041714-511311

Signature
SLIDE PRINTER

USER'S MANUAL

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 inaccordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Re-orient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help. Use of shielded cables is required to comply with the Class A limits of Part 15 of the FCC Rules. You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate and/or obtain warranty service for this equipment.

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

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!
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.

TOC

Section 1: Getting Started

THANK YOU...

...for purchasing a Signature Slide Printer. The Signature Slide Printer can significantly increase the efficiency of your lab while helping to reduce the risk of misidentification of specimens. It prints directly onto slides, eliminating hand-writing or expensive, difficult to apply xylene-resistant labels. With impressive 300 dpi print resolution, you can print text, graphics and logos along with high-resolution linear and 2D bar codes on every slide you process.

To begin using your Signature, please read this manual carefully. This Operator's Manual is a guide to the Signature Slide Printer only. There are other accessories and software that work with the Signature Slide Printers. Those items are purchased separately and include their own user's manual.

NOTE ON TERMS AND CONVENTIONS

From this point forward, the following terms and conventions will apply:

The Signature Slide Printer will be referred to simply as the Printer.

A. CHOOSING A GOOD LOCATION

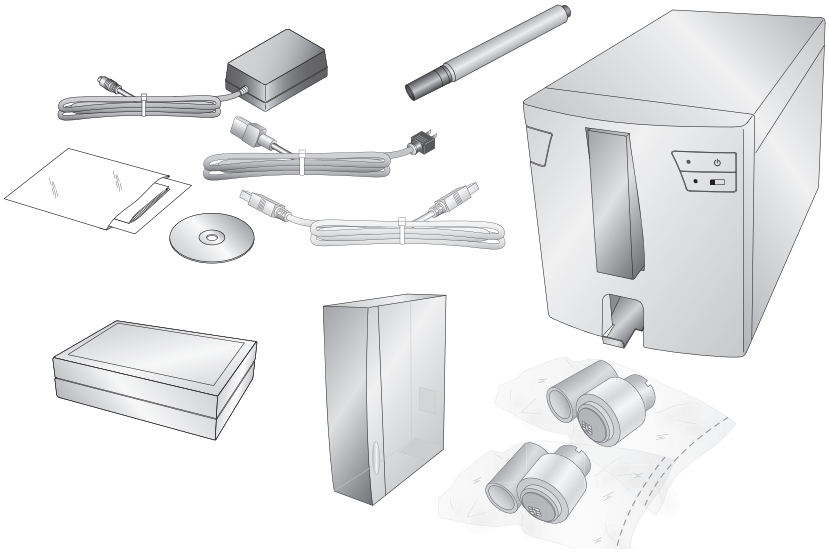
- Place the Printer in a location with adequate air circulation to prevent internal heat build-up. You will need at least 16" (41 cm) of overhead space to allow the top cover to open freely.
- Do not place the Printer near heat sources such as radiators or air ducts, or in a place subject to direct sunlight, excessive dust, mechanical vibration or shock.

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.

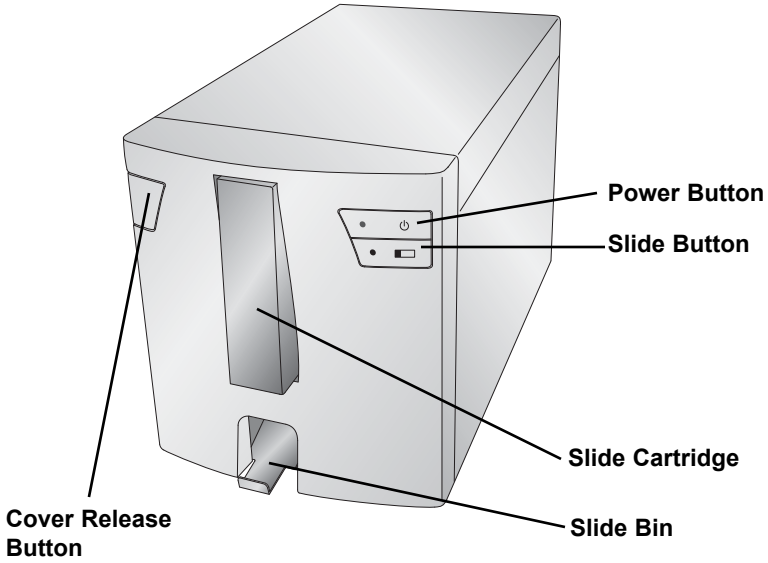
The following items should be included:

- Signature Slide Printer
- Power cord
- Power converter
- USB cable
- 100 pack of slides
- Blue slide cartridge
- One color ribbon
- One black ribbon
- Print head cleaning pen
- Installation disc and documentation



C. INDENTIFYING THE PARTS

The following illustrations show the various parts of the printer. These parts will be referred to throughout this manual so return here if you ever encounter a term that is unfamiliar to you.



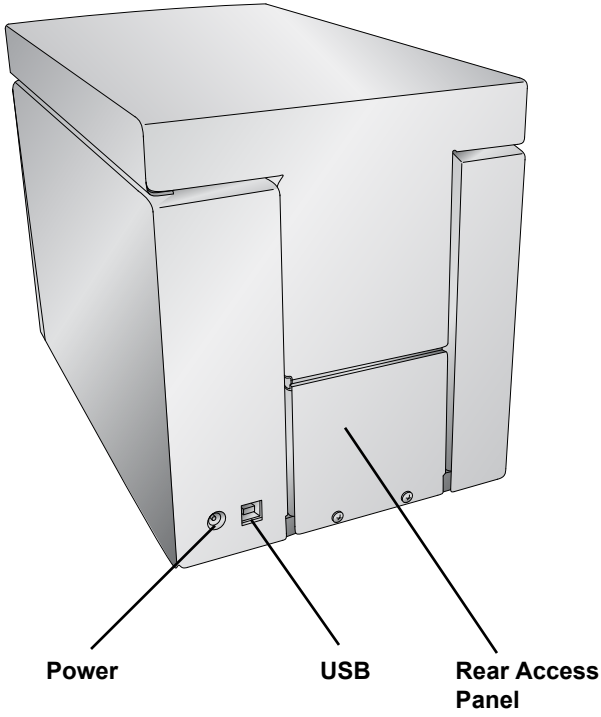
The **Cover Release Button** is a mechanical button that releases the spring-loaded mechanism on the cover.

The **Power Button** turns off the printer when the cover is closed. When the cover is open, press and hold the power button to reverse the slide rollers motors.

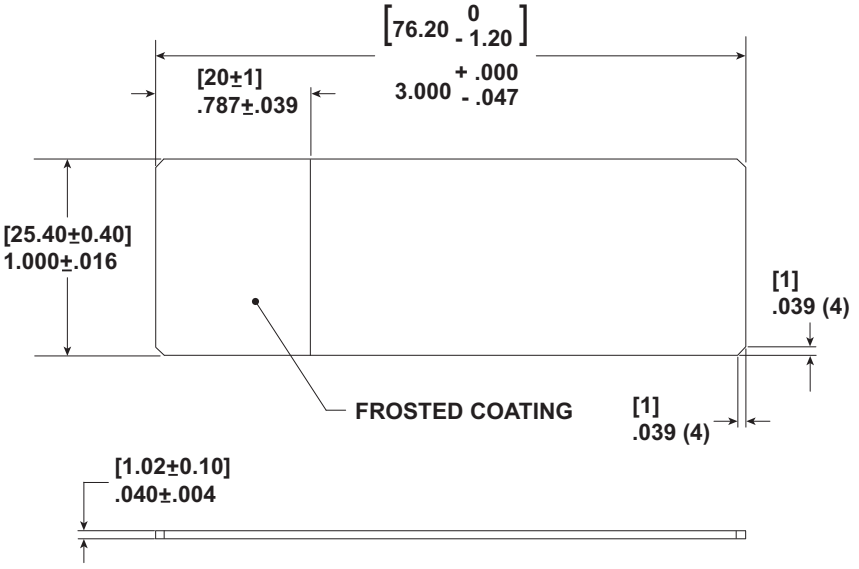
The **Slide Button** will advance any slide stuck in printer to the Slide Bin. When the cover is open, press and hold the slide button to advance the slide roller motors.

The **Slide Bin** will hold 15 Slides when it is fully ejected. Pull the Slide Bin forward to fully eject it. A sensor will trip if more than 15 standard 1mm slides are in the bin.

Rear View



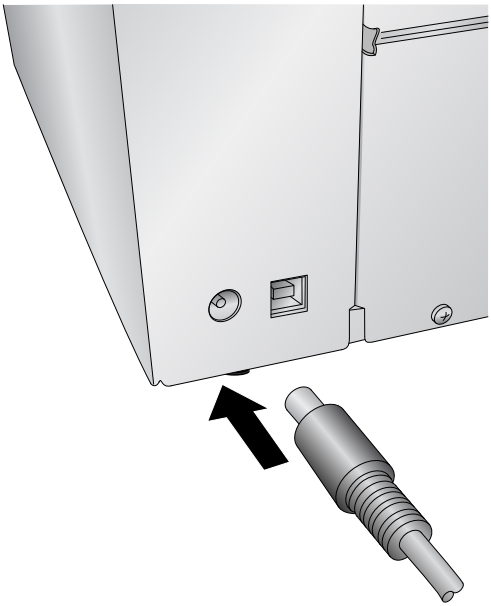
D. SLIDE SPECIFICATIONS



Slides should be 1.00" x 3.00" x .040" with clipped corners (1mm x 1mm). They should have ground edges and should be made from soda lime glass. Slides must have a coated white frosting. The frosted coating should cover 20mm of the length of the slide. The coating must be of uniform thickness across the entire width of the slide. The Signature Slide Printer uses thermal transfer print technology. This print technology requires stricter standards on the surface finish and cleanliness of the slide's frosted coating compared to slides that are used with ink jet technology printers. The coating must be smooth and free of any clumps or dust embedded in the coating or print defects will occur.

E. CONNECT POWER

Attach the power cord to the Power brick. Plug the power cord into a grounded outlet and the 5mm barrel connector to the back of the printer. The power converter is a universal 100v-240v input and a 12v output.

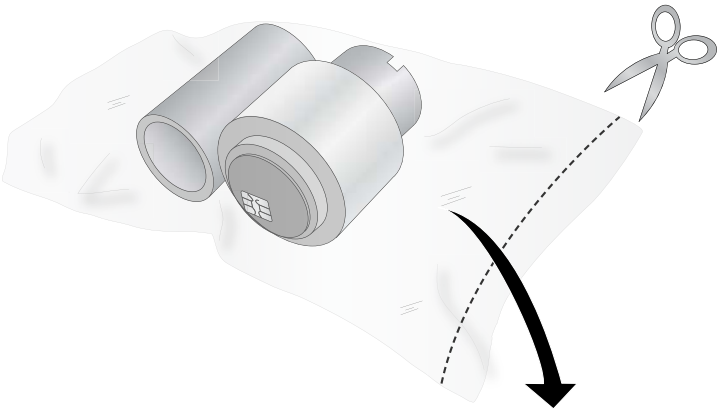


DO NOT CONNECT USB UNTIL THE PRINTER DRIVER HAS BEEN INSTALLED.

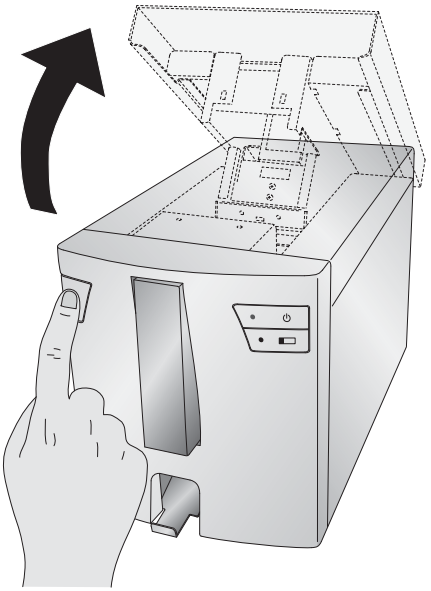
F. LOAD A RIBBON

The Signature Slide Printer uses either a Black ribbon (5000 prints) or a CMYK Color ribbons (1000 prints). You must use Primera ribbons to print with the Signature Slide Printer.

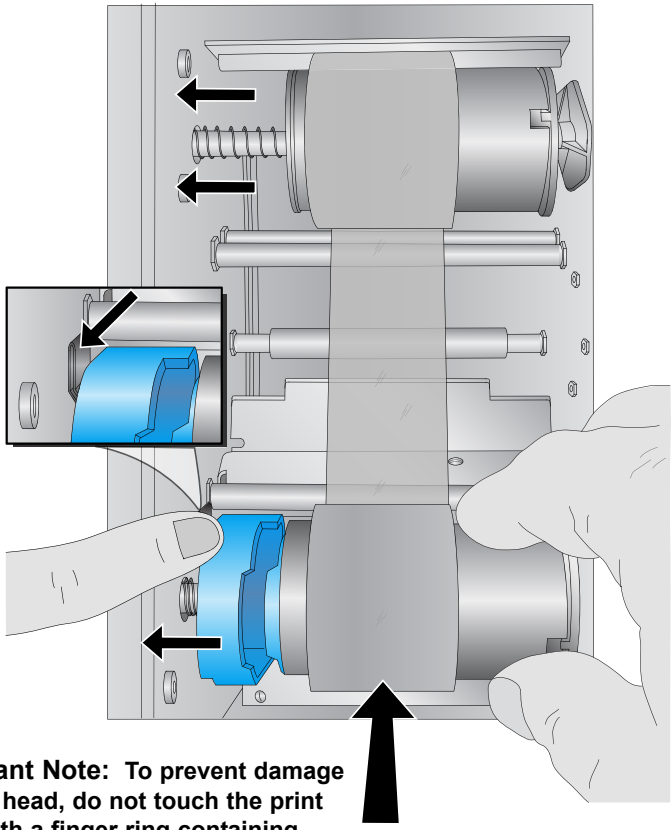
1. Remove a Color or Black Ribbon from its packaging. Detach the take up ribbon from the supply ribbon by gently pulling them apart.



2. Open the top cover by pressing the release button on the left side of the printer.



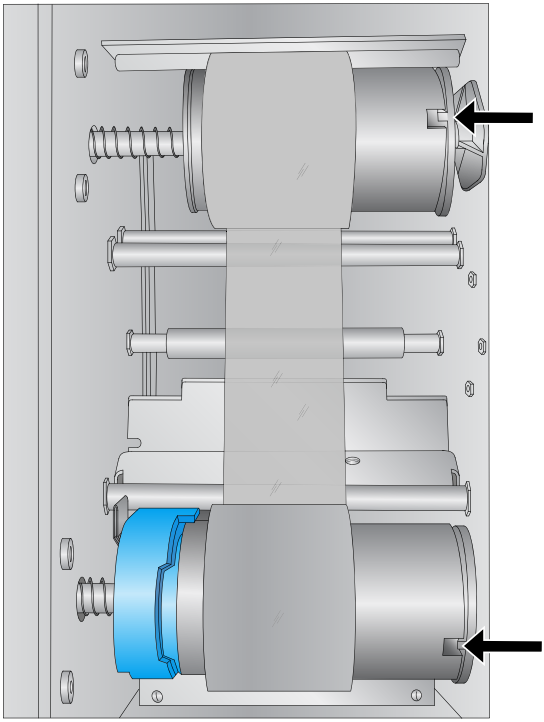
3. Remove the ribbon from its shrink wrapped packaging. Hold the take up (back) ribbon core with your left hand. Hold the supply (front) ribbon with your right hand. Install the take up ribbon by depressing the spring loaded hub inside the printer. Snap the take up ribbon core into place.



Important Note: To prevent damage to print head, do not touch the print head with a finger ring containing diamond or metal.

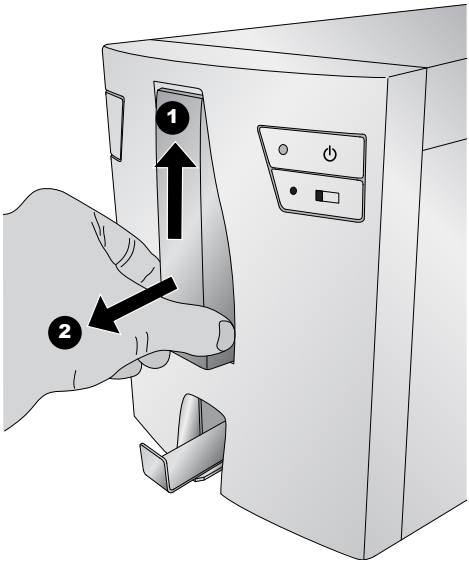
4. Push the blue spring loaded hub by depressing the tab with your left pointer finger. Insert the supply ribbon straight down. Match the blue shape on the ribbon to the corresponding depression on the hub. (You may need to rotate the blue shape on the ribbon.)

5. Rotate the hubs until the tabs on the right side hubs match the notches on the ribbon. Manually turn the take up core until the ribbon is taut.

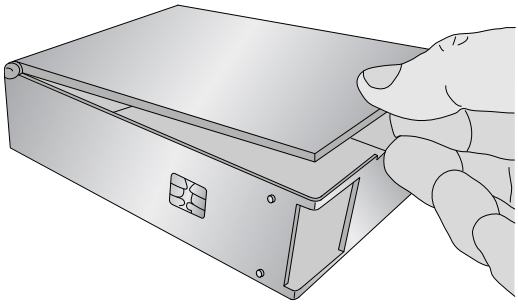


G. LOAD A SLIDE CARTRIDGE

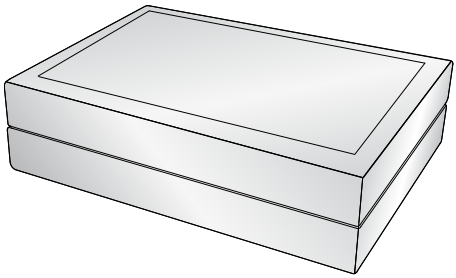
1. Remove the empty blue slide cartridge by pulling up and out.



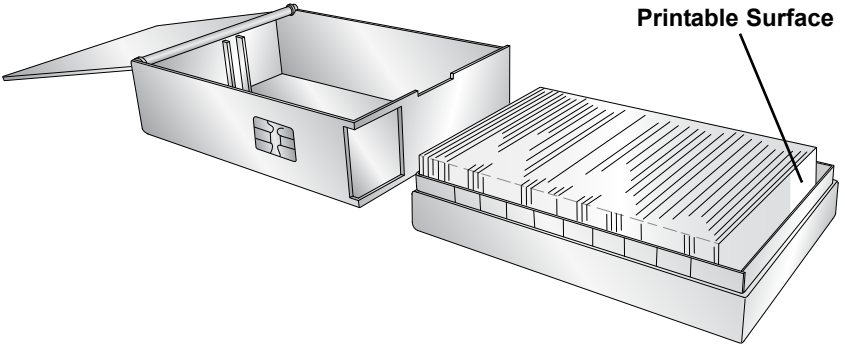
2. Open the blue side cartridge.



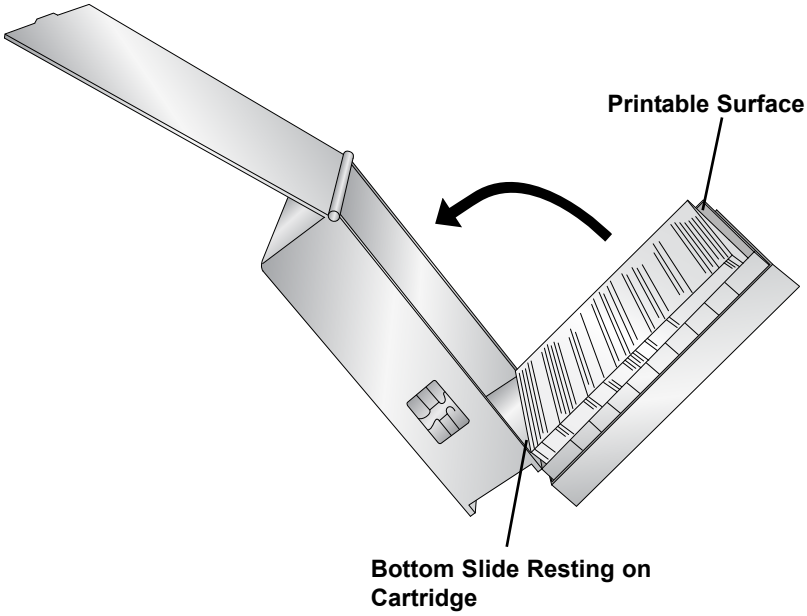
3. Locate the 100 pack slide box.



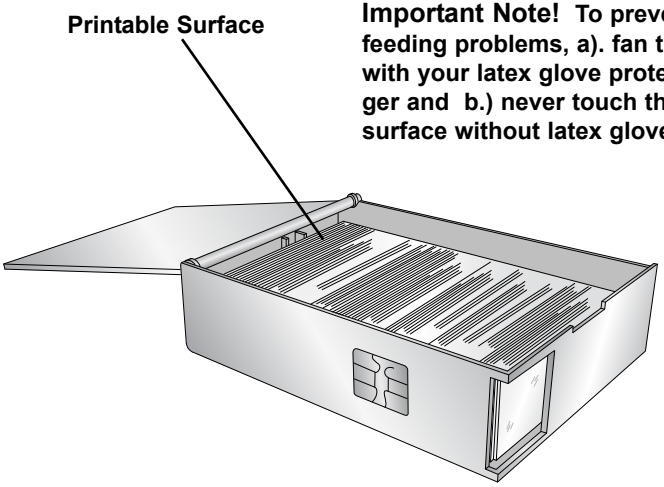
4. Place the slides next to the blue side cartridge so that the printable surface is on the TOP of the slide with the orientation shown below. **Note:** To achieve the proper orientation, it may be necessary to replace the box top, flip the box over and remove the other side of the box.



5. Carefully tip the slide box into the slide cartridge. The bottom slide in the box should rest on the edge of the slide cartridge. Note the location of the printable surface.

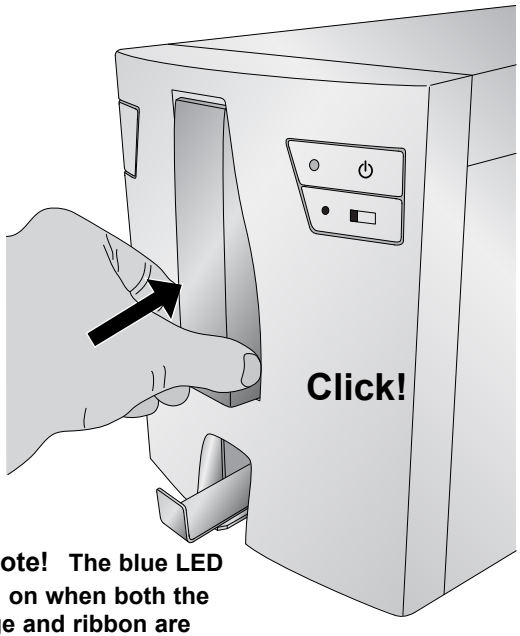


6. Once the slides are in place, straighten any that did not properly fall in the cartridge and ensure the printable surface is facing up and near the front of the cartridge as it is placed in the printer.



Important Note! To prevent feeding problems, a). fan the slides with your latex glove protected finger and b.) never touch the slide surface without latex gloves!

7. Close the lid and insert the cartridge into the printer. Push near the bottom of the cartridge until you hear a click.

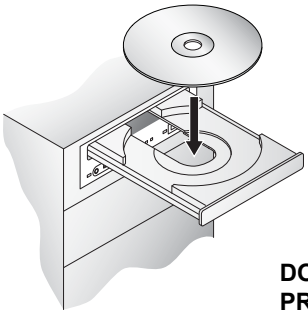


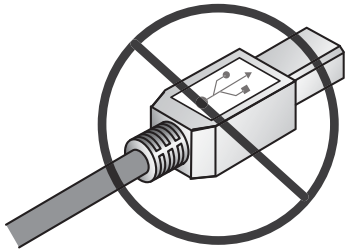
Important Note! The blue LED light will turn on when both the slide cartridge and ribbon are correctly installed.

H. INSTALL THE PRINTER DRIVER

If you have purchased the Primera Touch Screen you will not need to install the printer driver. It will be preinstalled on the Touch Screen. If you have your own computer that you will be connecting to Printer please follow these instructions.

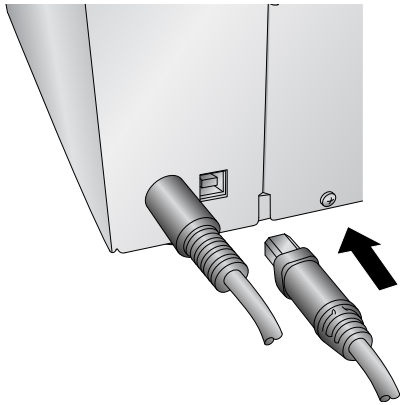
1. Insert the installation disc.

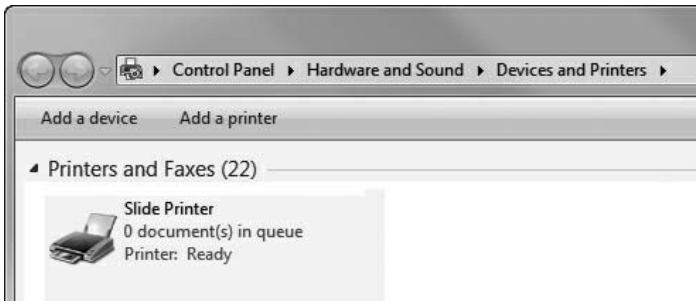




DO NOT PLUG IN THE USB CABLE UNTIL PROMPTED BY THE INSTALLER.

2. Follow the prompts in the installer to install the printer driver.
3. Finally plug in the USB cable to complete the installation.
4. When the printer driver has been installed successfully you will see a "Slide Printer" icon in your Devices and Printers.





Section 2: Printing Slides

If you have purchased the Primera PTLAB software or the Primera Touch Screen Computer with the PTLAB software you can use it to print to the Signature Slide Printer. The PTLab software has its own manual. Please refer to it for detailed capabilities.

A. PRINTING FROM OTHER PROGRAMS

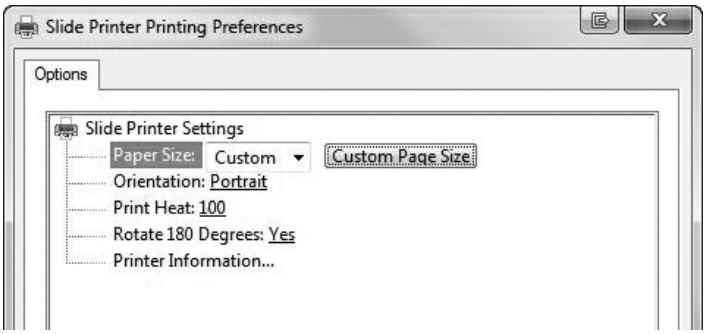
Printing to the Slide Printer from other software can be accomplished by using the standard Windows driver. The document requirements are listed below:

- Default Page = .87" (22mm) W x .67" (17mm) H
- Colors = Cyan, Magenta, Yellow, Red, Blue/Purple, Green, Black
- All colors must be 100% saturated

To print, simply go the applications print function. Choose the "Slide Printer" as the printer. Click OK to print.

B. PRINTER DRIVER SETTINGS

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



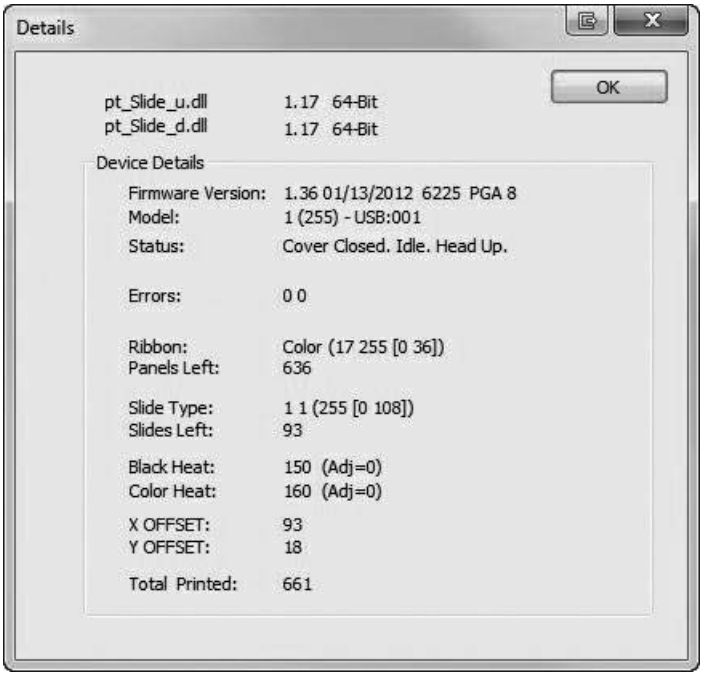
Paper Size: Default paper size is set to the maximum. Edit these settings if you are printing to slides with a smaller printable area.

Orientation: Change the orientation to Portrait or Landscape.

Print Heat: Increase or decrease the Print Heat from 1-255. Increase to print heat to improve print quality. 100 is the default value. Sustained use of a high print heat values will decrease the life of the print head and potentially break the ribbon. Different manufacturers of slides may require more or less heat. The minimum heat settings possible that result in a good print should be used.

Rotate 180 Degrees: Flips the image up-side down . Default setting is Yes.

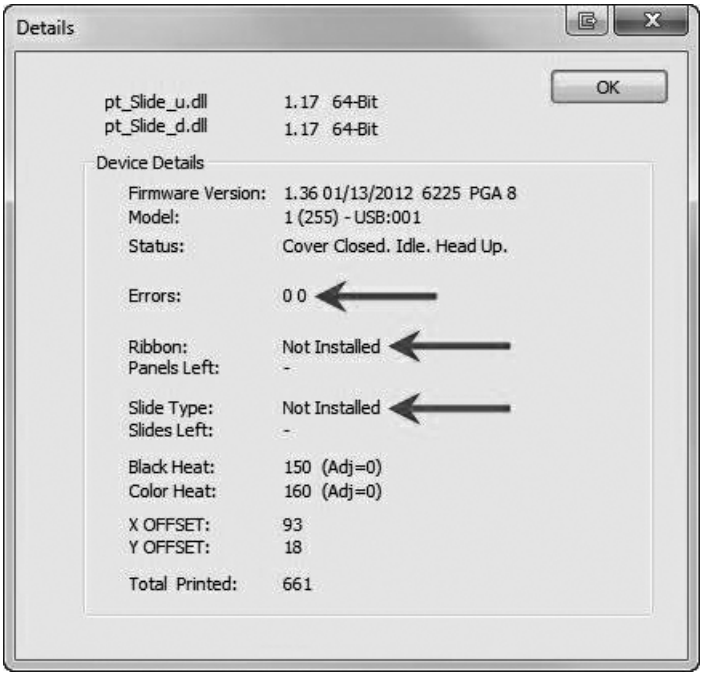
Printer Information… Click here to display, printer driver versions, firmware versions, total prints, current status, remaining slides, remaining prints and offset values.



Section 3: Maintenance and Troubleshooting

A. INDICATOR LIGHTS AND ERROR CODES

Power light on Steady - Slide Cartridge light **ON**	Ready to receive Print.
Power light on Steady - Slide Cartridge light **OFF**	No ribbon installed and/ or No Slide Cartridge Installed.
Flashing Slide Cartridge light and slide button light	An error is present. Refer to error code or error message displayed in the printer information dialog in the printer driver preferences area. See the error code list below. (PTLab will display these errors in the software)

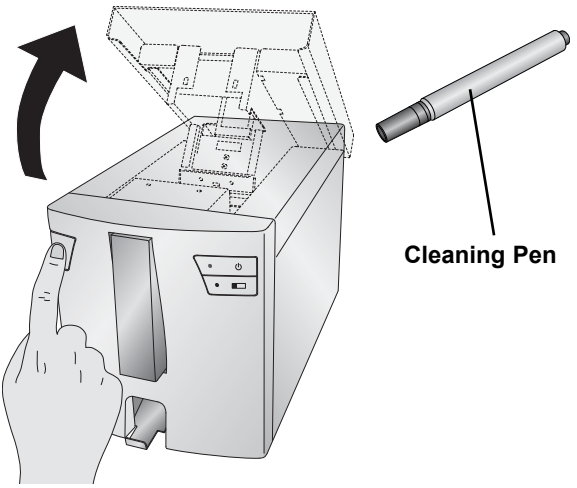


Slide Cartridge Invalid	80 0
Ribbon PWM	40 0
Head Load	20 0
Input Empty	10 0
Input Jam	08 0
Ribbon Advance Error	04 0
Ribbon Invalid	02 0
Lifter Not Functioning	01 0
Ribbon Out	00 01
Ribbon Break	00 02
Output Full	00 08
Slide Connection Error	00 10
Ribbon Connection Error	00 20
Ribbon Jam Error	00 40

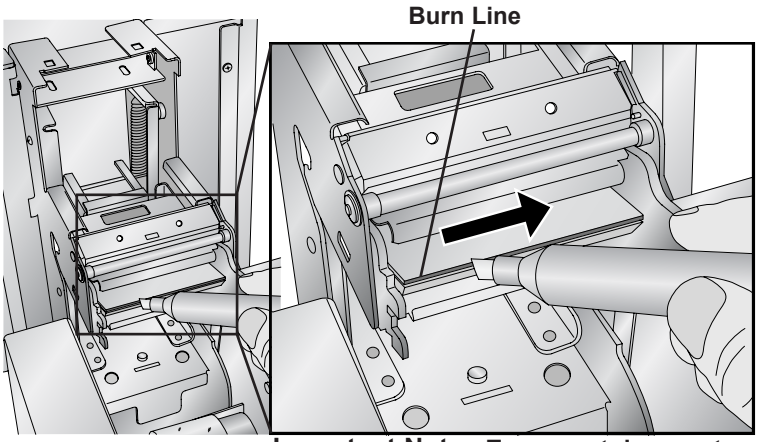
B. CLEANING THE PRINT HEAD

A print head cleaning pen is included with the printer. Clean the print head after every ribbon change or if you notice quality problems such as vertical line through the entire print.

1. Unplug Power.
2. Open the printer cover.



3. Locate the Print head mounted to the underside of the cover.



Important Note: To prevent damage to print head, do not touch the burn line with a finger ring containing diamond or metal.

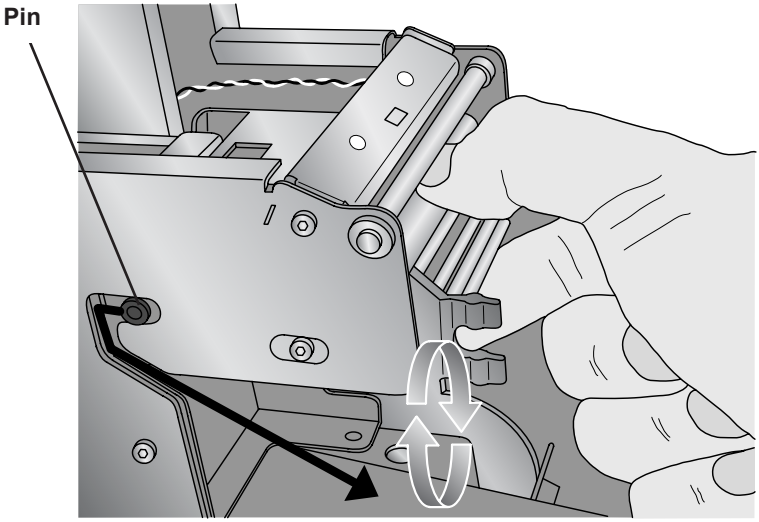
4. Clean the print head using the print head pen. Swipe the tip across the burn line 1 or 2 times. If you notice the tip getting dirty, clean it by wiping it across a clean paper surface.

C. REPLACING THE PRINT HEAD

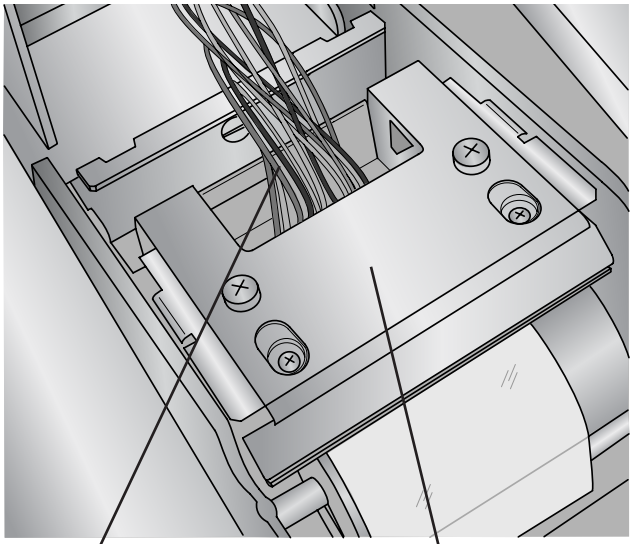
If cleaning the print head (Section 3B) does not resolve a quality problem such as a vertical line through the entire print, it may be time to replace the print head. Print heads are designed to last tens of thousands of prints. However, it is possible a premature failure could occur if high heat settings were continuously used, it is used in a particularly hot environment or if slides not recommended for the printer are used. **Print Head Part Number : 78250**

1. Unplug Power.
2. Open the printer cover.
3. Locate the Print head mounted to the underside of the cover.

4. Push back , then down and then flip it 180 degrees to reveal the cable connector. Watch the pin on the side of the print head mechanism to guide the print head out of the metal housing.

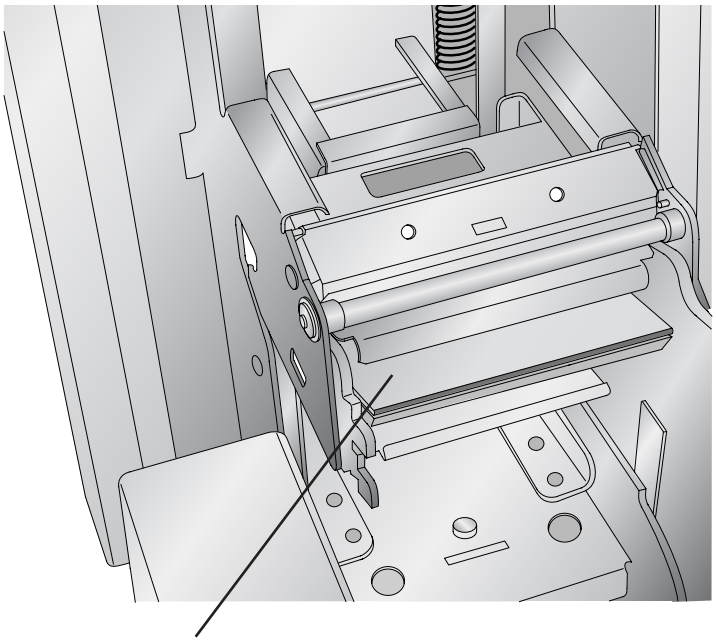


5. Disconnect the cable from the connector. Pull on the cables to remove the connector.



6. Connect the new print head.
7. Rotate the printhead 180 degrees and push it back into the metal housing.
8. **IMPORTANT!** Find the Resistance value printed on the printhead.

   Example: R= 3180



Before printing, enter this value in the advanced settings area of the PTLab software.

Click the settings icon in the upper right corner of PTLab. To enable the advanced area of settings hold SHIFT + A. Now click on Advanced Settings. Enter the Head Resistance. Click Set.

D. TROUBLESHOOTING PRINT QUALITY

Print Quality problems are usually caused by debris or flaws on the printable surface of the slide. Use the chart below to diagnose quality problems.

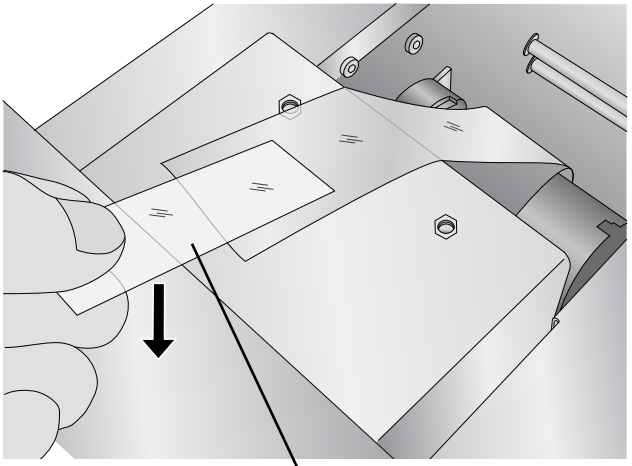
	Vertical Line. A line vertically through the entire print is cause by dust or debris on the print head burn line or blown pixel on the print head. See Section 3B for cleaning instructions and 3C for print head replacement instructions.
	Horizontal Line. A horizontal line through print is cause by a small bump on the slide. This causes the entire print head to lift at this point so the effect of the bump is extended to the left and right of the bump. Low quality or defective slides may be the cause.
	Group of Spots. This may by cause by dust particles on the slide. Keep the slide clean. Store them in the blue slide cartridge at all times. Avoid handling the slides. Do not remove them from their shrink wrapping until you will be inserting the slides into the blue cartridge.
	Light Printing. Light printing is caused by insufficient heat or slides that are not thermal printable (inkjet). You may be able to improve quality by increasing the heat setting in the Printer Preferences or the PTLab software. Different manufacturers of slides may require more or less heat. The minimum heat settings possible that result in a good print should be used. (Section 2B)
	Random Missing Area (Print Surface Intact). This is caused by a rough printable surface. Low quality slides, defective slides or slides that are not thermal printable (inkjet) may be the cause.

	Random Missing Area (Printable Surface Missing). If the printable surface is missing or scratched off, the printer cannot print in these areas. Low quality slides, defective slides or mishandling of slides may be the cause of this problem.
	Rounding at the leading edge. Rounding at the leading edge of any new color on a slide is typically caused by low quality slides or slides that are not thermal printable (inkjet).. If changing slides is not an option consider modifying your template to include a print quality line at the bottom of the printable area.

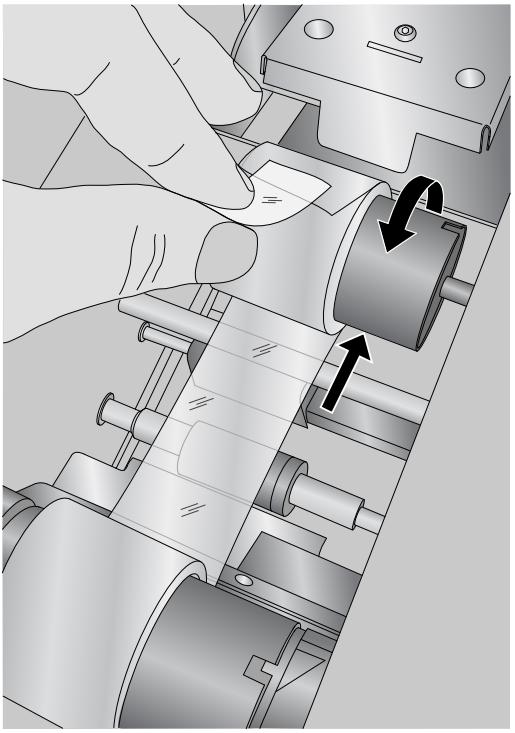
E. REPAIRING/PREVENTING RIBBON BREAKS

Ribbon breaks can occur if the head setting is too high. To repair a ribbon break follow this procedure:

1. Open the cover.
2. Locate the supply roll ribbon. Place it on the top of the print as shown below. Attach a piece of tape.



3. Feed the supply side of the ribbon under the take up roll. Tape the supply ribbon to the take-up roll.



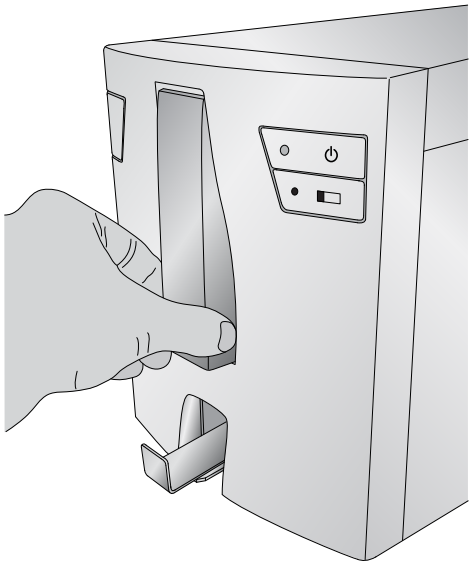
4. Manually turn the take-up roll several complete rotatations to prevent the tape from coming loose.
5. Close the Cover.

F. RETRIEVING A BROKEN OR STUCK SLIDE

If a slide is broken or stuck in the system there are two access panels that can be used to retrieve the slide. If a slide is found inside the printer, use the Power and Slide buttons to move the internal slide rollers forward and back to advance the slide to a point where it can be removed. Follow this procedure:

1. Open the top cover.
2. Remove the Ribbon.

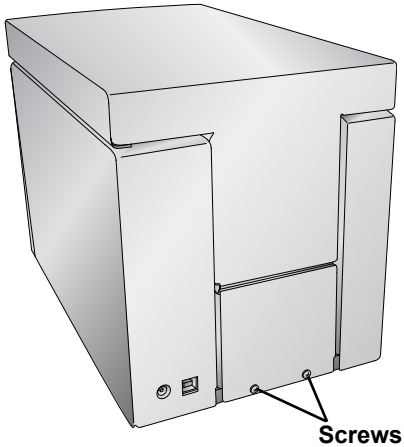
3. Remove the slide cartridge.



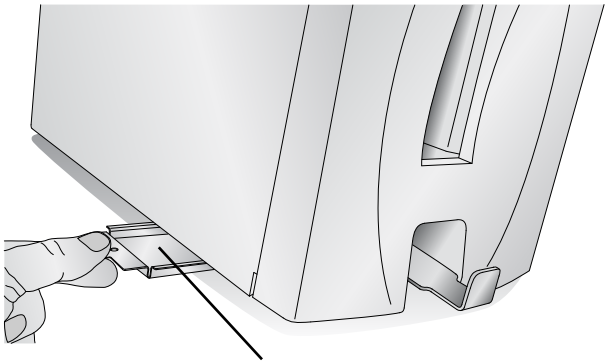
4. In the slide cartridge compartment check near the bottom roller for a slide.
5. Check under the ribbon. Use the Power and Slide buttons to move the slide to a position where you can remove it.

Tip! ***Once the slide is on the rubber belts near the back, you can close the cover and press the slide button to advance the side down the slide chute.***

6. If the slide is near the back and you are unable to retrieve it using the buttons you can remove the back cover panel.



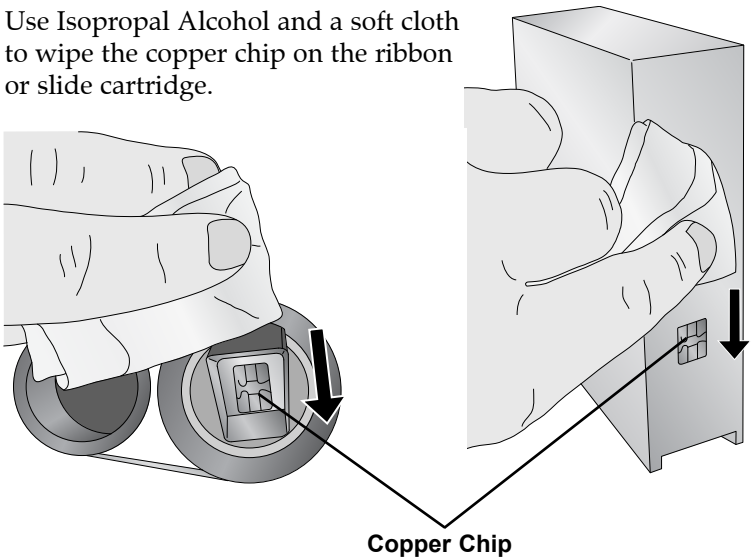
7. Finally if the slide is broken you can remove it using the bottom catch bin. Pick up the slide printer and rotate it in multiple directions until all of the pieces are in the bin. Now pull out the bin and empty it into the trash.



G. CARTRIDGE OR RIBBON RECOGNITION PROBLEMS

If your cartridge or ribbon is installed but the blue LED light behind the cartridge does not turn on or the software says no cartridge or ribbon is installed, you may need to clean the copper chip on the ribbon or cartridge.

Use Isopropal Alcohol and a soft cloth to wipe the copper chip on the ribbon or slide cartridge.



H. TECHNICAL SUPPORT

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

Source	Location
Primera Knowledge Base	http://www.primerahealthcare.com/knowledgebase.html
Email Support	http://www.primerahealthcare.com/contact_tech_support.html
Phone Support	763-475-6979 (Mon - Fri 8 a.m. - 6 p.m CST)

TOC

Section 4. Technical Specifications

Printing technology:	Thermal transfer
Print speed:	Up to 7 slides/minute (monochrome) Up to 5 slides/minute (solid colors) Up to 3 slides/minute (process colors)
Print resolution:	300 dpi
Ink type:	Resin thermal transfer
Ribbon types:	CMYK: 1000 prints Black: 5000 prints
Printable colors:	8 solid colors
Slide types:	3" x 1" standard or positive charged, white frosted end, clipped corners
Slide capacity:	100 slides/cassette
External cassette capacity:	100 slides
Output tray capacity:	15 slides
Construction:	Steel frame with powder-coated steel and plastic covers
Cabinet color:	Medical white
Data interface:	USB 2.0
Printer drivers:	Windows™ XP/Vista/7
Height:	8.6" (218.4mm)
Width:	7.08" (179.8mm)
Depth:	12.58" (319.5mm)
Weight:	16.8 lbs. (7.62 kg)
Power requirements:	100-240VAC, 50/60 Hz, 60 watts
Warranty:	One year parts and labor

Printed in the United States of America
P/N 511311

Signature CASSETTE PRINTER
Signature SLIDE PRINTER

PRIMERA TECHNOLOGY, INC.

PTLab User Manual

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LIS Integration

Managing Slide Levels

Managing Hoppers (Cassette Printer)

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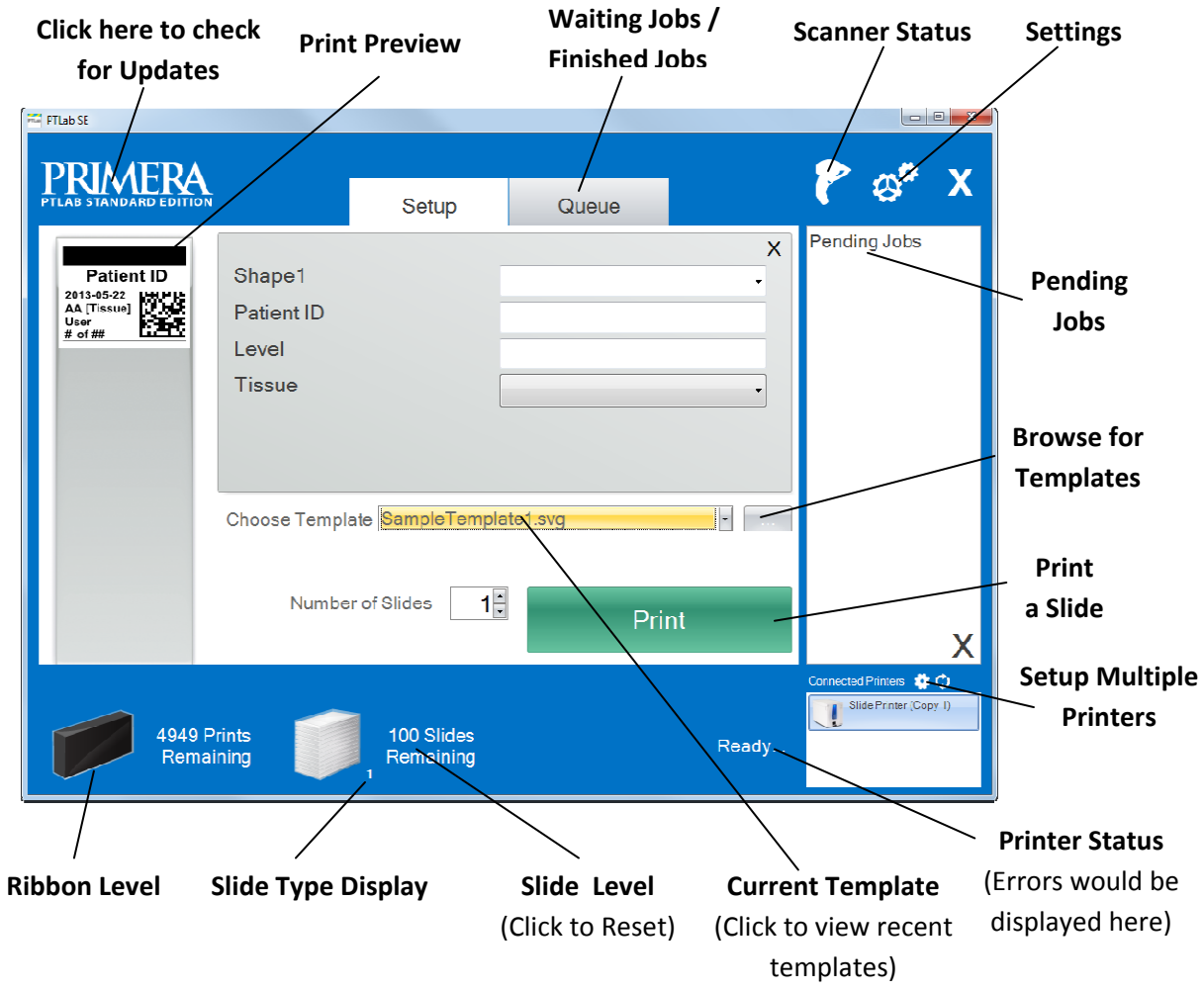
Section 10 Networking with PTNet Print Server

Section 1: Overview

PTLab with a Slide Printer Connected.

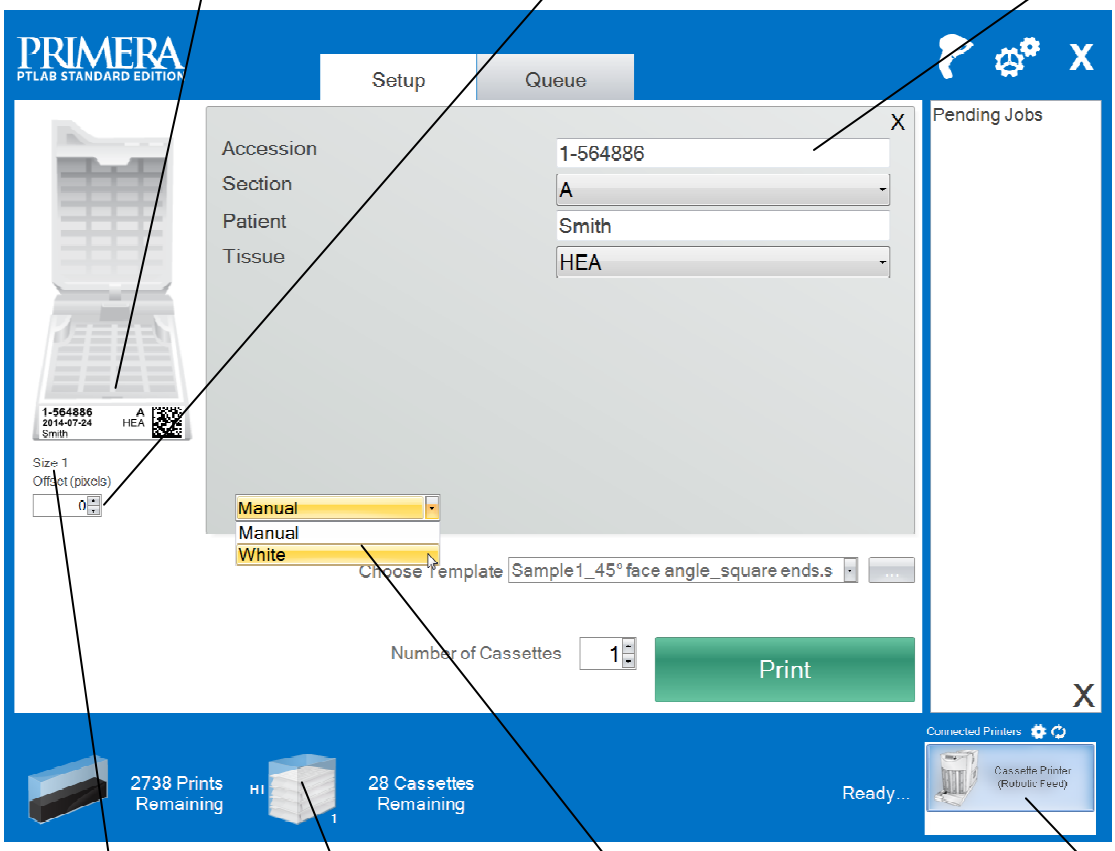


PTLab with a Cassette Printer – Robotic Feed connected (Only differences are noted)

Visual representation of cassette

Adjust horizontal offset of printed cassette

Template Designed specifically for size 1 cassette



Cassette Size associated with current template (Edit template to change)

Current Hopper Level (Mouse over to see all hopper levels)

Hopper selection (Only Present when Robot is connected)

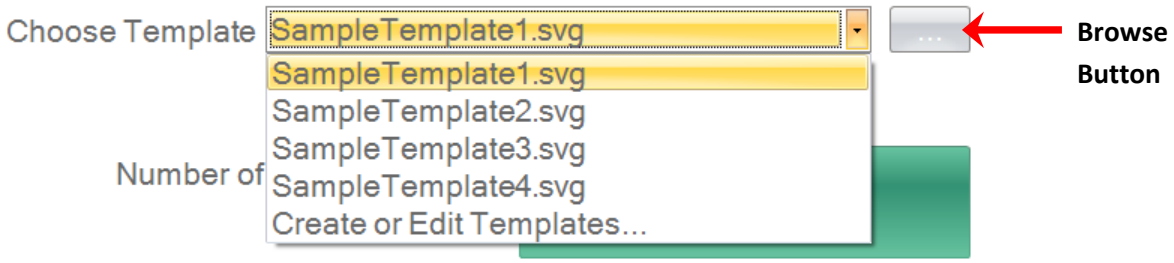
Indicates Cassette Printer (Robotic Feed is connected)

Section 2: Manual Input

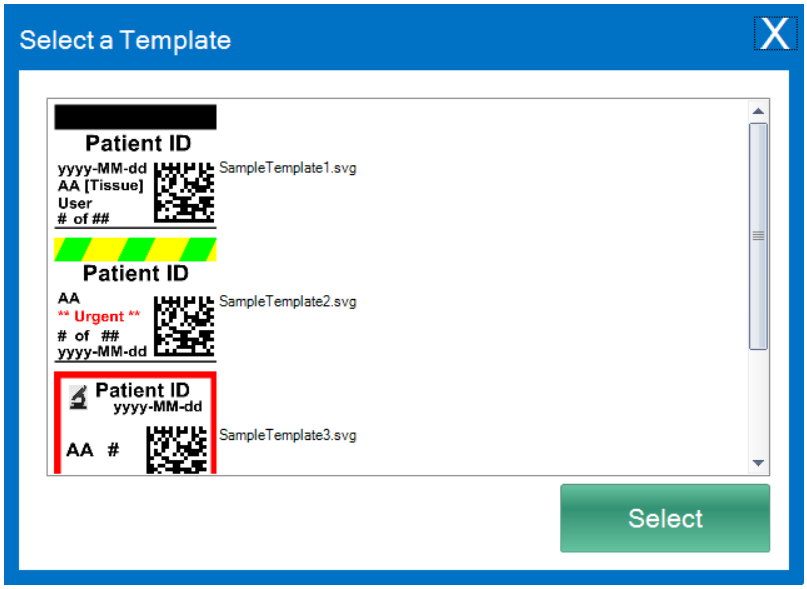
This is the least difficult data entry method to implement but still presents the possibility for data errors to be introduced by the user. Enter the data by typing or by choosing from menus. The type of menu, the order, the labels and even the slide type are all customizable using the PTTemplate software.

The software comes preloaded with several template options. These options are meant to provide you with a sampling of the printer's capability. They are not necessarily suited for practical use. Before using the printer in a lab you will probably want to edit an existing template or create an entirely new template using the PTTemplate software (See the PTTemplate software manual).

To quickly choose a preloaded template click the drop down arrow to view recent templates. Choose one.

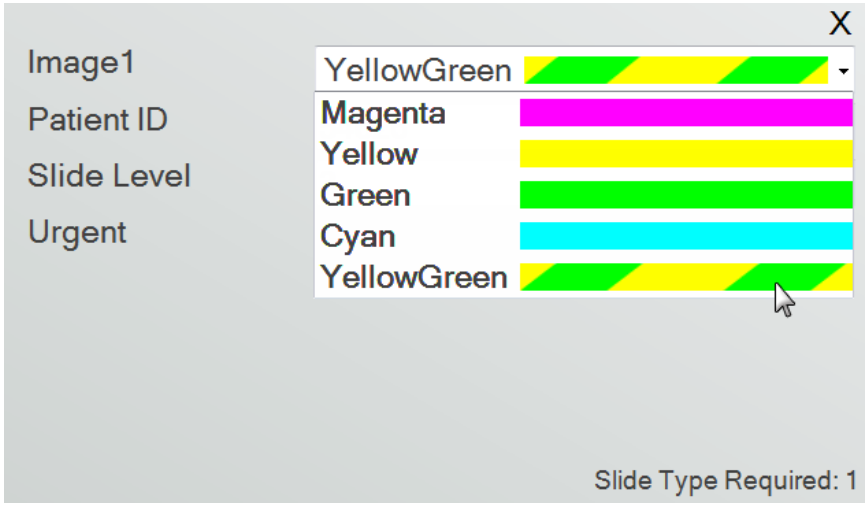


You may also click the browse button to the right of the currently selected template to view the same list of available templates with a preview.

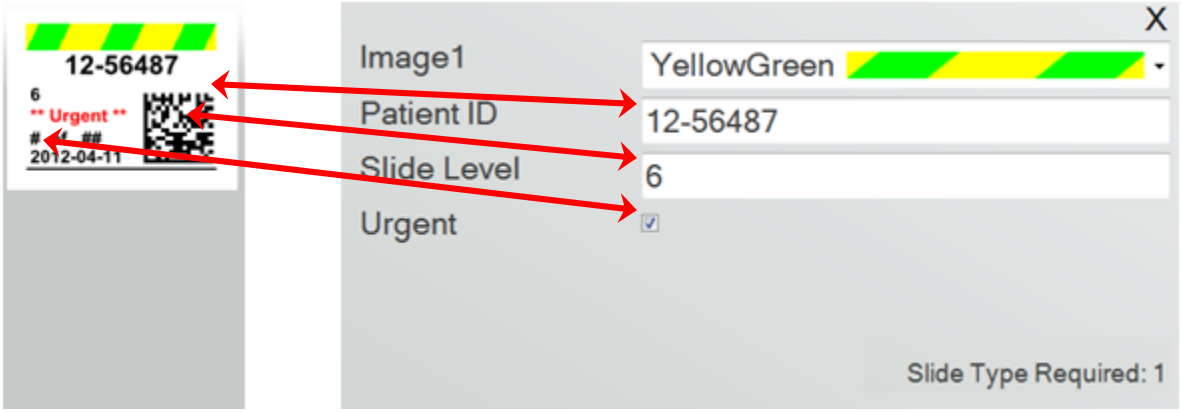


Once you have selected the template you must enter the information you would like to print.

1. For this example Sample Template2.svg was selected. Choose a color swatch to be printed.

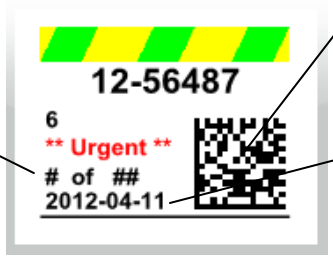


2. Type the necessary information in the text fields that require manual input. The preview will update as you enter the information.



3. This template also includes three other automatic fields/features:

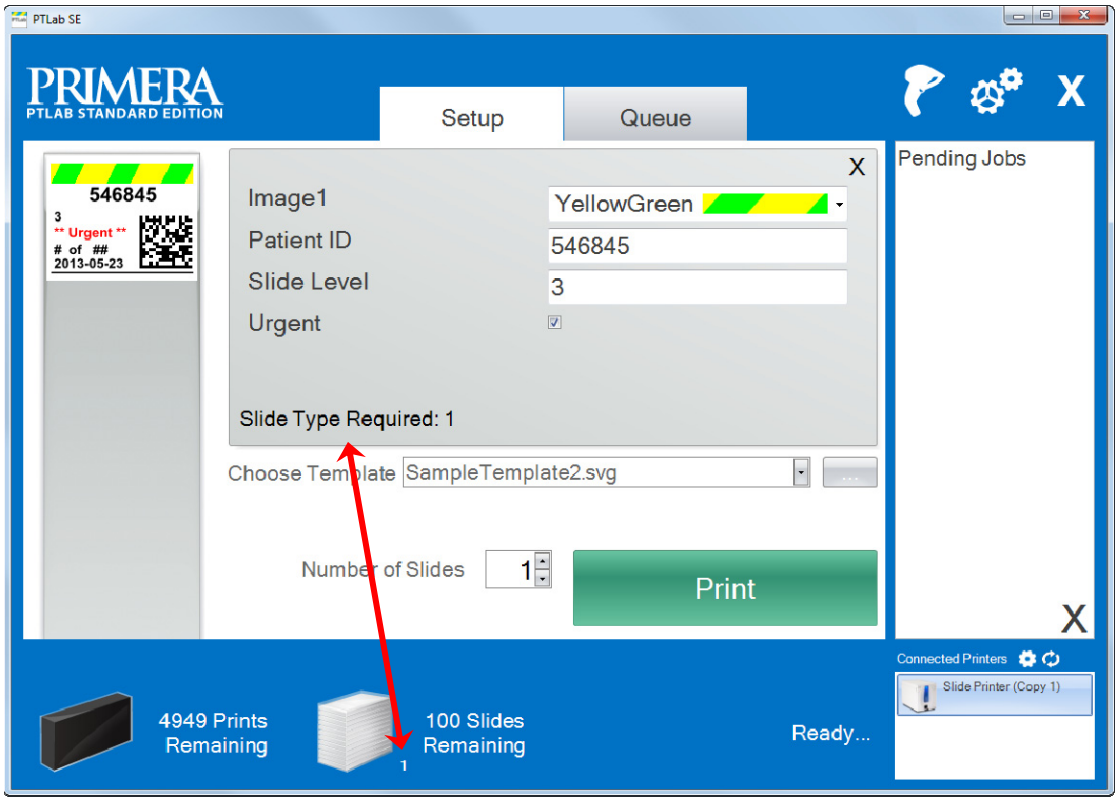
Slide Number in Set
Example: Slide "2 of 7" will be printed on the slide.



Barcode
A barcode encoded with the patient ID and the Slide Level will be printed.

Date
The current date will automatically be printed.

4. Finally, this template requires Slide Type 1. Slide type could be set to any number between 1 and 100 or removed entirely. Slide types can be used as internal designations in a lab for different types of slides such as charged slides (See section 7.6)



There are many other template fields/features available to preview in the other preloaded slide templates. Any of the fields found in the other preloaded templates can be added to a custom template that you can create in the PTTemplate software.

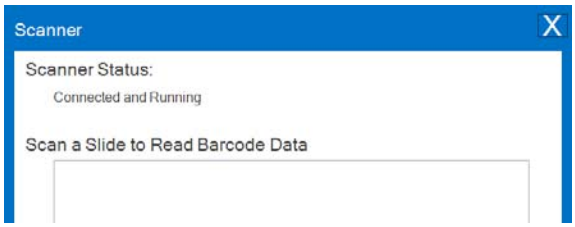
Section 3: Scan a Barcode

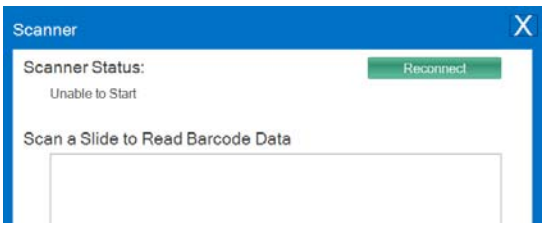
3.1 Overview (Sample / Demo Scan)

If the template supports it you can scan an existing linear or 2D barcode using the optional scanner from another label. This will allow you to directly transfer some or all the information on the label to the slide printer template. If all information to complete the template is present, you can either choose to automatically print the slide or send the job to the Pending Jobs queue.

If the scanned barcode contains the proper fields, the software can automatically choose the template needed, automatically adding the information to be printed, set a slide type (section 7.6), and even set the number of copies. Follow the instructions below to see an example of how this can work.

Connect your scanner and install the driver. Open PTLab. To verify that PTLab is communicating with your scanner, click the scanner icon at the top right part of your screen.





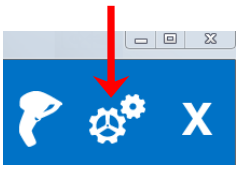
Scanner Status should report Connected and Running. If it cannot communicate you will see an error message and a "Reconnect" button will be present. Click "Reconnect".

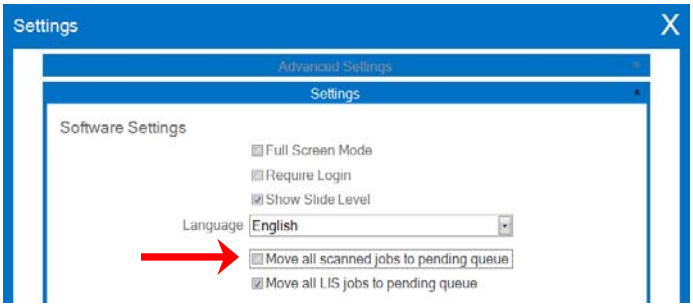
On this screen you may also display the character string which is actually encoded into any scanned barcode. Simply scan the barcode and the data string will appear.

Close this window before attempting a scan/print or scan/pending jobs operation.

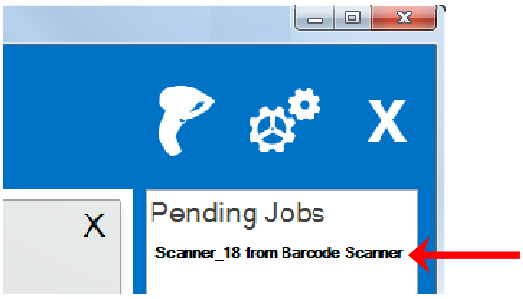
2. At any point while the software is open, simply scan a barcode to print its corresponding template or send the template to the pending jobs queue for review. The following sample label is preconfigured to automatically print or send it to pending jobs.

3. If "Move all scanned jobs to pending queue" is **unchecked**, the associated template will automatically print the slide.

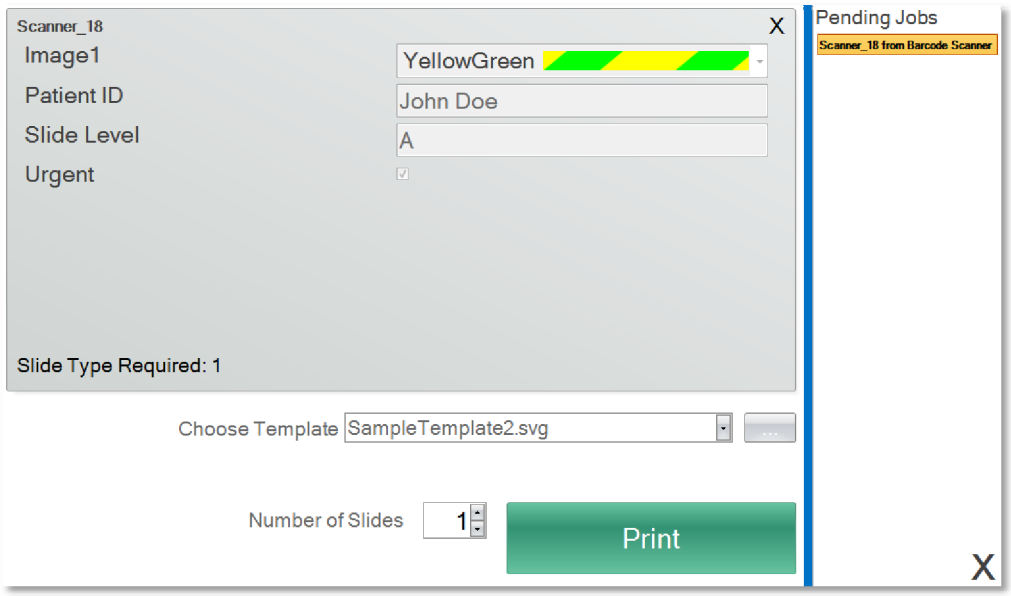




4. If "Move all scanned jobs to pending queue" is **checked**, the job will appear in the pending jobs queue.



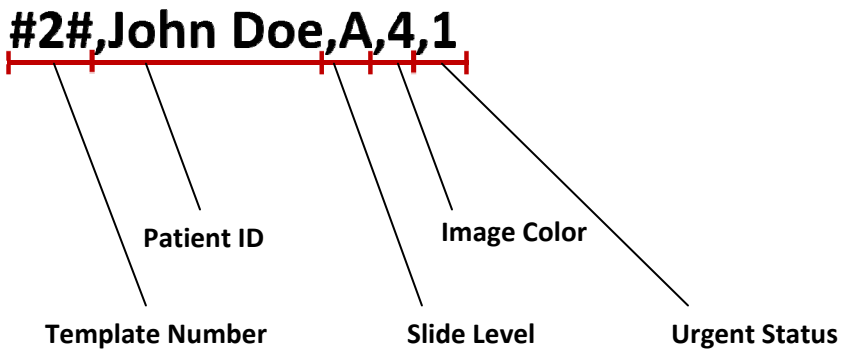
5. Click on the job to display the template and review the data before printing.



6. Click Print to print the slide.

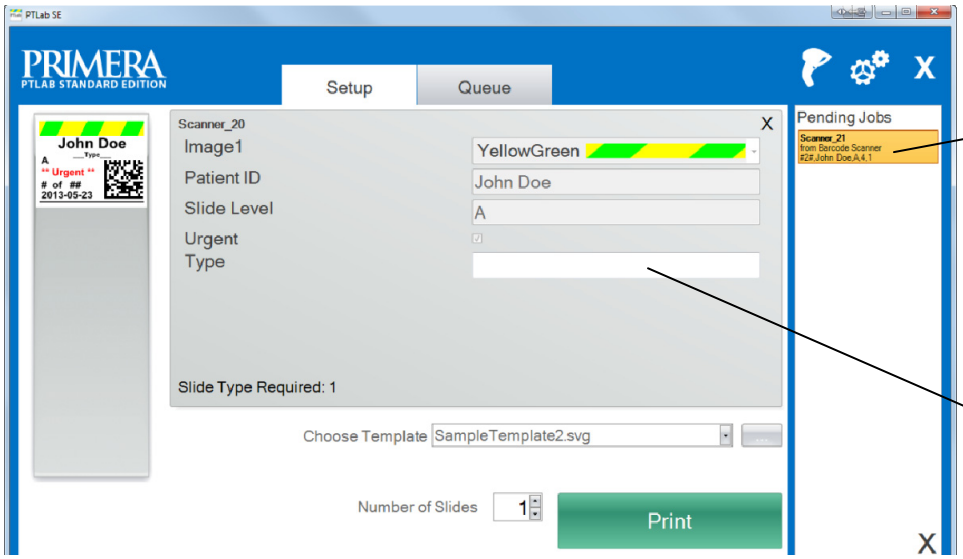
3.2 Scanned Barcode Requirements

In the sample case described in the previous section, the printed barcode on the specimen label required that the barcode be encoded with the following data in the order shown. This is not a requirement for all templates. You can edit or create a template to accept data in the format of an existing 2D barcode that is currently being printed. This can be accomplished using the PTTemplate software.



3.3 Incomplete Templates

If the template has more input fields than are provided by the data string scanned in from the barcode, the job will automatically go into the Pending Jobs queue. This will be the case regardless of whether you have "Move all scanned jobs to pending queue" checked or unchecked.



You may now choose to fill in the missing information or print the slide without the extra field information.

Section 4: LIS Integration (PTLab PE Only)

Using the Professional Edition (PE) version of this software, your LIS system can send orders for printed slides/cassettes to the printer and print them with no user interaction at all. This capability requires the purchase of an upgrade to this software.

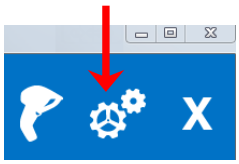
4.1 Install PTLab Professional Edition

1. Insert the Dongle into an open USB port.

2. If the installer does not automatically start, browse to the USB dongle drive via My Computer and double click the setup.exe to run the installer.

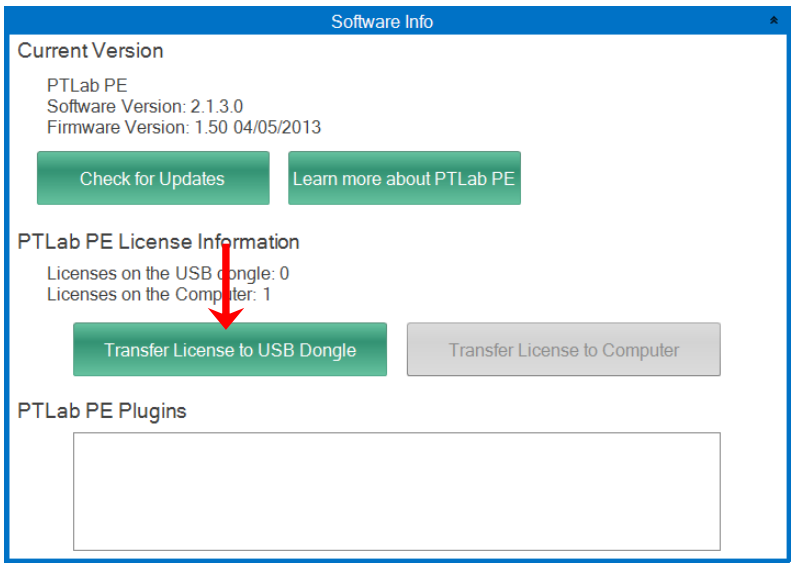
3. The License File will automatically be transferred to the computer.

Even though the license file was transferred to the computer, you will need the dongle if you ever want to install the software onto a new computer. Follow these instructions to transfer the license back to the USB Dongle.

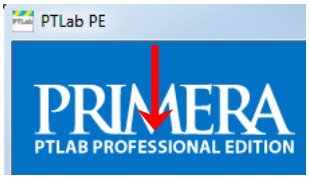


1. Open PTLab. Click the Settings icon on the upper right corner of the software.

2. Click Software Info. Click Transfer License to USB Dongle. Once complete you will receive a message if successful. Pro features will now be disabled in PTLab.



Note: PTLab PE Features will be enabled as soon as the dongle is connected. The name of the software in the upper left corner will change to "PTLab Professional Edition"



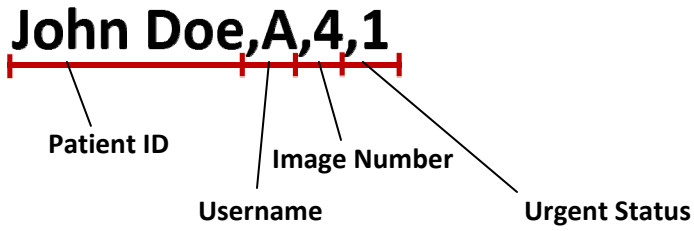
4.2 Format Data from LIS

Configure your LIS to place an ANSI or UTF8 text file which contains the data you would like to print, into the Watch folder. If PTLab Pro is installed, the software will immediately recognize the file, process it and then delete it.

Data Format

- ANSI or UTF8 (.txt file)
- Comma delimited fields
- Each new record (patient) on a new line (separated by carriage return)

Example data:



Note: If you need multiple copies of the same slide/cassette printed you may drop the same text file in the watch folder multiple times or set your print template to accept a "number of copies" field.

Special Fields - Add these fields to your data string to designate which printer, templates or hoppers should be used.

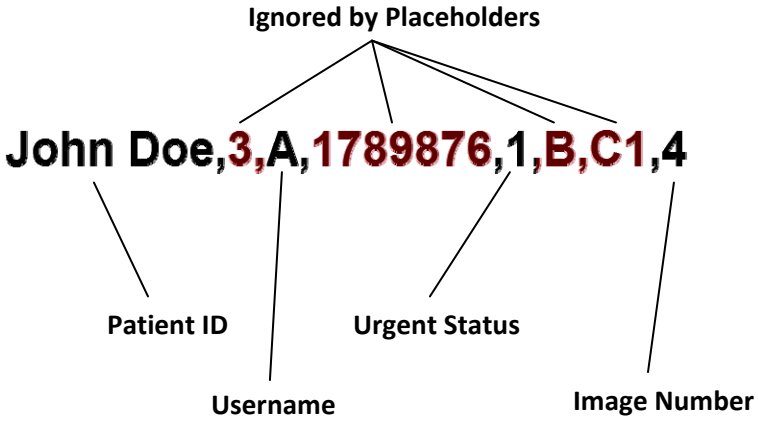
!,	**Print on Cassette Printer –Manual.** Precede all data in the string with this character followed by a comma to use the manual cassette printer. **Example data:** **!,John Doe,A,4,1**
!Cassette Type!,	**Print on Cassette Printer – Robotic.** Set Cassette printer to pick cassettes from the designated hopper based on the cassette type set. First, hoppers need be assigned a type description. (See Section 6). **Cassette Type = 1-16** **Example data:** **!7!,John Doe,A,4,1**
#Number#	**Set Template Number.** Set data to use a specific template number. Template numbers are set in the PTTemplate software. If this is set, the designated template is chosen no matter which printer is currently connected. **Number = 1 - ?** **Note:** Use for Slide Printer or Cassette Printer. **Example data:** **#2#,John Doe,A,4,1**
No Special	**Use Slide Printer.** To use the slide printer no special characters are necessary. If the Slide Printer is connected, the default template will be used.

Ignore data fields

Ideally the file should have ONLY the data you would like to print included. However, the print template can be configured to ignore fields in the text file that do not need to be printed on the slide. Use placeholders in your template - Input/Output fields section to ignore fields you do not intend to print. See section 5 of the PTTemplate manual.

Each text file can represent one unique slide/cassette or you may separate each record with a carriage return to print one slide/cassette for each record in the same file.

Example Data String with extra data that should be ignored in RED



4.3 Watch Folder Location

By default the watch folder is located at C:\ProgramData\PTI\PTLab\WatchFolder\

You may change the watch folder to any other location accessible by the PC running PTLab without using additional passwords. Change the watch folder by editing this file:

"C:\ProgramData\PTI\PTLab\Plugins\FlatFilePlugin.xml"

Edit this key:

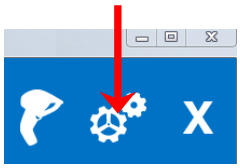
<WatchFolderPath>C:\ProgramData\PTI\PTLab\WatchFolder\</WatchFolderPath>

Status of the current job will be provided in two xml files (CurrentSlideJobs.xml and CompletedSlideJobs.xml) in the same Watch folder location.

4.4 Set Default Templates PTLab

When PTLab detects data in the watch folder it needs to determine what to do with it. You will need to set the default templates to use for both slide and cassette printers. The appropriate default template will be chosen depending on the which printer is connected. For example, if the cassette is the only printer connected, PTLab will send the data to the default LIS cassette template unless a specific template has been designated using the special field format described in the previous section.

1. Connect the Cassette printer or Slide printer. Different templates will appear depending on which printer is connected.

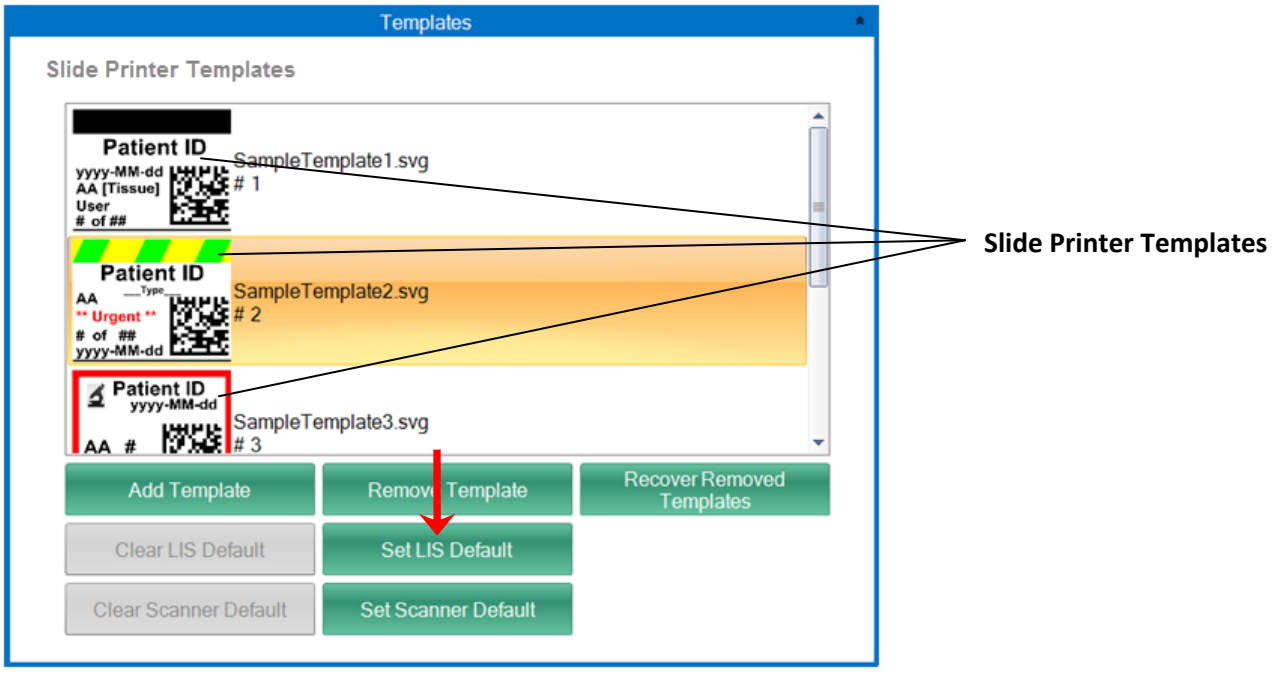


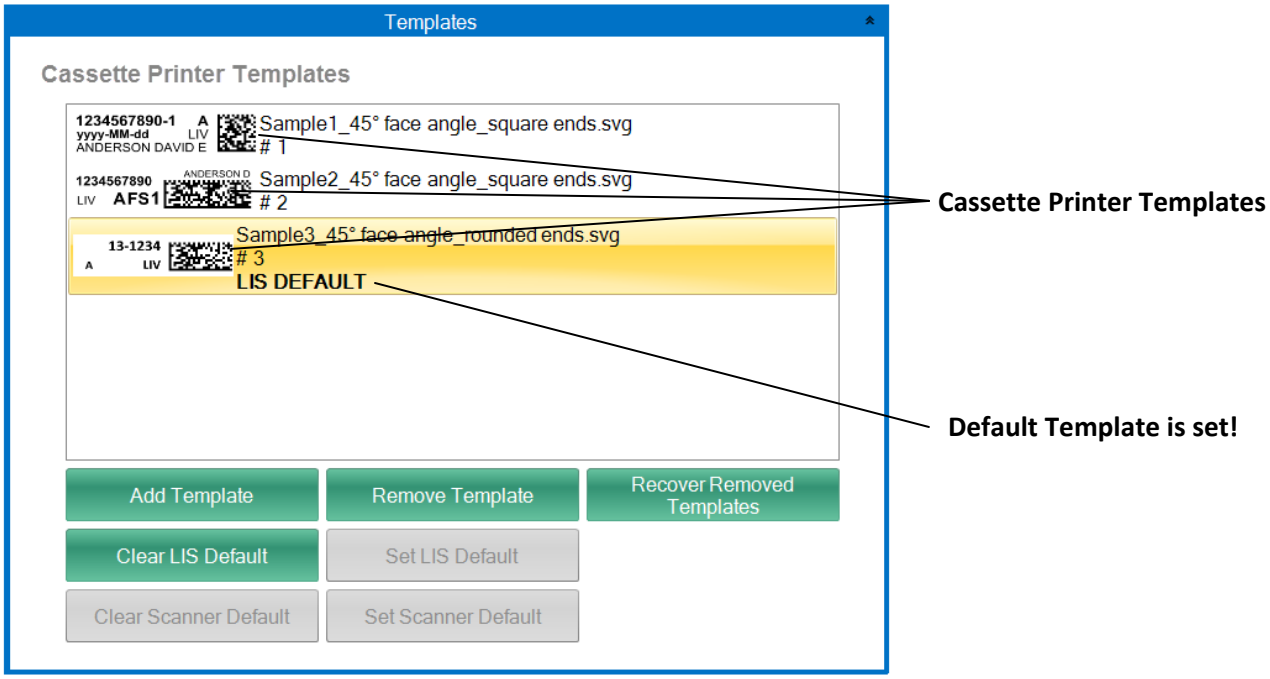
2. Open PTLab.

3. Go to the Settings icon.

4. Click the Templates Menu. Select the template you would like as your default and click "Set LIS Default"

Note: You must first create and export the template you will use in PTTemplate. Be sure to add input/output fields that correspond with the text file you place in the watch folder.



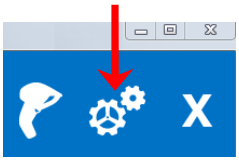

Templates
Cassette Printer Templates
1234567890-1 A
yyyy-MM-dd LIV
ANDERSON DAVID E
Sample1_45° face angle_square ends.svg
1
1234567890 ANDERSON D
LIV AFS1
Sample2_45° face angle_square ends.svg
2
13-1234
A LIV
Sample3_45° face angle_rounded ends.svg
3
LIS DEFAULT
Add Template
Remove Template
Recover Removed Templates
Clear LIS Default
Set LIS Default
Clear Scanner Default
Set Scanner Default
Cassette Printer Templates
Default Template is set!

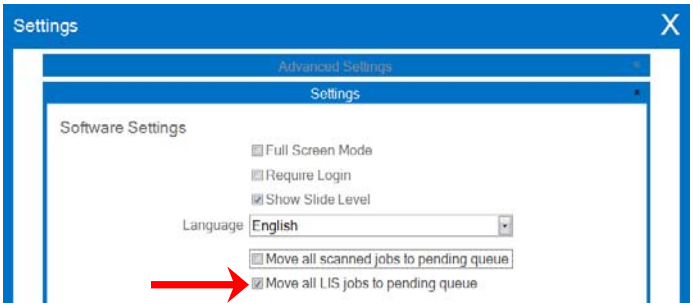
4.5 Set your Pending Jobs Queue preference

You can set PTLab to automatically print any slide/cassette as soon as the necessary text file with the data appears in the watch folder -or- you can set PTLab to automatically place all jobs in the pending queue.

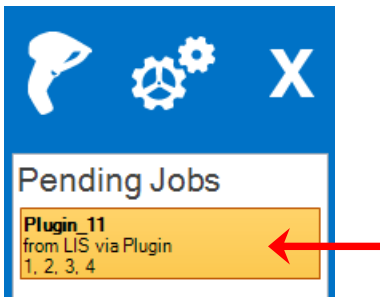
Note: If there is insufficient data to complete fill all fields in your template, the job will always go to the pending jobs queue no matter the setting.

If "Move all LIS jobs to pending queue" is **unchecked**, the associated template will automatically print the slide.





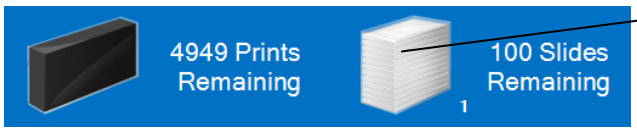
4. If "Move all LIS jobs to pending queue" is **checked**, the job will appear in the pending jobs queue.



5. Click on the job to display the template and review the data before printing. You may enter additional data in empty fields, leave them blank or change data in any field. Click "Print" when you are ready to print.

Section 5: Managing Slide Levels

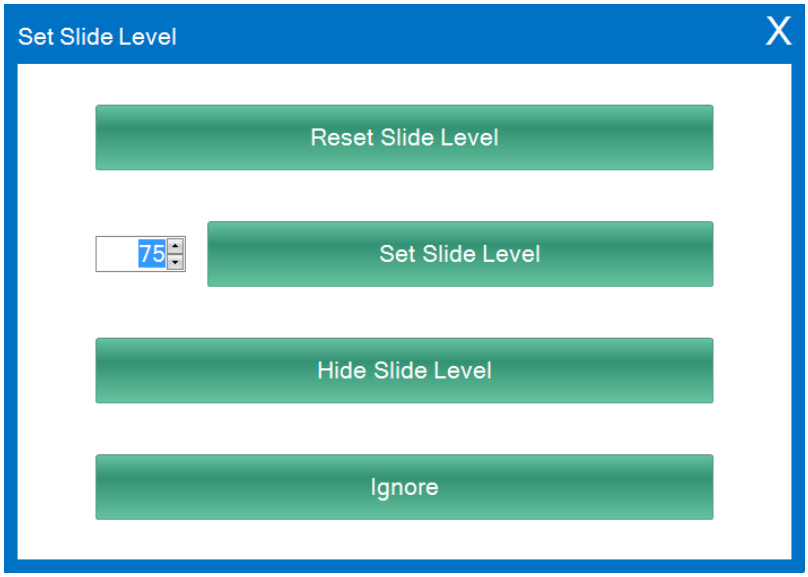
The slide level is tracked by the software and displayed on the status bar at the bottom.



Click to Open Set Slide Level Window

Note: The printer does not have a physical slide level sensor. The software tracks when a slide has been printed and subtracts one from the total. If the original total was incorrect for some reason, the slide level reported by the software would also be incorrect.

To set the slide level, click on the slide icon. The following screen will appear.



This window will also appear if the slide cartridge is taken out of the printer with 2 or less slides remaining. When you replace the slide cartridge you will be prompted with the window above.

An explanation of the function of each button is below.

- **Reset Slide Level** resets the slide level to 100

- **Set Slide Level** sets to a specific number that you can set by typing the number to the left. This number will be remembered the next time this window appears. This is useful if your slides do not come in packs of 100. You can easily reset the slide counter to equal whatever number of slides your standard box includes.

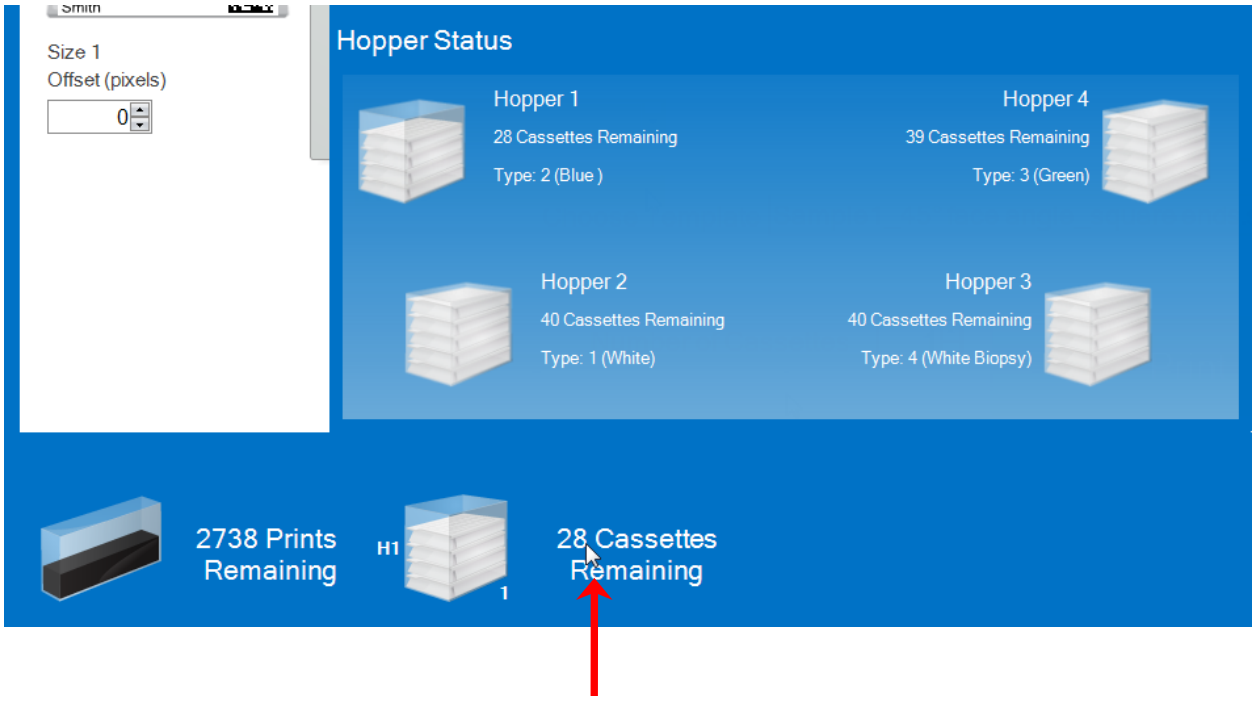
- **Hide Slide Level** will stop this window from appearing after a cartridge change and remove the slide level icon from the status bar. You can always track the slide level by looking at the actual slides remaining through the clear blue slide cartridge. You can re-enable the slide icon in the settings area.

- **Ignore** dismisses the window and does not change the slide level. Use this if you removed and inserted the same slide cartridge but did not alter the slide count.

Section 6: Managing Hoppers (Cassette Printer – Robotic Feed)

The Signature Cassette Printer – Robotic Feed has four hoppers (40 cassettes each) that can be filled with cassettes of different types. The different type cassettes could be different colors or different constructions as long as they meet the specifications outlined in the printer manual.

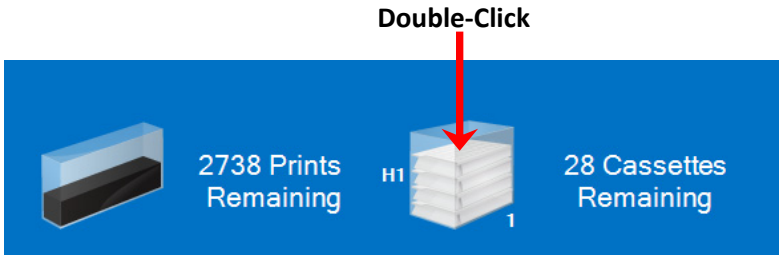
To view the current hopper levels and descriptions, hover your mouse over the hopper icon on the status bar.



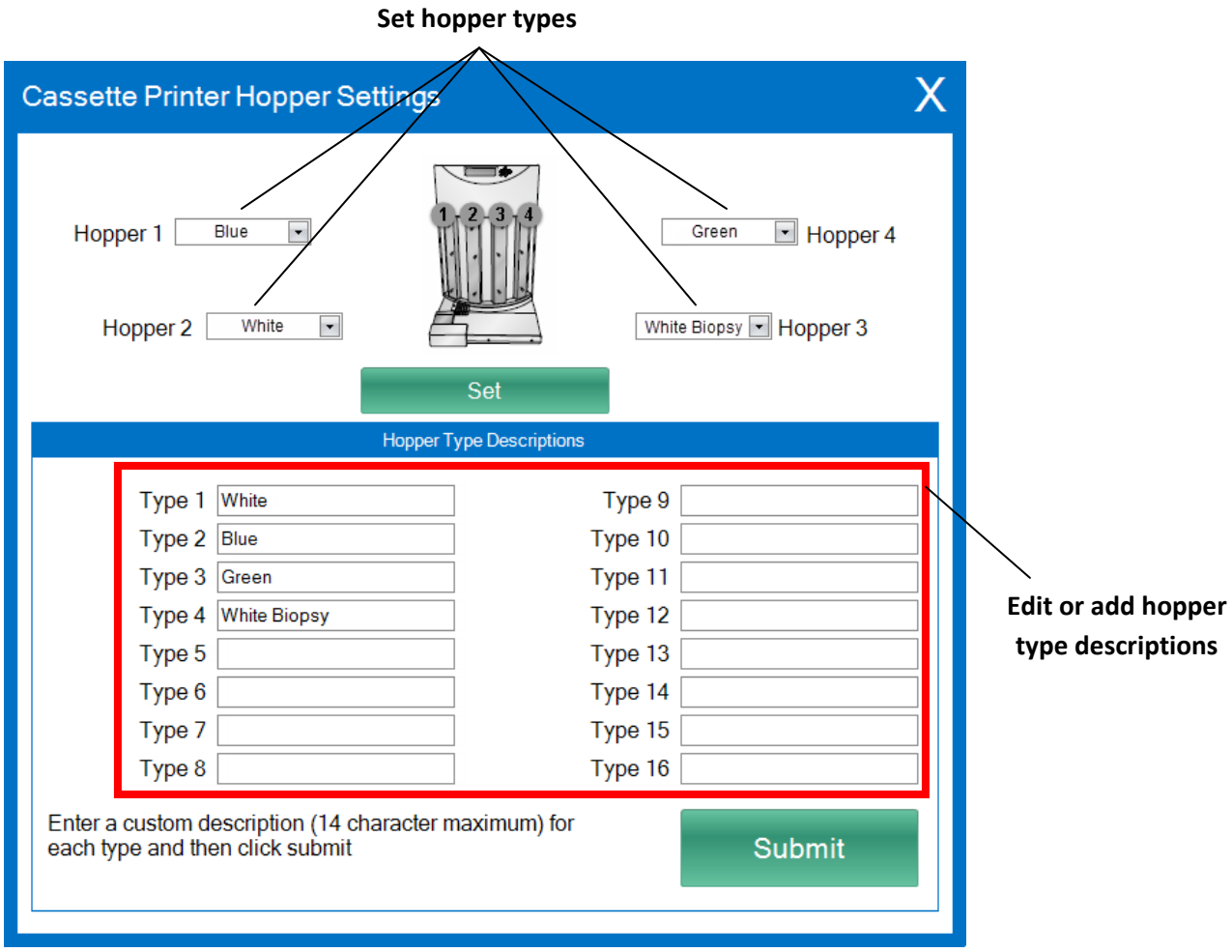
Programming Hopper Descriptions

Using PTLab you may program up to 16 different type descriptions that can be selected for each hopper location. Once the descriptions have been programmed you may set the current hopper type description on the control panel of the Robot or via the PTLab software. However, it is only possible to program the descriptions using PTLab.

To program hopper descriptions, double-click on the hopper icon on the status bar. You may also click on the settings icon and choose settings – Hopper Settings.



To change the currently selected hopper type, click on the drop down menu next to each hopper number. All available descriptions will appear in the drop down. Hopper numbers start with "1" on the left side of the printer. Once the hopper types are selected for each hopper number, click "Set". A confirmation dialog will appear.



If you would like to change or add hopper descriptions you can do so on the same screen. Simply change the current description or enter a new description in one of the 16 available boxes. Click "Submit".

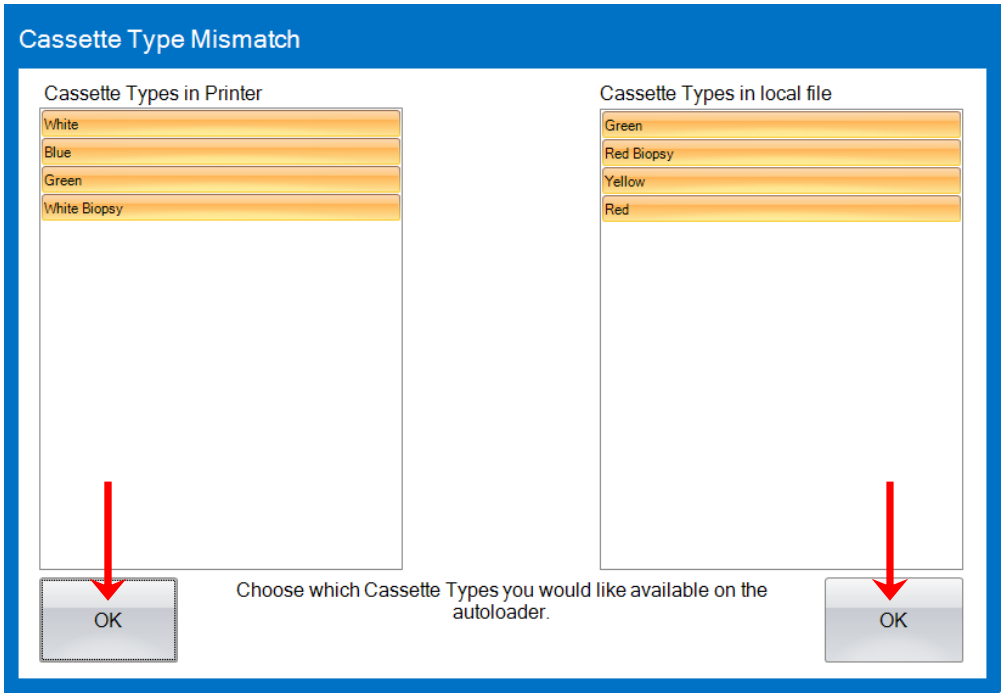
Note: You must click submit before any changes or additions will appear in the Hopper drop down menus at the top of the screen.

Cassette/Hopper Type Mismatch

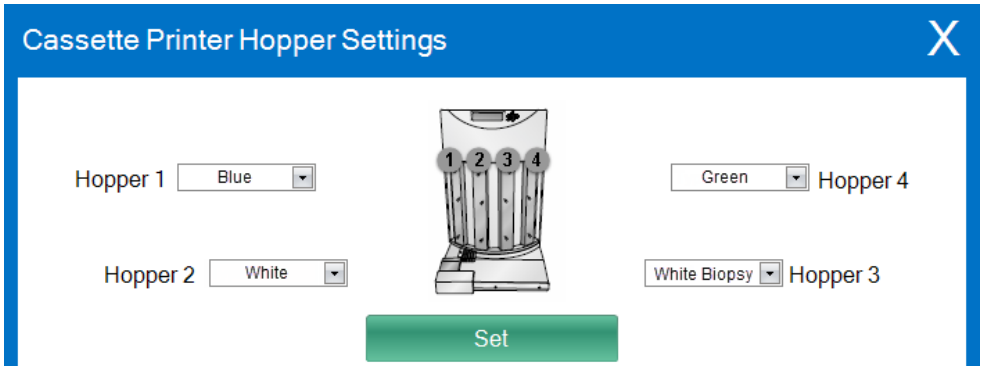
The hopper descriptions are stored on the printer (not the robot) and the currently connected computer. The descriptions are stored in both locations so that you do not have reenter them if either the printer or the computer is changed.

If you change the computer that is connected to the printer or change the printer attached to the Robot, you will receive a Cassette Type Mismatch error. You will need to reconcile the differences.

1. The screen below will appear if you open the hopper settings window. Simply click "OK" below the descriptions you would like to keep.



2. The Hopper Settings window will open. Set the hopper types to correspond with the cassettes which are actually loaded in the hoppers as described on the previous page.

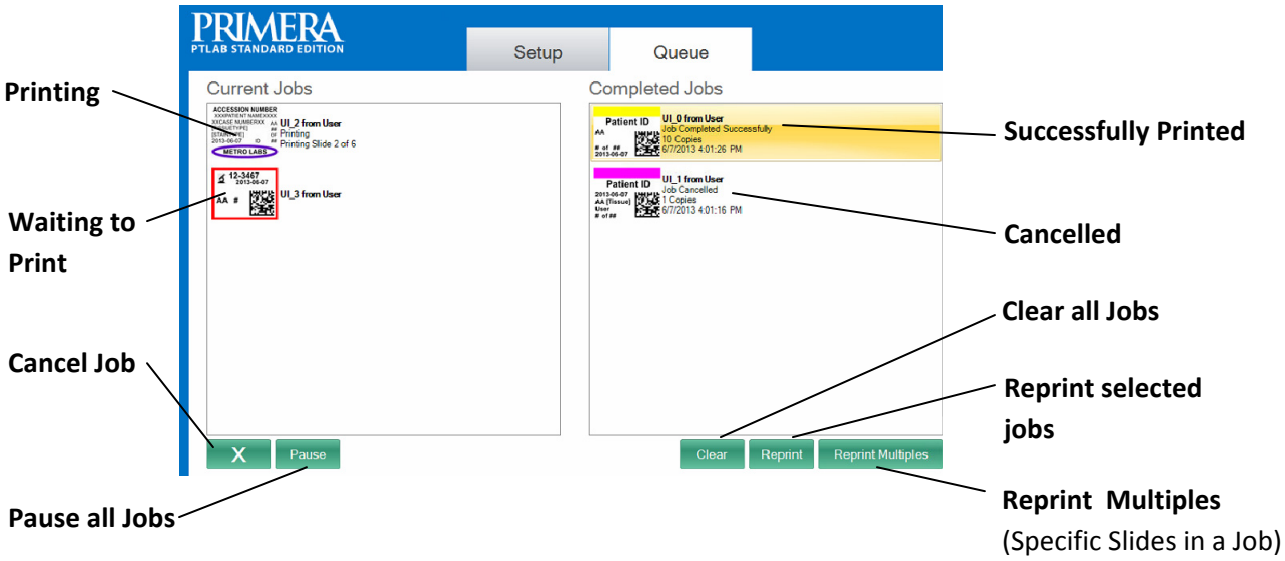


Section 7: Job Queue and Pending Jobs

7.1 Job Queue

The Job Queue displays all current jobs which are printing or waiting to be printed.

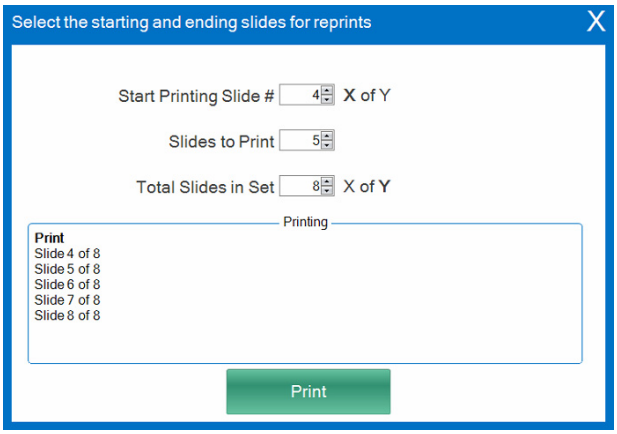
The currently printing job will show a status of "printing". The waiting job will appear below the printing job.



When a job has been successfully printed or cancelled it will be moved to the Completed Jobs window. The results of the job will be displayed below the status.

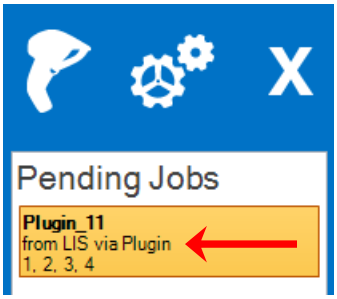
You may also cancel a currently printing job, pause jobs while they are printing, clear all jobs from the list, or reprint jobs using the buttons at the bottom of the window.

Click "Reprint Multiples" to reprint specific slides in a job. Enter the slide range you would like to reprint including the starting slide, the total slides in the set and the number of slides you want to print. The slides the software will be printing are shown in the white box.



Note: Use this feature ONLY if your slide has a number range component.

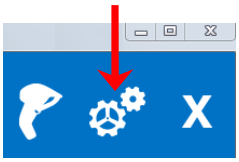
7.2 Pending Jobs

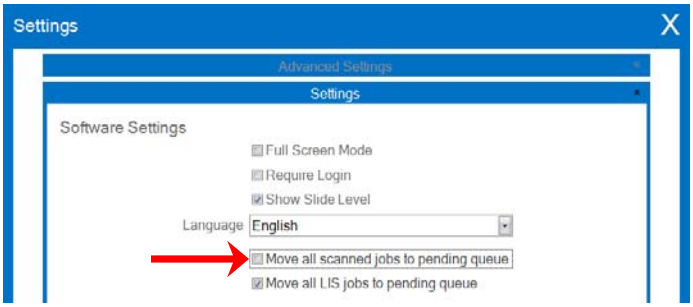


The Pending Jobs area is only used if data for your templates is received from an LIS or a connected barcode scanner. You can set PTLab to automatically print any slide/cassette as soon as the necessary data is received by the template -or- you can set PTLab to automatically place all jobs from an LIS or scanner in the pending queue.

Note: If there is insufficient data to completely fill all fields in your template, the job will always go to the pending jobs queue no matter the setting. Click on the job to open the template and finish filling fields or just click "Print".

If "Move all LIS jobs or scanned jobs to pending queue" is **unchecked**, the associated template will automatically print the slide.





If "Move all LIS jobs or scanned jobs to pending queue" is **checked**, the job will appear in the pending jobs queue.

Click on the job to display the template and review the data before printing. You may enter additional data in empty fields, leave them blank or change data in any field. Click "Print" when you are ready to print.

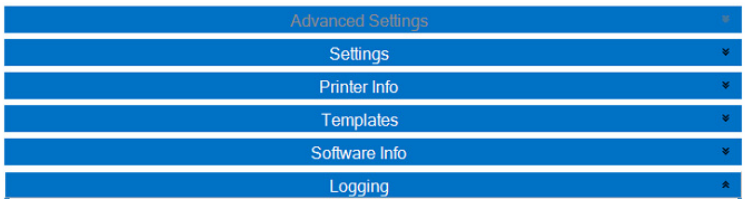
Section 8: Settings and Preferences

The settings window contains the following information:

- Various software settings
- Printer firmware version and printing statistics
- Template management
- Logging options

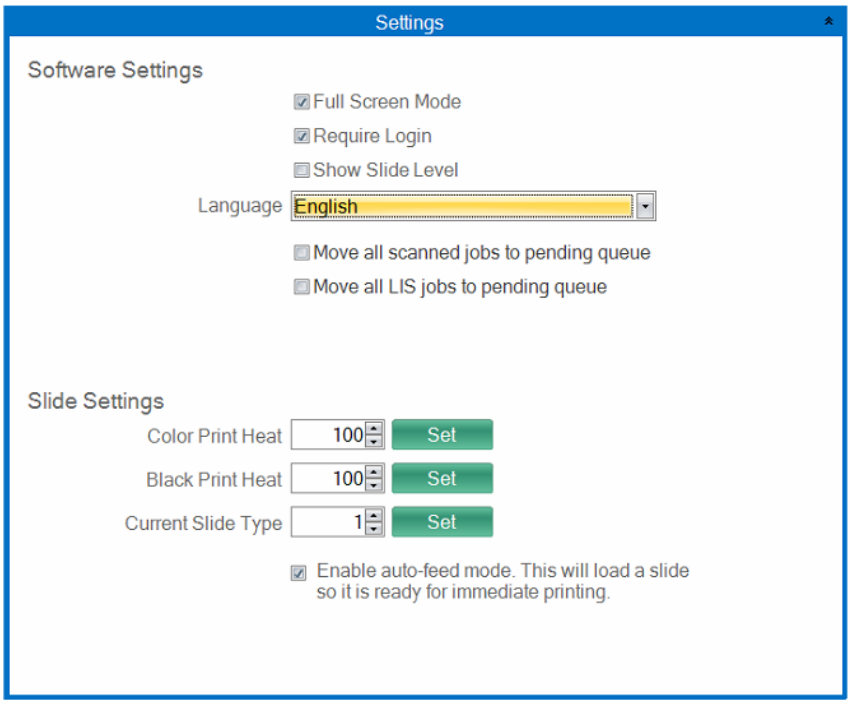
Open the settings area by clicking the tool icon in the upper right corner of the software.

To open or close each settings area click on the ribbon header above each section.



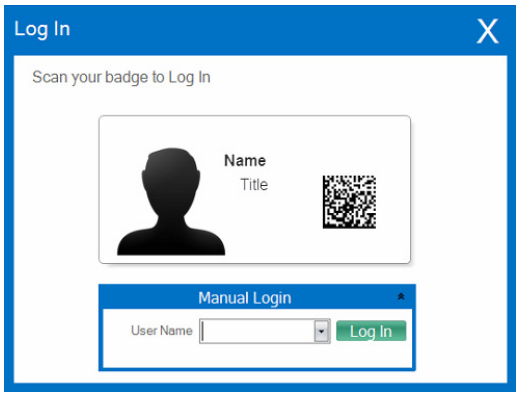
In the following sections you will find descriptions of each of the functions within each settings area.

8.1 Settings

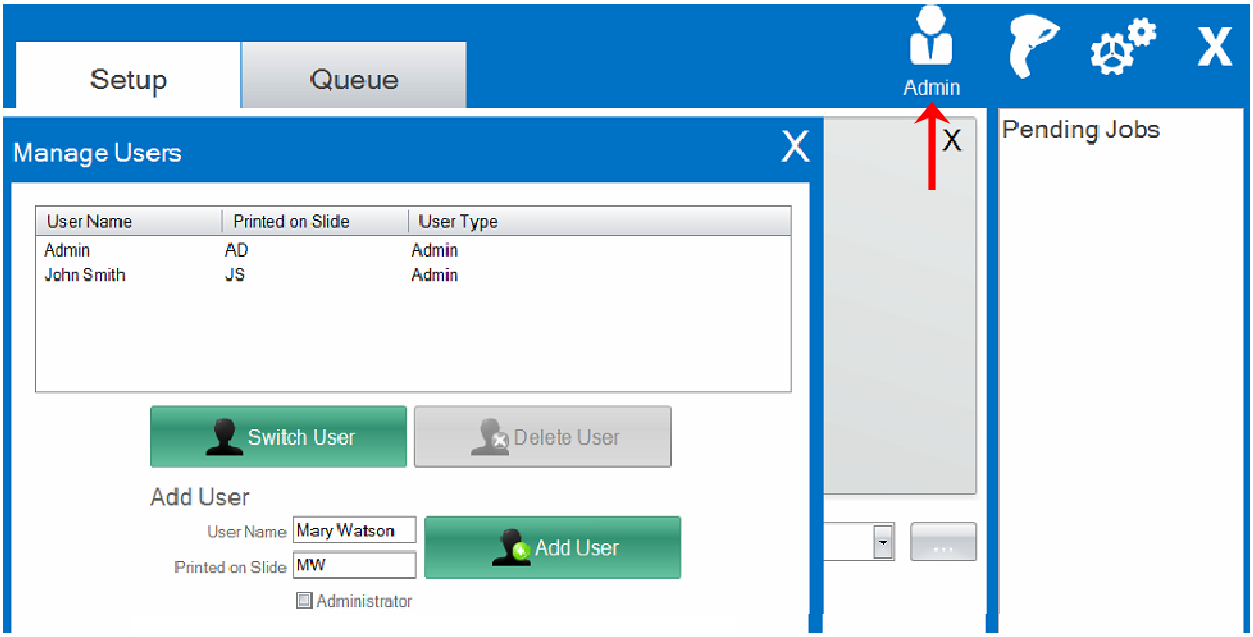


- **Full Screen Mode.** Check or uncheck to toggle between automatic full screen or standard window mode. You must restart the software for this setting to take effect.

- **Require Login.** Check this box to require a login username when the software starts. This is not necessarily meant as a security feature. If this is checked, a user will be prompted to scan their 2D barcode on their security card or enter a username. This username can be used by a template to print on the slide, encode on the slide barcode or simply be logged by the software. The following screen will appear if this option is checked:



Once this setting is enabled you may add new users or manage current users by clicking the admin icon. Here you can switch the current user, delete a user, or setup a new user. Check the Administrator box to allow this user to manage users. You may set "Printed on Slide" to users initials or some other code that will discreetly identify the user on the slide.



- **Show Slide Level.** Uncheck this box to remove the slide level icon from the start bar and stop tracking the number of slides in a cartridge.

- **Language.** Choose one of the many available languages. The text will immediately be changed to that language.

- **Move all scanned jobs to pending queue.** If unchecked, the associated template will automatically print the slide/cassette. If checked, the job will appear in the pending jobs queue. See section 6 for more information.

- **Move all LIS jobs to pending queue.** If unchecked, the associated template will automatically print the slide/cassette. If checked, the job will appear in the pending jobs queue. See section 6 for more information.

- **Color Print Heat / Black Print Heat.** Increase the heat settings to improve print quality. The minimum heat setting that achieves acceptable print quality should be used. Increasing print heat shortens print head life and increases the likelihood of a ribbon break. Separate heat settings for color and black ribbons can be stored. If using a color ribbon, the color heat setting will automatically be used. If using a black ribbon, the black heat setting will automatically be used.

- **Current Slide Type.** (Visible with Slide Printer Connected) See section 8.6

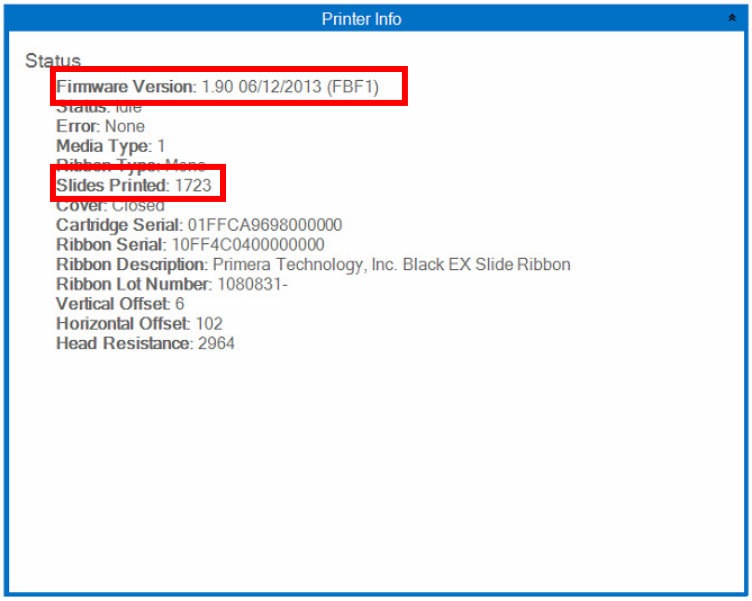
- **Enable auto-feed mode.** (Visible with Slide Printer Connected) See section 8.7

- **Cassette Printer Mode** (Visible with Cassette Printer Connected) See section 8.8

- **Auto Mode Delay** (Visible with Cassette Printer Connected) See section 8.8

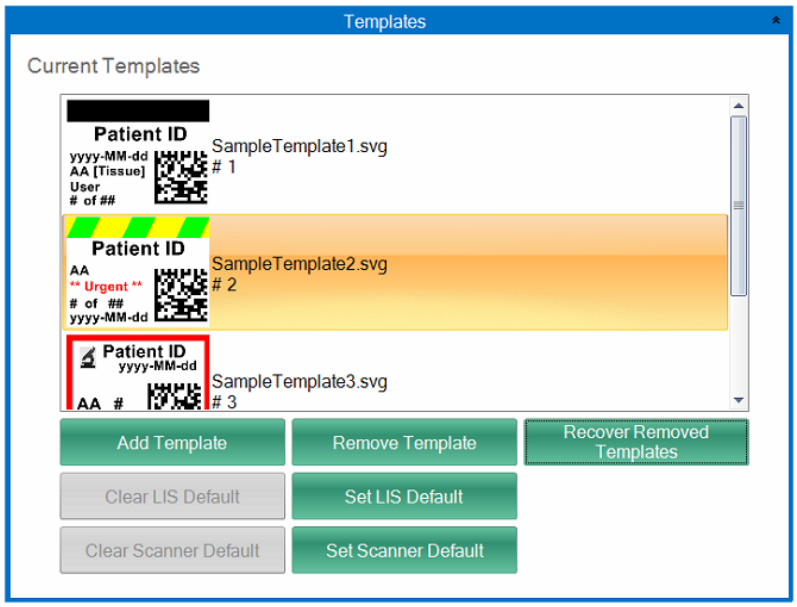
- **Hopper Settings Button** (Visible with Cassette Printer Connected) See section 6

8.2 Printer Information



This window displays the current firmware version on the printer, total slides/cassettes printed and other information that may be useful to tech support.

8.3 Template Management



All current templates are displayed. Click “Remove Template” to remove a template from the list of templates available to the user via the “Choose Template” drop down menu or the browse button.

Any template that has been removed can be recovered using the “Recover Removed Templates” button. You will be brought to the deleted Templates folder to recover your template.

If you have exported a template (for another computer) from the PTTemplate editing software you can add that template by clicking the” Add Template” button.

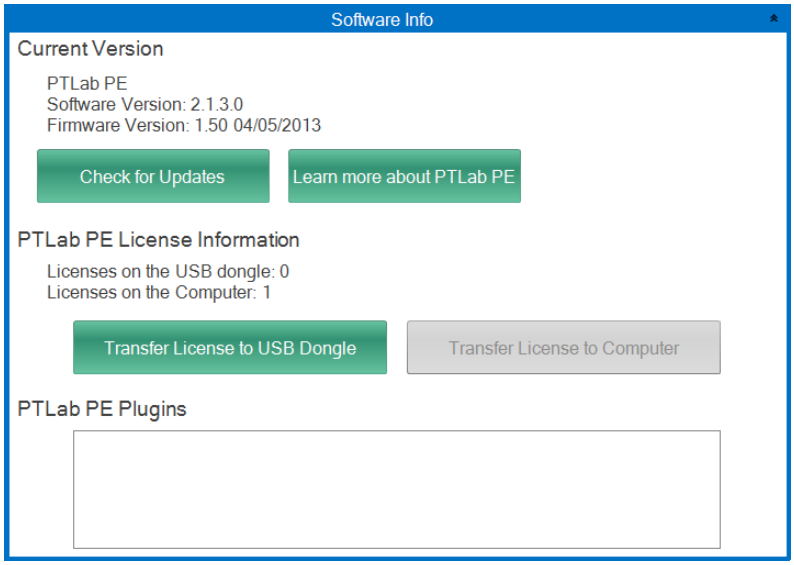
Templates exported (for this computer) from the PTTemplate software installed on the same computer as the PTLab software do not need to be added manually in this way. They will be automatically added to the list.

You may also Set your Scanner and LIS Default in this location. See section 3 and 4 for more information.

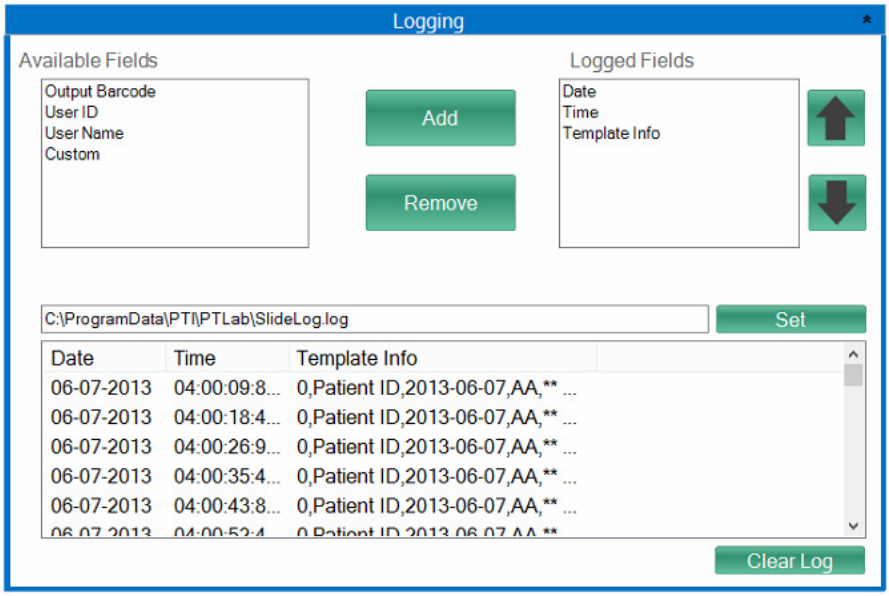
8.4 Software Info/Check for Updates

The Software Info area will tell you the current version of the software and Check for Updates.

If you have a PTLab Professional License Dongle connected you will have options to transfer that license to or from the computer. See Section 4.



8.5 Logging

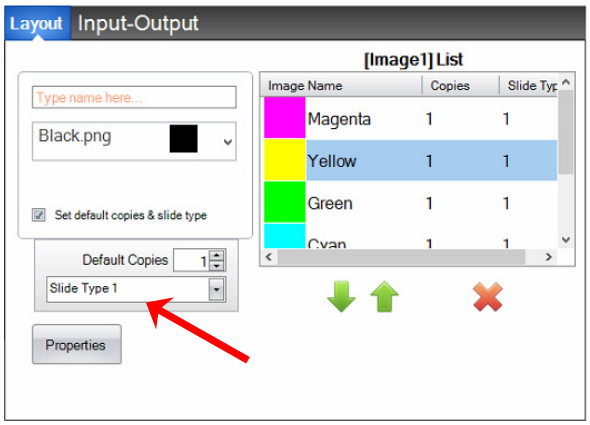


Several fields can be logged to the log file located where you choose.

- **Date.** Logs the date the slide was printed.
- **Time.** Logs the time the slide was printed.
- **Template Info.** Logs the Template fields printed for each slide.
- **Output Barcode.** Logs the information encoded in the barcode printed on the slide.
- **User Name.** Logs the Username associated with a template, if required.
- **User ID.** Logs the ID associated with a Username associated with a template.

8.6 Set the Slide Type on a Slide Cartridge (Slide Printer)

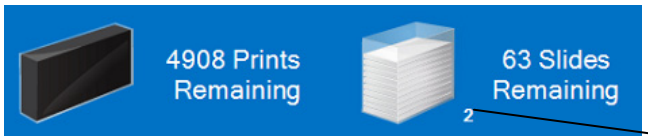
The slide type setting can be used to encode the blue slide cartridge with a unique number. Slide type can be set to any number between 1 and 100. Slides types can be used as internal designations in a lab for different types of slides such as charged slides. An encoded slide cartridge can be used in combination with a template that requires a specific slide type. In this way you can ensure certain procedures are done on the appropriate slides.



PTTemplate

Note: To require a specific slide type your template must have either an image list or text list which has the "Set default copies and slide type" option checked in the "Edit Text/Image List" area within PTTemplate.

When the cartridge is inserted, the slide type will be displayed below the slide icon on the status bar.



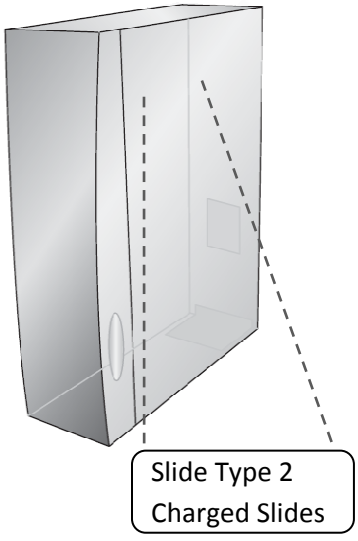
Slide Type

If a slide cartridge encoded with a slide type other than what the template requires is inserted into the printer the following error will appear.

The default designation for any new slide cartridge is "1".

If you would like to use the slide type setting to track different slide types, follow this procedure.

Slide Cartridge



1. Purchase additional slide cartridges for each of the slide types you would like to track. Extra slide cartridges may be purchased from your printer supplier. You can track many different slide types. Below are a few examples:

- Charged slides
- Colored slides
- Various manufacturers of slides
- Slides with different coatings and treatments for specific procedures

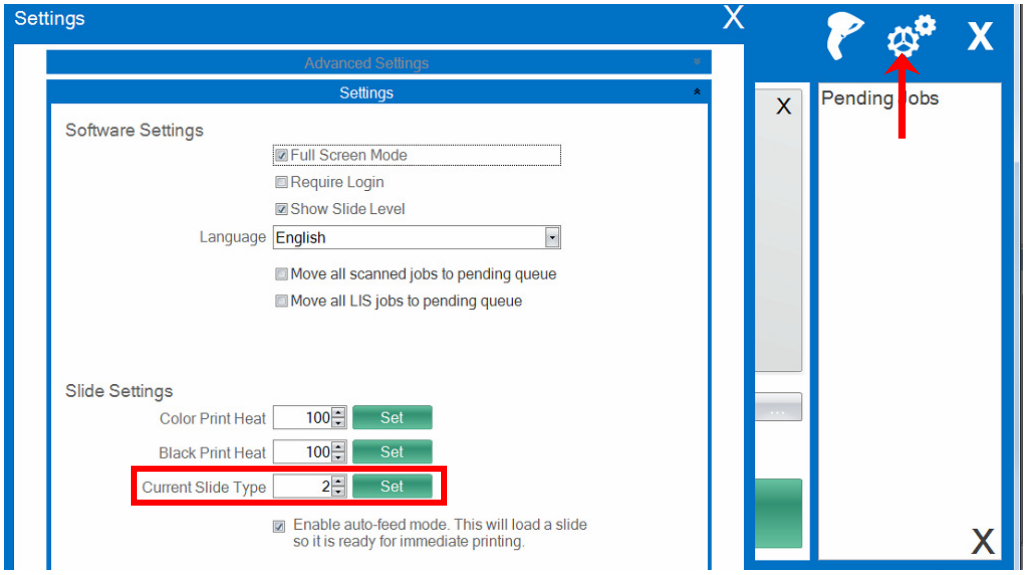
2. Label the slide cartridges. Once you have received the extra slide cartridges, label them by placing a label or writing on the front or side of the blue cartridge. The label should be permanent so it will withstand daily handling. The label should specify the slide type number and a description of the slide type.

3. To encode the slide type number to the IC chip imbedded in the Slide Cartridge, insert the cartridge into the printer.

4. Open the settings area by clicking the tool icon in the upper right corner of the software.

5. The settings window will appear. Click the settings ribbon to view all settings.

6. Choose the slide type number you would like to encode (1-100). Click Set. The cartridge will be encoded.



Important Note!

If you switch between different slide cartridges encoded with different slide type numbers and you have the auto-feed mode enabled, the slide of a different type left inside the printer will be automatically ejected.

8.7 Preload slides in Auto-feed Mode (Slide Printer)

The auto-feed mode automatically feeds a slide from the cartridge into printing position before a print is sent to the printer. This greatly reduces the time it takes for the first slide in a batch of slides to print. This feature, if enabled, is especially useful if you only print one slide at a time.

Important Note!

1. If you switch between different slide types and you have the auto-feed mode enabled, a slide of a different type could be left inside the printer after your remove a slide cartridge and insert another one of a different type.

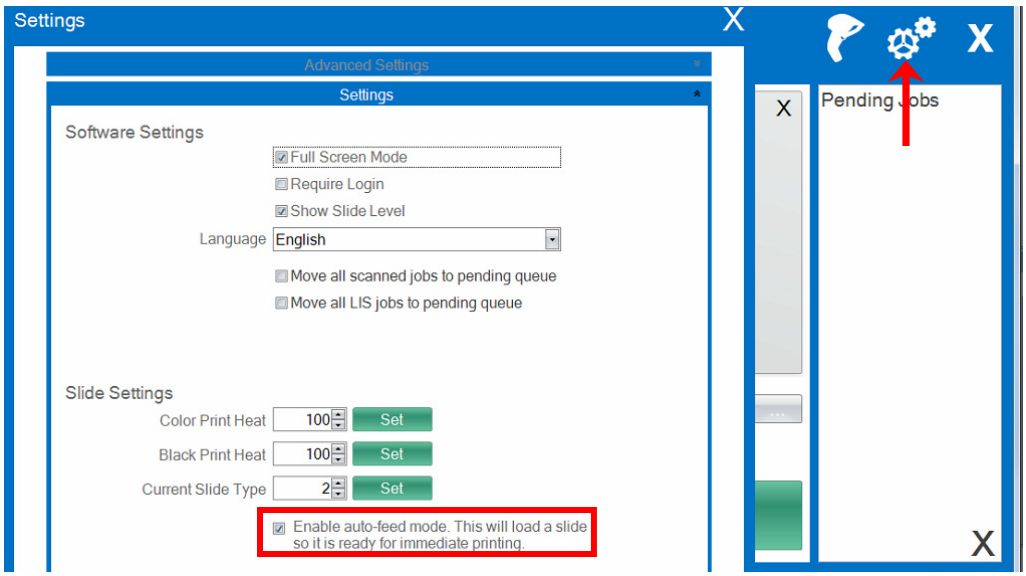
Press the Slide button on the printer to eject the slide!

2. If the cartridges containing different slide types have been encoded with different slide type numbers, the slide left inside the printer will be automatically ejected (see section 7.6).

Enable or Disable Auto-Feed Mode.

1. Open the settings area by clicking the tool icon in the upper right corner of the software.

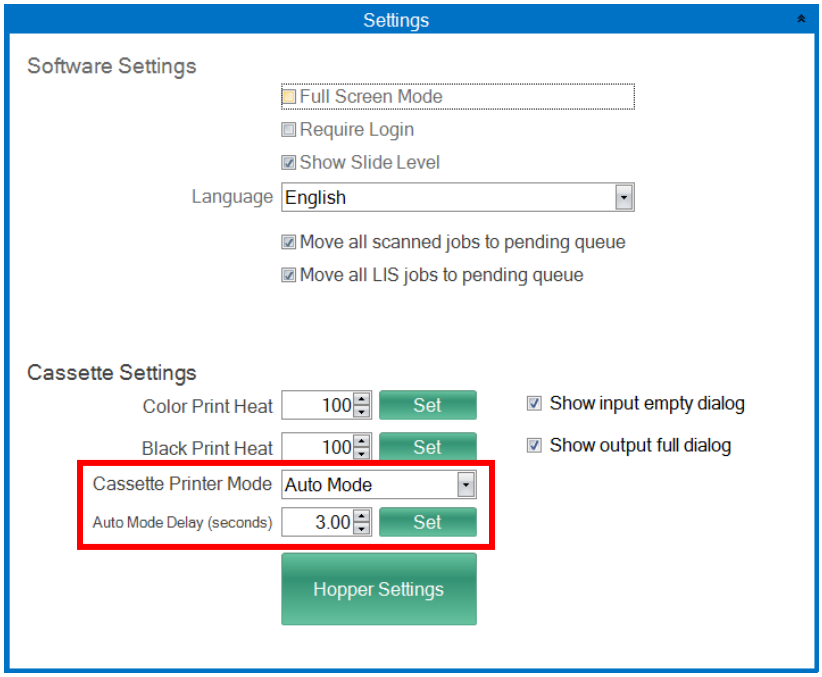
2. The settings window will appear. Click the settings ribbon to view all settings.



3. Check the Enable auto-feed mode box.

8.8 Auto Print Cassettes after loading (Cassette Printer)

The Auto Mode automatically print the cassette after a specified delay. This means you do not have to press the print button to engage the print. Set the Cassette Printer Mode to "Auto Mode". Set the Auto Mode Delay to the number of seconds it takes you to comfortably remove your hand from the cassette holder area.

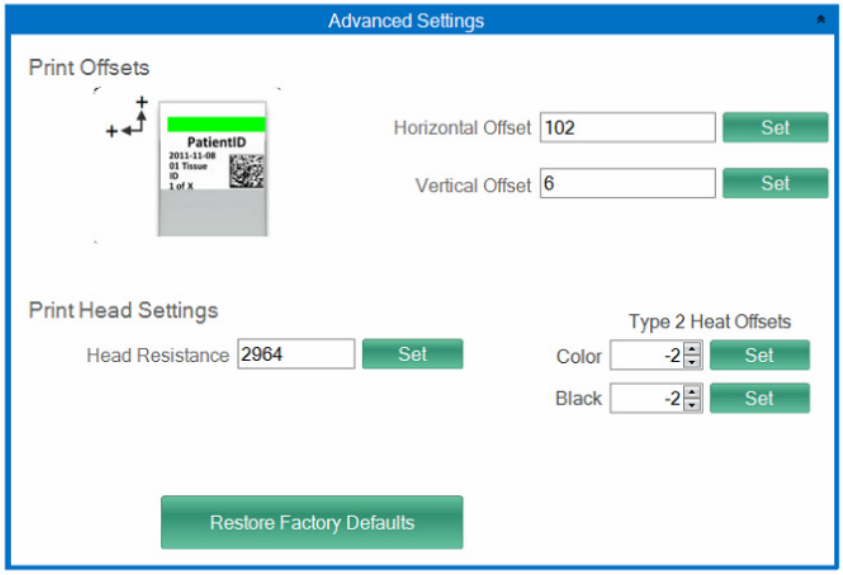


Note: If you fail to remove your hand with in the specified time the safety door will gently contact your hand. Because the safety door is not fully closed the print will not continue.

8.9 Advanced Settings

Press Shift +A on your keyboard to enable the advanced menu.

In this area you can set your print head resistance value, adjust print offsets, restore factory defaults or adjust heat offsets. Contact technical support before adjusting any of these settings.

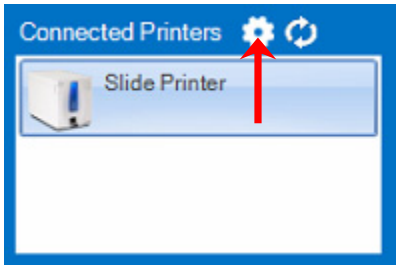


Section 9: Multiple Slide Printers

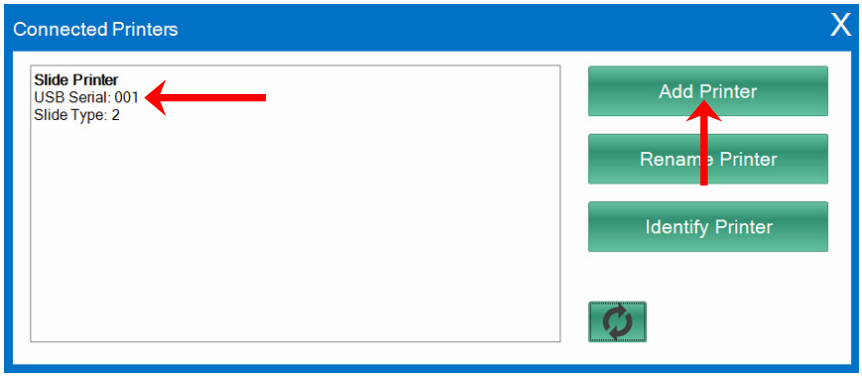
9.1 Setup Multiple Printers

You can connect multiple Slide Printers to the same computer and control them all through PTLab. This is useful if you have two different slide types that you regularly print to and you do not want to continuously change slide cartridges.

To set this up click the gear Icon above the picture of the currently connected slide printer.



The slide printer currently connected will be displayed only with the USB Serial. This is the number that Windows uses to differentiate between printers. If two different printers have the same USB serial number windows will recognize them as the same printer. If they both connected at the same time with the same serial number you may experience a Windows Blue Screen crash.

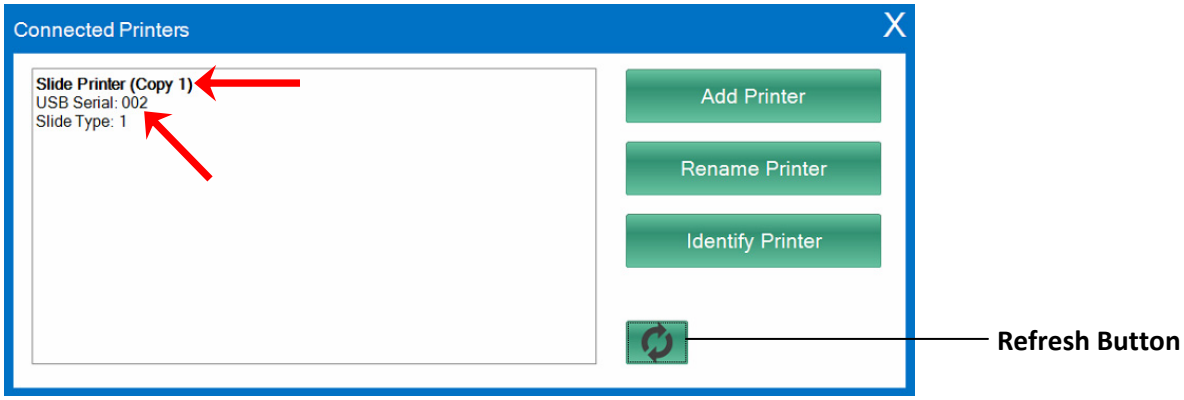


1. To get started click “Add Printer”.

2. You will be prompted to Unplug all slide printers from the system. Click OK when that has been completed.

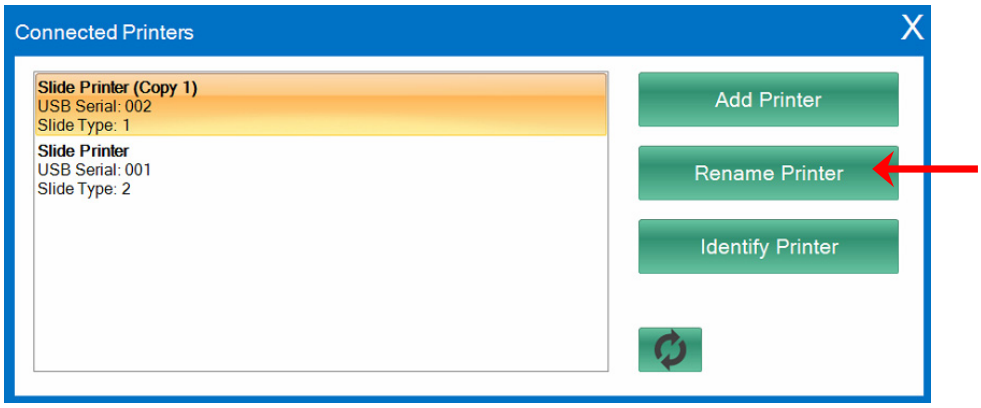
3. Now you will be prompted to Plugin the new slide printer. Plug it in and wait 5 seconds. Now click “OK”.

4. The new printer will appear by default as Slide Printer (Copy 1). If successful it should have a USB Serial of 002.



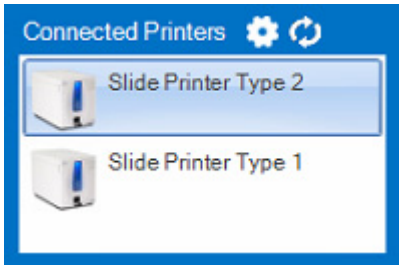
Note: If the slide printer says "Not Connected" click the refresh button.

5. Connect the original Slide Printer. Click "Refresh". You will now see both connected.



6. If you choose, you can now rename the slide printers. Select the one you want to rename and click "Rename Printer". You will be presented with a window that allows you to do so. Consider naming the printers after the slide type which will be installed. You may want to further label the cartridge and the printer itself to match this new name.

7. Close this window. You will see both printers connected. Click the Refresh button if ever you have need to disconnect one printer and reconnect it while not restarting PTLab.



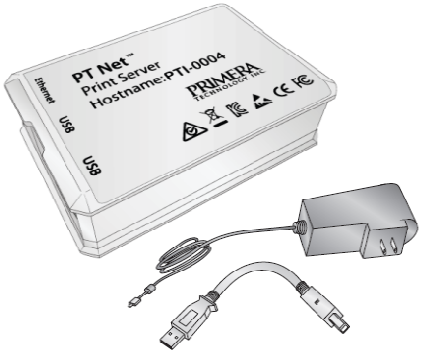
9.2 Printing to Multiple Slide Printers

To print to multiple slide printers simply click on the one you wish to print BEFORE clicking the “Print” button.

You will see the current number of prints remaining, slides remaining, printer name, current status and possibly the slide type change when you click on each different slide printer.

Note: Because both printers share the same PTLab printer queue, only one printer can be printing slides at any given time.

10 Networking with PTNet Print Server

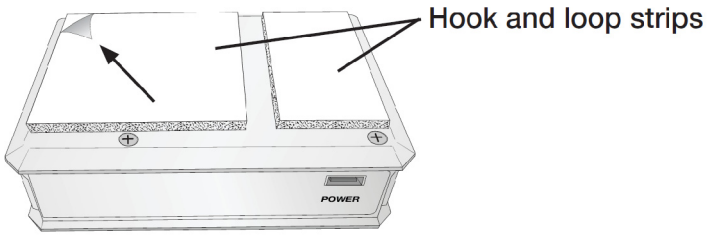


Part # 078215 (USA Plug)

Part # 078216 (Euro Plug)

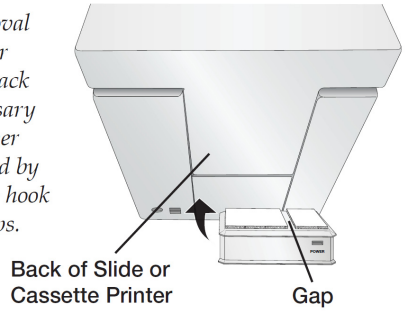
PTNet Print Server will allow printing to any slide or cassette printer attached to your network which is connected to PTNet Print Server. Multiple clients can easily print to the printer using PTLab installed on any PC connected to the network. You may also easily switch between multiple Cassette or Slide printers at multiple locations.

1. Remove the Adhesive backing paper from the hook and loop strips.

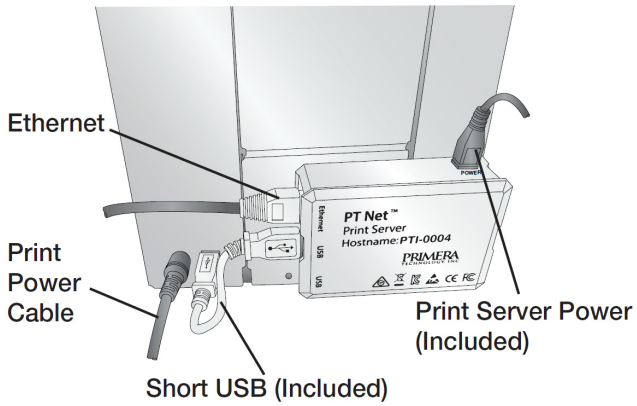


2. Position the Print Server so that the gap in the hook and loop strips align with the seam on the back of the printer. Press the Print server into place.

Note: If removal of the covers or access to the back panel is necessary the Print Server can be removed by separating the hook and loops strips.



3. Connect cables as shown. USB can be connected to any of the four ports on the Print Server.

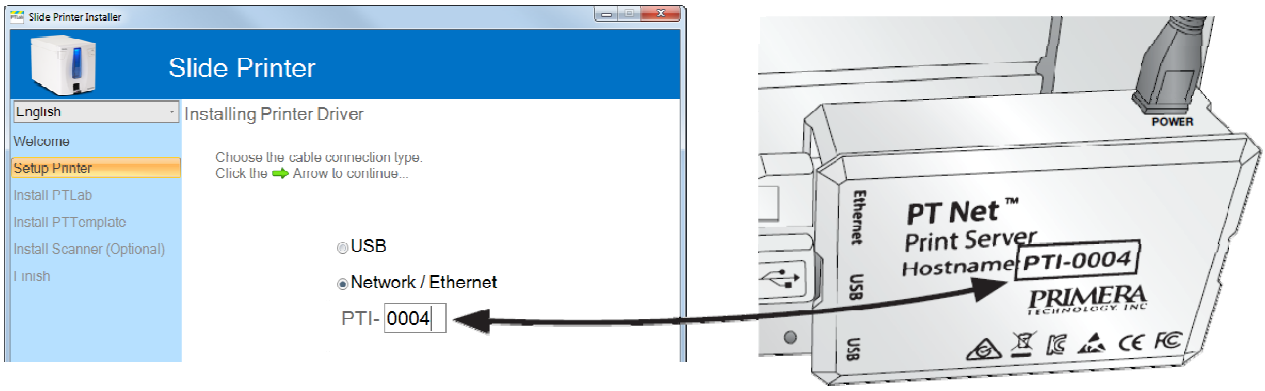


4. Download the Full Installer for your printer here:

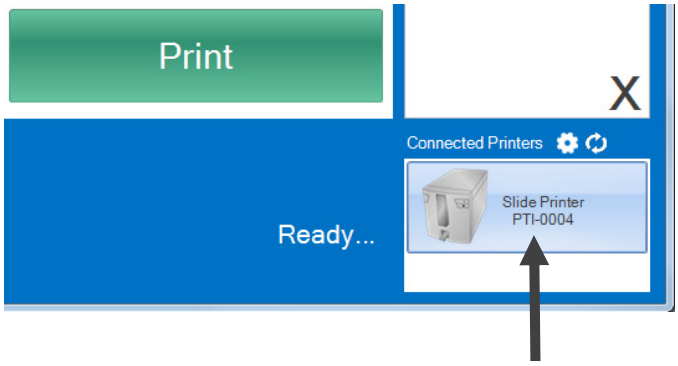
- Slide Printer - http://www.primerahealthcare.com/slideprintersupport.html
- Cassette Printer - http://www.primerahealthcare.com/cassetteprintersupport.html

Note: The latest version must be installed.

5. Install the Software. During installation you will be prompted to choose USB or Network. Choose Network. Enter the Hostname shown on your Print Server. Follow the prompts to complete the installation.



6. If setup and installation were successful, when you open PTLab you will see the Printer Server hostname below the printer name.



Signature CASSETTE PRINTER
Signature SLIDE PRINTER

PRIMERA TECHNOLOGY, INC.

PTTemplate User Manual

Overview

Getting Started

Add Components

Template Number

Input Fields

Logging

Exporting

Preview

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PRIMERA

Updated 9-16-14 (For use with PTTemplate 1.2.0 or higher)

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Section 4 Template Number

Section 5 Input Fields

Section 6 Logging

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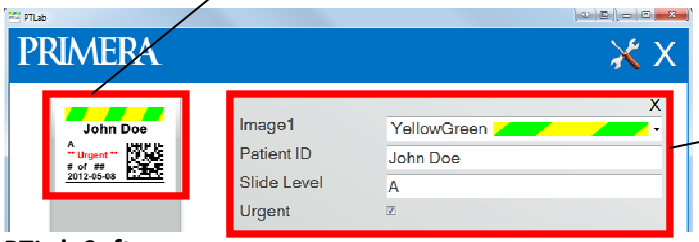
Section 1 Overview

With the template editing software you can edit existing templates or create new templates. This software will allow you to change the appearance of the printed slide/cassette and the appearance, content, quantity, order and type of fields the lab technician will use to enter the data that will be printed on that slide/cassette.

Printed Slide Appearance
(Edit this in PTTemplate)



PTLab Software

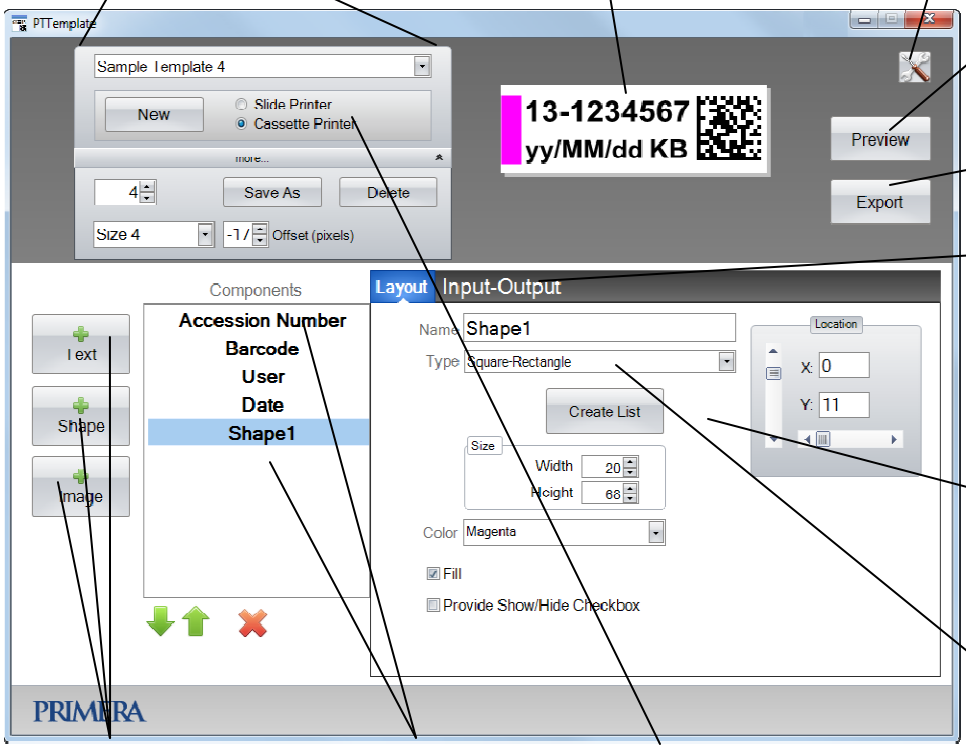
Data Entry Fields
(Edit this in PTTemplate)

Below is quick overview of the components of the PTTemplate template editing software.

Choose or Create Your Template Here

Active Template Preview
Click and drag the components to move them.

Settings



Preview in PTLab
Opens the PTLab software.

Export to PTLab

Input-Output
Set Data input parameters and encode printed Barcode data on this tab.

Edit Component Properties

Shape Field Type

Add a New Component

Current Template Components

Choose Slide or Cassette Template

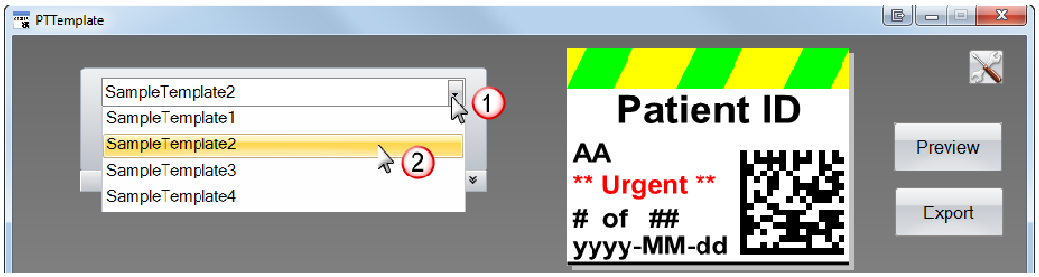
Section 2 Getting Started

PTTemplate comes preloaded with 4 templates for each for Slide and Cassette. These templates are designed to show examples of the available components in use. You may edit these templates to create your template. Once you have made your changes you can "Save As" and name the template as a new name or if you want to preserve the original sample templates "Save As" before you make any changes.

To edit an existing template:

1. Click on the template drop down list.

2. Choose a template from the list.

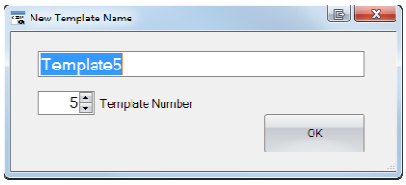


3. You may now begin editing the template.

To save the existing template as a new name:

1. Once you have opened the template, click the small double arrows below the template name to reveal the Save As button.

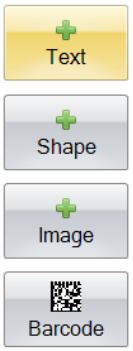
2. Click Save As.



3. Name your template and click OK. (Template Number will automatically be incremented to the next available number. See Section 4 for more information.)

To create a new blank template, click the New button below the template name.

Section 3 Adding Components

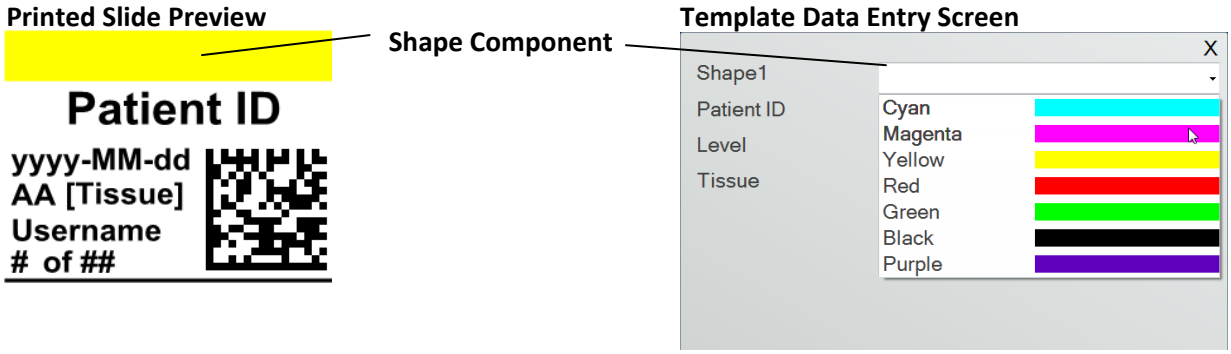


Components can be added to the template using one of the four buttons. Text components include static labels, editable text boxes, list boxes, dates, number ranges, usernames and others. Shapes allow you to choose from predefined colors and shapes such as squares or circles. Images allow you to add a simple monochrome label or multiple color designs. Barcode allows you to add a 2D Barcode. Click the button to add the component to your template. Once it has been added you can manipulate the type of text, the position, the color and the contents of the component using the properties area to the right. The next sections will explain how to use each of the many types of components that can be added to your template.

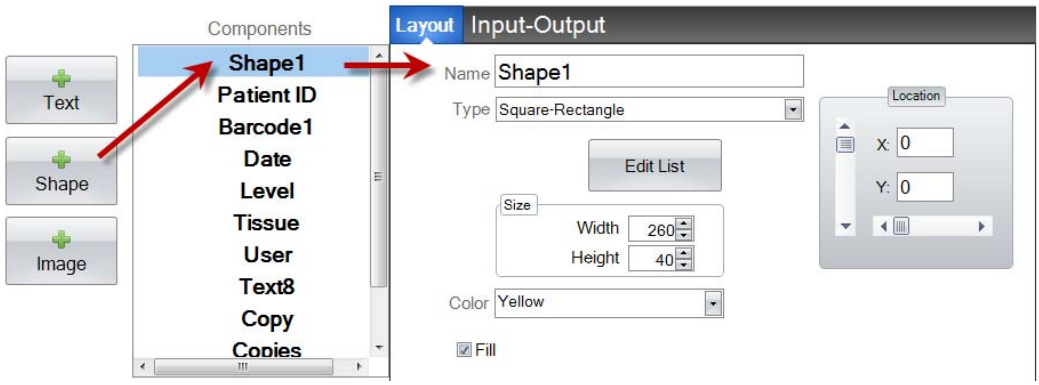
Section 3.1 Shape

Use this component to:

- Add a filled or outline circle, square, or rectangle to your template.
- Add a dropdown list to the component to allow the user to pick from a list of colors.
- Associate a name to each item on the list to denote is use. Example: Red = Liver, Blue = Kidney, etc.
- Automatically set this color using an LIS system or Scanner by designating its three digit RGB code.



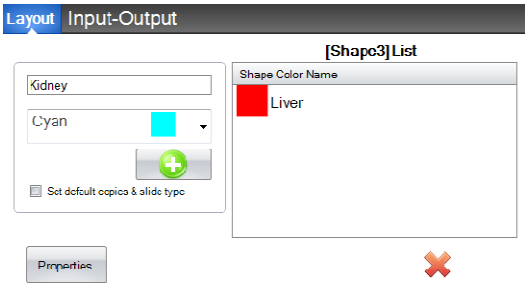
Click the shape button to add a shape component to your template. The layout tab will appear. Below is a description of each of the properties of this component.



- **Name.** This is the name that will appear on the template data entry screen in the PTLab software. It will also be the name that appears on the component list to the left.

- **Type.** Choose Square-Rectangle or Circle –Ellipse

- **Edit List/Create List.** Click here to create a list of colors that the user can choose from. Also associate names for each of the items on this list. ***Click Properties to go back to the layout tab.*** If no list is used, no entry will be available on the template data entry screen. The color property (below) will be used.



- **Size.** Change the size by editing the width and height in pixels.

- **Color.** Set the color of the shape. This is will be the default color if list has been used.

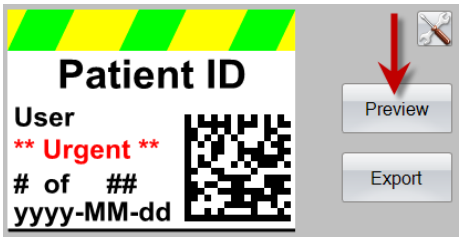
- **Fill.** Check this box to fill in the circle/ellipse or square/rectangle.

- **Location.** You may click on the component in the active preview area or move it using the XY values in the location control.

If you are using the input/output tab to set this component as one that will gather its data from a barcode scanner or LIS system you will need to set the color of the shape in your data string from the scanner or LIS using the following three digit sequences. See section 5 for more information on the using the input fields.

Black	000
Red	100
Green	010
Blue(purple)	001
Cyan	011
Magenta	110
Yellow	101

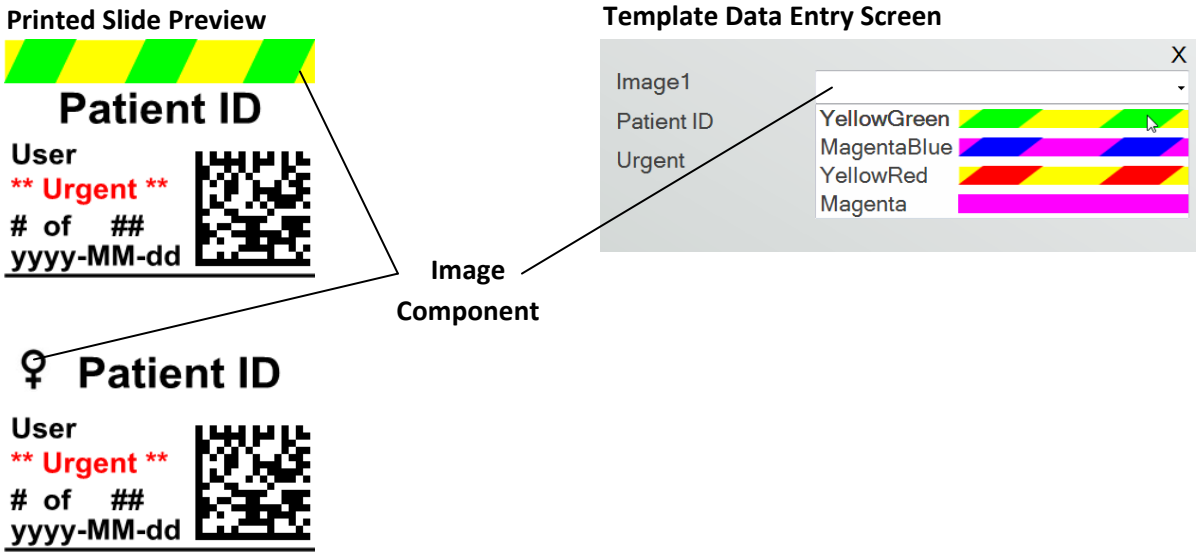
TIP! To view how template Data entry fields will look in PTLab click the Preview button at any time. PTLab will open displaying the template you are currently editing. You can also print the template at this point to view how it will look on a slide/cassette.



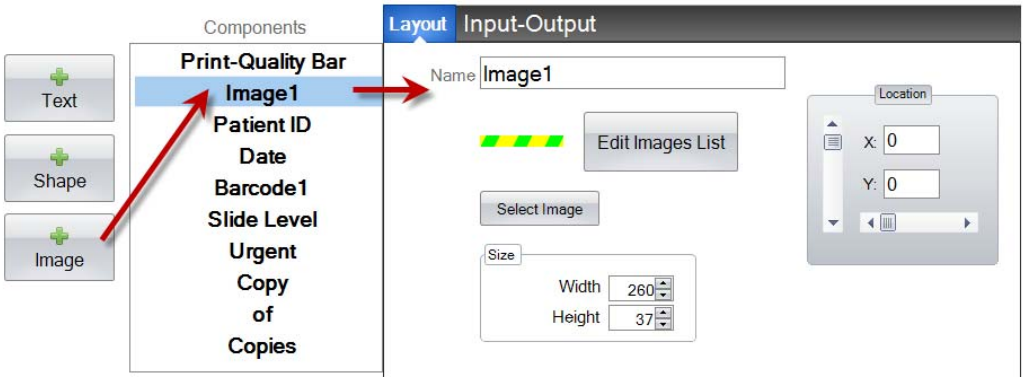
Section 3.2 Image Component

Use this component to:

- Add one of the eleven predefined images to your template. Some of these images are combinations of colors.
- Add your own custom image such as a logo or symbol.
- Add a dropdown list to the component to allow the user to pick from a list of images.
- Associate a name to each item on the list to denote is use. Example: Red = Liver, Blue = Kidney, etc.
- Automatically set this image using an LIS system or Scanner by designating its number from the dropdown list.

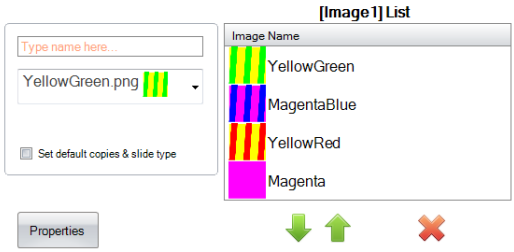


Click the image button to add an image component to your template. The layout tab will appear. Below is a description of each of the properties of this component.

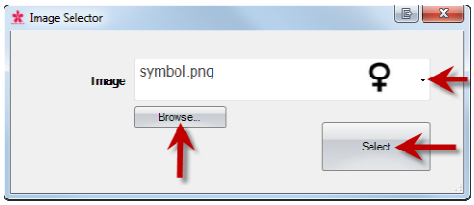


- **Name.** This is the name that will appear on the template data entry screen in the PTLab software. It will also be the name that appears on the component list to the left.

- **Edit List/Create List.** Click here to create a list of images that the user can choose from. Also associate names for each of the items on this list. Click Properties to go back to the layout tab. If no list is used, no entry will be available on the template data entry screen. The selected image (below) will be used.



- **Select Image.** If you just want to select an image to display with no list for the user to choose from click "Select Image". A list of all stored images will be displayed. To add any image to that list click Browse. Any image will print but monochrome images work best. If the image has a color that is not one of the 7 colors this printer supports, the printing software will approximate the closest of the 7 colors available. Once you have chosen your image, click Select.



- **Size.** Change the size by editing the width and height in pixels. The predefined images are all formatted for a size of 260 x 37 pixels. However, you may still manipulate the size of the image. Some images may appear squished or stretched when you change their pixel size. If you browse for a custom image you will want to determine the native size of that image by viewing its properties in Windows. Use the same size in pixels here or at least match the aspect ratio.

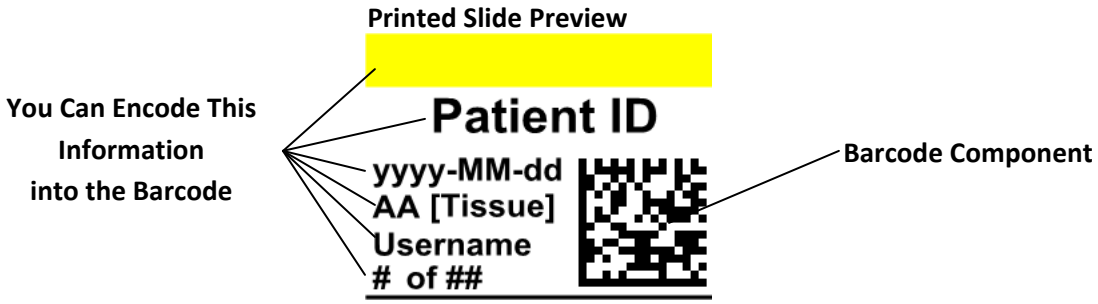
- **Location.** You may click on the component in the active preview area or move it using the XY values in the location control.

If you are using an input field to set this component as one that will gather its data from a barcode scanner or LIS system you will need to set the number in your data string which corresponds to the list you created in your template. The top item on your list = 0. The second item =1 and so on.

Section 3.3 Barcode

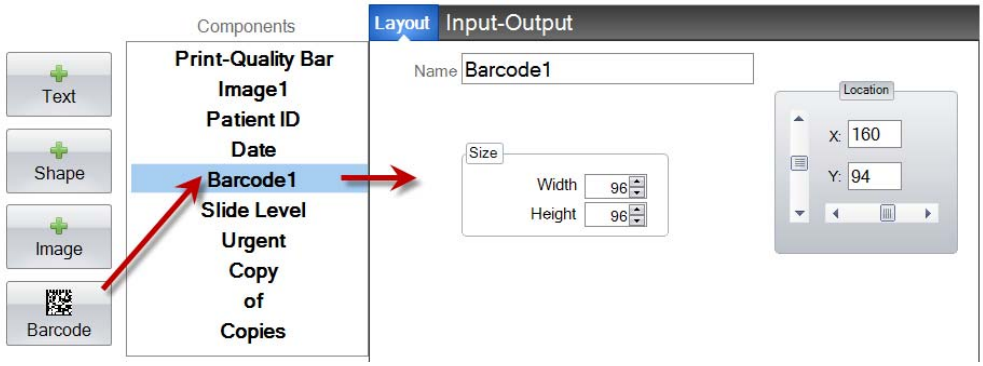
Use this component to:

- Add a 2D barcode to the printed slide/cassette.
- Encode any of the information entered by the user, passed by the LIS system or gathered by the scanner.



Click the barcode button to add a barcode component to your template. The layout tab will appear. Below is a description of each of the properties of this component.

Note: Once a barcode component has been added the button will disappear. This is because you are not able to add more than one barcode to a template.



- **Name.** This is the name that appears on the component list to the left.

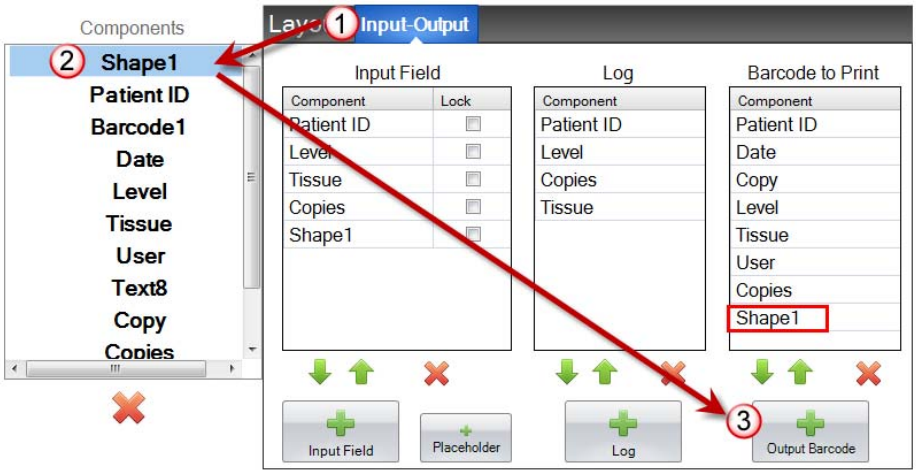
- **Size.** This value should be set to the maximum size of space that you would like to allow for the barcode on your template. If you set the size too small it will reduce the amount of data that you can encode. **Note:** The preview on the template editor and the printing software do not represent the actual barcode that will be printed. The size of each pixel in the barcode will increase or decrease depending on if less data or more data is encoded.

- **Location.** You may click on the component in the active preview area or move it using the XY values in the location control.

Encoding Data in the Barcode

1. To encode data in the barcode select the Input-Output Tab.

2. Select the component you would like to encode on the barcode from the list of components already added to your template.



3. Click the "+ Output Barcode" button to add the component to your barcode.

4. Change the order or remove the component from the barcode by using the arrow controls and the X at the bottom of the list.

Note: The order of the components listed will be the order of the data encoded in the barcode data string. For Example, after scanning the barcode the data will appear as:

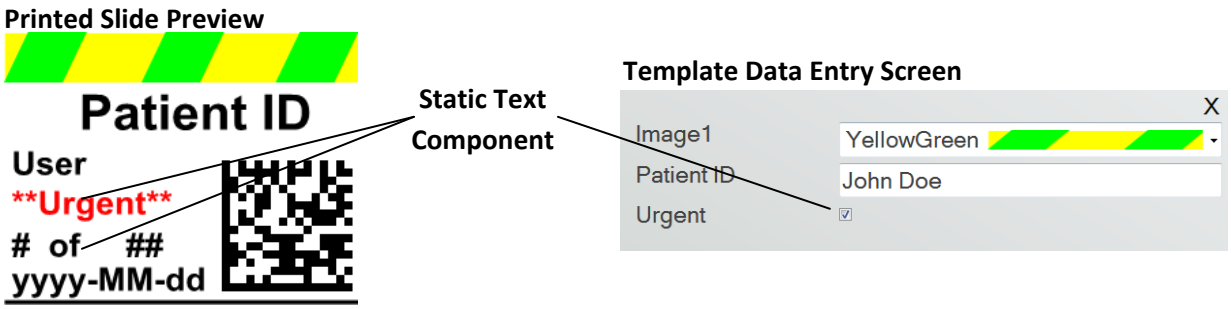
Patient ID, Date, Copy, Level, Tissue, User, Copies, Shape1

The actual data will be the information that you entered on the template data entry screen.

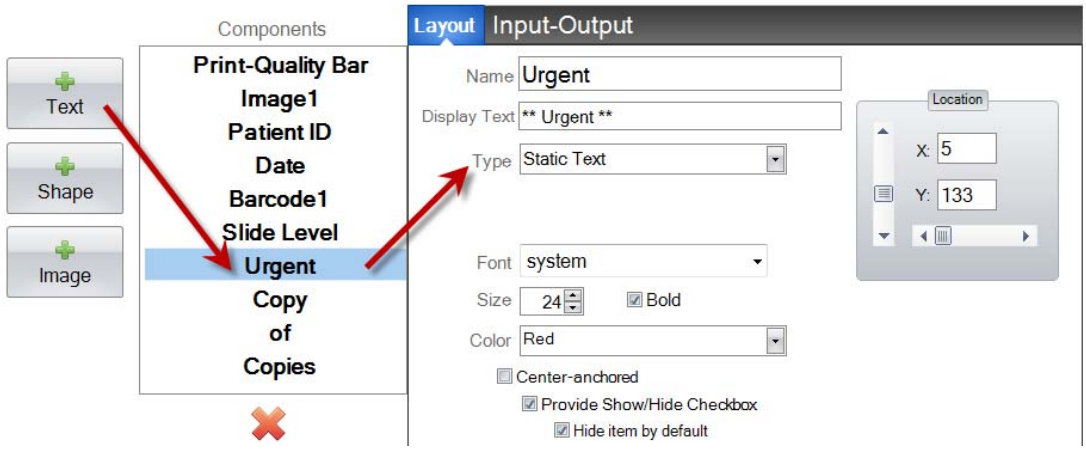
Section 3.4 Static Text/Display Text

Use this component to:

- Add display text that is not editable by a user that appears on every template.
- Print a string of text depending upon whether the user checks or does not check a box.
- Automatically set this text to print or not print using an LIS system or Scanner by designating its status as on or off (1 or 0).



Click the text button to add a text component to your template. The layout tab will appear. Below is a description of each of the properties of this component. Choose Type = Static Text



- **Name.** This is the name that will appear on the template data entry screen in the PTLab software if "Provide Show/Hide Checkbox" is selected. It will also be the name that appears on the component list to the left.

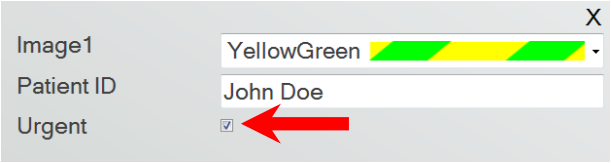
- **Display Text.** This is the text that will appear on the printed slide/cassette.

- **Type.** There are several different types of text components. Choose "Static Text". This will change the available properties below.

- **Font.** Choose the font of the text that will be printed. **Important Note:** Choose a font that will be installed on every computer that may be using the PTLab software. For example, choose

System, or Verdana. Both of those fonts are installed by default with any Windows installation.

- **Size.** Choose the Font Size.
- **Bold.** Check the Bold box to bold the text.
- **Color.** Choose the color from one of the 7 colors the printer can print.
- **Center-anchored.** Choose center anchored to center the text on the XY location. Uncheck it to left justify the text on the XY location.
- **Provide Show/Hide Checkbox.** Check this to show a check box and Name on the template data entry screen.

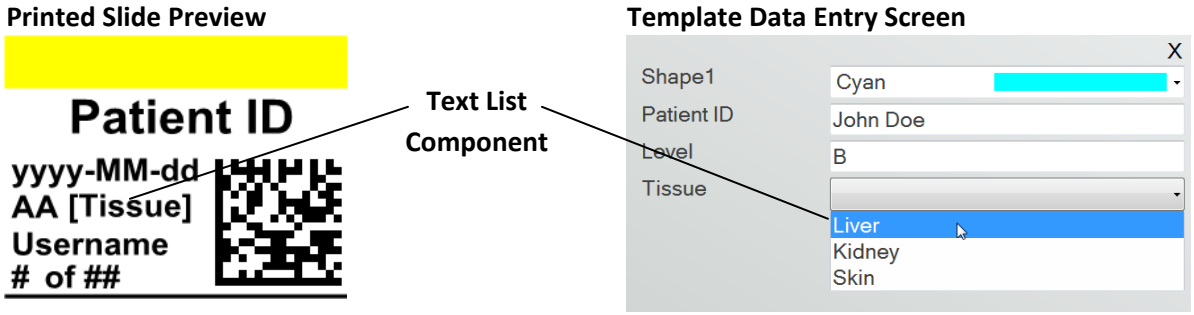


- **Hide item by default.** Check this box to set the default state of the "Provide Show/Hide Checkbox".
- **Location.** You may click on the component in the active preview area or move it using the XY values in the location control.

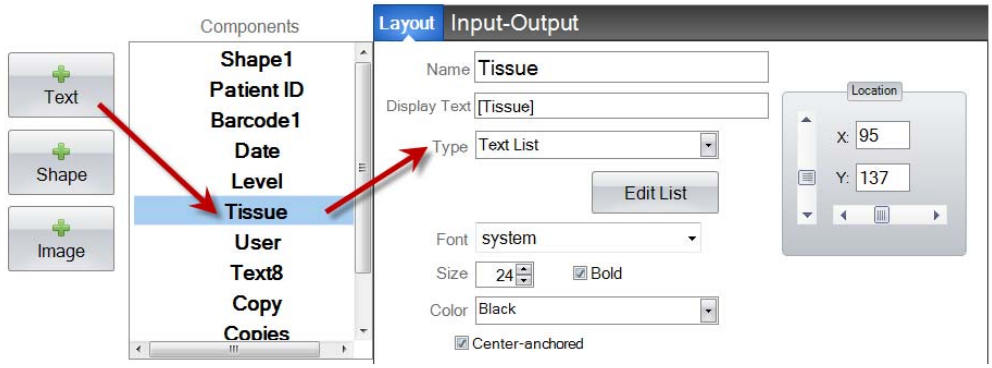
Section 3.5 Text List / List Box

Use this component to:

- Add a list box of text items from which a user can choose.
- Automatically choose an item from the list to print using an LIS system or Scanner by designating its relative number on the list.



Click the text button to add a text component to your template. The layout tab will appear. Below is a description of each of the properties of this component. Choose Type = Text List.

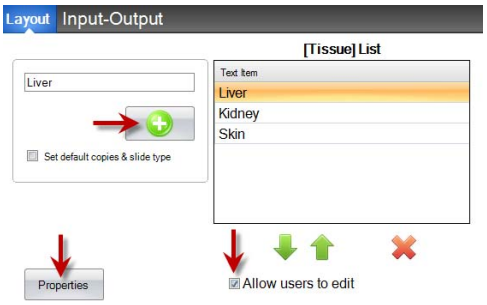


- **Name.** This is the name that will appear on the template data entry screen in the PTLab software. It will also be the name that appears on the component list to the left.

- **Display Text.** This is the default text that will appear on the template preview.

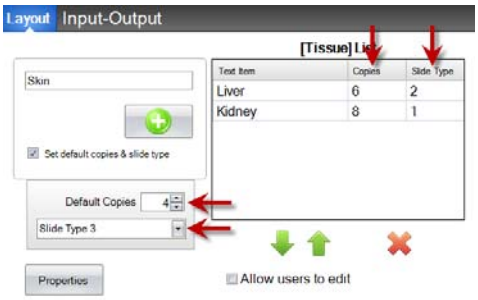
- **Type.** There are several different types of text components. Choose “Text List”. This will change the available properties below.

- **Edit List/Create List.** Click here to create or edit a list of text options that the user can choose from. Enter the name you would like to appear on the list. Click the add button. ***Click Properties to go back to the layout tab.***



- **Allow users to edit.** In the Edit List window check this box to allow users to type alternate text that is not on the list.

- **Set default copies and a slide type.** In the Edit List window, if you would like to require a specific slide type for each item on the text list or a default number of copies check this box. This is useful if you use the text list to designate tissue type and your lab always uses a specific slide type for procedures on this tissue type and/or requires a specific number of slides. You cannot edit items with this information if they are already on the list. You must create a new entry.



- **Font.** Choose the font of the text that will be printed. **Important Note:** Choose a font that will be installed on every computer that may be using the PTLab software. For example, choose System, or Verdana. Both of those fonts are installed by default with any Windows installation.

- **Size.** Choose the Font Size.

- **Bold.** Check the Bold box to bold the text.

- **Color.** Choose the color from one of the 7 colors the printer can print.

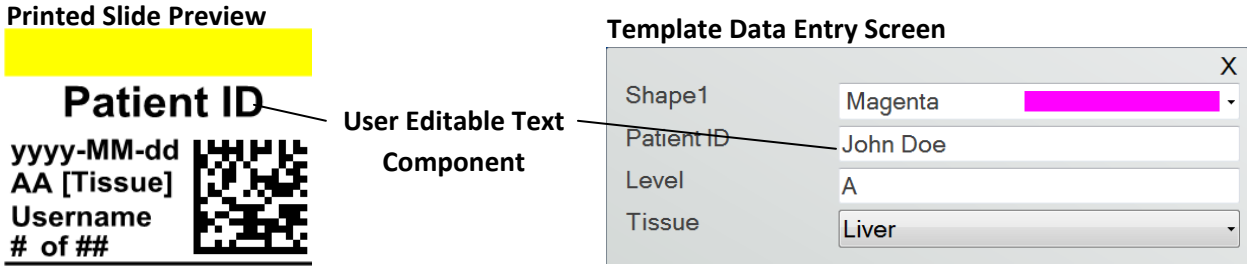
- **Center-anchored.** Choose center anchored to center the text on the XY location. Uncheck it to left justify the text on the XY location.

- **Location.** You may click on the component in the active preview area or move it using the XY values in the location control.

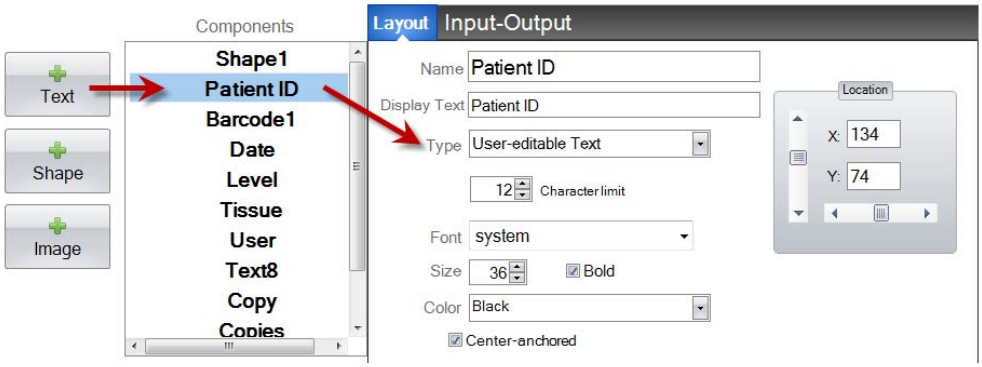
Section 3.6 User Editable Text

Use this component to:

- Add a text box where a user can type the information they want to appear on the slide/cassette.
- Automatically enter the text to print using an LIS system or Scanner.



Click the text button to add a text component to your template. The layout tab will appear. Below is a description of each of the properties of this component. Choose Type = User-editable Text.



- **Name.** This is the name that will appear on the template data entry screen in the PTLab software. It will also be the name that appears on the component list to the left.

- **Display Text.** This is the default text that will appear on the template preview.

- **Type.** There are several different types of text components. Choose "User-editable Text". This will change the available properties below.

- **Character limit.** Set a limit to the number of characters that can be entered so the text will not extend outside the printable area. Use this property with font size to increase the number of characters that will fit on the slide/cassette.

- **Font.** Choose the font of the text that will be printed. **Important Note:** Choose a font that will be installed on every computer that may be using the PTLab software. For example, choose

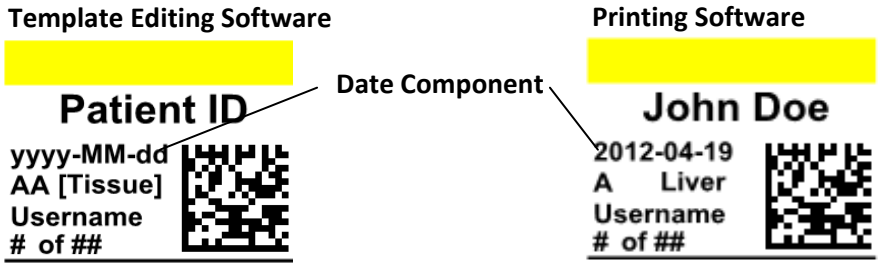
System, or Verdana. Both of those fonts are installed by default with any Windows installation.

- **Size.** Choose the Font Size.
- **Bold.** Check the Bold box to bold the text.
- **Color.** Choose the color from one of the 7 colors the printer can print.
- **Center-anchored.** Choose center anchored to center the text on the XY location. Uncheck it to left justify the text on the XY location.
- **Location.** You may click on the component in the active preview area or move it using the XY values in the location control.

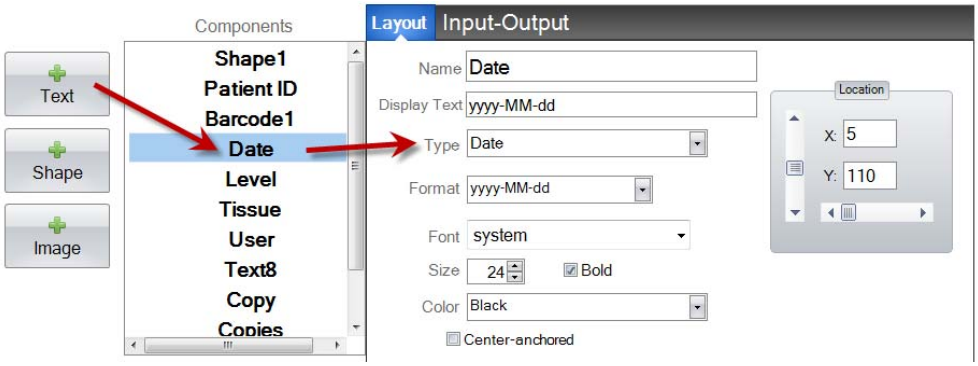
Section 3.7 Date

Use this component to:

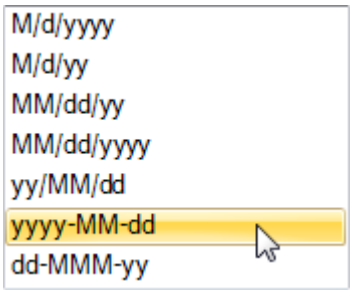
- Add the current date to the printed slide/cassette. The current date is gathered from the computer on which the printing software is installed.



Click the text button to add a text component to your template. The layout tab will appear. Below is a description of each of the properties of this component. Choose Type = Date.



- **Name.** This is the name that appears on the component list to the left.
- **Display Text.** This is the default text that will appear on the template preview
- **Type.** There are several different types of text components. Choose "Date". This will change the available properties below.
- **Format.** Set a date format. Choose from the list that appears.



- **Font.** Choose the font of the text that will be printed. **Important Note:** Choose a font that will be installed on every computer that may be using the PTLab software. For example, choose System, or Verdana. Both of those fonts are installed by default with any Windows installation.

- **Size.** Choose the Font Size.

- **Bold.** Check the Bold box to bold the text.

- **Color.** Choose the color from one of the 7 colors the printer can print.

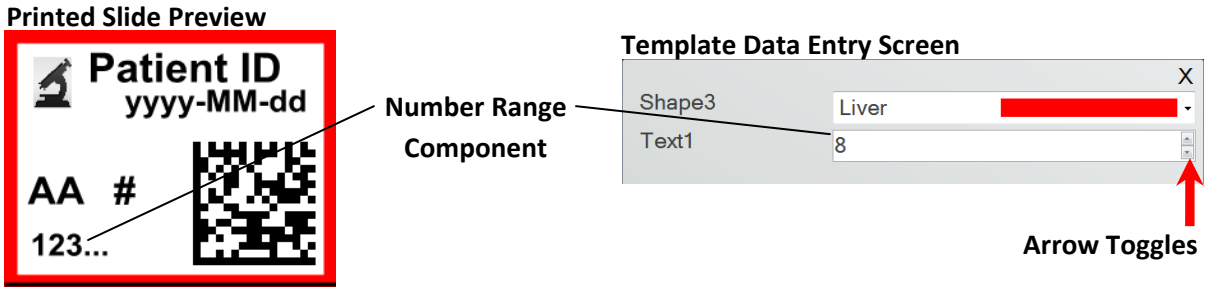
- **Center-anchored.** Choose center anchored to center the text on the XY location. Uncheck it to left justify the text on the XY location.

- **Location.** You may click on the component in the active preview area or move it using the XY values in the location control.

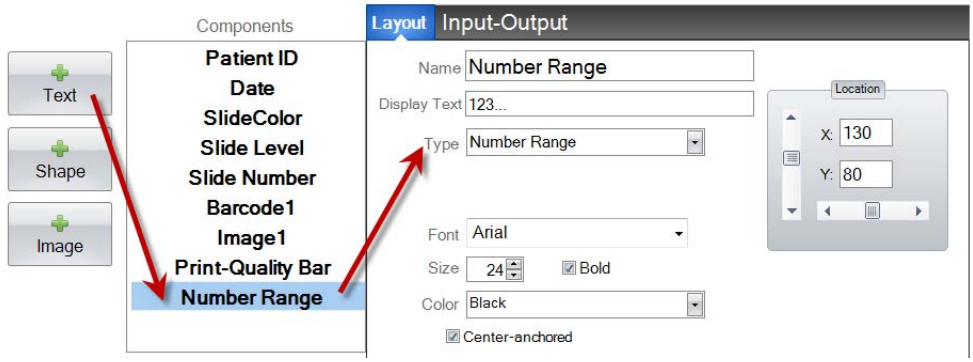
Section 3.8 Number Range

Use this component to:

- Add a number limited field to the template data entry screen.
- Type any number or toggle to the number using the up/down arrows.
- Use this instead of text list or user editable text if you want to limit data entry to numbers but still have the ability to choose any number instead of numbers only shown on a list.



Click the text button to add a text component to your template. The layout tab will appear. Below is a description of each of the properties of this component. Choose Type = Number Range.



- **Name.** This is the name that appears on the component list to the left.

- **Display Text.** This is the default text that will appear on the template preview.

- **Type.** There are several different types of text components. Choose “Number Range”. This will change the available properties below.

- **Font.** Choose the font of the text that will be printed. **Important Note:** Choose a font that will be installed on every computer that may be using the PTLab software. For example, choose System, or Verdana. Both of those fonts are installed by default with any Windows installation.

- **Size.** Choose the Font Size.

- **Bold.** Check the Bold box to bold the text.

- **Color.** Choose the color from one of the 7 colors the printer can print.

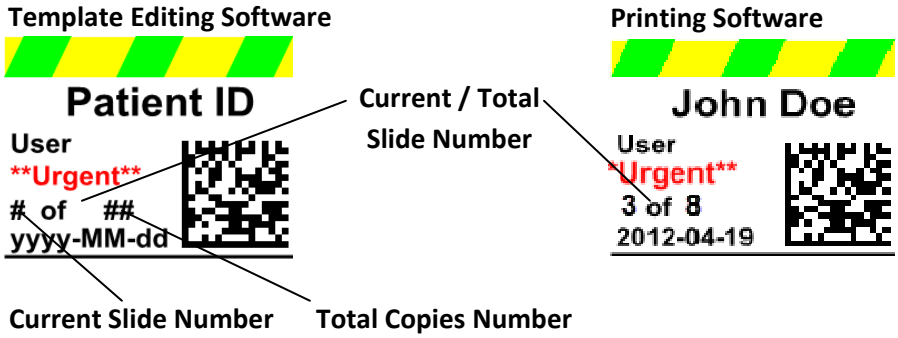
- **Center-anchored.** Choose center anchored to center the text on the XY location. Uncheck it to left justify the text on the XY location.

- **Location.** You may click on the component in the active preview area or move it using the XY values in the location control.

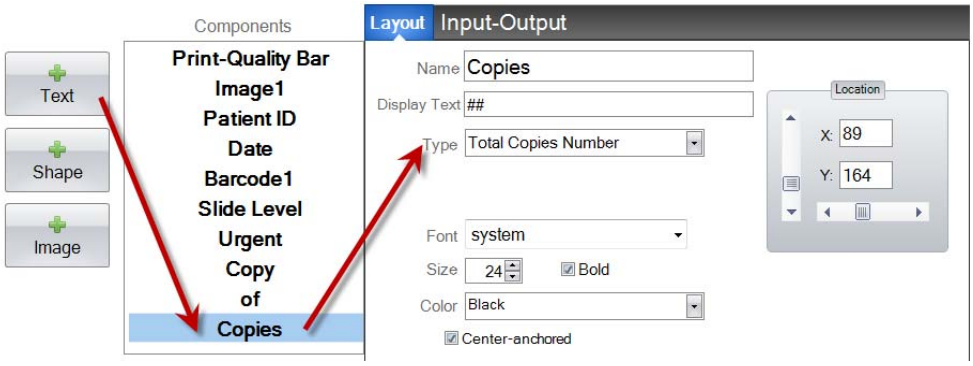
Section 3.9 Current Slide Number / Total Slide Number

Use this component to:

- Print the slide the number of the currently printing slide and the total number of slides to print. For Example, **3 of 8** would be printed on the third slide printed of a group of eight.



Click the text button to add a text component to your template. The layout tab will appear. Below is a description of each of the properties of this component. Choose Type = Current Slide Number or Total Copies Number.



- **Name.** This is the name that appears on the component list to the left.

- **Display Text.** This is the default text that will appear on the template preview.

- **Type.** There are several different types of text components. Choose “Current Slide Number” or “Total Copies Number. This will change the available properties below.

- **Font.** Choose the font of the text that will be printed. **Important Note:** Choose a font that will be installed on every computer that may be using the PTLab software. For example, choose System, or Verdana. Both of those fonts are installed by default with any Windows installation.

- **Size.** Choose the Font Size.

- **Bold.** Check the Bold box to bold the text.

- **Color.** Choose the color from one of the 7 colors the printer can print.

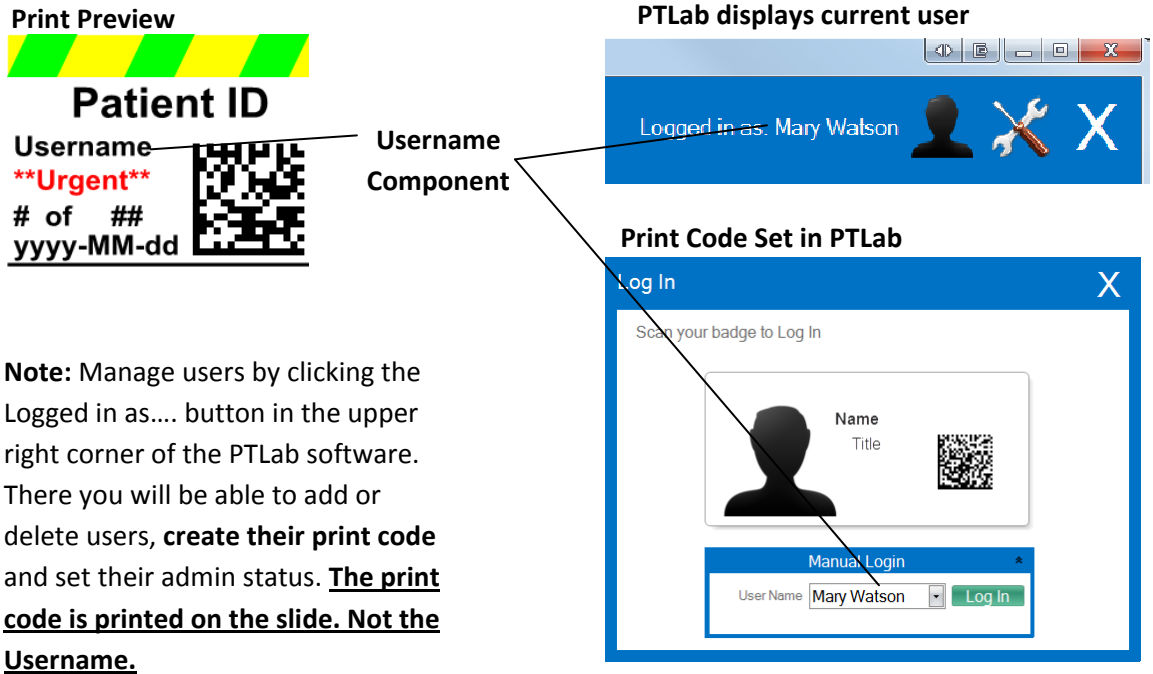
- **Center-anchored.** Choose center anchored to center the text on the XY location. Uncheck it to left justify the text on the XY location.

- **Location.** You may click on the component in the active preview area or move it using the XY values in the location control.

Section 3.10 Username

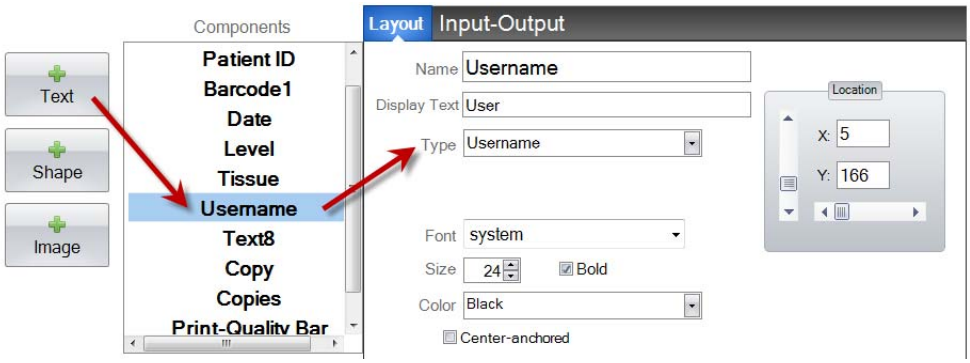
Use this component to:

- Print the "print code" of the user currently logged into the PTLab software.



Note: Manage users by clicking the Logged in as…. button in the upper right corner of the PTLab software. There you will be able to add or delete users, **create their print code** and set their admin status. **The print code is printed on the slide. Not the Username.**

Click the text button to add a text component to your template. The layout tab will appear. Below is a description of each of the properties of this component. Choose Type = Username.



- **Name.** This is the name that appears on the component list to the left.
- **Display Text.** This is the default text that will appear on the template preview.

- **Type.** There are several different types of text components. Choose “Username”. This will change the available properties below.

- **Font.** Choose the font of the text that will be printed. **Important Note:** Choose a font that will be installed on every computer that may be using the PTLab software. For example, choose System, or Verdana. Both of those fonts are installed by default with any Windows installation.

- **Size.** Choose the Font Size.

- **Bold.** Check the Bold box to bold the text.

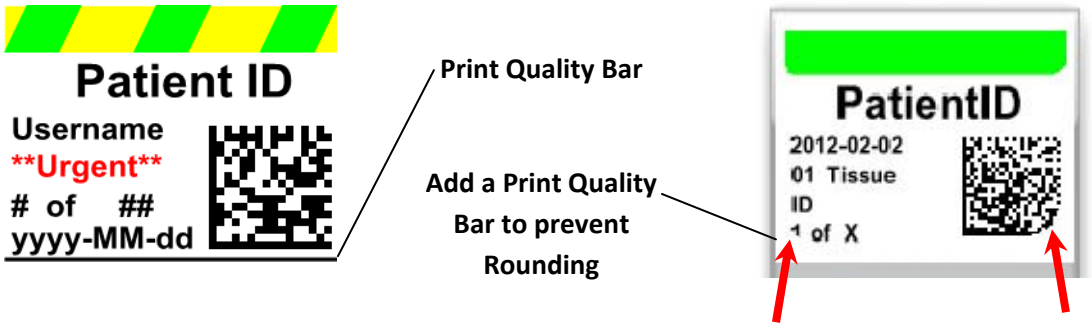
- **Color.** Choose the color from one of the 7 colors the printer can print.

- **Center-anchored.** Choose center anchored to center the text on the XY location. Uncheck it to left justify the text on the XY location.

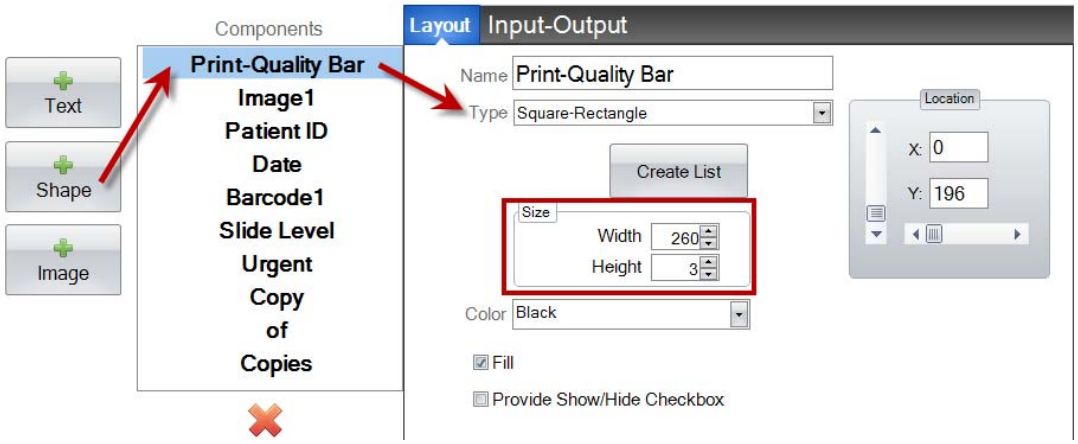
- **Location.** You may click on the component in the active preview area or move it using the XY values in the location control.

Section 3.11 Print Quality Bar

A print quality bar will automatically be added at the bottom of the print to prevent any leading edge print quality issues from affecting printed data. Rounding at the leading edge of any new color on a slide is typically caused by low quality slides or slides that are not thermal printable (inkjet). If changing slides is not an option consider modifying your template to include a print quality bar at the bottom of the printable area.

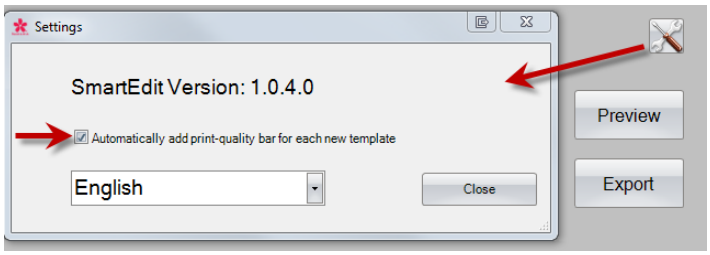


A print Quality bar is created using the shape component.



To create a Print Quality Bar set the size to 260 wide by 3 pixels high. Set the color to Black. Place it at the bottom of the template.

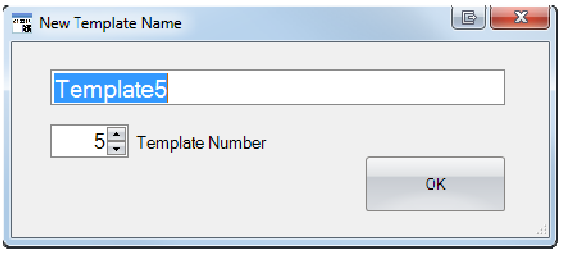
To prevent a print quality bar from being added to every new template uncheck the box in the settings area.



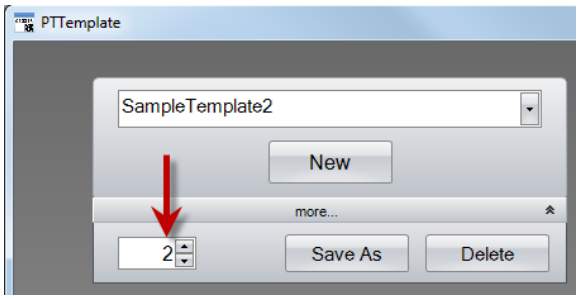
Section 4 Set a Template Number

Setting a template number allows you to automatically open and use a specific template by scanning an existing barcode on a specimen label in PTLab. For example, after scanning, in addition to automatically adding the information to be printed, the software can automatically choose the template needed.

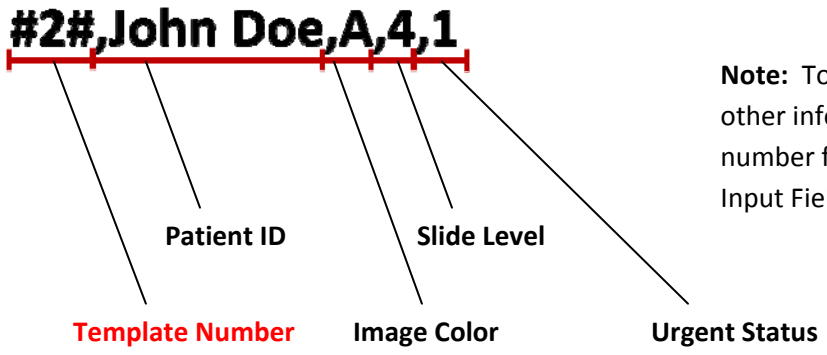
The next available template number will automatically be added any time a new template is created. You may also change this number but it should not be changed to the same number as an existing template.



You can view or change existing template numbers by clicking the down arrow under the template name. This will reveal the template number of the current template.



When you scan a printed barcode on the specimen label using the printing software the template number should be the first field encoded in the barcode encapsulated by number symbols.



Note: To setup your template to receive other information besides the template number from a barcode you must set the Input Fields. See section 5

Section 5 Input Field

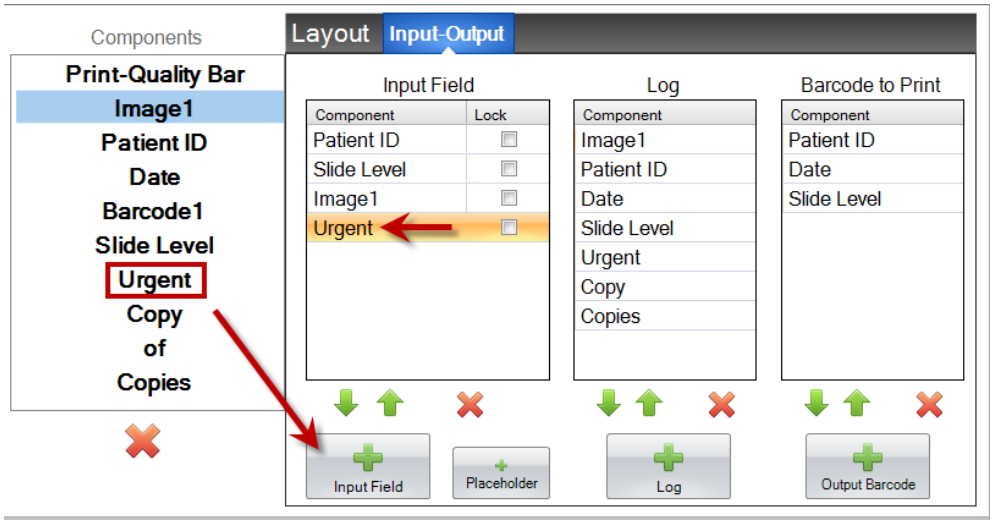
Setting input fields allows the template to receive data from external sources such as a barcode scanner or an LIS system. Without input fields set, the only way a user can add data to a template in the printer software is by manually typing the information or choosing it from a dropdown box. Some components such as date and username text fields will also gather data without an input field set.

1. To set an input field, first add all the components you would like to appear on your printed slide.

2. Click on the Input-Output tab.

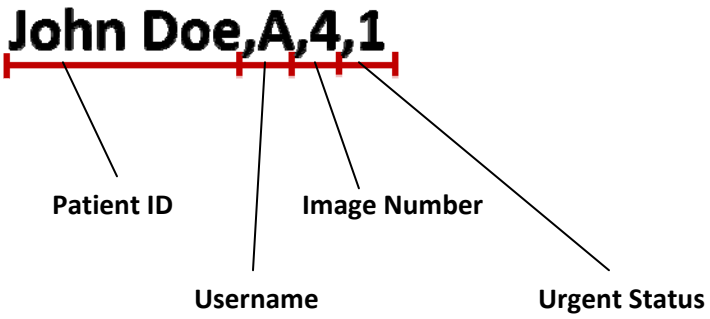
3. Select the component you would like to add.

4. Click the "+ Input Field" button to add it.

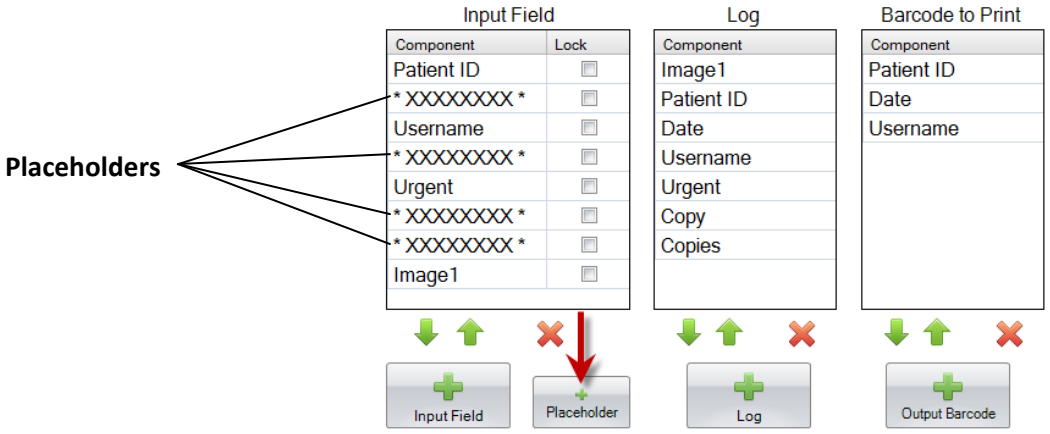


Setting the Order. Setting the order is very important! If you are working with existing barcodes on specimen labels or LIS systems where the data string scanned or received cannot be changed, set the order of the template to match those fields.

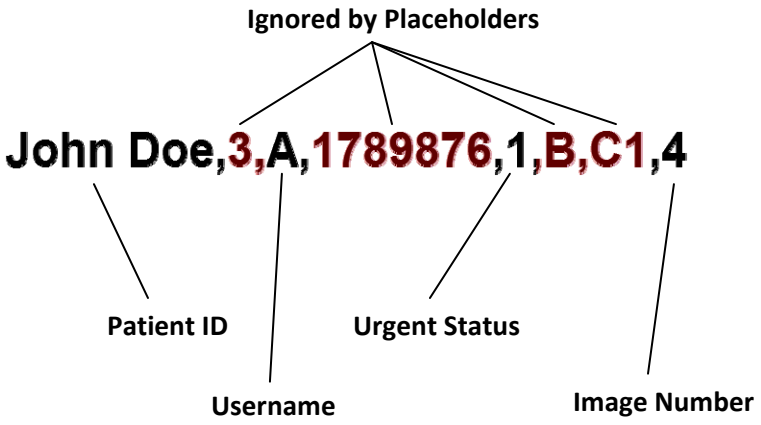
For example, if your data string is as shown below, set your data order so that Patient ID is on top and the others follow. Use the arrows keys to change the positions.



Adding a Placeholder. In most cases, if you are working with existing barcodes or an LIS system, there will be much more data in the data string than is needed to fill in your template. Often times there will be only a few fields you need among many more fields that are encoded in the barcode or sent by the LIS system. To get around this problem you need to add placeholders to account for the data that the template should ignore.

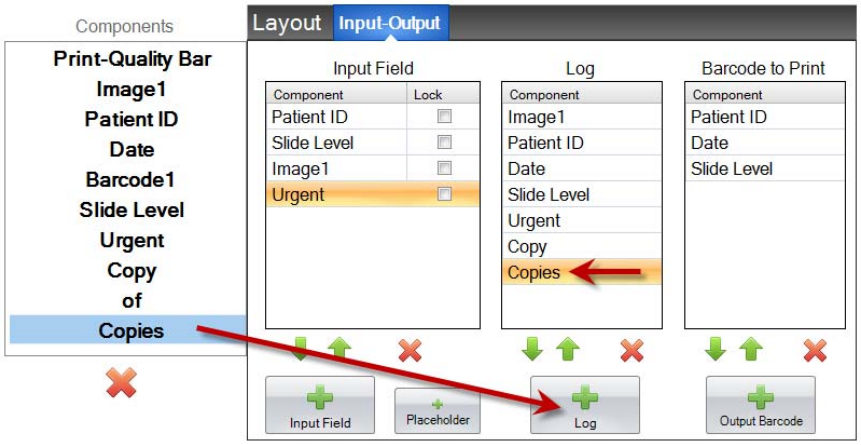


Example Data String with extra data that should be ignored in RED

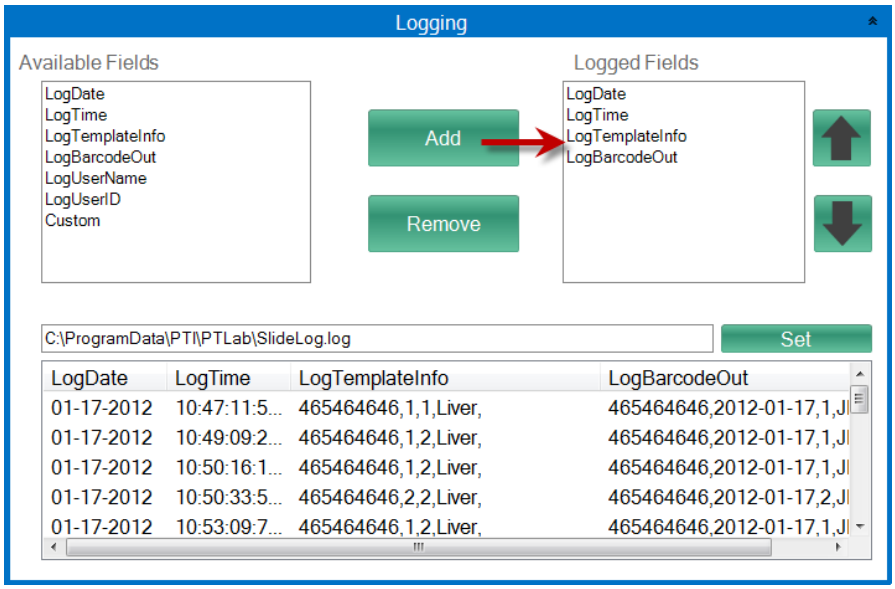


Section 6 Logging

Using the Input-Output tab set the fields that the printing software will log if you set it to log template data. Select the component you would like to log and click the "+Log" button in the Log column of the Input-Output tab.



To log these fields you will need to set logging in the printing software to "Log Template Info."



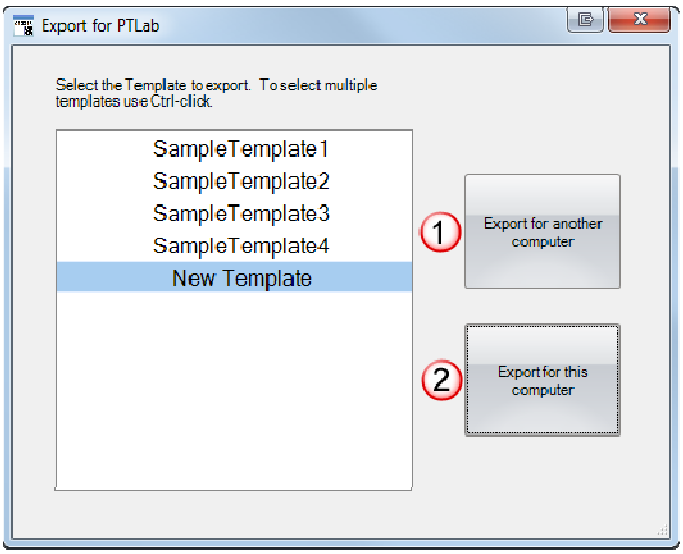
PTLab Software Logging Settings

Section 7 Exporting Templates

There are two ways you can export templates.

1. Export for another computer = PTTemplate is on a different computer than PTLab.
2. Export for this computer = PTTemplate is on the same computer as PTLab.

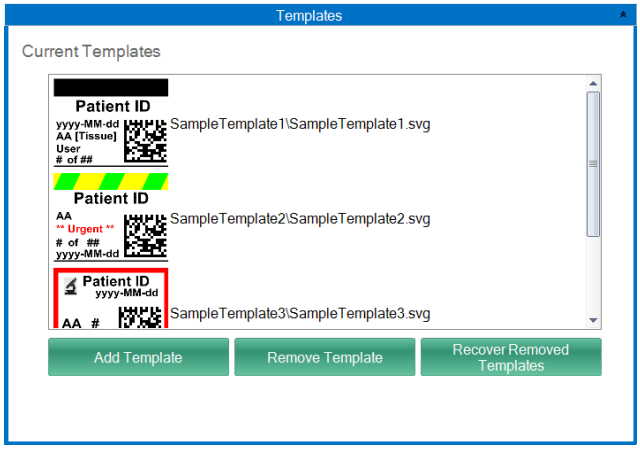
In either case, select the template you would like to export, and choose the appropriate button.

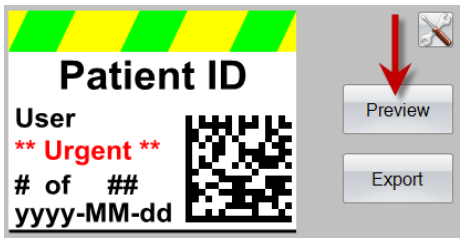


Note: You can select multiple templates for export by holding the CTRL key while clicking on each item.

If you choose to “Export for this computer”, your template will automatically appear in PTLab as an available template.

If you choose to “Export for another computer”, the software will create a zip file and place it where you choose. You will then need to move the zip file to the computer connected to the printer and add the zip file that is created using template management area of the PTLab settings page.



Section 8 Preview a Template

To view how template data entry fields will look in slide printing software click the Preview button at any time. The slide printing software will open displaying the template you are currently editing. You can also print the template at this point to view how it will look on a slide.