

DP-230L Series

Operator's Manual



DP-230L

Portable Thermal Printer

www.dascom.com

Version: 20190712-EN



This device fulfills the European standards requirements by complying with the Directive relating to electromagnetic compatibility and relating to low-voltage electrical equipment. Furthermore it fulfills the requirements for RoHS and RED where applicable.

Conformity with the above mentioned Directives is indicated by the CE symbol attached to the device.

Note: Conformity may be affected by:

- using interface cables not complying with the specifications
- non-observance of important instructions in the operator's manual
- installing components not approved for this device by the manufacturer
- unauthorized manipulation



Dieses Gerät erfüllt die Anforderungen der Europäischen Normen durch Einhaltung der Richtlinien bezüglich der Elektromagnetischen Verträglichkeit sowie bezüglich Elektrischer Betriebsmittel mit Niederspannung. Des Weiteren werden die Anforderungen bezüglich RoHS und falls anwendbar RED erfüllt.

Die Konformität zu den oben angeführten Richtlinien ist durch das am Gerät angebrachte CE-Zeichen gekennzeichnet.

Hinweis: Die Konformität kann beeinflusst werden durch:

- Benutzung von nicht spezifizierten Schnittstellen
- Nichtbeachtung wichtiger Hinweise der Bedienungsanleitung
- Ersetzen von Bauteilen, die nicht vom Hersteller für dieses Gerät freigegeben wurden
- Eingriffe durch Unbefugte



This device complies with the requirements of the United Kingdom (UK) legislation of Electrical Safety Regulations, Electromagnetic Compatibility Regulations, if applicable the Radio Regulations and the Restriction of the Hazardous Substances in Electrical and Electronic Equipment Regulations.

FCC Part 15 Class B

1. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1) This device may not cause harmful interference.
 - 2) This device must accept any interference received, including interference that may cause undesired operation.
2. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Re-orientate or relocate the receiving antenna.

Increase the separation between the equipment and receiver.

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

Canadian Department of Communications Radio Interference Statement

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: 1) this device may not cause interference; 2) this device must accept any interference, including interference that may cause undesired operation of the device. Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication. Maximum power output plus maximum antenna gain of the EUT is: 4.5W/m² , Limit is 10Wm².

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement. Conformément à la

réglementation d'Industrie Canada, le présent émetteur radio peut fonctionner avec une antenne d'un type et d'un gain maximal (ou inférieur) approuvé pour l'émetteur par Industrie Canada. Dans le but de réduire les risques de brouillage radioélectrique à l'intention des autres utilisateurs, il faut choisir le type d'antenne et son gain de sorte que la puissance isotrope rayonnée équivalente (p.i.r.e.) ne dépasse pas l'intensité nécessaire à l'établissement d'une communication satisfaisante. La puissance de sortie maximale plus gain d'antenne maximal du EUT est : 4.5W/m² Limite est 10W/m²

Battery Disposal

Only disposes of used batteries according instructions and/or your local regulations.

Acknowledgments:

DASCOM is a registered trademark of DASCOM Europe GmbH

Bluetooth is a registered trademark of Bluetooth SIG, Inc.

Zebra, CPCL and ZPL are registered trademarks of Zebra Technologies

Wi-Fi is a registered trademark of the Wi-Fi Alliance

Windows is a registered trademark of Microsoft Corporation

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Read all set up and operating instructions before proceeding with operation. Do not operate in an enclosure unless properly ventilated. Do not operate near a heat source.



Lesen Sie vor der Inbetriebnahme die Aufbau- und Bedienungsanleitung. Betreiben Sie den Drucker nicht in einem kleinen, geschlossenen Raum, es sei denn dieser wird ordnungsgemäß belüftet. Nehmen Sie den Drucker nicht in der Nähe einer Wärmequelle in Betrieb.



No user-serviceable parts inside. Refer service or repairs to a qualified service professional. Use of genuine DASCOM replacement parts is required to warrant proper, safe operation. Any alteration or modification of this device voids the user warranty and may make the product unsafe to operate. The print head and motors get hot during use. Wait until they cool before touching them. Make certain the printer is disconnected from AC power before removing any covers or performing any required cleaning or maintenance. Connecting this printer to an ungrounded receptacle can result in electrical shock. Never place the printer near inflammable or explosive substances. Do not operate near liquid or spill liquid into the printer at any time.



Enthält keine Teile, die vom Bediener instandgesetzt werden können. Bitte wenden Sie sich bei Instandsetzung oder Reparatur an qualifiziertes Kundendienstpersonal. Die Verwendung von echten DASCOM Ersatzteilen ist notwendig, um ordnungsgemäßen, sicheren Betrieb zu gewährleisten. Änderungen oder Modifikationen dieses Geräts machen die Garantie ungültig und können den sicheren Betrieb des Produkts gefährden. Während des Druckens werden Druckerkopf und Motoren heiß. Warten Sie, bis sich die Teile abgekühlt haben, bevor Sie sie berühren. Vergewissern Sie sich, dass der Drucker nicht mehr an die Stromquelle angeschlossen ist, bevor Sie Abdeckungen abnehmen oder das Gerät reinigen bzw. warten. Schließen Sie diesen Drucker nicht an eine ungeerdete Steckdose an; dies kann zum Elektroschock führen. Setzen Sie den Drucker niemals in die Nähe von feuer- oder explosionsgefährlichen Stoffen. Betreiben Sie den Drucker nicht in der Nähe von Flüssigkeiten und lassen Sie keine Flüssigkeiten in den Drucker gelangen.

Specifications are subject to change without notice.

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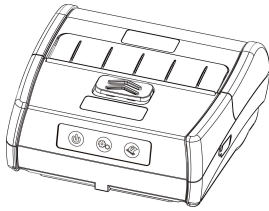
Thank you for purchasing the Tally Dascom DP-230L mobile thermal printer. The DP-230L is an ultraportable light weight printer with convenient OLED command screen. This allows you to quickly configure your printer and check your battery status.

With easy paper or label loading, the DP-230L quickly prints without ink or ribbon up to 3 inches per second on 3" wide media. The DP-230L has a large capacity battery of 7.2V/2200 mAH so you will no longer have to recharge the printer during the day.

Complete specifications may be found in section 8 of this manual.

We recommend using genuine Dascom supplied media and accessories. Please see our list of available items on www.dascom.com.

Packaging list



Printer(1 pc)



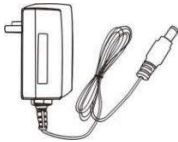
Battery(1 pc)



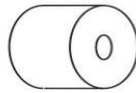
Paper spacer for
2* paper (1pc)



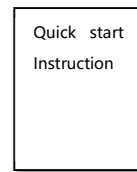
DC to Type-C
Power cord(1pc)



Power adapter(1pc)



Test paper roll (1 pc)

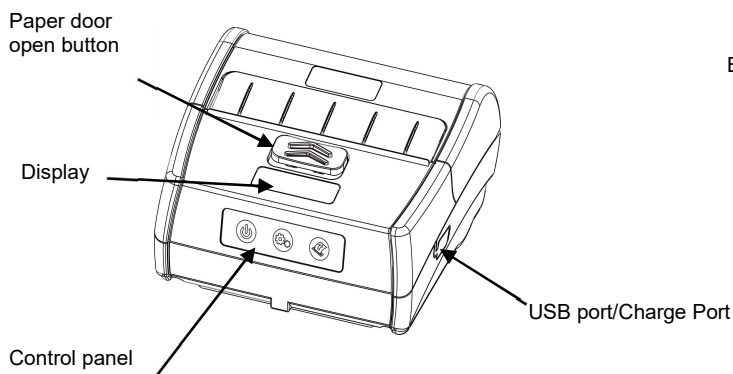


Quick Start Instruction
(1pc)

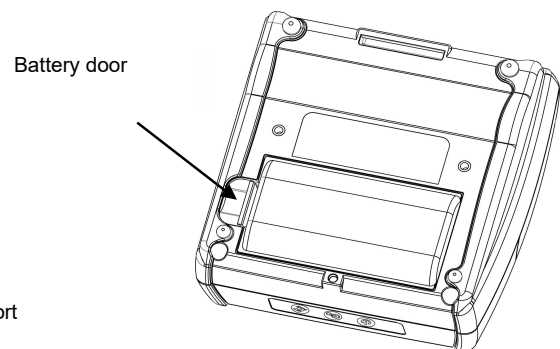
Reference Tally Dascom website www.dascom.com for DP-230L Operators Manual

Printer Parts

TOP VIEW



BOTTOM VIEW



1 Preparation before using

1.1 Battery storage

After a long period of storage of the printers and/or batteries without any initial use the batteries could be “deeply discharged” and cannot be recharged again. This is common behavior of Lithium-Ion batteries.

To avoid this behavior, we recommend for charging the battery annually to 20-40% capacity!

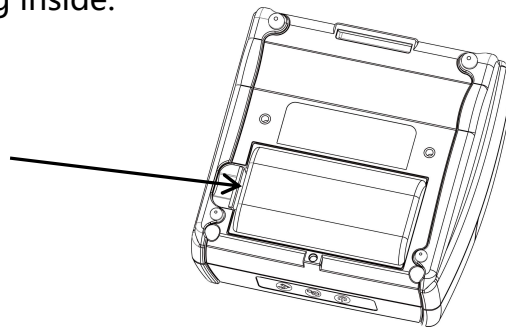
1.2 Battery installation

-
- i** The battery needs to be fully charged prior to first use. After long-term storage, also fully charge the battery before use to ensure highest performance.
-

Place battery into printer with the label facing inside.

Press down until you hear an audible click.

To remove battery, depress battery door clip and pull battery out.



1.2 Charging the battery

-
- i** Check the power adapter voltage before connecting the power adapter. If the voltage you use does not match the device, it will damage the adapter and printer. If you use a power adapter that is not provided or approved by Dascom, the printer may be damaged and warranty voided.
-


Connect the AC Adapter to the printer through the USB Type-C port. Plug the adapter into wall outlet. Do not remove the battery during charging.

Battery power:

- (1) The battery icon on the display will indicate the battery is charging by flashing the capacity bars.
- (2) Current power of battery will display on LCD as follows:

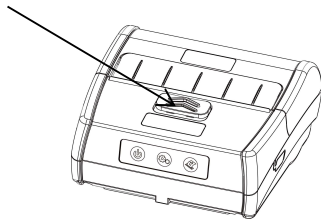
Empty (<5%)	Level 1 (15-40%)
Level 2 (40-70%)	Level 3 (70-100%)

1.3 Loading Media

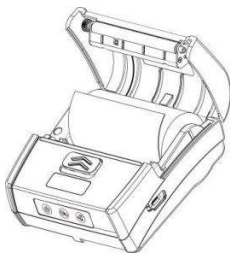
Before printing, please check the media type for printing. The printer prints labels by default, if you want to print continuous paper, you will need to set the Print Type to Continuous. Refer to the Configuration section of this  manual.

Please pay attention to the direction of the paper roll. If paper roll is in the wrong direction, it will result in a failure to print.

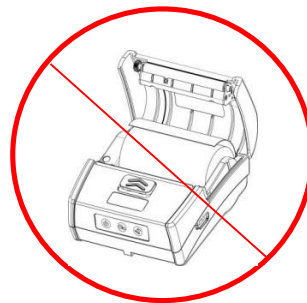
To open paper door slide paper door button in direction of arrows.



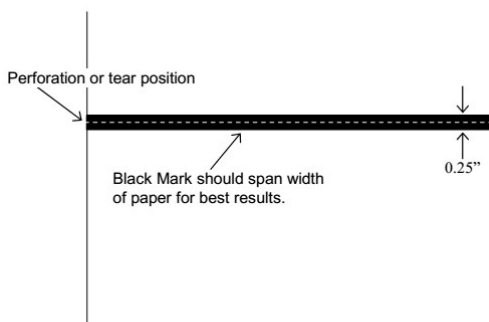
Correct way to install paper.



Incorrect way to install paper.



Black Mark media Optimum performance position:



Optimum Black Mark Position


For optimal performance, use Dascom supplied media. Dascom offers a variety of media types. Please see our website or contact your Dascom sales representative for a complete and up to date description of consumables and accessories.

Spacer

With spacer you will be able to use 40 or 60 mm wide paper rolls.

2 Using your printer

2.1 Power on

To power the printer on or off press  for 2 seconds.


2.2 Paper Feed

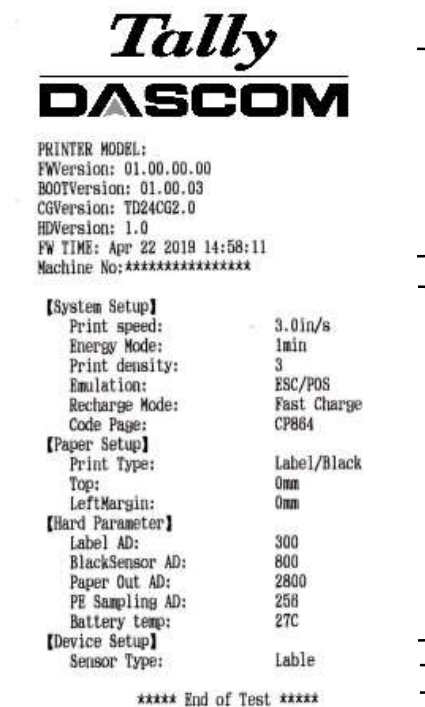
Feed paper by pressing  on control panel.

Continuous paper will perform a line feed.

Label/Black mark paper will perform a form feed to next label.

2.3 Self-Test

Press  for 3 seconds to print a self-test page



The image shows a self-test printout from a Tally DASCOM printer. The printout is divided into three sections by brackets on the right side:

- Production information:** This section includes the printer model, firmware (FW) version (01.00.00.00), root version (01.00.03), CG version (TD24CG2.0), HD version (1.0), FW time (Apr 22 2019 14:58:11), and a machine number (represented by asterisks).
- Printing Configuration data:** This section is divided into three sub-sections:
 - System Setup:** Print speed (3.0in/s), Energy Mode (lmin), Print density (3), Emulation (ESC/POS), Recharge Mode (Fast Charge), and Code Page (CP864).
 - Paper Setup:** Print Type (Label/Black), Top (0mm), and Left Margin (0mm).
 - Hard Parameter:** Label AD (300), BlackSensor AD (800), Paper Out AD (2800), PE Sampling AD (256), and Battery temp (27C).
- Character printing:** This section shows the sensor type (Lable) and ends with the text "***** End of Test *****".

2.4 Print Driver

You may download the appropriate Window driver from our website www.dascom.com.

Install the printer driver by the standard method for your version of Windows.

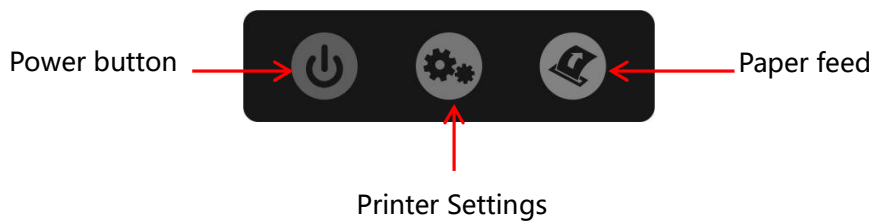
2.5 OLED display

Messages

Status	Display	Buzzer
Buffer has data	Working	/
Buffer is empty	Print Ready	/
Cover open	Head Up	Buzz/2s
Paper run out	Paper Out	Buzz/2s
Abnormal label positioning	Calibrate Error	/
No label gap detected	Out Tear Error	/
Print head overheats	Head Hot	/
Energy saving mode	Zzz...	/
FW download mode	Upgrade mode	/
FW is being downloaded	Fw Upgrade...	/
Finish the FW downloading	Upgrade OK	Buzz once
Battery is low	BAT Low	/

3 Configurations

3.1 Control panel



To access the Control Panel Menu:

- Push the Printer Settings button to enter the Configuration Menu.
- Push the paper Feed button to select the menu section.
 - System Setup
 - Paper Setup
 - Device Config
 - Bluetooth Setup
- Push the Printer Settings button to enter the section.
- Push the Paper Feed button to select Menu Selection.
- Push the Printer Settings button to select parameter under the menu section.
- Push the Paper Feed button to change the setting.
- Push the Power button to go back one menu selection.

Menu Parameters:

System Setup – Print Speed, Energy Mode, Print Density, Emulation, Recharge mode, Code Page

Paper Setup – Print Type, Top, Left Margin

Device Config – Sensor Type

Bluetooth Setup – BT Name, PIN Code

3.2 Setting Descriptions:

Asterisk * indicates default setting.

System Setup:		
Print Speed	Selects print speed	2.0, 2.5., 3.0* inch/sec
Energy mode	Sets energy setting	OFF, 1min*, 2min, 5min, 10min
Print Density	Sets print darkness	1, 2, 3*, 4, 5, 6
Emulation	Allows for use of different print commands	ESC/POS*, JPL, ZIC, ZPLII, CPCL
Recharge Mode	Sets charging speed	Fast Charge*, Normal
Code Page	Select code page to be used	Many page codes available

Paper Setup		
Print Type	Selects type of paper	Label/Blackmark*, Continuous
Top	Sets first line of print	0mm* to 30mm
LeftMargin	Sets left margin	0mm* to 20mm, -1mm to -20mm

Device Config		
Sensor Type	Set for label type	Positive, Label*, Back

Note: when changing the Sensor Type after saving the change you must cycle the power on the printer to allow for the sensor to re-calibrate. Be sure the label roll is in the printer.

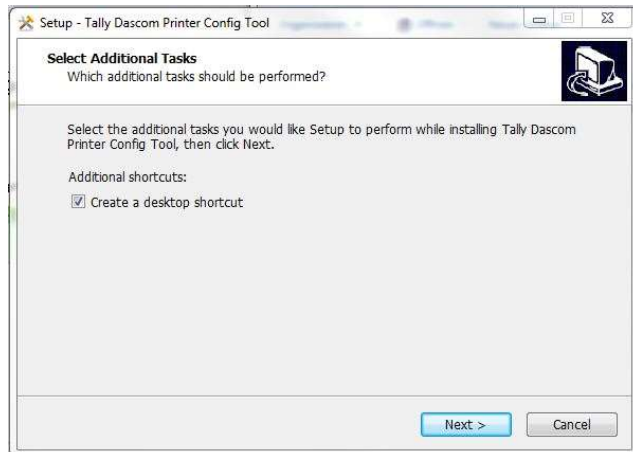
Bluetooth Setup		
Version	Bluetooth version	Factory set (information only)
BT Name	Name displayed when selecting printer through Bluetooth connection	DP-230L
PIN Code	Passkey when connecting through Bluetooth	1234
Bluetooth MAC	Address assigned to Bluetooth interface	Factory set (information only)

3.3 Installing Configuration Tool

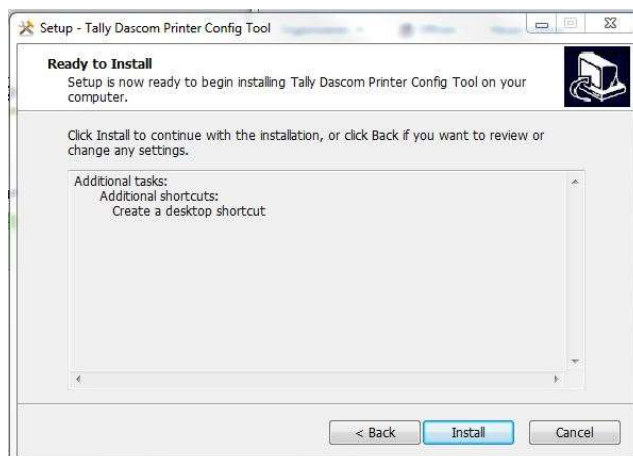
Tally Dascom offers a Windows based configuration program, Tally Dascom Printer Config Tool, to setup your DP-230L printer. This can be downloaded from our web page, www.dascom.com.

Select Tally Dascom Printer Config Tool Setup .exe” and select installation path.

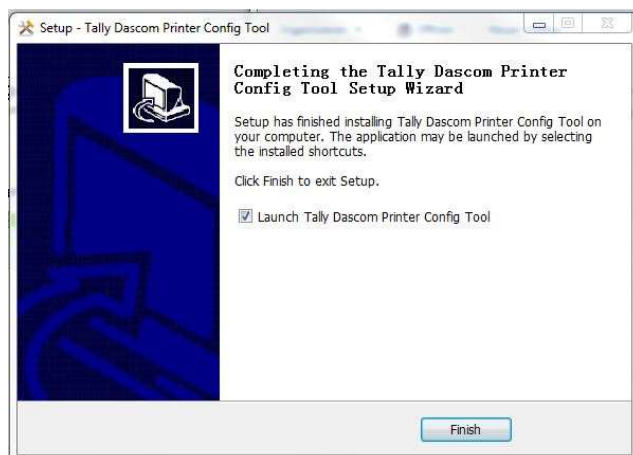
Click Next.



Click Install.

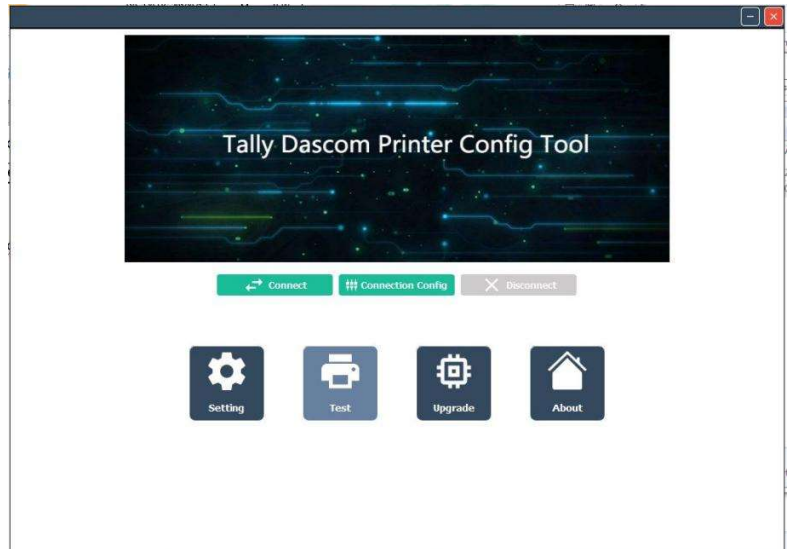


Click Finish.



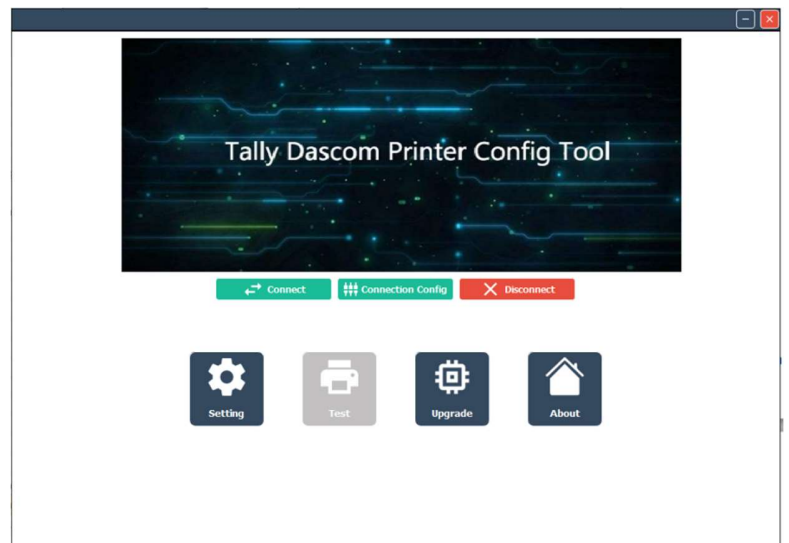
3.4 Using Configuration Tool

Open Tally Dascom Printer Config Tool

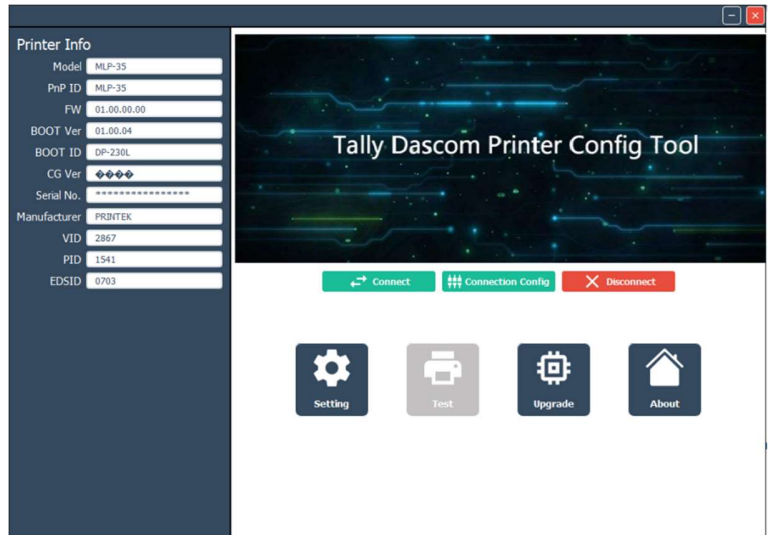


Click "Connection Config" and choose current connection port in the upper right corner. Set up relevant interface parameters.

Click "Connect" box to connect to the printer.



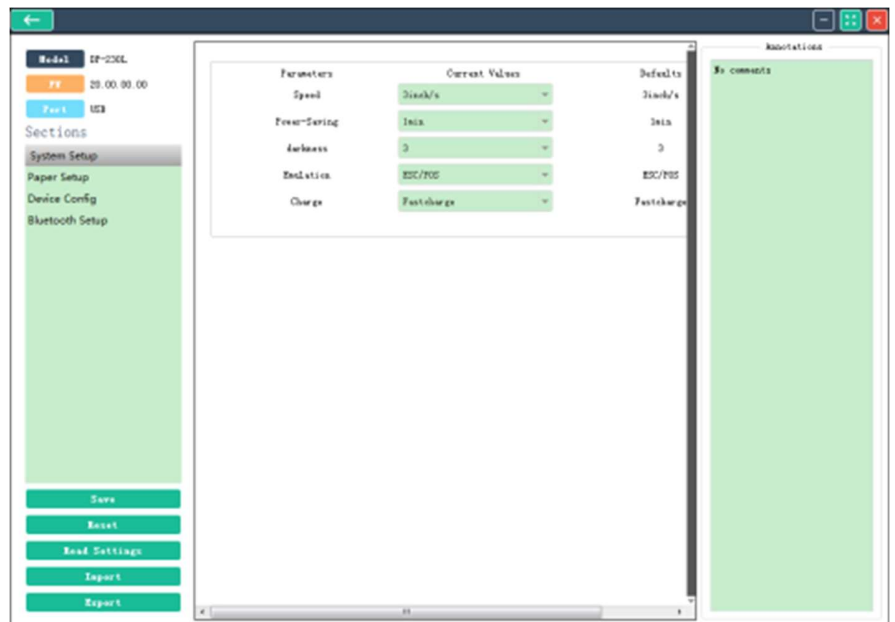
Click the "Settings" button to enter the Settings Menu.



3.5 Configuration Settings

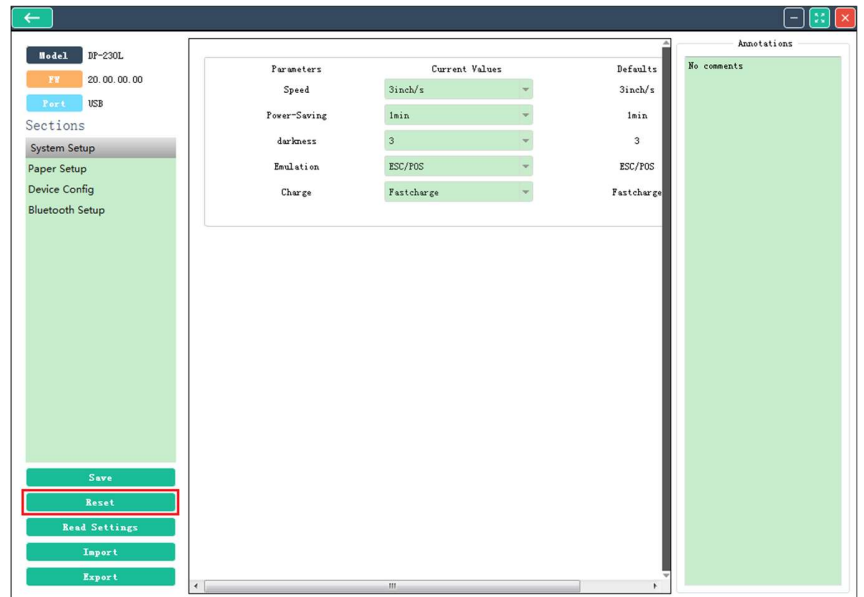
Click on the items you wish to modify.

Select the value and then click Save button to complete settings.



3.6 Reset factory default settings

Click the "Reset" button on lower left side of settings page.
Click "OK" in pop-up confirmation dialog box.



4 Software upgrade

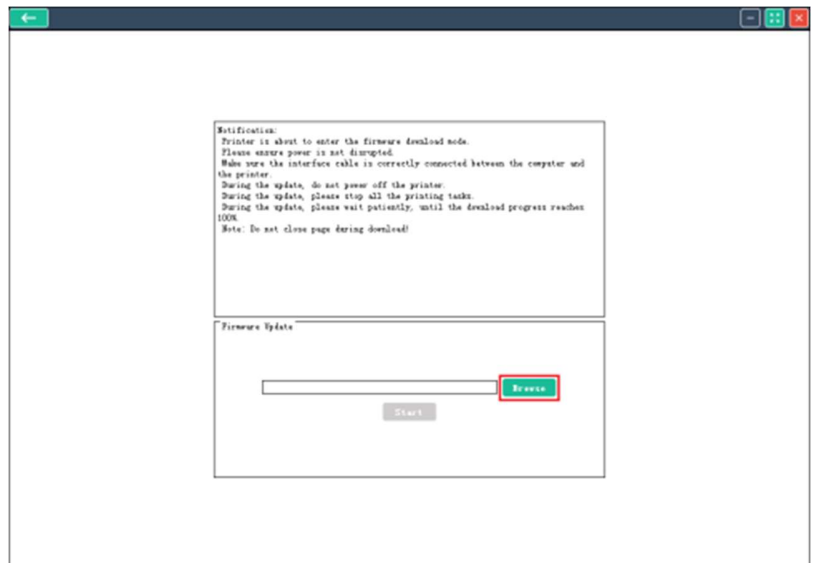
4.1 Software upgrade steps

To upgrade software connect printer to the computer with USB cable.

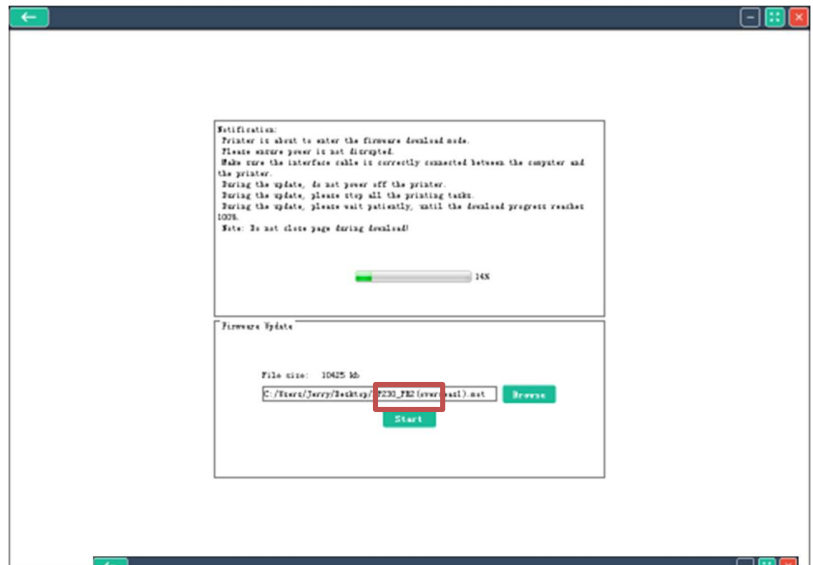
Open the Tally Dascom Printer Config Tool. Click “Upgrade”



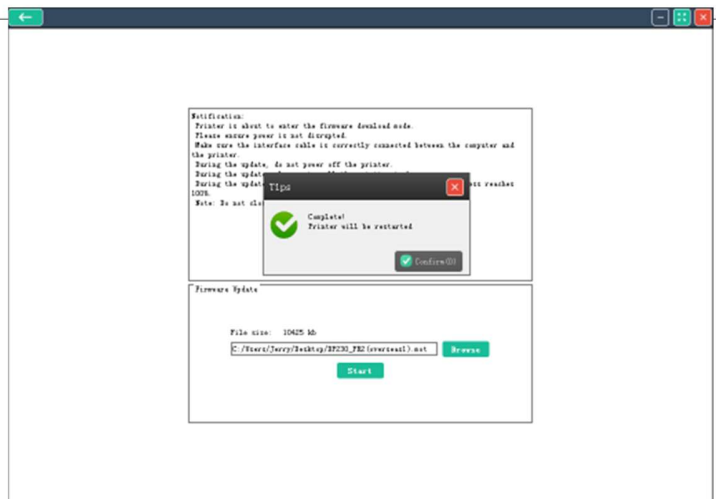
Click “Browse” to select the firmware file.



After selecting the file click “Start”.



After the update, the Tally Dascom Printer Config Tool pops up to tell you that the update is complete. The printer automatically restarts.



4.2 Hexadecimal Mode:

To enter hexadecimal, in the boot state, press power key twice quickly. To indicate the printer has entered hexadecimal mode, the following will print; [hexadecimal mode]

To exit hexadecimal mode, restart the printer.

5 Communication

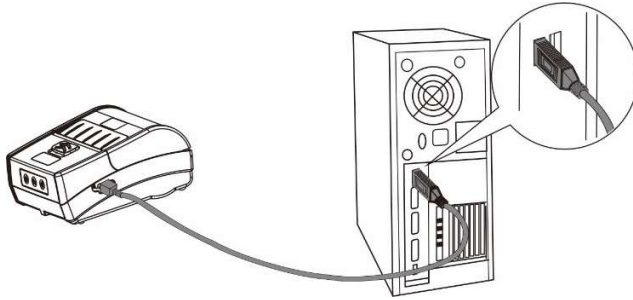
There are three communication modes

Wire: USB

Wireless: Bluetooth or Wi-Fi

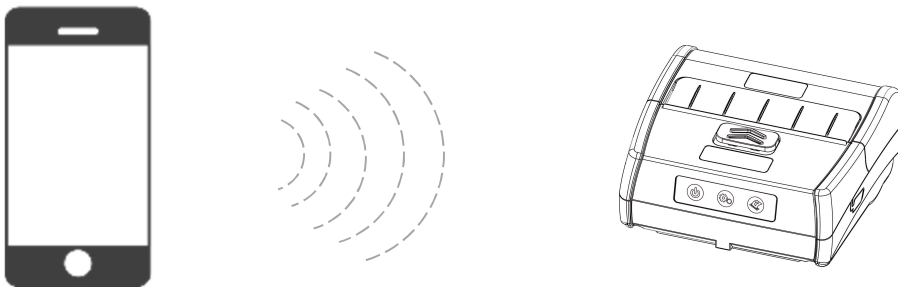
5.1 USB

Plus the USB end of cable into the host USB port and plug universal type C connector to the printer



5.2 Bluetooth

The DP-230L has a 4.0/CLASS 2 (10m) Bluetooth communication interface.



Device name: DP-230L-XXXX

5.3 Wi-Fi

The DP-230L supports Wi-Fi/IEEE 802.11 b/g/n standard communication. Wi-Fi can support AP mode and STA mode. The networking mode is convenient and diverse with strong signal strength. Maximum distance for Wi-Fi communication is 300m.



The default communication mode is AP mode.

When setting up the printer wirelessly, please use the Tally Dascom Printer Config Tool

6 Maintenance

6.1 Daily Printer Maintenance

To clean outside case and paper bin, gently wipe with moist cloth. Be sure to fully dry.

Clean print head mechanism with thermal cleaning pen, or with a degreasing cotton with anhydrous alcohol.

If you do not use the printer regularly, store battery separate from printer.

6.2 Use and storage of paper

Avoid storing paper in direct sunlight or in high temperature.

Storing printed documents at room temperature (approx. 20C or 68F) can prolong the retention time of documents.

7 Maintenance

7.1 Troubleshooting

Problem	Possible Cause	Solution
Press the power button and the printer does not work.	The battery has not been installed correctly.	Install the battery correctly.
	The battery has run out of power.	Charge immediately.
Printer automatically shuts down.	The battery has run out of power.	Charge or replace the battery immediately.
	Electrostatic discharge	Restart the printer.
The power light is off when the power adapter is connected.	Power adapter does not power on.	Check if the power adapter is properly connected.
	Power adapter is damaged.	Use the voltmeter to check if the adapter voltage is 5VDC
	The battery has not been installed correctly.	Install the battery correctly.
Cannot charge the battery.	Battery damage or adapter has quality issue.	You can try to replace battery or adapter.
Poor print quality or ink fades.	Mechanism contaminated with paper dust.	Clean the mechanism. Cleaning pens available from Tally Dascom.
	Quality problems of printing Paper	Please purchase approved Media.
No paper feeding.	There is a jam in the paper path, or the media is loaded in reverse.	Check the paper path and install the media again.
	Poor quality of printing paper	Please purchase approved Media.
	Paper door is not closed.	Be sure the paper door latches when closing.
Only feeding paper, no printing.	The media is loaded in reverse.	Load the paper correctly according to this user guide.
Can't feed the paper steadily to the label.	Label / Media Sensor contaminated	Cleaning sensor
	Printer does not power on to setup the label Paper fully.	Restart the printer.
	Label threshold is incorrect.	Adjust label threshold
The printer is not stable, or prints all the content together.	Poor quality of printing paper	Please purchase approved Media.
	Use the media with sliding layer.	Reduce maximum print speed
	Paper door is not closed.	Be sure the paper door latches when closing.
The printout is garbled.	Emulation language or data code system is not correct.	Setup the correct emulation language and data code system.
The printer accepted the print data, but did not print it.	Low voltage	Please check and charge.
	Media has not been properly loaded.	Properly load media.
	Emulation language or data code system is not correct.	Setup the correct emulation language and data code system.
The printer is not printing through the optional interface.	The interface setting is not correct.	Print the self-test page and correct the interface setting.

8 Printer Specifications

Printing parameters	Printing mode	Directly thermal
	Print width	72mm
	Resolution	203dpi
OLED screen	Standard	128×32dot matrix
Speed	Speed	3inch/s
	Emulation	ESC/POS、JPL、ZIC、ZPLII、CPCL
	Character	GB18030
	Barcode	One dimensional code: UPC-A、UPC-E、EAN-8、 QR code: QRCode、PDF417、DataMatrix
Media	Type	Thermal paper / thermal label
	Thickness	60-150μm
	Width	80mm
	Maximum outer diameter	45mm
Sensor	Open sensor	Yes
	Paper end sensor	Yes
	Label sensor	Optional
Memory	SDRAM	32Mbyte (Integrated into the SOC)
	Flash	8+32Mbyte (2 PCS)