ZEBRA TECHNOLOGIES

ZQ110

Mobile Printer User Manual

Made for

iPod iPhone iPad

P1069083-001
Rev. A

Table of Contents

■ Proprietary Statements

This manual contains proprietary information for Zebra Technologies Corporation. It is intended solely for the information and use of parties operating and maintaining the equipment described herein. Such proprietary information may not be used, reproduced, or disclosed to any other parties for any other purpose without the expressed written permission of Zebra Technologies Corporation.

Product Improvements

Since continuous product improvement is a policy of Zebra Technologies Corporation, all specifications and signs are subject to change without notice.

FCC Compliance Statement

NOTE: This equipment has been tested and found to comply with the limits of 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 with 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 to an outlet or circuit different from that to which the receiver is connected.

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

WARNING: Exposure to Radio Frequency radiation. To conform to FCC RF exposure requirements this device shall be used in accordance with the operating conditions and instructions listed in this manual.

NOTE: This unit was tested with shielded cables on the peripheral devices. Shielded cables must be used with the unit to ensure compliance.

Changes or modifications to this unit not expressly approved by Zebra Technologies Corporation could void the user's authority to operate this equipment.

Canadian Compliance Statement

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme á la norme NMB-003 du Canada.

"IC:" before the equipment certification number signifies that the Industry Canada technical specifications were met. It does not guarantee that the certified product will operate to the user's satisfaction.

Liability Disclaimer

Inasmuch as every effort has been made to supply accurate information in this manual, Zebra Technologies Corporation is not liable for any erroneous information or omissions. Zebra Technologies Corporation reserves the right to correct any such errors and disclaims liability resulting therefrom.

No Liability for Consequential Damage

In no event shall Zebra Technologies Corporation or anyone else involved in the creation, production, or delivery of the accompanying product (including hardware and software) be liable for any damages whatsoever (including, without limitation, damages for loss of business profits, business interruption, loss of business information, or other pecuniary loss) arising out of the use of or the results of use of or inability to use such product, even if Zebra Technologies Corporation has been advised of the possibility of such damages. Because some states do not allow the exclusion of liability for consequential or incidental damages, the above limitation may not apply to you.

Copyrights

The copyrights in this manual and the label print engine described therein are owned by Zebra Technologies Corporation. Unauthorized reproduction of this manual or the software in the label print engine may result in imprisonment of up to one year and fines of up to $10,000 (17 U.S.C.506). Copyright violators may be subject to civil liability.

This product may contain ZPL®, ZPL II®, and ZebraLink™ programs; Element Energy Equalizer® Circuit; E3®; and AGFA fonts. Software © ZIH Corp. All rights reserved worldwide.

ZebraLink and all product names and numbers are trademarks, and Zebra, the Zebra logo, ZPL, ZPL II, Element Energy Equalizer Circuit, and E3 Circuit are registered trademarks of ZIH Corp. All rights reserved worldwide.

Monotype®, Intellifont® and UFST® are trademarks of Monotype Imaging, Inc. registered in the United States Patent and Trademark Office and may be registered in certain jurisdictions.

Andy™, CG Palacio™, CG Century Schoolbook™, CG Triumvirate™, CG Times™, Monotype Kai™, Monotype Mincho™ and Monotype Sung™ are trademarks of Monotype Imaging, Inc. and may be registered in some jurisdictions.

HY Gothic Hangul™ is a trademark of Hanyang Systems, Inc.

Angsana™ is a trademark of Unity Progress Company (UPC) Limited.

Andale®, Arial®, Book Antiqua®, Corsiva®, Gill Sans®, Sorts® and Times New Roman® are trademarks of The Monotype Corporation registered in the United States Patent and Trademark Office and may be registered in certain jurisdictions.

Century Gothic™, Bookman Old Style™ and Century Schoolbook™ are trademarks of The Monotype Corporation and may be registered in certain jurisdictions.

HGPGothicB™ is a trademark of the Ricoh company, Ltd. and may be registered in some jurisdictions.

Univers™ is a trademark of Heidelberger Druckmaschinen AG, which may be registered in certain jurisdictions, exclusively licensed through Linotype Library GmbH, a wholly owned subsidiary of Heidelberger Druckmaschinen AG.

Futura® is a trademark of Bauer Types SA registered in the United States Patent and Trademark Office and may be registered in some jurisdictions.

TrueType® is a trademark of Apple Computer, Inc. registered in the United States Patent and Trademark Office and may be registered in certain jurisdictions.

All other product names are the property of their respective owners.

All other brand names, product names, or trademarks belong to their respective holders. ©2014 ZIH Corp.

■ Introduction to the ZQ110

This user manual gives you the information you will need to operate the ZQ110 series printer.   For a list of supplemental manuals provided with the ZQ110, please refer to the Manual Information section.

Unpacking and Inspection

Inspect the printer for possible shipping damage:

• Check all exterior surfaces for damage.

• Open the media cover (refer to "Loading the Media" in the Getting Ready to Print section) and inspect the media compartment for damage.

• In case shipping is required, save the carton and all packing material.

Reporting Damage

If you discover shipping damage:

• Immediately notify and file a damage report with the shipping company. Zebra Technologies Corporation is not responsible for any damage incurred during shipment of the printer and will not cover the repair of this damage under its warranty policy.

• Keep the carton and all packing material for inspection.

• Notify your authorized Zebra re-seller.

■ Manual Information

This user's manual contains basic information for product usage as well as for emergency measures that may be required when using the ZQ110 printer.

※ For additional information on the ZQ110, please refer to the following supplemental manuals:

1. Windows CE Module Program Manual
This manual provides information on the dll files required for Windows CE application program development.

2. Windows Driver Manual
This manual provides information on installation and main functions of the Windows driver for this product.

3. Unified Utility Manual
This manual provides information on the software used to select functions of this product, modify operation conditions, and so forth.

- VMSM (Virtual Memory Switch Manager)
  - Provides information on setting the basic operation conditions of the product, the use of non-hardware controls and software based virtual switches.
- NV Image Download Manager
  - Provides information on downloading image files, such as logos, intended for repetitive printing.
- Firmware Download Manager
  - Provides information on downloading and installing the latest firmware.

4. Bluetooth Connection Manual
This manual provides information on the connection of this product with devices equipped with Bluetooth functionality (Android/iOS smart phone).

5. Commands Manual
This manual provides information on the protocol and functions of the control commands that can be used with this product.

6. Code Pages Manual
This manual provides information on each character code page that can be used with this product.

■ Safety Precautions

When using the ZQ110 printer, please follow the recommended safety regulations provided below.

⚠ Warning

Violating the following instructions may cause serious injury.

1. Do not plug several products into one multi-outlet; this can provoke over-heating and a fire.
   • If the plug is wet or dirty, wipe it before usage.
   • If the plug does not fit perfectly in the outlet, do not force it.
   • Be sure to use only standard multi-plug outlets.

2. You must use only the supplied adaptor.
   • It is dangerous to use other adaptors.

3. Do not pull the cable to unplug.
   • This can damage the cable, resulting in a fire or a breakdown of the printer.

4. Keep the plastic bag (used to package the printer) out of children's reach.

5. Do not plug in or unplug with wet hands.

6. Do not bend the cable by force or leave it under any heavy object.

   • A damaged cable may cause a fire.

⚠ Caution

Violating the following instructions may cause injury to the user or damage the printer.

1. If you observe smoke, odor or noise from the printer, unplug it before taking

    the following measures:

    • Turn off the printer and unplug the unit from the electrical outlet.
    • Contact an authorized Zebra Technologies service provider for repair.

2. Keep the packet of desiccant material (silica gel used in the packaging of the printer) out

    of children's reach.

3. Use only approved accessories for your printer; do not disassemble or attempt to

    repair the printer yourself.

    • Contact your authorized service provider for all service replacements.
    • Do not touch the blade of the paper tear bar.

4. Keep liquids and foreign objects away from the printer.

    • If any object or liquid falls into the printer, immediately unplug the printer and have it
      checked by an authorized Zebra Technologies service provider.

■ Battery Safety Precautions

Make sure you review the user manual carefully prior to product use.

To avoid risks of battery overheating, combustion, and explosion damage and/or decline in performance and product life, handle batteries carefully and comply with the guidelines below.

⚠ Danger

1. Do not allow liquids to enter or leak into the battery compartment.

2. Do not use or leave the battery in a location exposed to high temperatures.

3. When charging the battery, use the exclusive charger or follow the charging requirements outlined by Zebra.

4. The battery has clearly delineated positive and negative poles. When inserting the battery into the charger and/or product, ensure that the battery is properly aligned.

5. Do not heat the battery or place it in a fire.

6. Do not allow the battery's positive (+) and negative (-) poles to contact any metals. In addition, do not carry or store the battery with metal items.

7. Do not subject the battery to strong shock.

8. Do not pierce the battery with a sharp object, or hit it with a heavy object. Avoid accidental short circuiting of any battery. Allowing battery terminals to contact conductive material will create a short circuit may cause burns and other injuries or could start a fire.

9. Do not solder the battery.

10. Do not disassemble and/or modify the battery.

11. Do not charge near a source of heat or in direct sunlight.

12. Do not expose the battery to high temperatures over $60^{o}C$, and do not use or store it in a hot or humid place.

13. Do not use the battery if it is damaged or if the exterior is deformed in any way.

⚠ **Warning**

1. Do not place the battery within the reach of small children to prevent swallowing. If a child swallows the battery, consult a physician immediately.

2. Do not place the battery in a microwave oven and/or high voltage appliance.

3. Do not combine and use any battery of different capacity and/or type with the primary battery

4. If during battery usage, storage, or charging, a strange odor or conditions differing from normal operations, such as condensation, color changes, warping, and so forth, are detected, remove the battery from the product or charger and discontinue use.

5. If the battery is not charged after the recommended charging time, discontinue charging.

6. If the battery is leaking electrolytic solution and the solution enters the eyes, immediately rinse the eye with clean water, and consult a physician. Neglecting to do so may cause permanent eye injuries.

⚠ **Caution**

1. Do not use or leave the battery in a location exposed to high temperatures or intense direct sunlight.

2. Do not use the battery in a location that is prone to static electricity (above the recommended levels in the manufacturer's product warranty).

3. The temperature ranges for battery usage are as follows. Any usage outside of these ranges may result in the battery overheating, damage, and performance and product life may be reduced.
    a. Charging: 0 ~ 40℃
    b. Product Usage: -20 ~ 60℃
    c. Storage: -20 ~ 60℃ (30 days)
    d. Long-Term Storage: -20 ~ 40℃ (90 days)

4. Please review the ZQ110 Quad Battery Charger Installation Guide carefully for charging instructions.

5. If, upon first use, a strange odor, overheating, and/or anything deemed out of the ordinary is detected, discontinue use and contact an authorized Zebra Technologies service provider.

6. Store the battery in a location that is out of the reach of small children. During usage, make sure to place the charger and/or product out of the reach of small children.

7. If the battery is leaking and the solution comes into contact with the skin or clothing, immediately rinse the affected area with clean water.

8. Carefully review the user manual and precautions prior to use.

9. When replacing the battery in the printer, use a battery equivalent to the one originally installed by the manufacturer. Dispose of used batteries per the instructions provided by the manufacturer.

⚠ Recommended

1. Review the user manual for instructions regarding insertion and removal of the battery from the printer.

2. The battery ships partially charged. You must charge the battery fully before using the printer for the first time. To charge the battery, use the exclusive charger provided with your printer.

3. To avoid improper use of the battery, review the product user manual carefully.

4. Do not charge the battery beyond the normal charging time indicated in the user manual.

5. If you do not plan to use the battery for an extended period of time, remove the battery from the printer and store in a low humidity location.   If you opt to store the printer with the battery installed, avoid high humidity locations.   High humidity may cause oxidation and a decline in printer performance.

6. Ensure that you turn off the printer after usage (at the end of a work shift). Neglecting to do so may cause a decline in printer performance.

7. A battery that has not been used over a long period of time may not be sufficiently charged. If you opt to store the battery for future use, ensure that you charge the battery to the status recommended by the manufacturer every six months. Neglecting to do so can cause a decline in battery performance and product life.

8. If the battery terminal is dirty, use a dry cloth to clean prior to use.   Neglecting to do so may cause power stoppages or difficulty in charging the printer.

9. Each battery has a product life. If the usage time of the product has become short, replace the battery.   Wrap the terminals of used batteries with tape to insulate prior to disposal.

1. Content Confirmation

If any item is damaged and/or missing, contact your dealer.
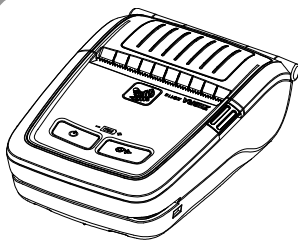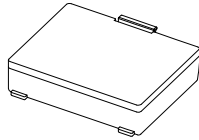
ZQ110	**Battery Standard**	**AC Adaptor**	**Paper**
Power Cord	**Belt Clip**	**CD**	**Registration Card**
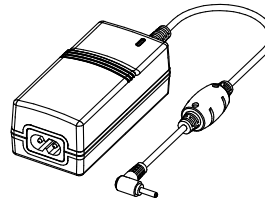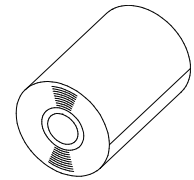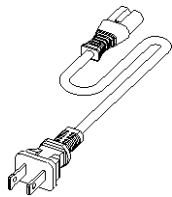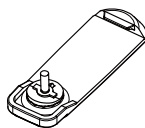
※ **Optional items**
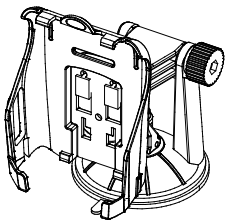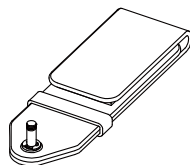
Vehicle Holder	**Belt Strap**	**Cigarette lighter Adaptor**	**USB Cable**	**Battery with outer contacts (for Cradle)**
Shoulder Strap	**Protective Case**	**Single Docking Cradle**	**Single Battery Charger**
Quad Docking Cradle	**Quad Battery Charger**	**Adaptor for Quad Battery Charger/Docking Cradle**
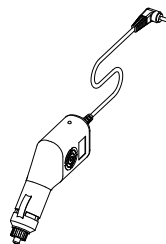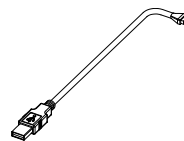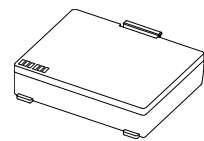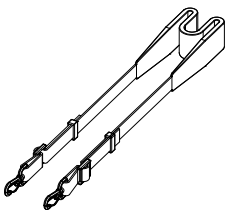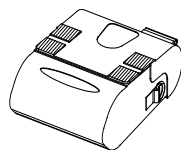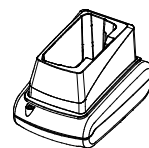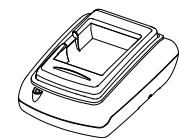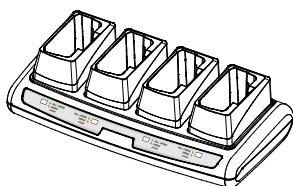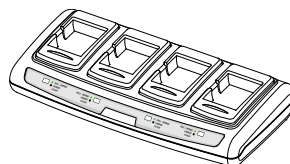
2. Product Part Names

• Front

Media Cover

Power Button

Open Button

Paper Feed Button

MSR Slot

• Rear

Hole for Mounting Belt Strap /Belt Strap   Battery

Interface Cap

Cable Connection

Power Connection
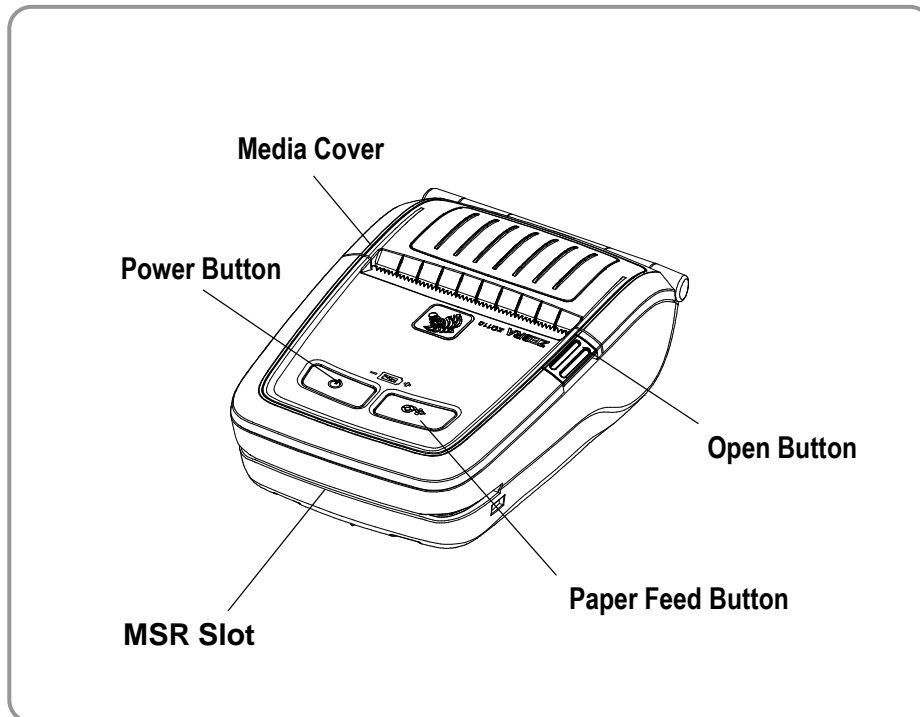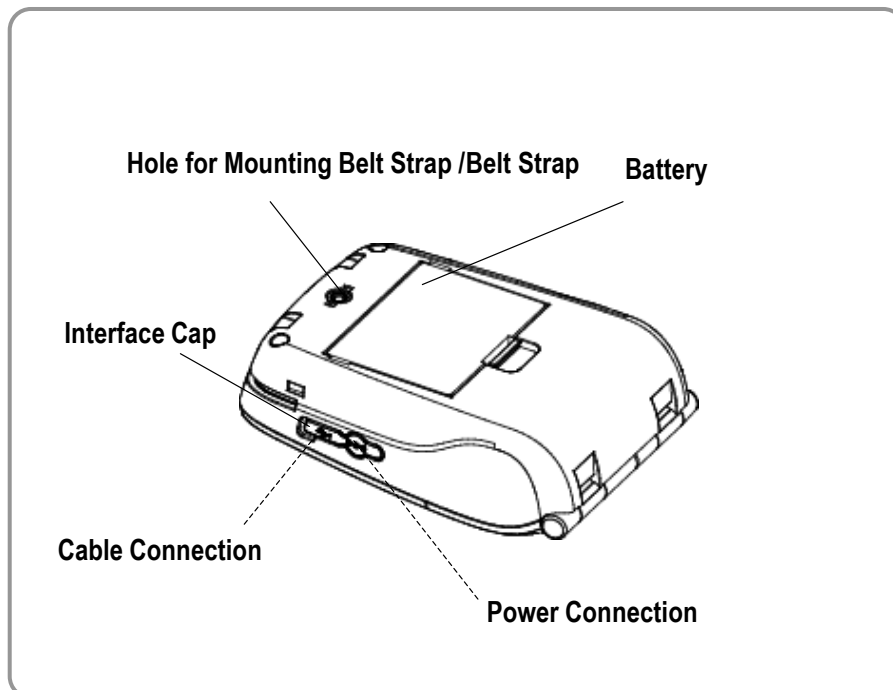
3. Installation & Usage

3-1 Battery Installation
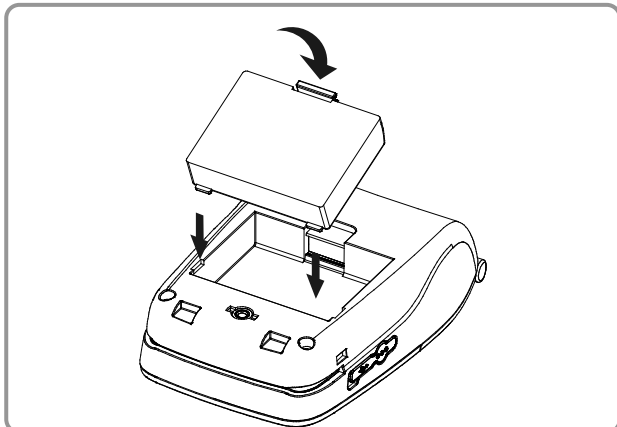
1. Insert the battery in the bottom of the printer, and ensure that you align the battery hook properly.

2. Push the battery into the slot until you hear it snap in place.

📝 *NOTE*
Since the battery is partially charged at the time of purchase, charge the battery prior to product use. (Use the AC adaptor or the optional Single battery charger/Quad battery charger.)

3-2 Battery Charging

3-2-1 Battery Charging Usage
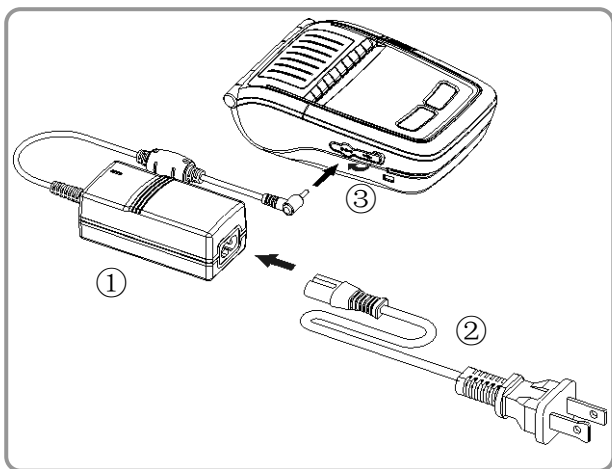
1. Turn off the printer power.

2. Connect the power cord ① to the AC adaptor ②.

3. Open the Interface Cap ③.

4. Connect the AC adaptor ② to the power connector of the printer.

5. Plug the power cord into an electrical outlet ①.

⚠ *CAUTION*
The printer may incur serious damage if the AC adaptor provided by Zebra is not used. Zebra is not legally liable for any such damages. (The voltage and electrical current specifications of the printer and AC adaptor must match.)

⚠ *WARNING*
Turn off the power before charging the battery for the printer.

3-2-2 Single battery charger (Optional) Usage
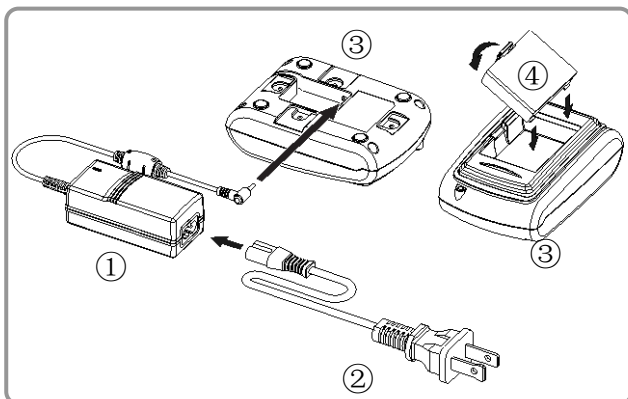
1. Connect the power cord ① to the AC adaptor ②.

2. Connect the AC adaptor ② to the power connector (on the bottom) of the single battery charger ③.

3. Plug the power cord ① into an electrical outlet.

4. Insert the battery ④ into the single battery charger ③ until it snaps in place.

3-2-3 Cigarette lighter adaptor (Optional) Usage
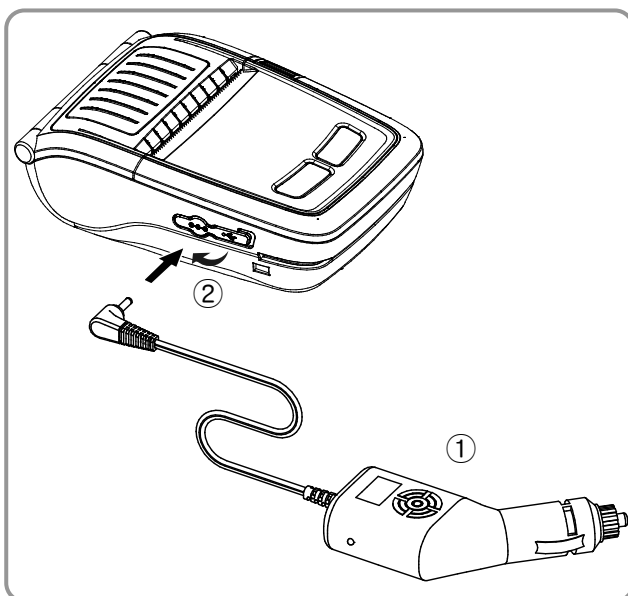
1. Turn off the printer power.

2. Connect the Cigarette lighter adaptor ① to your car's cigarette lighter jack.

3. Open the external interface cap ②.

4. Connect the Cigarette lighter adaptor ① to the power connector.

⚠ *CAUTION*
The printer may be seriously damaged if a cigarette lighter adaptor not provided by Zebra is used. Zebra is not liable for such damage.

⚠ *WARNING*
Turn off the power before charging the battery for the printer.

3-2-4 Single Docking Cradle (Optional) Usage
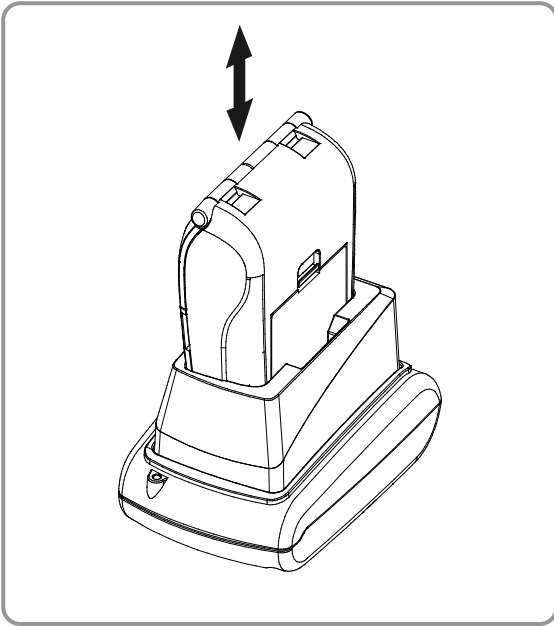
1. Turn off the printer.

2. Slide the printer into the single docking cradle as shown.

3. Push the printer in until you hear a click.

4. Charging will begin when the printer is installed.

5. Pull out the printer to remove it.

⚠ *CAUTION*
Please be sure to use the battery with Outer contacts.

3-2-5 Quad Battery Charger / Quad Docking Cradle (Optional) Usage

3-2-5-1 Connecting the cables
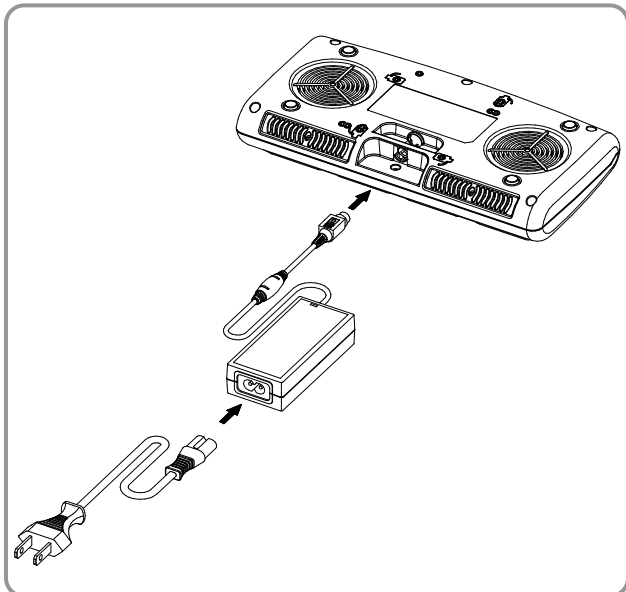
1. Connect the power cord to the adaptor, and connect the adaptor to the power connector on the bottom of the Quad Battery Charger/Quad Docking Cradle.

2. Plug the power cord into a power outlet. Input power is 100-240VAC, 50/60Hz, 1.0A.

3. When the power is on, the amber, green, and red LEDs are lit for three seconds.
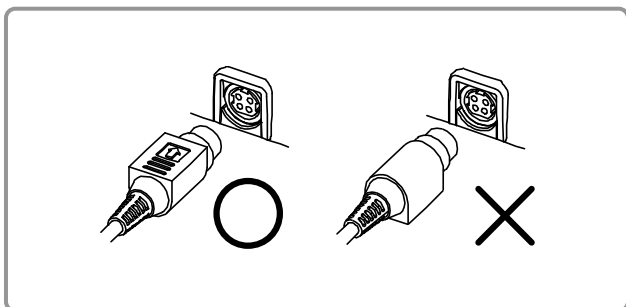
⚠ *WARNING*
Use only the designated AC/DC adaptor. (12VDC, 3A)

3-2-5-2 Charging Battery (Printer)
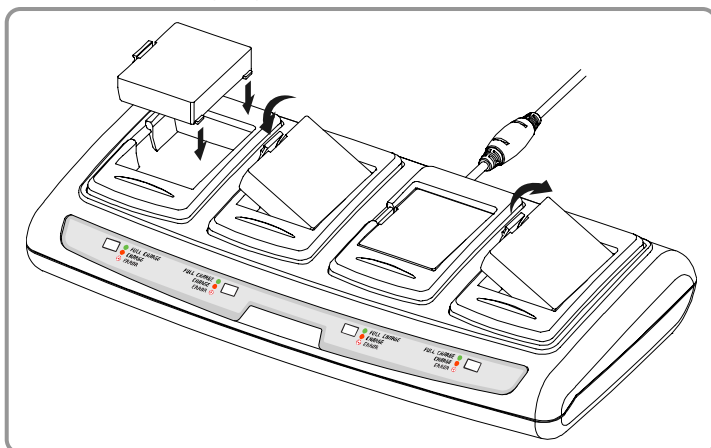
1. Using the battery hooks, insert the batteries into the Quad Battery Charger as shown.

2. Push the battery in until you hear a snap.

3. Charging begins as soon as the battery is completely inserted. Batteries are charged to 8.4VDC, 0.8A.

4. Lift the hook and pull up to remove the battery.
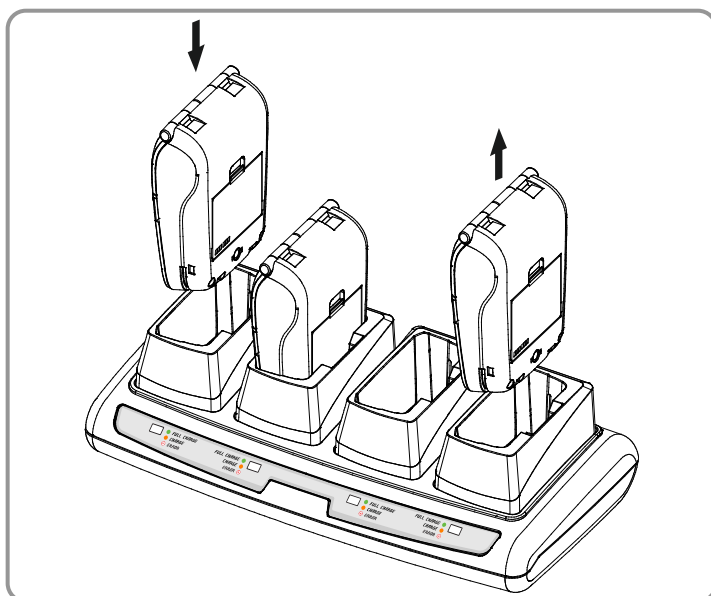
1. Turn off the printer.

2. Slide the printer into the Quad Docking Cradle as shown.

3. Push in the printer until you hear a click.

4. Charging will begin once the printer is installed.

5. When charging is complete, pull out the printer to remove it.

⚠ *CAUTION*
Please be sure to use the battery with Outer contacts.

✎ *NOTE*
Battery charging status descriptions are as follows:

LED	Charge Status	Charge Time
Amber LED On	Charging	
Green LED On	Fully Charged	2.5 hours
Red LED Blinking	Error Replace or Reinstall Battery	

⚠ *CAUTION*
1. If the red LED on the charger blinks, reinstall the battery.
2. If the red LED continues to blink despite several attempts (4-5 times) to install the battery, contact your local dealer.
3. The charging time may vary depending on the type of the charger and the ambient temperature.

3-3 Paper Installation
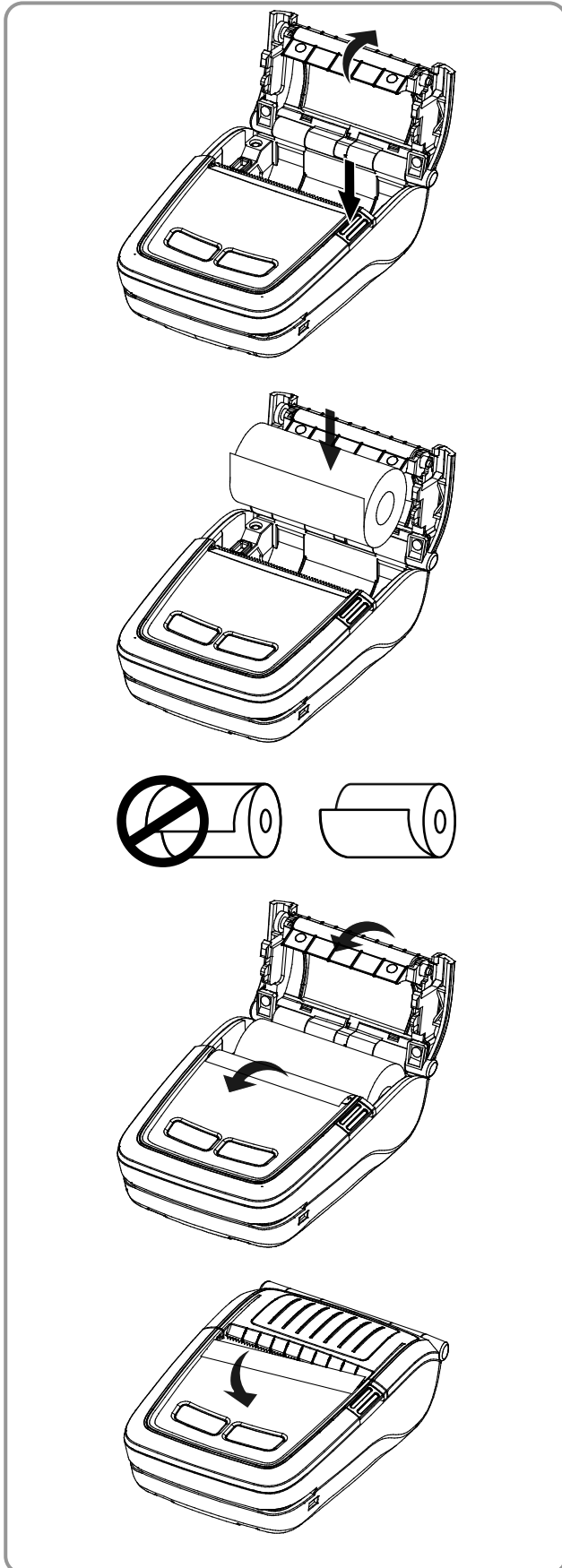
1. Press the Open button to open the media cover.

2. Insert the paper as shown. (Remove the empty core.)

3. Align the paper as shown.

4. Pull out the paper as shown and close the media cover.

5. Tear off any excess paper toward the side of the printer.

3-4 Belt Clip Usage
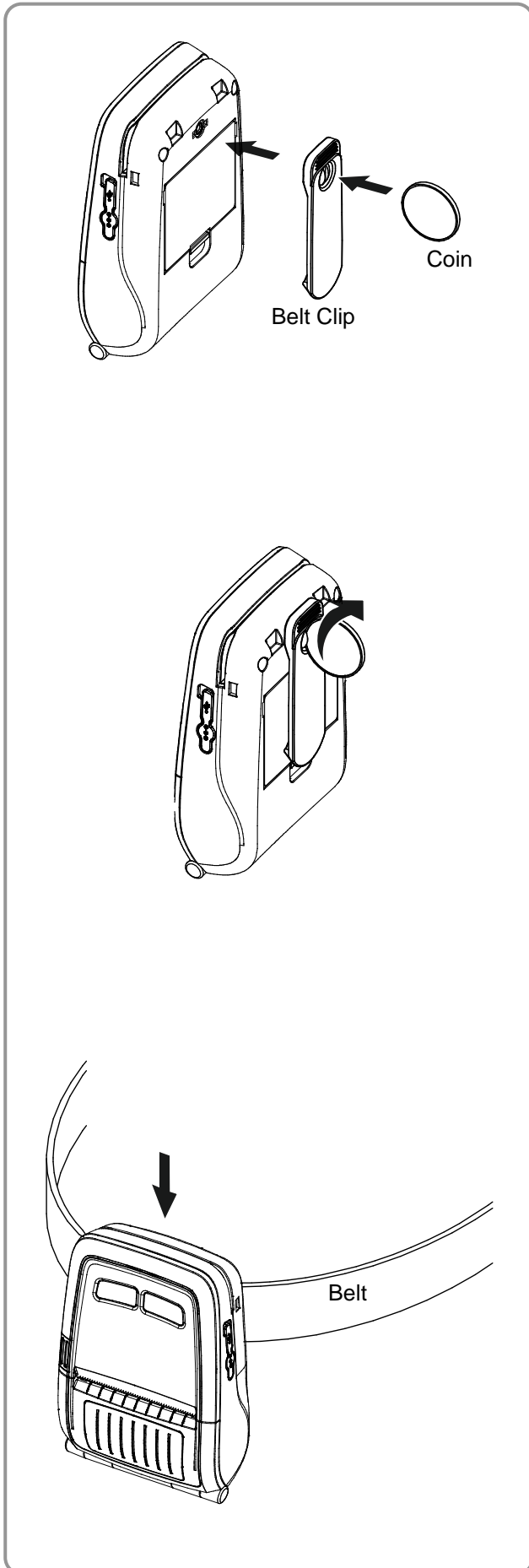
1. Insert the belt clip screw into the belt clip mounting hole.

Coin

Belt Clip

2. Tighten the screw of the belt clip with an object like a coin as shown. (Be careful to tighten the screw in the correct direction.)

3. Slide the clip over the belt..

Belt

3-5 Belt Strap (Optional) Usage

Belt Strap
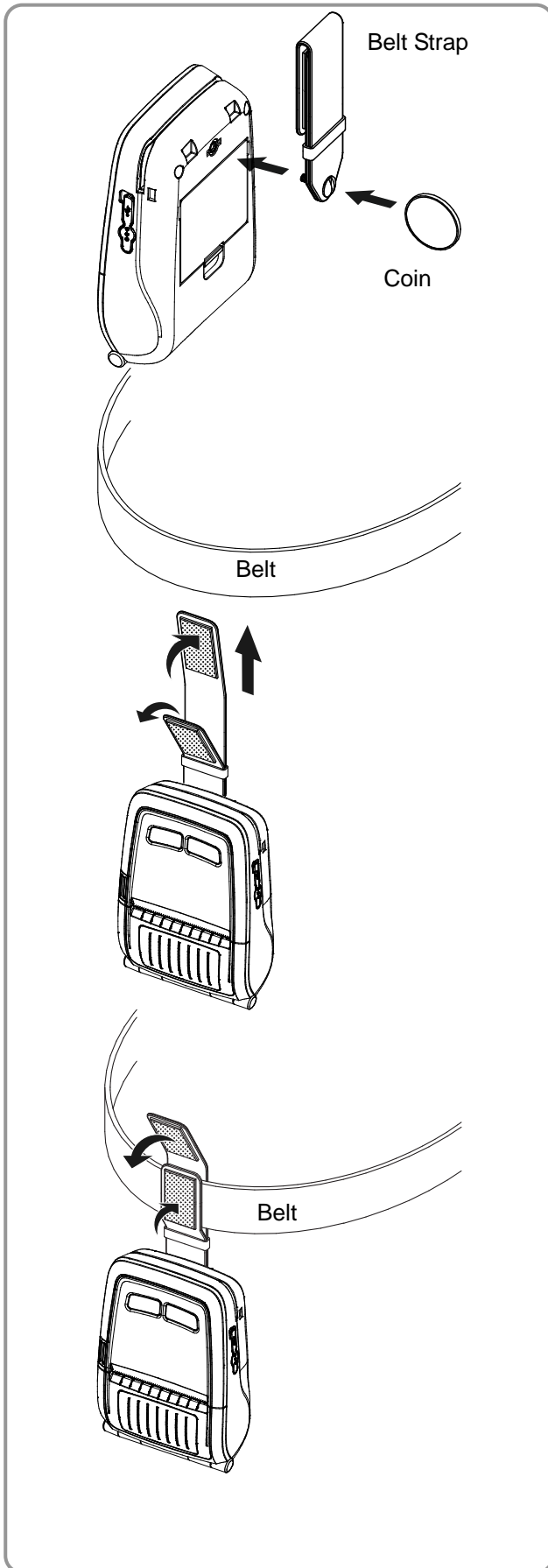
Coin

Belt

Belt

1. Insert the belt strap screw into the belt strap hole.

2. Use a coin to tighten the belt strap screw as shown.

3. Unfasten the belt strap Velcro.

4. Slide the belt strap over a belt.

5. Fasten the Velcro as shown.

3-6 Protective Case (Optional) Usage
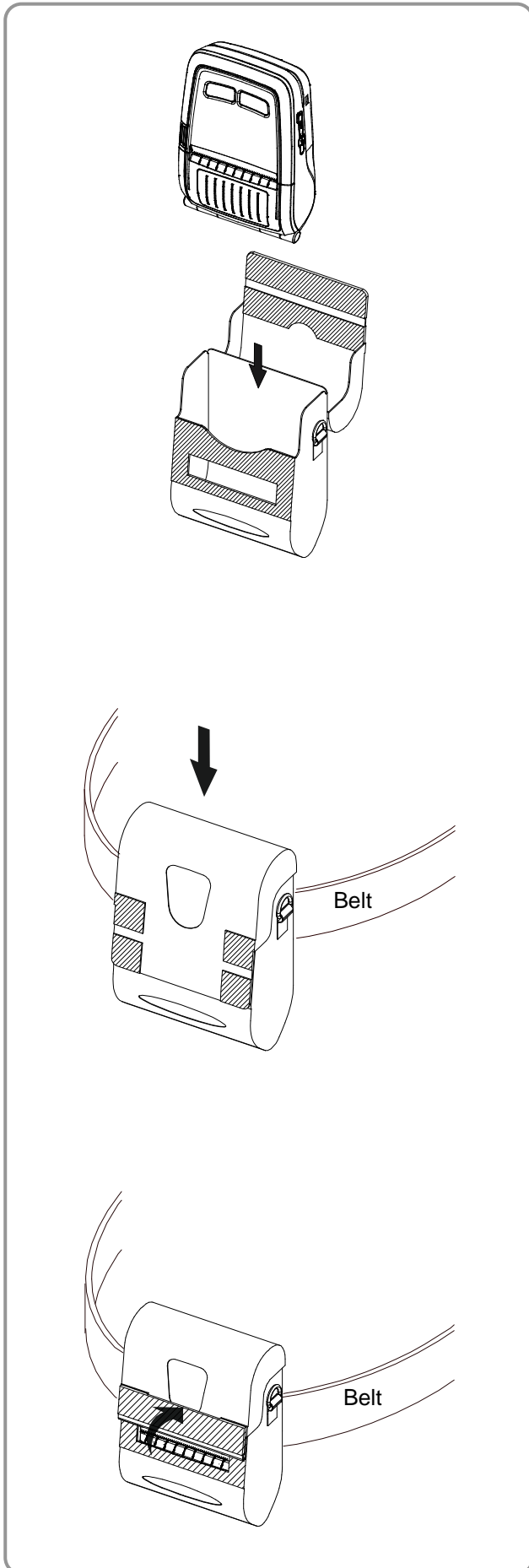
1. Open the top cover of the protective case.

2. Insert your printer into the protective case as shown.

3. Close the top cover.

Belt

4. Using the clip on the back of the protective case, attach it to the belt.

5. When using the printer, open the paper discharger as shown.

Belt

🖎 *Note*
The clip of the protective case can be rotated 30° for each of two steps (for up to 60°).

3-7 Vehicle holder (Optional) Usage
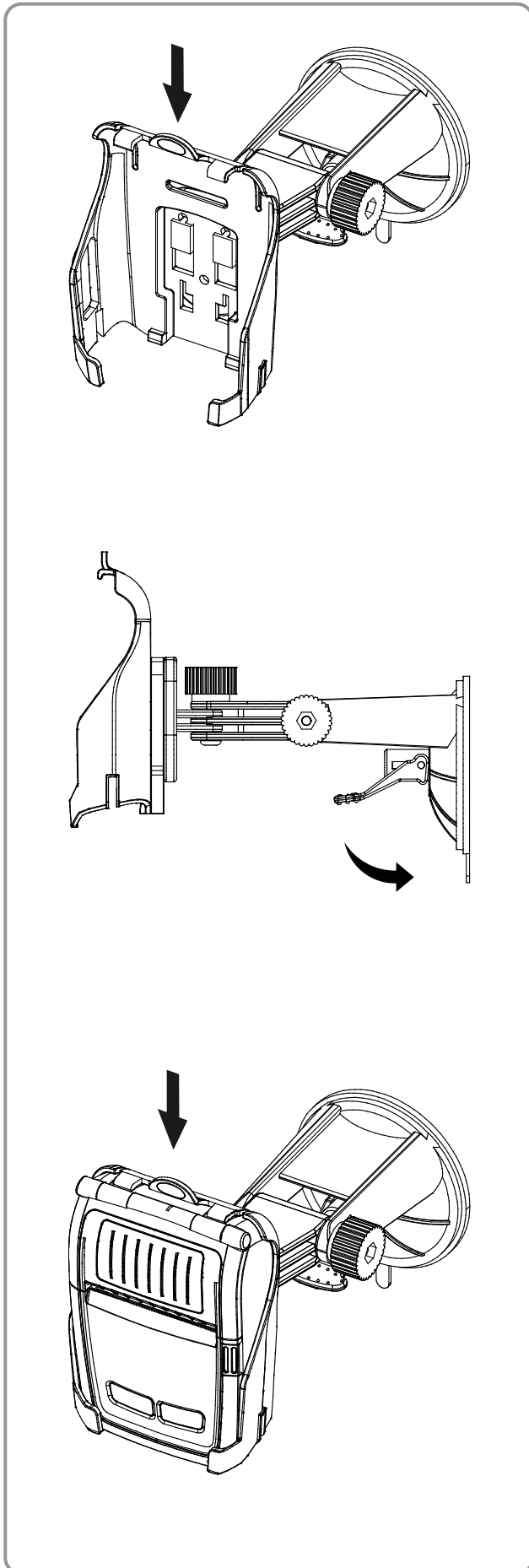
1. Attach the vehicle holder to the mount.

2. Adjust the vehicle mount properly, place the suction plate close to the glass, and push the lever to fix the position. (Use the disk pad to mount it on the dashboard)

3. Slide the printer into the vehicle holder completely as shown. (Push in the printer until you hear a click.)

3-8 Control Panel Usage
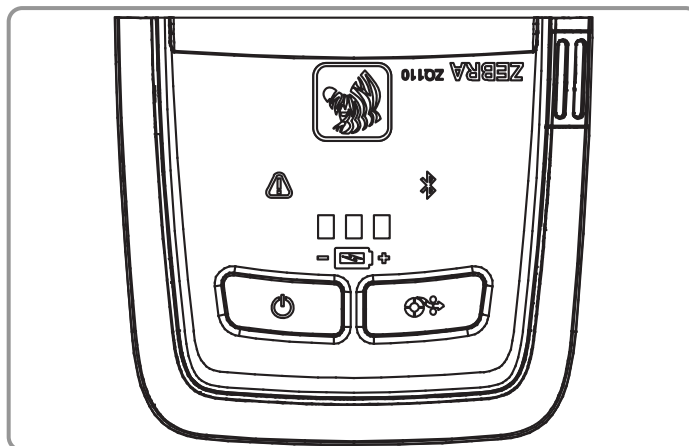
• Power Button
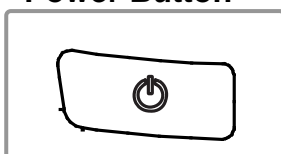
This button is used to turn the printer on and off.
When the printer is off, pressing this button for approximately 2 seconds will turn on the power. When the printer is on, pressing this button for approximately 2 seconds will turn off the power.

• Paper Feed Button
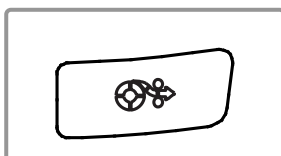
To manually feed the paper, press this button.
In addition, self-testing and Hexadecimal Dumping can be done.
1. Refer to "4. Self-Test" for self-test information.
2. Refer to the service manual regarding Hexadecimal Dumping.

• Battery Status LED (Green)
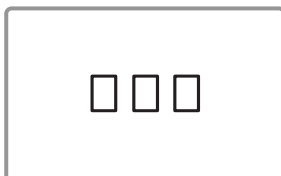
1. If three green LEDs are lit, the battery is fully charged.
2. If two green LEDs are lit, the battery is half charged.
3. If one green LED is lit, the battery is at the lowest charge level.
4. If one green LED is blinking, the battery must be charged or replaced.

• Error LED (Red)

1. If the red LED is lit, the media cover is open.
2. If the red LED is blinking, either the paper is out or the print head is overheated. (Replace the roll of paper or turn off the printer for at least 10 minutes.)
3. If the red LED continues to blink, it may indicate a more serious problem with the product. Call your authorized service dealer.

• Bluetooth LED (Blue)

1. If the blue LED is lit, Bluetooth is connected.
2. If the blue LED is blinking rapidly, data is transmitting between the printer and another device.

• WIFI (Green, Yellow or Red)

1. Infrastructure mode
   a. If the LED is off, the radio has not been found.
   b. If the LED is blinking red, signal association.
   c. If the LED is blinking yellow, authenticated.
   d. If the LED is solid green, strong signal.
   e. If the LED is blinking green, weak signal.
   f. If the LED is solid red, WLAN Fault (authentication error).
2. Adhoc / WiFi Direct mode
   • Regardless of signal power, green LED is always blinking.

• Power Save Mode (White)
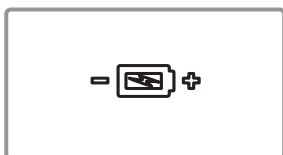
During Power Save mode, the white LED slowly alternates between bright and dim. The other LEDs are off.

3-9 MSR Usage
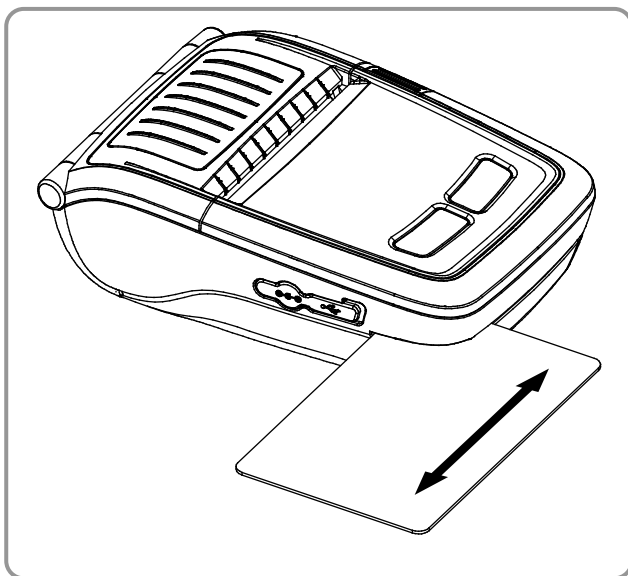
1. Insert the card as shown and swipe in either direction (see the arrow).

📝 *NOTE*

If the card does not register, insert the card and swipe it again.

4. Self-Test

Detailed setting of printer is able to be checked by performing self-test.

• Self-Test Instructions

1. Turn off the printer power and close the media cover.
2. Press and hold the paper feed button and power button simultaneously to turn on the printer.
3. After printing begins, release the two buttons.
4. To view a printout of the ASCII pattern, press the paper feed button once more.
5. After the ASCII pattern is printed out, the self-test is automatically terminated.

• Self-Test Printout Sample (For Bluetooth)

Firmware version :
    V01.00 STDa 010114
Butter Capacity : 64K Bytes
Print Density : 100%
Default Codepage : PC437
Print Speed : Max. 90mm/s
Double byte character mode: Off
Font : 12 x 24
Paper out Bell : Off
Low Battery Buzzer : On
Power off time : 15 Min
Idle mode time : 10 Sec
MSR data including sentinel
Character mode : None
MSR read mode : Auto TRACK1/2/3
BATT NTC : OK

Memory switch setup status

Memory S/W1
  1 2 3 4 5 6 7 8
Memory S/W2
  1 2 3 4 5 6 7 8

Memory S/W3
  1 2 3 4 5 6 7 8
Memory S/W4
  1 2 3 4 5 6 7 8

Memory S/W5
  1 2 3 4 5 6 7 8
Memory S/W6
  1 2 3 4 5 6 7 8

Memory S/W7
  1 2 3 4 5 6 7 8
Memory S/W8
  1 2 3 4 5 6 7 8

RF Interface
Bluetooth Firmware version :
    1.0.1
Bluetooth BD address :

74F07D205A9D
- Auth. & Encry. are enable
- Connection Mode = 2
Not available WLAN

If you want to continue
SELF-TEST printing,
Please press FEED button.

ASCII
```
!"#$%&'()*+,-./0123456789:;<=>?@
"#$%&'()*+,-./0123456789:;<=>?@A
#$%&'()*+,-./0123456789:;<=>?@AB
$%&'()*+,-./0123456789:;<=>?@ABC
%&'()*+,-./0123456789:;<=>?@ABCD
&'()*+,-./0123456789:;<=>?@ABCDE
'()*+,-./0123456789:;<=>?@ABCDEF
()*+,-./0123456789:;<=>?@ABCDEFG
)*+,-./0123456789:;<=>?@ABCDEFGH
*+,-./0123456789:;<=>?@ABCDEFGHI
+,-./0123456789:;<=>?@ABCDEFGHIJ
,-./0123456789:;<=>?@ABCDEFGHIJK
-./0123456789:;<=>?@ABCDEFGHIJKL
./0123456789:;<=>?@ABCDEFGHIJKLM
/0123456789:;<=>?@ABCDEFGHIJKLMN
0123456789:;<=>?@ABCDEFGHIJKLMNO
123456789:;<=>?@ABCDEFGHIJKLMNOP
23456789:;<=>?@ABCDEFGHIJKLMNOPQ
3456789:;<=>?@ABCDEFGHIJKLMNOPQR
456789:;<=>?@ABCDEFGHIJKLMNOPQRS
56789:;<=>?@ABCDEFGHIJKLMNOPQRST
6789:;<=>?@ABCDEFGHIJKLMNOPQRSTU
789:;<=>?@ABCDEFGHIJKLMNOPQRSTUV
89:;<=>?@ABCDEFGHIJKLMNOPQRSTUVW
9:;<=>?@ABCDEFGHIJKLMNOPQRSTUVWX
```

PC437
```
ÇüéâäàåçêëèïîìÄÅÉæÆôöòûùÿÖÜ¢£¥ Ptƒ
üéâäàåçêëèïîìÄÅÉæÆôöòûùÿÖÜ¢£¥ Ptƒá
éâäàåçêëèïîìÄÅÉæÆôöòûùÿÖÜ¢£¥ Ptƒáí
âäàåçêëèïîìÄÅÉæÆôöòûùÿÖÜ¢£¥ Ptƒáío
äàåçêëèïîìÄÅÉæÆôöòûùÿÖÜ¢£¥ Ptƒáíou
àåçêëèïîìÄÅÉæÆôöòûùÿÖÜ¢£¥ Ptƒáíóúñ
åçêëèïîìÄÅÉæÆôöòûùÿÖÜ¢£¥ PtƒáíóúñÑ
çêëèïîìÄÅÉæÆôöòûùÿÖÜ¢£¥ PtƒáíóúñÑ'
êëèïîìÄÅÉæÆôöòûùÿÖÜ¢£¥ PtƒáíóúñÑª
ëèïîìÄÅÉæÆôöòûùÿÖÜ¢£¥ PtƒáíóúñѪ¿
èïîìÄÅÉæÆôöòûùÿÖÜ¢£¥ PtƒáíóúñѪ¿⌐
ïîìÄÅÉæÆôöòûùÿÖÜ¢£¥ PtƒáíóúñѪ¿⌐¬
îìÄÅÉæÆôöòûùÿÖÜ¢£¥ PtƒáíóúñѪ¿⌐¬½
ìÄÅÉæÆôöòûùÿÖÜ¢£¥ PtƒáíóúñѪ¿⌐¬½¼
ÄÅÉæÆôöòûùÿÖÜ¢£¥ PtƒáíóúñѪ¿⌐¬½¼¡
ÅÉæÆôöòûùÿÖÜ¢£¥ PtƒáíóúñѪ¿⌐¬½¼¡«
ÉæÆôöòûùÿÖÜ¢£¥ PtƒáíóúñѪ¿⌐¬½¼¡«»
æÆôöòûùÿÖÜ¢£¥ PtƒáíóúñѪ¿⌐¬½¼¡«»▒
ÆôöòûùÿÖÜ ¢£¥PtƒáíóúñѪ¿⌐¬½¼¡«»▒
ôöòûùÿÖÜ¢£¥ PtƒáíóúñѪ¿⌐¬½¼¡«»▒│
öòûùÿÖÜ¢£¥ PtƒáíóúñѪ¿⌐¬½¼¡«»▒│┤
òûùÿÖÜ¢£¥ PtƒáíóúñѪ¿⌐¬½¼¡«»▒│┤
ûùÿÖÜ¢£¥ PtƒáíóúñѪ¿⌐¬½¼¡«»▒│┤╡
ùÿÖÜ ¢£¥PtƒáíóúñѪ¿⌐¬½¼¡«»▒│┤╡╢
ÿÖÜ¢£¥ PtƒáíóúñѪ¿⌐¬½¼¡«»▒│┤╡╢╖
```

*** Completed ***

• Self-Test Printout Sample (For Wireless LAN)

Firmware version :
    V01.00 STDa 010114
Butter Capacity : 64K Bytes
Print Density : 100%
Default Codepage : PC437
Print Speed : Max. 90mm/s
Double byte character mode: Off
Font : 12 x 24
Paper out Bell : Off
Low Battery Buzzer : On
Power off time : 15 Min
Idle mode time : 10 Sec
MSR data including sentinel
Character mode : None
MSR read mode : Auto TRACK1/2/3
BATT NTC : OK

Memory switch setup status

Memory S/W1   Memory S/W2
  1 2 3 4 5 6 7 8   1 2 3 4 5 6 7 8
ON   ON
OFF   OFF

Memory S/W3   Memory S/W4
  1 2 3 4 5 6 7 8   1 2 3 4 5 6 7 8
ON   ON
OFF   OFF

Memory S/W5   Memory S/W6
  1 2 3 4 5 6 7 8   1 2 3 4 5 6 7 8
ON   ON
OFF   OFF

Memory S/W7   Memory S/W8
  1 2 3 4 5 6 7 8   1 2 3 4 5 6 7 8
ON   ON
OFF   OFF

RF Interface
Not available Bluetooth
WLAN firmware version :
    Ver 2.0
WLAN MAC address :

cc7a30020517
- System Name : ZQ110
- Network Mode : Adhoc
- Authentication : Open
- Encryption : None
- ESSID : 125
- DHCP : Disabled
- IP : 192.168.1.1
- Netmask : 255.255.255.0
- Gateway : 192.168.1.2
- Port : 9100
- HTTPS : Disabled
- Telnet : Disabled
- FTP : Disabled
- SNMP : Disabled

If you want to continue
SELF-TEST printing,
Please press FEED button.

ASCII
```
!"#$%&'()*+,-./0123456789:;<=>?@
"#$%&'()*+,-./0123456789:;<=>?@A
#$%&'()*+,-./0123456789:;<=>?@AB
$%&'()*+,-./0123456789:;<=>?@ABC
%&'()*+,-./0123456789:;<=>?@ABCD
&'()*+,-./0123456789:;<=>?@ABCDE
'()*+,-./0123456789:;<=>?@ABCDEF
()*+,-./0123456789:;<=>?@ABCDEFG
)*+,-./0123456789:;<=>?@ABCDEFGH
*+,-./0123456789:;<=>?@ABCDEFGHI
+,-./0123456789:;<=>?@ABCDEFGHIJ
,-./0123456789:;<=>?@ABCDEFGHIJK
-./0123456789:;<=>?@ABCDEFGHIJKL
./0123456789:;<=>?@ABCDEFGHIJKLM
/0123456789:;<=>?@ABCDEFGHIJKLMN
0123456789:;<=>?@ABCDEFGHIJKLMNO
123456789:;<=>?@ABCDEFGHIJKLMNOP
23456789:;<=>?@ABCDEFGHIJKLMNOPQ
3456789:;<=>?@ABCDEFGHIJKLMNOPQR
456789:;<=>?@ABCDEFGHIJKLMNOPQRS
56789:;<=>?@ABCDEFGHIJKLMNOPQRST
6789:;<=>?@ABCDEFGHIJKLMNOPQRSTU
789:;<=>?@ABCDEFGHIJKLMNOPQRSTUV
89:;<=>?@ABCDEFGHIJKLMNOPQRSTUVW
9:;<=>?@ABCDEFGHIJKLMNOPQRSTUVWX
```

  PC437
```
ÇüéâäàåçêëèïîìÄÅÉæÆôöòûùÿÖÜ¢£¥ Ptƒ
üéâäàåçêëèïîìÄÅÉæÆôöòûùÿÖÜ¢£¥ Ptƒá
éâäàåçêëèïîìÄÅÉæÆôöòûùÿÖÜ¢£¥ Ptƒá
âäàåçêëèïîìÄÅÉæÆôöòûùÿÖÜ¢£¥ Ptƒáí
äàåçêëèïîìÄÅÉæÆôöòûùÿÖÜ¢£¥ Ptƒáíó
àåçêëèïîìÄÅÉæÆôöòûùÿÖÜ¢£¥ Ptƒáíóú
åçêëèïîìÄÅÉæÆôöòûùÿÖÜ¢£¥ Ptƒáíóúñ
çêëèïîìÄÅÉæÆôöòûùÿÖÜ¢£¥ PtƒáíóúñÑ
êëèïîìÄÅÉæÆôöòûùÿÖÜ¢£¥ PtƒáíóúñÑª
ëèïîìÄÅÉæÆôöòûùÿÖÜ¢£¥ PtƒáíóúñѪ¿
èïîìÄÅÉæÆôöòûùÿÖÜ¢£¥ PtƒáíóúñѪ¿⌐
ïîìÄÅÉæÆôöòûùÿÖÜ¢£¥ PtƒáíóúñѪ¿⌐ ¬
îìÄÅÉæÆôöòûùÿÖÜ¢£¥ PtƒáíóúñѪ¿⌐ ¬
ìÄÅÉæÆôöòûùÿÖÜ¢£¥ PtƒáíóúñѪ¿⌐ ¬½
ÄÅÉæÆôöòûùÿÖÜ¢£¥ PtƒáíóúñѪ¿⌐ ¬½¼
ÅÉæÆôöòûùÿÖÜ¢£¥ PtƒáíóúñѪ¿⌐ ¬½¼¡
ÉæÆôöòûùÿÖÜ¢£¥ PtƒáíóúñѪ¿⌐ ¬½¼¡«
æÆôöòûùÿÖÜ¢£¥ PtƒáíóúñѪ¿⌐ ¬½¼¡«»
Æôöòûùÿ ÖÜ ¢£¥PtƒáíóúñѪ¿⌐ ¬½¼¡«»
ôöòûùÿÖÜ¢£¥ PtƒáíóúñѪ¿⌐ ¬½¼¡«»
öòûùÿÖÜ¢£¥ PtƒáíóúñѪ¿⌐ ¬½¼¡«»
òûùÿÖÜ¢£¥ PtƒáíóúñѪ¿⌐ ¬½¼¡«»
ûùÿÖÜ¢£¥ PtƒáíóúñѪ¿⌐ ¬½¼¡«»
ùÿÖÜ ¢£¥PtƒáíóúñѪ¿⌐ ¬½¼¡«»
ÿÖÜ¢£¥ PtƒáíóúñѪ¿⌐ ¬½¼¡«»
```

*** Completed ***

5. Black Mark Paper Printing

5-1 Black mark Function Setting

Black mark paper available at the Black mark mode.

• Setting Operations
1. Turn on the printer power.

2. Open the paper cover and press and hold down the paper feed button for longer than two seconds.

3. After the buzzer tone is emitted, insert paper and close the cover.

4. Repeat the steps above to return to receipt mode.

• Setting Via Memory Switch
- Please refer to the black mark mode switching section of the Unified Utility tool

5-2 Auto Calibration Function

The Black mark paper printing function requires the recognition of Black mark paper's black bar in order to print.
If black mark paper's black bar are not properly recognized, use the auto calibration function.

• Auto Calibration Instructions
1. Turn the printer power off while in black mark print mode.

2. Press and hold down the paper feed button and then press the power button.

3. After the following printout is outputted, press the power button to perform auto calibration.

> Select the mode
> Auto Calibration: Power Button
> Self Test: Feed Button

4. Printer feeds three pages of Black mark paper when performing auto calibration.

6. iOS MFi Mode Setting (Optional)

This product supports Made for iOS (MFi) mode which enables Bluetooth communication with iOS devices.

• How to enable and disable MFi mode:
1. Turn on the printer.
2. Open the media cover.
3. Press and hold the power button and paper feed button for more than two seconds.
4. Close the cover when you hear a beep.
5. Reboot the printer when the following message is printed:
   - iOS mode enable!!
     Please Reboot Printer!!
6. To disable MFi mode, repeat the above procedure.

• Check iOS mode:
1. Execute a self-test.
2. If the printed firmware version contains a lowercase "a" (for example: V01.00 STDa), iOS mode is disabled.
3. If the printed firmware version contains a lowercase "i" (for example: V01.00 STDi), iOS mode is enabled.

7. Peripherals Connection

This product can communicate with other devices via Bluetooth communication and cable.

7-1 Bluetooth® Connection
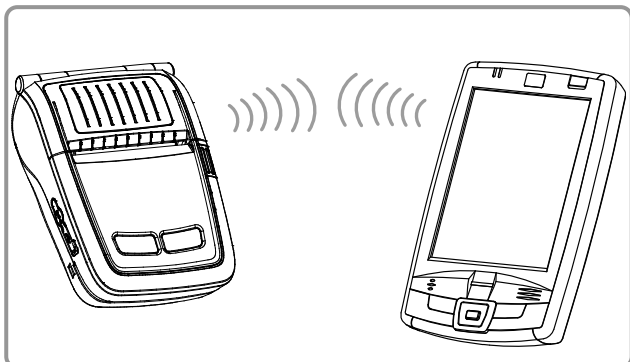
1. The printer can connect to devices equipped with Bluetooth communication capability. Make sure your printer is on and discoverable.

2. Use the Bluetooth connection function supported by the device to connect to the printer.
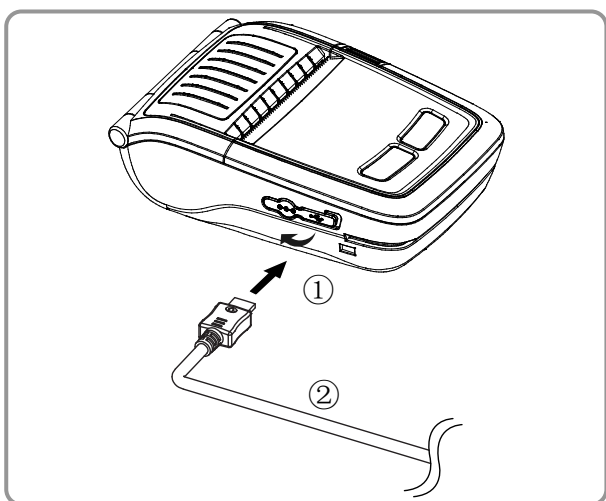
7-2 Wireless LAN
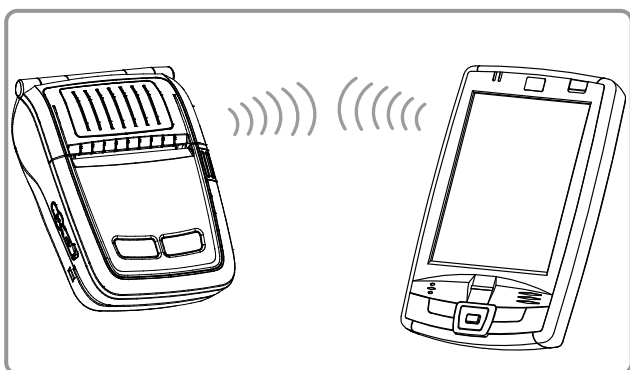
1. This printer supports WLAN communication in Ad-hoc mode and Infrastructure mode (AP).
The printer can be connected to other devices such as PDAs and PC's supporting wireless LAN communication in Ad Hoc mode and AP in Infrastructure mode.

✎ *NOTE*
Refer to the Bluetooth/WLAN Manual for more specific information about.

7-3 Interface Cable Connection

1. Open the Interface Cap ①.

2. Connect the USB interface cable (optional) ② to the cable connector of the printer.

✎ *NOTE*
Use only the USB cables (optional) provided by Zebra.

3. Connect the interface cable to the USB port of the device (PDAs, PCs, etc.).

✎ *NOTE*
The interface cable that can be connected with the printer is available in USB type.

8. Printer Cleaning

If the interior of the printer is dusty, print quality can decline. In such a case, follow the instructions below to clean the printer.

A Head
B Sensor
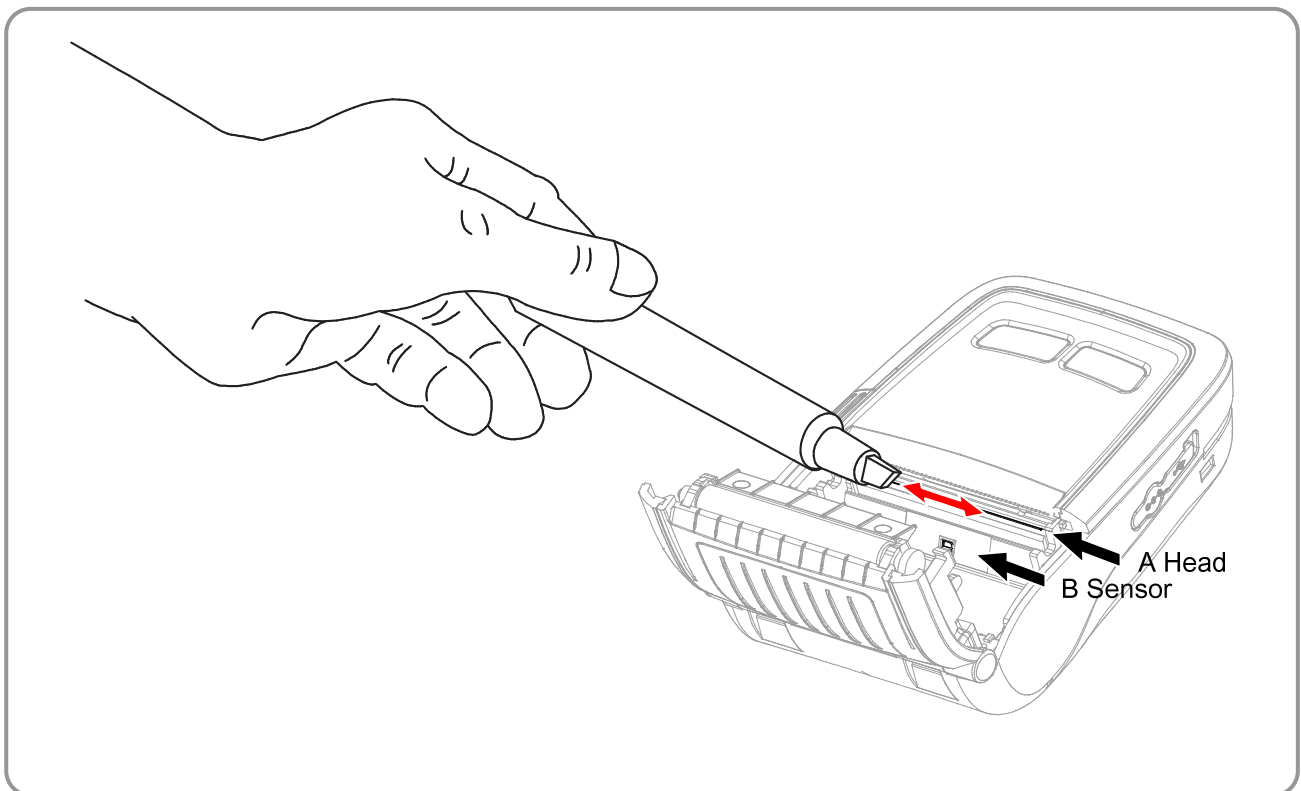
1) Open the media cover and remove the paper, if present.
2) Clean the printhead (A) using a Zebra cleaning pen. Apply the cleaning pen from the center to the edge of the printhead (A) for cleaning.
3) Using the cleaning pen, remove the paper dust from the paper detection sensor (B) .
4) Do not use the printer for one to two minutes after cleaning the printhead (A) until the cleaning agent (from the cleaning pen) has completely evaporated and dried.
5) Insert the paper and close the media cover.

⚠ *Caution*
- Make sure the printer power is turned off before cleaning.
- Wait for two to three minutes after power-off before printhead cleaning because it may be very hot.
- Do not to touch the heating region of the printhead with your hand while cleaning it.
- The printhead may be damaged by static electricity.
- Avoid scratching the printhead.
- Clean the printhead periodically if linerless paper is used. Recommended cleaning period is after consuming twenty rolls of linerless paper (100 meters), or approximately once a week. Print quality may be degraded or printhead life may be shortened if it is not cleaned periodically.

⚠ *Warning*
- Use only linerless paper that is provided by Zebra. Use of other paper voids product warranty.
- Use a Zebra Cleaning Pen; part number. 105950-035 (12 pack).

9. Appendix
9-1 Specifications

Item		Description	
Printing	Printing Method	Thermal printing	
	Print Speed	90 mm/sec (Receipt Paper), 60 mm/sec (Linerless Paper)	
	Resolution	203 DPI	
	Paper Supply Mode	Easy paper loading	
	Character Size	Font A: 12 × 24 Font B: 9 × 17 Font C: 9 × 24	
	Characters Per Line	Font A: 32 Font B/C: 42	
	Character Set	English: 95 Expanded Graphics: 128 × 33 pages International: 32	
	Barcode	1 Dimension: UPC-A, UPC-E, Code 39, Code 93, Code 128, EAN-8, EAN-13, ITF, Codabar 2 Dimension: PDF417, DATAMATRIX, QR Code, GS1 DataBar, Aztec (optional)	
	Driver	Windows XP(32/64bit) / WEPOS / 2003 Server(32/64bit) / VISTA(32/64bit) / 2008 Server(32/64bit) / 7(32/64bit) / 8(32/64bit)	
	SDK	Windows XP / WEPOS / 2003 Server / VISTA / 2008 Server / 7 / 8 / CE 3.0 and later	
	Sensor	Paper End, Media Cover Open	
	Cutter Type	Tear-Bar	
	Language	User language supported	
Paper	Paper Shape	Receipt	Linerless
	Paper Type	Thermal Paper	Thermal Paper
	Outer Diameter of Paper Roll	Max. ø30 mm (1.18 in.)	Max. ø30 mm (1.18 in.)
	Width	57.5 ± 0.5 mm (2.26" ± 0.2 in.)	57.5 ± 0.5 mm (2.26" ± 0.2 in.)
	Thickness	0.06 - 0.1 mm (0.0024 in.-0.0040 in.)	0.08 ± 0.008 mm (0.0031in. ± 0.00031in.)
Reliability	Printer	50 km (Receipt Paper), 10 km (Linerless Paper)	
	Battery	Rechargeable up to 500 times	
Communications	Interface	USB, Bluetooth Class2 V3.0 + EDR Wireless LAN 802.11 b/g/n * Communication is enabled only for devices with Bluetooth or Wireless LAN function.	
AC Adaptor	Input	Voltage: 100-250 VAC Current: 0.5A (Max. at 110VA)	
	Output	Voltage: 8.4 VDC Current: 0.8A * Charging current and charging time may depend on the type (option) of charger.	
Battery	Type	Lithium-ion	
	Output	Voltage: 7.4 VDC (Available 8.4-6.8VDC) Capacity: 1200 mAh	
	Charging Time	2.5 hours	
Usage Conditions	Temperature	Printer: -15-50℃ (5-122°F) Battery: 0-40℃ (32-104°F) Battery discharge: -20-60℃ (-4-140°F)	
	Humidity	Printer: 10-80% RH (No condensation) Battery: 20-70% RH (Non-condensing, refer to the temperature conditions on page 8)	
Dimensions	Printer	80.1mm × 118.8mm × 37.7mm (3.15 in. × 4.68 in. × 1.48 in.)	
Weight	Printer	Printer : 190g (0.42 lbs), Printer + Battery : 242g (0.53 lbs) Printer + Battery + Paper : 273g (0.60 lbs) Package: approx. 670g (1.5 lbs)	
Accessories	Basic Package	Battery Standard, AC Adaptor, Belt Clip, Paper, Power Cord	
	Sold Separately	Battery with outer contacts, Protective Case, Shoulder Strap, Belt Strap, Vehicle Holder, USB Cable, Cigarette Lighter Adaptor, Quad Docking Cradle, Quad Battery Charger, Single battery Charger, Single Docking Cradle, Adaptor for Quad Battery Charger/Docking Cradle	

✎ *NOTE*

Printer specifications are subject to change without notice.

9-2 Certification

1. WEEE (Waste Electrical and Electric Equipment)
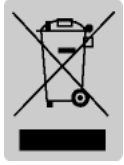
This mark shown on the product or its literature indicates that the corresponding item should not be discarded at the end of its working life with other household waste. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate marked items from other types of waste, and recycle them responsibly to promote the sustained reuse of material resources. Household users should contact either the retailer where they purchased this product, or their local government office for details on where and how they can conduct environmentally safe recycling of such items. Commercial users should contact their suppliers and check the terms and conditions of purchase contracts. This product should not be combined with other commercial waste for disposal.

2. This equipment is for indoor use and all of the communication wiring is limited to the inside of the building.

3. The switch is the disconnecting device. Turn off switch from any hazard.

4. The following Bluetooth mark D022644 is only applicable to models with the Bluetooth SIG qualification.

5. Instructions for the correct selection of a suitable Listed Class 2 Power Battery Charger (Adaptor) including "This product is intended to be supplied by a Listed Battery Charger (Adaptor) marked "Class 2" and rated output 8.4 V DC, 0.8 A."

⚠ **Warning**

Lithium-Ion Battery pack

\<Warning\> The battery has the potential risk of overheating, fire and/or explosion. To avoid such risks, observe the following instructions:

- A visibly swollen battery may be dangerous. Contact Zebra or your local dealer.
- Only use a Zebra ZQ110 charger.
- Keep away from open flames. (Do not place in a microwave.)
- Ensure proper ventilation around all sides of the battery pack during use and storage.
- Do not allow the battery port to touch metal items, such as a necklace, coin, key or clock.
- Use only a lithium battery guaranteed by mobile phone manufacturer or Zebra.
- Do not disassemble, compress or pierce the battery pack.
- Do not drop the battery pack from a high place or subject it to strong shock.
- Do not expose the battery to high temperatures over 60°C.
- Do not expose to high humidity.

Disposal Directions

- Do not dispose of used battery packs carelessly.
- Do not burn or throw in a fire to dispose of the battery pack. There is a risk of fire and/or explosion.
- Dispose of battery packs according to the methods defined by your country or region.

Recommendation for Charging

- Charge your battery pack according to the instruction manual to avoid risks of fire or explosion.

FCC compliance Information

This device complies with Part 15 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.

Information to the User

NOTE: 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 may 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 to an outlet different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

9-3 Label Types

The label types used with this printer are as follows.
- Rating Labels: PET
- Other Labels: PP, PET