Wavecom

Wavecom

TT040-50BB

Bluetooth Ready Battery Powered Printer

User Manual

Wavecom Thermal Transfer Printer

The TT040-50-BB printer is powered by a Lithium Ion Battery and features Bluetooth connectivity.

Important: Do not turn off the rear power switch on the TT040-50-BB. Always use the Power Button on the side of the printer.

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Operating the Printer

Turning on the Printer

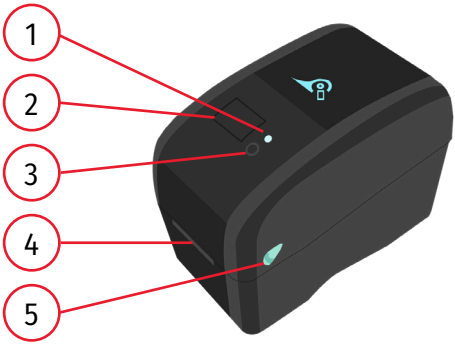
1. Before turning on the printer, ensure the battery is charged, and the battery isolation switch on the side of the printer is switched ON.
2. Press and hold the power button on the side of the printer for three to five seconds. The Battery Status indicator (next to the power button) will light up when the printer has turned on.

Connecting the Printer via the WinPATS App

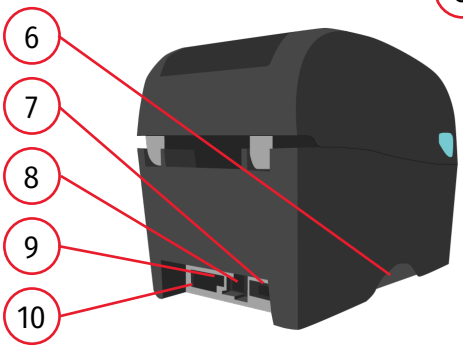
Once the printer is on, you can connect your printer to your tablet via WinPATS.

1. First, ensure the Bluetooth module on the rear of the printer is displaying a green light, indicating that the module is powered. If the module isn't powered, ensure it has not unplugged by gently pressing it into the rear of the printer.
2. Open the WinPATS App, and tap the PRINT icon at the top of the screen.
3. You will be prompted to connect to a printer via Bluetooth - select your printer from the popup menu.
4. The printer should connect - you can verify this connection by checking the Bluetooth module on the rear of the printer, which should display a Blue light. There should also be a Blue line under the Print icon in the WinPATS app, at the top of the screen.
5. Once you have connected your printer, you will be able to print tags directly from your tablet, either from the Inventory or during your test procedures.

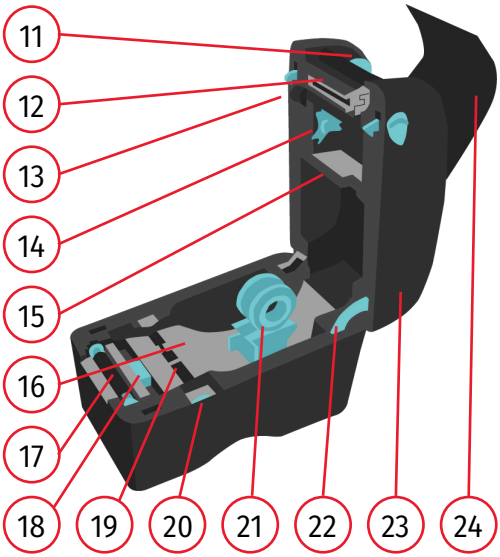
Printer Diagrams



1. LED Indicator
2. Media view window
3. Feed Button
4. Label Exit Chute
5. Top Cover Release Lever



6. SD Card Slot
7. RS-232C Interface
8. USB Interface
9. Power Socket
10. Power Switch



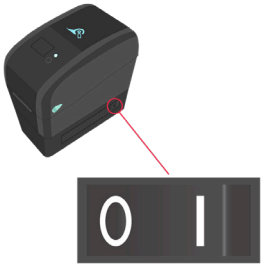
11. Ribbon Rewind Hub
12. Print Head
13. Ribbon Rewind Gear
14. Ribbon Supply Hub
15. Gap Sensor (Receiver)
16. Gap Sensor (Transmitter)
17. Platen Roller
18. Black Mark Sensor
19. Media Guide
20. Media Guide Adjuster Knob
21. Media Holders
22. Top Cover Hinge
23. Top Cover
24. Ribbon Access Cover

Charging the Printer

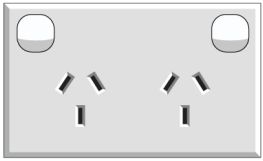
Using this method to charge the printer will avoid any issues with inrush current when the charging cable is plugged in, which can occur if the battery is not isolated.

Ensure the isolation switch is turned on once the charging cable is plugged in, otherwise the battery will not charge.

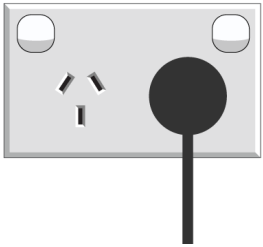
The TT040-50BB battery will take approximately seven hours to fully charge. Do not leave the TT040-50BB unattended while charging.



1. Turn the battery isolation switch

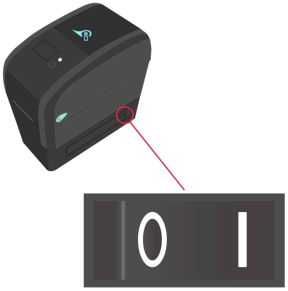


2. Turn off the switch at the mains outlet

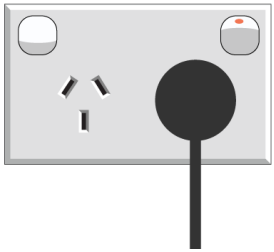


3. Plug the charging cable into the outlet

4. Plug the charging cable into the printer



5. Turn the isolation switch **on**

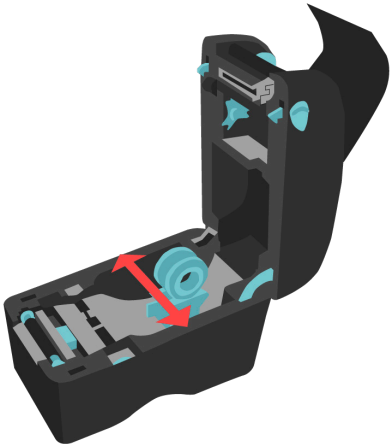


6. Turn on the switch at the power point

Loading Tags

Loading media into the TT-040-50 Printer is quick and easy.

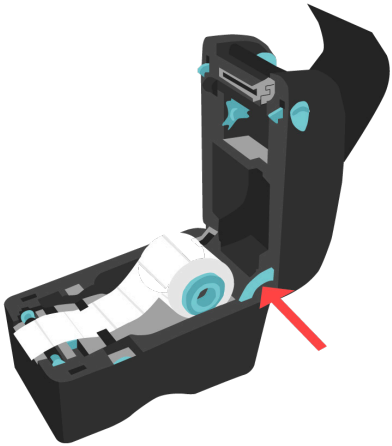
To begin, open the printer top cover by pulling the tabs located on each side towards the front of the printer, and then lift the top cover to the maximum open angle.



1. Separate the Label Holders by gently pulling them in opposite directions

2. Insert the media between the label holders as shown

3. Using the Media Guide Adjuster Knob, adjust the Media Guide until it is flush but not tight against the media.

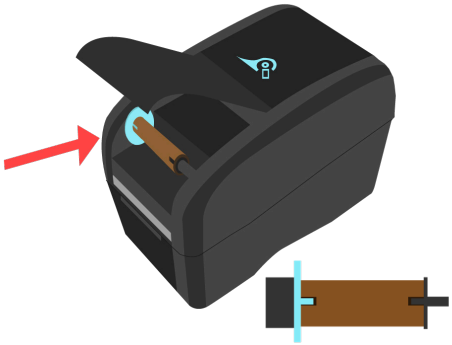


4. To shut the printer, push the support hinge in, then gently shut the printer, ensuring it latches shut. Press the Feed button on the printer before printing, to ensure the tag is printed correctly.

Loading Ribbons

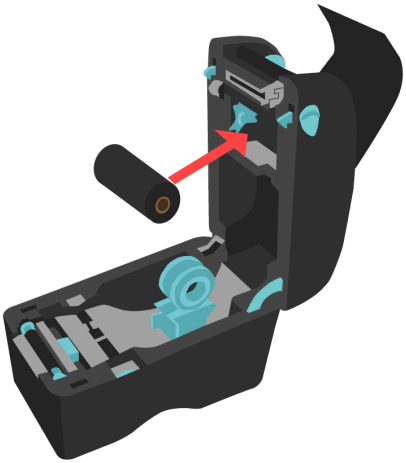
To begin, open the printer top cover by pulling the tabs located on each side towards the front of the printer, and then lift the top cover to the maximum open angle. You will also need to remove the old ribbon (which will be spooled under the top cover shown in step 1) before loading a new ribbon. To remove this ribbon, simply hold the ribbon roll and move it to the right (away from the blue gear).

1. Open the top cover of your Printer

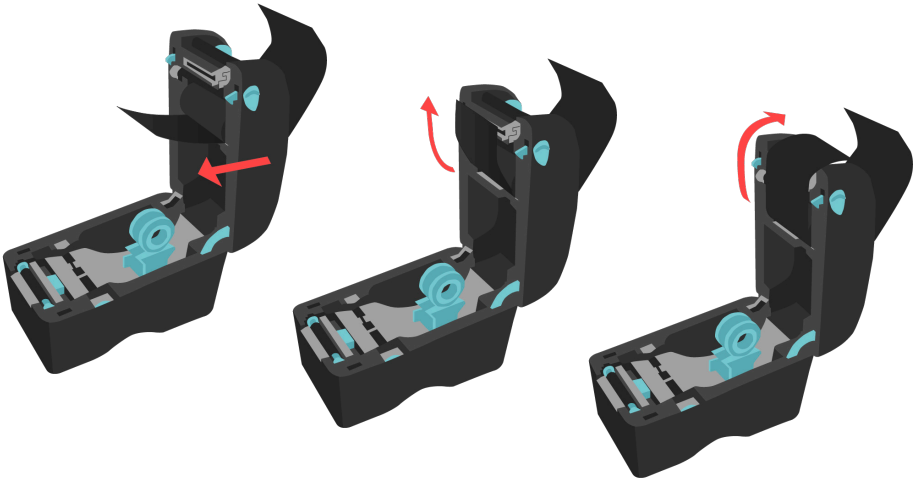


2. Insert an empty core between the gear and the axle - ensure the notches align as shown

3. Open the printer and get the thermal transfer ribbon ready.
   Ensure the ribbon unwinds from underneath as shown in Step 5



4. Push the ribbon into the right axle (black), then align the notches on the left and insert the ribbon onto the gear (blue)



5. Gently pull the ribbon out, up and over the print head, around to the empty core.

6. Attach the ribbon to the empty roll using a piece of tape - try to attach the ribbon as straight as possible.

7. Use the ribbon rewind gear to tighten the ribbon against the print head, then close the printer.

Printer Functions

LED and Button Functions

This printer has one button and one three-colour LED indicator. By indicating the LED with different colour and pressing the button, printer can feed labels, pause the printing job, select and calibrate the media sensor, print printer self-test report, reset printer to defaults (initialization). Please refer to the button operation below for different functions.

LED Colour	Description
Solid Green	This indicates that the power is on and the device is ready to use.
Flashing Green	This indicates that the system is downloading data from PC to memory or the printer is paused.
Amber	This indicates that the system is clearing data from printer.
Solid Red	This illuminates printer head open, cutter error.
Flashing Red	This indicates a printing error, such as head open, paper empty, paper jam or memory error etc.

Regular Button Function

Feed labels

When the printer is ready, press the button to feed one label to the beginning of next label.

Pause the printing job

When the printer is printing, press the button to pause a printing job. When the printer is paused, the LED will be green flashing. Press the button again to continue the printing job.

Default Printer Parameters

Parameter	Default setting	Parameter	Default setting
Speed	76.2 mm/sec (3 ips) (300DPI)	**Tear Mode**	On
Density	8	**Peel off Mode**	Off
Sensor Type	Gap sensor	**Cutter Mode**	Off
Label Dimensions	2" (50.8 mm) x 2" (50.8 mm)	**Serial Port Settings**	9600 bps, none parity, 8 data bits, 1 stop bit
Gap Setting	0.12" (3.0 mm)	**Code Page**	850
Print Direction	0	**Country Code**	001
Reference Point	0,0 (top left corner)	**Clear Flash Memory**	No
Offset	0	**IP Address**	DHCP

Power on Utilities

There are six power-on utilities to set up and test printer hardware.

To access the power on utilities:

1. Turn off the power switch.
2. Hold the Feed button then turn on the power switch.
3. The printer LED will cycle through the following options. Release the button when the LED reaches the relevant utility.

LED Colour (In Order)	Function
Amber Solid	None
Red 5 Flashes	Gap/Black Mark Sensor Calibration **Note: Please select Gap Sensor or Black Mark Sensor type (see below) prior to calibrating the sensor.** Release the Feed button to calibrate the Gap/Blark Mark Sensor. The Gap/Blark Mark Sensor should be calibrated when you first use your printer, when you change your label stock, and if you re-initialise your printer.
Amber 5 Flashes	Gap/Black Mark Sensor Calibration, Self Test and Enter Dump Mode **Note: Please select Gap Sensor or Black Mark Sensor type (see below) prior to calibrating the sensor.** While calibrating the gap/black mark sensor, printer will measure the label length, print the internal configuration (self-test) on label and then enter the dump mode. To calibrate gap or black mark sensor depends on the sensor setting in the last print job. The printer will calibrate the sensor and measure the label length and then print the internal settings. The printer will enter dump mode after printing printer configuration. In the dump mode, all characters will be printed in 2 columns as following. The left side characters are received from your system and right side data are the corresponding hexadecimal value of the characters. It allows users or engineers to verify and debug the program. Dump mode requires 2" wide paper width. To exit Dump Mode, turn off the printer and turn it back on again. Press the FEED button to return to the previous menu.
Green 5 Flashes	Printer Initialisation. Printer initialisation is used to clear DRAM and restore printer settings to defaults. Printer initialisation is activated by the following procedures.
Green/Amber 5 Flashes	Set Black Mark Sensor as Media Sensor & calibrate the Black Mark Sensor.
Red/Amber 5 Flashes	Set Gap Sensor as Media Sensor & calibrate the Gap Sensor.
Green Solid	Skip AUTO.BAS

Troubleshooting

The following guide lists the most common problems that may be encountered when operating this bar code printer. If the printer still does not function after all suggested solutions have been invoked, please contact the Customer Service Department of your purchased reseller or distributor for assistance.

LED Status / Colour	Printer Status	Possible Cause	Troubleshooting Procedure Procedure
OFF	No response	No power	1. Turn on the power switch. 2. Check if the green LED is lit on power supply. If it is not lit on, power supply is broken. 3. Check both power connections from the power cord to the power supply and from the power supply to the printer power jack if they are connected securely.
Solid Green	ON	The printer is ready to use	No action necessary.
Flashing Green	Pause	The printer is paused	Press the FEED button to resume printing.
Flashing Red	Error	The out of labels or the printer setting is not correct	1. **Out of labels** - Load a roll of label and follow the instructions in loading the media then press the FEED button to resume for printing. 2. **Printer setting is not correct** - Initialise the printer. See previous page for instructions.

Print Problems

Problem	Possible Cause	Troubleshoot Procedure
Not Printing	Check if interface cable is connected to the interface connector.	Reconnect cable to interface.
	The serial port cable pin configuration is not pin to pin connected.	Please replace the cable with pin to pin connected.
	The serial port setting is not consistent between host and printer.	Please reset the serial port setting.
	The port specified in the Windows driver is not correct.	Select the correct printer port in the driver.
	The Ethernet IP, subnet mask, gateway is not configured properly.	Configure the IP, subnet mask and gateway.
No print on the labels	Labels loaded not correctly.	Reload the media, taking care to follow the instructions to ensure the media is loaded correctly.
Continuous feeding labels	Printer settings are incorrect	Initialise the printer to return the printer settings to their default values.
Material Jam	Gap/black mark sensor sensitivity is not set properly	Calibrate the gap/black mark sensor.
	Make sure label size is set properly.	Set label size exactly as installed paper in the labelling software or program.
	Labels may be stuck inside the printer mechanism near the sensor area.	Remove the stuck label
Poor Print Quality	Top cover is not closed properly.	Close the top cover completely and make sure the right side and left side levers are latched properly.
	Wrong power supply is connected	Check if 24V DC output is supplied by the power supply.
	Check if supply is loaded correctly.	Reload the supply.
	Check if dust or adhesives are accumulated on the print head.	Clean the print head.
	Check if print density is set properly.	Adjust the print density and print speed.
	Check print head test pattern if head element is damaged.	Run printer self-test and check the print head test pattern if there is dot missing in the pattern.

Maintenance

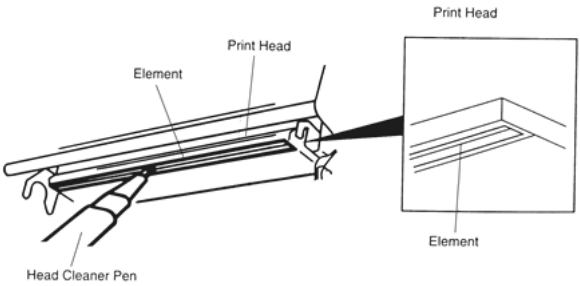
This section explains the methods to clean and maintain your printer.

Do not touch printer head by hand. If you touch it accidentally, please use 100% Ethanol to clean it. DO NOT use medical alcohol, which may damage the printer head.

Regularly clean the print head and supply sensors when changing media to keep optimal performance and extend printer life.

You will need the following items to clean the printer.

- Cotton swab (Head cleaner pen)
- Lint-free cloth
- Vacuum / Blower brush
- 100% ethanol

Printer Part	Method	Recommended Maintenance Interval
Print Head	1. Always turn off the printer before cleaning the print head. 2. Allow the print head to cool for a minimum of one minute. 3. Use a cotton swab and 100% ethanol to clean the print head surface.	Clean the print head when changing a new label roll
		
Platen Roller	1. Turn the power off. 2. Rotate the platen roller and wipe it thoroughly with 100% ethanol and a cotton swab, or lint-free cloth.	Clean the platen roller when changing a new label roll
Tear Bar/Peel Bar	Use the lint-free cloth with 100% ethanol to wipe it.	As needed
Sensor	Compressed air or vacuum	Monthly
Exterior	Wipe it with water-dampened cloth	As needed
Interior	Brush or vacuum	As needed

Wavecom Tags, Ribbons, & Accessories

To support our test and print units we offer to you our range of electrical test tags that are made of the highest grade polypropylene and polyester label materials. These materials are robust and resistant to tearing and will cope with harsh Australian environments. It is recommended in extreme external conditions you use UV resistant tags.

Wavecom Printable Tags

The test tags/labels we offer come in the full range of colours, each tag comes with a clear white area where a barcode can be printed onto, ensuring easy and accurate scanning. This ensures that your barcode scanner can read the barcode.

All of the Wavecom tags are suitable for printing using every brand of thermal transfer printers available from around the world. The adhesive used on our tags is most aggressive and comes highly recommended for use in the electrical test and tag industry, there should be no butterflying once applied.

Order Information:

Standard Tags (500 Tags per Roll)	Part no: WCM-TAG-(W, R, BL, G, O, Y, BR) *eg. WCM-TAG-W*
UV Tags (400 Tags per Roll)	Part no: WCM-UV-TAG-(W, R, BL, G, O, Y, BR) *eg. WCM-UV-TAG-W*

Wavecom Printing Ribbon

In support of the Wavecom Tags we offer two grades of ribbons for printing electrical test tags. Our standard ribbon (WCM-Ribbon) is recommended for locations where the printed tag is not exposed to harsh outdoor conditions, such as offices and factories.

Our UV Ribbon (WCM-UV-Ribbon) is recommended for harsher environments like mines or where the equipment is being tested is exposed to the elements. To ensure the durability of print on your tag it is essential that the right ribbon is used on the appropriate label material.

Order information:

Standard Ribbon	Part no: WCM-RIBBON
UV Ribbon	Part no: WCM-UV-RIBBON

Laminated Overlays

In locations where a tag is exposed to harsh chemicals or extreme environments a printed tag may need additional protection to ensure it is readable when the appliance needs to be retested. In these instances, clear film overlays can be applied over the top of an existing tag. These clear laminate overlays are made of strong durable synthetic materials and come with an adhesive backing that ensures that when the overlay is stuck down it stays stuck. This allows you to use your standard Wavecom tags in harsh environments where a standard tag would not normally be suitable.

To use our laminated overlays, the clear laminate is placed over the printed tag before removing it from the backing paper. The combined tag and overlay is then removed from the backing paper and applied to the appliance as normal.

Order information:

Clear Laminated Overlays (1000 per Roll)	Part no: WCM-TAG-ALL-Clear-LAM

Disclaimer – E&OE

All specifications may be subject to be change by Wavecom Pty. Ltd. without prior notice.

Updated Specifications & Model changes may be found on the Wavecom website: - www.wavecom.com.au

At the time of developing this manual, all care and consideration for accuracy has been implemented. Wavecom accepts no responsibility for any errors or omissions in this document. This is partly based on the fact that Electronics & Electrical testing and specifications worldwide are constantly changing and that Local, State and National Regulatory Authorities may also have differing or additional requirements. It is strongly recommended the Purchaser check Local Regulatory Standards that may be applicable in your region.

Purchase Information

Date of Purchase

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