



LX 200

LABEL PRINTER

(Label Printer 200)

User's Manual

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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.

CAUTION!

TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THE UNIT TO RAIN OR MOISTURE. TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE EXTERIOR PANELS. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL. OPERATE THE UNIT WITH ONLY THE PROPER ELECTRICAL SPECIFICATIONS AS LABELED ON THE PRINTER AND AC ADAPTER.

CAUTION!

**THIS PRODUCT CONTAINS A LASER DIODE OF A HIGHER CLASS THAN 1. TO ENSURE CONTINUED SAFETY, DO NOT REMOVE ANY COVERS OR ATTEMPT TO GAIN ACCESS TO THE INSIDE OF THIS PRODUCT. REFER ALL SERVICING TO QUALIFIED PERSONNEL. THE FOLLOWING LABEL APPEARS INSIDE YOUR UNIT:
CLASS 1 LASER PRODUCT LASER KLASSE 1**

CAUTION!

USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION.

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Interactive Feature in this PDF Document

There are interactive features that will allow you to jump to different locations within the document. Each listing in the Table of Contents is interactive. Place the cursor on either the words or the page number. A small hand with a pointing finger icon appears. Click on the line with the icon and the document will jump to that page. If you want to return to the Table of Contents, move the icon to the top of the page and click on the arrow marked TOC. Navigating through the Index is similar. Place the icon on one of the listings or page numbers, click on it, and it will move to that page. The text relating to the Index listing will appear in red. Returning to the Index can be done by clicking on the arrow marked Index.

Section 1: Getting Started

THANK YOU...

...for choosing an LX200 Label Printer. The LX200 Printer will print razor-sharp text and barcodes directly onto rolls of labels, card stock and fan-fold stock.

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

A. CHOOSING A GOOD LOCATION

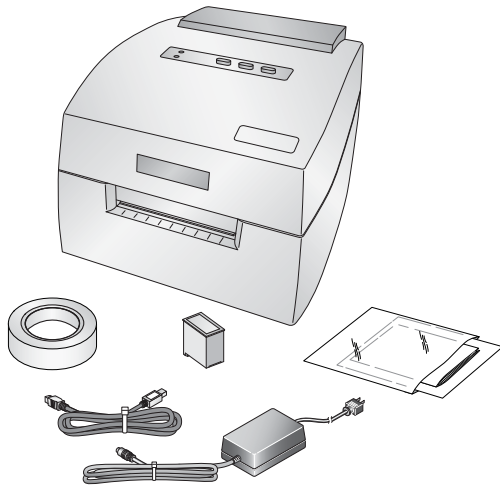
- Place the printer on a flat surface in a location with adequate air circulation to prevent internal heat build up.
- Do not place the printer near heat sources such as radiators or air ducts, or in a place subject to direct sun light, excessive dust, mechanical vibration or shock.
- Allow for adequate 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.
- Allow for adequate overhead 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 should be included:

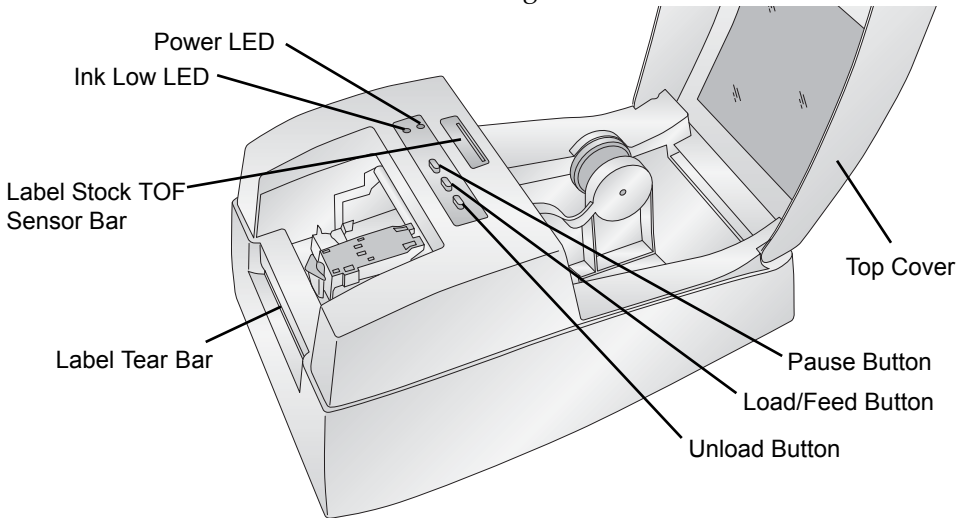
- Printer
- Power Adapter
- Separate Power Cord
- USB Cable
- Software Installer CD
- Black Ink Cartridge
- Starter roll of **high gloss label stock**
- Warranty Statement and Registration Card
- This manual and other printed information

Save the carton and packing materials. They will come in handy when transporting the printer.



C. IDENTIFYING THE PARTS

This illustration shows the front of the printer with its control buttons and LED indicator lights.



The **Pause Button** pauses the printer AFTER the printing of the current label has finished to allow for loading of label stock and ink cartridge.

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

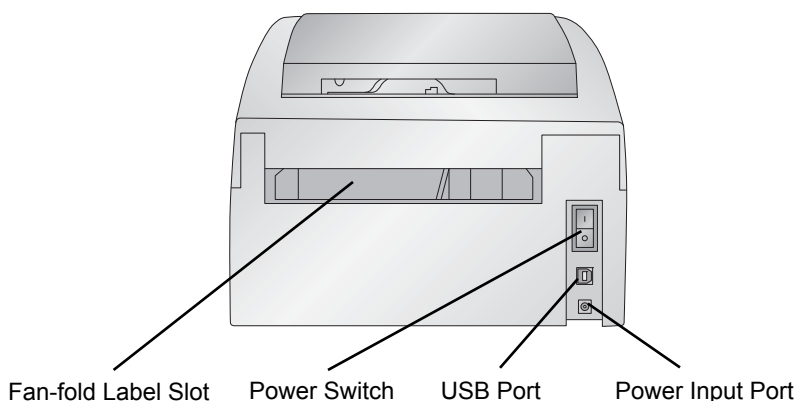
The **Load/Feed Button** is pressed in order to load label stock or form feed the label stock through the printer.

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

The **Unload Button** will unload the installed label stock by reversing it through the printer. Make sure to tear off the printed labels before pressing the Unload Button.

The **Label Tear Bar** is a serrated edge for conveniently tearing your finished labels from the printer.

This illustration shows the input ports and power switch found on the rear panel of the printer.



D. COMPUTER SPECIFICATIONS

Minimum PC Specifications

For optimal printing speed you must have a PC with the following minimum specifications:

- Pentium IV Processor
- 512 MB of RAM
- 5 GB of Free Hard Drive Space

If your computer does not have at least these minimum system requirements, system performance may not be acceptable.

Section 2: Hardware and Software Setup

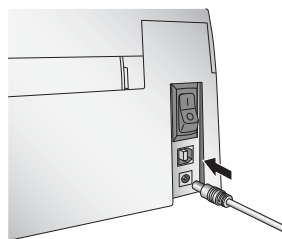
A. INSTALLING THE PC SOFTWARE

The Installer Disc has a menu that will guide you through the process of setting up your duplicator. Please refer to the following for more information on each step:

1. Place the Installer CD in your CDRom Drive. The Installer application should automatically launch in a few moments. If it does, proceed to Step 2. If it does not automatically launch, follow these steps:
 - Double-click the My Computer Icon, then double-click the icon of the appropriate CD drive containing the Software Installer disc.
 - Double-click **Installer.exe**
2. In the Installer Application, click the **Standard Install** button. The on screen instructions will guide you step-by-step through the installation process.

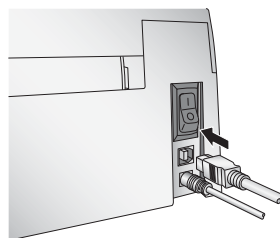
B. CONNECTING POWER

1. Locate the power adapter supplied with your printer.
2. Place one end of the adapter cord into the power port on the rear panel of the printer.
3. Plug the power cord of the adapter into an available wall outlet or surge protecting power strip. Once the power cord is connected, the printer can be switched on and off using the power switch.



C. CONNECTING THE USB CABLE / INSTALLING THE PRINTER DRIVER

Connect the printer to your PC with your beige USB 2.0 Cable.



If you are using a PC, after a few moments, Windows will tell you it has found new hardware and is looking for software to install it.



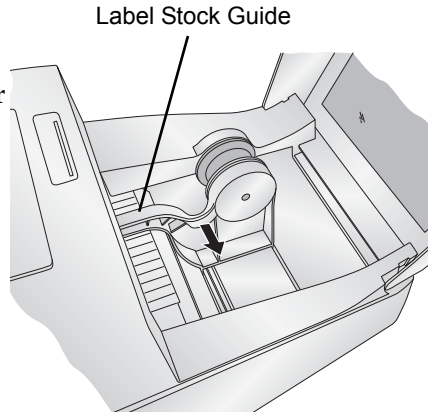
Select "Install the software automatically" and click **Next**. You may see a notice like the one shown here stating that the Printer has not passed Windows Logo Testing. Click **Continue Anyway** to continue **installing the printer driver** for your Publisher.



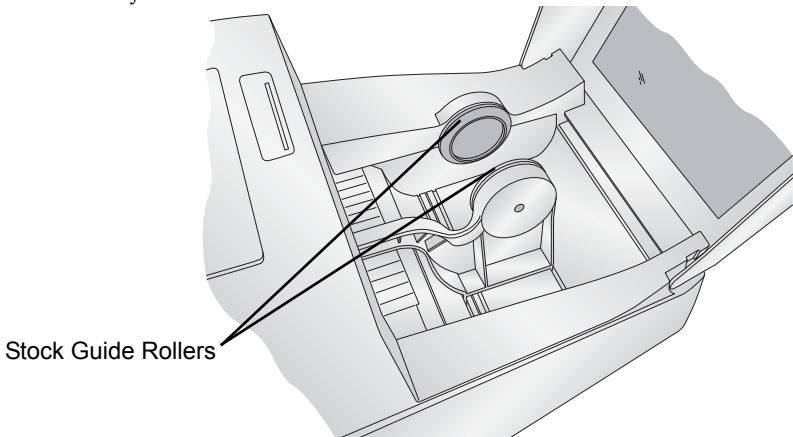
D. INSTALLING LABEL STOCK

Your printer will utilize a wide variety of paper label stock. As long as the label stock is paper and can receive ink jet printing and is within the allotted size, it will work in the printer. Primera carries a large variety of paper label stock that has been converted and ready for use with your printer.

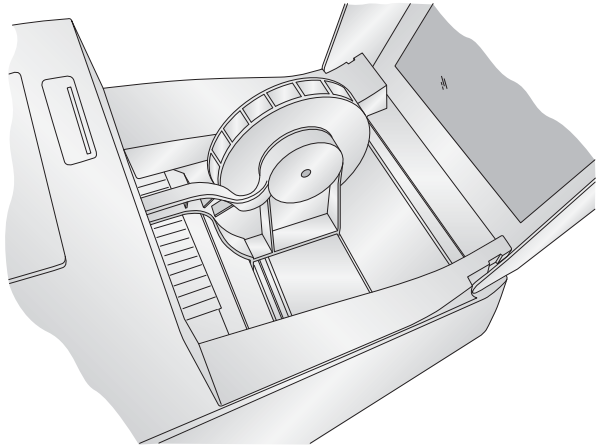
1. Open the Top Cover.
2. Pull the spring loaded label stock guide out far enough to fit the label stock.
3. Remove any shipping tape from your label stock roll to ensure that it can unroll freely, making certain that no adhesive portion is exposed. It is important to note that any exposed adhesive surface can attach itself to the inner workings of the print mechanism and cause a media jam.



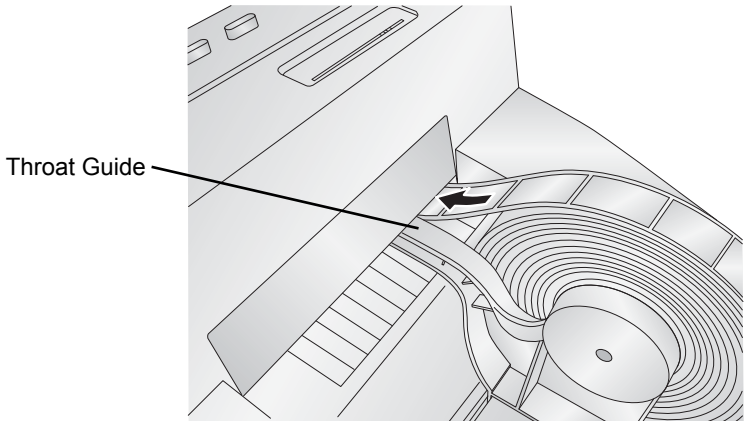
Note: If you are using fan-fold label stock or label stock other than standard square / rectangular die cut labels before continuing see Sections 2E and 2F for additional instructions.



4. Place the label stock between the stock guide rollers and release the spring loaded stock guide to hold the label stock. The stock guide rollers allow the label stock roll to move freely.



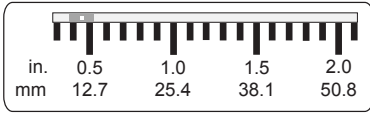
5. Place the leading edge of the label stock between the throat guide and the side of the printer.



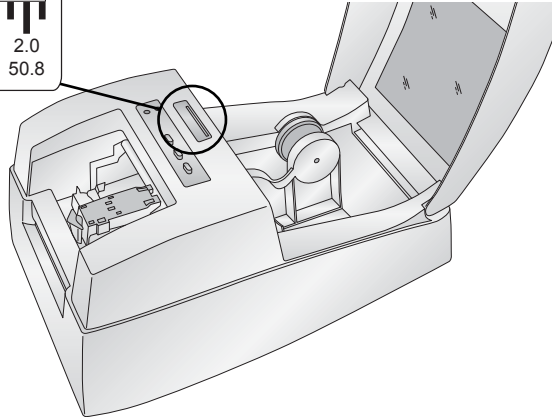
6. Feed the label stock further into the printer until it senses the label and automatically feeds it through the printer. If the printer fails to feed the label stock, press the Feed button on the front panel while continuing to guide the label stock into the printer.

E. 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 label stock TOF sensor.



Label Stock Sensor Bar



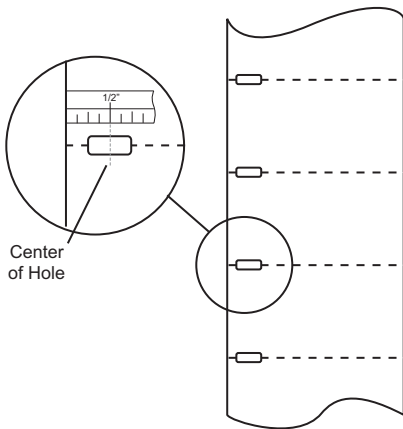
Circular Labels

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

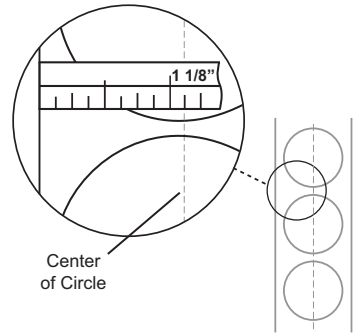
Through Hole Labels

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 Sensor Bar to position it over the identifying mark.

The Sensor Bar has a guide in inches and millimeters that will help you identify where to set the bar to align the sensor over any identifying mark or top of a circular shape. To do this, measure the distance from the edge of the label stock to the correct position on the stock. Set the sensor bar to this measurement. For example, if you have a two inch circular die-cut label, measure from the edge of the label stock to the center of the circle. For this example it should be about 1 1/8 inches. Set the Sensor Bar to this value.

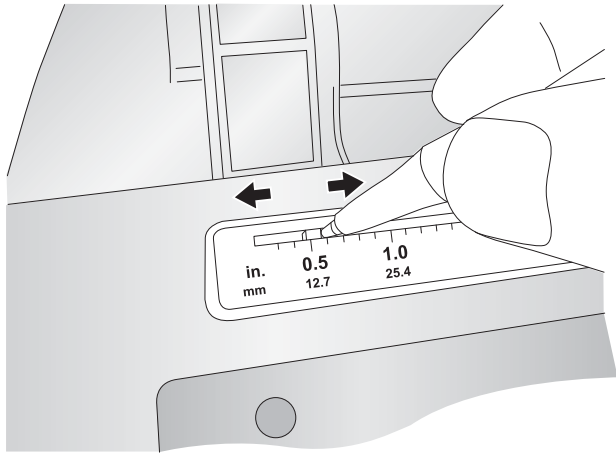


Through-Hole Labels



Circular Labels

To adjust the sensor position use a pen to move the slide bar to the correct position.

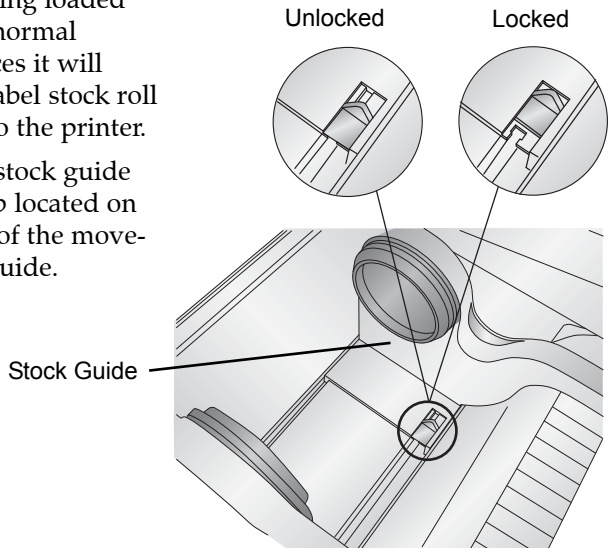


F. USING FAN-FOLD LABEL STOCK

It is possible to use fan-fold label stock by feeding it through the fan-fold slot in the the back of the printer.

Before feeding the fan-fold stock through the back of the printer, lock the stock guide in the out position so the stock guide rollers will not interfere with the label stock. The stock guide is spring loaded and under normal circumstances it will pinch any label stock roll inserted into the printer.

To lock the stock guide push the tab located on the bottom of the moveable stock guide.



G. INSTALLING THE INK CARTRIDGE

Your printer has a built-in ink tracking system. This system is designed to warn you if your ink cartridge is low on ink. This ensures your labels will print properly and that the printer can create large batches of labels unattended and worry-free.

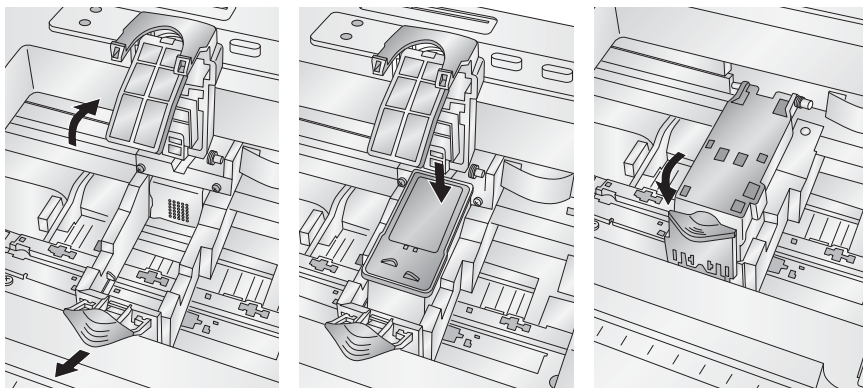
In order to make this system work properly, the cartridge must be changed using the procedure listed below. Failure to follow this procedure could result in inaccurate ink level tracking and could cause your print quality to suffer.

Ink cartridge is changed as follows:

1. Click **Start>Printers and Faxes**
2. Right-click on the Color Label Printer Icon
3. Click on **Printing Preferences** from the drop-down menu
4. Find the option labeled "**Clean/Change Cartridge & Check Ink...**" and click "**Properties**"
5. Click "**Change Cartridge**"
6. Open the Top Cover of the printer
7. The Cartridge Carrier will align itself to the center of the print area.
8. Press the Cartridge Cover Release to open the Cartridge Holder.
9. Replace/install the cartridge copper end first.
10. Remove the new Cartridge from its packaging. Be sure to remove the protective tape covering the copper contacts.



11. Push cartridge cover downward until it snaps in place.



12. Click **OK** on your screen to indicate the new cartridge is now installed. Once you click **OK** you will be prompted to align the cartridge. A warning will appear stating that you must have installed label stock that is equal to or larger than 4" x 4" (101.6 mm x 101.6 mm). If your label stock meets this requirement click **OK** to align the cartridge. If your stock does not meet this size requirement see Section 2H **before** clicking **OK**.

H. ALIGNING THE INK CARTRIDGE

Cartridge alignment will align the Color Cartridge for bidirectional printing and calibrate the printer to each individual cartridge. You will automatically be prompted to perform this alignment each time you install a new cartridge. You may also manually align the cartridge via the printer settings which are described in Section 3C.

For Alignment you will need to have installed label stock that is equal to or larger than 4" x 4" (101.6 mm x 101.6 mm). If your stock does not meet this requirement follow the steps below:

- a. Unload your current stock by pressing the **Unload** button. The printer will reverse the label stock so that it can be removed from the printer.
- b. Now click **OK** if you are continuing from Section H or **Send** the alignment via the printer settings area. It is important that you sent the alignment with no label stock installed.

- c. Cut or fold a 8.5" x 11" sheet of paper in half length wise so that it is no wider than 4.25 inches. Pull the the label stock guide all the way out and lock it in place using the instructions in Section 2G. Push the paper into the feed area. Once the printer senses the page it will pull it into place. You must feed the test sheet of paper into the printer after the alignment print has been sent to the printer otherwise it will feed the sheet right through the printer with out printing.
- d. The printer will print the alignment test and scan it into memory. Once the alignment is complete you will see a confirmation dialogue box on your monitor. Click **OK**.

Section 3: **Printing** Using a PC


A. **USING NICELABEL**

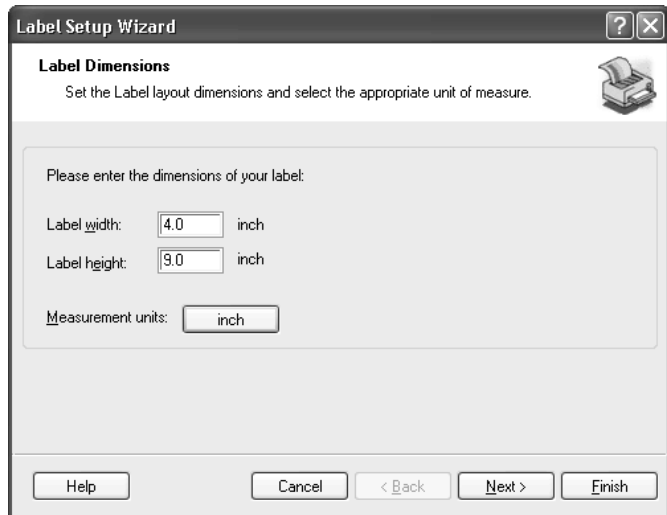
Your printer ships with a basic version of Niceware's NiceLabel software. This easy-to-use software is designed to allow you to create full color labels with text and barcodes quickly and simply. The following is a tutorial to guide you through creating and printing a sample label.

Launch NiceLabel from your computer's Start Menu.


Note: You are not required to print from the NiceLabel software. You can print from any application that prints to a Windows Printer.

Creating a label

1. Click the **New Label Icon**  from Main Tool Bar
2. You will see the **Label Setup Wizard**. This will guide you through setting up your label
 - a. Set the dimensions of your label and unit of measure and click **Next**.



Label Setup Wizard

Label Dimensions 

Set the Label layout dimensions and select the appropriate unit of measure.

Please enter the dimensions of your label:

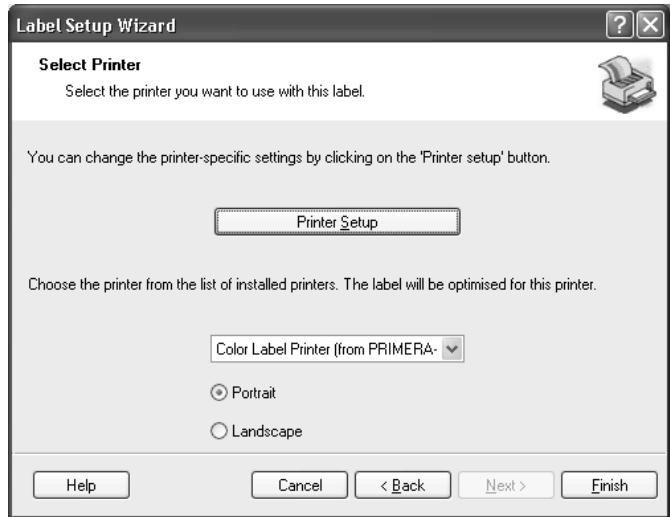
Label width: inch

Label height: inch

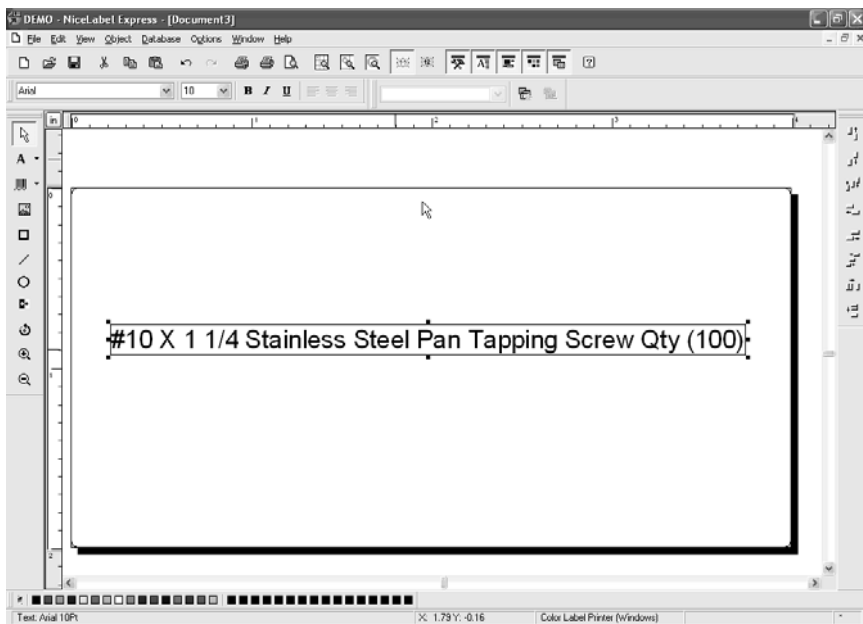
Measurement units:

Help Cancel < Back Next > Finish

- b. Select your printer. This should be the Label Printer 200. Click **Finish**.



3. Now you will see your label in the Document Window. You can start to design your label using Tools from the Tool Box. First, we will use the Text Tool.
 - a. Click the Text Tool Icon in your Toolbox, then move the text cursor over the Document Window and click in the location where you want to enter text. There is no need to be exact, once you enter your text it can easily be resized and/or moved about the label. Upon clicking in the Document Window, you will see a prompt to start typing your text.
 - b. When finished typing, click anywhere in the Document Window and you will see the text appear in a box with "edit handles". You can drag and resize the text anywhere in the document window. If the text is dragged off of the printable area, NiceLabel will turn the text red as a warning. This will not change the color the text prints out as when sent to the printer but is only used as a warning to let you know you may not be printing the full text on your label.

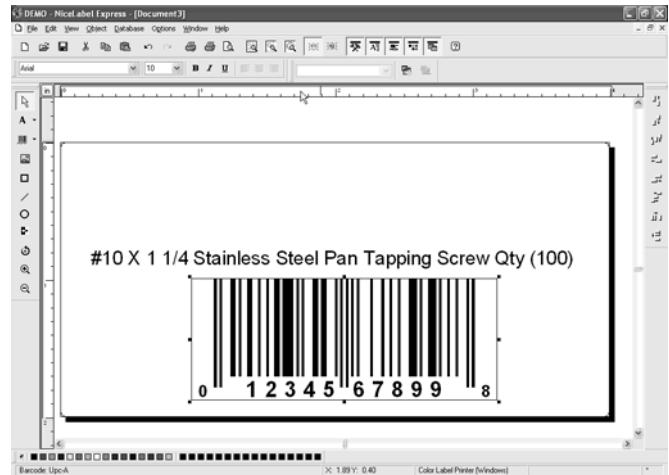


4. Now, insert a barcode.
 - a. Click the Barcode Tool Icon from the Toolbox. You will now have a Barcode Cursor that can be positioned anywhere within the Document Window. Position your cursor in the general area where you wish your barcode to print and click to start entering your barcode information. There is no need to be exact, once you create your barcode it can easily be moved and/or resized. Once clicked, you will see the **Barcode Wizard**.

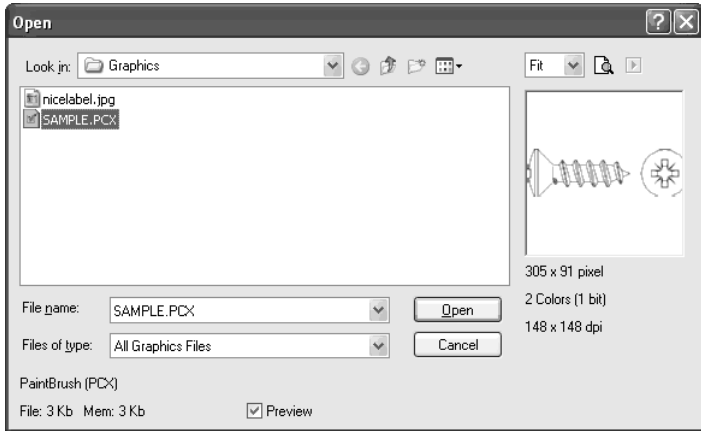
- b. The first screen in the **Barcode Wizard** will allow you to select the type of Barcode you wish to print. You can also enter the data to be used in the barcode. For this we are doing a simple UPC-A barcode. For more information on other types of barcodes, please see **Section 3B. Creating Barcodes in NiceLabel**.



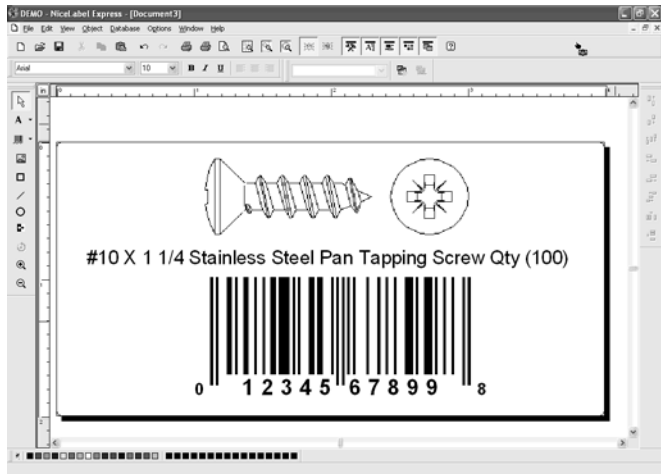
- c. Click **OK**, then click **Finish** and your Barcode will be placed on your label with "Edit Handles" to allow you to move and resize your barcode.



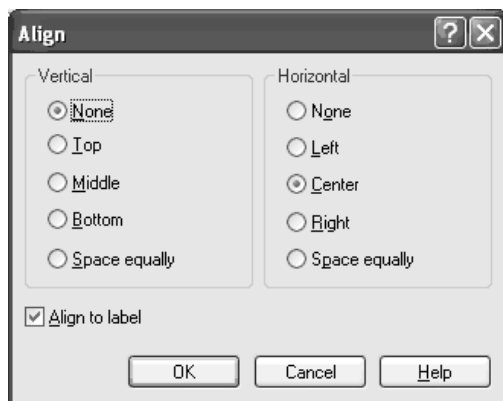
5. Now **insert a graphic**. Click on the Graphics Tool Icon in the toolbox. You will now see a Graphics Cursor. Drag the cursor to the general area where you wish to place the graphic and click to get an Open dialog box. You will be prompted to browse for graphic files. NiceLabel will accept bitmap graphics formatted as BMP, JPG, TIF, WMF, PNG and many more.



- a. Click **Open** and the graphic will be imported with edit handles so you can easily move and resize your graphic.



- b. There are other tools at your disposal to align the object or add shapes. On the right side of the screen you will see alignment tools so you can align the objects on your label in relation to each other. Select objects by clicking on them or clicking and dragging a "lasso" around multiple objects or by holding down the SHIFT key and clicking on each object individually. You can also center these objects by right clicking on a selected object and choosing **Align** from the drop-down menu. If you wish to center your object on the label choose the appropriate centering options and check the **Align to Label** checkbox.



- c. You are now ready to print your label. Click **File - Printer Settings** to adjust quality, color matching etc. See Section 3C for more information. Click **File** then **Print** from the main menu. Choose your number of copies and click **OK**.

Congratulations! You have successfully created and printed your first label. The rest of this section will explain in more detail how to use barcode labels. Also, you can find more tips and hints by simply clicking **Help** then **Contents** in the main menu.

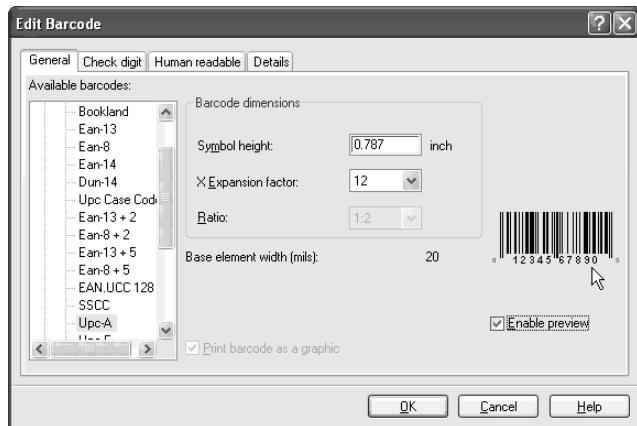
Note: Objects will be layered in the order they are added to your document. There is no ability to change the layering order in the SE version of NiceLabel. This feature is available in upgraded versions.

B. CREATING BARCODES IN NICELABEL

- a. Click the Barcode Tool Icon from the Toolbox.
- b. You will now have a Barcode Cursor that can be positioned anywhere within the Document Window. Position your cursor in the general area where you wish your barcode to print and click to start entering your barcode information. Once clicked, you will see the Barcode Wizard.
 - i. The first screen in the **Barcode Wizard** will allow you to select the type of Barcode you wish to print. You can also enter the data to be used in the barcode.



- ii. Click **Define** to change the type of Barcode.



- iii. This contains four tabs, **General**, **Check Digit**, **Human Readable** and **Details**.
- iv. The **General Tab** allows you to choose the appropriate barcode type from the **Available barcodes:** menu. You can choose one- or two-dimensional barcodes. Note that different barcode types have different requirements - some of them only allow numbers to be encoded, while others only allow upper case characters. For the further help on the barcode types contact your supplier

Available barcode types are listed here:

EAN and UPC	EAN-8, EAN-8 + 2-digit supplement, EAN-8 + 5-digit supplement, EAN-13, EAN-13 + 2-digit supplement, EAN-13 + 5-digit supplement, EAN-14, DUN-14, UPC Case Code, UPC-A, UPC-A + 2-digit supplement, UPC-A + 5-digit supplement, UPC-E, UPC-E + 2-digit supplement, UPC-E + 5-digit supplement, EAN.UCC 128, SSCC, Bookland, Addon 2, Addon 5
Linear	Interleaved 2 of 5, ITF 14, ITF 16, Code 39, Code 39 Tri Optic, Code 39 Full ASCII, Code 32, Code 93, CODE 128 (A, B and C subsets), MSI, Codabar, Postnet-32, Postnet-37, Postnet-52, Postnet-62, Kix, Pharmacode
RSS	Linear RSS symbologies RSS14, RSS14 Truncated, RSS14Stacked, RSS14 Stacked Omnidirectional, RSS Limited, RSS Expanded Composite RSS symbologiesRSS14, RSS14 Truncated, RSS14 Stacked, RSS14 Stacked Omnidirectional, RSS Limited, RSS Expanded, UPC-A, UPC-E, EAN-8, EAN-13, EAN.UCC 128 & CC-A/B, EAN.UCC 128 & CC-C
2D Barcodes	2D-Pharmacode, PDF-417, DataMatrix, MaxiCode, Aztec, QR, Micro QR, Codablock F, MicroPDF

Define the barcode dimensions in the **Barcode Dimensions Field**. The height is set in cm by entering the appropriate number in the **Symbol Height Field**. The width of the barcode is set as the **X Expansion factor**. Note that the width can be set only in pre-defined standard steps.

When you change the barcode dimension directly from the screen by moving the drag handle, the changed dimension will also appear in this dialog box.

Some of the barcode types also allow the definition of Narrow-to-wide bar ratio. It can only be set from the predefined steps in the pull-down menu - 1:2, 1:3 or 2:5.

Base element width (mils) is calculated automatically from the X expansion factor.

- v. The **Check Digit Tab** will allow you to include a system automated check digits or enter your own. Check digits can be disabled on some barcodes from this tab as well.
- vi. The **Human Readable Tab** allows you to manipulate the human readable text printed with your barcode. Here you can disable Human Readable, select position (above or below the barcode), include a check digit, and choose your font type and scaling.
- vii. The **Details Tab** allows you to set some further details of the barcode presentations on the printer. These settings are listed here:

Include Quiet Zones will enable the software to automatically create the necessary amount of free space before and after the barcode symbol by drawing an unprintable buffer area around the barcode symbol on the screen.

Descender Bars allows EAN 13, EAN 8, UPC A and UPC E to print longer first, middle and last bars when this option is selected.

Mirror Horizontally will allow the barcode to be printed as a graphic and will so it can be mirrored over the horizontal axis.

Mirror Vertically allows the barcode to be printed as a graphic so it can be mirrored over the vertical axis.

Intercharacter Gap: Some barcodes allow you to change the gap between characters in the barcode (e. g. Code-39). The barcode prints as a graphic.

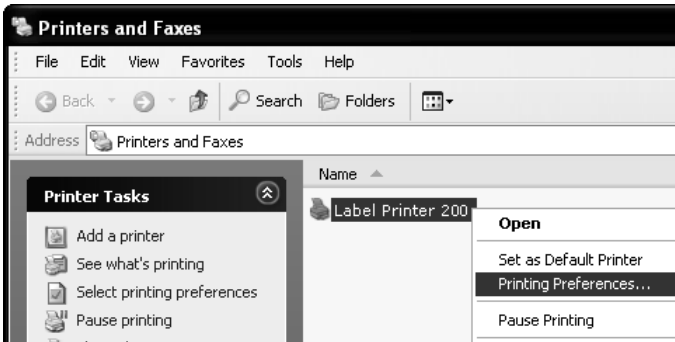
Include EAN white space: A special character is inserted before and/or after the barcode. It indicates the width of the barcode. If you place any other object in the extent of the barcode, it will reduce the readability of the barcode. This option is valid for EAN barcode types.

C. PRINTER DRIVER SETTINGS

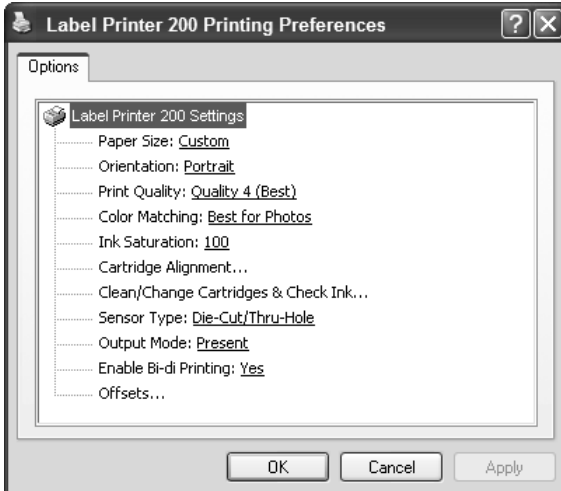
Once the printer driver has been successfully installed, you will need to setup the driver with the appropriate print options. Refer to the following steps to change or verify your default printer driver preferences. These settings will apply to all new designs created in NiceLabel or other programs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

To find Driver Settings:

Click the **Start** button, choose **Printers and Faxes**. Right-click on the Label Printer 200 Icon and select Printing Preferences from the drop-down menu.



The preferences screen will appear.



NOTE on PC Settings:

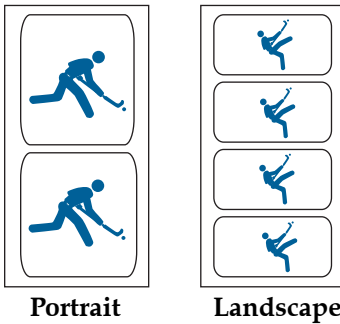
Most applications allow you to change these same printer driver options from their "Print" and/or "Printer Setup" screens. Some applications such as NiceLabel save your settings with the label, others use settings only for the current print job just sent to the printer.

Paper Size

If you are using NiceLabel, this setting is adjusted during the label setup wizard. If you are using a program other than NiceLabel you will need to set this to the dimensions of the your label. Keep in mind that the dimensions are always relative to the width and height of the actual label in the printer. Orientation of an image on the label should not change this setting. See Section 5 for minimum and maximum label sizes.

Orientation

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



Print Quality

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

Ink Saturation

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

Cartridge Alignment

Cartridge alignment will align the Cartridge for bidirectional printing and calibrate the printer to each individual cartridge. You will automatically be prompted to perform this alignment each time you install a new cartridge. To manually align the cartridge, click on **Cartridge Alignment** to reveal a **Properties** button. Click this button to start the Alignment procedure. You will be prompted to have label stock of 4"x4" (101.6mm x 101.6mm) or larger. If the loaded stock does not meet this requirement see Section 2H for additional instructions.

Clean/Change Cartridge & Check Ink Levels

Click this setting to reveal a **Properties** button. Click **Properties** and you will see the color ink level as well as buttons allowing you to either clean or change your ink cartridge. If you have printed a label you will see an estimation of prints remaining of the last label.

This number can also be used to calculate total number of labels you can print from one cartridge and also ink cost per label. Use the following formula:

Prints Remaining X 100 / Percentage of Ink Remaining = Total Labels from a Full Cartridge.

In the example above $300 \times 100 / 83 = 361$ labels from a full cartridge. Use the cost of the ink cartridge divided by the total labels from a full cartridge to receive cost per label.

Clean/Purge

If it has been more than 48 hours since your last print or if your print quality has deteriorated with bands or lines it is recommended that you clean the cartridge. This is done by clicking the **Clean/Purge** button. The Clean Purge is done as follows:

*Note: You will be prompted to load label stock of 4" x 4" (101.6 mm x 101.6mm) or larger, into the printer. If you have stock of this size or larger, simply click **OK**. If not see Section 2H for instructions on loading a test sheet to complete the purge print.*

The printer will print a purge pattern where swaths of each color are printed to clean the jets of the cartridge. A series of diagonal lines are printed in each color of the cartridge. By examining this pattern you can tell if the cartridge is firing all jets or if the cartridge is dirty and requires further cleaning. While the blocks of black may not print solidly, it is important that the diagonal lines be continuous. Repeat this process until all diagonal lines print without breaks.

Change Cartridge

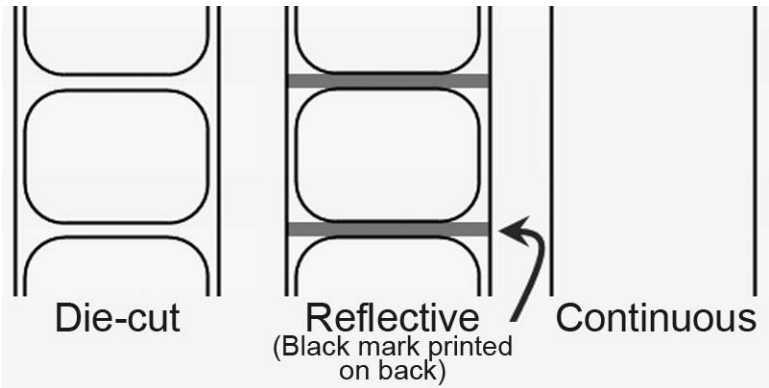
Click the **Change Cartridge** button to move the cartridge into position for easy access for replacement. For more information on this see Section 2G. When installing cartridge you will be prompted to align your cartridge as described earlier in this section.

Details/Print Counter

Clicking on the **Details** button will allow you to view information about printer settings stored on the printer. There is also a **print counter** in the details window to help you count the number of labels printed since the last time it was reset. Click **Reset Counter** to set the counter to zero. The **Restore Factory Defaults** button will restore the printer settings displayed on the details window to factory calibrated defaults.

Sensor Type

Sensor Type refers to the method the printer will use to detect the print starting position for each label. If you are using standard die-cut labels or Through-hole label material where a hole is punched through each label for alignment purposes use the **Through-hole/Die-Cut** setting. Use **Reflective** for black stripe sensing label material where a pre-printed line on the back of the label stock indicates the break between labels. If you have continuous stock with no die-cut, reflective mark or holes set the sensor type to **Continuous Feed**. This will turn off the stock sensor.



Output Mode

Do not present (use with Rewinder). 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 (Default). 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. This will occur only if there are no other print jobs in queue.

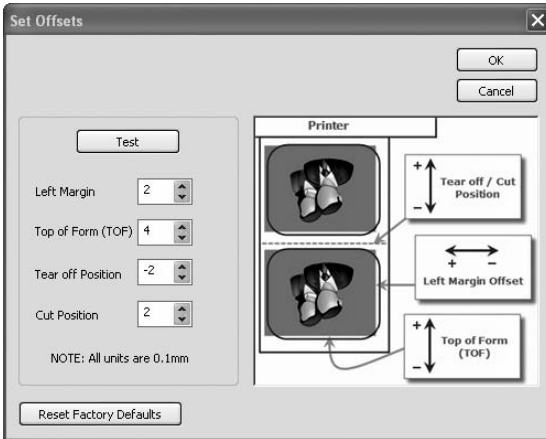
Cut (using optional cutter). Use this setting only if you have the label cutter attachment (Primera Part # 074263)

Enable Bi-di Printing

This setting defaults to Yes for fastest printing. When enabled you will be required to perform an alignment print after a new cartridge is installed.

Offsets

If your label is printing horizontally or vertically offset (printing on the liner or with white space left on the label) use these offset setting to adjust the position of the print on the label. Click **Offsets...** to reveal the properties button. Click **Properties**. The following screen will appear. Refer to the diagram to determine which direction to move the image, tear off position or cut position.



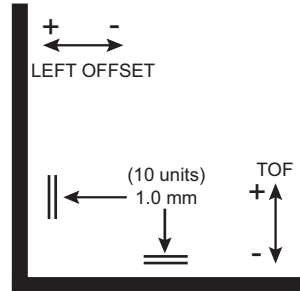
Left Margin Offset

This will be factory calibrated. If fine tuning is needed, increase this setting to move the image right on the label; decrease this setting to move the image to the left on the label. The unit of measure is 0.1mm.

Top of Form (TOF)

This setting allows you to fine tune the print starting position on your label stock. This will be factory calibrated. If fine tuning is needed, increase this value to move the image down on the label. Decrease this value to move the image up the label. The unit of measure is 0.1mm.

Click the **Test** button to send a test print to the printer that will help you adjust the TOF and Left Margin Offset. The printer will print the pattern shown. Adjust the values so that both black bars print on the label with no white space on the label and no ink on the liner.



Tear Off Position

If Output Mode (described earlier in this section) is set to Present, the printer will present your labels over the Tear Bar for easy removal. This tear off position is set at the factory. If fine tuning is needed to align the break in your label stock over the Tear Bar, increase this setting to eject the label further; decrease this setting to eject the label stock less. The unit of measure is 0.1 mm.

Cut Position

If a label cutter attachment is connected to the printer you can fine tune the cut position between the labels. Increase this value to move the label further out before the cut; decrease this value to eject the label stock less before the cut.

Section 4: Troubleshooting

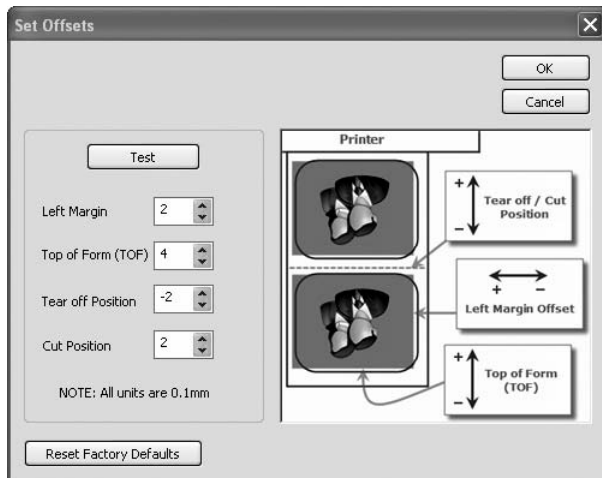
A. SOLVING REGISTRATION PROBLEMS

Image is Vertically Offset

The LX200 decides where to start printing by detecting the start of die-cut label, detecting a black mark on the back or detecting a thru-hole that corresponds to the start of the label.

The following items can cause the label sensor to improperly detect the start of a label:

1. **TOF Offset.** TOF stands for Top of Form and this setting allows you to fine tune the alignment of your printing on your label stock. This will be factory calibrated. If fine tuning is needed, increase this setting to move the image down on the label; decrease this setting to move the image up on the label. The unit of measure is 0.1mm. To access go to Start - Control Panel - Printers and Faxes - Right click "Label Printer 200" - Choose Printing Preferences - Select Offsets. See image in the dialog below for graphical example.

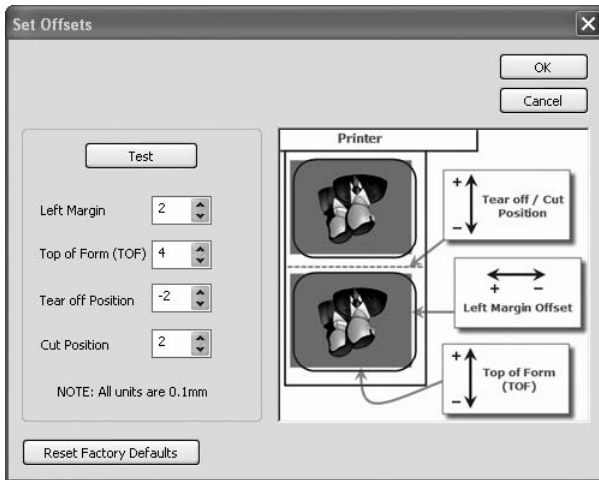


2. **Nonstandard / Non-translucent Backing Material.** Test the unit with the label sample material that came with the unit. If it prints correctly, your label stock may not be compatible. The label sensor needs to see the difference between a label and a backing material by seeing through the label stock for light variations. If it can not see through the label, problems will arise. If you must use this type of backing, try label stock that has a black mark on the back to show where the label begins. You will need to change the Sensor Type setting in the driver preferences to Reflective.
3. **Improper Label Gap Distance.** See Section 5 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. **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 2F for instructions.

The image is printing horizontally offset

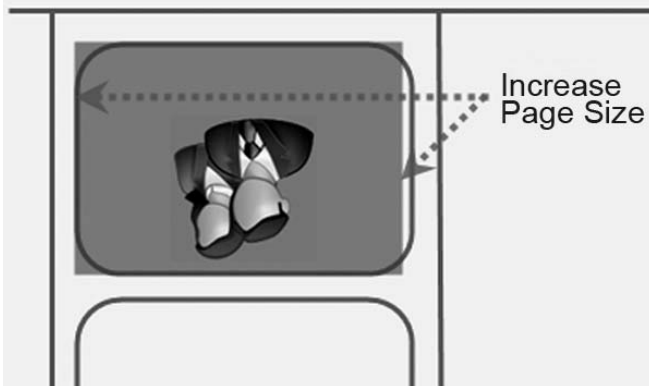
Two **printer driver settings** can affect this issue.

Left Margin Offset. This adjustment is found in the printer preferences area of the printer driver. If you see white space on the right (printers left) side of the label and overlap on the opposite side, decrease the number (negative numbers are allowed). If you see white space on the left (printers right) side of the label and overlap on the opposite side increase the number.



Note: Often times a space on the right (printers left) side indicates a margin around the label that is not being accounted for. The printer is factory calibrated for a 2mm margin. A larger margin around the label will cause a right (printers left) side space.

Page Size. Often the page size is not large enough for the label. If this is the case you may see white space on the right (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.



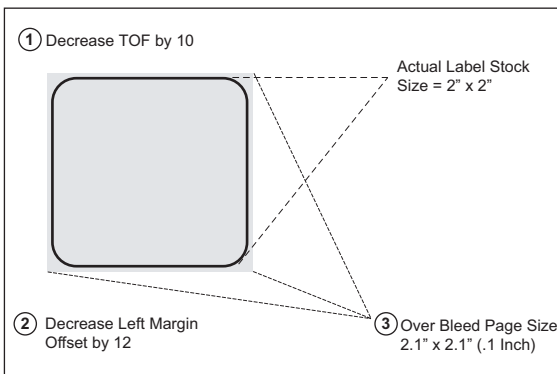
B. CREATING A FULL BLEED PRINT

1. If you are having trouble making the image cover the entire label, first make sure the image is printing at least as big as the **label size** you have selected. To accomplish this using Nice Label, make the image a few millimeters larger than the label by dragging the image over the edge of the label on all sides. The bounding box around the image will turn red when it is over the edge of the label. Try printing again to see if it covers the entire label. If not, move on to step two.
2. Adjust these settings in the printer driver preferences:

Page Size. Increase the page size width in the driver preferences by .1 inches. Increase the height by .1 inches. If you are using Nice Label, simply change the size under the File Menu - Label Setup. Increase the size of the image to fit the new larger page size. 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. Decrease the Left margin offset by half the increase of the page size width. In this case you would decrease the value by 12 (which corresponds to .05 inches). This will center the page size increase so there is a .05 inch over bleed on both left and right sides.

TOF. Decrease the Top of form by 10. This will cause the printer to start printing before the label and ensure a fully printed label.



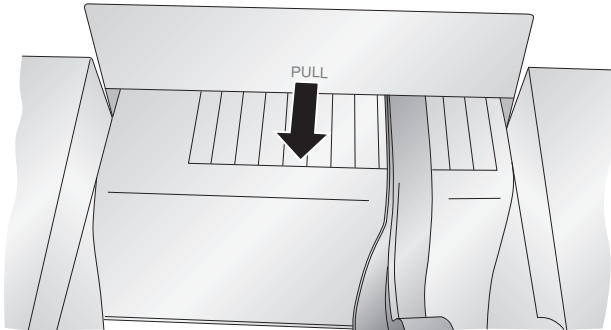
Note: It is best to over bleed as little as possible to avoid excess ink on the label backing. Also, over bleeding too much will cause the printer to skip labels. This is because the printer stops printing too late to sense the next label.

C. CLEARING A LABEL JAM

If there is a label jam in the printer mechanism first attempt to remove the jam by opening the cover and removing the jam from the printer feed output area.

If the jam can not be located, it is possible to remove a cover over the feed input area. Pull on the center of the cover as shown below to release the tabs on the sides.

To prevent future jams, use rubbing alcohol to remove an adhesive left in the printer feed area.



D. CLEANING THE PRINTER

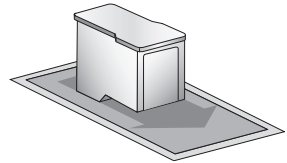
If any ink has gotten on to the printer casing itself, the case of the printer can be cleaned with an ammonia based window cleaner and a lint-free cloth.

Over time, ink overspray may gather at the base of the printer. The printer is designed using a vacuum system to gather most of this ink on a series of saturation pads. Eventually, these pads may need to be replaced. Contact tech support to determine if pad replacement is necessary.

E. CLEANING THE INK CARTRIDGE

It may be necessary to clean the ink cartridge nozzles if you notice reduced print quality, or if you suspect an cartridge nozzle has become slightly dried out or clogged. If you are having print quality problems, follow the steps below:

1. Remove the print cartridge.
2. Moisten a lint-free cloth with water.
3. Hold the cloth against the nozzles for three seconds. This will “wick” some additional ink onto the damp cloth.
4. Wipe in one direction only.
5. Repeat the process.



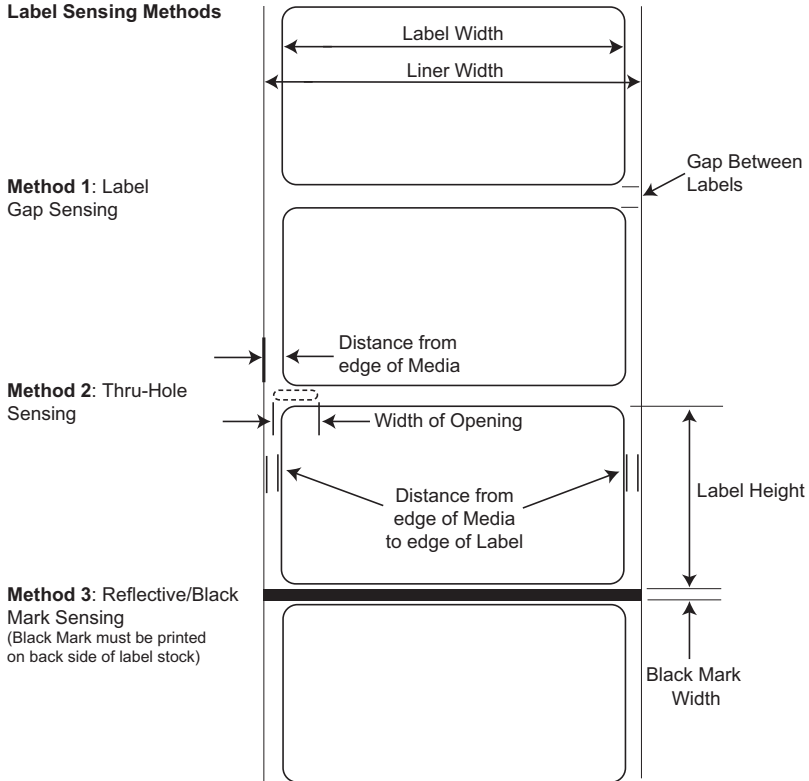
F. TECHNICAL SUPPORT

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 number using one of the methods listed below.

Source	Location
Primera Knowledge Base	www.primera.com/knowledgebase.html
NiceLabel Software Help files	Open the software. Click on the Help Menu - Contents
Email Support	www.primera.com/contact_tech_support.cfm
Chat Support	www.primera.com/knowledgebase.html
Phone Support	763-475-6669 (Mon - Fri 8 a.m. - 7 p.m CST)

Section 5: Label and Roll Specifications

Label Sensing Methods



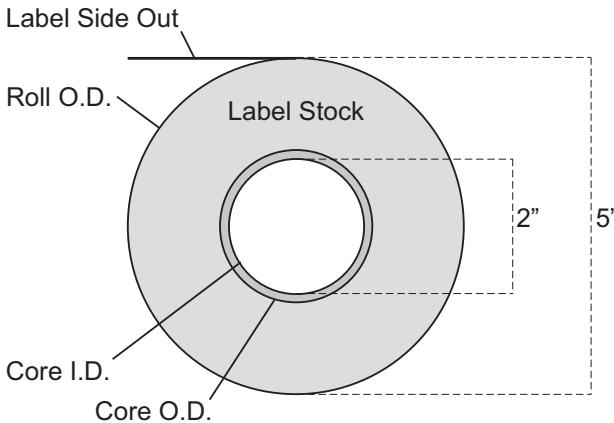
Note: See table below for Max and Min values in inches and mm..

	Max	Min
Label/Print width	4.25" (108mm)	0.75" (19mm)
Liner width	4.25" (108mm)	1" (25.4mm)
Label height/length	24" (609.6mm)	0.75" (19mm)
Gap between labels	0.75" (19mm)	0.10 (2.5mm)
Width of thru-hole opening	0.5" (12.7mm)	0.375 (9.5mm)

	Max	Min
Distance from edge of media to edge of thru-hole	1.90" (48.3mm)	0.20" (5.1mm)
Reflective/Black Mark Width*	Equal to distance between labels	0.10" (2.5mm)
Max Outer Diameter (OD)	5.0"(127mm)	N/A
Inner Core Diameter (ID)	see roll specifications below	
Stock Thickness	.006" (152 micron)	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.

Roll Specifications



Notes:

1. Label height ≤ 1.5 " requires a 2.00" I.D. x 3.00" O.D. core.
Label height > 1.5 " requires a 2.00" I.D. x 2.25" O.D. core.
2. Turret glue or 1/2"-wide 3M 928 double-sided removable tape must be used to attach stock to core. Removable tape must be positioned across full width of core. Other types of tape are not allowed.
3. End face of liner must align with end of core on both sides within 0.030".
(Core width should be the same as liner width.)
4. Masking tape or equivalent may be used to secure label stock to outside of roll.

Section 6: Technical Specifications

Print Method:	Inkjet
Print Resolutions:	4800 x 1200 dpi, 1200 x 1200 dpi, 600 x 600 dpi
Accessories:	A label cutter (part # 074263) can be connected to the printer to cut labels as they are fed out of the printer.
Ink Cartridge:	#53377 Black
Colors:	16.7 million
Media Types:	Roll-fed pressure-sensitive labels, roll-fed tags
Media Sensing:	Moveable see-through sensor for die-cut labels and reflective for tags with black stripe sensing
Ink Level Warning:	Calculates actual number of prints remaining based upon ink usage of graphics being printed (patent-pending)
Indicator Lights:	Power, Ink
Controls:	Pause, Load/Feed, Unload
Operating Systems:	Windows XP/2000
Data Interface:	USB 1.1
Minimum System:	Pentium® IV computer or better, 512MB RAM, 5GB free hard drive space, USB 1.1/2.0 port
Label Design Software:	NiceLabel™ SE Primera Edition included. Can also be used with most other popular Windows-based label design software programs
Electrical Rating:	12VDC, 5.0A
Power Requirements:	100-240VAC, 50/60 Hz, 60 watts
Certifications:	UL, UL-C, CE, FCC Class A
Weight:	7 lbs.
Dimensions:	10.4" wide X 15.3" deep X 7.1" high (closed) 17.4" high (open)
Warranty:	One year, parts and labor

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