ALTEC
INDUSTRIAL IDENTIFICATION

Make everything unique

ATP3000

User manual

Version 1.0

Contents

1 Introduction

Heavy duty labelprinter

The ATP-3000 is Altec's industrial heavy duty label printer. This is the successor to the ATP-4310 series.
This new label printer is technically improved and a lot more user-friendly. Placing media and printing labels is now easier and more advanced. Print 1001 types of labels with one and the same label printer.

Copyright information

Compliance and approvals

CE	EN 55032, Class A EN 55035 EN 60950-1 This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.
FC	FCC part 15B, Class A ICES-003, Class A
UL	UL 60950-1
TÜV SÜD	UL 62368-1 CSA C22.2 No. 62368-1 EN 62368-1
CCC	GB 4943.1 GB 9254, Class A GB 17625.1

Important safety instructions

1. Read all of these instructions and keep them for later use.
2. Follow all warnings and instructions on the product.
3. Disconnect the power plug from the AC outlet before cleaning or if fault happened.
   Do not use liquid or aerosol cleaners. Using a damp cloth is suitable for cleaning.
4. The mains socket shall be installed near the equipment and easily accessible.
5. The unit must be protected against moisture.
6. Ensure the stability when installing the device, Tipping or dropping could cause damage.
7. Make sure to follow the correct power rating and power type indicated on marking label provided by manufacture.
8. Please refer to user manual for maximum operation ambient temperature.

Warning

- Do not throw the battery in fire
- Do not short circuit the contacts
- Do not disassemble the battery
- Do not throw the battery in municipal waste

⚠ CAUTION

- For operation safety, please turn off the power by the power switch before opening the media cover to load labels, ribbons, or to repair. After completing the steps, please close the media cover first and then turn on the power to start printing.

- Risk of explosion if battery is replaced by an incorrect type.
  Dispose of used batteries according to the instructions.

- Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the equipment.

- Hazardous moving parts, keep fingers and other body parts away.

1.1 Product features

1.1.1 Standard features

The printer offers the following standard features:

Resolution	300 DPI (12 dots/mm)
Printing method	Thermal transfer / Direct thermal
Mechanism	Die-cast base and frame / Metal cover with two hinges and large clear media view window
LCD display / Operation buttons	• Multi-language selectable • 3.5” color touch display, HVGA 320 x 480 pixel • 6 operation buttons (menu, feed/pause, up, down, left, right) • 3 color LED
Processor	32-bit RISC high performance processor
Memory	• 128MB Flash memory • 128MB DRAM
Interface	• USB 2.0 (High speed mode) • Internal Ethernet print server (10/100 Mbps) • RS-232 (Max. 115,200 bps) • USB host *1, connecting USB storage device
Sensors	• Gap transmissive sensor (Position adjustable, 5 mm → 88 mm) • Black mark reflective sensor (Position adjustable, 0 mm → 81.7 mm) • Ribbon encoder sensor • Ribbon end sensor (Transmissive) • Head open sensor

1.1.2 Optional features

The printer offers the following optional features:

Bluetooth 4.2 module
Wi-Fi module kit
Peel-off module
Cutter module

1.2 General specifications

Physical dimensions	248 mm (W) x 274 mm (H) x 436 mm (D)
Weight	9,2 KG
Power	Auto sensing power supply (20% print ratio) - Input: AC 100-240V, ~2.0A, 50-60Hz - Output: DC 24V/3.75A; 90W
Environmental condition	Operation: 5 ~ 40°C (41 ~ 104°F), 25~85% non-condensing Storage: -40 ~ 60 °C (-40 ~ 140°F), 10~90% non-condensing
Environmental concern	Comply with Energy Star 2.0, REACH, RoHS and WEEE

1.3 Print specifications

Print head resolution (dots per inch/mm)	300 dots/inch (12 dots/mm)
Printing method	Thermal transfer / Direct thermal
Dot size	0,084 x 0,084 mm (1 mm = 12 dots)
Print speed	Up to 7 inch/s (178 mm/s)
Max. print width	105,7 mm (4,16”)
Max. print length	11.430 mm (450”)

1.4 Ribbon specifications

Ribbon outside diameter	Max. 81,3 mm OD
Ribbon length	450 meter
Ribbon core inside diameter	25,4 mm (1”) ID core
Ribbon width	40 mm ~ 110 mm
Wind direction	Ink coated outside wound / Ink coated inside wound

1.5 Media specifications

Media roll capacity	Max. 203,2 mm (8”) OD
Media core diameter	76,2 mm (3”) ID core
Media type	Continuous, die-cut, black mark, fan-fold, notch
Wind direction	Outside wound
Media width	20 mm ~ 120 mm (cutter mode: max. 114 mm)
Media thickness	0,06 mm ~ 0,28 mm
Label length	5 mm ~ 11.430 mm
Label length (peeler mode)	25,4 ~ 152,4 mm
Label length (cutter mode)	25,4 ~ 1.016 mm
Black mark	Min. 8 mm (W) x Min. 2 mm (H)
Gap height	Min. 2 mm

2 Product overview

2.1 Unpacking the printer

This printer has been specially packaged to withstand damage during shipping. Please carefully inspect the packaging and printer upon receiving the ATP-3000 printer. Please retain the packaging materials in case you need to reship the printer. Please check if the following items are included:

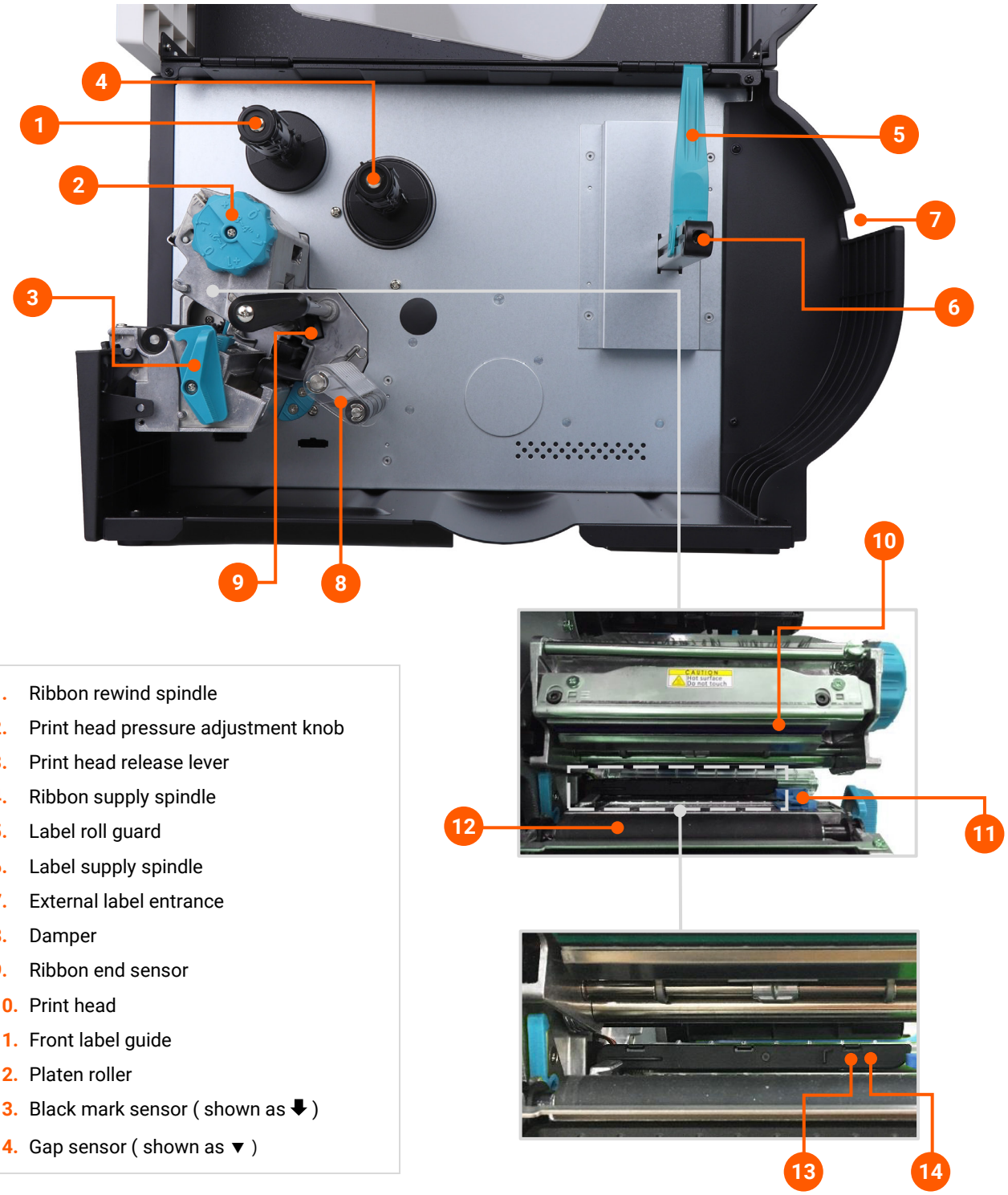
- ATP-3000 printer unit 1X
- Quick installation sheet 1X
- Power cord 1X
- USB interface cable 1X

2.2 Printer overview

2.2.1 Front view

1. LED indicator
2. LCD touch display
3. Front panel buttons
4. Media view window
5. Label exit
6. Media cover handle

2.2.2 Interior view



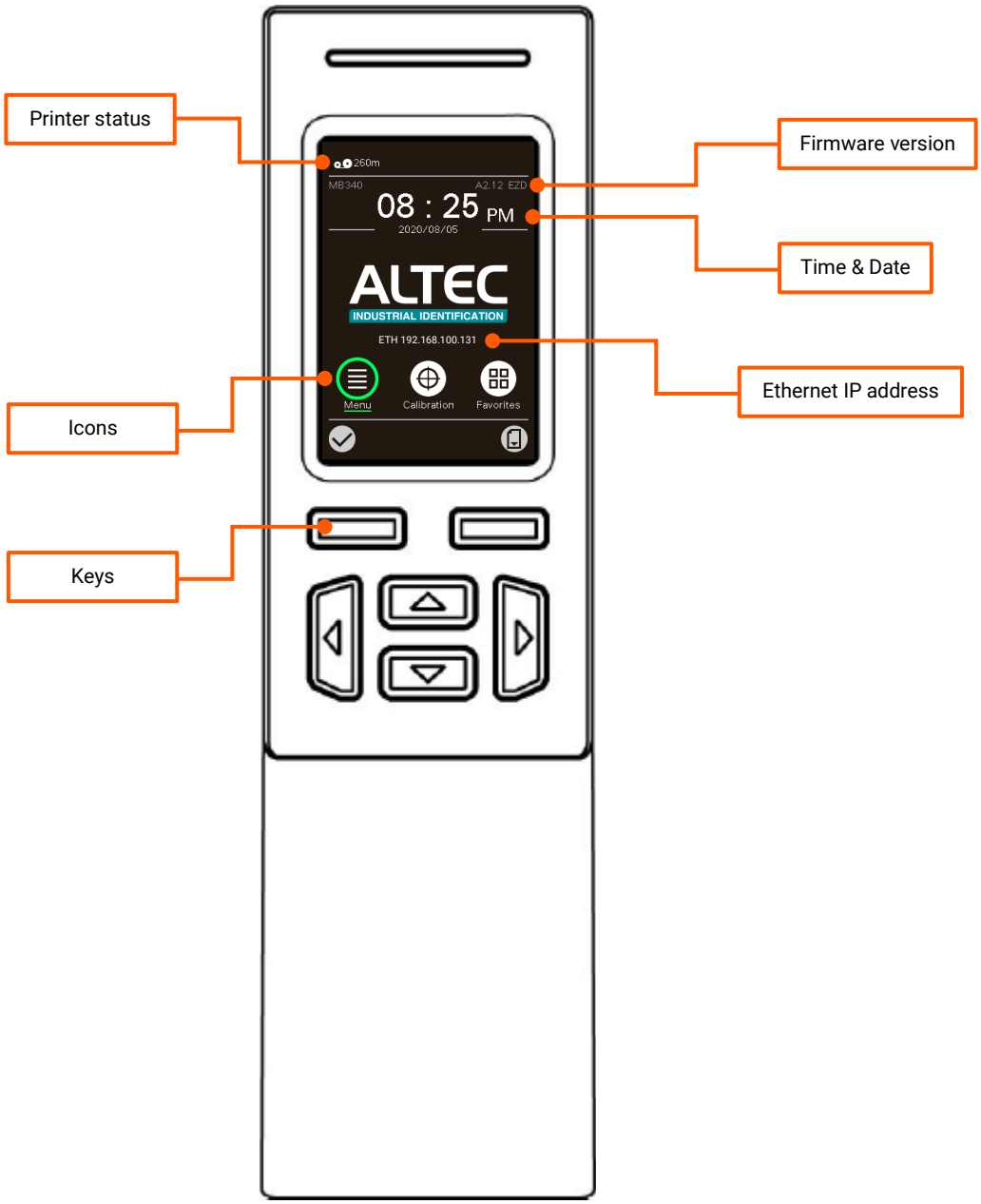
1. Ribbon rewind spindle
2. Print head pressure adjustment knob
3. Print head release lever
4. Ribbon supply spindle
5. Label roll guard
6. Label supply spindle
7. External label entrance
8. Damper
9. Ribbon end sensor
10. Print head
11. Front label guide
12. Platen roller
13. Black mark sensor (shown as ⬇)
14. Gap sensor (shown as ▼)

2.2.3 Rear view

1. External label entrance
2. Power switch
3. USB interface
4. USB host
5. RS-232C interface
6. Ethernet interface
7. Power cord socket

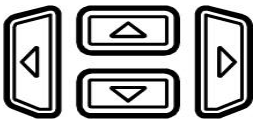
3 Operator control

3.1 Touch screen



3.1.1 LED indication and keys

LED	Status		Indication
	Green	Solid	Power on and the device is ready to use.
		Flash	System is downloading data from PC to memory and or printer is pause.
	Amber		System is clearing data from printer.
	Red	Solid	Print head open / cutter error
		Flash	Printing error, such as head open, paper empty, paper jam, ribbon empty, memory error, etc.

Keys	Function
Select keys 	The labels on the footer of the UI will explain the function for left and right soft key. Check the labels on the footer of the UI screen. The meaning of the select keys will vary.
Navigational keys 	Used to select icons, menu selection and navigation in the UI.

3.1.2 Main page icons

Indicated icon	Indication
	Wi-Fi device is ready (function)
	Ethernet is connected
	Bluetooth device is ready (option)
	Remaining amount of ribbon
	Security lock
	TPH cleaning

Icon button	Function
	Enter the menu
	Calibrate the media sensor
	Enter the “Favorites” option (please refer to section 6.8)
	Enter cursor (be marked in green) located option
	Feed button (advance one label)

Tap an item to open/use it

Note: for LCD Menu panel - please refer to section 6 for more details.

3.1.3 Power-on utilities

The ATP-3000 has power-on utilities to set sensor calibration, self-test, and factory default functions. Please refer to the template below to setup the settings.

Please follow the steps below for different power-on utilities:

1. Turn off the printer power switch.
2. Hold on the right side of the select key () then turn on the power switch.
3. Release the button when LCD monitor indicates with different functions.
4. Printer will setup the functions showing on the LCD monitor accordingly.

Sequence of the settings

Power-on utilities	**LED color will change in the following pattern**						
LED color / **Functions**	Amber	Red (5 blinks)	Amber (5 blinks)	Green (5 blinks)	Green / Amber (5 blinks)	Red / Amber (5 blinks)	Solid green (5 blinks)
Sensor calibration (Gap / Black mark sensor)		Release					
Self-test (and enter dump-mode)			Release				
Factory default				Release			
Bline calibration					Release		
Gap calibration						Release	
READY (Skip AUTO.BAS)							Release

4 Setup

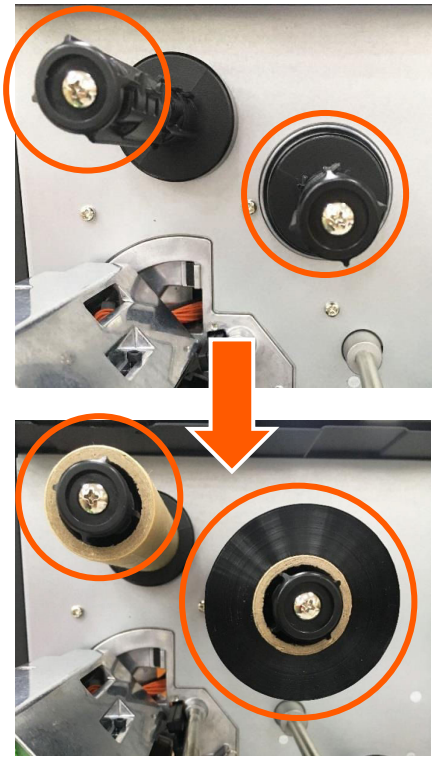
4.1 Setting up the printer

1. Place the printer on a flat, secure surface.
2. Make sure the power switch is off.
3. Connect the printer to the computer with the provided USB cable.
4. Plug the power cord into the AC power cord socket at the rear of the printer, and then plug the power cord into a properly grounded power outlet.

Note: Please switch OFF printer power switch prior to plug in the power cord to printer power jack.

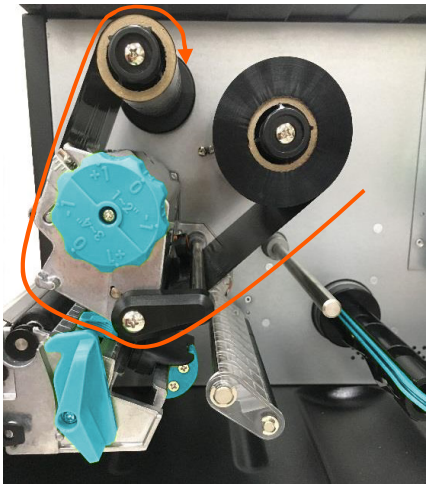
4.2 Loading the ribbon

1. Open the printer **right side cover**.

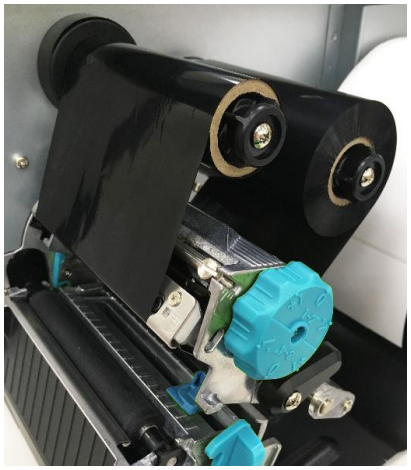


2. Install the ribbon onto **ribbon supply spindle** and install paper core onto **ribbon rewind spindle**.

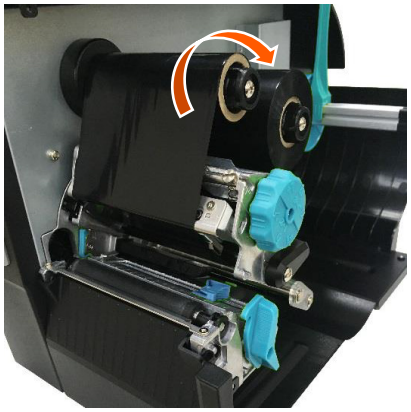
3. Push the **Print head release lever** to open the print head mechanism.



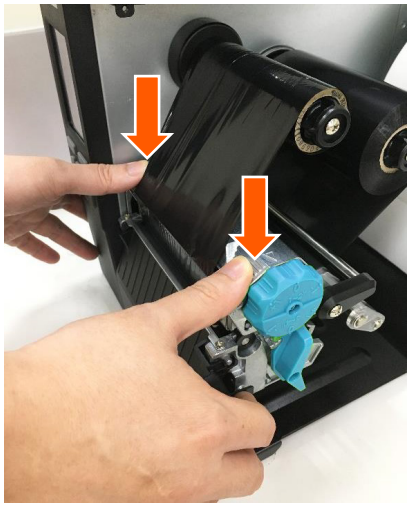
4. Thread ribbon below the **ribbon guidebar** through **ribbon sensor slot** as the loading path shown here.



5. Stick the **ribbon leader** onto the **paper core**. Keep the ribbon flat and without wrinkle.

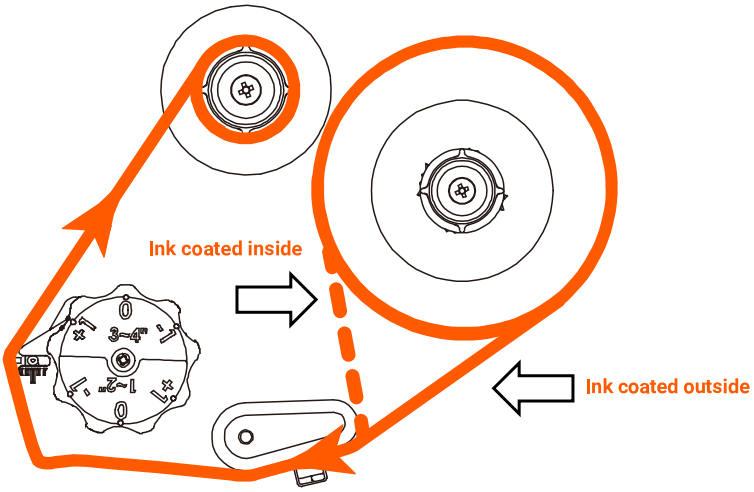


6. Wind the ribbon rewind spindle counter clockwise roughly 3-5 circles until the ribbon is smooth, properly stretched and wrinkle-free.

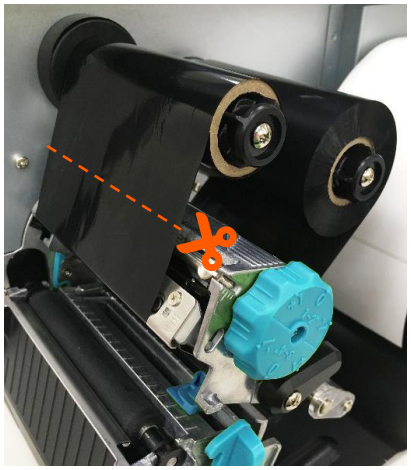


7. Close the print head mechanism by pushing down the both sides of the **print head release lever**.

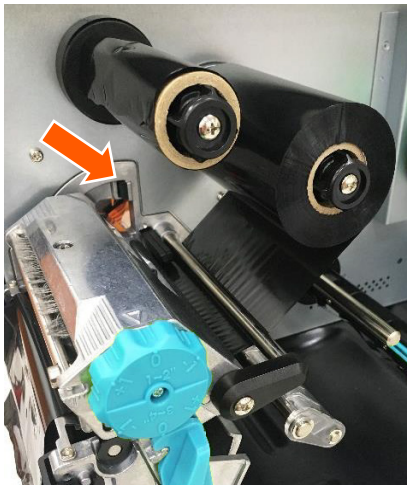
Ribbon loading path



4.3 Remove used ribbon



1. Break the ribbon between **ribbon guide plate** and the **ribbon rewind spindle**.



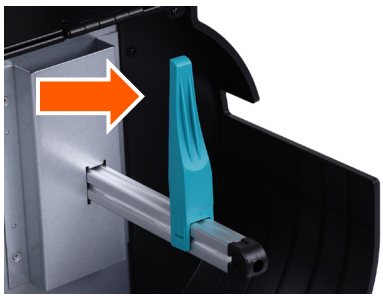
2. Slide the ribbon off to release the ribbon on the **ribbon rewind spindle**.

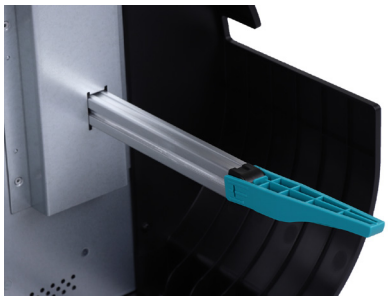
4.4 Loading media

4.4.1 Loading the media

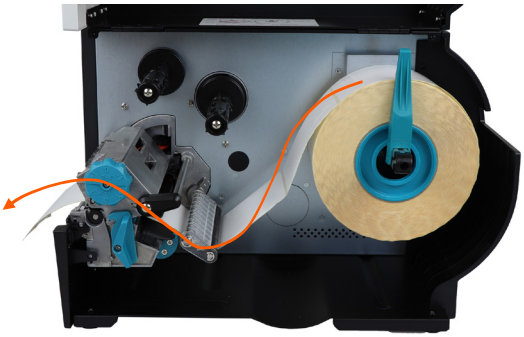
1. Open the printer **right side cover**.

2. Move the label **roll guard** horizontally to the end of label spindle, then flip down the label roll guard.



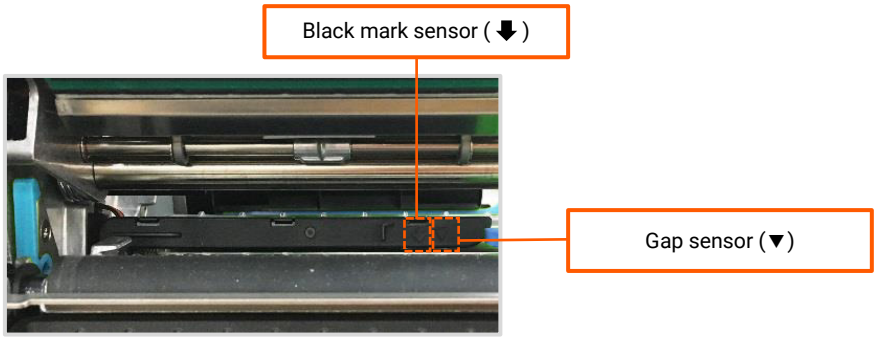


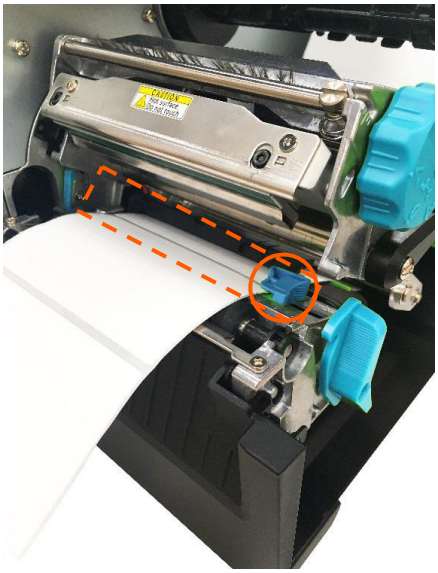
3. Place the media roll on the label supply spindle and use label roll guard to fix it.



4. Push the print head release lever and install the label through the damper, media sensor, and label guide to install the media.

5. Move the media sensor by adjusting the media sensor position adjustment knob, make sure the gap or black mark sensor is at the location where media gap/black mark will pass through for sensing.

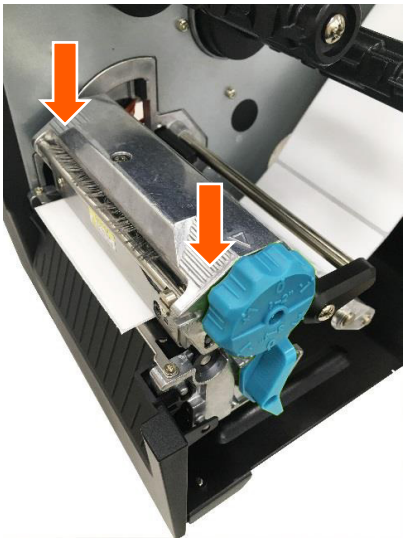




6. Adjust the label guide to fix the media position.

Note

- Please install the media through the media sensor
- The sensor location is marked by a triangle mark ▼ (gap sensor) and arrow mark ⬇ (black mark sensor) at the sensor housing.
- The media sensor position is movable, please make sure the gap or black mark is at the location where media gap/black mark will pass through for sensing.



7. Close the print head mechanism on both sides and make sure the latches are engaged securely.

8. Set media sensor type and calibrate the selected sensor.

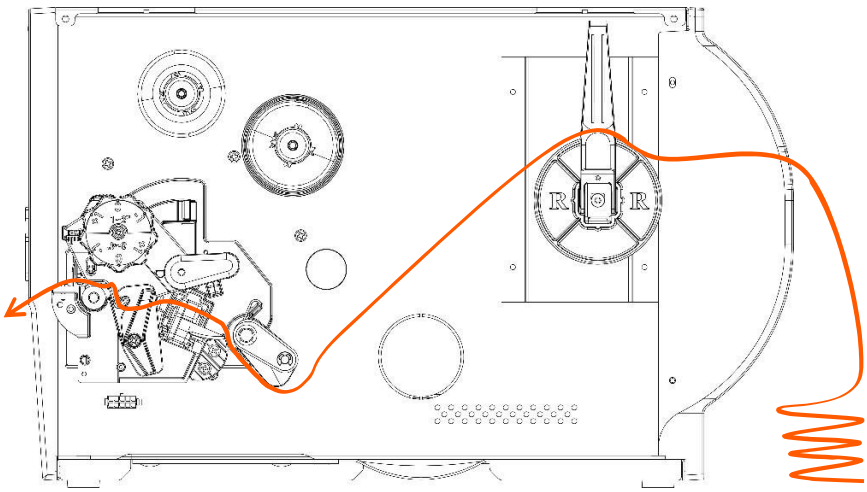
Note
Please calibrate the gap/black mark sensor when changing media.

4.4.2 Loading the Fanfold/External media

1. Open the printer right side cover.
2. Insert the fanfold media through the rear external label entrance chute.
3. Please refer to section 4.4.1 step 4-8 for loading media.

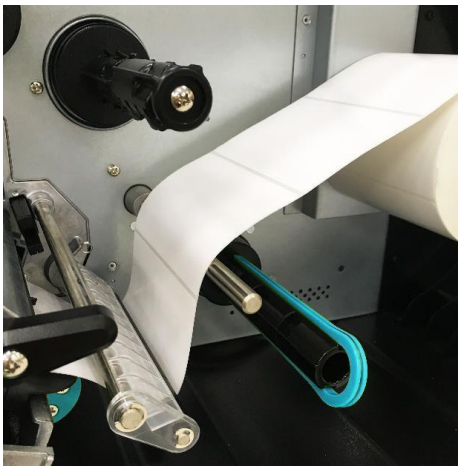
Note
Please calibrate the gap/black mark sensor when changing media.

Loading path for fan-fold labels



4.4.3 Loading media in peel-off mode (optional)

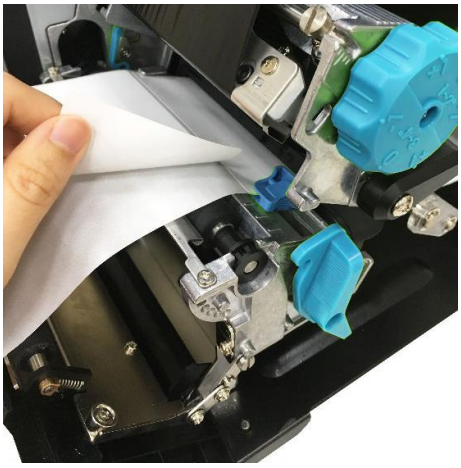
1. Open the printer right side cover.
2. Please refer to section 4.4.1 step 4-8 for loading media.



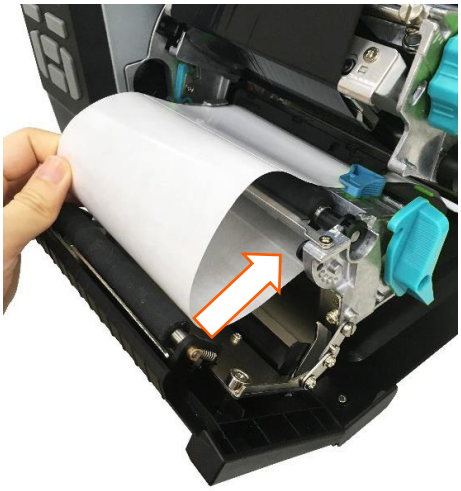
3. Use the front display panel to do the calibration first and set the printer mode to peeler mode.

Note

1. Please calibrate the gap/black mark sensor before loading media in the peel-off mode to avoid paper jam.
2. Please feed the label through media guide bar as shown in the picture.



4. Open print head release lever, pull approximately 650 mm of the label through the front of the printer.
5. Remove several labels to leave liner.



6. Feed the leading edge of the liner through the peel-off module slot as indicated.

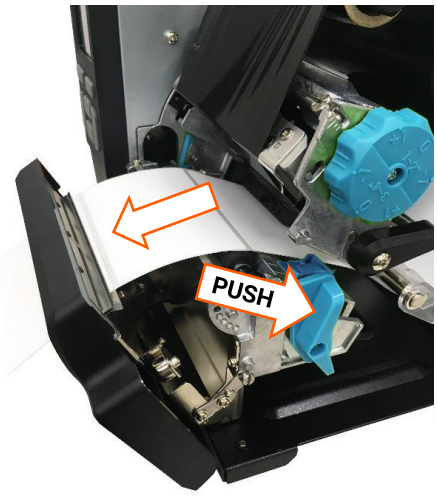
7. Pull out the media rewind spindle securing clip. Wind the media on the spindle until the liner stretched properly.
8. Insert the securing clip on media rewind spindle.

Note
The media rewind spindle can also install paper roll to wind the media on media rewind spindle.

9. Close the print head release lever and press the FEED button to test.

4.4.4 Loading media in cutter mode (optional)

1. Open the printer right side cover.
2. Please refer to section 4.4.1 step 4-8 for loading media.
3. Use the front display panel to do the calibration and set the printer mode to **cutter mode**.

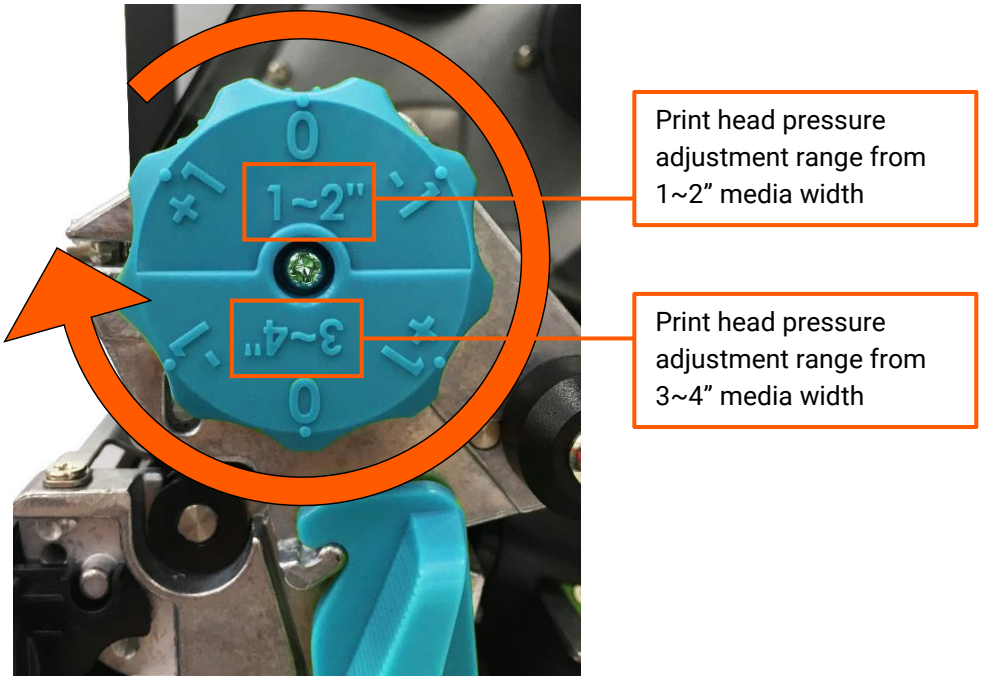


4. Push the Print head release lever to open print head mechanism. Lead the media through the cutter paper opening.

5. Close the print head mechanism and press the FEED button to test.

5 Adjustment knob

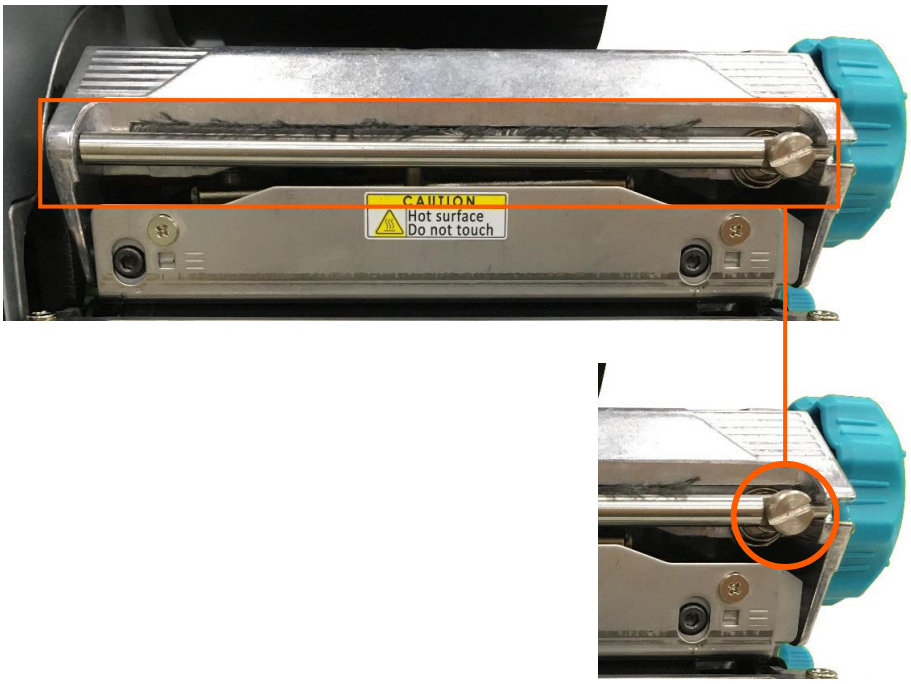
5.1 Print head pressure adjustment knob



The print head pressure adjustment knob has 6 levels of adjustment for 1~2” and 3~4” media widths. Because the printer’s paper alignment is to the left side of mechanism, different media widths require the different pressure to print the label correctly. Therefore, it may require adjusting pressure to get the best print quality.

5.2 Ribbon tension adjustment knob module

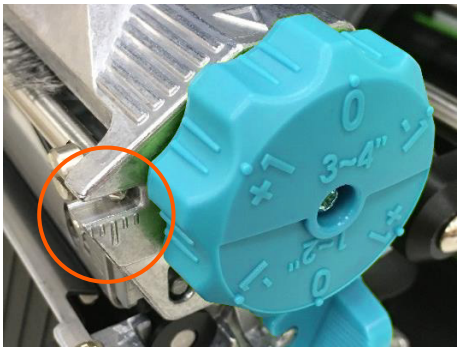
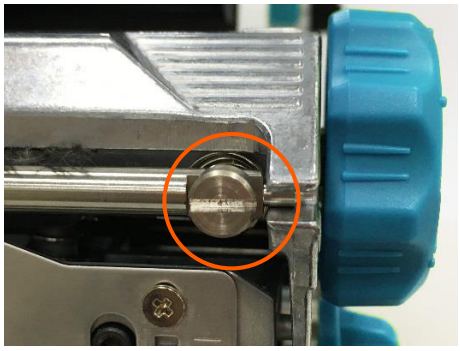
The ribbon tension adjustment knob has five positions for adjustment. Because the printer's ribbon alignment is to the left side of mechanism, different ribbon or media widths require different ribbon tension to print correctly. Therefore, it may require to adjust the ribbon tension adjustment knob to avoid wrinkle and get the best print quality.



Ribbon tension adjustment knob

5.3 Mechanism fine adjustment to avoid ribbon wrinkles

This printer has been fully tested before delivery. There should be no ribbon wrinkle presented on the media for general-purpose printing applications. Ribbon wrinkle is related to the media width, thickness, print head pressure balance, ribbon film characteristics, print darkness setting, etc. In case the ribbon wrinkle happens, please follow the instructions below to adjust the printer parts.

	Ribbon Tension Adjustment Knob has 5 positions for adjustment. Use flat blade driver to change the ribbon tension position.	
Adjustable printer parts	 Ribbon tension adjustment scales	 Ribbon tension adjustment knob
Symptom	1. Wrinkle happens from label lower right to upper left direction	2. Wrinkle happens from label lower left to upper right direction
Wrinkle example		

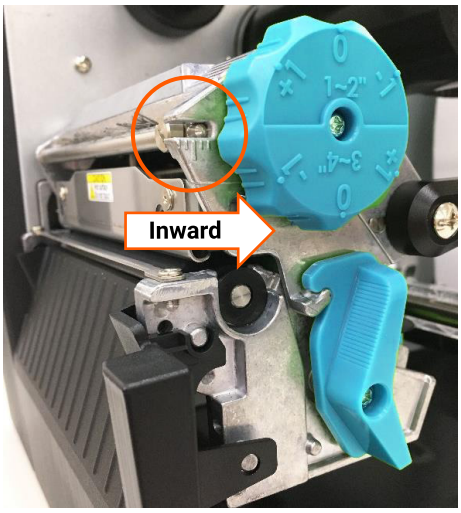
Feed direction

If the wrinkle on the label starts from the lower right side to upper left side, please do following adjustment.

1. Switch the ribbon tension adjustment knob clockwise per 1 level and print the label again to check if the wrinkle is gone.

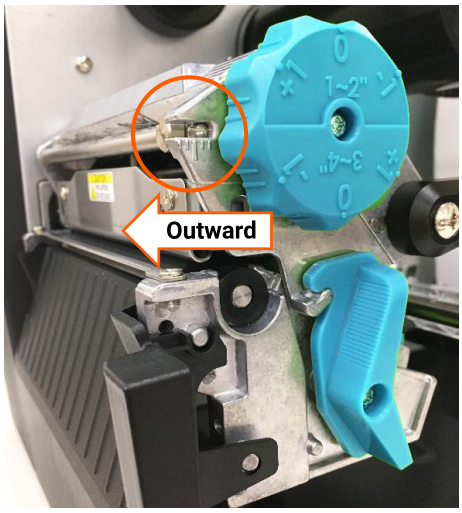
If the wrinkle on the label starts from the lower left side to upper right side, please do following adjustment.

1. Switch the ribbon tension adjustment knob counter-clockwise per 1 level and print the label again to check if the wrinkle is gone.



2. If the ribbon tension adjustment knob has positioned on the level of innermost side but didn't improve the ribbon wrinkle, please switch the print head pressure adjustment knob per 1 level and print the label again to check if the wrinkle is gone.

3. If the wrinkle can't be avoided, please contact Altec.

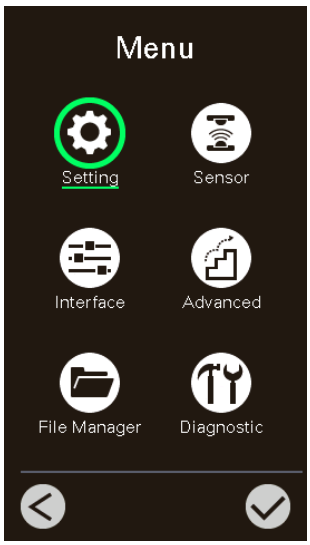


2. If the ribbon tension adjustment knob has positioned on the level of outermost side but didn't improve the ribbon wrinkle, please switch the print head pressure adjustment knob per 1 level and print the label again to check if the wrinkle is gone.

3. If the wrinkle can't be avoided, please contact Altec.

6 LCD display menu

6.1 Enter the menu



By touch display

Tap the menu icon on LCD main page to enter the menu.

By keys

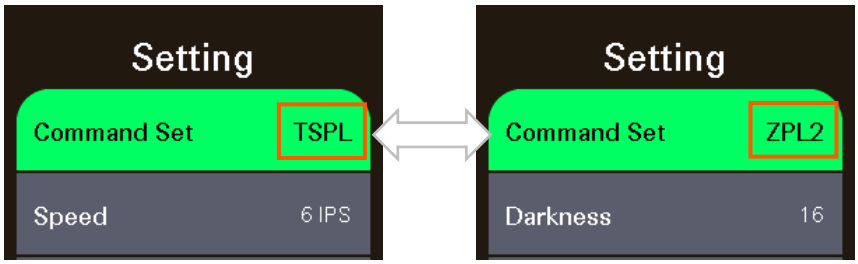
Use navigational keys to select
The menu icon (be marked in green)
and press the left soft key button (means) to enter the menu

6.2 Menu overview

Icon	Indication
	This “Setting” category can set up the printer settings for TSPL & ZPL2.
	This "Sensor"option is used to calibrate the selected media sensor. We recommend calibrate the sensor before printing when changing the media.
	This "Interface" option is used to set the printer interface settings.
	This "Advanced" option is used to set the printer LCD settings, initialization, cutter type, media low warning setting, etc.
	This "File Manager" option is used to check/manage the printer available memory.
	This "Diagnostic" optin is used to review printer to troubleshoot problems and other issues.

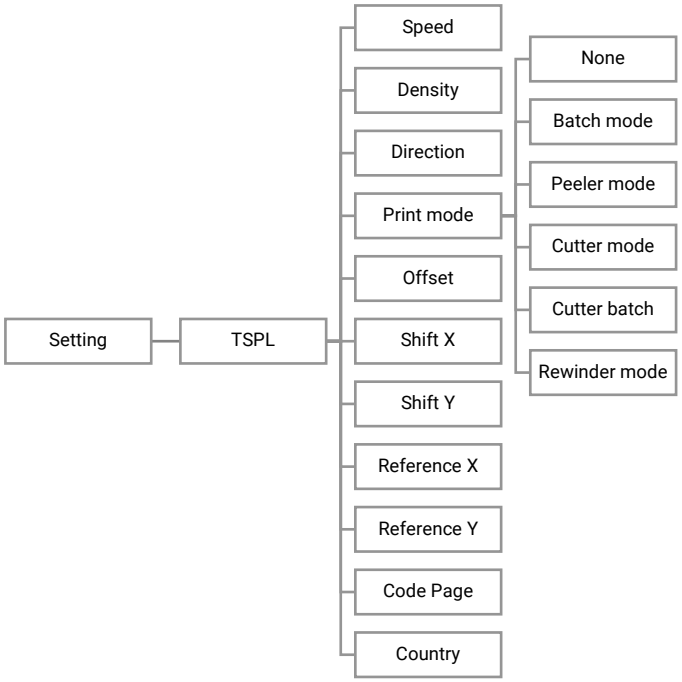
6.3 Setting

Tap the “Command Set” item on LCD to switch the TSPL and ZPL2. Or select the “Command Set” item by navigational key and press right soft key to switch the TSPL and ZPL2.

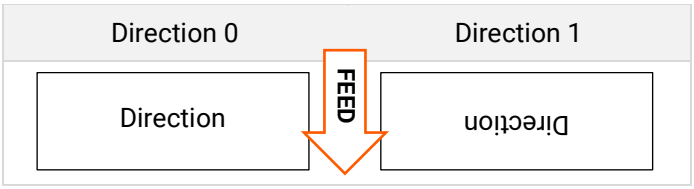


6.3.1 TSPL

This “TSPL” category can set up the printer settings for TSPL.



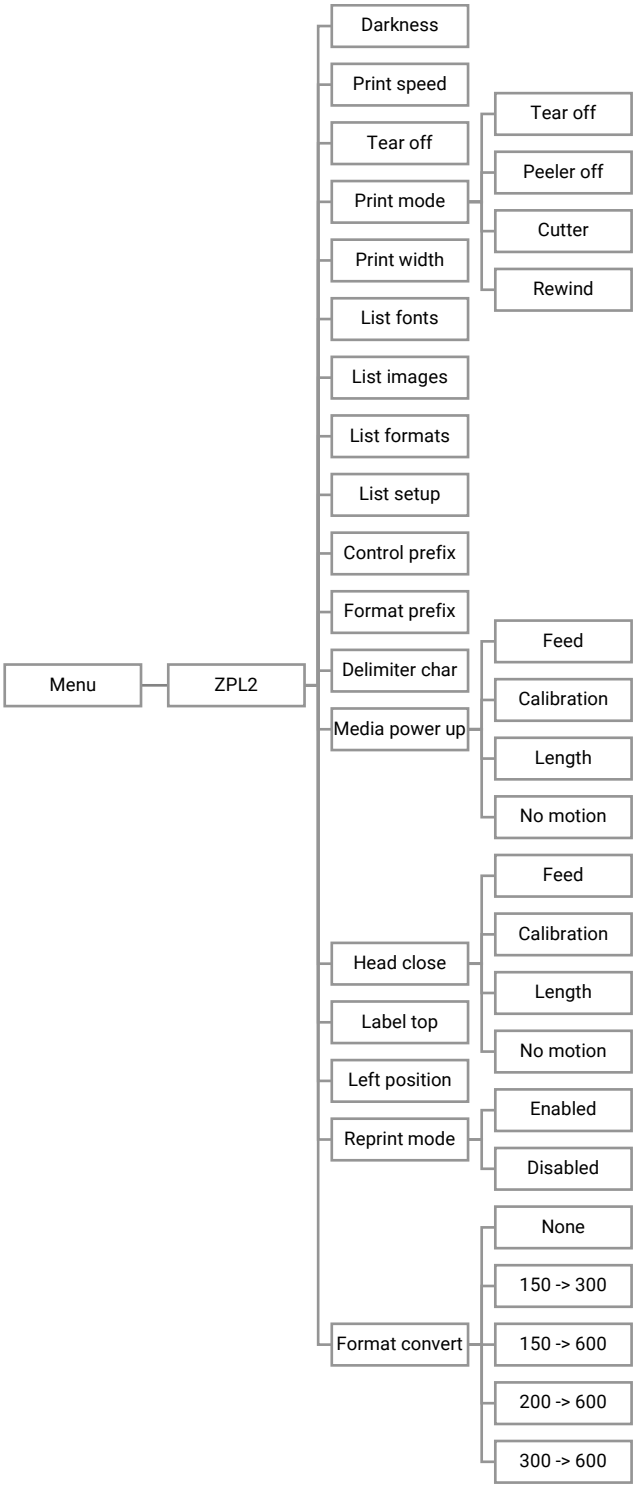
Item	Description	Default
Speed	Use this item to setup print speed. Available setting range is 1~10 for 203dpi and 1~7 for 300dpi.	3
Density	Use this option to setup printing darkness. The available setting range is from 0 to 15, and the step is 1. You may need to adjust your density based on selected media.	8

<table>
<tr><td>Direction</td><td>The direction setting value is either 1 or 0. Use this item to setup the printout direction.
 
</td><td>0</td></tr>
<tr><td>Print mode</td><td>This item is used to set the print mode. There are 6 modes as below:
<table>
<tr><th>Printer mode</th><th>Description</th></tr>
<tr><td>None</td><td>Next label top of form is aligned to the print head burn line location (tear-off mode).</td></tr>
<tr><td>Batch mode</td><td>Once image is printed completely, label gap/black mark will be fed to the tear plate location to tear away.</td></tr>
<tr><td>Peeler mode</td><td>Enable the label peel off mode.</td></tr>
<tr><td>Cutter mode</td><td>Enable the label cutter mode.</td></tr>
<tr><td>Cutter batch</td><td>Cut the label once at the end of the printing job.</td></tr>
<tr><td>Rewinder mode</td><td>Enable the label rewinder mode.</td></tr>
</table></td><td>Batch mode</td></tr>
<tr><td>Offset</td><td>This item is used to fine tune media stop location. Available setting value range is from -999 dots to 999 dots.</td><td>0 dot</td></tr>
<tr><td>Shift X</td><td rowspan="2">This item is used to fine tune print position. Available setting value range is from -999 dots to 999 dots.</td><td>0 dot</td></tr>
<tr><td>Shift Y</td><td>0 dot</td></tr>
<tr><td>Reference X</td><td rowspan="2">This item is used to set the origin of printer coordinate system horizontally and vertically. Available setting range is from 0 dot to 999 dots.</td><td>0 dot</td></tr>
<tr><td>Reference Y</td><td>0 dot</td></tr>
<tr><td>Code page</td><td>Use this item to set the code page of international character set.</td><td>850</td></tr>
<tr><td>Country</td><td>Use this option to set the country code. Available setting value range is from 1 to 358.</td><td>001</td></tr>
</table>

Note: If printing from enclosed software/driver, the software/driver will send out the commands, which will overwrite the settings set from the panel.

6.3.2 ZPL2

This “ZPL2” category can set up the printer settings for ZPL2.



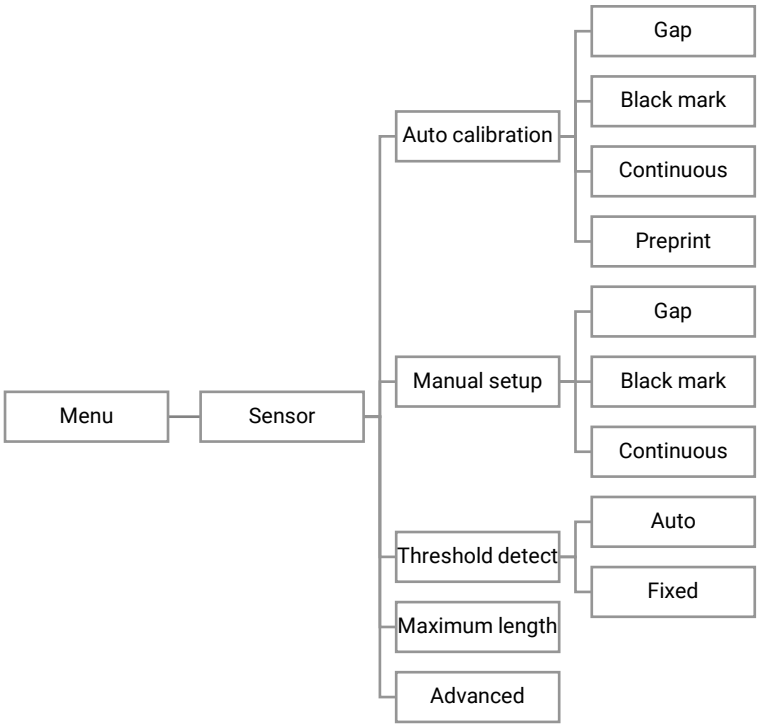
Item	Description	Default
Density	Use this item to setup printing darkness. The available setting range is from 0 to 30. You may need to adjust your density based on selected media.	16
Print speed	Use this item to setup print speed. Available setting range is 1~7 for 300dpi.	3
Tear off	This item is used to fine tune media stop location. Available setting value range is from -120~120 dots.	0 dot
Print mode	This item is used to set the print mode. There are 6 modes as below: **Printer mode** — **Description** Tear off — Next label top of form is aligned to the print head burn line location. Peeler off — Enable the label peel off mode. Cutter — Enable the label cutter mode. Rewind — Enable the label rewind mode.	Tear off
Print width	This item is used to set print width. The available value range is 2 ~ 999 dots.	812
List fonts	This feature is used to print current printer available fonts list to the label. The fonts stored in the printer's DRAM, Flash or optional memory card.	N/A
List images	This feature is used to print current printer available images list to the label. The images stored in the printer's DRAM, Flash or optional memory card.	N/A
List formats	This feature is used to print current printer available formats list to the label. The formats stored in the printer's DRAM, Flash or optional memory card.	N/A
List setup	This feature is used to print current printer configuration to the label.	N/A
Control prefix	This feature is used to set control prefix character.	N/A
Format prefix	This feature is used to set format prefix character.	N/A
Delimiter char	This feature is used to set delimiter character.	N/A
Media power up	This option is used to set the action of the media when you turn on the printer.	No motion

	Selections / **Description** Feed / Printer will advance one label Calibration / Printer will calibrate the sensor levels, determine length and feed label Length / Printer determine length and feed label No motion / Printer will not move media	
Head close	This option is used to set the action of the media when you turn on the printer. **Selections** / **Description** Feed / Printer will advance one label Calibration / Printer will calibrate the sensor levels, determine length and feed label Length / Printer determine length and feed label No motion / Printer will not move media	No motion
Label top	This option is used to adjust print position vertically on the label. The range is -120 to +120 dots.	0
Left position	This option is used to adjust print position horizontally on the label. The range is -9999 to +9999 dots.	0
Reprint mode	When reprint mode is enabled, you can reprint the last label printer by pressing ⌃ button on printer's control panel.	Disabled
Format convert	Selects the bitmap scaling factor. The first number is the original dots per inch (dpi) value; the second, the dpi to which you would like to scale.	None

Note: If printing from enclosed software/driver, the software/driver will send out the commands, which will overwrite the settings set from the panel.

6.4 Sensor

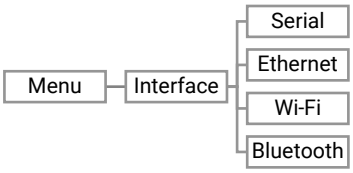
This option is used to calibrate the selected sensor. We recommend calibrate the sensor before printing when changing the media.



Item	Description	Default
Auto calibration	This option is used to set the media sensor type and calibrate the selected sensor automatically. Printer will feed 2 to 3 gap labels to calibrate the sensor sensitivity automatically.	N/A
Manual setup	In case “Automatic” cannot apply to the media, please use “Manual” function to set the paper length and gap/bline size then scan the backing/mark to calibrate the sensor sensitivity.	N/A
Threshold detect	This option is used to set sensor sensitivity in fixed or auto.	Auto
Maximum Length	This option is used to set the maximum length for label calibration.	254 mm
Advanced	This function can set the minimum paper length and maximum gap/bline length for auto-calibrate the sensor sensitivity.	0 mm

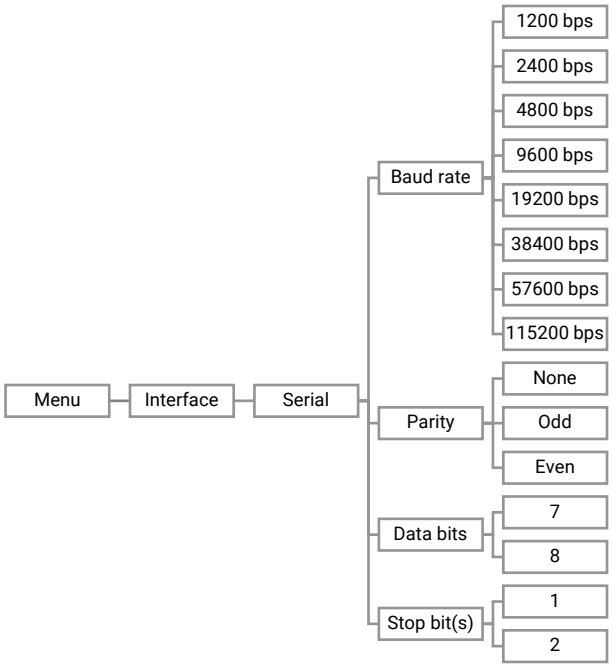
6.5 Interface

This option is used to set the printer interface settings.



6.5.1 Serial communication

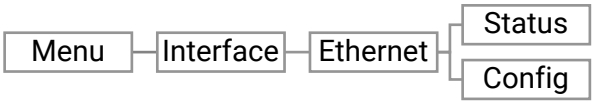
This option is used to set the printer RS-232 settings.



Item	Description	Default
Baud rate	This item is used to set the RS-232 baud rate.	9600
Parity	This item is used to set the RS-232 parity.	None
Data bits	This item is used to set the RS-232 Data bits.	8
Stop bit(s)	This item is used to set the RS-232 Stop bits.	1

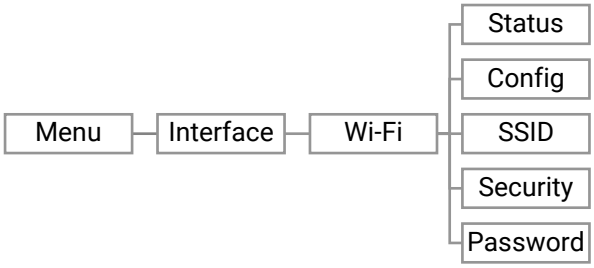
6.5.2 Ethernet

Use this menu to configure internal Ethernet configuration check the printer's Ethernet module status, and reset the Ethernet module.



Item	Description	Default
Status	Use this menu to check the Ethernet IP address and MAC setting status.	N/A
Config.	**DHCP:** This item is used to ON or OFF the DHCP network protocol. **Static IP:** Use this menu to set the printer's IP address, subnet mask and gateway.	DHCP

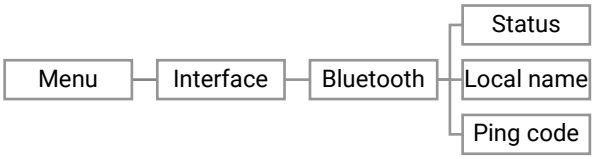
6.5.3 Wi-Fi



Item	Description	Default
Status	Use this menu to check the Wi-Fi IP address, MAC setting status	N/A
Config.	**DHCP:** This item is used to ON or OFF the DHCP network protocol. **Static IP:** Use this menu to set the printer's IP address, subnet mask and gateway.	DHCP
SSID	Use this menu to set the Wi-Fi SSID	N/A
Security	Use this menu to set the Wi-Fi security	Open
Password	Use this menu to set the Wi-Fi password	N/A

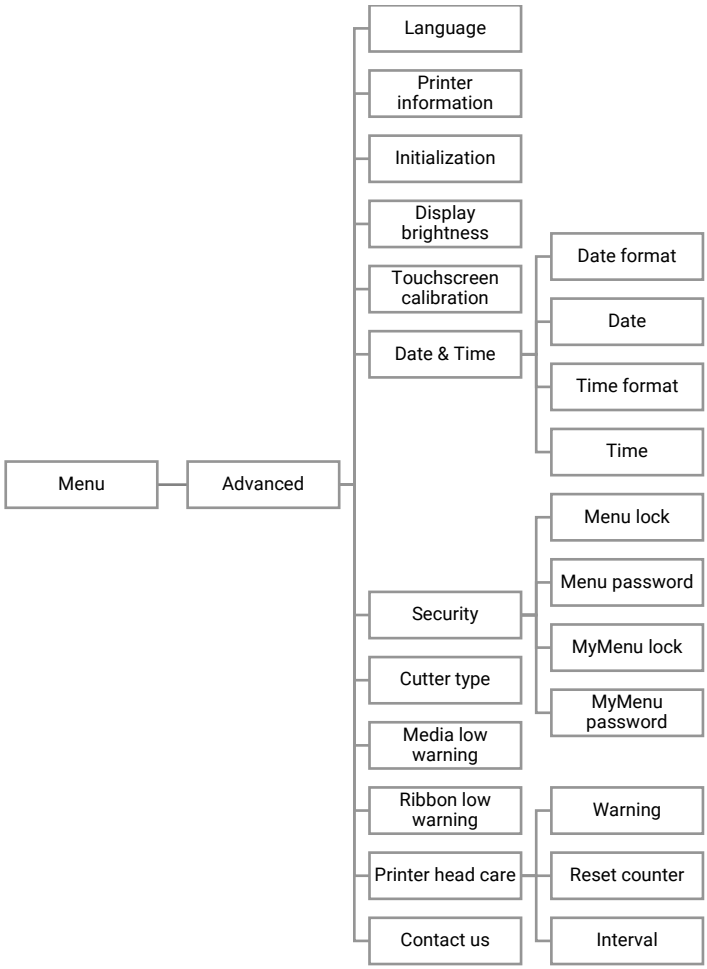
6.5.4 Bluetooth

This option is used to set the printer Bluetooth settings.



Item	Description	Default
Status	Use this menu to check the Bluetooth status.	N/A
Local name	This item is used to set the local name for Bluetooth.	RF-BHS
Pin code	This item is used to set the local pin code for Bluetooth	0000

6.6 Advanced

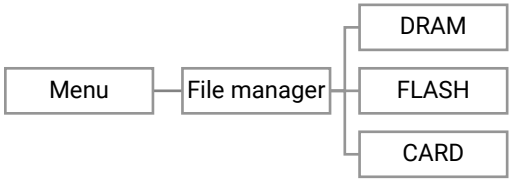


Item	Description	Default
Language	This item is used to setup the language on display.	English
Printer Information	This feature is used to check the printer serial number, printed mileage (m), printed labels (pcs) and cutting counter.	N/A
Initialization	This feature is used to restore printer settings to defaults.	N/A
Display brightness	This item is used to setup the brightness for display. (Range 0~100)	50
Touchscreen Calibration	This feature is used to calibrate the touchscreen for best result.	N/A
Date & Time	This item is used to setup the date and time on display.	N/A
Security	This feature is used to set the password for locking the menu or favorites. The default password is 8888.	Disable
Cutter type	This item is used to set the cutter type.	Guillotine
Ribbon Low Warning	This item is used to set the warning for ribbon low. For example, if setting value is 30m, when ribbon capacity was lower than 30m, the will be shown in red.	30M
Printer head maintenance	This item is used to check print head status and to set the settings for print head care.	N/A
Contact us	This feature is used to check the contact information for tech support service.	N/A

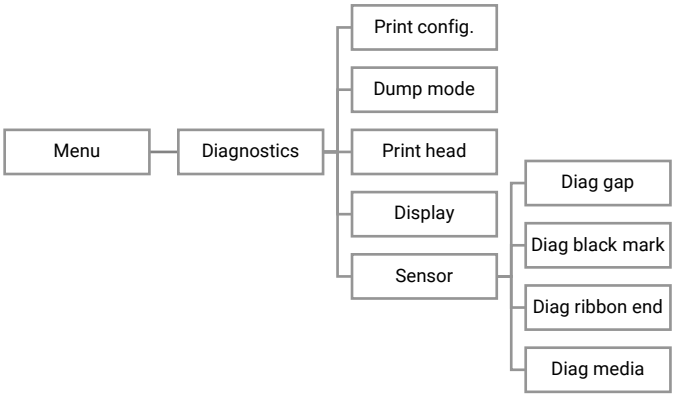
Item	Description
Warning	This item is used to enable/disable the print head clean warning. If enable this feature, once print head has been reached the setting mileage then the warning icon will be shown on printer UI for reminding user to clean the print head. The default setting is disable.
Reset counter	This item is used to reset the print head clean warning mileage after cleaned print head.
Interval	This item is used to set the expected mileage for reminding user to clean the print head. You have to enable the “TPH warning lock” for use. The default setting is 1 km.
Key sound	This item is used to enable/disable the sound of front panel buttons.

6.7 File manager

This feature is used to check the printer available memory, show the files list, delete the files or run the files that saved in the printer DRAM/Flash/Card memory.



6.8 Diagnostic

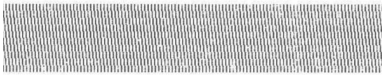


Item	Description
Printer config.	This feature is used to print current printer configuration to the label. On the configuration printout, there is a print head test pattern, which is useful for checking if there is any dot damage on the print head heater element.

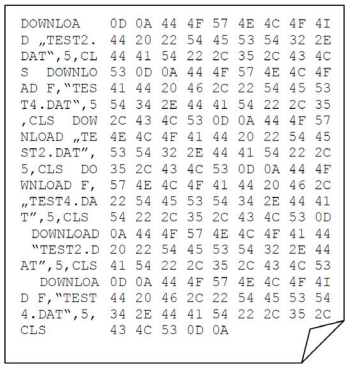
Self-test printout

```
------------------------------
     SYSTEM INFORMATION
------------------------------
       MODEL: XXXXXX
    FIRMWARE: X.XX
    CHECKSUM: XXXXXXXX
         S/N: XXXXXXXXXXX
         TCF: NO
        DATE: 1970/01/01
        TIME: 00:04:18
  NON-RESET: 110      m (TPH)
       RESET: 110      m (TPH)
  NON-RESET: 0          (CUT)
       RESET: 0          (CUT)
------------------------------
```

Model name
Firmware version
Firmware checksum
Printer S/N
Configuration file
System date
System time
Printed mileage (meter)
Cutting Counter

	PRINTING SETTING SPEED: 5 IPS DENSITY: 8.0 WIDTH: 4.00 INCH HEIGHT: 4.00 INCH GAP: 0.00 INCH INTENSION: 5 CODEPAGE: 850 COUNTRY: 001	Print speed (inch/sec) Print darkness Label size (inch) Gap distance (inch) Gap/Black mark sensor intension Code page Country code
	Z SETTING DARKNESS: 16.0 SPEED: 4 IPS WIDTH: 4.00 INCH TILDE: 7EH (~) CARET: 5EH (^) DELIMITER: 2CH (,) POWER UP: NO MOTION HEAD CLOSE: NO MOTION	ZPL setting information Print darkness Print speed (inch/sec) Label size Control prefix Format prefix Delimiter prefix Printer power up motion Printer head close motion
	RS232 SETTING BAUD: 9600 PARITY: NONE DATA BIT: 8 STOP BIT: 1	RS-232 serial port configuration
	DRAM FILE (0 FILES) PHYSICAL XXXX KBYTES AVAILABLE XXXX KBYTES FLASH FILE (0 FILES) PHYSICAL XXXX KBYTES AVAILABLE XXXX KBYTES	Number of download files Total & available memory space
		Print head check pattern
Dump mode	Captures the data from the communications port and prints out the data received by printer. In the dump mode, all characters will be printed in 2 columns. 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.	

ASCII Data



```
DOWNLOA   0D 0A 44 4F 57 4E 4C 4F 4I
D „TEST2. 44 20 22 54 45 53 54 32 2E
DAT“,5,CL 44 41 54 22 2C 35 2C 43 4C
S  DOWNLO 53 0D 0A 44 4F 57 4E 4C 4F
AD F,“TES 41 44 20 46 2C 22 54 45 53
T4.DAT“,5 54 34 2E 44 41 54 22 2C 35
,CLS  DOW 2C 43 4C 53 0D 0A 44 4F 57
NLOAD „TE 4E 4C 4F 41 44 20 22 54 45
ST2.DAT“, 53 54 32 2E 44 41 54 22 2C
5,CLS  DO 35 2C 43 4C 53 0D 0A 44 4F
WNLOAD F, 57 4E 4C 4F 41 44 20 46 2C
„TEST4.DA 22 54 45 53 54 34 2E 44 41
T“,5,CLS  54 22 2C 35 2C 43 4C 53 0D
  DOWNLOAD 0A 44 4F 57 4E 4C 4F 41 44
  “TEST2.D 20 22 54 45 53 54 32 2E 44
AT“,5,CLS 41 54 22 2C 35 2C 43 4C 53
   DOWNLOA 0D 0A 44 4F 57 4E 4C 4F 4I
D F,“TEST 44 20 46 2C 22 54 45 53 54
4.DAT“,5, 34 2E 44 41 54 22 2C 35 2C
CLS       43 4C 53 0D 0A
```

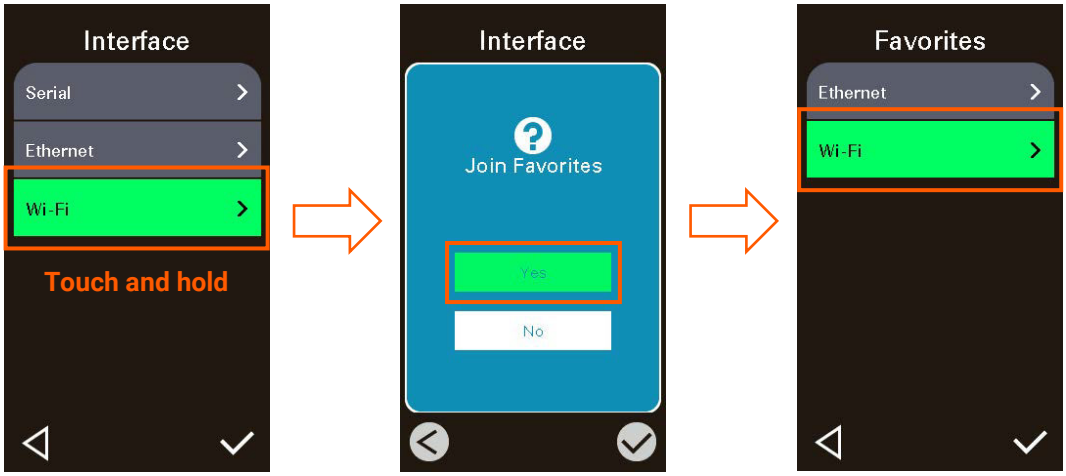
Hexdecimal data related to left column of ASCII data

Print head	This feature is used to check print head's temperature and bad dots.
Display	This feature is used to check LCD's color state.
Sensor	This feature is used to check sensor intensity and reading state.

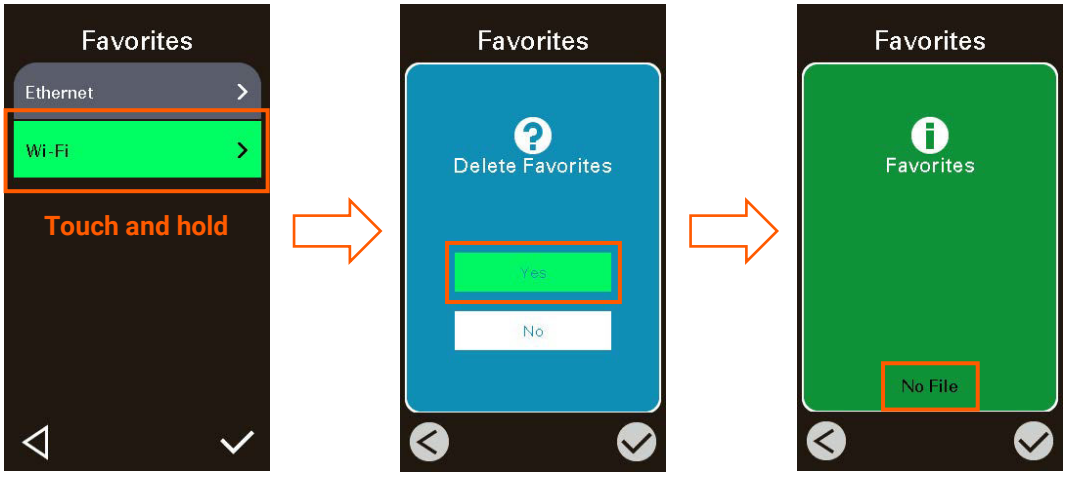
6.9 Favorites

This feature is used to create your own favorites list. You can organize the commonly used setting options in "Favorites" ⊞.

Get organized "Favorites" list
Touch and hold a favorite option item, until "Join Favorites" setting screen pops up.
Tap "Yes" to add this setting option item to "Favorites".



Delete "Favorites" item
Touch and hold the option item, until "Delete Favorites" setting screen pops up.
Tap "Yes" to delete this setting option item on "Favorites".



7 Printer management tool (TPM)

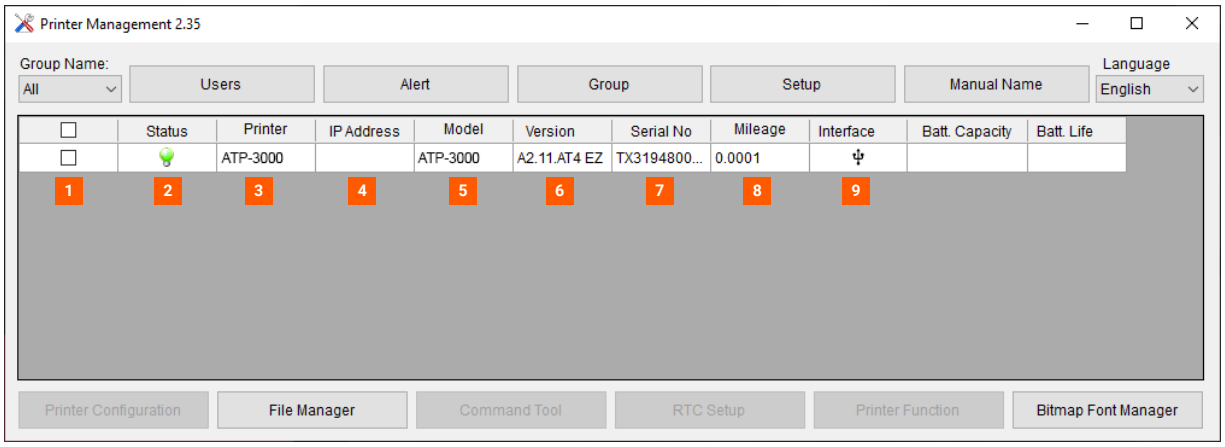
The **Printer management tool (TPM)** is a tool for Microsoft Windows to manage the ATP-3000 printer. With TPM you can:

- Check the printer status
- Configure printer settings
- Manage multiple printers

To download this tool on your PC, use the following link:

Download Printer Management Tool (TPM)

7.1 TPM overview



1. **Select printer(s)**
2. **Printer status**
   - Printer is ready
   - Error
3. **Printer** Printer name
4. **IP Address** When using Ethernet
5. **Model** Printer model name
6. **Version** Firmware version
7. **Serial No** Serial number
8. **Mileage** Printed mileage
9. **Interface** USB / Ethernet

7.2 Printer settings

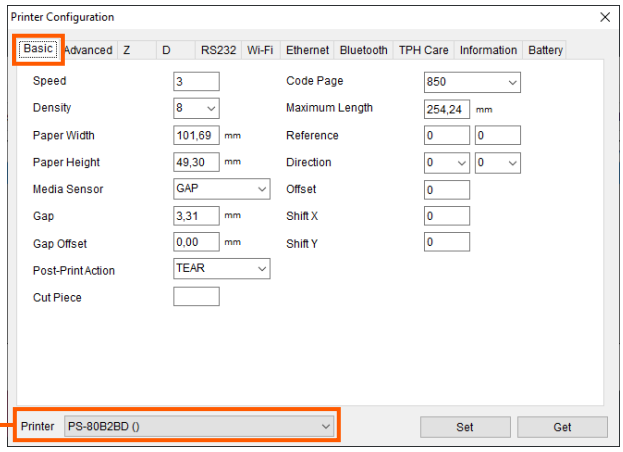
7.2.1 Printer configuration

Select the printer(s) in the list and click on **Printer Configuration**.

Basic

Apply basic settings to one or all printer(s).

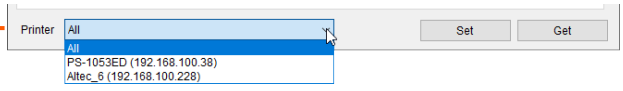
Note: these settings might be overruled by label software.



Speed	Print speed (1 – 6 inch/s)
Density	Printing temperature (0 - 15)
Paper width	Media width in millimeters
Paper height	Media height in millimeters
Media Sensor	Gap / Black mark / Continuous
Gap	Gap size (height) in millimeters
Gap Offset	Offset distance in millimeters
Post-Print action	TEAR / PEAL / CUTTER / REWINDER /OFF
Cut Piece	Cut after “X” labels
Code Page	Keyboard country code
Maximum Length	Maximum label detection length
Reference	Adjust print and tear-off position
Direction	Print direction (0 or 1)
Offset	Adjust tear-off position
Shift X / Y	Adjust print position

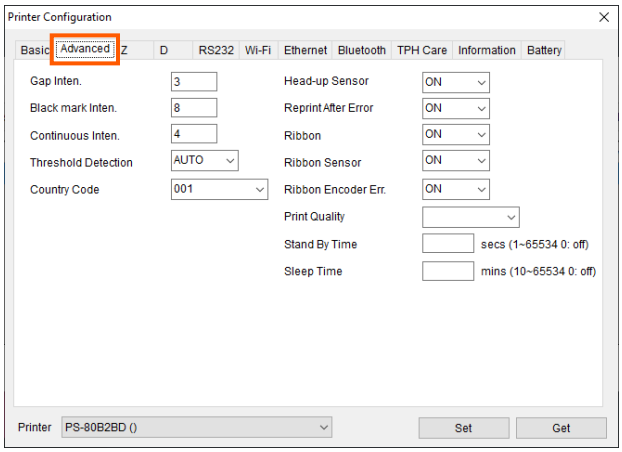
Printer selection

Select the printer(s) you want to apply the settings. This can be a specific printer or <u>all</u> printers.



Advanced

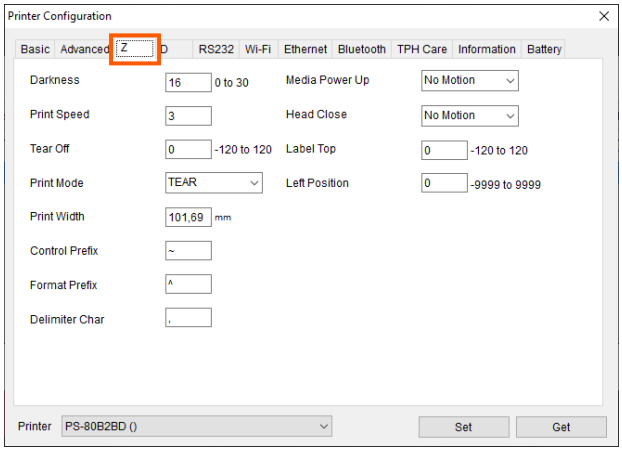
Apply advanced settings to one or all printer(s).



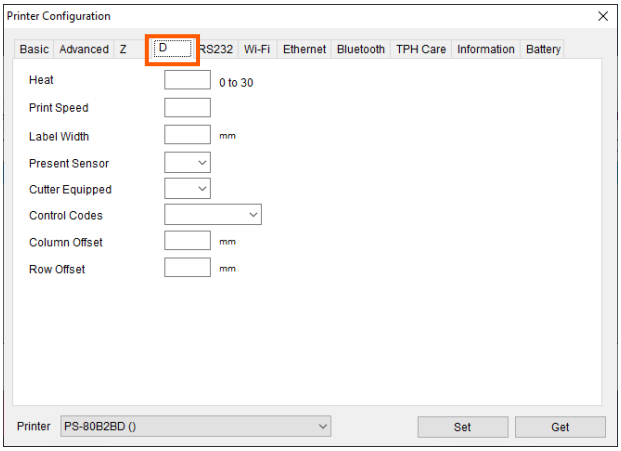
Gap Inten.	Gap sensor intensity
Black mark inten.	Black mark intensity
Continuous inten.	Continuous intensity
Threshold Detection	N/A for ATP-3000
Country Code	Keyboard country code
Head-up Sensor	Top cover open/closed check
Reprint After Error	Reprint last label after error
Ribbon	Turn ribbon use on/off
Ribbon Sensor	Turn ribbon sensor on/off
Ribbon Encode Err.	Ink ribbon speed detection
Print Quality	N/A for ATP-3000
Stand By Time	N/A for ATP-3000
Sleep Time	N/A for ATP-3000

Z / D configuration

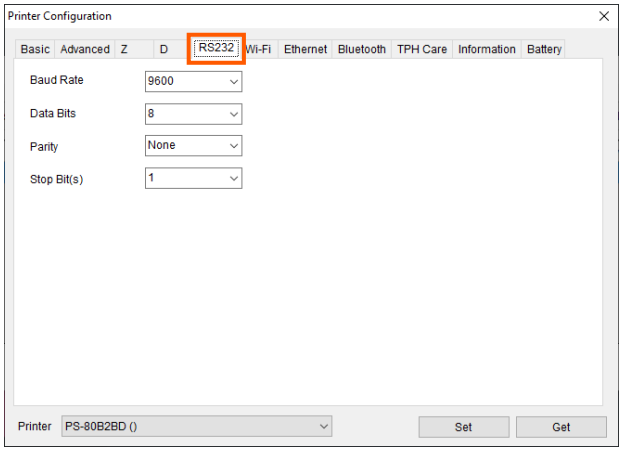
Z: Use these settings when sending ZPL language to the printer.



D: These functionalities are not available for ATP-3000.



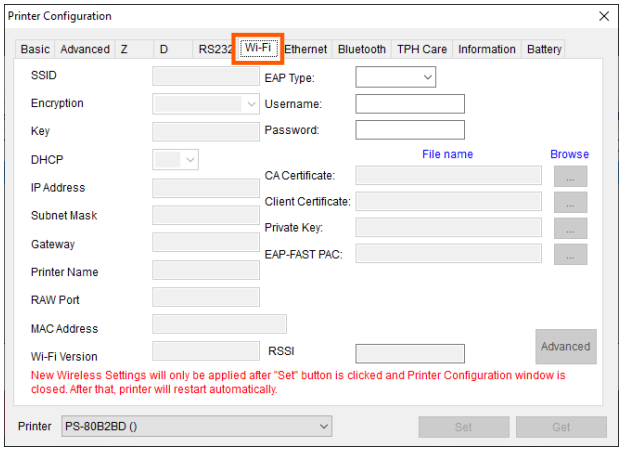
RS232 (serial port)



Port settings for the RS232 serial port

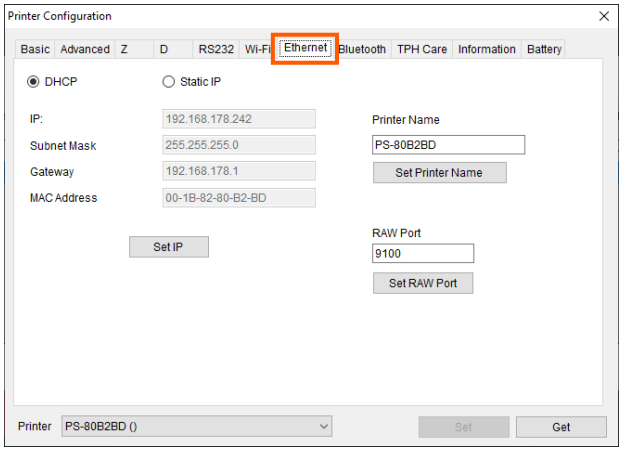
- Baud rate
- Data bits
- Parity
- Stop bit(s)

Wi-Fi



Settings for the (optional) Wi-Fi module
The optional Wi-Fi module can be requested from Altec.

Ethernet

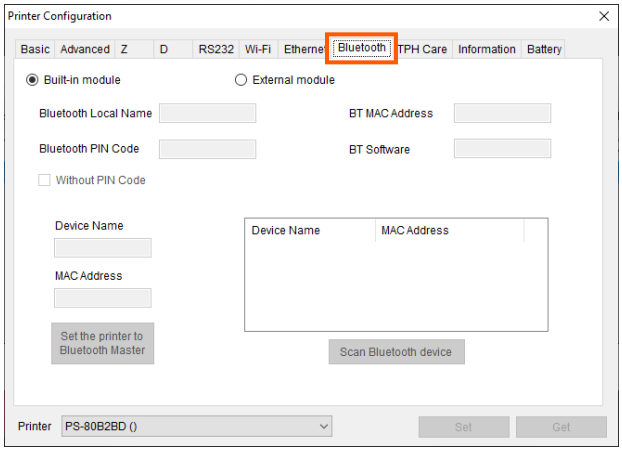


Settings for Ethernet connection

DHCP
Set printer name and RAW port

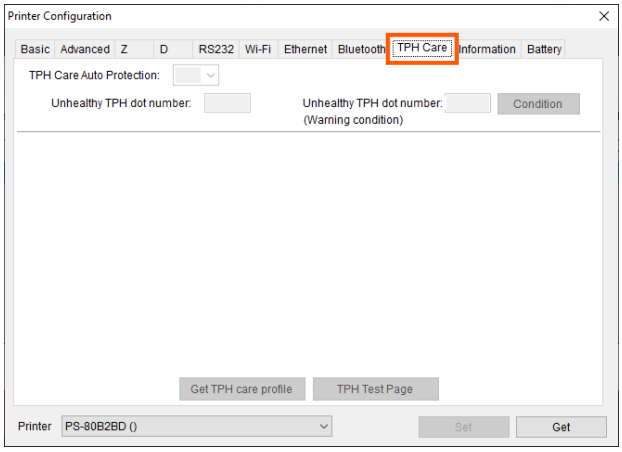
Static IP
Set (static) IP address, Subnet mask, Default gateway.
MAC address can not be changed.

Bluetooth



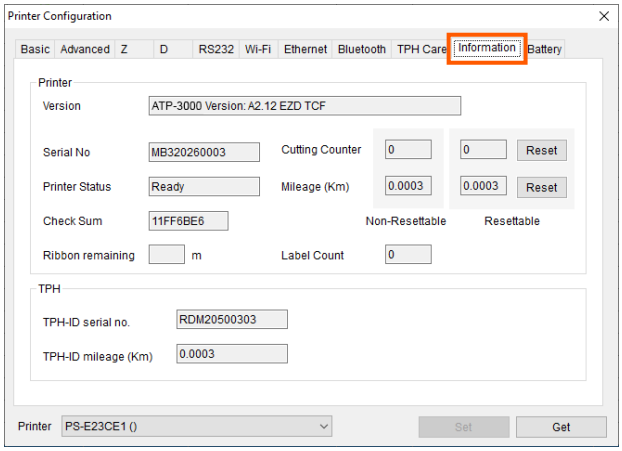
Settings for the (optional) Bluetooth module
The optional Bluetooth module can be requested from Altec.

TPH Care



These settings are not available for the ATP-3000.

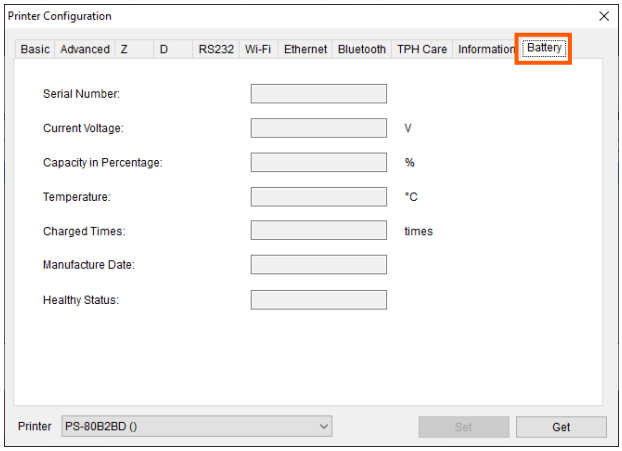
Information



Overview of ATP-3000 printer information

Cutting counter / Mileage (km) can be reset here.

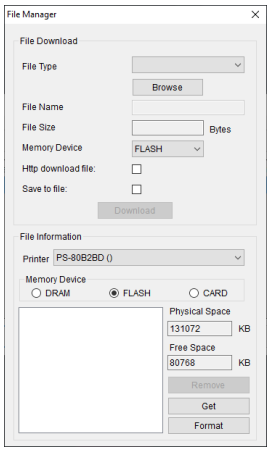
Battery



These settings are not available for the ATP-3000.

7.2.2 File manager

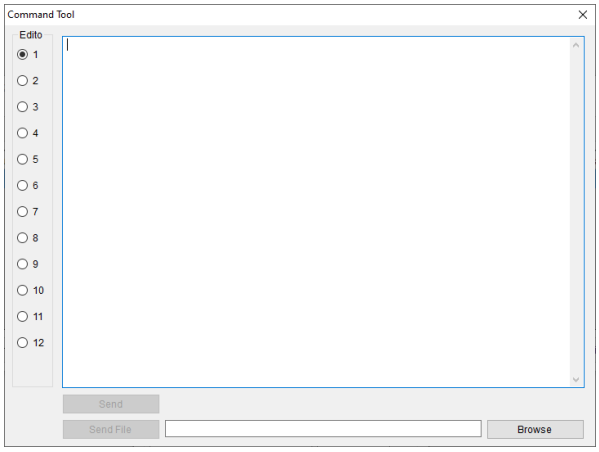
Send files to the printer using **File manager**.



File Type	BMP (*.bmp), PCX (*.pcx), True Type Font, Bitmap fonts, Printer BASIC File (*.bas), Data File, Firmware File (*.new / *.rom), TCF File (*.tcf) and RAW Data
File name	Name of the loaded file
File size	Size of the loaded file in Bytes
Memory Device	DRAM, FLASH (default) or CARD
Download	Send file to the printer
File information	**Get:** retrieve a list of the files on DRAM / FLASH / CARD Then you can select files and remove (delete) them. **Format:** delete all the files in the specified memory

7.2.3 Command tool

Send commands using printer language to the printer with the **Command tool** function.



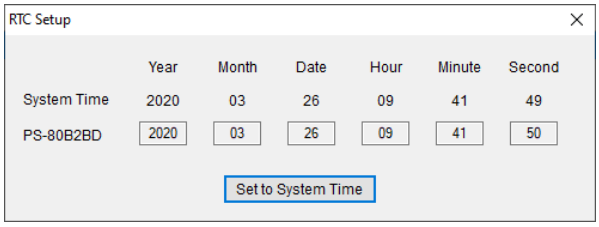
Put your command (printer language) in the white area.

> **Note** Always close the command with an Enter (carriage return)

Send	Send the command to the printer
Send File	Load file and send it to the printer

7.2.4 RTC Setup

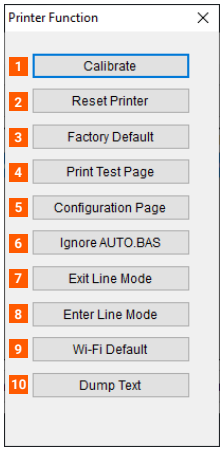
Send the system time to the printer.



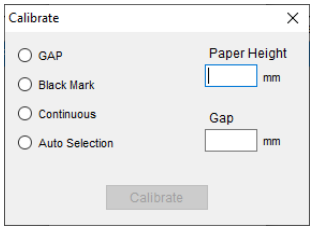
Click on **Set to System Time** to set the printer clock equal to the clock on your computer.

7.2.5 Printer function

These functions are performed directly on the printer.



1 | Calibrate



Choose the required sensor and enter the label height and gap.

Paper Height	Vertical label height from gap to gap
Gap	Height of the gap

2 | Reset Printer

Restart the printer. Use this function when an error occurs.

3 | Factory default

Reset all printer settings back to the default factory values.

4 | Print Test Page

Print a test page with all current media settings (dimensions).

5 | Configuration Page

Print a test page with all current printer settings.

6 | Ignore AUTO.BAS

Restart the printer without a loaded (.bas) program.

7 | Exit Line Mode / 8 | Exit Line Mode

To be used with ZPL.

9 | Wi-Fi Default

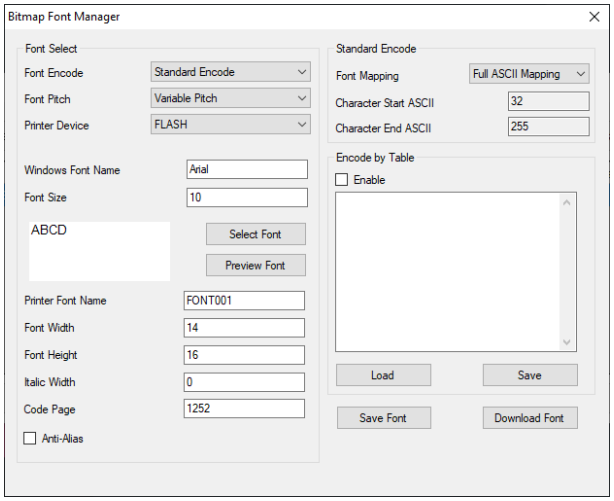
Reset Wi-Fi settings back to default.

10 | Dump Text

Sets the printer to dump mode. Reset the printer to leave dump mode.

7.2.6 Bitmap Font Manager

Load bitmap fonts into the printer.

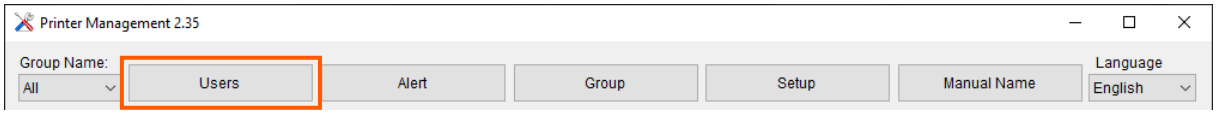


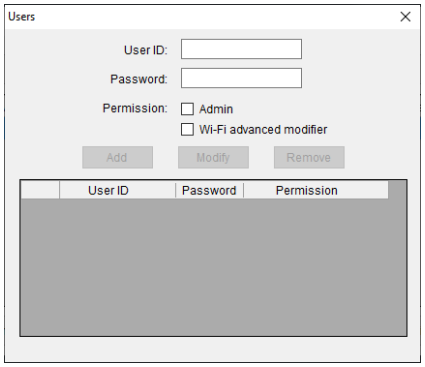
In **Bitmap Font Manager** you can load fonts into the printer.

This is sometimes used for **stand-alone** printing solutions

7.3 Program settings

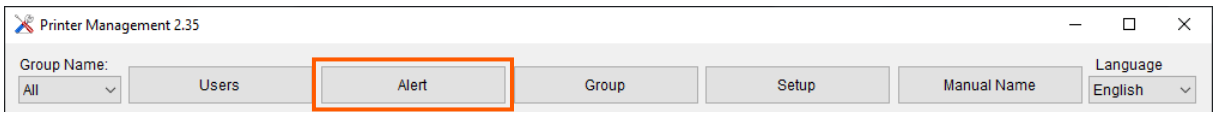
7.3.1 Users

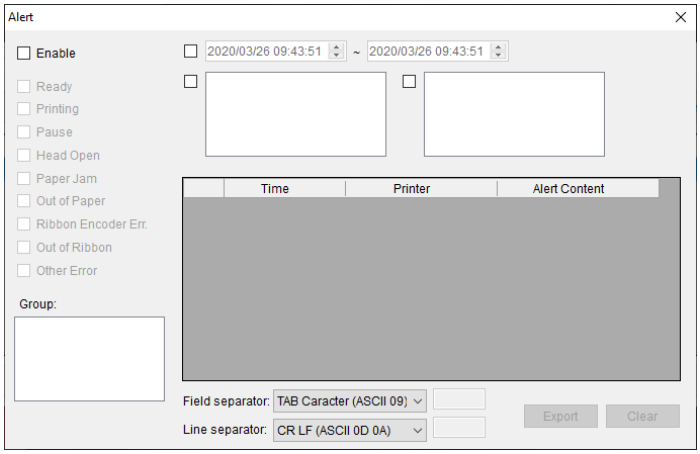




Create **users** within the Printer Management tool.

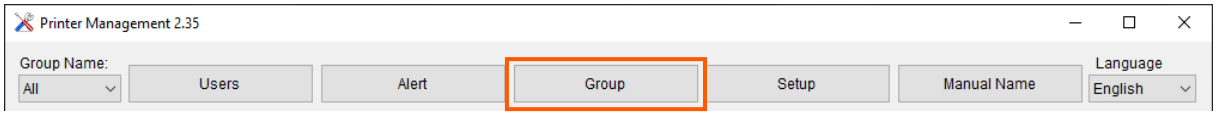
7.3.2 Alert

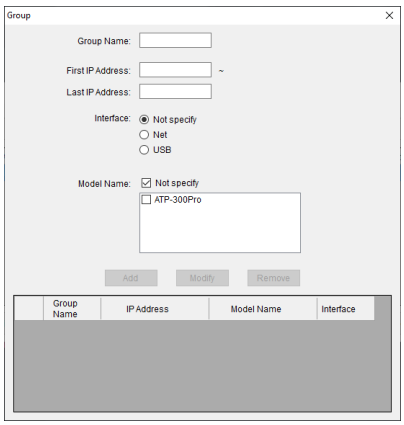




Send notifications (alerts) to users when the status of certain printer(s) - or printer groups - has changed.

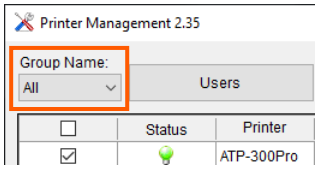
7.3.3 Group



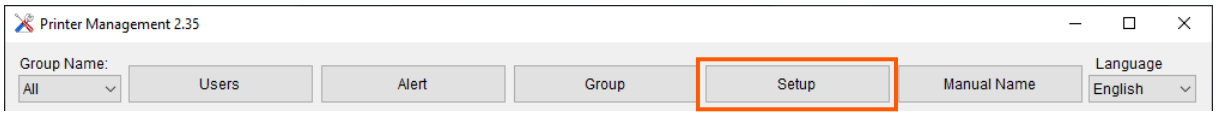


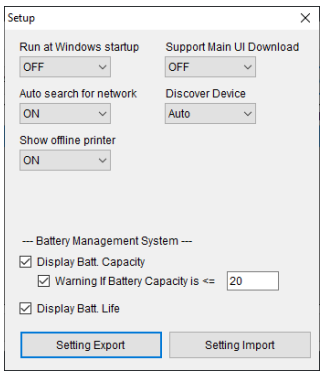
Set up printer group
Here you can set up groups of printers.

This way you can change settings in the Printer Management Tool and apply them directly to all printers in the group.



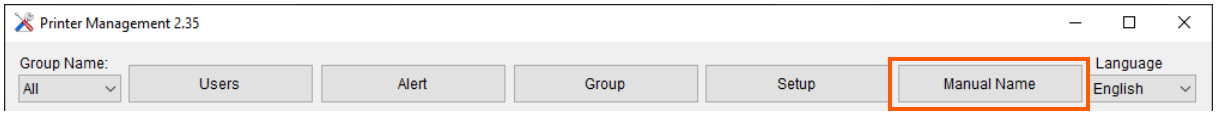
7.3.4 Setup

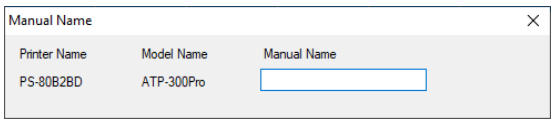




Change general program settings.

7.3.5 Manual name





In **Manual Name** you can set a (alternative) printer name. This name will only be used in the Printer Management tool.

8 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.

Problem	Possible cause	Recovery procedure
Power indicator does not illuminate	• The power cord is not properly connected. • The power switch is closed.	• Plug the power cord in printer and outlet. • Switch the printer on.
Carriage open	• The printer carriage is open.	• Please close the print carriage.
Not printing	• Check if interface cable iswell connected to the interface connector. • Check if wireless or Bluetooth device is well connected between host and printer. • The port specified in the Windows driver is not correct.	• Re-connect cable to interface or change a new cable. • Please reset the wireless device setting. • Select the correct printer port in the driver. • Clean the printhead. • Printhead's harness connector is not well connected with printhead. Turn off the printer and plug the connector again. • Check your program if there is a command PRINT at the end of the file and there must have CRLF at the end of each command line.
No print on the label	• Label or ribbon is loaded not correctly. • Use wrong type paper or ribbon.	• Follow the instructions in loading the media and ribbon. • Ribbon and media are not compatible. • Verify the ribbon-inked side. • The print density setting is incorrect.
No ribbon	• Running out of ribbon. • The ribbon is installed incorrectly.	• Supply a new ribbon roll. • Please refer to the steps in user's manual to reinstall the ribbon.
No paper	• Running out of label. • The label is installed incorrectly. • Gap/black mark sensor is not calibrated.	• Supply a new label roll. • Please refer to the steps in user's manual to reinstall the label roll. • Calibrate the gap/black mark sensor.

Paper jam	• Gap/black mark sensor is not set properly. • Make sure label size is set properly. • Labels may be stuck inside the printer mechanism.	• Calibrate the media sensor. • Set media size correctly. • Remove the stuck label inside the printer mechanism.
Take label	• Peel function is enabled.	• If the peeler module is installed, please remove the label. • If there is no peeler module in front of the printer, please switch off the printer and install it. • Check if the connector is plugging correctly.
Can't download file to memory (FLASH / DRAM / CARD)	• The space of memory is full.	• Delete unused files in the memory.
Poor print quality	• Ribbon and media is loaded incorrectly • Dust or adhesive accumulation on the print head. • Print density is not set properly. • Printhead element is damaged. • Ribbon and media are incompatible. • The printhead pressure is not set properly.	• Reload the supply. • Clean the print head. • Clean the platen roller. • Adjust the print density and print speed. • Run printer self-test and check the print head test pattern if there is dot missing in the pattern. • Change proper ribbon or proper label media. • Adjust the printhead pressure adjustment knob. • The release lever does not latch the print head properly.
Missing printing on the left or right side of the label	• Wrong label size setup.	• Set the correct label size.
Gray line on the blank label	• The print head is dirty. • The platen roller is dirty.	• Clean the print head. • Clean the platen roller.
Irregular printing	• The printer is in Hex Dump mode. • The RS-232 setting is incorrect.	• Turn off and on the printer to skip the dump mode. • Re-set the RS-232 setting.
Label feeding is not stable (skew) when printing	• The media guide does not touch the edge of the media.	• If the label is moving to the right side, please move the label guide to left. • If the label is moving to the left side, please move the label guide to right.

Skip labels when printing	• Label size is not specified properly. • Sensor sensitivity is not set properly. • The media sensor is covered with dust.	• Check if label size is setup correctly. • Calibrate the sensor by Auto Gap or Manual Gap options. • Clear the GAP/Black mark sensor by blower.
Wrinkle problem	• Print head pressure is incorrect. • Ribbon installation is incorrect. • Media installation is incorrect. • Print density is incorrect. • Media feeding is incorrect.	• Please refer to the chapter 5. • Please set the suitable density to have good print quality. • Make sure the label guide touch the edge of the media guide.
RTC time is incorrect when reboot the printer	• The battery has run down.	• Check if there is a battery on the main board.
The left side printout position is incorrect	• Wrong label size setup. • The parameter Shift X in LCD menu is incorrect.	• Set the correct label size. • Press [Menu] → [Setting] → [Shift X] to fine tune the parameter of Shift X.
The printing position of small label is incorrect	• Media sensor sensitivity is not set properly. • Label size is incorrect. • The parameter Shift Y in the LCD menu is incorrect. • The vertical offset setting in the driver is incorrect.	• Calibrate the sensor sensitivity again. • Set the correct label size and gap size. • Press [Menu] → [Setting] → [Shift Y] to fine tune the parameter of Shift Y.

9 Maintenance

This chapter presents the clean tools and methods to maintain your printer.

1. Please use an Altec CleaningWipe to clean the printer.

   ALTEC CLEANING WIPES (25 PCS.)
   Art.nr. 91001728

2. The cleaning process is described as following:

Printer part	Method	Interval
Print head	• Always turn off the printer before cleaning the print head. • Allow the print head to cool for a minimum of one minute. • Use a CleaningWipe to clean the printhead surface.	Clean the platen roller when changing a new label roll.
Platen roller	• Turn the power off. • Rotate the platen roller and wipe it thoroughly with a CleaningWipe .	Clean the platen roller when changing a new label roll.
Peel bar	Use a Cleaning Wipe to clean the peel bar.	As needed
Sensor	Compressed air or vacuum	Monthly
Exterior	Wipe it with water-damped cloth	As needed
Interior	Brush or vacuum	As needed

Note:

- Do not touch printer head by hand. If you touch it careless, please use ethanol to clean it.
- Please use an Altec CleaningWipe. DO NOT use medical alcohol, which may damage the print head.
- Regularly clean the print head and supply sensors when changing media to keep printer performance and extend printer life.

10 Support (FAQ)

Do you need any help setting up your printer or do you experience a problem during printing?

The Netherlands

T. +31(0)78 - 615 20 33

info@altec.nl

Belgium

T. +32(0)2 - 270 34 88

info@altec.be

ATP 3000