

THARO

V-425E and V-434E Users Manual



CONTENTS

1	Barcode Printer	1
1.1	Box Contents	1
1.2	Getting to Know Your Printer	2
2	Printer Setup	4
2.1	Opening the Top Cover	4
2.2	Opening the Print Mechanism	4
2.3	Loading Ribbon	5
2.4	Loading Labels	7
2.5	Label Supply Hub Installation	9
2.6	Preparation for Tag Printing	10
2.7	Connection the Printer to your Computer	11
2.8	EASYLABEL Start Installation	12
2.9	Windows Driver Installation	15
3	Printer Setting and Control	17
3.1	Operation Panel	17
3.2	Label Calibration and Self-Test	18
3.3	Error Alerts	19
4	NetSetting for Ethernet	20
4.1	Installing the NetSetting Software	20
4.2	NetSetting Interface	21
5	Accessories	28
5.1	Preparation	28
5.2	Installing the Label Dispenser	29
5.3	Installing the Cutter	34
6	Maintenance and Adjustment	38
6.1	Cleaning the Thermal Print Head	38
6.2	Adjusting the Print Head Pressure	38
6.3	Adjusting the Print Line	39
6.4	Clearing Cutter jams	39
6.5	Troubleshooting	40
	Appendix	41
	Product Specifications	41
	Interface Specifications	42

FCC COMPLIANCE STATEMENT FOR AMERICAN USERS

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. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at their own expense.

EMS AND EMI COMPLIANCE STATEMENT FOR EUROPEAN USERS

This equipment has been tested and passed with the requirements relating to electromagnetic compatibility based on the standards EN 55022:2006/A1:2007 Class A, EN61000-3-2:2006, EN 61000-3-3:2008 and EN55024:1998/A1:2001/A2:2003, IEC 61000-4-2:2008 series, The equipment also tested and passed in accordance with the European Standard EN55022 for the both Radiated and Conducted emissions limits.

V-400E SERIES TO WHICH THIS DECLARATION RELATES IS IN CONFORMITY WITH THE FOLLOWING STANDARDS

IEC 60950-1:2005(2nd Edition)+Am 1:2009, GB9254-2008 (Class A) ; GB17625. 1-2003; GB4943.1-2011, EN 55022:2006/A1:2007 Class A, EN61000-3-2:2006, EN 61000-3-3:2008 and EN55024:1998/A1:2001/A2:2003, IEC 61000-4-2:2008 series, UL 60950-1, 1st Edition, 2007-10-31, CSA C22.2 No. 60950-1-03, 1st Edition, 2006-07, CFR 47, Part 15

WARNING

This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to correct the interference at their own expense.

此为Class A产品，在生活环境中，该产品可能造成无线电干扰，在这种情况下，可能需要用户对其干扰采取切实可行的措施。

SAFETY INSTRUCTIONS

During the print process the Printhead will become hot. Do NOT attempt to clean the Printhead until it has had time to cool.

The Printhead is the most fragile part of your Printer. Do NOT use sharp or hard objects to clean the Printhead. Do NOT touch the glass surface of the Printhead with your hand.

This Printer is built exclusively to print labels, tickets and tags, continuous paper, etc. Only use media that is recommended for a direct thermal or thermal transfer Printer.

The Printer is configured for input voltages of 110 to 240 V. Connect only to a power outlet with a grounded contact. Always ensure the Printer is switched OFF before connecting the power cord to an electrical outlet.

Do not expose the Printer to moisture or operate it in wet or damp areas.

The Printer will operate with the cover open if necessary. This is not recommended, as the Printer's moving or rotating parts can cause injury. Keep long hair, jewelry and loose clothing away from any moving parts.

Remove the power cord from the rear of the Printer when disconnecting or attaching accessories such as rewind units, cutters, etc.

Caution

This printer is equipped with a button cell lithium battery. This battery on the main circuit board.

- * There is a Danger of explosion if the battery is replaced incorrectly.
- ** Dispose of used batteries according to the manufacturer's instructions.
- *** Only replace the battery with an equivalent type.

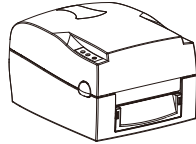
Specifications are subject to change without notice.

1 Barcode Printer

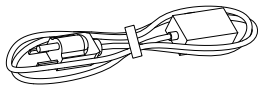
1.1 Box Contents

Please check that all of the following items are included with your printer.

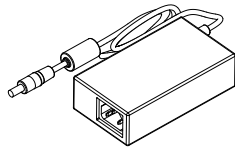
- V-425E / V-434E Printer



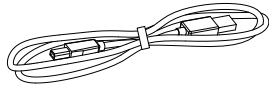
- Power Cord



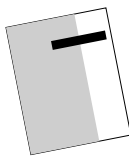
- AC Adapter



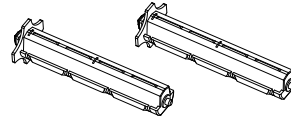
- USB Cable



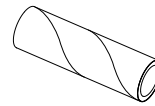
- Quick Start Guide



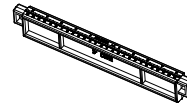
- Ribbon Hubs (2)



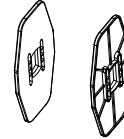
- Empty Ribbon Core



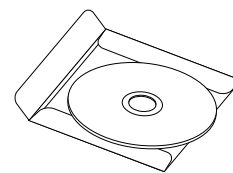
- Label Supply Hub



- Label Guide Plates (2)



- CD (EASYLABEL Start software and Users Manual)

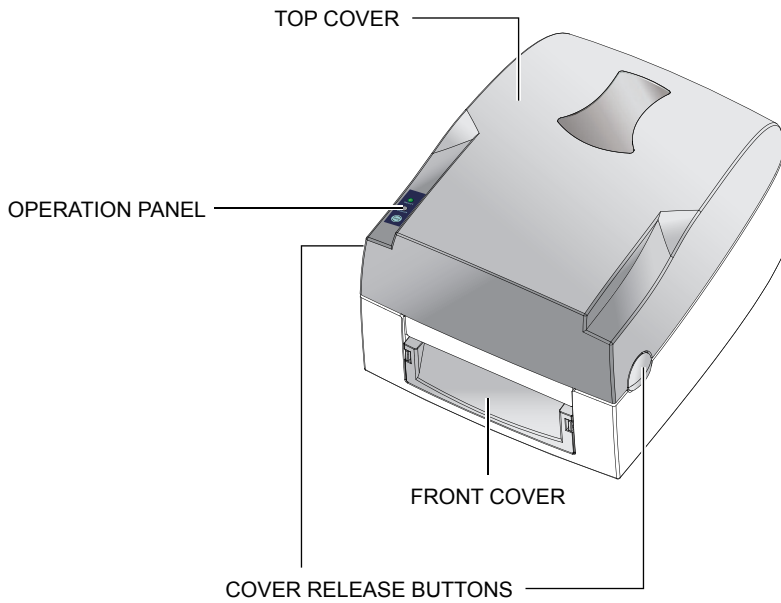


1 Barcode Printer

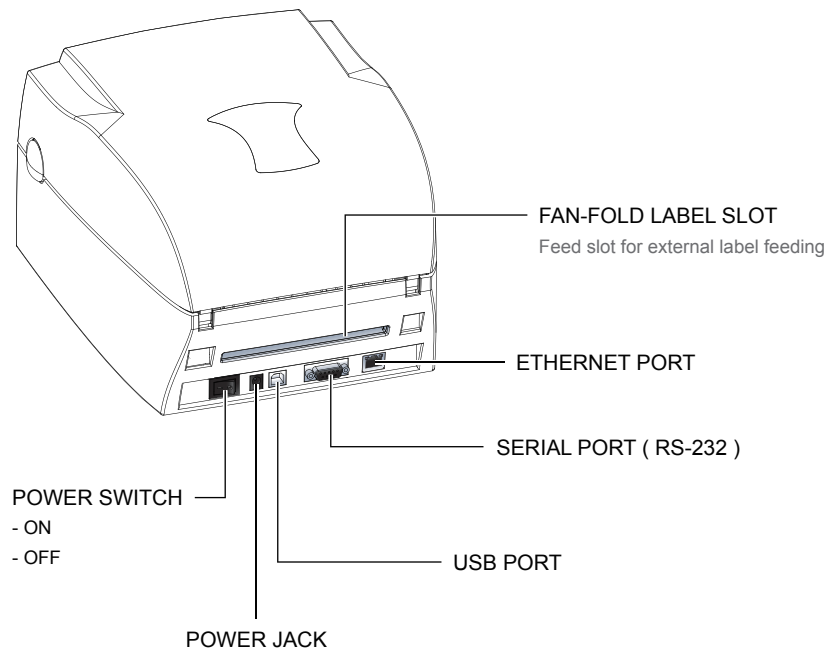
1.2 Getting To Know Your Printer

► Overview

- Front

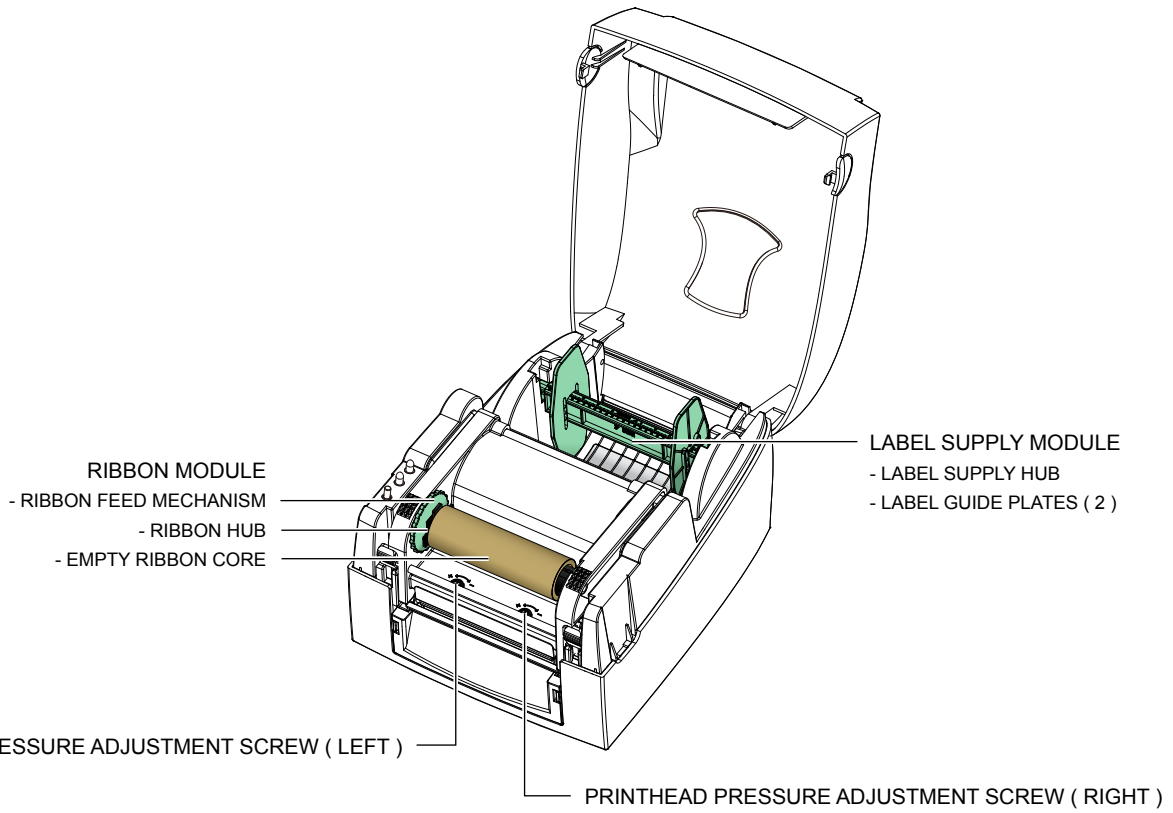


- Rear

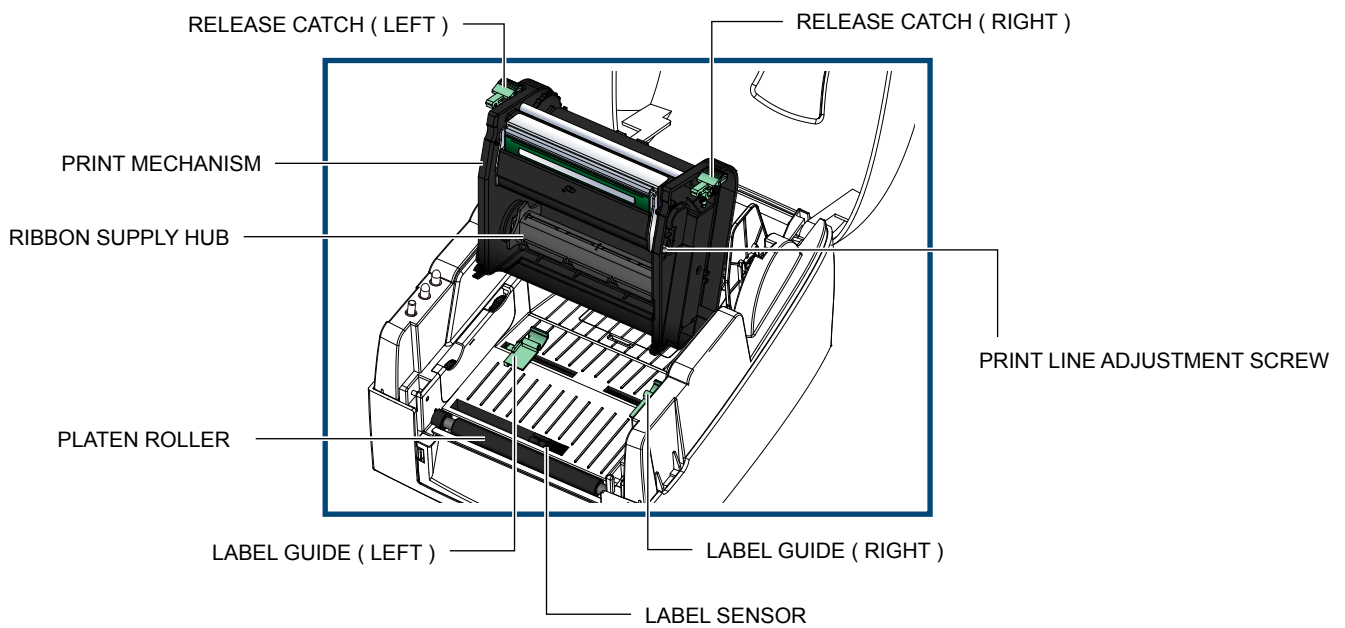


1 Barcode Printer

► Open Cover



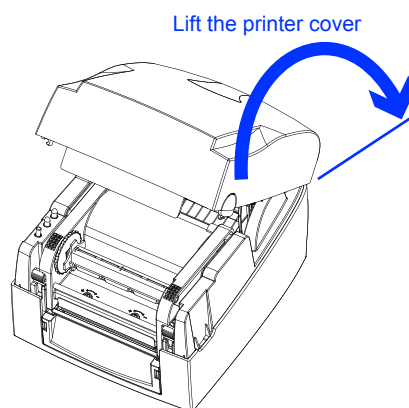
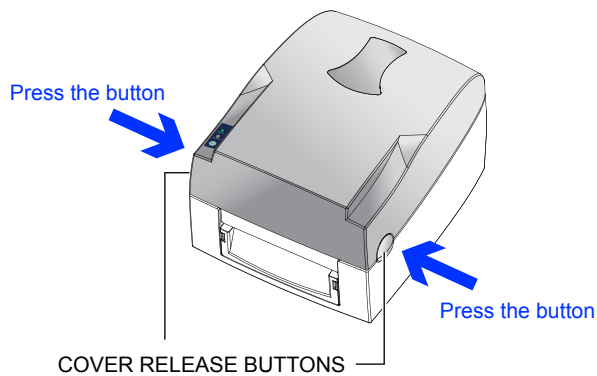
► Open Print Mechanism



2 Printer Setup

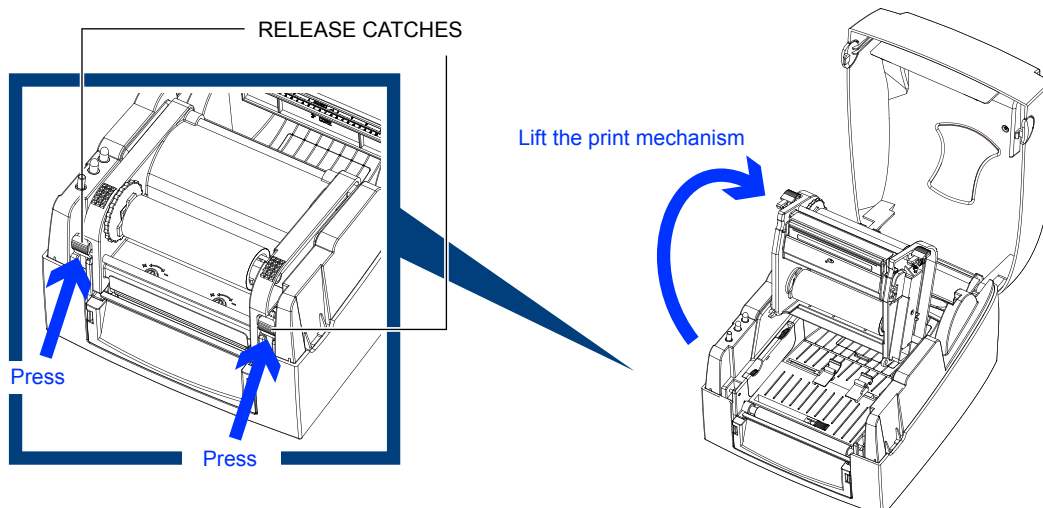
2.1 Opening the Top Cover

- ▶ Open the Top Cover by pressing the release buttons on both sides of the Top Cover and lift the cover.



2.2 Open the Print Mechanism

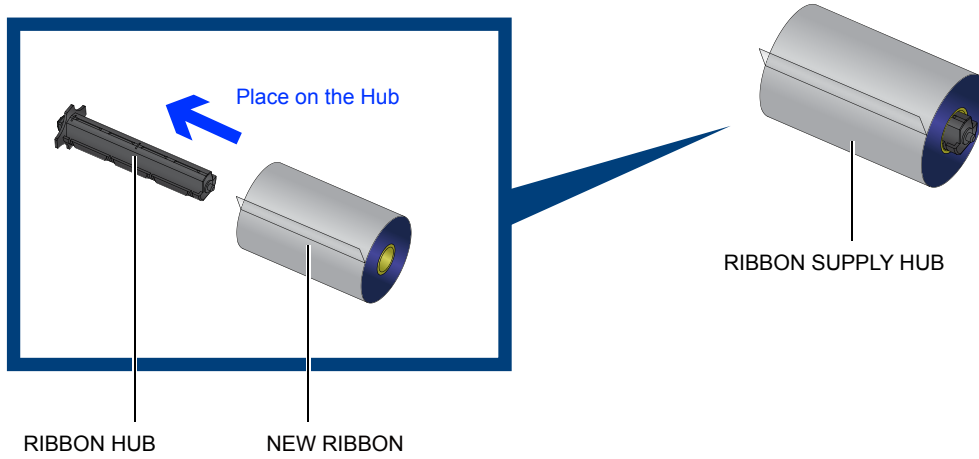
- ▶ Open the print mechanism by pressing the Release Catches and then lift the Print Mechanism.



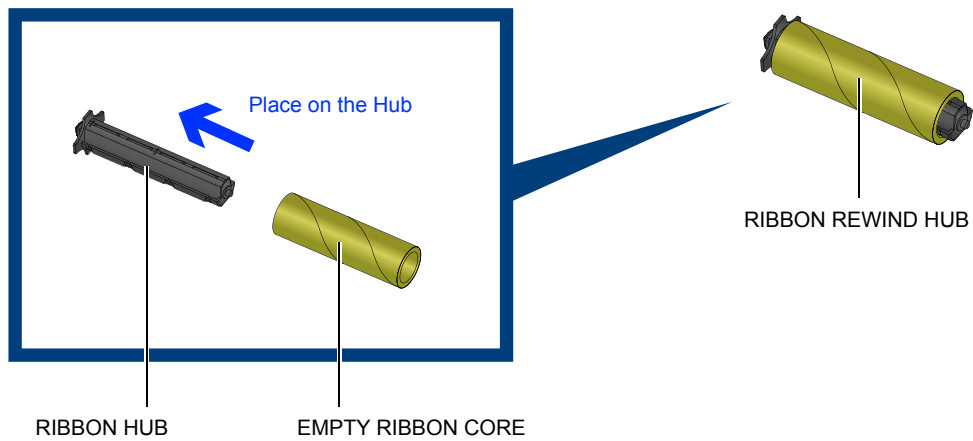
2 Printer Setup

2.3 Loading Ribbon

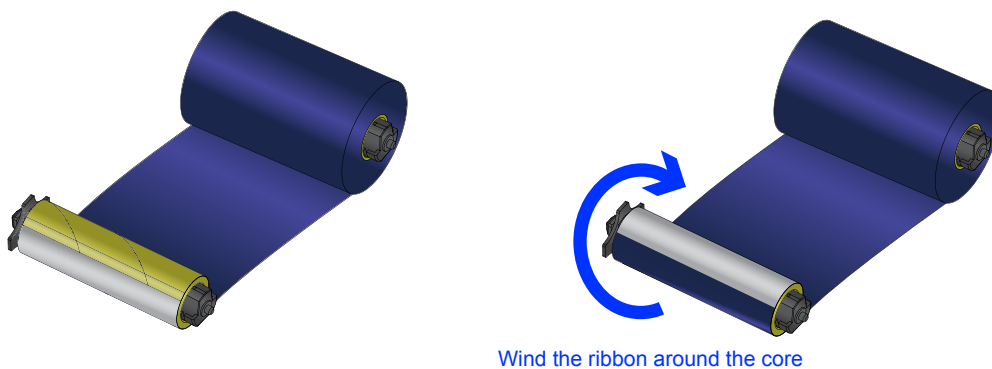
- ▶ Place the new ribbon on one of the Ribbon Hubs.



Place an empty ribbon core on the other Ribbon Hub.

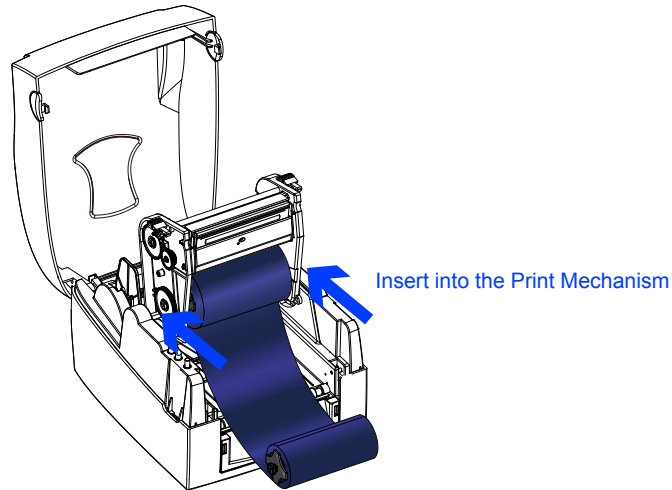


Attach the ribbon to the empty ribbon core and wind the ribbon around the core 2~3 times.

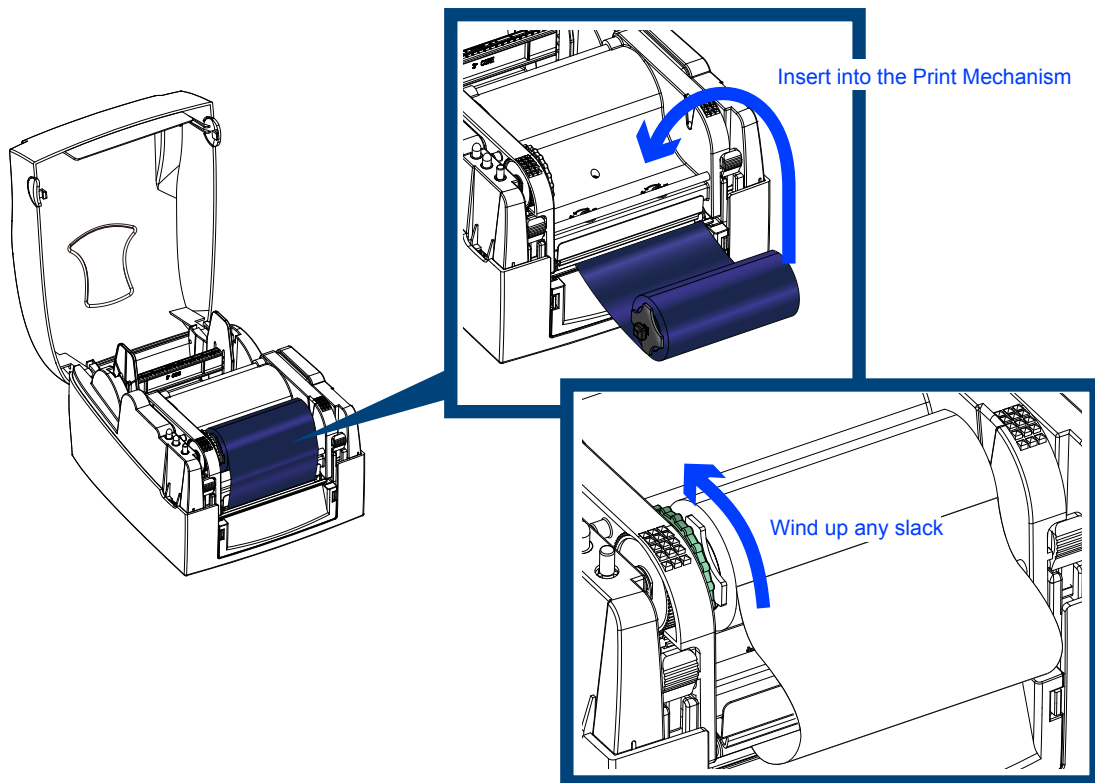


2 Printer Setup

- ▶ Place the Ribbon Supply Hub at the back of the Print Mechanism.



- Pass the ribbon under the Print Head.
- Insert the Ribbon Rewind Hub into the Print Mechanism.

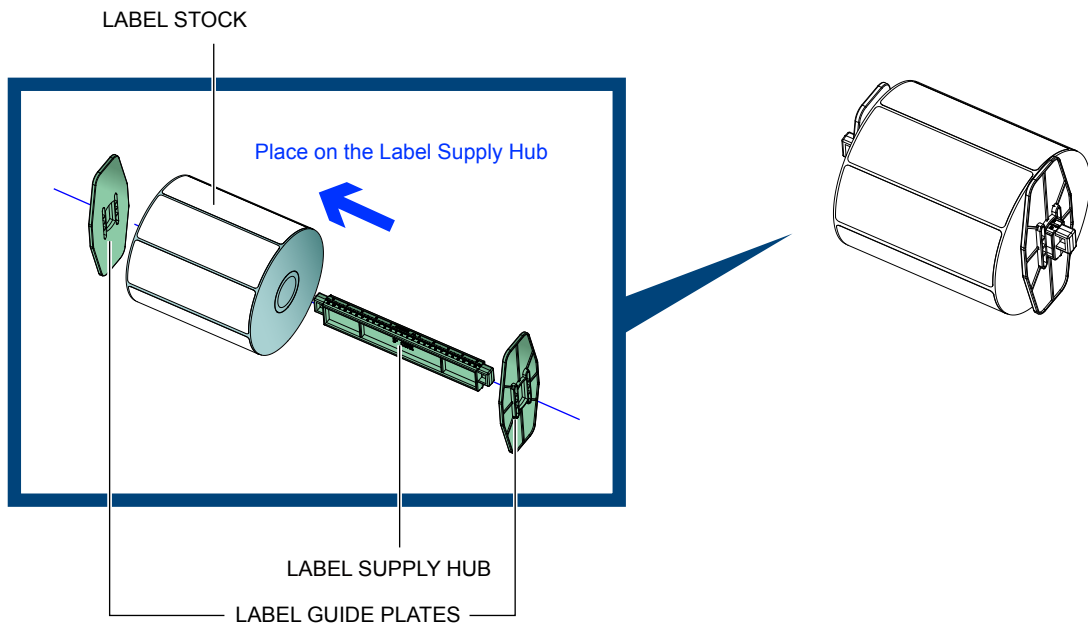


- Close the Print Mechanism.
- Make sure that it clicks into place.
- Wind up any slack in the ribbon.

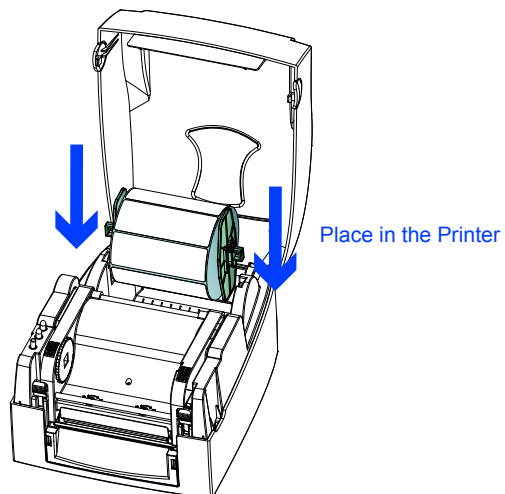
2 Printer Setup

2.4 Loading Labels

- ▶ Place a roll of label stock on the Label Supply Hub then slide a Label Guide Plate on to each side of the label roll.



- ▶ Now load the label stock into the Printer.

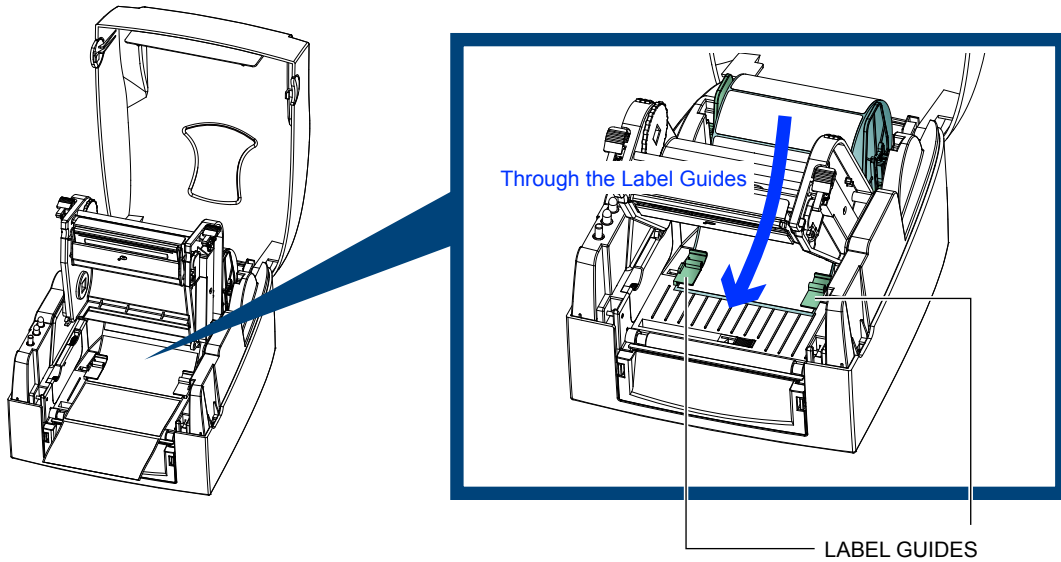


2 Printer Setup

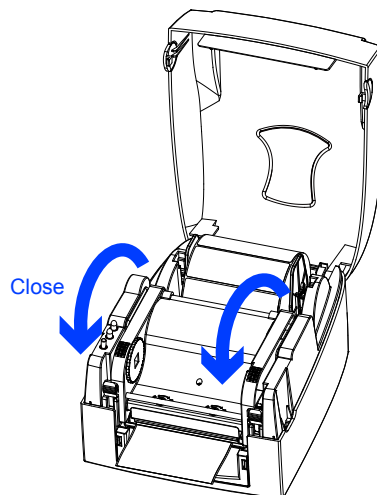
Open the Print Mechanism.

Feed the labels through the Label Guides and up to the Tear-off Plate.

Adjust the Label Guides to the label width.



Close the Print Mechanism.

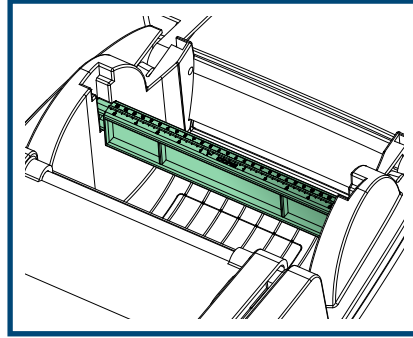
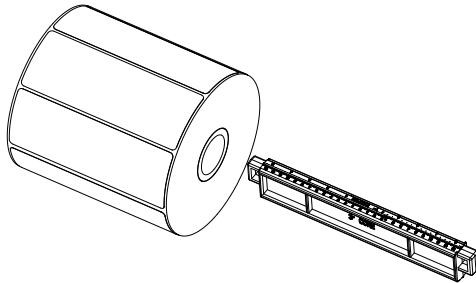


2 Printer Setup

2.5 Label Supply Hub Installation

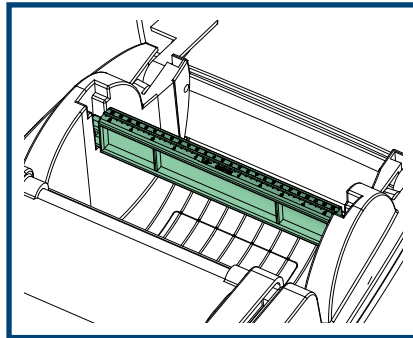
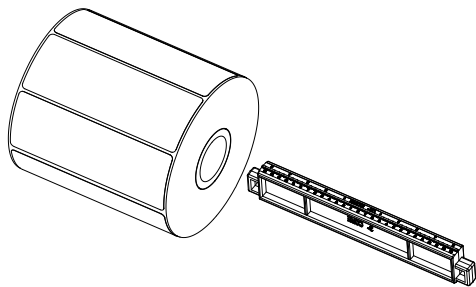
▶ 1" Cores

Installing the label supply hub for 1" cores.



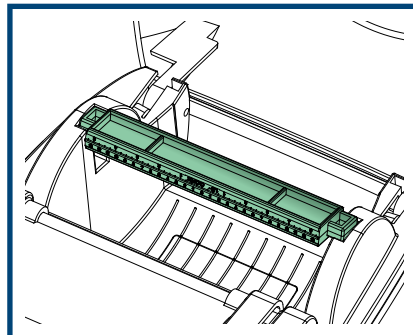
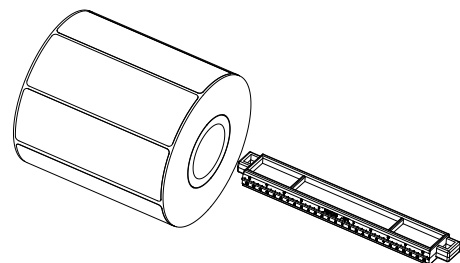
▶ 1.5" Cores

Installing the label supply hub for 1.5" cores.



▶ 3" Cores

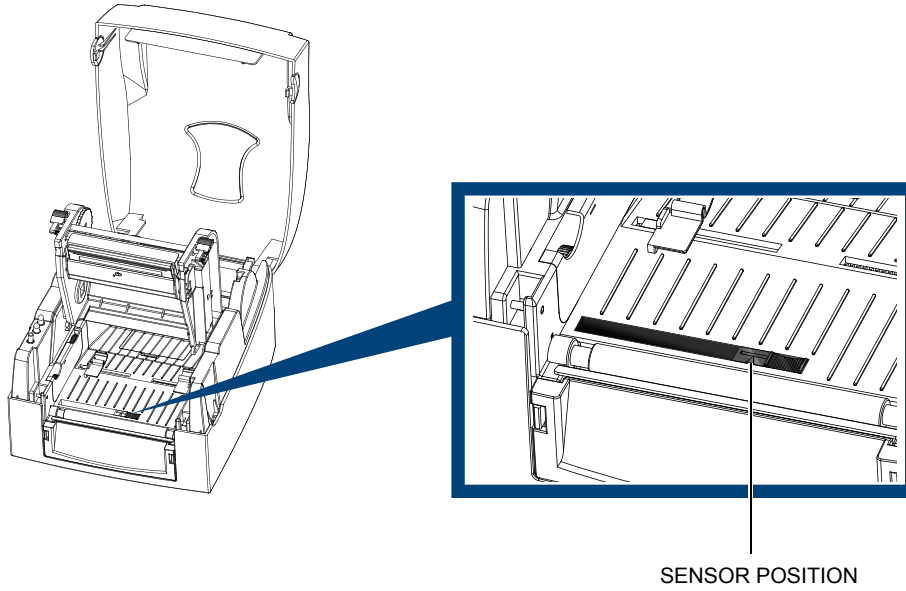
Installing the label supply hub for 3" cores.



2 Printer Setup

2.6 Preparation for Tag Printing

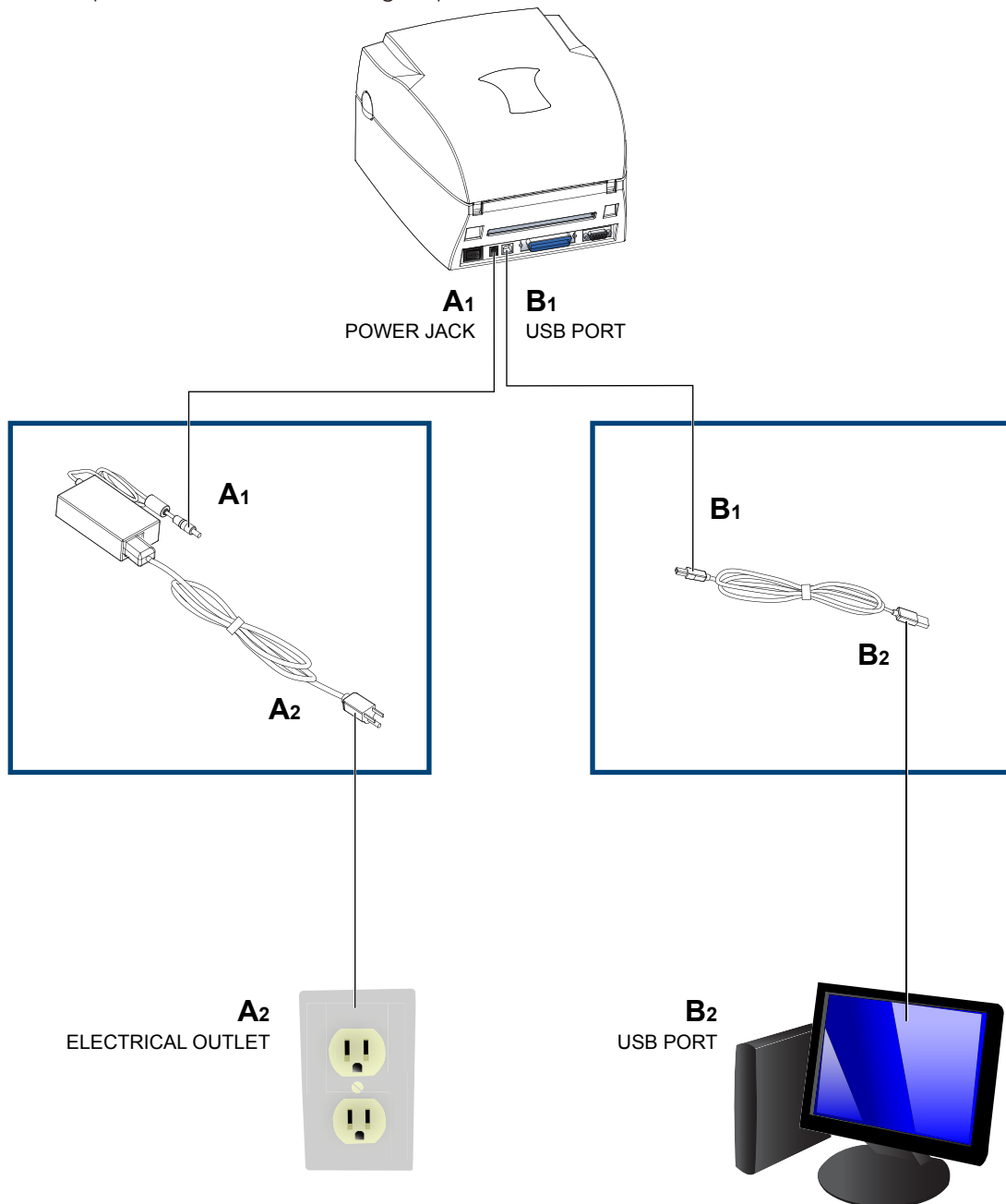
In tag printing, the tag hole indicates the height of a label.
Position the Sensor so that it is directly below the location of the tag hole.
The tag hole should be at least 3 mm in diameter.



2 Printer Setup

2.7 Connecting the Printer to Your Computer

1. Ensure that the printer is turned off.
2. Connect the power cord to the AC adapter and connect the AC adapter to the printer.
3. Plug the power cord into an electrical outlet.
4. Connect the USB cable to the printer and your computer.
5. Turn the printer on. The LED should light up.

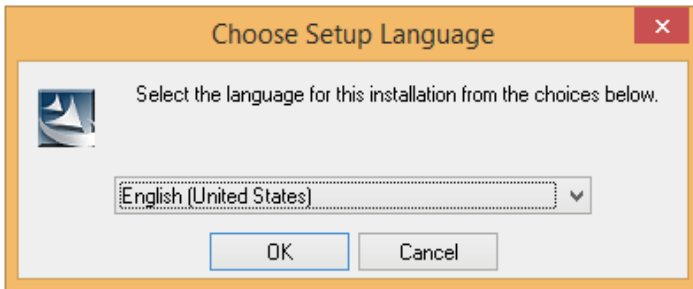


2 Printer Setup

2.8 EASYLABEL Start Installation

EASYLABEL Start is the free labeling package included with every Tharo printer.

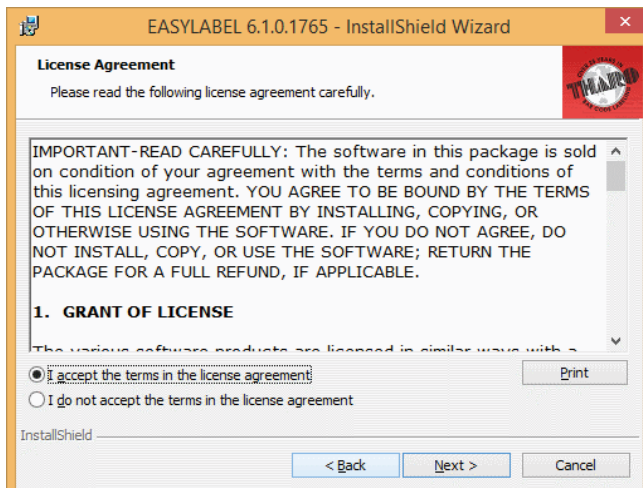
1. Insert the product CD into CD/DVD drive of your computer. Open the "install" folder on the CD. Right click on the setup.exe icon and choose "Run as Administrator" to start the installation. Select a language for the installation and click OK to continue.



2. The EASYLABEL InstallShield Wizard starts. Click "Next" to continue.

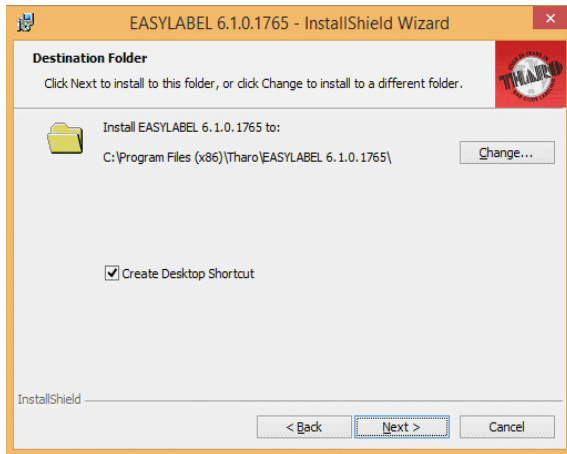


3. The next screen you can read EASYLABEL's License Agreement. Click the "I accept the terms in the license agreement" radio button and click "Next" to continue the installation.

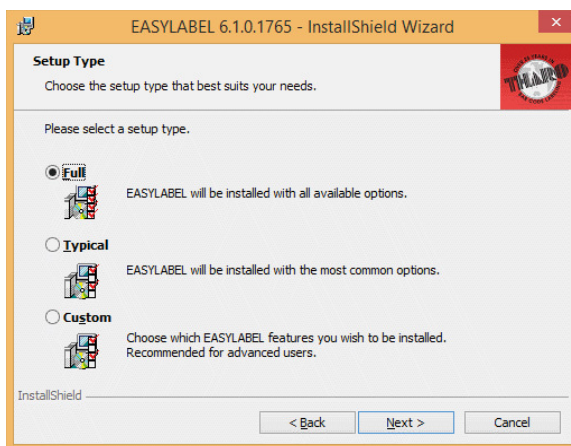


2 Printer Setup

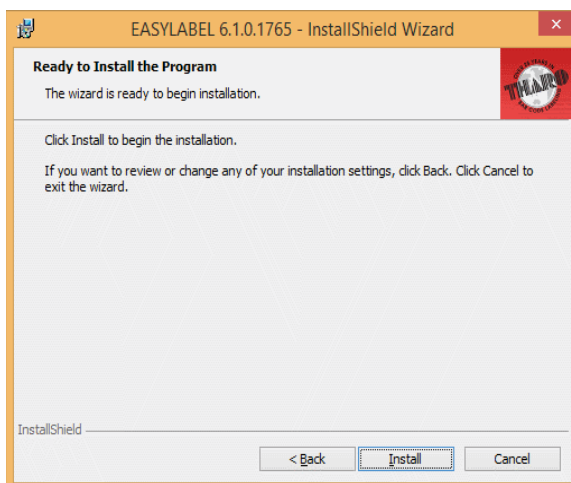
4. The next screen allows you to specify the directory to install EASYLABEL into. In most cases the default is fine. You may also specify if you want an EASYLABEL icon on your desktop. Click on "Next" to continue.



5. The next step allows you to specify the installation type. "Full" is recommended for most users. Click "Next" to continue.

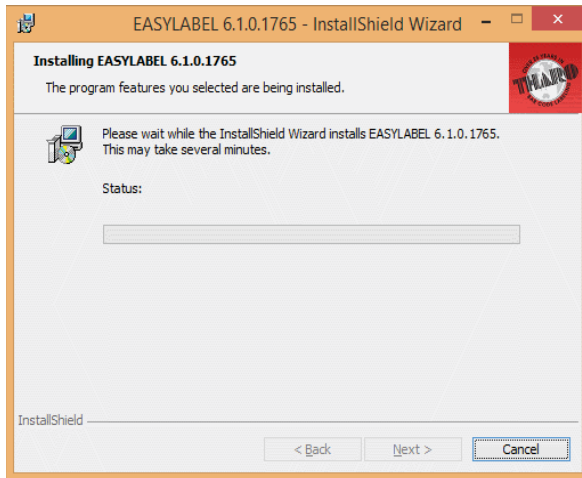


6. This is the confirmation screen. Click Install to install EASYLABEL Start.

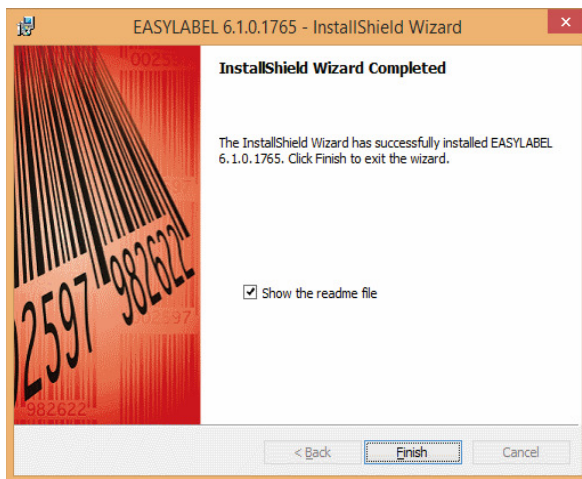


2 Printer Setup

7. The Status screen will show the progress of the EASYLABEL Start installation.



8. The installation is complete. Click "Finish" to close the InstallShield Wizard.



9. You are ready to start using EASYLABEL. If you are a new EASYLABEL user we recommend that you view the EASYTutor tutorials. EASYTutor is the best way to get acquainted with your new labeling software. EASYTutor can be found in the "EZtutor" folder on the product CD. You may also view EASYTutor online at www.tharo.com/interactive.php We suggest getting started with "Adding a USB printer" which is a great step-by-step walk through of how to add a USB printer to EASYLABEL.

www.tharo.com/Interactive/adding_a_usb_printer/adding_a_usb_printer.htm

2 Printer Setup

2.9 Windows Driver Installation

Windows Drivers are NOT needed when printing to your Tharo Printer with EASYLABEL.

If you want to print to your Tharo Printer from other Windows applications then a Windows driver is needed.

Insert the product CD into CD/DVD drive of your computer.

STOP!

Do NOT plug the Printer's USB cable into your computer yet. There are some special installation steps for Windows 8 and 10 users. If you are NOT using Windows 8 or 10 you can skip to the next page.

To install the Printer driver in Windows 8 or 10:

1. Open the "Tharo_Driver_Win8_Win10" folder.
2. Right Click on thr.inf and select "install"
3. Click on "Yes"
4. When the install finishes, Click on "OK"
5. Then plug the Printer's USB cable into your computer.

The printer should now be ready for use in Windows 8 or 10.

If you plugged in the printer without doing the above steps first, the printer is installed as an "Other Device" and you will have to install the driver this way:

1. Open the Windows Control Panel
2. Click on "Hardware and Sound"
3. Under "Devices and Printers" heading click on "Device Manager"
4. Expand "Other Devices"
5. Right-click on the Tharo Printer and select "Update Driver Software"
6. Select "Browse my computer for driver software"
7. Click "Browse" and browse to where the "Tharo_Driver_Win8_Win10" folder and then click on "Next"
8. Click on "Install"
9. Click on "Close" to exit the wizard

The printer should now be ready for use in Windows 8 or 10.

2 Printer Setup

The printer can be installed on Windows releases other than Windows 8 or Windows 10 without any special steps.

Insert the product CD into CD/DVD drive of your computer.

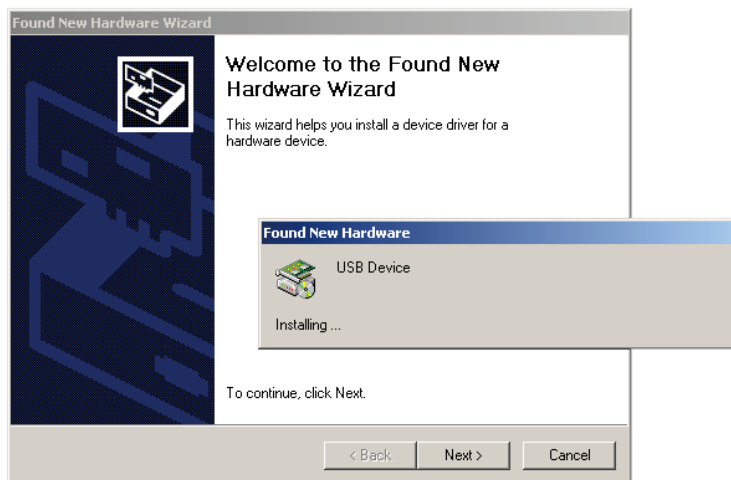
Turn the printer on and connect it to your computer with a USB cable.

The “Found New Hardware Wizard” should take over and install the drivers.

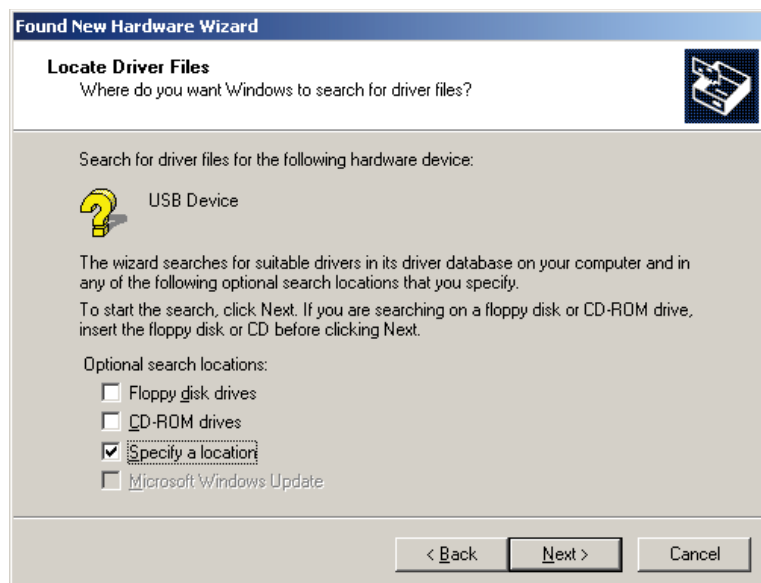
At some point you will be able to specify a location of the drivers.

Simply point the Wizard to the thr.inf file in the Windows Driver folder on the product CD.

1. USB is a Plug & Play facility. Once the USB cable is connected from PC to the printer, the PC will automatically detect the new device and begin the installation process.



2. Select 'Specify a location' and specify the path of the printer driver.
3. Follow the instructions in the Wizard to complete the installation.



3 Operation Panel

3.1 Operation Panel

▶ FEED Button

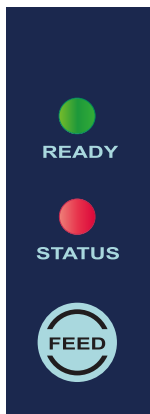
When you press the FEED button, the printer advances the label stock to a defined stop position.

If you are using continuous labels, pressing the FEED button will advance label stock until you release the button.

If you are using labels with gaps or black marks, pressing the FEED button will advance only one label.

If the label does not stop at the correct position the sensor must be calibrated. Follow the Label Calibration instructions in section 3.2 of this manual.

▶ LED Indicators



LED indicator	Beeps	Status	Description
READY	Green	Standby mode	The printer is ready for operation.
STATUS	OFF		
READY	OFF	Error mode	There is an error. (See Section 3-3. for a list of errors)
	2 x 2 beeps		
	2 x 3 beeps		
STATUS	Red		

3 Operation Panel

3.2 Label Calibration and Self-Test

The printer can automatically detect and store label height.

That means the host computer does not need to transmit the label height to the printer.

The Self-Test function lets you check whether the printer is functioning normally.

Follow these steps to run the Label Calibration and Self-Test.

STEP-01 ▶ Check that the label stock is loaded correctly.

STEP-02 ▶ Turn the Printer off and press the FEED button.

STEP-03 ▶ Turn the Printer on, keeping the FEED button pressed. When the READY LED starts to flash red and the STATUS LED lights up orange, release the FEED button. The printer will now perform a Label Calibration.

STEP-04 ▶ Once the Label Calibration is complete, the Printer will print a Self-Test label.


The contents of a sample Self-Test printout can be seen below.


Model & Version	V-425E GX.XXX
USB ID setting	USB S/N: XXXXXXXX
Serial port setting	Serial port : 96,N,8,1
MAC address of Ethernet port	MAC Addr: xx-xx-xx-xx-xx-xx
IP protocol setting	DHCP Enable
IP address of Ethernet port	IP xxx.xxx.xxx.xxx
Gateway setting	Gateway xxx.xxx.xxx.xxx
Netmask setting	Sub-Mask xxx.xxx.xxx.xxx
	#####
Number of DRAM installed	1 DRAM installed
Image buffer size	Image buffer size : 1500 KB
Number of forms	000 FORM(S) IN MEMORY
Number of graphics	000 GRAPHIC(S) IN MEMORY
Number of fonts	000 FONT(S) IN MEMORY
Number of Asian fonts	000 ASIAN FONT(S) IN MEMORY
Number of Databases	000 DATABASE(S) IN MEMORY
Number of Scalable fonts	000 TTF(S) IN MEMORY
Free memory size	2048 KB FREE MEMORY
Speed, Density, Ref. Point, Print direction	^S4 ^H10 ^R000 ~R200
Label width, Form length, Stop position	^W108 ^Q100,0,0 ^E12
Cutter, Label Dispenser, Mode	Option : ^D0 ^O0 ^AD
Sensor Setting	Reflective AD : 1.80 2.01 1.89 [0.21_0]
Code Page	Code Page : 850
Printer is on factory defaults	Default state= No







3 Operator Panel

3.3 Error Alerts

In the event of a problem that prevents normal functioning of the printer, you will see an error message on LED indicators and hear some beep signals. Please refer to below table for the error alerts.

- Light on 

- Flashing 

LED indicator		Beeps	Description	Solution
READY	STATUS			
		2 x 4 beeps	The Print Mechanism is not firmly closed.	Open the Print Mechanism and close it again.
		None	Print Head temperature is too high	Once the Print Head has cooled down, the printer switches to standby mode.
		2 x 3 beeps	No ribbon is installed and the printer shows an error message.	Make sure that the printer is set to direct thermal printing mode.
			The ribbon is used up or the Ribbon Supply Hub is not moving.	Replace the ribbon roll.
		2 x 2 beeps	No label stock is detected.	Make sure that the label sensor is positioned correctly. If the sensor still does not detect the labels, run the Label calibration function again.
			The label stock is used up.	Replace the label roll.
			Improper feeding of labels.	Possible causes: Media falling into the gap behind the Platen Roller; the sensor cannot detect a gap or black mark between the labels; there are no labels loaded.
		2 x 2 beeps	The memory is full. The printer prints the message "File System Full".	Delete unnecessary data from the memory.
			Unable to find file. The printer prints the message "File Name Not found".	Use the "~X4" command to print all files. Then check whether the files exist and whether the names are correct.
			A file of the same name already exists. The printer prints the message "Duplicate Name".	Change the name of the file and try to download it again.

4 NetSetting for Ethernet

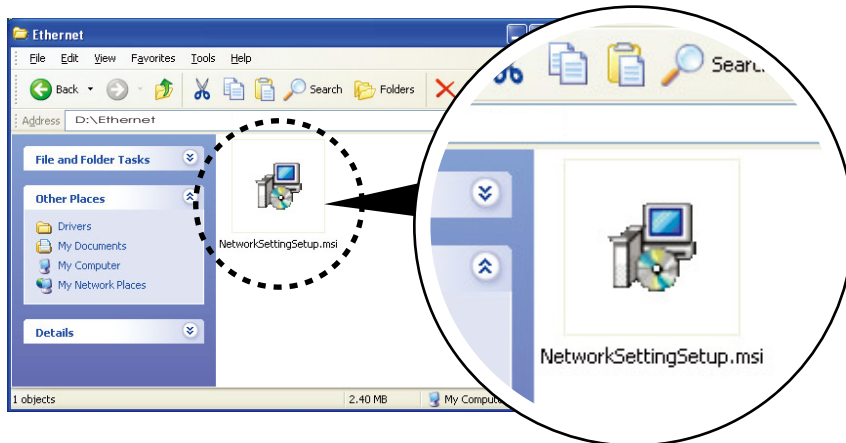
4.1 Installing the NetSetting software

The NetSetting software is used to manage the network configuration of the Ethernet port.

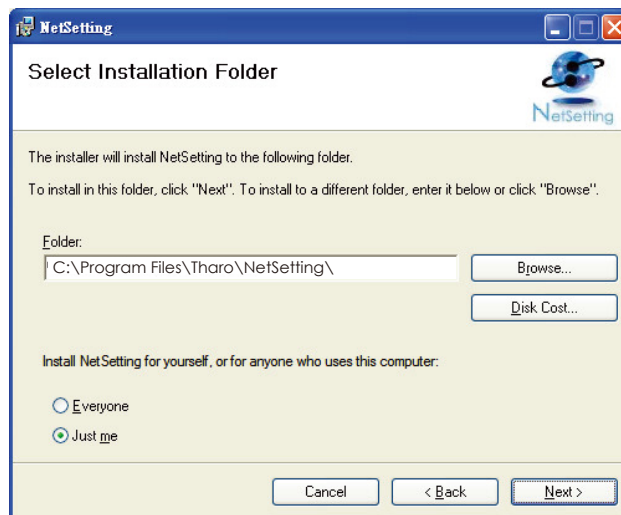
NetSetting is available on the CD that ships with the printer or it can be downloaded from our website (www.tharo.com).

To install NetSetting:

1. Insert the Printer CD in your computer's CD/DVD drive. Browse the contents of the CD and open the "Ethernet" folder.
2. Doubleclick on the NetworkSettingSetup.msi icon to start the installation.



3. The Setup Wizard will guide you through the installation procedure. Follow the instructions on the screen.
4. Specify an "Installation Folder".



5. Click "Next" to continue the installation.
6. Once the installation has completed, you will see the NetSetting icon on your desktop.

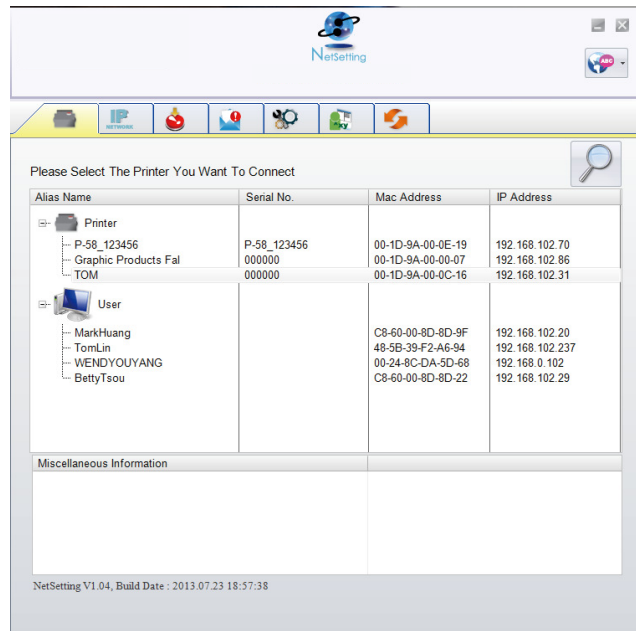


4 NetSetting for Ethernet

4.2 NetSetting Interface

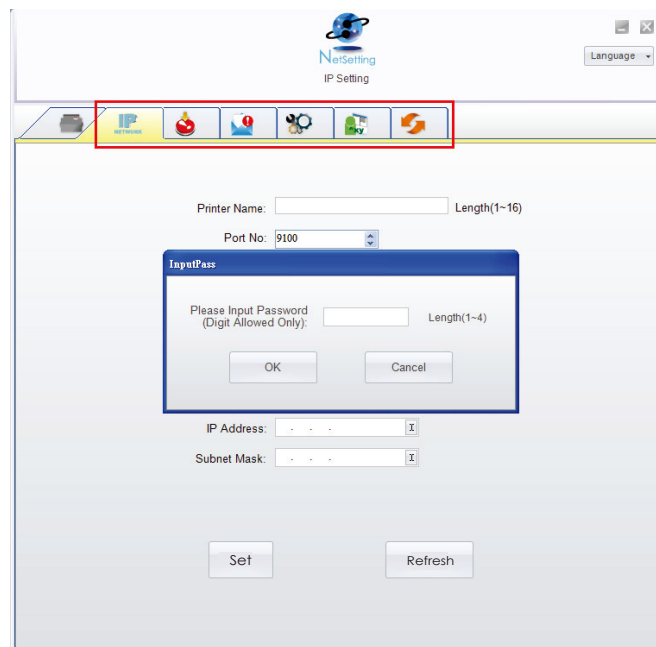
Doubleclick on the NetSetting icon to start the program.

You will see the start page below. The start page will display the basic information of any connected printer and your PC.



Click on the magnifying glass icon to search your network for Tharo Ethernet printers.

Any printers that are detected are listed on the start page.



There are six tabs on the top of interface which are used to access different network configuration settings.

You will need to enter a password to enter the configuration pages.

Notice

- * The default password is "1111". You can change the password on the "IP Settings" tab.

4 NetSetting for Ethernet

IP Settings

On the IP Settings tab you can change the Printer Name, Port Number, Default Gateway and Password. You can also set the printer's IP address either by DHCP or by Static IP.

Printer Name: Length(1~16)

Port No:

Default Gateway:

Password: Length(1~4)

Get IP From DHCP Server

Static IP

IP Address:

Subnet Mask:

Click the “Set” button to apply the settings and the “Refresh” button to re-query the printer and refresh the values.

Notice

- * To fully benefit from the NetSetting software, you should be familiar with basic networking principles. Please contact your network administrator for the required related network settings.

4 NetSetting for Ethernet

Alert Mail Setting

The Printer can send the alert messages to a designated mail account when errors occur. The alert messages are sent by SMTP (Simple Mail Transfer Protocol) or SNMP (Simple Network Management Protocol). You can set or change the configurations of SMTP and SNMP on the “Alert Mail Setting” tab.

NetSetting
Alert Mail Setting

Enable SMTP Alert Message Notification

Login Account: default Length(1~64)
Login Password: ***** Length(1~16)
Server IP Address: 192 . 168 . 0 . 1 xxx.xxx.xxx.xxx
Mail Subject: Barcode printer message Length(1~60)
Mail From Address: default@default.com Length(1~32)
Mail To Address: default@default.com Length(1~32)
Duration Cycle: 1 0 ~ 168 Hours
Event Counter: 5 1 ~ 100

Enable SNMP Alert Message Notification

SNMP Community: public Length(1~16)
SNMP Trap Community: public Length(1~16)
Trap IP Address: 192 . 168 . 0 . 1 xxx.xxx.xxx.xxx

Set Refresh

Click the “Set” button to apply the settings and the “Refresh” button to re-query the printer and refresh the values.

4 NetSetting for Ethernet

Alert Message Setting

Here you can specify which errors should trigger sending an email. The alert messages can be sent by SMTP, SNMP or both.

SMTP	SNMP	Description
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Paper or Ribbon Empty
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Paper Jam
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Ribbon Out
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Printhead Up (Open)
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Rewinder Full
<input type="checkbox"/>	<input checked="" type="checkbox"/>	File System Full
<input type="checkbox"/>	<input checked="" type="checkbox"/>	File Not Found
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Duplicated Name
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Syntax Unknown
<input type="checkbox"/>	<input checked="" type="checkbox"/>	Cutter Jammed or Not Installed
<input type="checkbox"/>	<input checked="" type="checkbox"/>	TPH Over Heat

Set Refresh

Click the “Set” button to apply the settings and the “Refresh” button to re-query the printer and refresh the values.

4 NetSetting for Ethernet

Printer Configuration

This tab allows you to change the configuration of the connected printer. Many of the printer settings can be modified on this setting page.

The screenshot shows the 'NetSetting Printer Configuration' window. The window title is 'NetSetting Printer Configuration'. The interface includes a navigation bar with icons for Printer, IP NETWORK, a red warning icon, a gear, a printer, and a refresh icon. The main content area is divided into 'Printer Setup' and 'Miscellaneous' sections.

Printer Setup

Printer Model	Tear-off Position	Speed	Darkness
T-4210	12	2	12
Dispenser/Applicator	Labels per Cut	Printing Mode	
0 (None)	0	Thermal Transfer	

Serial Port Setting

Baud Rate	Parity	Data Bits	Stop Bits
4800	None	8	1

Miscellaneous

LCD Language	Sensing Mode
English	0 - Reflective
Keyboard Country Code	Pre-Printing
US	OFF
Code Page	Top Of Form
Code Page 850	ON
Buzzer	
ON	

Buttons: Set, Refresh

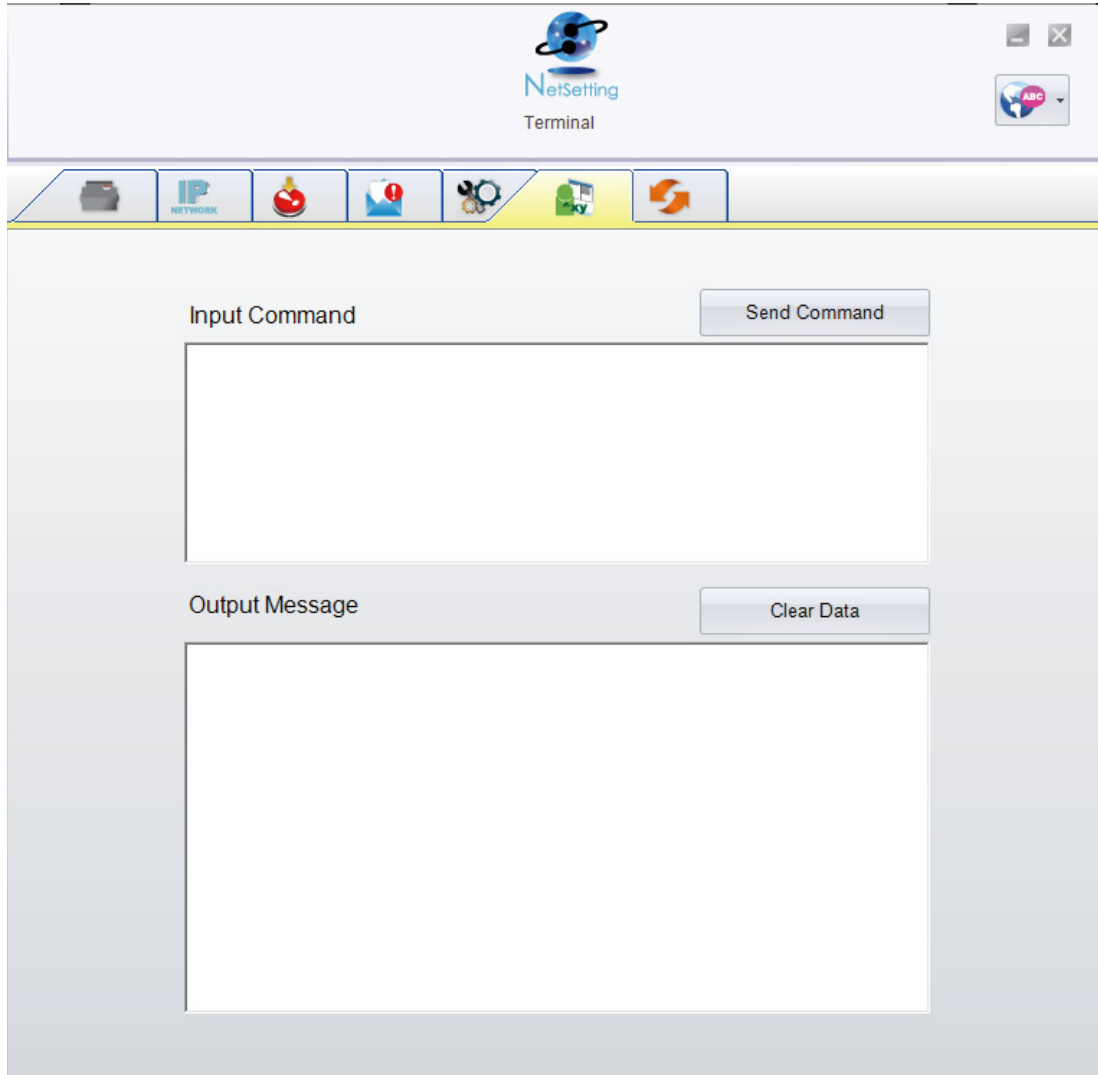
Click the "Set" button to apply the settings and the "Refresh" button to re-query the printer and refresh the values.

4 NetSetting for Ethernet

Terminal

The "Terminal" tab provides a communication interface for operator to control the printer. Enter printer commands into the "Input Command" window and press the "Send Command" button, the commands will be sent to the printer.

For the commands that return a response message, the message will be displayed in "Output Message" window. Click on the "Clear Data" button to clear these messages.

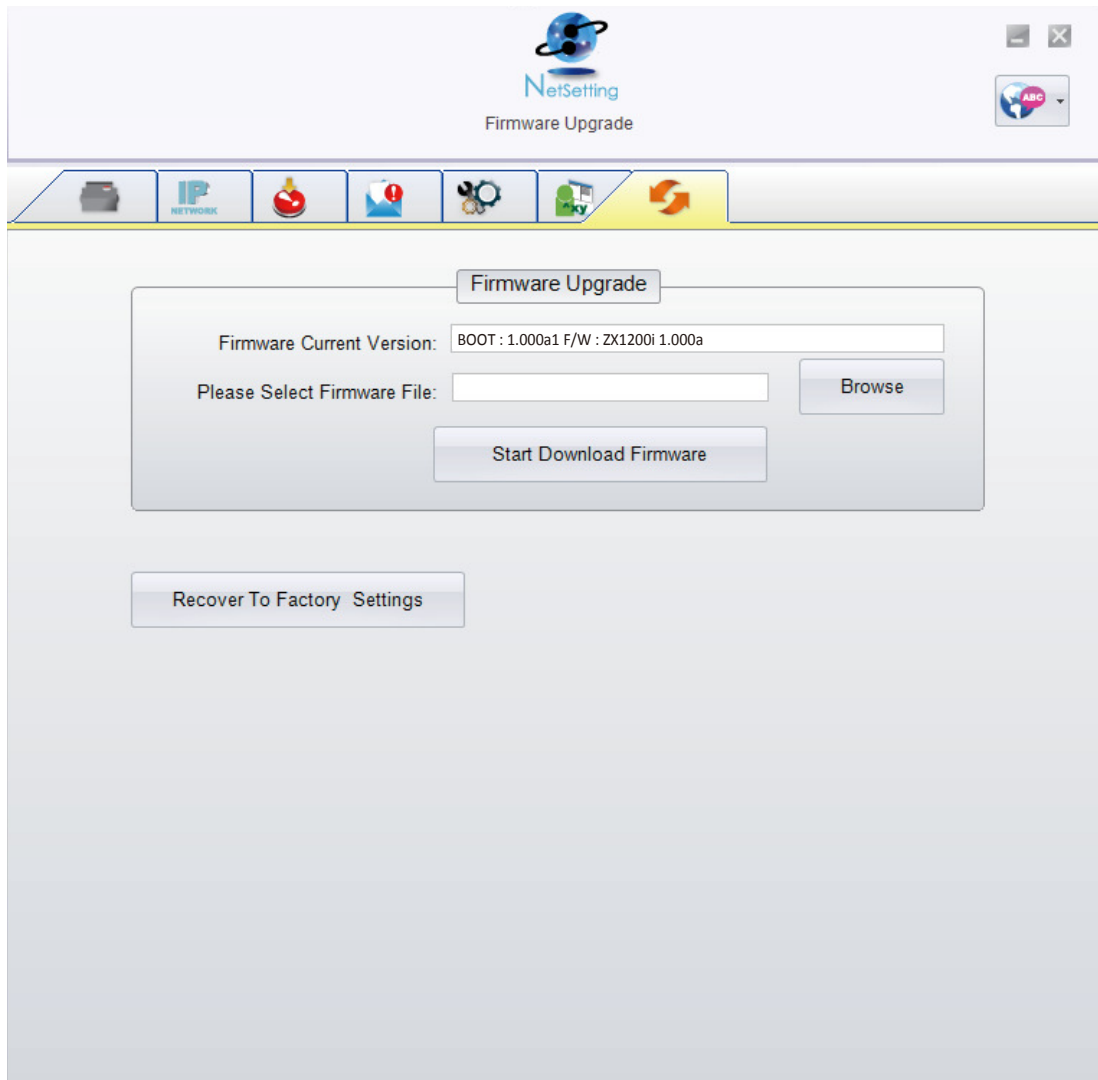


4 NetSetting for Ethernet

Firmware Upgrade

The current printer firmware version is shown on the “Firmware Upgrade” tab. You may also upgrade the printer firmware on this screen. Simply click the “browse” button and specify the firmware file location.

Then click the “Start Download Firmware” button. The printer firmware will be updated remotely.



In addition to the firmware update, you can click the “Recover To Factory Settings” button to restore all of the printer configuration settings back to factory default.

5 Accessories

5.1 Preparation

Please do the following before installing any of the optional modules.

Turn Off The Printer:

Turn off the printer before installing any module.

Open The Top Cover:

Open the Top Cover by pressing the release buttons on both sides of the Top Cover.

Please see the Section 2.1 of this manual for further information about opening the Top Cover.

Open The Print Mechanism:

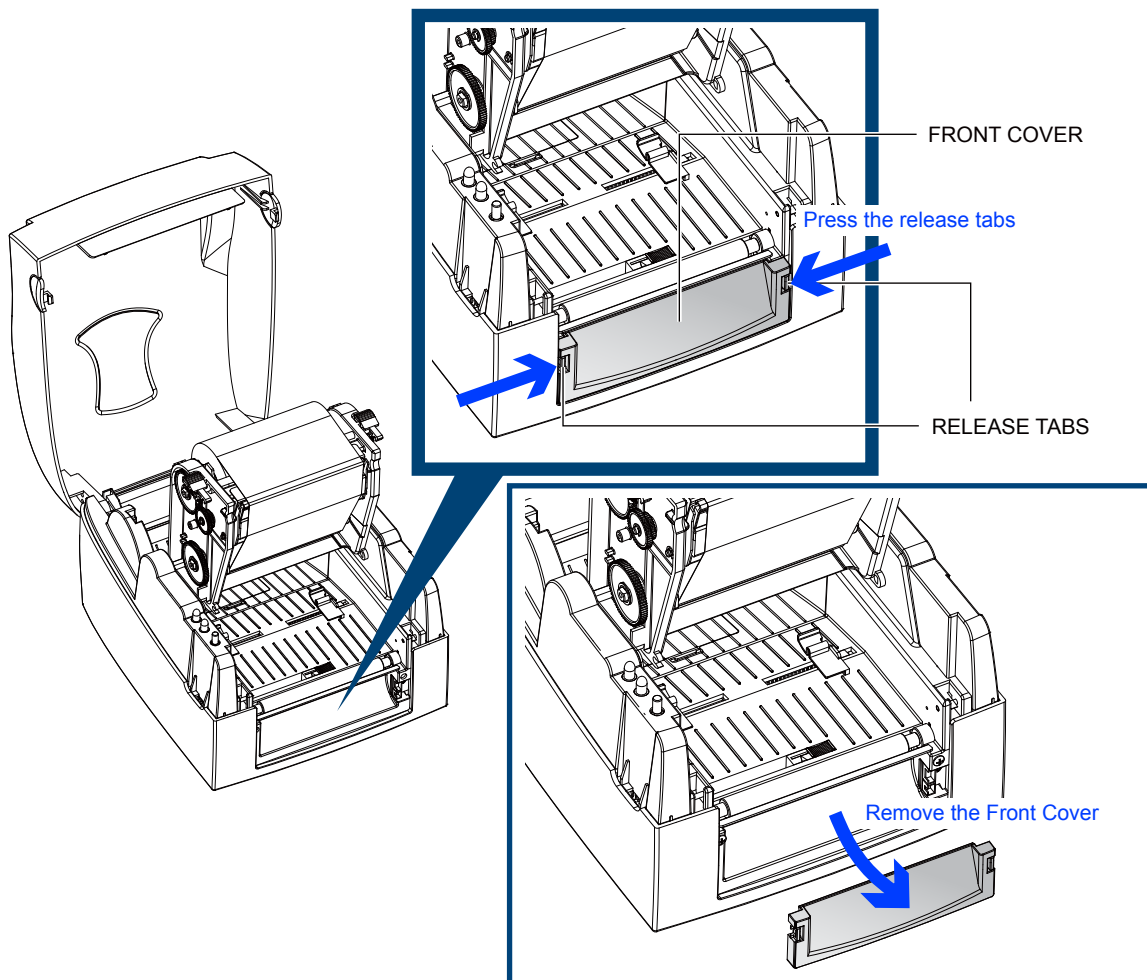
Press the release catches on both sides of the Print Mechanism to open and lift the print mechanism.

Please see the Section 2.2 of this manual for further information about opening the Print Mechanism.

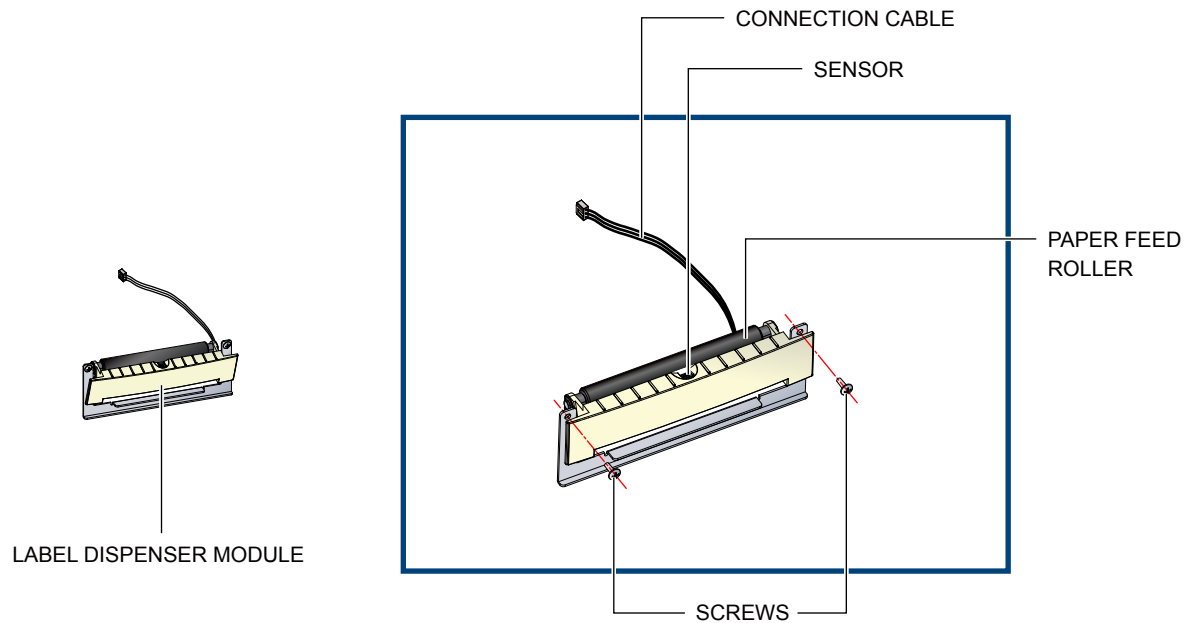
Remove the Front Cover:

Press in the two release tabs on the Front Cover.

Remove the Front Cover as shown in the illustration.



5.2 Installing the Label Dispenser



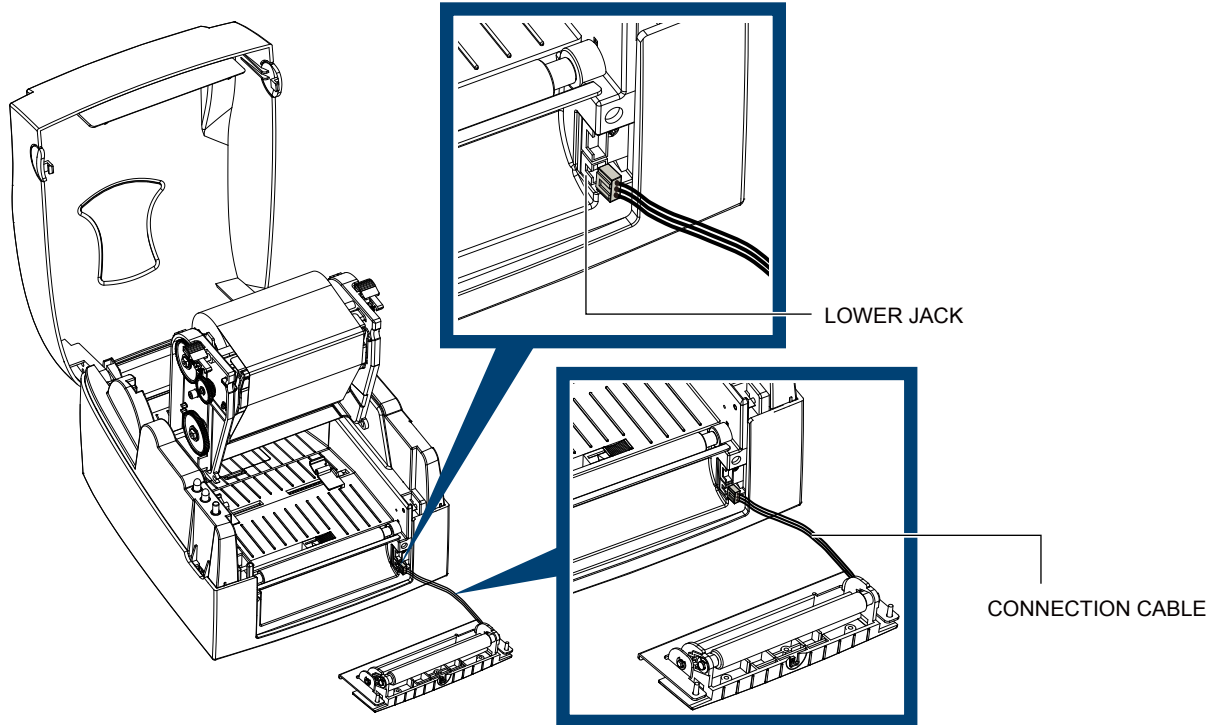
NOTICE

- Recommended label liner thickness: 0.006 mm \pm 10% and a weight of 65 g/m² \pm 6%
- The maximum width when using the Label Dispenser is 110 mm.
- Set the Stop Position to 9mm when using the Label Dispenser.

Please complete the preparation steps on page 28 before installing the Label Dispenser.

5 Accessories

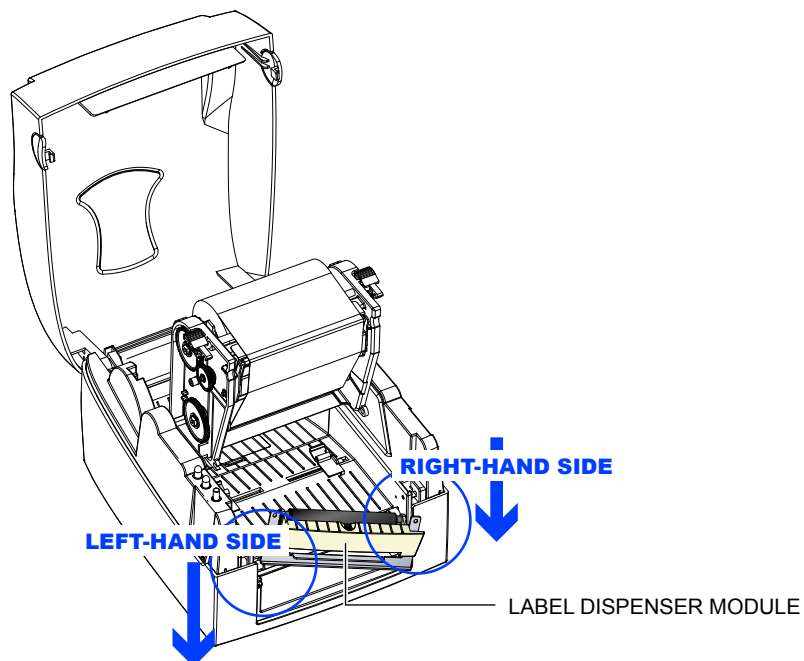
Connect the Connection Cable on the Label Dispenser to the lower jack on the front of the printer as shown below.



NOTICE

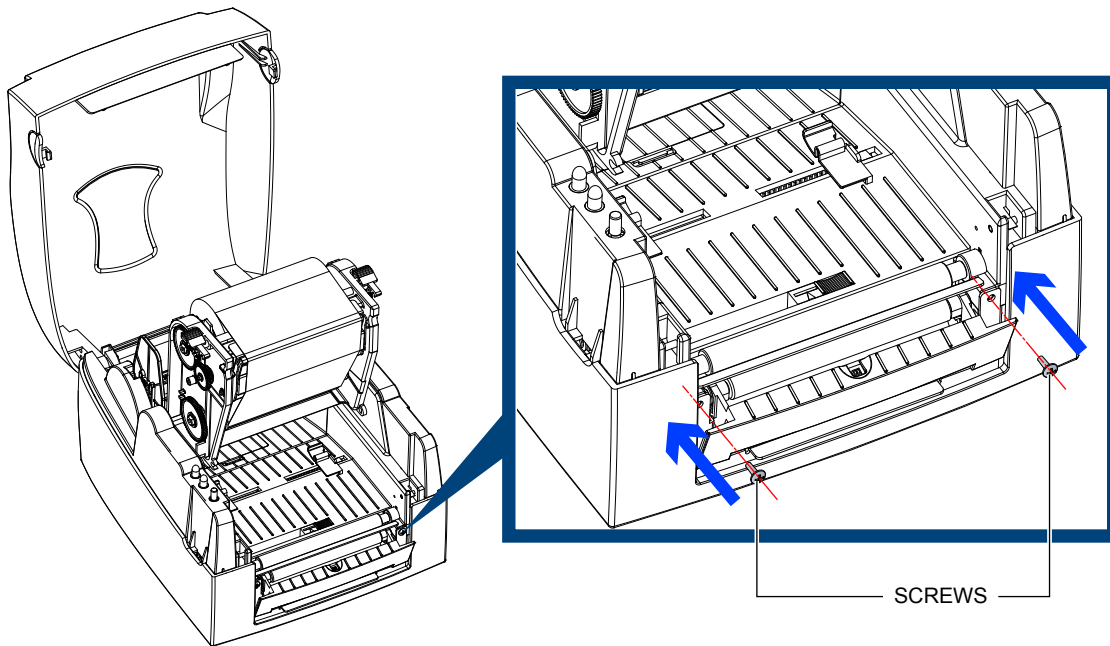
- The printer **MUST** be turned OFF or the motherboard may be damaged!
- There are 2 jacks: the lower jack is for the Label Dispenser, the upper jack is for the Cutter.

Install the Label Dispenser by pressing down on the right-hand side first and then the left-hand side.

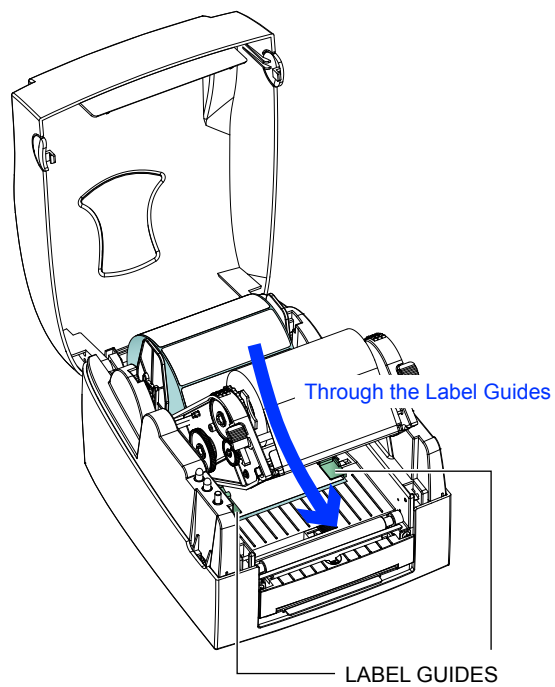


5 Accessories

Secure the Label Dispenser using the screws provided.



Feed the labels through the Label Guides.

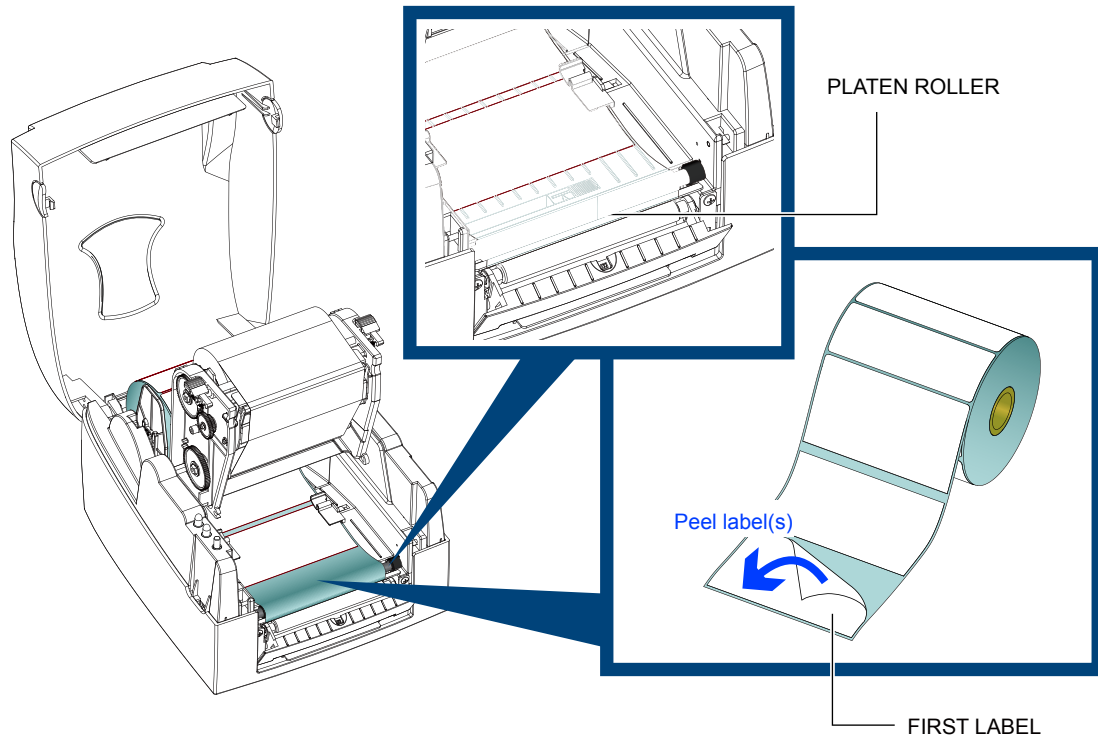


NOTICE

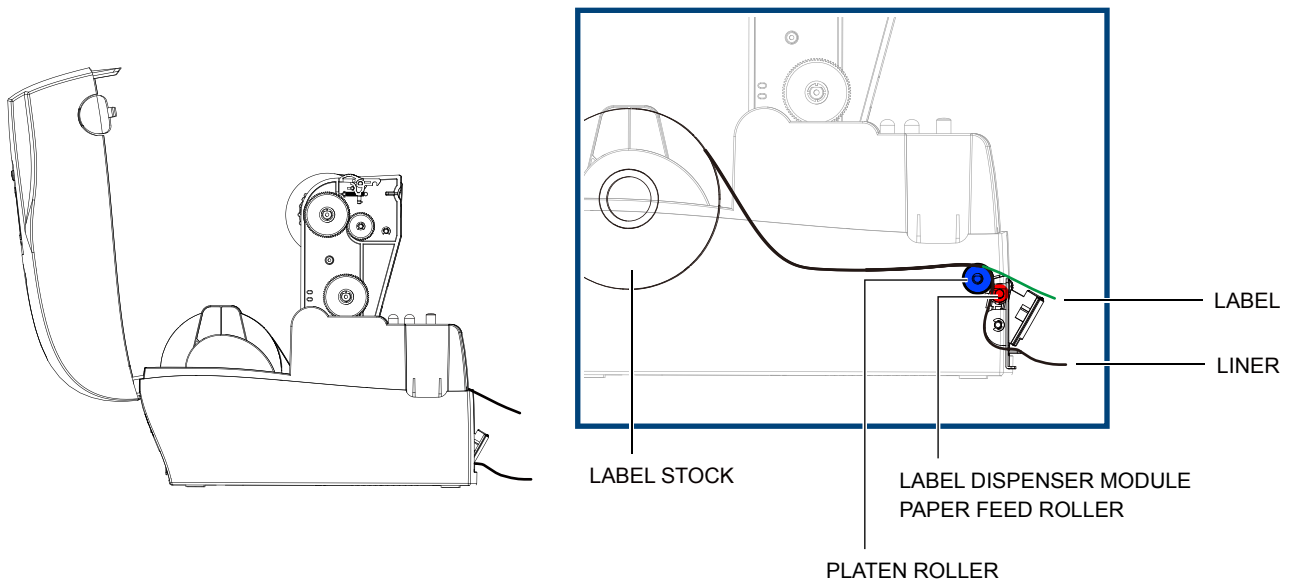
- Labels should be at least 25 mm high when using the Label Dispenser.

5 Accessories

Remove the first label(s) from the liner.

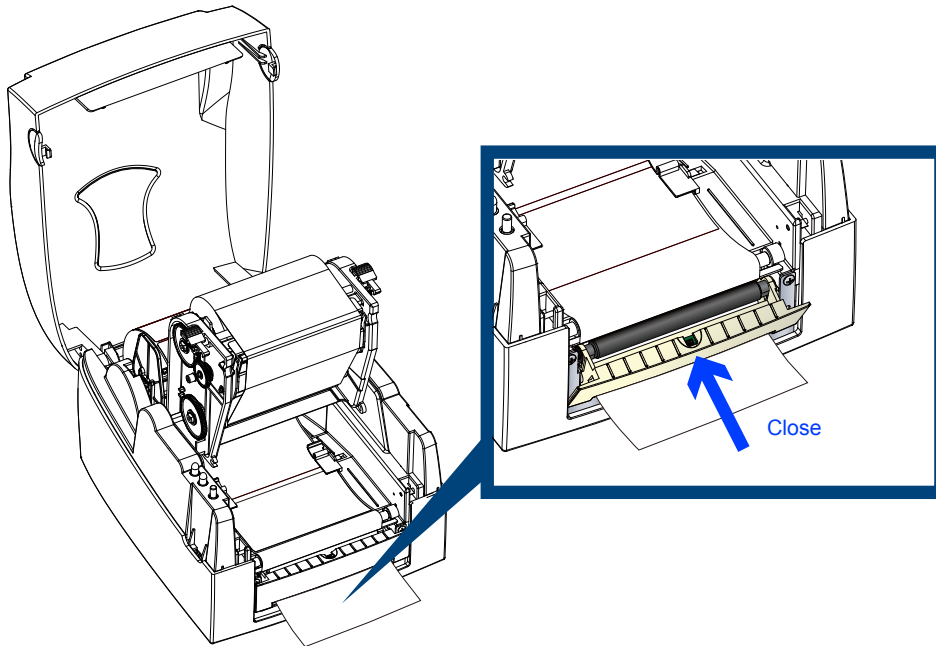


Feed the label stock through the Printer as shown in the illustration below.



5 Accessories

Close the Label Dispenser and the Print Mechanism to complete the installation.

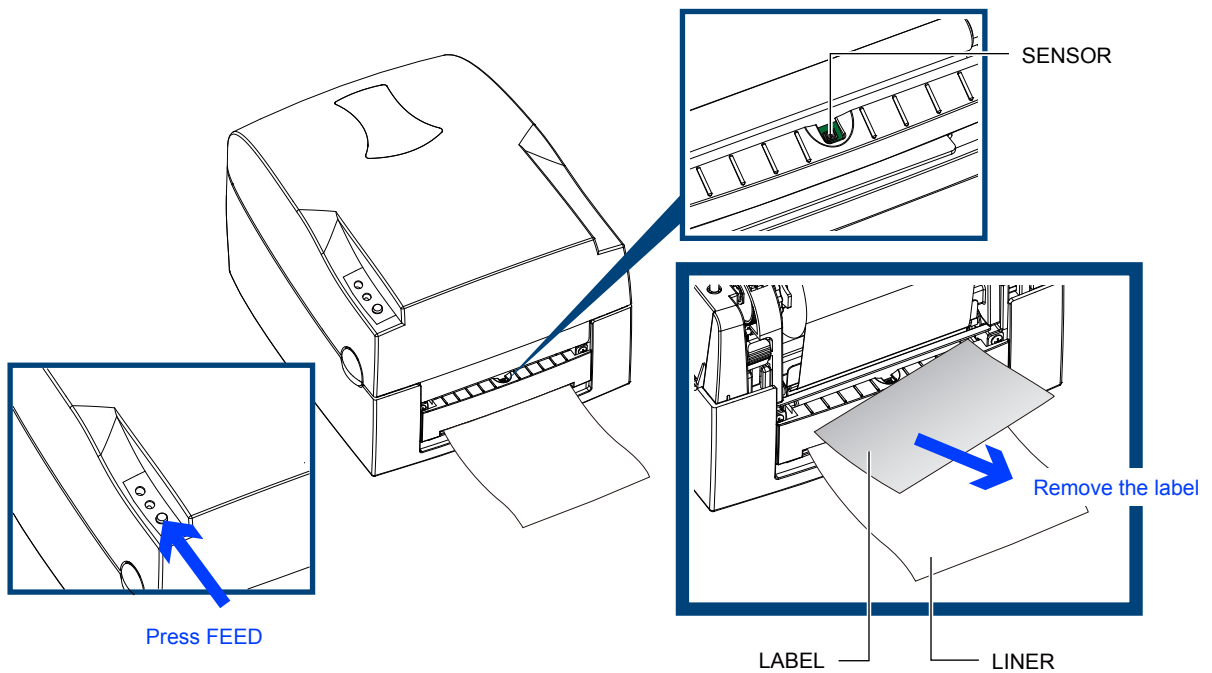


Press the FEED button to feed a label.

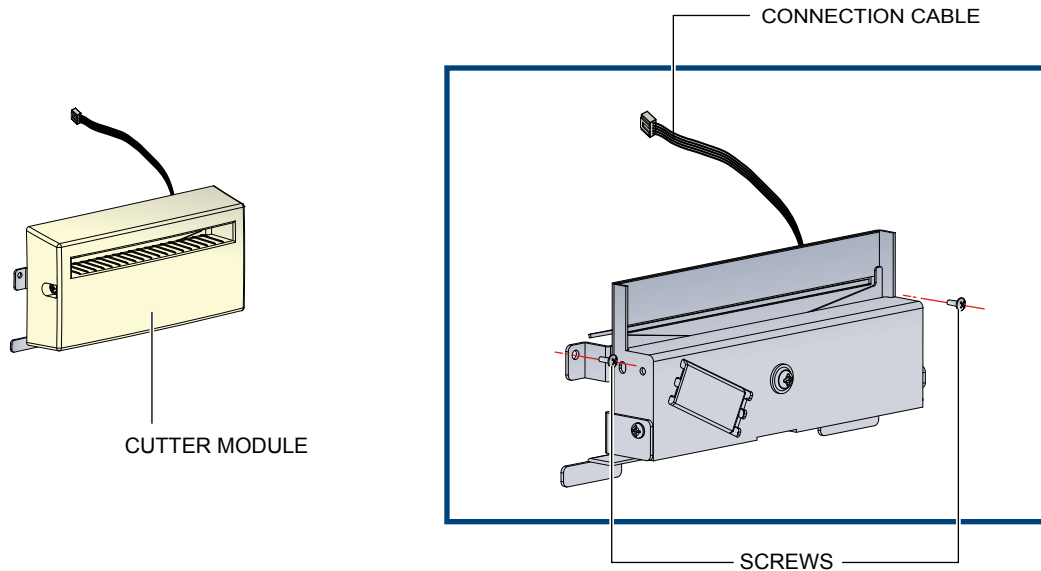
The label will be peeled from the liner while it passes through the Label Dispenser.

NOTICE

- There is a paper sensor on the Label Dispenser module. It will stop the printing if it is covered by a label. Remove the last printed label and the printer will print next label.



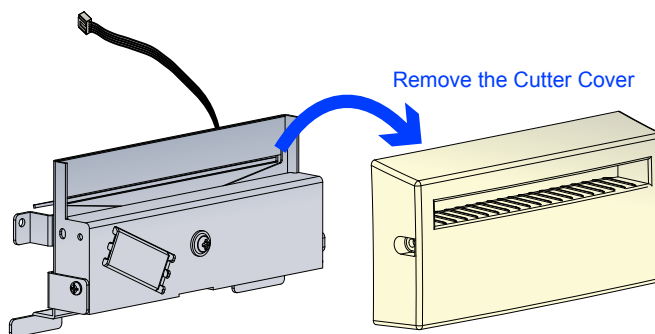
5.3 Installing The Cutter



NOTICE

- Remember to turn the Printer off before installing the Cutter.
- Do not use to cut adhesive labels! Glue residue will be left on the cutter blade and impair its function. The cutter has a blade life of 400,000 cuts when using paper liner which is 250µm thick and 3 inches wide.
- Maximum width when using the Cutter is 116 mm.

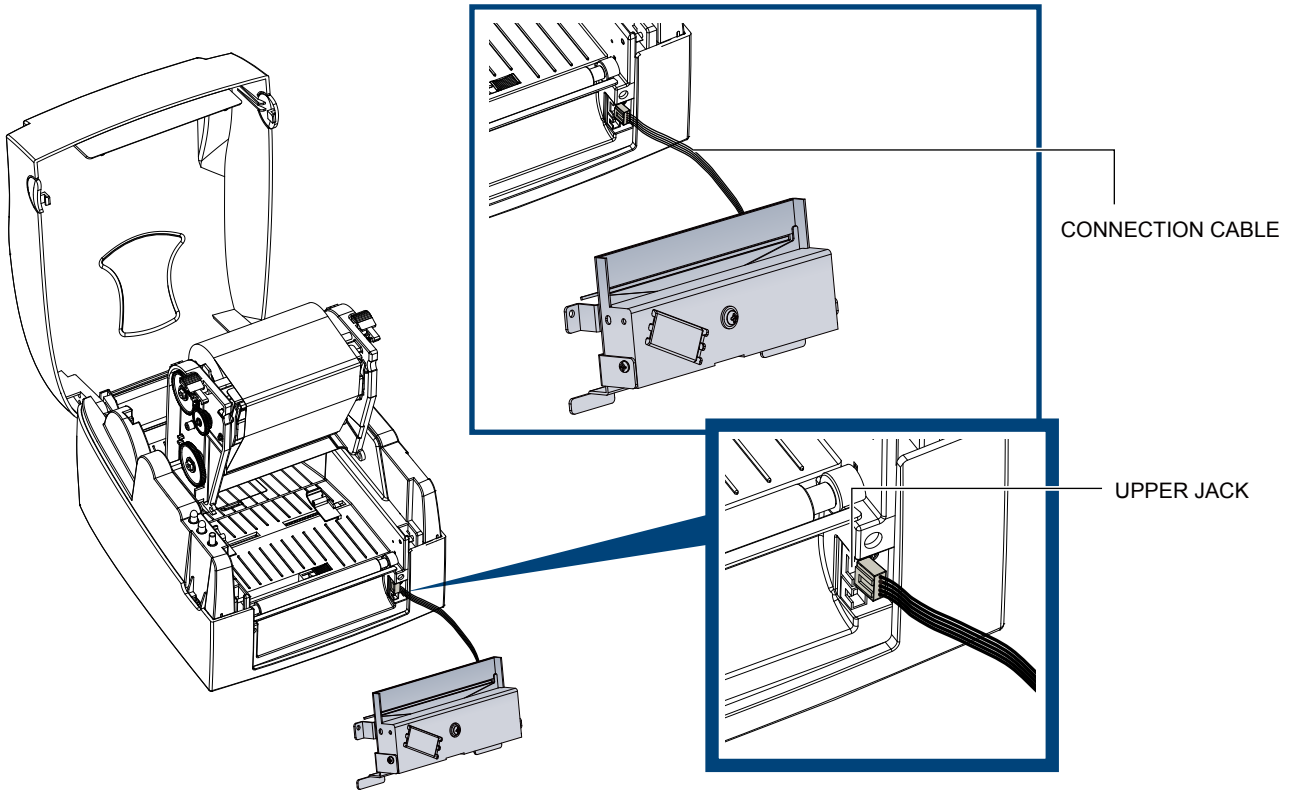
Remove the Cutter Cover before installing the Cutter module.



Please complete the preparation steps on page 28 before installing the Cutter.

5 Accessories

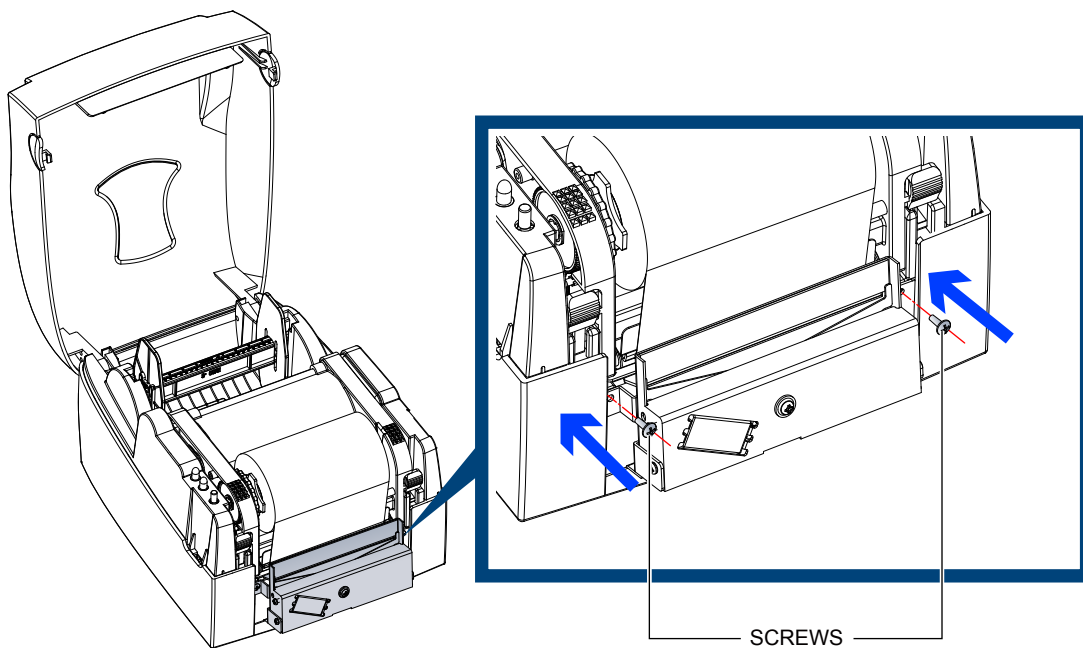
Connect the Connection Cable on the Cutter to the upper jack on the front of the printer as shown below.



NOTICE

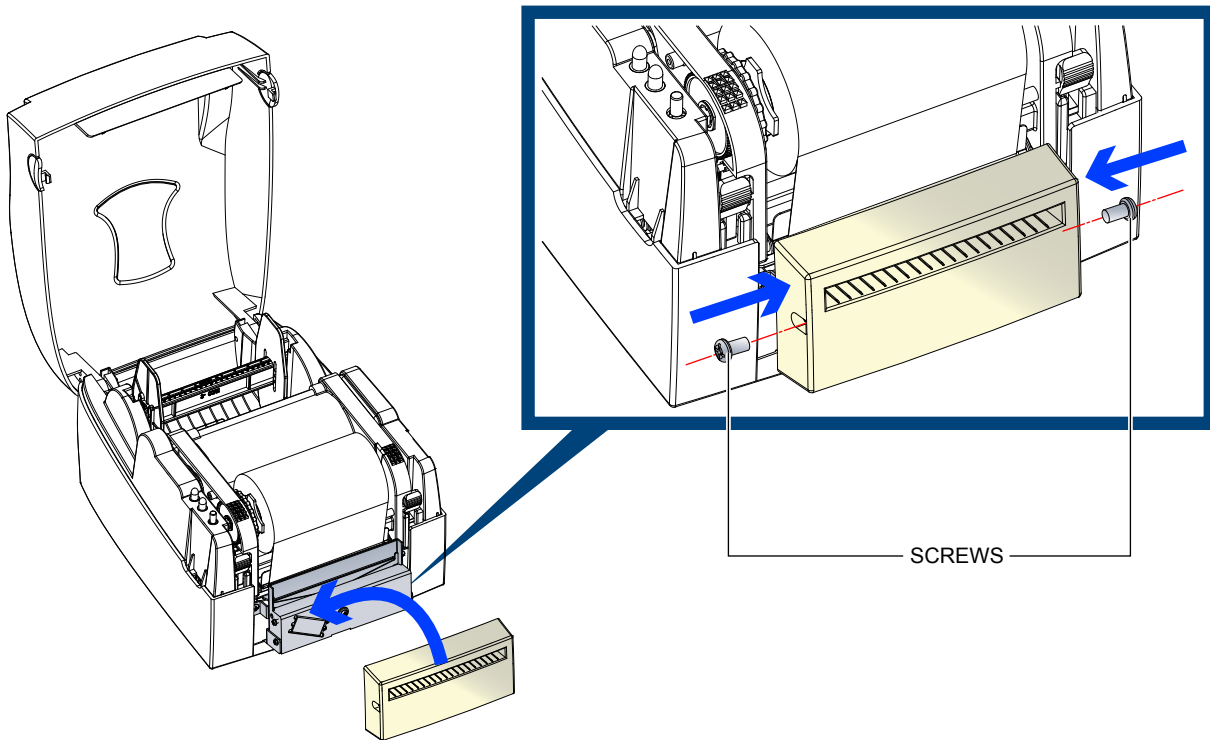
- The printer **MUST** be turned OFF or the motherboard may be damaged!
- There are 2 jacks: the lower jack is for the Label Dispenser, the upper jack is for the Cutter.

Secure the cutter using the screws provided.

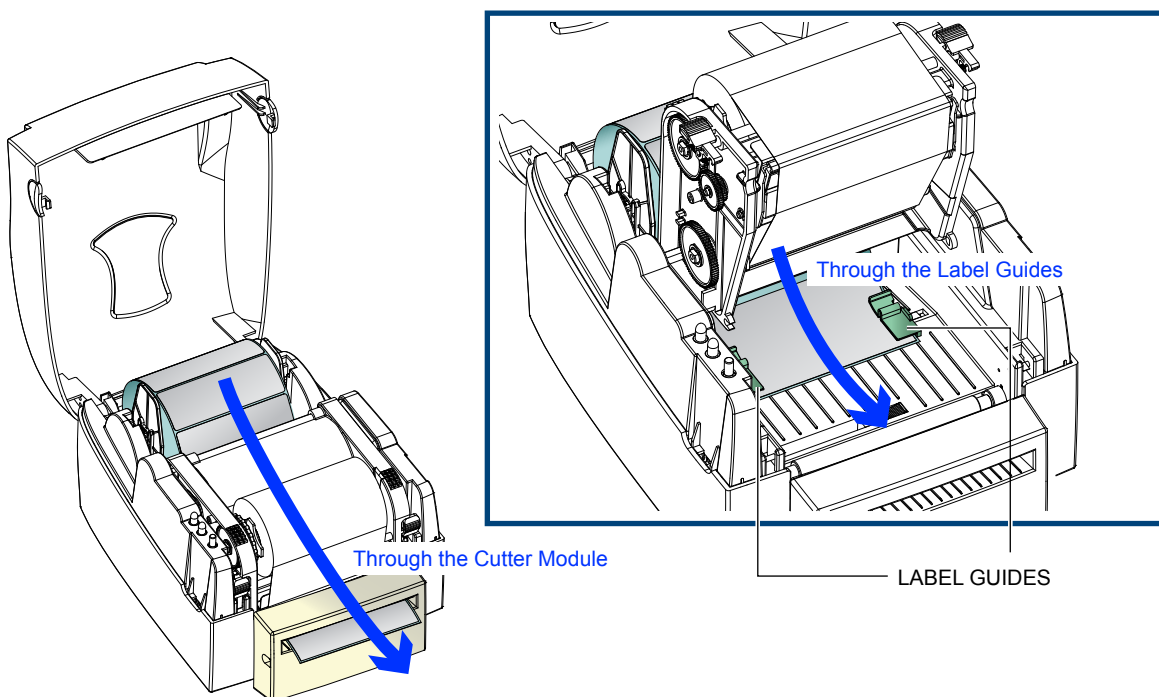


5 Accessories

Secure the Cutter Cover using the screws provided.

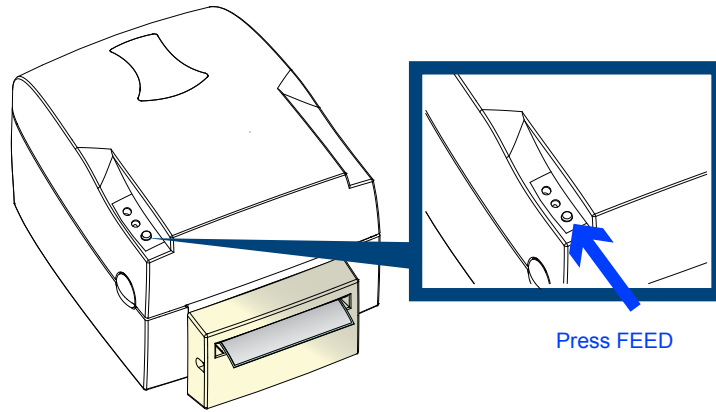


Feed the labels through the Label Guides and the Cutter.
Close the print mechanism.



5 Accessories

Press the FEED button to complete the Cutter installation.



NOTICE

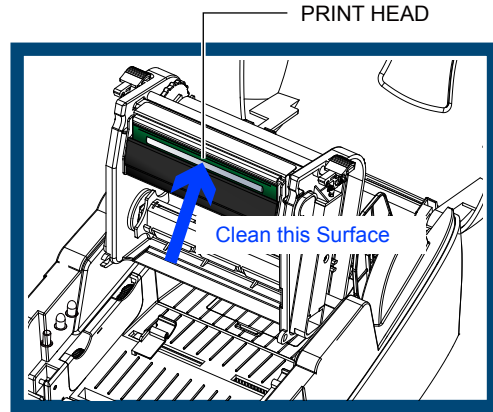
- We advise against using inside wound label stock with the Cutter.

6 Maintenance And Adjustment

6.1 Cleaning the Thermal Print Head

Printing labels will cause dirt such as paper dust, particles of ink and label adhesive to accumulate on the thermal print head. This can cause poor print quality and incomplete print outs. When this happens, the print head must be cleaned:

1. Turn off the printer.
2. Open the Top Cover.
3. Release the Print Mechanism.
4. Remove the ribbon.
5. Clean the print head surface (see Blue arrow) with a special cleaning pen or a cotton swab soaked in Isopropyl Alcohol.
6. Allow the print head to dry for 2-3 minutes before turning the printer back on.



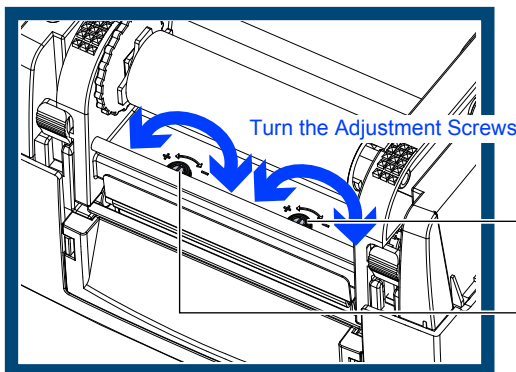
- The print head should be cleaned once a week or when the print media is changed.
- To help keep the print head clean, the top cover should be closed when printing.
- To ensure print quality and prolong print head life, do NOT use dusty or dirty print media.

6.2 Adjusting the Print Head Pressure

When using a variety of label stock and ribbons, the ink may not be evenly distributed.

If there is no printed image on one side of the paper then the print head pressure must be readjusted.

1. Open the Top Cover.
2. Remove the ribbon.
3. Use a screw driver to slowly turn the Print Head Pressure Adjustment Screws to increase or decrease the print head pressure.



Screw for adjusting the print head pressure on the right side

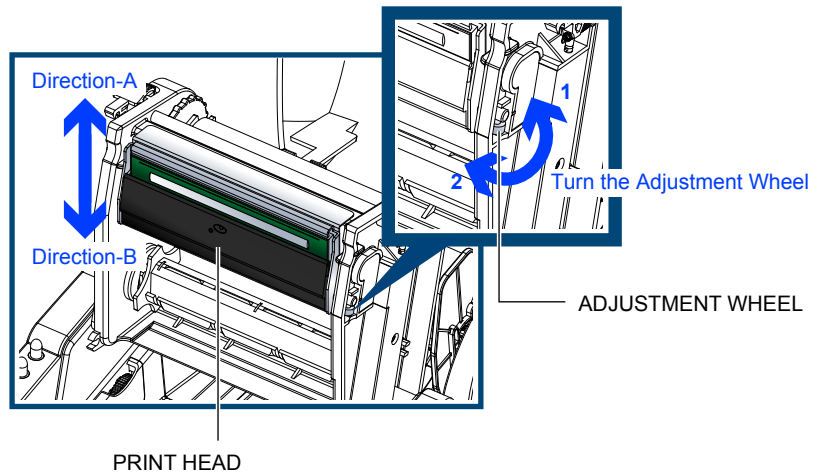
Screw for adjusting the print head pressure on the left side

6 Maintenance And Adjustment

6.3 Adjusting the Print Line

The Print Line must be adjusted so it is positioned parallel to the paper feed roller.

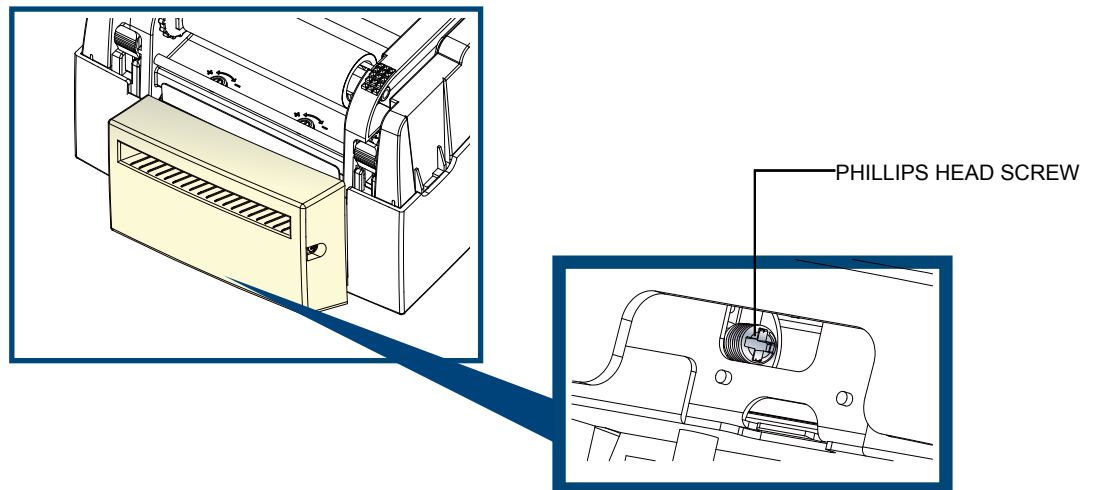
1. To move the Print Head forward (Direction A) turn the Adjustment Wheel counterclockwise (arrow 1).
2. To move the Print Head rearward (Direction B) turn the Adjustment Wheel clockwise (arrow 2).



6.4 Clearing Cutter Jams

Paper can jam the Cutter during use. Please follow the below steps to clean the paper jam.

A Phillips head screw for clearing cutter jams is located on the bottom of cutter module, as shown below.



1. Turn the Printer OFF.
2. Use a Philips screwdriver to turn the screw and clear the jam.
3. Once you have cleared the paper jam, turn the Printer back ON. The cutter will automatically reset.

NOTICE

- Labels should be at least 30 mm high to ensure proper functioning of the cutter.

6 Maintenance And Adjustment

6.5 Troubleshooting

Problem	Solution
The printer is switched on but the LED does not light up.	<ul style="list-style-type: none"> ◆ Check the power supply.
One or both LEDs lights up red and printing has stopped	<ul style="list-style-type: none"> ◆ Check for software setting or program command errors. ◆ Look for the error in Section 3.3 Error Alerts ◆ Check if the print mechanism is closed correctly.
The label stock passes through the printer but no image is printed.	<ul style="list-style-type: none"> ◆ Check that the ribbon is installed with the inked side facing the label media. ◆ Select the correct printer driver. ◆ Select the correct label stock and print mode.
The label stock jams during printing.	<ul style="list-style-type: none"> ◆ Clear the paper jam. ◆ Check that the print head is clean.
There is no printed image on some parts of the label.	<ul style="list-style-type: none"> ◆ Check if there is any label or ribbon stuck on the thermal print head. ◆ Check for errors in the application software. ◆ Check if the starting position has been set correctly ◆ Check the ribbon for wrinkles.
There is no printed image on part of the label or the image is blurred.	<ul style="list-style-type: none"> ◆ Check the thermal print head for dust or other dirt. ◆ Use the internal "~T" command to perform a Test Print and check if the print head can print across the entire width. ◆ Check the quality of the print media.
The printed image is positioned incorrectly.	<ul style="list-style-type: none"> ◆ Check if there is paper or dust covering the label sensor. ◆ Check if the label stock is suitable for use. Contact your reseller. ◆ Check the paper guide.
Skipping labels during printing.	<ul style="list-style-type: none"> ◆ Check the label height setting. ◆ Check if there is dust covering the label sensor. ◆ Perform a label calibration.
The printed image is blurred.	<ul style="list-style-type: none"> ◆ Check the print darkness setting. ◆ Check if the print head is dirty.
The cutter does not cut off the labels in a straight line.	<ul style="list-style-type: none"> ◆ Check if the label stock is installed correctly.
The cutter does not cut off the labels completely.	<ul style="list-style-type: none"> ◆ Check if the label thickness exceeds 0.2 mm.
When using the cutter, the labels are not fed through or are cut off incorrectly.	<ul style="list-style-type: none"> ◆ Check if the cutter has been correctly installed. ◆ Check if the paper guides are sticky.
The label dispenser is not functioning normally.	<ul style="list-style-type: none"> ◆ Check if there is dust on the label dispenser sensor. ◆ Check if the label stock is installed properly.

NOTICE

- If any problems occur that are not described here, please contact your reseller.

APPENDIX Product Specifications

V-425E

V-434E

Model			
	Print Method	Thermal Transfer/Direct Thermal	
	Resolution	203 dpi (8 dot/mm)	300 dpi (12 dots/mm)
	Print Speed	5 IPS (127 mm/s)	4 IPS (102 mm/s)
	Print Width	4.25" (108 mm)	4.16" (105.7 mm)
	Print Length	Min. 0.16" (4 mm)**; Max. 68" (1727 mm)	Min. 0.16" (4 mm)**; Max. 30" (762 mm)
	Processor	32 bit RISC CPU	
Memory	Flash	8 MB Flash (4 MB for user storage)	
	SDRAM	16 MB	
	Sensor Type	Adjustable reflective sensor 2 fixed transmissive sensors, central aligned	
Media	Types	Continuous form, gap labels, black mark sensing, and punched hole; label length set by auto sensing or programming	
	Width	1" (25.4 mm) Min. - 4.64" (118 mm) Max.	
	Thickness	0.003" (0.06 mm) Min. - 0.01" (0.25 mm) Max.	
	Label Roll Diameter	Max. 5" (127 mm)	
Ribbon	Core Diameter	1" (25.4 mm), 1.5" (38.1 mm), 3" (76.2 mm)	
	Types	Wax, wax / resin, resin	
	Length	981' (300 m)	
	Width	Min. 1.18" (30 mm) – Max. 4.33" (110 mm)	
Software	Ribbon Roll Diameter	2.67" (68 mm)	
	Core Diameter	1" (25.4 mm)	
	Printer Language	TPL	
Software	Label Design Software	EASYLABEL Start	
	Driver	Windows and CUPS (Linux and Mac)	
Resident Fonts	Bitmap Fonts	6, 8, 10, 12, 14, 18, 24, 30, 16x26 and OCR A&B Bitmap fonts 90°, 180°, 270° rotatable, single characters 90°, 180°, 270° rotatable Bitmap fonts 8 times expandable in horizontal and vertical directions	
	Scalable Fonts	90°, 180°, 270° rotatable	
Download Fonts	Bitmap Fonts	90°, 180°, 270° rotatable, single characters 90°, 180°, 270° rotatable	
	Asian Fonts	90°, 180°, 270° rotatable and 8 times expandable in horizontal and vertical directions	
Barcodes	Scalable Fonts	90°, 180°, 270° rotatable	
	1-D Bar Codes	Code 39, Code 93, EAN 8 /13 (add on 2 & 5), UPC A / E (add on 2 & 5), 12 of 5 & 12 of 5 with Shipping Bearer Bars, Codabar, Code 128 (subset A, B, C), EAN 128, RPS 128, UCC 128, UCC / EAN-128 K-Mart, Random Weight, Post NET, ITF 14, China Postal Code, HIBC, MSI, Plessey, Telepen, FIM and GS1 DataBar	
Code Pages	2-D Bar Codes	PDF417, Datamatrix code, MaxiCode, QR code, Micro PDF417, Micro QR code and Aztec code	
		Codepage 437, 850, 851, 852, 855, 857, 860, 861, 862, 863, 865, 866, 869, 737 Windows 1250, 1251, 1252, 1253, 1254, 1255, 1257 Unicode (UTF8, UTF16)	
Graphics		Resident graphic file types are BMP and PCX, other graphic formats are downloadable from the software	
Interfaces		USB 2.0	
		Serial port Ethernet	
Control Panel		Two bi-color status-LEDs: Ready, Status	
		Control key: FEED	
Environment	Power	Auto Switching 100-240VAC, 50-60Hz	
	Operation Temperature	41°F to 104°F (5°C to 40°C)	
	Storage Temperature	-4°F to 122°F (-20°C to 50°C)	
Humidity	Operation	30-85%, non-condensing	
	Storage	10-90%, non-condensing	
Agency Approvals		CE (EMC), FCC Class A, CB, CCC	
Dimension	Length	11.2" (285 mm)	
	Height	6.8" (171 mm)	
	Width	8.9" (226 mm)	
	Weight	6 lbs (2.72 Kg), excluding consumables	
Options & Accessories		Cutter module Label Dispenser External label roll holder for 10" (250 mm) O.D. label rolls External label rewinder	

Notice

Specifications are subject to change without notice. All company and/or product names are trademarks and/or registered trademarks of their respective owners.

► Serial Port

Default Settings: Baud rate 9600, no parity, 8 data bits, 1 stop bit, XON/XOFF protocol and RTS/CTS.

RS232 HOUSING (9-pin to 9-pin)				
DB9 Socket		DB9 Plug		
---	1	1	+5V,max 500mA	
RXD	2	2	TXD	
TXD	3	3	RXD	
N/C	4	4	N/C	
GND	5	5	GND	
DSR	6	6	RTS	
RTS	7	7	CTS	
CTS	8	8	RTS	
N/C	9	9	N/C	
PC		Printer		

► USB

Connector Type : Type B

Pin NO.	1	2	3	4
Function	VBUS	D-	D+	GND