



LX600

COLOR LABEL PRINTER

User's Manual

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Revision History

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FCC Compliance Statement: This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

For Users in the United States: This product is intended to be supplied by a UL listed Direct Plug-In Power Supply marked "Class 2" or a UL listed ITE Power Supply marked "LPS" with output rated 12VDC, 5A or higher. This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. In a domestic environment this product may cause radio interference, in which case the user may be required to take adequate measures. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

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

Use of shielded cables is required to comply with the Class A limits of Part 15 of the FCC Rules. You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate and/or obtain warranty service for this equipment.

For Users in Canada: This digital apparatus does not exceed the Class A limits for radio noise for digital apparatus set out on the Radio Interference Regulations of the Canadian Department of Communications. Le present appareil numerique n'emet pas de bruits radioelectriques depassant les limites applicables aux appareils numeriques de la class A prescrites dans le Reglement sur le brouillage radioelectrique edicte par le ministere des Communications du Canada.

CERTIFICATE OF TEST



Last Date of Test: August 1, 2019
Primera Technology, Inc.
Model: PT-A29-001

Emissions

Standards

Specification	Method
AS/NZS 61000.6.3:2012	CISPR 16-2-1:2014 CISPR 22:2009
EN 61000-3-2:2014	IEC 61000-3-2:2018
EN 61000-3-3:2013	IEC 61000-3-3:2013 +A1:2017
EN 61000-6-3:2007+A1:2011/AC:2012	CISPR 16-2-3:2010 +A1:2010 +A2:2014 CISPR 16-2-1:2014 CISPR 22:2009
EN 61000-6-4:2007+A1:2011	CISPR 16-2-3:2010 +A1:2010 +A2:2014
FCC 15.107:2019 FCC 15.109:2019 FCC 15.109(g):2019 ICES-003:2016 updated April 2017 VCCI-CISPR 32:2016	ANSI C63.4:2014 CISPR 32:2015

Results

Test Description	Applied	Results	Comments
Radiated Emissions	Yes	Pass	Class A
Radiated Emissions High Frequency	Yes	Pass	Class B
Conducted Emissions	Yes	Pass	Class B
Telecom Conducted Emissions	Yes	Pass	Class B
Harmonic Current Emissions	Yes	Pass	
Voltage Fluctuations and Flicker	Yes	Pass	

Deviations From Test Standards

None

Approved By:

Matt Nuernberg, Operations Manager

Product compliance is the responsibility of the client; therefore, the tests and equipment modes of operation represented in this report were agreed upon by the client, prior to testing. The results of this test pertain only to the sample(s) tested. The specific description is noted in each of the individual sections of the test report supporting this certificate of test. This report reflects only those tests from the referenced standards shown in the certificate of test. It does not include inspection or verification of labels, identification, marking or user information. As indicated in the Statement of Work sent with the quotation, Element's standard process is to always use the latest published version of the test methods even when earlier versions are cited in the test specification. Issuance of a purchase order was de facto acceptance of this approach. Otherwise, the client would have advised Element in writing of the specific version of the test methods they wanted applied to the subject testing.

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Section 1: Getting Started

THANK YOU...

...for choosing an LX600 Color Label Printer. The LX600 Color Label Printer will print razor-sharp text and barcodes, vibrant colors, and even stunning photo-realistic photographs directly onto rolls of labels, card stock and a variety of other approved media.

This User's Manual is your complete step-by-step guide to quickly and easily setting up and printing with your new Color Label Printer!

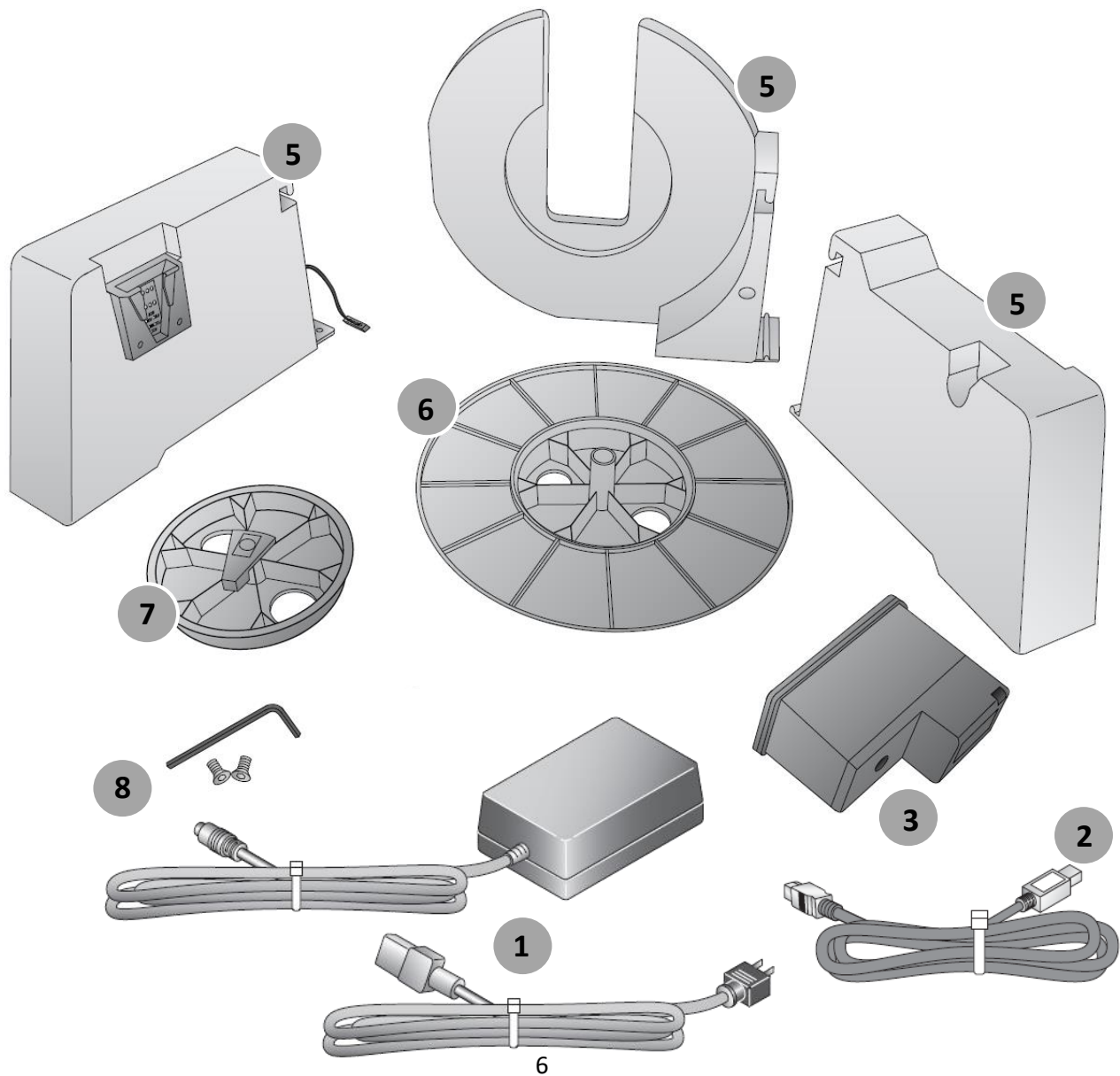
1A Choosing a Good Location

- Place the printer on a flat surface in a location with adequate air circulation to prevent internal heat buildup.
- Do not place the printer near heat sources such as radiators or air ducts, or in a place subject to direct sun light, excessive dust, mechanical vibration or shock.
- Allow for adequate clearance in front of the printer to accommodate the printed label stock as it is leaving the printer to avoid the possibility of binding or jamming of the label stock.
- Allow for 6" of clearance behind the printer to accommodate loop creation during cutting operations. The area directly behind the printer must also not be obstructed by USB or power cables connected to the printer.
- Allow for adequate overhead clearance for opening the top cover to allow easy access to the labels tock and ink cartridge. The printer will require 7 inches (17.78 cm) of additional space on the top side to completely open the cover (Total = 16.5" or 41.91 cm).

1B Unpacking and Inspection

While unpacking your printer, inspect the carton to ensure that no damage has occurred during shipping. Make sure that all supplied accessories are included with your unit. The following items are included in the supply box:

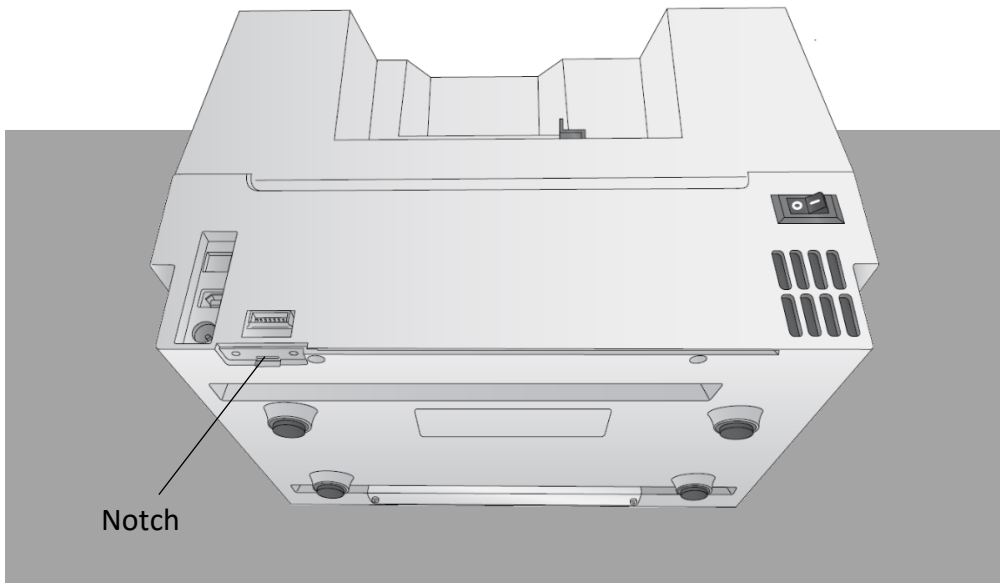
1. Power Adapter and Cord
2. 6' USB Cable (If other USB cable is used, it must be 6' (2 M) or less)
3. Color Dye Ink Cartridge Part Number 53496 (Pigment is also available – Part Number: 53491)
4. Printed documentation
5. Label roll holders (Assembly required – section 1C)
6. Large Roll Hub
7. Small Roll Hub
8. T8 Allen Key and two screws



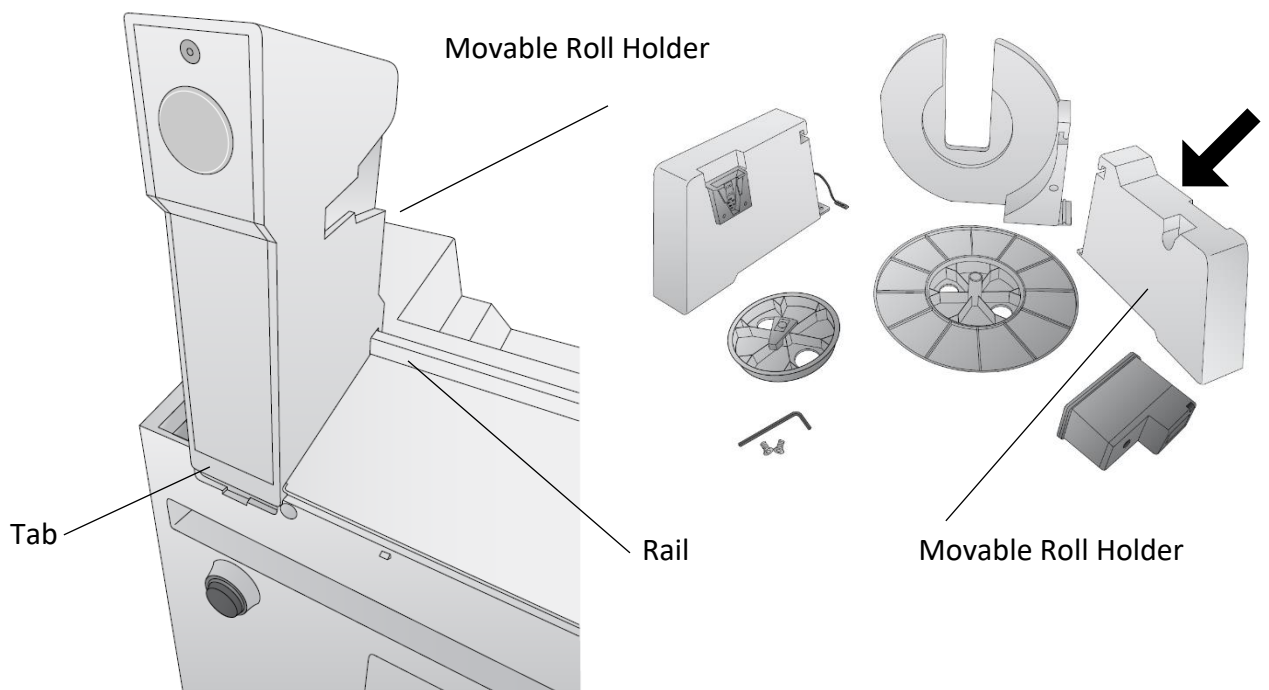
1C Installing the Roll Holders

Some light assembly is required before operating the printer. Follow these instructions to install the roll holders.

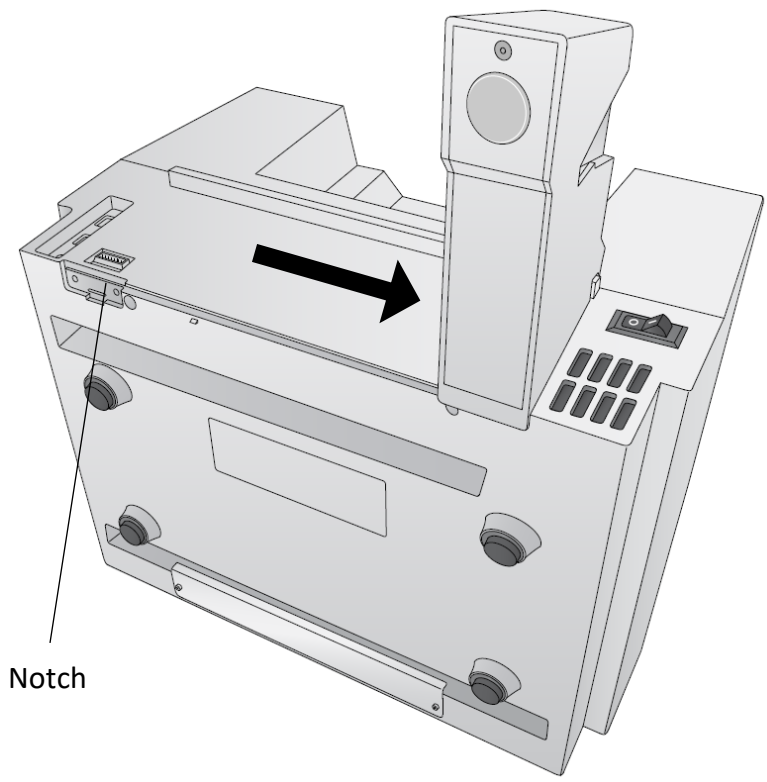
1. Set the printer on its front so the bottom is facing you.



2. Install the movable label roll holder by attaching the hooked end on the rail. The bottom of the holder will fit in the notch on the printer.

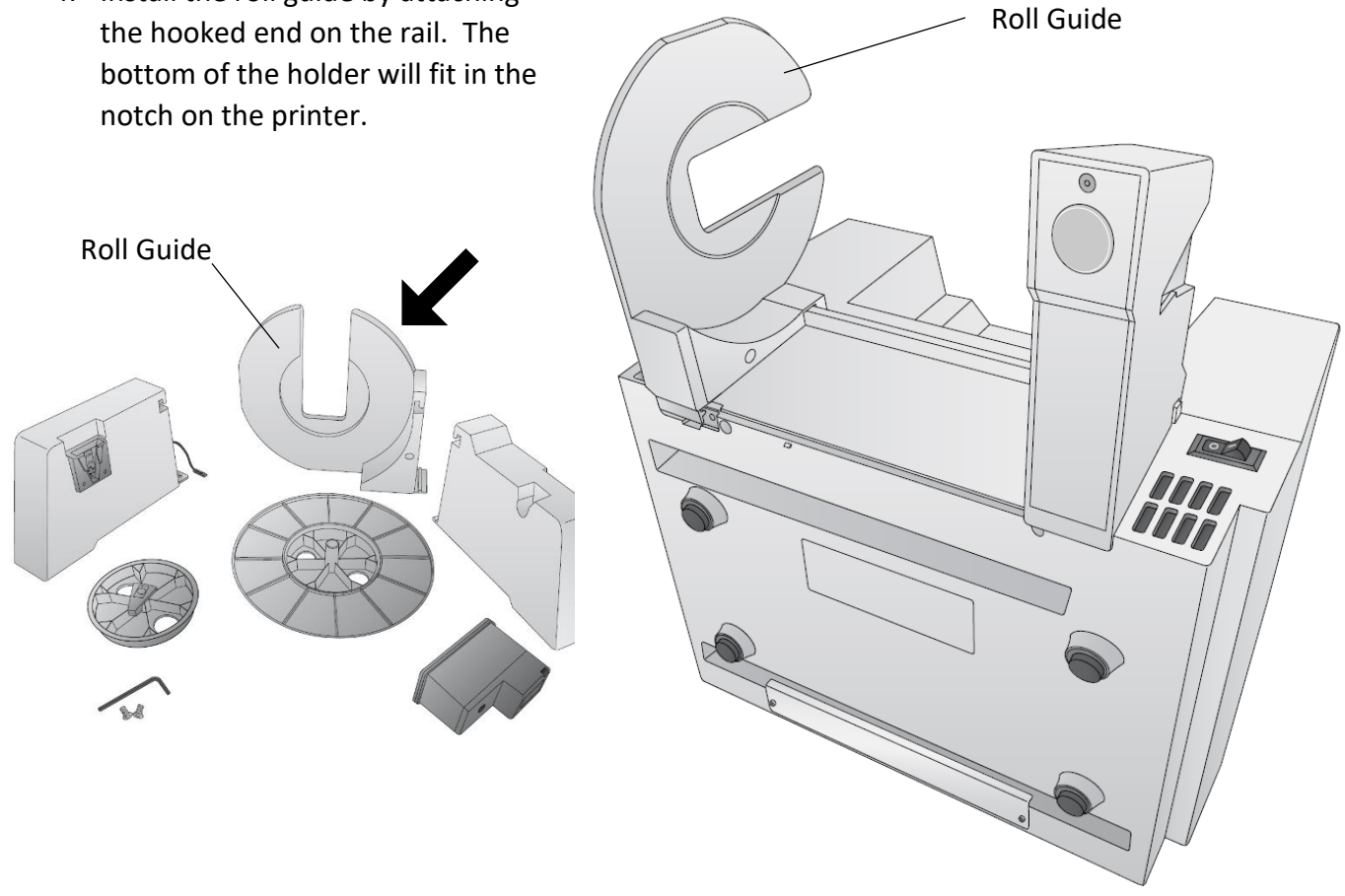


3. Slide the Roll Holder to the far right.



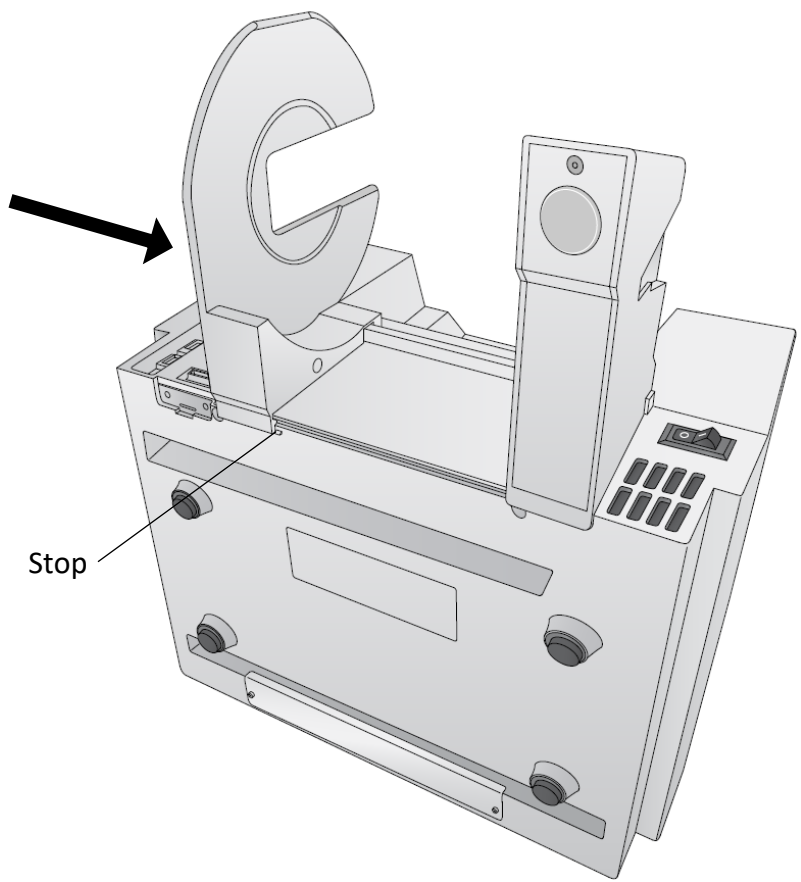
Notch

4. Install the roll guide by attaching the hooked end on the rail. The bottom of the holder will fit in the notch on the printer.

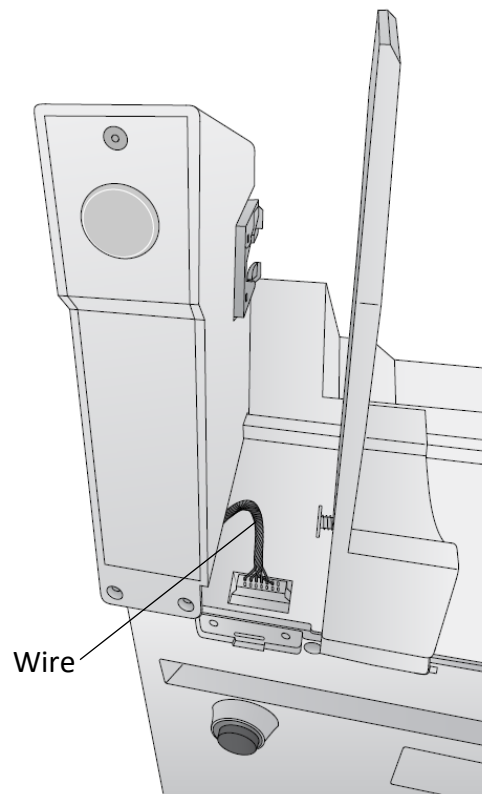


Roll Guide

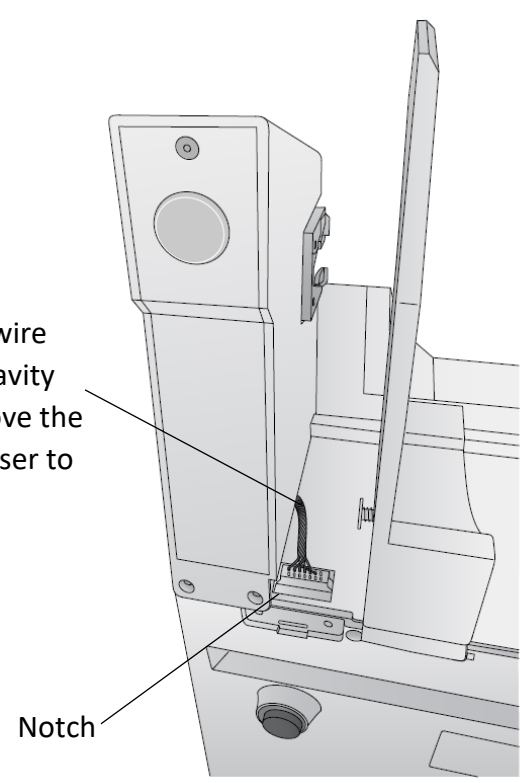
Roll Guide



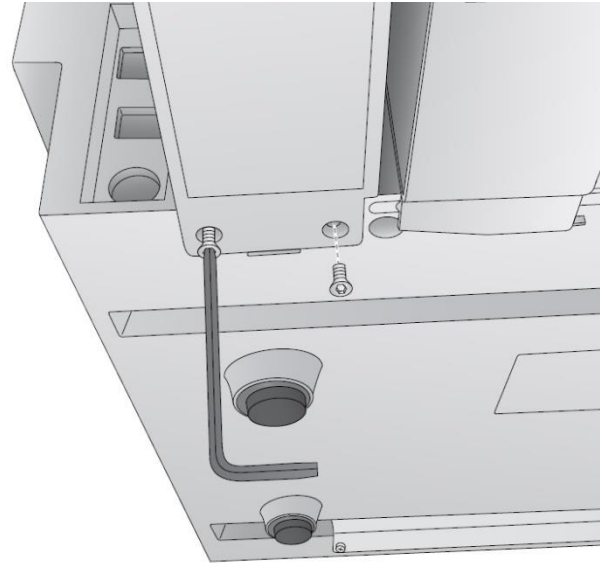
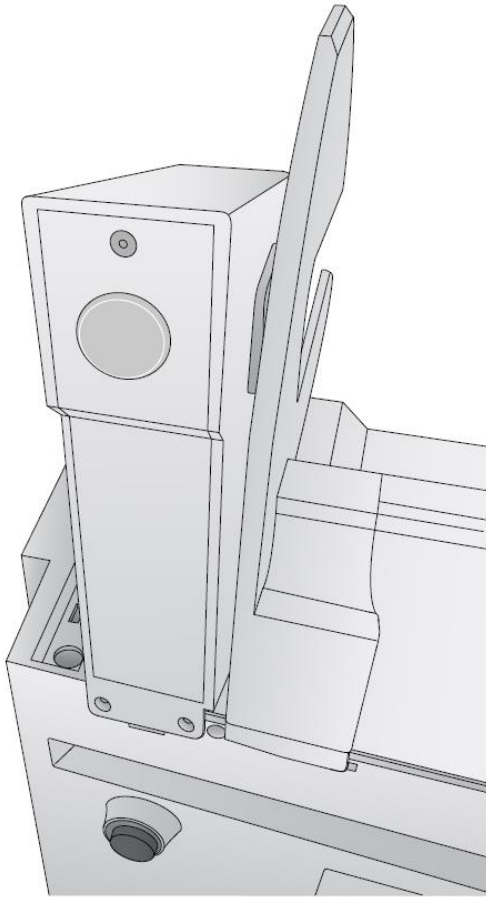
- 5. Slide the Guide to the stop.
- 6. Locate the remaining roll holder with the protruding wire. Connect the wire to the port on the printer. Tuck the wire inside the cavity.



Push the wire into the cavity as you move the holder closer to the notch



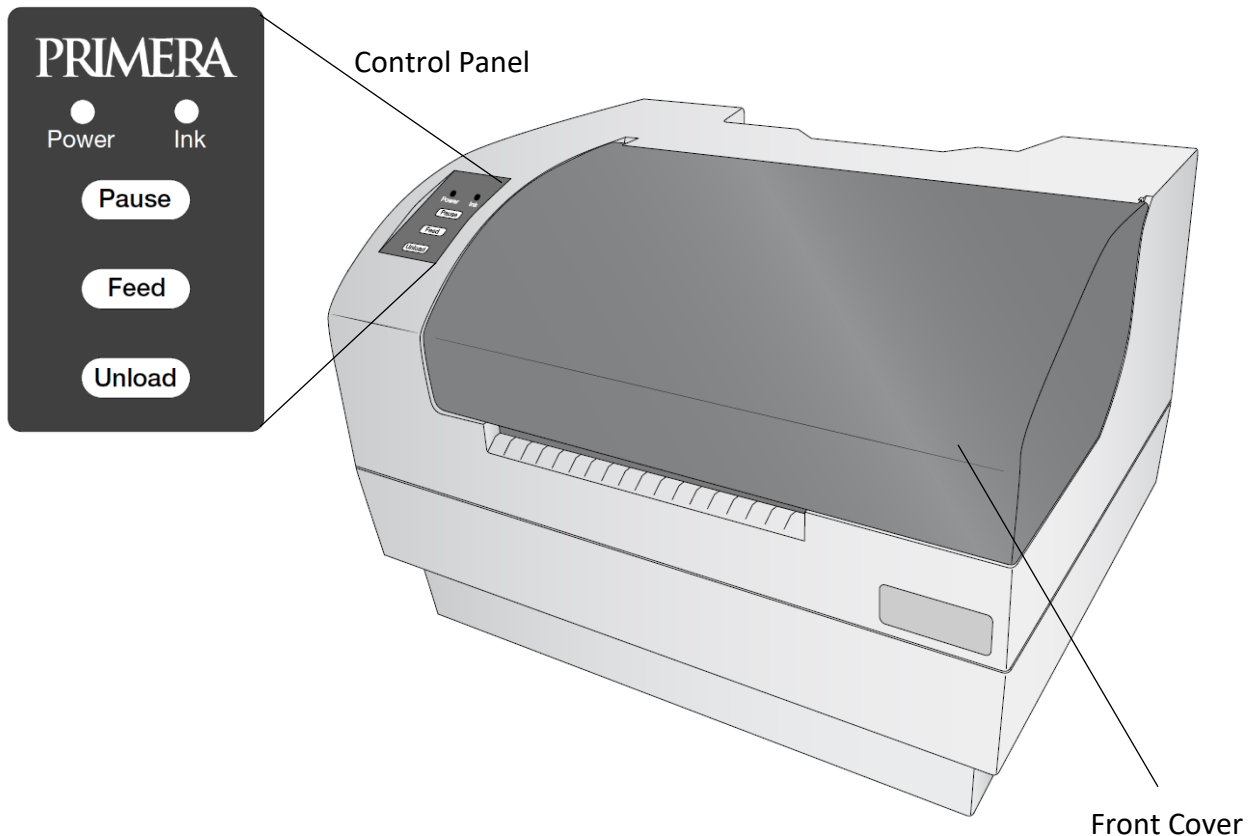
7. Snap the holder in place so the two screw holes line up with the holes on the printer.



8. Install the T8 screws using the INCLUDED Allen key or a Torx T8 screwdriver.
9. Rotate the printer back on its feet.

1D Identifying the Parts

This illustration shows the printer from various angles so all important parts can be identified.



The **Power LED** indicates that the printer is on and ready to receive print jobs.

The **Ink LED** will illuminate when a cartridge has 10% or less of its ink remaining.

The **Pause Button** is pressed to pause a job to allow for loading of label stock and ink cartridges. The printer pauses after the printing of the current label has finished.

The **Feed Button** is pressed in order to load label stock if the printer does not automatically detect the stock. When stock is loaded each press of the button will cause one label or a few inches to be fed through the printer.

The **Unload Button** is pressed to unload label stock after you receive an End of Roll message in PrintHub. The printer will reverse the label stock through the feed area.

Interior

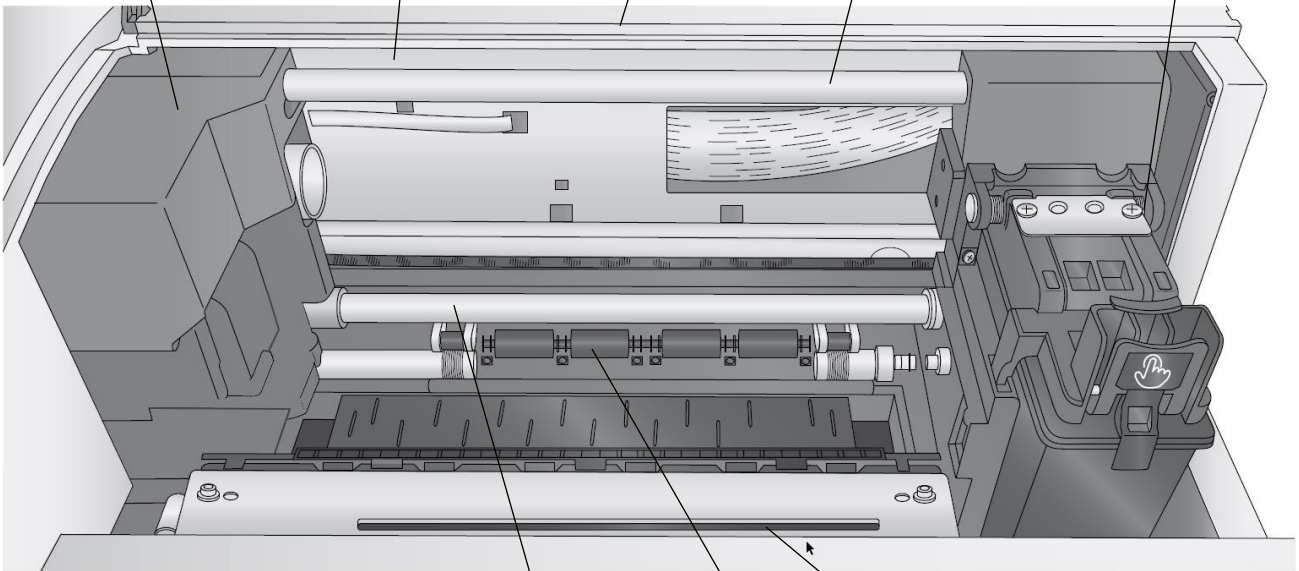
Print Carrier
Motor

Die Cutter
Ribbon Cable

Upper Guide
Shaft

Print Carrier
Ribbon Cable

Print Carrier

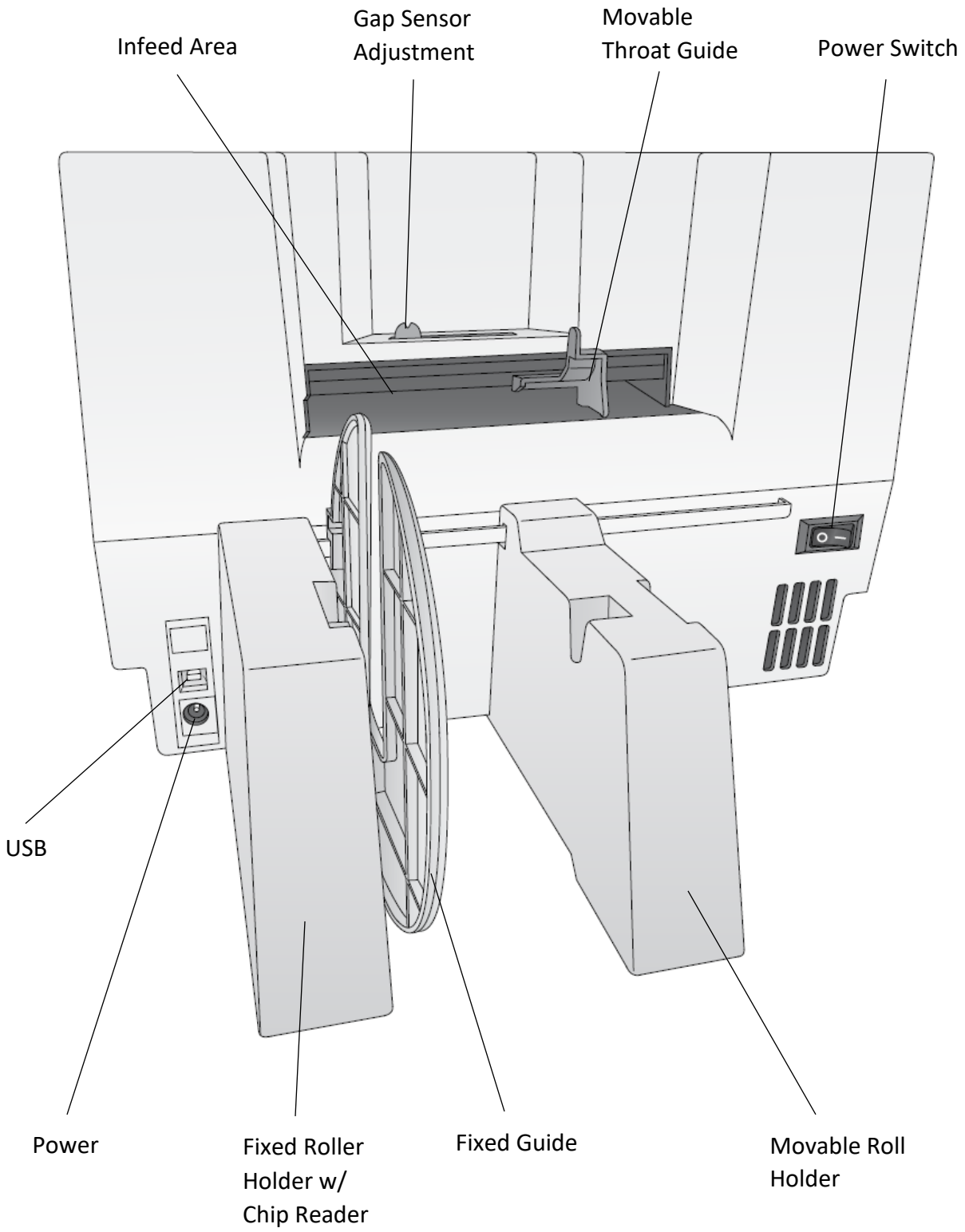


Lower Guide
Shaft

Pre die-cut
rollers

Cutter Wheel
Mechanism

Back

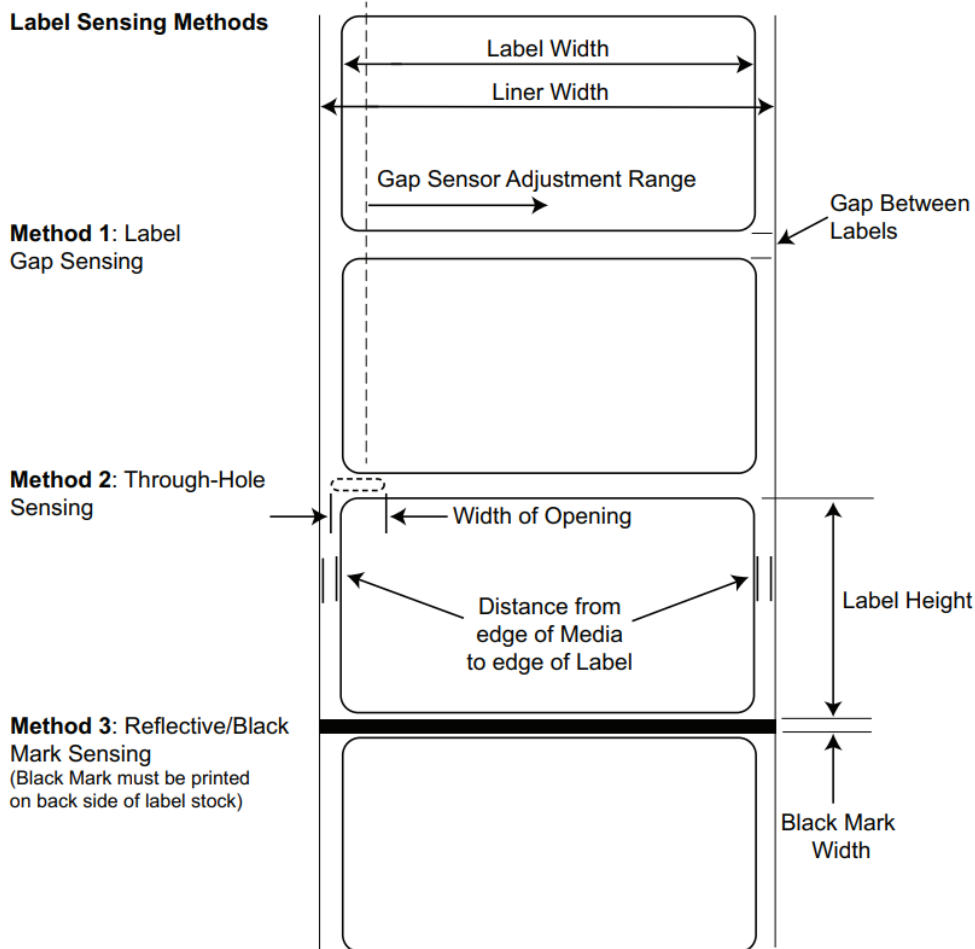


Section 2: Media, Cartridges and Knives

2A Label and Roll Specifications

Pre Die-Cut Labels. A wide variety of pre die-cut label stock can be used in the printer. Refer to the specifications and settings in the following sections before ordering custom stock from Primera or any stock from another company.

Important! Test all custom made label stock with the intended printer before ordering large quantities! Primera will only assume responsibility for custom label stock ordered from Primera.



Note: See table below for Max and Min values in inches and mm.

	Max	Min
Label width	5" (127mm)	0.5" (13mm)
Liner/media width	5.125 (130.17mm)	2" (50.8mm)
Label height/length	12" (305mm)	0.5" (13mm)
Gap between labels	10" (253mm)	0.10" (2.5mm)
Width of through-hole	0.5" (12.65mm)	0.25" (6.325mm)
Gap Sensor Adjustment Range (from left edge)	2.05" (52mm)	0.40" (10.16mm)
Reflective/Black Mark Width*	N/A	0.1" (2.54mm)
Max Outer Diameter (OD)	6.0"(152.4mm)	N/A
Inner Core Diameter (ID)	3.0" (76.2mm)	3.0" (76.2mm)
Recommended Total Thickness (Liner + Label)**	.0010" (10 mil)	
Distance from edge of media to edge of label	Printer assumes 2mm (1/16") gap. However, this is adjustable via the left margin offset.	

* The Reflective/Black Mark should be opaque to infrared light. The mark should be between the labels. The end of the mark should correspond with the beginning of the label.

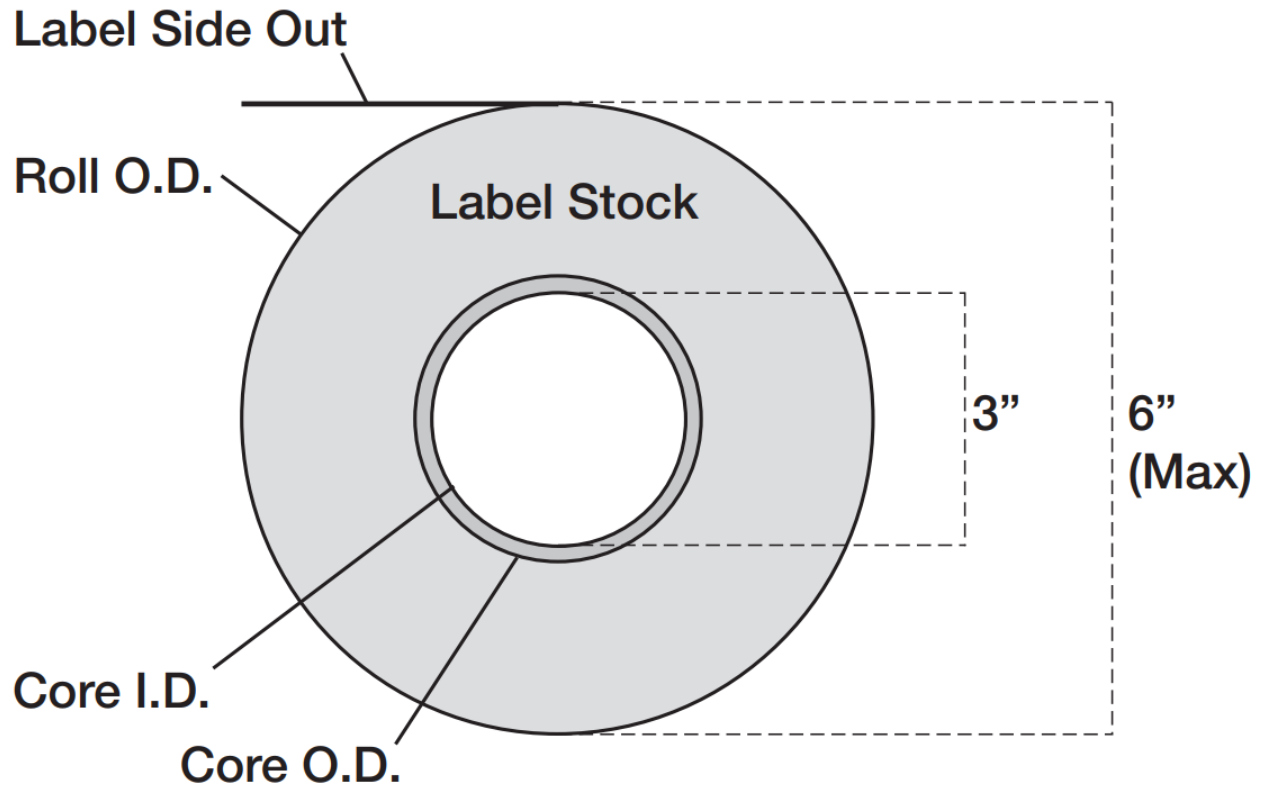
** This is the recommended maximum. There are two factors that determine whether the printer will accept any particular stock thickness.

1. The ability for the printer to pull the paper through the print area.
2. The ability for the sensor to read through the backing if the sensor is set to die-cut.

If you are printing in continuous or reflective label sensing mode number 2 does not apply. The fact that the printer must read through the backing in die-cut mode will limit the thickness much more than the printer's ability to pull the paper through the print area. However, if you adjust opacity level of the liner enough to allow the label to be seen by the stock sensor, the thickness will only be limited by the printer's ability to pull it through the printer area. For these reasons the weight or thickness of the liner is a variable that cannot easily be defined. Primera recommends and uses 40# liner with all Pre Die-Cut label stock.

It is important to test all label stock with the intended printer before ordering large quantities!

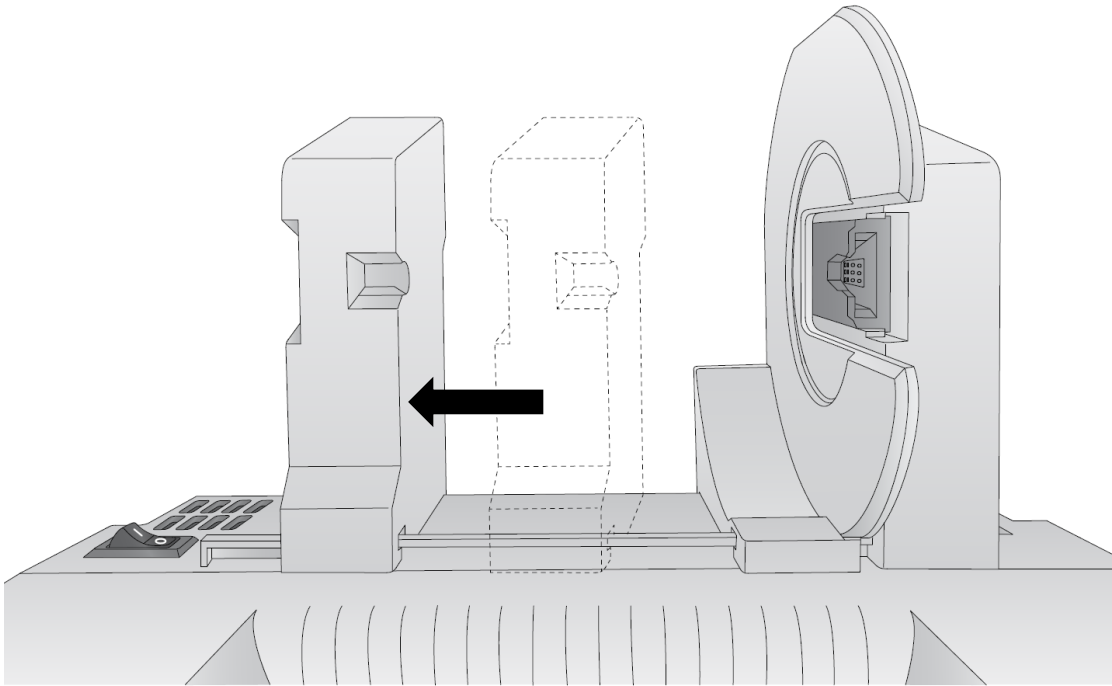
Roll Specifications:



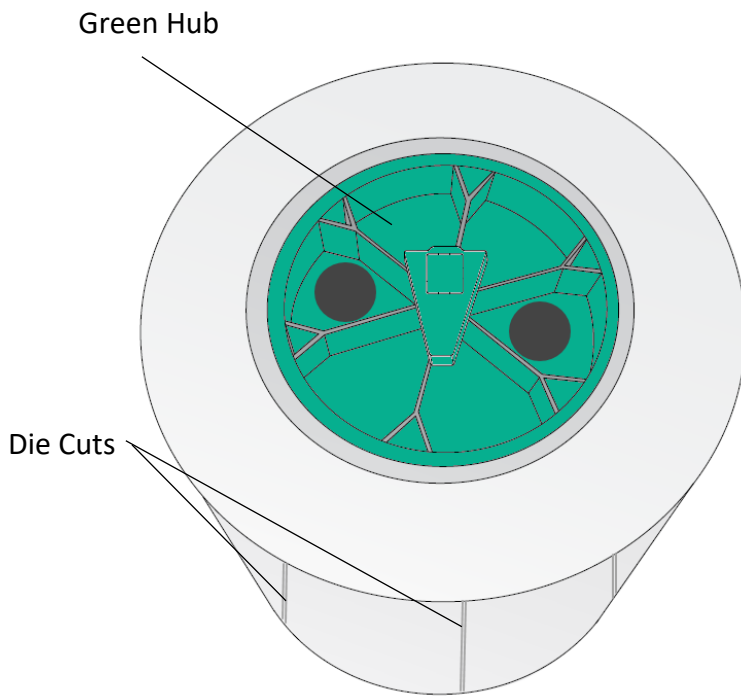
Note on Label Orientation: If you are using an applicator to apply your labels, be sure to order label stock with the correct orientation for your applicator. For example, most applicators will apply the side of the label first, so you will want to print the labels sideways.

2B Installing Pre Die-Cut Label Stock

1. Move the roll holder to the approximate position which matches the width of the stock you are installing. You can always fine tune this later.



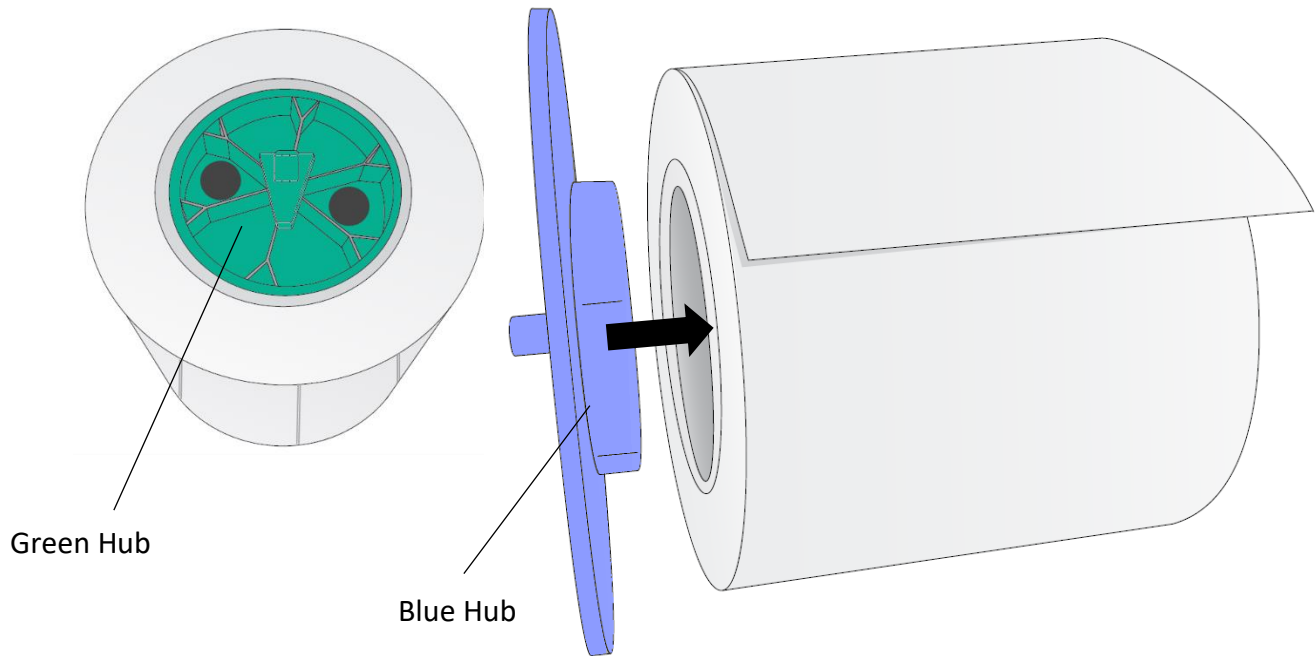
2. Install the Green Hub on the right side of the pre die-cut media.



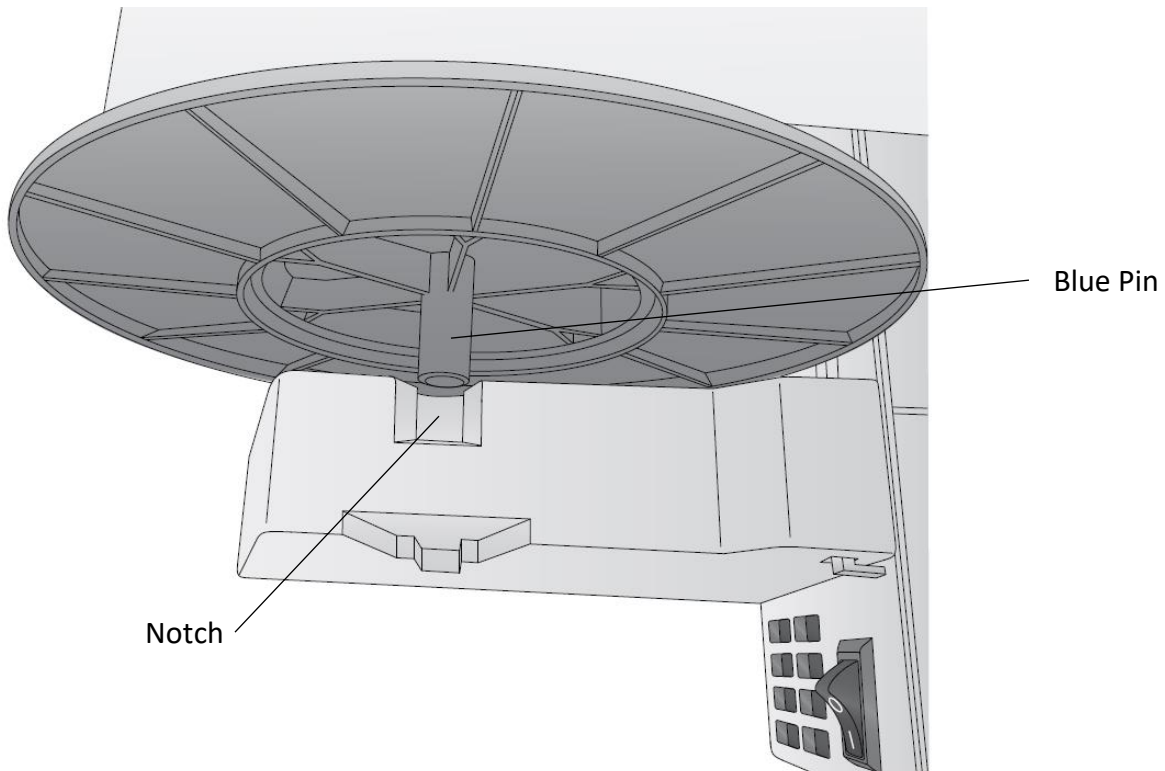
Pre Die-Cut Roll

(User must install Green Hub)

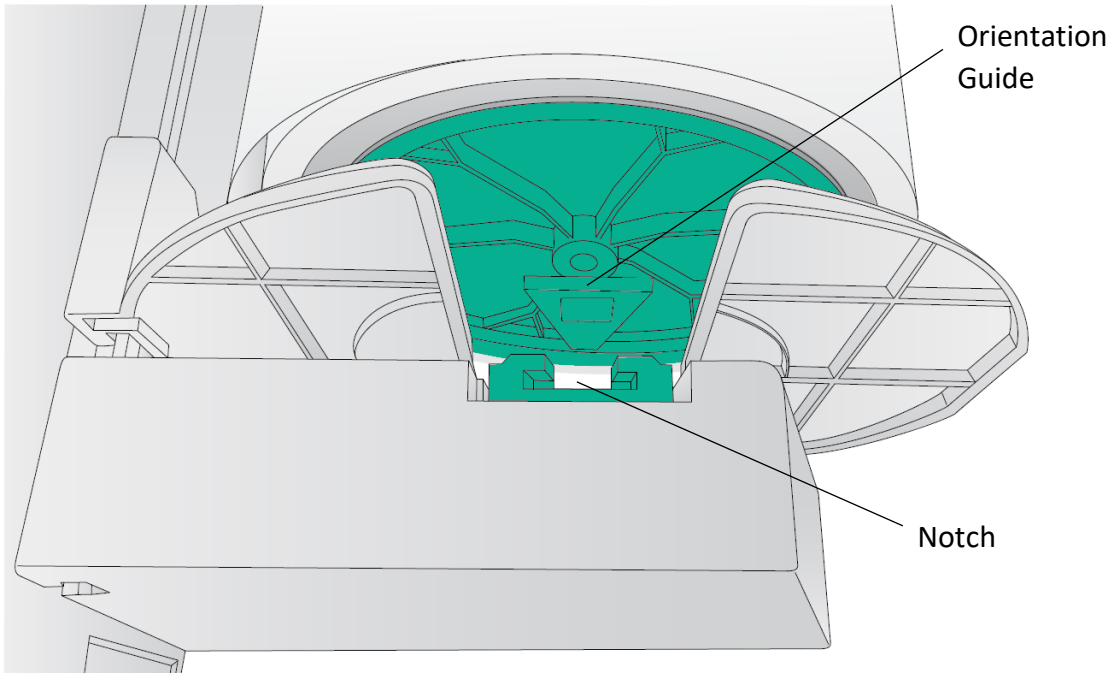
3. Install the Blue Hub on the left side of the digital die cutting media.



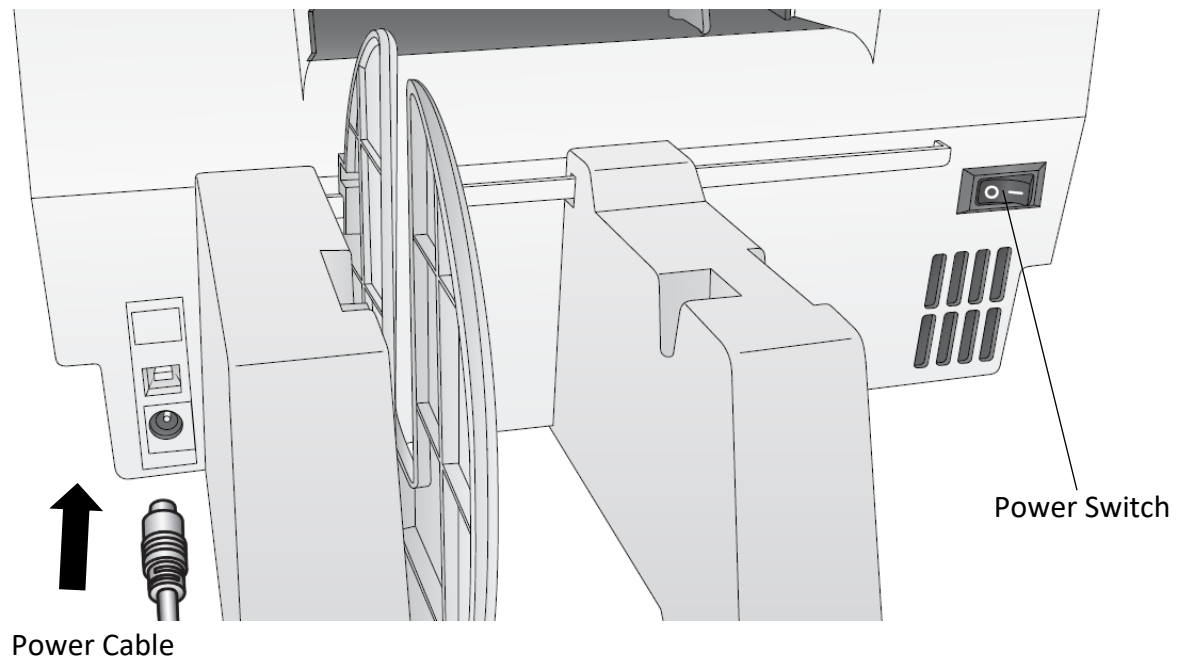
4. Set the roll in place so that the blue pin sits in the notch on the roll holder.



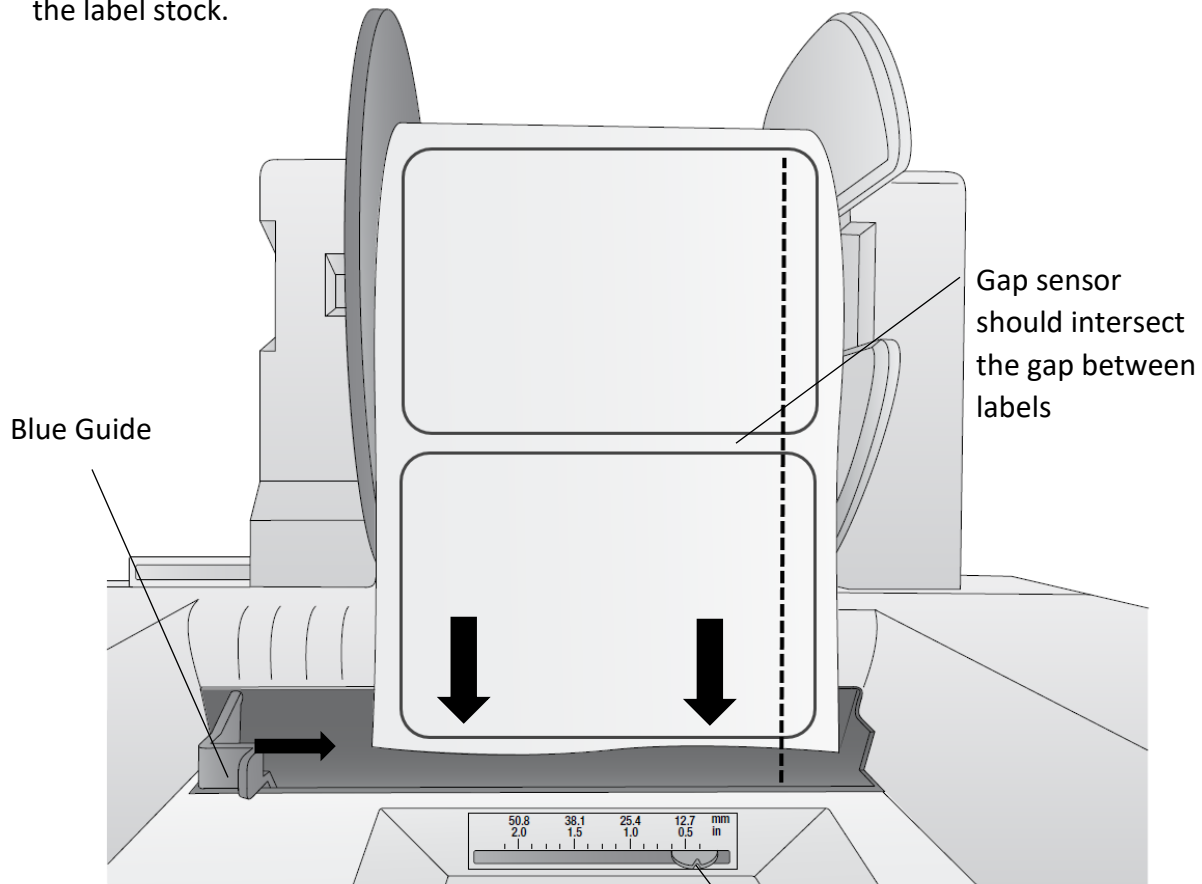
5. Make sure the green Orientation Guide fits in the corresponding green notch on the roll holder.



Before feeding the stock you must plug in power and switch on the printer.



6. Guide the leading edge of the roll into the feed area. Move the blue guide so that it touches the label stock.



Note the position of the label sensor. Slide the sensor position indicator so that it intersects with the gaps between your labels. For most label stock you will not need to move this.

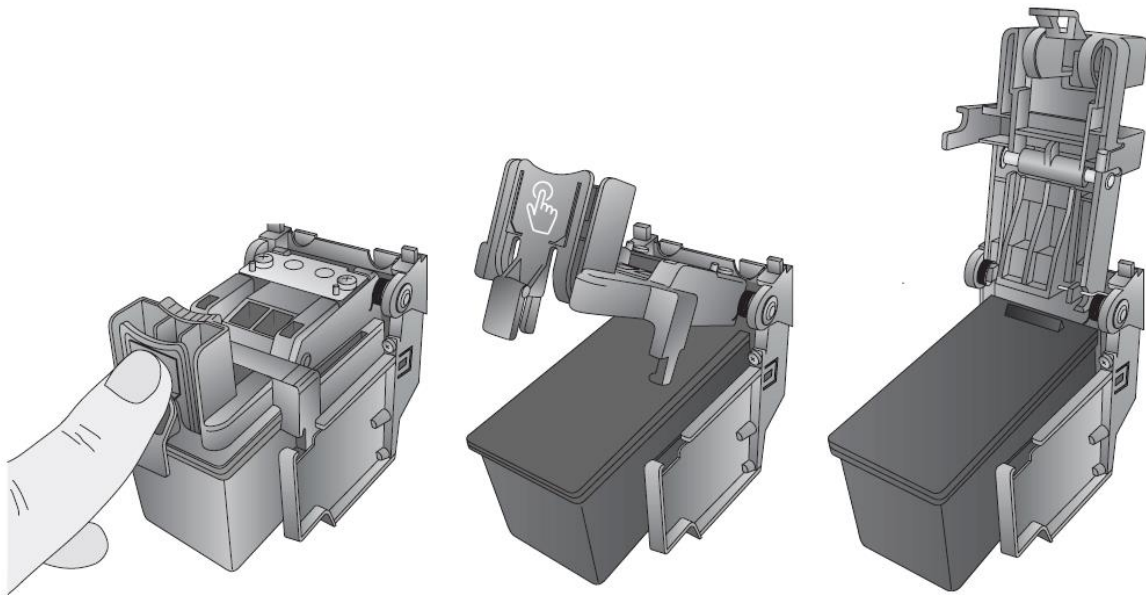
7. Push until the printer detects the stock, grabs it and pulls it through the printer.

2C Replacing Ink Cartridges

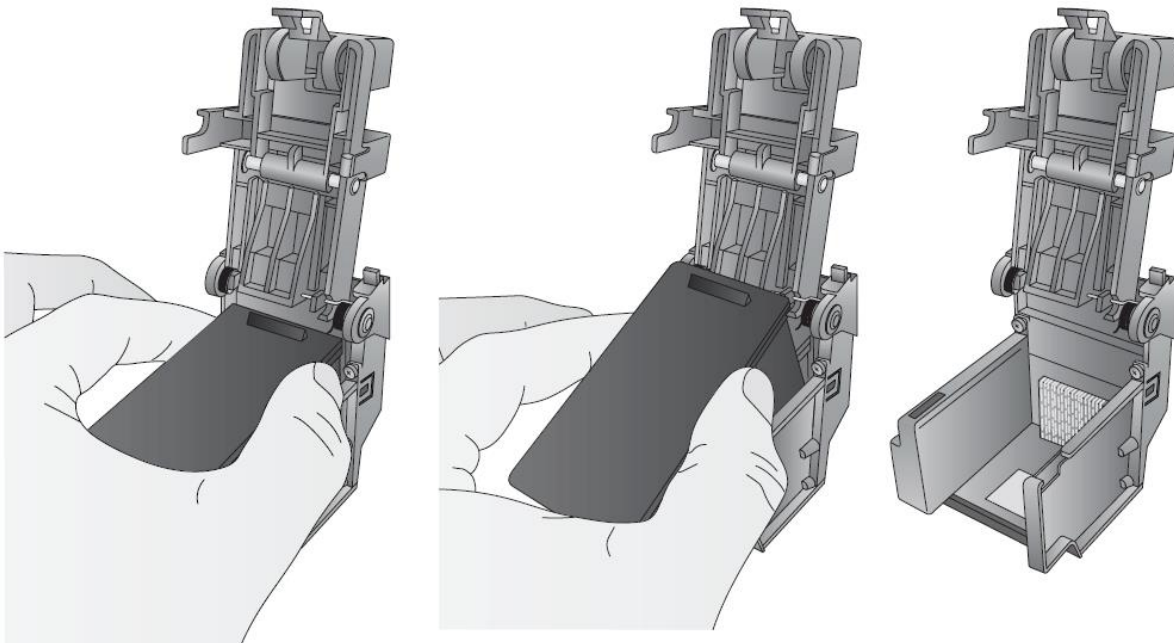
You can replace cartridges at any time or wait for the Low Ink Warning to prompt you to replace cartridges. You will receive low ink warnings at 10% and 0%. Press the Load/Feed button to continue printing after you receive this warning.

To change a cartridge, follow this procedure:

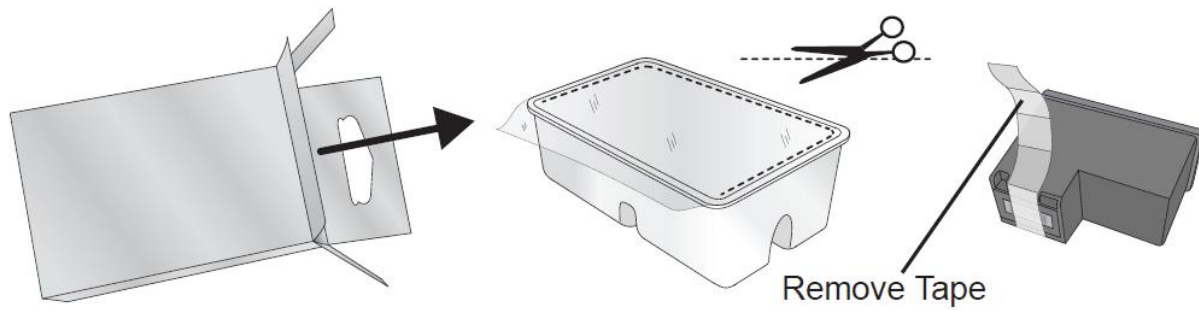
1. Open the front cover. That cartridge will automatically move to the right side if it is not already there.
2. Press or pinch the tab on the front of the cartridge holder.



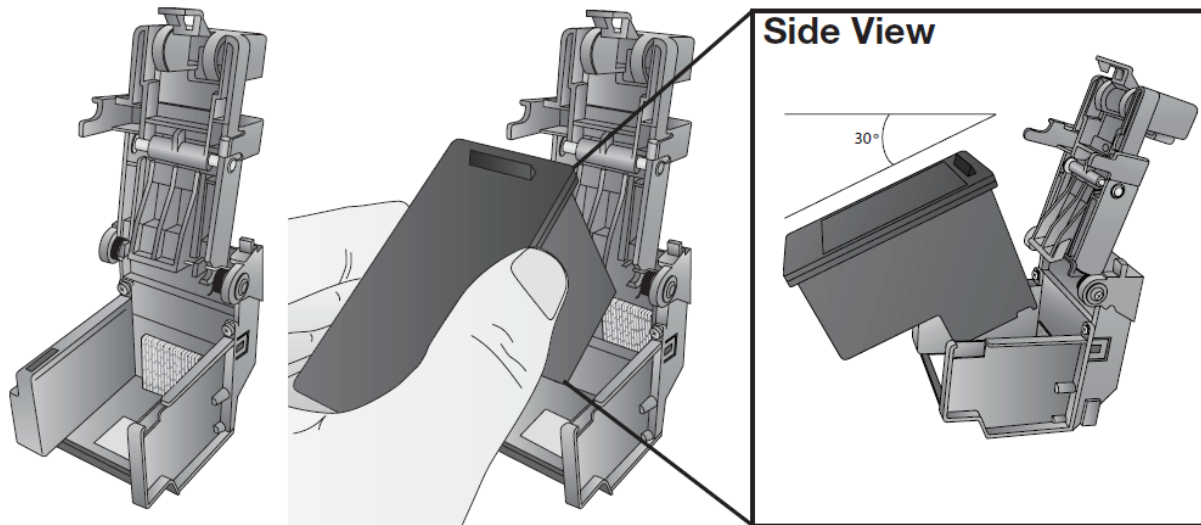
3. Remove the cartridge.



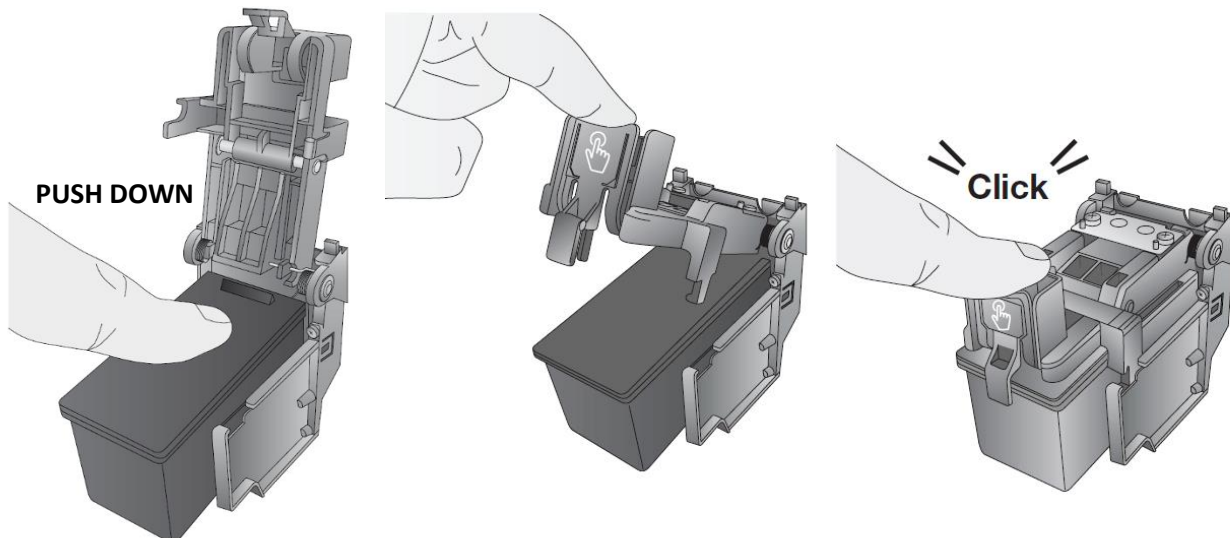
4. Locate a new cartridge and remove it from its packaging. Remove the foil outer package and the tape covering the nozzles.



5. Place the new cartridge into the empty carriage. Note: When installing the cartridge, tilt the cartridge at a slight backward angle of approximately 30 degrees.

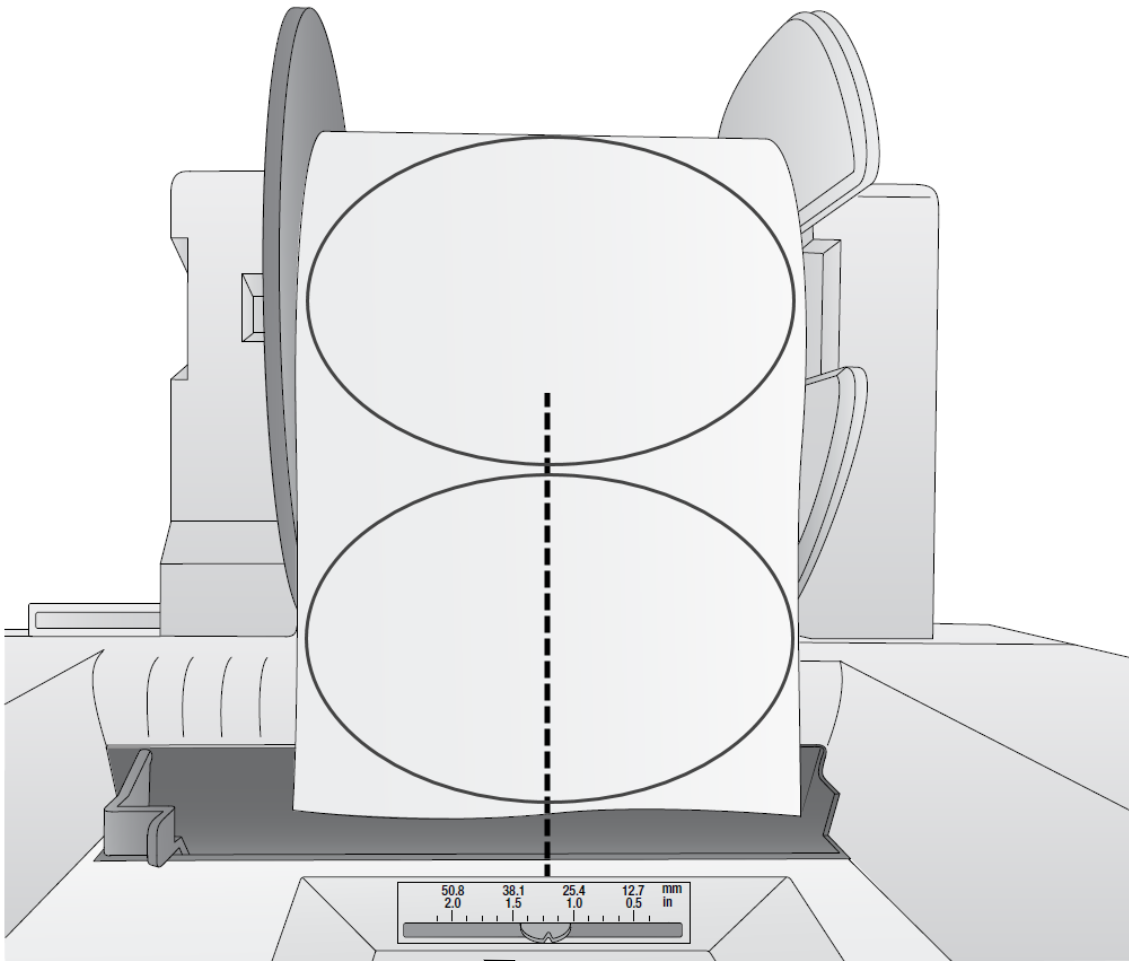


6. Make sure the cartridge is pushed back far enough so the ridge on the cartridge is behind the spring-loaded pusher on the lid. Push down on the cartridge. Close the lid on the cartridge by lightly pressing down from the top until you hear a click.



2D Adjusting the Gap Sensor Position (Non-rectangles Only)

If you are using label stock other than standard square / rectangular die-cut labels such as circular die-cut labels or through-hole stock use the instructions below to adjust the position of the label stock gap sensor. The sensor can be adjusted using the slide bar on the back of the printer. Below the slide bar is a measurement which represents the distance between the edge of the label stock and the sensor. Measure the distance from the edge of the label stock to the correct position on the stock. Set the sensor so the side of the slide bar lines up to this measurement. See dashed line in the illustration below.



Important Note: You must adjust the stock sensor before loading nonstandard label stock.

Circular Labels

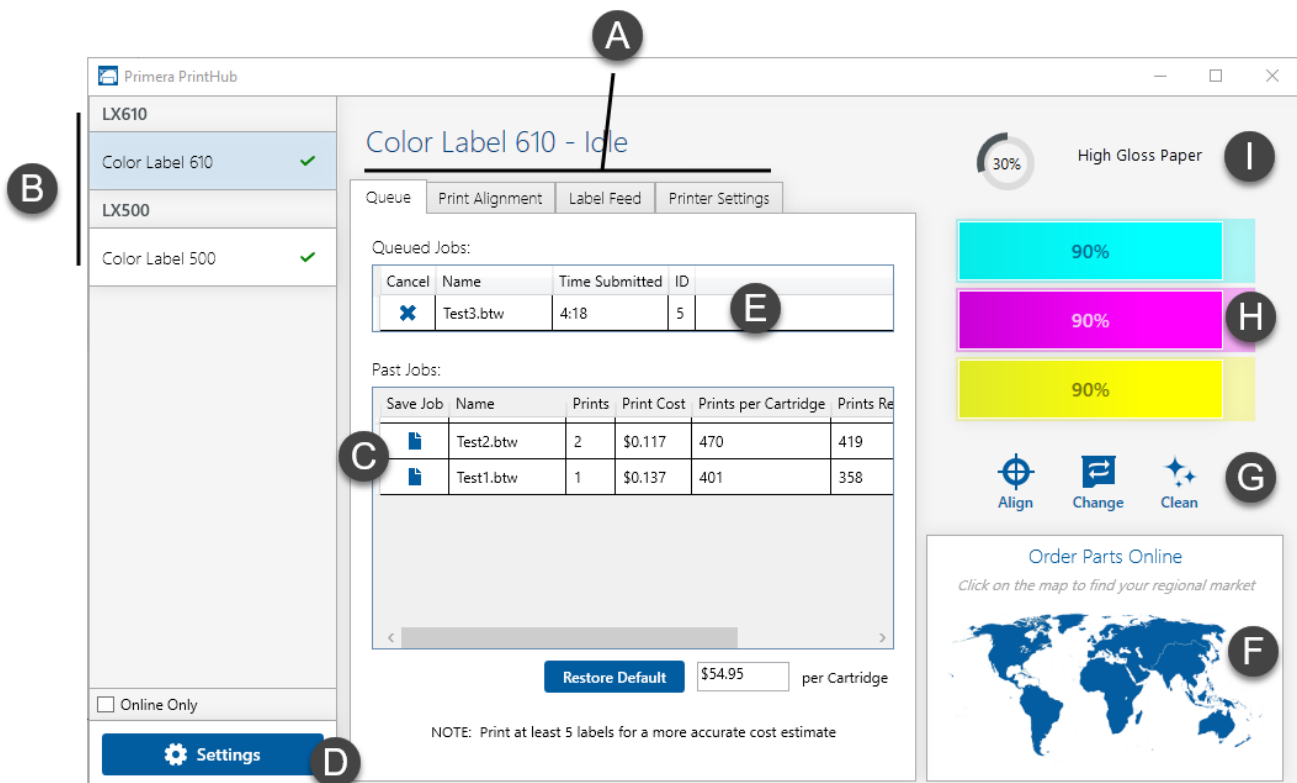
If you are using Circular Labels you must adjust the stock sensor to correspond with the very top of the label where the circles are closest together. If the sensor is too far to the right or the left the printer will still sense the label but the image may be offset downward because the printer will start printing at the wrong position. If you are using stock that has multiple labels across, make sure the sensor corresponds to a place on the stock that has a label and not a vertical gap

The sensor can only be moved a maximum of 2 inches from the left side of the printable area. This means that the maximum diameter circular label that can be printed is 4 inches. For circular labels larger than 4 inches in diameter, you must have a black mark printed on the back of the label stock. This means that you must change the Stock Sensor Mode to Reflective. The printer will now look for the black mark representing the beginning of the next label instead of the die-cut. For more information on changing the Stock Sensor Mode see section 3C.

Section 3 Primera PrintHub

Primera PrintHub is used to interact with the printer for gathering ink levels, maintenance, alignment, cost calculation and several other functions. You can use it to manage these functions on multiple LX610 printers and other Primera label printer models. PrintHub automatically installs with your printer driver and can be accessed through the printer driver preferences or as a program on your Windows start menu.

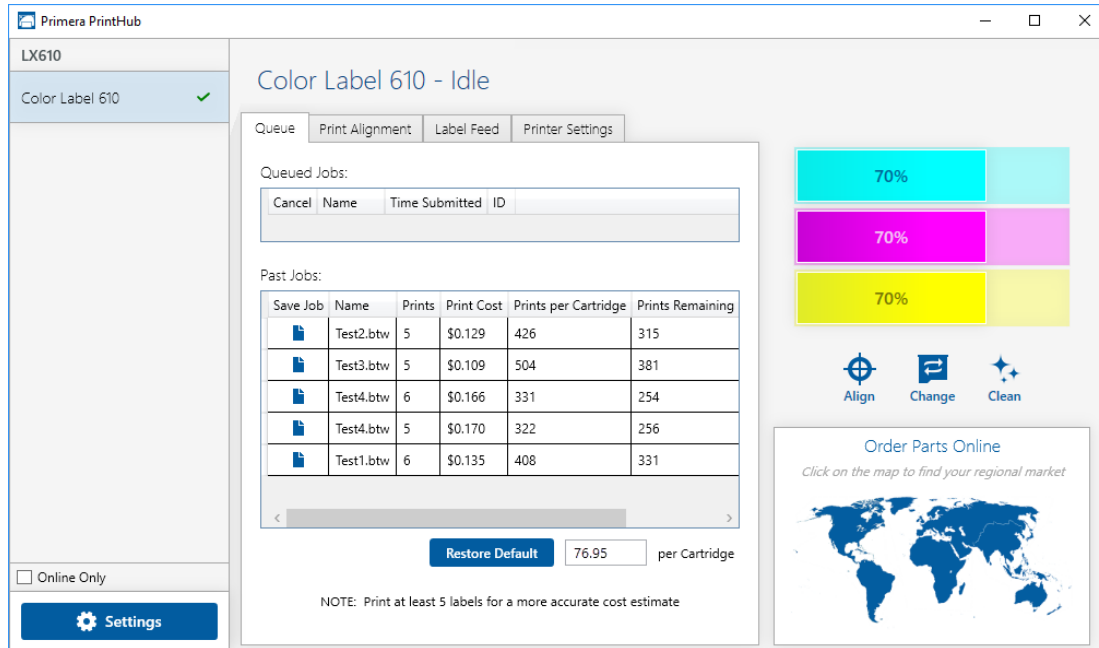
1. Connect the printer via USB and turn on the power. The PrintHub accesses most of the information it uses from the printer itself so the printer must be turned on and communicating for the program to be useful.
2. Go to Start - Programs - Primera Technology - Primera PrintHub.



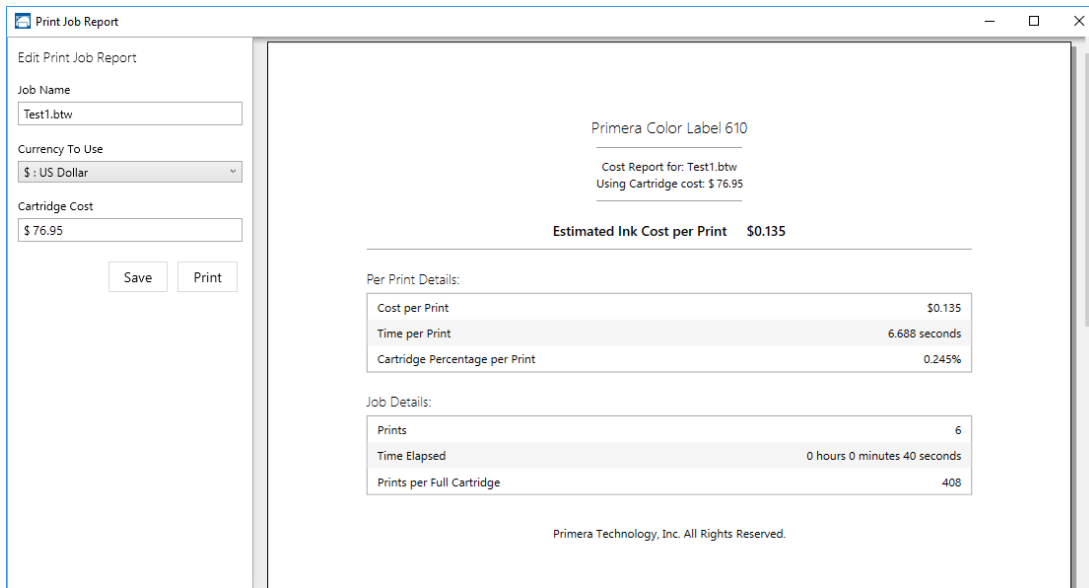
- A. Adjust alignment, sensor mode, output mode and advanced settings.
- B. If you have multiple Primera printers connected, they will be listed here.
- C. Past jobs will show the last 5 jobs along with cost information. Click the document icon to view a cost report.
- D. Application Settings
- E. Print Queue shows the currently printing job.
- F. Order Link
- G. Frequent Activities
- H. Current Ink Levels (Ink is displayed in 10% increments. Example 100% to 90% to 80% etc.)
- I. Digital Die Cutting Media Status and Remaining Amount (If installed)

3A Using the Cost Estimator

The cost estimator is found under the queue section on the first tab of the PrintHub. The last five job costs are stored in the list. Each job will show the cost per label based on the cost per cartridge entered below the list. Enter the actual cost of the cartridge you paid. Prints remaining on the currently installed cartridge and total prints on new cartridge are both displayed.



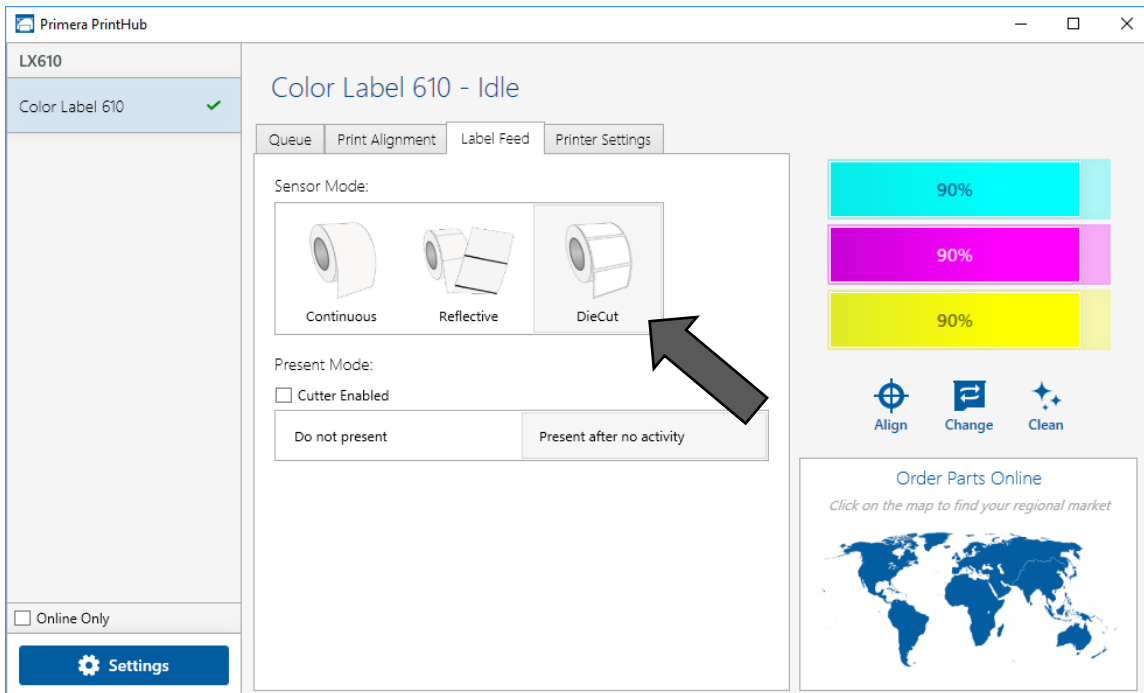
To see a printable/savable report click on the document icon next to the job you want to see. A report will display the information. You can print or save the report from this screen. You can also change the currency using the drop down, change the job name or adjust the cost from this screen.



3B Set the Gap Sensor Mode

The stock sensor mode refers to the method the printer will use to detect the print starting position for each label. To adjust the stock sensor mode, open the PrintHub. In most cases you will NOT need to change this setting. By default, it is set to sense standard Pre die-cut labels. It is only necessary to change this setting if you are using clear labels or any label with a black sensing mark on the back. When you install Digital Die-Cutting Label Stock this setting will automatically be set for you.

1. Connect the printer via USB and turn on the power. The Stock Sensor Mode setting is stored in the printer's internal memory so you will not be able to access it unless the printer is turned on and properly communicating with the computer.
2. Go to Start - Programs - Primera Technology - Primera PrintHub.
3. Click on the Label Feed (3rd tab from left).
4. Select the Stock Sensor Mode by clicking on the graphic that most closely corresponds to the stock you intend to install.
5. Load the label stock after you have set the sensor mode



There are three sensor modes:

Die-Cut (Default). If you are using standard die-cut labels that look similar to the graphic, use this setting regardless of the size of the label. Also, use this setting for Through-hole label material where a hole is punched through each label or a notch is cut in the side.

Reflective. Use Reflective for label material where a black pre-printed line (black mark) on the back of the label stock indicates the break between labels. Black marks are required on clear label stock rolls, or label where the label waste matrix (waste) is left on the liner. Black marks can also be used for irregular shaped labels, circles larger than 4 inches or on any stock where the print starting position cannot be sensed using the label itself.

Continuous. (Sensor off) If you have continuous stock with no die-cut, reflective mark or holes, set the sensor type to Continuous. This will turn off the stock sensor. In this mode there is no way to set the print starting position. The printer will simply start printing the first label and print each subsequent label immediately after that previous one. To produce a gap between prints simply add the desired amount of white space to the end of the label being printed. The printer will automatically switch to this setting when Digital Die Cutting Label Stock is installed.

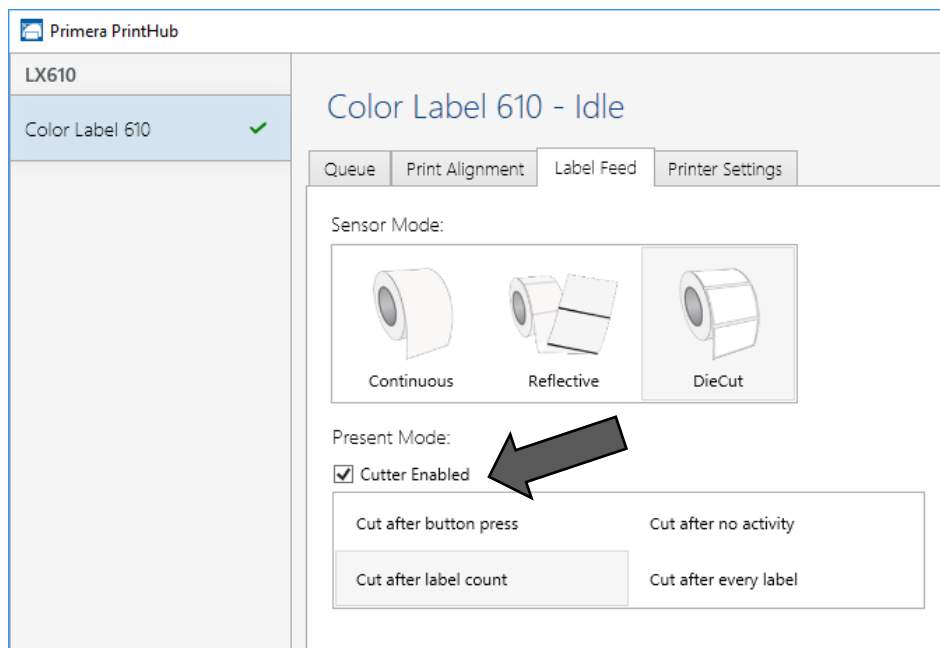
Important Note: You must also set the Stock Sensor Position (Section 2G)

3C Set the Present/Cut Mode

Use the Present/Cut Mode to adjust how the printer presents labels after they are printed or if/when they are cut after printing. To adjust the Present/Cut Mode, open the PrintHub program.

1. Connect the printer via USB and turn on the power. The Output/Cut Mode Setting is stored on the printer main board so you will not be able to access it unless the printer is turned on and properly communicating with the computer.
2. Go to Start - Programs - Primera Technology - Primera PrintHub.
3. Click on the Label Feed Tab.
4. Click on the Output/Cut Mode button. There are different options available which change if the Cutter is enabled or disabled. If the Cutter is disabled, the label present options will be available. If the Cutter is enabled the present options are no longer available but cut options become available.

Cutter Options



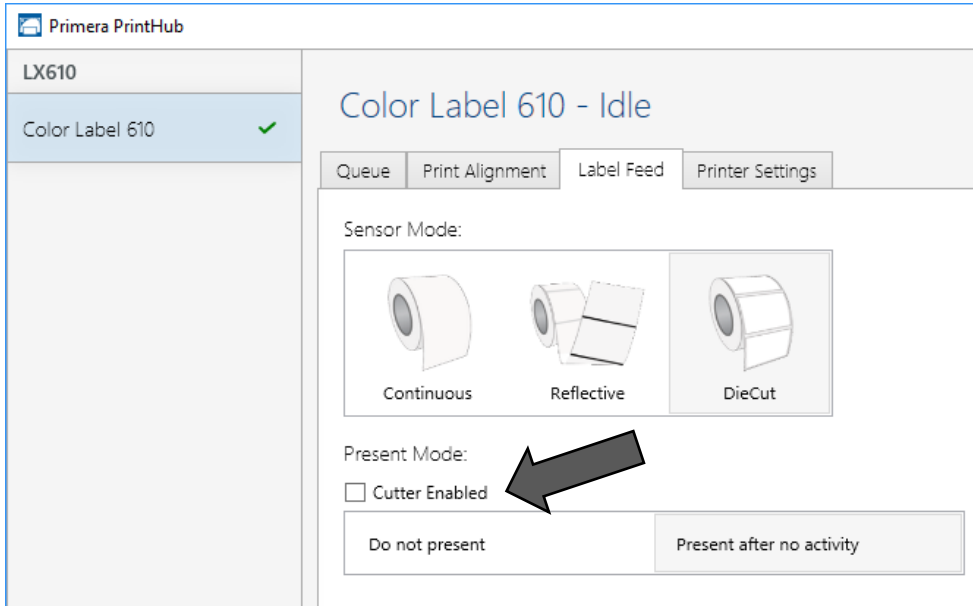
Cut after button press. This setting will cut after you press the Load/Feed button on the printer. This can be used after one label or an entire job. This feature is useful if you will not be present at the end of the print to catch the cut label.

Cut after label count. This option will cut after the number of labels specified in the toggle box that appears when this option is selected. This is useful if you have front/back labels or sets of labels.

Cut after no activity. This setting will cut at the end of a print job if the printer does not receive another print job within one second of the last print job in the queue. You can use this feature to cut at the end of multi-copy job, multi-page job or multiple individual jobs in the queue.

Cut every label. This setting will cut after every label.

Present Options



Do not present. In this mode the label stock does not move after the last label is printed. This means that part of the last label printed is still in the printer. This should be used only if you have a label rewinder attached.

Present after no activity. This setting will present (feed all printed labels past the front opening) at the end of a print job if the printer does not receive another print job within one second of the last print job in the queue. You can use this feature to present at the end of a multi-copy job, a multi-page job or multiple individual jobs in the queue.

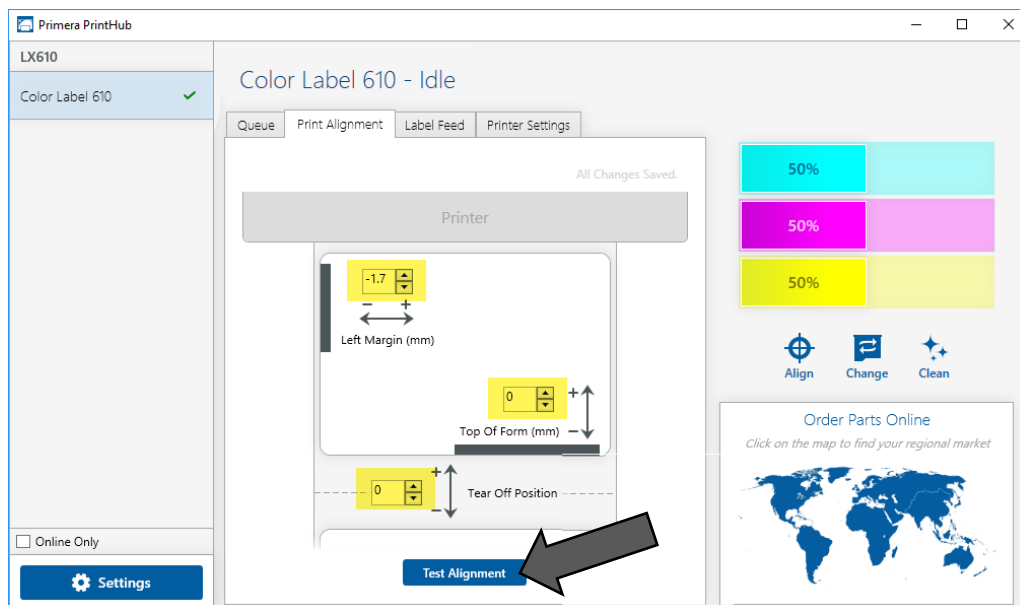
3D Adjusting Print Alignment

If your previous experience with printing is limited to printing letters and cards to 8.5 inch by 11 inch paper you probably are not familiar with an essential part of a label printing - Print Alignment. Standard printers feed a sheet and start printing based on the start of the sheet. They also prohibit printing to the edge of the sheet. This is to avoid any need for alignment.

The LX610 senses the beginning of the label with an optical sensor and is capable of printing to top, bottom, left and right edge. Because of this it is necessary to align the printer to work with specific types of label stock.

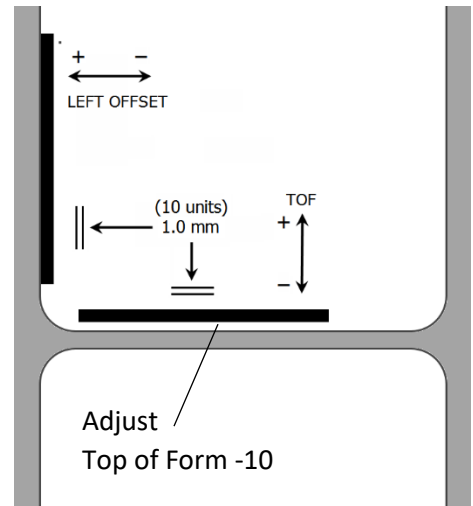
The LX610 comes factory calibrated to print exactly to the edge of Primera label stock. However, due to variations in the left margins and other variables it may be necessary to fine tune these settings at the beginning of each roll. This is especially true for other non-Primera brand label stock.

Adjust print alignment using the PrintHub. Go to the Print Alignment Tab (second tab).



Click on Test Alignment to print the alignment shown to the right. Look at the print to determine how much white space is visible on the edges. The black lines should print right on the leading edge and left edge. In this example the Top of Form needs approximately - 10.

1. **Left Margin Offset.** This value moves the printed label left or right. Add to the current value to move the printed label to the right. Subtract from the current value to move the printed label to the left.
2. **Top of Form (TOF).** This value moves the print start position up or down on the label. Add to the current value to move the printed label down or toward the printer. Subtract from the current value to move the printed label up or away from the printer. The value is automatically saved as soon as you set it. You may have to make several adjustments to one or more of these values. After each adjustment you can click the Test Alignment button to print a small test pattern on the label. This will help you find the proper alignment value.
3. **Tear off/Cut Position.** This value adjusts the position of the last label printed after it has been presented. This only applies if the output mode is set to "Present the label." Add to the current value to move the tear point closer to the printer. Subtract from the current value to move the tear point away from the printer. The value is automatically saved as soon as you set it.

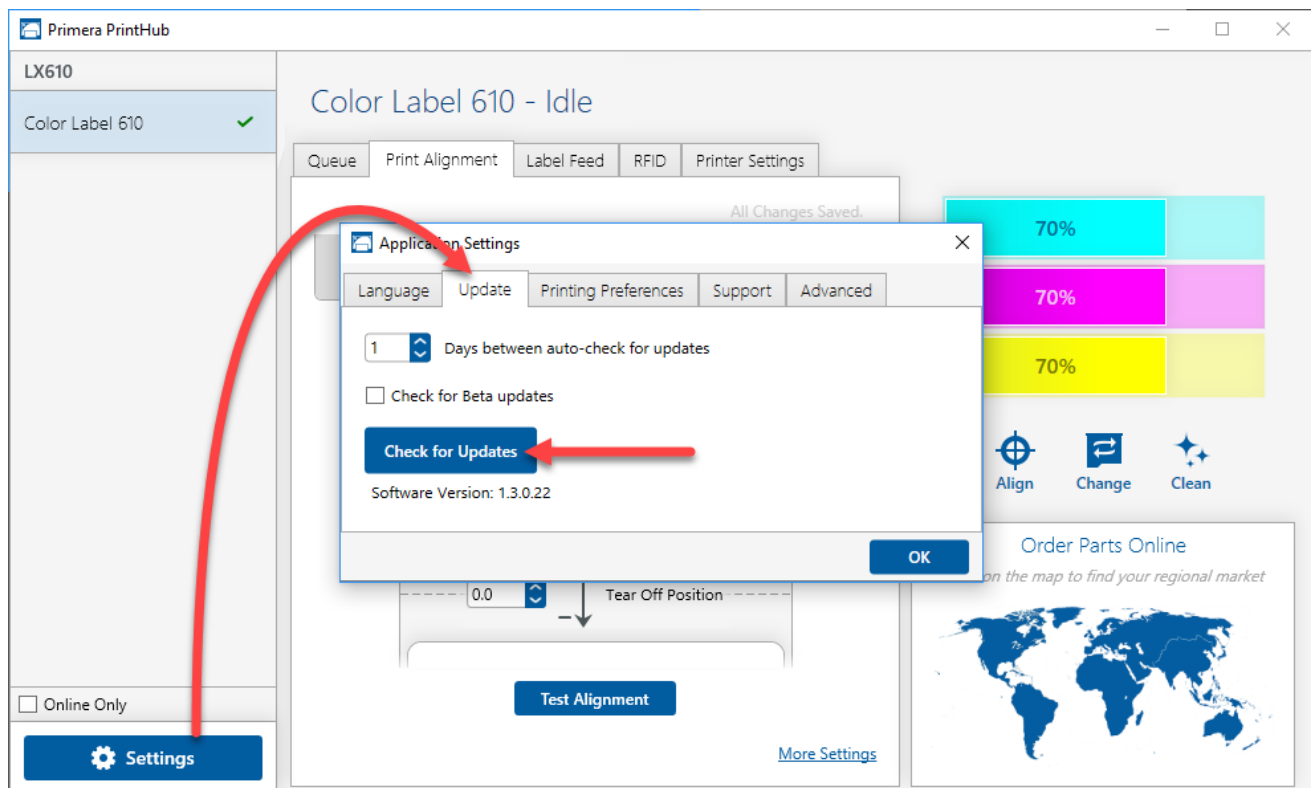


3E PrintHub Settings

General application settings that apply to the software and all printers can be found by clicking the blue “Settings” button in the lower left. Printer specific settings can be found on the “Printer Settings” Tab. See next section.

Language. Typically, the language is set to match the language setting in the operating system. However, you can override currency settings on the Language Tab.

Automatic Updates. Automatic Updates will update PrintHub, the printer driver and the printer firmware. Every 7 days you will be prompted to update the software if there are any newer versions. You can choose to increase or decrease that automate check. You can also perform a check for updates immediately by clicking the “Check for Updates” button. Finally, if you would like to receive beta software check the “Check for Beta updates” box



Printing Preferences. You can choose to close PrintHub after printing completes by checking the “Close this application after printing completes” box. PrintHub automatically opens whenever you send a print job to the printer. If you do not want PrintHub to open in front of other programs, you can check the “Launch minimized during print” option.

Support. Click the “Generate Support Report” button to generate a zip file on your desktop containing all recent log files. Send this to tech support so they can help solve any printing problems.

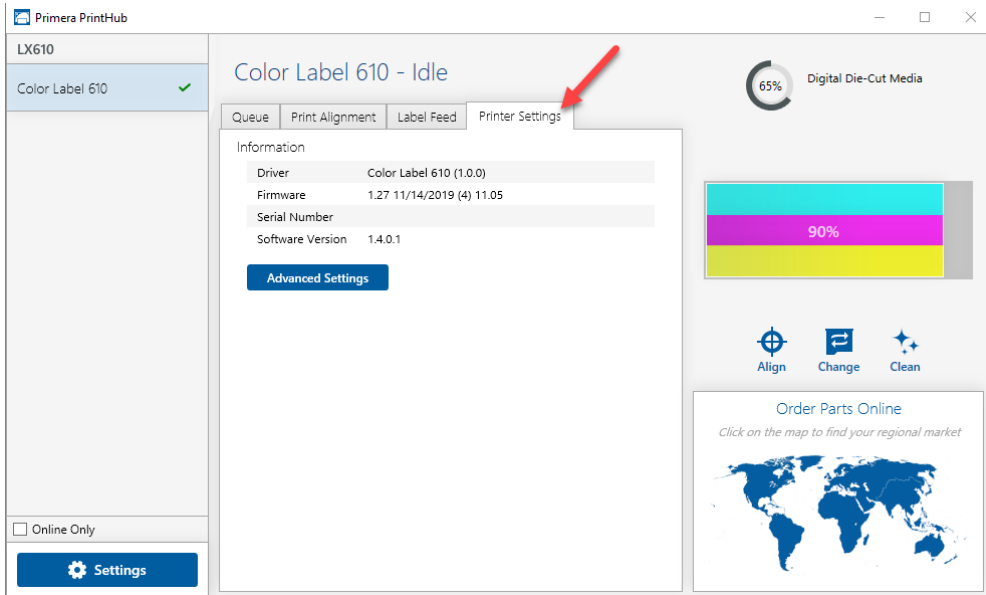
Advanced. Check the “Generate Printer Status XML” box to create an XML at

"C:\ProgramData\PTI\PrintHub\PrinterStatus.xml".

Software developers can use this file to display status information such as error messages and ink levels in 3rd party applications.

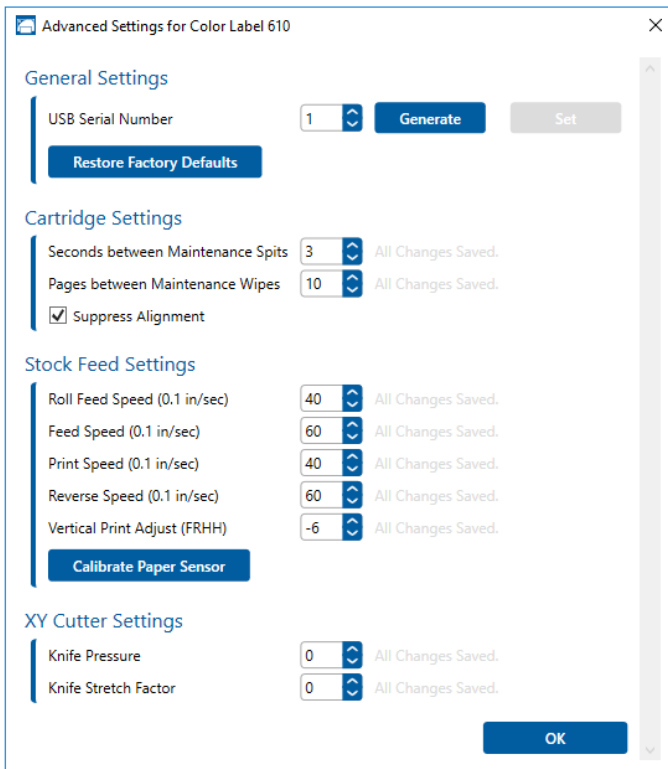
3F PrintHub Printer Settings

Printer settings can be found in Primera Print Hub on the Printer Settings Tab for the LX610.



Information. This section displays all current driver, software and firmware versions.

Advanced Setting Button. Click the Advanced Settings button to view the following settings.



General Settings

3G. Multiple Printer Support.

You can install multiple printers to the same computer and use them simultaneously. To do so you will need to change the USB serial number identifier of one of the two printers, two of three printers, three of four printers etc. To change serial numbers:

1. Connect each new printer one at a time. The current USB Serial Number will be displayed.
2. Click Generate. It will find the next available USB Serial Number based on the currently connected printers. For the first one it should set it to 2 and for the next printer 3 and so on.
3. Click Set. You will hear the printer reset and the settings window will turn gray. After it resets you will be able to see the settings window again. Keep the printer connected.
4. Now you can connect the next printer. Windows will automatically install a new driver for that new printer and name it Color Label 610 (Copy 1). You can rename it later by editing the printer properties in the Windows printer list.
5. You will now see a second printer appear in the left column – Color Label 610 (Copy 1). Click on it to display information about this printer. If this is the last printer, you will connect you are done. If you wish to connect additional printers follow through steps 2-4.

Restore Factory Defaults. This will set all Print alignment and other calibration settings back to factory defaults.

Cartridge Settings. Here you can adjust the frequency of certain maintenance operations. Increasing the value of “Seconds between Maintenance Spits” will decrease ink usage but could also cause poor quality printing.

Increasing or Pages between Maintenance Wipes will speed up printing but could also cause poor quality printing.

Check the Suppress Alignment message to prevent the window from appearing which prompts you to align the cartridge every time a new cartridge is installed. Skipping the alignment is faster but can result in poor print quality.

Stock Feed Settings.

Adjust these settings only if directed to do so by Tech Support.

Calibrate the paper sensor if you are receiving TOF errors. The calibration process will prompt you to remove all paper/stock from the printer before calibrating.

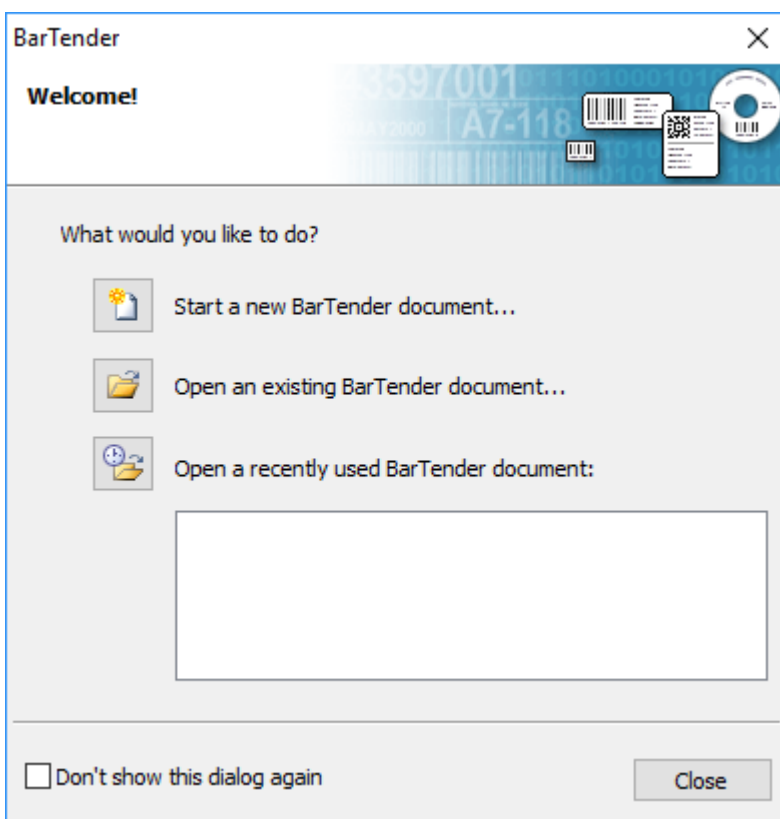
Section 4: Printing only to Pre Die-Cut labels

If you don't need to cut custom shapes, the LX610 is an extremely capable Pre Die-Cut Label printer. While PTCreat can print only to the LX610 other dedicated printing programs offer some advantages.

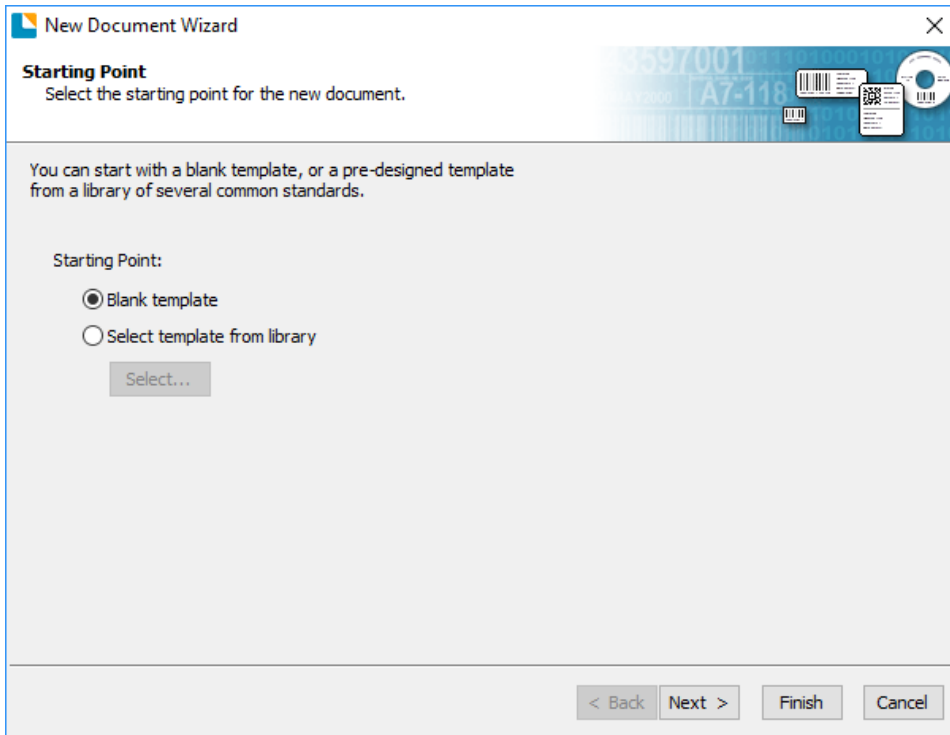
4A Using BarTender for Pre Die-Cut Printing

When you open BarTender you will be given the choice to select an existing label or create a new one using a wizard. Use the following instructions as a guide through the wizard setup process.

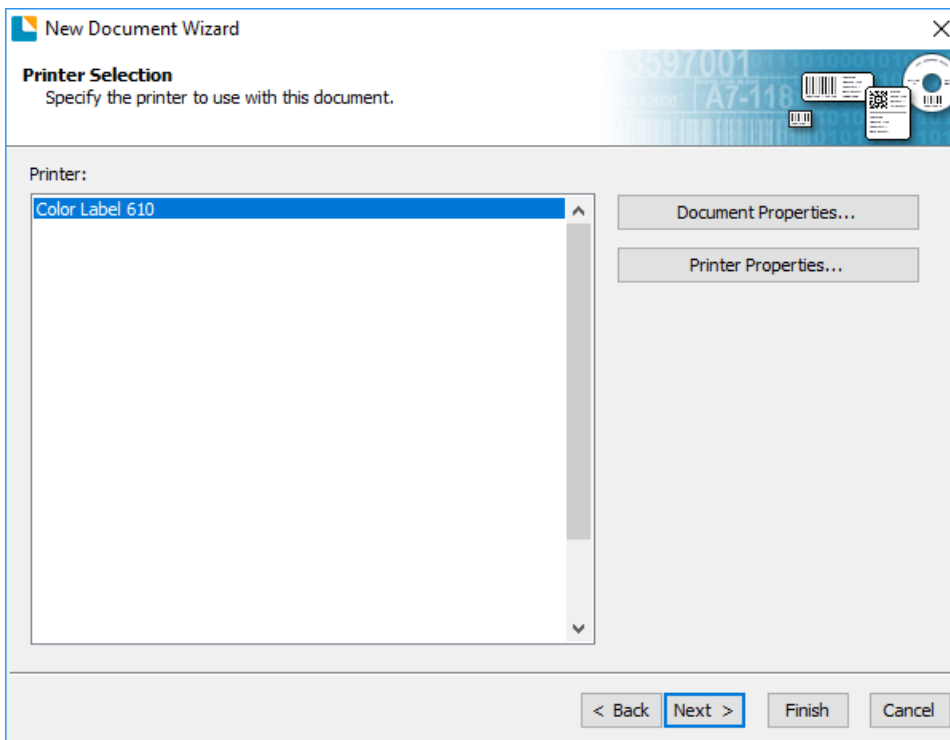
1. Choose "Start a new BarTender document..."



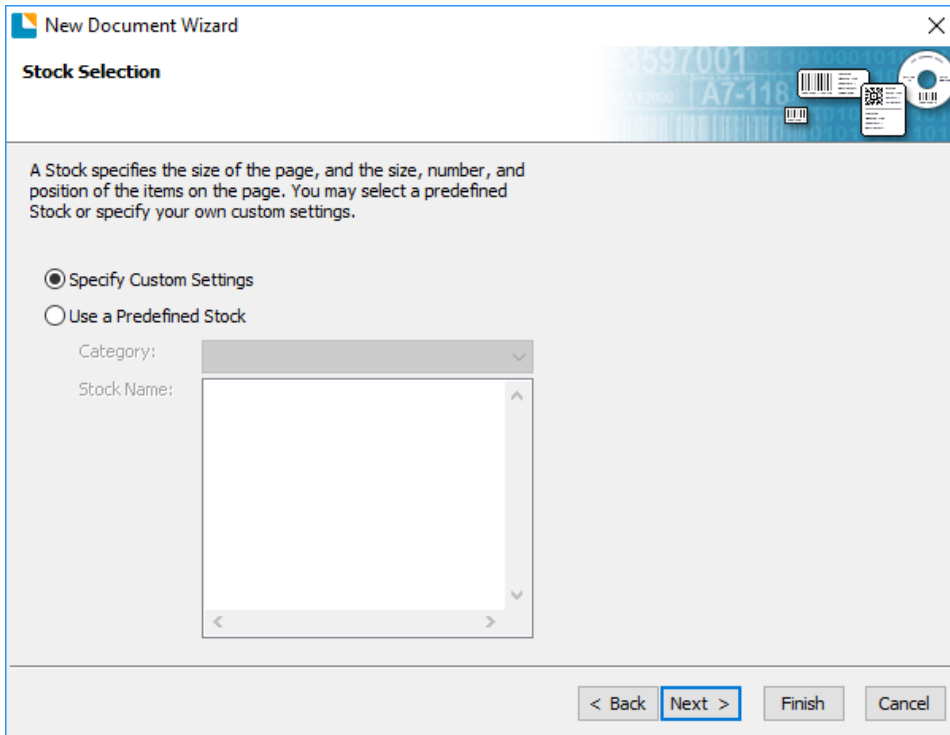
2. Select "Blank Template". Click "Next".



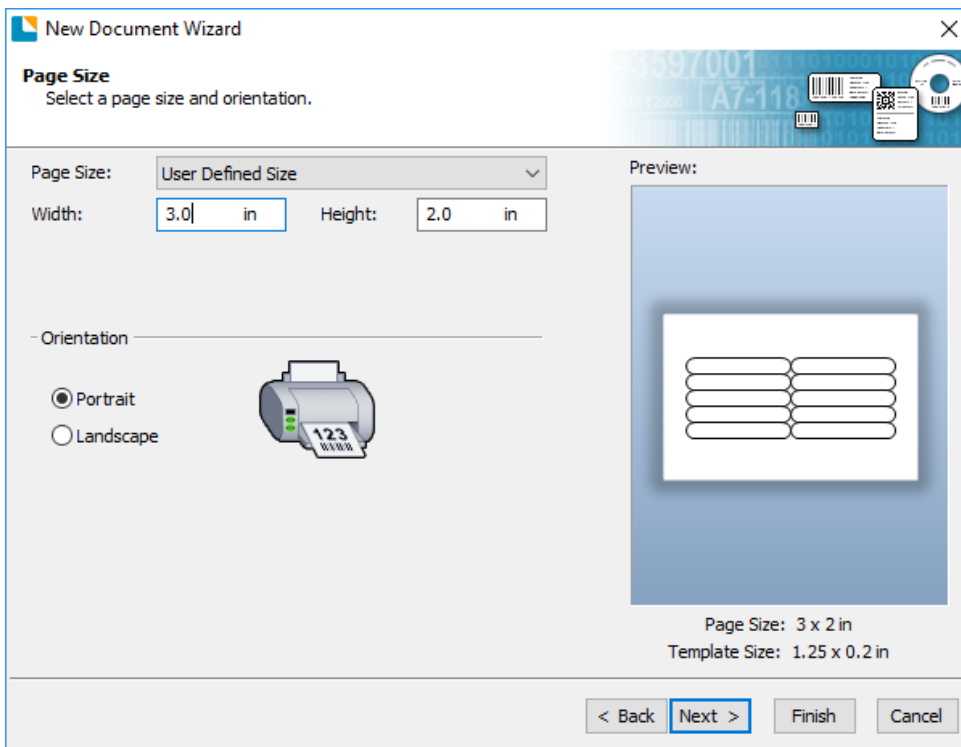
3. Select "Color Label 610". Click "Next".



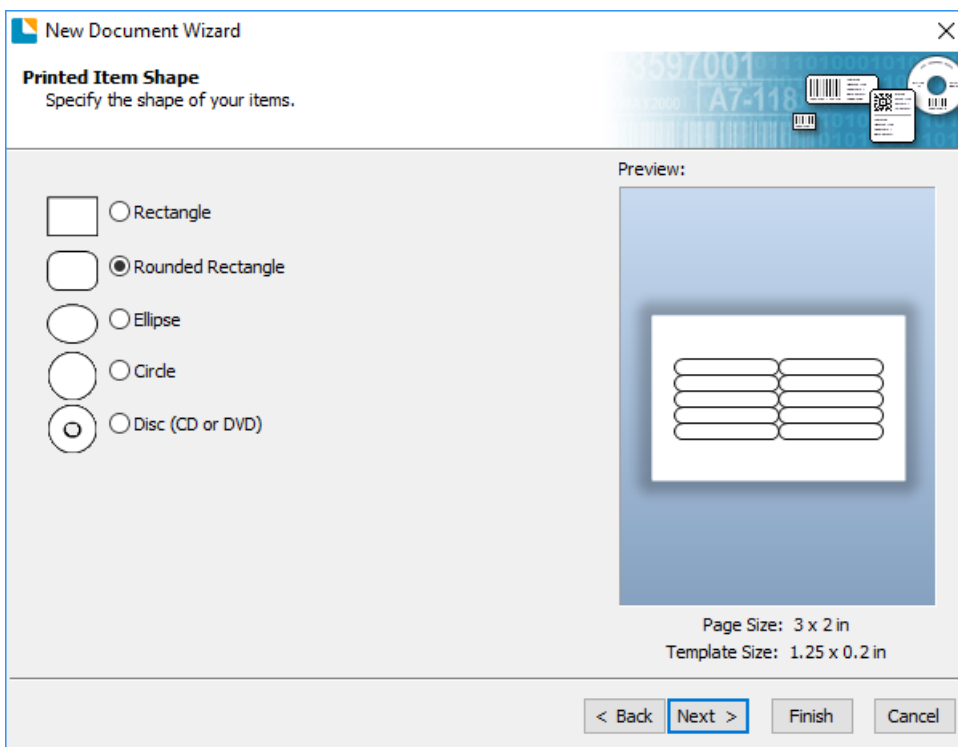
4. Select "Specify Custom Settings". Click "Next".



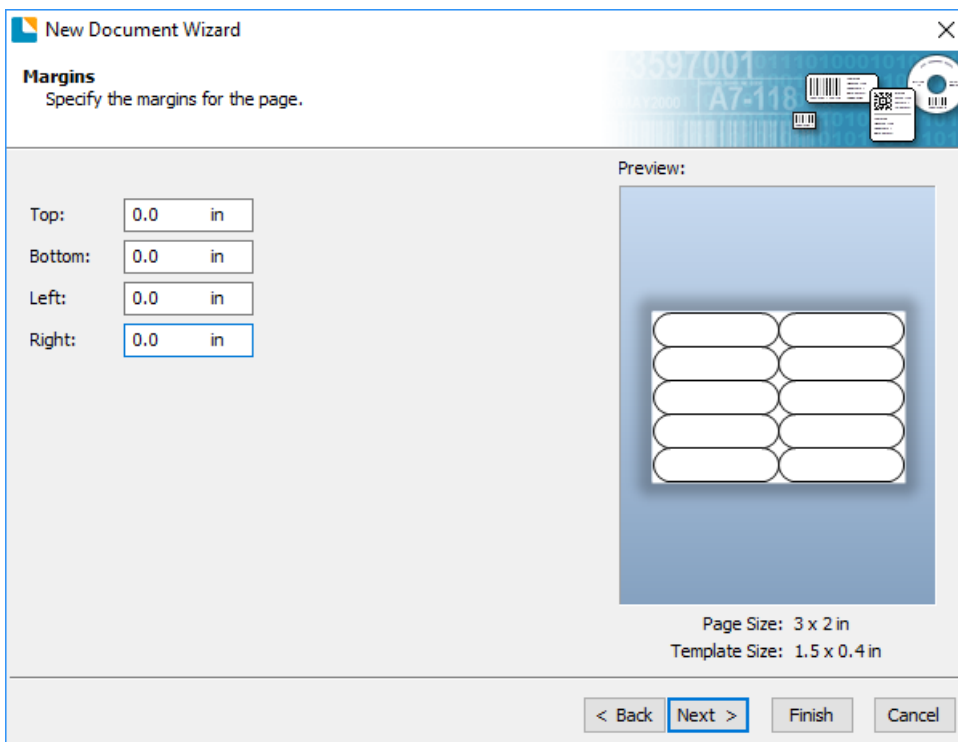
5. Set the page size, width and height to match labels installed in the printer. Click "Next".
Important: Measure the label stock if you are unsure about the size.



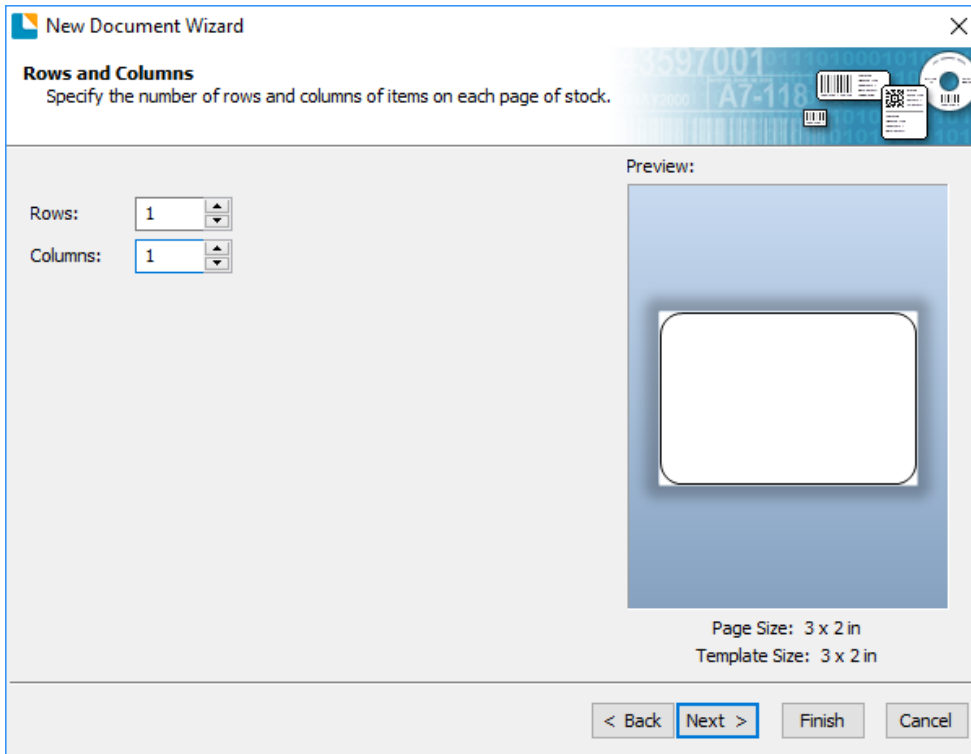
6. Select your label shape. This is typically "Rounded Rectangle" for standard labels from Primera. Click Next.



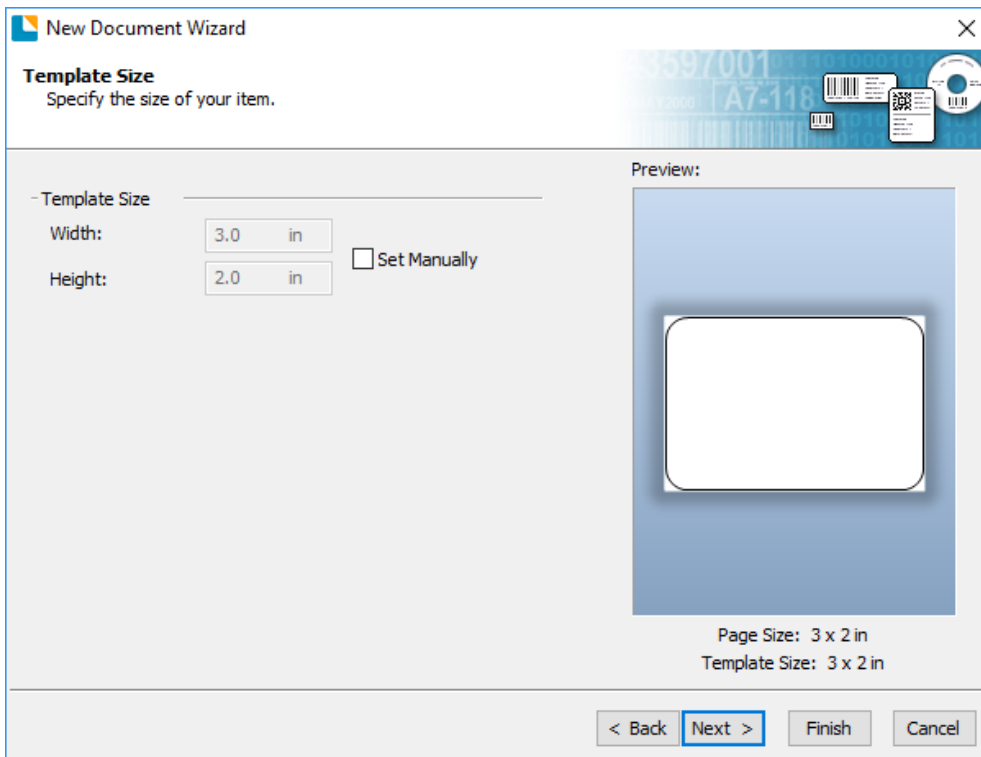
7. Set all of the margins to zero. (You can adjusted the left margin and Top of Form in the Label Alignment Section). Click Next.



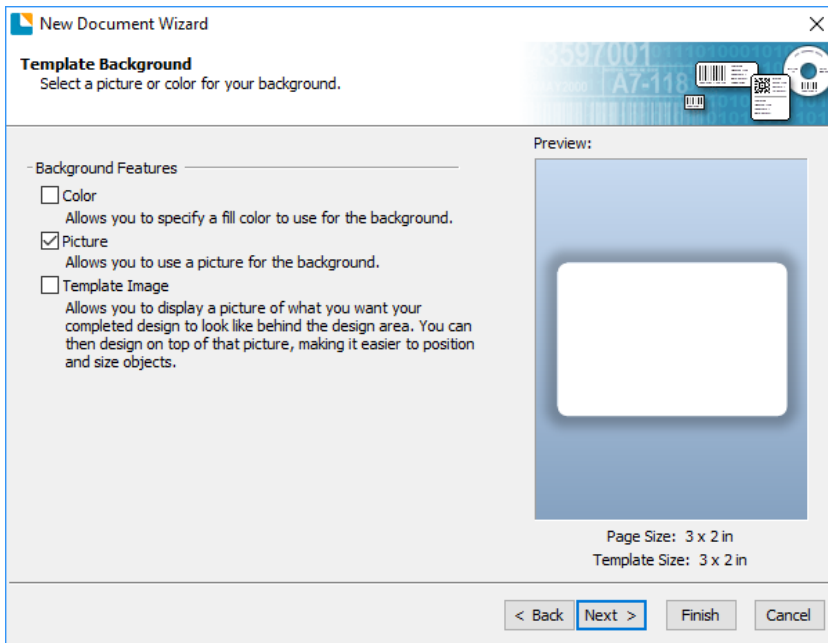
8. Set Rows and Columns to 1 for a standard label. Click Next.



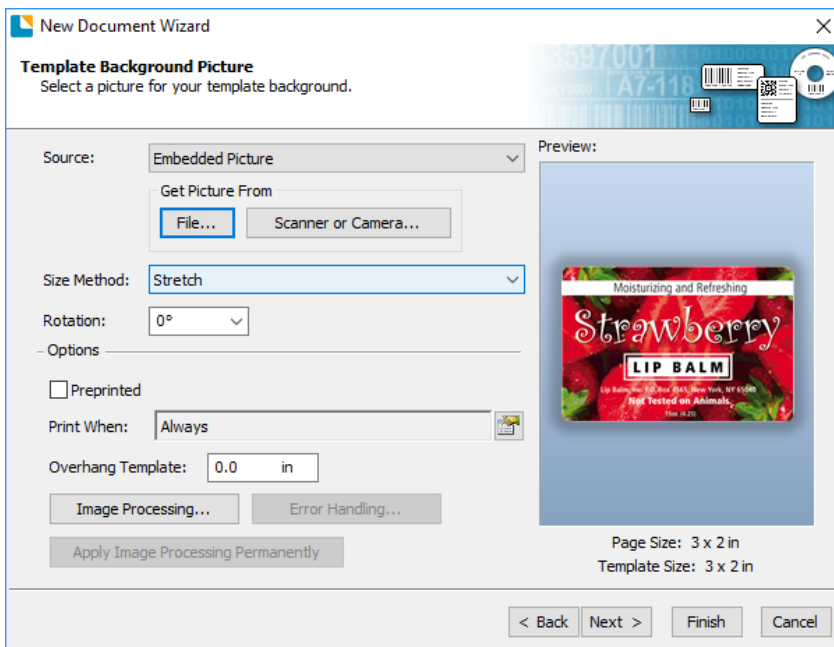
9. Set Template Size to be the same as the label size. Click Next.



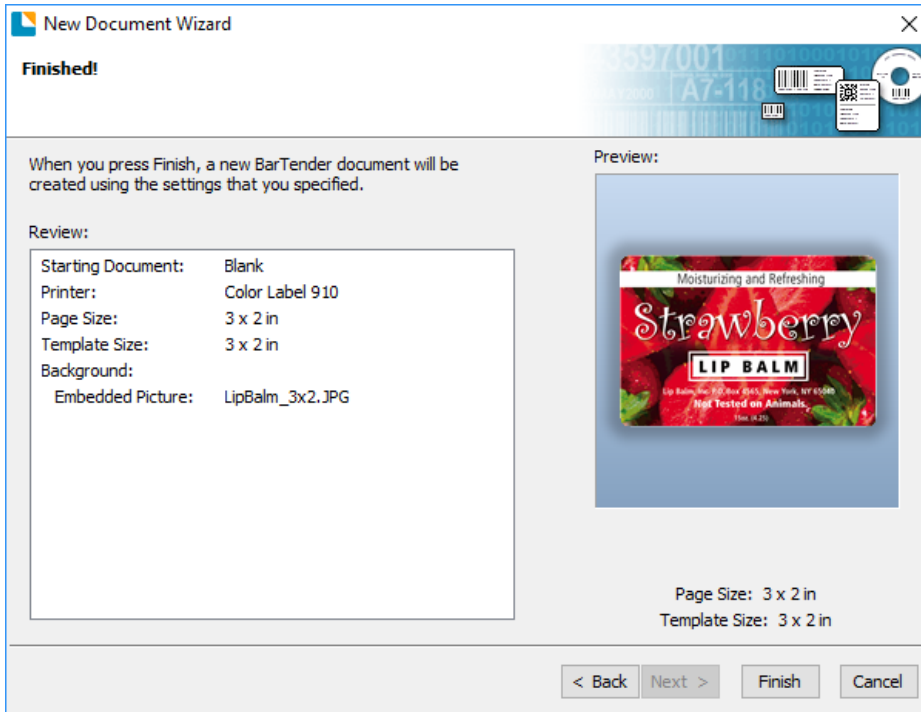
10. Check the "Picture" box to add a background photo or graphic to your label. Click "Next". If you click "Finish", the remaining default wizard options will be set and no picture will be added.



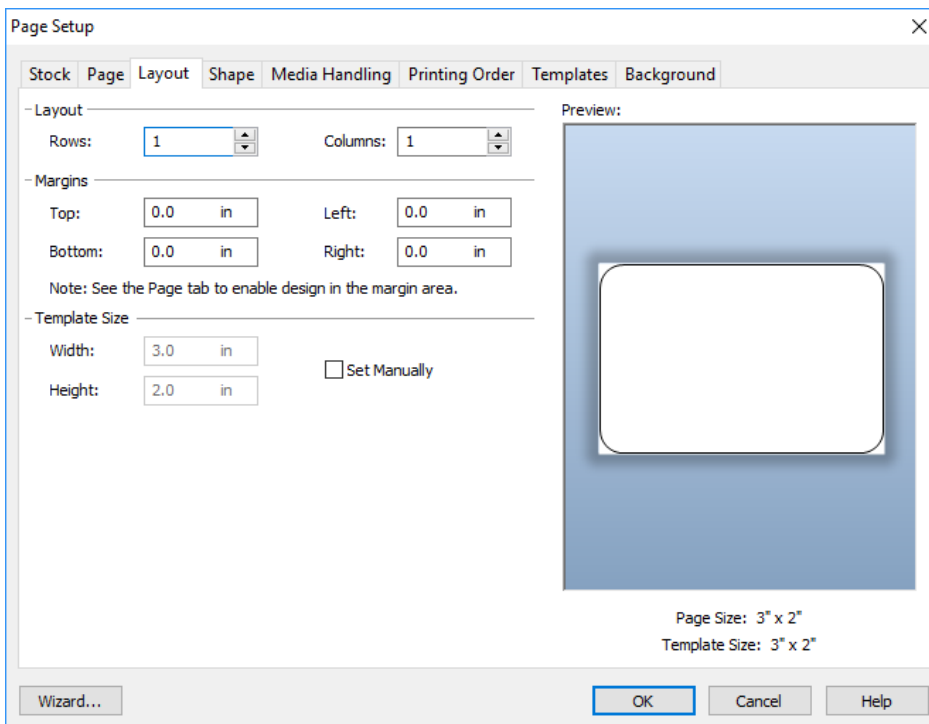
11. Select "Embedded Picture". Click the "File" Button to browse to the location of your photo/graphic file. Set the Size Method to "Stretch". Note the preview to the right. Click "Next" if you are satisfied with the layout of the photo or graphic. Otherwise you may try one of the other Size Methods in the drop down menu.



12. Review the label setup summary. If it is correct, click "Finish". Your blank label or label with background will be displayed.



You can edit any of these initial settings by going to the File Menu and selecting "Page Setup". Basic and advanced settings are available on the various tabs.

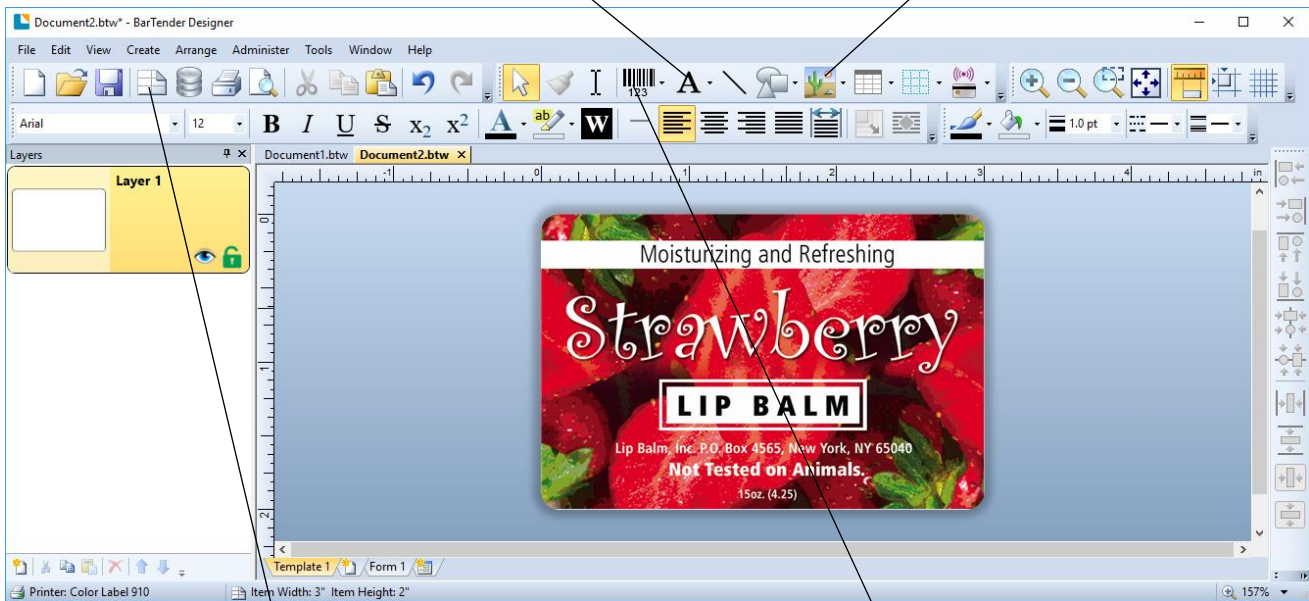


4B Add Text, Barcodes and Graphics to a BarTender Label

Once you have created your label size you will be able to add text, a barcode and/or graphics. This can be done using one of the buttons on the button bar at the top of the screen.

Add Text. Click the Text button. Now click anywhere on your label. "Sample Text" will appear. Edit the text on screen or double click it to open up text settings to change font, size and other settings.

Add Graphic. Click the Image button. Now click anywhere on your label. An Image icon will appear. Double-click it to open up image settings and browse to the image/graphic that you would like to insert.



Page Setup. Click the Page Setup button to change your label size, adjust corner radius or change the shape.

Add Barcode. Click the Barcode button. Now click anywhere on your label. A barcode settings window will appear. Here you can choose any type of barcode and enter the value.

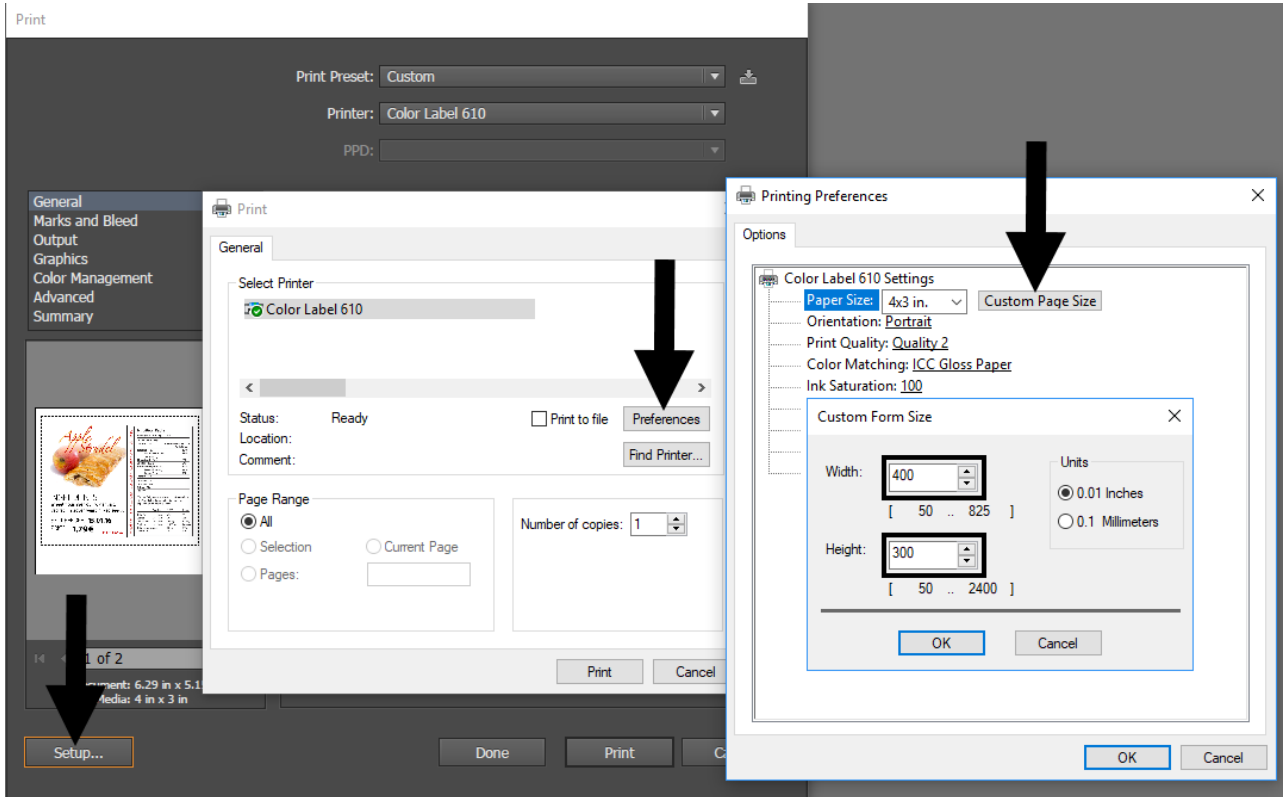
Tip! Double-click any object to open settings for that object.

Tip! Go to the Help menu to access the BarTender Manual and Tutorials.

4C Printing from Other Programs

Since this printer uses a standard Windows printer driver you can print from any application you would like. There are just a few things to remember that will make it much easier.

1. Set the Page/Label Size in the Driver. BarTender automatically prompts you for the size of the label that you are using. When printing from any other program you must do this manually. Before you print, simply set the custom page size just as you would set print quality in the printing preferences. In the example below the label size is 4" x 3" so the custom page size is set to 400 x 4300 (displayed in .01 inch units).

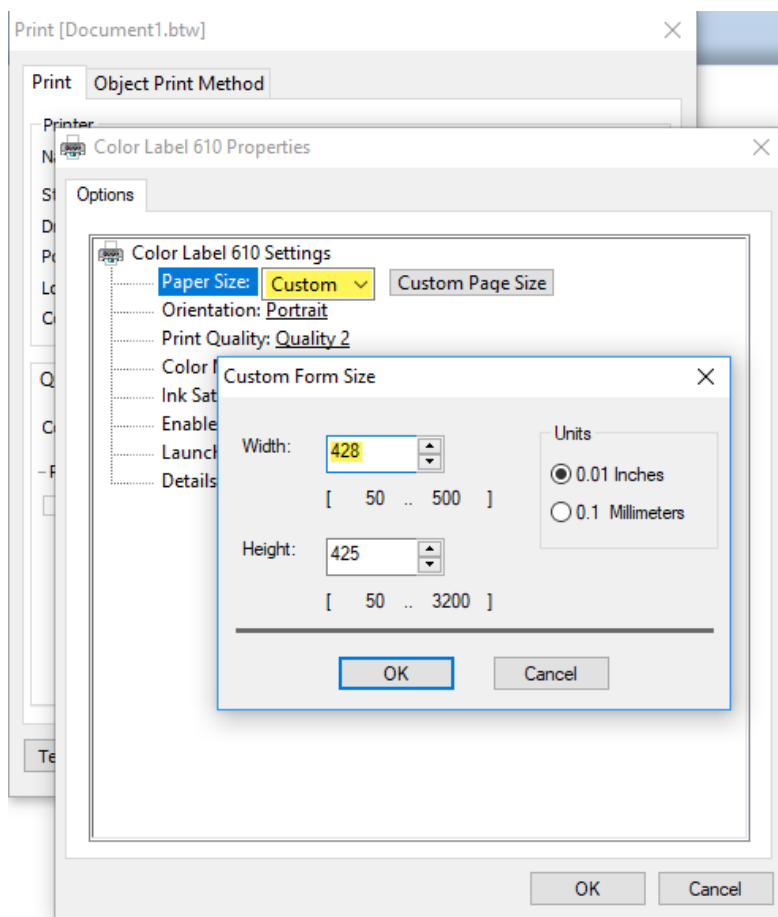


2. Check the image or document size. The image size or document size set in Illustrator should match to the Page/Label Size set in the driver. If you have set your page size to 4" x 4" but your image is actually 5" x 3" the printer driver will automatically shrink your image to fit inside the 4" x 4" label. The result is that the actual printed label is 4" x 2.4". Avoid this by setting your document size or image size to match the label size.
3. Choose the right printing program. There are many different applications that are capable of printing to the LX610. However, there are only a few that are ideal printing applications. For example, Adobe Illustrator is an excellent design program but is not always the best printing program. It can be difficult to find the printing preferences or to know the exact size of the art board. It is best to save as a PDF file and print from Adobe Reader or export as a 300 dpi JPG and print from BarTender.

4D Creating a Full Bleed Print

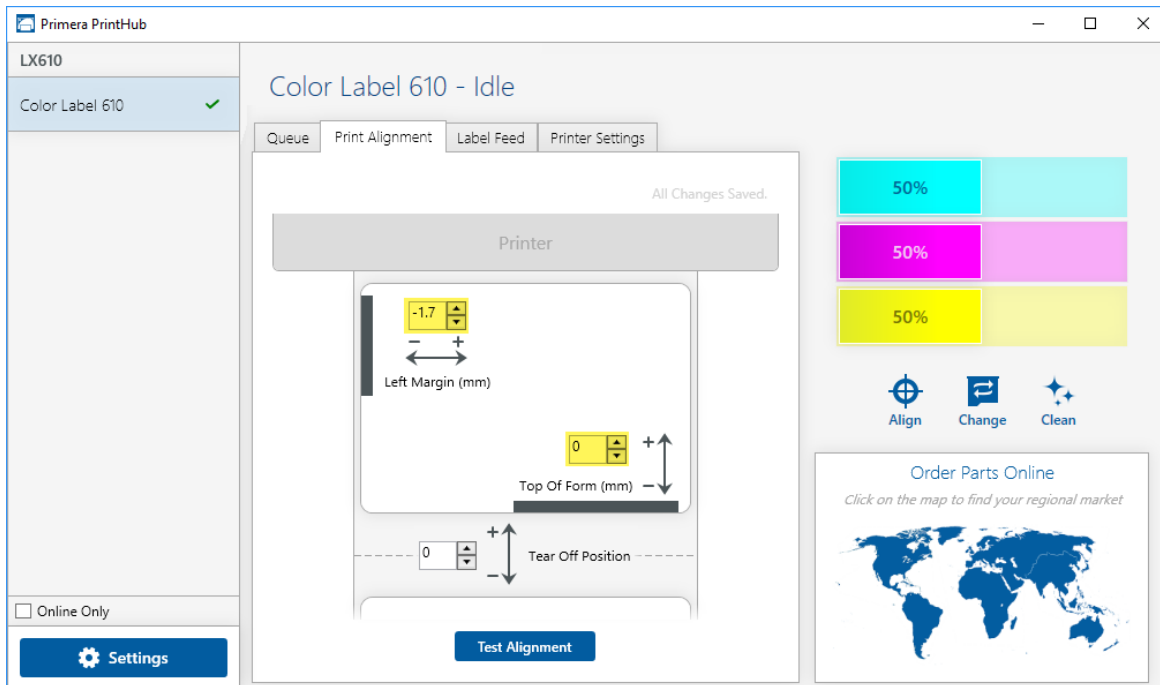
To create a label that completely fills the space with no white margins, adjust these settings in the status monitor and printing application (BarTender). This is only necessary if you are printing to Pre-Die Cut Label stock. If you are printing and cutting using die cutting media, you can adjust the position of the cut line to accomplish this.

Page Size. Increase the page size width by .03 inches (1mm). Increase the height by .03 inches (1mm). If you are using BarTender, simply change the size under the File Menu - Page Setup. If you are using other graphics programs you will need to change the page size in the application and in the printer driver preferences.



Left Margin Offset. You must decrease the left margin offset to center the over bleed on the label. If you over bleed by .03" you will need to decrease the Left Margin Offset by 0.4mm. This will center the page size increase so there is a .03 inch over bleed on both left and right sides. Some additional adjustment may be necessary if the label was not perfectly aligned to begin with. See Section 4E.

TOF. Increase the Top of Form by 0.4mm. This will cause the printer to start printing before the label and ensure a fully printed label. Some additional adjustment may be necessary if the label was not perfectly aligned to begin with. See Section 4E.

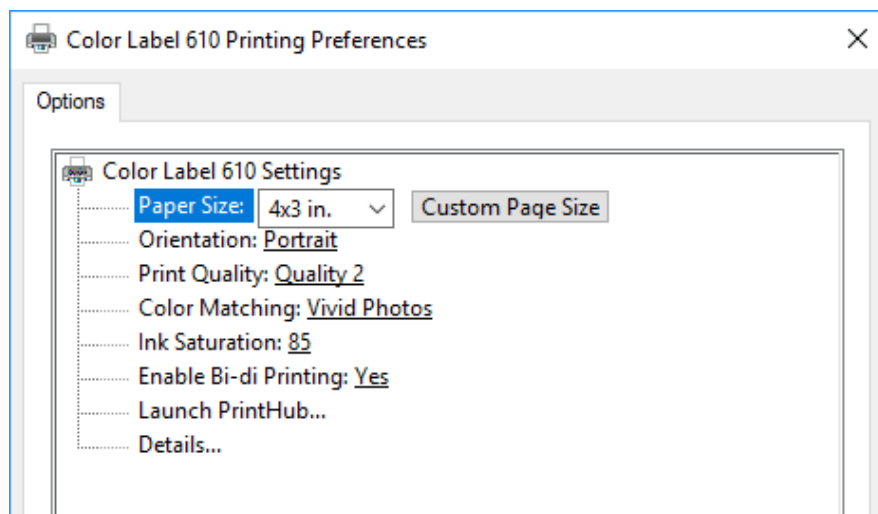
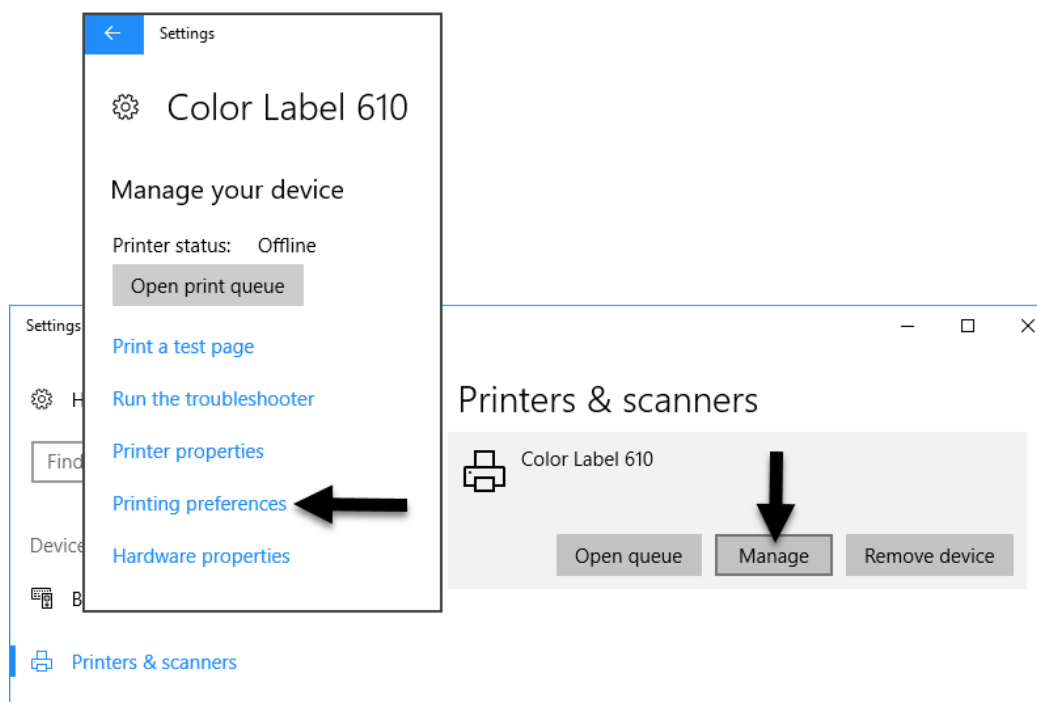


Note: It is best to over bleed as little as possible to avoid excess ink on the label backing. Also, over bleeding too much will cause the printer to skip labels. This is because the printer stops printing too late to sense the next label.

4E Printer Driver Settings

Once the printer driver has been successfully installed, you will need to setup the driver with the appropriate print options. Refer to the following steps to change or verify your default printer driver preferences. These settings will apply to all new designs created in BarTender or other programs after the preferences were changed. Existing labels saved in BarTender will not be affected since the preferences are saved with the label. To change these preferences, you will have to change printer preferences through BarTender. (File Menu - Printer Settings)

Click the Start button, search for "Printers". Select Printers and Scanners. Select the Color Label 610. Choose Manage. Select Printing preferences.



Note on PC Settings:

Most applications allow you to change these same printer driver options from their "Print" and/or "Printer Setup" screens. Some applications such as BarTender save your settings with the label, others use settings only for the current print job just sent to the printer.

Paper Size

If you are using BarTender, this setting is adjusted during the label setup wizard. If you are using a program other than BarTender you will need to set this to the dimensions of your label. Keep in mind that the dimensions are always relative to the width and height of the actual label in the printer. Orientation of an image on the label should not change this setting. See Section 2A for minimum and maximum label sizes.

Orientation

There are two settings for orientation, Portrait and Landscape. If your text and graphics print left to right or as shown on the screen, select portrait. If you wish your printing to rotate 90 degrees from what you see on the screen so it is printing horizontally, select landscape as your orientation. Remember, this does not change the width and height Paper Size. It is only a tool for viewing a label upright on screen that will be printed sideways on the printer.

Print Quality

There are 4 levels of print quality in the driver. The lower the quality, the faster the print. Quality 1 provides the fastest print available while Quality 4 provides the best quality. It is recommended that you experiment with the different levels when designing your label to find a good balance between print quality and print speed. Quality 2 is the default.

Color Matching

There are several options available depending on which cartridge is installed (Pigment or Dye). The options will update automatically depending on which cartridge is installed.

Vivid Graphics mode is best used for graphical images where accurate color reproduction is not as essential. Images printed in this mode will look more vibrant because more ink is being used to produce them. However, printing images of people may produce skin tones that have a reddish tint.

Vivid Photos mode is best used for photographic images where accurate color reproduction is very essential. Images printed in this mode will look lighter than those printed in Vivid Graphics mode. Skin tones especially will look more natural in this mode.

ICC Gloss Paper, ICC Gloss Polyester and ICC Matte Bopp are all ICC calibrated color matching options. Select the setting that corresponds to your installed Primera media of the same type to produce ICC color matched prints. Note: ICC monitor calibration and additional setup is required for this option to work.

-NONE- will use no color matching.

Ink Saturation

This option controls the amount of ink used when printing an image. The default setting is 100%, which will provide the most accurate color matching. If the ink is not drying fast enough or "bleeding", you can decrease the Ink Saturation to lessen the amount of ink that is applied to the label.

Rotate 180 Degrees

Set this setting to Yes to print with the labels right side up as they exit the printer.

Enable Bi-di

Set to "Yes" for fastest print speed. Requires an alignment print after every cartridge change. Set to "No" for better quality print (in some cases).

Launch PrintHub

This setting will open the Primera PrintHub application.

Details

Select this setting to see current firmware and driver version information and other printer settings.

Section 5: Troubleshooting

5A Solving Print Alignment Problems

Image is Vertically Offset (White space can be seen on the top or bottom of the label) The LX610 decides where to start printing by detecting the start of a die-cut label, detecting a black mark on the back or detecting a thru-hole that corresponds to the start of the label. The following items can cause the label sensor to improperly detect the start of a label:

- 1. TOF Offset.** TOF stands for Top of Form and this setting allows you to fine tune the alignment of your printing on your label stock. This will be factory calibrated. If fine tuning is needed, increase this setting to move the image down on the label; decrease this setting to move the image up on the label. The unit of measure is 0.1mm.
- 2. Nonstandard / Non-translucent Backing Material.** Test the unit with approved label stock from Primera (ask tech support to send a sample). If it prints correctly, your label stock may not be compatible. The label sensor needs to see the difference between a label and a backing material by seeing through the label stock for light variations. If it cannot see through the label, problems will arise. If you must use this type of backing, try label stock that has a black mark on the back to show where the label begins. You will need to change the Sensor Type setting in the driver preferences to Reflective if you switch to a label with a black mark on the back.
- 3. Improper Label Gap Distance.** If the gap between labels is too small there will not be enough time for the gap to be detected. See Label Specifications.
- 4. Page Size is Bigger than Label Stock Size.** If the page size set in the driver is larger than the actual label stock, ink will be printed on the gaps and the sensor will start looking for a gap too late. This can cause label skipping or inconsistent print starting points.
- 5. Portrait / Landscape.** If the Portrait / Landscape setting does not correspond to the label stock installed this will also cause the printer to print over the gap and onto the next label. Make sure this is set correctly.
- 6. Sensor Position.** Circular, nonstandard label shapes or multiple labels across will require precise adjustment of the label sensor. If you are using circular or other non rectangular die-cut labels see Section 2B for instructions.

The image is printing horizontally offset

(White space is seen on the left or right side of the label)

Two printer driver settings can affect this issue. Left Margin Offset. This adjustment is found in the Status Monitor. If you see white space on the right side of the label and overlap on the opposite side, increase the number. If you see white space on the left side of the label and overlap on the opposite side decrease the number (Negative numbers are allowed). Note: Usually a space on the right side indicates a margin around the label that is not being accounted for. The printer is factory

calibrated for a 2mm margin. A larger margin around the label will cause a right side space. Page Size. Often the page size is not large enough for the label. If this is the case you may see white space on the right side of the label and no image overlap on the opposite side. This indicates that the page size needs to be increased. Increase the page size through the printer preferences enough to cover the label.

5B Maintenance

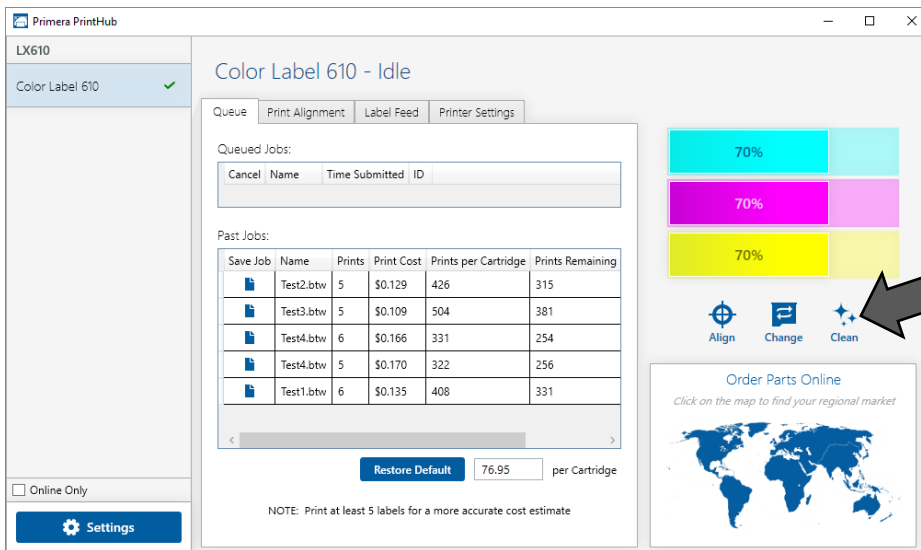
Cleaning the Printer

The case of the printer can be cleaned with an ammonia based window cleaner and a lint-free cloth. Over time, ink overspray may gather at the base of the printer. The printer is designed using a vacuum system to gather most of this ink on a series of saturation pads. Eventually, these pads may need to be replaced. Contact tech support to determine if pad replacement is necessary.

5C Poor Print Quality – Cleaning the Cartridge

It may be necessary to clean the ink cartridge nozzles if you notice reduced print quality, or if you suspect a cartridge nozzle has become slightly dried out or clogged. If the cartridge has been left out of the printer more than 30 minutes, the ink in the print head nozzles may have dried. If you are having print quality problems, follow the steps below:

1. Before moving on to the next step, ensure that the ink level of the color cartridge is more than 10%. If the ink level is lower than 10%, replace the cartridge.
2. Try cleaning the cartridge using the clean function in PrintHub.



3. Determine if printing is now acceptable by printing your image. If the sample has missing colors or voids within a color strip, remove the cartridge from the printer and proceed to step 4.
4. Prepare items needed for procedure

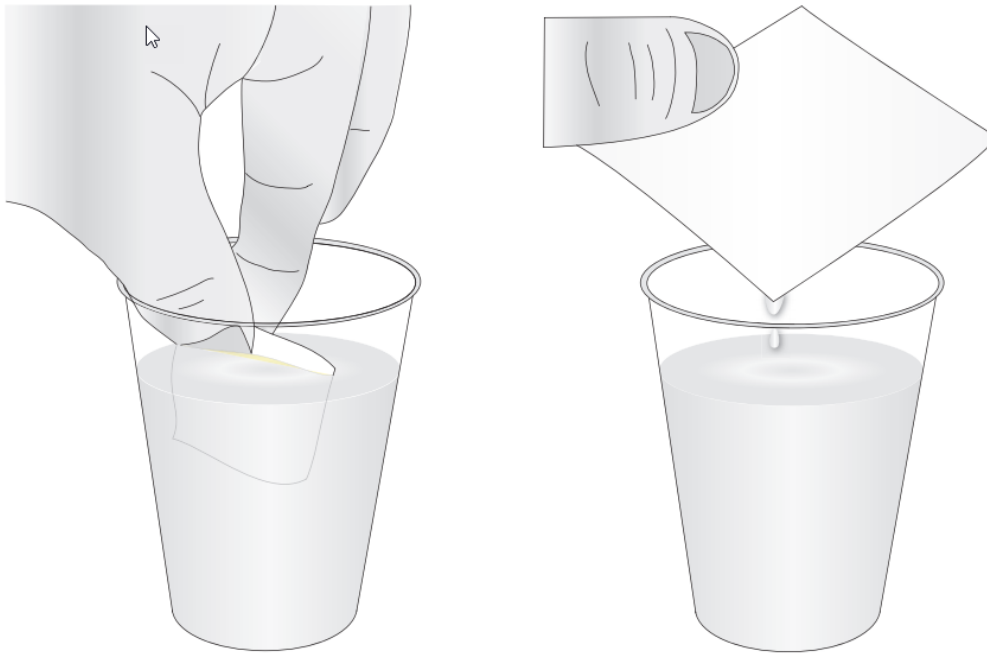
Two Paper Towels
folded four times each



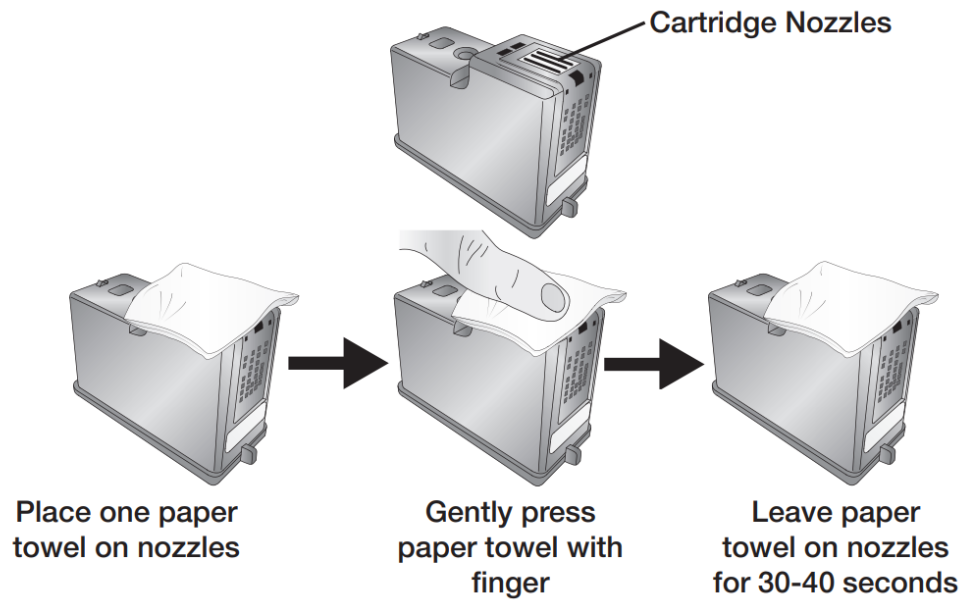
A Glass of Water



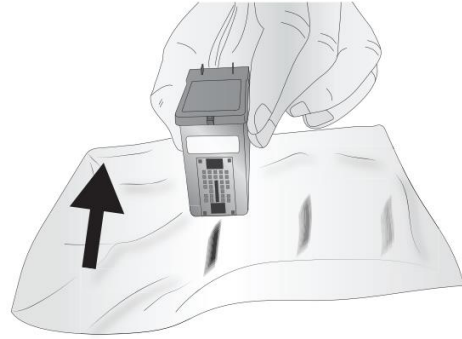
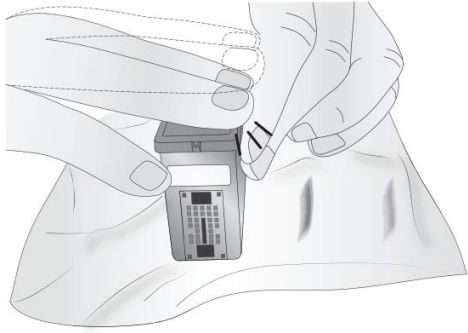
5. Soak the paper towels in water for 5 seconds.



6. Place one paper towel on cartridge nozzles. Gently press the paper towel with your finger. Leave the paper towel on the nozzles for 30-40 seconds.



7. Wipe nozzles.



- Place second paper towel on flat/hard surface.
- Press the nozzles into the paper towel.
- Firmly tap the top of the cartridge three times to force the ink out.
- Wipe/Drag the cartridge in the direction indicated.
- Repeat until all colors are seen on the paper towel.
After wiping the nozzles, the paper towel should show all three colors. If all three colors are present, proceed to step 8. If the paper towel doesn't show all three colors, then repeat step 7. If paper towel still doesn't show all three colors repeating step 7, then replace the cartridge.



8. Dry the cartridge.



Dry excess water from cartridge.
Ensure cartridge contacts are completely dry. Printer damage may result if cartridge contacts are not completely dry.

9. Verify cartridge is now functioning properly by printing your label.

5D Technical Support.

If you have difficulties operating your Printer, contact technical support using one of the methods listed below.

Source	Location
Primera Knowledge Base	www.primera.com/kb
Email Support	www.primera.com/customer-support
Phone Support	763-475-6669 (Mon - Fri 7 a.m. - 10 p.m CST and Saturday 11 a.m. – 8 p.m.)
Chat	www.primera.com – see chat icon in lower right corner (Mon - Fri 7 a.m. - 10 p.m CST and Saturday 12 noon – 9 p.m.)

Section 6: Technical Specifications

PRINT SPEED¹	Pre-die cut media: Up to 4.5" per second
PRINT RESOLUTION	Up to 4800 x 1200 dpi
PRINT TECHNOLOGY	Thermal Inkjet
INK TYPES	Dye-based CMY, Pigment CMY
Label Types	Pre-die cut, continuous and black marks
STANDARD CONNECTIVITY	USB 2.0 (USB 3.0 compatible)
Print Width	0.5" (13mm) - 5" (127mm)
Media Width	2.125" (54mm) to 5.25" (133mm)
Maximum Print Length	12" (305mm)
Operating System	Windows 7, 8 or 10.
DIMENSIONS	13.6 W x 17" D x 9.5" H (345mm W x 432mm D x 242mm H)
WEIGHT	12.5 lbs (5.7kg)
POWER	Input: 100 – 240 VAC, 50/60 Hz, 60 watts, Output: 12 volt 5 amp
WARRANTY	One-year parts and labor; lifetime phone, chat and email support
Operating Temperature	50 to 95° F (10 to 35° C)
Recommended Operating Temperature	61 to 87° F (16 to 32° C)
Storage Temperature	-4 to 140° F (-20 to 60° C)
Operating Humidity	10 to 60% RH (non-condensing)
Storage Humidity	10 to 80% RH (non-condensing)
Certifications	UL, UL-C, CE, FCC Class A
REPLACEMENT INK CARTRIDGES	Primera Pigment 53491 Primera Dye 53494