

DP-330 Series

Operator's Manual



DP-330 Thermal Printer

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Germany
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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 R&TTE if 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 R&TTE 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

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, and (2) this device must accept any interference received, including interference that may cause undesired operation.

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:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the 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.

This equipment complies with Canadian and FCC radiation exposure limits set forth for an uncontrolled environment. This equipment is in direct contact with the body of the user under normal operating conditions. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Part 15.21 Caution: Changes or modifications not expressly approved by Dascom could void the user's authority to operate the equipment.

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 10W/m².

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:

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Windows is a registered trademark of Microsoft Corporation
All other trademarks are the property of their respective owners.

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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 DASCOS 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 DASCOS 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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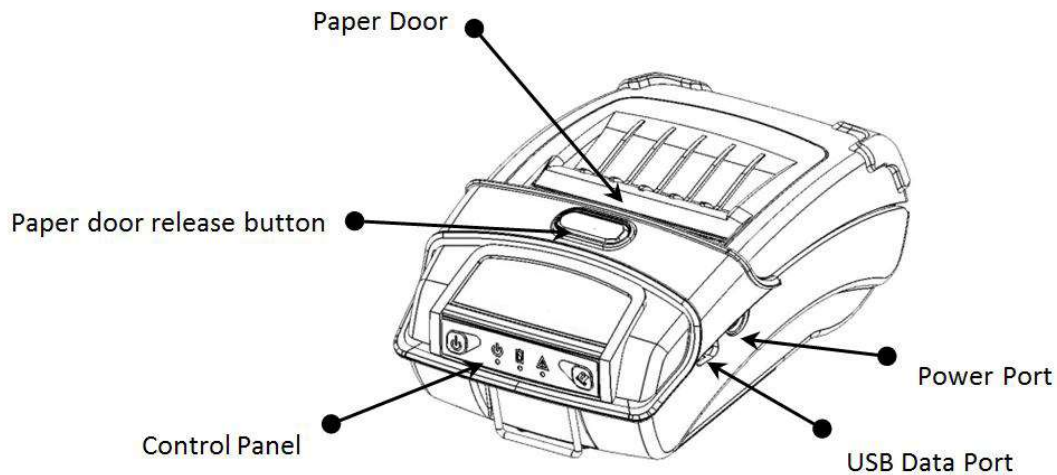
Introduction

Thank you for purchasing the Tally Dascom DP-330 Series mobile thermal printer also referred to in this manual as the “DP-330” (for Receipt) or “DP-330L” (for Label). The DP-330 series prints on special thermal media supplied in roll form up to 80 mm wide. All models are equipped with a USB port which supports cabled communications. All models support an optional internal Bluetooth or Wi-Fi interface. Complete specifications may be found in [Appendix A – DP-330 Printer Specifications](#) and [Appendix B – DP-330L Printer Specifications](#).

The remainder of this manual focuses on preparing the printer for initial use and performing tasks that will be encountered during daily use.

[Maintenance and Troubleshooting](#) describes how to maintain the printer for optimal performance and has information on how to diagnose any problems that may occur.

Printer Features



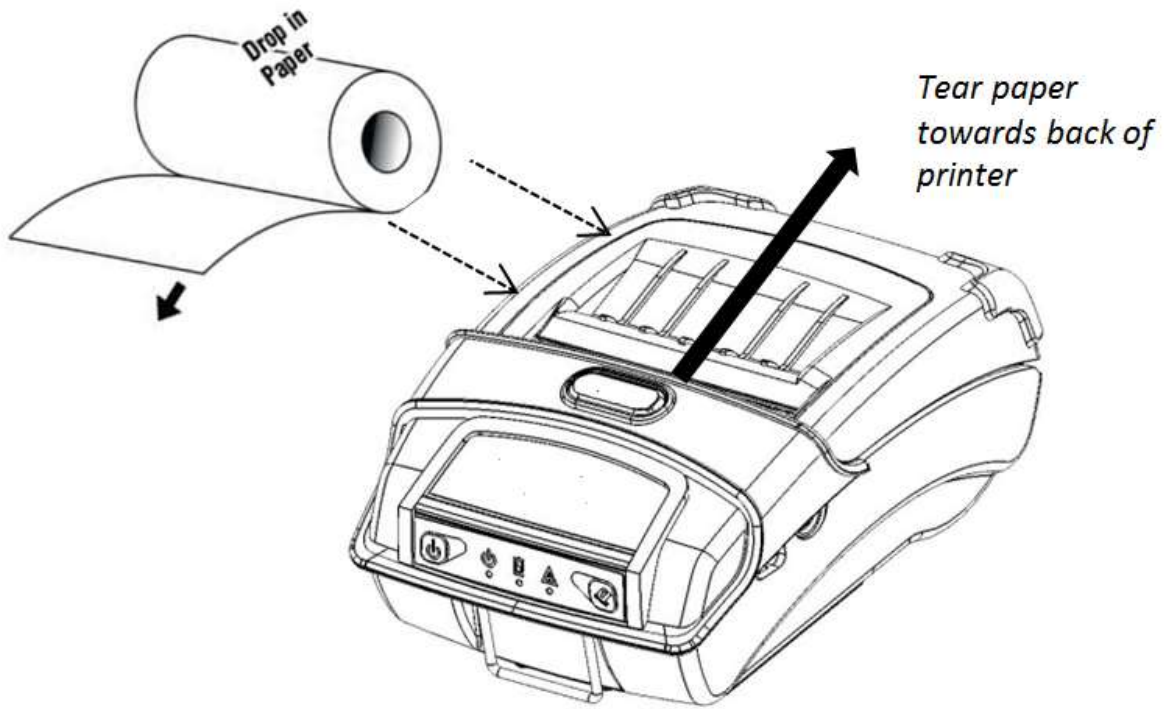
Your DP-330 features:

- Easy-to-read control face and simple drop-in paper loading
- Quickly prints a wide variety of tickets, receipts, and labels (330L)
- IP54 rated for water and dust resistance... plus rated for repeated 6-foot drops to concrete
- Print speeds up to 4 ips
- Extensive fonts, character sets, bar codes and graphic capabilities
- Printer configuration is quick and easy with a setup tool
- The latest in battery technology provides for full-shift printing in all modes
- Compatible with Windows, Windows Mobile, Apple iOS, and Android
- Emulations that allow the printer to be a drop-in replacement for nearly any mobile printer

For detailed specifications reference [Appendix A – DP-330 Printer Specifications](#) and [Appendix B – DP-330L Specifications](#).

Quick Start Instructions

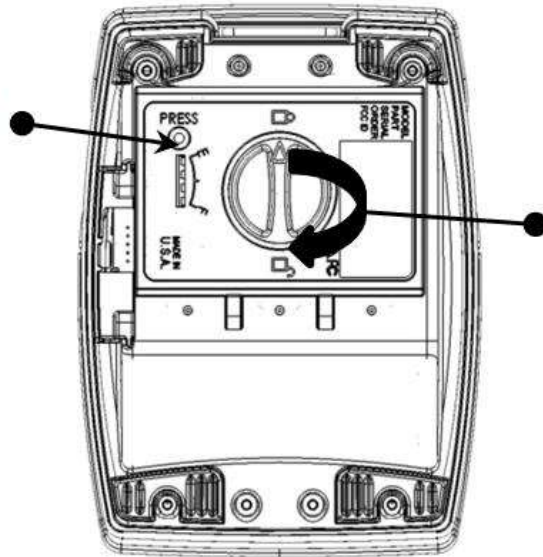
A. Paper Load



Press Paper door release button to open the paper compartment door. Pull small leader of paper out and close paper door. "Clicks" when properly closed.

B. Battery Installation

Press button to see battery charge level.
4LED 100% charge
3LED 75%
2LED 50%
1LED 25%



Loosen hand strap (not pictured) to access battery door.

Rotate knob 180° to unlock battery door.

Drop in battery.

Close battery door and rotate knob 180° to lock.



C. Charge Battery




Uncover the printer ports and plug in your AC power adapter to the Power port (must be a DASCOS-supplied accessory). The yellow LED will show solid ON while the printer battery is charging.

D. Power On

Depress the Power button on the control panel. The green LED and the red LED will both be lit while the printer is going through its startup sequence (about 10 seconds). The red LED will go off, leaving the green LED on to indicate the printer is ready to print.

E. Control Panel

Control Panel		
 Power Button	Power Up Power Down	Press & Release Press & Hold
 Paper Feed Button	Advance paper Print Setup Report	Press once Press & Hold for 3 seconds

Indication	Power (Green/ Red/Orange) 	Battery (Yellow) 	Alert (Green/ Red/Orange) 	Buzzer
Data in Buffer	Flashing (Green)	According to actual volume	Off	/
No Data in Buffer	On (Green)		Off	/
Ready	Refer to buffer status		Off	/
Setup Mode	On (Orange)		Off	/
Paper End/Lid Open	Refer to buffer status		On (Red)	buzz every 2 seconds
Media on the peeler			On (Orange)	/
Black Mark/Label positioning error			Flashing (Red)	/
Print head over heat			On (Green)	/
Print head over cold	On (Red)		On (Green)	/
EEPROM Error	On (Red)		On (Red)	/
Cannot read battery volume	Refer to buffer status	Off	On (Green)	/
Power save mode	On (Green)	Off	Off	/
Download mode	Flashing (Green-Red)			/
Downloading	Flashing (Orange)			/

F. Performing a Printer Self-Test



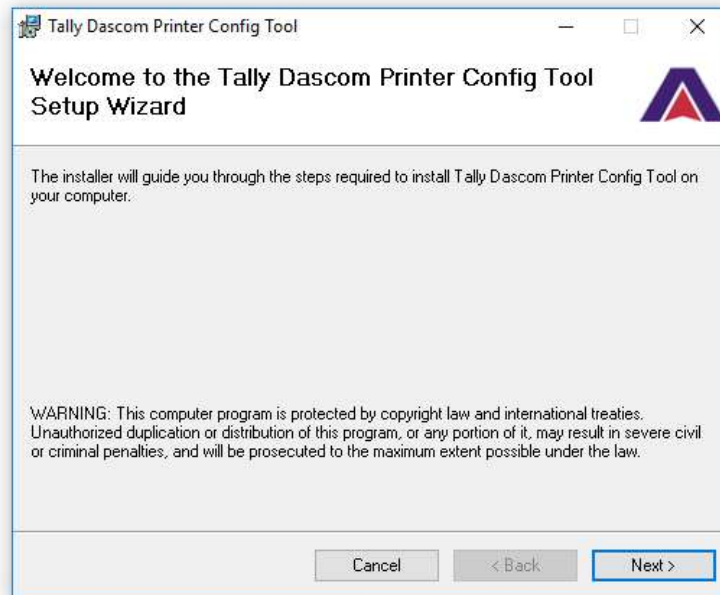
With power on, press the paper feed button for three seconds.

Configuration

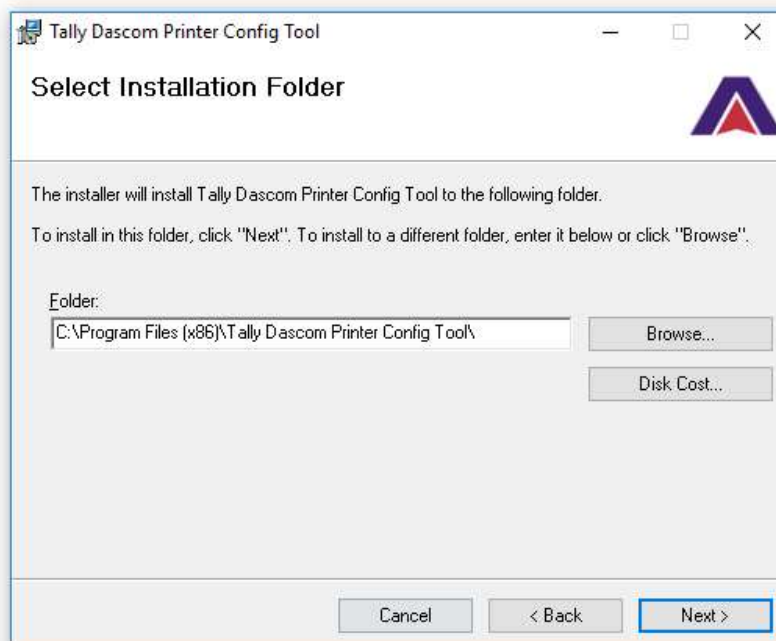
Configuration of the DP-330 printer is done through a configuration tool downloaded from the website (www.dascom.com). This allows you to configure the printer from any windows computer and is compatible with your DP-330 communication capabilities.

A. Install Config Tool

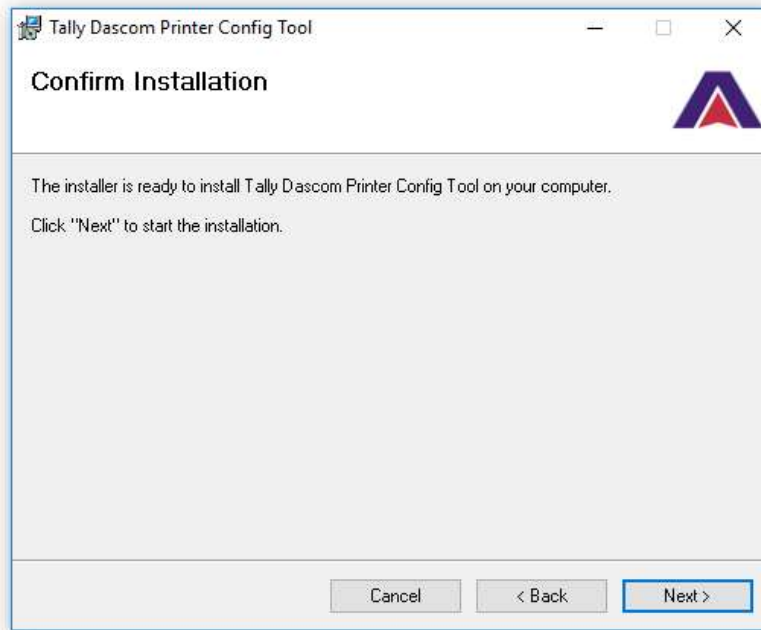
1. Double click the config tool software. Click Next to continue.



2. Select installation folder, and click Next to continue.



3. Click next to continue and complete installation.



B. Configuration Setup

1. Turn the printer ON.
2. Make sure you installed the latest configuration tool.
3. Connect a USB cable between the printer and a PC.
4. Open the configuration tool on the desktop. You could change the settings.

Units

Select between inches or millimeters. Default setting is inches.

Max Paper Speed

Possible values: 1.0 to 5.5 ips, Default = 5.0

When using labels or heavy paper stock, you may need to decrease the paper speed to prevent paper jam errors.

Mark Seeking

Possible values: Off, Front, Rear, Gap. Default= Off (Note: Rear and Gap apply to 330L models only)

Set the value when using regular or label media with appropriate characteristics. To align the printed image to the media, the printer will use the indicator according to the user choice here.

Front Paper Sensor Threshold

Possible values 0-100%. Default value is 75%

When using paper with a black on the front adjust this setting to insure the paper stops at the black mark.

- If the printer is not detecting black marks reliably, set the Mark Sensitivity to a lower value.

- If the printer is detecting false check paper conditions, set the Mark Sensitivity to a higher value.
- If the printer is detecting black marks where none exist, set the Mark Sensitivity to a higher value.

Rear Paper Sensor Threshold (DP-330L models only)

Possible values 0-100%. Default value is 75%

When using paper with a Black on the back adjust this setting to ensure the paper stops at the Black Mark.

- If the printer is not detecting Black Marks reliably, set the Mark Sensitivity to a lower value.
- If the printer is detecting false Check Paper conditions, set the Mark Sensitivity to a higher value.
- If the printer is detecting Black Marks where none exist, set the Mark Sensitivity to a higher value.

Gap Paper Sensor Threshold (DP-330L models only)

Possible values 0-100%. Default value is 75%

When using labels without a Black Mark, adjust this setting to insure the label stops at the gap in between labels.

- If the printer is not detecting gaps between labels reliably, set the Gap Sensitivity to a higher value.
- If the printer is detecting gaps where none exist, set the Gap Sensitivity to a lower value.

Backup Distance Before Printing

Used with Mark Seek. User defined. This is the distance the printer will pull in the paper before starting to print.

Max Mark Search Distance

Used with Mark Seek. User defined. This is the distance the printer will advance paper to seek the mark before displaying a Paper Out condition.

Stop Distance after Mark

Use with Mark Seeking. User defined. This is the distance the printer will advance the paper after the mark is detected.

Left Margin

Setting this value will tell the printer how far from the left edge of the paper to start the print job.

Contrast

Possible values 0 – 10. Default value is 5

The lower the value the lighter the print. The higher the value the darker the print.

Paper Energy Values

This is a locked value. These settings are supplied by the paper manufacturer. The default settings cover most grades of paper. If you are using non-standard paper consult the paper manufacturer for recommended settings.

Integrating the Printer into your Business Applications

Step by Step – Creating a Link from Host to Printer

A. Windows Desktop Computers

Print Drivers

You may download the appropriate Windows driver from our website. Install the printer driver by the standard method for your version of Windows.

I. USB

- a) Install the printer driver onto your host before connecting the printer. Follow prompts displayed during installation.
- b) Plug the printer into a USB port on your host system using a mini-USB cable.
- c) The printer will appear in the “Unspecified” devices section. Right click on the icon.
- d) In the popup window, select the Hardware tab. Note the USB port number displayed.
- e) Using the “Add Printer” wizard, install the printer using the driver file obtained from DASCOCM and the USB port number noted above.
- f) After the printer driver installs, the printer will appear as “Dascom 3-inch printer” under the “Printers and Faxes” heading of your Windows “Devices and Printers” screen.

II. Bluetooth – General

- a) Turn on printer. Make sure Bluetooth on your host device is turned ON.
- b) Your host Bluetooth manager may automatically scan for new devices, or you may need to tell it to scan. The discover name of the DP-330 printer will be “DP-330-XXXxxxxx”, where XXXxxxxx = the Printer Serial Number.
- c) For Pairing, the default passkey is “0000”.

Note: Bluetooth host devices pair after discovery, but only **connect** to Bluetooth printers when the host application has asked it to print.

III. Bluetooth – Windows 7 and above

- a) Turn on printer. Make sure Bluetooth on your host device is turned ON.
- b) Open the “Devices and Printers” folder.
- c) Select “Add a Device”. The printer will display using the discover name listed above.
- d) Select the printer from the list of devices.
- e) Select “Enter the Device’s Pairing Code”. The default pairing code is “0000”.
- f) A window will display informing you the device was successfully added, and the printer name will appear in the devices list. Close this.
- g) Printer now appears under “Printer and Faxes” heading of the “Devices and Printers” screen, as “DP-330-serial #”. The icon may show that it is still configuring.
- h) Right click on the printer name or icon and select Properties. Select “Services” tab and deselect all items except for “SPP”.
- i) Now select “Hardware” tab. A virtual com port number will be listed here – make note of this COM Port number. Use this Com Port number when setting up the printer driver, under the “port settings”.

- j) Install the printer driver. Using the “Add Printer” wizard, install the printer using the driver file obtained from DASCOM and the COM port number noted above.
- k) After the printer driver installs, the printer will appear as “DP-330-*serial #*” under the “Printers and Faxes” heading of your Windows “Devices and Printers” screen.

IV. Wi-Fi

Note: The following instructions are fundamentally the same for an Infrastructure or Wi-Fi Direct (peer to peer) setup. They also assume that you have already configured your Wi-Fi interface via the DP-330 printer web page (see the section on Configuration).

- a) Perform a configuration printout to verify the printer Wi-Fi setup and to record the IP address assigned and the Port number.
- b) Install the printer as a local printer using the USB instructions above.
- c) In the “Devices and Printers” screen, right click the printer icon representing your mobile printer.
- d) Under Printer Properties, select the Ports tab, then select “Add a Port”
- e) In the new dialog box which appears, select “Standard TCP/IP ports”; this will open the Standard TCP/IP Printer Port wizard.
- f) Follow the on-screen prompts in this wizard. You’ll use the IP address recorded above to set up the port. In the same screen you can also name the port something familiar and relevant, and this will appear as the name of the printer to the user.
- g) After the port is detected, it will be displayed as a “generic network card” – accept this by clicking Next / Finish.
- h) After you are finished adding the port, Windows will report it as a “Standard TCP/IP port”; click OK to accept this.
- i) Close the Printer Port window.
- j) Now in the Printer Properties dialog box your IP address (or the familiar name you assigned above) will appear in the list of ports available. Select it to configure the port.
- k) Windows defaults standard TCP/IP ports to port number 9100. The DP-330 Wi-Fi port number is internally set to 8023. Change the port number to 8023 in the Windows screen and click OK.
- l) Click “Apply” in the Printer Properties box.
- m) Your DP-330 printer driver should now be properly coupled to the Wi-Fi parameters you have chosen.

B. Windows Tablets and Smartphones

This feature and/or specific directions for use were not available as of this printing.

C. Android Tablets & Smart phones

I. Bluetooth

- a) Turn on printer. Make sure Bluetooth on your host device is turned ON.

- b) Your host Bluetooth manager may automatically scan for new devices, or you may need to tell it to scan. The discover name of the DP-330 printer will be “DP-330-XXXxxxxx”, where XXXxxxxx = the Printer Serial Number.
- c) For Pairing, the default passkey is “0000”.
- d) The printer should appear in your paired devices list.

Note: Android devices pair after discovery, but only **connect** to Bluetooth printers when the host application has asked it to print.

II. Wi- Fi

This feature and/or specific directions for use were not available as of this printing.

D. Apple™ Tablets & Smartphones

I. Bluetooth

This feature and/or specific directions for use were not available as of this printing.

II. Wi-Fi

This feature and/or specific directions for use were not available as of this printing.

Media

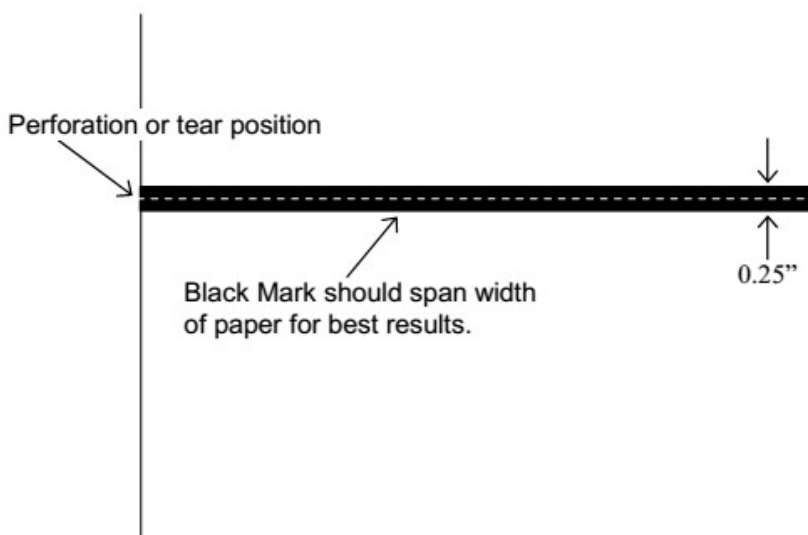
A. Standard Media

DASCOM offers a variety of media types. You may contact your DASCOM sales representative for a complete and up to date description of our consumables and accessory products.

B. Black Mark Media Position

For automatic ticket printing, the Black Mark should be positioned as shown in the figure below. When using Mark Sensing mode (see [Configuration](#), earlier in this document), DP-330 printers will automatically position the output for tear-off and printing following a Form Feed command or by pressing the Paper Feed button.

For non-automatic paper positioning, refer to the *Integrator's Guide* for sensing and positioning commands.



Optimum Black Mark Position

Maintenance and Troubleshooting

A. Cleaning

In normal environments, the printer should be cleaned after printing a few rolls of paper or if there are voids in the printout. For optimum performance and life, you should clean the Print Head and Platen Roller whenever you load new paper.

To clean the printer areas as described below, use a Thermal Head Cleaning Pen or you may use cotton swabs moistened with isopropyl alcohol.

- Turn the printer off. Open the Paper Door and remove the paper.
- Using a Thermal Head Cleaning Pen, clean the white ceramic surface on the Print Head.
Caution: Do not use sharp objects to clean the print head. This may damage the printer and require service. Such damage is not covered under warranty.
- Clean the Black Mark Sensor below the print head.
- Clean the Tear Bar.
- Clean the Platen Roller. Turn the Platen Roller with your finger to clean the entire surface.

You may also experience a buildup of paper dust in the printer. This may be removed using a can of compressed air or by vacuuming.

To clean the exterior of the printer, turn the printer off and use a soft cloth moistened with a mild detergent.

B. Battery Care

I. 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!

II. Getting the Maximum Battery Life

New batteries are shipped in an “uncharged” state and must be charged for at least 4 hours prior to the first use. Maximum battery capacity is not reached until after completing a minimum of three complete charge and discharge cycles.

III. Charging the Battery

- Plug the power adapter into a power source appropriate for the adapter being used.
- Plug the power adapter into the power connector on the side of the printer. The printer’s battery charging circuitry will analyze the condition of the battery and begin charging it if necessary.
- If the battery is not fully charged, charging will begin and the Battery Indicator will illuminate.

- When the battery is fully charged, the Battery Indicator will turn off. Charging may take up to 8 hours (4 hours with external desktop charger accessory) depending on the condition of the battery.
- The printer may be used while the battery is charging, but this will extend the time required to fully charge the battery.
- The power adapter may remain connected to the printer to keep the battery fully charged and will not cause damage to the printer or battery.

IV. Additional Battery and Safety Information

- The DP-330 series printers use a 11.3 volt 2950 mAH Lithium Ion battery.

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

- The recommended ambient temperature for charging is 68-77° Fahrenheit (20-25° Centigrade).
- Take the battery out of the printer when storing the printer for long periods of time. The battery storage temperature is 40-104° Fahrenheit (4-40° Centigrade). Do not store a fully charged battery at temperatures above this range for long periods of time or the battery may permanently lose charge capacity.
- Do not disassemble, short circuit, heat above 80°C, or incinerate the battery. The battery may explode.

- Only dispose of used batteries according to your local regulations



V. Testing the Power Adapter and Battery

To verify that the printer's internal battery charger is functioning properly, perform the following steps.

- Test the power adapter (100-240VAC/50-60Hz, 12/24VDC adapter) with a voltmeter to verify that its output voltage is 19 VDC.
- Connect the power adapter to a power source and then connect it to the printer.
- Verify that the printer's Battery Indicator is illuminated. If illuminated, the charging circuit is functioning properly.

Note: If the battery is already fully charged, the Battery Indicator will turn off after a short time.

- After the battery has been charged for five minutes, disconnect the power adapter.
- Perform a printer Self-Test.
 - Make sure the printer is turned off.
 - Press and hold the Paper Feed Button while turning the printer on.
- If the printer successfully prints the Self-Test, the battery is functional. If the Self-Test does not complete and the printer turns off, repeat this test with a known good battery.
- Once this test has completed successfully, allow the battery to fully charge. At the end of this time the Battery Indicator will turn off.

If the printer and battery do not appear to successfully pass these tests, refer to the [Troubleshooting](#) section for possible causes and solutions.

Note: This test only verifies that the power adapter, the internal charging circuit, and the battery are functioning properly. This test does not provide a valid indication of the relative capacity of the battery or how long it may hold a charge.

C. Troubleshooting

When encountering problems, the cause may be the printer or may sometimes be due to other problems with your system. Please review the following tables to solve common problems you may encounter with your printer.

I. General Error Conditions

Whenever the printer detects an error condition the Alert (red) Indicator will either flash or stay on. In some cases the audible alarm will also sound. Please refer to the following table for a list of what causes these conditions and how they may be corrected.

Error Indicator	Possible Cause	Solution
Flashes, With Alarm	Paper Out or Paper Door not fully closed	Install paper and press the Paper Feed Button to clear the error. Make sure the door is fully closed by opening the door and closing it again until the door “clicks” closed. Check the platen roller for damage.
Stays On, With Alarm	Communications error	Verify communications settings in the Interface Menu. Printer power must be cycled to clear error.

II. Fault Description and Resolution

Problem	Possible Cause	Solution
Printer will not turn on.	Battery not installed properly	Remove and reinstall battery making sure the battery is seated with door closed.
	Discharged battery	Recharge battery.
Printer turns itself off.	Battery discharged	Replace or recharge battery.
	Electrostatic discharge	May occur in extreme low humidity conditions. Turn printer back on with power button.
Battery Indicator does not light or does not stay lit when power adapter is connected.	Battery already fully charged	No action required.
	Power adapter not receiving power	Check building/vehicle circuit breakers/fuses.

Problem	Possible Cause	Solution
	Faulty power adapter	Check output of power adapter with voltmeter. Should be 19 VDC.
	Battery not installed properly	Remove and reinstall battery making sure the battery is seated with door closed.
Battery not charging.	Faulty power adapter or battery	Try new power adapter, or replace battery.
Poor print quality.	Low battery	Check and recharge battery.
	Print head dirty	Clean print head. Refer to " Maintenance " section of this document.
	Poor quality or "old" paper	Verify paper from approved source. Try new roll of paper.
Paper not feeding.	Obstruction in paper path, or paper improperly installed	Check paper path and reinstall paper (see " Quick Start Instructions ").
	Poor quality paper	Verify paper from approved source.
	Paper Door not fully closed	Verify door is closed.
Paper does not advance to black mark reliably.	Dirty Black Mark/Paper Sensor	Clean Sensor as described in " Maintenance " section of this document.
	Black Mark density/contrast	Adjust Mark Sensitivity as described in Device Settings Menu .
Paper not feeding reliably or print is compressed vertically	Poor quality paper	Verify paper from approved source.
	Heavy or thick forms; specialty paper with slick finish	Lower the Max Paper Speed as described in Device Settings Menu .
	Paper Door not fully closed	Verify door is closed.
Print Garbled.	Improper Serial Interface configuration	Verify printer and host settings match.
Printer will not print.	Paper not loaded correctly	Check paper path and reinstall paper (see " Quick Start Instructions ").
Cannot print via optional interface.	Interface not configured correctly	Print a self-test to verify printer settings. Make sure printer and host set ups match.

D. Obtaining Service

If service is required for your printer, please contact the company where you purchased your printer.

APPENDIX

A. Appendix A – DP-330 Printer Specifications

Printing Specifications

Printing Method: Direct thermal.
Printing Resolution: 203 dpi (8 dots per mm).
Printing Speed: Up to 4 ips.
Printing Width: Up to 72 mm.

Fonts/Characters/Bar Codes

Fonts: Virtually all TrueType fonts, from 6 cpi to 34 cpi depending on emulation chosen, plus scaling.
International Characters: Most common sets available.
Unicode support.
Bar Codes: Virtually all 1D and 2D codes supported, depending on emulation chosen.
Downloadable firmware, fonts, graphics, and logos.

Connectivity

Standard (All Units): USB 2.0 PNP.
Wireless Options:

- Bluetooth®
Complete Bluetooth® 4.0 Stack
Dual Mode with EDR
- Wi-Fi 802.11b/g/n compatible**

Universal Port: Data and power port – allows connection of external devices such as MCR, barcode scanners, biometrics, RFID.

Software

Drivers and Utilities: Drivers for XP, WIN 7, WIN 8, WIN 8.1, WIN 10
Compatible with Windows CE/Pocket PC, Windows Mobile, Apple iOS, Android. Print utilities and SDK's for all platforms. Native App and Web printing.

Printer Setup via internal web page, access with browser from any host (tablets and smartphones included).
Emulations: Emulates many popular printer brands and languages including: Zebra CPCL and ZPL, Exttech, IPL, and ESC POS. Firmware can be upgraded as new emulations become available.

Print Media

Paper Type: Direct Thermal Roll.
Roll Size: Maximum roll diameter 2.0" (51 mm), roll widths up to 3.125" (80 mm).
Roll Capacity: Approx. 94' 28.6 m), creating 188 6" long receipts.
Core Size: 0.75" Recommended (19 mm).

Power Management

Battery: Rechargeable 3 cell Lithium Ion, (11.3 V, 2950 mAh, 33.2 Wh).
Endurance: Over 3,500 printed inches per charge.
Power Option: 100-240 VAC wall adapter, or 12-24 VDC in-vehicle adapter. When plugged in, the printer can be used while recharging the battery or can be run without the battery (print & charge adapter).

Physical Specifications

L x W x H: 6.1" x 4.6" x 2.7" (15.5 x 11.7 x 6.9 cm).
Weight: 24 ounces (.68 kg) with battery.

Environmental Specifications

Operating Environment: -10° to 40°C/
0% to 65% RH (non-condensing).
Storage Temp: -25° to 65°C) /
0% to 98% RH (non-condensing).
Rated IP54 per IEC 529

Operator Controls and Indicators

3 LED indicators for general fault, power and battery status indication.
Buttons for power and paper feed.
Sensors for paper out, black mark detection, and door open. "Gas gauge" on battery door.

Memory Capacity

4 MB Flash, 32 MB DDR2. Standard memory supports large and graphic intensive print jobs.

Durability and Reliability

Survives multiple 6 foot drops to concrete (each face) per IEC 68-2.
MTBF: 10,000 hours in normal use.

Regulatory Approvals

FCC Class B, CE mark, RoHS, UL listed AC adapters, e-mark.

Warranty

Depends on local requirements. Please contact your national DASCOM sales office.

Options and Accessories

- Universal Port, 3-Track
Simultaneous Read MCR, barcode scanners, biometrics, RFID.
- AC Wall Adapter, 100 to 240 VAC
 - Print and charge version
 - Charge only version
- In-Vehicle Power Adapter, 12 to 24 VDC
- Shoulder Strap
- Data Cables; USB
- Spare Batteries in Multi-Packs
- Media in Case Quantities
- Popular Mounting Systems
 - In-Vehicle Systems
 - Cart Mounting Systems

B. Appendix B – DP-330L Printer Specifications

Printing Specifications

Printing Method: Direct thermal.
Printing Resolution: 203 dpi (8 dots per mm).
Printing Speed: Up to 4 ips.
Printing Width: Up to 72 mm.

Fonts/Characters/Bar Codes

Fonts: Virtually all TrueType fonts, from 6 cpi to 34 cpi depending on emulation chosen, plus scaling.
International Characters: Most common sets available.
Unicode support.
Bar Codes: Virtually all 1D and 2D codes supported, depending on emulation chosen.
Downloadable firmware, fonts, graphics, and logos.

Connectivity

Standard (All Units): USB 2.0 PNP.
Wireless Options:

- Bluetooth®
Complete Bluetooth® 4.0 Stack
Dual Mode with EDR
- Wi-Fi 802.11b/g/n compatible**

Universal Port: Data and power port – allows connection of external devices such as MCR, barcode scanners, biometrics, RFID.

Software

Drivers and Utilities: Drivers for XP, WIN 7, WIN 8, WIN 8.1, WIN 10.
Compatible with Windows CE/Pocket PC, Windows Mobile, Apple iOS, Android. Print utilities and SDK's for all platforms. Native App and Web printing.

Printer Setup via internal web page, access with browser from any host (tablets and smartphones included).
Emulations: Emulates many popular printer brands and languages including: Zebra CPCL and ZPL, Extech, IPL, and ESC POS. Firmware can be upgraded as new emulations become available.

Print Media

Paper Type: Direct Thermal Roll.
Roll Size: Maximum roll diameter 2.625" (66.7 mm), roll widths up to 3.125" (80 mm).
Roll Capacity:
Label Media: Approx. 75' (23 m), creating 148 6" long receipts (with 5.5 mil thick media).
Receipt Media: Approx. 173' (52.6m), creating 346 6" long receipts.
Core Size: 0.75" Recommended (19 mm).

Power Management

Battery: Rechargeable 3 cell Lithium Ion, (11.3 V, 2950 mAh, 33.2 Wh).
Endurance: Over 3,500 printed inches per charge.
Power Option: 100-240 VAC wall adapter, or 12-24 VDC in-vehicle adapter. When plugged in, the printer can be used while recharging the battery or can be run without the battery (print & charge adapter).

Physical Specifications

L x W x H: 6.1" x 4.6" x 2.7" (15.5 x 11.7 x 6.9 cm).
Weight: 24 ounces (.68 kg) with battery.

Environmental Specifications

Operating Environment: -10° to 40°C / 0% to 65% RH (non-condensing).
Storage Temp: -25° to 65°C / 0% to 98% RH (non-condensing).
Rated IP54 per IEC 529

Operator Controls and Indicators

3 LED indicators for general fault, power and battery status indication.
Buttons for power and paper feed.
Sensors for paper out, black mark detection, and door open. "Gas gauge" on battery door.

Memory Capacity

4 MB Flash, 32 MB DDR2. Standard memory supports large and graphic intensive print jobs.

Durability and Reliability

Survives multiple 6 foot drops to concrete (each face) per IEC 68-2.
MTBF: 10,000 hours in normal use.

Regulatory Approvals

FCC Class B, CE mark, RoHS, UL listed AC adapters, e-mark.

Warranty

Depends on local requirements. Please contact your national DASCOS sales office.

Options and Accessories

- Universal Port, 3-Track Simultaneous Read MCR, barcode scanners, biometrics, RFID.
- AC Wall Adapter, 100 to 240 VAC
 - Print and charge version
 - Charge only version
- In-Vehicle Power Adapter, 12 to 24 VDC
- Shoulder Strap
- Data Cables; USB
- Spare Batteries in Multi-Packs
- Media in Case Quantities
- Popular Mounting Systems
 - In-Vehicle Systems
 - Cart Mounting Systems

Glossary of Terms

802.11	Wireless networking communication standards created by IEEE.
Ad-Hoc	A Wi-Fi network consisting of only stations (no access point). Same as Peer-to-Peer.
authentication	The process a Wi-Fi station uses to identify itself to another station.
baud rate	The rate at which characters are transmitted over a serial interface. This is also often referred to as bits per second.
Bluetooth	A definition for short range radio frequency communications.
client	Any node on a network that requests services from another node (server).
character pitch	The horizontal spacing of characters. Measured in cpi.
cpi	Characters per inch.
default	Value or configuration assumed when the printer is powered on or reset.
DHCP	Dynamic Host Configuration Protocol. A method used to centrally control the assignment of IP addresses on a network.
dpi	Dots per inch. Generally used to refer to graphics density or resolution.
font	A group of characters of a given shape or style.
infrastructure	A Wi-Fi network consisting of stations connecting to a wired network or other stations via an access point.
interface	The connection between the printer and the host computer.
IP	Internet Protocol. A specification for packets, or datagrams, of data and an addressing method to allow the exchange of data with another system. Must be combined with another protocol such as TCP to create a complete connection with the other system.
LAN	Local Area Network.
LED	Light emitting diode.
lpi	Lines per inch.
margin	An area along any edge of a form where data may not be printed.
Peer-to-Peer	A network consisting of only stations (no access point or central server). Same as Ad-Hoc.

reset	Initialization of various operating features of the printer to the value or state assumed when the printer is powered on.
server	Any node on a network that provides services to another node (client).
SSID	Service Set Identifier. An identifier attached to packets on a Wi-Fi network that identify the particular network the packets are intended for.
TCP	Transmission Control Protocol. A specification that controls the connection between systems on a network.
top of form	The vertical position where the first line is printed on the paper. Also the position the paper is advanced to when a form feed (FF) character is received from the host or the Form Feed button is pressed on the printer's control panel.
USB	Universal Serial Bus.
WAN	Wide Area Network. Refers to connections that allow one LAN to communicate with another LAN(s).
WEP	Wired Equivalent Privacy. A security protocol for wireless LANs designed to provide data security similar to a wired LAN.
Wi-Fi	Refers to any of the IEEE 802.11 standards.
WLAN	Wireless Local Area Network. A LAN made up of wireless nodes.

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