TJ-4420TN/TJ-4520TN/TJ-4620TN
TJ-4422TN/TJ-4522TN

User's Guide (English)

Version 01

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ENG

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Not all models are available in all countries or regions.

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1. Introduction

1.1 Product Introduction

The robust design of the label printer can handle up to 600 m of ribbon and has the capacity to handle 8" label rolls.

The label printer comes equipped with a number of functions, including:

- Built-in Ethernet
- USB 2.0 Ports (for connecting a keyboard or barcode scanner)
- Serial Interface (RS-232C)
- Wi-Fi and Bluetooth Interface Expansion Slot (for the optional WLAN / BT Interface (PA-WB-001))
- 16-bit Color Touchscreen (TJ-4422TN/TJ-4522TN only)

The label printer uses its high-performance and high-quality built-in Monotype Imaging® TrueType font engine with the CG Triumvirate Bold Condensed smooth scalable font. It also provides a choice of eight different sizes of the alphanumeric bitmap font and supports most of the standard barcode formats.

1.2 Additional Product Reference

For information on how to write custom programs for your label printer, see the *Command Reference* on your model's **Manuals** page at support.brother.com.

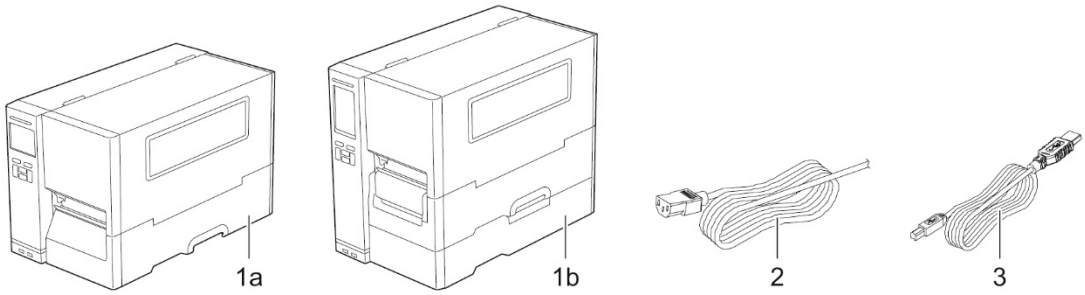
2. Operations Overview

2.1 Unpack the Label Printer and Check the Components

Note

Keep the packaging materials in case you must ship the printer.

The components included in the box:



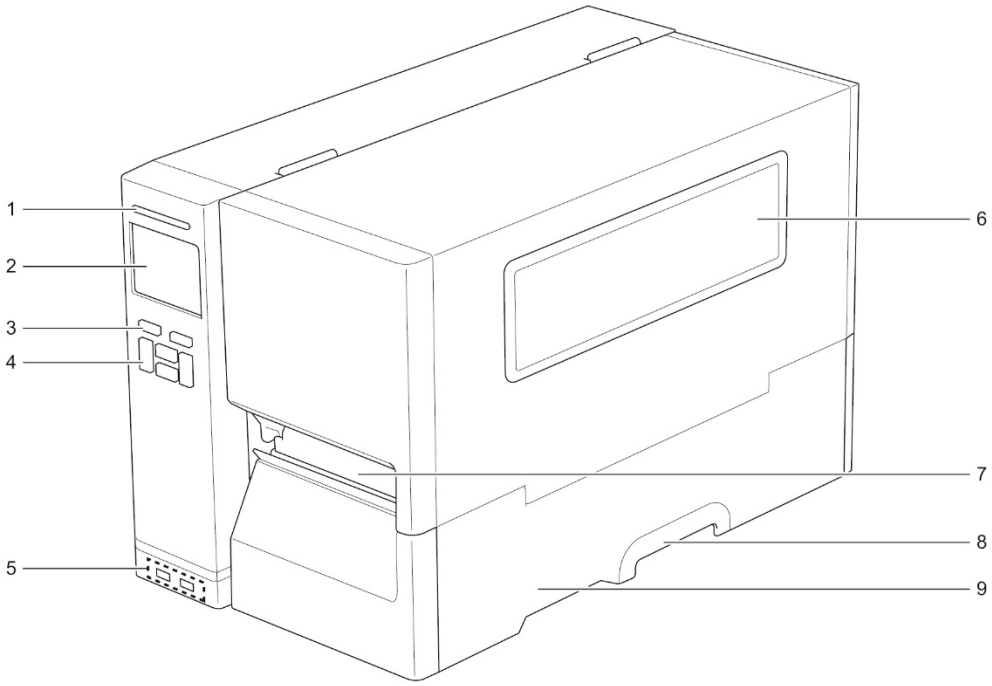
1. Label Printer
   a. TJ-4420TN/TJ-4520TN/TJ-4620TN
   b. TJ-4422TN/TJ-4522TN
2. Power Cord
3. USB Cable

If any components are missing, contact the product manufacturer's customer service or your local dealer.

2.2 Printer Overview

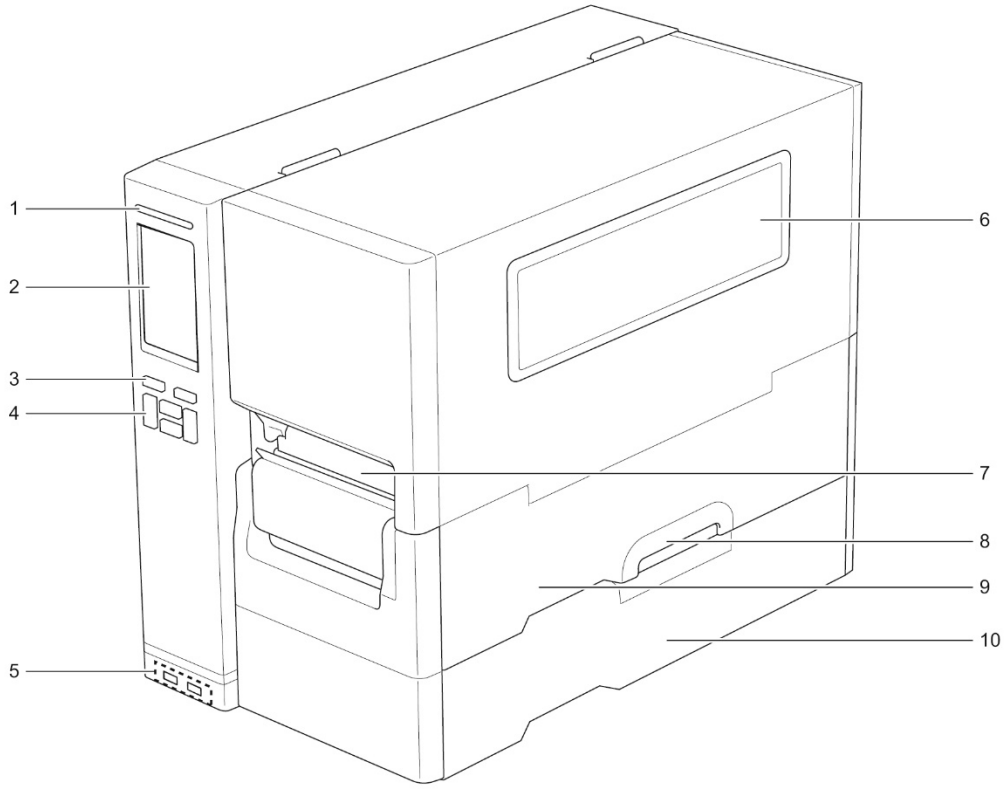
2.2.1 Front View

TJ-4420TN/TJ-4520TN/TJ-4620TN



1. Power LED
2. LCD
3. Selection Buttons
4. Navigation Buttons
5. USB Host Ports
6. Media View Window
7. Media Output Slot
8. Media Cover Handle
9. Media Cover

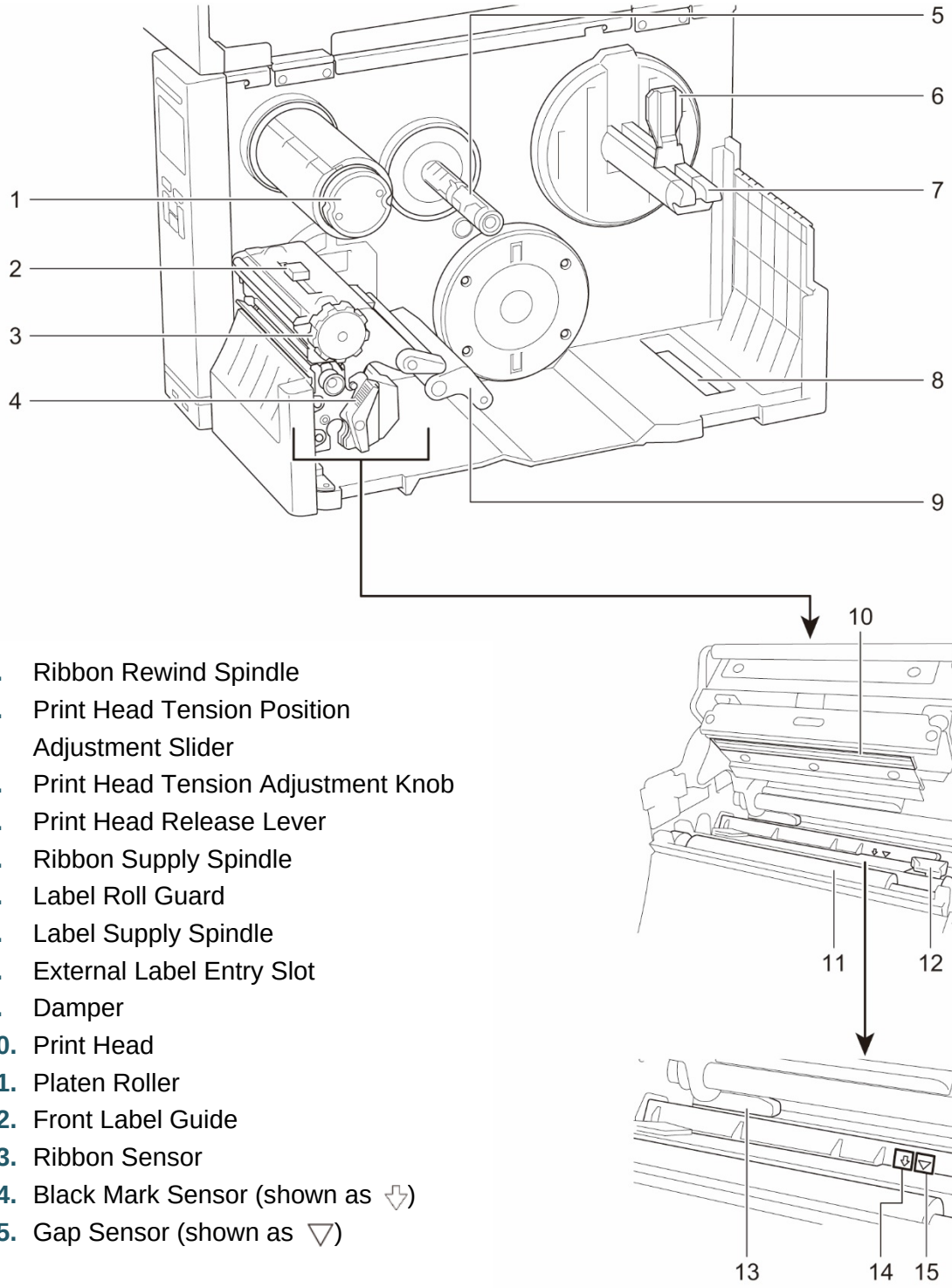
TJ-4422TN/TJ-4522TN



1. Power LED
2. Touchscreen
3. Selection Buttons
4. Navigation Buttons
5. USB Host Ports
6. Media View Window
7. Media Output Slot
8. Media Cover Handle
9. Media Cover
10. Base Cover

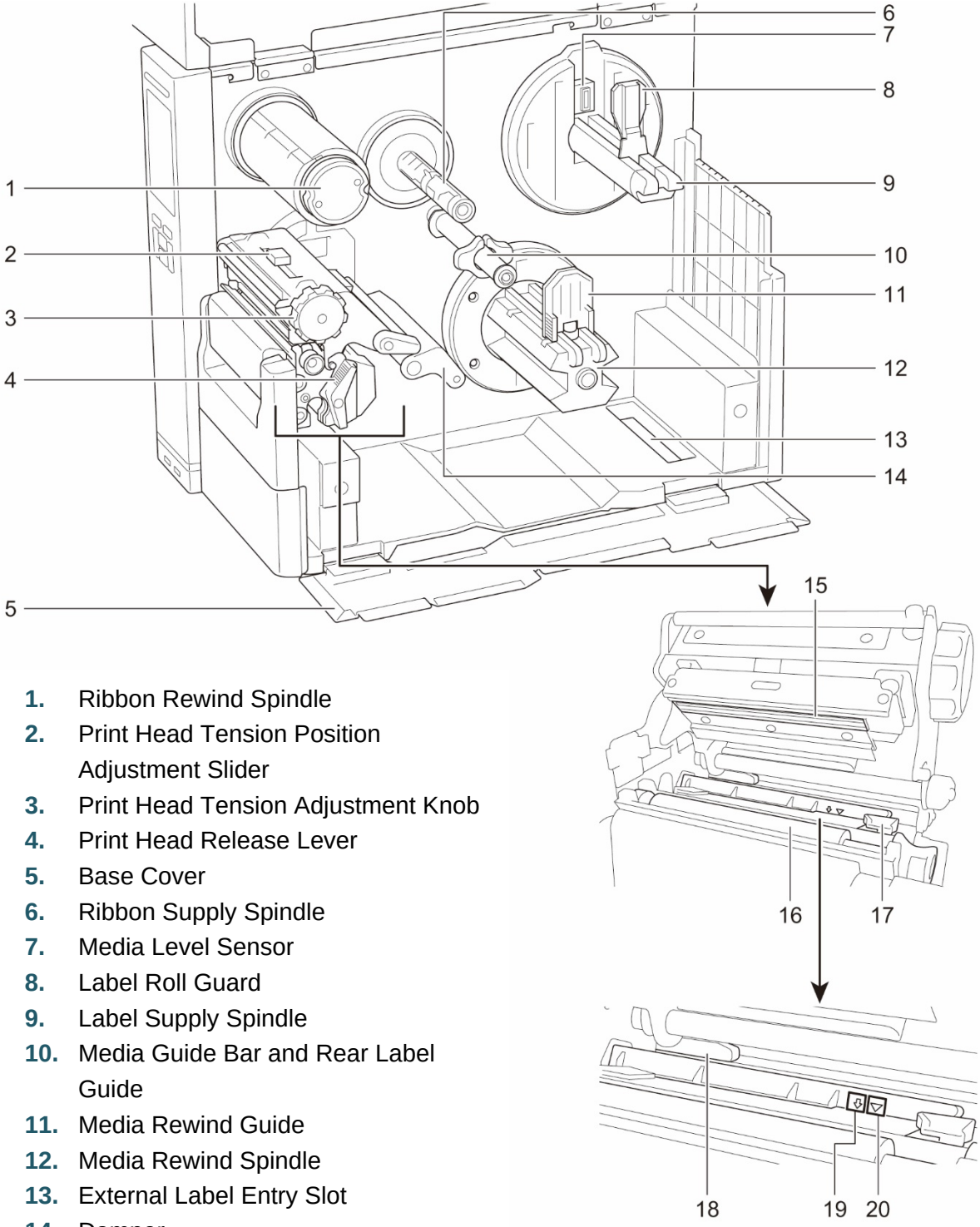
2.2.2 Interior View

TJ-4420TN/TJ-4520TN/TJ-4620TN



1. Ribbon Rewind Spindle
2. Print Head Tension Position Adjustment Slider
3. Print Head Tension Adjustment Knob
4. Print Head Release Lever
5. Ribbon Supply Spindle
6. Label Roll Guard
7. Label Supply Spindle
8. External Label Entry Slot
9. Damper
10. Print Head
11. Platen Roller
12. Front Label Guide
13. Ribbon Sensor
14. Black Mark Sensor (shown as ⇩)
15. Gap Sensor (shown as ▽)

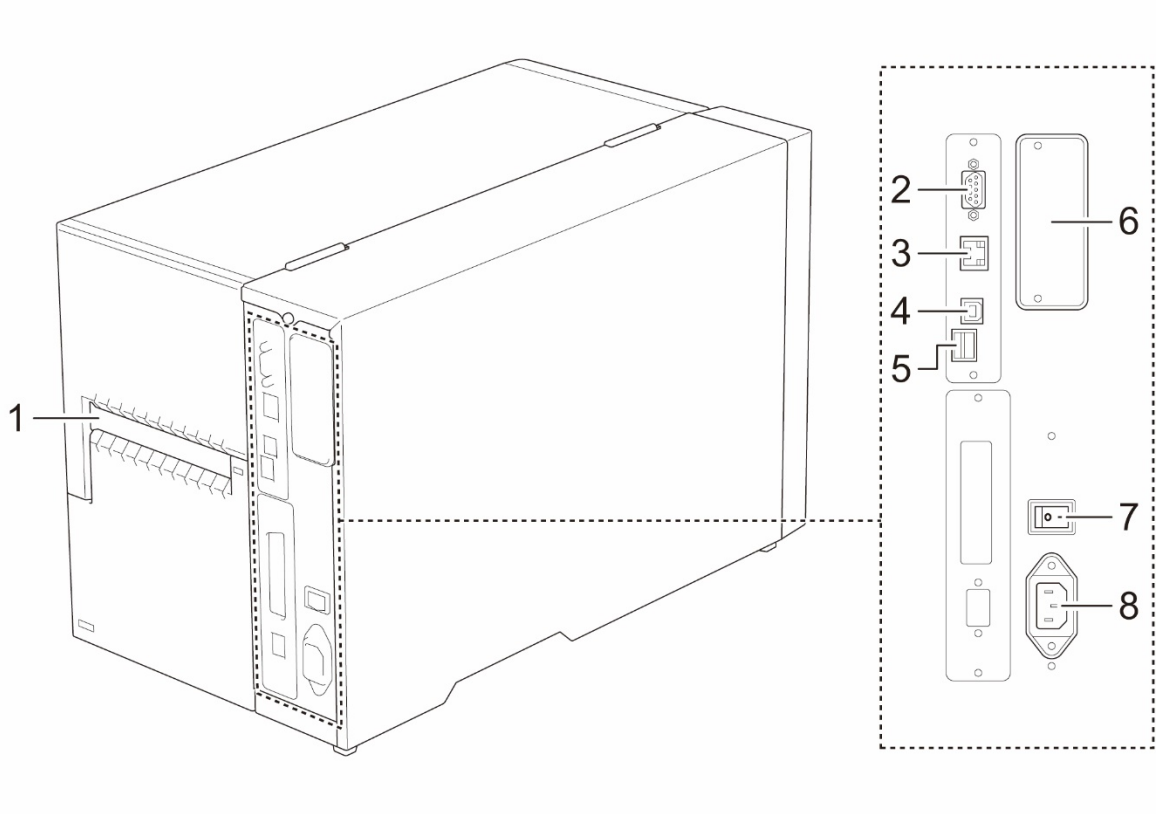
TJ-4422TN/TJ-4522TN



1. Ribbon Rewind Spindle
2. Print Head Tension Position Adjustment Slider
3. Print Head Tension Adjustment Knob
4. Print Head Release Lever
5. Base Cover
6. Ribbon Supply Spindle
7. Media Level Sensor
8. Label Roll Guard
9. Label Supply Spindle
10. Media Guide Bar and Rear Label Guide
11. Media Rewind Guide
12. Media Rewind Spindle
13. External Label Entry Slot
14. Damper
15. Print Head
16. Platen Roller
17. Label Guide
18. Ribbon Sensor
19. Black Mark Sensor (shown as ⇩)
20. Gap Sensor (shown as ▽)

2.2.3 Rear View

TJ-4420TN/TJ-4520TN/TJ-4620TN

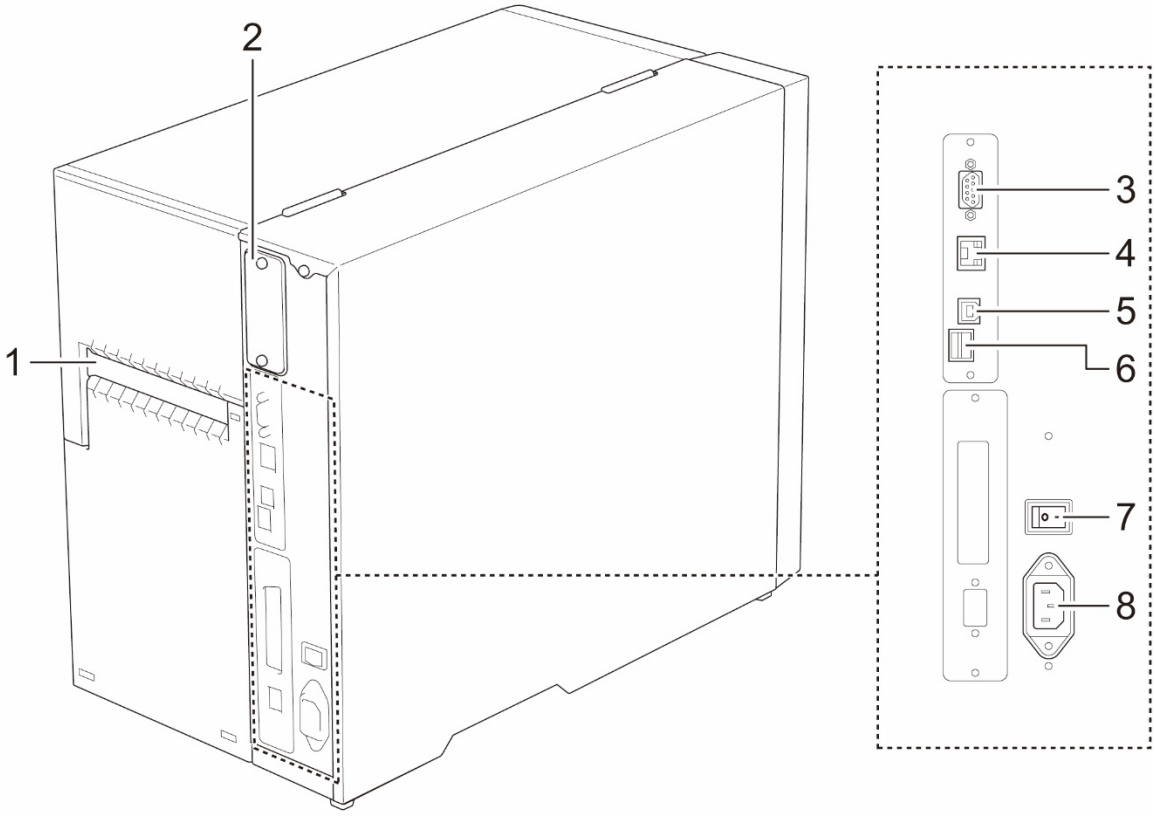


1. External Label Entry Slot
2. RS-232C Serial Port
3. Ethernet Port
4. USB Port (USB 2.0/Hi-Speed Mode)
5. microSD Card Slot [1]
6. Wi-Fi and Bluetooth Interface Expansion Port [2]
7. Power Switch
8. Power Cord Socket

[1] For the recommended microSD card types, see section *9.1 Recommended microSD Cards*.

[2] For the optional WLAN / BT Interface (PA-WB-001).

TJ-4422TN/TJ-4522TN



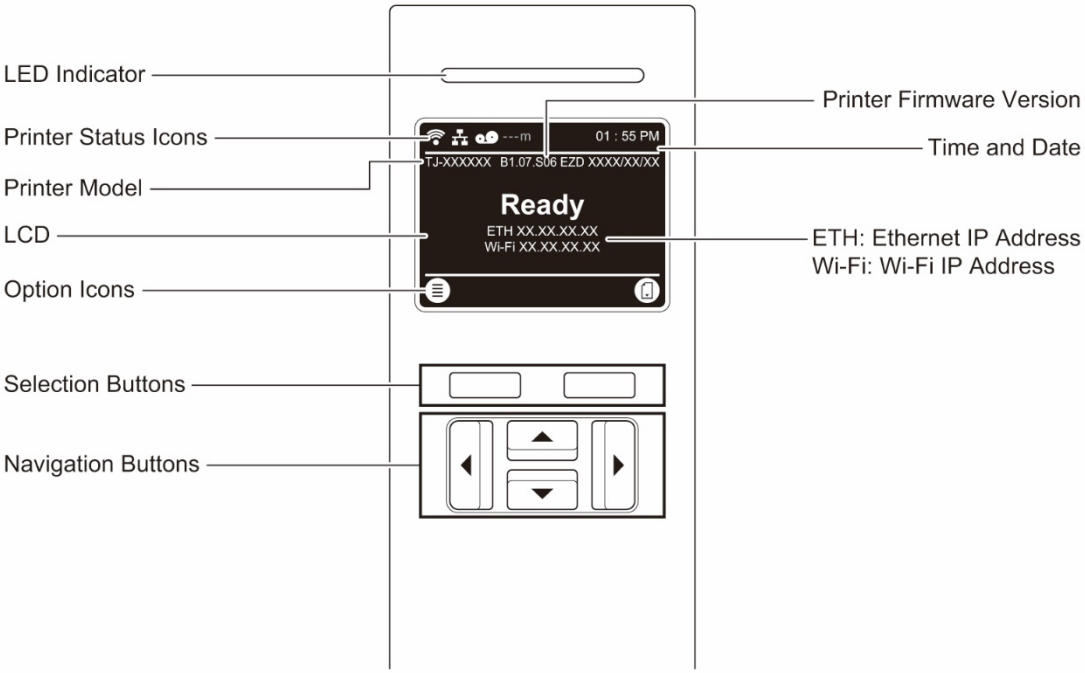
1. External Label Entry Slot
2. Wi-Fi and Bluetooth Interface Expansion Port [1]
3. RS-232C Serial Port
4. Ethernet Port
5. USB Port (USB 2.0/Hi-Speed Mode)
6. microSD Card Slot [2]
7. Power Switch
8. Power Cord Socket

[1] For the optional WLAN / BT Interface (PA-WB-001).

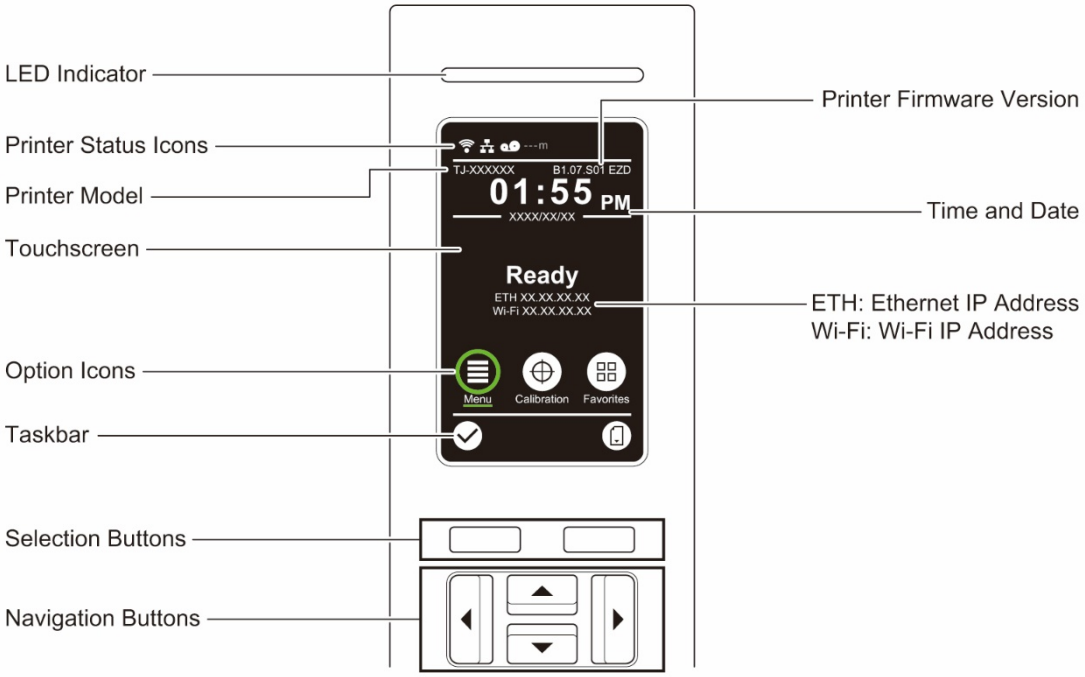
[2] For the recommended microSD card types, see section *9.1 Recommended microSD Cards*.

2.3 Control Panel

TJ-4420TN/TJ-4520TN/TJ-4620TN



TJ-4422TN/TJ-4522TN

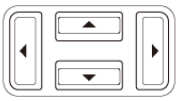


2.3.1 LED Indicators and Buttons

LED Indications

LED Color	Description
Green (Lit)	The power is on and the printer is ready to use.
Green (Flashing)	- The printer is downloading data from a computer. - The printer is paused.
Amber (Lit)	The printer is removing data from memory.
Red (Lit)	The Print Head is open or there is a Cutter error.
Red (Flashing)	There is a printing error, such as "Paper Empty", "Paper Jam", "Ribbon Empty", or "Memory Error".

Selection and Navigation Buttons

Buttons	Function
Selection Buttons	Use to select the icons on the LCD/Touchscreen.
Navigation Buttons 	Use to navigate the LCD/Touchscreen and highlight icons and menus.

2.3.2 Home Screen Icons

Printer Status Icons

Icon	Indication
	Wi-Fi device is ready (Available when the Wi-Fi Interface is installed)
	Bluetooth device is ready (Available when the Bluetooth Interface is installed)
	Ethernet is connected
	Media capacity
	Ribbon capacity (m)
	Security lock

Option Icons

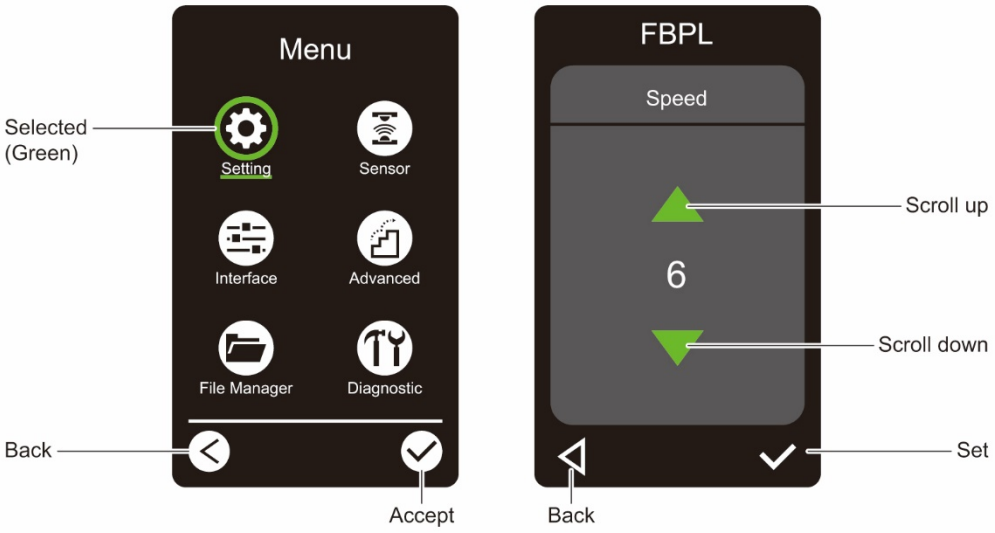
Icon	Function
	Access the Main Menu For more information, see section *2.3.3 Screen Overview*.
	(TJ-4422TN/TJ-4522TN only) Calibrate the media sensor
	(TJ-4422TN/TJ-4522TN only) Enter the “Favorites” screen For more information, see section *2.3.3 Screen Overview*.
	Accept your selection
	Feed one label

2.3.3 Screen Overview

Select the icons to access printer features and change settings.

TJ-4420TN/TJ-4520TN/TJ-4620TN

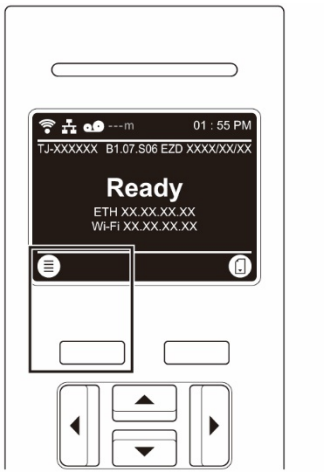
TJ-4422TN/TJ-4522TN



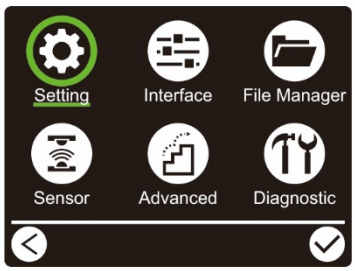
Access the Main Menu

TJ-4420TN/TJ-4520TN/TJ-4620TN

Make sure the printer's LCD displays "Ready". If not, press the left **Selection** button.

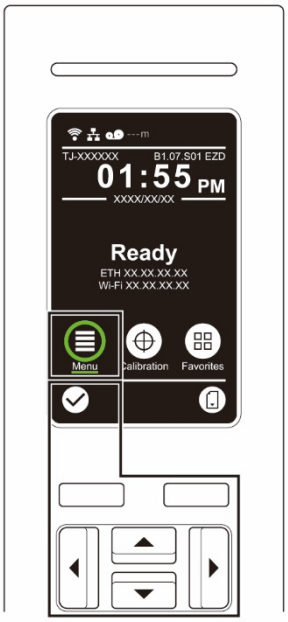


To select an option on the Main Menu, use the Navigation buttons to browse the options and then press the button under the icon.



TJ-4422TN/TJ-4522TN

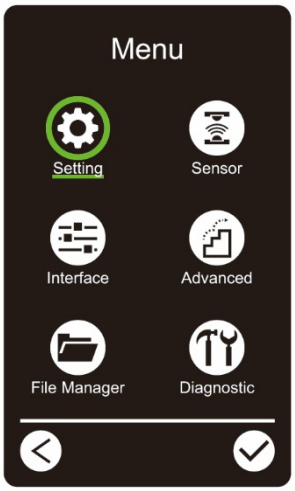
Make sure the printer's Touchscreen displays "Ready". If not, tap the **Menu** icon .



Note

You can also use the Control Panel buttons. Use the Navigation buttons to select the **Menu** icon, and then press the **Selection** button under the icon.

To select an option on the Main Menu, tap the option's icon.



Note

You can also use the Control Panel buttons. Use the Navigation buttons to browse the options, and then press the button under the icon. To return to the previous screen, press the button under the icon.

Main Menu Overview

Use the Main Menu options to configure various printer settings without connecting the printer to a computer.

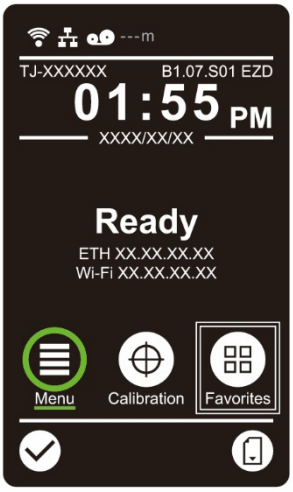
Icon	Option	Description
	Setting	Configure the printer's FBPL and ZPL2 settings.
	Sensor	Calibrate the selected media sensor. We recommend calibrating the sensor every time you change the media.
	Interface	Configure the printer interface settings.
	Advanced	Configure the printer's screen, initialization, cutter type, or media low warning settings.
	File Manager	Check or manage the available printer memory.
	Diagnostic	Check the printer status to help troubleshoot any issues.

Note

For more information about printer settings, see section *7. Change Printer Settings*.

Favorites (TJ-4422TN/TJ-4522TN)

Add frequently used Main Menu options to "Favorites" for quick access. To display the "Favorites" list, tap the Favorites icon .

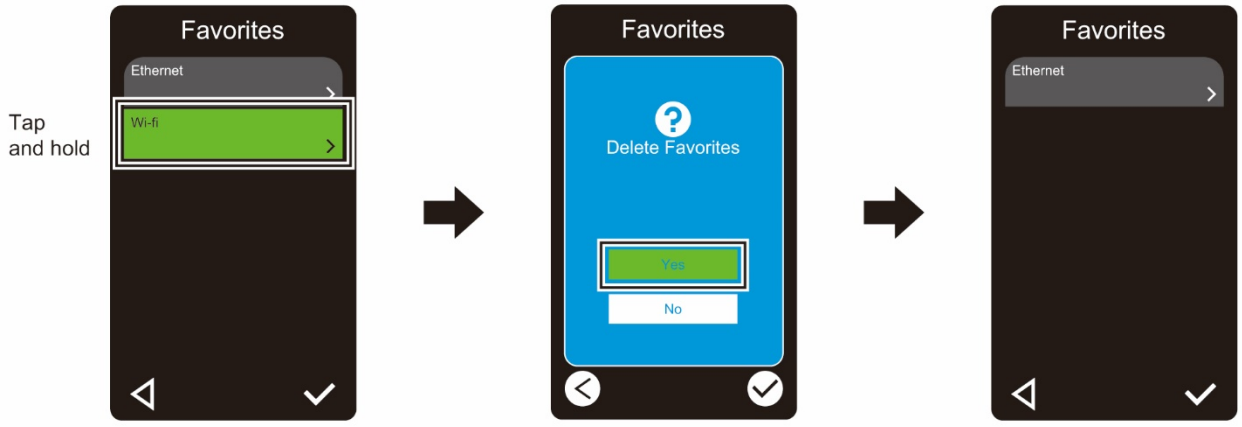


To add an option to the "Favorites" list:

1. Tap and hold the option you want to add to favorites until “Join Favorites” appears.
2. Tap “Yes”.

To remove an option from the "Favorites" list:

1. Tap and hold the option you want to remove from favorites until “Delete Favorites” appears.
2. Tap “Yes”.



3. Set Up Your Printer

3.1 Connect the Power Cord

1. Place the printer on a flat, secure surface.
2. Make sure the Power Switch is in the OFF position.
3. Connect the printer to the computer using a USB cable.
4. Plug the Power Cord into the Power Cord Socket at the rear of the printer, and then plug the Power Cord into a correctly grounded power outlet (earthed electrical socket).

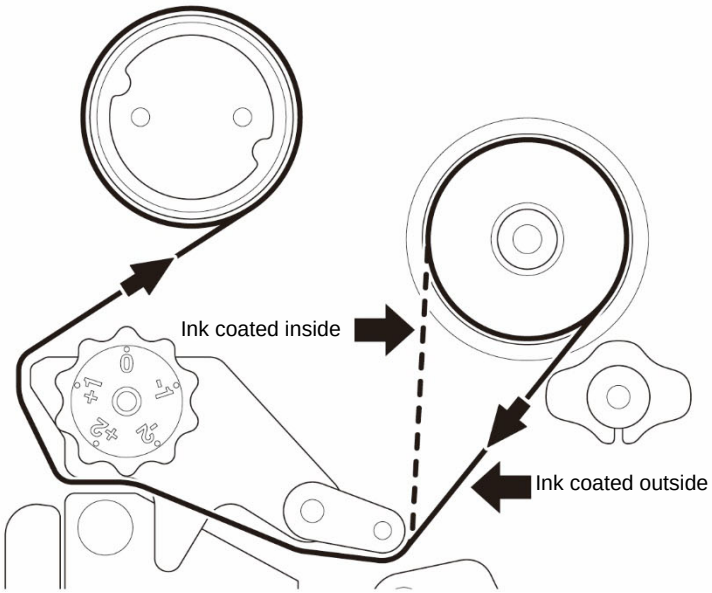
Note

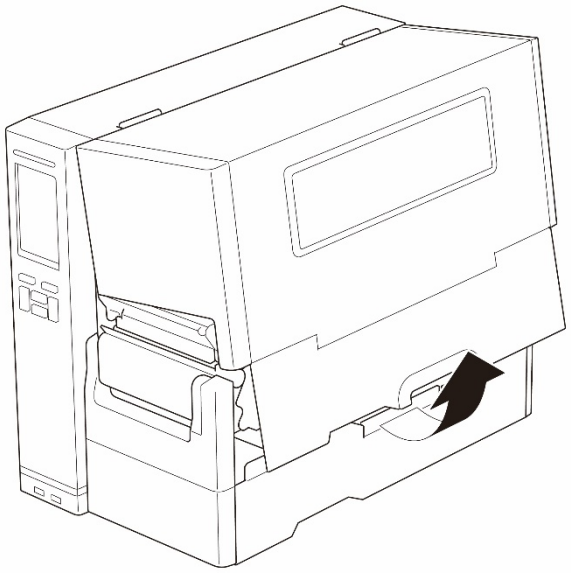
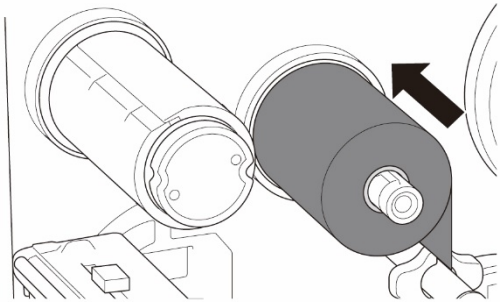
- Before plugging the Power Cord into the printer's Power Cord Socket, make sure the printer's Power Switch is in the OFF position.
- After powering the printer on, the LED blinks until the printer receives the first print job.

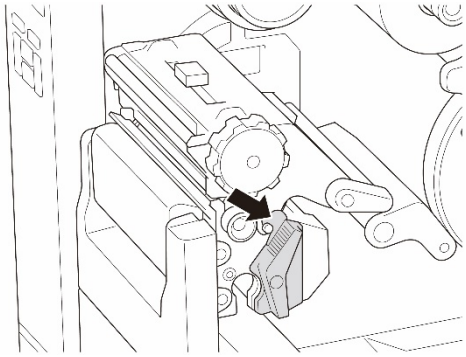
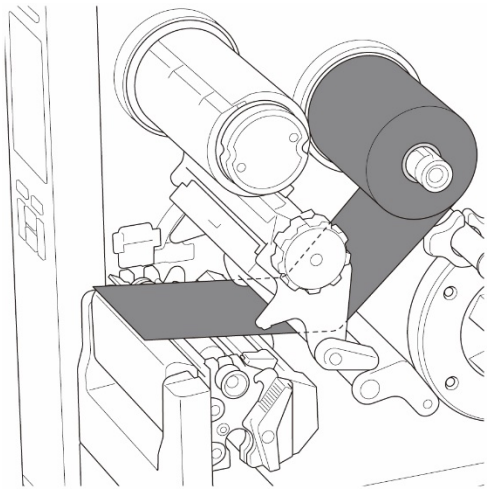
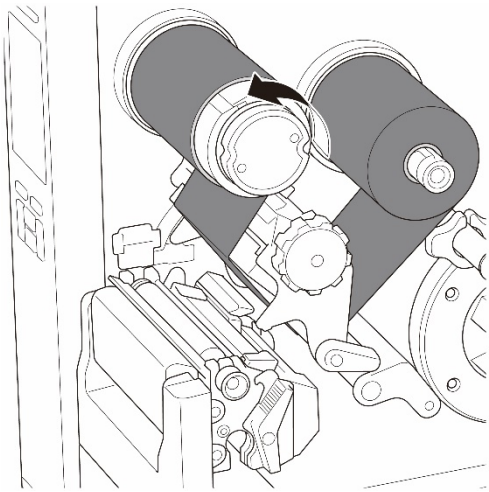
3.2 Load the Ribbon

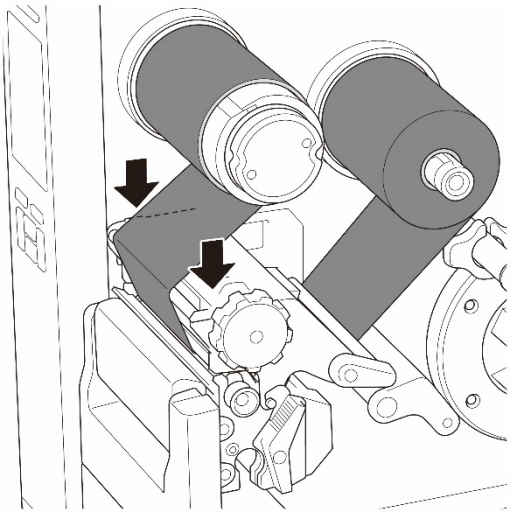
Unless indicated otherwise, the illustrations in this *User's Guide* show the TJ-4422TN/TJ-4522TN.

Ribbon loading path



1. Open the Media Cover.	
2. Install the ribbon onto the Ribbon Supply Spindle.	

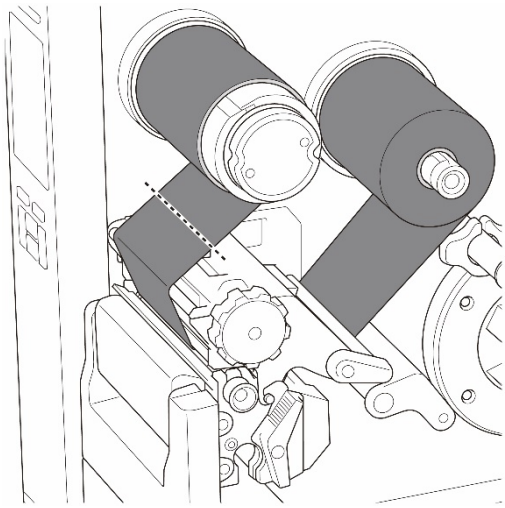
3. Push the Print Head Release Lever to open the Print Head.	
4. Thread the ribbon under the ribbon guide bar and through the ribbon sensor slot following the loading path printed on the Media Cover.	
5. Wind the Ribbon Rewind Spindle counterclockwise about three to five turns until the ribbon is smooth, flat, and without wrinkles.	

6. Close the Print Head by pushing down on both sides of the Print Head Release Lever.	

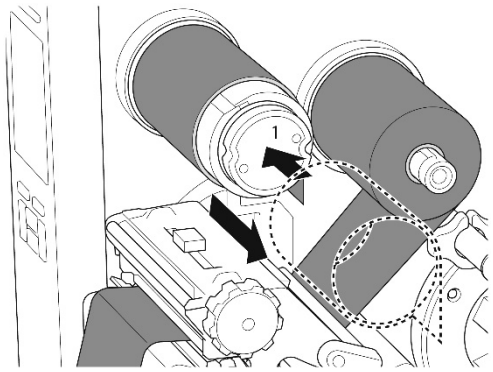
3.3 Remove Used Ribbon

Unless indicated otherwise, the illustrations in this *User's Guide* show the TJ-4422TN/TJ-4522TN.

1. Cut the used ribbon with scissors along the dotted line.



2. While pushing the Ribbon Release Button (1), remove the ribbon from the Ribbon Rewind Spindle, and discard it.



Note

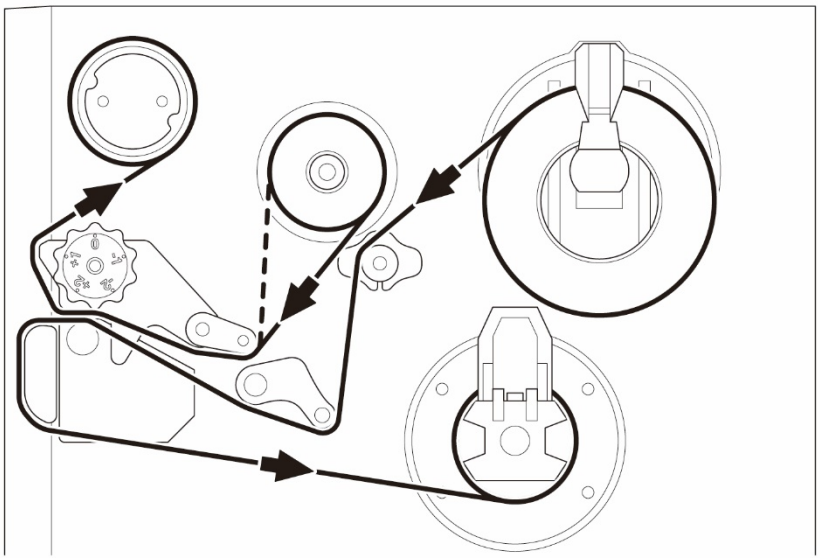
We recommend destroying the used ribbon if it has retained any visible prints.

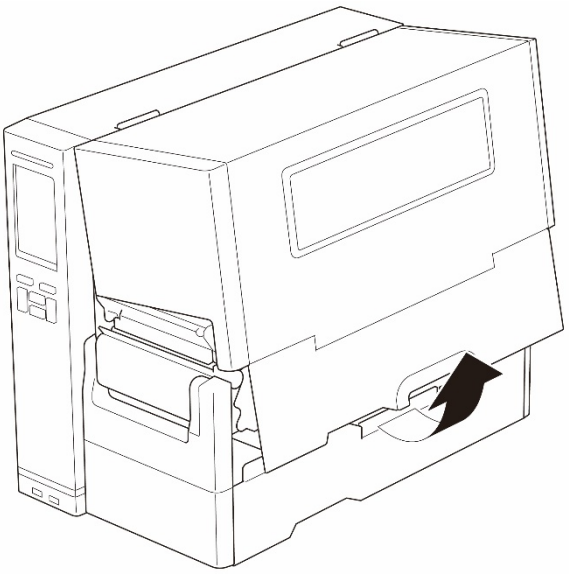
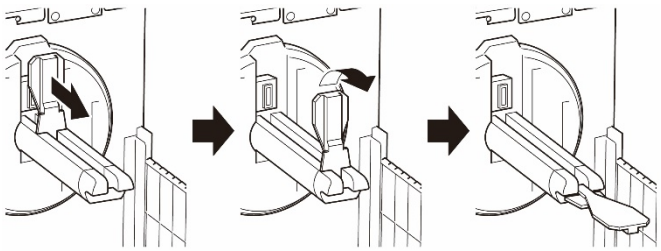
3.4 Load the Media

Unless indicated otherwise, the illustrations in this *User's Guide* show the TJ-4422TN/TJ-4522TN.

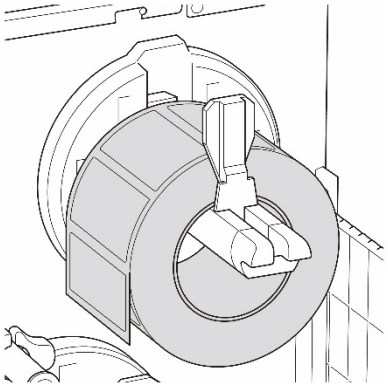
3.4.1 Load Label Roll

Label Roll loading path



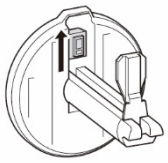
1. Open the Media Cover.	
2. Slide the Label Roll Guard horizontally to the end of the Label Supply Spindle, and then flip down the Label Roll Guard.	

3. Place the label roll on the Label Supply Spindle and then flip the Label Roll Guard upwards to hold it in place.



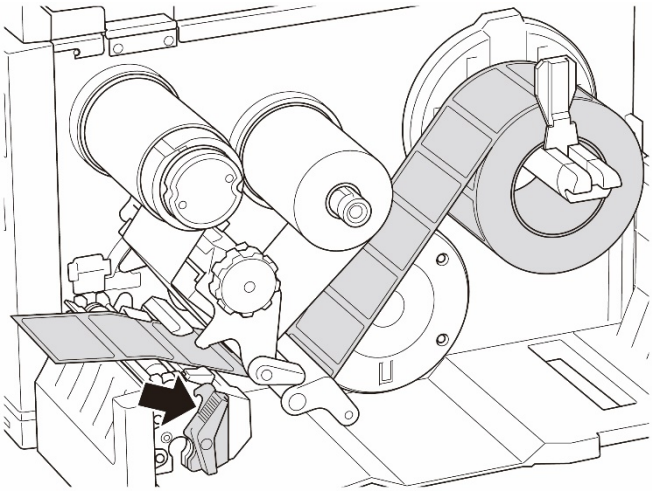
Note

- Make sure the label print side is facing up.
- (TJ-4422TN/TJ-4522TN)
  To detect the remaining amount of the media in the label roll, slide the Media Level Sensor up.

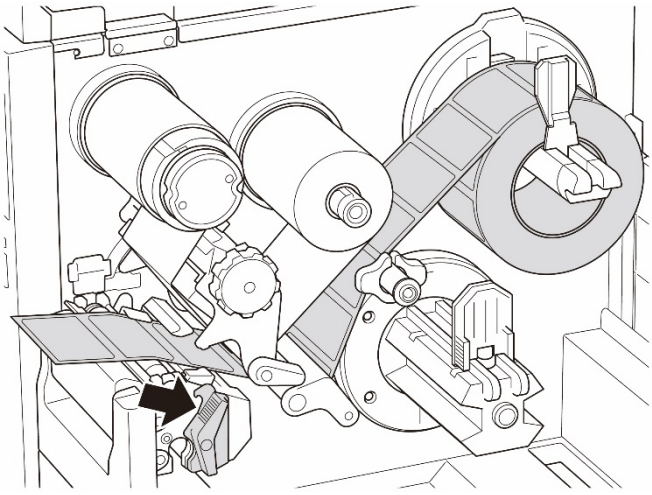


4. (TJ-4420TN/TJ-4520TN/TJ-4620TN)
   Push the Print Head Release Lever and thread the label through the Damper, Media Sensor, and Front Label Guide to install the media.
   (TJ-4422TN/TJ-4522TN)
   Push the Print Head Release Lever and thread the label through the Media Guide Bar, Damper, Media Sensor, and Front Label Guide to install the media.

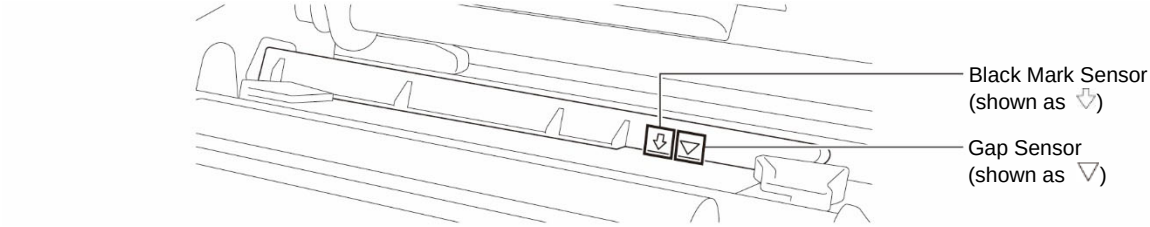
(TJ-4420TN/TJ-4520TN/TJ-4620TN)



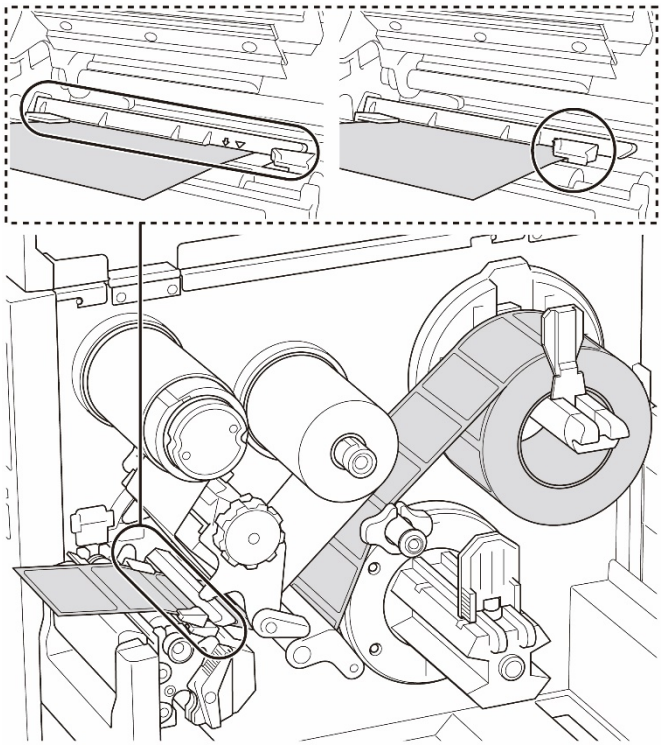
(TJ-4422TN/TJ-4522TN)



5. Move the Media Sensor by adjusting the Media Sensor Position Adjustment Knob. Make sure the position of the Gap or Black Mark Sensor matches the position of the Gap/Black Mark on the label roll.



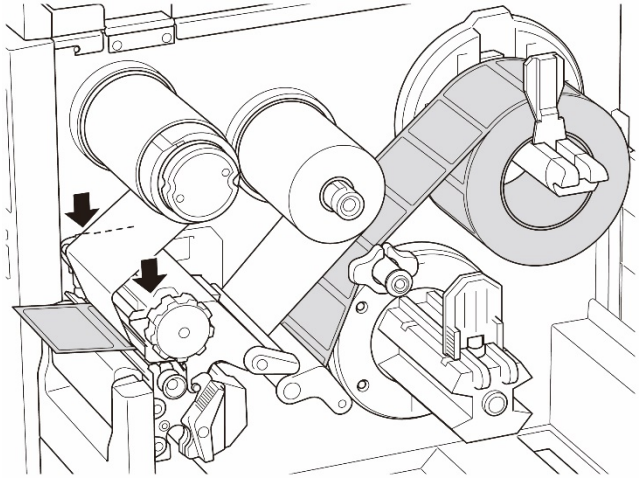
6. Adjust the Front Label Guide to fix the media position.



Note

- Make sure you thread the media through the Media Sensor.
- The sensor locations are marked by the triangle mark ▽ (Gap Sensor) and the arrow mark ⇩ (Black Mark Sensor) at the sensor housing.
- The Media Sensor position is adjustable. Make sure the position of the Gap or Black Mark Sensor matches the position of the Gap/Black Mark on the label roll.

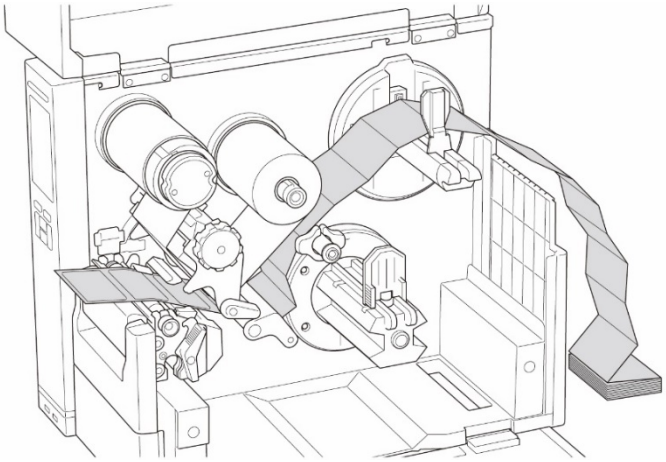
7. Close the Print Head on both sides and make sure it locks into place.
8. Set the media sensor type and calibrate the selected sensor.



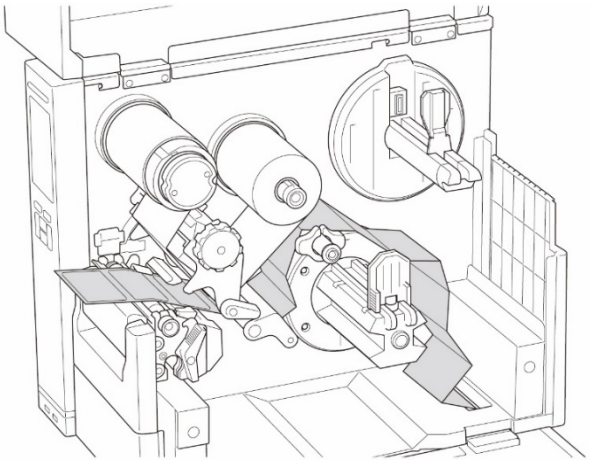
3.4.2 Load External Media

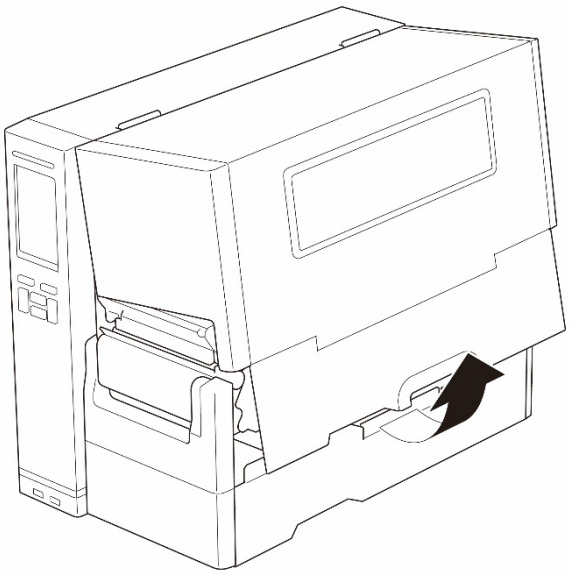
Unless indicated otherwise, the illustrations in this *User's Guide* show the TJ-4422TN/TJ-4522TN.

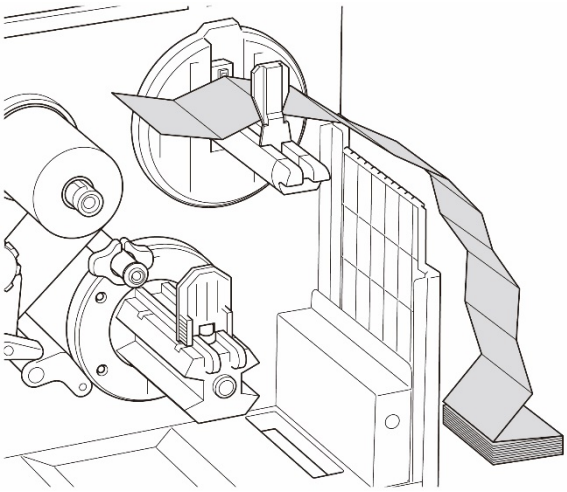
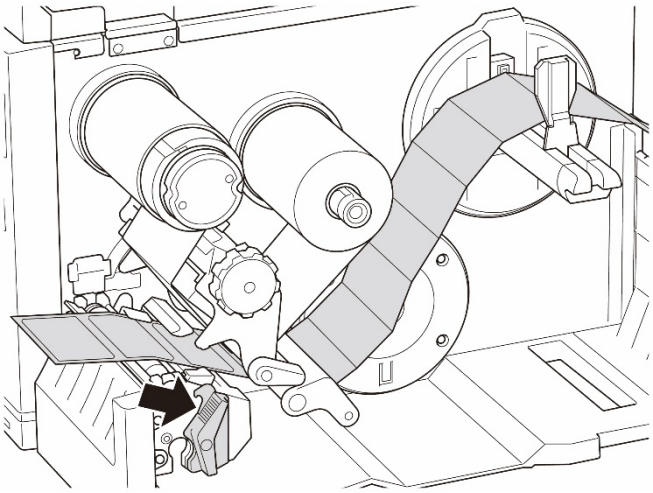
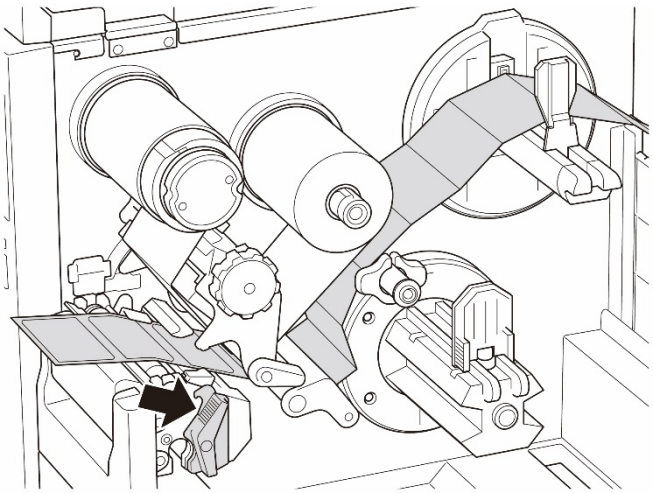
Fan-fold label loading path



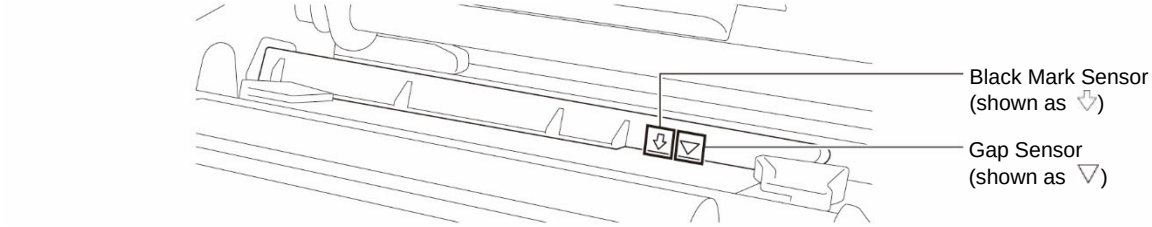
External media loading path



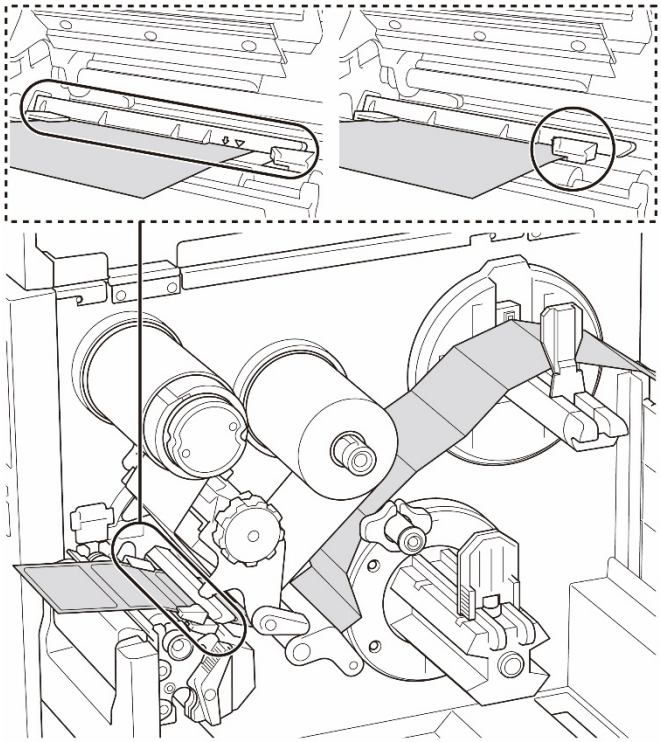
1. Open the Media Cover.	

2. Insert the media through the External Label Entry Slot.	
3. (TJ-4420TN/TJ-4520TN/TJ-4620TN) Push the Print Head Release Lever and thread the label through the Damper, Media Sensor, and Front Label Guide to install the media. Align the Label Roll Guard with the label width. (TJ-4422TN/TJ-4522TN) Push the Print Head Release Lever and thread the label through the Media Guide Bar, Damper, Media Sensor, and Front Label Guide to install the media. Align the Label Roll Guard with the label width.	(TJ-4420TN/TJ-4520TN/TJ-4620TN)  (TJ-4422TN/TJ-4522TN) 

4. Move the Media Sensor by adjusting the Media Sensor Position Adjustment Knob. Make sure the position of the Gap or Black Mark Sensor matches the position of the Gap/Black Mark on the label.



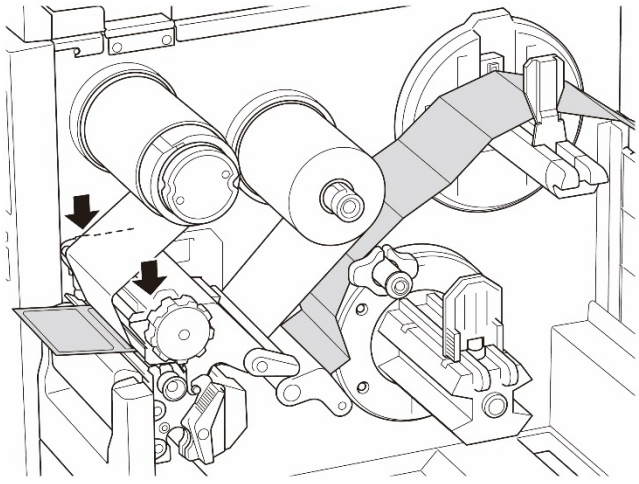
5. Adjust the Front Label Guide to fix the media position.



Note

- Make sure you thread the media through the Media Sensor.
- The sensor locations are marked by the triangle mark ▽ (Gap Sensor) and the arrow mark ⇩ (Black Mark Sensor) at the sensor housing.
- The Media Sensor position is adjustable. Make sure the position of the Gap or Black Mark Sensor matches the position of the Gap/Black Mark on the label.

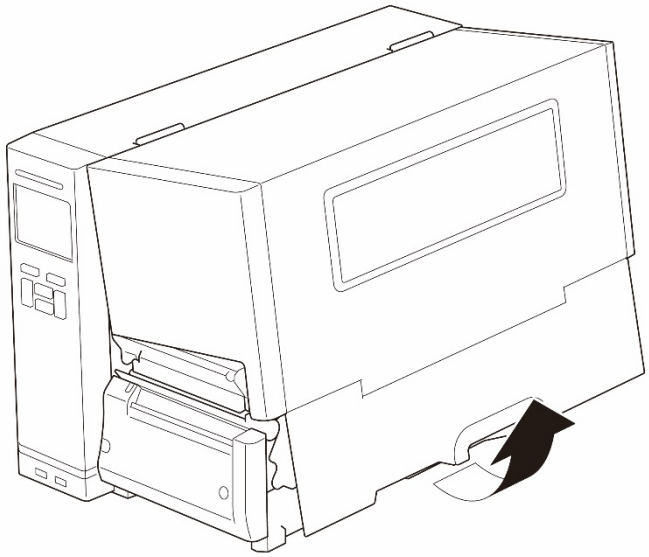
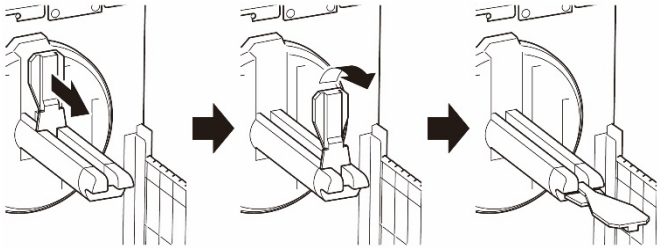
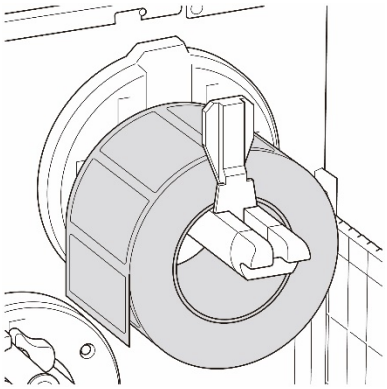
6. Close the Print Head on both sides and make sure it locks into place.
7. Set the media sensor type and calibrate the selected sensor.



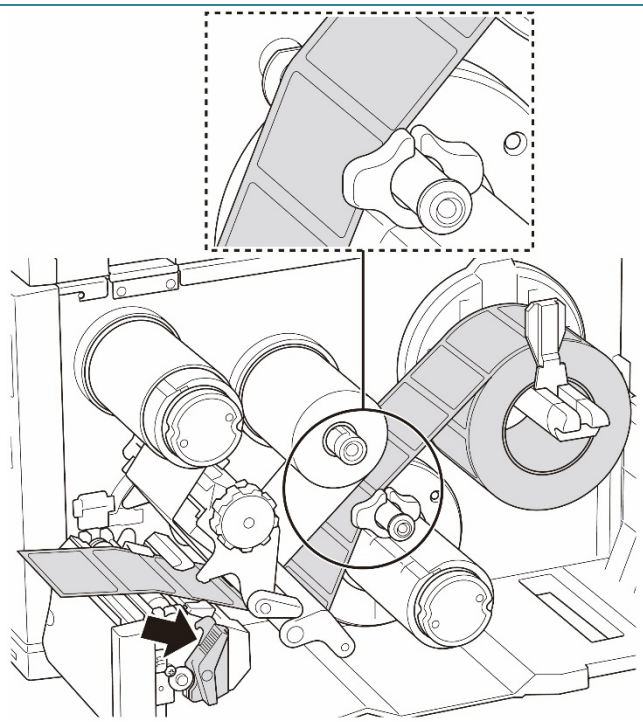
Note

- Calibrate the Gap/Black Mark Sensor every time you change the media.
- For more information about sensor calibration, see section *8.2 Auto-Calibrating the Media Sensor using the BPM*.

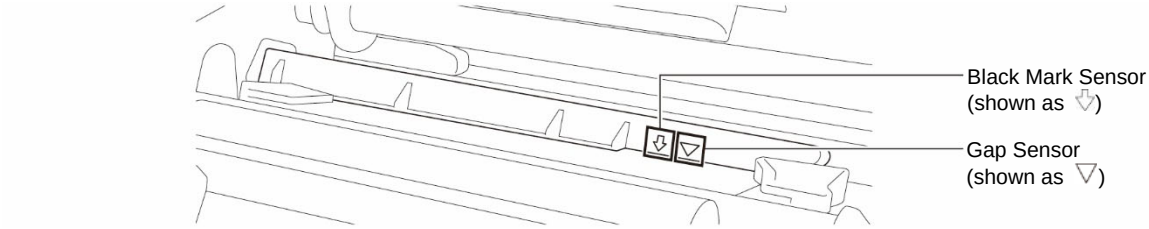
3.4.3 Load the Media in Peeler Mode (Optional for TJ-4420TN/TJ-4520TN/TJ-4620TN)

1. Open the Media Cover.	
2. Slide the Label Roll Guard horizontally to the end of the Label Supply Spindle, and then flip down the Label Roll Guard.	
3. Place the label roll on the Label Supply Spindle and then flip the Label Roll Guard upwards to hold it in place. **Note** Make sure the label print side is facing up.	

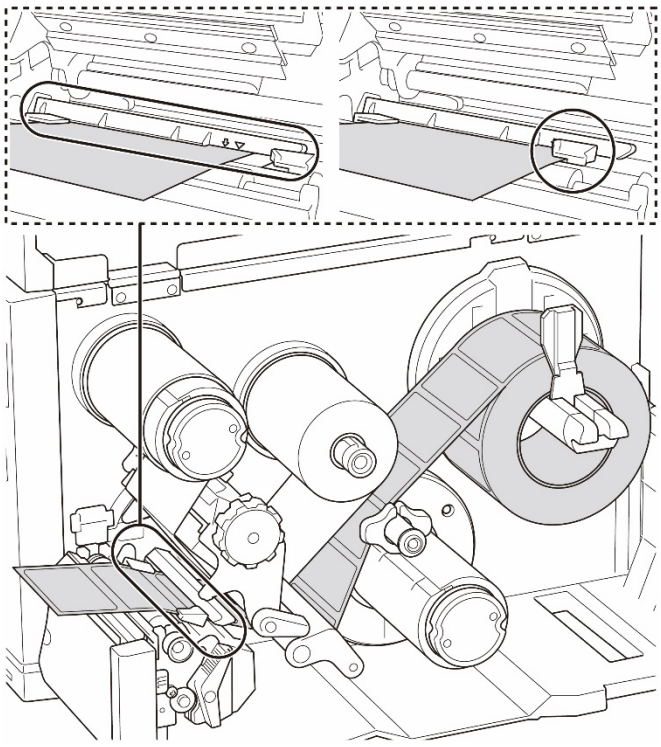
4. Push the Print Head Release Lever and thread the label through the Damper, Media Sensor, and Front Label Guide to install the media.



5. Move the Media Sensor by adjusting the Media Sensor Position Adjustment Knob. Make sure the position of the Gap or Black Mark Sensor matches the position of the Gap/Black Mark on the label roll.



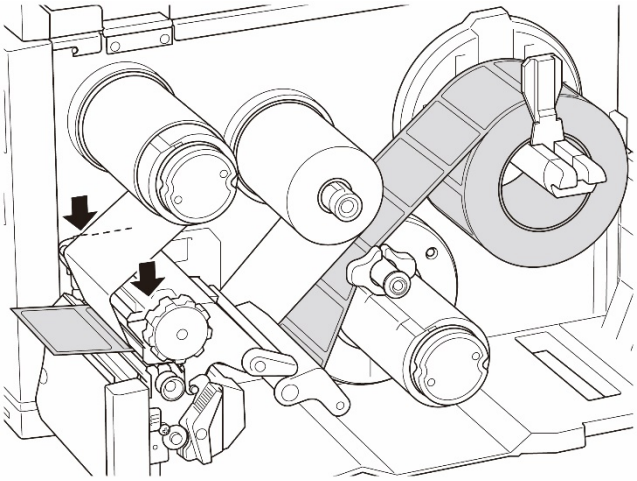
6. Adjust the Front Label Guide to fix the media position.



Note

- Make sure you thread the media through the Media Sensor.
- The sensor locations are marked by the triangle mark ▽ (Gap Sensor) and the arrow mark ⇩ (Black Mark Sensor) at the sensor housing.
- The Media Sensor position is adjustable. Make sure the position of the Gap or Black Mark Sensor matches the position of the Gap/Black Mark on the label roll.

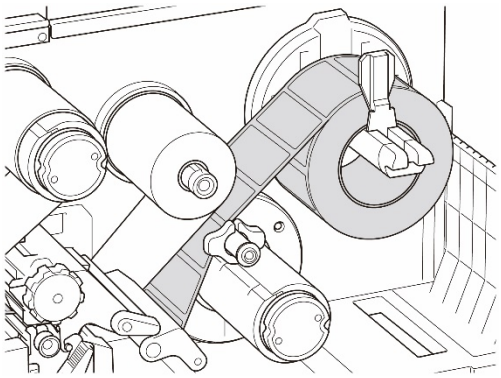
7. Close the Print Head on both sides and make sure it locks into place.
8. Set the media sensor type and calibrate the selected sensor.



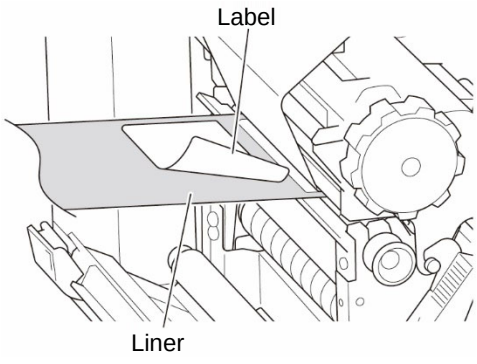
9. Perform the calibration using the BPM. For more information about sensor calibration, see section *8.2 Auto-Calibrating the Media Sensor using the BPM*.

Note

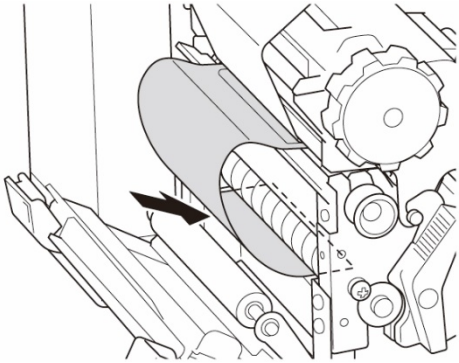
1. Calibrate the Gap/Black Mark Sensor before loading media in Peeler Mode to avoid paper jams.
2. Make sure you thread the label over the Media Guide Bar and under the Damper as shown.



10. Turn the Print Head Release Lever, Label Guide Release Lever and Peel-Off Kit, and pull approximately 650 mm of the label roll through the Media Output Slot.
11. Remove some labels leaving only the liner.

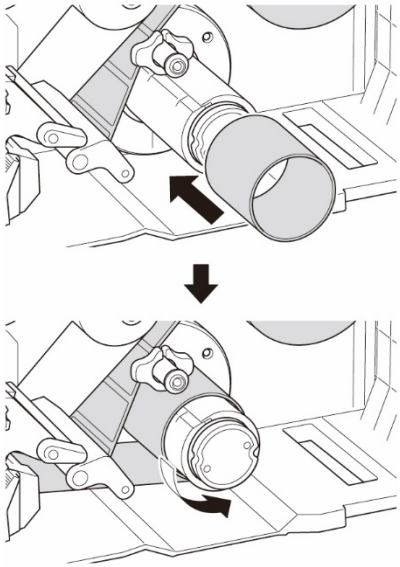


12. Thread the liner through the Label Peeler Cover Slot.

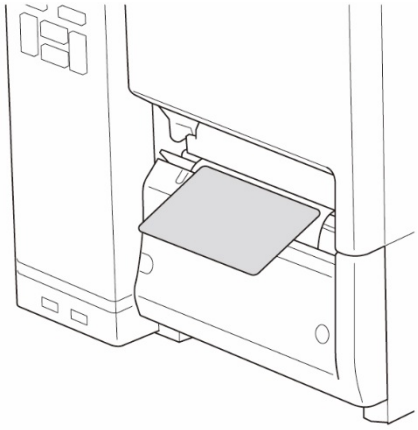


13. Wrap the liner around the paper core and adhere the liner to the Media Rewind Spindle. Wind the liner on the Media Rewind Spindle until the liner is fully stretched.

> **Note**
> The paper core is not included in the box. Use the one you have.

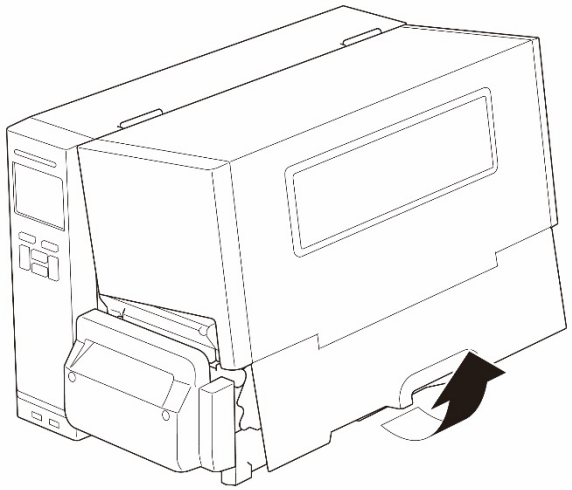


14. Lock the Print Head Release Lever and set the print mode to "Peel Off" using the Main Menu.
    (**Main Menu** > **Setting** > **Print Mode** > **Peel Off**)
15. Press the right **Selection** button to feed a label to test.

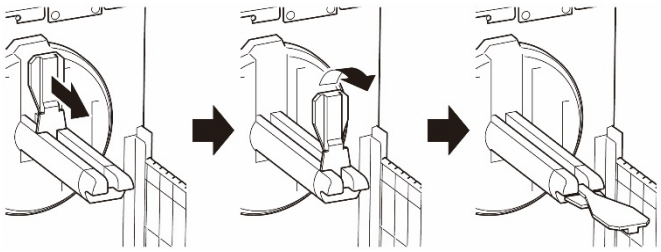


3.4.4 Load Media in Cutter Mode (Optional for TJ-4420TN/TJ-4520TN/TJ-4620TN)

1. Open the Media Cover.

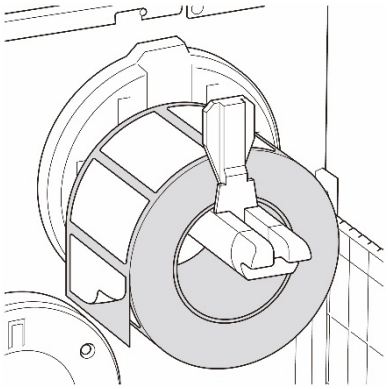


2. Slide the Label Roll Guard horizontally to the end of the Label Supply Spindle, and then flip down the Label Roll Guard.

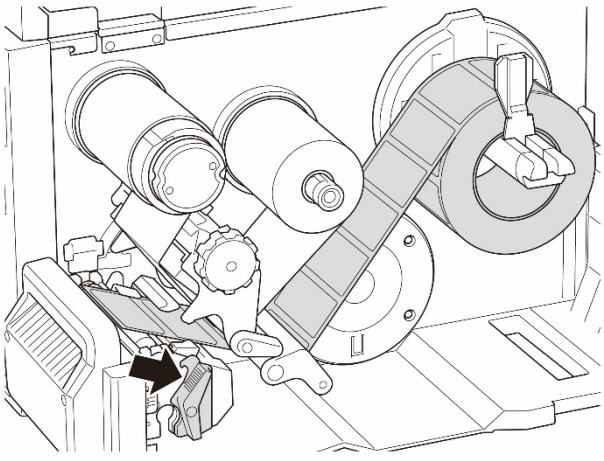


3. Place the label roll on the Label Supply Spindle and then flip the Label Roll Guard upwards to hold it in place.

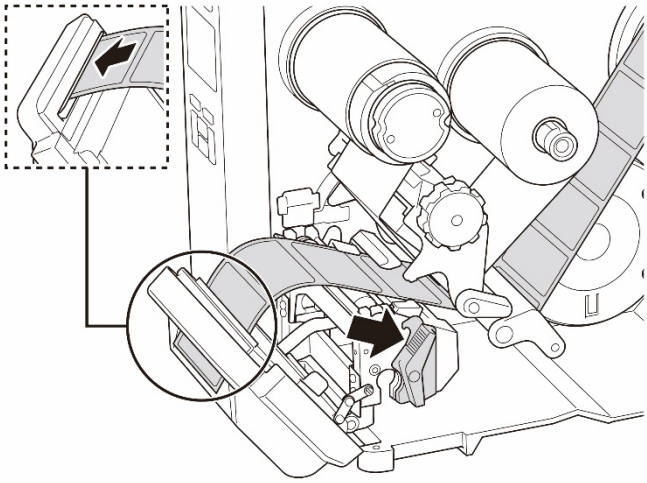
> **Note**
> Make sure the label print side is facing up.



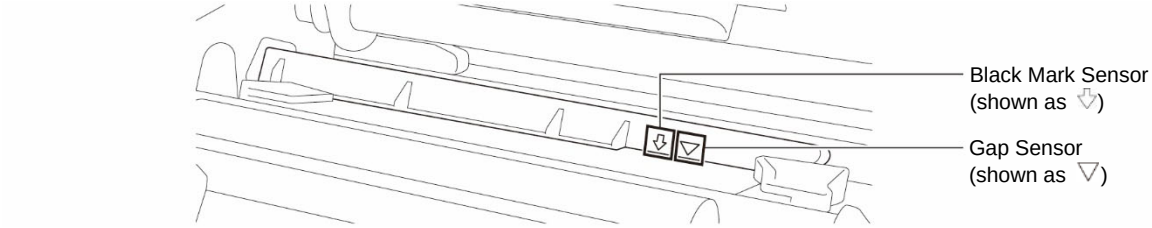
4. Push the Print Head Release Lever and thread the label through the Damper, Media Sensor, and Front Label Guide to install the media.



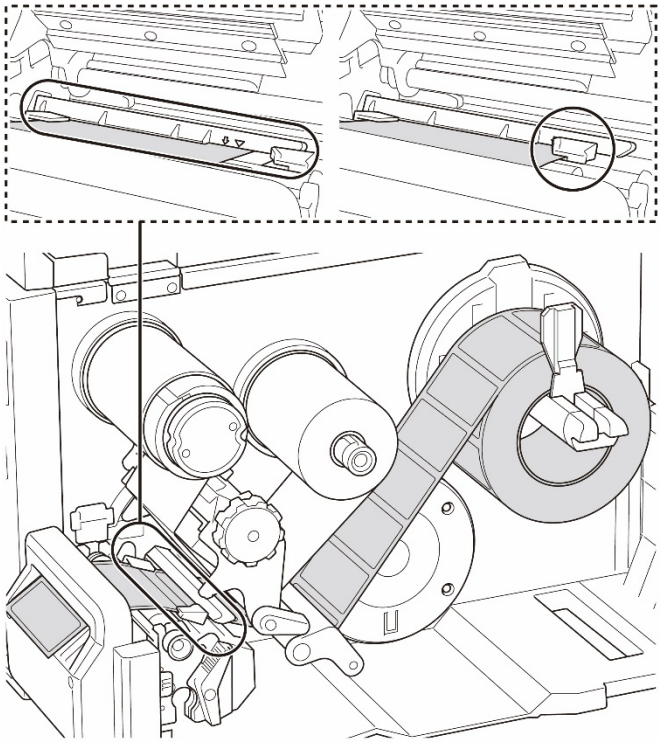
5. Feed the media through the Label Cutter Cover Slot.



6. Move the Media Sensor by adjusting the Media Sensor Position Adjustment Knob. Make sure the position of the Gap or Black Mark Sensor matches the position of the Gap/Black Mark on the label roll.

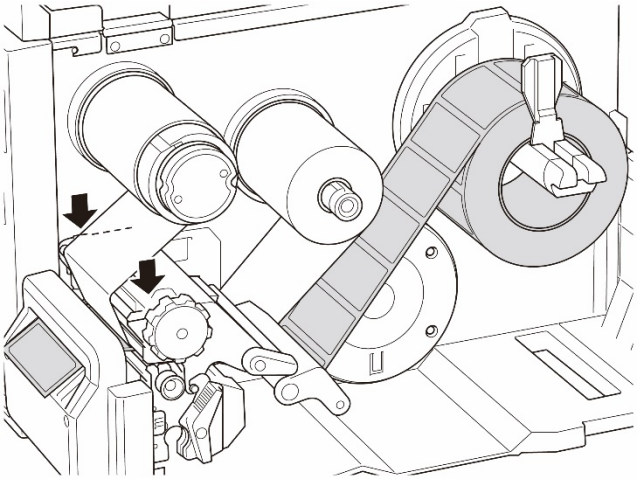
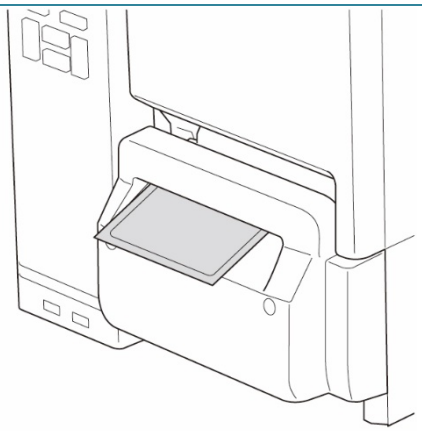


7. Adjust the Front Label Guide to fix the media position.

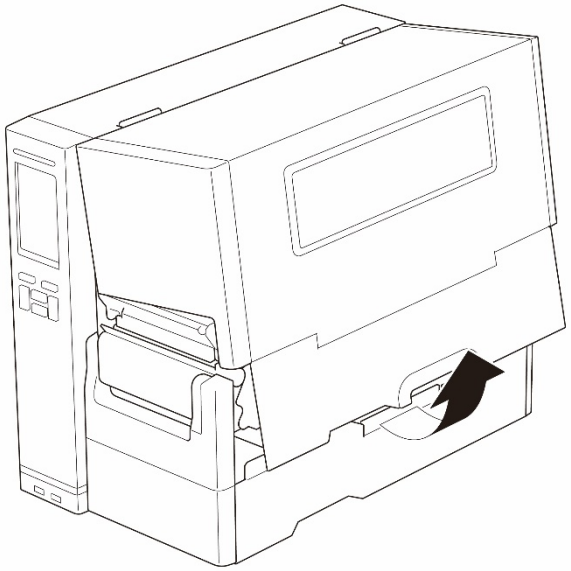
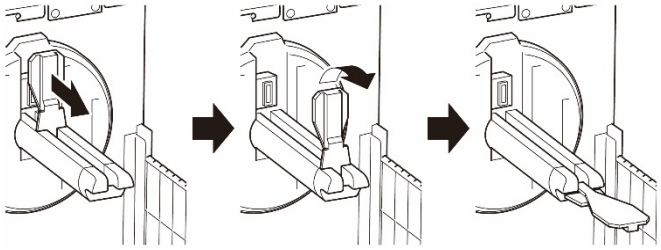


Note

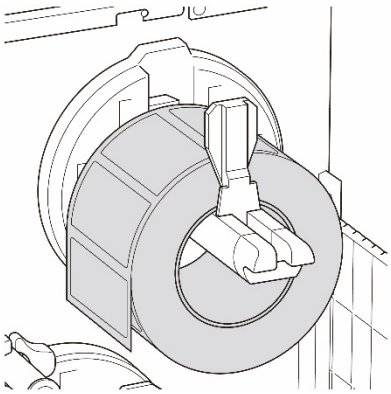
- Make sure you thread the media through the Media Sensor.
- The sensor locations are marked by the triangle mark ▽ (Gap Sensor) and the arrow mark ⇩ (Black Mark Sensor) at the sensor housing.
- The Media Sensor position is adjustable. Make sure the position of the Gap or Black Mark Sensor matches the position of the Gap/Black Mark on the label roll.

8. Close the Print Head on both sides and make sure it locks into place. 9. Set the media sensor type and calibrate the selected sensor. 10. Perform the calibration using the BPM. For more information about sensor calibration, see section *8.2 Auto-Calibrating the Media Sensor using the BPM*.	
11. Close the Print Head and press the right **Selection** button to feed one label to test.	

3.4.5 Load Media in Rewind Mode (For TJ-4422TN/TJ-4522TN)

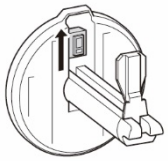
1. Open the Media Cover.	
2. Slide the Label Roll Guard horizontally to the end of the Label Supply Spindle, and then flip down the Label Roll Guard.	

3. Place the label roll on the Label Supply Spindle and then flip the Label Roll Guard upwards to hold it in place.

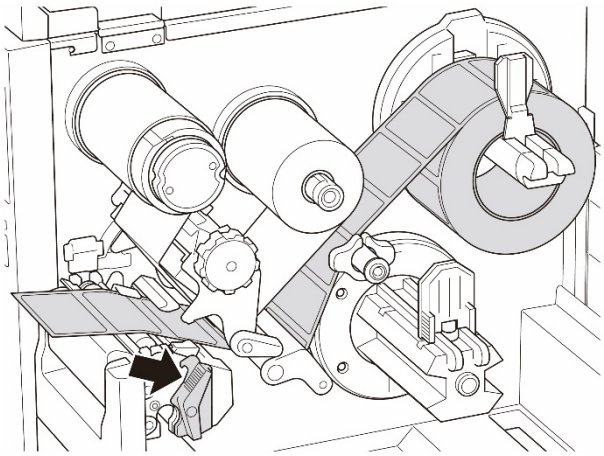


Note

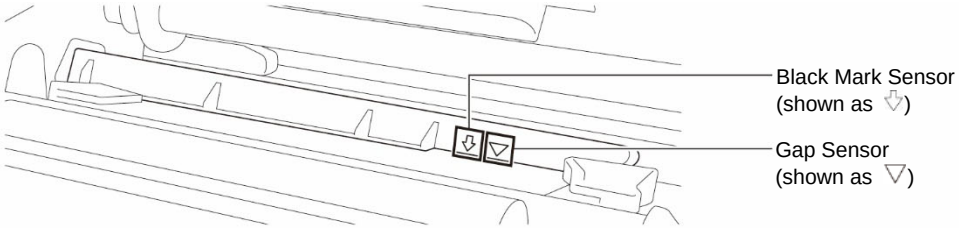
- Make sure the label print side is facing up.
- To detect the remaining amount of the media in the label roll, slide the Media Level Sensor up.



4. Push the Print Head Release Lever and thread the label through the Media Guide Bar, Damper, Media Sensor, and Front Label Guide to install the media. Align the Label Roll Guard with the label width.



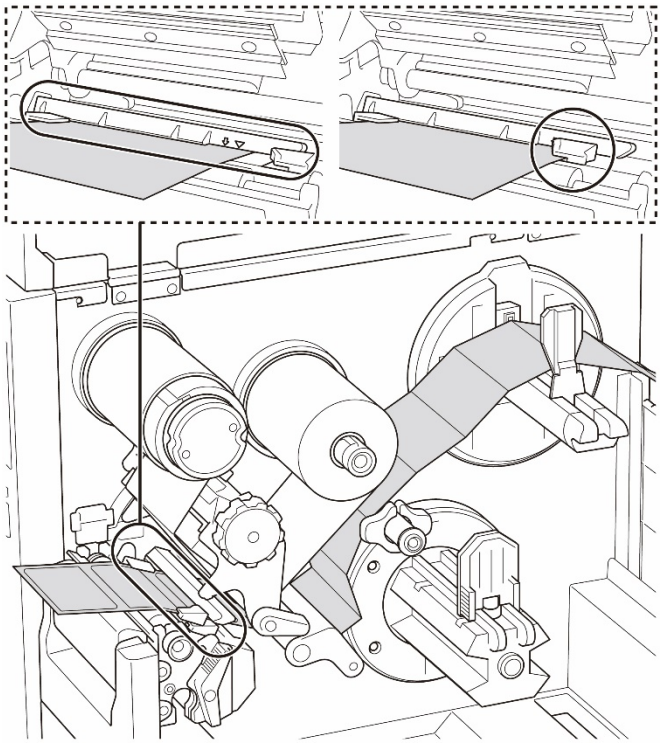
5. Move the Media Sensor by adjusting the Media Sensor Position Adjustment Knob. Make sure the position of the Gap or Black Mark Sensor matches the position of the Gap/Black Mark on the label roll.



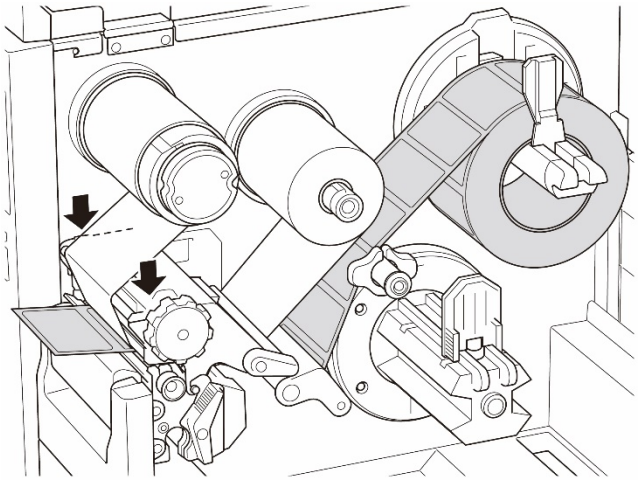
6. Adjust the Front Label Guide to fix the media position.

Note

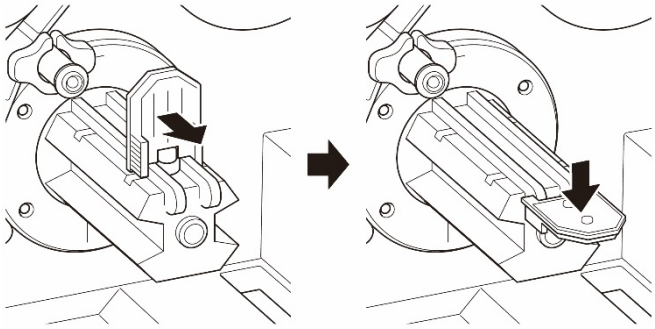
- Make sure you thread the media through the Media Sensor.
- The sensor locations are marked by the triangle mark ▽ (Gap Sensor) and the arrow mark ⇩ (Black Mark Sensor) at the sensor housing.
- The Media Sensor position is adjustable. Make sure the position of the Gap or Black Mark Sensor matches the position of the Gap/Black Mark on the label roll.



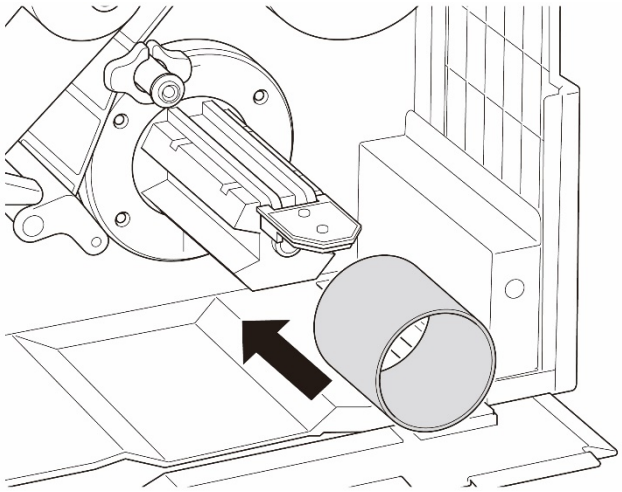
7. Close the Print Head on both sides and make sure it locks into place.
8. Set the media sensor type and calibrate the selected sensor.
9. Perform the calibration first, and set the printer mode to Rewind Mode.



10. Open the Media Cover, and then push the Label Guide to the far right side and pull it down.

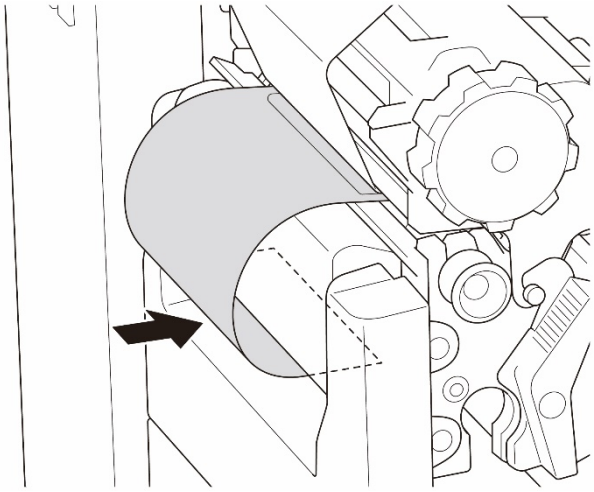


11. Install the Paper Core onto the Media Rewind Spindle.

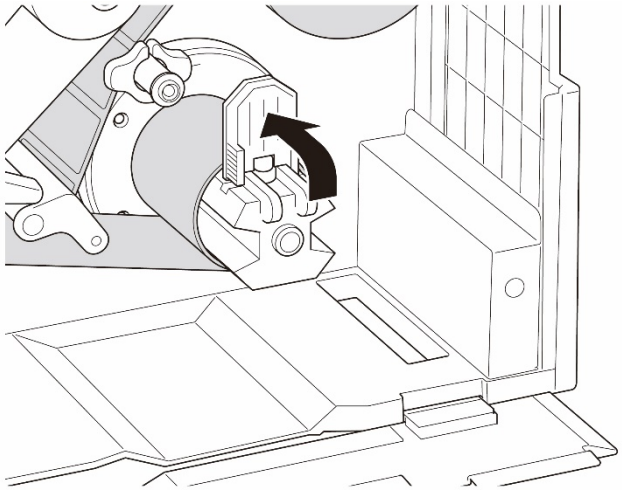


> **Note**
> The paper core is not included in the box. Use the one you have.

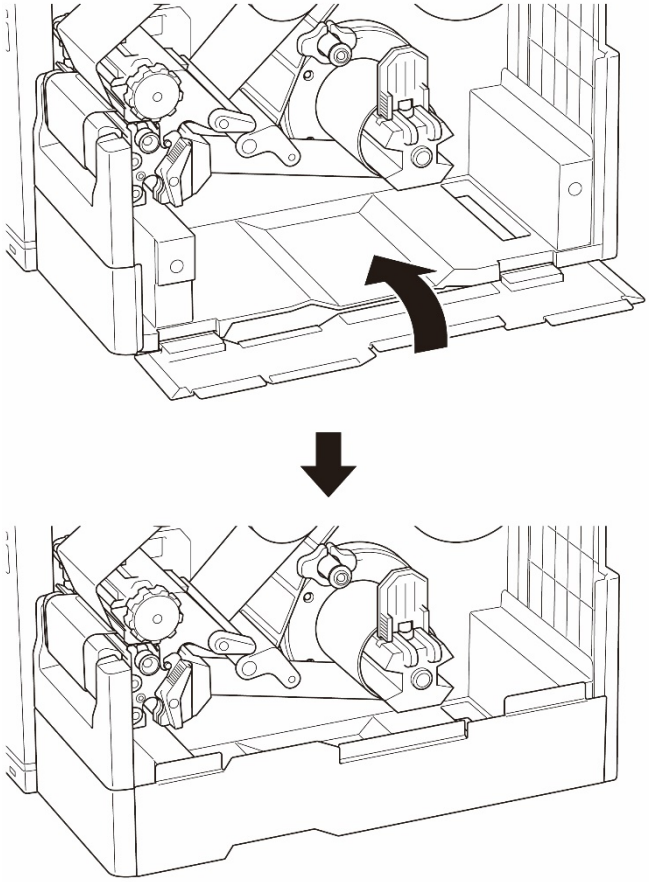
12. Open the Print Head Release Lever and Label Guide Bar Release Lever, and pull approximately 650 mm of the label roll through the Media Output Slot.
13. Feed the leading edge of the media through the front panel Rewind Slot as shown.



14. Wrap the label around the internal Media Rewind Spindle and adhere the label to the Paper Core. Wind the spindle counterclockwise until the label is fully stretched.



15. Adjust the Media Rewind Guide to fit the label width.
16. Close the Print Head Release Lever and Base Cover.

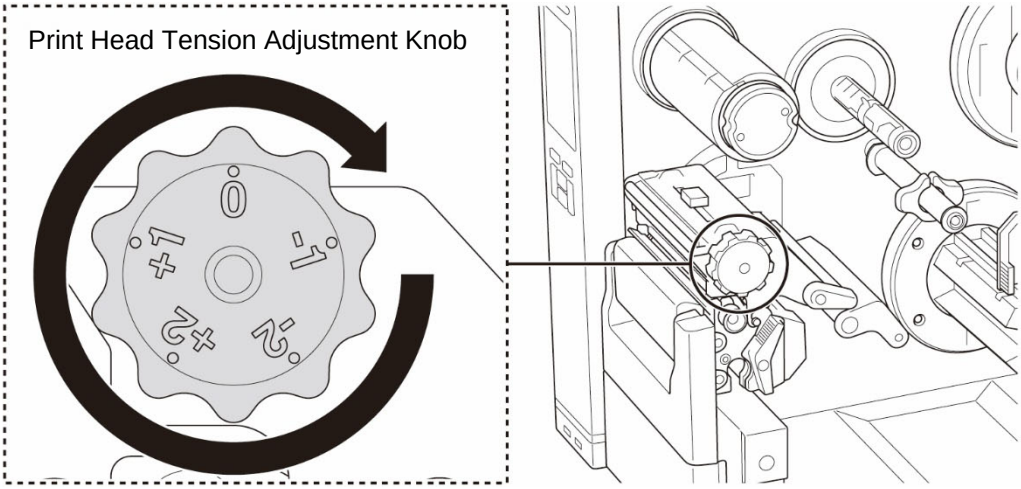


4. Improve Print Quality

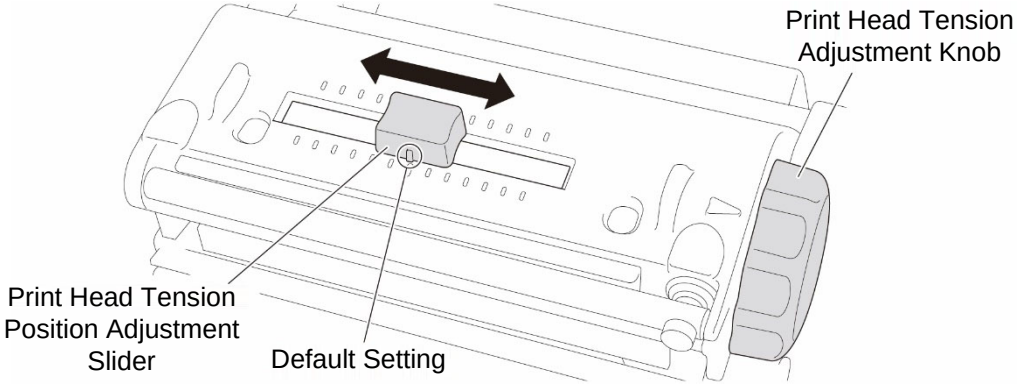
4.1 Adjust Print Head Tension to Improve Print Quality

Unless indicated otherwise, the illustrations in this *User's Guide* show the TJ-4422TN/TJ-4522TN.

For the best print quality, adjust the Print Head using the Print Head Tension Adjustment Knob. Choose one of five levels of tension adjustment depending on the media width you use.



For labels (less than 2" width), set the Print Head Tension Position Adjustment Slider as close to the label edge as possible to prevent unnecessary friction between the Print Head and the Platen Roller.

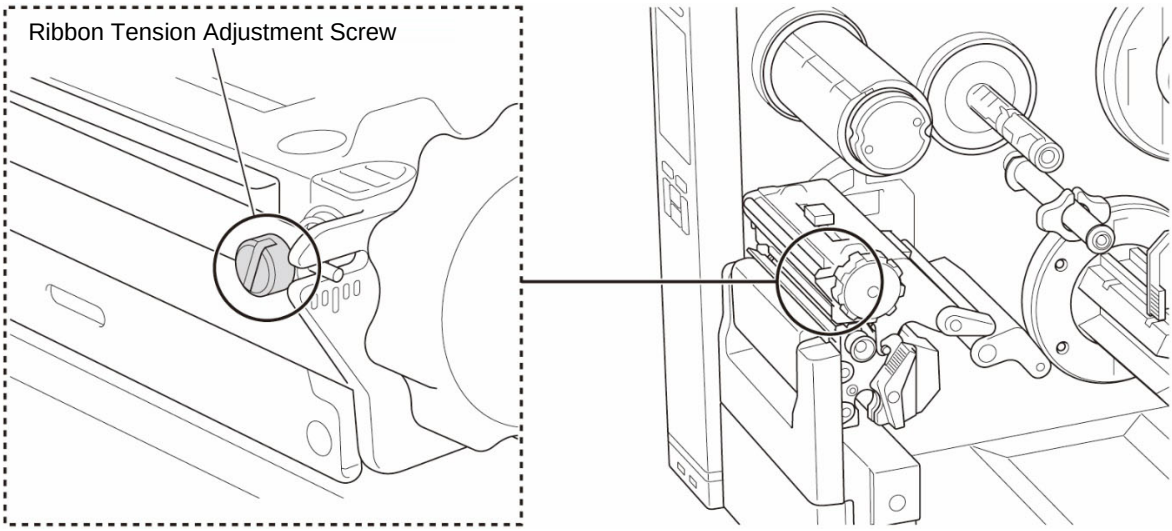


4.2 Adjust Ribbon Tension to Avoid Wrinkled Labels

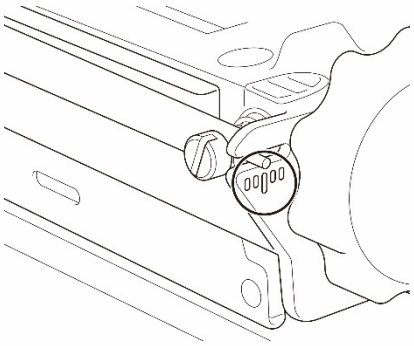
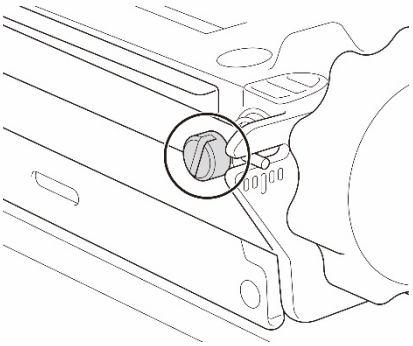
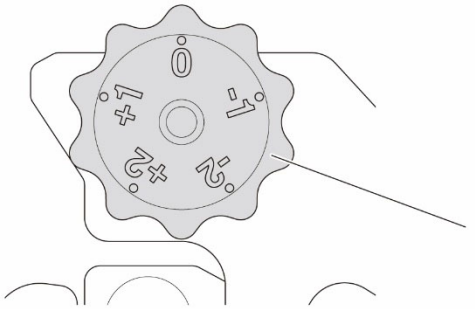
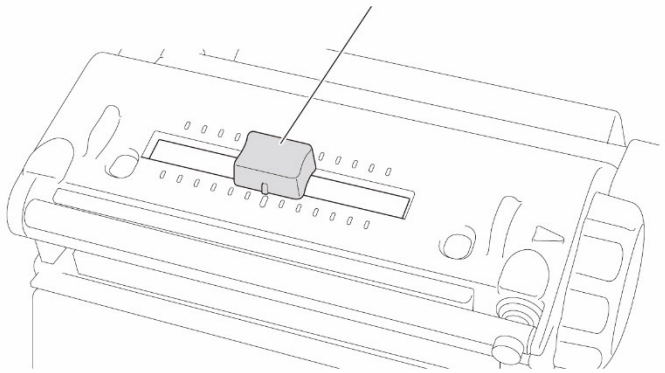
Wrinkles can occur due to many factors, including media width and thickness, Print Head pressure balance, ribbon film characteristics, and print density/darkness settings.

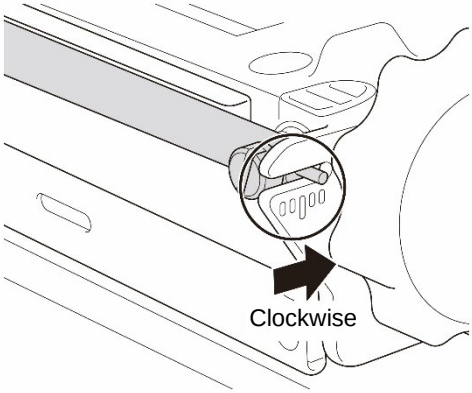
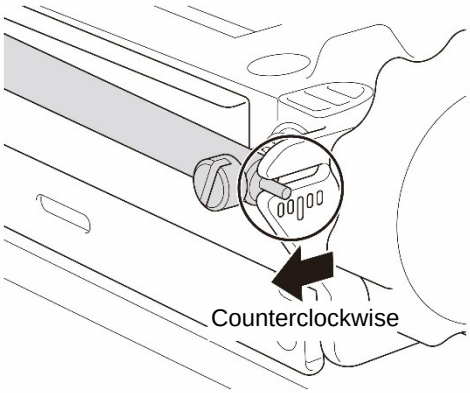
4.2.1 Adjust Ribbon Tension

To avoid wrinkled labels, adjust the ribbon tension using the Ribbon Tension Adjustment Screw. Choose one of five levels of tension adjustment.



Description	The ribbon wrinkle occurs from the lower right to the upper left of the label.	The ribbon wrinkle occurs from the lower left to the upper right of the label.
Wrinkle Example		

Adjustable Printer Parts	The Ribbon Tension Adjustment Screw has five levels for adjustment. Use a flat blade screwdriver to change the ribbon tension level.  Ribbon Tension Adjustment Scale  Ribbon Tension Adjustment Screw The Print Head Tension Adjustment Knob has five setting levels. Turn the Print Head Tension Adjustment Knob and adjust the Print Head Tension Position Adjustment Slider to adjust the tension and position of the Print Head.  Print Head Tension Adjustment Knob Print Head Tension Position Adjustment Slider 

	1. Turn the Ribbon Tension Adjustment Screw clockwise once per level on the Ribbon Tension Adjustment Scale and print the label again to check if the wrinkle is gone.  2. If the Ribbon Tension Adjustment Screw is positioned on the innermost side but the ribbon wrinkle has not improved, move the Print Head Tension Position Adjustment Slider one level at a time, print the label again, and check if the wrinkle is gone. 3. If the ribbon wrinkle still has not improved after moving the Print Head Tension Position Adjustment Slider, turn the Print Head Tension Adjustment Knob one level at a time again and check if the wrinkle is gone.	1. Turn the Ribbon Tension Adjustment Screw counterclockwise once per level on the Ribbon Tension Adjustment Scale and print the label again to check if the wrinkle is gone.  2. If the Ribbon Tension Adjustment Screw is positioned on the outermost side but the ribbon wrinkle has not improved, move the Print Head Tension Position Adjustment Slider one level at a time, print the label again, and check if the wrinkle is gone. 3. If the ribbon wrinkle still has not improved after moving the Print Head Tension Position Adjustment Slider, turn the Print Head Tension Adjustment Knob one level at a time again and check if the wrinkle is gone.

4.2.2 Change the Print Density/Darkness Settings

Note

For information about the print density/darkness, see sections *7.1.1 FBPL Settings* and *7.1.2 ZPL2 Settings*.

4.2.3 Try Different Media

Make sure you load the correct paper.

Note

For more information about the supported paper width and thickness, see section *9. Product Specifications*.

Note

If the wrinkles continue to occur, contact the product manufacturer's customer service or your local dealer for service.

5. Printing

5.1 Printer Driver Installation

Note

The model name and serial number are located on the back of the printer.

Make sure you download the correct driver for your model:

- TJ-4420TN/TJ-4422TN: Brother TJ-44
- TJ-4520TN/TJ-4522TN: Brother TJ-45
- TJ-4620TN: Brother TJ-46

The driver installation method depends on the connection type:

- USB Connection (Windows/Mac/Linux)
- Bluetooth Connection (Windows)
- Wi-Fi Network Connection (Windows)
- Wired Network Connection (Windows)

5.1.1 USB Connection (Windows/Mac/Linux)

Note

Mac/Linux Users

For more information about driver installation, see the driver installation guide provided with the driver.

1. Connect your printer to the computer using a USB cable.
2. Visit support.brother.com, go to your model's **Downloads** page, and download the latest printer driver and software.
3. Run the Seagull Driver Wizard application and select **Install printer drivers** and **USB**.
4. Follow the on-screen instructions.

Note

If you cannot install the printer driver:

- Install the printer driver manually:
  In the Seagull Driver Wizard application, select **Install printer drivers** > **Others**.
- Remove the printer drivers:
  In the Seagull Driver Wizard application, select **Remove printer drivers** > **Automatically remove all Drivers by Seagull** or **Use advanced printer driver removal options**.
- Reset the printer settings:
  Start the BPM, and then click **Printer Function** > **Factory Default**.

5.1.2 Bluetooth Connection (Windows)

> **Note**
>
> To use Bluetooth, an optional WLAN / BT Interface (PA-WB-001) is required.

1. Check the Bluetooth Local Name:
   - BPM: Connect the printer to the computer using a USB cable. Click **Printer Configuration** > **Bluetooth**.
   - LCD: Select **Interface** > **Bluetooth**.
2. Turn on the Bluetooth feature on your computer and then pair it with a printer by selecting **Start** > **Settings** > **Devices** > **Bluetooth & other devices** and enabling Bluetooth. Then, select **Add Bluetooth or other device** and select a printer.
3. Run the Seagull Driver Wizard application and select **Install printer drivers** and **Bluetooth**.
4. Follow the on-screen instructions.

> **Note**
>
> If you cannot install the printer driver:
>
> - Remove the printer drivers:
>
>   In the Seagull Driver Wizard application, select **Remove printer drivers** > **Automatically remove all Drivers by Seagull** or **Use advanced printer driver removal options**.
> - Reset the printer settings:
>
>   Start the BPM, and then click **Printer Function** > **Factory Default**.

5.1.3 Wi-Fi Network Connection (Windows)

> **Note**
>
> To use Wi-Fi, an optional WLAN / BT Interface (PA-WB-001) is required.

Make sure both your wireless router/access point's and your printer's network settings are correctly set up. For more information, see the documentation provided with your wireless router/access point, or contact the router manufacturer, your system administrator, or Internet service provider.

1. Configure the network settings:

- Using the BPM
  a. Connect your printer to the computer using a USB cable.
  b. Click **Printer Configuration** > **Wi-Fi**.
  c. Specify **SSID**, **Encryption**, and **Key** (Network Password), and then click **Set**.
  d. Click **Get**.
  e. Click **Printer Function** > **Configuration Page**.
  The network settings are printed. Confirm that the printer's IP address is correct.

- Using the LCD/Touchscreen
  a. Select **Interface** > **Wi-Fi**.
  b. Specify **SSID**, **Security**, and **Password**.
  c. When finished, the Wi-Fi icon and printer's IP address appear on the screen.

2. Visit support.brother.com, go to your model's **Downloads** page, and download the latest printer driver and software.
3. Run the Seagull Driver Wizard application and select **Install printer drivers** and **Network**.
4. Select your printer, and then click **Next**.
5. If your TCP/IP port does not appear in the list, click **Create port** and select **Standard TCP/IP port** > **New Port**.
6. Type your printer's IP address and port name, and then click **Next**.
7. Click **Finish**.
8. Return to the **Specify Port** window and select the port you created.
9. Follow the on-screen instructions.

> **Note**
>
> If you cannot install the printer driver:
>
> - Remove the printer drivers:
>
> In the Seagull Driver Wizard application, select **Remove printer drivers** > **Automatically remove all Drivers by Seagull** or **Use advanced printer driver removal options**.
>
> - Reset the printer settings:
>
> Start the BPM, and then click **Printer Function** > **Factory Default**.

5.1.4 Wired Network Connection (Windows)

1. Connect both the printer and the computer to your router/access point using LAN cables. The printer automatically receives a default IP address and displays it on the screen.
2. Visit support.brother.com, go to your model's **Downloads** page, and download the latest printer driver and software.
3. Run the Seagull Driver Wizard application and select **Install printer drivers** and **Network**.
4. Select your printer, and then click **Next**.
5. If your TCP/IP port does not appear in the list, click **Create port** and select **Standard TCP/IP port** > **New Port**.
6. Type your printer's IP address and port name, and then click **Next**.
7. Click **Finish**.
8. Return to the **Specify Port** window and select the port you created.
9. Follow the on-screen instructions.

Note

If you cannot install the printer driver:

- Remove the printer drivers:
  In the Seagull Driver Wizard application, select **Remove printer drivers** > **Automatically remove all Drivers by Seagull** or **Use advanced printer driver removal options**.
- Reset the printer settings:
  Start the BPM, and then click **Printer Function** > **Factory Default**.

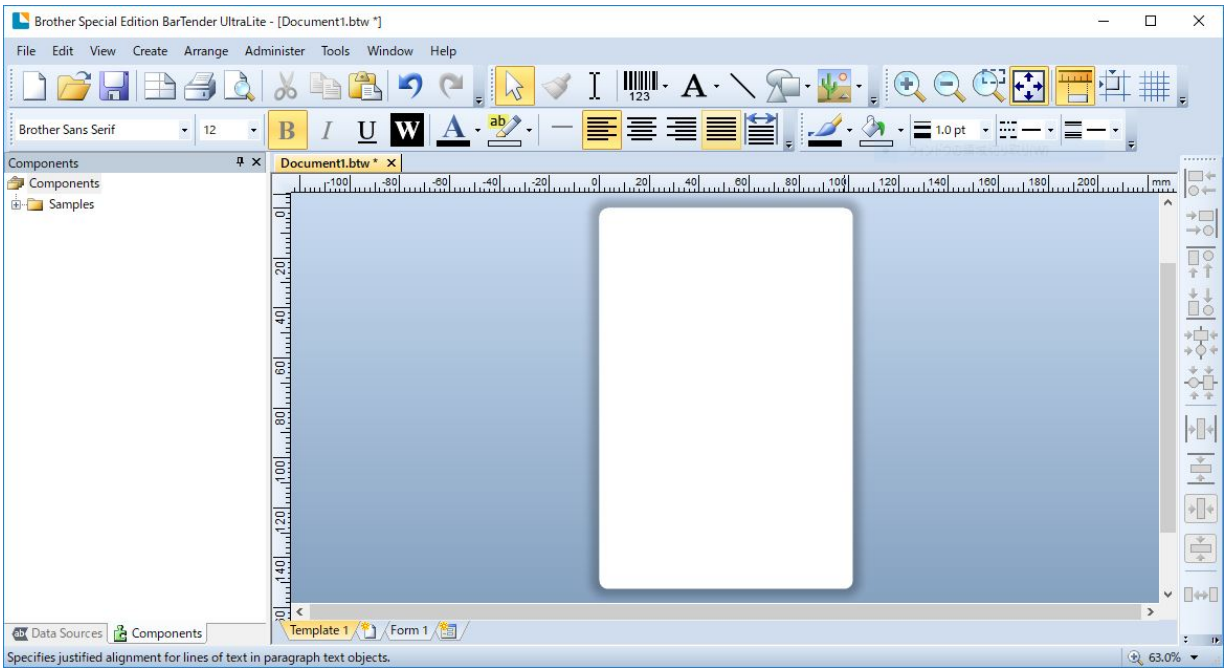
5.2 Create and Print Labels Using BarTender

BarTender is a label creation tool, which can be downloaded for free from the product's page at support.brother.com.

1. Launch BarTender.

- For Windows 10, Windows Server 2016, or Windows Server 2019:
  Start > **BarTender 2016 R7 UltraLite** > click **BarTender UltraLite**, or double-click the **BarTender UltraLite** icon on the desktop.
- For Windows 8.1, Windows Server 2012, or Windows Server 2012 R2:
  Click **BarTender UltraLite** on the application screen, or double-click the **BarTender UltraLite** icon on the desktop.
- For Windows 7:
  Start > **All Programs** > **BarTender 2016 R7 UltraLite** > click **BarTender UltraLite**, or double-click the **BarTender UltraLite** icon on the desktop.

2. Follow the on-screen steps to create a label.



Note

For more information on using BarTender, click **Help**.

3. Click **File** > **Print** to print the label.

6. Operation

6.1 Power-on Utilities

There are various power-on utilities to set up and test the printer's functions.

Use power-on utilities to set sensor calibration, self-test, and factory default functions.

1. Turn off the label printer.
2. Press and hold the right **Selection** button, and then turn on the Power Switch.
3. Release the button when the function you want to set or test appears on the screen.

Power-On Utility	**Power LED Patterns**						
LED color / Function	Amber (Lit)	Red (Blinks five times)	Amber (Blinks five times)	Green (Blinks five times)	Green/ Amber (Blinks five times)	Red/ Amber (Blinks five times)	Green (Lit)
1. Sensor Calibration (Gap / black mark sensor)		✔					
2. Self-test (And enter Dump Mode)			✔				
3. Factory Default				✔			
4. Bline Calibration					✔		
5. Gap Calibration						✔	
6. READY (Skip AUTO.BAS)							✔

6.1.1 Ribbon and Gap/Black Mark Sensor Calibration

Calibrate the Gap/Black Mark Sensor sensitivity when:

- You purchase a new printer.
- You change label stock.
- The label printer initializes.

To calibrate the Ribbon and Gap/Black Mark Sensors:

1. Turn off the printer.
2. Press and hold the right **Selection** button, and then turn on the Power Switch.
3. Release the button when **Sensor Calibration** appears on the screen.

Note

- The LED color will change as follows:
  Amber (lit) → **red (5 times)** → amber (5 times) → green (5 times) → green/amber (5 times) → red/amber (5 times) → green (lit)
- To select the sensor for calibration, send the correct command to the printer:
  ・For the Gap Sensor: send the GAP command
  ・For the Black Mark Sensor: send the BLINE command
  For more information about the available commands, see the *FBPL Command Reference* on your model's **Manuals** page at support.brother.com.

6.1.2 Gap/Black Mark Sensor Calibration, Self-Test, and Entering Dump Mode

Calibrate the Gap or Black Mark Sensor if the sensor's settings used in the last print job are not suitable for the current print job. During the calibration of the Gap/Black Mark Sensor, the printer detects the label length, prints the internal configuration (self-test), and then enters Dump Mode.

To calibrate the Gap/Black Mark Sensor:

1. Turn off the printer.
2. Press and hold the right **Selection** button, and then turn on the Power Switch.
3. Release the button when **Self-test** appears on the screen.

Note

The LED color will change as follows:

Amber (lit) → red (5 times) → **amber (5 times)** → green (5 times) → green/amber (5 times) → red/amber (5 times) → green (lit)

4. The printer calibrates the sensor and detects the label length, prints the internal settings, and then enters Dump Mode.

Note

To select the sensor for calibration, send the correct command to the printer:

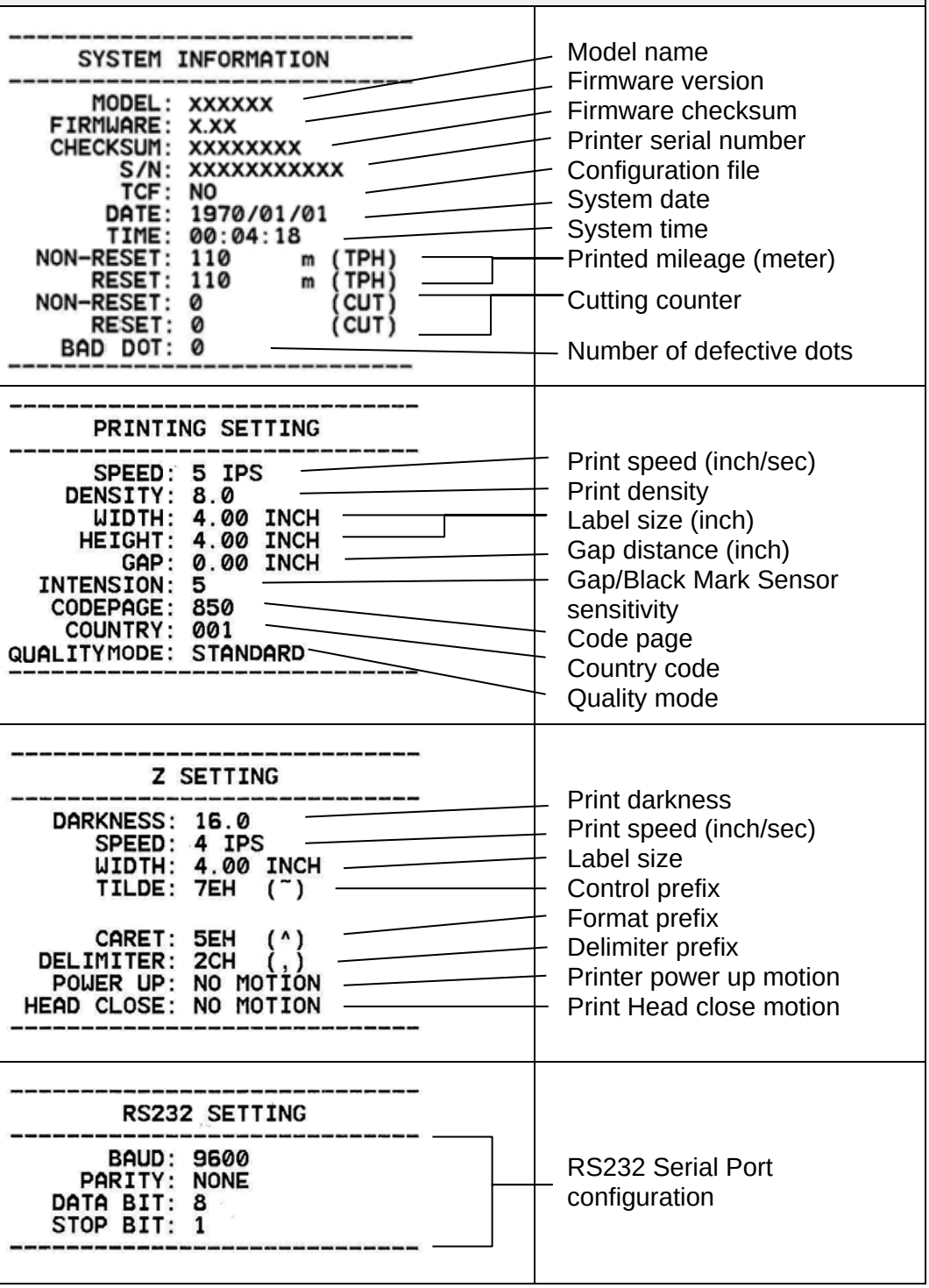
- For the Gap Sensor: send the GAP command
- For the Black Mark Sensor: send the BLINE command

For more information about the available commands, see the *FBPL Command Reference* on your model's **Manuals** page at support.brother.com.

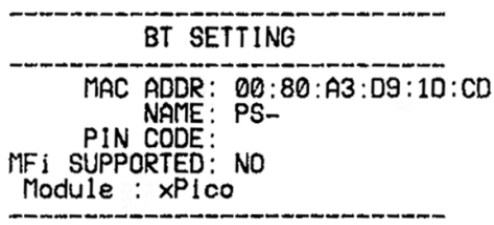
■ Self-test

Print the printer configuration after you run Gap/Black Mark Sensor calibration. The self-test printout lists the printer's configuration and available memory, and can indicate if there is any dot damage on the heater component.

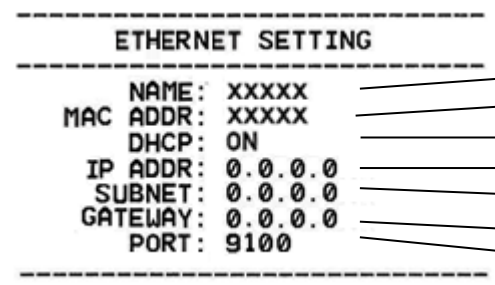
Self-test printout



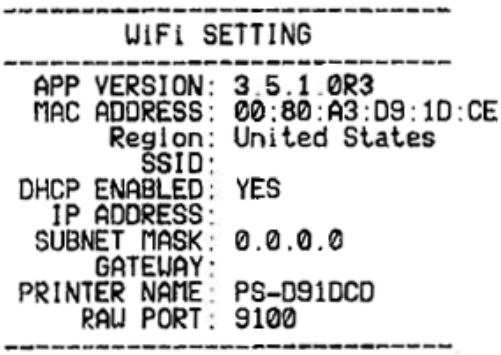
Self-test printout



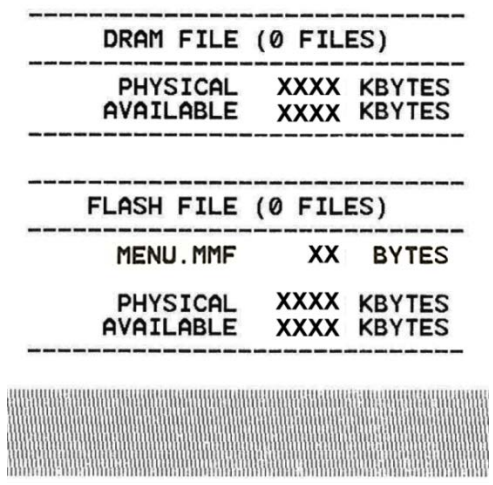
Bluetooth configuration



Printer name
Mac Address
DHCP
IP Address
Subnet Mask
Gateway
RAW Port



Wi-Fi configuration



Number of downloaded files
Total and available memory space

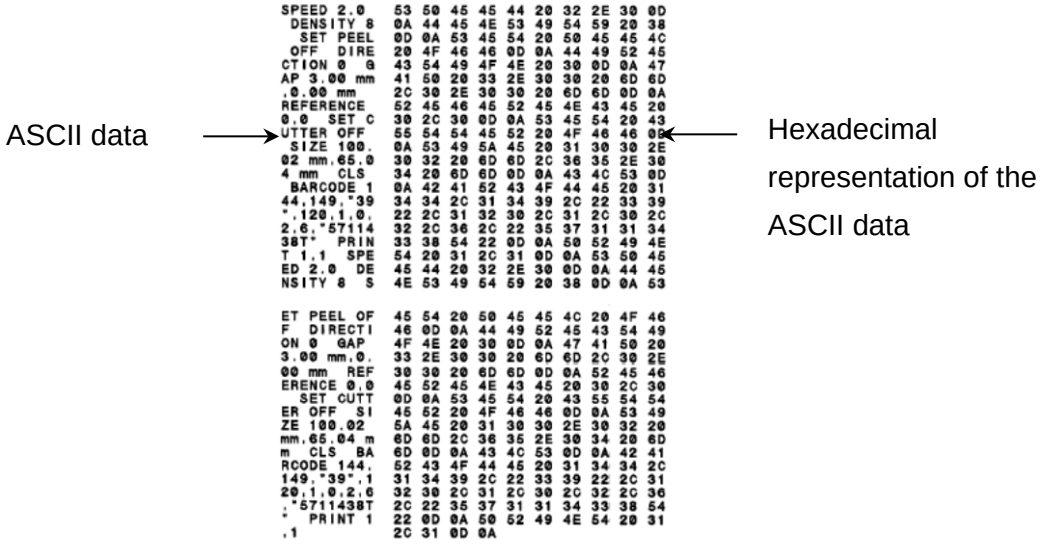
Print Head check pattern

■ Dump Mode

Note

- Dump Mode requires 101.5 mm wide paper.
- To resume normal printing, turn the printer off and then on again.

The printer enters Dump Mode after printing the printer configuration. Dump Mode allows users to verify and debug the printer's programs. The characters in the left column are received from the printer's system and those in the right column are their hexadecimal representation.



6.1.3 Printer Initialization

Printer initialization clears the printer's DRAM and restores its factory settings.

1. Turn off the printer.
2. Press and hold the right **Selection** button, and then turn on the Power Switch.
3. Release the button when **Factory Default** appears on the screen.

Note

The LED color will change as follows:

Amber (lit) → red (5 times) → amber (5 times) → **green (5 times)** → green/amber (5 times) → red/amber (5 times) → green (lit)

After the initialization, the following factory settings will be restored:

Parameter	Default setting
Speed	152.4 mm/sec (6 ips) (203 DPI) 101.4 mm/sec (4 ips) (300 DPI) 76.2 mm/sec (3 ips) (600 DPI)
Density	8
Label Width	101.5 mm
Label Height	101.5 mm
Sensor Type	Gap sensor
Gap Setting	3 mm
Print Direction	0
Reference Point	0,0 (upper left corner)
Offset	0
Tear Mode	On
Peeler Mode	Off
Cutter Mode	Off
Rewinder Mode	Off
Code Page	850
Country Code	001
Clear Flash Memory	No

6.1.4 Media Sensor Calibration (for the Black Mark Sensor)

1. Turn off the printer.
2. Press and hold the right **Selection** button, and then turn on the Power Switch.
3. Release the button when **Bline Calibration** appears on the screen.

Note

The LED color will change as follows:

Amber (lit) → red (5 times) → amber (5 times) → green (5 times) → **green/amber (5 times)** → red/amber (5 times) → green (lit)

6.1.5 Media Sensor Calibration (for the Gap Sensor)

1. Turn off the printer.
2. Press and hold the right **Selection** button, and then turn on the Power Switch.
3. Release the button when **Gap Calibration** appears on the screen.

Note

The LED color will change as follows:

Amber (lit) → red (5 times) → amber (5 times) → green (5 times) → green/amber (5 times) → **red/amber (5 times)** → green (lit)

6.1.6 Skip the AUTO.BAS Program

You can upload the AUTO.BAS program to the printer's flash memory so that it runs automatically at startup, but if you do not want it to run automatically, follow these steps:

1. Turn off the printer.
2. Press and hold the right **Selection** button, and then turn on the Power Switch.
3. Release the button when **READY** (Skip AUTO.BAS) appears on the screen.

Note

The LED color will change in the following order:
Amber (lit) → red (5 times) → amber (5 times) → green (5 times) → green/amber (5 times) → red/amber (5 times) → **green (lit)**

4. The printer will start without running the AUTO.BAS program.

7. Change Printer Settings

7.1 Setting Menu

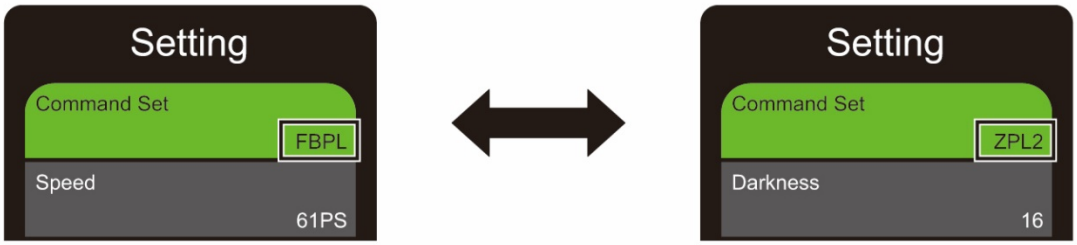
TJ-4420TN/TJ-4520TN/TJ-4620TN

1. From the Main Menu, select **Setting**.
2. Select the programming language you want in **Command Set**.

3. Press the button under the icon.

TJ-4422TN/TJ-4522TN

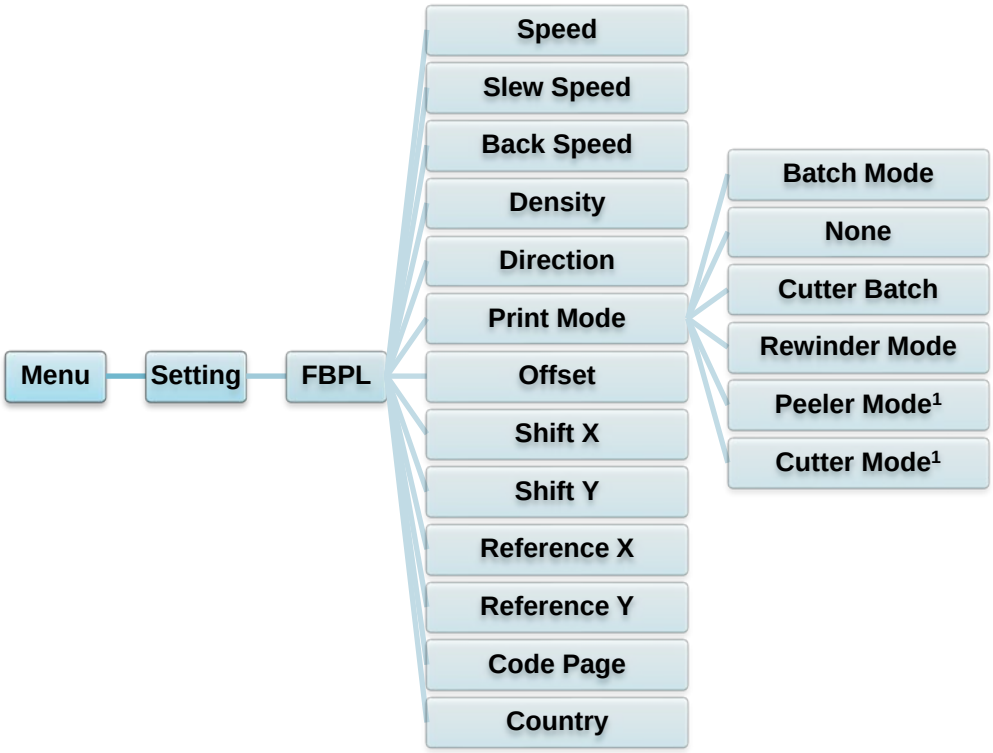
1. In the Main Menu, tap **Setting**.
2. Tap **Command Set**, and then select the programming language you want.



3. Tap the icon.

7.1.1 FBPL Settings

Available FBPL settings:



[1] Available for TJ-4420TN, TJ-4520TN, and TJ-4620TN only.

Setting	Description
Speed	Set up the print speed. Settings range from: • 2 - 14 for 203 dpi (Default: 6) • 2 - 12 for 300 dpi (Default: 4) • 1 - 6 for 600 dpi (Default: 3)
Slew Speed	Set up the printer feed speed. Settings range from: • 2 - 8 for 203 dpi • 2 - 8 for 300 dpi • 1.5 - 6 for 600 dpi
Back Speed	Set up the printer backfeed speed. Settings range from: • 2 - 3 for 203 dpi • 2 - 3 for 300 dpi • 1.5 - 3 for 600 dpi
Density	Adjust the print darkness/lightness. Settings range from 0 to 15. You may need to adjust the print density based on the media.
Direction	Specify print direction. DIRECTION 0 / DIRECTION 1 Direction FEED Direction

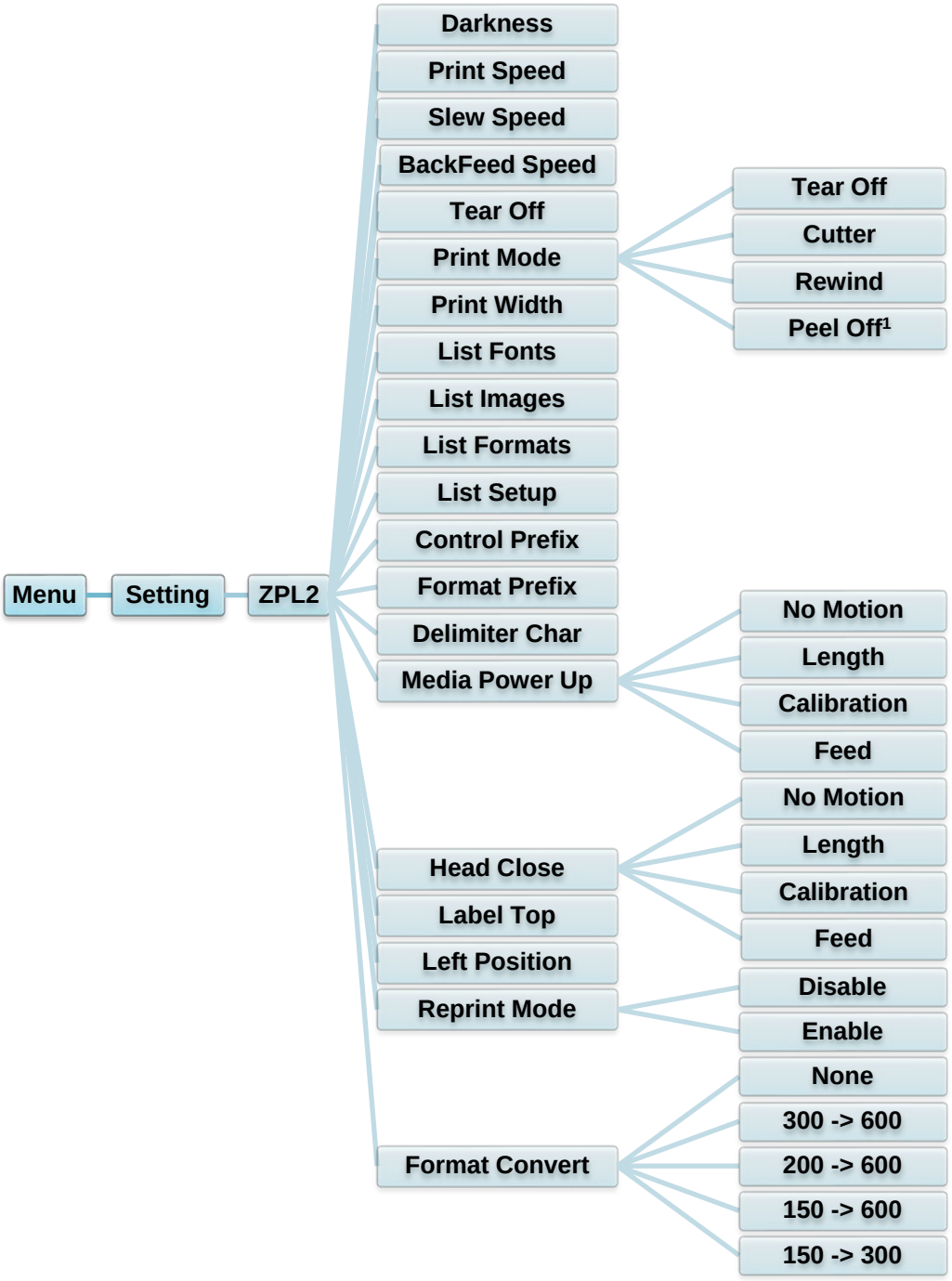
<table>
<tr><th>Setting</th><th>Description</th></tr>
<tr><td>Print Mode</td><td>Set the Print Mode.
<table>
<tr><th>Print Mode</th><th>Description</th></tr>
<tr><td>Batch Mode</td><td>When the image is printed, the Gap/Black Mark is fed through the tear plate for tear away.</td></tr>
<tr><td>None</td><td>The top of the next label is aligned with the Print Head burn line (Tear Off Mode).</td></tr>
<tr><td>Cutter Batch</td><td>Cuts the label once at the end of the printing job.</td></tr>
<tr><td>Rewinder Mode</td><td>Enables Rewinder Mode.</td></tr>
<tr><td>Peeler Mode</td><td>Enables Peeler Mode.</td></tr>
<tr><td>Cutter Mode</td><td>Enables Cutter Mode.</td></tr>
</table></td></tr>
<tr><td>Offset</td><td>Fine-tune the media stop location. Settings range from -999 dots to 999 dots.</td></tr>
<tr><td>Shift X</td><td rowspan="2">Fine-tune the print position. Settings range from -999 dots to 999 dots.</td></tr>
<tr><td>Shift Y</td></tr>
<tr><td>Reference X</td><td rowspan="2">Set the origin of the printer coordinate system horizontally and vertically. Settings range from 0 dots to 999 dots.</td></tr>
<tr><td>Reference Y</td></tr>
<tr><td>Code Page</td><td>Set the international character set code page.</td></tr>
<tr><td>Country</td><td>Set the country code. Settings range from 1 to 358.</td></tr>
</table>

Note

If printing from the downloaded software/driver, the software/driver commands will overwrite the Printer settings.

7.1.2 ZPL2 Settings

Available ZPL2 settings:



[1] Available for TJ-4420TN, TJ-4520TN, and TJ-4620TN only.

Setting	Description
Darkness	Set up the print darkness. Settings range from 0 to 30. You may need to adjust the print density based on the selected media.
Print Speed	Set up the print speed. Settings range from: • 2 - 18 for 203 dpi (Default: 6) • 2 - 14 for 300 dpi (Default: 4) • 1.5 - 6 for 600 dpi (Default: 3)

<table>
<tr><th>Setting</th><th>Description</th></tr>
<tr><td>Slew Speed</td><td>Set up the printer feed speed. Settings range from:
2 - 8 for 203 dpi
2 - 8 for 300 dpi
2 - 6 for 600 dpi</td></tr>
<tr><td>BackFeed Speed</td><td>Set up the printer backfeed speed. Settings range from:
2 - 3 for 203 dpi
2 - 3 for 300 dpi
2 - 3 for 600 dpi</td></tr>
<tr><td>Tear Off</td><td>Fine-tune the media stop location. Settings range from -120 dots to 120 dots.</td></tr>
<tr><td>Print Mode</td><td>Set the print mode.
<table>
<tr><th>Print Mode</th><th>Description</th></tr>
<tr><td>Tear Off</td><td>The top of the next label is aligned with the Print Head burn line.</td></tr>
<tr><td>Peel Off</td><td>Enable the Peeler Mode.</td></tr>
<tr><td>Cutter</td><td>Enable the Cutter Mode.</td></tr>
<tr><td>Rewind</td><td>Enable the Rewind Mode.</td></tr>
</table></td></tr>
<tr><td>Print Width</td><td>Set the print width. Settings range from 2 dots to 999 dots.</td></tr>
<tr><td>List Fonts</td><td>Print the current printer fonts list to the label. The fonts can be stored in the printer’s DRAM, Flash, or optional memory card.</td></tr>
<tr><td>List Images</td><td>Print the current printer images list to the label. The images can be stored in the printer’s DRAM, Flash, or optional memory card.</td></tr>
<tr><td>List Formats</td><td>Print the current printer formats list to the label. The formats can be stored in the printer’s DRAM, Flash, or optional memory card.</td></tr>
<tr><td>List Setup</td><td>Print the current printer configuration.</td></tr>
<tr><td>Control Prefix</td><td>Set the control prefix character.</td></tr>
<tr><td>Format Prefix</td><td>Set the format prefix character.</td></tr>
<tr><td>Delimiter Char</td><td>Set the delimiter character.</td></tr>
<tr><td>Media Power Up</td><td>Set the media action you want when you turn the printer on.
<table>
<tr><th>Action</th><th>Description</th></tr>
<tr><td>Feed</td><td>The printer ejects one label.</td></tr>
<tr><td>Calibration</td><td>The printer calibrates the sensor levels, determines the label length, and feeds one label.</td></tr>
<tr><td>Length</td><td>The printer determines the label length and feeds the label.</td></tr>
<tr><td>No Motion</td><td>No action.</td></tr>
</table></td></tr>
</table>

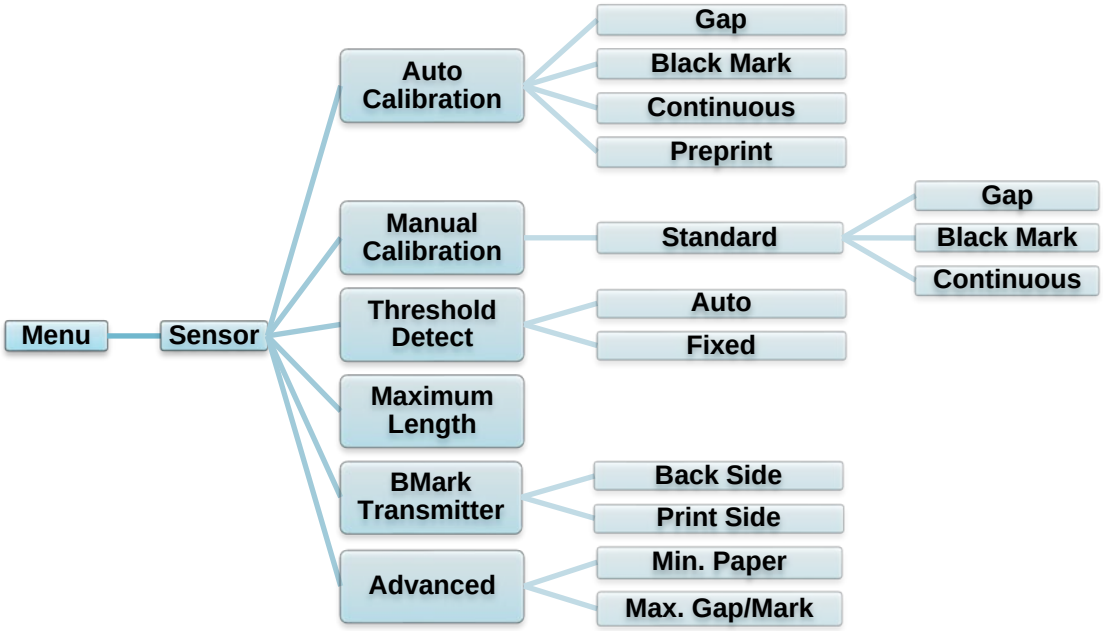
<table>
<tr><th>Setting</th><th>Description</th></tr>
<tr><td>Head Close</td><td>Set the media action when you close the Print Head.
<table>
<tr><th>Action</th><th>Description</th></tr>
<tr><td>Feed</td><td>The printer ejects one label.</td></tr>
<tr><td>Calibration</td><td>The printer calibrates the sensor levels, determines the label length, and feeds one label.</td></tr>
<tr><td>Length</td><td>The printer determines the label length and feeds the label.</td></tr>
<tr><td>No Motion</td><td>No action.</td></tr>
</table></td></tr>
<tr><td>Label Top</td><td>Adjust the print position vertically on the label. Settings range from -120 dots to +120 dots.</td></tr>
<tr><td>Left Position</td><td>Adjust the print position horizontally on the label. Settings range from -9999 dots to +9999 dots.</td></tr>
<tr><td>Reprint Mode</td><td>Reprint the last label by selecting the up arrow ( ) button on the screen.</td></tr>
<tr><td>Format Convert</td><td>Selects the bitmap scaling factor. The first number is the original DPI value; the second number is the DPI setting you want.</td></tr>
</table>

Note

If printing from the downloaded software/driver, the software/driver commands will overwrite the settings set from the screen.

7.2 Sensor Settings

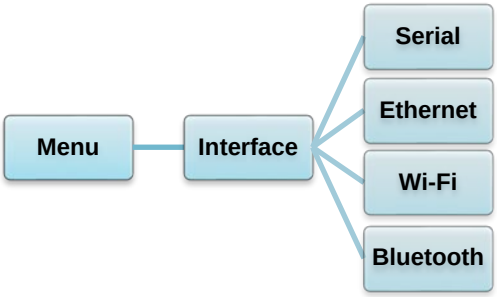
We recommend calibrating the sensors every time you change the media.



Setting	Description
Auto Calibration	Set the media sensor type and calibrate the selected sensor automatically. The printer feeds up to three gap labels to calibrate the sensor sensitivity automatically.
Manual Calibration	If “Auto Calibration” cannot apply to the media, use the “Manual Calibration” function to set the paper length and gap/BLINE size, and then scan the backing/mark to calibrate the sensor sensitivity.
Threshold Detect	Set the sensor sensitivity to Fixed or Auto.
Maximum Length	Set the maximum length for label calibration.
BMark Transmitter	Set the upper black mark sensor or the lower black sensor as the main transmitter. Action: Back Side — The black mark is back side. Action: Print Side — The black mark is printing side.
Advanced	Set the minimum paper length and maximum gap/BLINE length to calibrate the sensor sensitivity automatically.

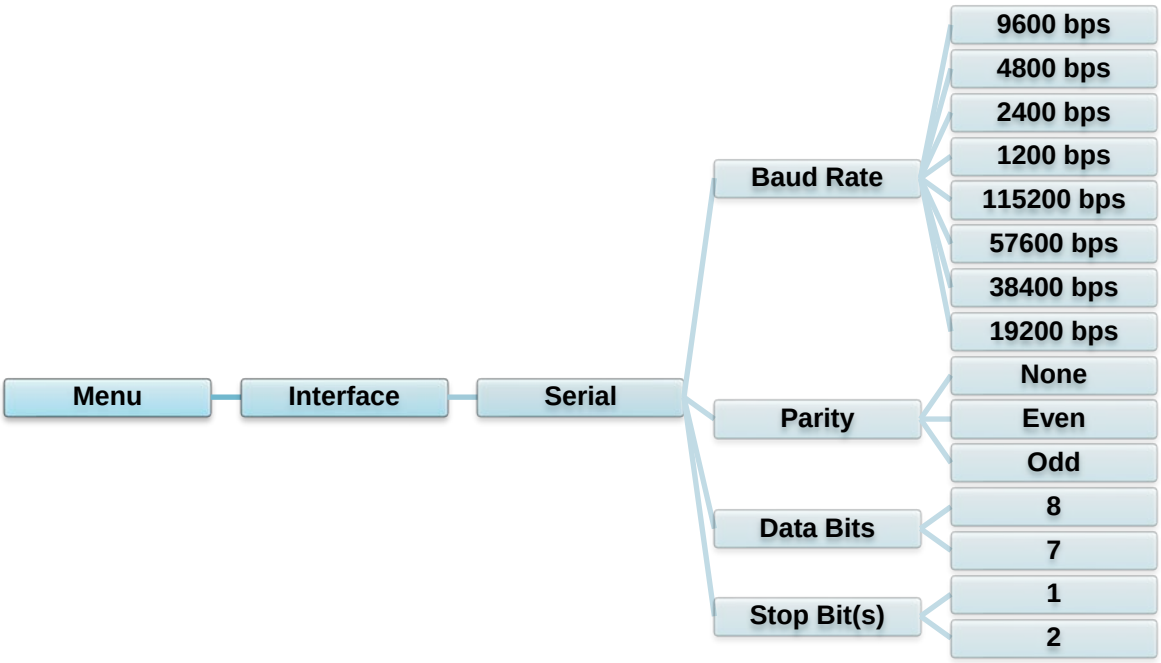
7.3 Interface Settings

Set the printer interface settings.



7.3.1 Serial Communication Settings

Set the printer RS-232 settings.

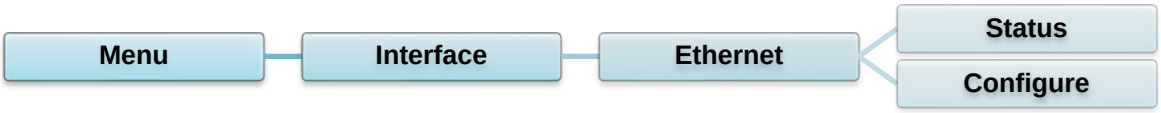


Setting	Description
Baud Rate	Set the RS-232 Baud rate.
Parity	Set the RS-232 Parity.
Data Bits	Set the RS-232 Data bits.
Stop Bit(s)	Set the RS-232 Stop bits.

7.3.2 Ethernet Settings

Configure your printer's Ethernet (wired) connection and check its status.

When the Ethernet is connected, the Ethernet icon and IP address appear on the screen as shown below.



Item	Description
Status	Check the Ethernet IP address and Mac address setting status.
Configure	**DHCP:** Enable (On) or disable (Off) the Dynamic Host Configuration Protocol (DHCP) network protocol. **Static IP:** Set the printer's IP address, subnet mask, and gateway.

Note

For information about installing a printer driver, see section *5.1.4 Wired Network Connection (Windows)*.

7.3.3 Wi-Fi Settings

Note

To use Wi-Fi, the optional WLAN / BT Interface (PA-WB-001) is required.

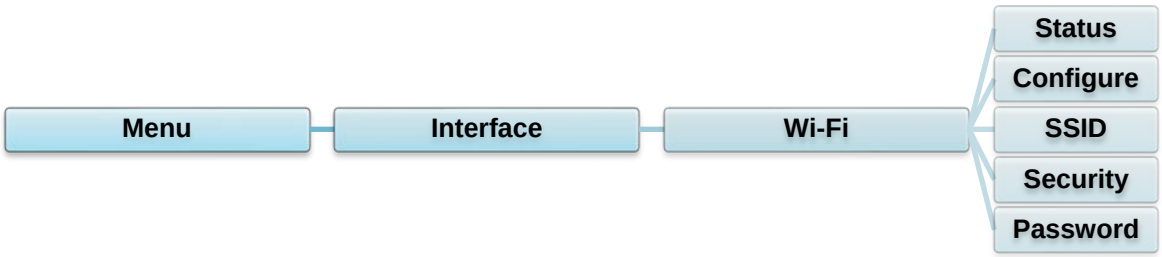
Configure your printer's Wi-Fi connection and check its status.

To use this feature, set up the Enterprise configuration using the Brother Printer Management Tool (BPM). For more information on setting Wi-Fi using the BPM, see the *Brother Printer Management Tool Quick Start Guide* on your model's **Manuals** page at support.brother.com.

When the Wi-Fi Interface is connected, the Wi-Fi icon and IP address appear on the screen as shown below.

Note

Make sure both your wireless router/access point's and your printer's network settings are correctly set up. For more information, see the documentation provided with your wireless router/access point, or contact the router manufacturer, your system administrator, or Internet service provider.



Item	Description
Status	Check the Wi-Fi IP address and Mac address setting status.
Configure	**DHCP:** Enable (On) or disable (Off) the Dynamic Host Configuration Protocol (DHCP) network protocol. **Static IP:** Set the printer's IP address, subnet mask, and gateway.
SSID	Set the SSID (Network Name).
Security	Select the Wi-Fi encryption.
Password	Set the password (Network Key).

Note

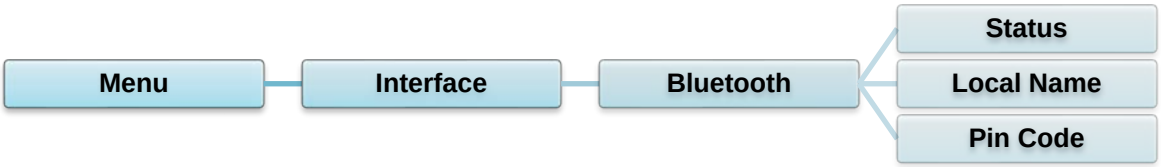
For information about installing a printer driver, see section *5.1.3 Wi-Fi Network Connection (Windows)*.

7.3.4 Bluetooth Settings

Note

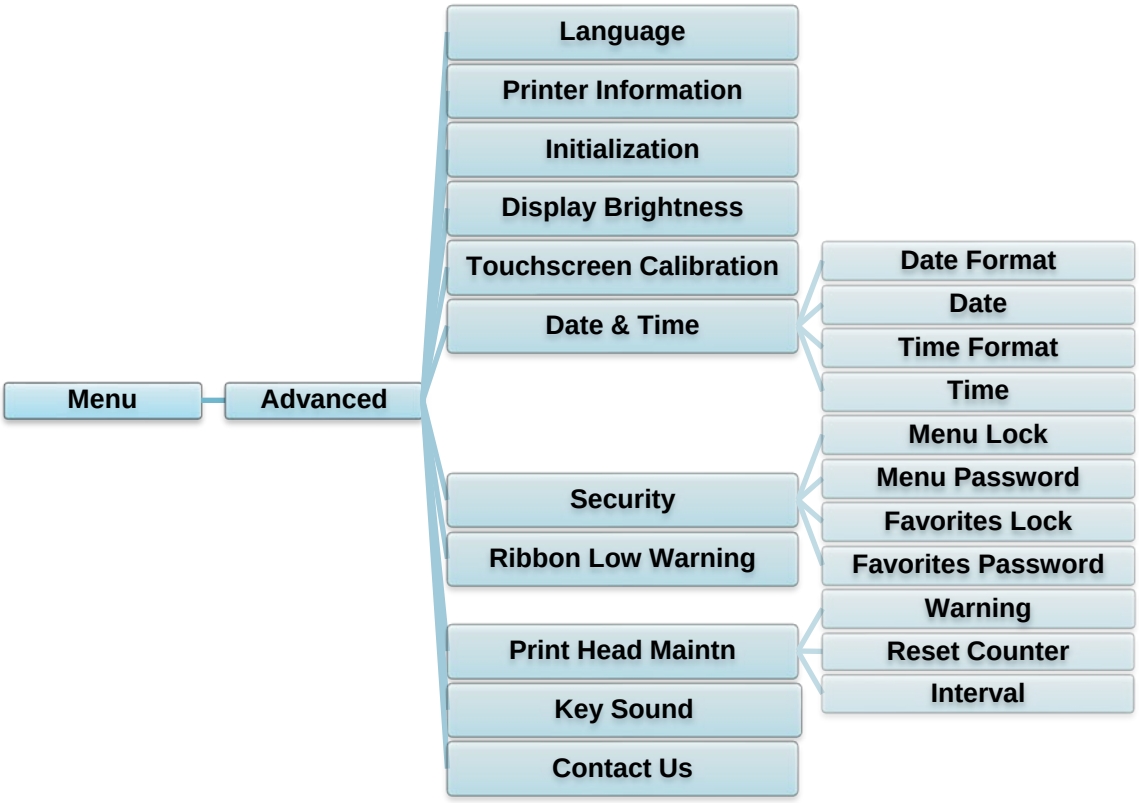
To use Bluetooth, the optional WLAN / BT Interface (PA-WB-001) is required.

Configure your printer's Bluetooth connection, check its status, and reset the local name. Enable the Bluetooth feature to allow your mobile device to discover and connect your printer.



Item	Description
Status	Check the Bluetooth setting status.
Local Name	Reset the Bluetooth local name.
Pin Code	Set the local PIN code for Bluetooth.

7.4 Advanced Settings



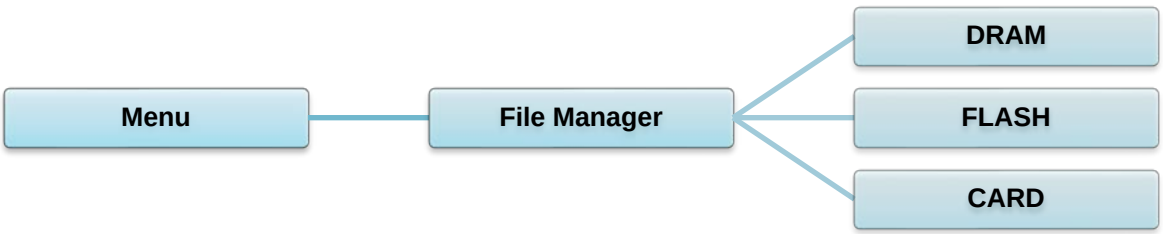
Item	Description
Language	Specify the screen language.
Printer Information	Check the printer serial number, printed mileage (in./m), number of printed labels (pcs), and cutting counter.
Initialization	Restore the printer settings to the default settings.
Display Brightness	Adjust the screen brightness (settings range from 0 to 100).
Touchscreen Calibration	Calibrate the screen.
Date & Time	Adjust the date and time displayed on the screen.
Security	Set the password for locking the menu or favorites. The default password is 8888.
Ribbon Low Warning	Set the Ribbon Low Warning message. For example, if you set the value at 30 m, when the ribbon capacity is less than 30 m, the icon appears in red.

<table>
<tr><th>Item</th><th>Description</th></tr>
<tr><td>Print Head Maintn</td><td>Check the Print Head status and maintenance notifications.

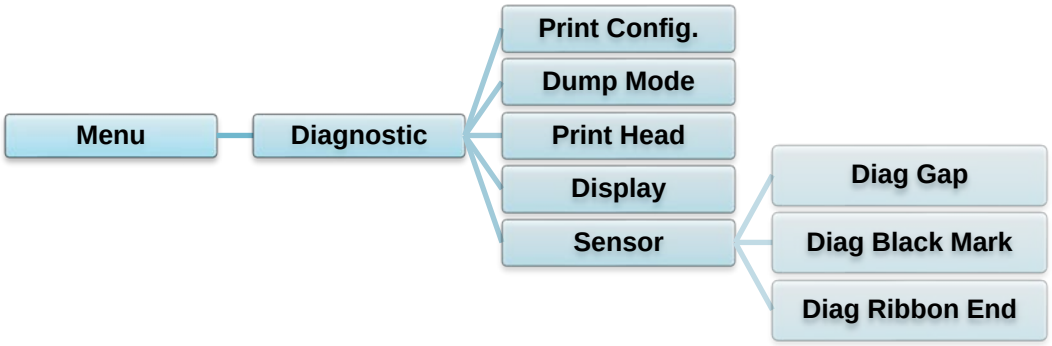
<table><tr><th>Item</th><th>Description</th></tr><tr><td>Warning</td><td>Enable or disable the Print Head cleaning warning. If this setting is enabled and the Print Head has reached the setting mileage limit, a warning appears on the screen to remind you to clean the Print Head. The default setting is "Disable".</td></tr><tr><td>Reset Counter</td><td>Reset the Print Head mileage warning after the Print Head has been cleaned.</td></tr><tr><td>Interval</td><td>Set the mileage for when to display the Print Head cleaning warning. You must enable the “TPH warning lock” to use it. The default setting is 1 km.</td></tr></table></td></tr>
<tr><td>Key Sound</td><td>Enable or disable the button press sound.</td></tr>
<tr><td>Contact Us</td><td>Displays a QR code to access the Brother Support website at support.brother.com using a mobile device.</td></tr>
</table>

7.5 File Manager

Check the printer's available memory, show the files list, delete the files, or run the files that are saved in the printer's DRAM/Flash/Card memory.



7.6 Diagnostic Functions



Item	Description
Print Config.	Print the current printer configuration. On the configuration printout, there is a Print Head test pattern, which is useful for checking if there is dot damage to the Print Head Heating Element. For more information, see section *6.1.2 Gap/Black Mark Sensor Calibration, Self-Test, and Entering Dump Mode*.
Dump Mode	Captures the data from the communications port and prints out the data received by the printer. In the Dump Mode, all characters will be printed in two columns. The characters in the left column are received from the printer's system and those in the right column are their hexadecimal representation. It allows you to verify and debug the program. For more information, see section *6.1.2 Gap/Black Mark Sensor Calibration, Self-Test, and Entering Dump Mode*. **Note** Dump Mode requires 101.6 mm paper width.
Print Head	Check for any visible dots and the Print Head's temperature.
Display	Check the screen color state.
Sensor	Check the sensors' intensity and reading state.

Item	Description
Diag Gap	Return current value from GAP sensor.
Diag Black Mark	Return current value from Black Mark sensor.
Diag Ribbon End	Return current value from Ribbon End sensor.

8. Brother Printer Management Tool (BPM)

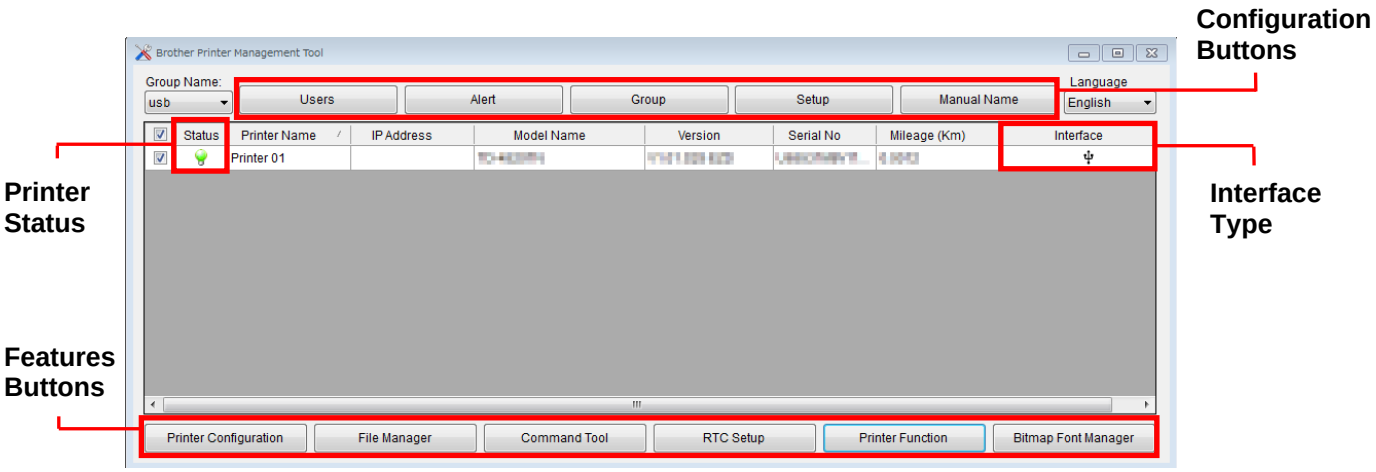
The Brother Printer Management Tool (BPM) is an integrated tool that lets you:

- Check a printer's status and settings
- Change printer settings
- Send additional commands to a printer
- Download graphics and fonts
- Create a printer bitmap font
- Download and update firmware
- Configure the wireless LAN (Wi-Fi) and Bluetooth settings

Using this tool, you can also review your printer's status and settings to troubleshoot any problems.

8.1 Start the BPM

Double-click the BPM icon to start the software.



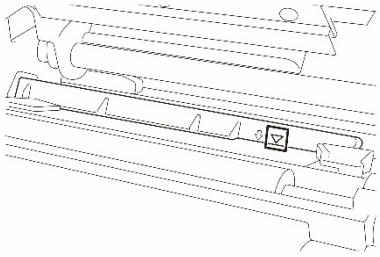
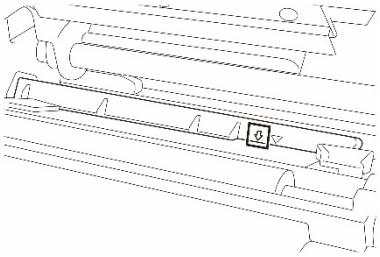
The BPM's main screen allows you to access the following options:

- Printer Configuration
- File Manager
- Command Tool
- RTC Setup
- Printer Function
- Bitmap Font Manager

For more information, see the *Brother Printer Management Tool Quick Start Guide* on your model's **Manuals** page at support.brother.com.

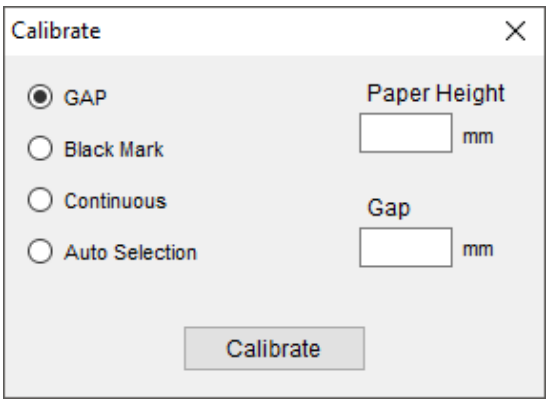
8.2 Auto-Calibrating the Media Sensor using the BPM

Use the BPM to set the media sensor type (Gap Sensor or Black Mark Sensor) and calibrate the selected sensor.

Gap Sensor	Black Mark Sensor
	

The Gap Sensor (transmissive sensor) detects the beginning of the label and the printer feeds the label to the correct position.
The Black Mark Sensor (reflective sensor) detects the mark and the printer feeds the media to the correct position.

1. Make sure the media is already installed and the Print Head is closed. (See section *3.4 Load the Media*.)
2. Turn on the printer.
3. Start the BPM.
4. Click the **Printer Function** button.
5. Click the **Calibrate** button.
6. Select the sensor media type and click **Calibrate**.



9. Product Specifications

Display	
LCD	(TJ-4420TN, TJ-4520TN, TJ-4620TN) 320 px × 240 px, 3.5" color TFT display (TJ-4422TN, TJ-4522TN) 16-bit color, 480 px × 272 px, with backlight, Resistive Touchscreen
LED	1 power indicator (3 colors - Green, Red, Amber)
Printing	
Print Method	Thermal Transfer and Direct Thermal
Maximum Print Width	104 mm
Maximum Print Length	(TJ-4420TN/TJ-4422TN) 25,400 mm (TJ-4520TN/TJ-4522TN) 11,430 mm (TJ-4620TN) 2,540 mm
Maximum Print Speed	(TJ-4420TN/TJ-4422TN) 356 mm / second (TJ-4520TN/TJ-4522TN) 305 mm / second (TJ-4620TN) 152 mm / second
Print Resolution	(TJ-4420TN/TJ-4422TN) 203 dpi (TJ-4520TN/TJ-4522TN) 300 dpi (TJ-4620TN) 600 dpi

Size	
Dimensions	(TJ-4420TN/TJ-4520TN/TJ-4620TN) 276 mm (W) × 326 mm (H) × 502 mm (D) (TJ-4422TN/TJ-4522TN) 276 mm (W) × 412 mm (H) × 502 mm (D)
Weight	(TJ-4420TN/TJ-4520TN/TJ-4620TN) Approximately 15.35 kg (TJ-4422TN/TJ-4522TN) Approximately 18.93 kg
Interface	
USB	USB Ver. 2.0 (High Speed) (Type B)
Serial	RS-232
Wired LAN	10/100 Mbps
USB Host Port	Stand-alone: USB keyboard, USB scanner Storage: USB flash driver
Bluetooth (Optional)	Wi-Fi and Bluetooth co-exist module
Bluetooth	Bluetooth Ver.4.2 SPP (Bluetooth Classic), GATT (Bluetooth Low Energy)
Wi-Fi (Optional)	IEEE 802.11a/b/g/n
Wi-Fi Security	Open, WEP-Open, WPA-PSK/WPA2 (AES and TKIP) - 802.11i - WPA2-Enterprise: EAP-FAST, EAP-TTLS, EAP-TLS, PEAPv0
Environment	
Temperature	Operation: 0°C - 40°C Storage: -40°C - 60°C
Humidity	Operation: 25% - 85% (without condensation) Storage: 10% - 90% (without condensation)
Power Supply	
Power Supply	Internal Switching Power Supply • Input: AC 100 V - 240 V, 4.0 A - 2.0 A, 50 Hz - 60 Hz • Output: DC 5 V, 5.0 A; DC 24 V, 7.0 A; DC 36 V, 1.4 A; Total 243 W

Paper Specification	
Media Type	Continuous, die-cut, black mark, fan-fold, notch, perforated, tag, care label Peeler mode: regular coated paper
Wound Type	Outside wound
Media Width	20 mm - 114 mm
Media Thickness	0.06 mm - 0.28 mm
Roll Outside Diameter (maximum)	203.2 mm
Core Size	38.1 mm - 76.2 mm
Media Sensor	Gap (Transmissive), Black mark (Reflective)
Ribbon Specification	
Width	600 m long, max. Outer Diameter 90 mm
Core Size	25.4 mm (ink coated outside or inside)
Ribbon Width	25.4 mm - 114.3 mm
Other	
Cutter	Heavy Duty Cutter option (full cut guillotine cutter), (Not User Replaceable) [1]
Label Peeler	Label Peeler option (Not User Replaceable)[1]
Supported Barcodes	• 1D barcodes Code128UCC, Code128 (subsets A, B, C), EAN128, Interleaved 2 of 5, Interleaved 2 of 5 with check digit, Code39, Code39 with check digit, Code93, EAN13, EAN8, UPCA, UPCE, EAN and UPC 2 (5) digits add-on, Codabar, Postnet, MSI, MSI with check digit, PLESSEY, China post, ITF14, Code11, TELEPEN, TELEPENN, PLANET, Code49, Deutsche Post Identcode, Deutsche Post Leitcode, LOGMARS, Standard 2 of 5, Industrial 2 of 5, EAN14 • 2D barcodes GS1 DataBar, GS1 DataMatrix, Maxicode, AZTEC, PDF417, QR Code, Micro PDF 417, CODABLOCK F mode, TLC39
Printer Control Command	FBPL-EZD (Compatible to FBPL II, EPL II, ZPL II, DPL) FBPL-EZS (Compatible to FBPL II, EPL II, ZPL II, SBPL)
Built-in Fonts	• 8 alphanumeric bitmap fonts • Monotype Imaging® TrueType font engine with one CG Triumvirate Bold Condensed scalable font

[1] Only authorized Brother Dealers should perform accessory replacements.

9.1 Recommended microSD Cards

microSD Card Class	Capacity	Approved Manufacturer
V2.0 Class 4	4 GB	Transcend
	8 GB	Transcend
V3.0 Class 10 UHS-I	16 GB	Transcend
		Sandisk
	32 GB	Transcend
V3.0 Class 10	16 GB	Kingston
V2.0 Class 4	16 GB	Sandisk

Note

- Make sure your microSD card uses the DOS FAT file system.
- The folders and files stored on the microSD card must be in the 8.3 file name format.
- You must purchase a miniSD or SD card adapter separately.

10. Troubleshooting

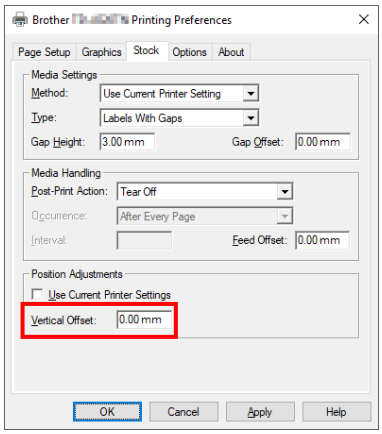
10.1 Common Problems

This chapter explains how to resolve typical problems you may encounter when using the printer. If you have any problems with the printer, first make sure you have performed the following tasks correctly.

If you still have problems, contact the product manufacturer's customer service or your local dealer.

Problem	Possible Cause	Solution
The LED Indicator is not lit.	The Power Cord is not correctly connected.	Make sure the printer is correctly connected to the power outlet (electrical socket) using the Power Cord.
	The Power Switch is off.	Turn the printer on.
Memory full (DRAM/Flash/Card).	The printer's DRAM/Flash/ Card memory is full.	Delete unused files from the DRAM/Flash/ Card memory.
The microSD card cannot be used.	The microSD card is damaged.	Use a different microSD card.
	The microSD card is not inserted correctly.	Insert the microSD card again.
	The microSD card is made by a non-approved manufacturer.	For the supported microSD card specification and the approved microSD card manufacturers, see section *9.1 Recommended microSD Cards*.
Not Printing.	The serial or USB cable is not connected correctly.	Reconnect the serial or USB cable.
	The wireless device may be connected incorrectly to the printer.	Reset the device's wireless settings and set up the device again.
	The serial or USB cable may be damaged.	Try a new cable.
	The port specified in the Windows driver is not correct.	Specify the correct port.
	The Print Head may need cleaning.	Clean the Print Head.
	Your custom program may not contain the necessary commands.	Make sure that your program contains the PRINT command at the end of the file and a CRLF at the end of each command line.
No print on the label.	The ribbon/media is loaded incorrectly.	Reload the media/ribbon.
		Make sure the ink coated ribbon is set in the correct position.
	The ribbon/media is incompatible.	Install the correct ribbon/media.
	The print density/darkness is set incorrectly.	Adjust the print density/darkness.

Problem	Possible Cause	Solution
Poor Print Quality.	The ribbon/media is loaded incorrectly.	Reload the media/ribbon.
	Dust or adhesive has accumulated on the Print Head.	Clean the Print Head.
		Clean the Platen Roller.
	The print density is set incorrectly.	Adjust the print density and print speed.
	The Print Head is damaged.	Run the printer self-test and check the Print Head test pattern for missing dots.
	The ribbon/media is incompatible.	Install the correct ribbon/media.
	The Print Head tension is not set correctly.	Use the Print Head Tension Adjustment Knob to adjust the Print Head tension. (See section *4. Improve Print Quality*)
		The Release Lever is not locked in place.
Incomplete printing on the left or right side of label.	The label size is not specified correctly.	Check if the label size is set up correctly.
Blank labels with gray lines.	The Print Head is dirty.	Clean the Print Head.
	The Platen Roller is dirty.	Clean the Platen Roller. (See section *11. Maintenance*.)
Irregular printing.	The printer is in Hex Dump Mode.	Turn the printer on and off to skip the Dump Mode. (See section *6.1.2 Gap/Black Mark Sensor Calibration, Self-Test, and Entering Dump Mode*.)
	The printer's RS-232 communication is not set correctly.	Make sure the printer's RS-232 settings are set up correctly. For more information, see section *7.3.1 Serial Communication Settings*.
Labels are fed incorrectly (skewed) when printing.	The media guide does not touch the edge of the media.	If the label is moving to the right side, move the Front Label Guide to the left.
		If the label is moving to the left side, move the Front Label Guide to the right.
Labels are skipped when printing.	The label size is not specified correctly.	Check if the label size is set up correctly.
	The sensor sensitivity is not set correctly.	Calibrate the Gap Sensor either manually or automatically (See section *7.2 Sensor Settings*).
	The media sensor is dirty.	Clean the Gap/Black Mark Sensor using a compressed air or vacuum.
Ribbon Wrinkles.	The Print Head tension is not set correctly.	Use the Print Head Tension Adjustment Knob to adjust the Print Head tension. (See section *4. Improve Print Quality*)
	The ribbon is installed incorrectly.	Reinstall the ribbon. To install the ribbon roll, see section *3.2 Load the Ribbon*.
	The media is installed incorrectly.	Reinstall the label roll. To install the label roll, see section *3.4 Load the Media*.
	The print density/darkness is not set correctly.	Adjust the print density/darkness to improve the print quality.

Problem	Possible Cause	Solution
	The media is not fed correctly.	Make sure the Front Label Guide touches the edge of the Media Guide Tips.
RTC time is incorrect when rebooting the printer.	The coin battery has dislodged. The coin battery has finished.	Contact the product manufacturer's customer service or your local dealer.
The left side printout position is incorrect.	The label size is set up incorrectly.	Set the correct label size.
	The Shift X setting is incorrect.	Fine-tune the Shift X setting. For more information, see *7.1.1 FBPL Settings*.
The printing position of small labels is incorrect.	The media sensor sensitivity is not set correctly.	Calibrate the sensor sensitivity again.
	The label size is incorrect.	Set the correct label size and gap size.
	The Shift Y setting is incorrect.	Fine-tune the Shift Y setting. For more information, see *7.1.1 FBPL Settings*.
	The vertical offset setting in the driver is incorrect.	If using the BarTender software, set the Vertical Offset in the driver. 

10.2 Error Messages

When an error occurs, the screen displays the appropriate error message.

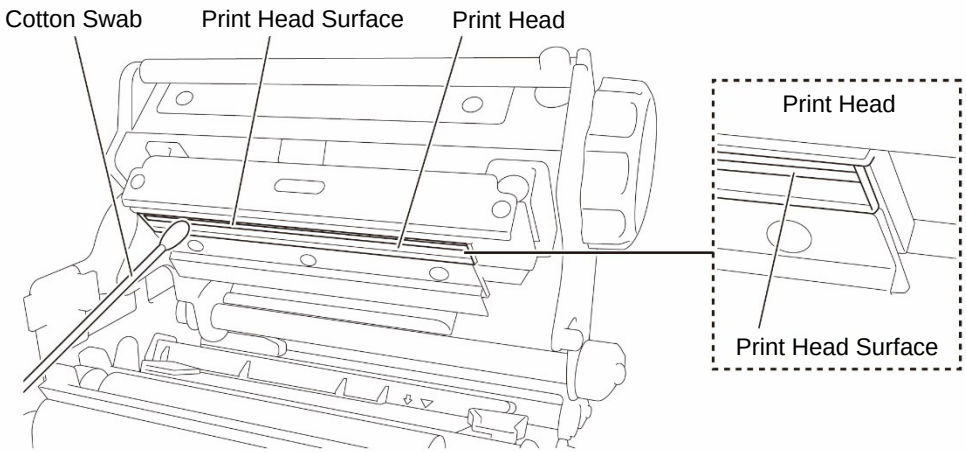
Error Message	Possible Cause	Solution
`Carriage Open`	The Print Head is open.	Close the Print Head.
`No Ribbon`	The ribbon has finished.	Install a new ribbon roll. To install a new ribbon roll, see section *3.2 Load the Ribbon*.
	The ribbon is installed incorrectly.	Reinstall the ribbon. To install the ribbon roll, see section *3.2 Load the Ribbon*.
`No Paper`	The label roll has finished.	Install a new label roll. To install a new label roll, see section *3.4 Load the Media*.
	The label is installed incorrectly.	Reinstall the label roll. To install the label roll, see section *3.4 Load the Media*.
	The Gap/Black Mark Sensor is not calibrated.	Calibrate the Gap/Black Mark Sensor.
`Paper Jam`	The Gap/Black Mark Sensor is not calibrated.	Calibrate the Gap/Black Mark Sensor.
	The label size is not set correctly.	Set the label size correctly.
	A paper jam occurred inside the printer.	Remove the jammed paper.
`Take Label`	**Peeler Mode** is enabled.	Remove the label.

11. Maintenance

We recommend cleaning your printer on a regular basis to maintain its correct performance.

Recommended cleaning materials:

- Cotton swab
- Lint-free cloth
- Vacuum / Blower brush
- Compressed air
- Isopropyl alcohol or ethanol

<table>
<tr><th>Printer Part</th><th>Cleaning Method</th><th>Interval</th></tr>
<tr><td rowspan="2">Print Head</td><td>1. Turn the printer off.
2. Allow the Print Head to cool down for at least one minute.
3. Wipe the Print Head with a cotton swab dipped in isopropyl alcohol or ethanol.</td><td>Clean the Print Head when changing a label roll.</td></tr>
<tr><td colspan="2"> 
</td></tr>
<tr><td>Platen Roller</td><td>1. Turn the printer off.
2. Rotate the Platen Roller and wipe it thoroughly with a lint-free cloth or cotton swab dipped in isopropyl alcohol or ethanol.</td><td>Clean the Platen Roller when changing a new label roll.</td></tr>
<tr><td>Peel Bar</td><td>Wipe with a lint-free cloth dipped in isopropyl alcohol or ethanol.</td><td>As needed.</td></tr>
<tr><td>Sensor</td><td>Use compressed air or vacuum.</td><td>Monthly.</td></tr>
<tr><td>Exterior</td><td>Wipe the printer exterior with a lint-free cloth dipped in water.</td><td>As needed.</td></tr>
<tr><td>Interior</td><td>Use a brush or vacuum.</td><td>As needed.</td></tr>
</table>

Note

- Do not touch the Print Head. If you have touched it, clean it as described above.
- Do not use medical alcohol as it may damage the Print Head. Use isopropyl alcohol or ethanol according to the manufacturer's safety guidelines, as applicable.
- To maintain correct performance, we recommend cleaning the Print Head and sensors every time you install a new ribbon.

IMPORTANT

Securely dispose of any printers, components, and supplies if they are no longer going to be used. Ensure there is no jammed paper in the printer and destroy the thermal transfer ribbon if it has retained any visible prints.