



DASCOM DP-581H Operator's Manual

Rev1_01

- Read this manual carefully before use and keep it at your side for reference.
- The contents of this manual are subject to change without notice.
- The manufacturer will not be responsible for the result of operation using this manual regardless of errors or misprint.
- The manufacturer will not be responsible for troubles resulting from use of accessories and consumables other than specified in this manual.
- Do not disassemble or repair the printer by yourself in any ways other than specified in this manual.
- The manufacturer will not be responsible for any trouble resulting from wrong operation or inadequate use environment.
- Print data can not be saved in the printer for long period. The manufacturer will bot be responsible for any data loss or other damage resulting from breakdown, repair, inspection of the printer.
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Safety Guide

Warning Indications

Warning

Indications which, if not properly followed, may have high risk of serious injury or death.

Caution

Indications which, if not properly followed, may lead to serious injury or death.

Alert

Indications which, if not properly followed, may result in injury or property damage.

lcons







Caution



In case of heating, smoke, abnormal sound or smell, turn the power off and contact your dealer or customer service.

Continued usage may become a fire hazard.



When any foreign objects (metal fragments, water or other liquid, etc.) entered in the printer, turn the power off and contact your dealer or customer service. Continued usage may become a fire hazard.

Alert



 \bigwedge Install the printer on a flat and stable surface.



Do not use or store the printer in:

- a place exposed to direct sunlight or near the heater
- a hot and humid place
- a dusty or dirty place
- a place that may be exposed to water or other liquid It may become a cause of malfunction.

Handle the printer gently.

Strong impact may become the cause of malfunction or damage.



 \bigotimes Do not use solvent such as thinner and benzene for cleaning. Refer to "Maintenance" page for cleaning.

 \bigotimes Do not move or add impact to the printer during printing or standby mode. It may cause malfunction or power off resulting in data loss.

Caution

 \bigcirc Do not touch the printhead or paper cutter when opening the paper cover. The printhead may be very hot and the cutter may injure your hand.



Be careful not to have your hand caught in the paper cover.

Alert



igtriangleup Use only specified thermal paper. Using other thermal paper may deteriorate print quality and shorten printhead life.



 \bigotimes Never touch printhead with sharp or hard objetcts.

In case of condensation, dry the printhead before printing. Insufficient drying may damage the printhead.

Battery

Danger



/ If any electrolyte come into contact with your eyes, immediately wash your eyes with fresh running water and consult your doctor.

Failure to follow the instructions below may result in leakage, heating, or explosion of the battery:

- Do not heat the battery or throw in fire.
- Do not solder the battery to other objects.
- Do not hit or throw the battery.
- Do not place the battery near wires or other metal objects which could lead the battery ports becoming short circuited.

Do not disassemble or alter the battery or it may lead to leakage, heating or explosion.

Caution

🕂 If any eletrolyte come into contact with you skin or clothings, immediately wash the affected area with fresh running water to avoid skin trouble.

Alert



🚫 Do not wet the battery. It may cause heating or produce rust.



 \bigotimes Do not use or store the battery in a hot place. It may cause leakage, and deteriorate the performance and life of the battery.





Consult your dealer when you find anything abnormal with the battery.

AC Power Adapter

Alert

 \bigcirc Do not disassemble or alter the AC Power Adapter or it may lead to electric shock or fire.

<u>Thermalpaper</u>

Alert

Print density can be affected by temperature and media types.

To avoid discoloration and deterioration of thermal paper, pay attention to the following:

- Store in a dark, cool place. Avoid hot, humid place or place exposed to sunlight or any kind of liquid. (Temperature under 25°C, humidity under 65%)
- Avoid contact with PVC film, adhesive, adhesive tape for a long time.
- Do not scratch the paper with hard objects.
- Avoid contact with hand oil or sweat on printing surface.

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Chapter 1 Introduction

Thank you for purchasing the DP-581H mobile thermal printer. This is an easy-to operate thermal printer that prints on rolled paper up to 8.5 inches wide.

This document describes basic operation and information that you need before first use.

"Maintenance and Trouble Shooting" (P17) describes how to maintain the printer for optimal performance and has information onhow to diagnose any problems that may occur.

1.1 Printer Features

- Simple drop-in paper loading
- Large capacity battery provides mobility and enables long time printing.
- USB communication

 $\ensuremath{\mathbbmm}$ For detailed specifications refer to the last page.

% This machine is not a standard printer that prints data from PC.

1.2 What's included



1.3 Quick Start

- 1. Install battery (P7)
- 2. Install rolled paper (P5)
- 3. Charge the battery (P8)
- 4. Turn on power (P9)
- 5. Self-test (P10)

Chapter 2 Main unit

2.1 Names



2.2 Operation panel

2.2.1 Buttons

Button	Function	Operation
	Power on	Press & release when the power is off.
	Power off	Press & hold 3 seconds when the power is on.
Power	Web Configuration mode	Press twice when the printer is ready.
	Advance paper	Press once when the printer is ready.
Paper Feed	Self-Test	Press twice when the printer is ready.

2.2.2 Lamps

		Lamp		
Status	Power/Status (Green)	Battery (Yellow)	Error (Red)	
Booting up	• On	○ Off	• On	
Ready	• On	○ Off	⊖ Off	
Paper end / Lid open	Elashing	⊖ Off	\bigcirc Off	
Printing				
Web Configuration mode	Flashing	○ Off	Flashing	
Charging battery	-	• On	-	
Low battery	-	Flashing	-	
Changing Power mode	• On	-	Flashing (2-3 seconds)	
"Printhead too hot" error	• On	⊖ Off	Flashing	
Paper end / Lid open				

Chapter 3 Rolled Paper

3.1 Installing (8 inch rolled paper)

Press button (1) and open paper lid (2). Install rolled paper.



Pull out paper end about 5cm and close paper lid until you hear "click".



3.2 Cutting

The paper is cut by the cutter attached on the printer lid. Hold and pull the end of the paper so that the paper is cut from one end of the cutter to the other end continuously.



The Cutter is very sharp. Please do not touch the cutter in order to avoid injury.

3.3 Removing

Press button (1) and open paper lid (2). Pull tape (3) and remove rolled paper (4).



4.1 Battery installation

Place Main Unit bottom side up and insert battery as shown. Turn screws **clockwise to fix** battery firmly. Turn screws **counter-clockwise to remove** battery.

Main Unit (Bottom)



Please see "Battery Care" in "Maintenance and trouble shooting" (P19).

4.2 Battery charge level



Press Indicator button to check battery charge level in the indicator.

4.3 Connecting the AC Power Adapter

- 1. Connect the power cord to the AC Power Adapter.
- 2. Connect the DC connector of the AC Power Adapter to the printer.
- 3. Insert the plug at the end of the power cord into the power outlet.



A Be sure to follow this procedure. Failure to do so may cause problem in the machine.

4.4 Charging the battery

- 1. Uncover the printer ports and plug in the AC Power Adapter to the Power port.
- 2. Turn the power ON. The battery lamp will show solid ON while the battery is charging.
- The printer is charged only when the power is ON.
- A Charge via USB is not supported. Do not charge via the USB-C port.

4.5 Power ON

- 1. Press the Power button on the operation panel.
- 2. The Power lamp and the Error lamp will show ON during the start up sequence.
- 3. The Error lamp will be turned OFF when the printer is ready to print.

4.6 Power OFF

- 1. Hold down Power button for about 3 seconds.
- 2. The power lamp turns OFF and the printer power will be OFF.

When battery volume goes below 10%, the Battery lamp will flash and when it is below 5% the printer will shut down.

4.7 Disconnecting AC Adapter

- Perform reversed steps described in 4.3.
- Grab and pull the lock on connector when disconnecting the AC cable from the AC adapter's inlet.

5.1 Performing Self-Test

- 1. Install the rolled paper and close paper lid.
- 2. Turn the power ON.
- 3. When the printer becomes ready, press the Feed button twice continuously. The printer will start printing the test page.

Chapter 6 Windows PC software

6.1 Web Configuration Driver

6.1.1 Installing

Configuration of the DP-581H printer is done through a built-in web page. To use it, Web Configuration Driver must be installed in your PC.

- 1. Open ¥Driver_Software¥RNDIS_Driver¥Install. exe in the CD.
- 2. Click the Next button.

RNDIS Driver Installer	
	Welcome to the RNDIS Driver Installer This wizard will help you install the drivers for your RNDIS device.
	To continue, click Next.
	< Back Next > Cancel

3. Click the Install button.



4. Click the Finish button and then installation is completed.



6.1.2 Uninstalling

- 1. Open Device Manager in your PC.
- 2. Choose "Show hidden devices" in the View menu to make it checked.



3. Right-click Network adapters > USB Ethernet/RNDIS Gadget and choose "Uninstall device" from the contextual menu.



4. Select "Delete the driver software for this device." and click the Uninstall button.



5. Web Configuration Driver is removed from your PC.

Configuration of the DP-581H printer is done through a built-in web page. Web Configuration Driver is required, which is described above.

7.1 Accessing Web Configuration

- 1. Turn on the printer.
- 2. Connect a USB cable between the printer and a PC.
- 3. Wait until the printer become ready the Power lamp (green) is on and the Error lamp (red) is off.
- 4. Push the Power button twice rapidly. This will put the printer into Configuration mode.
- 5. When the printer is in Configuration mode, the Power lamp and the Error lamp will flash together.
- 6. About 30 seconds later, open web browser on your PC and enter 169. 254. 200. 1 in the address bar and press the Enter key.

※)If the login screen does not appear after entering the address, wait for a while and enter it again. Some PC takes time to recognize the change of the printer's mode to web configuration.

DP-581H	Configuration Interface
Password:	
	Login
	English \vee
	www.dascom.com

7. The password is 0000. Enter the password and click the Login button.

Tally DASCOM @	
Main WIFI Config Updates Reset To Factory Default	• •
Printer Info Model: DP-581H Primary SW Version: CoProcessor SW Version: Kernel info. Sep.25.2017 Print head recode: 63.06 m	Print Test Page
WIFI Config Address Method: DHCP IP Address: 192.168.0.191 SubnetMask: 255.255.0.0 Gateway: 192.168.0.254 MAC Address: Connection: Printer	

When configuration is finished, press and hold the Power button to turn the printer off. Then turn it on again.

7.2 Wi-Fi configuration

1. Click "WIFI Config" placed on the top menu to open Wi-Fi configuration.

1000	<u>y</u>	F	,						
DASC	OM	12	1						
Main WIFI Config	Updates	Reset To I	Factory Defaul	lts					
						○ Static	:		
Aberett	sizenod					DHCF	2		
Printer	Name					10.7702-0001			
Wift	Port					\$023			
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BSSID	Frequency	Sign	al Level			Flags		SSID	Add/Connect
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	2472		179	[WPA2-PSK-CCMP][WPS][ESS]		PSK-CCMP][WPS][ESS]		4.0.000	AddConnect
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dd Personal Network	2437 1		169		[WP.	A2-PSK-CCMP[[ESS]		No. 220 (Book)	AddConnect
dd Personal Network	2437		169		[WP.	A2-PSK-CCMP[[ESS]			AddCorrect
dd Personal Network	2437		169		[WP.	A2-PSK-CCMP[[ESS]			AddConnet
dd Personal Network	2437 d SSID Password		169		[WP	A2-PSK-CCMP[[ESS]			AddConnect
dd Personal Network	2437 SSID Password		169		[WP.	A2-PSK-CCMP[[FSS]			AddConnect
dd Personal Network Add Personal Network said	2437 SSID Password Authentication entication		169		[WP.	A2-798-CCM9[[555]			AddConnect
dd Personal Network	2437 SSID Password Authentication artication semication Keynau (KK)	л) °	169		[WP,				AddConnet
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2. Select suitable address method.

DHCP: Printer will acquire an IP address from your network DHCP server.

Wireless Configuration 🖌					
Address Method	⊖ Static ● DHCP				
Printer Name					
Wifi Port	8023				
Submit Changes Discard Changes					

Static: Printer will always connect to the network using the IP address defined.

IP Address	192 168 0 45					
SubnetMask	255 255 0					
Gateway	192 168 0 1					
Address Method	Static DHCP					
Printer Name	1.700.001.700					
Wifi Port	8023					
Submit Changes Discard Changes						

Click the Submit Changes button to save the settings.

- 3. The Available Networks list shows access points discovered by the printer. Click the Add/Connect button to use one of these access points.
- 4. Enter the password of the access point and click the Connect button.

Password:	
	Connect

5. The Previously Connected Networks list shows access points connected previously by the printer.

The Disconnect button will disconnect the access point.

The Remove button will remove the access point from the list.

- 6. Click "Main" to back to the main page.
- 7. In the main page, the WIFI Config field shows the current Wi-Fi settings.

WIFI Config	
Address Method: DHCP	
IP Address: 192.168.0.191	
SubnetMask: 255.255.0.0	
Gateway: 192.168.0.254	
MAC Address:	
Connection: Printer	

- 8. Close the web browser.
- 9. Press and hold the Power button of the printer to turn off the power and push the Power button to turn on the power again.

7.3 Printer configuration reset

You can reset the Printer Configuration to the Factory Defaults.

1. Click "Reset To Factory Defaults" placed on the top menu.



2. Click the Printer To Factory Defaults button and then your printer configuration is reset to the factory defaults.

7.4 Updating the firmware

- 1. Make sure that the printer is connected to a power source through the AC Power Adapter.
- 2. Click "Updates".

	Tall SC	y OM	(3)
Main	WIFI Config	Updates	Reset To Factory Defaults
File n This upload correct root	Upload Firmware nust end with .tgz .sv Upload will extract and plac directory.	w .fw .bin Browse e applications to	

- 3. Click the "Browse..." button and choose the firmware file saved in your PC.
- 4. Click the "Upload" button and it starts processing.
- 5. After a few minutes, the Web browser will show some messages.

Notice:

1. The file is uploaded successfully and the printer is updating the firmware.

2.Please keep the power energized and keep waiting for 30~60 seconds.Do not operate the printer.

3. When three LED lights are shining at the same time, the update is conpaleted.

4.Press the power key for 3~5 seconds to switch off the printer.

5.Restart the printer to finish the upgrade.

- 6. Don't turn off the printer while updating.
- 7. When updating is finished, the 3 lamps will flash together.
- 8. Turn off the printer and close the Web browser on the PC.
- 9. Turn on the printer and then it will run with the firmware that you uploaded.

It may take longer time when rebooting after updating the firmware.

Chapter 8 Maintenance and troubleshooting

8.1 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.

In order to clean the printer, prepare alchol, cotten swab, soft cloth, and air spray. Also prepare mild detergent to clean the outer cover.

Before cleaning, turn off the printer, disconnect it from the AC Power Adapter and disconnect the USB cable and remove the paper.

8.1.1 Print Head

To clean the print head as described below, use cotton swabs moistened with isopropyl alcohol.





Do not clean the printhead while it is still hot after printing.

Make sure that isopropyl alcohol is completely evaporated before turning on the power.

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.

8.1.2 Platen Rollers

Turn the platen roller gently with your hand and wipe the surface with a soft cloth moistened with alcohol.



8.1.3 Inside

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



8.1.4 Exterior

To clean the exterior of the printer, use a soft dry cloth.

8.2 Battery Care

8.2.1 Usage

- 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.
- When the battery is charging and not fully charged, the Battery lamp on the Control Panel will illuminate.
- The printer may be used while the battery is charging, but this will extend the time required to fully charge the battery.
- The battery will not be charged when the printer's power is off.

8.2.2 Environment

- 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.

8.2.3 Disposal

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

- 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.

If you do not know your local regulations, the Rechargeable Battery Recycling Corporation (RBRC) is a non-profit organization created to promote recycling of rechargeable batteries. For more information visit <u>www.rbrc.org</u>.



8.3 Troubleshooting

8.3.1 General Error Conditions

Whenever the printer detects an error condition the Error lamp will either flash or stay on.

Error lamp (Red)	Possible Cause	Solution
Flashes	Paper Out or Paper Door not fully closed.	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.
Flashes	The printhead is too hot.	Wait for a few seconds and restart the printer.
Flashes	Changing power mode	The Error lamp will be turned off when power mode has changed.

8.3.2 Fault Description and Resolution

Problem	Possible Cause	Solution
Printer will not turn on. (When the AC Power Adapter is not connected)	Battery not installed properly	Remove and reinstall battery.
	Discharged battery	Recharge battery.
Printer turns itself off. (When the AC Power Adapter is not connected)	Discharged battery	Connect the AC Power Adapter to charge the battery.
Battery lamp does not light or does not stay lit when AC Power Adapter is connected.	Battery already fully charged	(When the battery is fully charged, Battery lamp doesn't light.)
	No power supply	Check if power is supplied to the AC Power Adapter.
	Faulty AC Power Adapter	Try the new AC Power Adapter.
	Faulty battery	Replace the battery.
Battery not charging.	Faulty AC Power Adapter or battery	Try the new AC Power Adapter or replace the battery.

Problem	Possible Cause	Solution
Poor print quality	Not suitable paper	Verify paper from approved source.
	Not suitable or "old" paper	Verify paper from approved source. Try new roll of paper.
	Print head dirty	Clean print head. Refer to " <u>Maintenance</u> " section of this document.
	Battery deterioration	Exchange to a new battery.
Paper not feeding.	Obstruction in paper path, or paper improperly installed	Check the paper path and reinstall the paper.
	Not suitable paper	Verify paper from approved source.
	Paper Door not fully closed	Verify door is closed.
Paper not feeding reliably or print is compressed vertically	Not suitable paper	Verify paper from approved source.
	Paper Door not fully closed	Verify door is closed.
Print Garbled	A loose connection of the USB.	Check the USB cable connection and replace to a new cable if needed.
	Paper Door not fully closed	Verify door is closed.
Printer will not print.	Low Battery	Check and recharge battery.
	Paper not loaded correctly	Reinstall the paper.
	Improper Interface configuration	Verify printer and host settings match. Print a selftest to verify printer settings and to verify printer is functioning properly.

Chapter 9 Specifications (Printer)

VPrinting

Printing Method

Direct thermal

Printing Resolution

• 203 dpi (8 dots per mm)

Printing Speed

• Up to 2 ips (11 pages per minute)

Printing Width

• Up to 8.27" (210mm)

▼ Interface

- USB 2.0 PNP, Type-C connector
- Wi-Fi 802.11b/g/n compatible

VSoftware

• Printer Setup via internal web page, access with the web browser on the PC.

Supported Operating Systems

• Windows 7, Windows 8, Windows 8.1, Windows 10

V Print Media

Paper Type

• Direct Thermal Roll

Roll Size

- Maximum roll diameter: 54 mm
- Roll width: From 8" to 8.5"

V Power Management

Battery

- Rechargeable 6 cell Lithium Ion (11.1 V, 6000 mAh, 66.6 Wh)
- Endurance above 150 m printing per charge (@12.5% density)

AC Power Adapter

• 100-240V AC

▼ Physical

Dimensions

• D 66 x W 312 x H 109 mm

Weight

- 1.57 kg without battery
- 1.92 kg with battery

Environmental

Operating Temp

• -10°C to 45°C (using battery)

Storage Temp

-20°C to 60°C

Humidity

- 10% to 90% RH (noncondensing)
- Operator Controls and Indicators

LED lamps

• Error, Power, Battery

Buttons

Power, Paper feed

Sensors

• Paper out, Door open

Battery

• Indicator LED lamp x 4, Indicator button

Memory

- 256 MB Flash
- 512 MB DDR2 which supports full graphics

Durability and Reliability

Case

Durable PC-ABS case

Print head life

• min 50km @ 12.5% coverage

MTBF

• MTBF: 20,000 hours in normal use

V Regulatory Approvals

Main unit

• FCC Class B, CE mark, RoHS, UL, CCC, VCCI Class A

AC adapter

• PSE, UL, CCC, CE

Wireless

• FCC ID, RED, SRRC, Telec

Battery

• UN38.3