like. Consumables include ink cartridges and labels, which are covered under a separate warranty. If the customer discovers a defect, this defect must be reported promptly to QuickLabel or an authorized QuickLabel dealer.

QuickLabel will, at its option, repair the printer or repair or replace its defective component(s) at no additional charge. 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 or authorized service center. 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.

This warranty is void if the product has been damaged by accident, abuse, neglect or misapplication or by the use of incompatible consumables or parts, or if the product has been improperly installed, or if the product has been modified without the express written permission of 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.

Ink Limited Warranty

This warranty covers QuickLabel QL-240 ink cartridge sold by QuickLabel.

Each QL-240 ink 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 3 months after installation, whichever occurs first. This warranty applies only to the ink cartridges as used in the QuickLabel QL-240 printing system.

If the customer suspects a defect in a QL-240 ink cartridge, the customer must notify QuickLabel or an authorized QuickLabel dealer within the warranty period. Upon return of the ink cartridge and QuickLabel's verification of the defect, QuickLabel will, at its option, either:

1. Replace the defective ink cartridge; or,
2. If the customer has used the ink, pro-rate the price of a new ink based upon the estimated life remaining for the ink, as reported by the QL-240 system. The QL-240 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-240 ink 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-240.

This warranty is void if the QL-240 ink 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.

Printhead Limited Warranty

QuickLabel warrants the printhead from the date of purchase for a period of 90 days or for 250,000 inches of printing, whichever comes first, contingent upon the use of QuickLabel ink and labels. The QL-240 printhead is calibrated for use with QuickLabel ink and labels and performs optimally only when used with these materials. This specific printhead warranty does not apply to printheads damaged by accident, abuse, neglect, misapplication or the like. This warranty is void if the product has been damaged by accident, abuse, neglect or misapplication, or if the product has been improperly installed, or if the product has been modified without the express written permission of QuickLabel.

Obtaining Service

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

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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.

Declaration of Conformity Declaration de Conformité Übereinstimmungserklärung Dichiarazione di Conformità	
ID	DoC-22834680
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
Model No. Modèle No. Model Nr. Modello No.	QL-240 TrojanOne
Description of Products Description des produits Produktbeschreibungen Descrizione dei Prodotti	Color Label 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/(IEC) 61000-4-2:2009 EN/(IEC) 61000-4-3:2006+A1+A2 EN/(IEC) 61000-4-4:2012 EN/(IEC) 61000-4-5:2007 EN/(IEC) 61000-4-6:2009 EN/(IEC) 61000-4-8:2010 EN/(IEC) 61000-4-11:2004 CISPR 16-2-1:2008+A1 ANSI C63.4:2014 CISPR 16-2-3:2010+A1 EN 61000-3-2:2014 EN 61000-3-3:2013 EN/(IEC) 61326-1:2013 FCC 47CFR Part 15 Subpart B Class A ICES-003 (April 2017) - Class A UL 60950-1:2007 Ed.2 +R:14Oct2014 CSA C22.2#60950-1:2007 Ed.2+A1;A2 IEC 60950-1:2005 (Second Edition) + Am 1:2009 + Am 2:2013 EN 60950-1:2006/A11:2009/A1:2010/A12:2011/A2:2013
Application of Council Directives Application des Decisions du Conseil Anwendbar für die Richtlinien Applicazione delle Direttive del Comitato	2014/30/EU 2014/35/EU
I, the undersigned, hereby declare that the equipment specified above conforms to the above Directive and Standard. Je, Soussigné, déclare que l'équipement spécifié ci-dessus est en conformité avec la directive et le standard ci-dessus. Ich, der unterzeichnende erkläre hiermit, daß das oben beschriebene Gerät den vorgenannten Richtlinien und Normen entspricht. Il sottoscritto dichiara che l'apparecchio sopra specificato è conforme alle Direttive e Norme sopra specificate.	
Steven Holbrook Quality Assurance Manager AstroNova, Inc. CE Label First Affixed Date: 14	 Date of issue: <u>2/19/2018</u> Place of issue: <u>West Warwick, RI</u>
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1

Getting Started

System Requirements

- Windows® 10/8.1/8/7 Server 2012/2008
- Microsoft .NET Framework 3.5 SP1
- 350 MB free hard drive space
- One available USB 2.0 port for driver installation (or Internet connection)
- Network connectivity for network installation (USB connection not supported)

Unpacking the Printer

- 1 Open the shipping carton. Remove the cables and accessories from the carton. Verify that all parts are included in the shipment.
 - Power cable and 24VDC power supply
 - USB cable
 - Ethernet cable
 - Printhead
 - USB flash drive with printer driver software and documentation
 - Printer foot adjustment tool
 - Media guide thumbscrews (2)
- 2 Remove the packing foam from the shipping carton.
- 3 With help from another person, lift the printer out of the shipping carton.

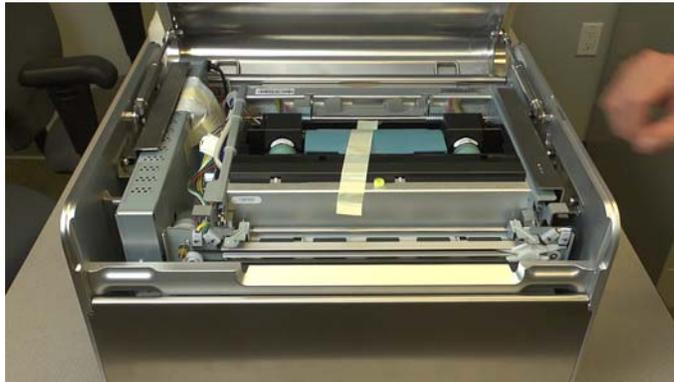
Warning: *The printer is heavy and moving it requires two people. Lift the printer by the bottom metal frame near each corner. Keep the printer level while lifting it.*

- 4 Place the printer on a level, flat horizontal surface that can support the size and weight of the printer and accessories. Approximate sizes and weights are provided below.

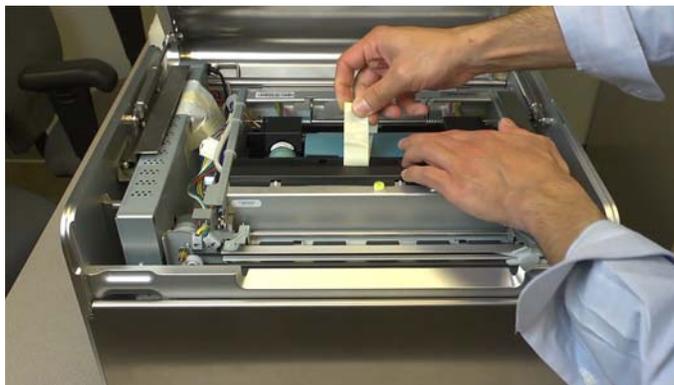
Description	Dimensions	Weight
Printer	19 x 16 x 12 inches (480 x 395 x 301 mm)	80 lbs (36 kg)
Touchscreen Control	19 x 9 x 11 inches (479 x 230 x 269 mm)	18 lbs (8 kg)
Standard Unwinder	18 x 17 x 15 inches (458 x 432 x 381 mm)	25 lbs (12 kg)
Standard Rewinder	18 x 17 x 15 inches (458 x 432 x 381 mm)	25 lbs (12 kg)

Caution: Do not plug in the printer until prompted later in this guide. Powering up the printer before removing shipping inserts can result in printer damage.

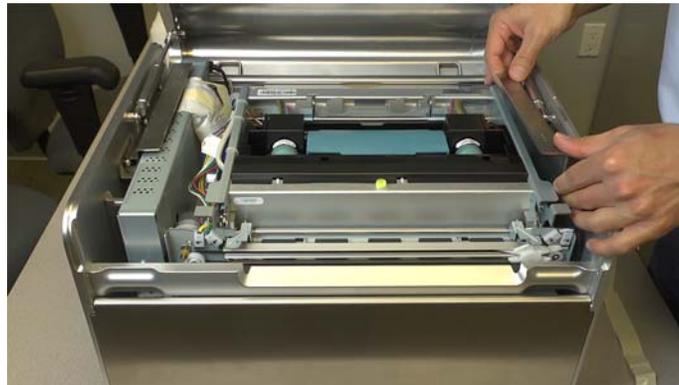
- 5 Open the top cover on the printer.



- 6 Peel off the shipping tape that secures the printhead latch.



- 7 On the right side of the printer, slide the metal shipping insert backward. Then lift the bracket off the three posts and out of the printer. Save the shipping insert for future shipping purposes.



- 8 On the left side of the printer, slide the metal shipping insert forward. Then lift the bracket off the three posts and out of the printer. Save the shipping insert for future shipping purposes.



- 9 Remove the desiccant bag from the left side of the printer.



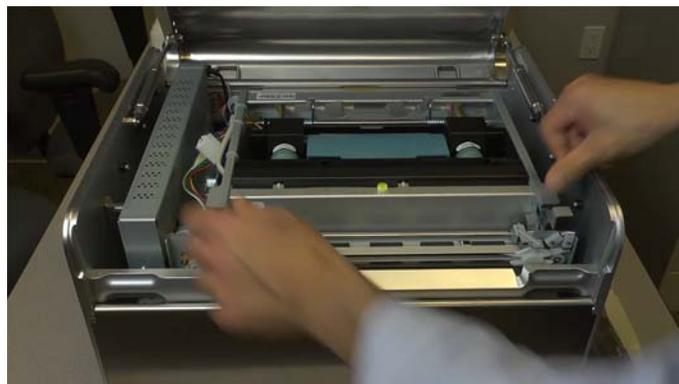
- 10 Open the transport module by pressing the latches upward and lifting the transport module.



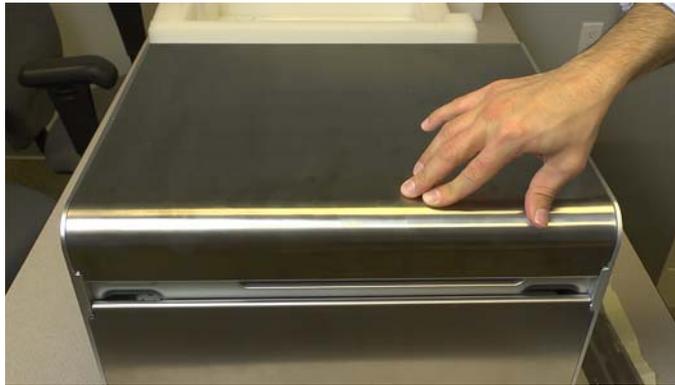
- 11 Remove the cardboard shipping insert from the printhead area.



- 12 Close the transport module by pressing it downward until it latches.



- 13 Close the top cover.



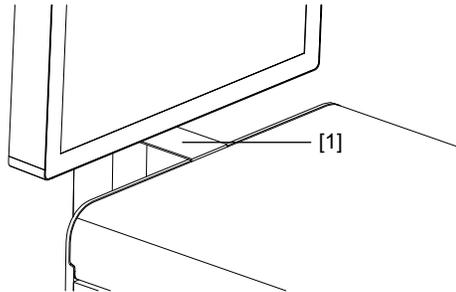
- 14 Install the two thumbscrews in the media guides near the media entry slot. Slide the left guide all the way to the left and then tighten the thumbscrew. The thumbscrew on the right guide will be tightened after loading media.



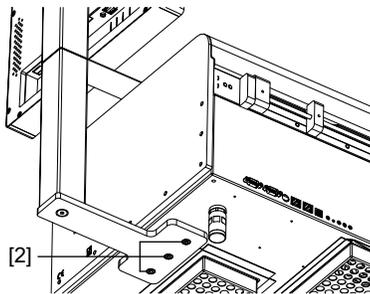
Installing the QL-240 Touchscreen Control (Optional)

- 1 Unpack the QL-240 Touchscreen Control. Verify that all parts are included in the shipment.
 - Touchscreen Control
 - Power cable and power supply
 - Ethernet cable
 - Mounting stand
 - Screws (3 fasten the stand, 4 fasten the Touchscreen Control)

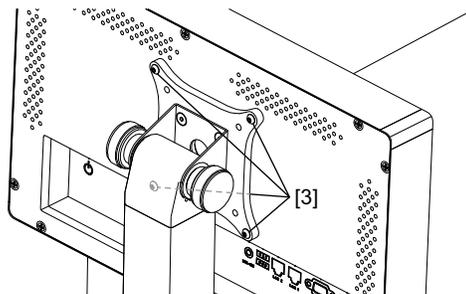
- 2 Insert the tab from the support bracket [1] into the slot between the printer top cover and frame.



- 3 With help from another person, fasten the base of the stand to the bottom of the printer with three screws [2]. One person can slightly tilt the printer while the other person tightens the screws.



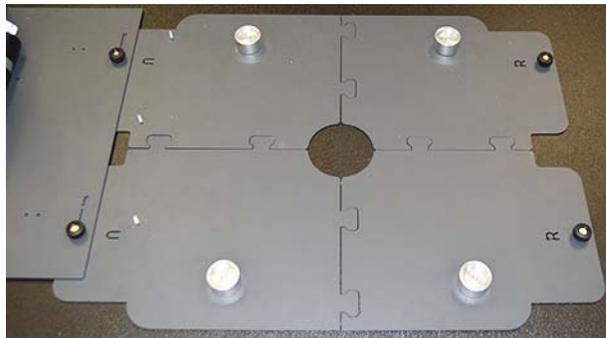
- 4 With help from another person, fasten the Touchscreen Control to the stand with four screws [3]. One person can support the Touchscreen Control while the other person tightens the screws.



- 5 Connect the external power supply to the Touchscreen Control.
- 6 Connect the LAN cable from the LAN2 port on the Touchscreen Control to the Touchscreen Control port on the printer.
- 7 Use the On/Off switch to power on the Touchscreen Control.
- 8 In the QL-240 Control software on the Touchscreen Control, choose **Settings > Network**. Select the networking method for the Touchscreen Control.
 - To use a static IP address, enter the desired IP address. Clear the **DHCP** check box. Then choose **Save**.
 - To use DHCP, check the **DHCP** check box. Then choose **Save**.

Setting up the Unwinder

- 1 Unpack the unwinder. Verify that all parts are included in the shipment.
 - Unwinder and connected base plate
 - Power cable and power supply
 - Printer base plate
 - Entrance guide
 - Thumbscrews
- 2 Assemble the printer base plate. Fasten the unwinder base plate to the printer base plate with the thumbscrews. Do not fully tighten the thumbscrews at this time.



Put the plates where the printer and unwinder will be permanently located.

- 3 Fasten the entrance guide to the base plates with the thumbscrews.



- 4 With help from another person, lift the printer and position it on the printer base plate. The legs on the printer should fit in the corresponding posts on the base plate.

Caution: The printer is heavy and moving it requires two people. Lift the printer by the bottom metal frame near each corner. Keep the printer level while lifting it.



- 5 Use a straight edge such as a ruler to align the unwinder with the printer. The inside edge of the inside flange should be aligned with the left edge of the media entrance on the printer.

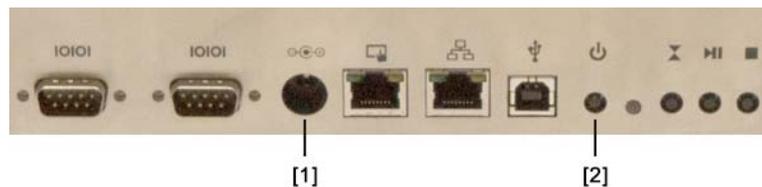


Adjust the unwinder position as needed. Then tighten the thumbscrews on the unwinder base plate.

- 6 Connect the external power supply to the unwinder.

Powering On the QL-240 Printer

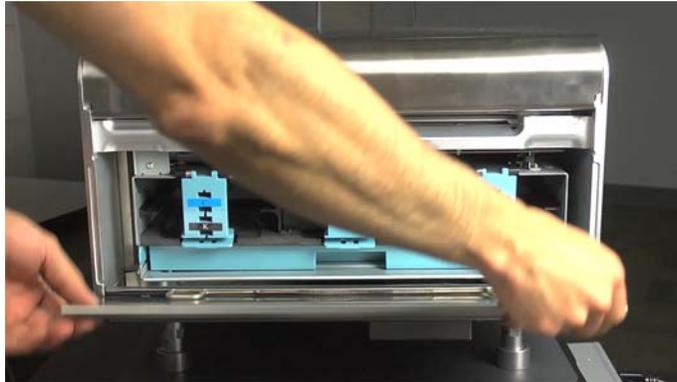
- 1 Connect the external power supply to the printer power inlet [1].



- 2 Turn the printer on by pressing the power button [2].

Installing Ink Cartridges

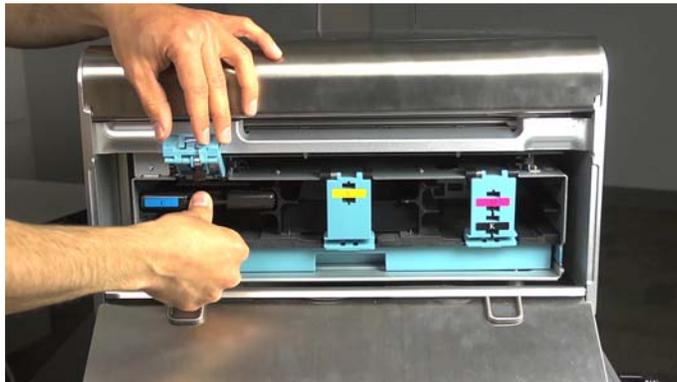
- 1 Open the front door on the printer.



- 2 Open the ink cartridge latches and install ink cartridges in the proper slots. The proper slot for each color is labeled on the latches.

Warning: For safety, keep ink cartridges out of the reach of children. If ink is accidentally ingested, contact a physician immediately.

Warning: There are sharp needles in the ink cartridge slot. Never put your fingers in this area.



Each color (CMYK) can only be inserted in the proper slot. Black cartridges can be inserted into both black (K) slots.

- 3 Close the ink cartridge latches and make sure they are locked.



- 4 Close the front door on the printer.



Installing the Printhead

Caution: The printhead is sensitive to electrostatic discharge (ESD). Use ESD protection when handling the printhead.

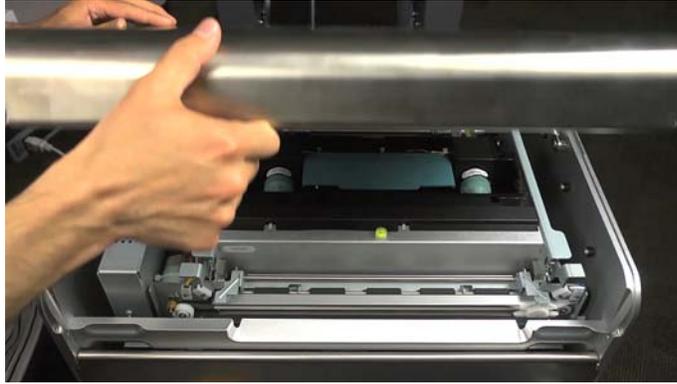
Caution: Do not touch the printhead cartridge ink couplings, nozzle surface, or the electrical contacts when installing the printhead cartridge. Hold the printhead cartridge ONLY by the handles.

Caution: To avoid drying out the printhead, do not open the printhead packaging until you are ready to use it. When storing unopened printheads, orient them as described on the printhead carton.

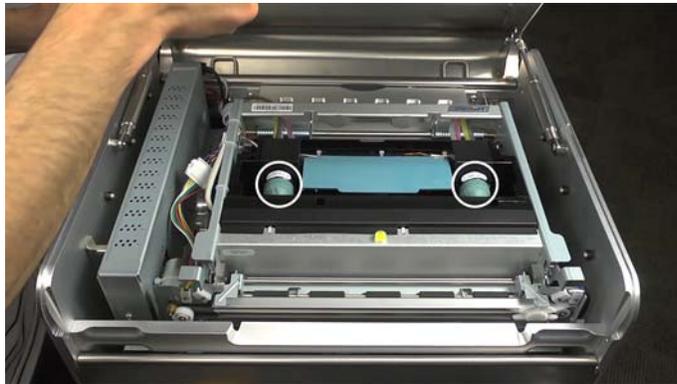
Caution: Open the printhead packaging over an appropriate receptacle to safely capture any excess shipping fluid.

- 1 Ensure the printer is powered on and all five ink cartridges have been installed.

- 2 Open the top cover on the printer.



- 3 Remove the two blue rubber caps from the printhead dock.



- 4 Use a small screwdriver to press the printhead release button. The printhead latch will open in five to ten seconds.



- 5 Remove the printhead from the packaging.

Note: If the foil packaging is damaged, report the issue to Technical Support.

Caution: Do not place the unprotected printhead cartridge on any surface. Protect the printhead cartridge at all times from contamination such as dust or fibers.

- 6 Wipe any excess shipping fluid from the printhead cartridge with a clean, lint-free cloth.

- 7 Remove the orange protective plastic cover from the printhead cartridge, holding the printhead by the handle.
- Remove the flaps covering the ink ports.
 - Remove the clip holding the cover near the center of the printhead cartridge.
 - Carefully remove the protective cover. Do not touch any of the ink ports or nozzle plate after the orange cover is removed.



- 8 Hold the printhead cartridge by the handle with one hand. Carefully remove the protective plastic strips with the other hand.

Grasp the pull tab and slowly peel back the plastic strip covering the electrical contacts.

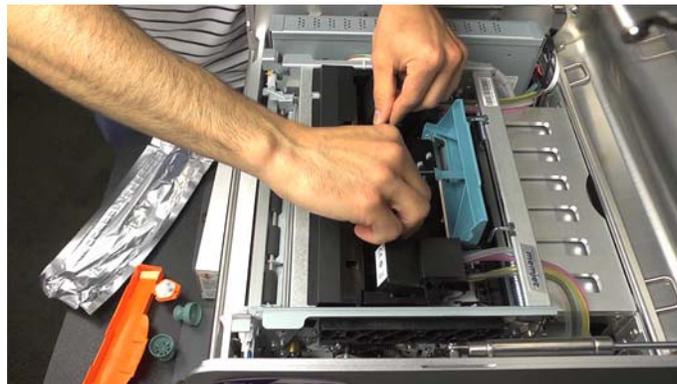


Grasp the pull tab and slowly peel back the plastic strip covering the printhead nozzles. Maintain an angle of no less than 45 degrees with the printhead surface when pulling on the strip.

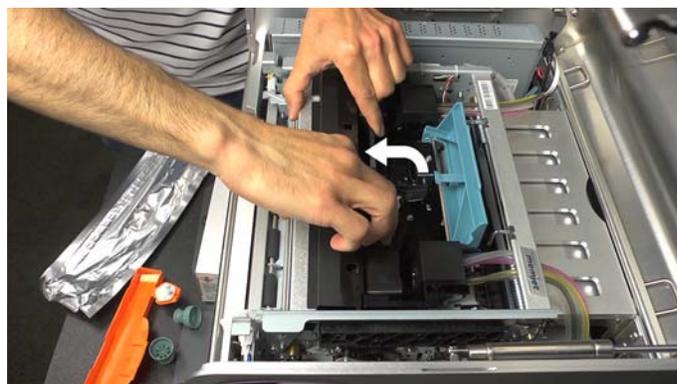


Caution: Dispose of the removed strips immediately and do not allow the removed strips to touch the electrical contacts or printhead nozzles.

- 9 Fully open the printhead latch.
- 10 Carefully put the printhead into the cradle. Allow the printhead to slide fully downward into the cradle.



- 11 Pull the top of the printhead toward the front door until you feel it snap into the proper position standing upright.



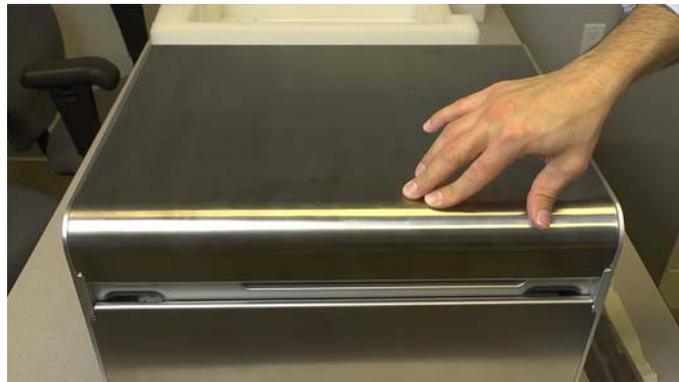
- 12 Close the printhead latch.



Ink delivery system priming (filling up the system and printhead with ink) will begin automatically. This process may take several minutes.

When the printer is ready for printing, the system status in QL-240 control software will change to **Online**.

- 13 Close the top cover on the printer.

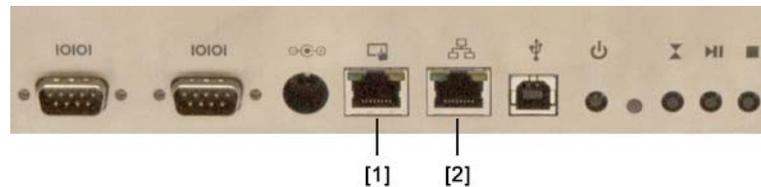


Installing the Printer Driver

- 1 Ensure the QL-240 is powered on. If you are using the optional Touchscreen Control, ensure it is also powered on.

- 2 Make the appropriate network connections based on your configuration. The printer must be connected to the PC with a LAN connection. A USB connection is not supported.

There are two Ethernet ports on the printer. One is labeled as the Touchscreen Control port [1] and the other is labeled as the LAN port [2].



- **QL-240 Printer Only** - Connect the LAN cable from either Ethernet port on the printer to your router.
 - **QL-240 Printer with Touchscreen Control** - Ensure a LAN cable is connected from the LAN2 port on the Touchscreen Control to the Touchscreen Control port [1] on the printer. Also connect a LAN cable from the LAN1 port on the Touchscreen Control to your router.
- 3 Power on your PC and insert the QL-240 USB flash drive in a USB port. Launch the “winsetup.exe” file on the drive. The installer program will open.

Note: You also can obtain the software from www.QuickLabel.com/downloads.

- 4 Choose **Install Printer Software**. The software installation will start.

Note: If the Windows logo testing or publisher verification warning messages appear during installation, choose to continue the installation.

- 5 Select **Configure to print over the network** when prompted for the connection method. Then choose **Next**.

The installer will scan the network and display a list of IP addresses. Select the appropriate IP address based on your configuration.

- **QL-240 Printer Only** - The installer will find the IP address of the QL-240 printer. By default, the printer is configured to obtain an IP address with DHCP.

Write down the IP address of the printer you want to install. This information will be used later to connect to QL-240 Control Light software.

Select the IP address of the printer you want to install. Then choose **Next**.

- **QL-240 Printer with Touchscreen Control** - The installer will find the IP address of the Touchscreen Control. The Touchscreen Control creates an internal network for the connected printers.

Select the IP address of the Touchscreen Control. Then choose **Next**.

- 6 When prompted, select whether the QL-240 will be set as the default printer.
- 7 Choose **Finish**.

Loading Media

- 1 Use QL-240 Control or QL-240 Control Light software to disable the roll media/volume winder control. Use the appropriate software based on your configuration.

- **QL-240 Printer Only** - Start Mozilla Firefox® on your PC and enter the printer's IP address in the address bar. QL-240 Control Light software will open in the browser window.

Note: QL-240 Control Light is fully supported in Mozilla Firefox only. Errors may occur when using other web browsers.

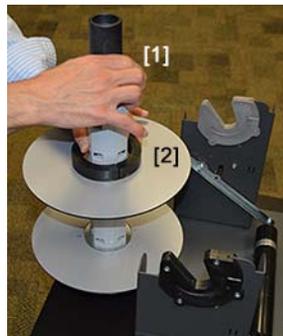
You can also open QL-240 Control Light by choosing **Start > All Programs > QuickLabel QL-240 > Toolbox**.

Open the **Media Settings** menu. Clear the **Roll Media** check box.

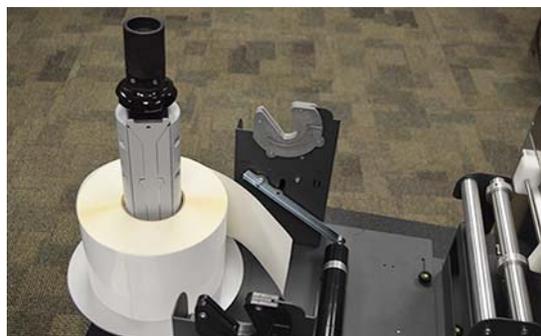
- **QL-240 Printer with Touchscreen Control** - Use the QL-240 Control software on the touchscreen.

Open the **Media Settings** menu. Clear the **Volume Winder Control** check box.

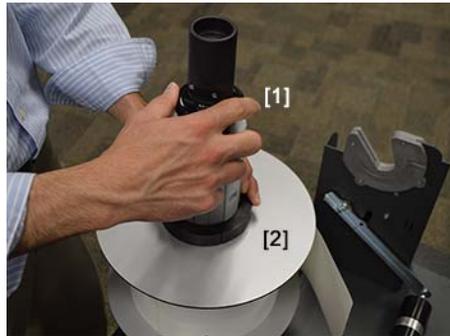
- 2 Remove the roll holder from the unwinder. Turn the fastening knob [1] counterclockwise and remove the outer flange [2].



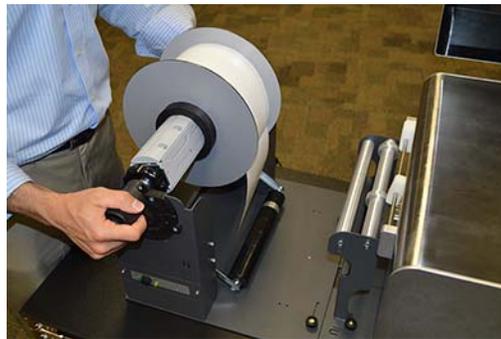
- 3 Orient the media roll as shown. Then insert the media roll on the roll holder. Make sure the roll makes contact with the inner flange.



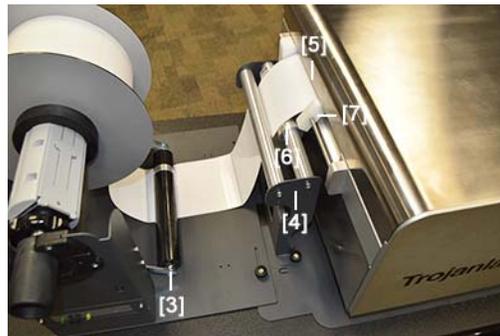
- 4 Reinstall the flange [2]. Turn the fastening knob [1] clockwise to secure the roll.



- 5 Reinstall the roll holder on the unwinder.



- 6 Feed the media under the dancer arm [3], up between the two bars on the entrance guide [4], and into the media entry slot [5] on the printer. Adjust the media guides [6] [7] to the width of the media.

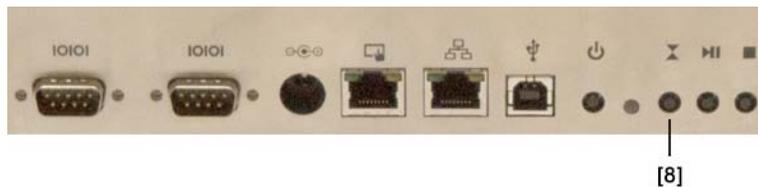


- 7 Tighten the thumbscrew on the white adjustable media guide.

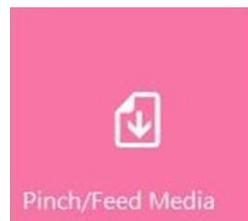


- 8 Activate the pinch/feed media function using one of the following options.

- Press the **Pinch/Feed Media** button [8] once on the printer.



- In QL-240 Control Light, choose **User Interface**. Then choose the **Pinch/Feed Media** button once.
- In QL-240 Control, choose **Handling**. Then choose the **Pinch/Feed Media** button once.



The printer will pinch the media, advance it into the printer, and adjust the media position for printing.

Note: Pressing the Pinch/Feed Media button once sets the printer in “Roll to Cut” mode, where the media is cut after each print job. Pressing the button twice sets the printer in “Roll to Roll” mode, where the media is not cut after each print job. After three minutes of not printing in “Roll to Roll” mode, the printer will automatically switch to “Roll to Cut” mode to protect the printhead from dehydration.

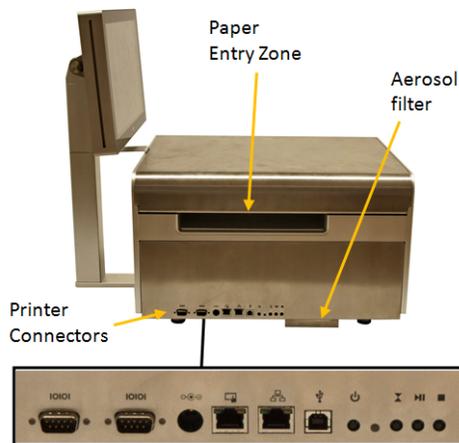
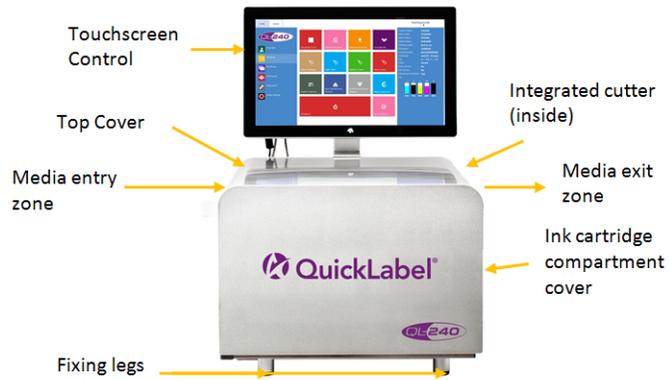
The LED will flash blue indicating that media is pinched and the printer is ready to receive a print job.

- 9 Turn the unwinder power on with the unwinder power switch.

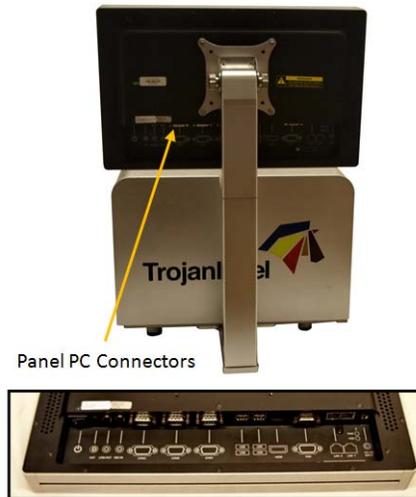
2

QL-240 Overview

Printer Parts and their Functions

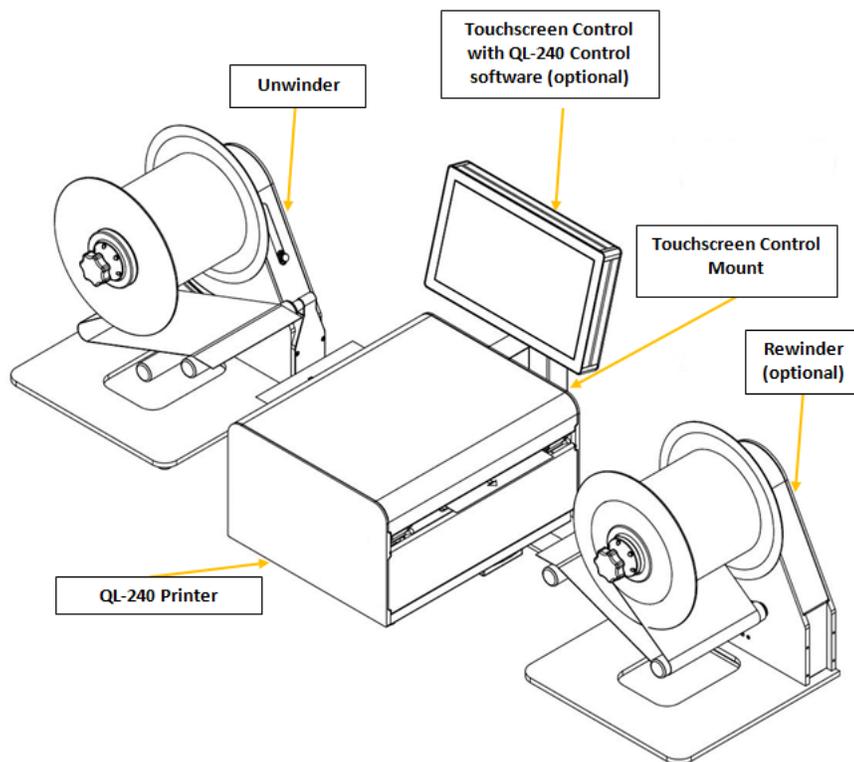


From left to right: Serial Port 1-2 for winders, Power Supply, Ethernet to Touchscreen Control or LAN, Ethernet to next printer, USB, Power On/Off Button, Status LED, Pinch Media Button, Retract Media Button, Stop / Cancel Button



From left to right: Power Button, Line In-Out, Serial Port 1, Serial Port 2, Serial Port 3, USB 4x, HDMI Connector, VGA Connector, LAN 2 (Connect to first QL-240), LAN 1 (Connect to company network, Internet), Power Connector

QL-240 Printer and Accessories



- Set of ink cartridges YMCKK



- Printhead



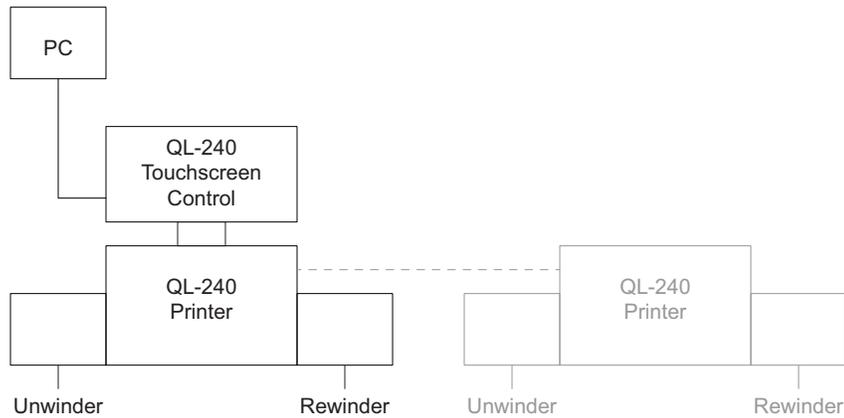
Configuration Options

The QL-240 is available in two configuration options.

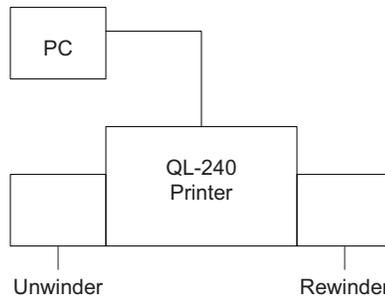
- Full configuration with Touchscreen Control and fully functional QL-240 Control software
- Standalone configuration (without Touchscreen Control) with QL-240 Control Light software

Full configuration with QL-240 Control software	Standalone configuration with QL-240 Control Light software
<ul style="list-style-type: none"> • Plug & Play printer detection • Controls up to five QL-240 printers • Enhanced user interface • Automatic updates (software, firmware) • Job library for storing print jobs • Ethernet connection • Remote desktop support • Multi language interface 	<ul style="list-style-type: none"> • Printer detection with driver installation • USB or Ethernet connection • Basic interface • No job library (print jobs have to be regenerated every time) • Running from web browser • No automatic updates • Multi language interface

The following diagram illustrates connections in a sample full configuration.



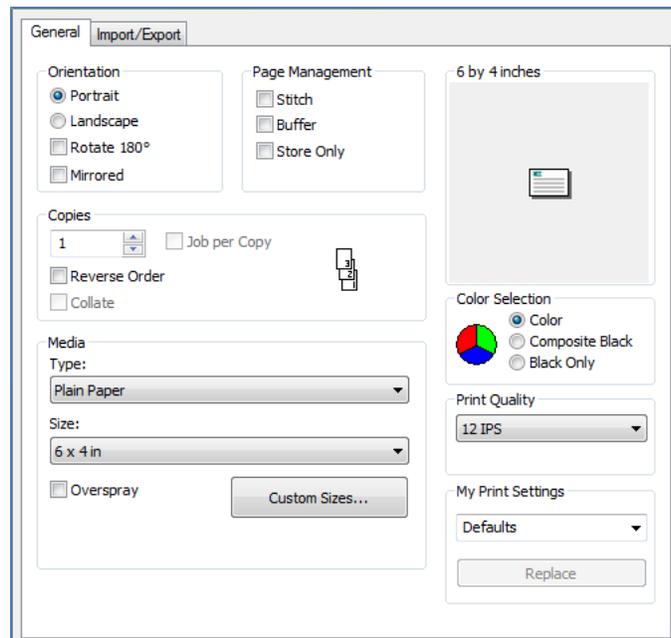
The following diagram illustrates connections in a sample standalone configuration.



Driver Features and Functions

- The driver is compatible with Windows XP, Windows Vista, Windows 7, Windows 8, and Windows 10 (both 32bit and 64bit versions)
- Can print from any software which is able to print from Microsoft Windows environment.
- Original file format that the print engine accepts is ZX (driver makes the conversion)

- Handles ICM color profiles (provided by QuickLabel)



Orientation

Adopts software settings (like how it is set in Adobe Reader) for portrait or landscape mode. Printed image can be rotated by 180 degrees or mirrored. For other rotation than 180 degrees, this has to be set in the artwork (design the artwork to be in the desired orientation) or only if the particular software (like Adobe Illustrator) includes this feature.

Copies

Number of copies times the number of labels in actual print job.

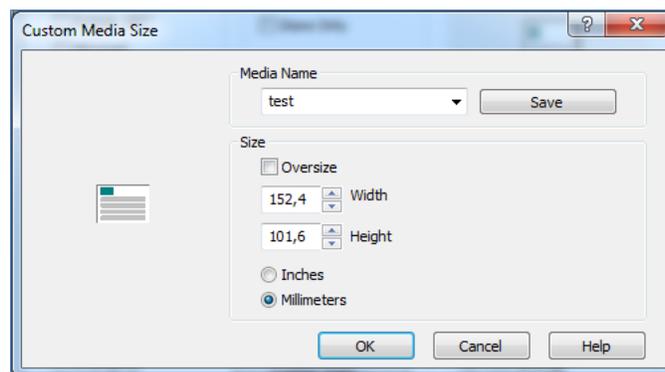
Reverse Order: Prints copies in reverse order.

My Print Settings

Can create and load profiles from settings

Media

- **Type:** List of available color profiles.
- **Size:** Predefined size from the list or custom size.



- **Media Name:** Save custom size into the profile list.

- **Enlarge:** Full bleed printing = oversizing the image by 1mm over the edges when printed.
Aspect ratio is locked.
- **Enlarge:** Enlarge printed image over the label size by 0.5mm. Does not preserve aspect ratio.

In practice Enlarge and Enlarge checkboxes are not the optimal solution for printing with full bleed. The best practice is to oversize the label size in the artwork by 1mm (e.g.: instead of 100x100mm, make the artwork size 101x101mm) and then set 1mm enlarge in the label size when setting the size in the driver at custom media size window (set 101x101mm label size in driver). This way the label will be printed by 1mm enlarge in a fully controlled way. Note that oversizing the printed image reduces the physical gap in case of diecut labels and recommended gap size is 3mm by all means (make sure that 3mm gap remains even if oversizing reduces the gap by 1mm).

Color Selection

- Color mode (uses CMYK ink to mix out colors on labels).
- Composite Black (uses CMYK to mix out black color on labels).
- Black Only (uses only black ink for printing black color on labels).

Print speed

- 6 IPS (resolution 1600 x 1600 DPI)
- 12 IPS (resolution 1600 x 800 DPI)

Page Management

- **Stitching:** Stitching images together to make one continuous image. This mode is for exceeding the maximum printable label length which is 762mm.

The maximum printable label length is 762mm. If 762mm label height is not enough, then stitching is the workaround option. In practice, create a multi-page PDF where the long image is cut into pieces. This way if stitching option is on, the printer will stitch all images from the multi-page PDF together and print it out as one continuous image without gaps between pages.

Note: The PAUSE function is not available in stitched mode because pause is only possible between two printed labels/pages. Stitched images count as one label/page. The label counter also counts it as one label.

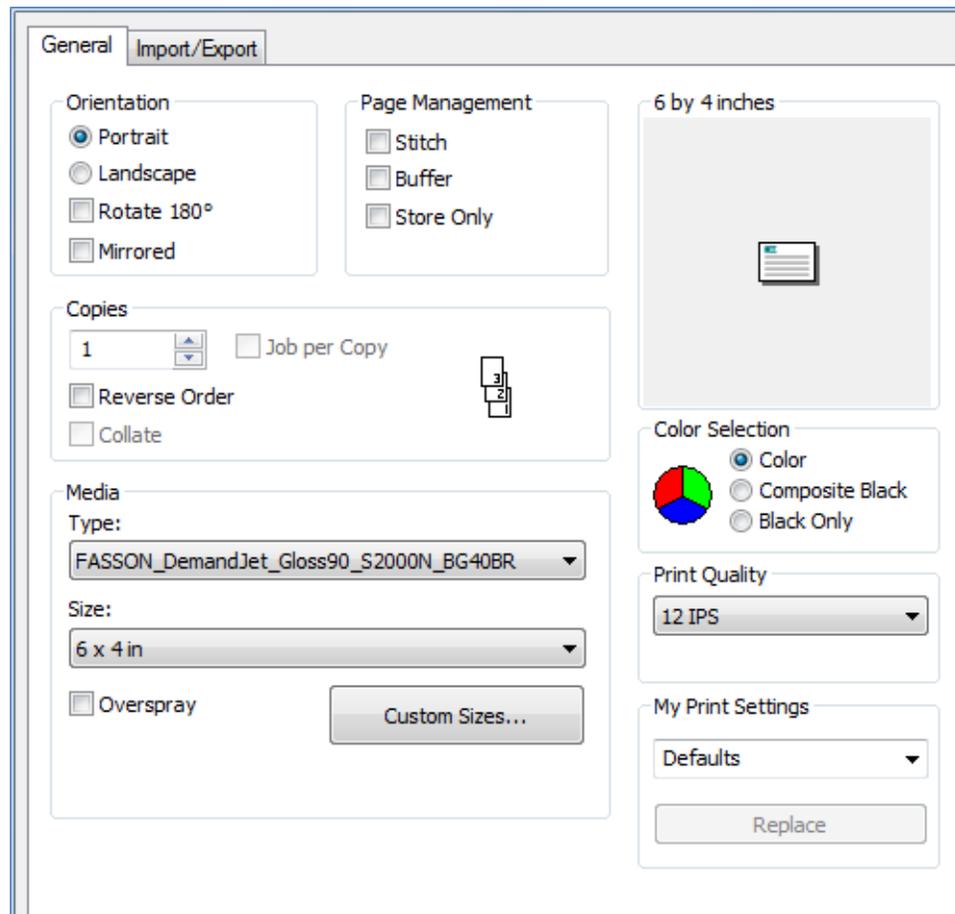
- **Buffer:** Buffering the whole print job into the user PC's memory before sending it to the printer. This can be useful when the hardware of the user PC (where the driver is installed) is not powerful enough to generate the print stream in real time. Especially for large print jobs with variable data.

Note: In case of using the Touchscreen Control, the panel PC does the buffering, so this checkbox should be left unselected.

- **Store only:** Sending and storing the selected print job into the job library without actually printing. The stored job can be printed out later from the Job Library menu at the touch screen.

Note: Store only function only works if Touchscreen Control is used, in standalone mode there is no job library.

Integrating additional color profiles



- Color profiling is done on demand by QuickLabel
- Color profile installer packages are available from QuickLabel
- 5 default color profiles (Plain, Matte Coated label/paper, Glossy, Premium Glossy)
- Monochrome profiles included (composite black and black only options)

Full Bleed Printing

In full-bleed labels, color prints up to the edge of the label. Use the following guidelines when setting up a file for a full-bleed label.

The label artwork should be 1mm longer and wider than the physical label size.

If your physical label size is 4"x5" (101.6mm x 127.0mm), then to print full bleed make the label size in the artwork design 1mm more than the physical label size, such as 102.6 x 128mm in this case. Also enter 102.6 x 128mm as the label size in the driver. This way you will print 1mm more on each side and make sure there are no white lines on the edges of the print. The ink sprayed on the liner with oversizing, usually 0.5 -1mm, does not cause any problem and does not contaminate the printed labels.

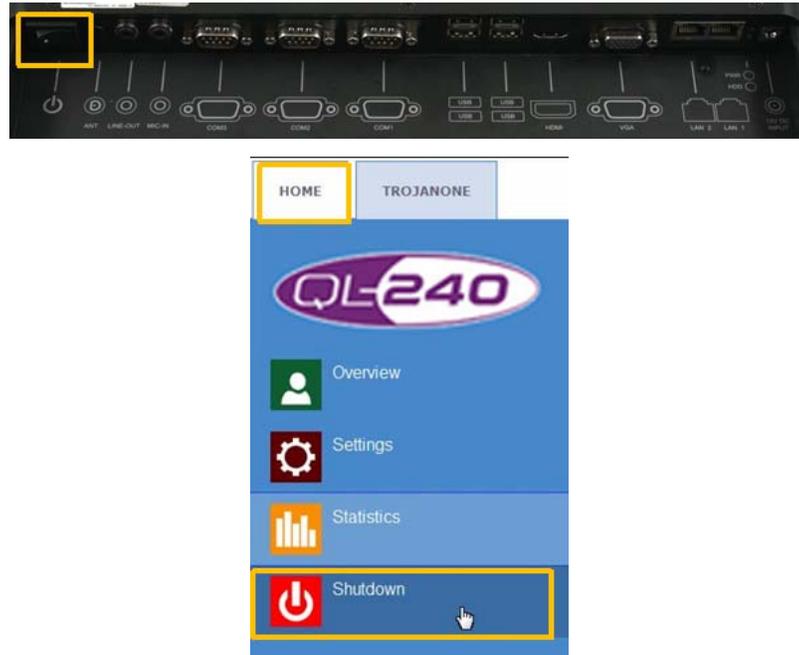
Turning the Printer On/Off



- To turn the QL-240 printer ON press the Printer ON/OFF button.
- To turn the QL-240 printer OFF either press the Printer ON/OFF button or select the desired printer and press the Shutdown button in QL-240 Control (same in QL-240 Control Light). Go to **Printer > Handling > Shutdown**.

Caution: Always wait until the shutdown process finishes before shutting down the power supply! Otherwise the Maintenance Module inside the printer might not end up in the proper position and cannot protect the printhead from dehydration. Dehydration of nozzles in the printhead may result in print quality defects. Shutdown process may take 1-2 minutes.

Turning the Touchscreen Control On/Off

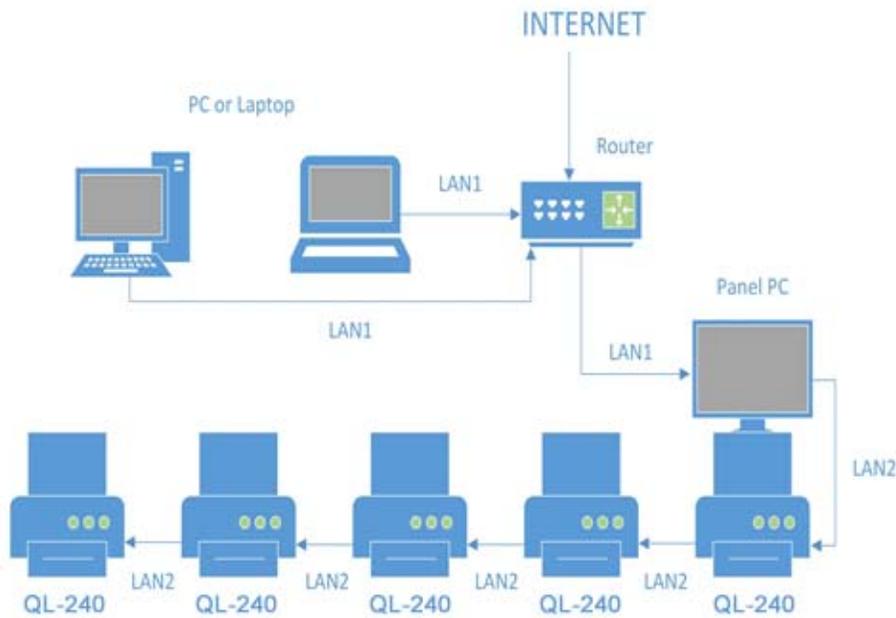


- To turn the Touchscreen Control ON press the power ON/OFF button at the back of the Touchscreen Control.
- To turn the Touchscreen Control OFF go to **HOME > Shutdown** in QL-240 Control software.

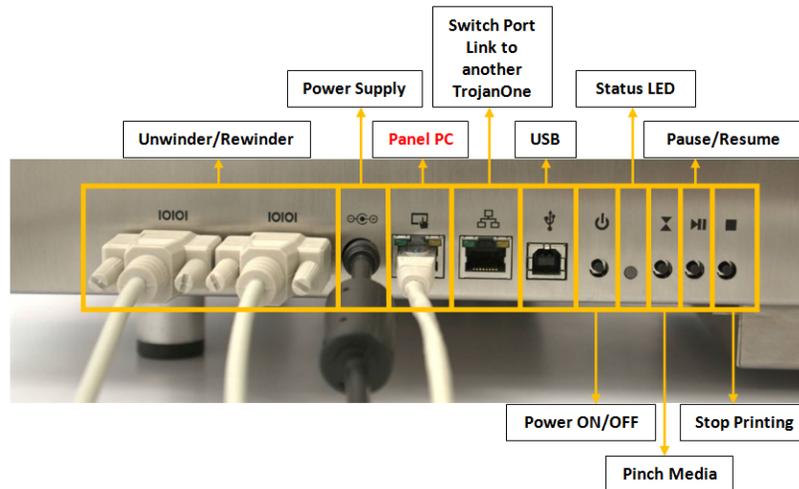
Shutting down the Touchscreen Control does not shut down the QL-240 printer and vice versa. The recommended shutdown process is shutting down from QL-240 Control or from QL-240 Control Light software.

Connecting QL-240 Control

Network Schematic for QL-240 Printer with Touchscreen Control

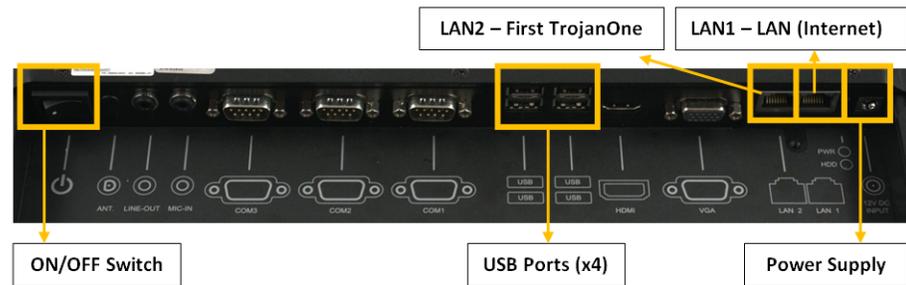


Connections on QL-240 Printer



- Pressing Pinch Media button twice switches the QL-240 into Roll2Roll mode.
- Pressing the STOP printing button twice does a cut and unfeeds the media.

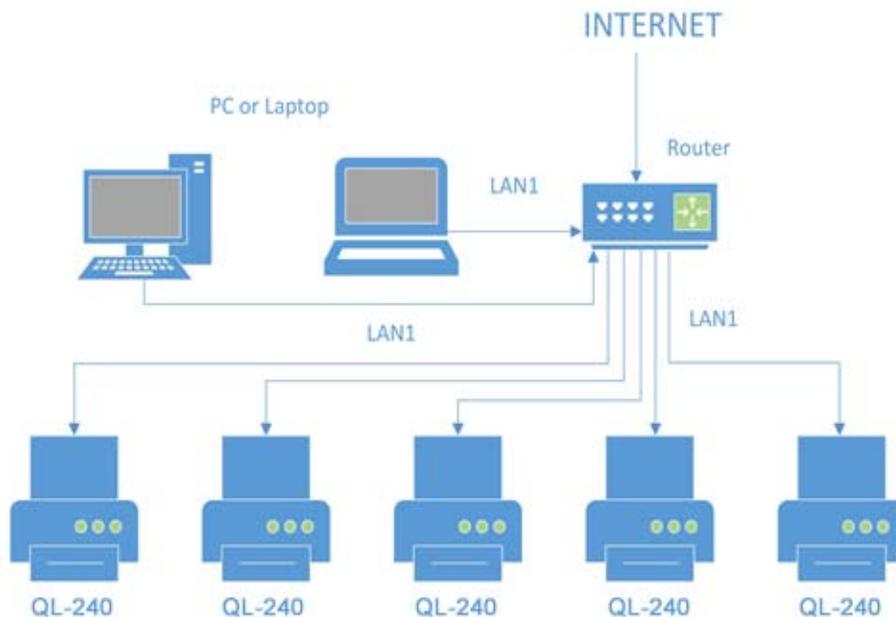
Connections on the Touchscreen Control



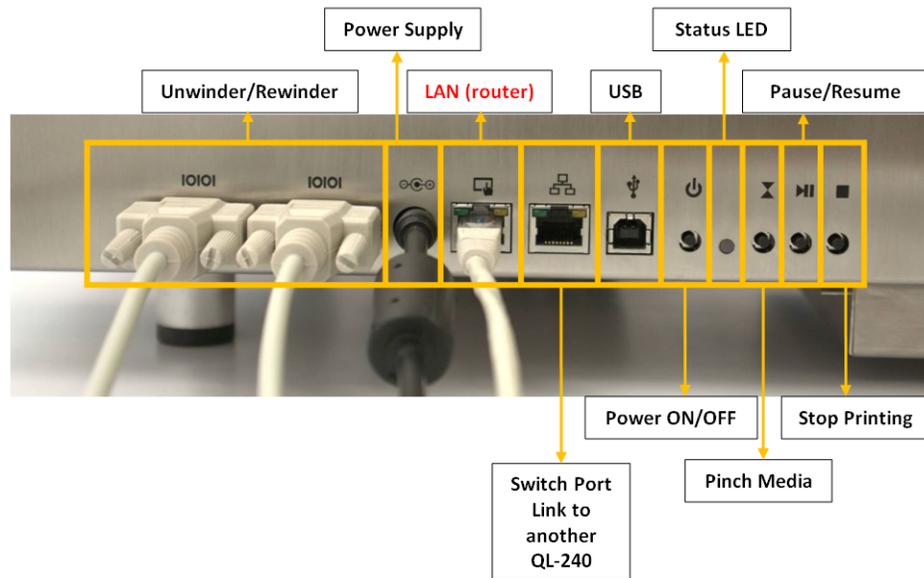
QL-240 printers can be linked to each other as a chain using the switch port on the printer housing. The Touchscreen Control can control up to 5 QL-240 units in an internal network. The Touchscreen Control acts as a DHCP server for the QL-240 units (provides IP address automatically for linked QL-240 printers).

Connecting QL-240 Control Light

Network Schematic for QL-240 Printers on the Local Area Network in Standalone Mode



Connections on QL-240 Printer in Standalone Mode



- Pressing Pinch Media button twice switches the QL-240 into Roll2Roll mode.
- Pressing the STOP printing button twice does a cut and unfeeds the media.

Connecting to QL-240 Printer through QL-240 Control Light (Ethernet Connection)

- By default the printer gets an IP address from the office network through DHCP server.
- During driver installation on host PC the installer finds QL-240 printer(s) on the network.
- Type the IP address(es) of the printer(s) into Mozilla Firefox browser software.

Installing the QL-240 Driver over Ethernet without the Touchscreen Control

There are two ways to install the driver with an Ethernet connection when the Touchscreen Control is not being used. By default, the QL-240 printer is in DHCP mode (it receives an IP address from the network).

- 1) Connect the printer to a router or your company's network so the printer can receive an IP address via DHCP. Then run the driver installer. The IP address will be found automatically. You can later type the IP address into a web browser to open the QL-240 Light interface.

- 2) If the printer is not in DHCP mode, and you want to set it to DHCP mode, follow this step.

Press the **STOP** and **PINCH** buttons at the same time for three seconds. The Status LED will turn white indicating that you have entered into a selection menu. Choose from the options below.

- Press the **PINCH** button to set the QL-240 to DHCP mode.
- Press the **PAUSE** button to set the QL-240 to static IP address mode. A static IP address can be assigned in QL-240 Control and QL-240 Control Light interfaces.
- Press the **STOP** button to exit the menu without changes.

After setting the printer to DHCP mode, run the driver installer and continue as described in step 1.

3

QL-240 Control Features and Functions

QL-240 Control Interface



Features:

- Print job management
- Print queue management
- Job receiving, storing, processing
 - Preview generation
 - Stores last 30 print jobs by default
 - All print job settings are stored
- Calculating statistics, ink usage and material cost information
- Detailed statistics history for all installed printheads and print engines
- Plug & Play setup and control for up to 5 printers
- Maintenance functions
- Error handling
- User management
- Network management (DHCP server)
- Proven always responsive UI
- Automatic updater service
 - System update over Internet
 - Including FW and software components
 - Local upgrade is available if the Touchscreen Control cannot be connected to Internet

- Easy update installation
- Multi language interface
- Dedicated printer ports (for sending jobs directly to specific printer from user PC)

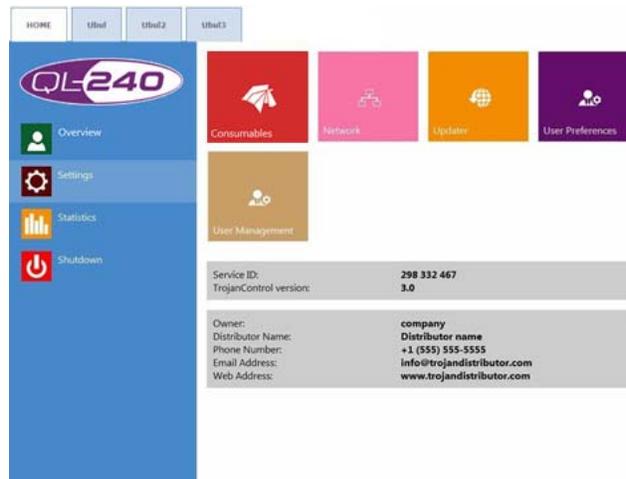
HOME - General Settings

Overview

- Print overview of actual printer(s) with status and preview of running print job(s)
- Up to 5 printers on 1 Touchscreen Control



Settings



Service ID for remote support

Service ID is the unique ID of the QL-240 printer. Based on the service ID the QuickLabel support team can access QL-240 Control remotely via the Internet.

Actual software version

Actual software version number of the QL-240 Control interface.

Owner and Distributor information field

The local QuickLabel distributor fills out the owner and distributor information field at installation. This field is not editable for users.

Consumables Button



- **Ink cartridge price** is the base of ink cost/label calculation in statistics menu. The actual price of a 250 ml ink cartridge should be typed here.
- **Print head price** when filled up also included in cost/label calculation in statistics menu.
- **Print head life time** is theoretical value which can be included in cost/label calculation as well. The value entered here represents the printed ink volume until a planned print head change.
- If you change a setting, choose the **Save** button to save the changes.

Network Button



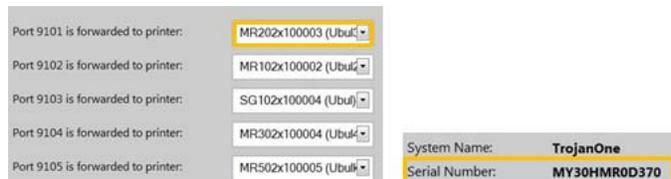
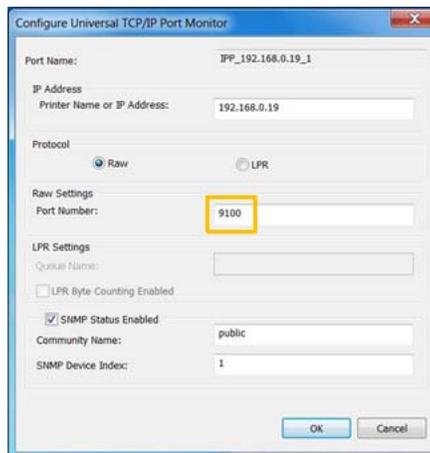
- Select **Use DHCP** checkbox to acquire IP address for the Touchscreen Control from the local network (as long as DHCP mode is selected, the Touchscreen Control ignores static IP settings).
- **Current IP address** is the IP address of the Touchscreen Control.
- **Restart QL-240 Control** button is an emergency button for re-initializing all QL-240 Control network connections both to printers and local network directions. Use it only if you experience problems with network communication. It can interrupt all running print jobs.
- **Advanced tab:** enables usage of Auto configuration scripts or Proxy Server wherever the local network policy requires these for network/Internet connection.
- If you change a setting, choose the **Save** button to save the changes.

- **Port forwarding:**

The default printer port is 9100. Print jobs sent to this port are printed on the default printer if there is a default printer selected. If no default printer is selected then the print job will be printed on the first printer in the row.

With the port forwarding option, users can print directly to the desired printer (up to 5 printers) from the user PC. Users do not have to go and select the active printer manually on the screen.

In order to do this, change the port number on the user PC in Windows OS at **Devices and Printers > QL-240 driver > Printer properties > Ports > Port settings** to 9101-9105 (from the default 9100) depending on which printer you want to print on:



Select printer serial number to assign printer from the list. You can find the serial number of each connected printer in the printer's tab in Diagnostics menu.

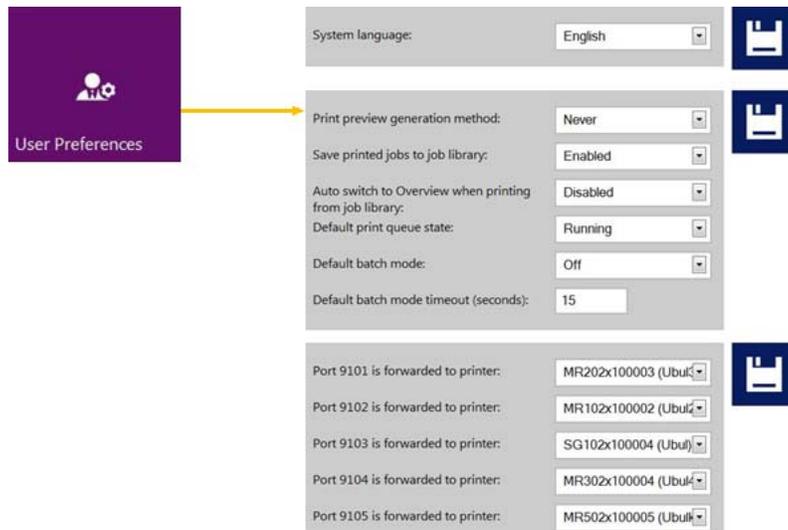
Note: After changing the port number in Windows, rename the printer in the devices and printers section. This makes the identification of the installed printer easier.

Updater Button



- By default for system updates the **Alternative update URL** field has to be empty.
- Press download button to download updates.
- If you change a setting, choose the **Save** button to save the changes.

User Preferences Button



- System language:** Choose desired language from the list. Press the Save button to switch into the selected language.
- Print preview generation method:**

When idle (default): creates one preview thumbnail image from the first image in the actual print job when print job arrives, then job is printed out. Previews for subsequent labels are created later in the background when system is in idle state.

Instantly: creates preview images from all the images in the actual print job when print job arrives, then sends job to print when finished with image creation.

Never: no preview.

The preview is available in the Job Library. *See “Job Library” on page 55.*
- Save printed jobs to job library:**

Enabled: The printed print job is stored and available for reprinting in the job library.

Disabled: The printed print jobs are not stored in the job library, however jobs that already are in the library will remain and be available for printing.

Note: *When preview generation is set to 'Instantly' it greatly increases the transfer time of large print jobs due to generating a preview image for every page in real time and can also cause Data Path Underrun error when large variable data jobs are sent.*
- Auto switch to Overview when printing from job library:**

Enabled: When printing from the job library the screen switches to overview mode.

Disabled: When printing from the job library the screen remains in job library view.
- Job library default sort order:** The order how the stored print jobs are displayed in job library. Can be name ascending/descending or date ascending/descending.

- **Default print queue state:**

Running: (Default) Print jobs are queued progressively as they are sent and processed in FIFO (first in first out) system. The queue can be managed from Print queue menu. *See "Print Queue" on page 57.*

Paused: Paused print job queuing.
- **Default batch mode:**

Batch mode means that the QL-240 printer is waiting for a certain period of time and batches the print jobs sent during the batch mode timeout. Batched print jobs are merged into 1 print job and printed out at once. Batched print jobs show as 1 print job in statistics.

Off: (default) Batch mode is switched off by default.

On: Batch mode is on.
- **Default batch mode timeout (seconds):**

If batch mode is on, the printer is waiting for the print jobs until the timeout interval expires. All print jobs sent during this timeout will be merged into 1 print job and printed out at once after the timeout expires.
- **Barcode scanner support in job library:** enabled/disabled.

When barcode scanner support is enabled, the search filter in Job Library menu will be active and only accepts input from a connected Barcode scanner (the virtual keyboard is disabled on screen) when searching for job names.

Note: *Rename print jobs to match with barcode input to make this function work.*
- **Use paging in job library:**

Enabled: Enables paging with finger swipe and with scroll bar in Job Library.

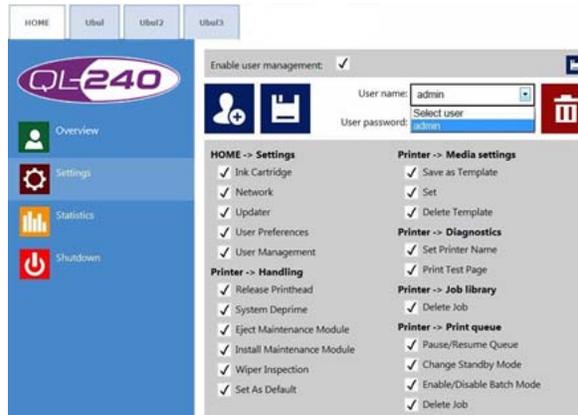
Disabled: Disables swiping and scroll bar in Job Library.
- **Decimal separator:** User can define separator for displaying decimals in the user interface.
- **Thousands separator:** User can define separator for displaying thousands in the user interface.

User Management button



- By default user management is not enabled, every function is accessible without authentication.

- Once the User Management is enabled (press save button to enable) authentication is needed for accessing specific functions in QL-240. A user with 'User Management' rights (like the built in 'admin' user) can create user accounts and can assign rights for each user to access certain functions in QL-240 Control software.



Note: Passwords can only contain numeric characters (only numbers). The default password for the admin user is 123. It is advised to change the admin password during installation. Take care not to lock out yourself: at least one user must have 'User Management' rights otherwise there is no way to add or change properties of other users. If you lock out yourself please contact Technical Support.

Statistics



Last Printed Jobs

- Statistics list for the last 30 printed jobs (contains: number of pages, print speed, ink consumption, ink cost/label calculation, ink + printhead cost/label, ink + media + print head cost/label calculation)
- Cost/label (ink only) calculation** is the cost/1 label in the actual print job based on cartridge price given at **HOME > Settings > Consumables** menu.
- Cost/label (ink + PH) calculation** is the cost/1 label in the actual print job based on ink cartridge price and print head price given at **HOME > Settings > Consumables** menu. Print head cost is added.

- **Cost/label (ink + PH + media) calculation** is the cost/1 label in the actual print job based on ink cartridge price and printhead price given at **HOME > Settings > Consumables** menu and in addition media price given at **Printer tab > Media settings** menu, m² price for continuous material and label price for die-cut or blackmarked material).
- **Job ID** is the name of the actual print job in the job library. The name can be specified instead of random numbers in job library. See “Job Library” on page 55.

Engine & Printhead Usage button

Usage data

TrojanControl

Ink	Length	Area	#Labels	#Jobs
33.613 ml	36.485 m	4.791 m ²	5 952	238

Engine: MY2A4MR00985

Ink	Length	Area	#Labels	#Jobs
33.613 ml	36.485 m	4.791 m ²	5 952	238

Print head: B001KXD

Ink	Length	Area	#Labels	#Jobs
0.160 ml	0.300 m	0.060 m ²	1	1

- **QL-240 Control:** Total statistics for all the connected QL-240 printers for ink usage, printed length, printed area, number of labels and printed jobs.
- **Engine:** Total statistics and history for print engine(s). If there is a print engine replacement, the counter registers the serial number and statistics for each print engine. Also if multiple printers are connected, the software registers all connected printer statistics separately.
- **Print head:** Total statistics and history for all the print heads which have been connected to the Touchscreen Control. If there has been a printhead replacement, the counter history also contains the counter data of the previous printhead.

***Note:** A printhead must print at least 1 page to be able to register the usage statistics. A freshly installed printhead that has not printed any pages at the certain QL-240 printer is displayed as an empty record.*

***Note:** Printhead usage data is the total usage of the particular printhead in the particular QL-240 printer. In case the particular printhead has been used in other QL-240 printer(s) too, that usage data is not registered here.*

- Viewing statistics in a browser or exporting statistics data to a CSV file
 Statistics data from **HOME > Statistics** menu can be exported and saved into a CSV file from a user PC which is connected to the same network as the Touchscreen Control.

Actual IP address of the Touchscreen Control can be set or acquired at **Home > Settings > Network** menu.

Type the actual IP address of the Touchscreen Control into a browser at a user PC. Press **Export to CSV** button on the page to save the statistics into a CSV file.

***Note:** Ink consumption is more detailed in this view and displayed for each used base color (CMYK) and in total as well.*

Shutdown menu

Shutdown button only shuts the Touchscreen Control down. The connected QL-240 printer(s) can be shut down by either pressing the physical power button on the printer or by pressing the shutdown button at **Printer tab > Handling menu**.

Printer Handling



Stop printing / Clear error

- When pressed while printing it stops the printing.
- When pressed in Roll2Cut mode (while not printing) the QL-240 ejects media.
- When pressed in Roll2Roll mode (while not printing) the QL-240 cuts media and switches to Roll2Cut mode.

Pinch / Feed Media

- Press once to feed media.
- Press twice to switch to Roll2Roll mode and feed media.

Note: In Roll2Roll mode after 3 minutes of not printing, the QL-240 printer cuts the media and switches back to Roll2Cut mode (the media remains inside at the entry sensor). This is normal and it is to protect the printhead from dehydration. To switch back to Roll2Roll mode press Pinch/Feed Media button.

Set as Default

- If more than one printer is connected to QL-240 Control the default printer will print incoming jobs automatically. If no printer is explicitly specified as the default, the first printer is the default printer.
- Default printer can be selected by selecting the printer's tab and pressing Set As Default

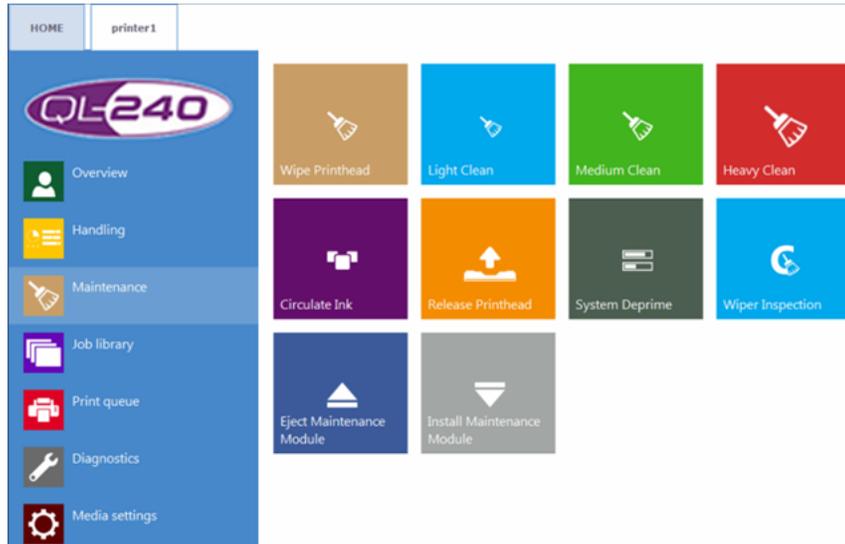
Replace Printhead

- Pumps the ink back into the Ink Tanks
- Opens the Printhead latch to remove & install the Printhead

Shutdown

- Shuts the selected printer down
- Touchscreen Control is still running

Maintenance



Wipe Printhead button

Maintenance module performs printhead wiping to clean the surface of the printhead.

Light Clean button

Additional maintenance routine for fixing fine streaks and for cleaning the printhead surface. This routine requires approximately one minute. It can be run multiple times. Use this routine when automatic maintenance routines and ink circulations are not enough.

Medium Clean button

Additional maintenance routine for fixing streaks, spitting ink through the nozzles, and for cleaning the printhead surface. This routine requires approximately 2-3 minutes. It is a heavier form of Light Clean. Use this routine when automatic maintenance routines, ink circulations, and Light Cleanings are not enough to recover print quality. Usually when medium clean is needed, it is a sign that the particular printhead is getting aged and near the end of life.

Heavy Clean button

Additional maintenance routine for fixing serious streaks and nozzle dehydration. Heavy cleaning requires approximately 5 minutes. This routine is only advised when Medium clean does not recover print quality. Heavy cleaning creates a significant amount of waste ink. Usually when heavy cleaning is needed, it is a sign that the installed printhead has reached end of life or the printhead nozzles are heavily dehydrated.

Circulate Ink button

Circulates ink in the system to purge air bubbles. This function does not create waste ink and can be run as many times as needed. One ink circulation cycle requires only a few seconds.

Note: *Ink circulation is a very useful function and can help to remove fine streaks generated by air bubbles which might be blocking some printhead nozzles. It requires less time than Light Cleaning.*

Release Printhead button

Removes the ink from the printhead and opens up the printhead latch to be able to install/replace the printhead physically.

System Deprime

Removes most of the ink from the tubes and pumps the ink back into the ink cartridges from the whole ink system. It is recommended to do a system deprime prior to transportation of the printer or servicing the printer.

Wiper Inspection

The wiper roller of the maintenance module lifts up and rotates slowly for visual inspection. The clamshell must be opened for visual contact. This can be used without ejecting the Maintenance Module.

Eject Maintenance Module

Ejects the maintenance module (MM) from the print engine.

Note: *The transport module of the print engine must be opened prior to ejecting the MM.*

Install Maintenance Module

Moves the maintenance module (MM) back to the proper position, so the MM can protect the printhead.

Job Library

- Stores 30 printed jobs with random job name by default (print streams uploaded from driver)
- Print jobs can be renamed: Renamed print jobs are stored beyond the default 30 with random name. Only the drive space is the limit for storing jobs.
- Stored labels:
 - Print, change number of copies, print from a certain page number.
 - Information about each print job (size, number of labels, speed, cost per label, applied color profile etc.).
 - Preview of print job.
 - View images in a print job.
 - Delete print job(s).

- Can swipe on touchscreen or use the scroll bar for paging when paging is enabled at HOME > Settings > User Preferences menu.



Information button



- **Print one copy for cost calculation button:** Prints only one copy without pre or post job maintenance. Focus is on cost/label calculation not on quality. Pure ink cost of 1 label.
- **Applied color profile:** the color profile applied in the driver when the job was sent.
- **Collate button:** Describes the order how the different pages will be printed within one print job when printing a multi-page file.

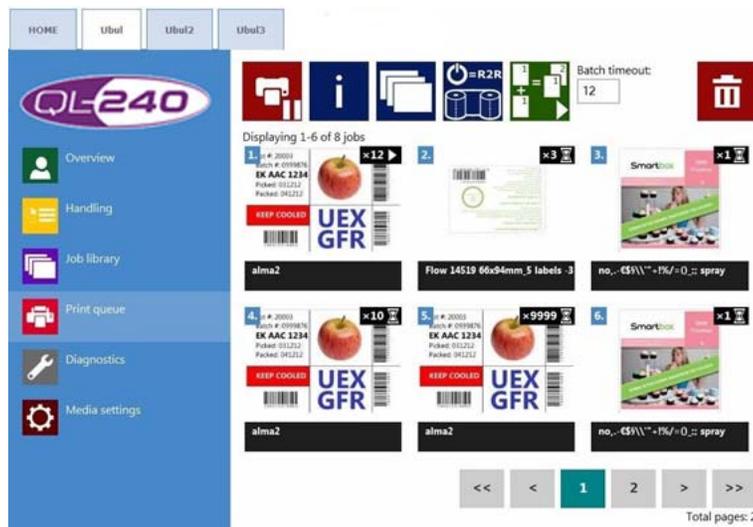
Copies of a page are printed one after the other within a print job.

Copies of pages are printed in sequential order within a print job.

- **Print From button:** Used when the job contains different pages (variable data, different images etc.) and user wants to print out the stored job from a certain page number.
- **Force Stitch Mode checkbox:** Normally Stitch mode can be enabled from the printer driver. However, enabling the stitch mode checkbox will create a stitch mode job from the actual job when printed. This function is useful when the job was sent from the RIP software where stitch mode is not available.
- **Rename print job:** Tap on the job name to rename it.

Print Queue

- Print jobs are queued progressively as they are sent and processed in FIFO (first in first out) system. The queue can be managed from Print queue menu.
- The print queue is stored even if the Touchscreen Control or printer is restarted.
- Each connected QL-240 printer has its print queue. Each print queue can be managed individually at the printer's tab.
- The currently printing job in the queue cannot be deleted.



Pause/Resume Print Queue button

While print queue is paused the jobs are pending in the queue and printing only starts when the queue is resumed.

Information button

Same as in job library.

Batch Mode on/off

Batch mode means that all jobs sent within a defined timeout period will be merged into 1 job and will be printed out at once when the timeout expires. The timeout counter begins when batch mode is switched on.

Batch mode timeout

Period of time while jobs are merged together when batch mode is on.

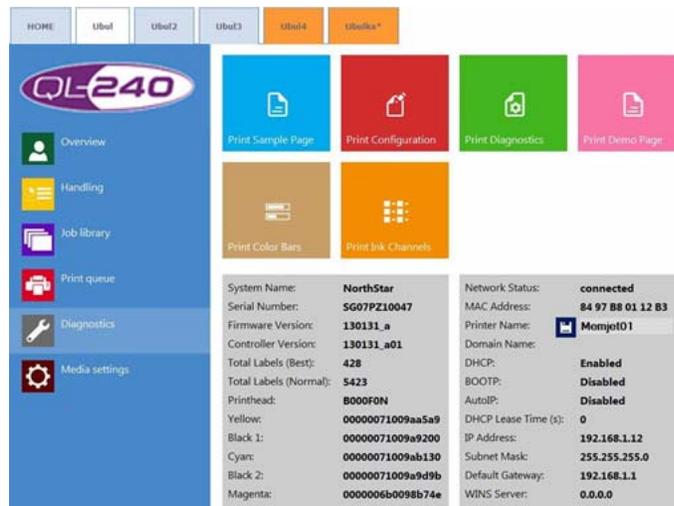
Standby Mode button

Can be Roll to Roll or Roll to Cut.

- If standby mode is set to roll to cut mode, then the printer will switch to roll to cut mode after the next print job automatically.
- If standby mode is set to roll to roll mode, then after the first job is printed, the QL-240 printer will switch to roll to roll mode and not cutting at the end of a job. This way starting the next job can be paused to load the media to the rewinder without wasting any labels. This is an alternative to switching to roll to roll mode normally by pressing the pinch button twice where some empty labels are ejected which are wasted.

Note: Even if the default mode is set to roll to roll, if there is no printing for 3 minutes, then the machine will cut the media, retract, and switch back to roll to cut mode until the next job is printed.

Diagnostics



- Information about software, serial numbers, total label counter.

Sample page

Sample page with current NVM and variable settings (A4 size).

Configuration page

Containing current configuration settings (A4 size).

Diagnostics page

Containing system information (A4 size).

Demo page

Demo image (A4 size).

Color Bars

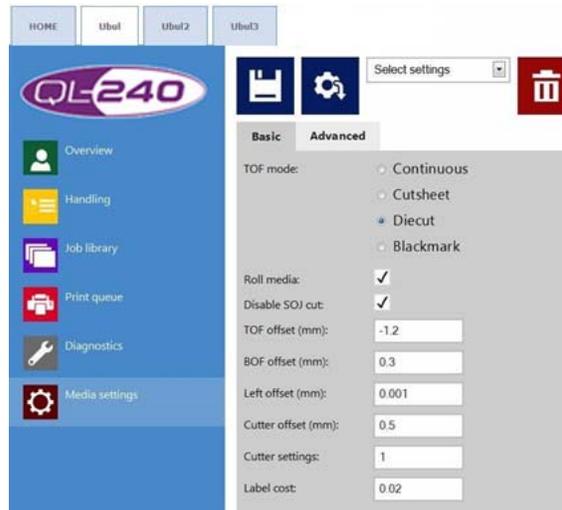
Standard color bars for checking printhead nozzles, mixes CMYK colors (A4 size).

Ink Channels

Printing a color bar with each ink channel, no ink mixing (CMYK - A4 size).

Media Settings

Media Settings - Basic



TOF mode

TOF = Top of Form - selecting the algorithm to detect top of the label.

- **Continuous** - no gaps between labels, the label height will decide the top of label.
- **Diecut** - gaps between labels, the labels are pre die-cut on the liner and built-in label gap sensor detects the label gaps as the top of the label.
- **Blackmark** - pre-printed blackmarks or registration marks on the media and built-in blackmark sensor detects the blackmarks as the top of the label.
- **Cutsheet** - not roll media, cut-sheets are sheets of media (e.g.: A4 size cutsheet)

Note: There is no cutsheet feeder for the printer. Paper sheets can only be loaded manually one by one into the printer. Basically this mode is for printing diagnostics pages only. When printing on cutsheet media do not pinch the media in advance, start printing and manually keep the media at the paper entry zone until the printer grabs it.

Roll Media

If **Roll Media** checkbox is selected then QL-240 is communicating with the winders. If winders are not connected then printing will not start unless the checkbox is unchecked.

Volume Winder Control checkbox

This checkbox must be marked when using the Volume Winder system (enables communication with the Volume Winders) and disabled when using the Standard Winder system. Checkbox must also be turned off when printing in cutsheet mode.

Disable SOJ cut

SOJ = Start of Job. Disables/enables start of job cut at roll to cut mode.

TOF offset (mm)

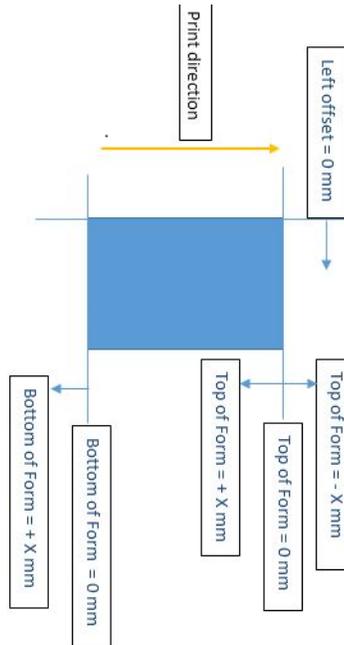
TOF = Top Of Form (top of label) can be +/- depending on moving the top of the image up or down on label. Limits are -160mm to +160mm.

BOF offset (mm)

BOF = Bottom of Form (bottom of label) can be +/- depending on moving the bottom of the image up or down on label. Limits are 0mm to 100mm.

Left offset (mm)

Moving printed image towards the right compared to the left edge of the printhead. Limit is 150mm.



Minimum gap (mm)

Sets the gap size between 2 pages in continuous mode. The recommended gap is at least 3mm.

Cutter offset

Can be +/- depending on moving cutting position up or down.

Cutter settings: (cut after N labels)

0 = cutting after the last label when print job ends.

1 = cutting after each printed label

2 = cutting after every second label

N = cutting after N labels

Square meter cost/Label cost

This is where the price of the media can be registered. The label material price when filled will get into the cost/label calculation formula. *See "HOME - General Settings" on page 46.*

When TOF mode is continuous, the field is called 'Square meter cost'.

When TOF mode is diecut/blackmark/cutsheet, then field is called 'Label cost'.

Media Settings - Advanced



KWS mode: KWS = Keep Wet Spitting

KWS is a function to protect the 70,400 nozzles in the printhead from dehydration. In practice it means that during printing all of the nozzles fire some ink, even the nozzles which do not take part effectively in printing. As a result tiny (almost microscopic) dark spots of ink might be seen on the printed label's background, especially when the background of the printed image is white. When those tiny spots are not acceptable from the print quality point of view, this function can be reduced or switched off completely.

- **Default:** The QL-240 chooses (normal or light) KWS mode depending on the print job.
- **Normal:** Normal KWS level ensures maximum protection for the printhead nozzles.
- **Light:** Decreased KWS level. Not advised to use for longer periods.
- **Off:** KWS is turned off. Best print quality but reduced printhead lifetime. Only use this option for small amount of labels.

Caution: Reducing or turning off KWS for a longer period of time can result in print quality defects due to the dehydration of nozzles and can significantly reduce the lifetime of the printhead! We at QuickLabel do not advise turning this feature off completely for a long period of time otherwise we cannot accept warranty claims originated from disabling KWS option!

Reduce SOJ maint

Reduce the start of job maintenance.

Disable mid job maint

Disables maintenance during printing.

By default there is an automatic maintenance during printing after a certain printed length. This mid job maintenance pauses the printing for 1-2 seconds and includes some ink circulation and warming of the ink inside the printhead. If this pause is not acceptable for some reason, this function can be disabled here. Mid job maintenance distance is not adjustable.

Note: It is not advised to turn off mid job maintenance at long runs as it helps to keep print quality consistent throughout the whole print job.

Unwinder / Rewinder tension adjustment (Volume Winders Only)

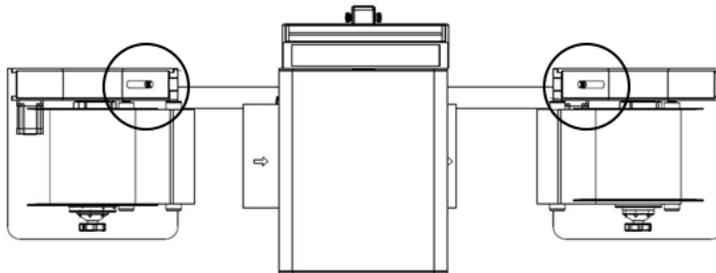
This option is only visible when Roll media checkbox is checked at **Media settings > Basic** tab.

Wider and heavier label material requires more tension, whereas narrow and light label material requires less tension from the winders.

- **Unwinder tension R2C (Roll to Cut mode):** adjusts the tension of unwinder's dancer arm in roll to cut mode (rewinder is not loaded). Minimum value is 10, maximum value is 90.
- **Unwinder tension R2R (Roll to Roll mode):** adjusts the tension of unwinder's dancer arm in roll to roll mode (rewinder is loaded). Minimum value is 10, maximum value is 90.
- **Rewinder tension R2R (Roll to Roll mode):** adjusts the tension of rewinder's dancer arm in roll to roll mode. Minimum value is 10, maximum value is 90.

Winder tension can also be adjusted manually with a knob on the Unwinder/Rewinder.

- Slightest tension is when the knob is all the way up.
- Highest tension is when the knob is all the way down.



Label Gap and Blackmark sensor adjustment

This option is only visible when TOF mode is set to Diecut or Blackmark at **Media settings > Basic** tab.

- **Sensor sensitivity:** adjusts reading level of the label gap/blackmark sensor depending on which TOF mode (diecut/blackmark) is selected at **Media Settings > Basic** tab. For the gap sensor minimum value is 1, maximum value is 7. For the blackmark sensor minimum value is 1, maximum value is 50.
- **Sensor noise reduction:** adjusts reading level of the label gap/blackmark sensor. Minimum value is -1, maximum value is 255.

The QL-240 printer can be used for “Label gap”, “Blackmark”, “Continuous (No mark)” and “Cut sheet” media. The print engine uses its transmissive sensor to detect the media edge and gap, and reflective sensor to detect the blackmark of the media.

In general, the majority of the markings can be used with the default setting. However, users can change the printer settings to be able to use certain non-standard gaps/black markings. If the default setting does not read the gaps/black markings, users can adjust the reading levels of the sensors in order to detect the gap/black markings. Please keep in mind that this modification may still not work for certain media.

QL-240 Control Light Interface

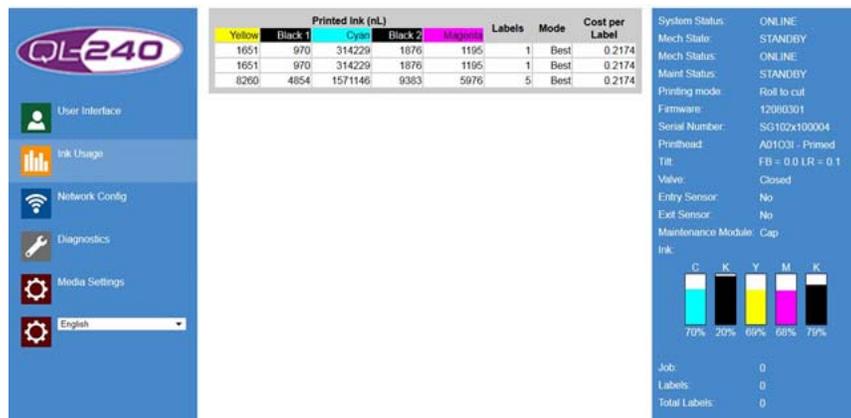
- QL-240 Control Light interface looks quite similar compared with the full version.
- Once the printer driver is installed, QL-240 Control Light is available in a browser window by typing the IP address of the printer. *See “Connecting QL-240 Control Light” on page 41.*
- In case of USB connection, QL-240 Control Light is available via the Toolbox application which installs with the driver. *See “Connecting QL-240 Control Light” on page 41.*
- Multi language interface is also available in QL-240 Control Light.

User Interface



- All of the buttons have equal functions as in QL-240 Control software. *See “QL-240 Control Interface” on page 45.*
- Select the desired language in the language list to switch QL-240 Control Light's system language.
- Shutdown button shuts the QL-240 printer down.

Ink Usage



- Ink usage statistics separately for all colors and cost/label calculation.

- Ink consumption volume is displayed in nano liters.

Note: The ink usage statistics are reset every time the QL-240 printer is restarted.

Network Config



- Change printer name, static IP address (if local area network policy requires). Default setting for IP configuration is DHCP (getting IP address from local network automatically).

Diagnostics



- Printing sample and diagnostic pages (all pages are set to A4 size cutsheet).
- Serial numbers, software version, network settings displayed.

Reset Job Counter

- Resets the printed jobs counter in the print engine's firmware.
- Counter can be seen in status bar in bottom right corner.

Reset Page Counter

- Resets the printed labels counter in the print engine's firmware.
- Counter can be seen in status bar in bottom right corner.

Note: The above counters reset every time the QL-240 printer is restarted.

Media Settings



Cartridge price

Setting for cost calculation.

Disable SoJ Cut

Soj = Start of Job cut. By default the QL-240 does a cut at the start of each print job. This is to avoid having not straight cut or not complete labels on the beginning of rolls. Start of Job cut can be disabled by unchecking the checkbox.

Reduce SOJ maint

Reduced start of job maintenance.

Disable mid job maint

Disable mid job maintenance when selected (no maintenance during printing).

Standby Mode

Can be Roll to cut or Roll to Roll depending on user setting.

Note: Standby mode means that the printer is behaving as the standby mode setting at the beginning of the print job (example: when set to R2R the printer will not cut at the end of the print job).

Winder tension adjustment

Same as in QL-240 Control. See “Media Settings” on page 59.

Note: Winder tension adjustment settings are only visible when 'Roll Media' checkbox is checked.

Note: Sensor reading level adjustment settings are only visible when ToF Mode is set to diecut or blackmark.

The rest of the media settings are equal to QL-240 Control media settings. *See “Media Settings” on page 59.*

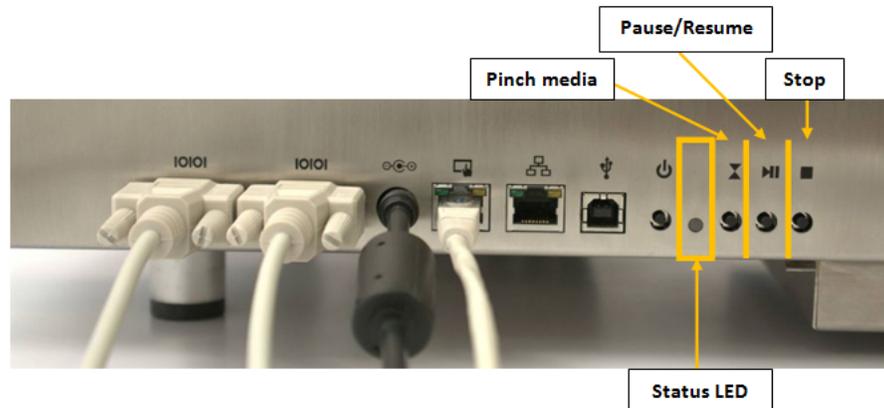
Note: *Offsetting in QL-240 Control Light is done in microns whereas offsetting is in millimeters in the full version. For 1mm offset from QL-240 Control Light enter 1000 as the offset value (1000 micron = 1 millimeter).*

Note: *Winder tension adjustment settings are only visible when 'Roll Media' checkbox is checked.*

4

Status LED on QL-240 Printer

- The Status LED at the back of the QL-240 housing is a quick diagnostic tool.
- It has different states and colors to provide feedback for the users about the status of the printer.



State	Conditions	Blink rate	Color
idle	Media is not pinched	constant lit	blue
idle	Media is pinched	1 blink per sec	blue
waiting	Media is Roll2Roll loaded, duration > 10 sec	1 blink per sec	yellow
waiting	Media is Roll2Roll loaded, duration <= 10 sec	4 blinks per sec	yellow
printing	Print job is running	constant lit	green
waiting	Print job is paused, Roll2Roll, duration > 10 sec	1 blink per sec	green
waiting	Print job is paused, Roll2Roll, duration <= 10 sec	4 blinks per sec	green
waiting	Print job is paused, Roll2Cut	1 blink per sec	green

State	Conditions	Blink rate	Color
maintenance	Print Engine is up and doing maintenance	constant lit	purple
maintenance	Print Engine is booting up	1 blink per sec	purple
error	Print Engine is in error state	constant lit	red

Press STOP and PINCH buttons at the same time for 3 seconds. The Status LED will turn WHITE indicating that you entered into a selection menu. You have the following options:

- Press PINCH button to set QL-240 to DHCP mode (gets an IP address from the network).
- Press PAUSE button to set QL-240 to Static IP address mode (Static IP address can be set in QL-240 Control and QL-240 Control Light interface).
- Press STOP button to exit menu.

5

Updating QL-240 Control Software and Firmware

QuickLabel is regularly updating the QL-240 Control interface and the firmware for the printer.

- If an Internet connection is available for the Touchscreen Control, the update is just pressing the download button and following the installation process.
- If an Internet connection is not available, then an offline update package can be downloaded from our website and installation can be done from the local network.
- Updating firmware on standalone QL-240 printers requires a technician.
- For updating the printer firmware, a USB A-B cable (not included) must be connected between the QL-240 printer and Touchscreen Control, or between a user PC and QL-240 printer.

Automatic Updater

The updater section can be found in **HOME > Settings > Updater** at QL-240 Control. Actual software version can also be checked at **HOME > Settings** section.

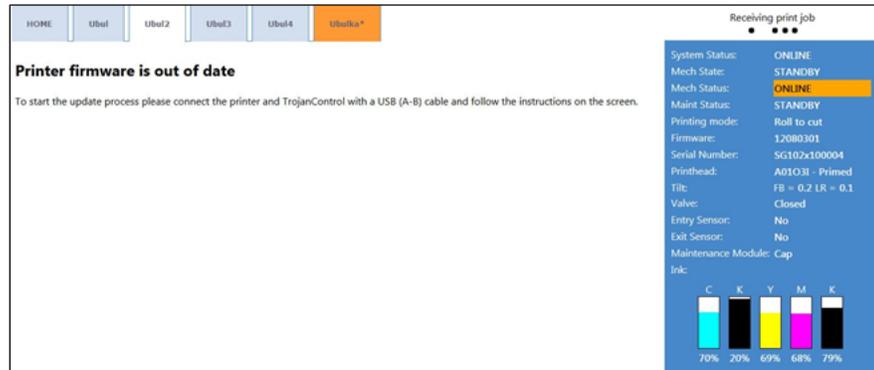


- Connect the Touchscreen Control to the Internet.
- Leave **Alternative update URL** field empty. The Alternate update URL field is reserved for customized updates and for offline updating.
- Press green download button.
- Installation starts automatically.
- Press **NEXT** button when asked during the installation.
- Check QL-240 Control version after installation.

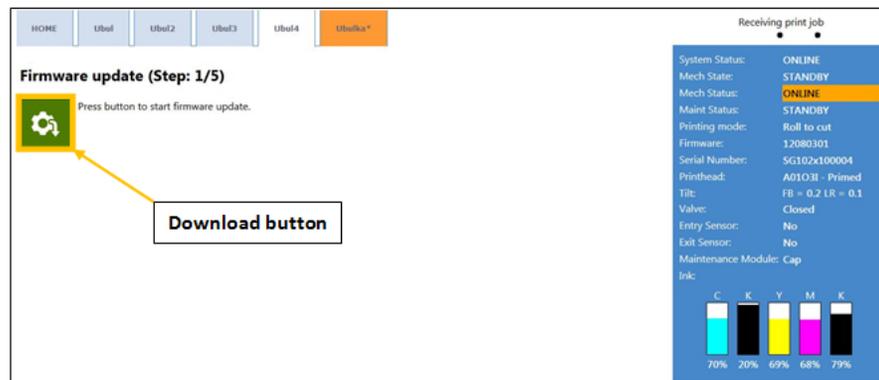
Note: The QL-240 Control may restart several times during the update process.

Firmware Upgrade

- During QL-240 Control software update the installer detects if QL-240 firmware is not the latest version.



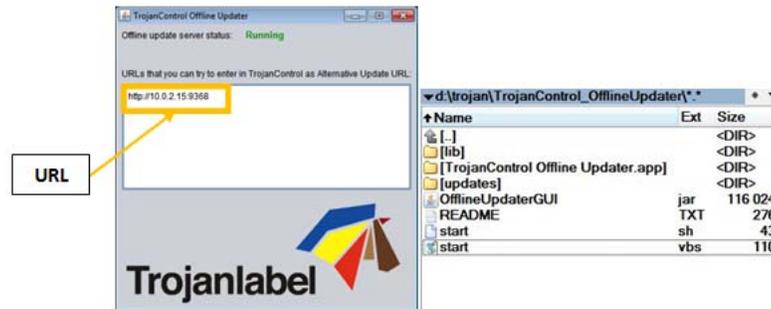
- When the USB cable is connected and detected between the QL-240 and the Touchscreen Control the firmware upgrade can begin.
- Press download button to begin firmware update.



- Wait until the firmware upgrade finishes. This may take 15-20 minutes.
- After the upgrade has been completed the main screen of QL-240 Control software returns.

Note: Automatic firmware upgrade is not available for standalone usage of the QL-240 printer (no Touchscreen Control). For upgrading the firmware on standalone units please contact technical support.

Manual Offline Updater



- "The actual offline updater package can be obtained in zipped format.
- Copy and unzip the updater package to a user PC which is connected to the same network as the Touchscreen Control.
- Double click on 'OfflineUpdaterGUI.jar' to start the update server.
- The update server window will open. The window should be left open as long as the update is going on.
- The update server will provide an update URL (usually with the IP address of the certain user PC).
- Type the update URL into **Home > Settings** 'Alternate update URL' field and press the save button.
- Press green download button.
- Installation starts automatically.
- Press 'NEXT' button when asked during the installation.
- Check QL-240 Control version number after installation.

Note: The QL-240 Control may restart several times during the update process.

- After updating the QL-240 Control interface, the updater will detect the current Firmware version and will start updating the QL-240 printer firmware when needed.

Updating firmware and QL-240 Control Light on a Standalone QL-240

- The manual update is recommended to be performed by technical support.
- Manual update requires the firmware package to be downloaded and also requires USB connection between the QL-240 printer and a user PC on site.

6

Maintenance

- There are automatic maintenance routines running from the printer's firmware regularly between print jobs and after certain periods of time.
- However to ensure reliable operation and high print quality while using the product, regular inspection and maintenance steps are required. These include mechanical subsystem checks, occasional cleaning, consumables changing and printhead cleaning.

Standard Maintenance

General and periodic maintenance procedures are needed to keep the Print Engine in good condition. These procedures can enhance the lifetime of the print engine significantly.

- Use the table below to determine which maintenance task (inspection, cleaning, lubrication, or replacement, etc.) to perform at a given time period or usage interval.
- The following tasks are to be performed by the operator only with very basic supplies, no special tools are needed.

General Maintenance Tasks	Interval				
	Daily	Bi-weekly	Monthly	Annually	As Needed
Printhead (manual wipe)					Wipe
PPCA Contact Cleaning					Every PH Removal
IDS Fluidic Couplings					Every PH Removal
Aerosol & Debris Removal	Clean	Clean	Clean	Clean	Clean
Optical Sensors - Paper Path		Clean	Clean	Clean	
Wiper Inspection		Inspect	Inspect	Inspect	
Wiper Cleaning			Clean	Clean	
Waste Ink Absorber			Inspect	Inspect	Replace

General Maintenance Tasks	Interval				
	Daily	Bi-weekly	Monthly	Annually	As Needed
Ink Tubing			Inspect	Inspect	
Lift Motor Gear			Inspect	Inspect	
Grit Rollers - Paper Path			Inspect	Clean	
Moving Parts - Motor Test				Test	
Maintenance Module				Clean	
Ink Tank Latches				Inspect	
Cutter				Inspect	

Please contact Technical Support about performing the monthly and annual maintenance tasks.

Repair and replacement tasks should be performed by qualified technicians.

In order to avoid personal injury, always use appropriate personal protection when performing maintenance tasks:

- Clothing protection
- Powder-free nitrile gloves
- Lint-free cloth wipes - It is critical that the wipes used have to be soft to avoid scratching the printhead, and lint-free to avoid contaminating the printhead.
- De-ionized (DI)/Distilled water (electronics grade) - Use only deionized or distilled water for cleaning the unit. Take care and avoid contaminating the printhead with cleaners, lubricants or other chemicals.

Regular Cleaning/Checking Tasks

Checking/Cleaning Filters

The QL-240 printer has 2 filter drawers underneath the bottom plate of the printer housing.

Aerosol filter (HEPA filter) in the front drawer:



Dust filter in the back drawer:



Both filters are consumables and can be ordered as a spare part. Part numbers are 20020011 for the aerosol filter and 20020012 for the dust filter.

Note: Both filters can be cleaned under tap water or by blowing them out with compressed air.

Checking the Wiper Roller (MFR)

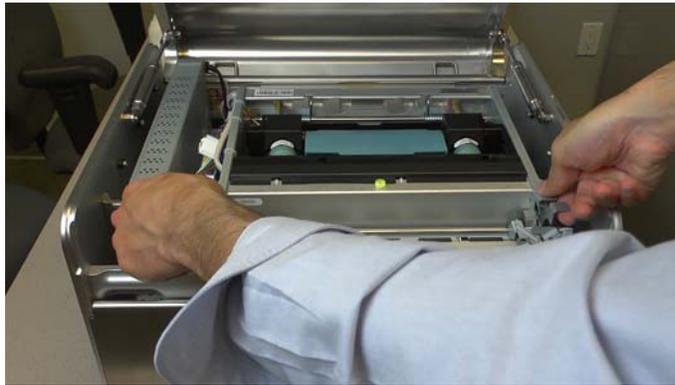
The 10001360 Wiper Roller (microfiber roller) is a consumable. Checking the wiper roller is for verifying that the microfiber roller is not worn down and can still clean the printhead properly.

- 1 Open top cover and front door on the printer housing.
- 2 Press the **Wiper Inspection** button at the **Printer tab > Handling** menu

The effect of the wiper inspection takes about 1-2 minutes, then Maintenance Module goes back to the actual position. If this time is not enough for completing the check, then Wiper Inspection can be repeated.

Note: The clamshell tower must be opened to gain visual access to the wiper roller.

- 3 Open the transport module by pressing the latches upward and lifting the transport module.



- 4 Visually inspect the wiper roller.



The wiper roller comes up and it is rotating slowly. Visually inspect the wiper roller. Remove any particles that might be stuck on the roller and could damage the printhead nozzles. Look for any visual damage on the roll and verify that surface of the MFR is “fluffy” still. In case the surface of the roller is shiny, then replacement of the MFR is recommended.

Performing a Manual Wet Wipe on the Printhead

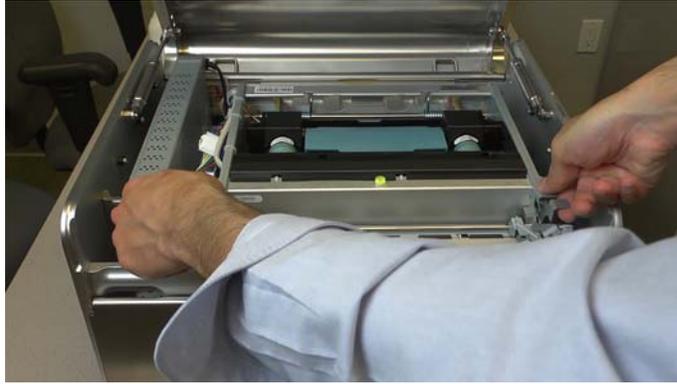
Manual wet wipe function is important for keeping the printhead healthy and to preserve the print quality over time. It is advised to do a manual wet wipe on the printhead at least once in every week.

This procedure requires powder-free nitrile gloves, distilled water, and a lint-free cloth.

Warning: Only use distilled or de-ionized water for cleaning the printhead. Never use any chemicals or alcohol for cleaning/wiping the printhead. Chemicals and alcohol are damaging to the printhead nozzles.

- 1 Open top cover and front door on the printer housing.

- 2 Open the transport module by pressing the latches upward and lifting the transport module.



- 3 Wipe the printhead with a wet lint-free cloth from one end to the other.



Note: Wiping should always be just a single move from one end to the other. Never wipe back and forth as that would transfer some waste ink back to the printhead nozzles contaminating the colors.

- 4 Close the transport module and top cover of the printer.

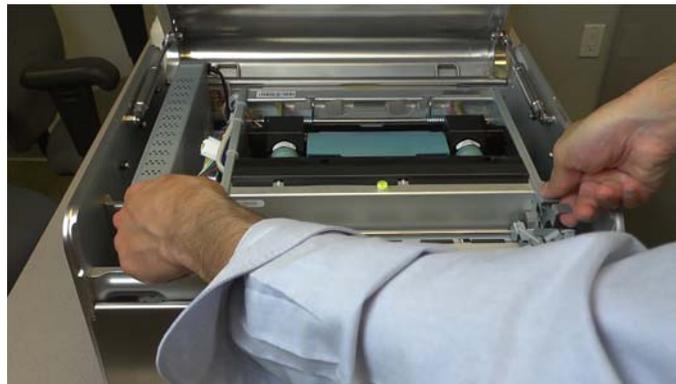
Cleaning the Maintenance Module (MM)

- 1 Open top cover and front door on the printer housing.
- 2 Remove the cross bar from in front of the print engine.



The crossbar is fixed by 2 latches on the inner side of the bar. Pull both latches towards the middle (1) and pull out the cross bar (2).

- 3 Open the transport module by pressing the latches upward and lifting the transport module.



- 4 Press the **Eject Maintenance Module** button in the QL-240 Control Maintenance menu to eject the maintenance module.
- 5 Pull out the Maintenance Module (MM).

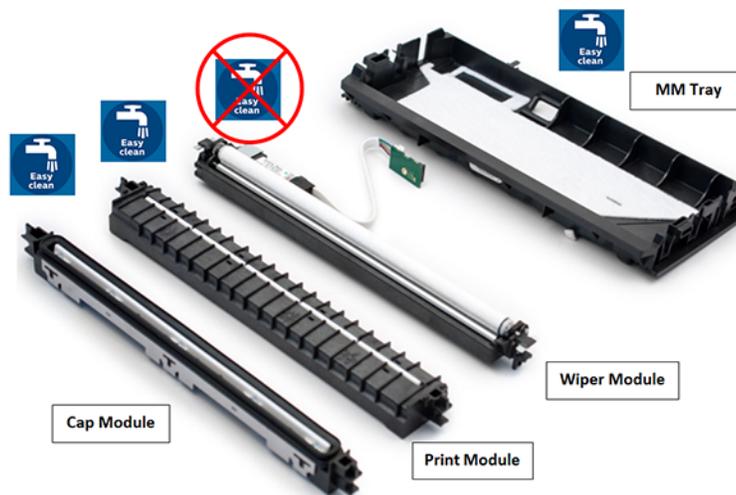


- 6 Disconnect the flexible cable from the back of the maintenance module. There is a latch that has to be loosened before disconnecting the flexible cable.



- 7 Clean the maintenance module (MM) tray, the cap module, and the print module under tap water.

Caution: Do not clean the wiper module with tap water.



- 8 Reinstall the maintenance module after cleaning. Connect the flexible cable and close the latch.



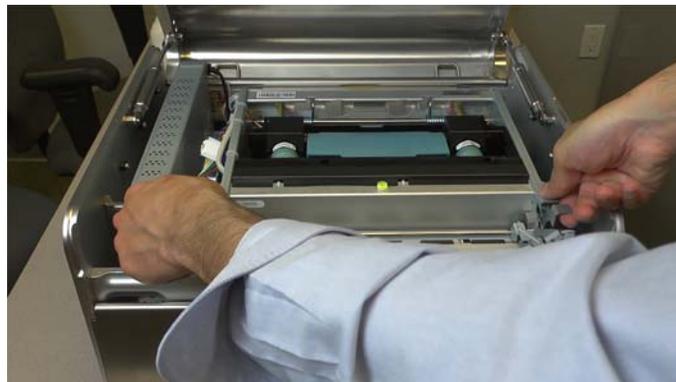
- 9 Carefully insert the maintenance module back onto the rails and turn the gear manually to drive the maintenance module in, but only until the gear gets hold over the maintenance tray.



- 10 Press the **Install Maintenance Module** button in the Handling menu to install the maintenance module.
- 11 Close the transport module and install the cross bar.
- 12 Close the top cover of the printer.

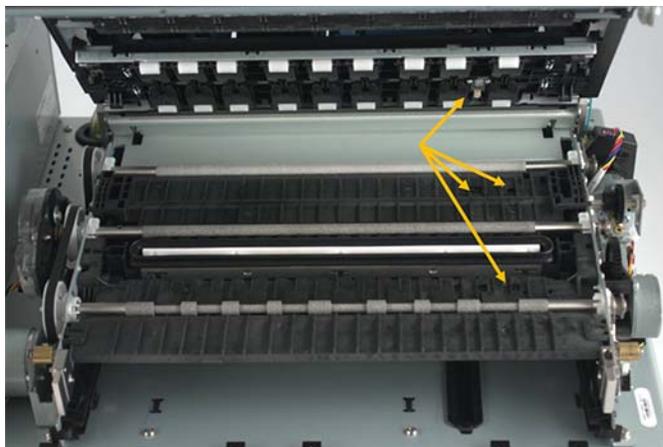
Checking/Cleaning the Paper Path

- 1 Open top cover and front door on the printer housing.
- 2 Open the transport module by pressing the latches upward and lifting the transport module.



- 3 Use a wet cloth and carefully clean the paper path area (except printhead) and the entry/exit/blackmark sensors from any dust and debris.

Caution: Do not wipe the printhead surface with the wet cloth. Manual wiping of the printhead is only with lint-free cloth and distilled/de-ionized water.



Caution: While cleaning the paper path area, the printhead is unprotected. After the cleaning, the transport module must be closed immediately and printhead must not be exposed to open air for a longer period of time.

Consumable Change

The main consumables in the printer are the ink cartridges and the printhead. The most frequent user intervention during the lifetime of the printer is the ink cartridge and printhead replacement.

When the printer has run out of a particular color of ink, the QL-240 Control will display a message on the screen specifying which tank is out of ink. Remove the empty tank and insert a new one and the printer will operate again as before.

Note: All ink cartridges must be installed and recognized to be able to print.

If the operator needs to change the printhead due to unrecoverable printing defects, select Replace Printhead in QL-240 Control. This starts a wizard that will guide the operator through the printhead changing procedure. Follow the steps and wait until the wizard finishes.

Prepare the Printer for Transportation

Short Distance Transportation

In most cases the transportation is done on land with a car or a truck.

- **System deprime** to remove the ink from the system. The ink from the tubing is pumped back to the ink cartridges from all color lines. Use **System Deprime** button in QL-240 Control or QL-240 Control Light at **Printer tab > Handling** menu to perform this action. At the end of the system deprime process the printhead latch opens up allowing the printhead to be removed.

- **Remove printhead.** When the printhead latch opens up, remove the printhead from the printer. Use the original packaging of the printhead for transportation.

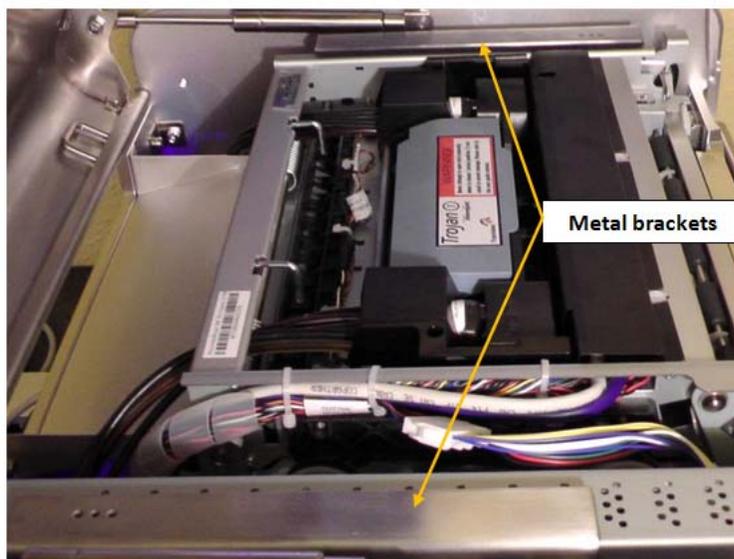
Note: Use a lint-free cloth and soak it in deionized water to make it wet. Put the wet cloth into the orange plastic cap of the printhead and store the printhead with the wet cloth in the cap. Also store the printhead box in a sealed bag for the duration of the transportation. This protects the printhead from dehydration.

- **Remove ink cartridges.** Transport cartridges standing upwards to avoid leaking.
- **Use blue rubber dock protector caps to seal the revolver heads.** This avoids ink leaking during transportation from the revolver heads. A few drops of ink can remain there after system deprime.



Dock protector caps protecting the revolver heads

- **Attach metal brackets to keep the print engine fixed.** These brackets are part of the original packaging and can be reattached for transportation. The two brackets protect the print engine from moving inside the printer housing if a heavy impact happens during transportation (sudden braking, for example).



Metal brackets

- **Use the original packaging material and boxes for the transportation.** The QL-240 packaging is made for protecting the printer from impacts. Do not throw away the original packaging.

Long Distance Transportation

In case the QL-240 printer has to be shipped overseas by ship or with air cargo.

- **The washing kit** has to be used to wash out all the ink from the ink delivery system.
Please contact Technical Support to perform the washing process.
- After washing out the ink, the procedure to prepare the printer for transportation is the same as described above at short distance transportation section. *See “Short Distance Transportation” on page 81.*

7

Troubleshooting

- Troubleshooting is mainly done by skilled technicians or engineers.
- This chapter provides a list of issues that may require intervention.

Maintenance Module Troubleshooting

The following table lists possible issues related to the Maintenance Module, with possible causes and solutions.

Problem	Possible Causes	Solution
Motor stalls	<ul style="list-style-type: none">• Jammed gear train from broken post or improperly seated gears• Squeegee (doctor blade) wedged, not seated properly• Debris build-up on blade and rollers, increasing friction• Bad motor	<ol style="list-style-type: none">1 Check through each of the possible causes.2 If possible, correct the situation. For example, re-seat the gears and squeegee, clean off debris from blade and rollers.3 Re-test.4 If motor is still stalled, contact Technical Support.
Color Mixing	<ul style="list-style-type: none">• Wiper roller (microfiber roller (MFR)) is saturated• Squeegee (doctor blade) wedged, not seated properly, or is bowed	<ol style="list-style-type: none">1 If wiper roller is saturated, replace it.2 If squeegee is not seated properly, re-seat it.3 If squeegee is bowed, contact Technical Support.
Unable to remove maintenance module from the print engine	<ul style="list-style-type: none">• Not properly inserted, not straight on rails• Lifter Arm is broken• Stepper motor gear worn off• Sensor read error	Contact Technical Support.

Printhead Troubleshooting

Occasionally print quality is affected by minor problems caused by the printhead. The following table provides a list of printhead issues, their symptoms, and solutions.

Problem	Problem Causes	Solution
Air bubbles in Ink Delivery System (IDS) causes some nozzles to be blocked	Appear as missing groups of adjacent drops but the shape is often rounded or irregular	<ul style="list-style-type: none"> • Cured by circulating ink, priming or cycles of de-priming and re-priming. • Often the bubbles disappear after a short time.
Debris on printhead	Shows up as regularly missing or misdirected nozzles, or as ink color mixing	Cured by automatic servicing or manual wiping.
Ink mixing	Appears as mixed or muddy colors. Can be caused by ink flooding, air in the printhead, or a dirty printhead	Cured by automated serving or manual wiping.
Electrical failure or contact fault on electrical connection	Results in no print or crisp blocks of missing drops usually conforming to the printhead die boundaries	<p>Cured by reinserting the printhead or replacing the printhead</p> <p>Clean electrical contacts on Printhead</p>
One or more ink colors not printing	Ink is not reaching the printhead via the tubes	<ul style="list-style-type: none"> • Remove the printhead and reinsert it. Run additional ink circulations after printhead priming if ink is still not coming up fully. • Check the revolvers in the printhead area. Look for a loose revolver cap on either the pump side or valve side. • Try using another printhead.

Ink Cartridge Troubleshooting

Occasionally the QL-240 printer can stop or cannot prime up the system with ink due to ink cartridge related problems. The following table provides a list of ink cartridge issues, their symptoms, and solutions.

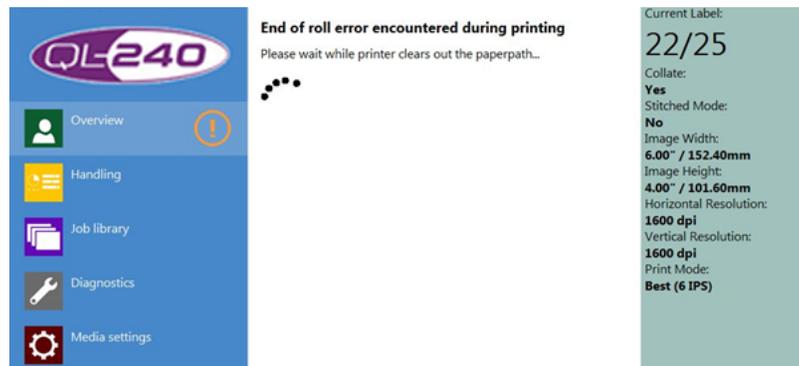
Problem	Problem Causes	Solution
<p>Ink cartridge is missing Y/M/C/K error message appears on the screen although the cartridge said to be missing is physically inserted.</p>	<p>There is no connection between QA chip on the cartridge and chip reader PCB inside the cartridge slot.</p>	<ul style="list-style-type: none"> • Firmly reinsert the cartridge(s) several times. Push it in firmly until it hits the back of the slot, then pull it out and push it in again. Close the latch. This solves 90% of the cases. • Clean contacts on QA chip and chip reader, clean white plastic septums inside ink cartridge slots. • Take a look inside the ink slot and check for any visual damage (e.g.: broken pins on chip reader PCB) • Replace ink cartridge.
<p>Cartridge is out (empty) message appears on the screen but by measuring or shaking the cartridge manually, it can be felt that the cartridge is not empty.</p>	<p>Ink consumption registering was not precise due to not proper tilt level.</p>	<ul style="list-style-type: none"> • Connect USB cable between QL-240 PC and printer. Open a command prompt on the screen and type: <code>usbcmd -c ids_retest_low</code> command • Replace ink cartridge. • In case of standalone mode (without Touchscreen Control) please contact Technical Support.

Error Handling in QL-240 Control Interface

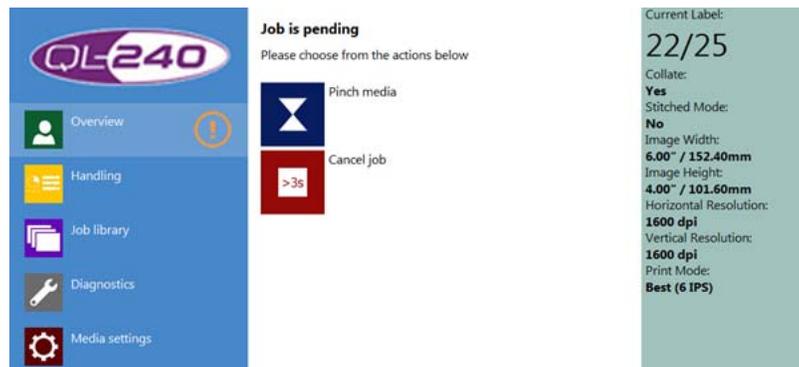
End of Roll Error

This error happens when the roll of labels run out during printing.

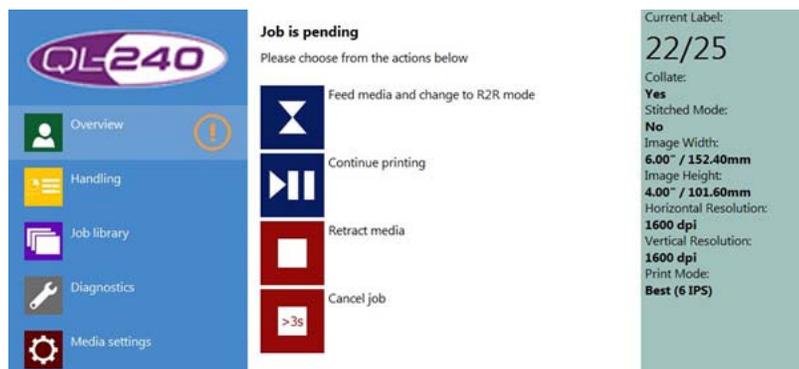
The user can choose between loading a new roll and continue printing the actual print job, or canceling the actual print job.



- The printer removes the last piece of media, then jumps into the job is pending screen (see below).

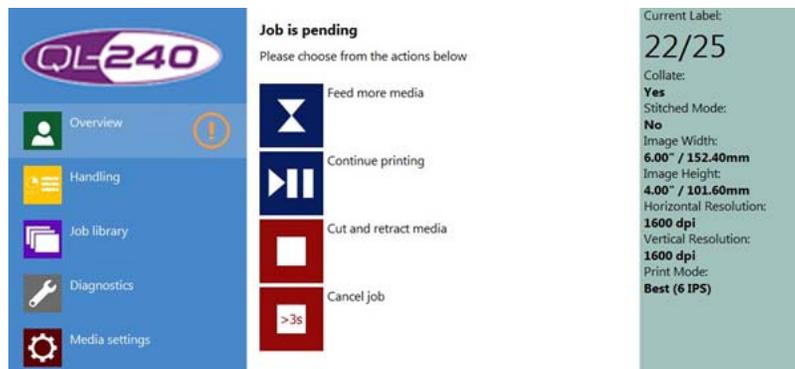


- Press pinch media button to load a new roll. New options become available (see below).
- Press Cancel job button on screen or stop button on printer chassis for more than 3 seconds to cancel the actual print job.



If the print job has not been cancelled and pinch media button has been pressed (and media is already loaded), the user has the following options:

- Press pinch media button to switch printer into roll to roll mode and load media to the rewinder (new options come up). See below.
- Press Continue printing button to continue the pending print job in roll to cut mode.
- Press Retract media button to unload media from the printer.
- Press Cancel job button on screen or stop button on printer chassis for more than 3 seconds to cancel the actual print job.



If the 'Feed media and change to roll2roll mode' button has been pressed at the previous screen, then these options become active:

- Press Pinch media button to feed more media. This makes it easier to load media onto the rewinder.
- Press Continue printing button to continue the pending print job in roll to roll mode.
- Press Cut and retract media button to cut and unload media from the printer.
- Press Cancel job button on screen or stop button on printer chassis for more than 3 seconds to cancel the actual print job.

Note: The physical buttons on the printer chassis can also be used for the above listed options.

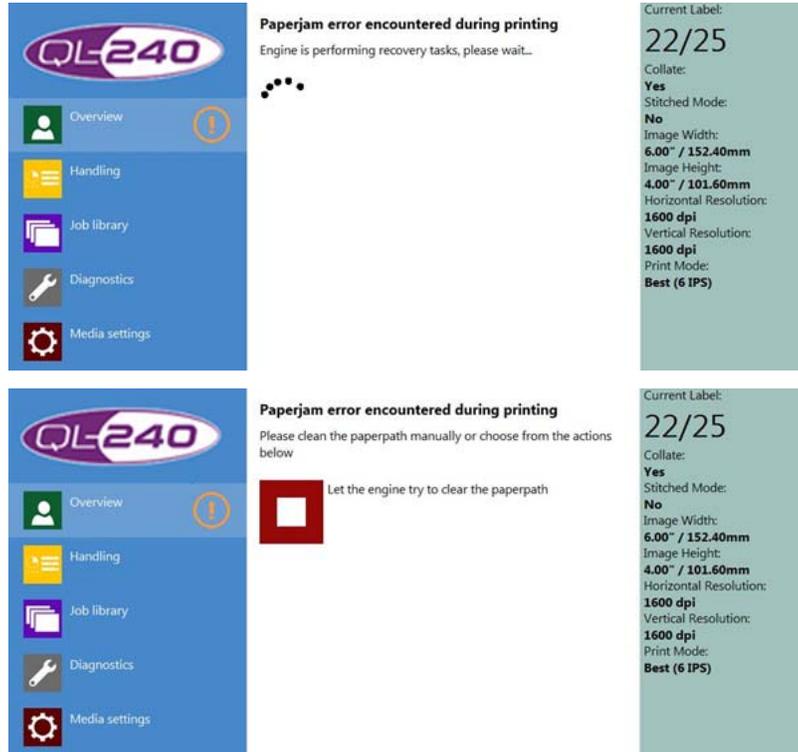
The following actions can also be used to correct this error:

- Select Roll media / Volume Winder Control checkbox at Media Settings menu when using Volume winder system.
- Unselect Roll media / Volume Winder Control checkbox at Media Settings menu when using standard winder system.
- Make sure the proper TOF mode (media format) is selected at Media Settings menu (continuous, die-cut, cutsheet, blackmark).
- Make sure that the dancer arm is in the topmost left or right position before doing zero point calibration on Volume Winder dancer arms (use the manual tension adjusting knob to drive the dancer arm to the topmost position before calibrating).

Paper Jam Error

Paper jam error can be caused by wrong media alignment (not properly loaded media) and creases on the media.

The user can choose between reloading the media and continue printing the actual print job, or canceling the actual print job.

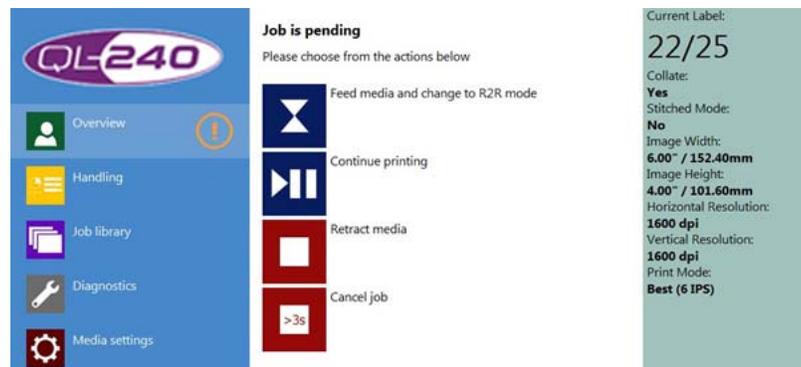


- In most cases when the media is creased inside the printer, the only option is to remove the creased media manually from the paper path. If media is removed then pending print job options become available (see below).

- Press Stop button to let the printer try to remove media from the paper path. Use this option only if the media jammed inside the paper path can be removed by rolling the rollers. If the media is removed then pending print job options become available (see below).



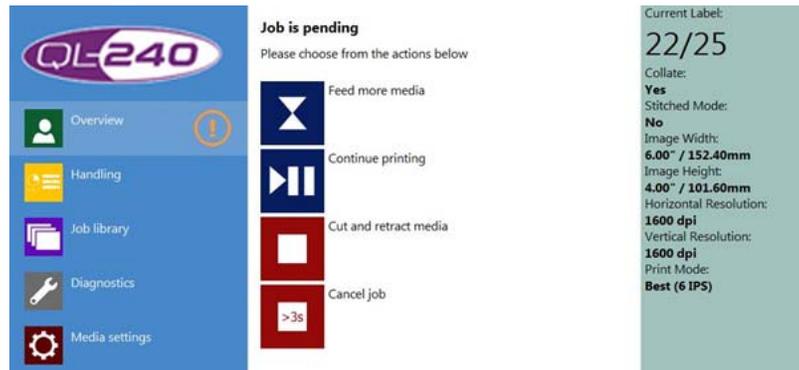
- Press pinch media button to load media. New options become available (see below).
- Press Cancel job button on screen or stop button on printer chassis for more than 3 seconds to cancel the actual print job.



If the print job has not been cancelled and pinch media button has been pressed (and media is already loaded), the user has the following options:

- Press pinch media button to switch printer into roll to roll mode and load media to the rewinder (new options come up). See below.
- Press Continue printing button to continue the pending print job in roll to cut mode.
- Press Retract media button to unload media from the printer.

- Press Cancel job button on screen or stop button on printer chassis for more than 3 seconds to cancel the actual print job.



If the 'Feed media and change to roll2roll mode' button has been pressed at the previous screen, then these options become active:

- Press Pinch media button to feed more media. This makes it easier to load media onto the rewinder.
- Press Continue printing button to continue the pending print job in roll to roll mode.
- Press Cut and retract media button to cut and unload media from the printer.
- Press Cancel job button on screen or stop button on printer chassis for more than 3 seconds to cancel the actual print job.

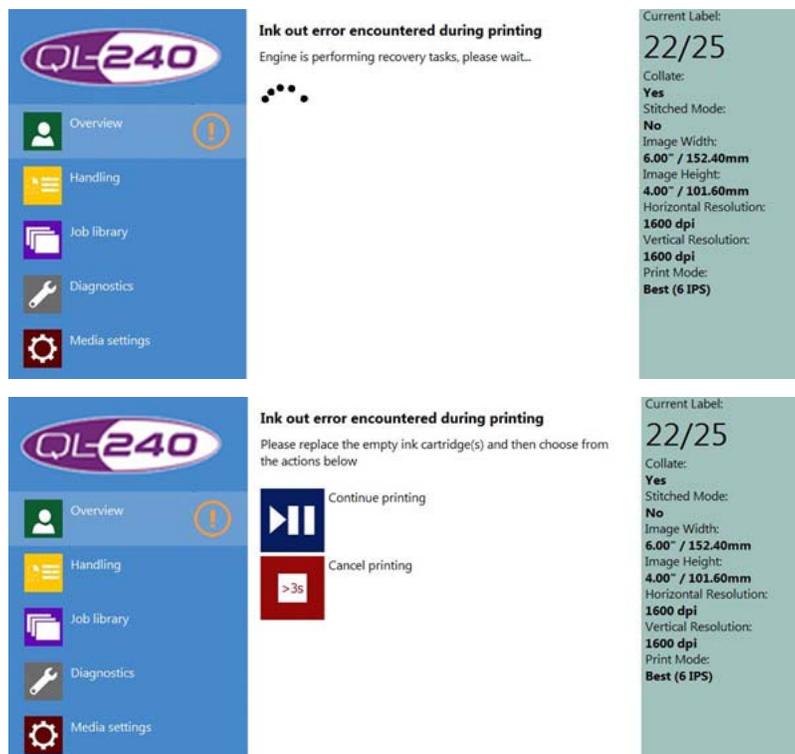
Note: The physical buttons on the printer chassis can also be used for the above listed options.

The following actions can also be used to correct this error:

- Make sure the proper media format is selected at Media Settings menu (continuous, die-cut, cutsheet, blackmark)
- Make sure that the printer is aligned in line with the winder system to avoid traveling/oscillation of the label media during printing.

Ink Out Error

This error happens when one or more cartridge(s) run(s) out while the actual print job is being printed.



After replacing the empty cartridge(s), the user has the following options:

- Press Continue printing button to continue printing the actual interrupted print job.
- Press Cancel job button on screen or stop button on printer chassis for more than 3 seconds to cancel the actual print job.

Note: The physical buttons on the printer chassis can also be used for the above listed options.

The following actions can also be used to correct this error:

- Pull out the cartridge and firmly push it in several times, then close the latch.

Data Path Underrun Error

This error is related to sending and processing the data stream (print job) to the printer. When a user starts to print, the driver is creating a print stream and sending this print stream to the print engine's memory. Printing starts as the print stream starts downloading and the printer is caching the data stream progressively.

A print stream contains:

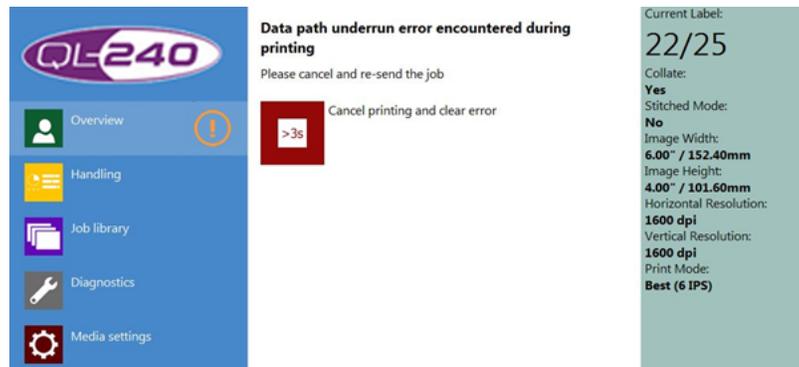
- All images of the actual print job.
- Settings like: number of pages, printing speed, resolution.

By default the processing of the print stream is done continuously by the printer's firmware.

Data path underrun error occurs during printing when the print stream is not sent fast enough to the print engine's memory to process it continuously and print out the actual print job.

This can have several reasons:

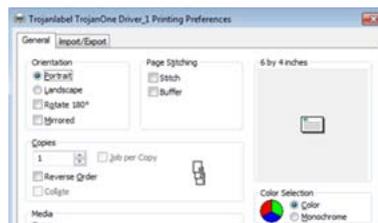
- Damaged network cable.
- Slow network speed.
- The computer where the driver is installed is too slow to generate the print stream progressively.
- Size of the print stream is too large (variable data, too many large high resolution images).



In this case the user has to re-send the actual print job. There is no way to continue the interrupted print job.

- Press Cancel job button on screen or stop button on printer chassis for more than 3 seconds to cancel the actual print job.

If this error occurs often, try to reduce the image complexity in the print job and check your computer network speed. Use the buffer checkbox in the driver to buffer the whole print stream on the PC's memory if PC is too slow to generate the print stream in real time and printer goes into data path underrun error. If QL-240 Control is used with the Touchscreen Control, this option can be safely unchecked because QL-240 Control software automatically buffers the whole print stream.



- Use the **Buffer** checkbox to buffer the whole print job into the user PC in advance.
- This way printing only starts after the buffering is completed.
- Buffering time depends on the size of the print job and PC hardware.

The following actions can also be used to correct this error:

- Resend print job via the driver.
- Check original PDF artwork in Adobe Illustrator for any overreaching objects in the background layer(s). Edit the artwork file.

- Reduce image complexity (reduce resolution) in PDF file.
- Switch off or set preview generation to 'When Idle' at HOME->Settings->User Preferences menu.
- Try to print the same PDF from another PDF viewer instead of Adobe Reader or Illustrator.
- Check if network connection is stable between printer and user PC (where the driver is installed).

Tilt Error

This error occurs when the built in tilt sensor senses that the printer is not leveled physically.

- Make sure that printer is leveled physically.

FATAL 71-02 OFFLINE Cancel Page Error

In most cases, this error occurs when the maintenance module inside the print engine is stuck or the module's position is not readable. The left lifter arm may be broken due to transportation damage.

In some cases the dual pinch valve is defective or pinch valve sensor is dirty.

- Eject and reinsert maintenance module manually. *See "Printer Handling" on page 53.*
- Check flexible cable on maintenance module. The cable can be partly lose in the socket or damaged.

63-01 PRINTHEAD OFFLINE Cancel Page Error

This error indicates a communication error with the printhead. This may be due to ink or dirt covering the printhead electrical contacts or pins on circuit boards.

- Eject printhead and clean contacts.
- Reinsert the printhead.
- Replace the printhead if necessary.

Maintenance Busy Error

When after a paper jam, some label material blocks the paper path area and maintenance busy state remains without actually hearing the sound of any maintenance.

- Clean paper path from any remaining label materials and pieces.

8

Volume Unwinder / Rewinder (Optional)

The volume winder system was developed and aligned specially for the QL-240 printer. Both winders can communicate directly with the printer sending and receiving data (start, stop, speed, calibration, printing mode).

Volume winders are recommended for labels over four inches wide. They are not recommended for narrower labels.

Features:

- Solid stainless steel and high quality aluminum housing.
- Roll size up to 300 mm.
- Intelligent communication with QL-240. Label material remaining and warnings when running low on labels.
- DC brushless motor
- Adjustable core (inner core size 76mm Ø and adjustable)
- Microcontroller
- Easy alignment with printer to ensure the best print quality
- Tension adjustment possible from QL-240 Control software or manually with an adjusting knob.

It is not recommended to replace the QL-240 printer's own winder system with winders from other vendors. However it is possible to use other winder systems but QuickLabel does not take responsibility and warranty on other vendor's products and for incidental print quality issues caused by the usage of other vendor's winder system.

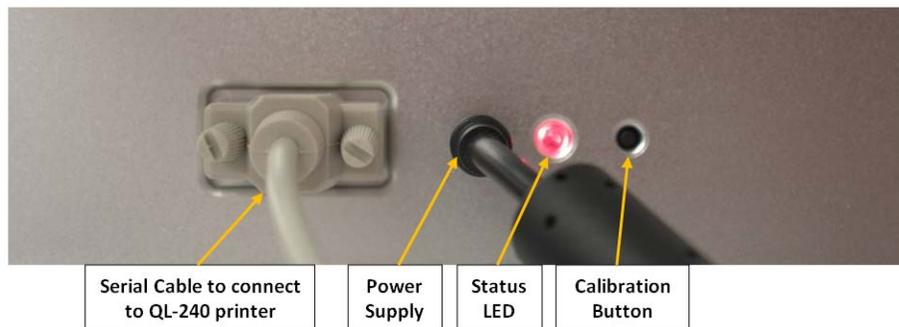


Complete assembly with volume unwinder and rewinder:



Connecting Volume Winders to the QL-240 Printer

Connections on Volume Winders (same for both Unwinder and Rewinder)



Status LED states on Volume Winders

- RED: Power ON
- ORANGE BLINKING: Zero Point calibration mode where an Unwinder can set as Rewinder and vice-versa (Press calibration button for 5 sec. then move dancing arm slowly all the way to the other end, hold it for a couple of seconds, then let it fall back. Repeat this once more without pushing the button again. The LED will light RED constantly if zero point is calibrated.) - By default this is done by the factory.
- GREEN: Ready for printing. Calibrated and media is loaded into the printer.

Connecting Volume Winders to the QL-240 Printer

Connect Unwinder/Rewinder to one of the serial ports on the QL-240 printer.



The order of the serial ports does not matter. Both Unwinder and Rewinder can be connected to either the first or the second serial port. The QL-240 printer automatically detects and identifies the winders.

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