![GoDEX logo]

EZ2050/EZ2150 BARCODE PRINTER
USER MANUAL

CONTENTS

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 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 55022:2010 Class A, EN61000-3-2:2006/A2:2009, EN 61000-3-3:2008 and EN 55024:1998/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.

EZ2050 SERIES
TO WHICH THIS DECLARATION RELATES
IS IN CONFORMITY WITH THE FOLLOWING STANDARDS

IEC 60950-1:2005(2nd Edition)+Am 1:2009, GB4943-2001 GB9254-2008(Class A) GB17625.1-2003, EN 55022:2010 Class A, EN61000-3-2:2006/A2:2009, N 61000-3-3:2008 and EN 55024:1998/A1:2001/A2:2003, IEC 61000-4-2:2008 series, CAN/CSA C22.2 No. 60950-1-03, date July, 2011, UL 60950-1, 1st Edition, 2007-10-31, 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 take adequate measures.

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

Please read the following instructions carefully.

1. Keep the equipment away from humidity.
2. Before you connect the equipment to the power outlet, please check the voltage of the power source.
3. Make sure the printer is off before plugging the power connector into the power jack.
4. It is recommended that you connect the printer to a surge protector to prevent possible transient overvoltage damage.
5. Be careful not to get liquid on the equipment to avoid electrical shock.
6. For safety and warranty reasons, ONLY qualified service personnel should open the equipment.
7. Do not repair or adjust energized equipment under any circumstances.

Caution

* Danger of explosion if battery is incorrectly replaced. Replace only with the equivalent type recommended by the manufacturer.

** Dispose of used batteries according to the manufacturer's instructions.

*** Only use with designated power supply adapter model.

**** Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Specifications are subject to change without notice.

1 Barcode Printer

1.1 Box Content

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

- EZ2050/EZ2150 Barcode Printer
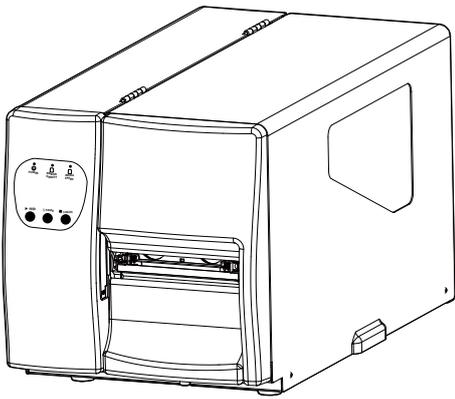
- Label Stock
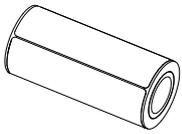
- USB Cable
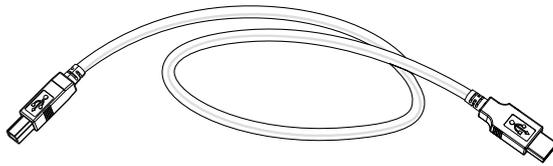
- EZ2050 Series Quick Guide

- Ribbon Module
  Empty Ribbon Core
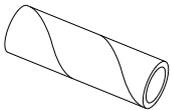
Ribbon

- Power Adapter
  Power Cord
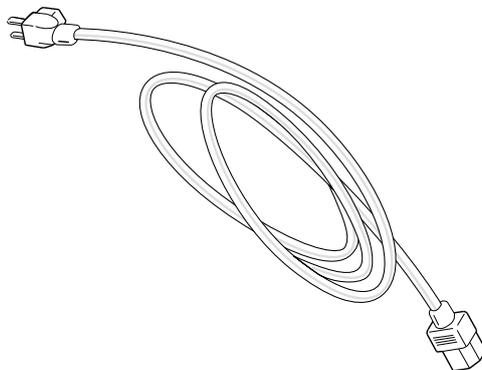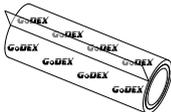
- CD
  Including QLabel software
  and user manual.
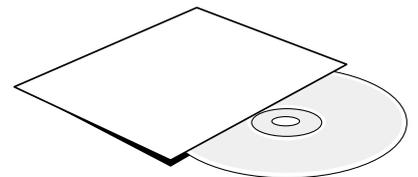
1 Barcode Printer

1.2 Getting to Know Your Printer

External view

1.	Operator panel
2.	Lower cover plate
3.	Viewing window
4.	Printer cover
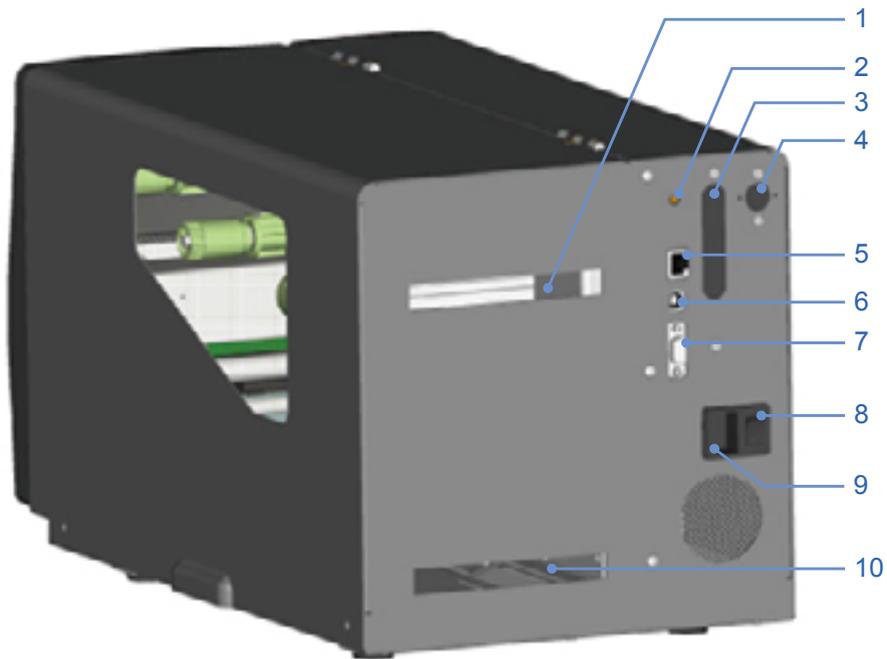
1.	Feed slot for continuous labels
2.	Auto-Calibration button
3.	Parallel port (optional)
4.	Applicator interface (optional)
5.	Ethernet port
6.	USB port
7.	Serial port (DB-9)
8.	On/Off switch
9.	Power jack
10.	Feed slot for continuous labels

1 Barcode Printer
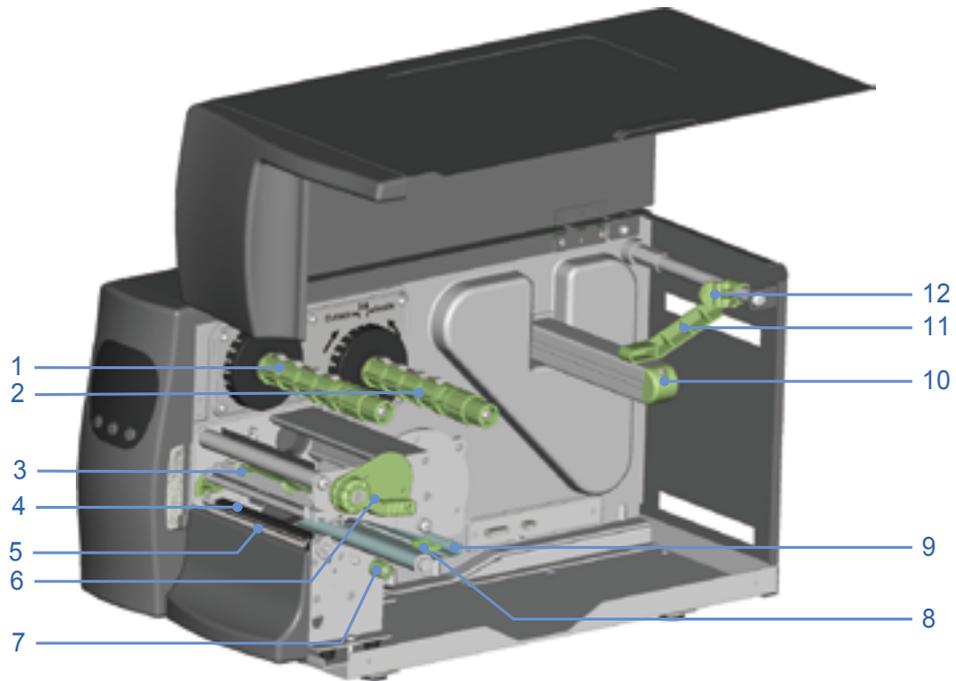
1.	Ribbon rewind hub
2.	Ribbon supply hub
3.	Print mechanism
4.	Platen roller
5.	Tear-off plate
6.	Release lever for print head
7.	Adjustment wheel for sensor
8.	Paper guide
9.	Label tension guide
10.	Label supply hub
11.	Label roll guide
12.	Release catch
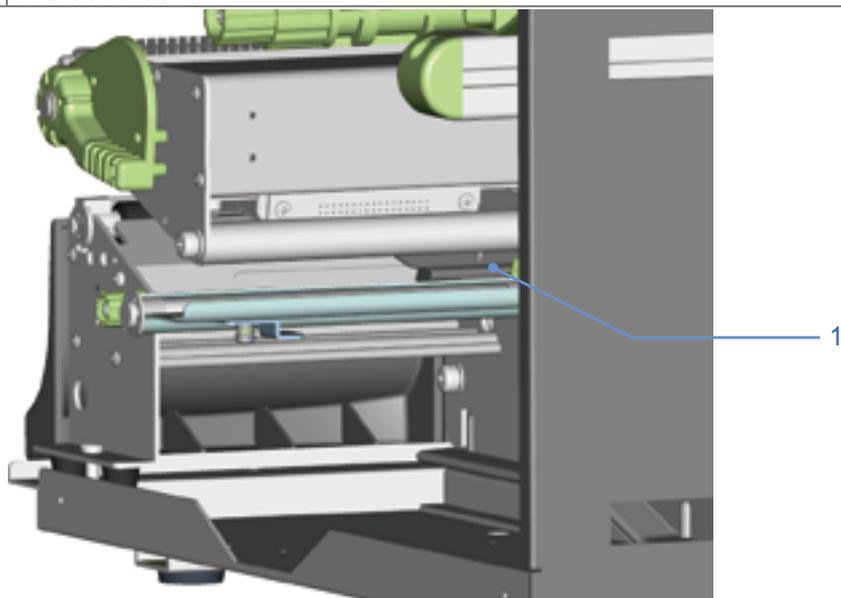
1.	Movable sensor

2 Printer Setup

2.1   Loading the label roll

This printer supports the following printing methods:

Thermal transfer printing (TTP)：Requires a ribbon for transferring a printed image to a medium.

Direct thermal printing (DTP)：Does not require a ribbon, only thermal paper.

Please check which printing method you are using and alter the settings accordingly in the printer driver, printer menu, and/or software.
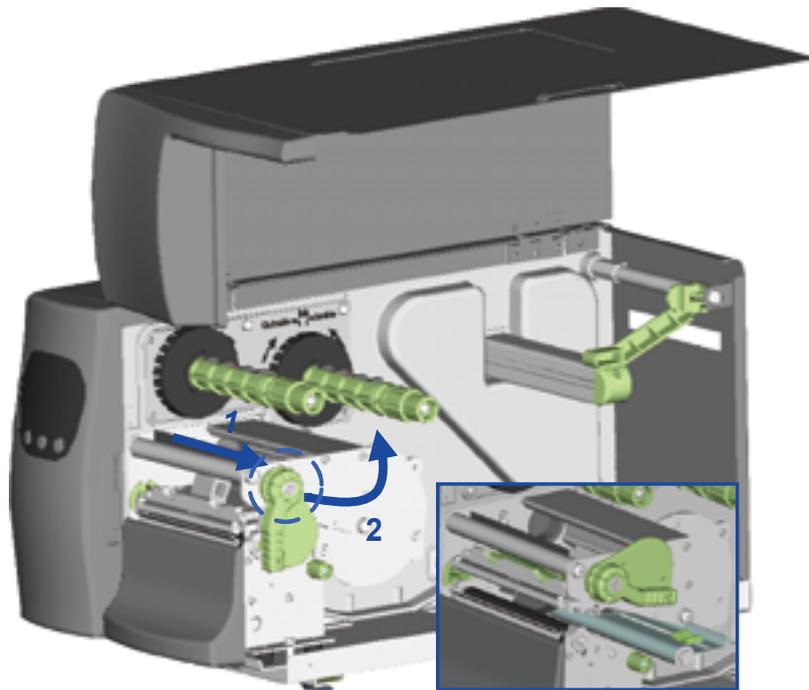
1.   Place the printer on a flat surface and open the printer cover.

2.   Pull out the print head release lever as shown in the illustration (1) and turn it anticlockwise to a top right position (2).
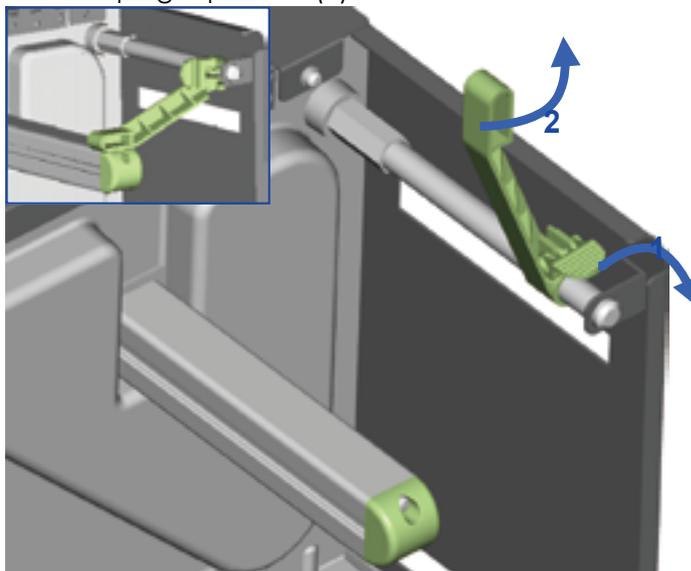
3.   Pull the release catch for the label roll guide to the right as shown by the blue arrow 1.
4.   Now slide the label roll guide forward and fold it up as shown by the blue arrow 2.

2 Printer Setup
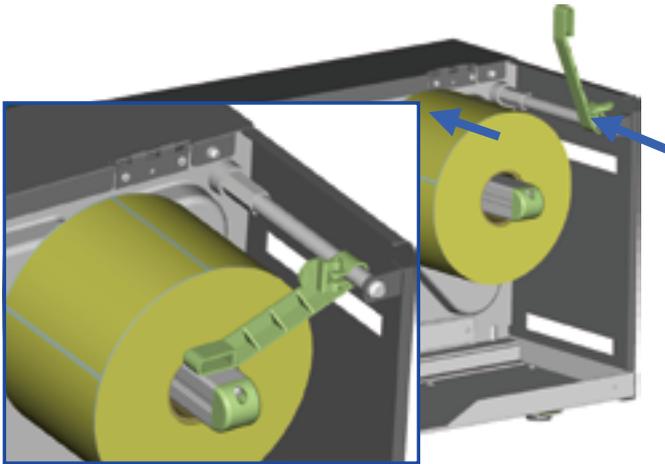
5. Place the label roll on the label supply hub, pushing it right up to the printer housing. (Do not apply too much pressure to avoid damaging the label stock.)

6. Fold the label roll guide back down and push it against the label roll.

【Note】

When moving the label roll guide, hold it only by the end that is attached to the bracket, not by its top.
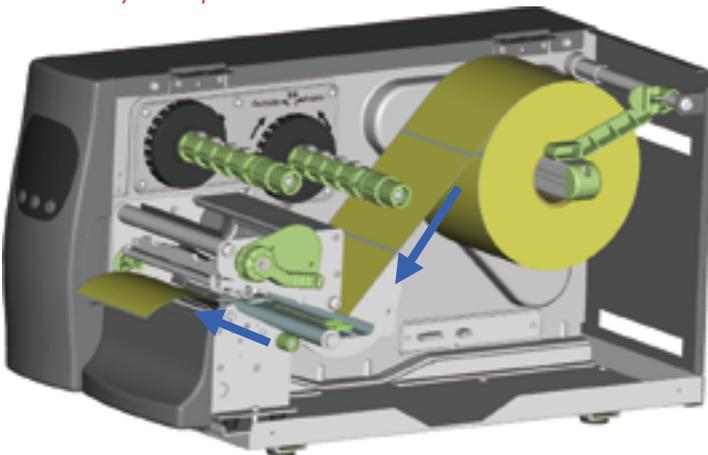
7. Load the label roll into the printer as shown in the illustration. Pass it through the printer as indicated by the blue arrows.
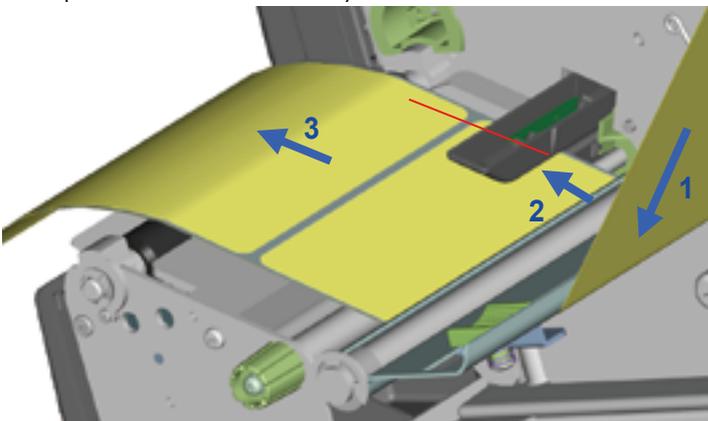
8. Pass the label stock through the sensor and up to the tear-off plate.

【Note】

Remember to set the movable sensor to gap, black mark, or tag hole by changing the position of the sensor with the adjustment wheel.
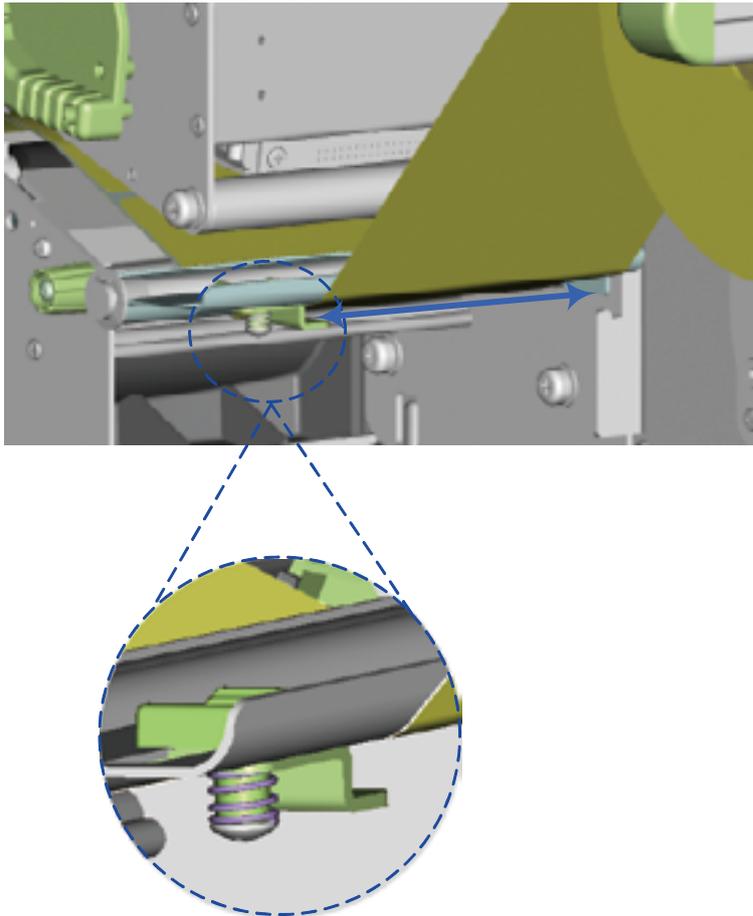
9. The labels pass between the wall of the printer housing and the adjustable paper guide.

【*Note*】
Pass the labels through the printer as shown in the illustration.

10. Return the print head release lever to its original position.

11. Then close the printer cover.

2 Printer Setup

2.2 Loading the Ribbon
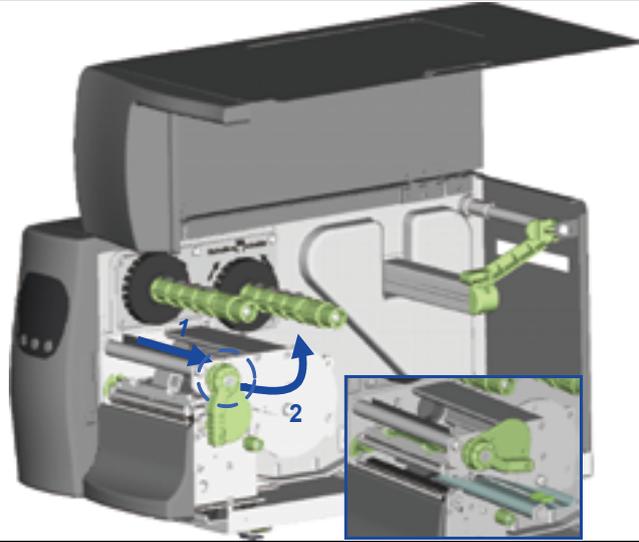
1. Place the printer on a flat surface and open the printer cover. 2. Pull out the print head release lever as shown in the illustration (1) and turn it anticlockwise to a top right position (2).	
3. Place a new ribbon on the ribbon supply hub. Then place an empty ribbon core on the ribbon rewind hub. 4. The two illustrations on the right show you how to install the ribbon depending on the ribbon type (ink side in or out).	Ink side out Ink side in
5. Pass the ribbon under the print head and back up on the other side. Attach it to the empty ribbon core. 【Note 】 *Do not pass the ribbon under the sensor.*	
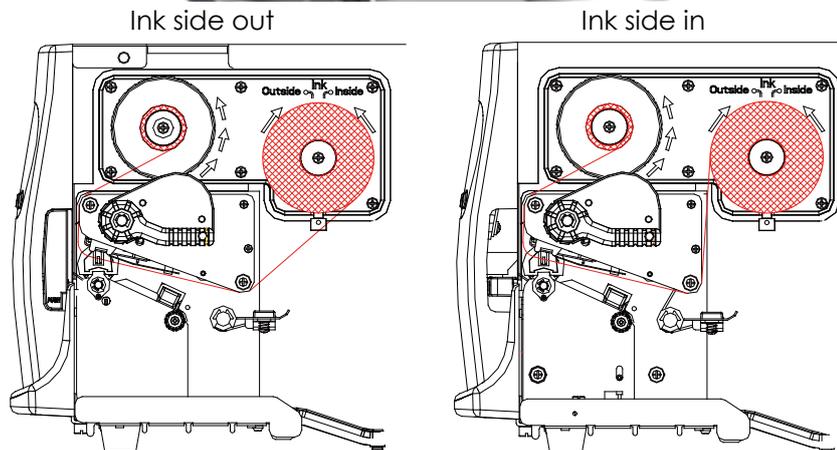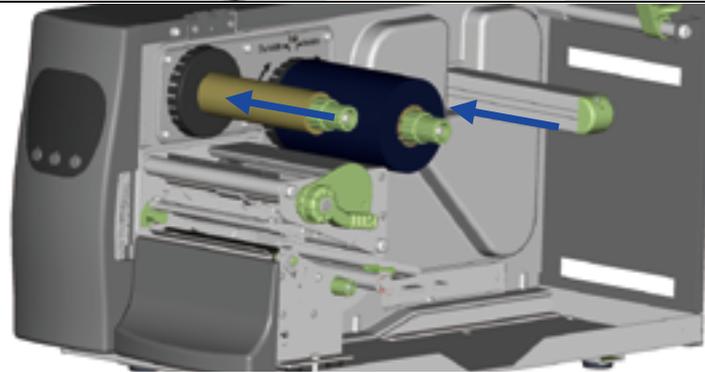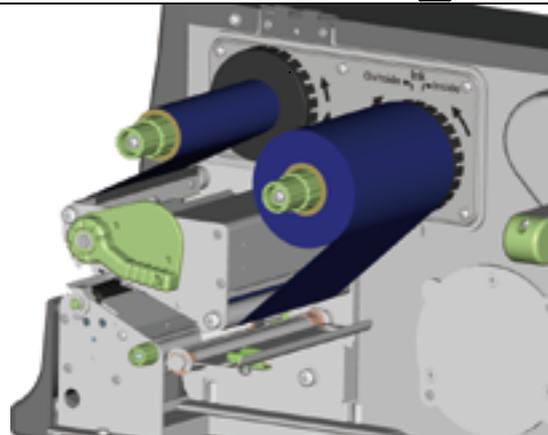
2 Printer Setup

2.3   Connecting the Printer to the Host Computer

1. Please make sure that the printer is switched off.
2. Connect the power cord to the AC adapter and connect the adapter to the printer.
3. Connect the USB cable to the printer and host computer.
4. Switch on the printer. The operator panel should now light up.
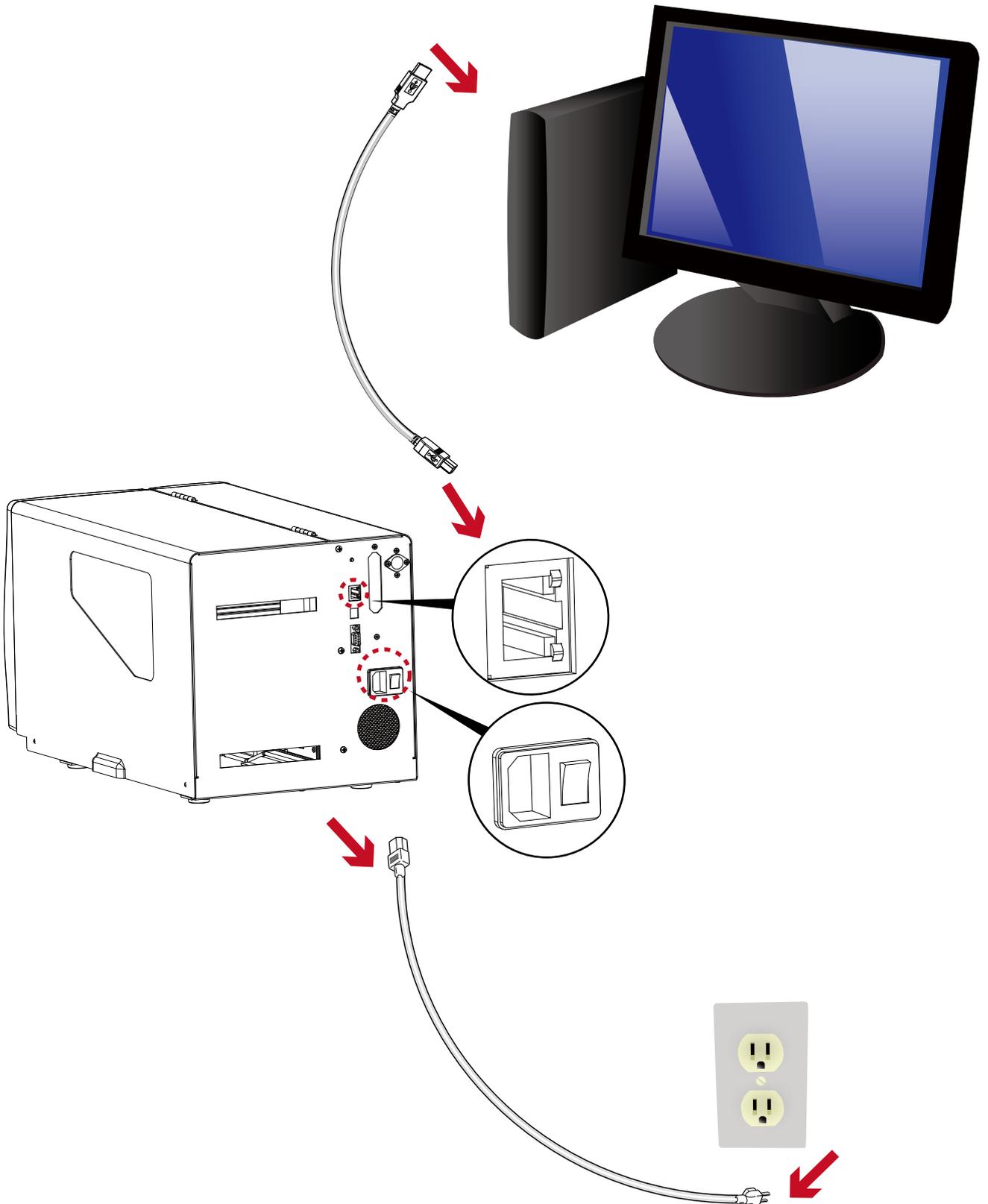
2 Printer Setup

Installing Printer Driver Directly from CD Folder

1. Insert the product CD in the CD/DVD drive of the host computer and open the "Seagull Drivers" folder on the CD. Select the icon for the driver file and click it to start the installation.
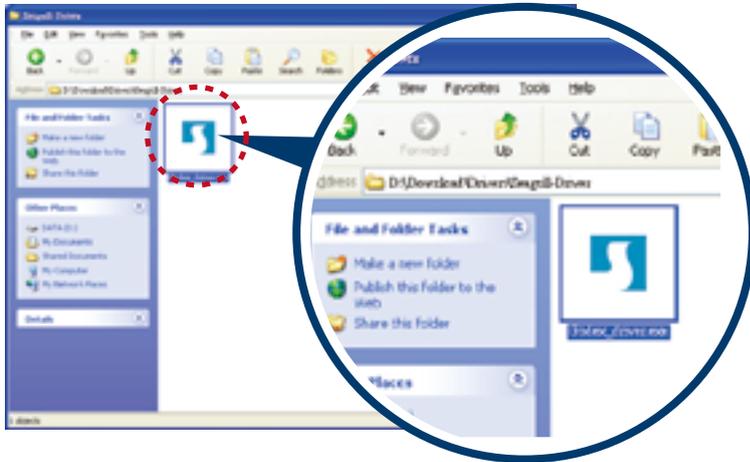
2. Follow the instructions on the screen. The Driver Wizard guides you through the installation procedure. Select "Install printer drivers".

3. Specify your printer model.
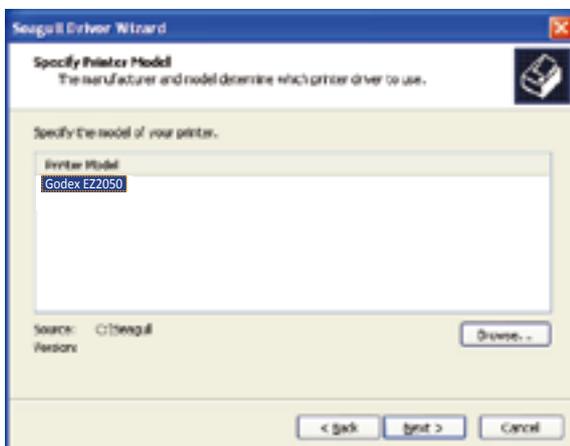
2 Printer Setup

4. Specify the port used to connect the printer to the host computer.
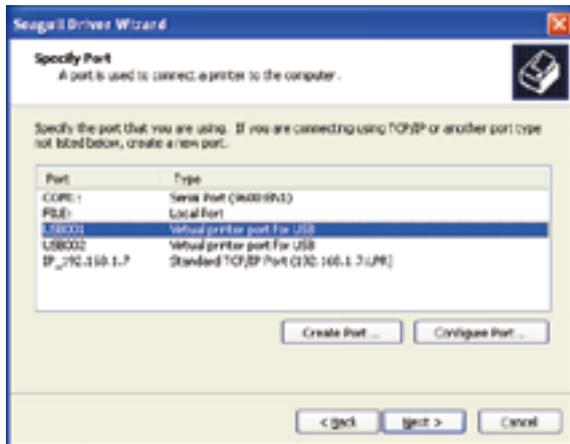
5. Enter a printer name and assign the appropriate rights.
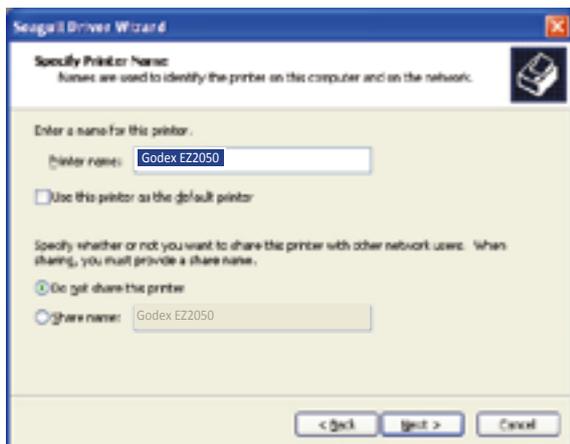
6. Once the installation is complete, a summary of the printer settings is displayed.
   Check whether the printer settings are correct and click "Finish" to start copying the driver files.
   Wait until copying is complete, then finish the installation.
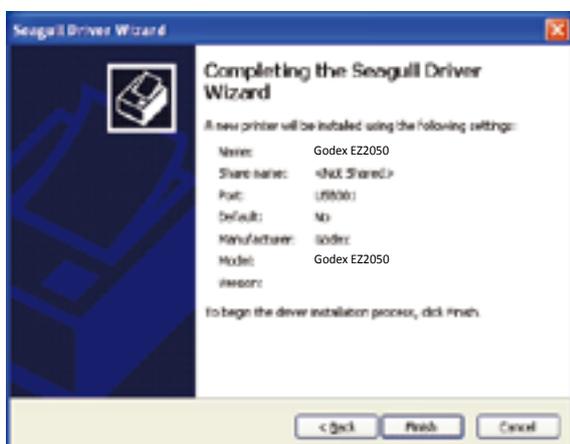
2 Printer Setup

7. Once the driver installation is complete, the new printer should appear in the "Printers and Faxes" folder.

Godex EZ2050
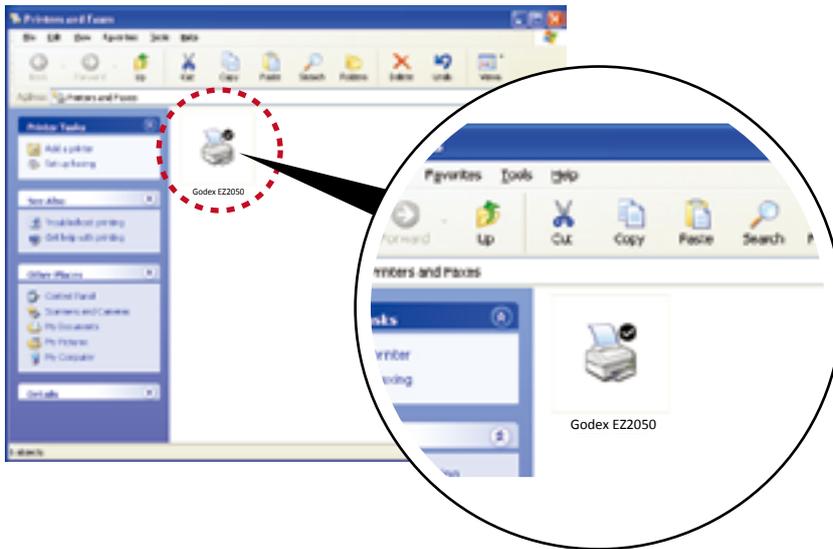
3 Printer Setting and Control

3.1 Operation Panel

Operation Panel Introduction

Function buttons		
▷		FEED
‖		PAUSE
▢		CANCEL
LED indicators		
POWER		The POWER (Ready) LED lights up when the printer has started up and is ready to print.
RIBBON / DENSITY		(1) Ribbon status indicator (2) Density adjustment indicator in Setting Mode
MEDIA / SPEED		(1) Media status indicator (2) Speed adjustment indicator in Setting Mode

3 Setting and Control for Operation Panel

3.2 Function buttons – introduction

▷ FEED button

When you press the FEED button, the printer moves the label to the defined stop position. If you are using continuous labels, pressing the FEED button will move label stock until you release the button again. If you are using individual labels, pressing the FEED button will move only one label. If the label does not stop at the correct position, you need to run the auto-detection function on the label stock (**see Section 3-5**).

❙❙ PAUSE button

Pressing the PAUSE button while the printer is in standby mode will set the printer to pause mode. In this mode, the printer can receive commands, but it can only process them when it is reset to standby mode. Pressing the PAUSE button again will reset the printer to standby mode.

Pressing the PAUSE button during printing will interrupt printing. When the PAUSE button is pressed again, the printer resumes printing. Example: While a 10-label print job is running, you press the PAUSE button to pause the printer. Two of the labels have been printed. To resume printing and print the remaining eight labels, you press the PAUSE button again.

▢ CANCEL button

Pressing the CANCEL button during printing cancels a print job. The current print job is cancelled. Example: While a 10-label print job is running, you press the CANCEL button. Two of the labels have been printed. The print job is cancelled and the remaining eight labels are not printed.

You can combine the FEED, PAUSE and CANCEL buttons in a number of ways to perform different printer functions:

Function	Button	Beeps	Description
Self test	+ Power On	3 beeps	Switch on the printer and keep the button pressed until you hear 3 beeps.
Dump mode	+ Power On	3 beeps → 1 beep	After the self test, keep the button pressed until you hear a beep.
Auto-detection	+ Power On	3 beeps	Switch on the printer and keep the button pressed until you hear 3 beeps.
Factory settings	+ ▢ + Power On	2 x 2 beeps	Switch on the printer and keep the and ▢ buttons pressed until you hear 2 beeps. This resets the printer to the factory settings.
Download mode	▢ + Power On	1 beep	Switch on the printer and keep the ▢ button pressed until you hear a beep. This mode is for download of the firmware only.
Settings mode	☰	3 beeps	Switch on the printer and keep the ☰ button pressed for about 3-4 seconds, until you hear 3 beeps.

3 Setting and Control for Operation Panel

3.2 Settings mode

In settings mode, you can change different settings, such as the printing mode or media type.

1. Switch on the printer and make sure that the POWER (Ready) LED lights up.
2. Press the PAUSE button and keep it pressed for about 3-4 seconds until you hear 3 beeps.
3. In settings mode, the buttons have the following functions:

   ━ : Minus / Enter
   ☰ : Menu / Next
   ✚ : Plus / Exit

   Press the ☰ button to select the adjustment items; press the ━ button or the ✚ button to change the setting values.
4. To exit the settings mode, you need to go back to the beginning of setting mode and decide whether to save the changes you have made or exit without saving. Once you have saved or discarded your changes, the printer will switch back to standby mode.

Press the ☰ button and keep it pressed for about 3-4 seconds until you hear 3 beeps.

 Blinking   Steady

☰		✚	DENSITY	SPEED	Description
Start / Exit Setting mode	Exit without saving	Save & exit	●	●	DENSITY and SPEED lights steady to indicator the strat or the end of setting mode.
		↓			
Darkness	Decrease the setting value	Increase the setting value	●		DENSITY light flashes and then blinks for each pressing. The buzzer will beep when the adjustment reaches the maximum or minimal.
		↓			
Speed	Decrease the setting value	Increase the setting value		●	SPEED light flashes and then blinks for each pressing. The buzzer will beep when the adjustment reaches the maximum or minimal.

					When reaching this item, press ➕ button to set the printer to TT mode, press button to set the printer to DT mode and press ≡ button to go to next item.
Direct Thermal / Thermal Transfer	DT mode	TT mode	(light)		

					DENSITY light blinks and Speed light flashes. The buzzer will beep when the adjustment reaches the maximum or minimal.
Stop Position	Decrease the setting value	Increase the setting value	(light)	(light)	

					When reaching this item, press ➕ button to set the printer buzzer ON, press button to set the printer buzzer OFF and press ≡ button to go back to Start / Exit Setting mode.
Buzzer	Off	On		(light)	

Return to the Start / Exit Setting mode

3 Setting and Control for Operation Panel

3.4 Label Calibration and Self Test

Label Calibration

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.

Self Test

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

Here is how you run the label size calibration and self test.

1. Check that the label stock is loaded correctly.
2. Turn off the printer.
3. Turn the printer on again, keeping the FEED button pressed. When the LED starts to flash red, release the FEED button. The printer will now measure the label stock and store the label height.
4. Once the printer has successfully measured the label stock, it will print a self-test label.

The contents of a self-test printout are listed below.

Model & Version	EZ2050:GX.XXX
USB ID setting	USB S/N:12345678
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	0000 FORM(S) IN MEMORY
Number of graphics	0000 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	4073 KB FREE MEMORY
Speed, Density, Ref. Point, Print direction	^S4 ^H8 ^R000 ~R200
Label width, Form length, Stop position	^W102 ^Q100,3 ^E18
Cutter, Label Dispenser, Mode	Option:^D0 ^O0 ^AD
Sensor Setting	Reflective AD:1.96 2.84 2.49[0.88_23]
Code Page	Code Page:850

3 Setting and Control for Operation Panel

Label Calibration Button

A hardware button to make a Label Calibration while printer encountering ''Media Error'' during the cases when first-time printer start up or change label or ribbon to another type, such as change using gap label to continuous or black mark labels.

CALIBRATION BUTTON
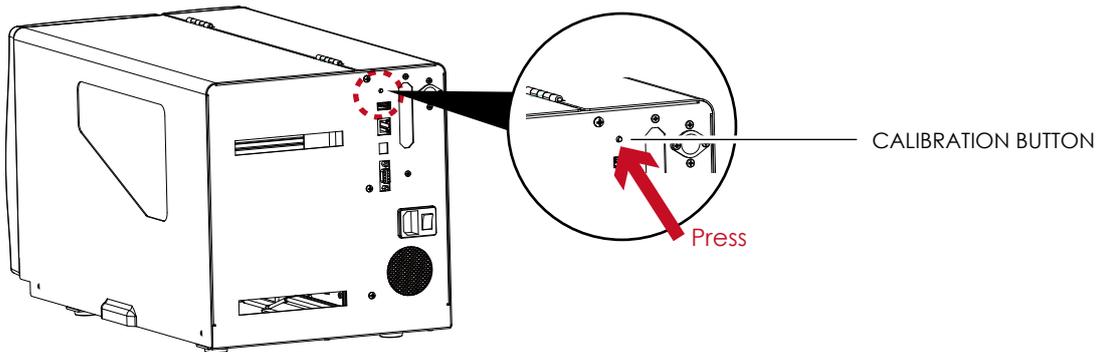
Press

Press C-button for 2 seconds, it will make an auto-sensing to calibrate the label and ribbon's parameters.
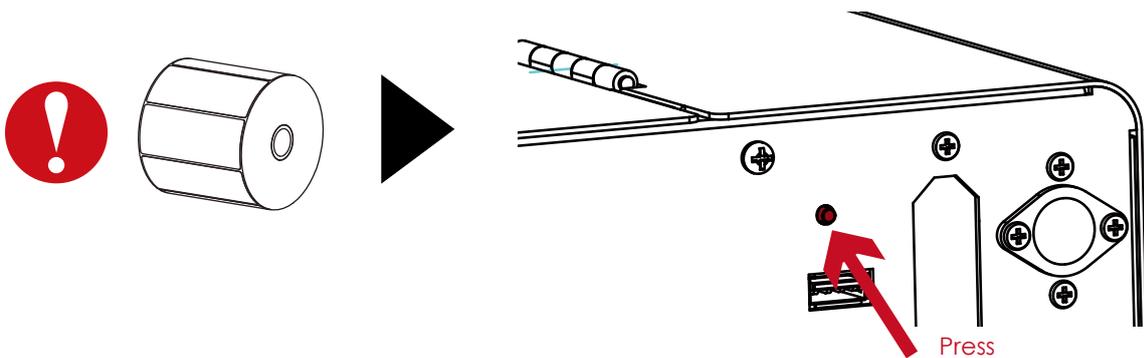
Press

Notice

*   Press C-button is equivalent to the auto-sensing command ''~S,SENSOR'' that will cancel on-printing-job and make the Label Calibration immediately.

3 Setting and Control for Operation Panel

3.5   Dump mode

If the label settings do not match the printer output, you can switch the printer to dump mode to check whether an error has occurred during the transfer between printer and host computer. In dump mode, the unprocessed raw data are sent to the printer and printed. This shows you quickly whether any data are sent to the printer at all.

Here is how you switch to dump mode:

1.   Switch off the printer.
2.   Switch on the printer and keep the FEED button pressed.
3.   You will hear 3 beeps first and then one beep later. Release the FEED button after the last beep.
         The printer will automatically print "Dump Mode Begin". That means the printer is now in dump mode.
4.   Send commands to the printer and check whether they match the printer output.

To exit dump mode, press the FEED button. The printer will automatically print "Out Of Dump Mode" and switch to standby mode. Alternatively, you can switch off the printer to exit dump mode.

3 Setting and Control for Operation Panel

3.6 Error alerts

In the event of a problem that prevents normal functioning of the printer, you will see an error message on the display and hear some beep signals. The LED indicators will also light up.

Fast flashing   Slow flashing   Light on

Types	LED above the display			Beep	Description	Solution
	RIBBON	MEDIA				
Print head is open	Light on	Light on	Both LEDs light up	4x2 beeps	The print mechanism is not closed.	Please make sure that the print mechanism is closed correctly.
Entering cooling process	Fast flashing	Fast flashing	Both flashing		The print head is too hot.	Once the print head has cooled down, the printer switches to standby mode.
Out of ribbon	Light on			3x2 beeps	No ribbon is loaded.	Please make sure that the printer is set to thermal direct mode.
					The ribbon is finished or the ribbon roll is not moving.	Replace the ribbon roll.
Out of media		Light on		1x2 beeps	Unable to detect the paper.	Please make sure that the gap sensor is positioned correctly. If that does not fix the problem, run the auto-detection function again.
					The labels are finished.	Replace the label roll.
					Paper jam.	Check the path of paper feeding.
Memory full	Slow flashing			2x2 beeps	The memory is full.	Delete data you no longer need from the memory.
Rewinder full		Slow flashing		2x2 beeps	The label or liner on rewinder is full.	Remove the label or liner to continue rewinding.
File name not found	Fast flashing			2x2 beeps	Unable to find file.	Use the "~X4" command to print all file names and check whether the file exists in the memory.
File name already exists		Fast flashing		2x2 beeps	The file name already exists.	Change the name of the file and try storing it again.

4 Accessories

4.1 Internal rewinder

1	Rewinder	
2	Retention clip	
3	Screws (set of 4)	
4	Rewinder guide	
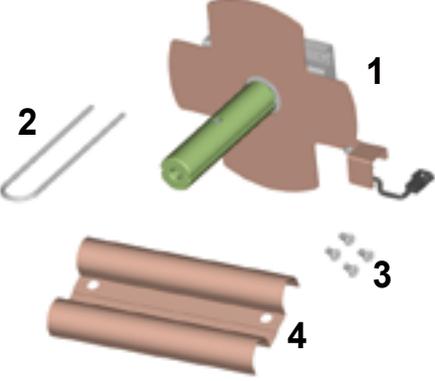
【Note】
Maximum height of the rewound medium: 118 mm

【Suggestion】
Medium thickness: 0.06 mm– 0.25 mm
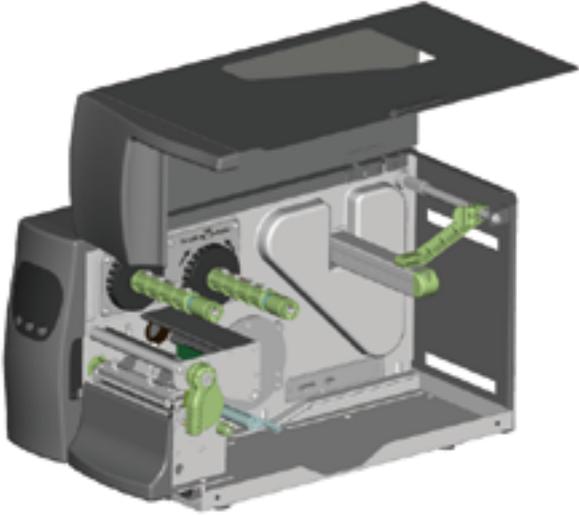
1. Place the printer on a flat surface and open the printer cover. 【Note】 *Remember to switch off the printer before starting the installation.*	
2. Remove the cover for the rewinder module.	

3.	Remove the retention clip from the rewinder. 4.	Secure the rewinder on the printer housing using the four screws supplied.	
5.	Now connect the rewinder cable to the printer housing.	
6.	Installation of the rewinder module is now complete.	
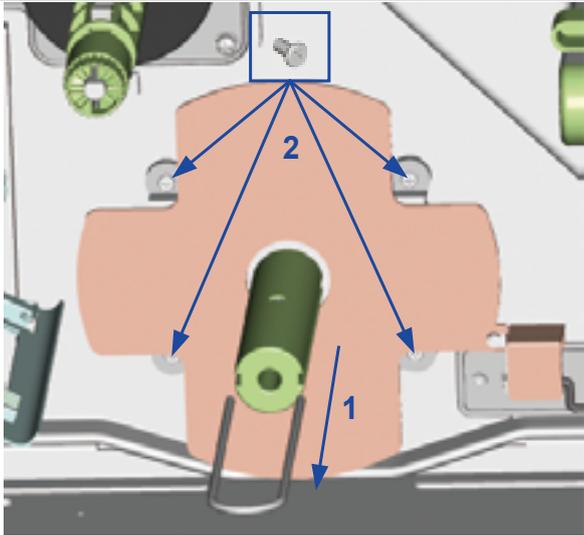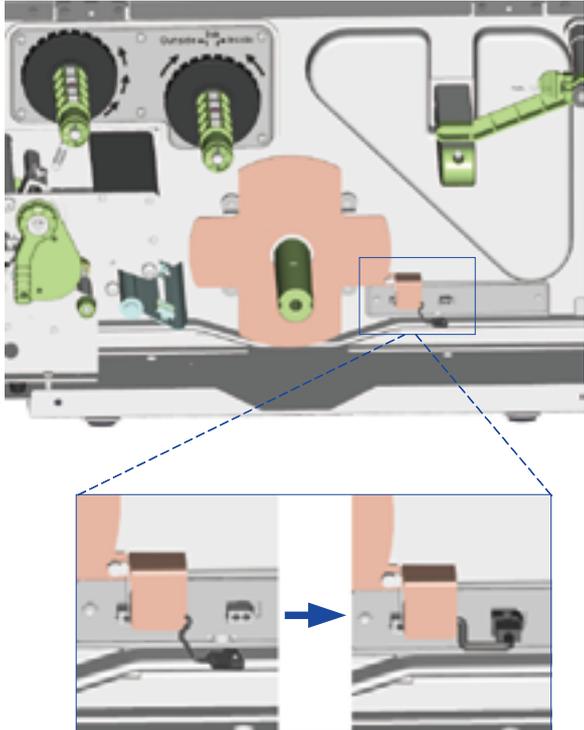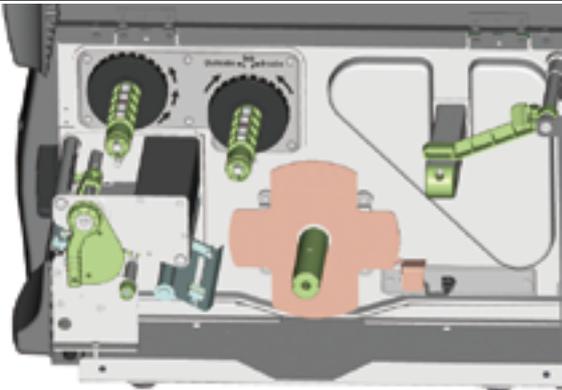
4 Accessories

4.2 Installing the rewinder guide

1. Unscrew the screw marked in the illustration on the front of the printer, which secures the lower cover plate. 2. Remove the lower cover plate. 【Note 】 *Switch off the printer before starting the installation.*	
3. Mount the rewinder guide on the print mechanism and secure it with screws.	
4. Installation of the rewinder guide is now complete.	
5. Now load the label stock. 6. Pass the label stock through the rewinder from the bottom up. Secure the label stock on the rewinder using the retention clip. 【Note 】 *Make sure you choose the correct rewind direction.*	
7. Close the printer cover to complete the installation. 【Note 1 】 *Before you start using the rewinder, please make sure that you have carried out all the steps as shown in the illustrations.* 【Note 2 】 *To use the label dispenser, you have to remove the rewinder guide again.*	
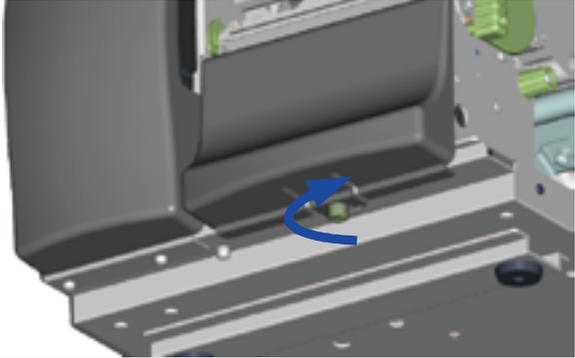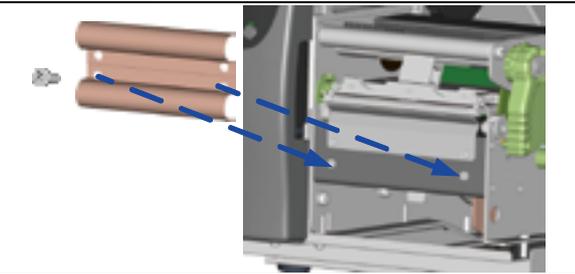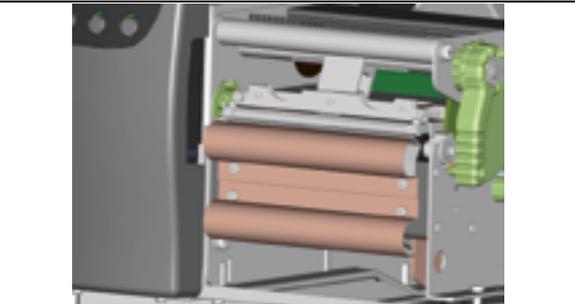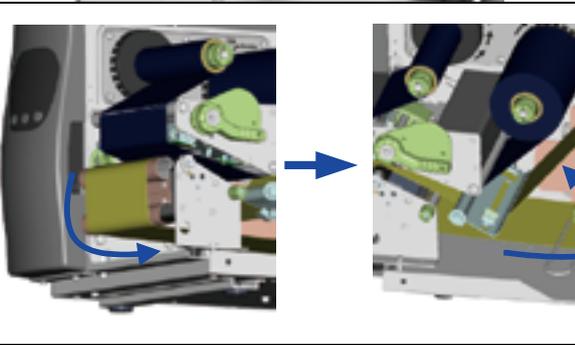
4.3   Label dispenser

3. Wind the label liner around the rewinder and secure it using the retention clip. 4. Return the print head release lever to its original position. 【*Note*】 *Please make sure that the label stock rewinds the right way onto the rewind hub.*	
5. Replace the lower cover plate on the printer and secure it with screws	
6. Press the lower part of the stripper sensor to fold it out. 7. The sensor locks in a horizontal position.	
8. Close the printer cover to complete installation of the dispenser.	
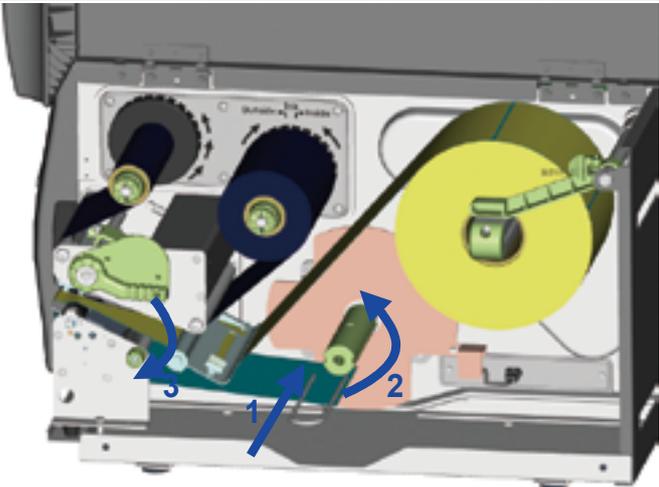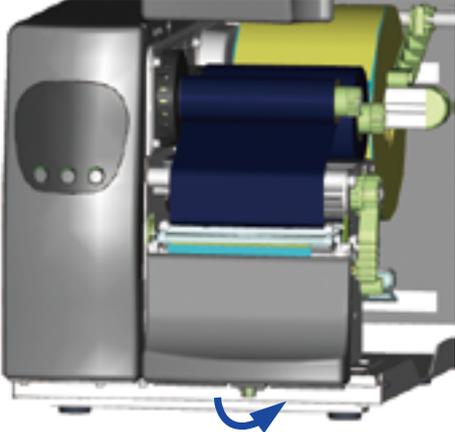
8.	Wind the label liner around the rewinder and secure it using the retention clip. 9. Return the print head release lever to its original position. **【**Note**】** *Please make sure that the label stock rewinds the right way onto the rewind hub.*	
10.	Replace the lower cover plate on the printer and secure it with screws	
11.	Press the lower part of the stripper sensor to fold it out. 12. The sensor locks in a horizontal position.	
13.	Close the printer cover to complete installation of the dispenser.	
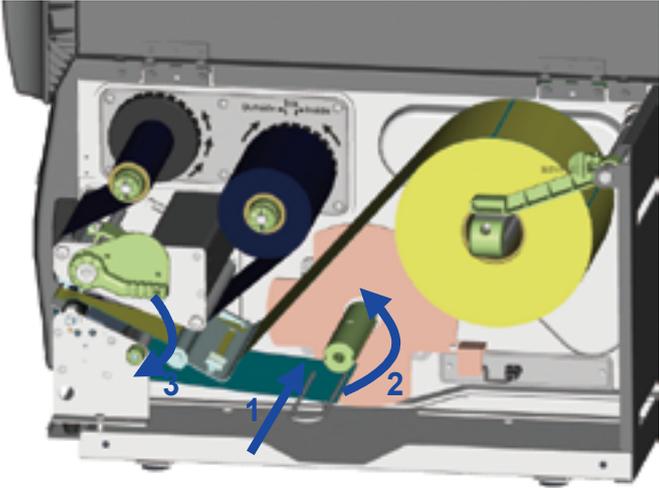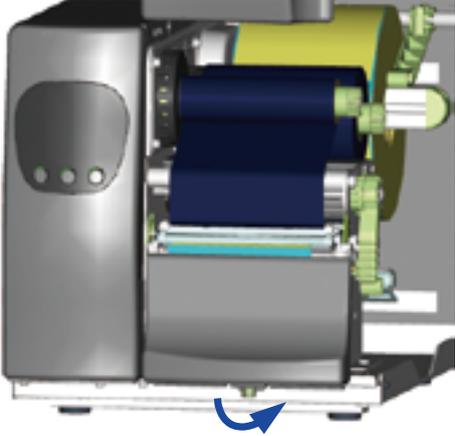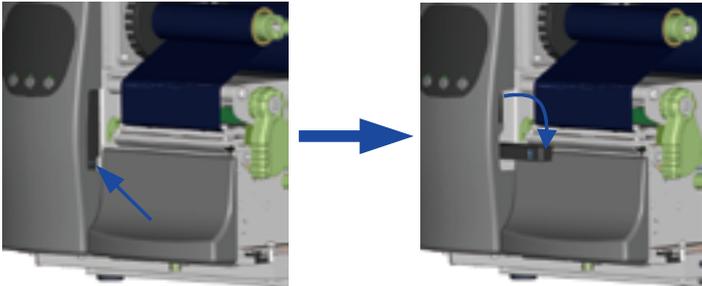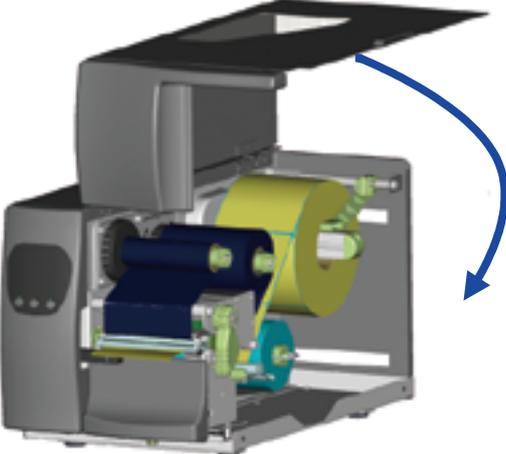
4 Accessories

4.4 Installing the cutter

1	Cutter cover
2	Cutter module
3	Cable clips
4	Screws (set of 4)

【Note 1】

Remember to switch off the printer before installing the cutter.

【Note 2】

Do not use to cut adhesive labels! Glue residue will be left on the cutter blade and impair its functioning.
The cutter has a blade life of 500,000 cuts when using paper weighing 160 g/m² and 250,000 cuts when using paper weighing 200 g/m².

1. Unscrew the screw marked in the illustration on the front of the printer, which secures the lower cover plate. 1. Remove the lower cover plate.	
2. Remove the two screws securing the tear-off plate, then remove the tear-off plate.	

3.	Secure the cutter module on the printer housing using the screws.	
4.	Connect the cutter cable connector to the cutter jack on the printer. 5. Route the connection cable along the bottom of the printer housing using the cable clips.	
6.	Place the cutter cover over the cutter module and secure it using the screw you removed from the lower cover plate. 7. Now load the label roll into the printer and close the printer cover. 【Note 1】 *Check whether the cutter function is enabled in the printer.* 【Note 2】 *Labels or paper should be at least 30 mm high.* 【Suggestion】 *After installation of the cutter module, set the stop position (^E) to 26.*	
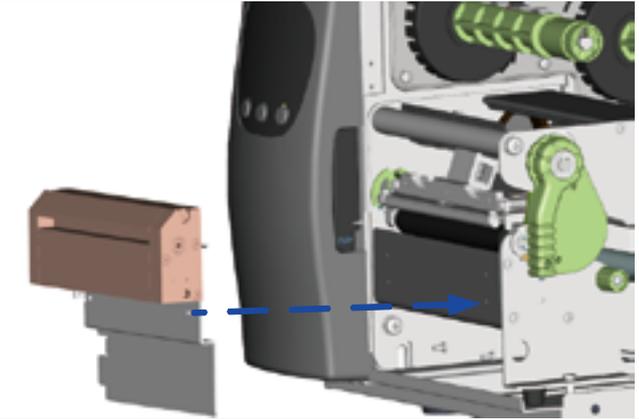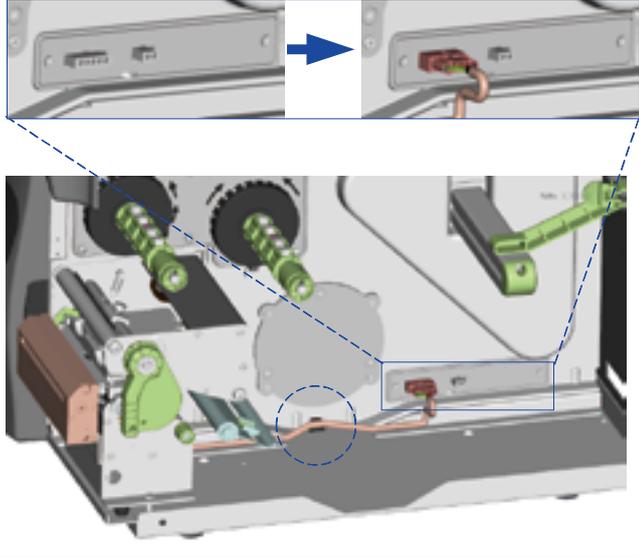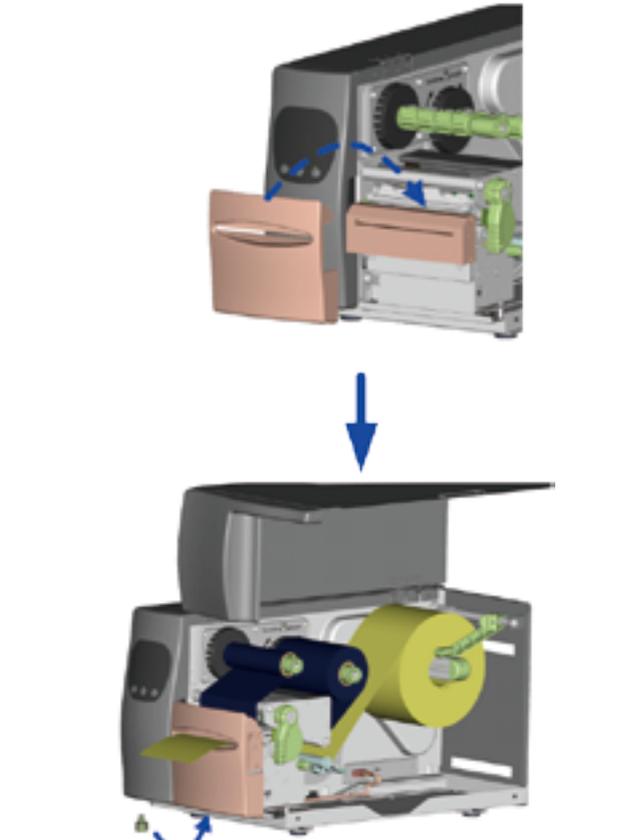
4 Accessories

4.5 Installing the Parallel adapter

1	Parallel cable	
2	Parallel adapter	
3	Connection cable	
4	Screws (set of 2)	
1.	Check whether the printer is switched off. Place the printer on a flat surface and open the printer cover.	
2.	Unscrew the two screws marked in the illustration on the right and remove the left-hand side of the printer housing.	
3.	Unscrew the screws on the parallel port cover and remove the cover.	
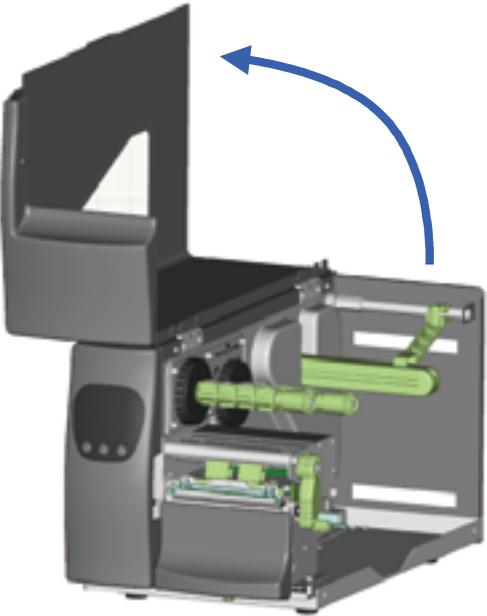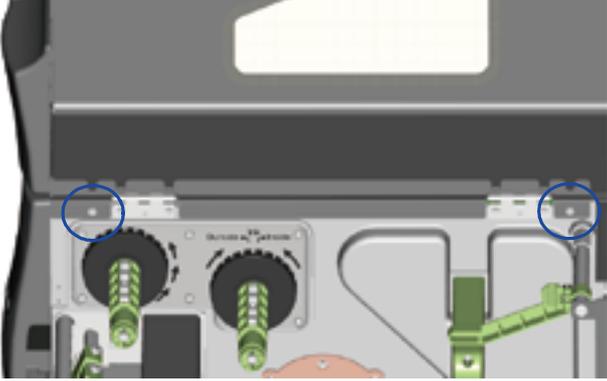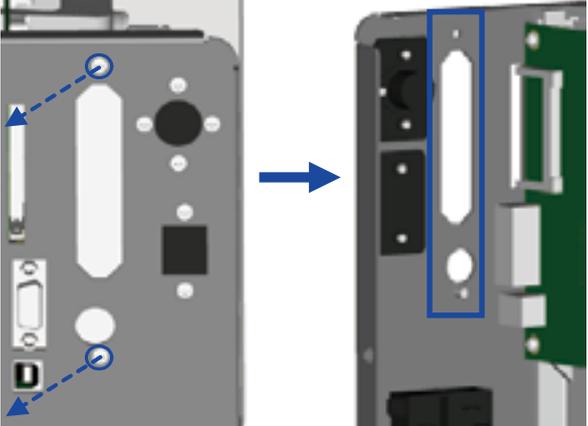
4.	Install the Parallel adapter in its place and secure it on the housing with screws.	
5.	Connect the 30-pin connection cable to the motherboard.	
6.	Replace the left-hand part of the printer housing and secure it with the screws you removed earlier.	
7.	Installation of the Parallel adapter is now complete.	
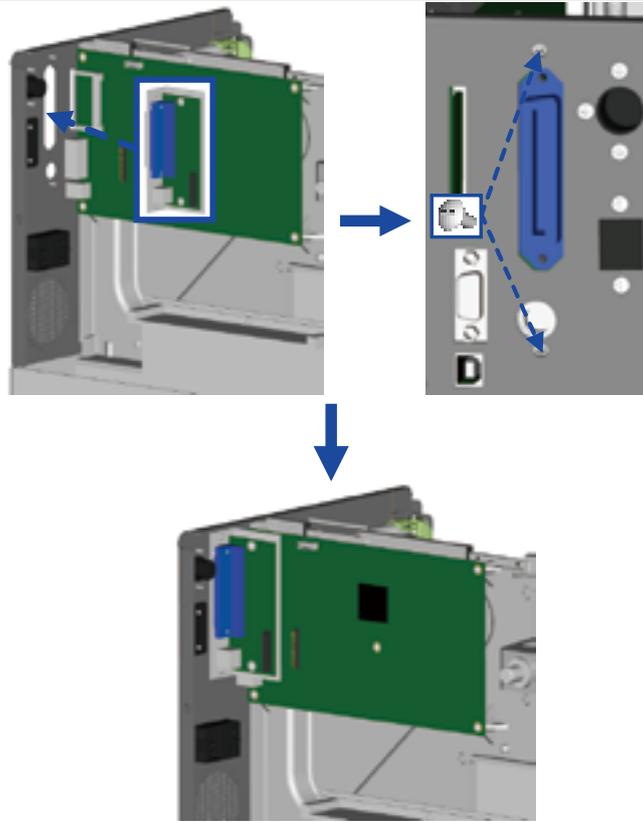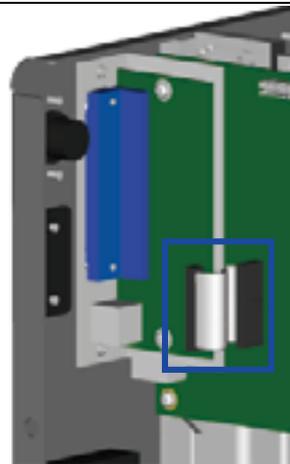
4 Accessories

4.6 Installing the Applicator interface

1	Applicator interface	
2	Screws (set of 2)	
1.	Place the printer on a flat surface and open the printer cover. 【Note】 *Remember to switch off the printer before starting the installation.*	
2.	Unscrew the two screws marked in the illustration on the right and remove the left-hand side of the printer housing.	
3.	Unscrew the screws on the applicator interface cover and remove the cover.	
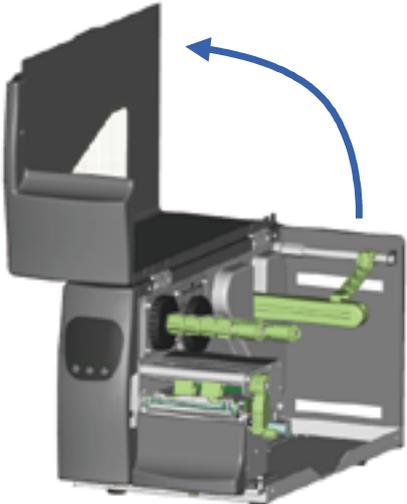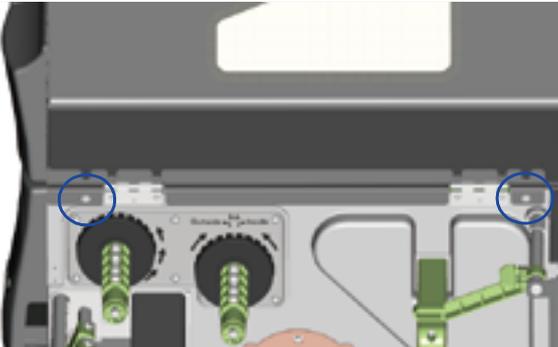
4.	Pass the applicator cable through the opening into the housing. 5. Connect the applicator cable to the jack marked "APP" on the motherboard.	
5.	Secure the applicator interface using two screws.	
6.	Replace the left-hand part of the printer housing and secure it with the screws you removed earlier to complete the installation.	
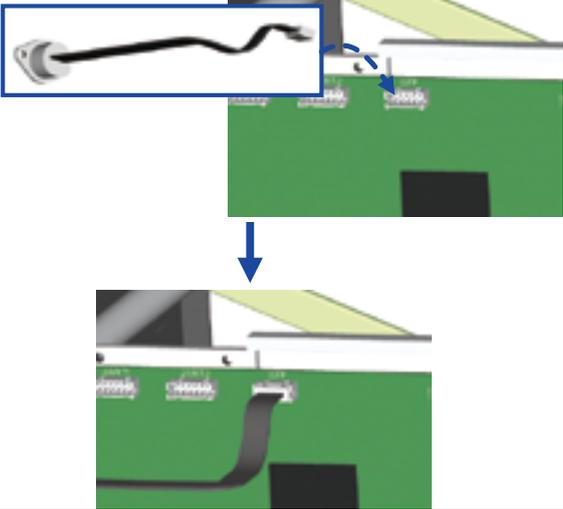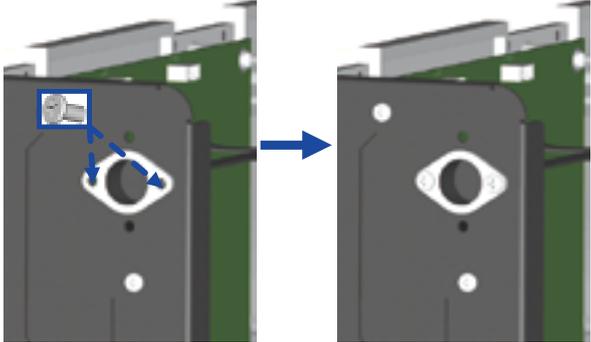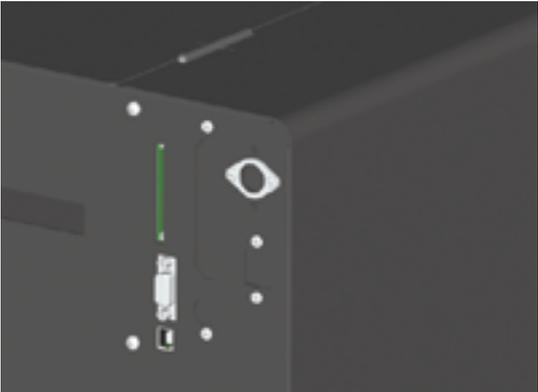
5 Maintenance and Adjustment

5.1 Installing / removing the print head module

1. Open the printer cover. 【Note 】 *Remember to switch off the printer before removing the print head module.*	
2. Pull out the print head release lever as shown in the illustration (1) and turn it anticlockwise to a top right position (2).	
3. Hold the print head module at the front and gently pull it out.	
4. If you cannot remove the module by gently pulling it, use a screwdriver as shown in the illustration.	
5. Hold the module at the front and slide it into the printer along the guide rails. Firmly press the module in so the contacts are fully connected.	
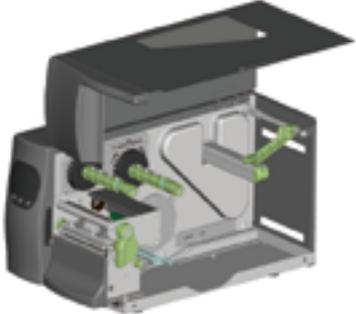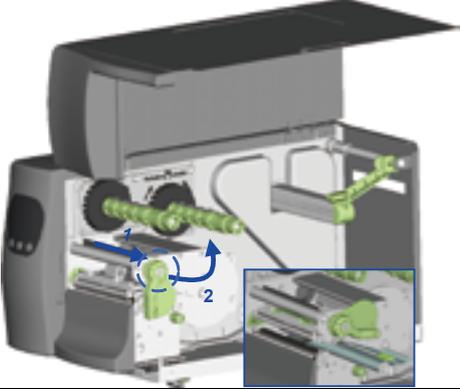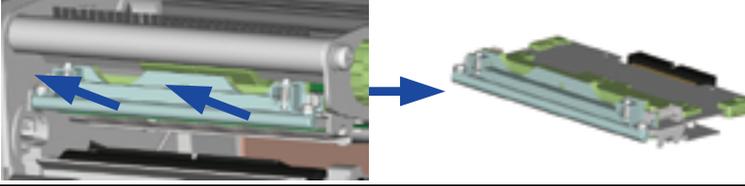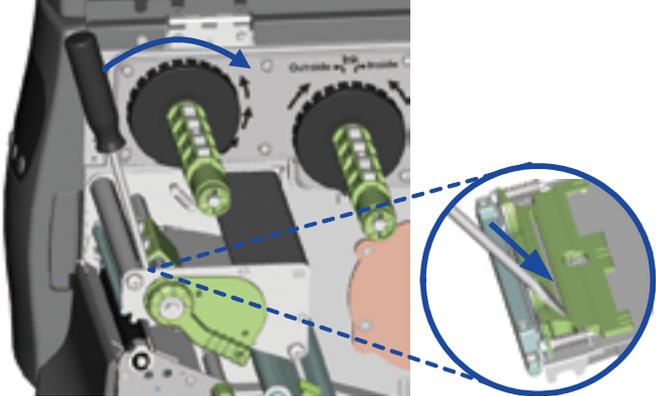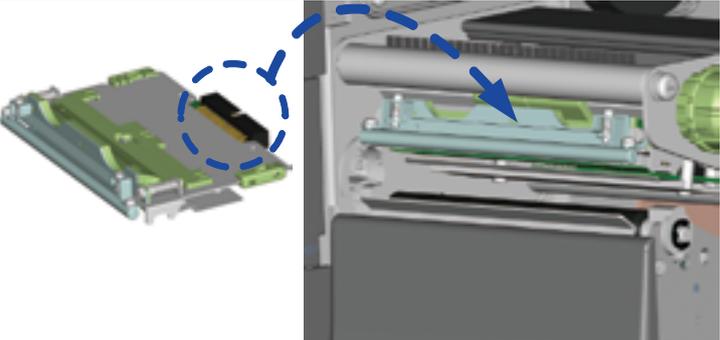
5 Maintenance and Adjustment

5.2 Adjusting the print line

Please contact your local dealer for technical support. 1. Open the printer cover.	
2. Pull out the print head release lever as shown in the illustration (1) and turn it anticlockwise to a top right position (2).	
3. TPH print line adjustment: ◆ When printing is slow or when printing on thick label stock, the print line must be moved to the front (in paper feed direction) for a better print result. Using a flat-head screwdriver, turn the screws clockwise to move the TPH forward. ◆ The two screws on the left and right must be adjusted to the same position to ensure the print line and feed roller are in parallel. ◆ One turn of the screw moves the print head by 0.5 mm. To keep track of the change in quality, you should adjust the screws by ¼ turn at a time. ◆ If no improvement is visible, gently turn the screws clockwise as far as possible, then restart the adjustment process from there.	
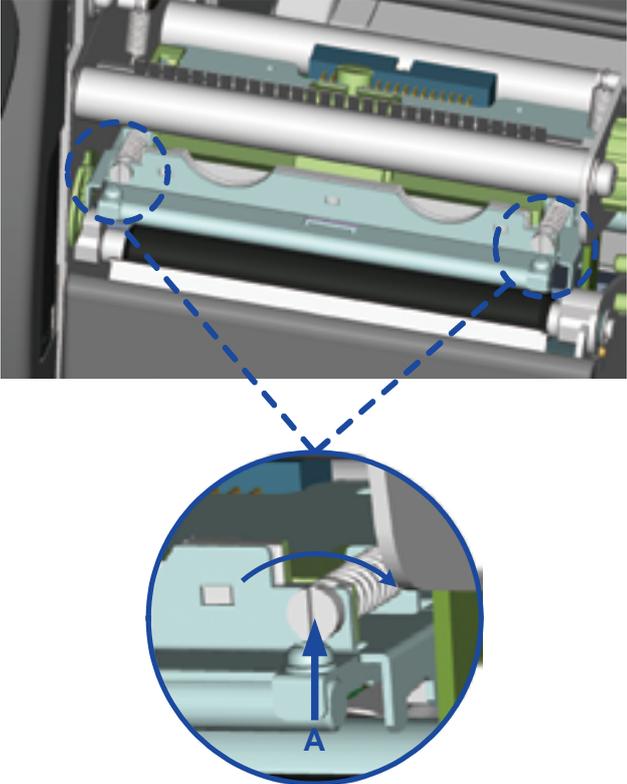
5.3 Adjusting the print line

You can adjust the ribbon tension by turning the ribbon shaft knob (green wheel at the base of the ribbon supply hub – see illustration) clockwise or anticlockwise. There are 4 possible settings, which are marked on the knob of the ribbon rewind hub and the ribbon supply hub. When set to 1, the tension is highest, while the tension is lowest at 4. If the tension is so low that the ribbon does not move forward, you need to reduce the tension of the ribbon supply hub or increase the tension of the   ribbon rewind hub. To set the tension, press in the knob and turn it clockwise or anticlockwise as required.

Increasing the tension of the ribbon rewind hub will remove any wrinkling of the ribbon during printing, which results from the use of different ribbon materials. (For details about the wrinkling/creasing of ribbons, see Section 5-6.)

If you are using a very narrow ribbon, the printer may not move the label stock forward (particularly with a ribbon that is less than 2" wide). In that case, reduce the tension by turning the knob of the ribbon supply hub anticlockwise. If the tension is too high, the ribbon core may be crushed and thus impossible to remove. In that case, reduce the tension of the ribbon supply hub and the ribbon rewind hub by turning the knobs anticlockwise.
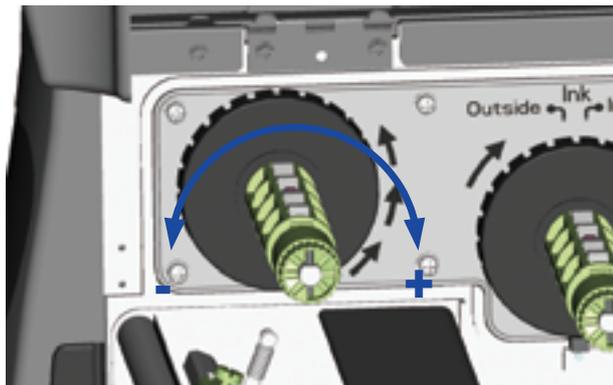
5 Maintenance and Adjustment

5.4 Cleaning the thermal print head

Dirt on the print head or ribbon may result in inadequate print quality (no printed image on part of the label). The printer cover should therefore be kept closed whenever possible. Keeping dirt and dust away from the paper or labels ensures a good print quality and a longer lifespan of the print head. Here is how you clean the print head:

1. Switch off the printer.
2. Open the printer cover.
3. Remove the ribbon.
4. Release the print head by turning the print head release lever.
5. To remove any label residue or other dirt from the print head (see blue arrow), please use a soft lint-free cloth dipped in alcohol.

【Note 1】
The print head should be cleaned once a week.

【Note 2】
Please make sure that there are no metal fragments or other hard particles on the soft cloth used to clean the print head.
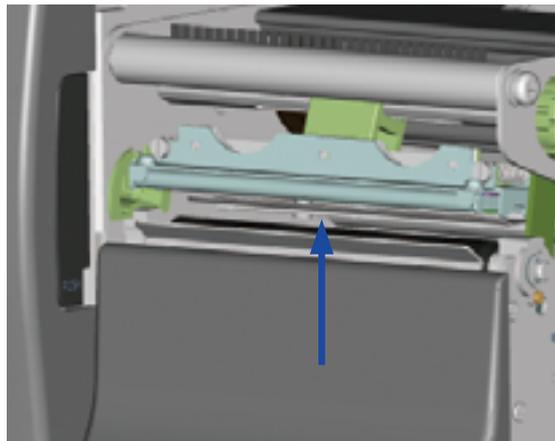
5 Maintenance and Adjustment

5.5   Adjusting the balance and print head tension

1. Open the printer side cover.	
2. Pull out the print head release lever as shown in the illustration (1) and turn it anticlockwise to a top right position (2).	
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, or the ribbon wrinkles, the print head pressure must be readjusted using the TPH spring boxes. 3. Move the TPH spring boxes as shown in the illustration to change the print head pressure. The wider the medium you are using, the further out the TPH spring boxes must be moved. If there is no quality improvement, you need to change the pressure on the TPH spring boxes.	
4. Turning the screw clockwise increases the pressure, while turning it anticlockwise reduces the pressure.	
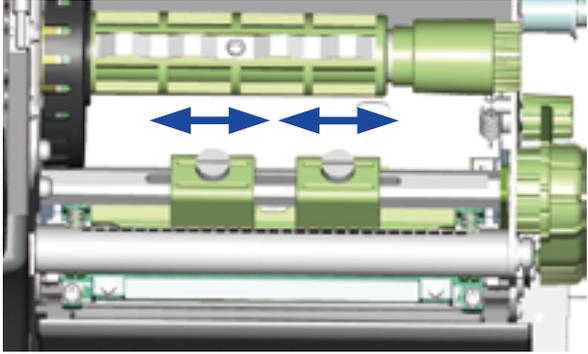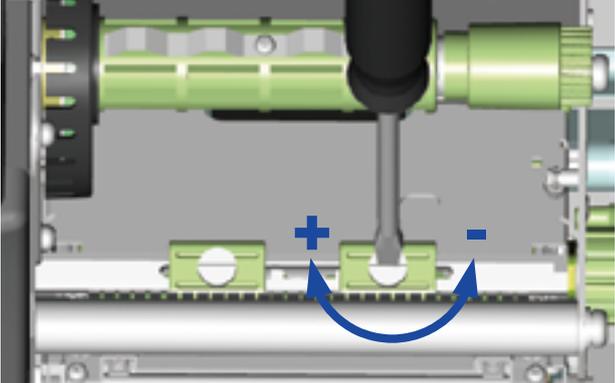
5 Maintenance and Adjustment

5.6 Ribbon shield settings

1. The use of different ribbon materials may cause wrinkling of the ribbon, which in turn affects the print result as illustrated by the examples in (a) and (b). To change the print quality, you can adjust the ribbon shield screws.

   If your print result looks like the example in (a), you need to turn ribbon shield screw A clockwise. If your print result looks like the example in (b), you need to turn ribbon shield screw B clockwise.

| (a) | (b) |

2. To keep track of the change in print quality, you should adjust the screws by half a turn at a time. Print a test page. If there is no improvement in the print result, turn the screw by another half turn. Do not turn the adjustment screw more than two full turns.

   【Note】
   If you adjust the screw by more than two full turns, the paper feed may no longer function correctly. In that case, unscrew the ribbon shield screws fully and restart the adjustment process.
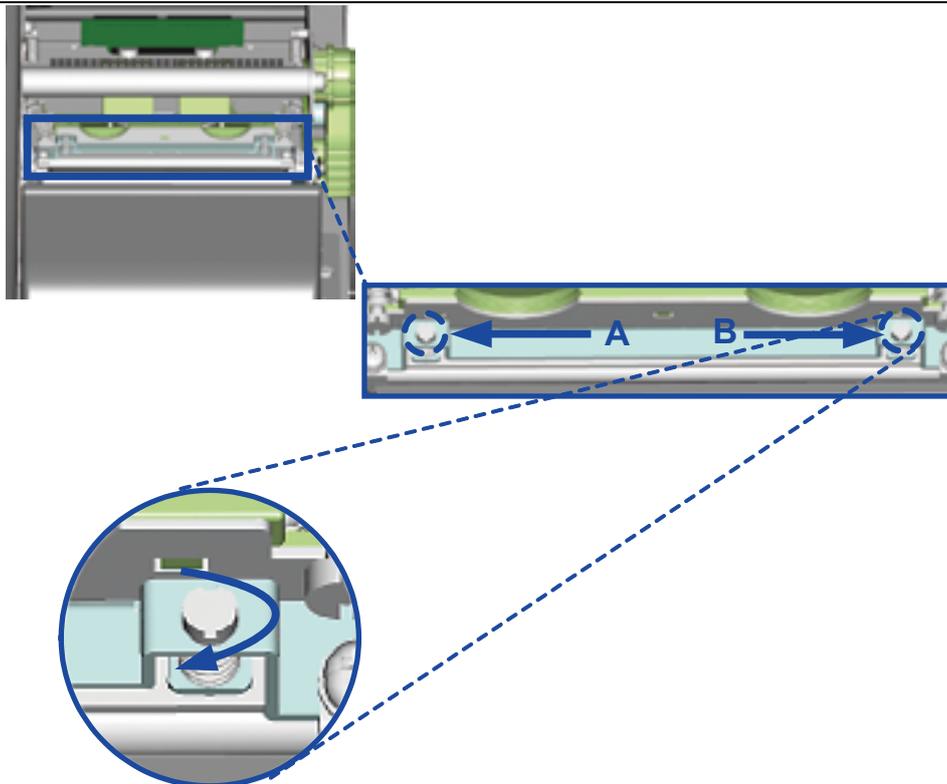
5.7   Cutter settings

1. Socket head screws for adjusting the cutter are located on both sides of the cutter. 2. In the event of a paper jam, the cutter will no longer function correctly. Switch off the printer and use a hex key (#M3) to turn the socket head screw. 3. Turn the key anticlockwise to remove the jammed paper. 4. When you have removed the jammed paper, you can switch the printer back on. The cutter will automatically reset. *【Note】* *The label medium should be at least 30 mm long to ensure correct functioning of the cutter.*	
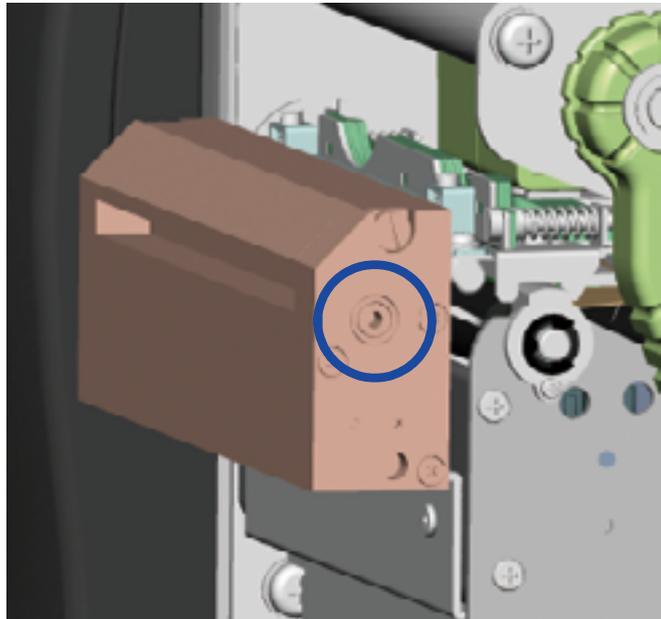
5 Maintenance and Adjustment

5.8 Troubleshooting

Problem	Solution
The printer is switched on but the LED does not light up.	♦ Check the power supply. *Please see the Section 2.4*
The LED lights up red and printing is interrupted.	♦ Check the software settings (driver settings) or command codes. ♦ Look for the error alert in the table in Section 3.3. Error Alerts. ♦ Check whether the print mechanism is closed correctly. *Please see the Section 3.3*
The label stock passes through the printer but no image is printed.	♦ Please make sure that the label stock is loaded the right way up and that it is suitable material. ♦ Choose the correct printer driver. ♦ Choose the correct label stock and a suitable printing mode.
The label stock jams during printing.	♦ Clear the paper jam. Remove any label material left on the thermal print head and clean the print head using a soft lint-free cloth dipped in alcohol. *Please see the Section 6.1*
There is no printed image on some parts of the label.	♦ Check whether any label material or ribbon is stuck to the thermal print head. ♦ Check for errors in the application software. ♦ Check whether the starting position has been set incorrectly. ♦ Check the ribbon for wrinkles.
There is no printed image on part of the label or the image is blurred.	♦ Check the thermal print head for dust or other dirt. ♦ Use the internal "~T" command to check whether the thermal print head will carry out a complete print job. ♦ Check the quality of the print medium.
The printed image is positioned incorrectly.	♦ Check whether there is paper or dust covering the sensor. ♦ Check whether the label stock is suitable. Contact your supplier. ♦ Check the paper guide settings.
A label is missed out during printing.	♦ Check the label height setting. ♦ Check whether there is dust covering the sensor. ♦ Run the auto-detection function. *Please see the Section 3.2*
The printed image is blurred.	♦ Check the darkness setting. ♦ Check the thermal print head for dust or dirt. *Please see the Section 6.1*
The cutter does not cut off the labels in a straight line.	♦ Check whether the label stock is positioned straight.
The cutter does not cut off the labels completely.	♦ Check whether the label is more than 0.2 mm thick.
When using the cutter, the labels are not fed through or cut off incorrectly.	♦ Check whether the cutter has been correctly installed. ♦ Check whether the paper guides are functioning correctly.
The label dispenser is not functioning normally.	♦ Check whether there is dust on the label dispenser. ♦ Check whether the label stock is positioned correctly.

Notice

* If any problems occur that are not described here, please contact your dealer.

APPENDIX

PRODUCT SPECIFICATIONS

Model		EZ2050	EZ2150
Print Method		Thermal Transfer/Direct Thermal	
Resolution		203 dpi (8 dot/mm)	300 dpi (12 dots/mm)
Print Speed		6 IPS (150 mm/s)	4 IPS (102 mm/s)
Print Width		4.09" (104 mm)	
Print Length		Min. 0.16" (4 mm)**; Max. 100" (2540 mm)	Min. 0.16" (4 mm)**; Max. 45" (1143 mm)
Processor		32 bit RISC CPU	
Memory	Flash	8 MB Flash (4 MB for user storage)	
	SDRAM	16 MB	
Sensor Type		Adjustable reflective sensor and transmissive sensor, left aligned	
Media	Types	Continuous form, gap labels, black mark sensing and punched hole; label length set by auto sensing or programming	
	Width	Standard: Min. 1" (25.4 mm) – Max. 4.64"(118 mm) With Cutter: Max. 4.61" (117 mm) With Dispenser / Rewinder: Max. 4.64" (118 mm)	
	Thickness	Min. 0.003" (0.06 mm) – Max. 0.01" (0.25 mm)	
	Label Roll Diameter	Max. 8" (203.2 mm) with 3" (76.2 mm) core Max. 6" (152.4 mm) with 1.5" (38.1 mm) core	
	Core Diameter	1.5" (38.1 mm), 3" (76.2 mm)	
Ribbon	Types	Wax, wax / resin, resin	
	Length	1471' (450 m)	
	Width	Min. 1.18" (30 mm) – Max. 4.33" (110 mm)	
	Ribbon Roll Diameter	2.99" (76 mm)	
	Core Diameter	1" (25.4 mm)	
Printer Language		EZPL, GEPL, GZPL auto switch	
Software	Label Design Software	GoLabel (for EZPL only)	
	Driver	Windows 2000, XP, Vista, 7 and Windows Server 2003 & 2008	
	DLL	Windows 2000, XP and Vista	
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	
	Scalable Fonts	90°, 180°, 270° rotatable	
Barcodes	1-D Bar Codes	Code 39, Code 93, EAN 8/13 (add on 2&5), UPC A/E (add on 2&5), I 2 of 5 & I 2 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	
	2-D Bar Codes	PDF417, Datamatrix code, MaxiCode, QR code, Micro PDF417, Micro QR code and Aztec code	
Code Pages		Codepage 437, 850, 851, 852, 855, 857, 860, 861, 862, 863, 865, 866, 869 and 737 Windows 1250, 1251, 1252, 1253, 1254, 1255 and 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: RS-232 (DB-9) Ethernet 10/100 Mbps	
Control Panel		Three mono-color status-LEDs: Power on, Ribbon out, Media out Control keys: FEED, PAUSE and CANCEL Calibration button	
Power		Auto Switching 100-240V AC, 50-60Hz	
Real Time Clock		Standard	
Environment	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, cUL, CCC	
Dimension	Length	20.15" (512 mm)	
	Height	11.45" (291 mm)	
	Width	10.78" (274 mm)	
Weight		33 lbs (15 Kg), excluding consumables	
Options&Accessories		Cutter Module Label Dispenser + Internal Rewinder Parallel Port (IEEE1284) Applicator Interface (1 input, 3 outputs, power 500mA @ 5V, for project base) 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.

* Minimum print height and maximum print speed specification compliance can be dependent on non-standard material variables such as label type, thickness, spacing, liner construction, etc. Godex is pleased to test non-standard materials for minimum print height and maximum print speed capability.

APPENDIX

INTERFACE

- Parallel port

Handshaking	: DSTB is sent to the printer, BUSY to the host computer
Interface cable	: Parallel cable compatible with IBM computers
Pinout	: See below

Pin No.	Function	Transmitter
1	/Strobe	Computer / printer
2-9	Data 0-7	Computer
10	/Acknowledge	Printer
11	Busy	Printer
12	/Paper empty	Printer
13	/Select	Printer
14	/Auto-Linefeed	Computer / printer
15	N/C	
16	Signal Gnd	
17	Chassis Gnd	
18	+5V, max 500mA	
19-30	Signal Gnd	Computer
31	/Initialize	Computer / printer
32	/Error	Printer
33	Signal Ground	
34-35	N/C	
36	/Select-in	Computer / printer

- 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
DTR	4		4	N/C
GND	5		5	GND
DSR	6		6	RTS
RTS	7		7	CTS
CTS	8		8	RTS
RI	9		9	N/C
Computer				Printer

Notice

* The total current to the serial port may not exceed 500mA.

APPENDIX

INTERFACE

- USB

  Connector Type : Type B

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

- Internal interface

UART1 wafer			Ethernet module
N.C	1	1	N.C
TXD	2	2	RXD
RXD	3	3	TXD
CTS	4	4	RTS
GND	5	5	GND
RTS	6	6	CTS
E_MD	7	7	E_MD
RTS	8	8	CTS
E_RST	9	9	E_RST
+5V	10	10	+5V
GND	11	11	GND
+5V	12	12	+5V

UART2 wafer			Add-on module
N.C	1	1	N.C
TXD	2	2	RXD
RXD	3	3	TXD
CTS	4	4	RTS
GND	5	5	GND
RTS	6	6	CTS
N.C	7	7	N.C
RTS	8	8	CTS
N.C	9	9	N.C
+5V	10	10	+5V
GND	11	11	GND
+5V	12	12	+5V

APPENDIX

INTERFACE

Applicator wafer			Applicator module
+5V	1	1	+5V
+24V	2	2	+24V
Printing (out)	3	3	Printing
Print error (out)	4	4	Print error
Printed (out)	5	5	Printed
Print (in)	6	6	Print
GND	7	7	GND
N.C	8	8	
GND	9	9	
N.C	10	10	

7Pin Mini Din Jack

JR1

7Pin Mini Din Jack

JR1

1 ==> Black
2 ==> Brown
3 ==> Red
4 ==> Orange
5 ==> Yellow
6 ==> Green
7 ==> Blue
8 ==> Purple

+5V
APP_PRINTING
APP_PRINTED
Logic GND
Chassis GND

+24V
APP_PRINTEER
APP_PRINT

Housing 2.00 5x2