INFINITE PERIPHERALS

STIMARE

DPP-255

CONTACT INFORMATION

Web: www.stimare.net

General enquiries: info@stimare.net

Support: support@stimare.net

United States:
4730 Tejon Street
Denver CO
80211
USA
Phone: +1-720-257-7070

United Kingdom:
Unit 4, Bramber Court,
Bramber Road,
London,W14 9PW,
United Kingdom
Phone: +44 208 099 8071

Ireland:
46A Patrick Street
Dun Laoghaire
Co. Dublin
A96 YH33
Ireland
Phone: +353 1 685 4600

INFINITE PERIPHERALS

STIMARE

COMPATIBILITY

DPP-255 Made for:

Bluetooth® device with iOS, Android™, Windows®, Windows Phone® 8, Windows Mobile

TRADEMARK CREDITS

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WARNINGS, CAUTIONS AND NOTES

Please observe the *Warnings*, *Cautions* and *Notes* presented throughout this manual. An explanation of these items is provided below:

	Symbol	Description
⊘	**WARNING:**	Actions may result in a serious outcome *(e.g., injury, death or other adverse affect)* to the user.
⚠	**CAUTION:**	Special care is required to avoid damage to the product or other property.
ⓘ	*Note:*	*Important points and tips about the product are being provided.*

GUIDELINES FOR USE

Warnings and Cautions

Environmental

Avoid using the printer under the following conditions, as it may result in printer failure and/or serious personal injury.

- Anywhere printer may be exposed to excessive dust, moisture, or direct sunlight/heat.
- Slanted surfaces, or those surfaces which may be subject to strong shocks or vibrations.
- Environments with temperatures over 60°C or below -20°C, or with a relative humidity of 85% or more.
- Areas subject to electromagnetic noise or corrosive gas.
- If there is condensation on the thermal head. If condensation is present, the power should be kept off until the condensation evaporates completely.

Mechanical

Use caution when handling the thermal head to prevent heat elements and driver IC from exposure to static electricity.

Do Not...

- Touch the dot line on the thermal head/driver IC with metal, sandpaper, etc., or your fingers. This may cause damage and/or contamination and result in reduced print quality.
- Use volatile chemicals such as thinners or benzene for maintenance work.
- Open the paper cover while printing.
- Pull the paper out of the printer forcibly when the printer cover is closed.
- Use loose paper or block the paper exit of the printer. It may cause the paper to jam. **Note:** *If a paper jam occurs, turn off the power to the printer.*
- Attempt to disassemble or repair the printer, AC adapter or power cord yourself.   See section titled *SERVICING YOUR DPP-255 MOBILE PRINTER* for additional information.

Electrical

If the printer is not being used, or any of the following conditions exist, turn the printer power OFF and disconnect the AC adapter from the outlet..

- Smoke, unusual noises or odd smells are emittied by the printer.
- When metallic objects are dropped, or any liquid is spilled, inside of the printer.

Do Not...

- Connect or disconnect the AC adapter with wet hands. This may result in electric shock, short circuit and failure.
- Use any AC adapter or power cord other than those provided with the printer and/or specficified by an IPC account representative or certified service center.
- Bend the AC power cord or place heavy objects on top of it. Doing so may cause damage to the cord and/or cause fire or electric shock.
- Use a damaged AC power cord due to risk of fire or electric shock.
- Drop any metallic objects or spill coffee, water or any other liquid onto the printer.

- Touch the thermal head as it may be very hot immediately after printing. Be sure that the thermal head is cool before replacing the paper or cleaning the thermal head.

- Remove the interface cable or AC adapter from the connector or the receptacle by gripping the connector or the AC plug. Never pull the cable itself, as it may cause damage to the cable and/or adapter.

Operational

Use the specified paper or paper of an equivalent type. Use of other paper may reduce life of the thermal head and cause a decrease in printing quality. Sodium(Na+), potassium(K+) and chlorine(Cl-) containing substances can remarkably reduce the life of the thermal head.

When pasting printed pages, use water-based glue (e.g., starch glue, synthetic glue, etc.)

The surface of thermal paper has been specially treated with a chemical agent to produce coloring by thermal chemical reaction.

Do Not...

- Expose the paper to bright light for extended periods of time.

- Expose the paper to organic solvents.

- Expose the paper to vinyl chloride film, erasers or adhesive tapes for extended periods ot time.

- Store paper in areas with high temperatures, high humidity, damps area or areas with exposure to direct sunlight. The paper should be stored in a cool, dry and dark place.

- Store the paper on diazo print paper or wet, freshly made paper copies.

- Handle the paper with wet hands or hard objects as it may result in tears, fingerprints or smudges.

IMPORTANT:

Continuous use of the printer under improper conditions could lead to printer failure, fire and/or electric shock and may void the warranty. If the fault condition continues, contact an authorized service center for further assistance.

GETTING STARTED

Before Using Your DPP-255 Printer

- Remove the device and any included accessories from the shipping carton and verify contents against your packlng list.

- Retain all packing materials, invoice, and bill of lading.   These may be required to return the printer for servicing later, or to process a claim with the carrier.

- Carefully inspect the packaging and contents for any signs of damage. If there are signs of damage, DO NOT attempt to use the unit.   Notify your account executive or contact IPC technical support at *support@ipcmobile.com*.

Your **DPP-255 Printer** includes the following items:
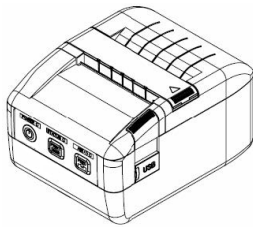
DPP-255 Printer	*Battery Pack (installed)*	*Paper Roll (installed)*	*AC Adapter*
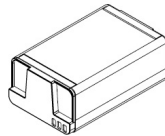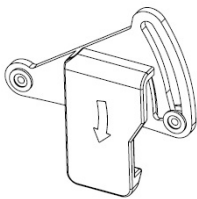
Belt Clip	*Fixing Screw (2 pieces)*	USB Cable	Data Cable
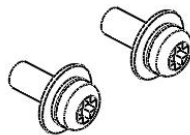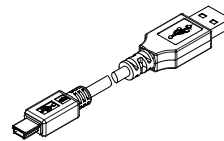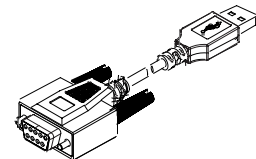
Note: *Box contents and part numbers may vary based on ordered configuration.*

The following table will help you get the DPP-255 mobile printer ready for use:

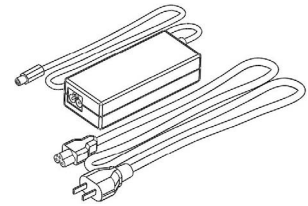| Step	Purpose	Additional Information
1. **Charge the DPP-255**	The battery pack should be fully charged before use to ensure long battery life.	*See manual section:* **CHARGING THE BATTERY**
2. **Load the DPP-255 print media (Thermal Paper)**	Use of the printer requires the installation of thermal paper for printing.	*See manual section:* **USING YOUR DPP-255**
3. **Install Software**	Printer features requires the installation of software on your mobile device.	*See manual section:* **DEVELOPING APPLICATIONS**
4. **Setup Bluetooth Pairing**	Set up Bluetooth® pairing to allow DPP-255 to communicate with the Bluetooth®	*See manual section:* **BLUETOOTH PAIRING**

ACCESSORIES

Please visit our website *ipcmobile.com*, or contact your Infinite Peripherals (IPC) account representative, for additional information about our current and future product accessory offerings.

DEVELOPING APPLICATIONS

Software is not provided with your DPP-255 mobile printer. Please contact your reseller or Infinite Peripherals for Third Party software solutions.

Integrating the DPP-255 into your mobile application requires the use of the Infinite Peripherals Universal SDK. The SDK incorporates an API specifically for developing applications to use the functionality of the DPP-255.

For additional details on using the Infinite Peripheral Universal SDK, please refer to the SDKs documentation.

For the latest Infinite Peripheral Universal SDK please visit our developer portal at:

http://www.ipcmobile.com/developer

DPP-255 PRINTER FEATURES

The DPP-255 is a mobile thermal printer which allows data input from computers and other host systems through Serial (RS232C), USB and Bluetooth (MFi or SPP). The versatile functions built in the series make it possible to use for several data output applications.

- Max 100mm/sec high-speed printing (Using peeler unit : Max 62.5mm/sec)
- Rugged body design. Drop Rating of up to 1.5m
- Water and dust resistant comply to IP54 with carry case
- Drop-and-load design.
- Wide operating environment
- Multiple settings
    - Adustable Line Spacing
    - Variable Paper Guide
    - Paper feed
    - Print density
- Print capability for:
    - Barcode and 2-dimensional code printing HEX dump and test printing
    - Large characters
    - Graphic by bit image
    - Downloaded and user-defined characters
    - Table layout
- Page Mode allows erect/inverse images, clockwise 90 degrees/counter-clockwise 90 degrees and overlapping printing.
- Graphic data can be registered.
- Command system conforms to ESC/POS
- Numerous character codes supported

PRODUCT OVERVIEW

Peeler Unit

Paper Cover
Release
Button

Figure 1:   Top

Power LED   Status LED   Air LED

POWER ○   STATUS ○   AIR))) ○

PRINT   FEED

Power
Button   Print
Button   Feed
Button
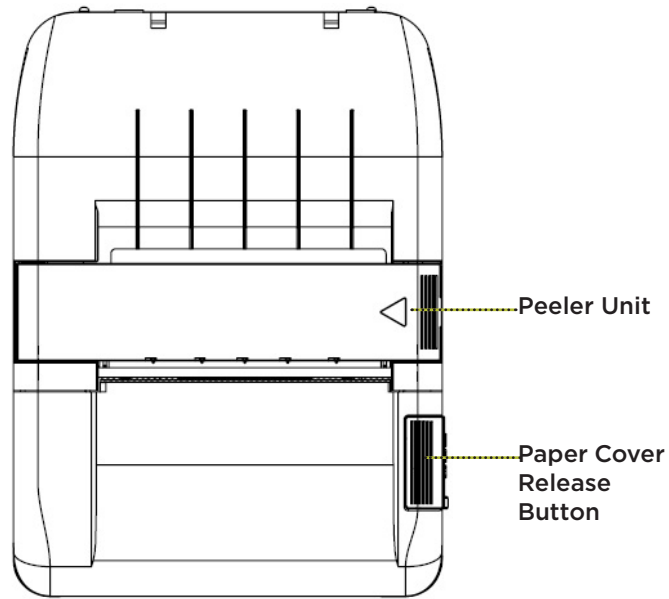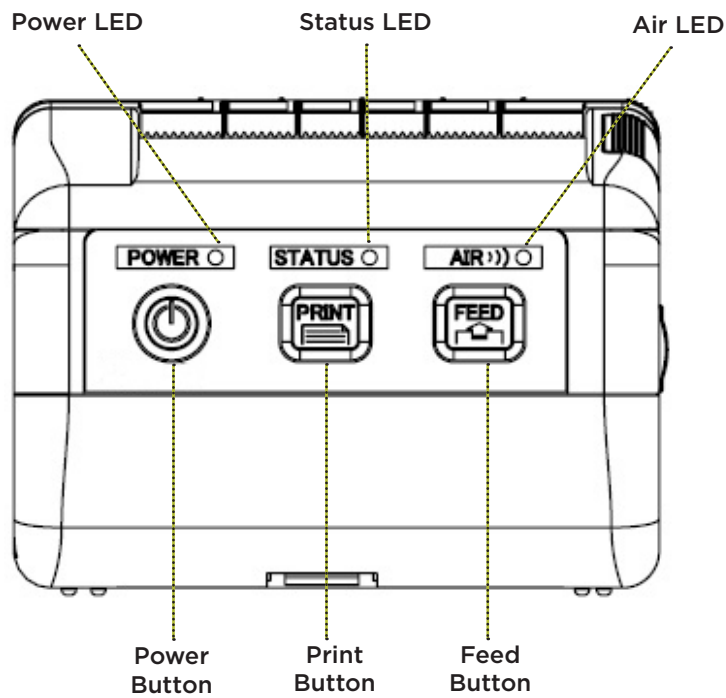
Figure 2:   Front

DC Jack
Port

Figure 3: Left Side

USB/Serial
Port
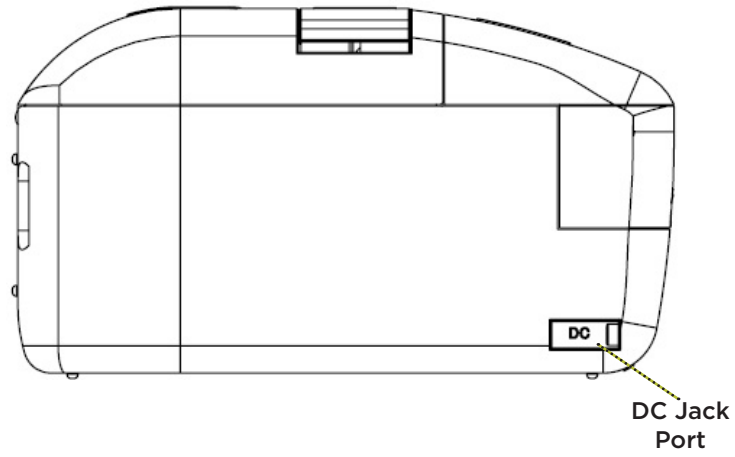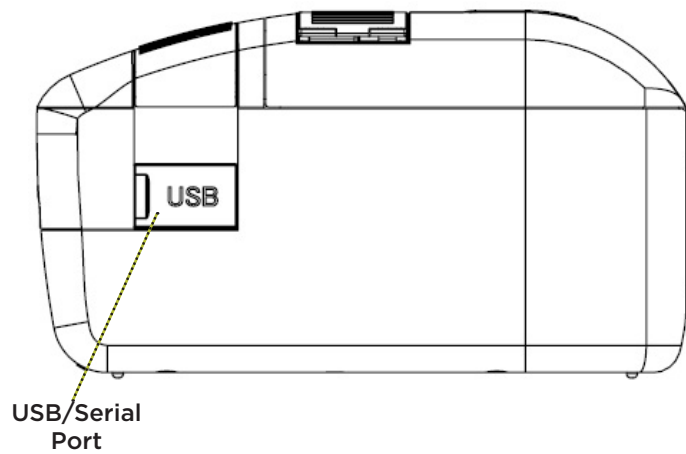
Figure 4: Right Side

Battery
Compartment

Figure 5:   Bottom

Paper Cover

Paper Guide/
Stopper
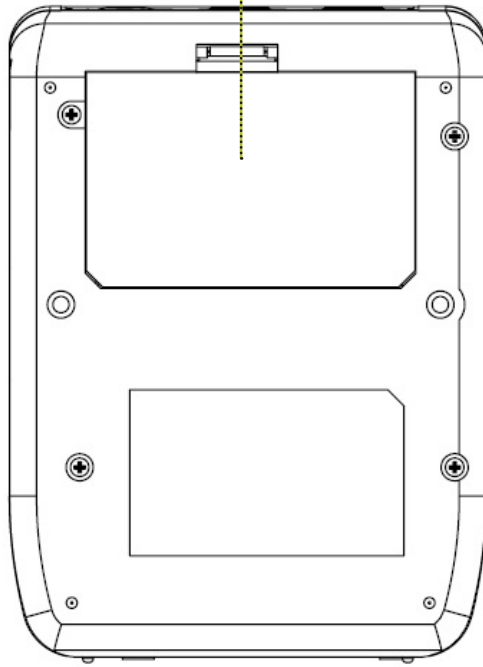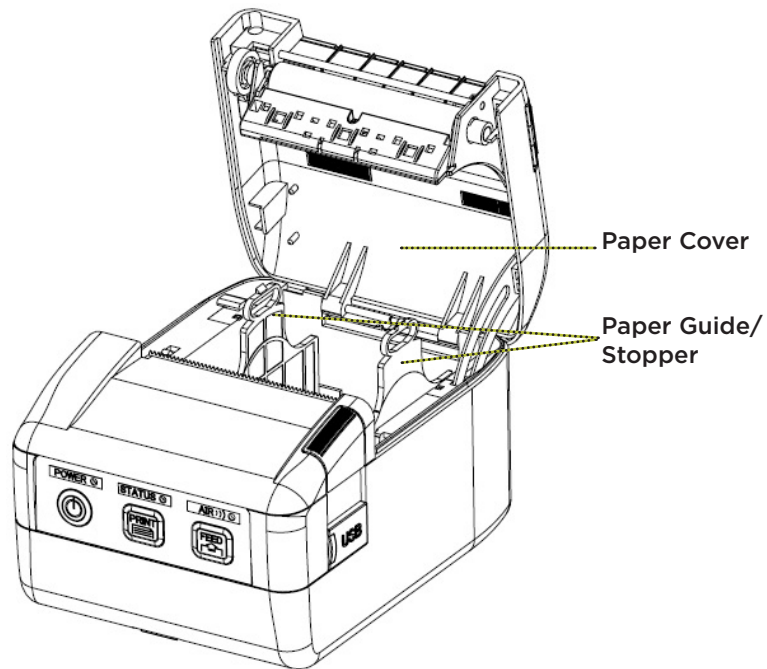
Figure 6:   Interior

DPP-255 Printer Features	
POWER button:	Press to turn printer power on/off
FEED button:	Press to feed the paper through the printer
PRINT button:	Press to configure printer settings
Power LED:	Indicates the status of the power and battery pack.
Status LED:	Indicates the operational status of the printer
Air LED:	Indicates the status of the Bluetooth connection.
USB/Serial cover:	Cover for wired interface
Battery cover:	Cover for battery compartment
DC cover:	Cover for adapter and DC jack
Paper Cover Release button:	Press to open the paper cover
Paper Guide:	Adjust guide to accomodate paper width
Stopper:	Stopper for the paper guide
Peeler Unit:	Peels the label off the label roll

REPLACING THE BATTERY

1. Open the cover to the battery compartment on the bottom of the printer.

2. Remove the battery from the battery compartment.

3. Place a new battery pack in the battery compartment and replace the cover.
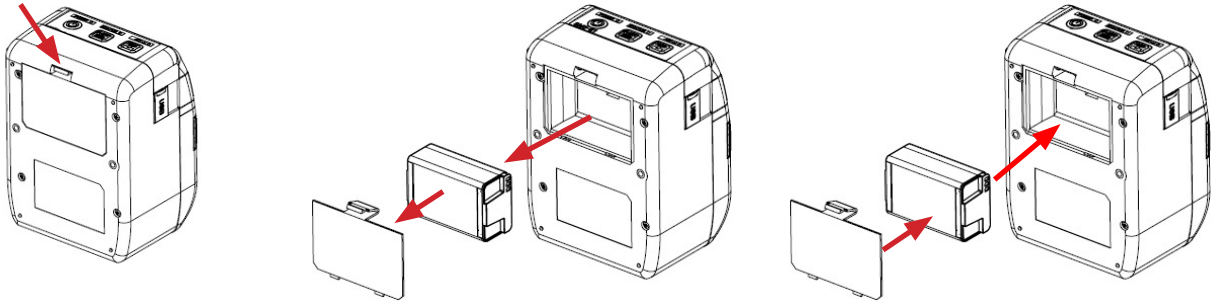
Figure 7: Battery Replacement

DISPOSAL

Dispose of used batteries appropriately, according to federal law. This may include disposing of them at a battery-recycling center or hazardous waste collection site.

CHARGING YOUR DPP-255

Before using the DPP-255 thermal printer, the battery should be properly charged. The DPP-255 uses a Lithium Ion rechargeable battery pack. Before first use, the battery pack should be charged for at least 3 hours.

1. Pull the DC Jack Port cover tab back and Insert the AC adapter into the port.

2. Insert the AC adapter plug into an outlet to begin charging.
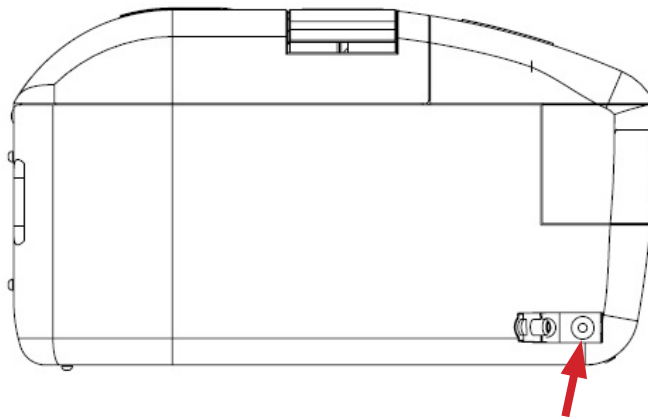
Figure 8: DC Jack Port

CAUTION:

⚠️ To prevent electrical damage to the DPP-255 and/or battery pack, please use approved AC Charger only.

After completing initial battery charge, monitor battery status and recharge, as needed. If the operating time of a fully charged battery becomes too short, battery may need to be replaced.

USING YOUR DPP-255

Attaching the Belt Clip

1. Insert screws through the holes of the belt clip and tighten with a screwdriver.
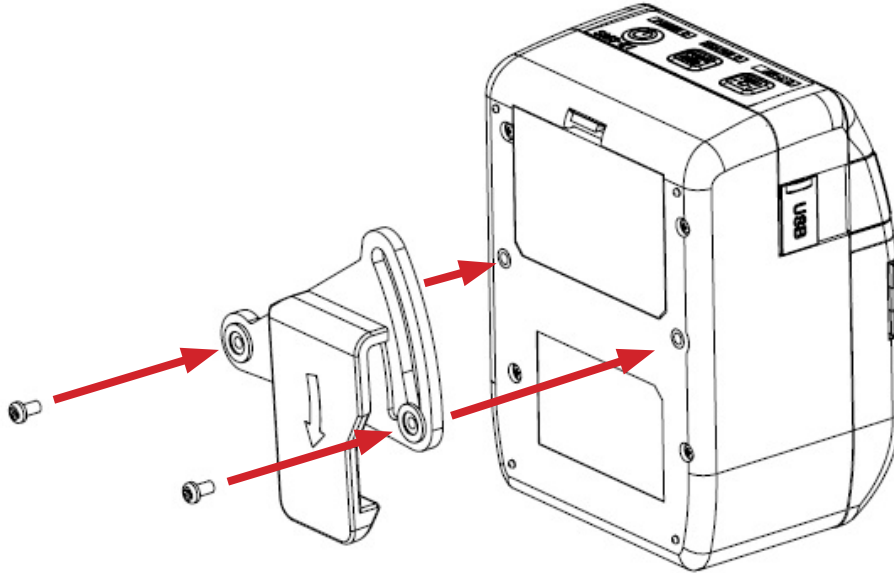
Figure 9: Belt Clip

Installing a Paper Roll

The DPP-255 uses a drop-and-load design, making paper loading easy and trouble free. To load a paper roll, simply lift up the paper cover latch and drop in the new roll as shown in the steps below.

1. Press the Paper Cover Release button to open the cover *(Figure 10)*.
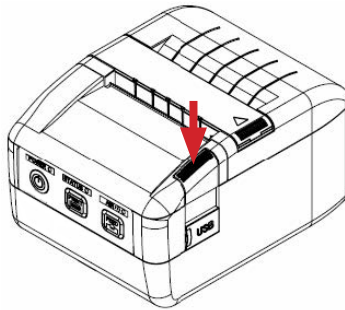
Figure 10: Paper Cover Release

2. Gently pull the paper guides apart *(Figure 11a)* and insert the paper roll so that the end of the paper roll faces the back of the printer and comes up from the bottom of the compartment *(Figure 11b)*.

3. Pull the end of the paper roll so that it is sticking slightly outside of the paper feed area and close the cover.
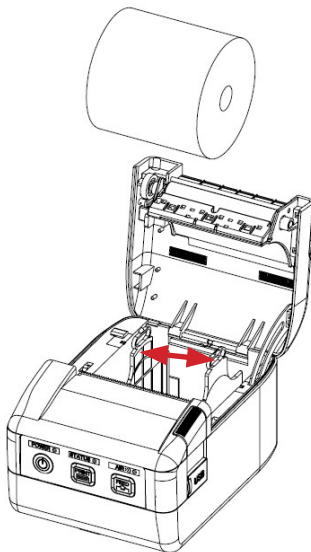
Figure 11a: Paper Guide   *Figure 11b: Paper Roll*
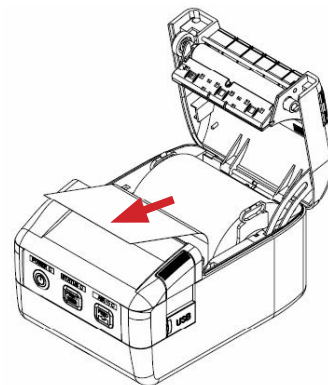
WARNING:

🚫   Handle the paper cutter carefully to avoid potential injury to fingers and hands.

🚫   Be sure that the thermal head is cool before replacing the paper roll. Thermal head may be very hot immediately after printing. Touching the thermal head white hot may result in burn injuries.

Setting the Peeler Unit for Labels

1. Insert the label stock into the printer with the end of the label roll sticking out of the feeder approximately 1-1/2 inches (40 mm). Close the cover.

2. Raise the peeler unit arm and pull the label-end toward the back of the printer.

3. Lower the peeler unit to secure the label stock place.

4. Press the Feed button on the front of the printer to set the position of the label paper.
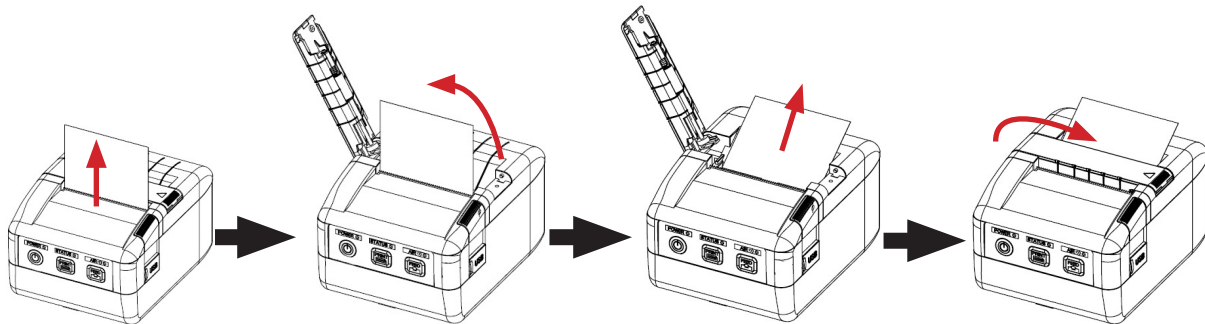
Figure 12: Setting the Peeler Unit

Sensors

1. **Paper End Sensor**

   The Paper-End Sensor is installed into the paper path where the photo-interrupter detects that there is paper in the printer. Once the Paper End Sensor sends signal to indicate the paper roll is empty, the printer stops printing and the Status LED turns red. As soon as the paper-end strip appears, the paper roll should be replaced.

   Once the paper has been replaced, the printer cancels the error status and resumes printing.

2. **Open Cover Sensor**

   The Open Cover Sensor detects when the cover is open. Once the sensor detects the Open Cover signal, the printer stops printing and goes offline. The Status LED turns red.

   Once the cover has been closed, the printer cancels the error status and resumes printing.

3. **Thermistor**

   The Thermistor that is built into the print head detects the temperature of the print head. If printing at a high printing rate for a long time, the print head temperature rises and the head may become overheated. To prevent overheating, the printer stops printing when the temperature is beyond a certain level, and the Status LED blinks red.

4. **Peeled Label Sensor**

   The Peeled Label Sensor detects whether there is issued label by printing or feeding. Once the sensor detectes the label paper signal, the printer stops printing and goes offline, the Status LED turns red. Pull out the label paper, the printer goes back online and cancels the print stop mode.

Print Area

The left and right margins are the approximate distance from the paper edge and will shift about ±1mm depending on the paper path, paper position and tolerances.

When using label stock, the area of the thermal paper becomes equivalent to printing area.

Printing area (Unit:mm)

Inch width	Paper width/Printing width	A	B	C	D
2 Inch	58mm/ 48mm	58	48	5	5
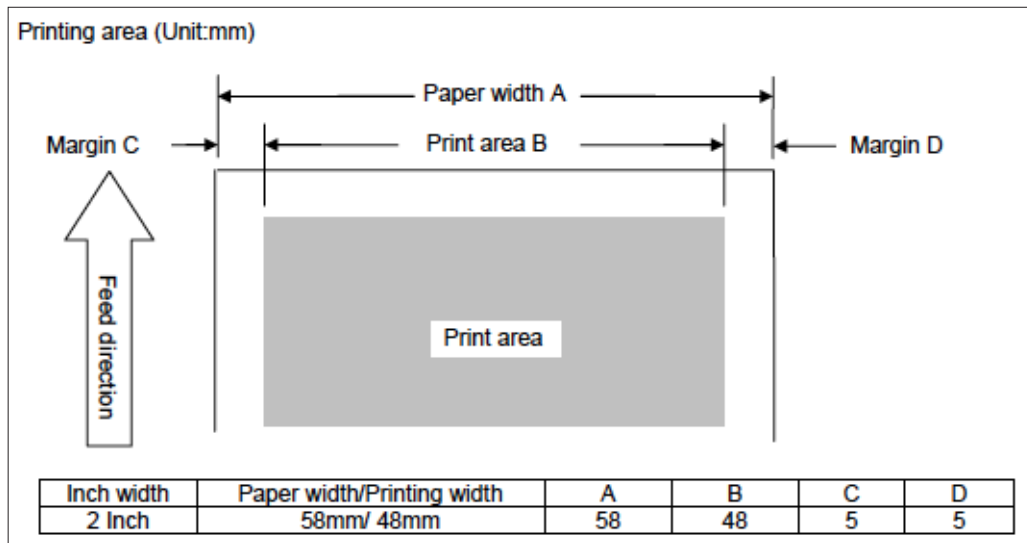
Figure 13: Print Area Diagram

Print Head and Cutter Position

The numeric values in the figure below are nominal center values. Leave enough margin for the cutting position to account for paper flex or variability.
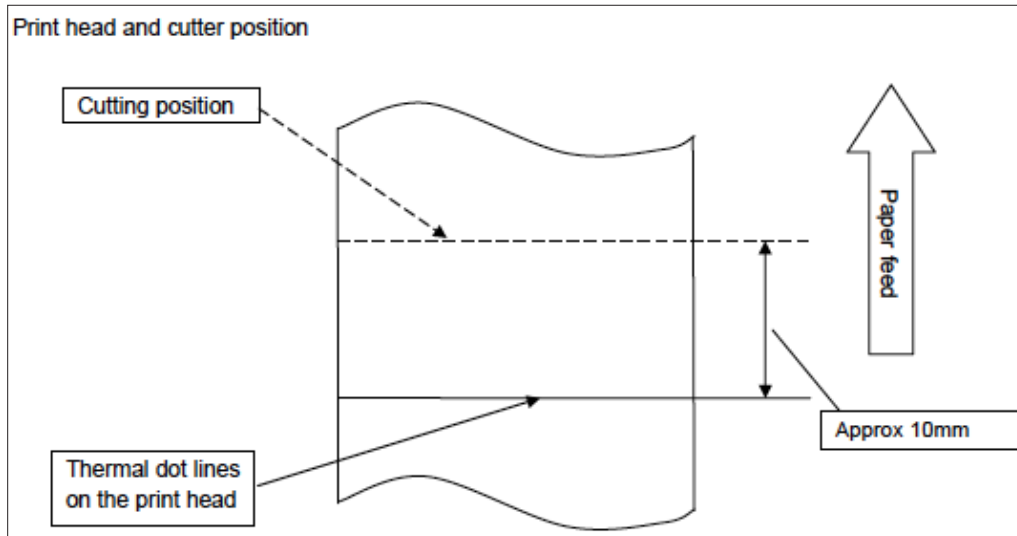
Figure 14: Print Head and Cutter Position Diagram

Paper Sensor Position

Sensor	Distance from paper edge (±1.0mm)
Black Mark Sensor	12.0 mm
Label GAP Sensor	12.0 mm
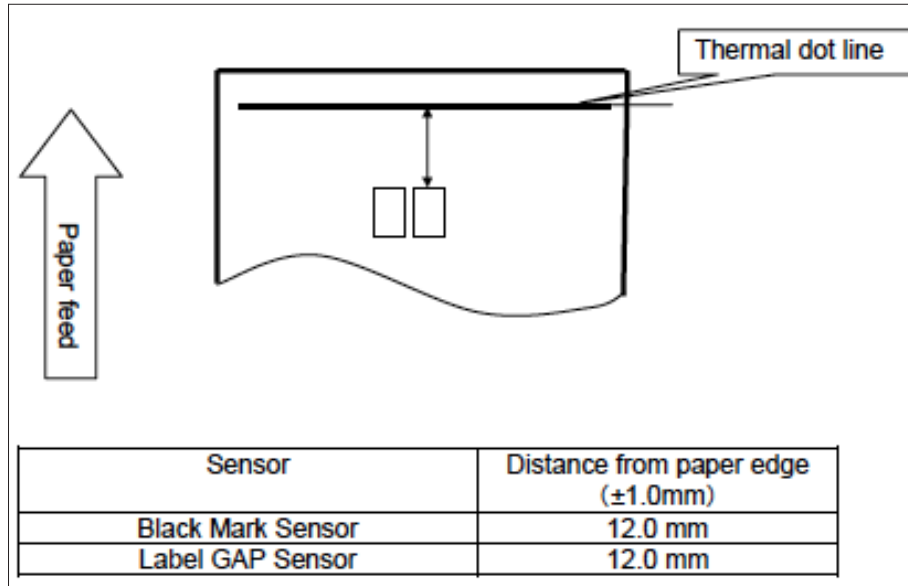
Figure 15: Paper Sensor Position Diagram

Paper Feeding

Backlash

Backlash in the paper feed mechanism may lead to under-feeding and crowding of characters on adjacent lines. Always be sure to turn the paper feed motor 24 steps (3mm) at the start of printing and initialization, and after opening and closing the thermal head.

Graphic Printing

If the printer must wait for data from the host systems while printing, it will temporarily stop printing and feeding paper. After the printer receives new data and resumes printing, the paper feeding for 1 to 3 lines may become irregular, especially while printing a bit image.

In graphic printing, you may see irregular printing if the single lines of data are specified for Raster bit images. Specify a minimum of 16 lines or more when graphic data is printed.

Diagnostic Self Test Printing

The DPP-255 printer's Feed button is used for entering various printer modes. These modes can be used to assist developers in debugging problems related to programing and communication. The following explain how to access the various operating modes.

1. Press the Power button and FEED button to power the printer on and start the self-test.

2. When the Status LED lights up and the printer begins printing, release the FEED button.

After completing the print test, the printer will go in to Standby mode.

Note: Care must be taken when entering operating modes to prevent the clearing of factory preset configuration information.

Figure 16: Sample - Self Test Printing

Hex Dump Mode

Data entered from the computer is printed in hexadecimal numbers and characters.

1. Press and hold the FEED button, then press the POWER button.

2. When the printer beeps and the POWER LED turns green, release the FEED button.

3. After printing title "Dump mode!", any hexadecimal numbers and characters entered from the host system will be printed.

4. Press the power switch again to cancel HEX dump mode.

Figure 17: Sample - Hex Dump Printing

Function Setting Mode

There is a function setting mode to switch register functions in the memory manually. Functions are called up by the POWER and FEED buttons, and the printer prints registered functions.

Operation:

1. Hold down the POWER button to turn the power on.

2. Release POWER button when title "HARDWARE SETUP" has started printing.
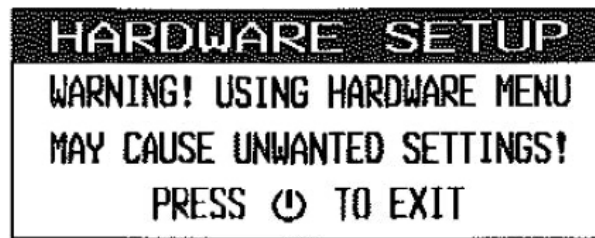
Figure 18: Hardware Setup Warning

3. Press the FEED button to print the contents of the memory switch.
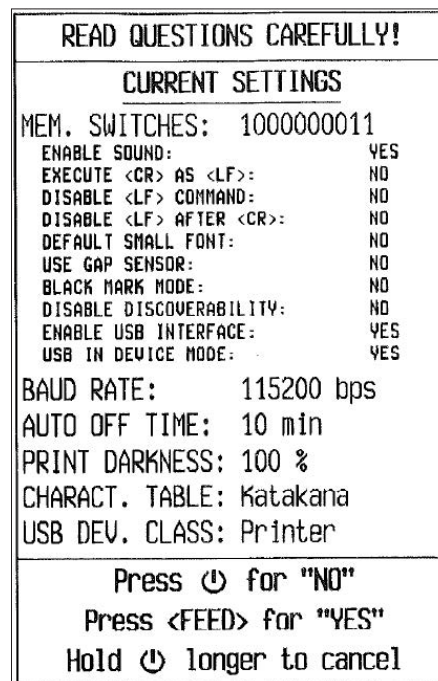
Figure 19: Current Settings

Follow the flow chart below to change settings. As the setting parameter is printed, select the right parameter using the FEED and POWER buttons.

After completing the parameters set up, the data is stored and the printer turned off.
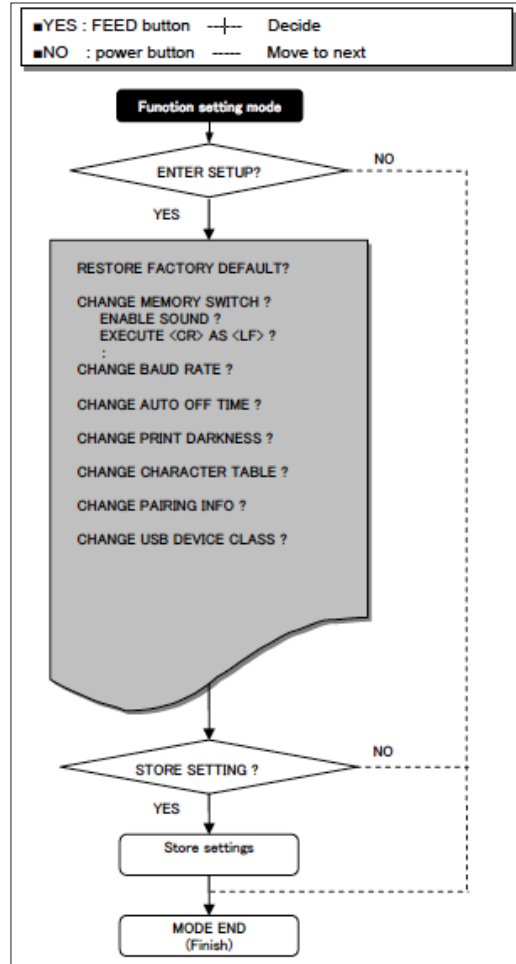
Figure 20: Parameter Changes

Setting Memory Switches (Default Settings)

1. **RESTORE FACTORY DEFAULTS?**

   Select to reset memory switch as factory default.

   - YES: Returns to the default memory
   - NO: No action

2. **CHANGE MEMORY SWITCHES?**

   Set memory switch controlled by 1 bit.

SWITCH NO	NO (Value: 0)	YES (Value: 1)
ENABLE SOUND	Buzzer OFF	Buzzer ON
EXECUTE <CR> AS <LF>	Disable CR	Enable CR
DISABLE <LF> COMMAND	Enable LF	Disable LF
DISABLE <LF> AFTER <CR>	Enable LF after CR *(Only the SWITCH NO3=0)*	Disable LF after CR
DEFAULT SMALL FONT	FONT A(24×12)	FONT B(16×9)
USE GAP SENSOR	BM sensor	GAP sensor
BLACK MARK MODE	Disable black mark detaction	Enable black mark detaction
DISABLE DISCOVERABLITY	Bluetooth discovery mode	NOT Bluetooth discovery mode
ENABLE USB INTERFACE	Disable USB function	Enable USB function
USB IN DEVICE MODE	Inhibit setting	Use as a USB device

3. **CHANGE BAUD RATE?**

   Select the baud rate.

   Options: *1200bps, 2400bps, 4800bps, 9600bps, 19200bps, 38400bps, 57600bps, 115200bps*

4. **CHANGE AUTO OFF TIME?**

   Set auto power off time from stand by.

   Options: *2min, 5min, 10min, 15min, 20min, 30min, 45min, 60min, 0min (Disable)*

5. **CHANGE PRINT DARKNESS?**

   Specify the printing density.

   Options: *60%, 75%, 90%, 100%, 120%, 140%, 160%*

6. **CHANGE CHARACTER TABLE?**

   Select the ASCII character table.

   Options: English(437), Latin 1(850), Portuguese(860), Lithuanian, Latin 2 (852), Polish, Turkish(857), Baltic(775), Bulgarian(856), Russian(866), Latvian, Greek(737), Hebrew(862), Western(1252), CE(1250), Turkish(1254), Baltic(1257), Cyrillic(1251), Greek(1253), Hebrew(1255), Katakana, Arabic(1256), Arabic(1256A), Arabic(1256F), Thai(874), VISCII

7. **DISABLE AUTHENTICATION?**

   Select Enable or Disable for Bluetooth authentication.
   - YES: Disable authentication.
   - NO: Enable authentication.

8. **CHANGE PAIRING INFO?**

Select the setting for Bluetooth Pairing key.

After selecting "YES" option, automatically goes to the setting item "SAVE PAIRING INFO". This option may be set up even when "DISABLE AUTHENTICATION?" option is set "NO".

9. **SAVE PAIRING INFO?**

Select option for saving pairing key.
- YES: Save pairing key.
- NO: Do not save pairing key.

10. **CHANGE USB DEVICE CLASS?**

Select device USB operation mode.

Options: Printer, Serial

11. **STORE SETTINGS?**

Confirm storage of settings.
- YES: Save and exit.
- NO: Discard and exit.

Dip Swich Setting Menu

Default settings can established for the functions below by setting the corresponding DIP-switch. When the power is ON, the printer reflects the default data in standby mode.
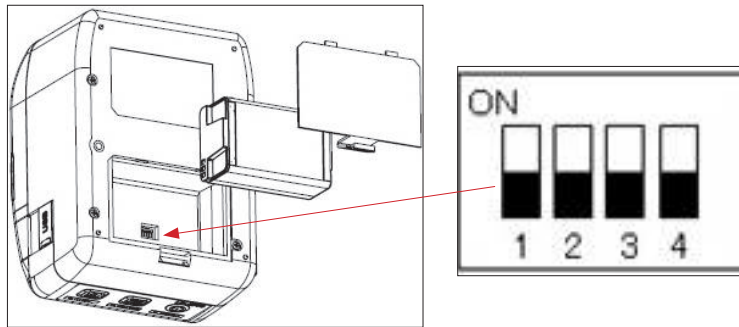
Figure 21: Dip Switch

Number	Function	On	Off
1	BLUETOOTH	Enable Bluetooth function	Disable Bluetooth function
2	PEELER MODE	Standard mode	Peeler mode
3	Xon/Xoff	Disable	Enable
4	PROTOCOL MODE	Disable	Enable

Adjusting the Print Density

Paper sensitivity varies by type of thermal paper. Choose the proper print density to achieve the best print quality and reliable printing. Excess heating of the thermal print head may result in a reduction of and/or print head performance and longevity.

Allows print density to be set from 60 to 160%. The default setting from the factory is 100% to allow for maintaining proper print quality.

LED Display

When an error occurs, the Status LED lights up or blinks (depending on the error type) as follows.

1. **No Error Detected:**

   - Standby

     The printer is online and awaiting printing data.

   - Initialization

     Initialize printer memories. The printer goes offline during initialization. Once initialization is complete, the printer goes into standby mode.

   - Status of Waiting Error Cancellation

     Printer changes to this status during certain error conditions (e.g., paper empty, paper cover open, etc.). Offline status and Status LED remain its status. Printer goes into standby mode when FEED button is pressed.

2. **Error Detected:**

   - Temperature Error

     The print head temperature is increased by continuous, heavy-duty printing. If the print head temperature exceeds 70°C, operation of the print head is automatically stopped to prevent overheating. The printer goes offline and resumes printing only when the temperature of the print head returns to 60°C or below.

   - Paper Empty

     When the printer detects that paper roll has reached the end, the Status LED lights up and the printer goes offline.

   - Paper Cover Open

     When the paper cover is open, the Status LED lights up and the printer goes offline.

3. **Status LEDs:**

   (1) No Error Signal is Detected:

Status	LED	
Standby	Power LED:	No LED (Off)
	Status LED:	Green
Initializing	Power LED:	Green
	Status LED:	Red
Waiting for Error Cancellation	Power LED:	No LED (Off)
	Status LED:	Red

(2) Error Signal is Detected:

Status	LED			
Temperature Error *(70°C or higher)*	Power LED:	Green -> No LED (Off)		
	Status LED:	No LED (Off) -> Red		
Battery Low	Power LED:	Green		
	Status LED:	No LED Green Red	= = =	(Off) (*Standby*) (*Paper Empty*)
Paper Empty	Power LED:	Off		
	Status LED:	Red		
Paper Cover Open	Power LED:	Off		
	Status LED:	Red		

(3) Charge:

Status	LED			
Charging	Power LED:	Green > Green > No LED (Off)		
	Status LED:	No LED Green Red	= = =	(Off) (*Standby*) (*Paper Empty*)
Charge Finished	Power LED:	Green		
	Status LED:	No LED Green Red	= = =	(Off) (*Standby*) (*Paper Empty*)

Memory

1. **Input Buffer**

   Buffer memory stores input data from the interface. Buffer size is approximately 30 kilobytes (KB).

2. **User Memory**

   User memory is used for download bit image and macro commands registration. Maximum size is 16 kilobytes (KB).

   Users are able to manipulate the area freely. Calculate the available memory size due to the limited amount of memory available. If there is no available memory, erase the used memory to free up enough space

USB

(1)   Pin layout:

Connector: Mini-B type 5-PIN

Cable: Use specified serial cable

Pin	Signal	Function
RxD	Input	Serial data input
TxD	Output	Serial data output
GND	--	GND

(2)   Conditions:

Baud rate: 1200 to 115200bps

Parity: None

Bit length: 8 bit

Busy control: Software control(XON/XOFF) / None

(3)   Software control (XON/XOFF):

Xon(11H) / Xoff(13H) signal is used to control data transmission to the host system.

Xoff signal is sent to host system if the receiving buffer is filled out curtain level (1).

The host side should stop sending data if Xoff signal is received. If the data in the input buffer is reduced to curtain level, Xon signal is sent to the host system and re-start sending remained data (2)
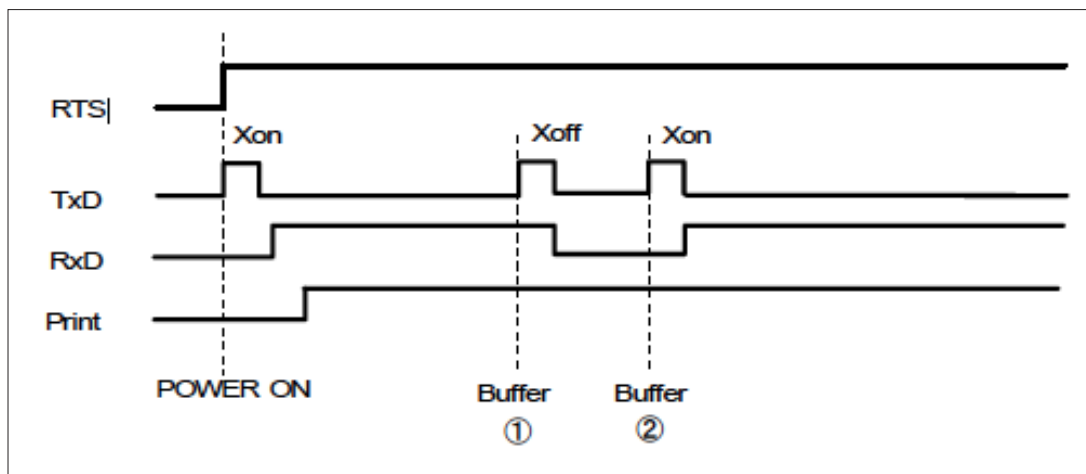
Figure 22: USB - Software Control Diagram

Bluetooth

This printer is equipped with a BT module obtained MFi license which can communicate with iOS including the iPhone, iPod and iPad, as well as non-iOS devices such as Android and PC terminals, through SPP profile and the printer is widely used for electronic equipment.

Item	Specifications
Interface	Bluetooth V2.1 + EDR
Output Frequency	2.4GHz (2402~2480MHz)
Modulation	FH-SS
Output Level	Class2
Profile	MFi/SPP (Serial Port Profile)

PIN code: Default [0000]
Device name: DPP-255

1. If data larger than 1 megabyte (1MB) is sent to the printer during Bluetooth communications, the printer buffer may become overloaded and cause the printer not to print properly.

2. The default PIN code for the printer should be changed as soon as possible.

WiFi (W Model)

Contents		Items
Hardware	WiFI standard:	IEEE 802.11b
	Speed rate:	Max. 11Mbps
	Channel:	CH 1 to 13
	Security:	64/128 WEP, WPA-PSK, WPA2-PSK
Software	WiFI protcol:	TCP, IP, SOCKET, ARP, RAPP
	Port:	1 to 9999 (default 9100)
	Mode:	Infastructure, Adhoc
	SSID:	Alphanumeric character, SP, -, _ Max 32 columns of character string
	IP address setting:	Fixed IP or DHCP
	IP address:	0.0.0.0 to 255.255.255.255
	Sub net mask:	0.0.0.0 to 255.255.255.255
	Gateway:	0.0.0.0 to 255.255.255.255

1. If data larger than 270 kilobytes (270KB) is sent to the printer during WiFi communications, the printer buffer may become overloaded and cause the printer not to print properly.

2. If security is required, WPA2 or other security setting options may be configured. Refer to the setting guide for communication and security.

Label Printing

Optional Gap sensor (transparent photo interrupter) and Black Mark sensor (reflective photo interrupter) are sensed to top of label form.

Label Printing Setup:

- Set the paper sensor as marking detector.
- Detection of marking position is operated by FF command.
- Height of marking should be 3mm. If marking goes over 6mm or can't be detected within 360mm, it detects as paper end.
- When marking is selected, paper can be fed to the next marking position by pressing the FEED button.
- Sensitivity of sensor can be adjusted using ESC CSL command.
- Printing position has some error that is ±2mm top and bottom and ±1mm left and right, please design while considering margin of printing area.

Note: *The left and right margin is calculated space could shift approximately ±1mm, depending on the paper width, paper position and tolerance.*

Setting the Paper:

1. Set the end so that it is emerging 10mm from the cutter.
2. Detect marking position using the FEED button.
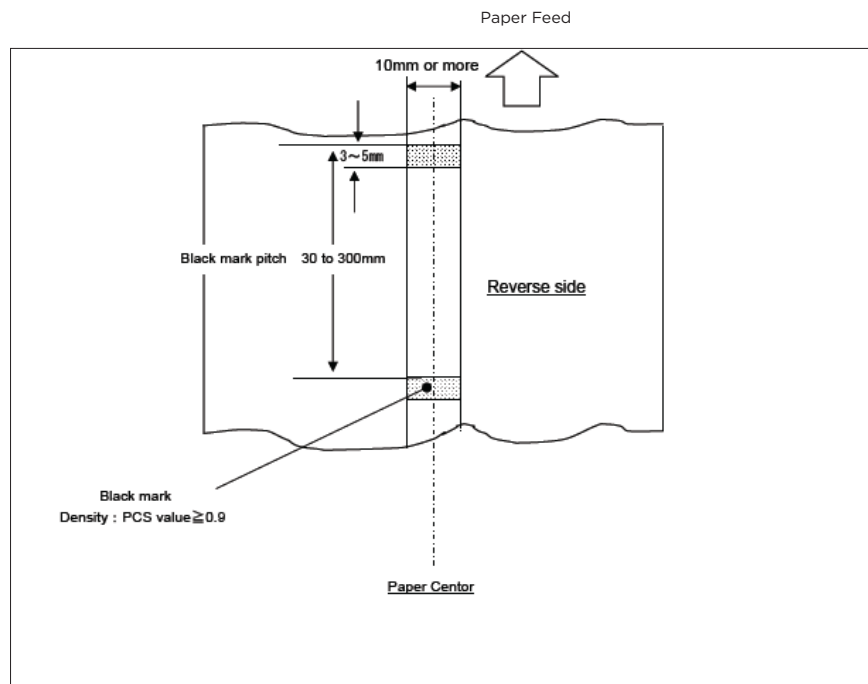
Black Mark:

Figure 23: Black Mark

Label Specifications:

| Item	Without Black Mark	With Black Mark
Recommended Media:	Length: 75µm Thickness of base paper: 58µm Color on base paper: Blue or White Total thickness: 150µm or less	
Roll Diameter:	58mm or less	
Label Core:	25.4mm (Internal dia.) × 31.4mm (External dia.)	
Base Paper Width:	24.9±0.5mm to 57.5±0.5mm	
Label Width:	21.4±0.5mm to 54.0±0.5mm	
Length:	25 to 300mm	
Label Gap:	3 to 5mm	--
Roll Up Direction:	Label surface is on outside of roll	
Black Mark Size:	--	Width: 10mm or more Length: 3 to 5mm
Black Mark Density:	--	Ink: Reflective ratio should be 7% or less.
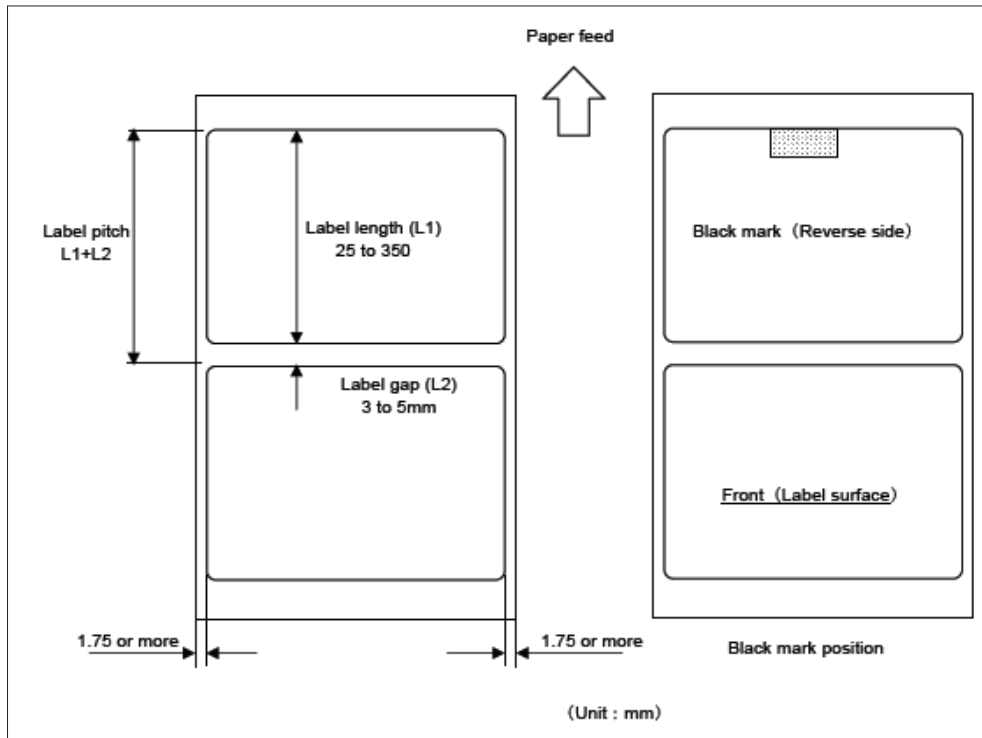
Figure 24: Label Specifications

PRINTER MAINTENANCE

The printer should be cleaned periodically to maintain print quality and avoid device failures. Below are the recommended guidelines for cleaning your printer:

Roll Paper: Every 6 months or 1 million lines of printing

Label Paper: Clean printer head and roller once per day or every five rolls.

1. **Thermal Head**

   When cleaning the thermal dot line on the print head, use a cotton swab with alcohol (ethanol, methanol or Isopropyl alcohol) and wipe off stains and dust.

   Isopropyl alcohol may be used to wipe off dust or light stains.

2. **Paper Feed Roller**

   When cleaning the paper feed roller and/or peeler roller, use a cotton swab with alcohol (ethanol, methanol or Isopropyl alcohol) and wipe off stains and dust while rolling the roller. Isopropyl alcohol is available to wipe diposited dirt.

3. **Sensor and Peripherals**

   Clean the stain, dust and paper powder on the paper empty sensor and paper cover sensor.

4. **Peeler Unit**

   It's necessary for using continuously and smoothly to clean accumulated residue of paste from peeler unit as figure below, or the unit won't work because of the residue. If the sign appeared, please clean up peeler unit. Indication of regular cleaning is once per five rolls.

SERVICING YOUR DPP-255 MOBILE PRINTER

Please contact your Infinite Peripherals representative or certified service center for printer servicing. Do not attempt to disassemble or repair the printer, AC adapter, or power cord as this may void the warranty. See section titled **PRODUCT RETURNS AND SERVICING** for additional information.
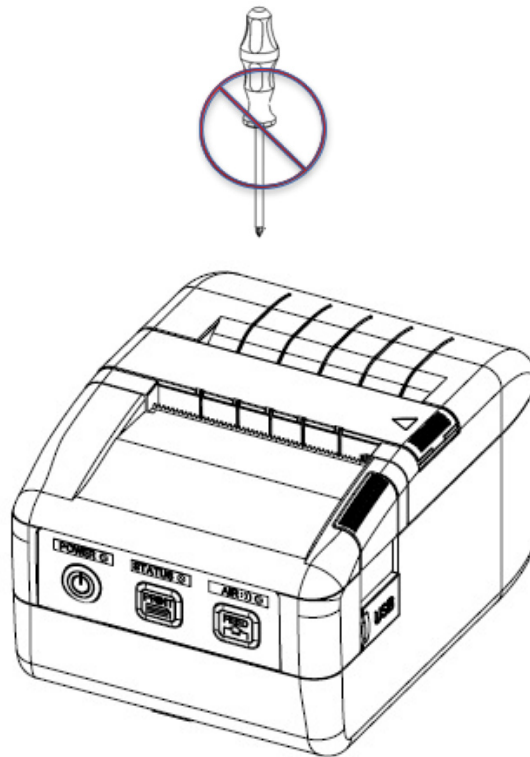

Figure 25: Servicing

TROUBLESHOOTING

The troubleshooting guidelines provided in the following section are included to assist in the successful installation and configuration of the DPP-255 mobile printer.

If you are having problems operating your printer, first verify that there is power to the printer and that it is powered on and sufficiently charged.

See section titled *CHARGING YOUR DPP-255 MOBILE PRINTER* for additional information on charging your printer.

Once power and proper battery charge has been confirmed, please review the appropriate sections below for additional troubleshooting options. If the problem persists or the problem is not described below, contact technical support at *support@ipcmobile.com.* Your unit may need to be returned for servicing.

Troubleshooting > General

Problem	Possible Cause	What To Do
Paper feeds after issuing a print job but no printed text visible on paper.	• Paper roll and/or paper cover not installed properly. *Note: Thermal media is specially coated on outside of roll.*	• Remove paper roll and reload property. • Refer to Section "**Installing a Paper Roll**".
On-line LED blinks RED continuously.	• Battery voltage is low. • Printer out of paper. • Paper not properly loaded.	• Charge battery pack. • Install new paper roll. • Refer to section "**Installing a Paper Roll**".
Printed text and/or graphics are very light.	• Battery voltage is low. • Thermal media not imaging correctly.	• Charge battery pack. • Verify that you are using the recommended thermal media.
Non-standard characters are printing.	• Battery voltage is low.	• Charge battery pack.
Printer stops responding to print and paper feed commands.	• Printer needs to be reset.	• Remove battery for 5 seconds and then reinstall.
Printing is light or missing only on half of the print width.	• Paper cover not properly installed. • Printer components are loose.	• Refer to Section "**Installing a Paper Roll**". • Contact technical support.

TECHNICAL DATA

FEATURES	
Standard Features	Bluetooth, RS232C Interface, USB Interface
Optional Features	WiFi

PRINTING SPECIFICATIONS		
Printing Method	Direct line thermal	
Printing Speed	Max 100mm/s (Standard), 62.5mm/s (Peeler Function) *Note: DC7.4 Printing ratio 12.5%, Standard paper*	
Print Width	48mm (384 dots per line)	
Resolution	203 x 203 dpi (8 x 8 dot/mm)	
Printable Font Sizes	**Font A:**	48 characters per line
	Font B:	64 characters per line
Loadable Font Sizes	**Font C:**	48 characters per line
	Font D:	48 characters per line
Logo Registration	1 black and white image - (384 x 248 dots)	
Input Buffer	30K bytes	
Resident Barcodes	**1D**: EAN 13, EAN 8, UPC A, UPC E, Code 39, Code 93, Code 128, Codabar, 2 of 5 interleaved	
	2D: PDF417, QR Code	
Emulation	ESC/POS, Eltron, ZPL	
Thermal Paper	**Paper Width:**	25.4 to 58mm (Variable Paper Guide)
	Paper Thickness:	Receipt 60 to 150µm, Label 165µm or less
	Outer Diameter:	Max O.D. 58mm
Reliability	**Thermal head:** 50km/31 miles **Mechanism MCBF:** 15,000,000 lines	

MECHANICAL	
Compatibility	iOS, Android OS, Blackberry OS, Windows OS, Win CE, Windows Mobile, Windows Phone 8.x
Dimensions (LxWxH)	88mm x 120mm x 64mm (3.46" x 4.72" x 2.52")
Weight	420 grams (14.82oz.) with battery

ELECTRICAL	
Power Supply	Battery Pack: DC7.4V, 2000mAHm, AC adapter
Battery Life	2.5 hrs charging time 20,000 lines per fully charged battery

Connectivity	Bluetooth	Bluetooth (MFI/SPP) Bluetooth 2.0 Class 2 (Serial Port Profile) – optional Bluetooth 3.0 Class 2 (Serial Port Profile, iPod Accessory Protocol) – optional
	USB	Mini USB 2.0 port (device)
	Serial	RS-232C port (max 115200b)
	WiFi	Wireless LAN 802.11b (Optional)
ENVIRONMENT		
Operating Environment		**Temperature:** -10°C to +50°C (14°F to +122°F)
		Humidity: 30% to 85% RH (No condensation)
Storage Environment		**Temperature:** -20°C to +60°C (4°F to +140°F)
		Humidity: 10% to 90% RH
RATINGS		
Drop Resistance		1.5m (4.92 feet)

WARRANTY

Infinite Peripherals (IPC) does not warrant, and is not responsible for, any smart phone or other device made by anyone other than IPC or approved manufacturer. If a material or workmanship defect arises with regard to any IPC product, and a valid claim is received within the Warranty Period, IPC (at IPC's sole discretion) will:

(1) Repair the DPP-255 mobile printer using new or refurbished parts, or

(2) Replace the DPP-255 mobile printer with a new or refurbished DPP-255 mobile printer.

For purposes of this limited warranty, "refurbished" means a product or part that has been substantially returned to its original specifications. In the event of a defect, these are your exclusive remedies.

DISCLAIMER

NO WARRANTY. This technical documentation is provided AS-IS. Further, the documentation does not represent a commitment on the part of Infinite Peripherals, Inc., and does not warrant that it is accurate, complete or error free. Any use of the technical documentation is at the risk of the user. Infinite Peripherals, Inc. reserves the right to make changes in specifications and other information contained in this document without prior notice, and the reader should in all cases consult Infinite Peripherals, Inc. to determine whether any such changes have been made. Infinite Peripherals, Inc. shall not be liable for technical or editorial errors or omissions contained herein; nor for incidental or consequential damages resulting from the furnishing, performance, or use of this material. Infinite Peripherals, Inc. does not assume any product liability arising out of, or in connection with, the application or use of any product or application described herein.

PRODUCT RETURNS AND SERVICING

Vist our online support center at *http://ipcmobile.com/support/rma-support.html.* Use the link provided to create an account and gain access to our Knowledge Base and online support services. Through our online support center, you'll be able to download files, open a Support Ticket, manage your RMAs, view your account Profile and subscribe to Alerts.

To Request an RMA

1. Create a user account in the RMA Support Portal at *http://ipcmobile.com/support/rma-support.html.*

2. Login to your user account and click on the the "Open a New RMA" option.

3. Read the instructions provided and complete the online request form.

4. Note the assigned RMA number and write it clearly on your shipping carton.

5. Ship your equipment back to us at the address provided.

SYMBOLS FOR USE

Symbol	Definition
	Consult Instructions for Use
	Manufacturer
	Manufacture Date
	Caution
SN	Serial Number
P/N	Part Number
	Waste Electrical and Electric Equipment
CE	Mark of conformity to European Union Directives
FC	Complies with part 15 of the FCC rules.

FEDERAL COMMUNICATIONS COMMISSION

Federal Communications Commission (FCC) Statement

15.21

You are cautioned that changes or modifications not expressly approved by the part responsible for compliance could void the user's authority to operate the equipment.

15.105(b)

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 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.

Operation is subject to the following two conditions:

1. This device may not cause interference, and

2. This device must accept any interference, including interference that may cause undesired operation of the device.

FCC RF Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. End users must follow the specific operating instructions for satisfying RF exposure compliance. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.