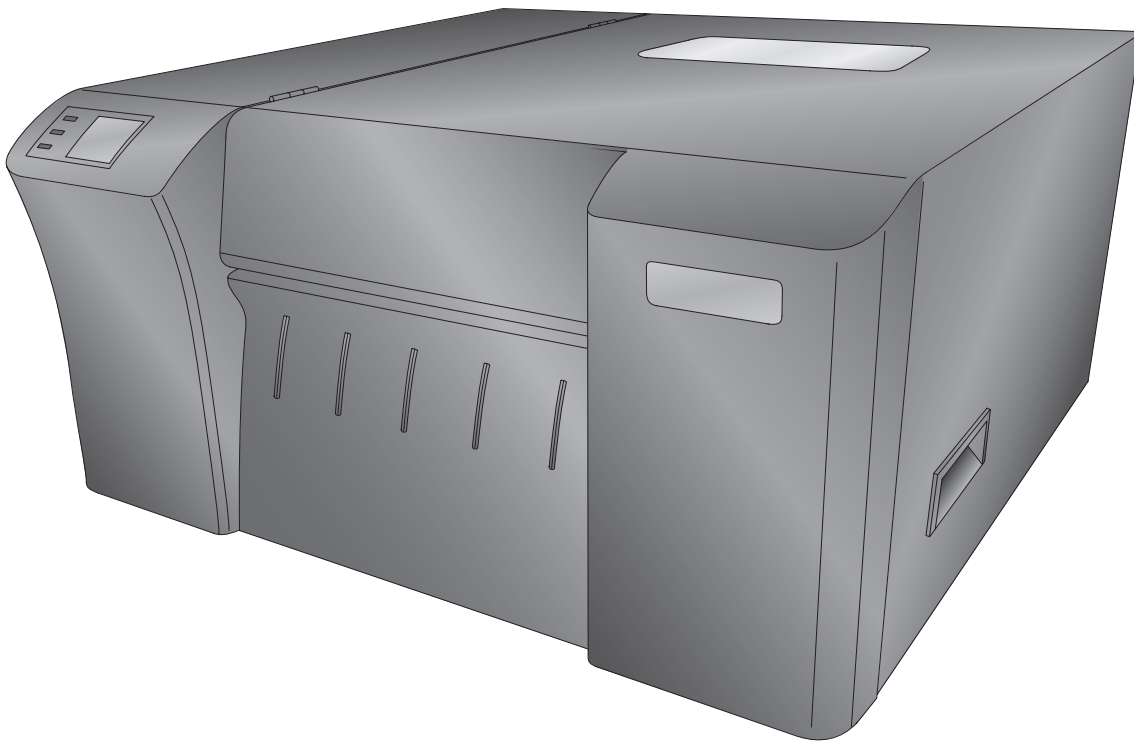


# LX2000

COLOR LABEL PRINTER

# LX1000

COLOR LABEL PRINTER



# Operator's Guide

# PRIMERA

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### **Printing 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, 4.5A 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 présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la Class A prescrites dans le Règlement sur le brouillage radioélectrique édicté par le ministère des Communications du Canada.

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# Section 1: Getting Started

---

## Thank you...

...for choosing an LX2000/LX1000 Color Label Printer. The 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 Operator's Guide is your complete step-by-step guide to quickly and easily setting up and printing with your new Color Label Printer!

## A. Choosing a Good Location

- Place the printer on a flat surface in a location with adequate air circulation to prevent internal heat build up.
- 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. Except in the case of individual cut labels or connecting to a rewinder, the printer should sit close to edge of a table so that the printed labels hang from the front of the printer and fall to the floor or an empty box. This will prevent labels from bunching up in the front of the printer which can cause print quality issues.
- Allow for adequate overhead and left side clearance for opening the top cover to allow easy access to the label stock and ink cartridge.

## B. Unpacking and Inspection

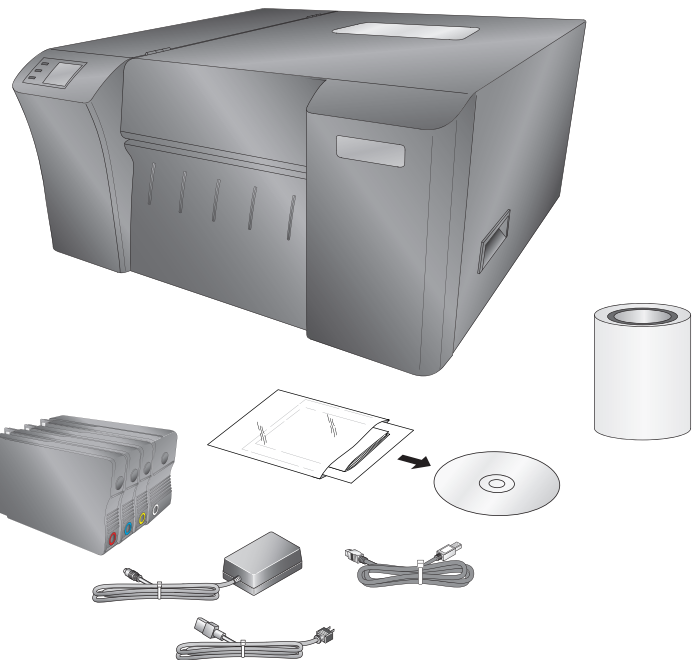
While unpacking your printer, inspect the carton to ensure that no damage has occurred during shipping. Make sure that all supplied accessories are included with your unit. The following items are included in the supply box:

- Power Adapter
- Power Cord
- USB Cable
- Software Installer CD
- Cyan, Magenta, Yellow and Black Ink Setup Cartridges
- Warranty Statement and Registration Card
- This Guide and other Printed Information

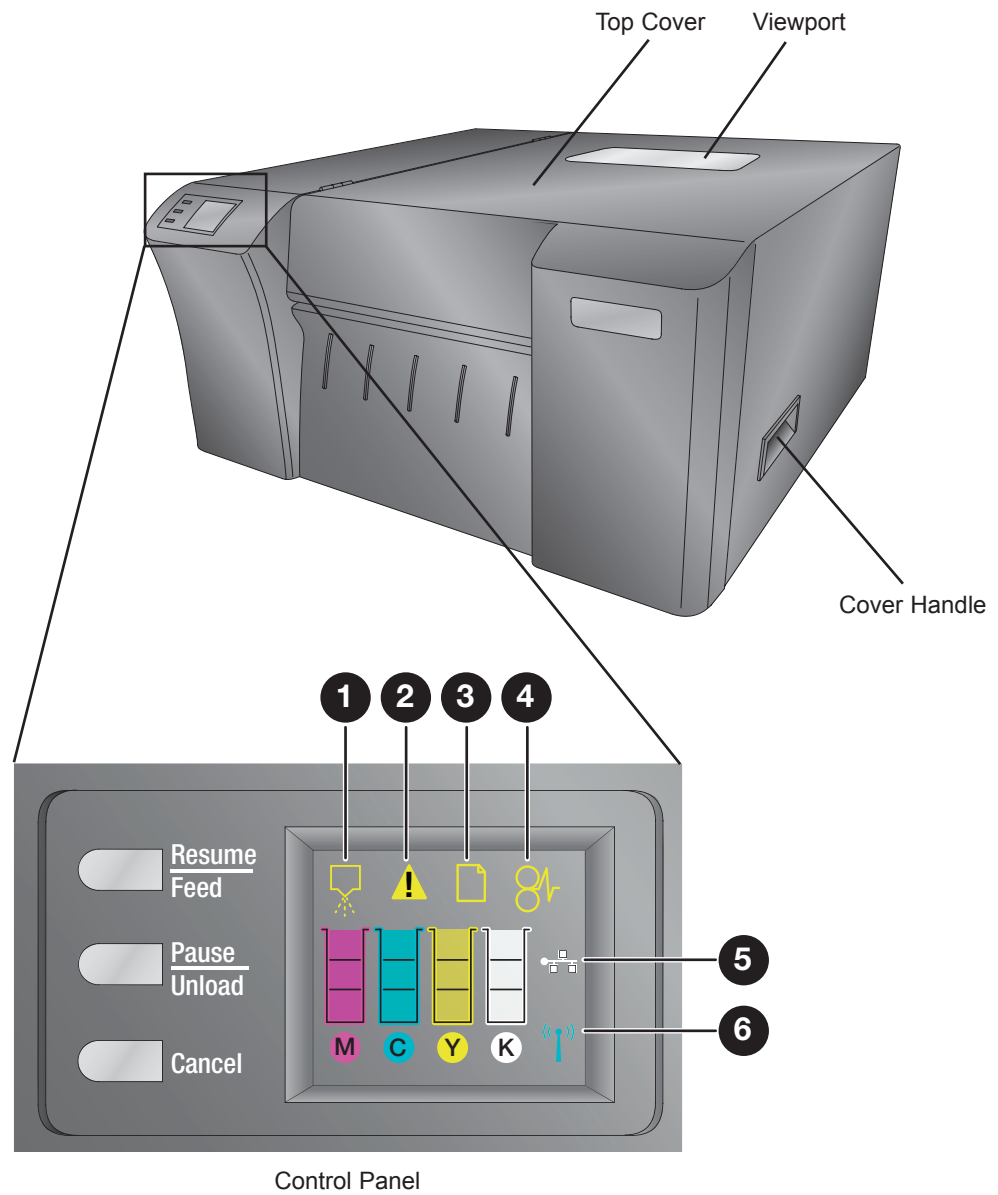
The following items are inside the printer:

- Replaceable Print Head (Already installed in the printer)
- Starter Roll of High Gloss Label Stock

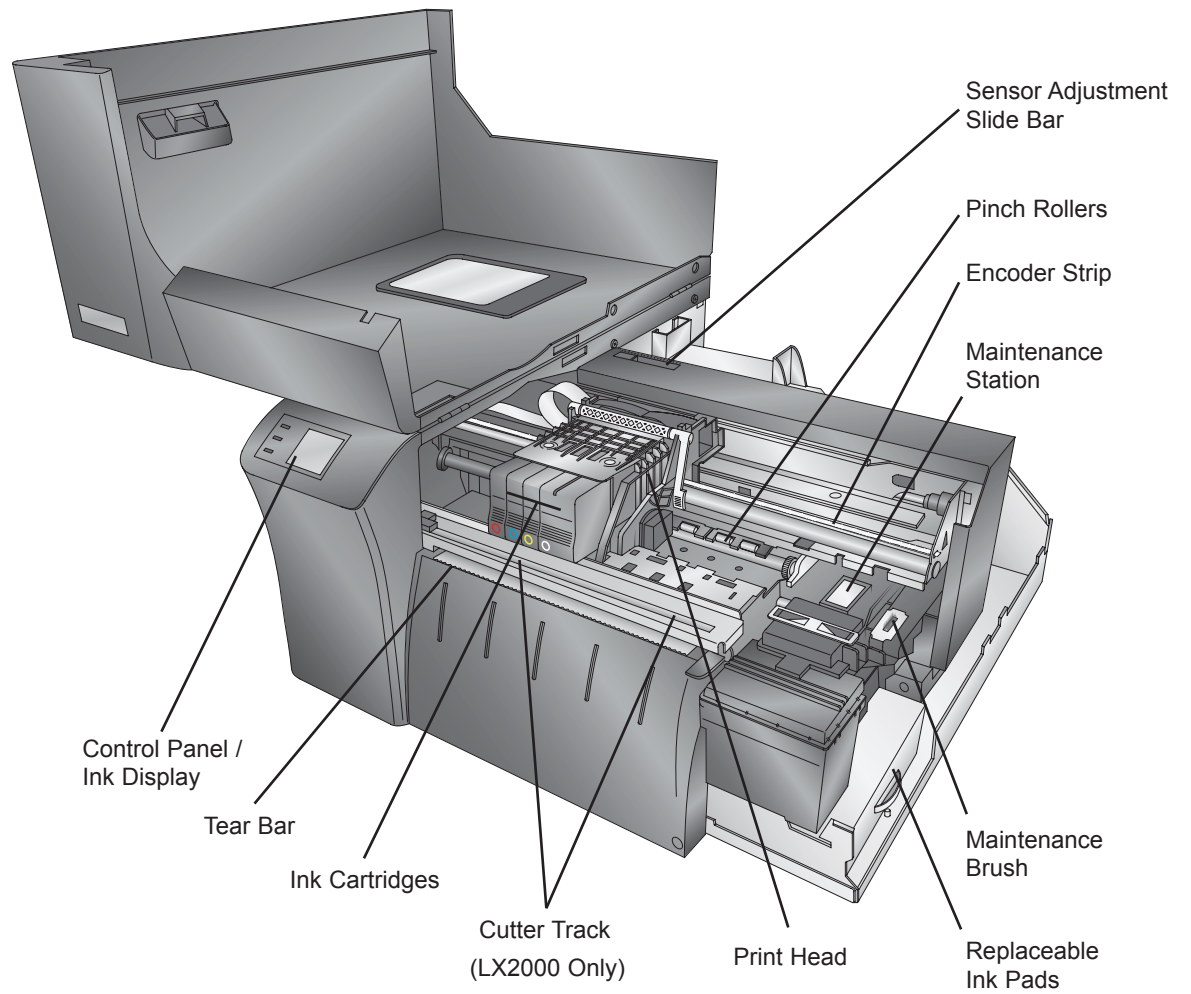
Save the carton and packing materials. They will be required should the printer need to be transported.



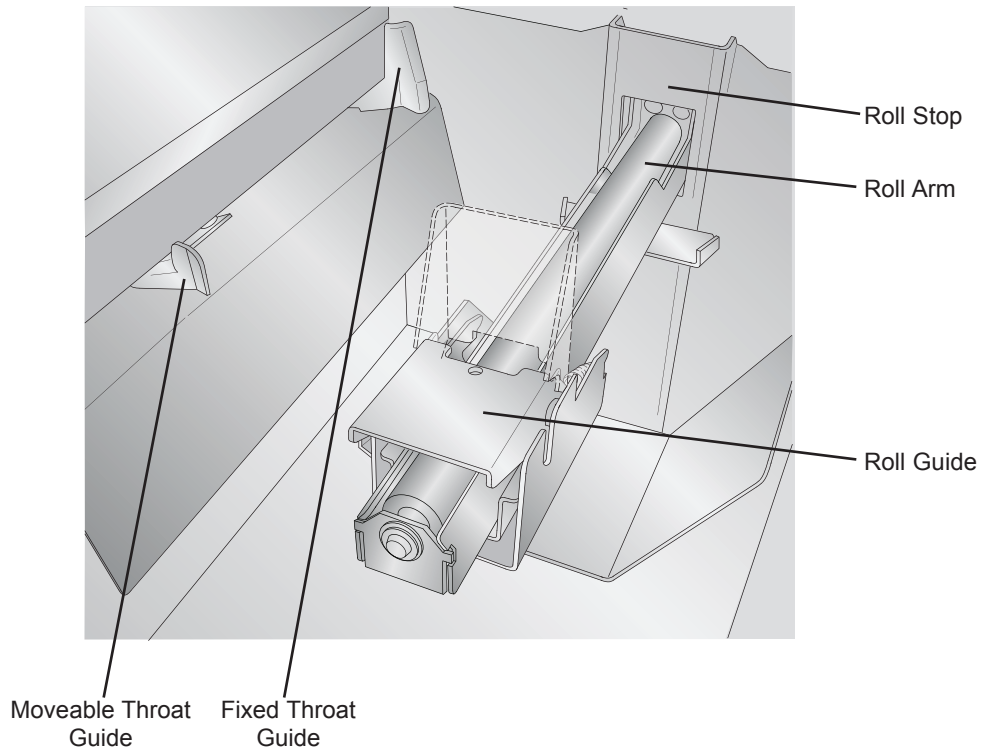
### C. Identifying the Parts



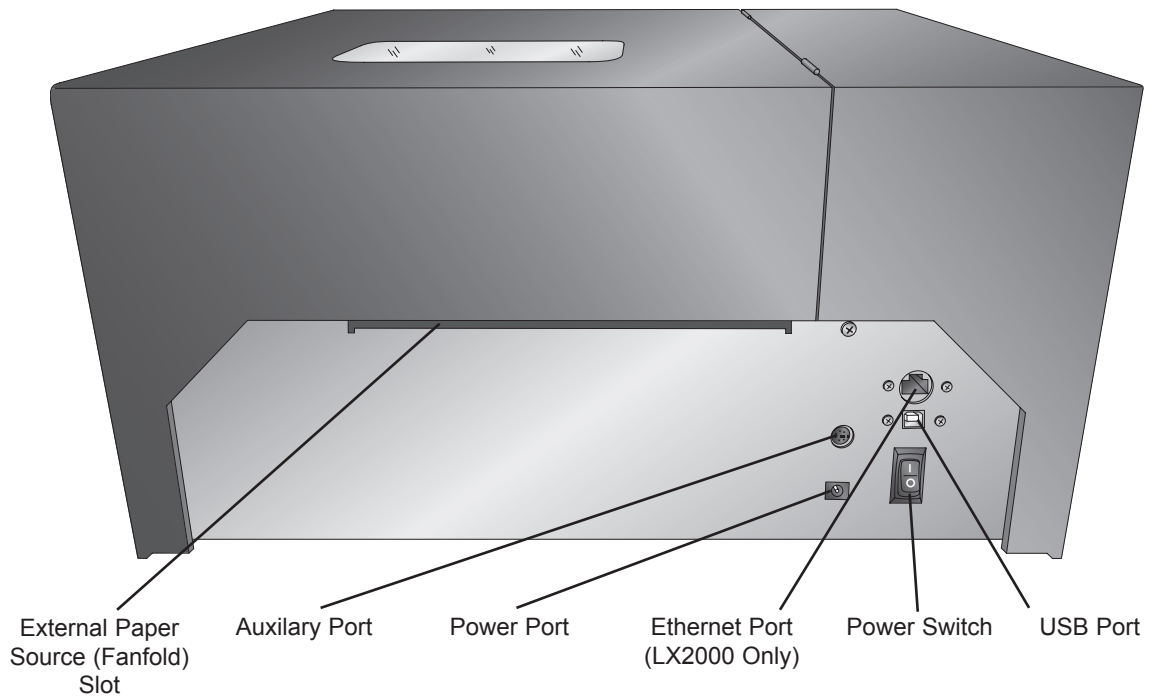
Label	Name and Description
1	Printhead align control panel icon. Shows that the printhead requires alignment.
2	Ink cartridge access door open icon. Shows that the printer's ink cartridge access door or top cover is open.
3	Out of paper icon. Shows that the printer is out of paper.
4	Paper jam icon. Shows that the printer has a paper jam.
5	Ethernet network icon. Shows that an Ethernet network connection exists (LX2000 only).
6	Wireless network icon. Shows that a wireless network connection exists (LX2000 only).



## Interior Label Loading Area



## Back





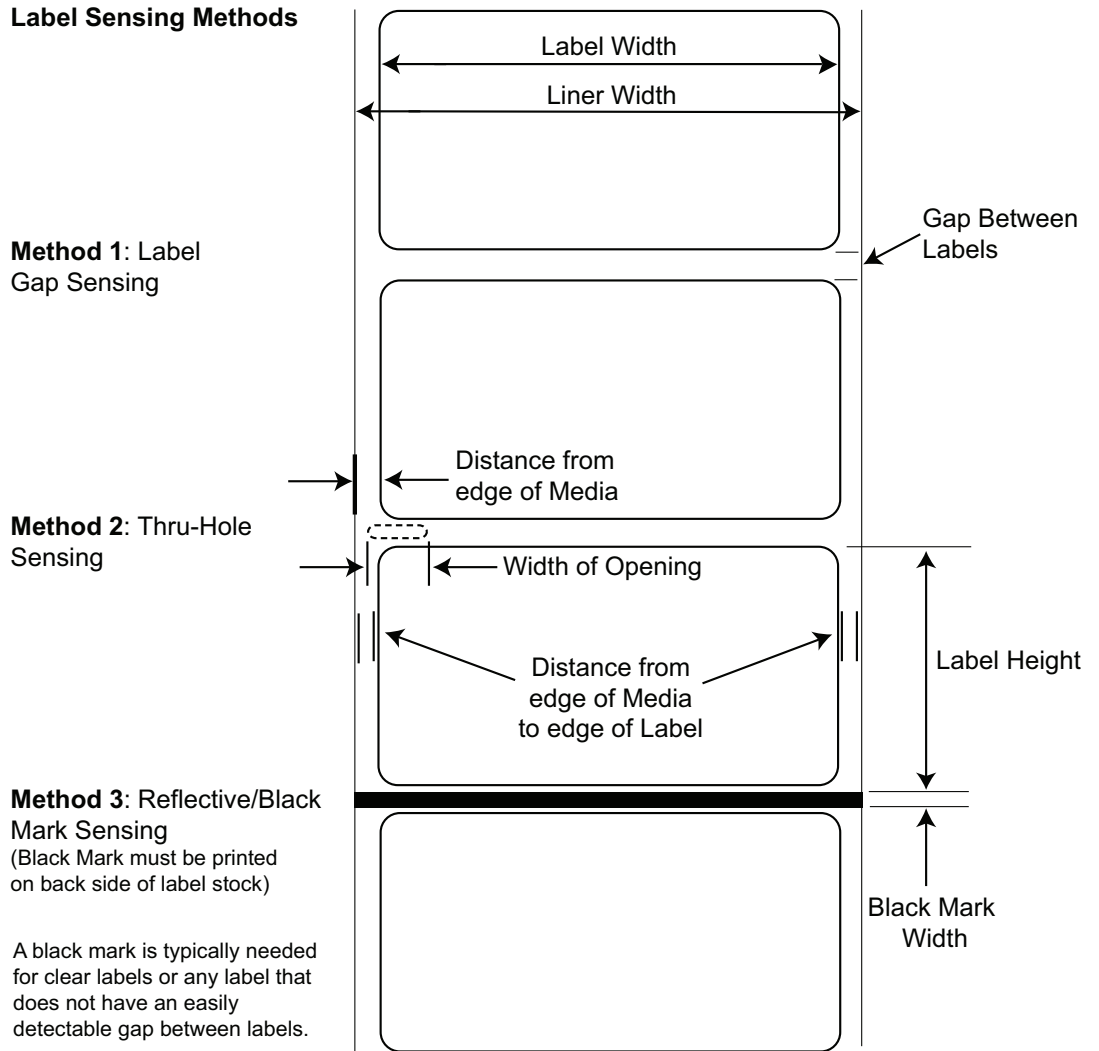
# Section 2: Label Stock

## A. Label and Roll Specifications

A wide variety of 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 on the next page for Max and Min values in inches and mm.



	Max	Min
Label width	8.25" (209.6mm)	0.75" (19.1mm)
Liner/ media width	8.375" (212.7mm)	1.5" (38.1mm)
Label height/length	24" (60.96 cm)	0.5" (12.7mm)
Gap between labels	10" (254mm)	0.1" (2.5mm)
Width of thru-hole opening	0.5" (12.7mm)	0.25" (6.4mm)
Distance from edge of media to edge of thru-hole	2.25" (57mm)	0.2" (5.1mm)
Reflective/Black Mark Width*	N/A	0.1" (2.54mm)
Max Outer Diameter (OD)	6"(152.4mm)	N/A
Inner Core Diameter (ID)	3" (76.2mm)	3" (76.2mm)
Total Thickness (Liner + Label)**	0.010" (10 mil)	N/A
Distance from edge of media to edge of label	Printer driver assumes 2 mm gap. However, this is adjustable via the left margin offset.	

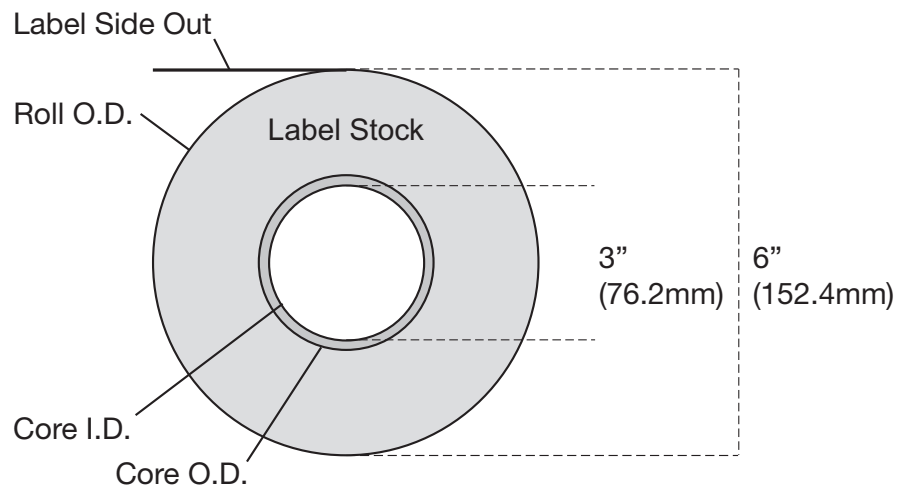
\* The Reflective/Black Mark should be opaque to infrared light. The mark should be between the labels. The end of the mark should correspond with the beginning of the label.

\*\* 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 printers ability to pull it through the printer area. For these reasons the weight or thickness of the liner is a variable that can not easily be defined. Primera recommends and uses 40# liner with all label stock. **It is important to test all label stock with the intended printer before ordering large quantities!**

## Roll Specifications



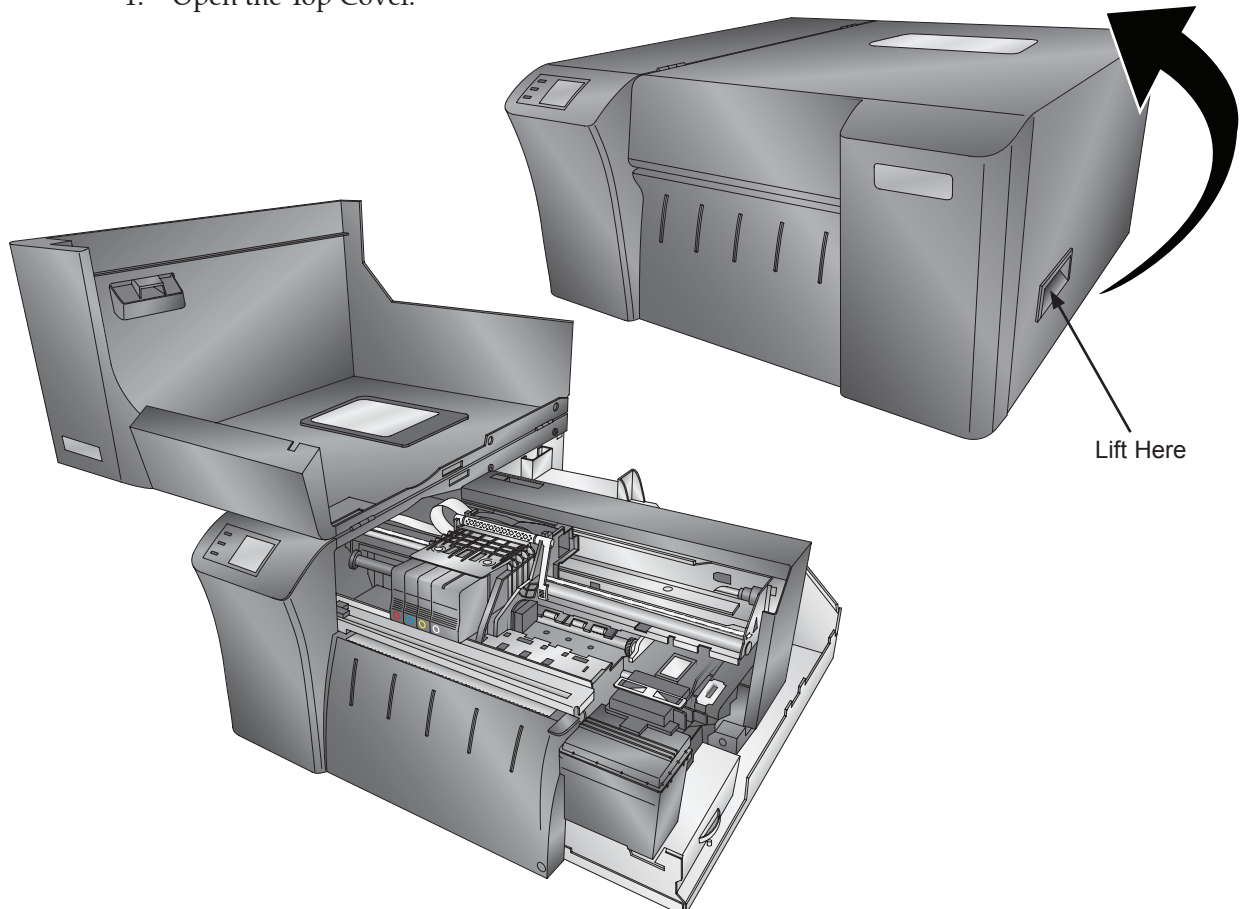
**Note on Label Orientation:** If you are using an applicator to apply your labels, be sure to order label stock with the correct orientation for your applicator. For example: most applicators will apply the side of the label first, so you will want to print the labels sideways.

## B. Installing Label Stock

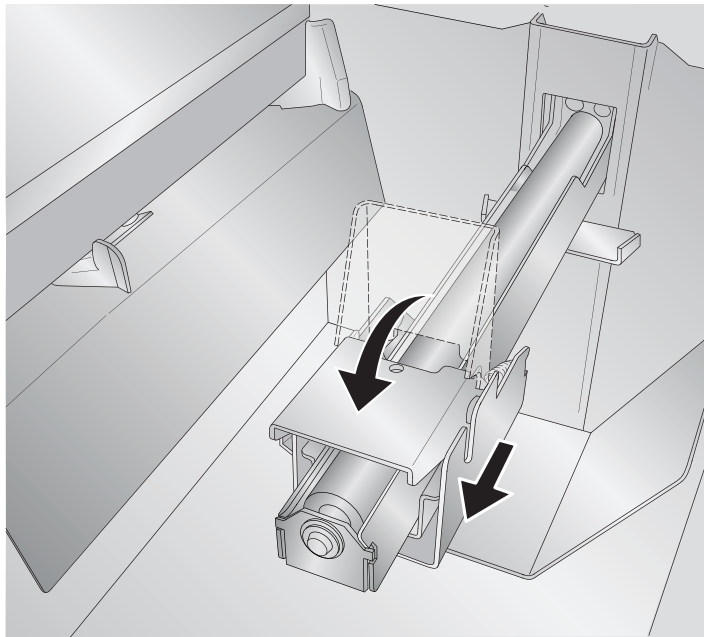
The following steps will guide you through loading label stock in your printer:

Make sure power is connected and printer is on.

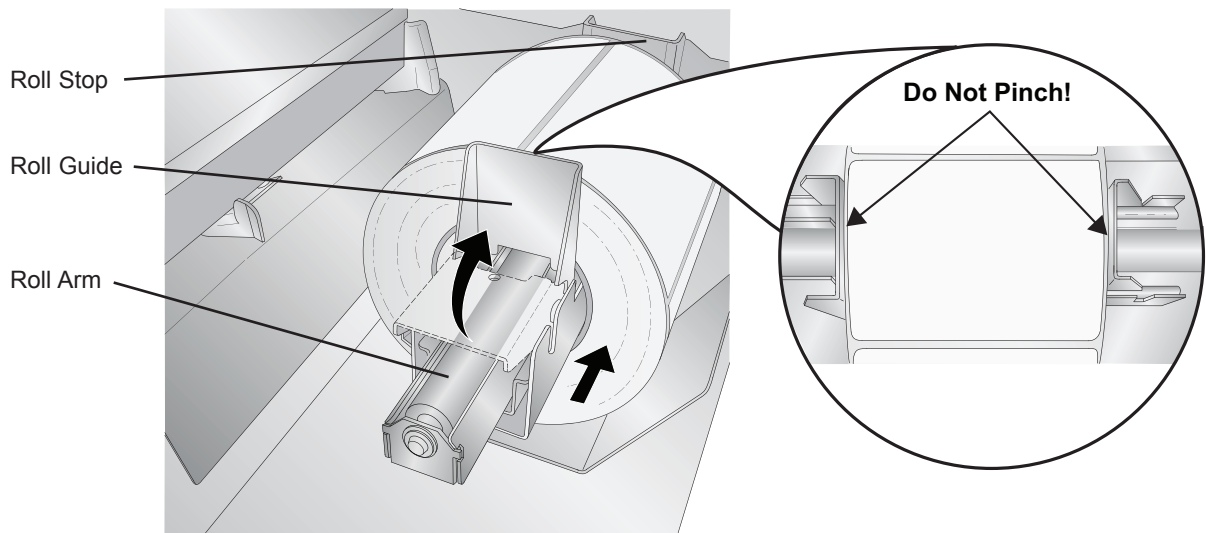
1. Open the Top Cover.



2. Lower the Roll Guide and pull it outward to make room for your label stock.



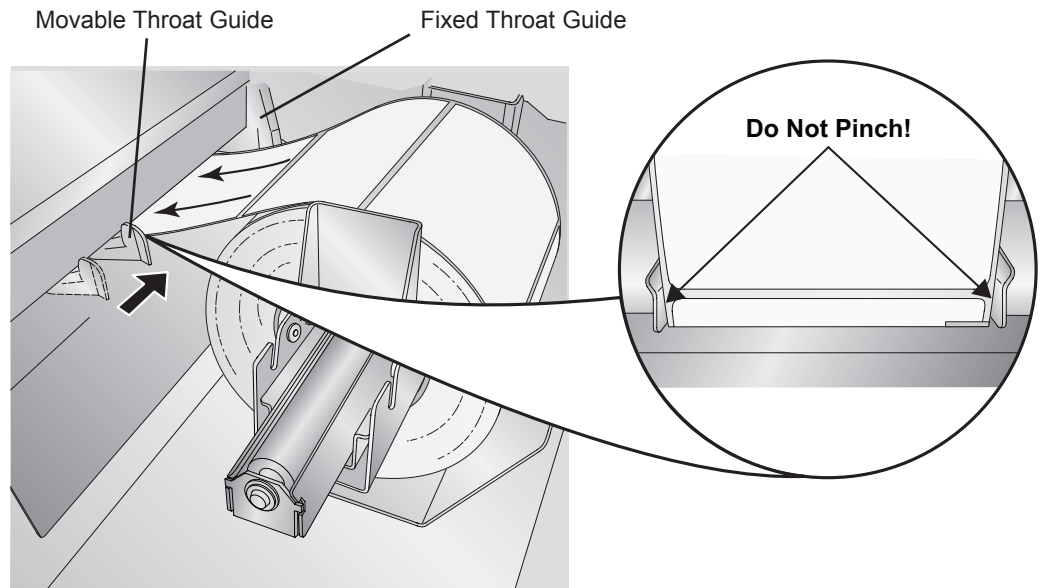
3. Remove any shipping tape from your label stock roll to ensure that it can unroll freely, making certain that no adhesive portion is exposed. It is important to note that any exposed adhesive surface can attach itself the inner workings of the print mechanism and cause a media jam.
4. Place your roll of label stock on the Roll Arm and push it inward until it touches the Roll Stop.



5. Flip up the Roll Guide and slide it inward until it touches the label stock. The Roll Guide will automatically pull back slightly to the correct position. There should be approximately a .040" (1.0mm) gap between the roll guide and the roll.

**Important Note:** Be aware that some label stock may have a core that is slightly too large for the roll or the labels may have wrapped unevenly causing some to stick out beyond the edge of the core. Both of these issues can cause feeding problems.

6. Pull the Movable Throat Guide outward to make room for the label stock.
7. Place the leading edge of the label stock under the "label stock" symbols on the Throat Guides. The label stock should be placed far enough into the throat of the printer to correctly position the Movable Throat Guide but not yet into the printer itself.



8. Slide the Movable Throat Guide inward until it **almost** touches the label stock.

**Important Note:** The label stock should be close enough to the Fixed and Movable Throat Guides to provide proper guidance but not close enough to pinch the label stock. If the label stock is pinched by the guides, poor print quality or feeding problems could result.

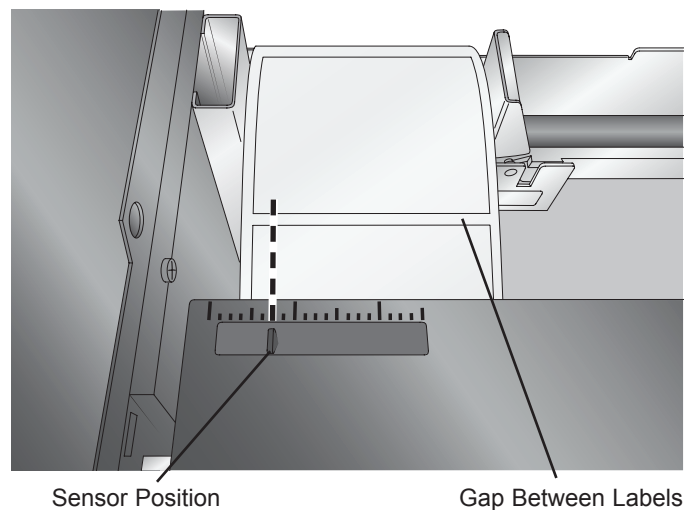
9. Feed the label stock further into the printer until it senses the label and automatically feeds it through the printer. If the printer fails to feed the label stock, press the Load/Feed button on the front panel while continuing to guide the label stock into the printer. If the printer does not automatically grab and feed the stock or continues to feed the stock without stopping check the Stock Sensor position or mode (Section 2C or 2D).

### C. Adjusting the Label Stock TOF (Top of Form) Sensor

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 sensor. The sensor can be adjusted using the slide bar on the inside of the printer. Set the sensor position to correspond to any point where it will intersect with a gap between the label stock.

**Important Note:**

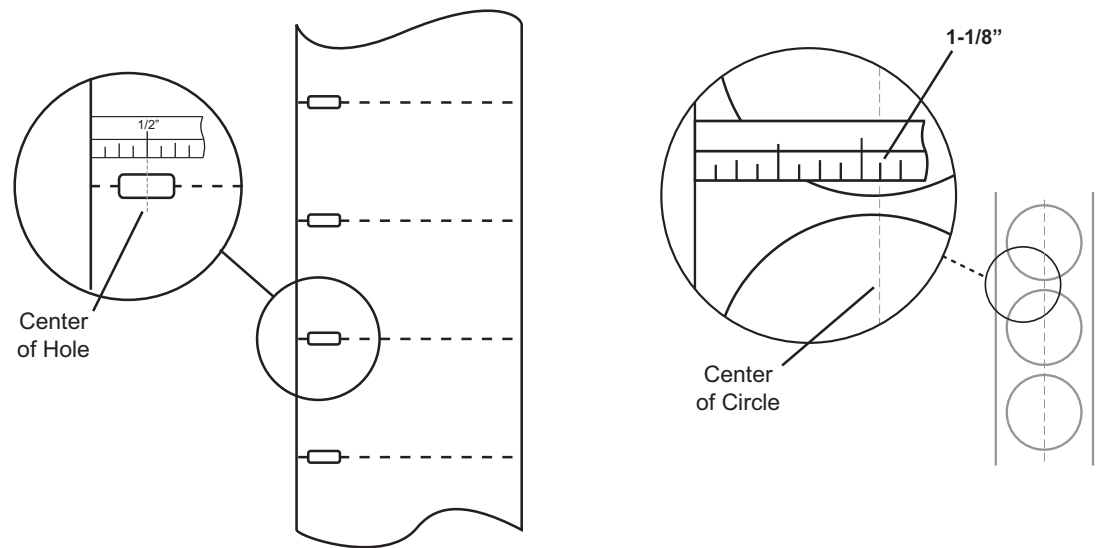
*You must adjust the TOF Sensor before loading nonstandard label stock.*



## Circular Labels

If you are using Circular Labels you must adjust the TOF 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 2.3 inches (58.4mm) from the left side of the printable area. This means that the maximum diameter circular label that can be printed is 4.6 inches (116.8mm). For circular labels larger than 4.6 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 diecut. For more information on changing the Stock Sensor Mode see Section 2D.



Thru-Hole Labels

Circular Labels

Set Sensor Bar to 1-1/8" for 2" circular label (1/8" liner edge gap).

## Thru-Hole Labels

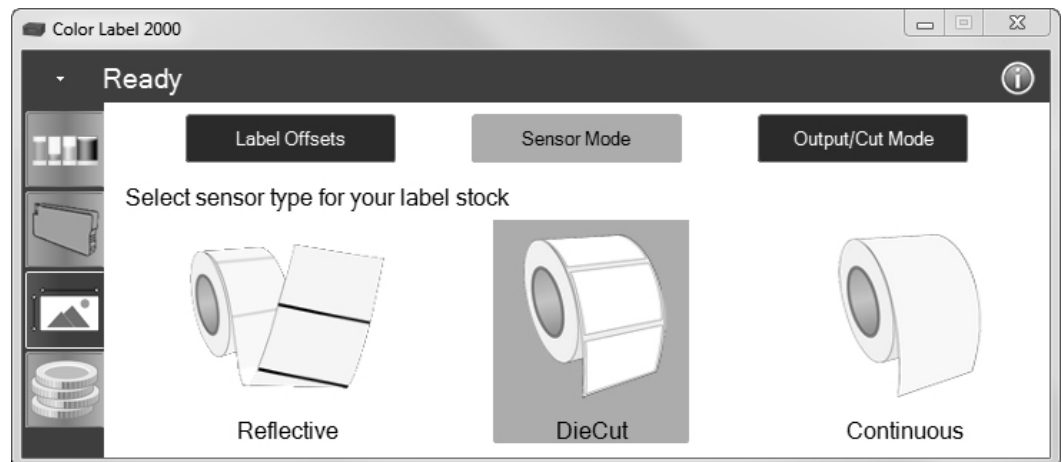
If you are using card stock or label stock that has a hole punch or a notch to identify a transition from backing to label, you can adjust the Stock Sensor to position it over the identifying mark.

## D. Set the Stock 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 PTStatus program. PTStatus automatically installs with your printer driver and can be accessed through the printer driver or as program that is accessible in the same manner as all other programs.

**Important Note:** Set the Stock Sensor Mode **BEFORE** loading label stock!

1. Connect the printer via USB or ethernet and turn on the power. The Stock Sensor Mode setting is stored on 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 - PTStatus.
3. Click on the Alignment Tab (3rd tab from top).
4. Click on the Stock Sensor Mode button.
5. Select the Stock Sensor Mode by clicking on the graphic that most closely corresponds to the stock you intend to install.



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 thru-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 4.6 inches or on any stock where the print starting position can not be sensed using the label itself.

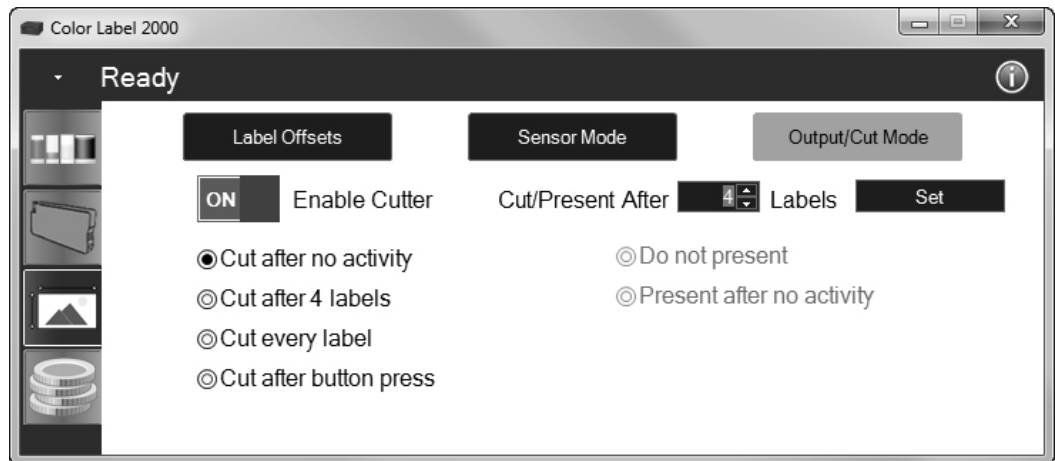
**Continuous.** (Sensor off) If you have continuous stock with no die-cut, reflective mark or holes, set the sensor type to Continuous. This will turn off the stock sensor. In this mode there is no way to set the print starting position. The printer will simply start printing the first label and print 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.

**Important Note:** You must also set the Stock Sensor Position (Section 2C) so that the sensor is sensing the correct point on the label stock.

## E. Set the Output/Cut Mode

Use the Output/Cut Mode to adjust how the printer presents labels after they are printed or if/when they are cut after printing. To adjust the Output/Cut Mode, open the PTStatus program. PTStatus automatically installs with your printer driver and can be accessed through the printer driver or as program that is accessible in the same manner as all other programs.

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 - PTStatus2000.
3. Click on the Alignment Tab (3rd tab from top).
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 (LX2000 Only):

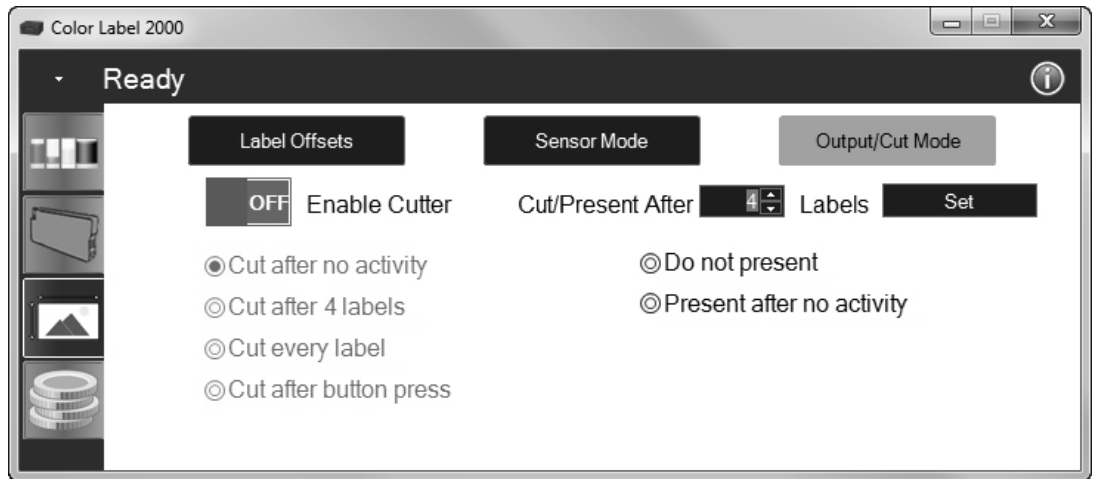
**Cut after no activity.** This setting will cut at the end of a print job if the printer does not receive another print job within one second of the last print job in the queue. You can use this feature to cut at the end of multi-copy job, multi-page job or multiple individual jobs in the queue.

**Cut after specified number of labels.** This option will cut after the number of labels specified in the "Cut/Present After \_\_\_ Labels" setting above. Change the value and then click "Set" to send it to the printer. The quantity will change on the setting to reflect the change.

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

**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.





### 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 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 multi-copy job, multi-page job or multiple individual jobs in queue.

**Present after specified number of labels.** This option will present after the number of labels specified in the "Cut/Present After \_\_\_ Labels" setting above. Change the value and then click "Set" to send it to the printer. The quantity will change on the setting to reflect the change.

**Present after every label.** This setting will cause the printer to feed the last label printed forward so that it and the previously printed labels can be torn off using the tear bar. If no other jobs are sent to the printer within one second after the last label has printed, the last printed label will present for tear off.

**Present after button press.** This setting will present after you press the Load/Feed button on the printer. This can be used after one label or an entire job.

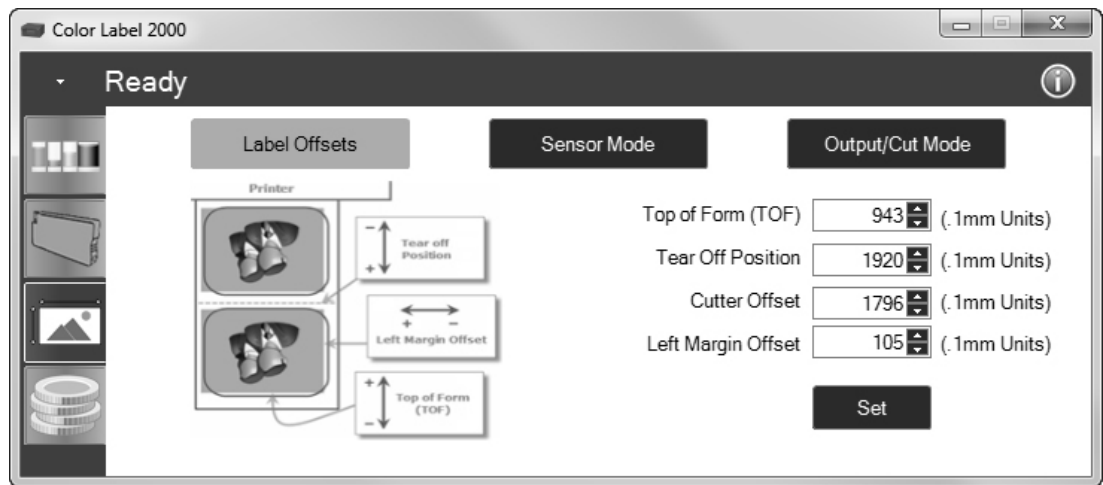
## F. Adjusting Print Alignment

If your previous experience with printing is limited to printing letters and cards to 8.5 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 LX2000 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 LX2000 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.

**Important Note:** Before adjusting alignment settings first print one label at the quality level you intend for the entire job. This will ensure the label stock is moving at the same speed and the stock sensor will sense the gap in the same way.

Adjust print alignment using the Status Monitor. Go to the Alignment Tab (third tab).



Four items can be adjusted here:

- **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. After adjusting the value click the "Set" button to send the value to the printer.
- **Tear off Position.** This value adjusts the position of the last label printed after it has been presented for tear off. 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. After adjusting the value click the "Set" button to send the value to the printer.
- **Cutter Offset.** This setting will adjust the position of the cut (if enabled). By default it should cut in the center of gap between the labels. Add to the current value to move the cut toward the printer. Subtract from the current value to move the cut away from the printer. After adjusting the value click the "Set" button to send the value to the printer.
- **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. After adjusting the value, click the "Set" button to send the value to the printer. Note: Before adjusting this value make sure the label stock is properly loaded so that there is no gap between the edge of the liner and the fixed throat guide. Any gap at this point will greatly affect the Left Margin Offset value needed to align the label. Also, if you adjust the value with improperly loaded label stock you will have to adjust it again if you load the label stock correctly the next time.

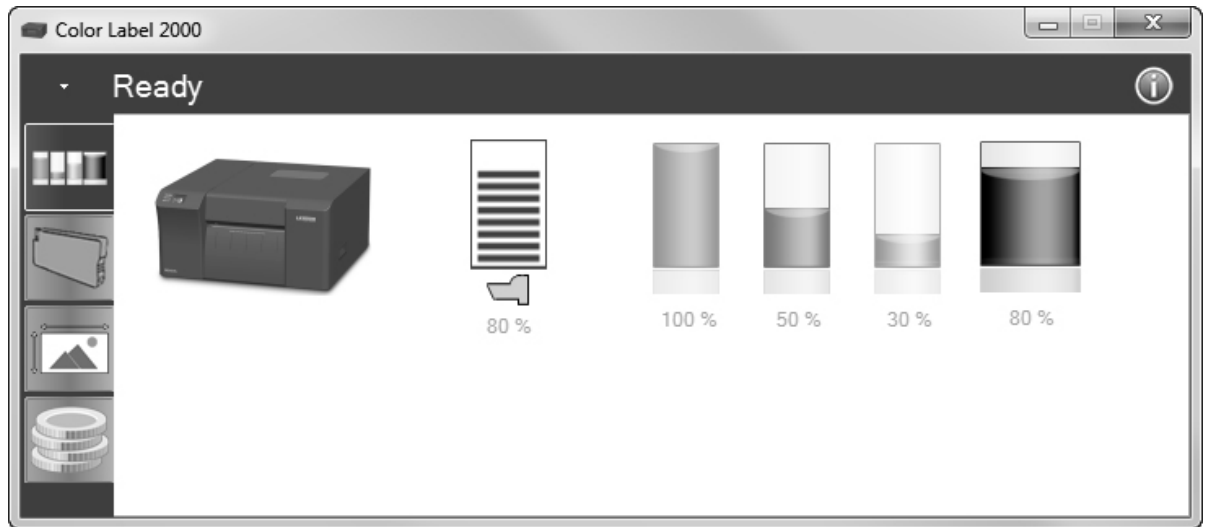
## Section 3: Status Monitor

PTStatus or Status Monitor is used to interact with the printer for gathering ink levels, maintenance, alignment, cost calculation and several other functions.

PTStatus 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 or ethernet and turn on the power. The Status Monitor accesses most of the information it uses from the printer itself so the printer must be turned on and communicating for the program to open.
2. Go to Start - Programs - Primera Technology - PTStatus2000 Once open, the Status Monitor consist of four tabs that are arranged on the left side of the window. Each tab opens a screen that has various similar functions. The tabs will only be displayed if the printer is idle (not printing).
  - **Ink Tab (First Tab).** Displays ink levels, Print Head life, pauses or cancels a job, displays print counter.
  - **Cartridge Utilities Tab (Second Tab).** Aligns Print Head, cleans Print Head and changes the Ink Cartridges.
  - **Alignment Tab (Third Tab).** Adjust vertical and horizontal print alignment, changes the Stock Sensor Mode and toggles the Output Mode.
  - **Cost Tab (Fourth Tab).** Calculates cost per label based on last label printed.

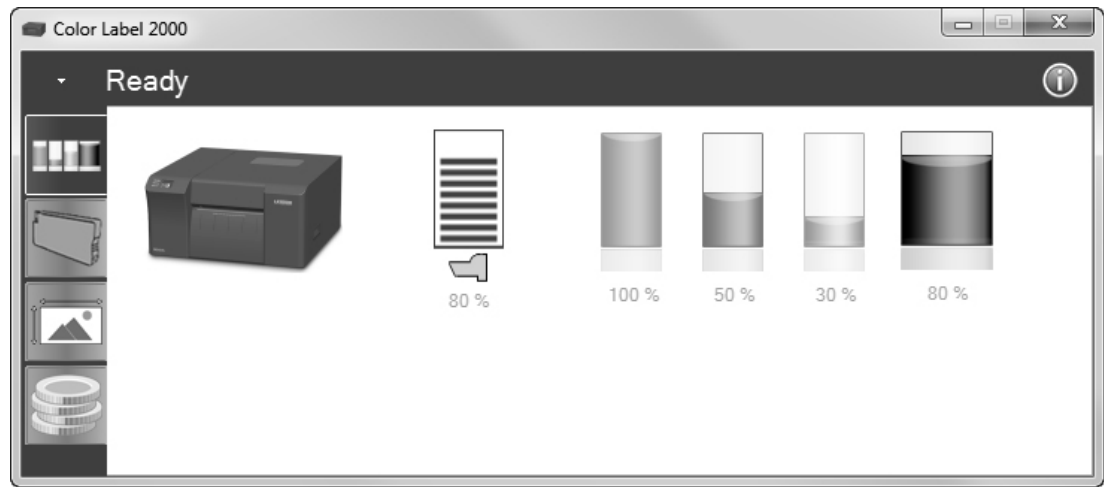
In addition to these functions you can also click the "i" icon to access the Primera Knowledgebase, contact tech support, gather version information or set applications options.



## A: Monitoring Ink Levels

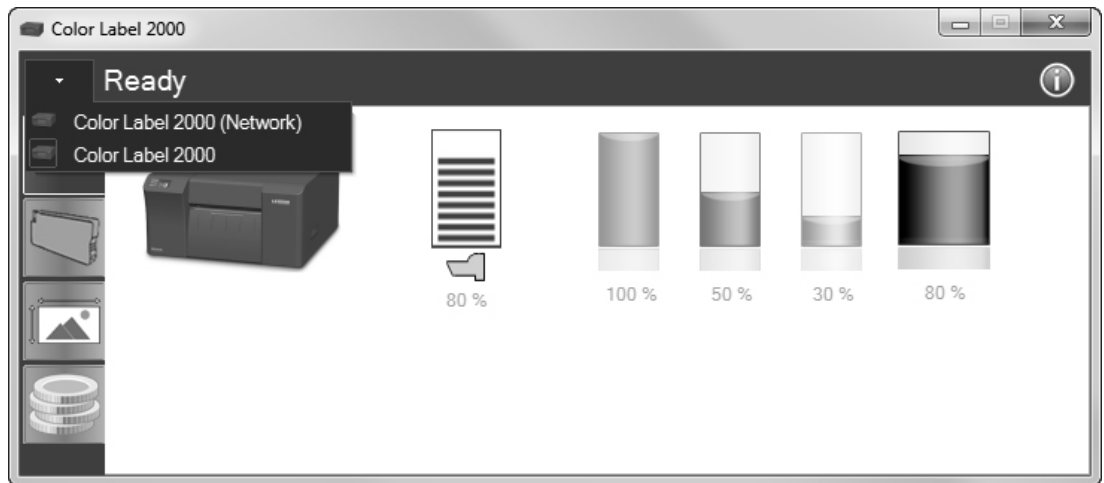
Ink levels can be monitored at any time by using the Status Monitor. Immediately after printing starts the Status Monitor will display the ink levels in the lower right corner of your screen.

The print status will also be displayed on the top bar.



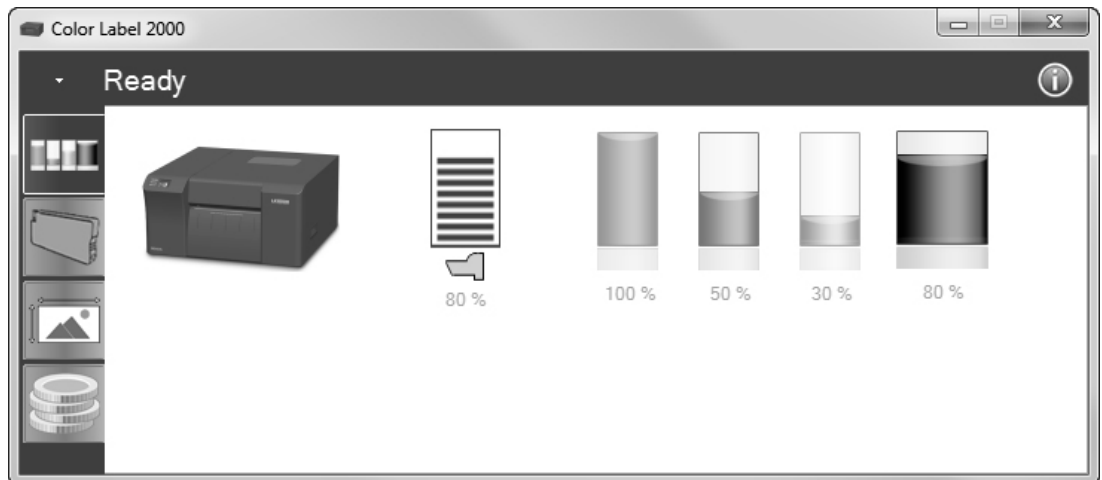
In the Ready mode, the ink percentages and Print Head life will be displayed, along with four tabs and the Print Counter. The tabs will only be displayed if the printer is Ready (not printing).

**Note:** If you are using multiple printers, you can switch between them using the drop down arrow at the top of the status monitor. The title of each will correspond to the printer name as shown in *Devices and Printers*.



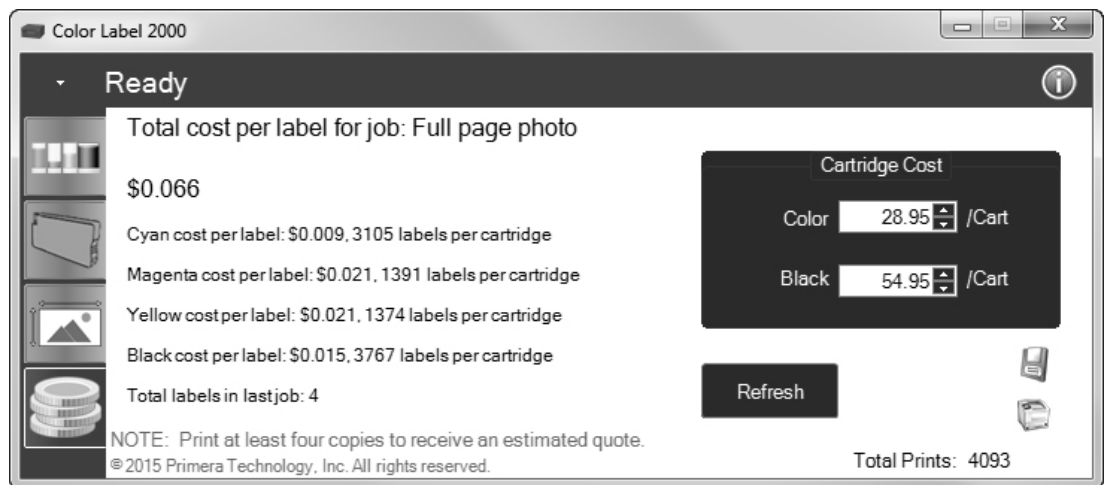
## B. Print Head Life Gauge

Print Head life remaining is displayed in the status monitor. Hover your mouse over the icon to display more information.



## C. Using the Cost Estimator

The cost estimator is found on the last tab of the Status Monitor. The Status Monitor automatically opens as soon as you begin printing. However, you can also access it at any time as long as the printer is turned on and communicating by going to Start - Programs - Primera Technology - PTStatus.



Ink cost is automatically and continuously calculated based on the black and color cartridge costs entered. Only the last printed label cost is displayed. For reference, the print file and date of last print is displayed at the top of the window.

- Adjust the cartridge costs according to the actual price paid for them. The estimate does not take currency into account so you can assume that whatever value you entered is displayed in your currency.
- Save a screen capture of the cost by clicking the disc icon.
- Print a screen capture of the cost by clicking the printer icon.

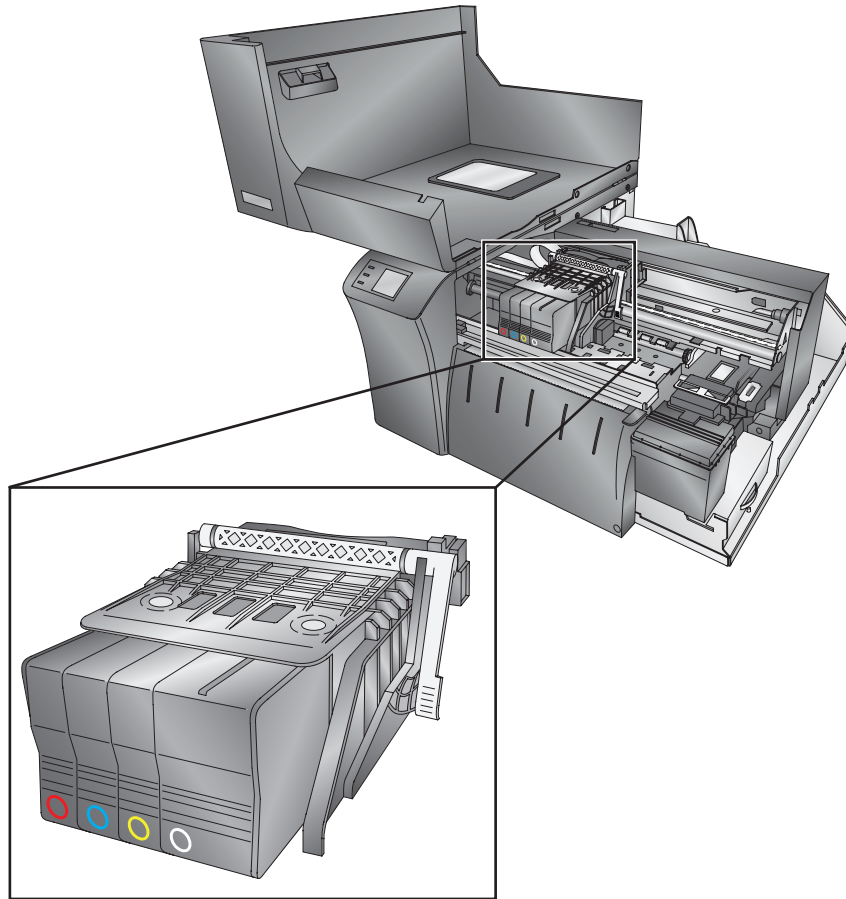
**Important Note:** The cost per label represents the average cost per label over an entire run of labels. This means that the per label cost will decrease and become more accurate as the number of labels printed increases. This is because the ink that is used for beginning and periodic cartridge maintenance is divided into a larger number of labels.

## D. Replacing Ink Cartridges / Low Ink Warning

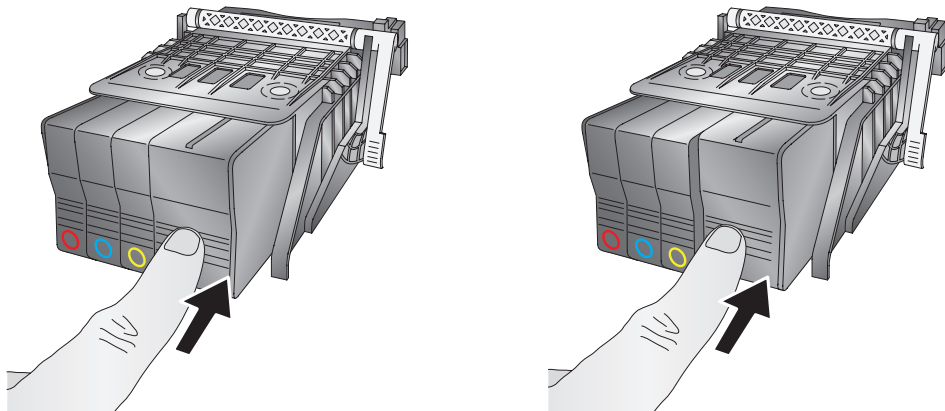
You can replace the ink cartridges at any time or wait for the Low Ink Warning to prompt you to replace the cartridges. The low ink warning will display continuously at 20% or less. When the cartridge is empty you will be prompted to change the cartridge. At the empty point there is no way to ignore the warning. You must change the cartridge.

To change an ink cartridge, follow this procedure:

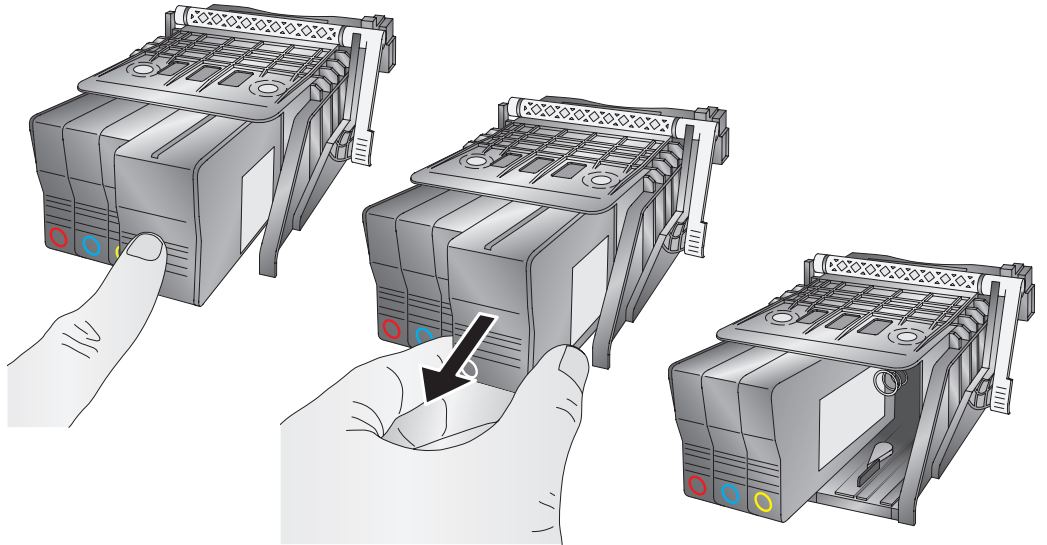
1. Open the cover. The Print Head will move to the center of the print area for easy access.



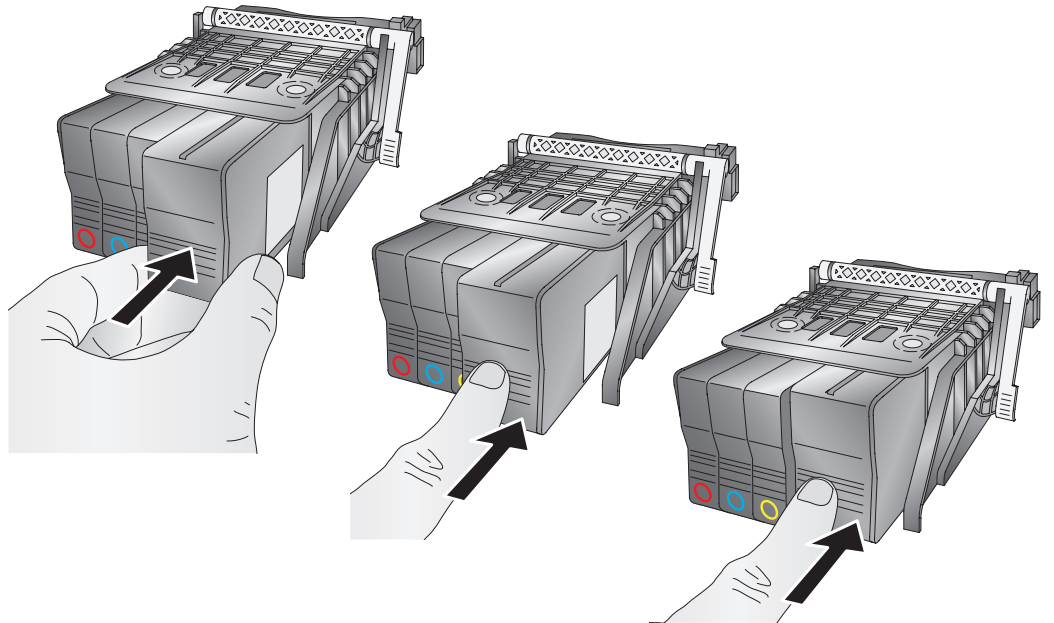
2. Remove the cartridge by pressing inward on the corresponding cartridge.



3. The cartridge will pop out slightly. Pull out the cartridge.



4. Install the new cartridge by pushing the cartridge in as far as you can and then letting go.



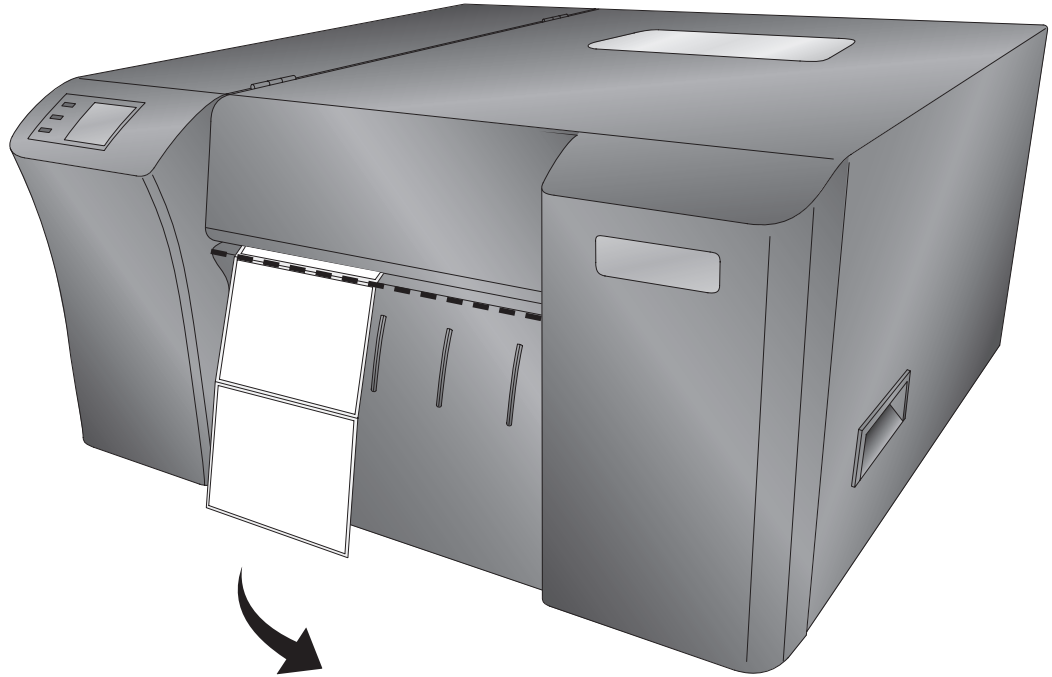
5. Close the cover. The printer will prime the new ink cartridge(s) and then continue to print if it was in the middle of a print job.



## E. Alignment Print

An alignment print is required after a Print Head change. You may be prompted for an alignment after every 10,000 prints to maintain quality. This is optional. You may also manually run an alignment print to improve print quality. Follow these instructions:

1. Open PTStatus 2000. Click on the Cartridge Tab (Second Tab). Click the Align Print Head button.
2. Tear off any printed labels. Click Next.

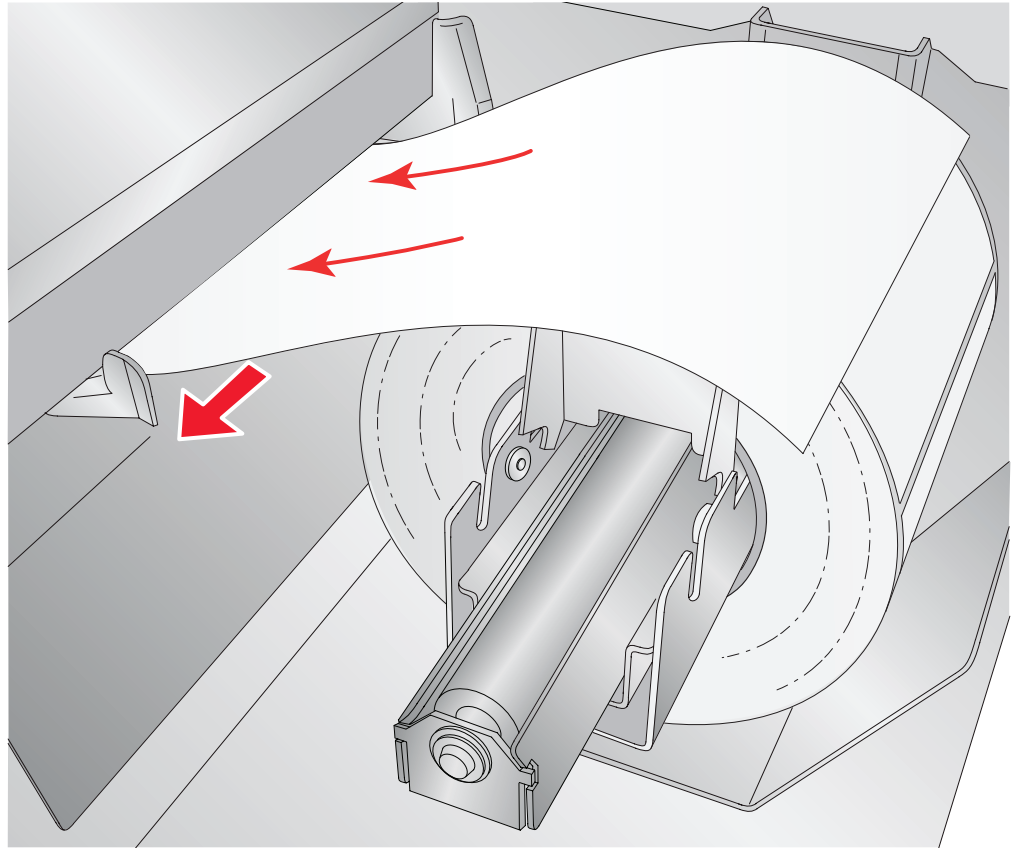


3. The printer will now automatically back the remaining labels out of the printer. You can leave the label stock roll in the printer.

**Note:** *Keep the remaining blank alignment paper sheets for future alignment prints.*

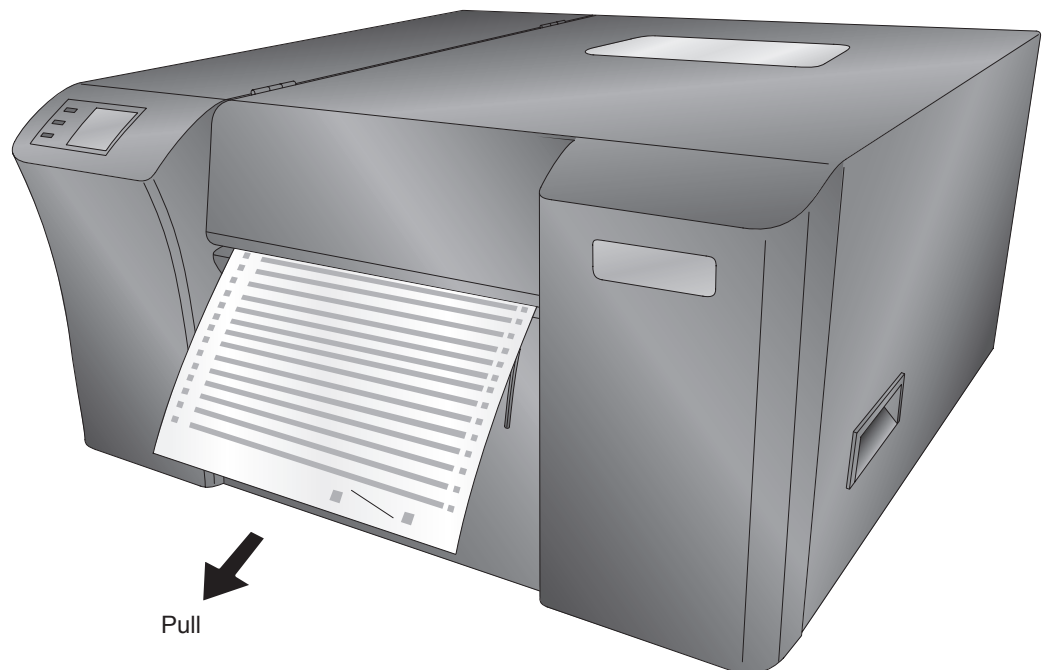


4. Move the Throat Guide to the widest position and feed the alignment paper into the printer. Ten alignment sheets were included with the printer. These are slightly smaller than a standard 8.5" x 11" sheet used for most office printers. The size is actually A4, which is 8.27" x 11.69" or 210mm x 297mm. If you do not have the alignment paper, you can cut a .25" strip off of a standard size sheet to make a usable sheet.



**Important Note:** Use included Alignment Paper or an 8.27" x 11" (210mm x 297mm) sheet.

5. Once the alignment is complete, you will need to pull the finished alignment sheet from the printer.



## Section 4: Printing from a PC

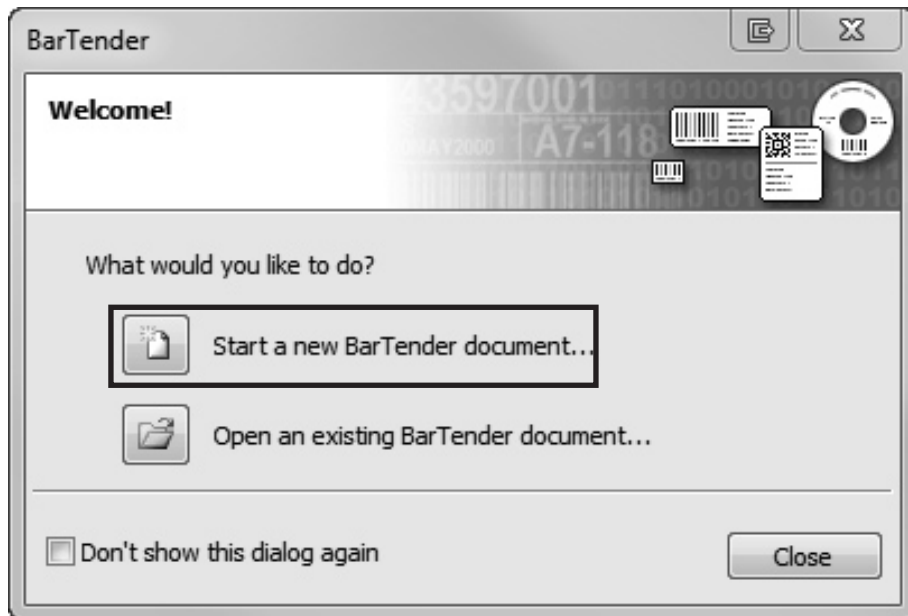
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### A. Using BarTender®

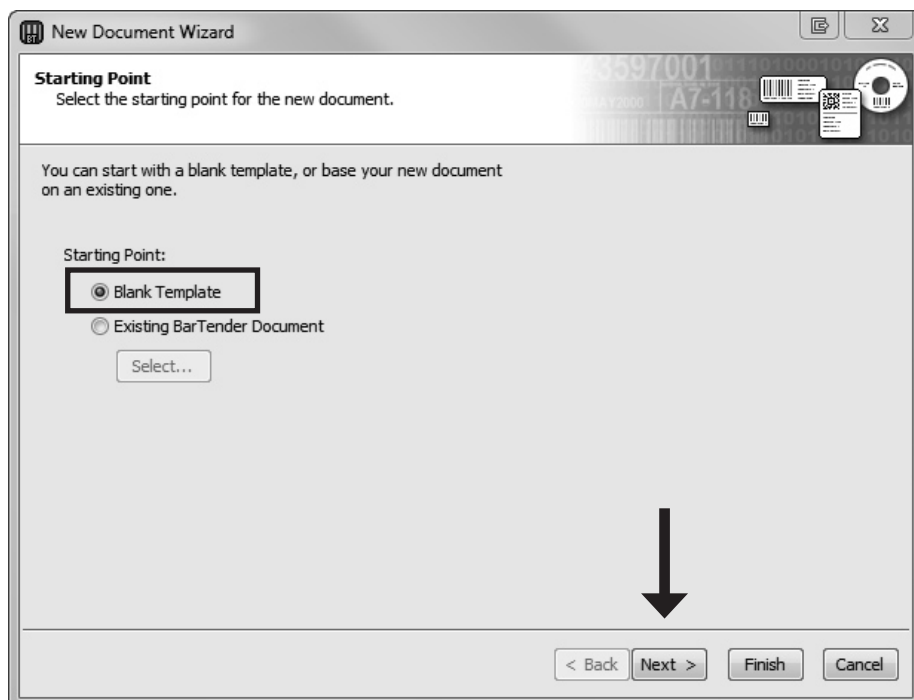
Primera Special Edition BarTender UltraLite is included with the LX2000. However, other programs can be used to print.

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. These instructions are based on using the included sample labels. More complex labels will require additional/different options to be selected.

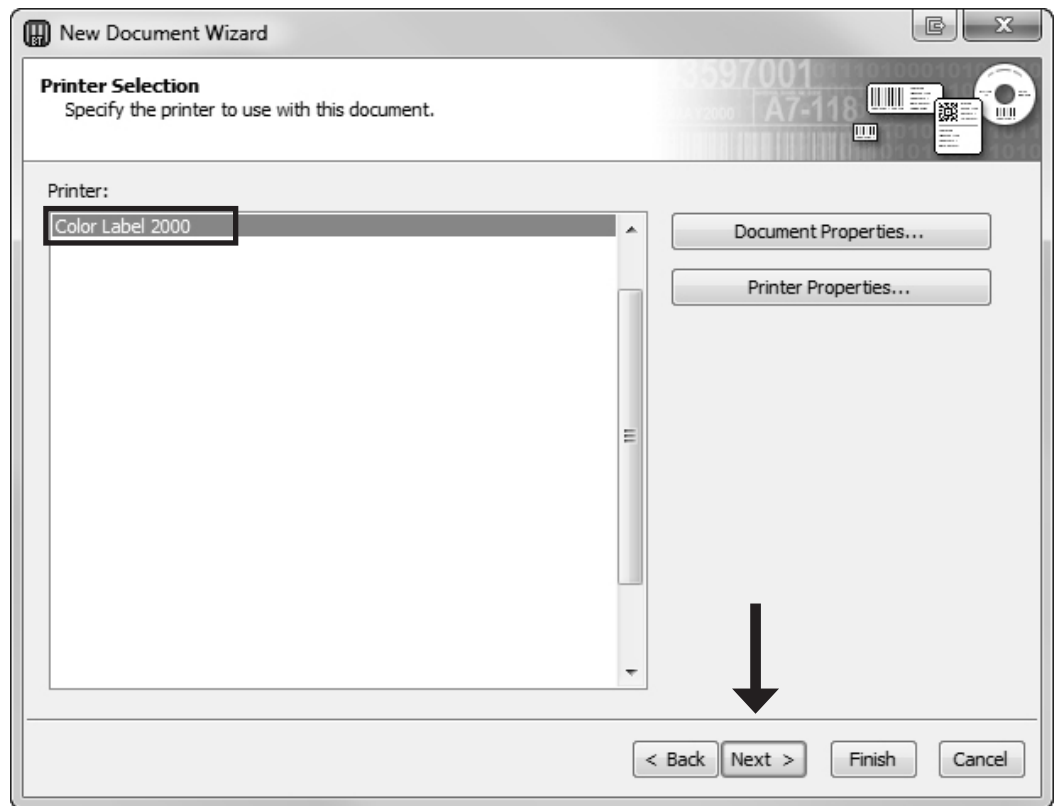
1. Choose "Start a new BarTender document..."



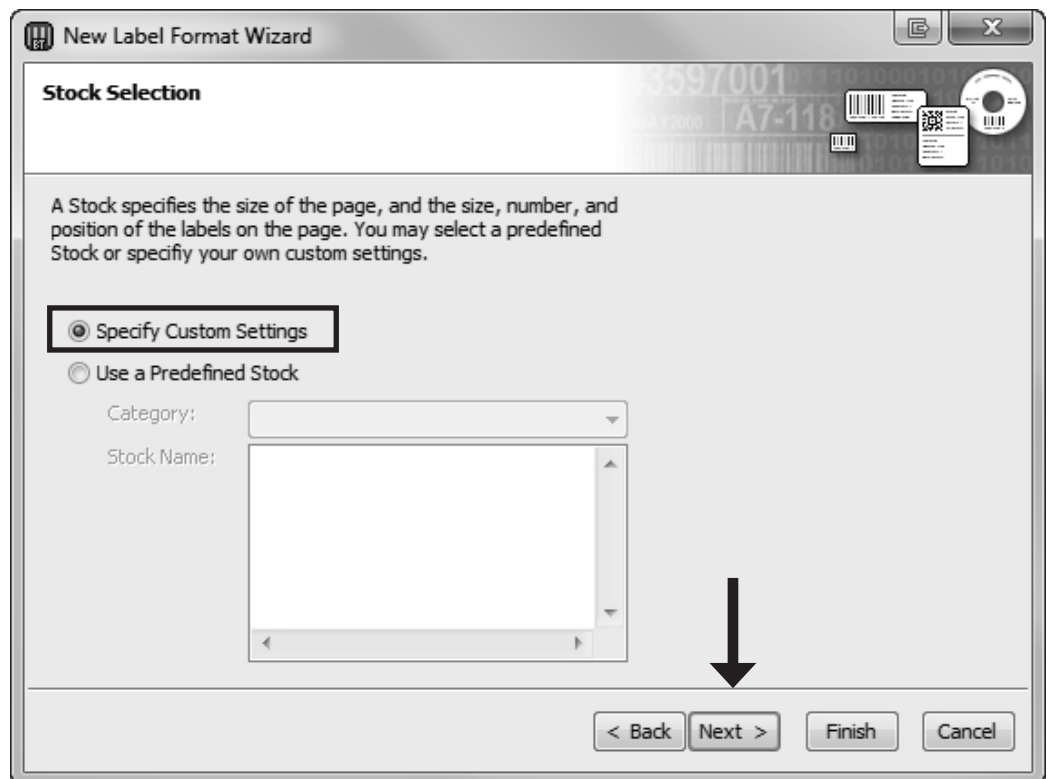
2. Select "Blank Template." Click "Next."



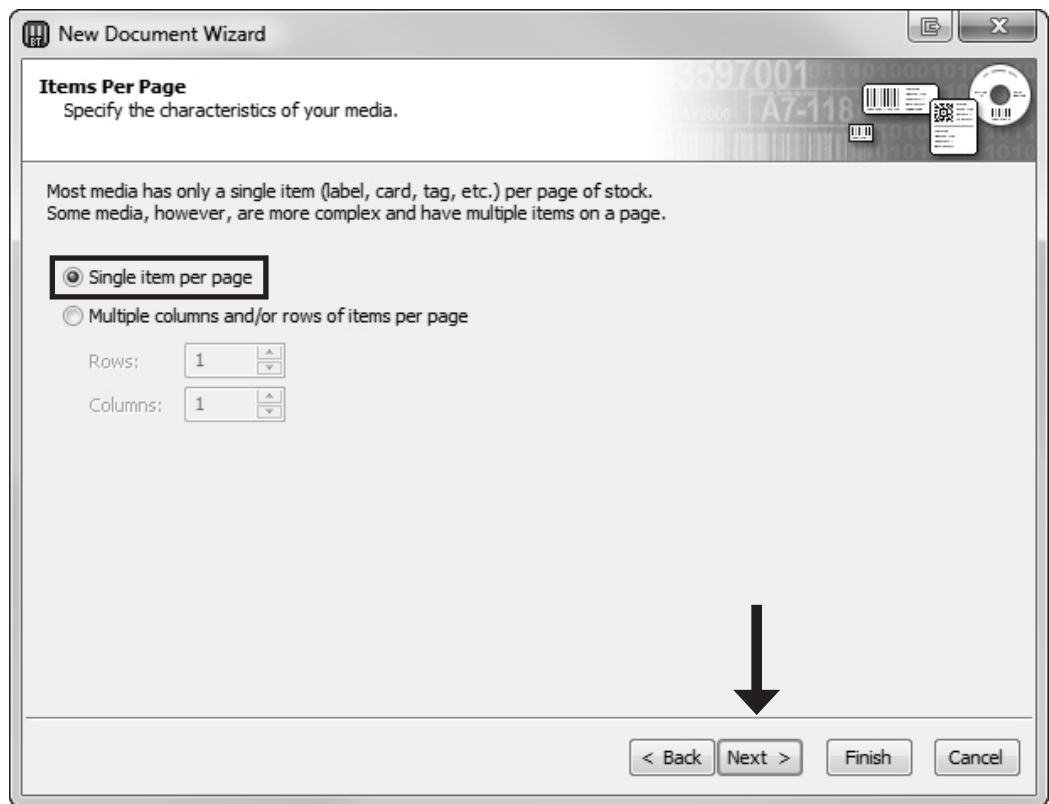
3. Select "Color Label 2000." Click "Next."



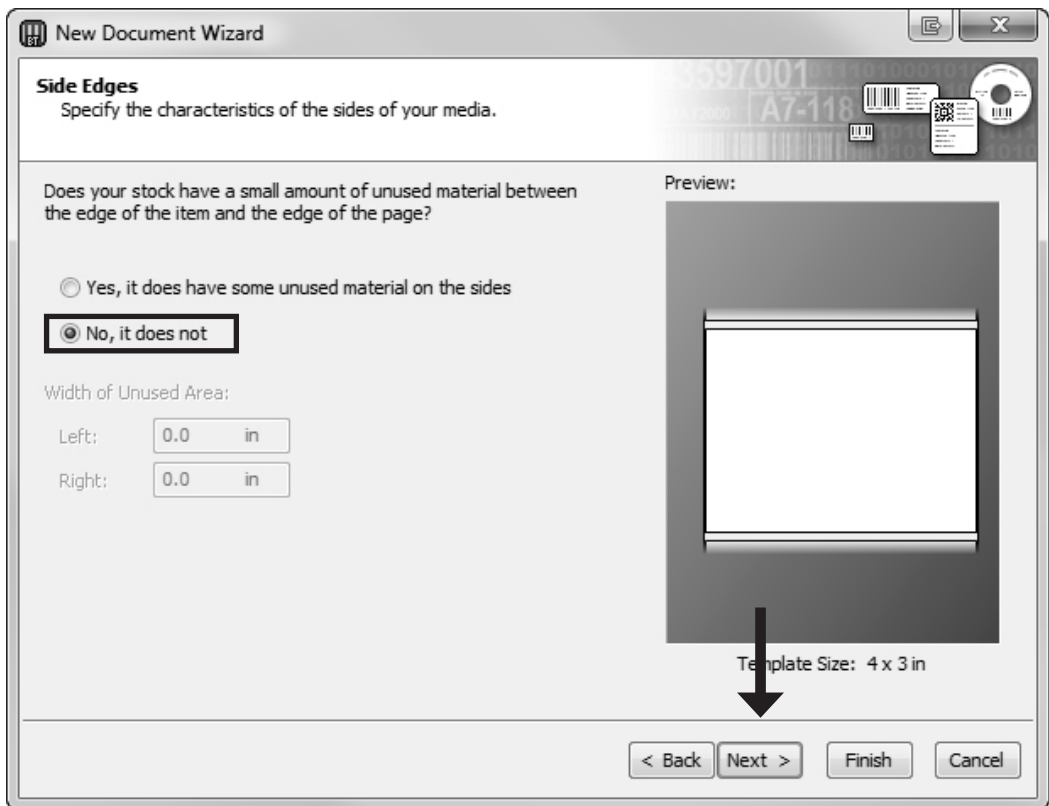
4. Select "Specify Custom Settings." Click "Next."



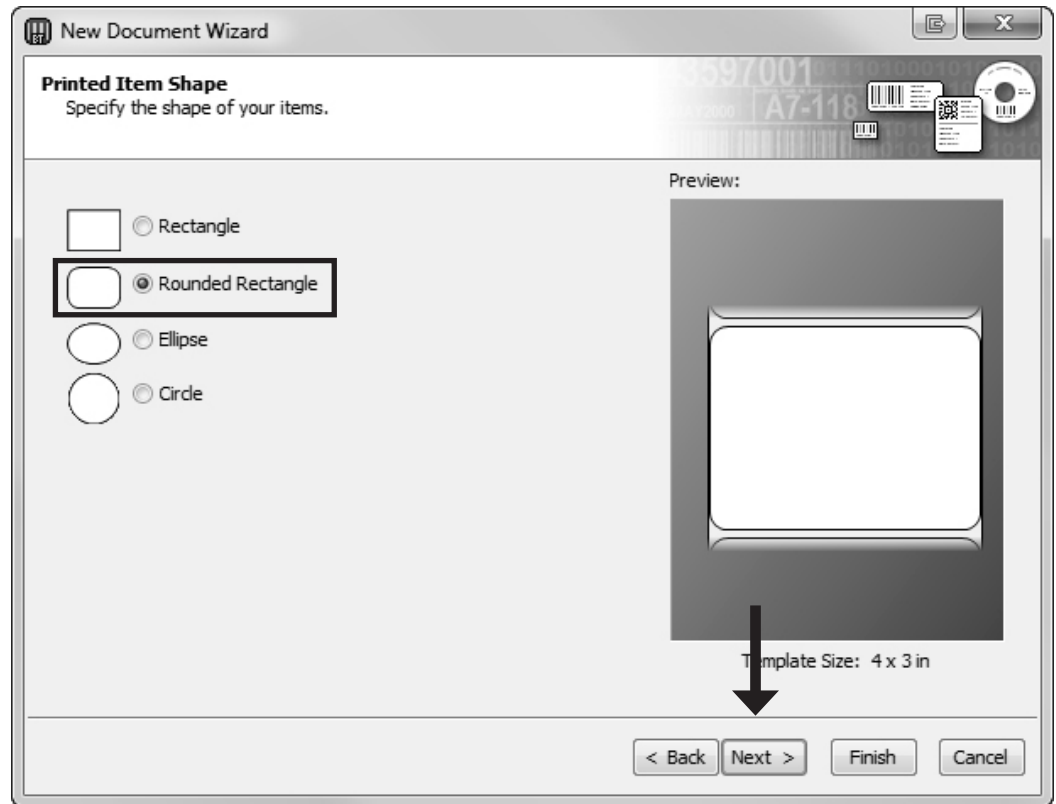
5. Set "Items Per Page" to "Single item per page." Click "Next."



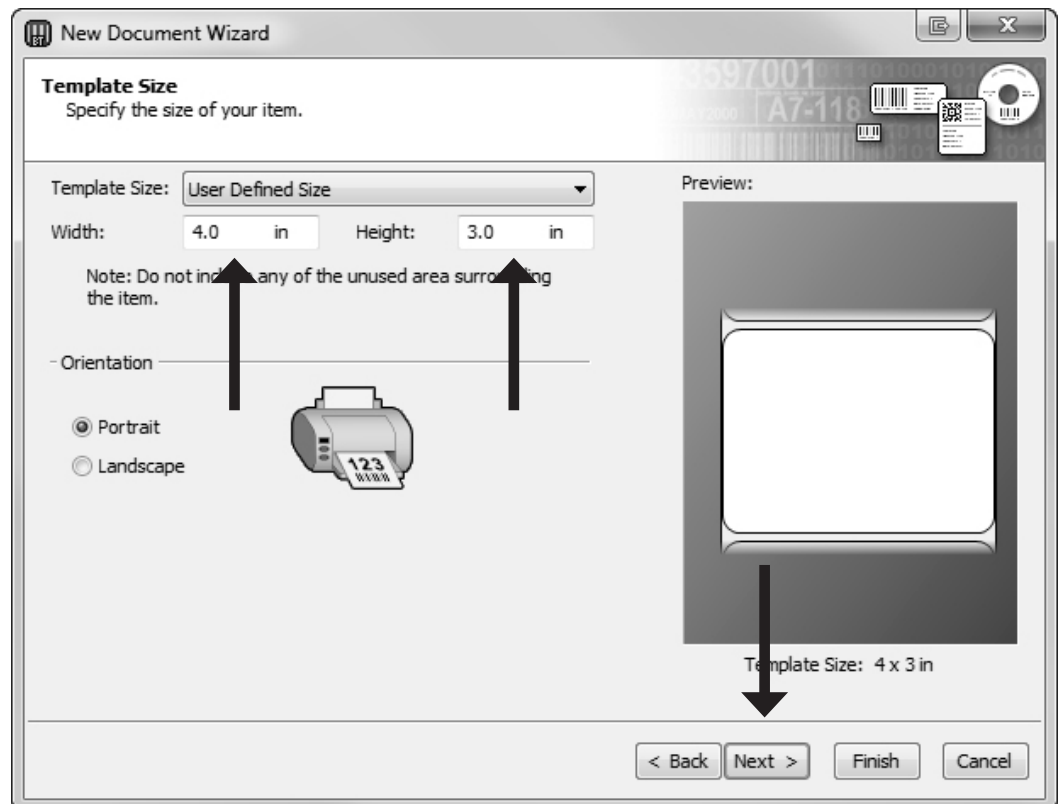
6. Set "Side Edges" to "No, it does not." Click "Next."



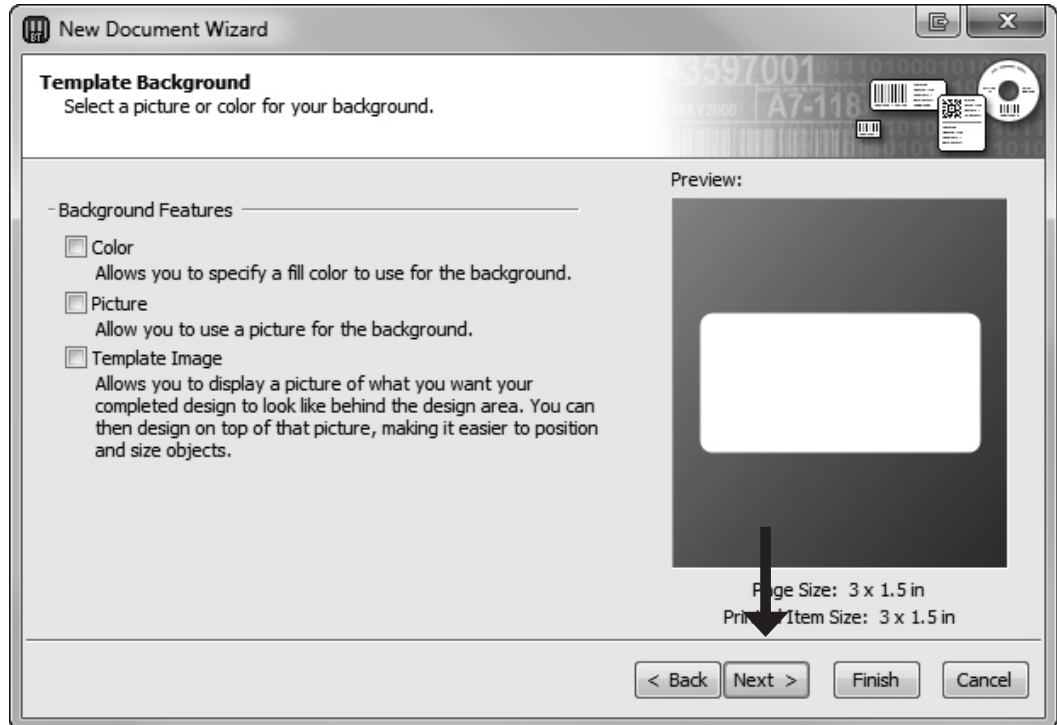
7. Set "Printed Item Shape" to "Rounded Rectangle." Click "Next."



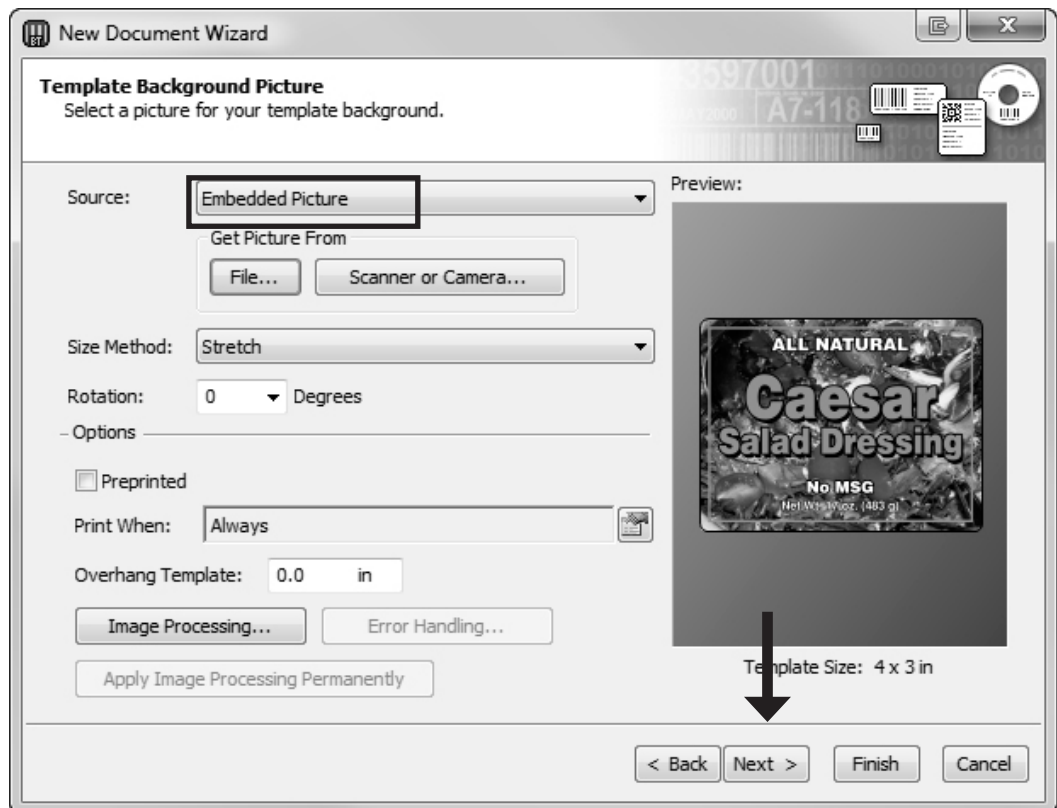
8. Set the page size, width and height to match the labels installed in the printer. Click "Next."



9. 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.

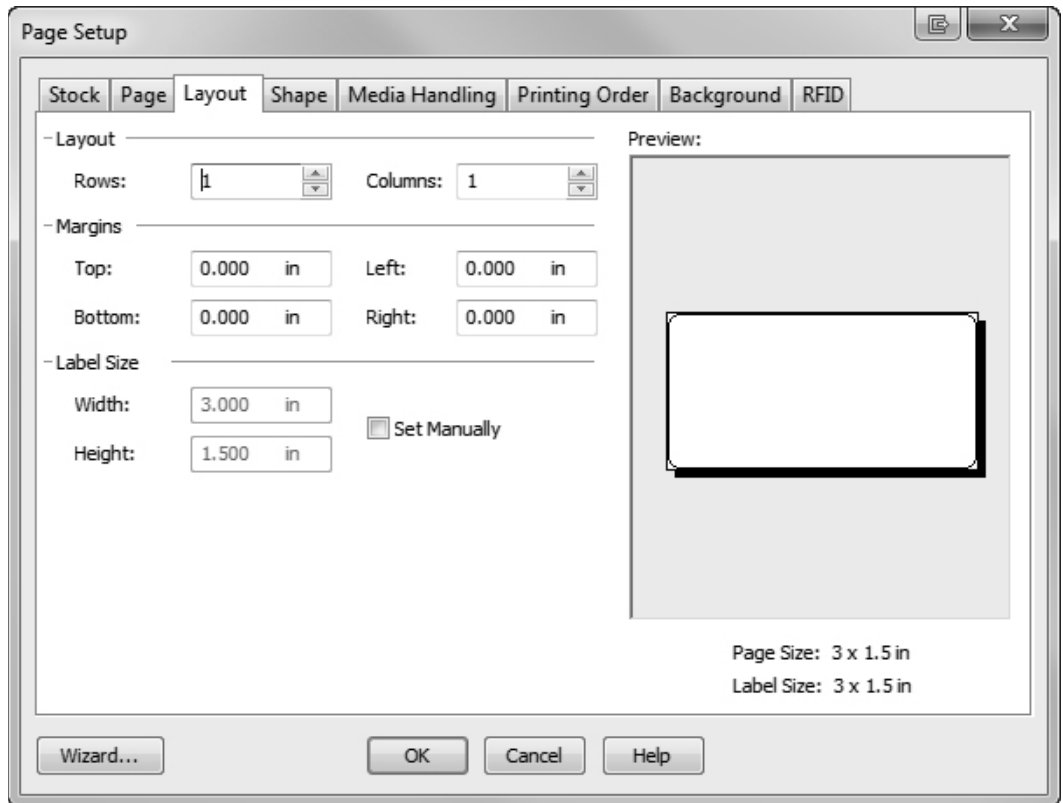


10. Select "Embedded Picture." Click the "File" Button to browse to the location of your photo/graphic file. Set the Size Method to "Stretch." Note the preview to the right. Click "Next" if you are satisfied with the layout of the photo or graphic.



11. Review the label setup summary. If it is correct, click "Finish." Your blank label will be displayed.

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



## B. Add Text, Barcodes and Graphics to a BarTender Label

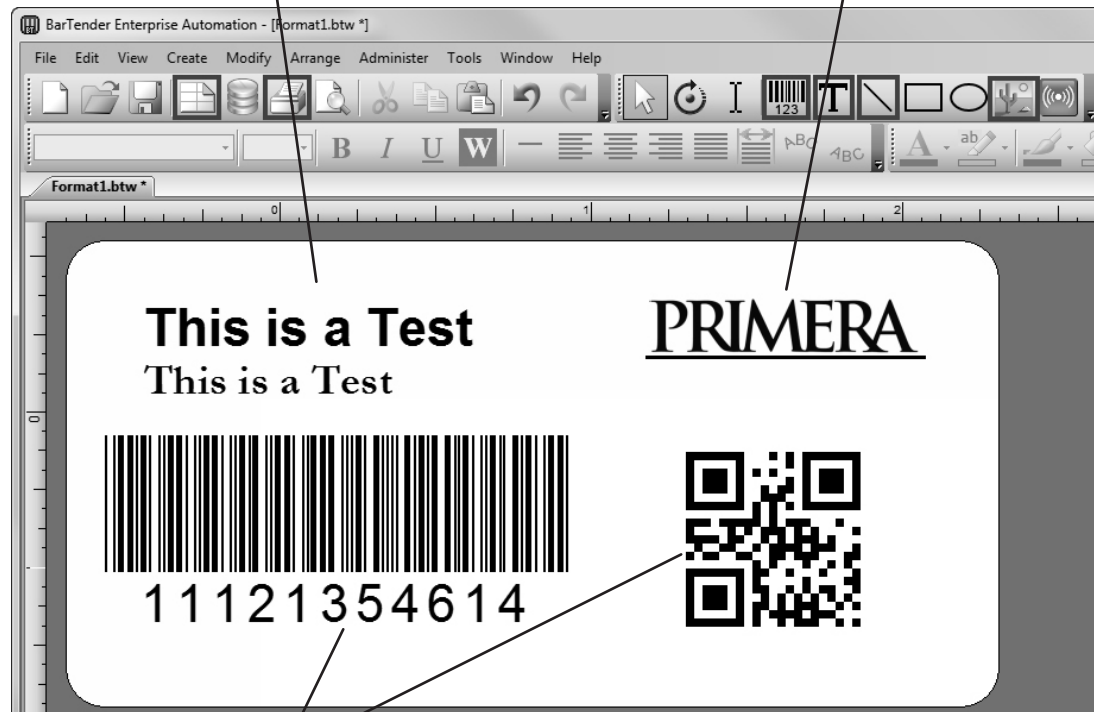
Once you have created your label size you will need to add text, a barcode and/or graphics. This can be done using one of buttons on the button bar at the top of the screen.



**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.



**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.



**Print.** Click the Print button to start printing.



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



**Lines.** Click the Line button to add a horizontal or vertical line.

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

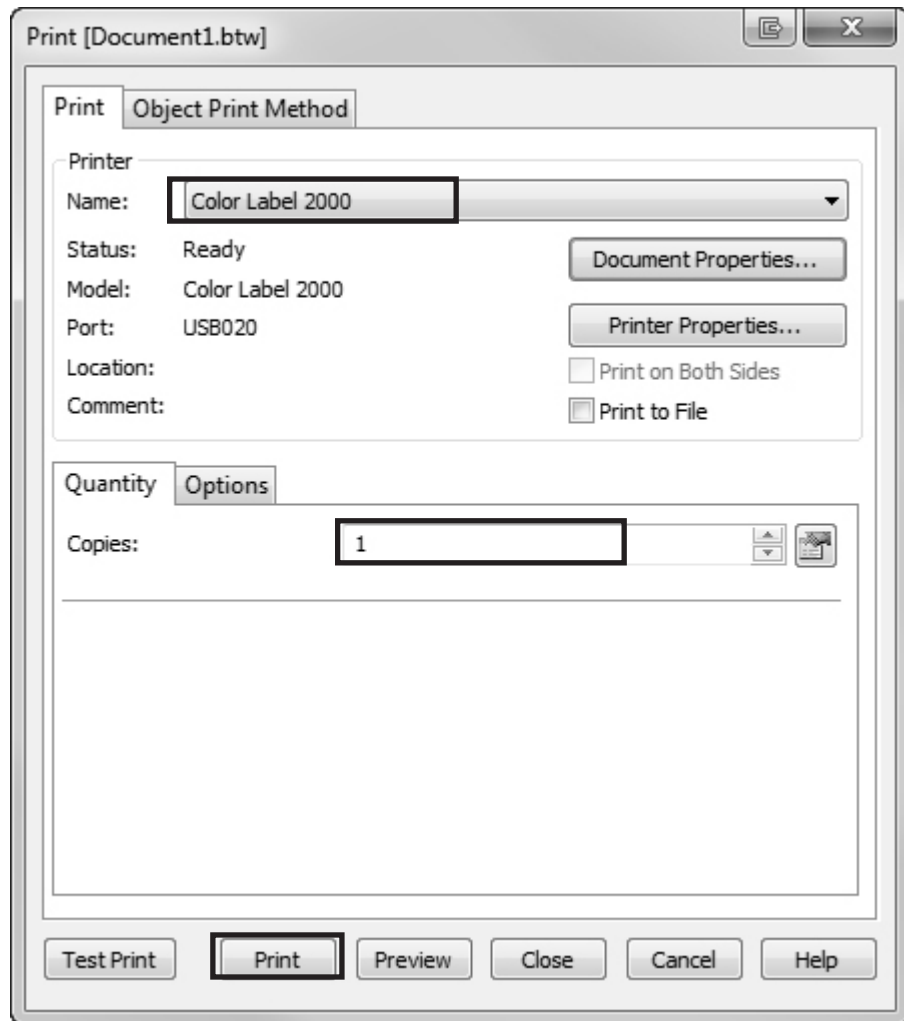
**Tip!** Go to the Help menu to access the BarTender Manual and Tutorials.



### C. Printing from BarTender



1. To print, click the Print button or go to the File Menu and select "Print." The Print Dialog window will appear.



2. Select the Color Label 2000.
3. Set the number of copies.
4. To adjust Quality Settings, click on "Document Properties." **Choose the Paper/Quality Tab.** Refer to section 4F for more information on these settings.
5. Click "Print" when you are ready.

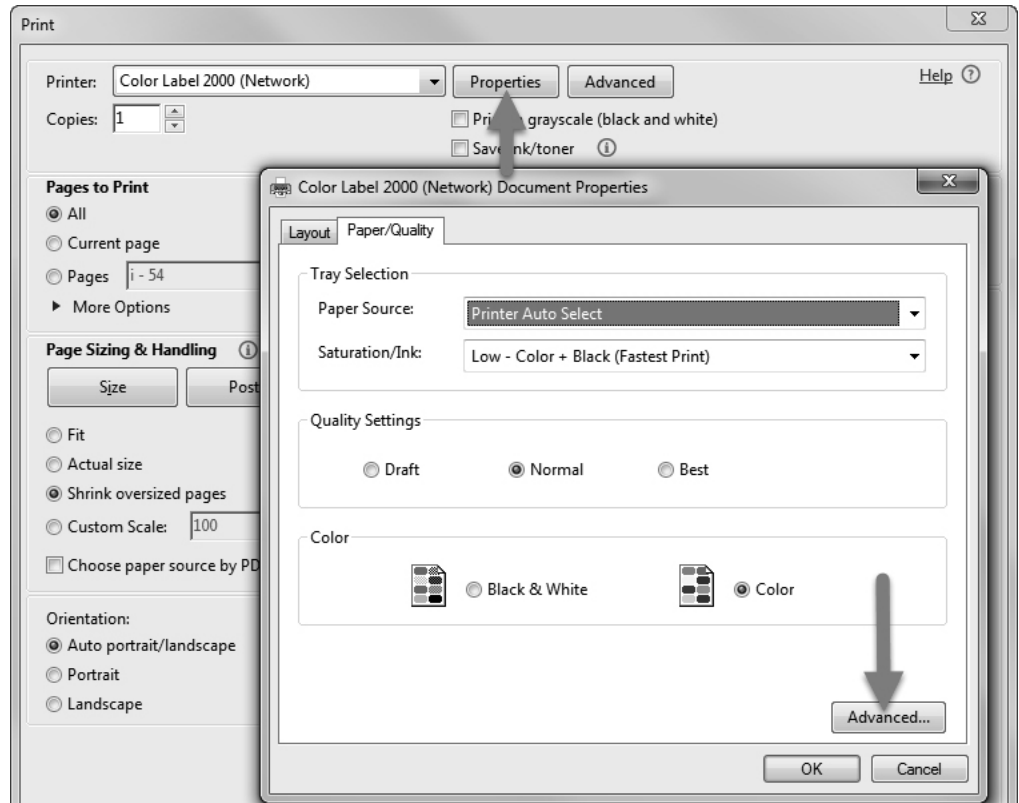
## D. Printing from Other Programs

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.

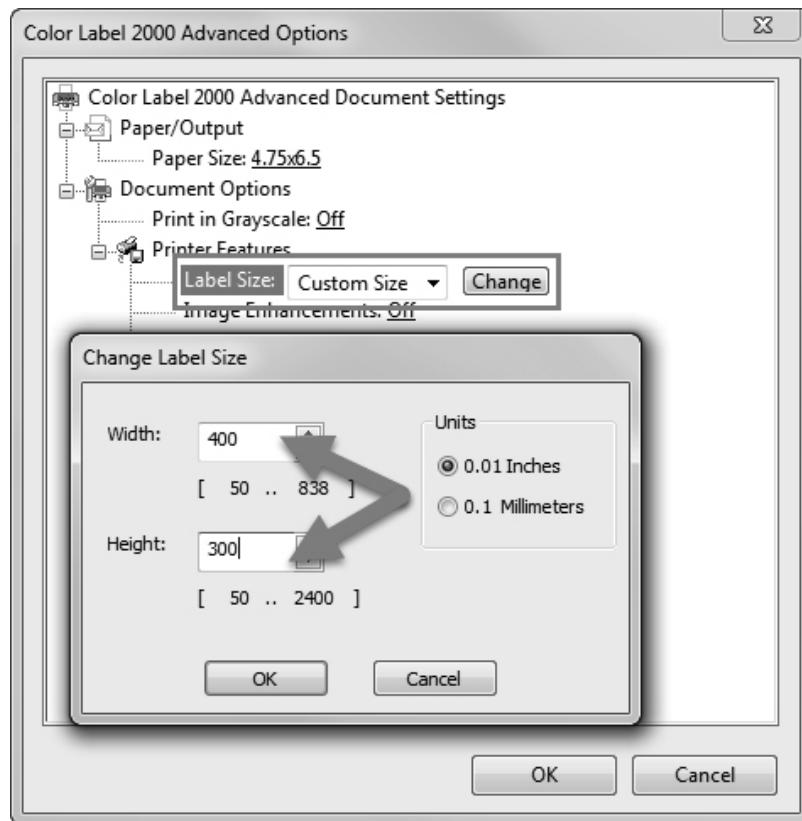
1. **Set the Page/Label Size in the Driver.** BarTender automatically prompts you for the size of the label that you are using. When printing from any other program you must do this manually. Before you print, simply set the custom page size just as you would set print quality in the printing preferences. In the example below the label size is 4" x 3" so the custom page size is set to 400 x 300 (displayed in .01 inch units).

### Example: Adobe Acrobat Reader DC

- A. From Adobe Reader click Print. Choose the LX2000 printer. Click Properties. Click Advanced.



- B. Select the Change button next to the Label Size: Set your page size.

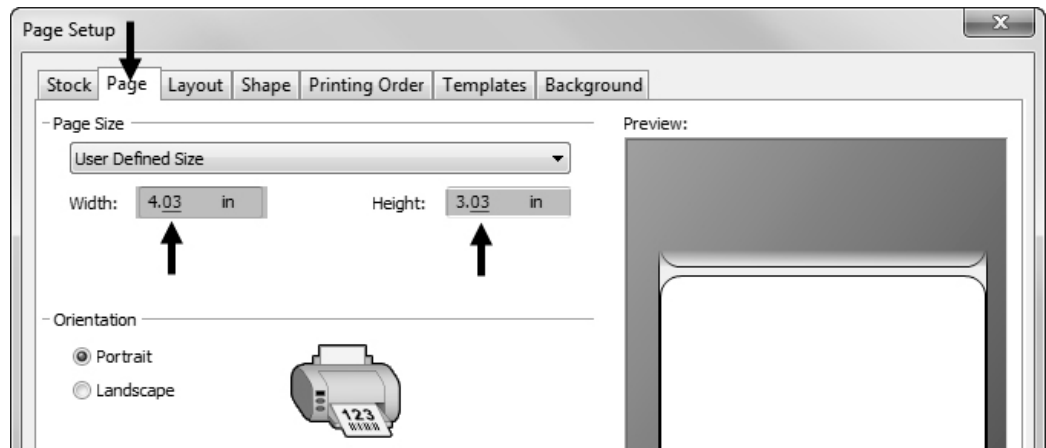


2. **Check the image or document size.** The image size or document size should correspond to the Page/Label Size set in the driver. If you have set your page size to 4" x 3" but your image is actually 5" x 3" the printer driver will automatically shrink your image to fit inside the 4" x 3" label. The result is that the actual printed label will be stretched, skewed or smaller than intended. Avoid this by setting your page 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 LX2000. 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.

## E. Creating a Full Bleed Print

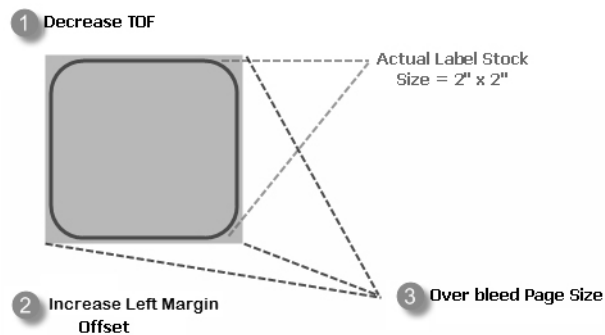
1. Adjust these settings in the status monitor and printing application (BarTender).

**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 increase the left margin offset to center the over bleed on the label. If you over bleed by .03" you will need to increase the Left Margin Offset by 4. 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 4D.

**TOF.** Decrease the Top of form by 4. 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 4D.



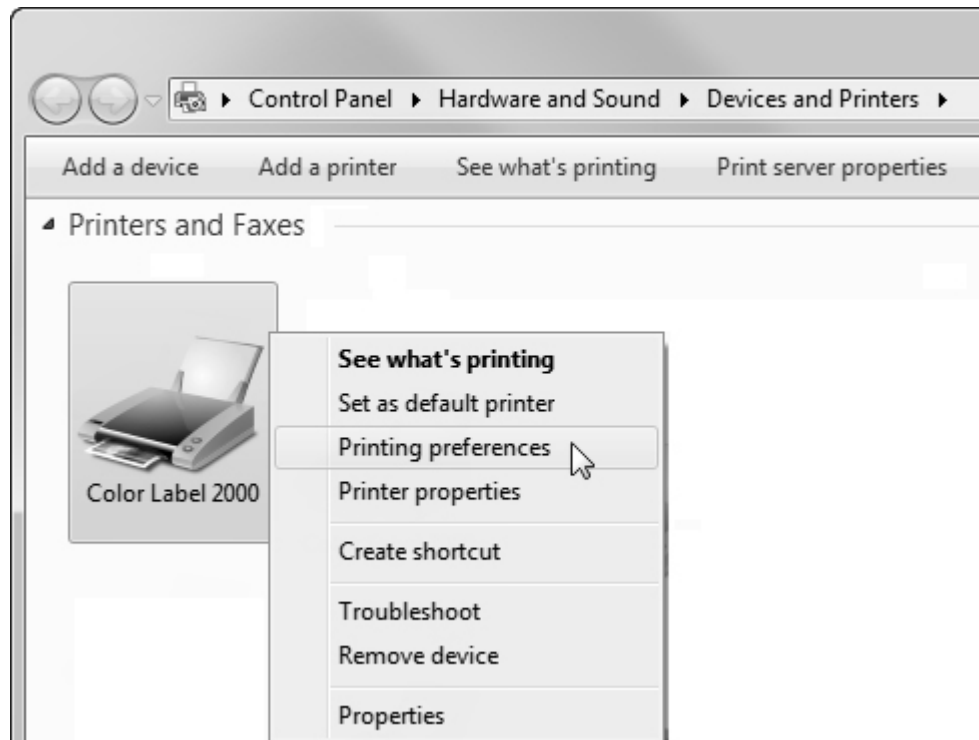
**Note:** It is best to over bleed as little as possible to avoid excess ink on the label backing. Also, over bleeding too much will cause the printer to skip labels. This is because the printer stops printing too late to sense the next label.

## E. Printer Driver Settings

Once the printer driver has been successfully installed, you may choose 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)

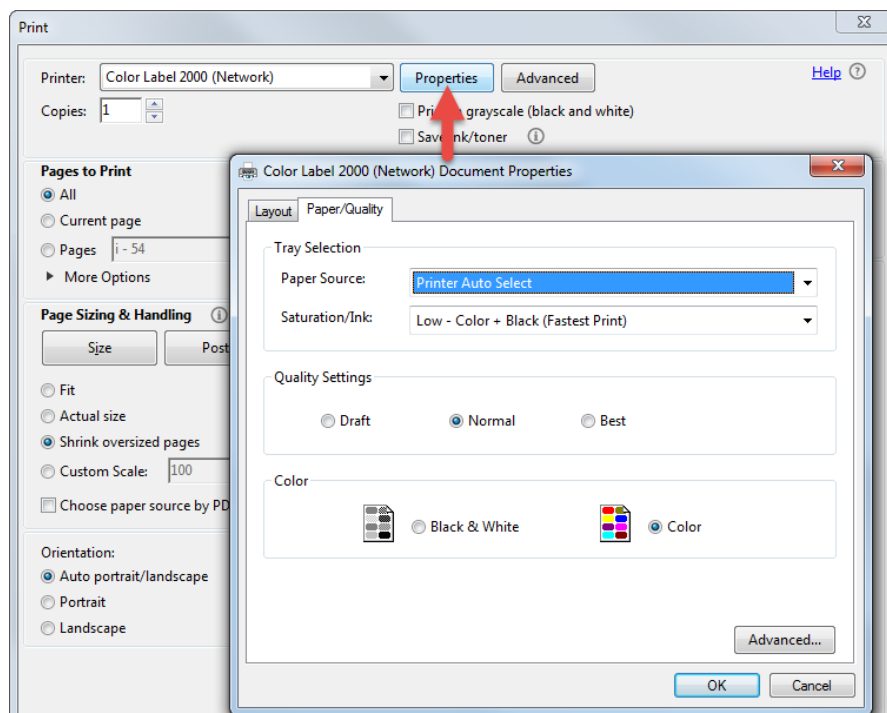
### To find Driver Settings:

Click the Start button, choose Printers and Faxes (XP), Printers (Vista), Devices and Printers (Windows 7 and 8). Right-click on the Color Label 2000 Icon and select Printing Preferences from the drop-down menu.



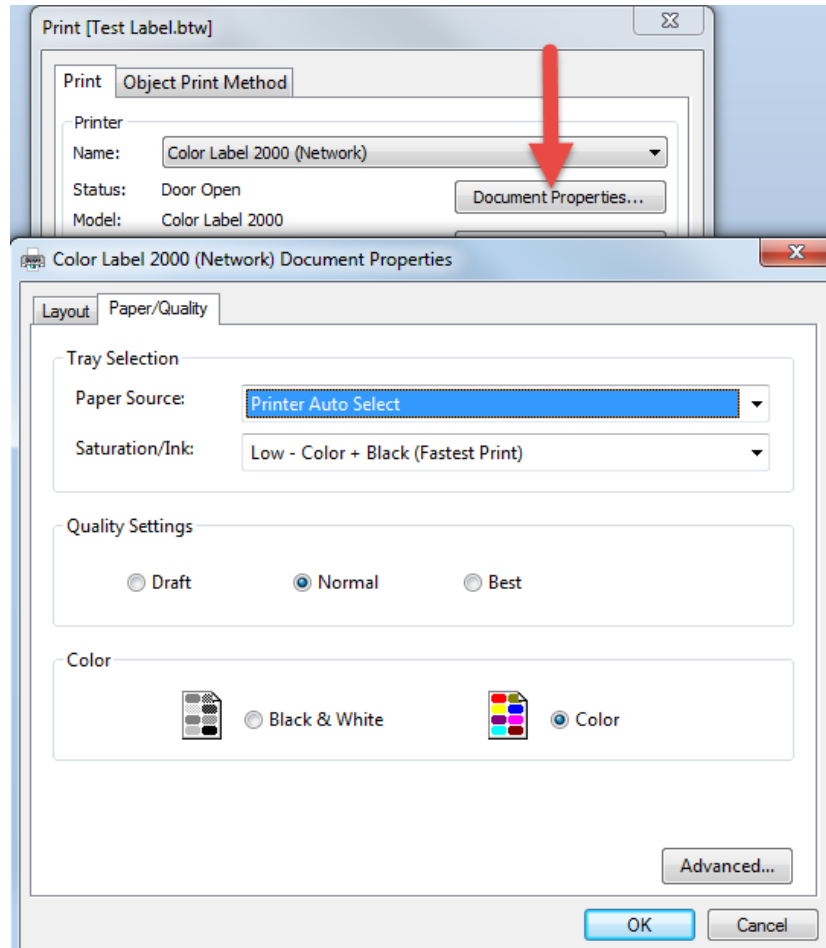
### Adobe Acrobat Reader DC:

Click on Properties before printing.

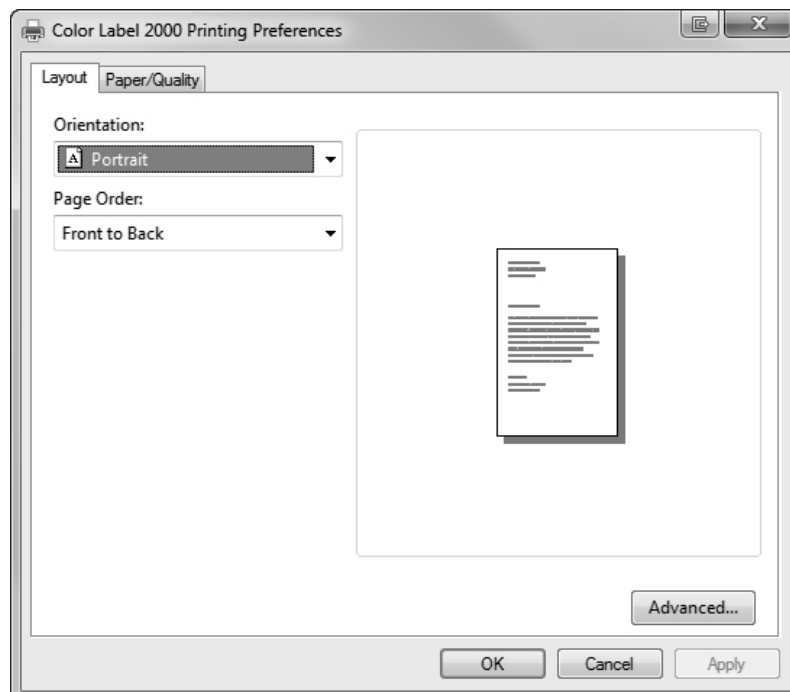


## BarTender Ultralite:

Click on Document Properties.

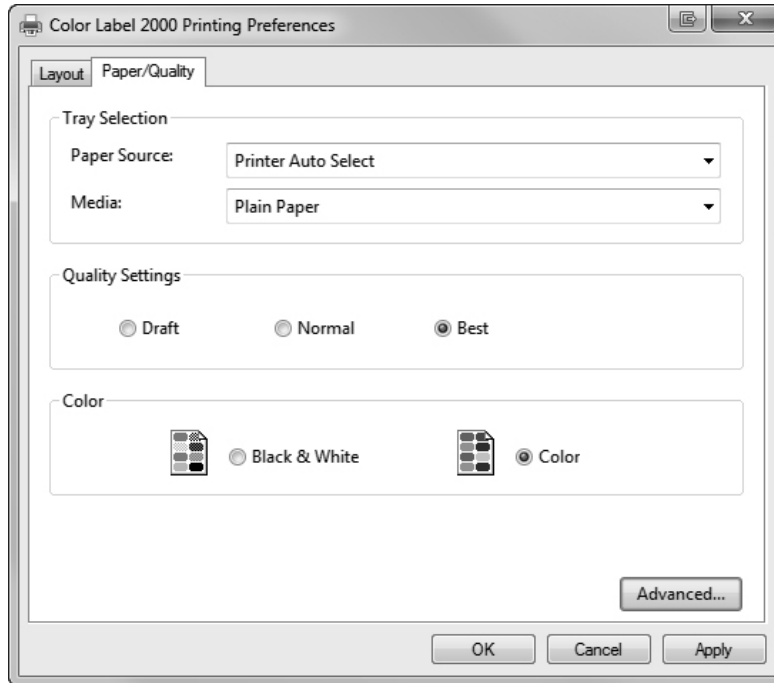


The preferences screen will appear.



**Orientation (Layout Tab).** 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.

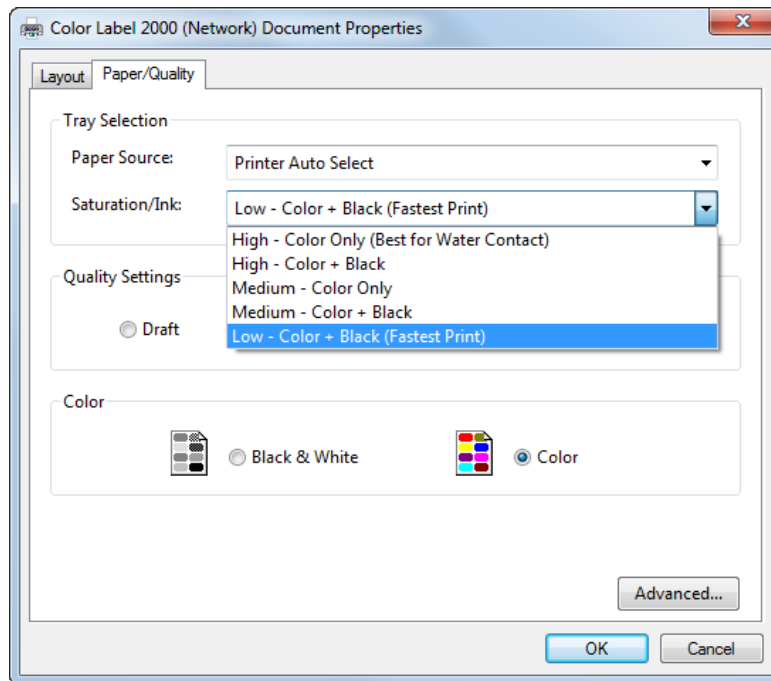
**Page Order (Layout Tab).** Use this feature only for multipage documents to either print the last page first (back to front) or the first page first (front to back). This will not be changed for most printing projects.



**Paper Source (Paper/Quality Tab):** This setting should always be set to “Printer Auto Select”.

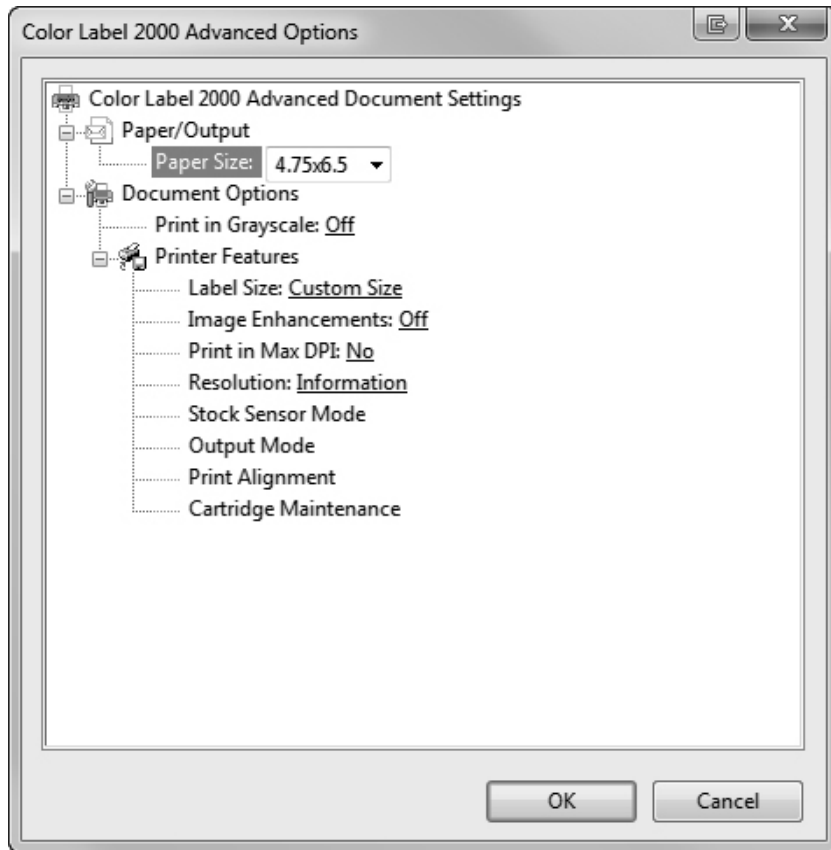
**Saturation/Ink Settings.** These settings will provide the most dramatic quality differences. USE COLOR ONLY SETTINGS IF YOUR LABEL WILL CONTACT WATER. The higher saturation settings will print slower and use more ink while the lower saturation settings will print faster and use less ink.

- High-Color Only (Best for Water Contact) - Slowest Print \*\* - Most Ink Consumption
- High-Color + Black
- Medium - Color Only - Water Contact Setting.
- Medium - Color + Black
- Low - Color + Black - Fastest Print - Least Ink Consumption.





**Color (Paper/Quality Tab).** This setting affects which cartridges will be used to print the label. The “color” setting will use the cyan, magenta, yellow and black ink cartridges. The “Black & White” setting will use only the black cartridges. Color images will be converted to black and white when using this setting.



**Paper Size (Advanced Button).** 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 use the page size setting in that program to set the dimensions of your label. If the program you are using does not have a page size setting you can set it here. Set the Paper Size to “Custom” and then change the Label Size setting to match your specific 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.

**Print in Max DPI (Advanced Button).** You can set the printer to print at the highest quality possible by changing this setting to “Yes.” It dramatically slows printing speed and is only available when media is set to Matte BOPP, Clear Polyester or White Polyester.

**Stock Sensor Mode (Advanced Button).** Click this setting to open the Status Monitor. See Section 2D.

**Output Mode (Advanced Button).** Click this setting to open the Status Monitor. See Section 2E.

**Print Alignment (Advanced Button).** Click this setting to open the Status Monitor. See Section 4D.

**Cartridge Maintenance (Advanced Button).** Click this setting to Align the Print Head, Clean the Print Head or Change a Cartridge. This setting opens the Status Monitor.

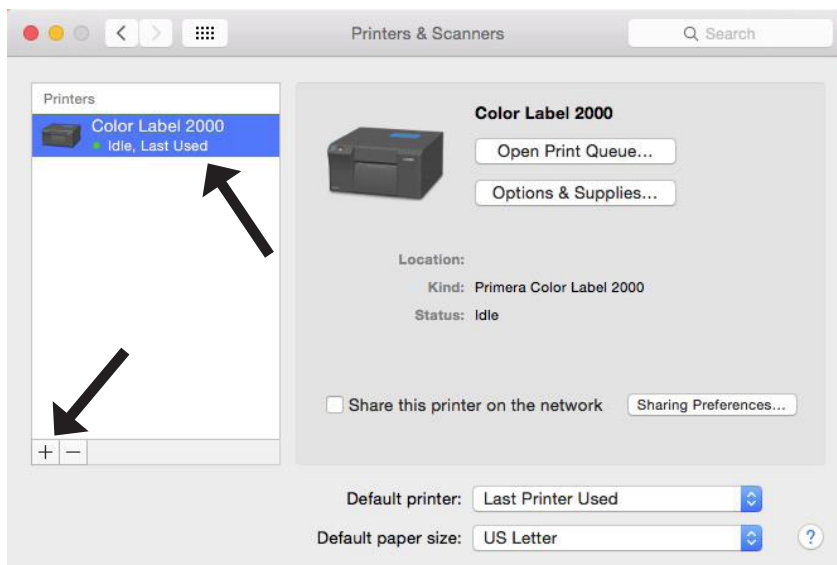
**Other settings (Advanced Button).** All other settings on the Advanced Tab not mentioned above should not be changed unless directed to do so by tech support.

## Section 5: Printing from a Mac

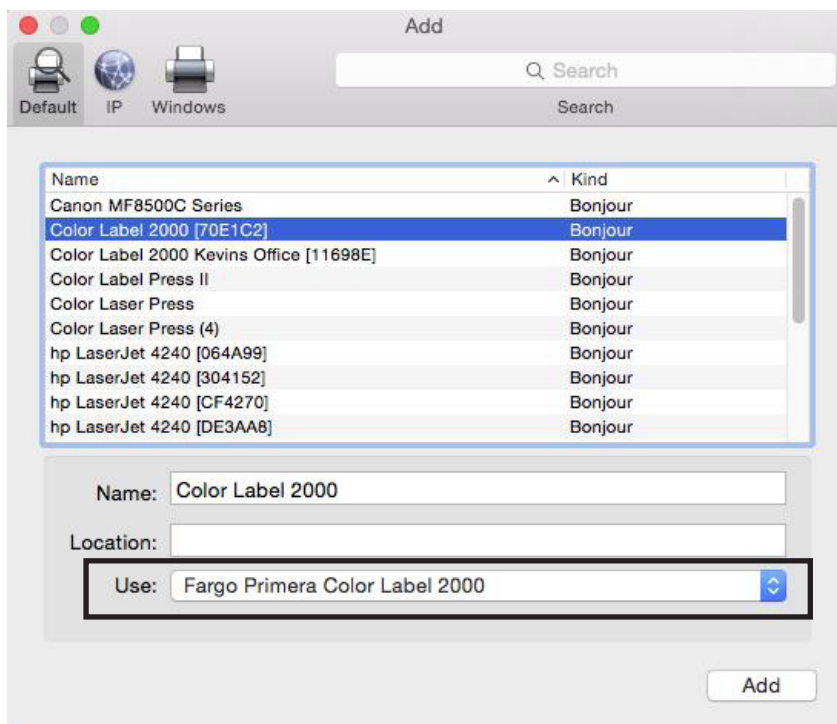
### A. Adding a Printer

Install the software from the website or the installation disc. Once the software has been installed you will need to add the printer.

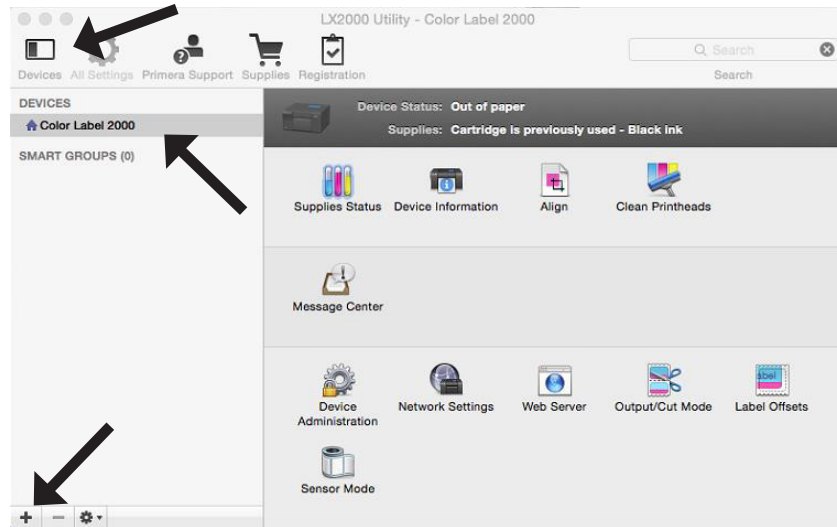
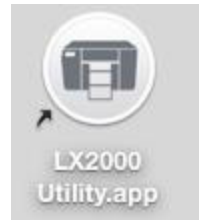
1. Go to Apple – System Preferences – Printers and Scanners. Look for the Color Label 2000. Depending on your computer setup it may have already installed once it has been discovered on your network or the USB cable has been connected.



2. If the device was already added. Remove it by clicking the minus “-“
3. Add the device by clicking the plus +
4. Select the LX2000 from the list – **Make sure “Fargo Primera Color Label 2000” is selected in the “Use” menu.** It may default directly to “AirPrint”. While printing via AirPrint is possible you will experienced decreased functionality if that option is selected on a Mac. We recommend using AirPrint only for iPhone or iPad.



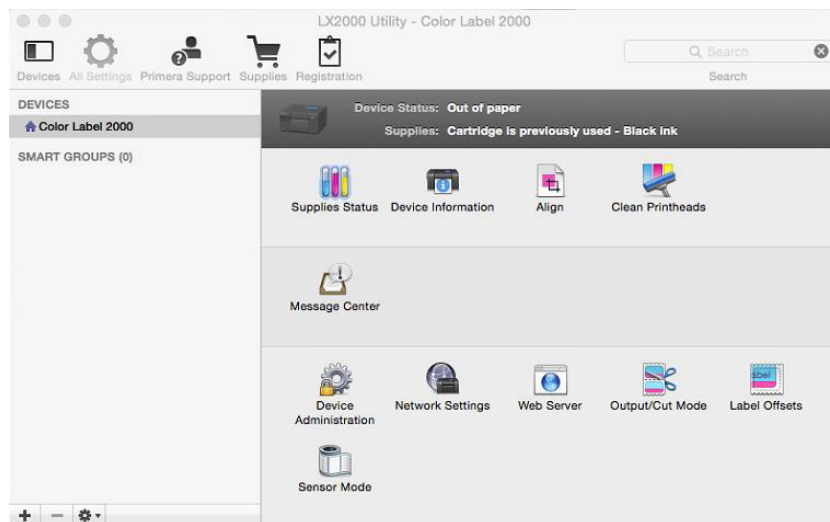
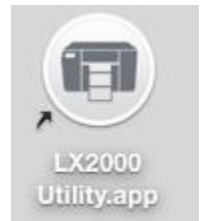
5. Now Launch the LX2000 Utility. The icon can be found on the desktop. You may also launch it via Apple – System Preferences – Printers and Scanners – select the LX2000 printer – click on the Options and Supplies button – click on the Utility Menu – Click on Open Printer Utility.
6. The print should automatically be added to the list of devices. If it has not been added click the plus “+” to add it.



## B. LX2000 Utility

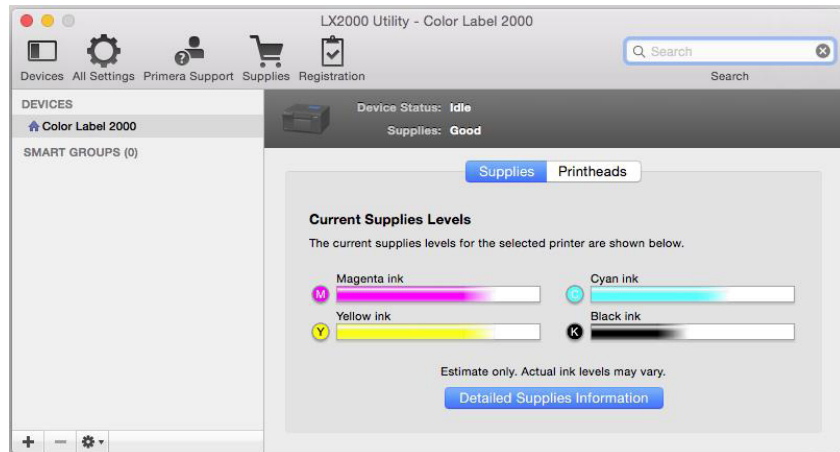
The LX2000 Utility Icon can be found on the desktop. It is located in you're Applications – Primera folder. You may also launch it via Apple – System Preferences – Printers and Scanners – select the LX2000 printer – click on the Options and Supplies button – click on the Utility Menu – Click on Open Printer Utility.

Use the Utility to check ink levels, adjust alignment offsets, change cut and present settings, change the stock sensor, change network settings and other functions.

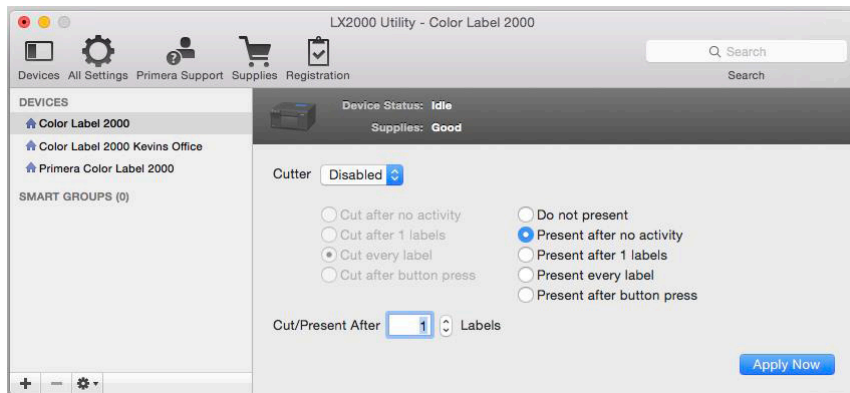
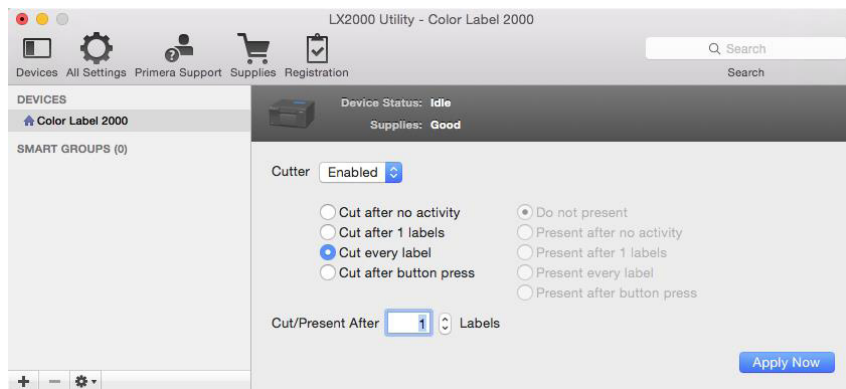


## Ink Levels and Printhead Life

Ink levels can be monitored at any time by using the Utility. Go to Supplies Status. Click on Printheads to display printhead life remaining.



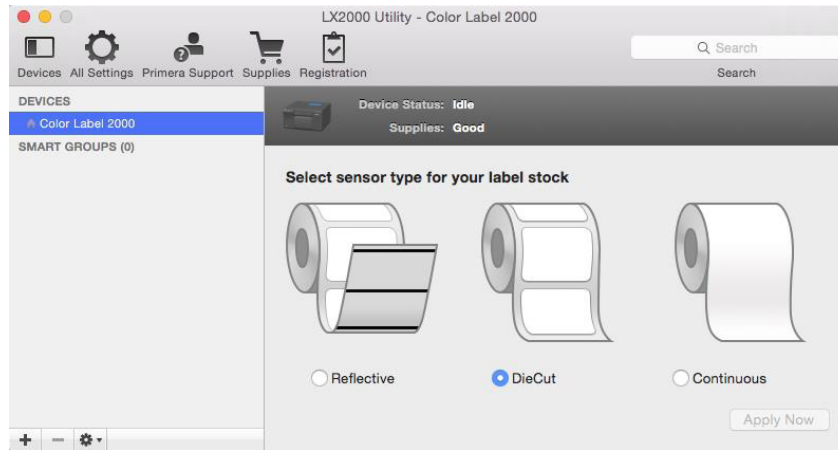
## Output/Cut Mode (See Section 2D for more information)



## Label Offsets/Print Alignment (See Section 2F for more information)



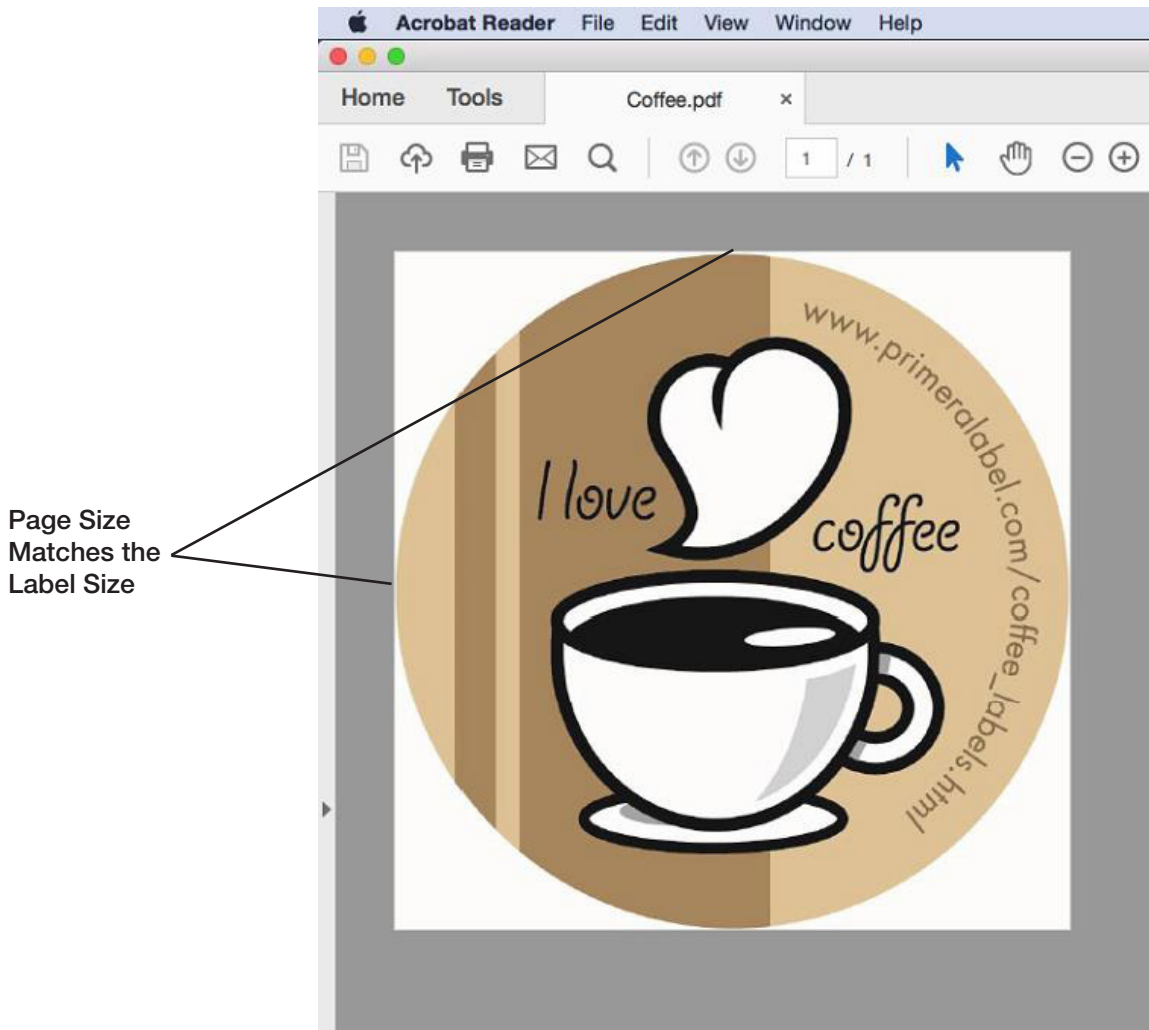
## Stock Sensor Mode (See Section 2D for more information)



## C. Printing from Adobe Reader

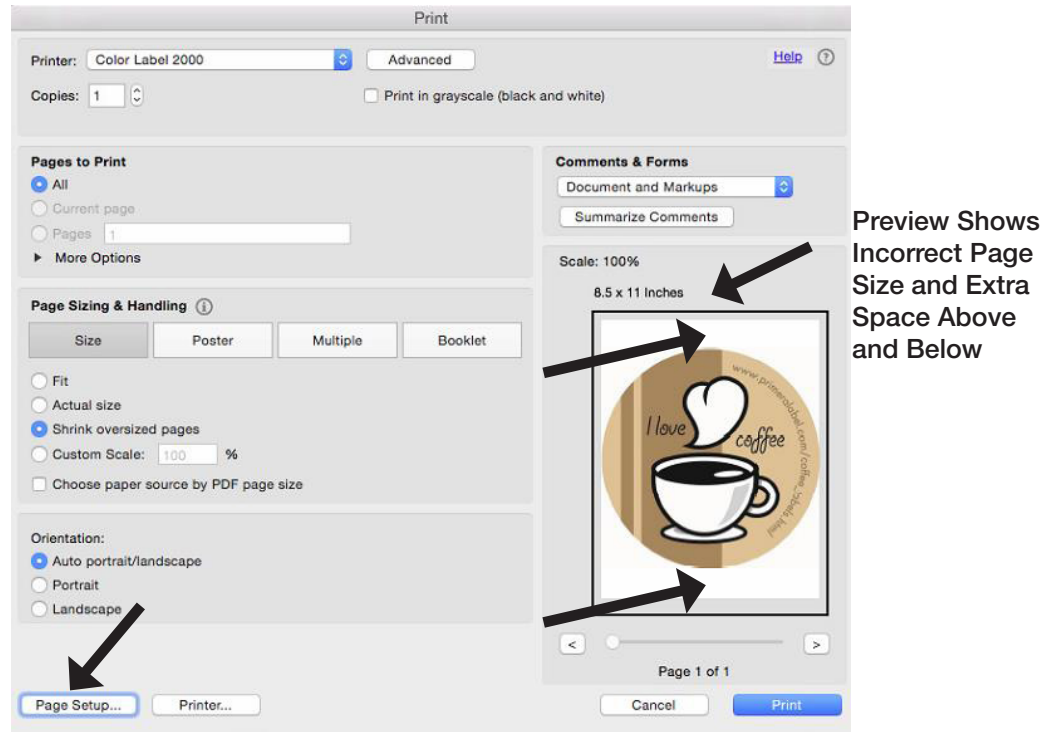
You can print to the printer from any program. However, Adobe Reader is free and is ideal for printing PDF files created in Adobe Illustrator or Photoshop. It does require setting up a custom page size (Section 5E) for each label. To setup a label and print follow these instructions.

1. Before printing make sure the pdf file page size matches the label size and there are no crop or proof marks on the label. If any of these are present you will need go back to the design program and export/save the file for printing.
  - a. The Page Size should match the label size.
  - b. No crop marks or proof markings should be visible.

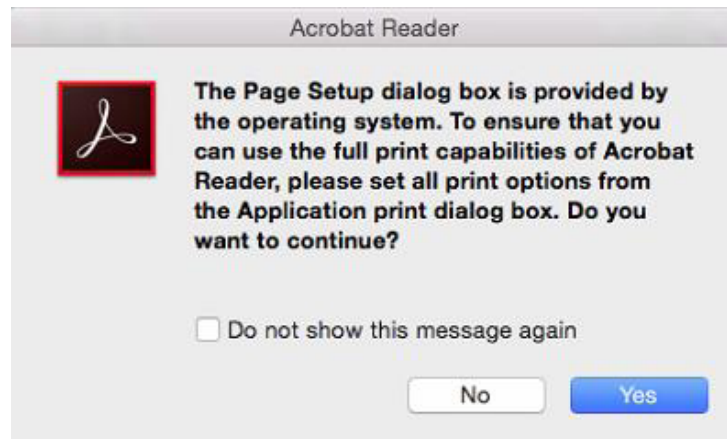


2. Go to the File menu – Print or select the Print Icon.

3. Click on the Page Setup... Button to adjust the page size. You can see that it is incorrect by looking at the preview.

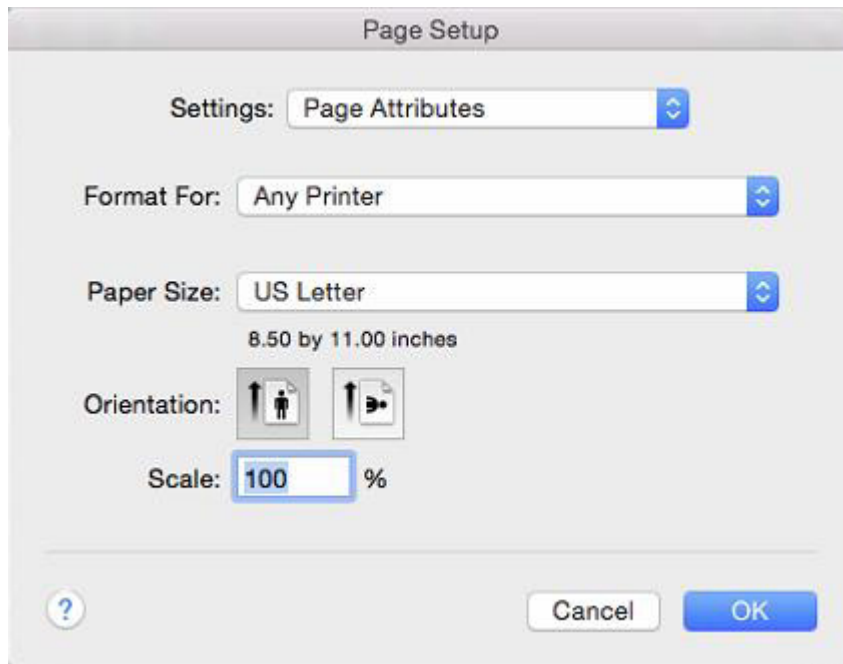


4. When you click on the Page Setup... button for the first time you will see a message that indicates you are leaving the Adobe software and instead using screens provided by the Mac OS. Click Yes. (Tick the box, do not show this message again if you wish).

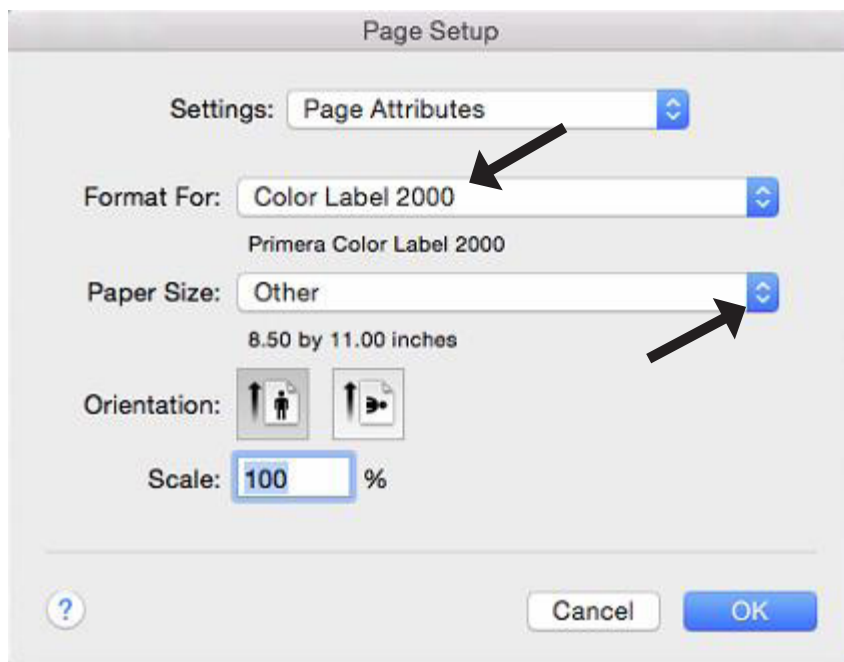




5. You will see the page setup is not set for any printer.



6. Change "Format For" to Color Label 2000

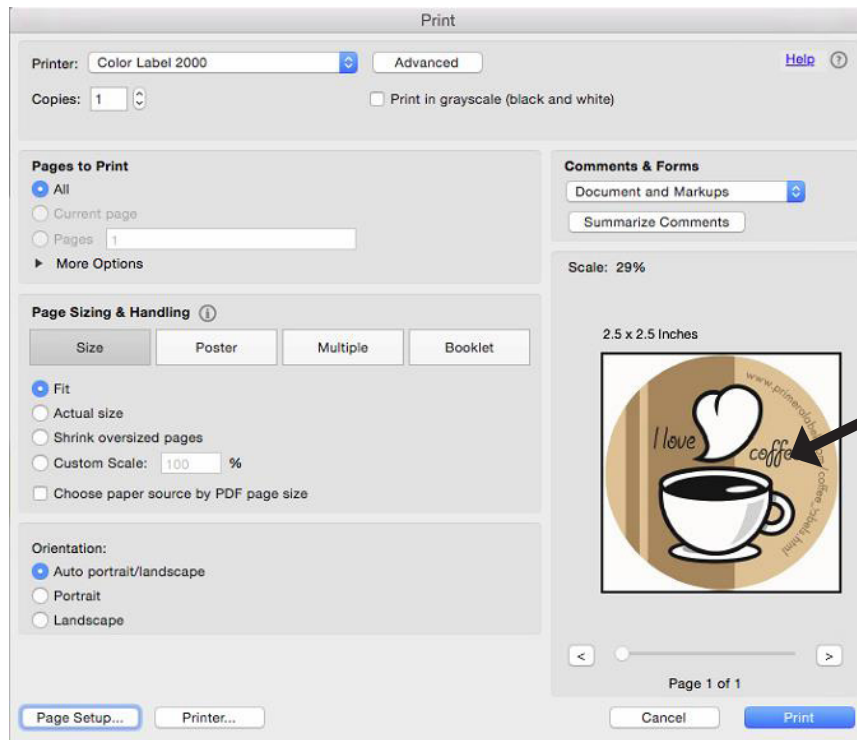




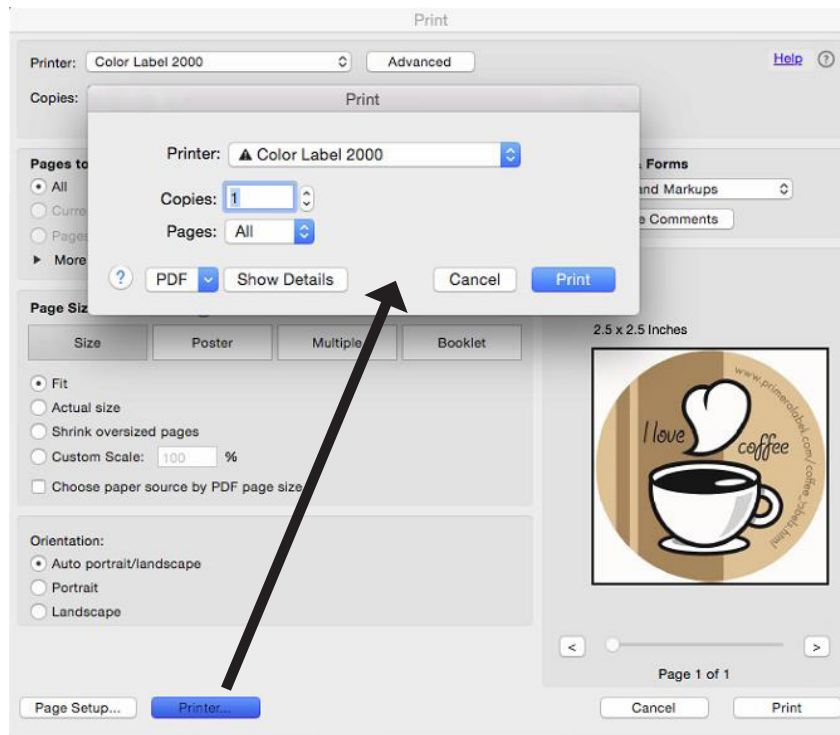
- Click on the Paper Size menu. There are several preloaded sizes available. If your size is not on the list, you may need to create a custom size. Custom sizes you have already created will be displayed in the second section. In our example we have already created a custom size (2.5 x 2.5) according to the instructions in Section 5E.



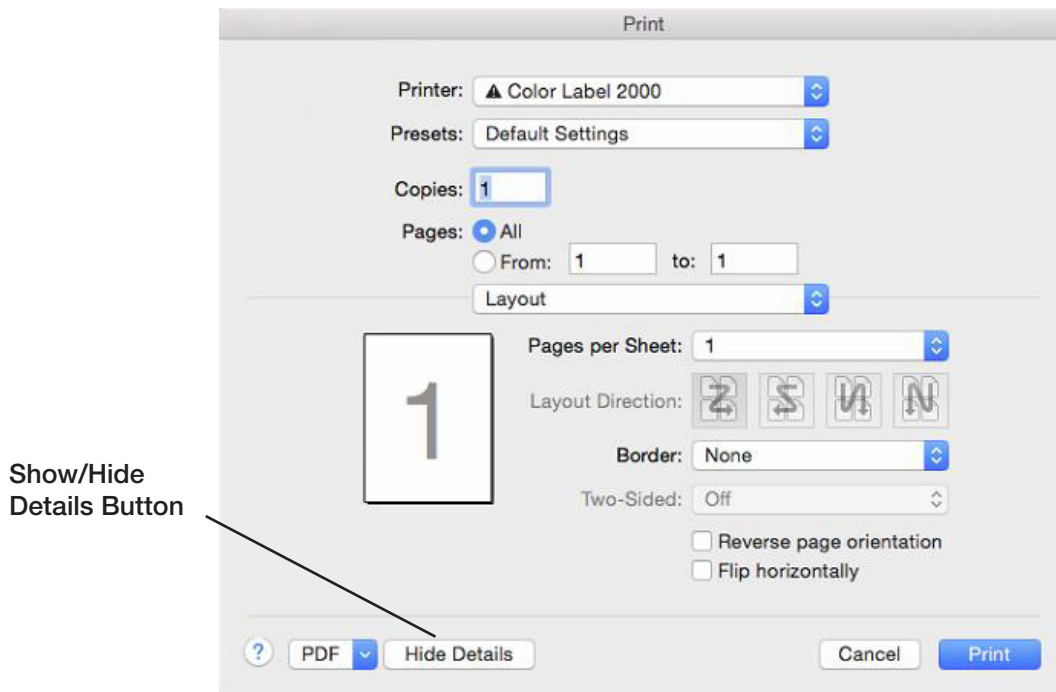
- Once you have chosen the correct size you will see that the preview now shows the same size and there is no longer extra white space around the label. *Note:* Circle labels like the example will always show your circle label inside of a square.



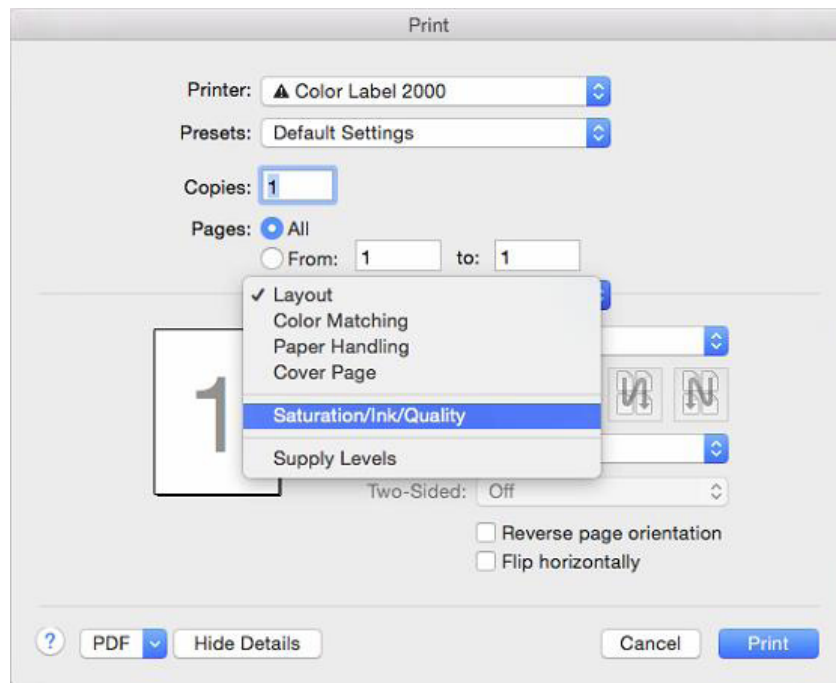
9. You may print at this point. However, if you would like to adjust printer quality settings, click on the Printer... button.



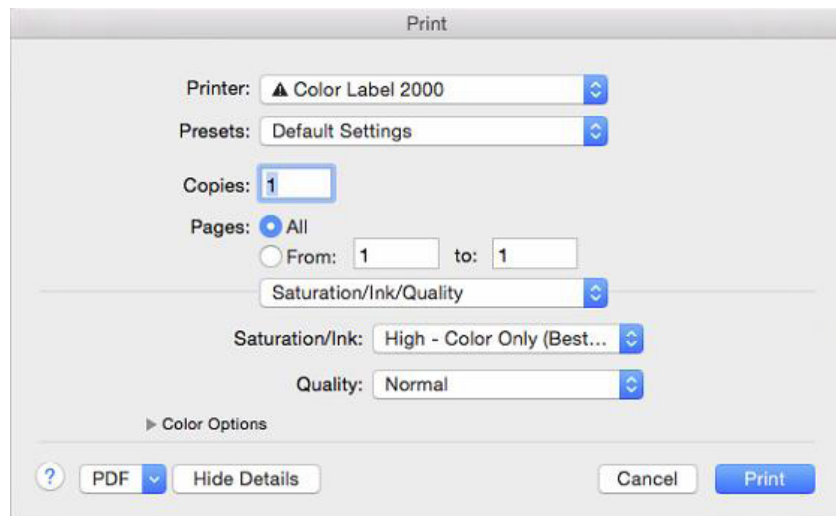
10. Click on the Show Details button.



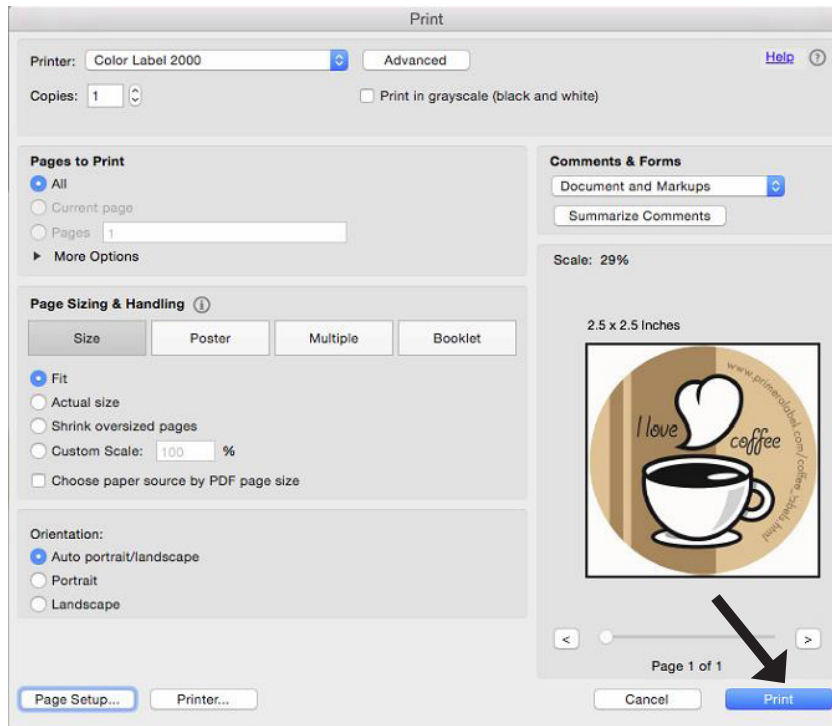
11. Click on the Layout button to reveal the Saturation/Ink/Quality settings.



12. More details about Quality Settings can be found in Section 5F



- When you have set the quality settings click Print. You will be brought back to the preview screen. Set the number of copies and click Print to print your labels.

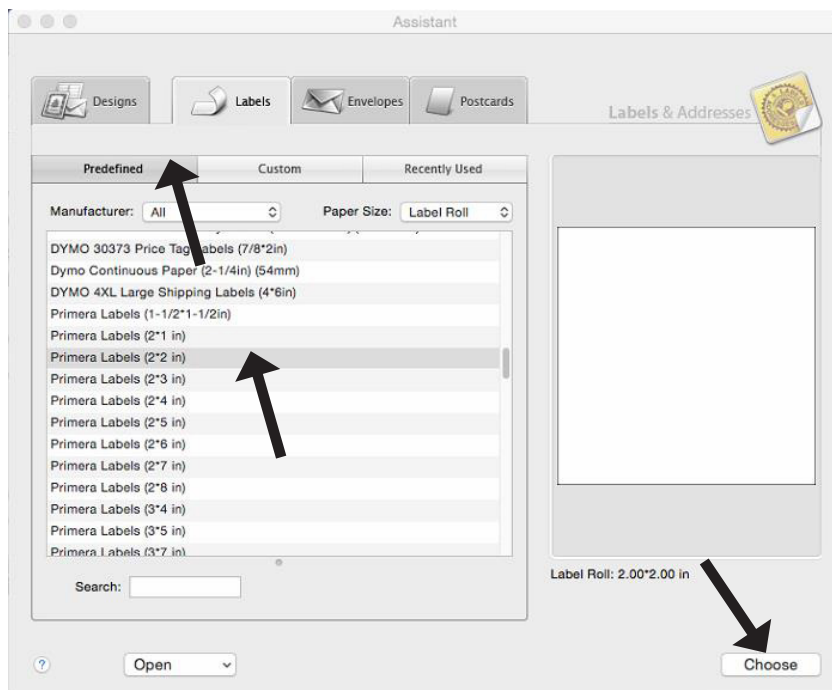


#### D. Printing from Belight Labels and Addresses

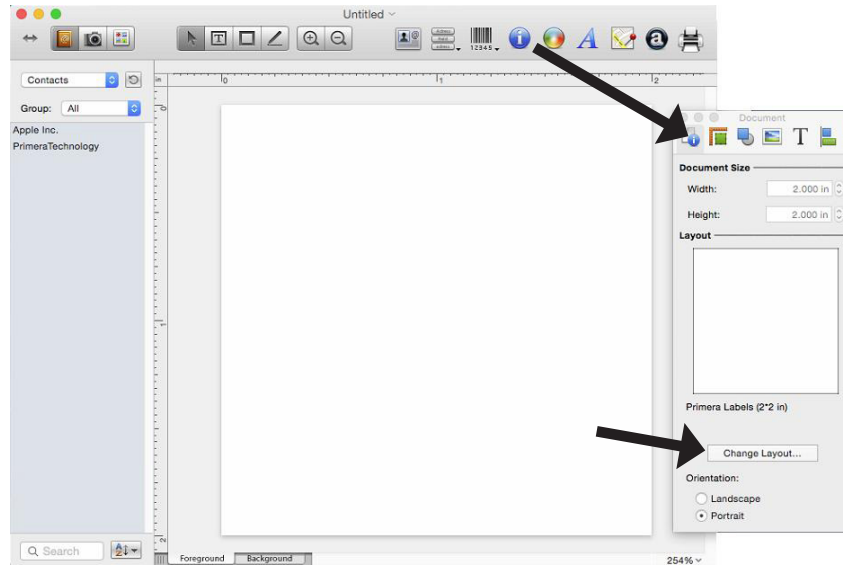
You can print to the printer from any program. However, Belight's Labels and Addresses is an affordable program that we recommend. It saves time by eliminating the need to setup a custom page size (Section 5F) for each label. You may download a trial version at their website: [www.belightsoft.com](http://www.belightsoft.com)

To setup a label and print follow these instructions.

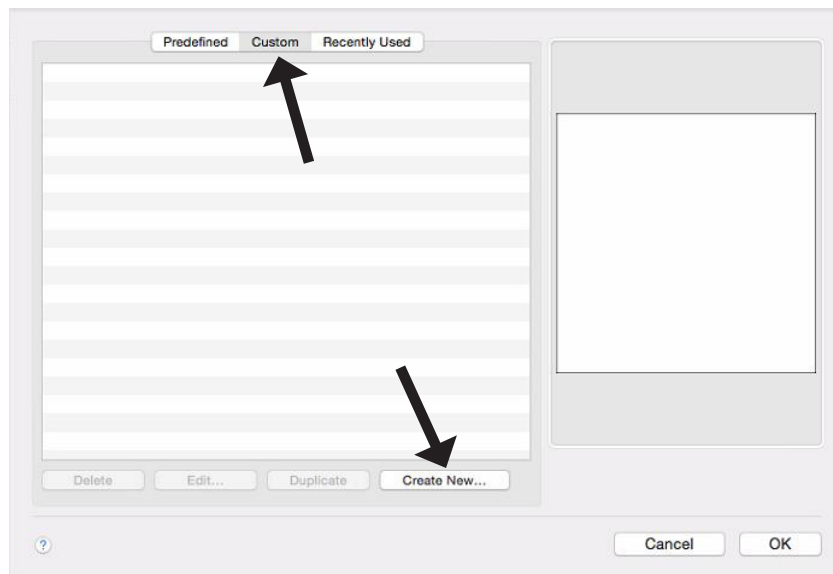
- When you open the program for the first time, a label assistant will be displayed. You may choose a Predefined label if your label size is on the list.



2. If your size is not on the list, select ANY label and click Choose. You will have to setup a new label before it will appear on the Custom tab. Click on the information icon to display label size information. Click on Change Layout...



3. Click on the custom tab. Choose Create New. Click OK.



4. The setup will contain a default name and setup. All of this information needs to be changed. First change the name to match your label size.

Units: Inches      Name: Primera 2.5 x 2

Label Size

Width: 2.6250  
Height: 1.0000  
Corner Radius: 0.1000

Layout

Paper Size: Letter

Page Width: 8.5000  
Page Height: 11.0000

Arrange labels automatically

Columns: 3  
Rows: 10

Top Margin: 0.5000  
Left Margin: 0.1875  
Horizontal Spacing: 0.1250  
Vertical Spacing: 0.0000

Cancel      OK

5. Change the Label Size and Layout. Use this information as a guide. In this example we will setup a 2.5" wide x 2" high label.
- Label Width and Height should match Page Width and Height
  - A standard Corner radius (rounded corner) is .125
  - Paper Size should be set to "Other"
  - Rows and Columns should be set to 1
  - All Margins should be set to zero.
  - All Spacing should be set to zero.

Units: Inches      Name: Primera 2.5 x 2

Label Size

Width: 2.5000  
Height: 2.0000  
Corner Radius: 0.1250

Layout

Paper Size: Other

Page Width: 2.5000  
Page Height: 2.0000

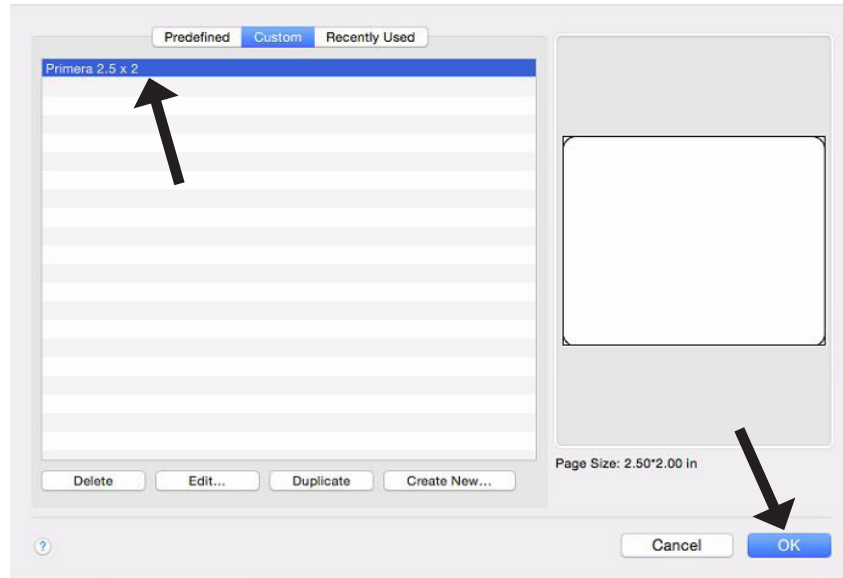
Arrange labels automatically

Columns: 1  
Rows: 1

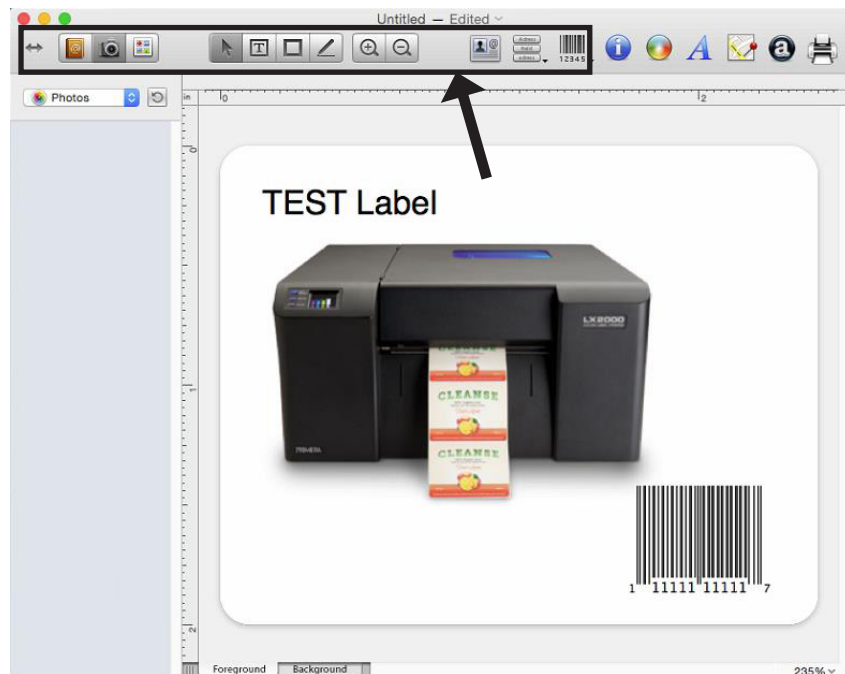
Top Margin: 0.0000  
Left Margin: 0.0000  
Horizontal Spacing: 0.0000  
Vertical Spacing: 0.0000

Cancel      OK

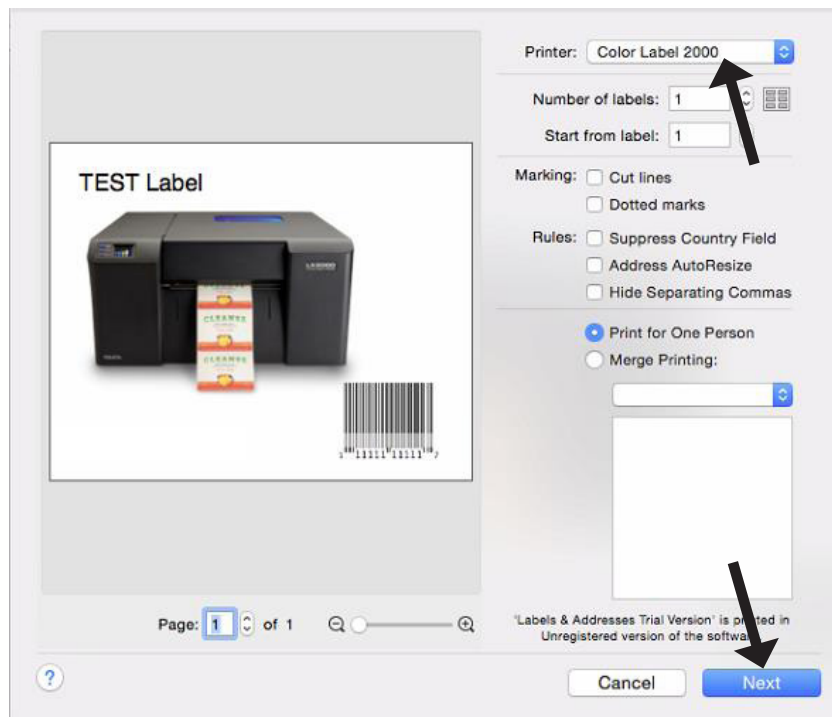
- Click OK when the label is setup. Now select the label you setup from the custom tab. Click OK.



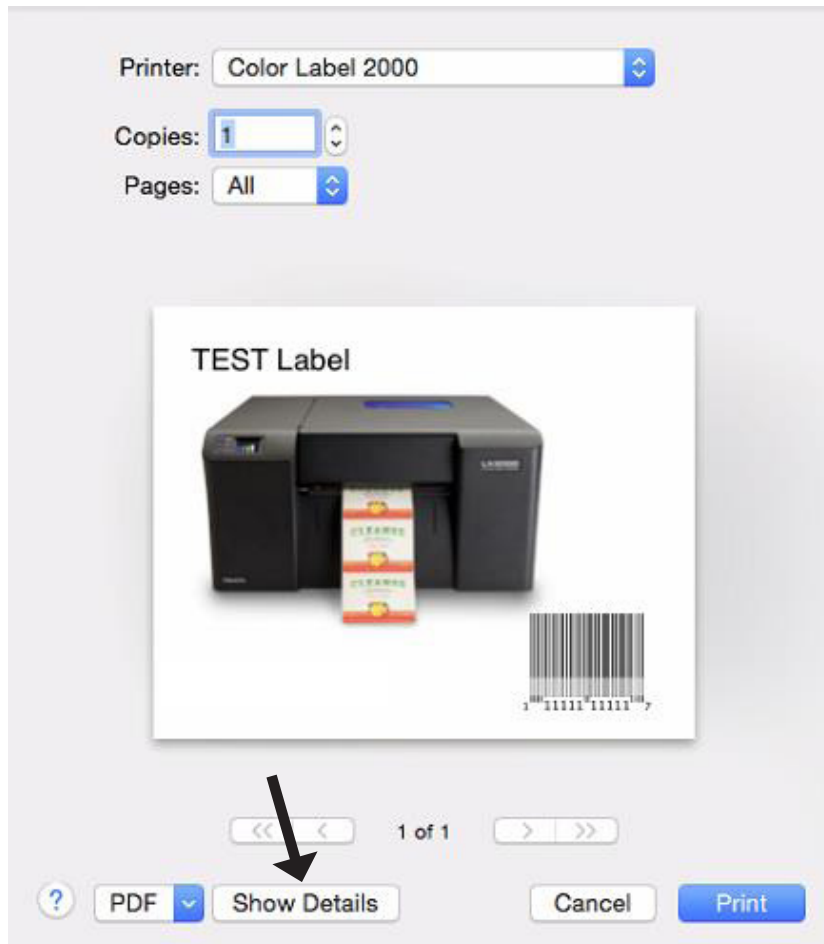
- Add Images, Barcodes or text using the buttons across the top ribbon. For more information on how to setup a label and use the software, contact Belight or visit the Help menu. When you are ready to print, go to the file menu – print.



8. Choose the Color Label 2000 as the printer and click Next.

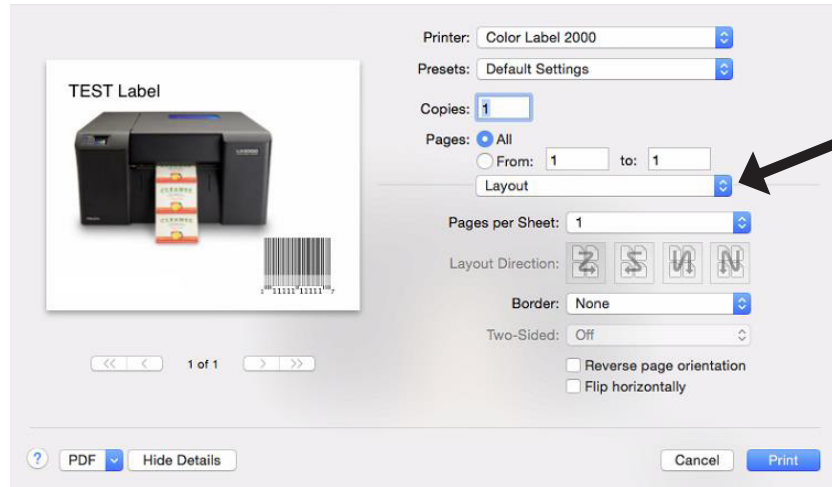


9. You may print at this point. However, if you wish to adjust print settings, click on the Show Details button.

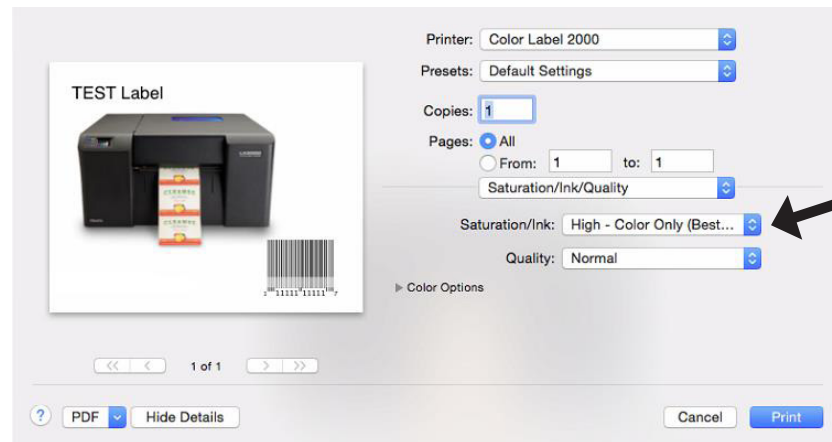




10. Next click on the Layout menu to reveal additional menu options. Choose Saturation/Ink/Quality.



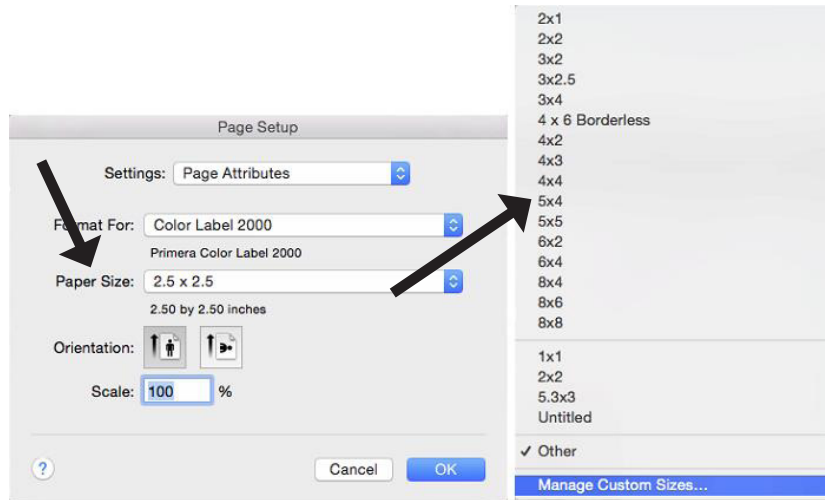
11. Set your Saturation, Ink and Quality settings according to the guide in section 5F. Click Print.



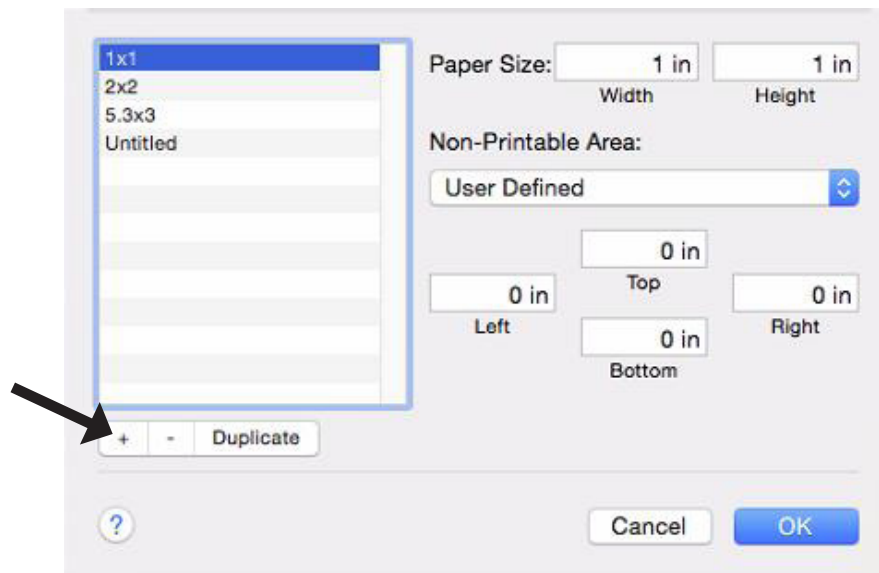
## E. Setup a Custom Page Size

If you are not using one of the preloaded label sizes, and you are not printing from Belight's Labels and Addresses, you will need to create a custom page size for your label. This can be accomplished from any printing program. Once the custom page size has been created it will be available for use in any program regardless of where it was originally created. Use the instructions below to setup your custom page size.

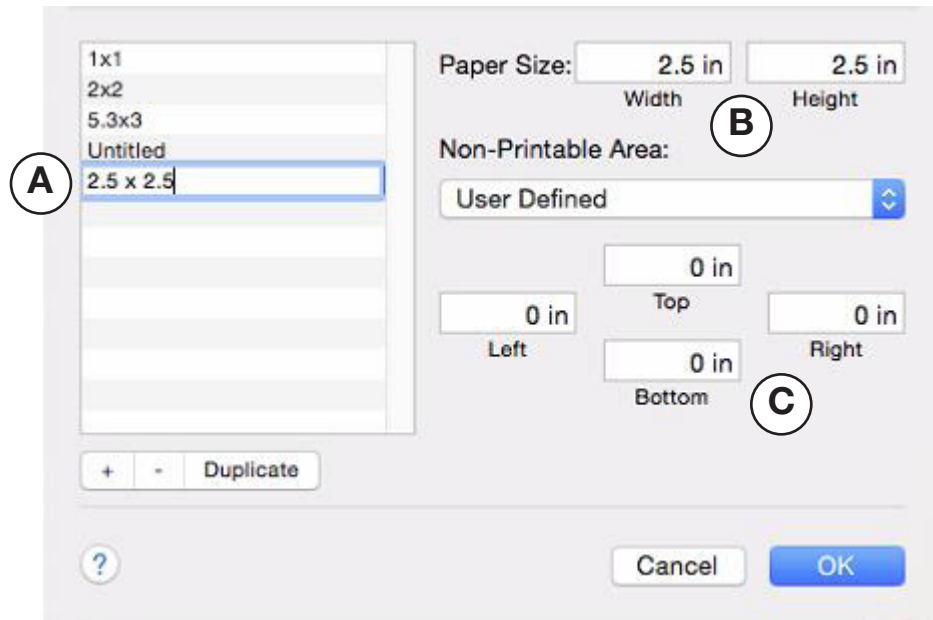
1. Before printing in any program on the print preview screen button click on the Paper Size Menu. To find paper size in some programs you may need to click on the Page Setup button or menu item.



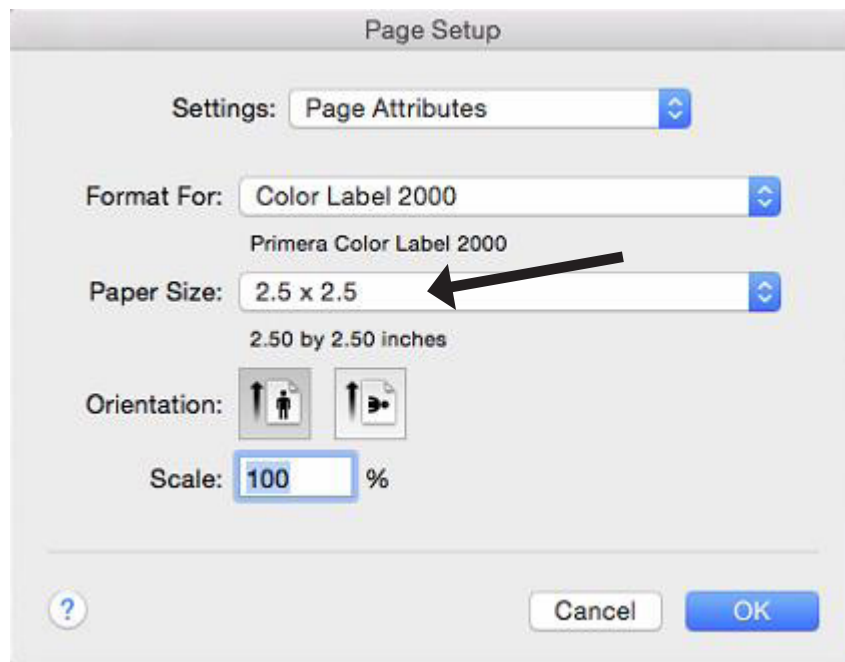
2. Click on Manage Custom Sizes...
3. Click on the Plus + button.



4. Edit the following items:
  - a. **Name.** Change the Name from "Untitled" to the size or the name of the label you are printing.
  - b. **Paper Size.** Paper Size should be the same as the actual label.
  - c. **Margins.** Set all Margins to zero.

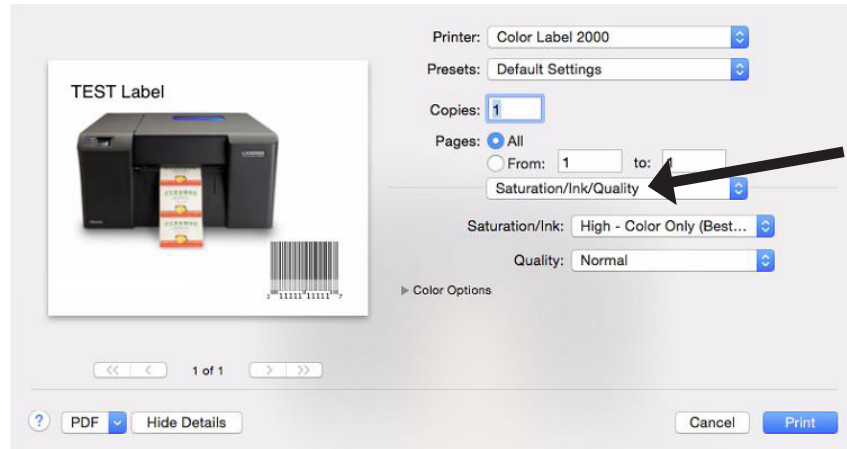


5. Click OK. The new size will automatically be selected.



## F. Printer Driver Settings

Print quality, cartridge settings and saturation are controlled by two settings in the driver. Saturation/Ink and Quality. You can access the driver settings before you print from any application by clicking the Layout drop down menu.



### Saturation/Ink Settings

These settings will provide the most dramatic quality differences. **USE COLOR ONLY SETTINGS IF YOUR LABEL WILL CONTACT WATER.** The higher saturation settings will print slower and use more ink while the lower saturation settings will print faster and use less ink.

- High-Color Only (Best for Water Contact) - **Slowest Print \*\* - Most Ink Consumption.**
- High-Color + Black
- Medium - Color Only - **Water Contact Setting.**
- Medium - Color + Black
- Low - Color + Black - **Fastest Print - Least Ink Consumption.**

### Quality Settings:




Within each Saturation/Ink setting you can also adjust Quality to Draft, Norma Best and Max dpi\*\*. These are simply finer adjustments within each saturation/ink setting. Draft quality modes are only available for the low saturation/ink setting.

\*\* When in the highest possible quality setting the driver also allows you to select the "Print in Max DPI" mode which is the best possible quality. Many media types will not be able to accept the amount of ink used in this mode so it could actually make the prints look worse. Click on the Advanced button to access this setting.

*Note:* Wait 24 hours before allowing labels to come into contact with water.

## G: Printing Using Apple AirPrint

*Important!* First, you will need to set the printer up in wireless mode using either the PC or Mac printer installer. See Section 5A.

1. On your iOS device, Open the app you want to print from. Find the print option by tapping the share icon  or .
2. Tap  or Print.
3. Choose the LX2000 Color Label Printer.
4. Choose the number of copies.
5. Tap Print.

*Note:* AirPrint does not have any ability to change the page size to match the installed label stock in the LX2000. This page formatting needs to be done inside the app. For this reason only apps designed to print to label printers should be used. Any app will be able to send documents to the LX2000. However, the print will probably not fit the label and may print off the page.

*Note 2:* Since AirPrint functionality is extremely limited we do not recommend using AirPrint on a Mac computer. See section 5A for more details.

## Section 6: Troubleshooting and Maintenance

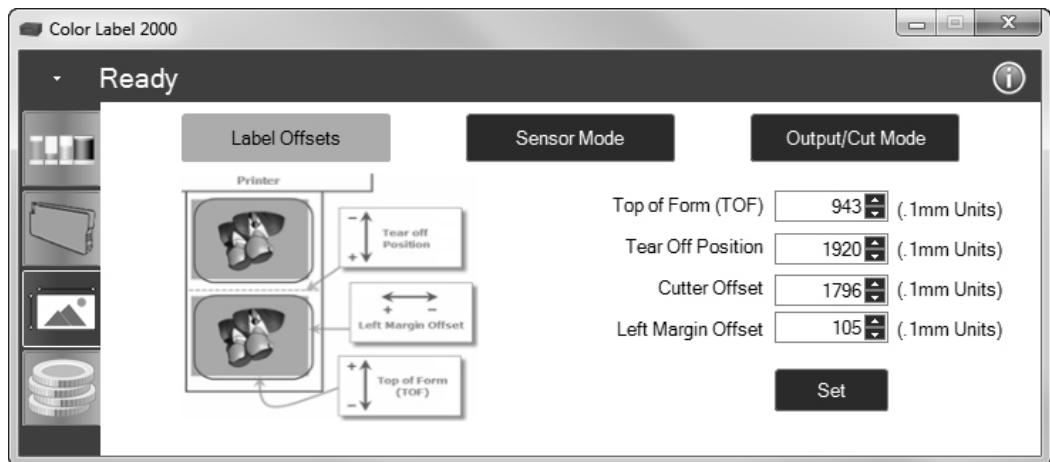
### A. Solving Print Alignment Problems

#### Image is Vertically Offset

The LX2000 decides where to start printing by detecting the start of the 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. **Top of Form (TOF).** 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. This setting is found on the Alignment Tab of the PTStatus Monitor.



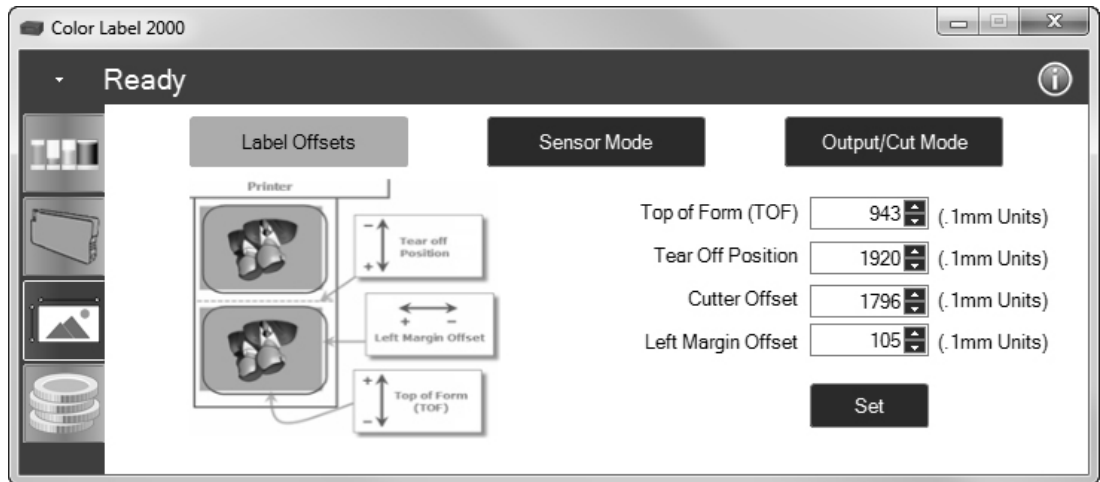
2. **Nonstandard/Non-translucent Backing Material.** Test the unit with the label sample material that came with the unit. If it prints correctly, your label stock may not be compatible. The label sensor needs to "see" through the backing/liner to detect the edges of the labels. If it can not adequately "see" through the backing/liner, 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 Stock Sensor Mode in the Status Monitor.
3. **Insufficient Label Gap Distance.** See Section 2A for 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. **Stock 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 2C for instructions.

#### The image is printing horizontally offset

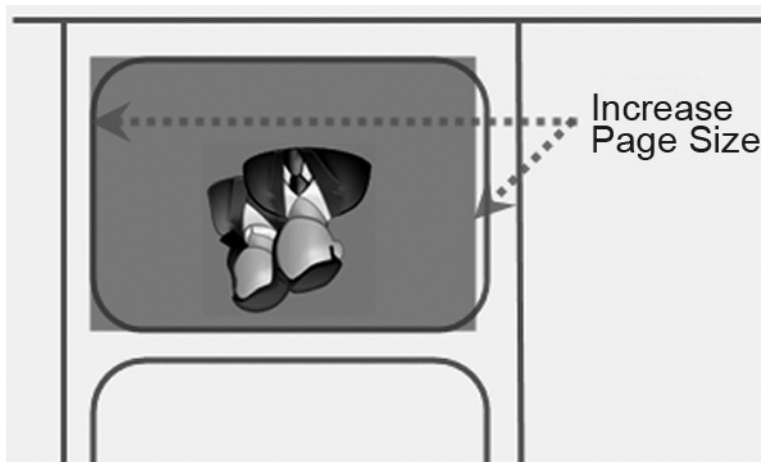
Three things can affect this issue.

**Label Stock Loading.** It is very important to correctly load the label stock so that there is no space between the throat guides and the label liner edge. If there is a gap between the throat guides and the label stock it may "walk" back and forth causing inconsistent horizontal image location. See section 2B for label stock loading instructions and tips.

**Left Margin Offset.** This adjustment is found on the Alignment tab of the PTStatus monitor. See Section 4D.



**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 (printers left) side of the the label and no image over-lap 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.



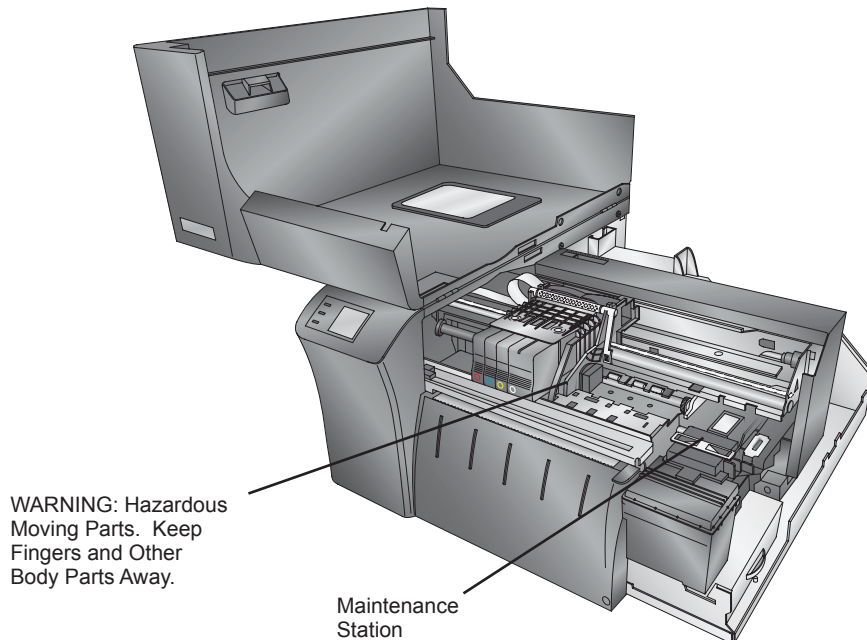
## B. Solving Print Quality Problems

Many factors can affect the quality of the print. The following are listed in order from most likely to least likely:

1. **Quality Setting.** Change your quality setting. The lowest quality setting (fastest printing) may not be sufficient for many photos or graphics. The highest quality setting may cause ink to bleed on certain graphics in combination with certain label stock. Increasing the quality increases print time because the printer makes more horizontal passes across the label.
2. **Clean the Print Head.** Run an automatic Print Head cleaning print or manually clean the Print Head as described in Section 5F.
3. **Change Cartridge.** Try a new Ink Cartridge. Make sure that the ink cartridge has ink remaining. Check the ink levels via the Status Monitor.
4. **Align Print Head.** Normally, Print Head alignment is only necessary after changing a Print Head. However, in certain cases, running the alignment again can improve print quality. Align the Print Head by opening the PTStatus Monitor. Click on the Align Print Head button on the Cartridge Utilities Tab (second tab). Follow the onscreen prompts to load your paper for alignment.



5. **Clean the Maintenance Station.** Power off the printer! Clean the maintenance station located on the right side of the print area. This includes the rubber cartridge nozzle cap and the plastic squeegee. Under normal use this can become dirty with ink. Clean with rubbing alcohol and a paper towel.



6. **Color Matching.** Change your Color Matching setting to Graphics or Photos via the printer driver preferences. See Section 4F.
7. **Cartridge Setting.** Change the cartridge setting in the driver. Try Color + Black or Color only. To change the cartridge setting, right click on the printer in the Printers and Faxes area - choose preferences -click cartridge - set it to Color + Black or Color. Color only will still print black, but will use the color cartridge to print it. We recommend "Color" only for the best possible quality on photographic images with small amounts of black. If your image has large areas of black text, graphics or barcodes, we recommend Color + Black for the best quality.
8. **Media.** Make sure your label stock is inkjet printable. Many thermal label stocks look the same as inkjet but do not allow the ink to soak into the surface of the media.
9. **Source File Image Mode.** The image mode of the source file may be set to RGB instead of CMYK. This can cause the color matching to be off. Change the image mode of the original file, resave and reprint.
10. **Copper Contacts.** Clean the copper contacts on the back of the print carriage and the contacts on the Print Head with rubbing alcohol.
11. **Image Resolution (DPI).** Try another Image. Perhaps the resolution of the current image is not sufficient for a quality print. Many graphics suitable for viewing onscreen have a DPI of 72. This is the minimum DPI for proper screen display. However, if you print this image it will look blurry and pixelated. Images that are 72 DPI are typically graphics saved for web use. We recommend a 300 DPI image.
12. **Cable.** Try another USB cable. Make sure that it is less than 6ft (2 Meters) long. Faulty cables or cables that are too long interrupt communications which can result in print quality issues.
13. **Saturation.** If ink is bleeding, decrease saturation in driver preferences.
14. **Change the Print Head.** If print nozzles of certain colors are still clogged after repeated cleanings it may be time to replace the Print Head. See Section 5G.

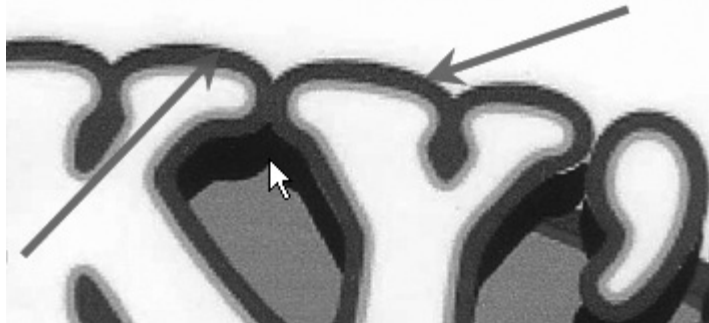


## C. Color Matching and Design Tips

Whether you contract your graphic design or do it yourself, these guidelines will help you get the best quality labels out of your LX2000.

1. **Image Size/Shape.** The image size should correspond with the size of the label you will be printing. Note: If the source image is smaller and must be enlarged to fill the entire label space, this will affect the DPI. A 2" x 2" 300 dpi label blown up to fit on a 4" x 4" label would have an effective DPI of 75. This would not be a sufficient resolution. See item 2.
2. **Resolution.** Resolution is measured in dots per inch or dpi. 300 dpi is sufficient to get the best possible quality from most images. A 72 DPI image will look fine on screen but WILL NOT print well. Graphics and logos found on websites are typically 72 DPI. The image below was printed from a 72 DPI image. Notice the jagged edges. Remember, print quality settings found in the label printer driver will have no effect on improving a low dpi source image.

On the other hand, resolutions higher than 300 DPI will not produce better quality but may require more RAM to print and hard drive space to store. They could even slow down the print process.



72 DPI Image printed with the LX2000

3. **Image File Format.** Most graphics are created in a graphic application. Since this graphic application is not usually on the same computer as the label printer doing the printing, it is necessary to export the graphic into a universal format that can be read by other programs. We recommend TIF and BMP files for graphics. These formats are uncompressed. JPG files also work well for graphics that include photographs. All three formats can be imported into the BarTender application.
4. **Color Mode.** Set the color mode in the source graphic application to CMYK. In most cases this will produce the most accurate color reproduction of the image on screen. However, if CMYK is not producing the desired color matching try changing the source image to RGB and then exporting the image again in one of the universal formats mentioned above.

**Note:** Often it is useful to request that your graphic designer provide you with several different formats for you to try printing. For example you could request your image in six different formats: JPG, BMP, and TIF in RGB color mode and a JPG, BMP and TIF in CMYK color mode.

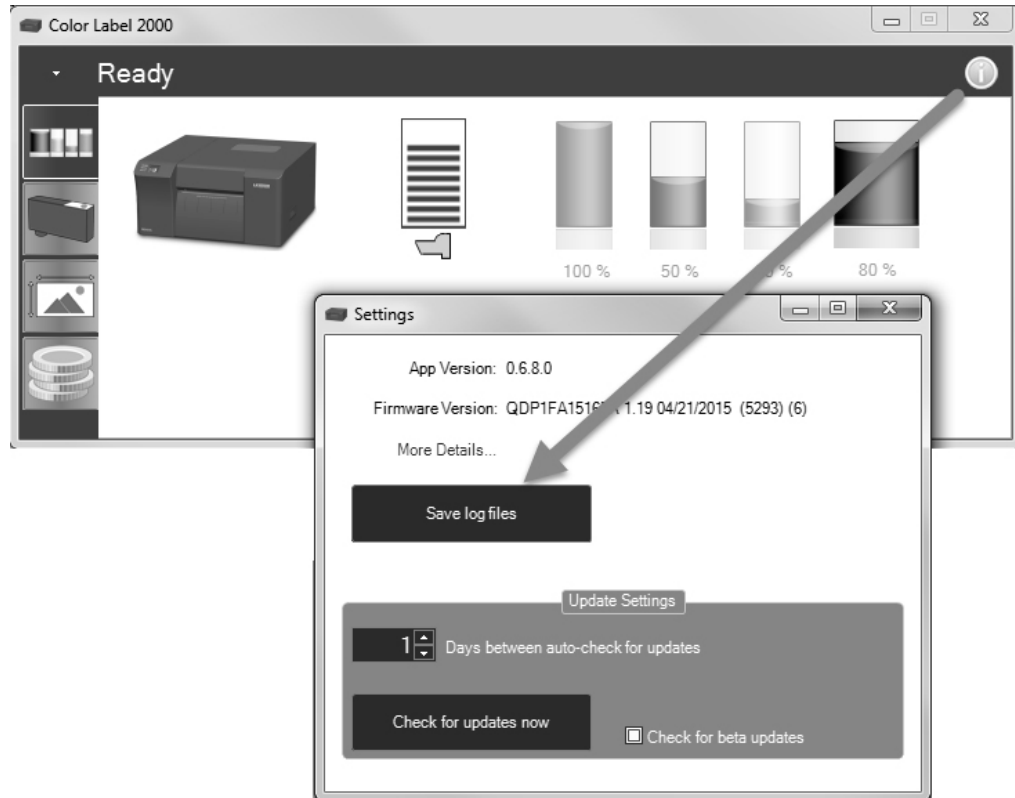
5. **Media Type Setting.** Experiment with the Media setting in the printer preferences (Section 4F) to achieve the best color matching. There are multiple media type options which correspond with the various types of label stock sold by Primera. Match this setting to the media installed in the printer to achieve the closest color match to the screen. Each of these settings employs a slightly different color table developed specifically for the media type listed.

If the printed output is not matching the color on screen, regardless of what media you have installed you can adjust this setting to change the color output.

If you are still not getting the correct color output, the graphic designer may need to change the color values of the source graphic to achieve the proper print output.

## D. Save the Log Files

If you are encountering any problems with your LX2000 tech support may ask you to create a Tech Support Report. You can do this from the Status Monitor by clicking the "i" icon and clicking Save Log Files. A zip file will be created on your desktop.



## E. Vacuum Tube Maintenance Kit and Ink Pad Replacement

The LX2000 has a vacuum system to carry excess ink overspray into the ink saturation pads. Depending on how often the printer is used, some ink can build up inside the tube opening and eventually block the vacuum tube opening. Ink Pads can also become saturated over time and should be replaced.

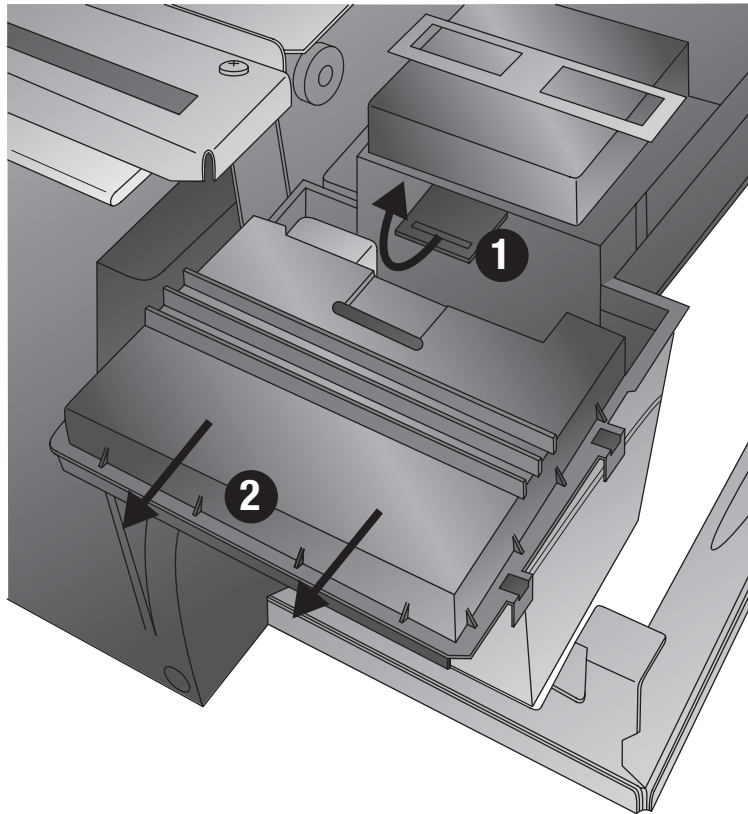
**Tube Cleaning Maintenance Interval:** Perform this maintenance every 10,000 prints or at the first sign of any ink build up on the internal mechanism. If you start to see a magenta fog on any of the internal components, this maintenance should be done regardless of how many prints have been sent to the printer.

**Ink Pad Maintenance Interval:** 50,000 prints

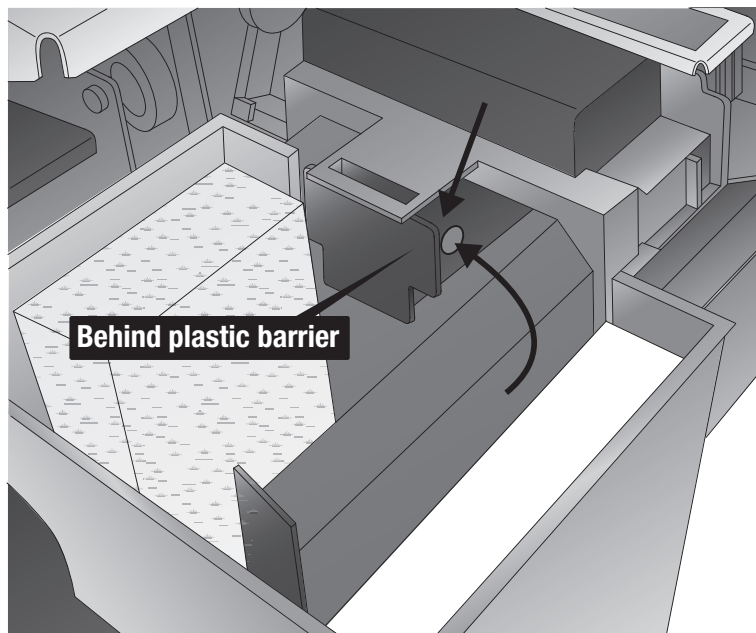
**Maintenance Kit Part Number:** 661380 – Purchase on [www.primera.com](http://www.primera.com)

**Kit includes:** Ink pad tray with 2x saturation pads, 1x clear tube to clean the vacuum tube opening.

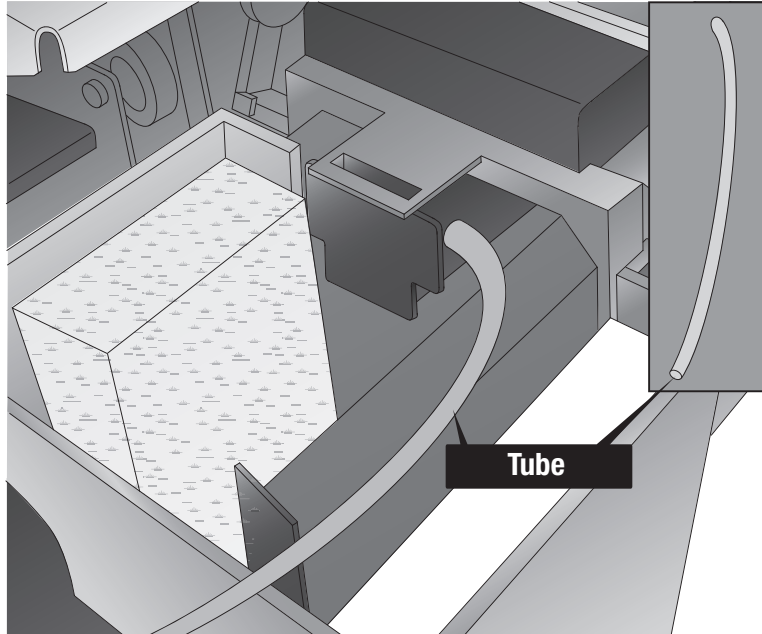
1. Open the Cover
2. Locate the black Ink capture bin.
3. Lift the latch (1) and pull the cover forward (2).



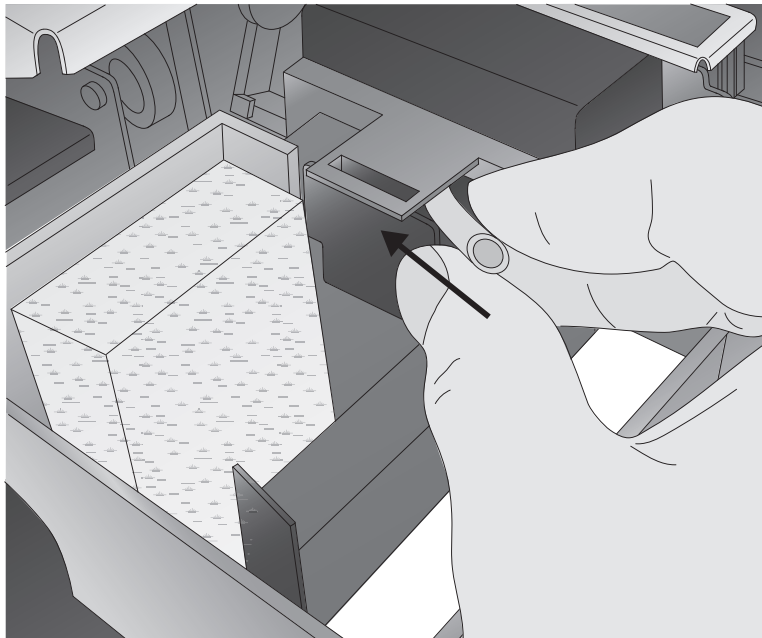
4. Look for the tube opening behind the small plastic barrier. You may need to use a flash light to see the opening.



5. Locate the clear tube included with the kit. The tube is just small enough to fit inside the vacuum tube. Insert the tube into the vacuum tube opening. **Tip!** Use rubber gloves for this part.

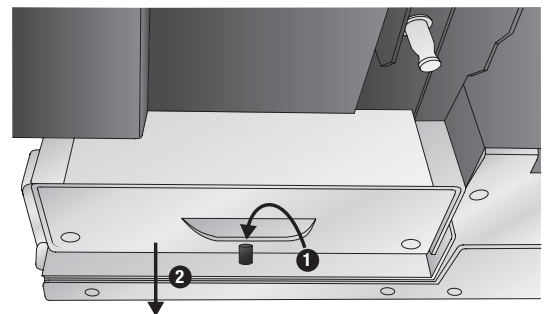


6. Push the tube as far as you can while still holding it with your fingers.



7. Remove the tube. It should be full of black ink. One cleaning is usually enough. However, you may wash the tube and repeat the cleaning immediately, save the tube for repeat use or discard it after use.
8. Replace the Ink Capture Bin Cover.
9. Finally replace the ink pad saturation tray by pushing down on the release pin and pulling the drawer out.

**Note:** The new tray has only 2 saturation pads instead of 3. This was done to prevent blockage of drain holes inside the capture bin.

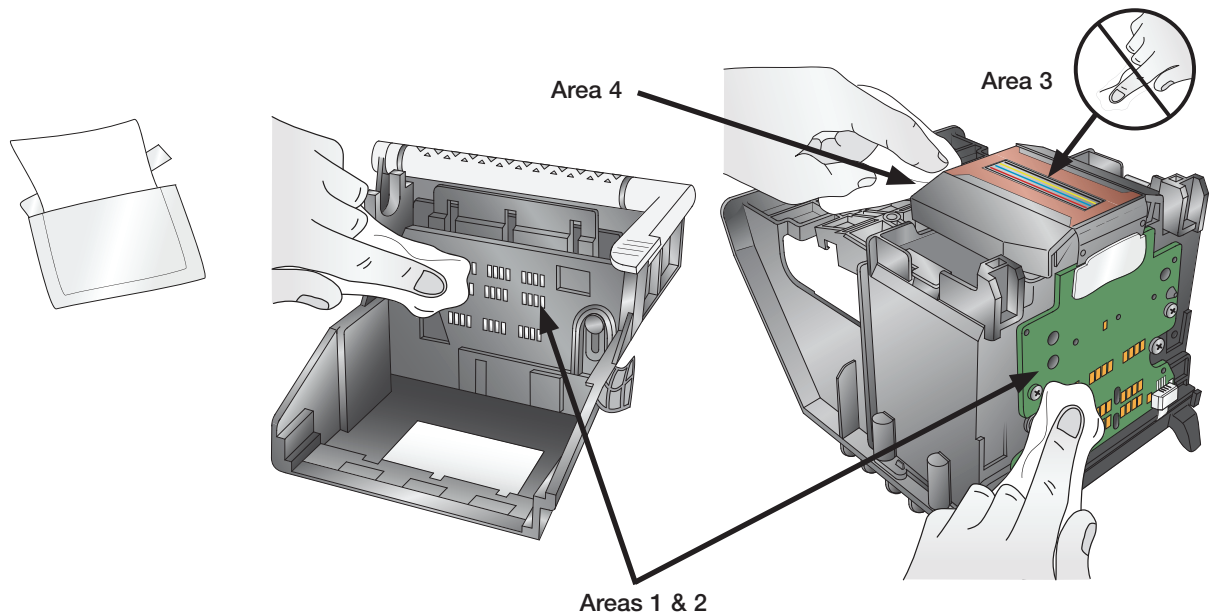


## F. Cleaning the Print Head

It may be necessary to clean the Print Head nozzles if you notice reduced print quality, missing colors or if you suspect a cartridge nozzle has become slightly dried out or clogged. Try the following solutions:

1. **Secure Ink Cartridges.** Make sure the corresponding cartridge is snapped into place. Remove and reload the cartridge to make sure an air-tight connection has been made.
2. **Clean the Copper Contacts.** Ink over-spray can build up inside the printer over time causing interrupted electrical signals. Remove the Print Head and clean the copper contacts on the Print Head Carrier and the Print Head.

(Area 1, 2 and 4 below). Do not clean the print nozzles! (Area 3).



### 3. Clean the Print Head.

**DO NOT touch the Print Head nozzles with a tissue or paper towel.** This can damage the nozzles! This may be different than previous printers. Instead used the methods described below:

1. Open PTStatus2000.
2. Click Clean Print Head on the Cartridge Utilities Tab (second tab).

You may need to repeat this process up to 4 times depending on how clogged the Print Head is. Only repeat the procedure if you start to see improvement after each clean print.

During this process the printer will make several loud whirring noises. This is normal! This is the sound of a pump forcing ink through the nozzles. If you do not hear this sound, the clean/purge print did not complete successfully. Try again.

### 4. Preventing Clogged Nozzles.

Clogged nozzles on the Print Head can be caused by not using the printer for extended periods of time. Follow these guidelines:

- Always keep the LX2000 plugged in and turned on. The printer will do periodic maintenance to make sure the nozzles do not clog.
- Never store a used Print Head outside of the printer. The nozzles will dry out with exposure to air. If you must store a Print Head outside of the printer, place full or empty cartridges in the Print Head and put the entire Print Head and cartridges in a sealed plastic bag.
- Use the printer regularly!

5. **Quality Setting.** Change your quality setting. The lowest quality (fastest printing) may not be sufficient for many photos or graphics. The highest quality setting may cause ink to bleed on certain graphics in combination with certain label stock. Increasing the quality increases print time because the printer makes more passes over the media.
6. **Backup Print Head/Cartridge.** The cartridge may be empty or defective. The Print Head nozzle for one color could be clogged. The fastest way to diagnose a quality problem is to have backup Print Heads and cartridges available for comparison testing. If one color is missing, replace that color cartridge(s). Next try replacing the Print Head.
7. **Defective Print Head/Cartridge Replacement Procedure.**

If you think your Ink Cartridge/Print Head is defective, please contact tech support to arrange for a replacement. Tech support may ask you to perform troubleshooting before sending a replacement cartridge or Print Head.

#### **Notes on Ink Cartridge/Print Head Replacement**

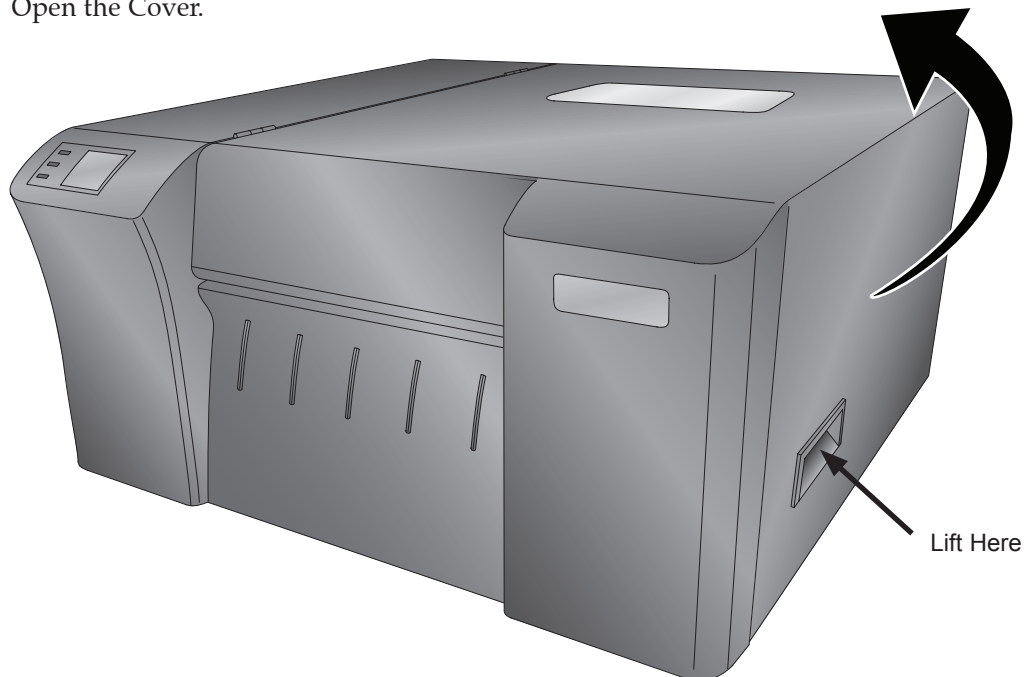
- All replacements for defective cartridges or Print Heads must be processed through Tech Support.
- To receive replacement cartridges, you may be required to send in your defective cartridges/Print Head.
- Tech Support will perform the cleaning procedures and tests mentioned above on all cartridges/Print Heads received.
- Tech Support will not replace cartridges with less than 50% ink remaining.
- Print Heads with zero percent life remaining will not be replaced.
- Print Heads with greater than zero percent life remaining prints may be replaced depending on the description and circumstances of the failure at the discretion of Primera Tech Support.

#### **Replaceable Print Head - Part Number 53467**

### **G. Replacing the Print Head**

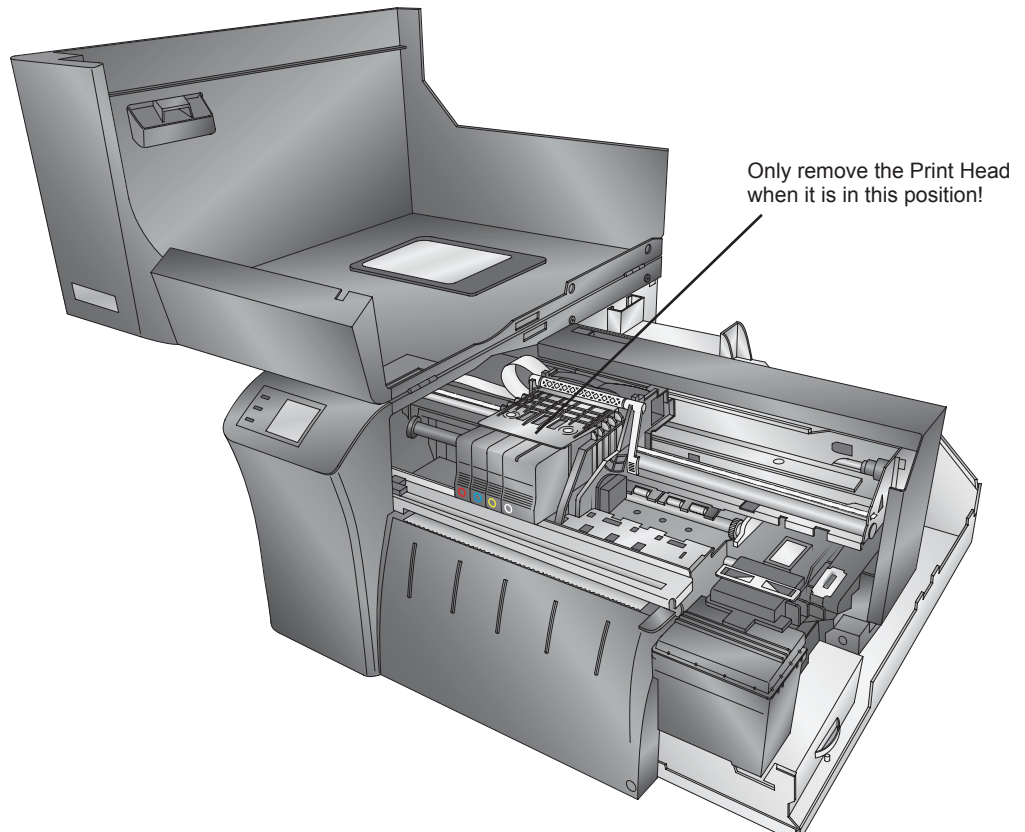
The Print Head may need to be replaced when the Print Head life monitor shows no life remaining. You should purchase a spare Print Head when this life monitor is nearing 0% remaining. You may continue using the Print Head until you notice print quality problems. To replace the Print Head follow the procedure below.

1. Open the Cover.

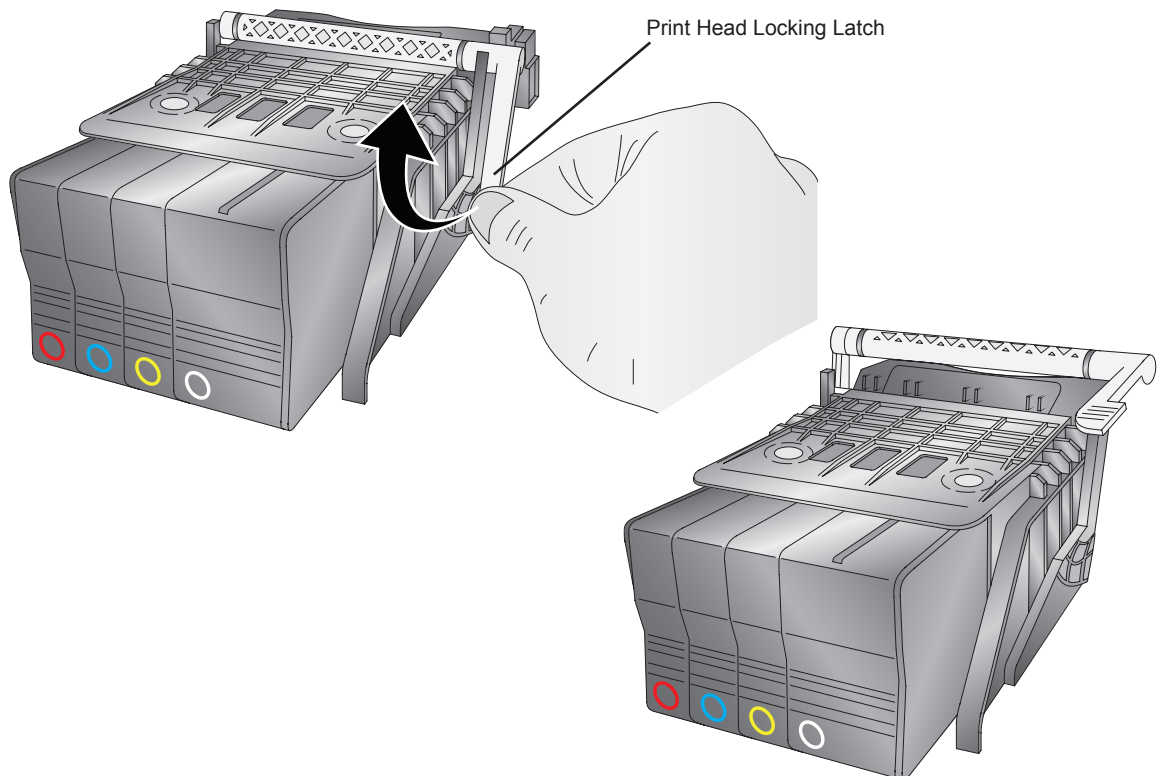




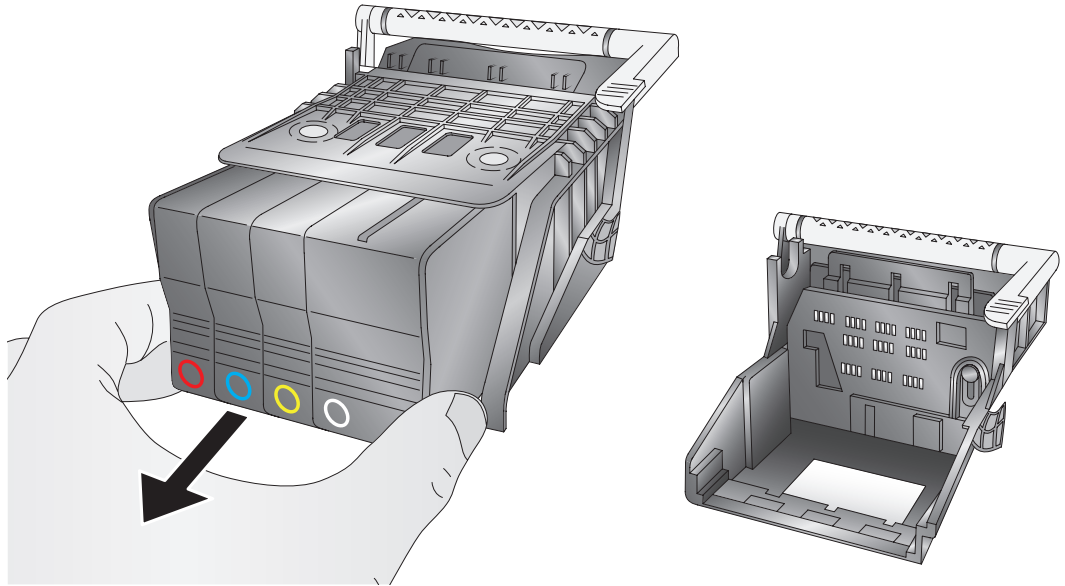
2. When the cover is open the Print Head will move to the center of the printer.  
**Important!** If it does not move to the center as shown do NOT attempt to remove the Print Head. It can only be removed when in the position shown below!



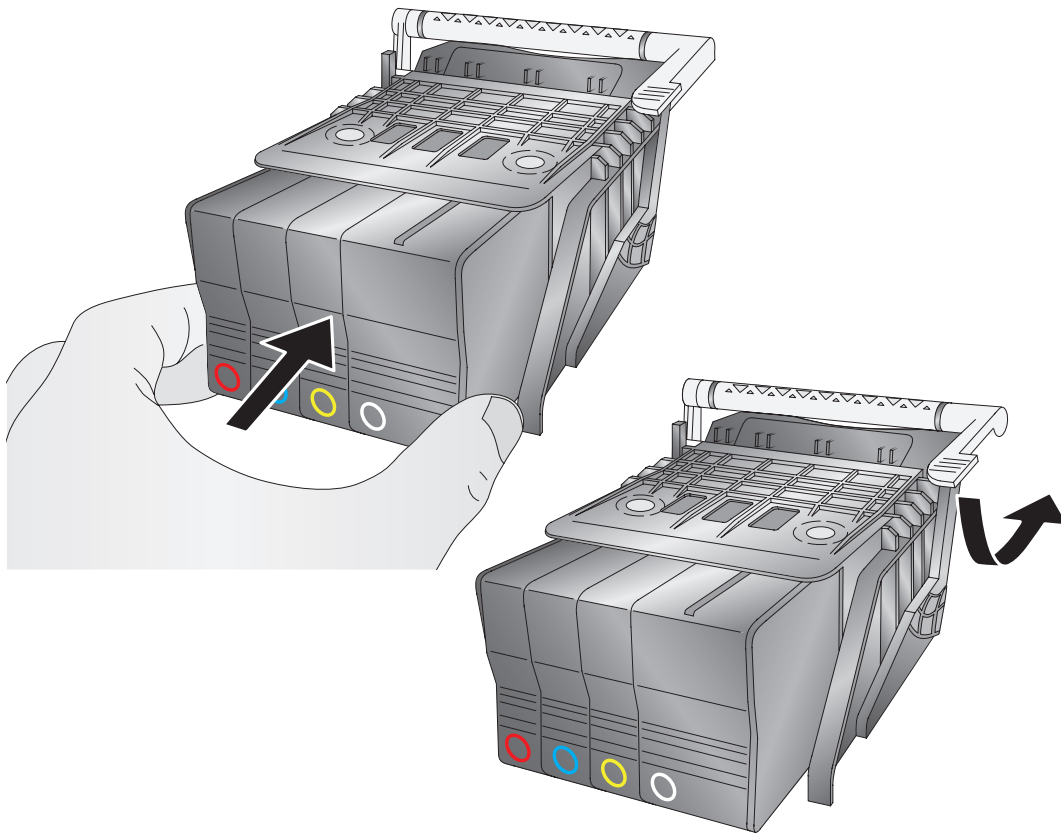
3. Locate the white Print Head locking latch. Unlock it by flipping the hand up.



4. Remove the Print Head by pulling outward and slightly upward.

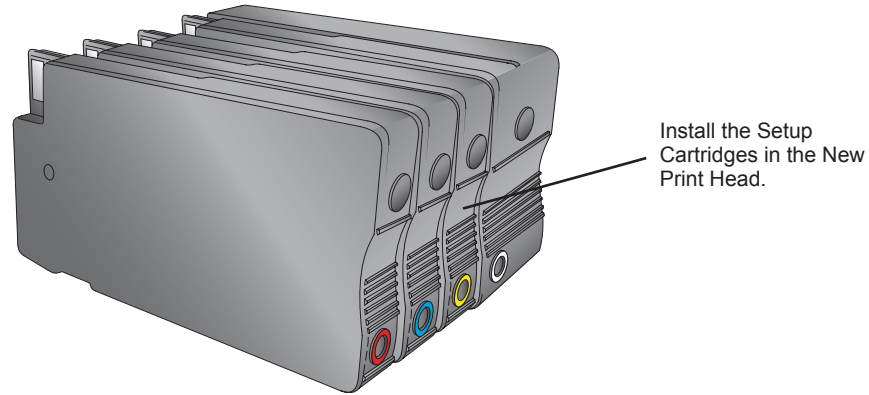


5. Locate a new Print Head. Install it as shown.
6. Lower the latch on your new Print Head.





7. Install the Setup Cartridges that came with your new Print Head. These cartridges are partially filled and specially coded. The Print Head will not function until these cartridges are installed.



8. Close the cover. The priming process of the Setup Cartridges will begin. After the priming procedure is complete, you may use these setup cartridges until they are empty.
9. You will be prompted to run an alignment print once the Print Head has been primed. See Section 3E for more information.

## H. Printer Buttons and Lights

### Button/Cover Functions:

<b>RESUME/FEED-BUTTON:</b>	
<i>Printer State</i>	<i>Press Action</i>
SYSTEM IDLE:	Feeds to next label, Cuts the label if cutter enabled. Cuts current label in LOAD BUTTON CUT MODE.
SYSTEM PAUSED:	Unpauses system.
SYSTEM BUSY PRINTING	Pauses system.
ERRORS PRESENT:	Retries to correct error or just clears error state
<b>PAUSE/UNLOAD-BUTTON:</b>	
<i>Printer State</i>	<i>Press Action</i>
SYSTEM BUSY PRINTING:	Pauses system.
COVER OPEN:	Unloads stock.
SYSTEM PAUSED:	Unpauses system/Resumes Printing.
CANCEL-BUTTON:	Cancels current job in progress.
<b>COVER OPEN SENSOR:</b>	
WHEN COVER OPENED:	Pauses current job if active, will finish printing current label. Moves Carrier to Head Change Position.
COVER CLOSED:	If closed after it has been opened the Printer will be in pause mode. Press Resume/Feed to continue.
<b>BUTTON COMBINATIONS</b>	
LOAD-BUTTON and UNLOAD-BUTTON	Hold buttons down until Wireless symbol changes; this will toggle the wireless antennae ON/OFF.
LOAD-BUTTON and CANCEL-BUTTON	After 2 seconds will reset the Printer

## LED Indicator Lights

RESUME/FEED-LED on solid others off	Printer Ready/Idle
RESUME/FEED-LED flashing fast (6 per second)	Printer error is present - see status monitor for more informaton
RESUME/FEED-LED PULSES, others off	Printer is busy or printing
RESUME/FEED-LED flashing slow (50/50 on/off per second)	Printer is paused by button
RESUME/FEED-LED & PAUSE/UNLOAD-LED flashing slow (50/50 on/off per second)	Printer is paused by external input from 6 pin mini din
RESUME/FEED-LED and PAUSE/UNLOAD-LED alternately flash	Cover is open
ALL LEDs flash in chase mode	Printer is powering up

## I. Technical Support

If you have difficulties in operating your printer, the procedures in this manual and the software User's Guide should, in most cases, solve the problem. If you still have difficulty, contact the Technical Support using one of the methods listed below.

Source	Location
Primera Knowledge Base	<a href="http://kb.primera.com">kb.primera.com</a>
BarTender Software Help files	Open the software. Click on the Help Menu - Contents
Email Support	<a href="http://www.primera.com/customer-support">www.primera.com/customer-support</a>
Phone Support	763-475-6669 (Mon - Fri 8 a.m. - 6 p.m. CST)

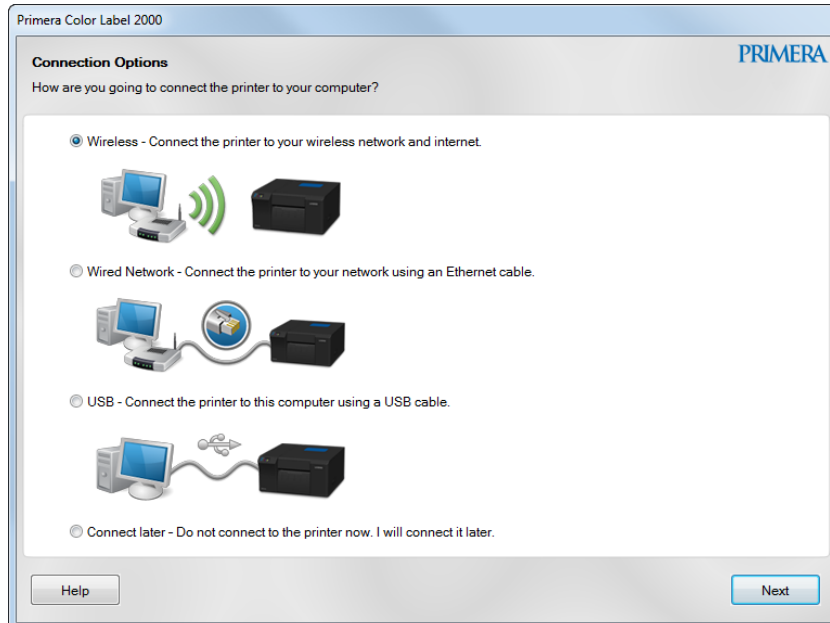
## Section 7: Networking the Printer (LX2000 Only)

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### A. Enable Ethernet or Wireless

#### PC

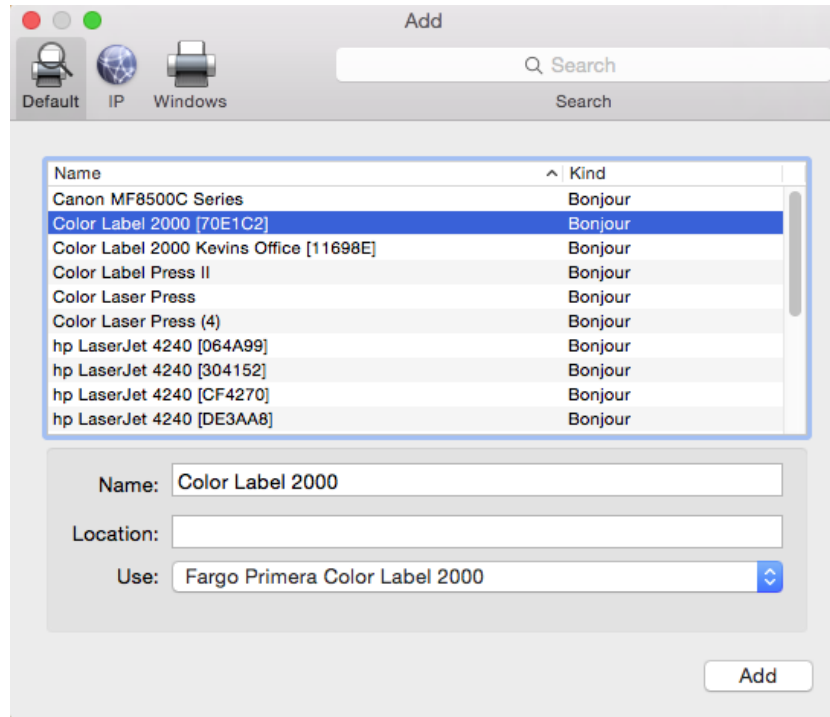
The LX2000 can be networked and shared via wireless or Ethernet. During the initial setup, the installer will ask how you would like to connect your printer. At that time you can choose wireless, Ethernet or USB.



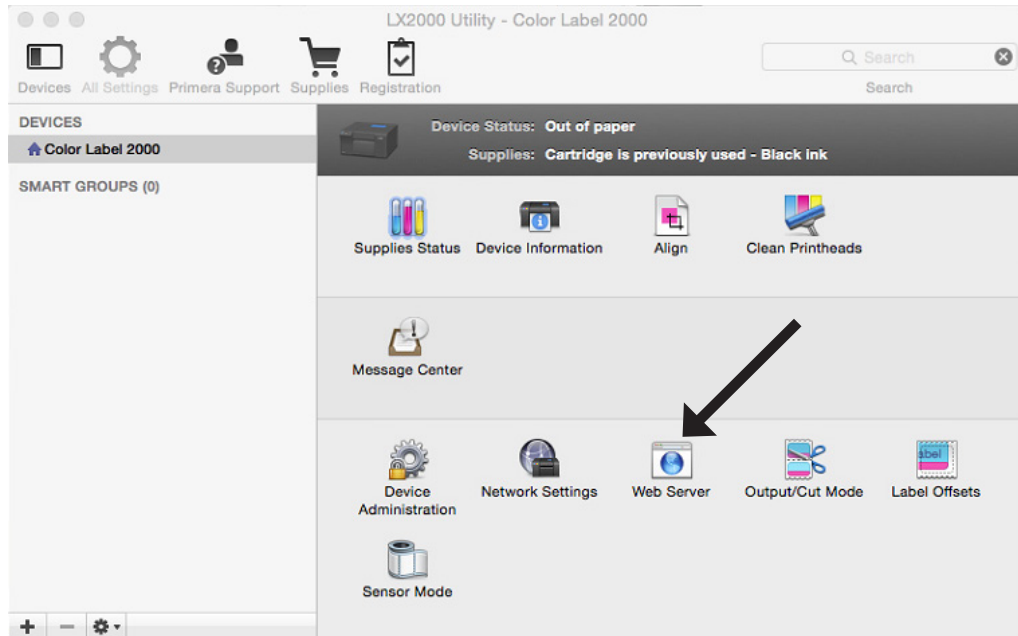
If you choose one option, such as USB, during installation and you would like to change your choice later, you can do so using the Connection Setup Utility (See Section B below). You can also install the driver and PTStatus on a new computer that you would like to have shared access to the LX2000 (See Section C below).

## Mac

On a Mac, when you add the printer it will detect it automatically if connected via USB or Ethernet. If connected via ethernet, it will appear in your list of available printers as a "Bonjour" kind.



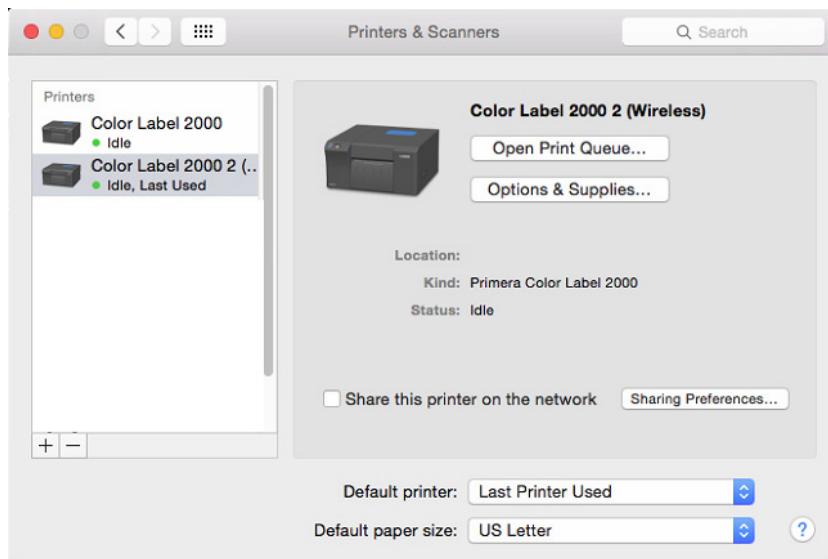
To setup Wireless printing you will first need to connect via Ethernet or USB according to the instructions in section 5A. Open the LX2000 Utility. Click on Web Server.



## Launch the Wireless Setup Wizard

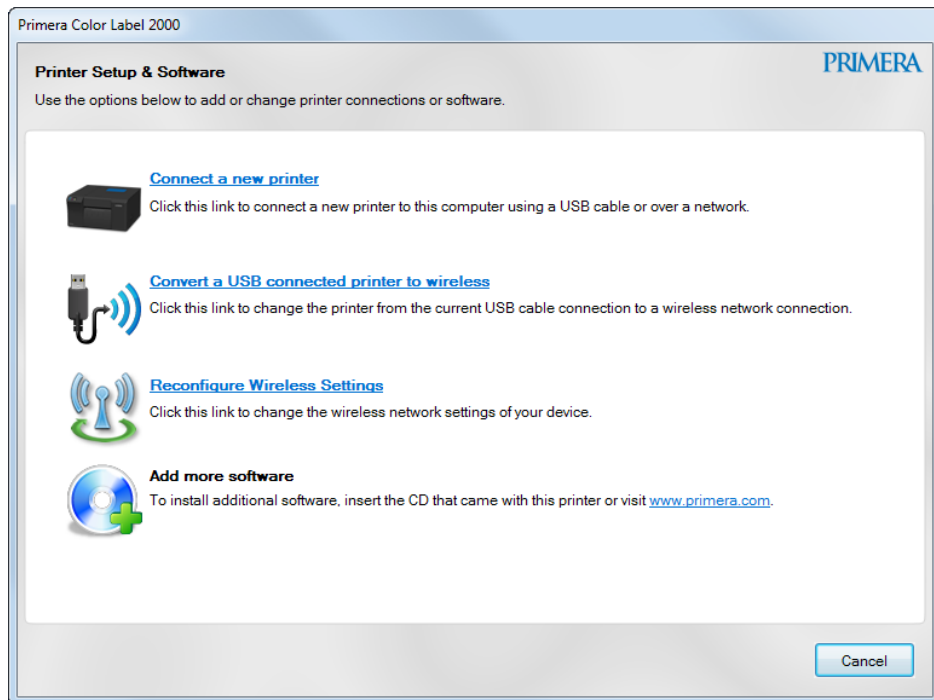
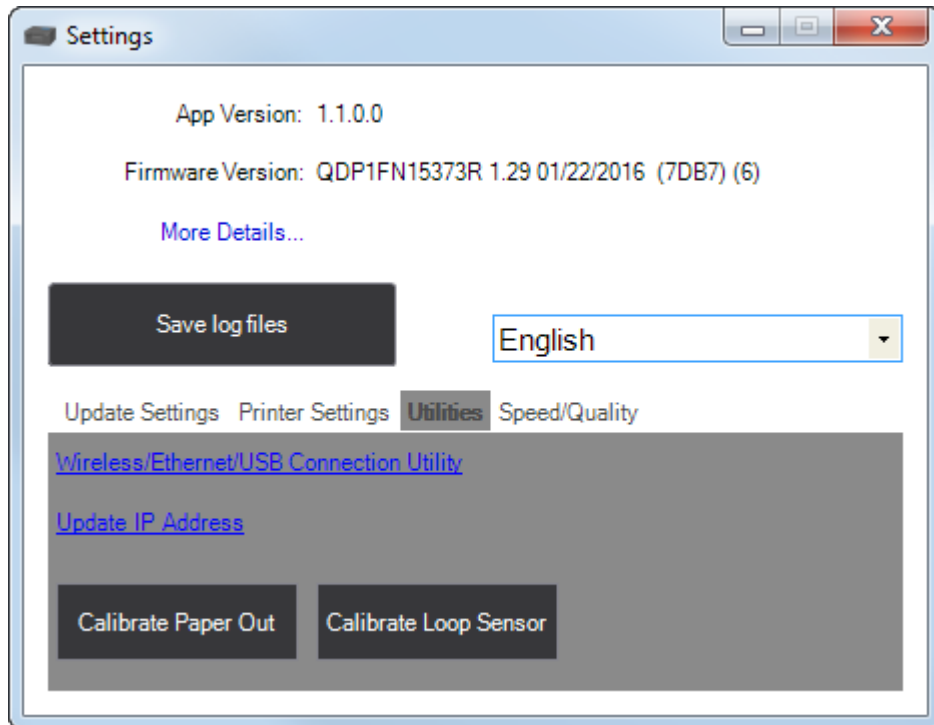


Continue through the wizard to choose your wireless network and enter your password. Once Wireless has been enabled, disconnected the USB or Ethernet cable. Now you will need to add your printer again using the instructions in Section 5A. You will be adding a second driver for the same printer. It is recommended that you name this printer driver Color Label 2000 (Wireless).

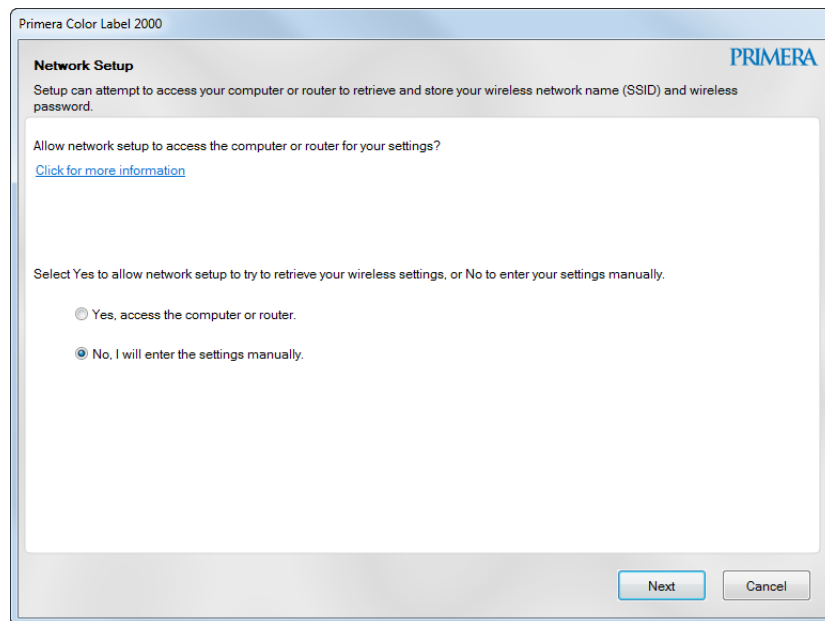


## B. Change Your Connection Method to Wireless

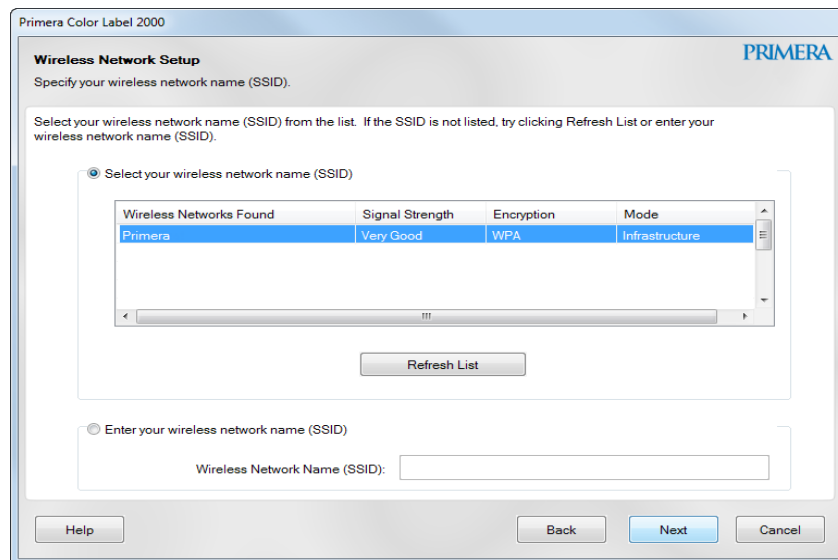
- Go to Start – All Programs - Primera Technology – Primera Color Label 2000 – **Printer Setup and Software**.
- You may also access this utility through the PTStatus2000 software. Click the information icon - select the utilities tab - choose Wireless/Ethernet/USB Connection Utility.



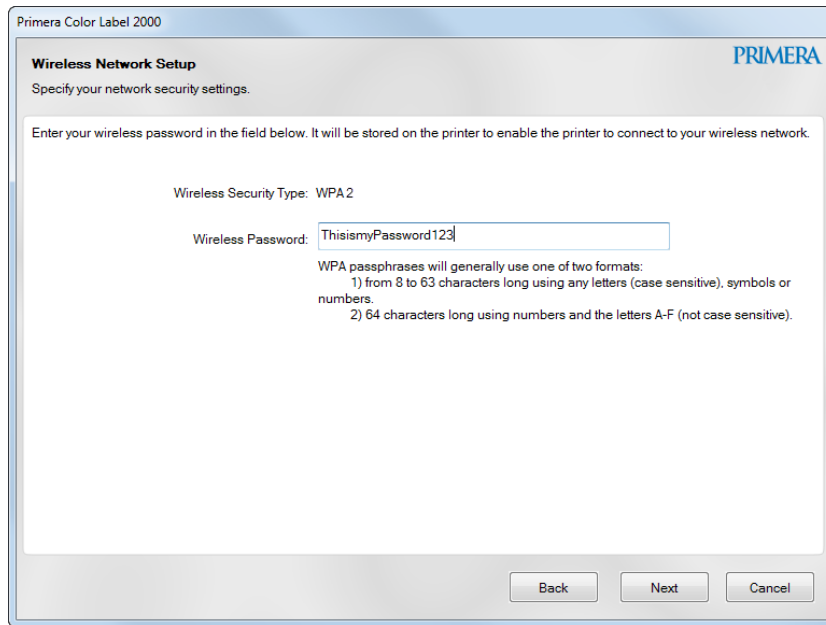
1. Choose Convert a USB connected printer to wireless.
2. If you are currently connected to your wireless network on the PC you are using choose "Yes, access the computer or router." This option will search your computer for the settings of your currently connected network and use the same settings for the LX2000. In most cases this is the easiest and fastest way to setup your printer. If you do not want to setup this way click "No, I will enter the settings manually."



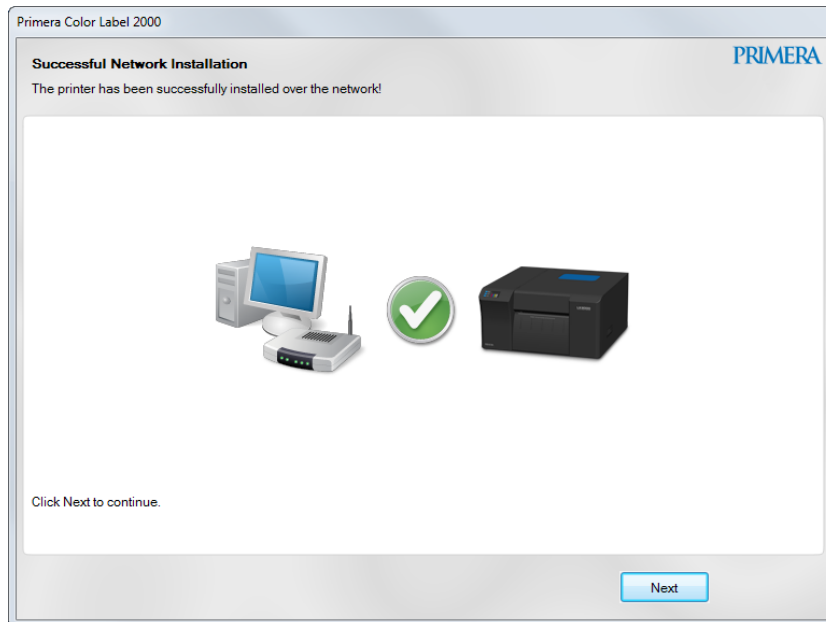
3. The printer will search for your wireless network and display a list. Choose your network from the list.



4. Enter your Password. This will only appear if you have chosen the manual method.

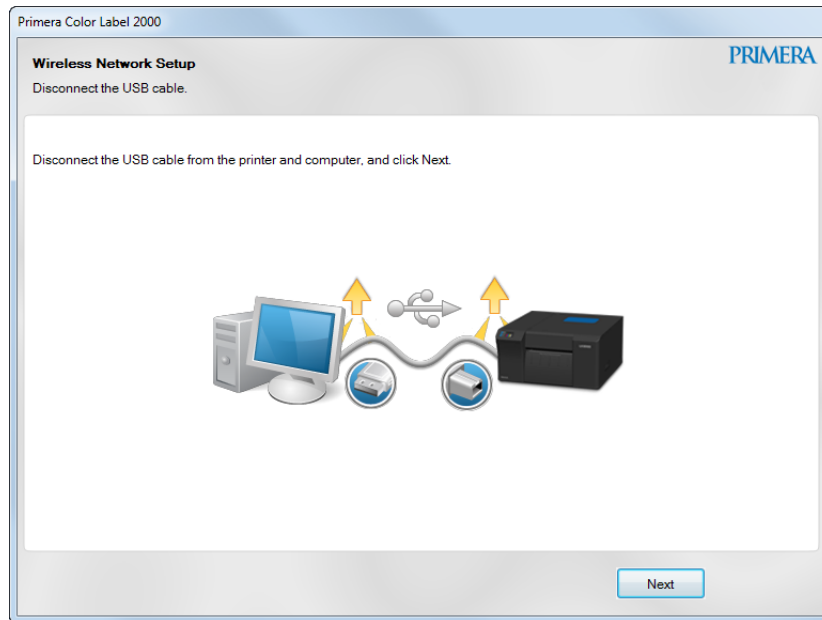


5. If the password was entered correctly you will get a message that you have connected to the network successfully.

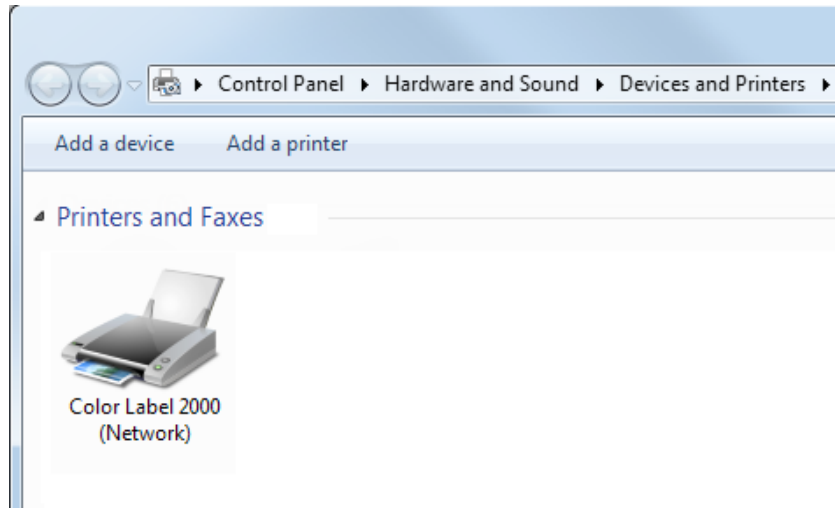




6. You will now be prompted to disconnect your USB cable.

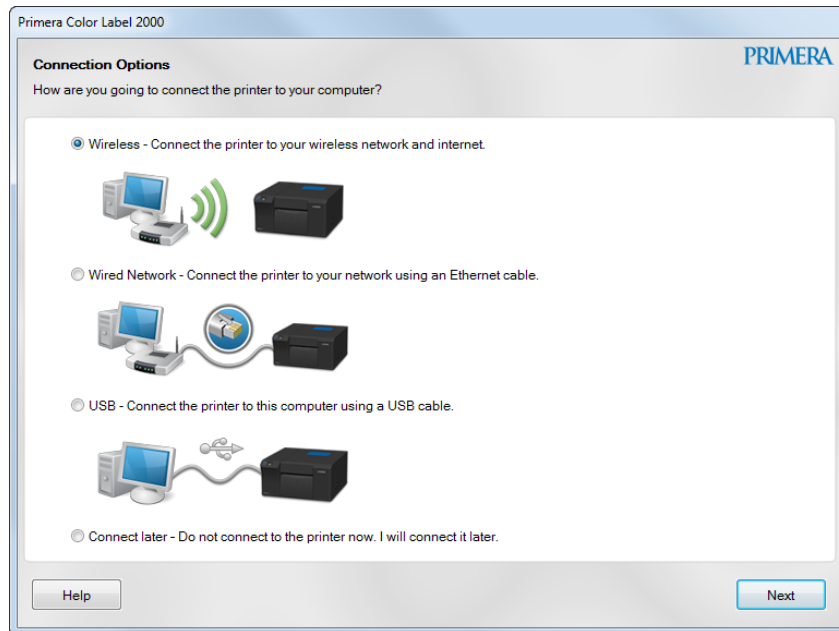


7. A new driver will appear in your printer list. "Color Label 2000 (Network)"

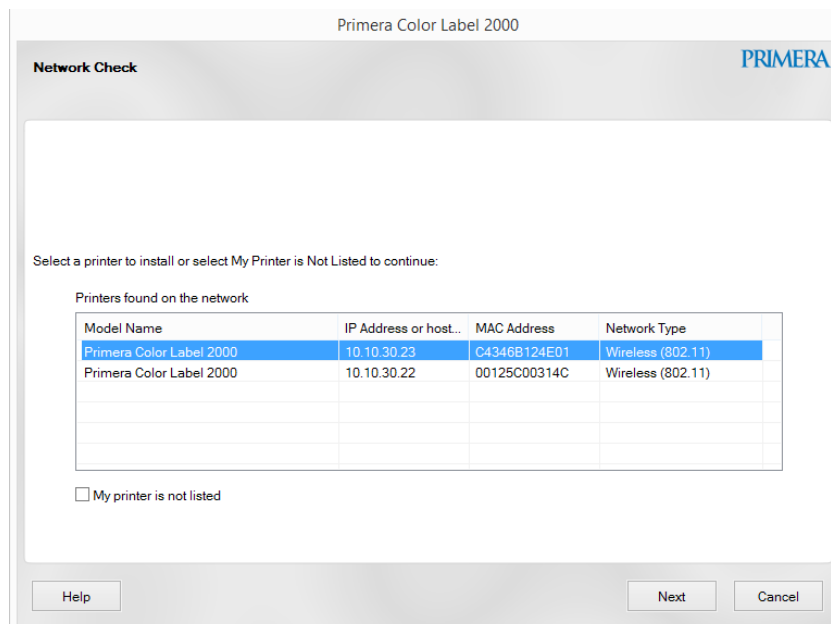


## C. Connect Another PC to a Wireless LX2000 or Install an Ethernet Connected LX2000 Printer

1. If you are sharing an LX2000 which has already been setup for wireless or is currently connected to an active Ethernet port, simply run the installation software on the new computer. When you are prompted to choose a connection option, choose the appropriate connection.



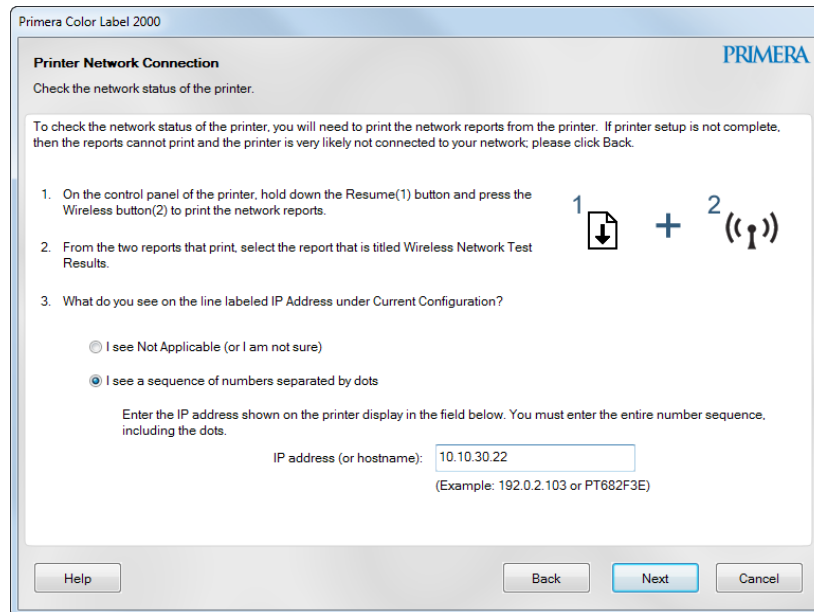
- 2a. If your PC has a wireless antennae or you are connecting to an LX2000 which is connected via Ethernet, you will be shown a list of wireless/Ethernet connected LX2000 printers within your network. Choose the appropriate printer. Click "Next" and skip to step 6.



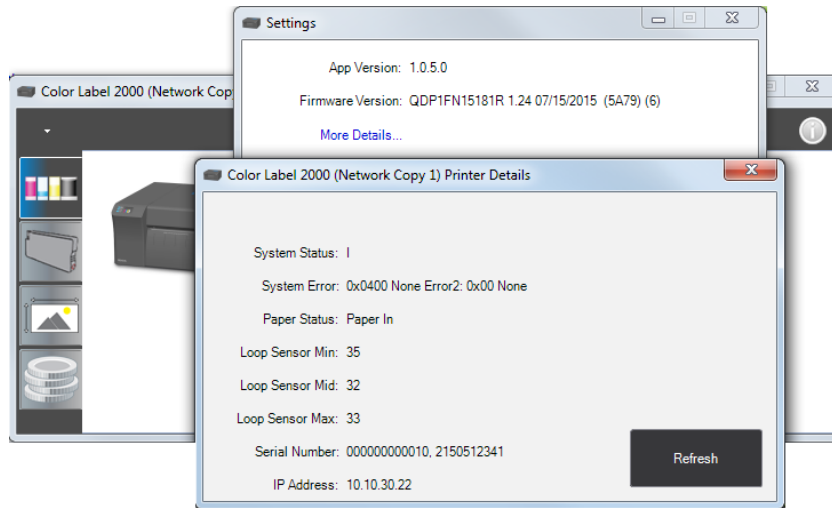
- 2b. If your PC does not have a wireless antennae or it is connected to your network via a different router, you will receive a prompt to connect your LX2000 via USB. You do not need to do this. Check the box "The printer is already connected to a wireless network." Click Next.



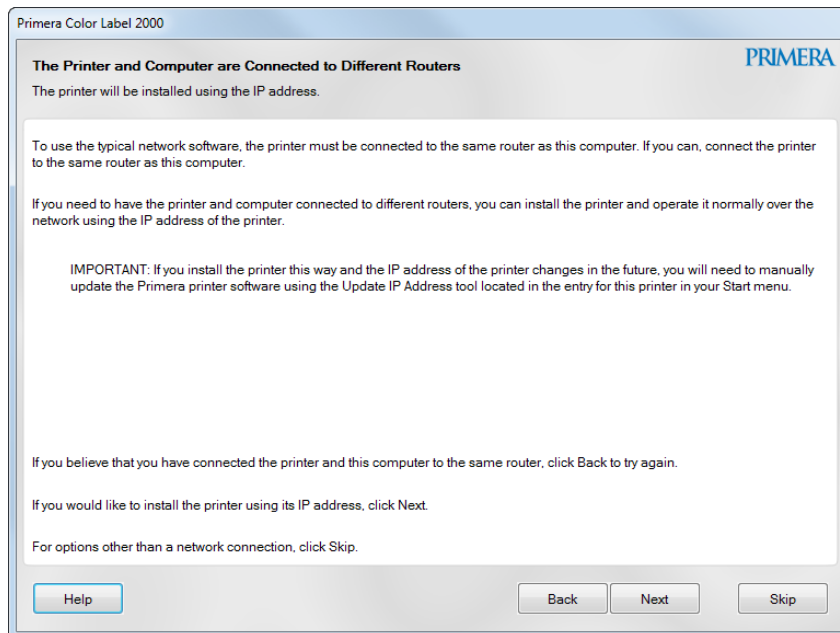
3. Choose "I see a sequence of numbers separated by dots". Enter the IP address of the LX2000.



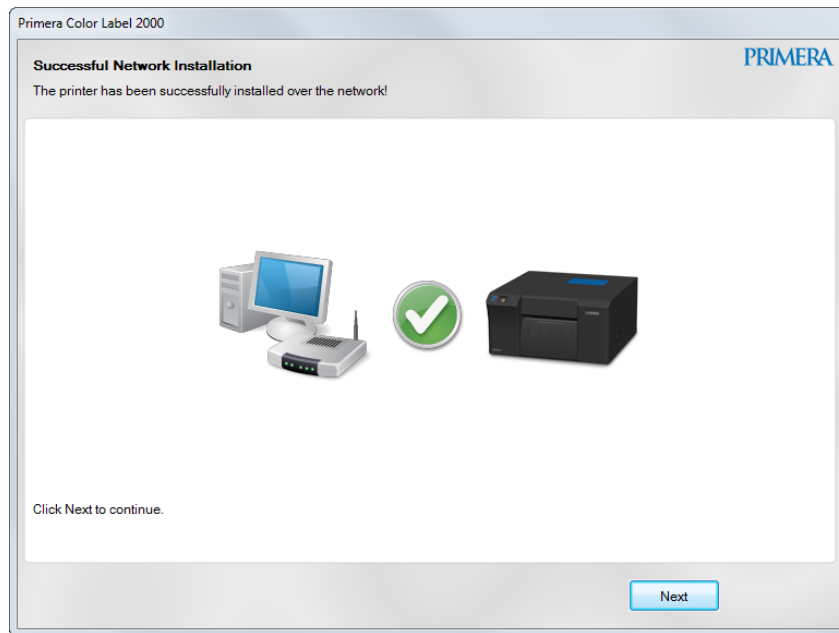
- If you do not know the IP address you can find it in the PTStatus2000 software. Go to a PC that is already connected wirelessly to the LX2000. Open PTStatus2000. Click on the info icon. Choose "More Details". The IP address is displayed at the bottom of this window.



- Click next to this notice screen.

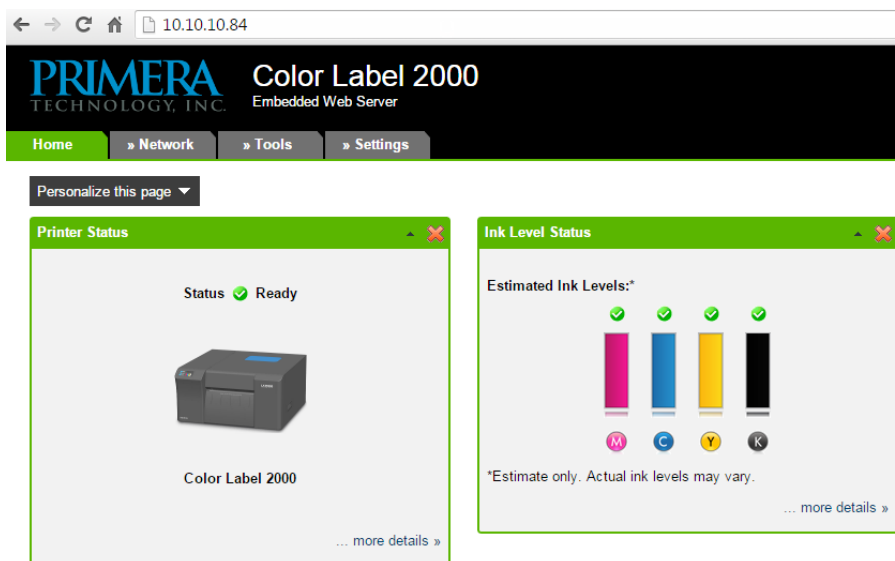


6. You will receive a message that the printer was successfully installed.

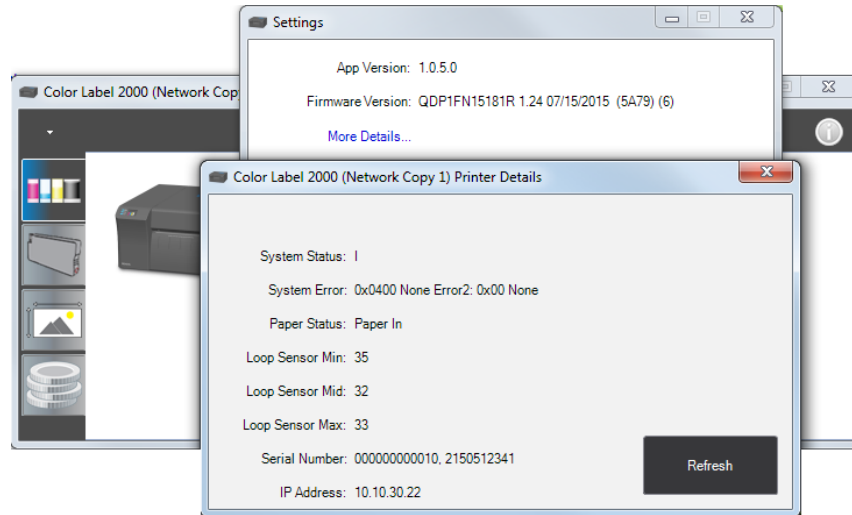


#### D. Access the LX2000 Embedded Web Server for Advanced Network Settings

Type the IP address of your printer in any web browser to display the embedded web server. Here you can access wireless network settings on the Network, Tools, and Settings tabs across the top.



If you do not know the IP address you can find it in the PTStatus2000 software. Go to a PC that is already connected wirelessly to the LX2000. Open PTStatus2000. Click on the info icon. Choose "More Details". The IP address is displayed at the bottom of this window.



## Section 8: Technical Specifications

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Print Method:	Thermal inkjet; Pigment ink
Print Resolutions:	Up to 4800 dpi
Print Speeds:	Draft Mode: 6" per second (LX1000 - 4" per second) Normal Mode: 1.8" per second
High Quality Mode:	0.8" per second
Print Head:	Replaceable Print Head
Inks:	Individual ink cartridges for Cyan, Magenta, Yellow and Black
Colors:	16.7 million
Color Matching:	Z-Color™ Color Matching Software
Max. Print Width:	8.25" (210mm)
Media Liner Width:	1.50" to 8.38" (38.1mm to 212.7mm)
Media Types:	Roll-fed pressure-sensitive labels, or roll-fed tags
Media Sensing:	Moveable see-through sensor for die-cut labels; reflective sensor for labels and tags with black stripe; can use continuous and pre-printed labels and tags
Supply Roll:	6" (152mm) maximum diameter on 3" (76mm) core.
Ink Level Warning:	Calculates actual number of prints remaining based upon ink usage of graphics being printed (patent-pending)
Indicator Lights:	Power, Pause, Ink
Controls:	Pause, Feed, Unload, Cancel
Operating Systems:	Windows® 7/8/10+ or Mac OS X 10.8-10.12 (Mac Software for LX2000 Only)
Label Design Software:	BarTender UltraLite Primera Edition included. Can also be used with most other popular label design and graphics software programs
Electrical Rating:	12VDC, 5.0A
Power Requirements:	100-240VAC, 50/60 Hz, 1.7A
Integrated Cutter:	LX2000 Only
Certifications:	UL, UL-C, CE, FCC Class A
Weight:	45 lbs. (20.4 kg)
Dimensions:	19.5"W x 10.2"H x 20.5"D (495mmW x 259mmH x 521mmD)
Connectivity:	Hi-Speed USB 2.0 (LX1000/LX2000); Built-in Wired Ethernet 10/100 Base-TX (RJ45) Networking; Built-in wireless 802.11b/g/n Networking (Ethernet/Wireless for LX2000 Only)
Included:	Bartender Ultralite software for Windows, 4"X3" Tuffcoat™ Extreme White Polyester starter roll and starter CMYK ink set.

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