

SMART POS / ANDROID ALL-IN-ONE PAYMENT

SP60

USER
Manual



BLUEBIRD



This user manual is protected by copyright.

Copyright © 1995-2018 Bluebird Inc. All rights reserved.

Bluebird Inc. is the designer and manufacturer of Bluebird handheld mobiles.

This manual and the programs in this device are protected under international copyright laws, and may not be copied, distributed, translated, or removed by any means.

Registered Trademark



BLUEBIRD is an emerging global brand, striving to lead the market in performance and mobility. Their products represent reliability, innovation, and innovative technology. Bluebird is a registered trademark from the global brand of Bluebird Inc. and is copyright protected.

- Bluebird and stylized Bluebird Logo are registered trademarks and symbols of Bluebird Inc.
- Microsoft logo, Windows logo, MS Office, ActiveSync and Windows Mobile Device Center are registered trademarks of Microsoft Corporation.
- Qualcomm® IZat™ is a registered trademark of Qualcomm Atheros, Inc. trademark of Qualcomm Atheros, Inc.
- Adobe® is a registered trademark of Adobe Systems Inc.
- All other trademarks and copyrights are the property of their respective owners.

User's Guidance

Device type	User's guidance
Class B Device (Household Information & Communication)	This device has qualified the electromagnetic wave suitable registration and can be used as a household device at a residential area as well as any other areas.
Type Registration	This wireless device may cause propagation interference, and so, it cannot be used for life-saving services.

Revision History

Revised Version	Revised Date	Revised Details

Contents



This user manual is protected by copyright.

Registered Trademark

User's Guidance

Revision History

Contents

1 About This Manual

2 Safety Information

2.1 Symbols.....	2
2.2 Device	2
2.3 Environment.....	3
2.4 Battery and Charging.....	3
2.5 Distraction.....	3
2.6 Frequency Interference	3
2.7 Cleaning Instructions.....	4

3 Overview

3.1 Package Contents	5
3.2 Your Device.....	6
3.2.1 Front	6
3.2.2 Back and Bottom	7

4 Getting Started

4.1 Cards	8
4.1.1 Installing the Cards.....	8
4.1.2 Removing the Cards	9
4.2 Battery	10
4.2.1 Installing the Battery.....	10
4.2.2 Removing the Battery.....	11
4.2.3 Charging the Battery	12

5 Basics

5.1 Turning the Device On and Off.....	14
5.2 Resetting the Device.....	14
5.3 Using the Touchscreen	15
5.4 Installing a Paper Roll	16
5.5 Making Payment.....	17
5.5.1 Using the Magnetic Card Reader	17
5.5.2 Using the Contactless Card Reader	17
5.5.3 Using the Smart Card Reader	18

Contents



[Appendix A Device Specification](#)

[Appendix B Accessories](#)

[Appendix C Troubleshooting](#)

[Appendix D Safety Regulatory](#)

[Appendix E Warranty and Support](#)

1 About This Manual



The SP60 provides high quality features as a smart terminal using Bluebird's creative ideas and technological expertise. This user manual is designed to help users effectively operate the device.

- Please read this manual carefully before using the device for safe and proper use.
- This device may only be used in countries where it is sold.
- The components and colors of this device in this manual may differ from the actual product.
- Features and specifications are subject to change without prior notice.
- Content may vary by software version or by service provider.
- Applications and features may vary by country or region.
- Certain features of this device may have performance issues due to user environment, programs in use, or peripheral device usage. Bluebird is not liable for any issues caused by third-party apps or accessories.
- Modifying the device's operating system or installing software from unknown sources may cause device malfunction or data loss. Improper or unauthorized use of the device is a violation of the Bluebird license agreement and void your one-year limited warranty.

2 Safety Information



2.1 Symbols

This manual uses the following symbols to indicate hazards and additional information.

Symbol	Name	Description
	Warning	Indicates situations that could cause injury to yourself or others.
	Caution	Indicates situations that could cause damage to your device or other equipment.
	Note	Indicates additional information that can help you get the most out of the device.

 Please read this safety precaution information carefully. Failure to follow the information provided may result in fire, electric shock, or other property damage or bodily injuries.

2.2 Device

-  • Do not press the Power button on the device if the device is wet or do not touch adapter or power cord with wet hands. There is risk of electric shock.
- Do not use your device in an explosive danger zone.
- If your device becomes wet, do not put your device in heaters, microwaves, etc. to dry it. There is a risk of explosion or malfunction.
-  • Do not scratch the device's touchscreen. Use only your fingers or a compatible pen. Never use an actual pen, or any other sharp object on the touchscreen.
- Although this device is very sturdy, do not drop, hit, bend, or sit on it on purpose. It can be broken.
- Do not modify, take apart, or repair the device. Contact to your customer service center. Failure to do so will void your warranty.
- Do not attempt to modify your hardware or software. It may cause device malfunction and void your warranty.
- You may not be able to use this wireless device in basements, open fields, skyscrapers, or other places where the signal is weak.
- Backup the data and information from your device. Your data, such as ringtones, texts, and voice messages, may be erased during repairs or upgrades.
- Do not paint your device. It can damage your screen or your device's exterior.
- Avoid using or storing this device at extreme temperatures. This device is designed to work at temperatures between -10°C and 50°C (14°F and 122°F), and humidity level between 5% and 95%.
 - When the operating temperature is 58°C, the warning tone occurs every 20 seconds and the following warning message is displayed : 'Approaching high battery temp.'
 - When the operating temperature is 63°C, the device will power off with the following warning message : 'Power off'

2 Safety Information



2.3 Environment

-  • Do not use the device while driving or operating heavy machinery. Doing so may result in death or serious injury.
-  • Do not use the device in locations with combustible goods. Doing so may result in an explosion.
-  • Do not use the device in dusty or hot locations. Doing so may damage the device.
- Do not expose your device to direct sunlight such as on the dashboard of a car for extended periods of time.
- Do not use the device in humid locations. Doing so may damage the device and void the warranty.
- Do not keep the device close to air conditioner vents. Corrosion within the device may occur due to condensation from changes in temperature.
- Do not allow children to play with the device.

2.4 Battery and Charging

-  • Improper battery use may cause fire, explosion, or other hazard.
-  • If the battery is removed due to impact, heat, submersion, or other damage, there is a risk of explosion. Keep away from children and animals.
- Do not allow the battery's contacts to touch things like necklaces, coins, or electric conductors. Do not give any impact with sharp objects. There is a risk of explosion.
-  • Use only the approved battery and charger. Using an incompatible battery or charger may cause device malfunction or other damage, such as fire.
- When you are not using the device for a long period, take out the battery and keep the device and the battery in a dry, cool place. Also, charge the battery at least once a year. If you keep it without charging for a long time, it may cause device malfunction.

2.5 Distraction

-  In some situations, using your device may distract you and cause serious injuries and damages. For example, avoid talking on the phone or texting while driving or riding a bicycle. It is strictly prohibited by law in some jurisdictions. If you cannot avoid using your device while driving, stop your vehicle or use hand-free kit.

2.6 Frequency Interference

-  • This wireless device may cause radio frequency interference, so use Airplane mode or turn off the device when prohibited.
- The device emits an electromagnetic fields. It may interfere with your medical devices.
- Do not place credit cards, phone cards, bankbook, and tickets next to the device. The magnetic field of the device can damage their magnetic strips.



2.7 Cleaning Instructions



Important Guidelines:

- Do not immerse the device in water or any other liquid.
- Do not apply or spray the cleaning products directly onto the device. Always apply the product to the cloth.
- Avoid cleaning electrical connections.
- Do not use harsh chemicals such as solvents, detergents, or abrasive materials, as they may damage the device.
- Do not apply excessive pressure to the device, as this may cause damage.
- Only insert credit cards into the smart card reader slot.
- Avoid prolonged exposure to direct sunlight.



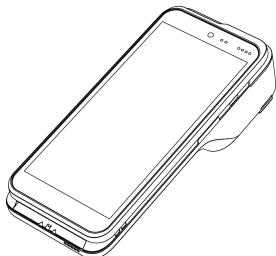
- Power off the device and disconnect all power sources prior to cleaning.
- Apply an approved cleaning product to a soft, clean, non-abrasive cloth.
- Gently clean the device. Once it's completely dry, reconnect the power and turn the device on.

3 Overview

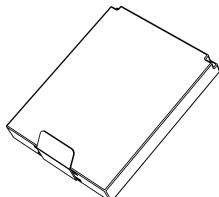


3.1 Package Contents

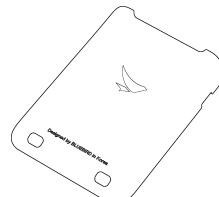
The package includes:



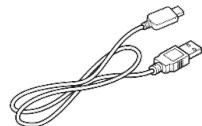
SP500 device



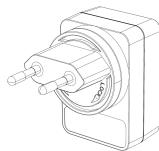
Battery



Battery Cover



USB-C cable



Power adaptor



Paper Roll



- The illustrations may differ from your actual items.
- To purchase additional accessories, contact your sales representative.
- You can download your User Manual from www.bluebirdcorp.com.



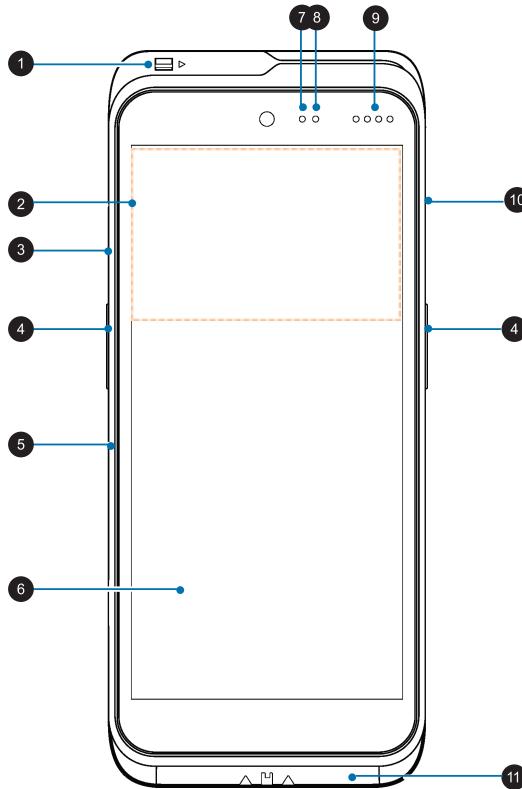
- Please use the power supply unit provided with your SP60 device ONLY.
Using a different power supply may damage your device, even if it appears to have similar voltage or current specifications.

3 Overview



3.2 Your Device

3.2.1 Front

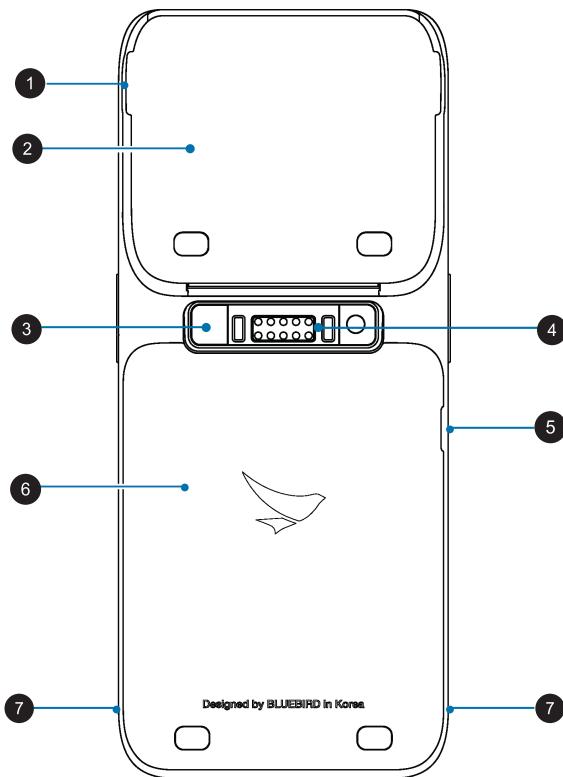


No.	Name	Description
①	Magnetic card reader	Swipe a card's magnetic stripe through the reader for payment. Supports bi-directional reading
②	Contactless card reader	Tag a card for payment
③	Power button	Powers the device or screen on or off. You can lock the device by turning off the screen.
④	Scan/Programmable key	Functions as the scan or programmable key.
⑤	Volume Up/Down	Adjusts the device volume
⑥	Touchscreen	Displays applications and functions as a multi-touch interface.
⑦	Scan LED	Illuminates during scanning
⑧	Charge LED	Illuminates during charging
⑨	Transaction LED	Four virtual LEDs light sequentially during the transaction.
⑩	Charging port	Connects to the power adapter for charging the device.
⑪	Smart card reader	Insert the metallic contacts of a smart card for payment

3 Overview



3.2.2 Back and Bottom



No.	Name	Description
①	Printer Access Point	Used to open the paper slot
②	Printer Cover	Protects the paper roll and inner part of the paper slot
③	Rear camera	1D/2D barcode scanning.
④	Rear Interface	Supports connection to Extra Peripherals (e.g., communication cradle)
⑤	Battery Access Point	Used to access the battery slot
⑥	Battery cover	Protects the battery and inner part of the device.
⑦	Stylus Pen/ Hand-strap Hole	Attach a hand strap and stylus pen

4 Getting Started



4.1 Cards

The device includes slots for a Micro SD card, SAM card, and Micro SIM card, all accessible within the inner compartment on the back of the device. Additionally, a Dual SIM & SAM slot is provided.

- A SAM card is required for secured transactions that are made through your device. It validates the device and the credit cards. It also includes the company information.
- A micro SD card is required for external storage.
- A micro SIM card is required for using mobile services.
- Dual SIM & SAM slot can be function in either of the following:
 - 2 SIM/1 SAM: Functions as a SIM
 - 1 SIM/2 SAM: Functions as a SAM

 All cards should be purchased separately if necessary. The specifications may differ according to country where the device is purchased. Contact your sales representative for more information.

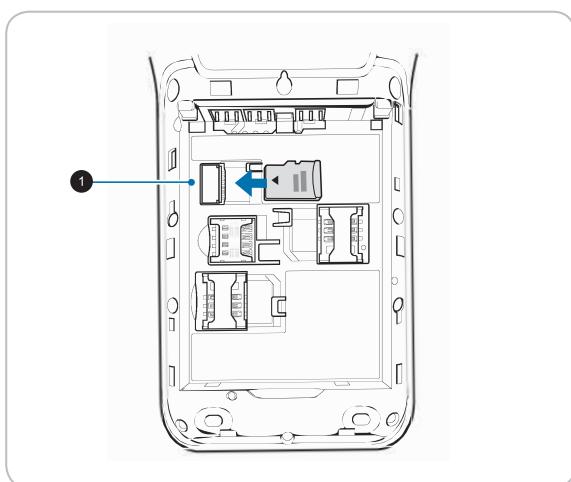
4.1.1 Installing the Cards

To insert the cards, the battery cover must be removed first. For information on how to remove the battery cover, refer to *Installing the Battery* on page 10. Before inserting a card, make sure you are using the correct slot.

 • Ensure the device is powered off before removing the battery cover
• Ensure that you are using the correct slot for each card.
Each slot is marked with engraved identifiers on the lower housing.

Inserting the Micro SD card

Align a Micro SD card with the corresponding slot ①, ensuring the contact on the card face downward. Gently slide the card into the slot until it is fully inserted.

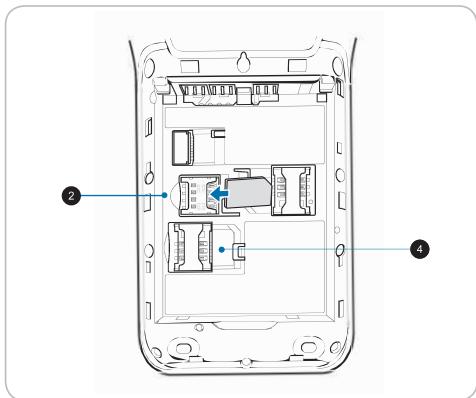


4 Getting Started



Inserting the Micro SIM cards

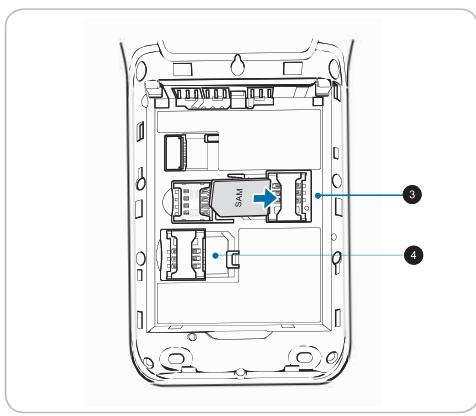
Align a Micro SIM card with the corresponding slot ②, ensuring that the contact on the card face downward. Gently slide the card into the slot until it is fully inserted.



 Inserting an additional Micro SIM card into the Dual SIM & SAM slot ④ will enable it to function as a SIM.

Inserting the SAM cards

Align a SAM card with the corresponding slot ③, ensuring the contact on the card face downward. Gently slide the card into the slot until it is fully inserted.



 Inserting additional SAM card into the Dual SIM & SAM slot ④ will enable function as a SAM.

4.1.2 Removing the Cards

To remove the cards

- 1 Push the inserted card once.
The card will release with a click sound.
- 2 Pull the card out to remove it.

4 Getting Started

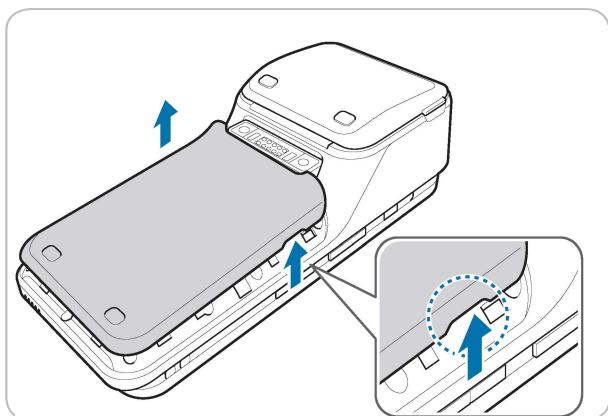


4.2 Battery

SP60 uses a 3,420mAh Lithium-ion rechargeable battery (7.6V, 3,420mAh/26.34Wh). Install the provided battery before charging the device.

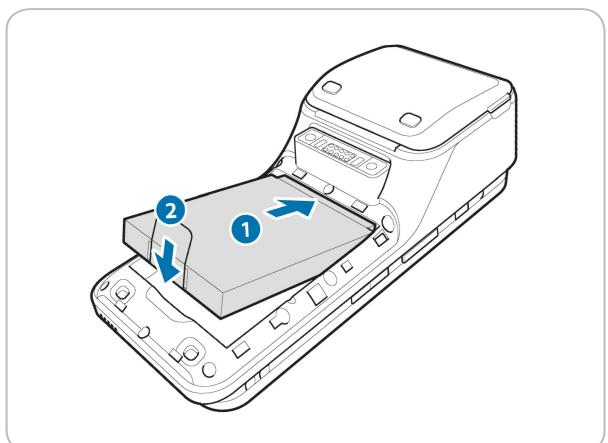
4.2.1 Installing the Battery

- 1 Remove the battery cover by gently pulling it upward using the battery access point.



- Avoid excessive force when removing the cover to prevent potential damage and injury.

- 2 Insert the battery into the battery compartment.



4 Getting Started

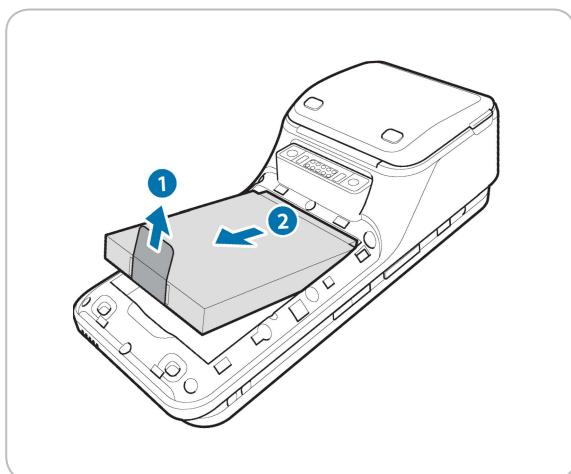


- 3 Put back the battery cover, pressing firmly until it locks securely into place.



4.2.2 Removing the Battery

- 1 Remove the battery cover as described in *Installing the Battery* on page 10.
- 2 Carefully lift the battery out of the compartment as shown in the figure below.



- Ensure the device is powered off before removing the battery to prevent potential damage.

4 Getting Started



4.2.3 Charging the Battery

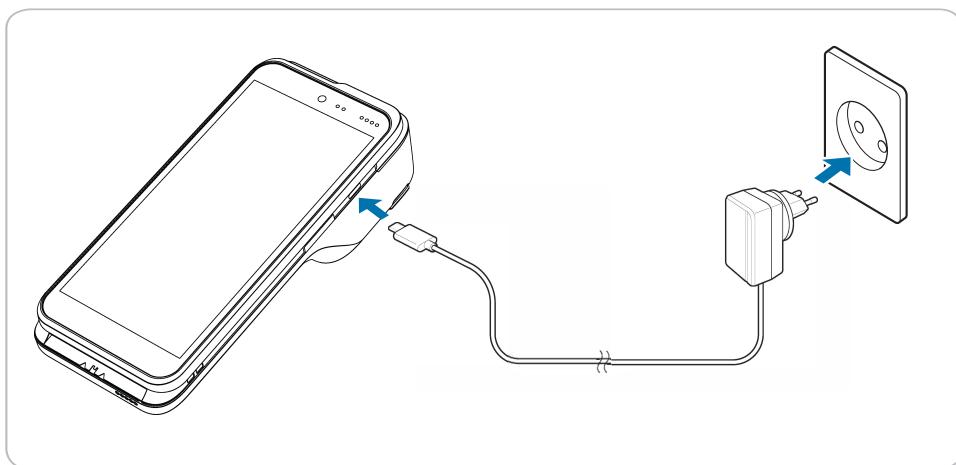
The device can be charged with a charger or a cradle. Check the device's battery status on the status bar. You can also check the battery status on the lock screen.

- When the battery is low, the device will emit a sound and display a low battery warning.

 For safety, the battery provided with the device is not fully charged.
Charge the device before using it for the first time or after not using it for a long time.

Charging with the charger

Connect the end of the power adapter to the device's charging port, located on the right side of the device. Then, connect the adapter into a power outlet.



 When the battery is extremely low on power, the device may not turn on. Charge the device enough and try to turn it on again. You can use the device while charging. But it may take longer to fully charge the device.

 • Ensure the charger is securely connected to avoid potential damage to the device.
• The device may heat up when charging. Stop charging if it becomes excessively hot.
• Avoid removing the battery before disconnecting the charger, as this may damage the device.

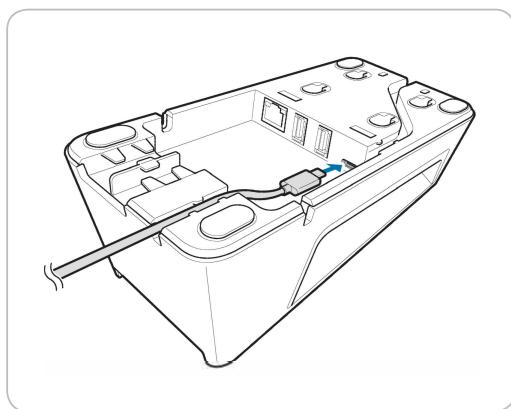
4 Getting Started



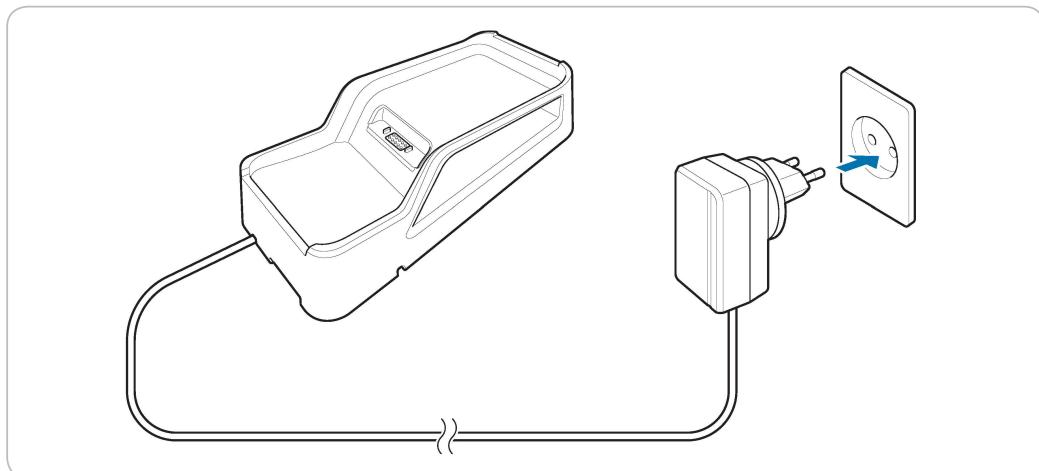
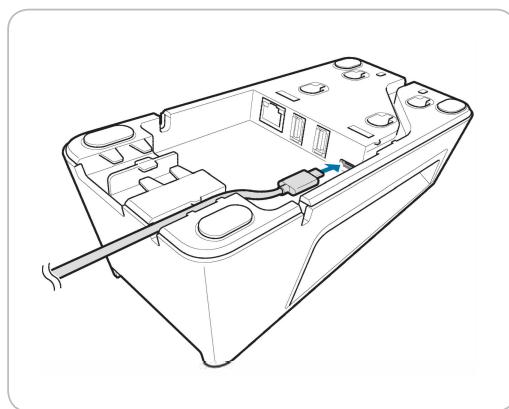
Charging with the cradle

- 1 Connect the power adapter with the cradle, and plug it into a power outlet.

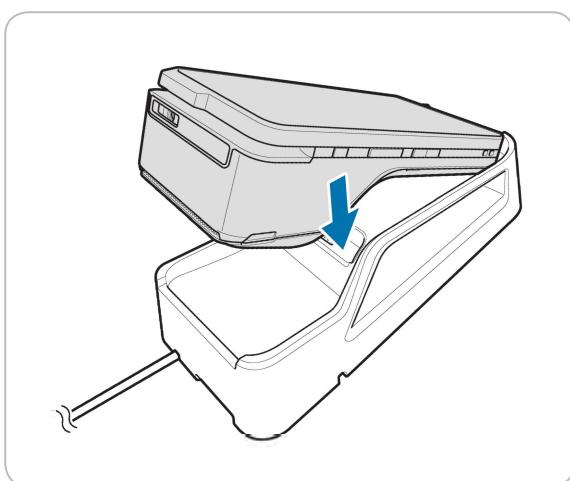
Cradle with Ethernet port



Charge-only cradle



- 2 Place the device on the cradle to start charging.



Repeated charging and usage will cause the battery to wear out over time.



This chapter explains the basics of how to use your Android device.

5.1 Turning the Device On and Off

To turn on the device, press and hold the Power button for about 4 seconds until the display shows up.

To turn off the device, press and hold the Power button for about 1 second, then tap **Power off**.



- To turn the screen on or off, press the Power button.
- When the battery is fully discharged, the device will automatically shut down.
- To conserve battery power, briefly press the power button (approximately 0.5 seconds) to turn off the screen.
- Registering the accounts without turning on the Wi-Fi may incur extra charges depending on your data plan.



Do not turn off the device by removing the battery, as this may damage the device.

5.2 Resetting the Device

If your device does not work properly or freezes due to unknown errors, you can force the device to restart.

To reset the device's hardware

Press and hold the Power button for at least 12 seconds.

- The device will restart automatically.



The data on the device is keep saved when you perform the hardware reset.

To select the Factory reset

- 1 While the device is turning off, press the Volume up and Power buttons at the same time to enter the recovery mode.
- 2 Press the Volume up or down button to select **Factory reset** and than press the Power button.
 - All settings and data, including apps and personal content, will initialize, and the factory settings will be restored.



The data on the device is maintained even though you perform the hard reset.

- Before resetting the device, check the battery is charged enough not to make the device turn off suddenly during resetting.
- Back up any data and settings before doing factory reset. After factory reset, all the data in the device will be deleted and the device will be reset to its factory default settings.



5.3 Using the Touchscreen

Use finger gestures to use the touchscreen effectively.

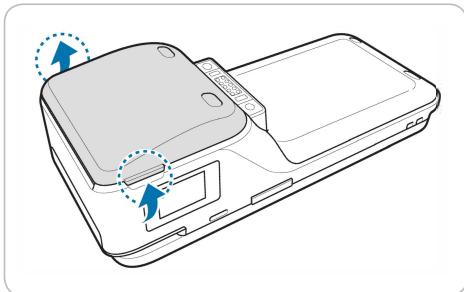
- Do not touch the screen with any sharp objects.
- Do not apply too much pressure to the touchscreen.

Gesture	Name	Description
	Tap	Briefly touch an item to open, launch, or select it.
	Zoom in or out	Place two fingers on the screen and spread them apart to zoom in. Pull the fingers together to zoom out. You can also double-tap the screen quickly to zoom in or out.
	Tap and hold	Touch an item or the screen for a few seconds to access more detailed menus or options.
	Swipe	Touch the screen and quickly flick in any direction to scroll through menus or pages.
	Drag	Touch an item or the screen for a few seconds and move your finger around the screen to move the item or move through screens.

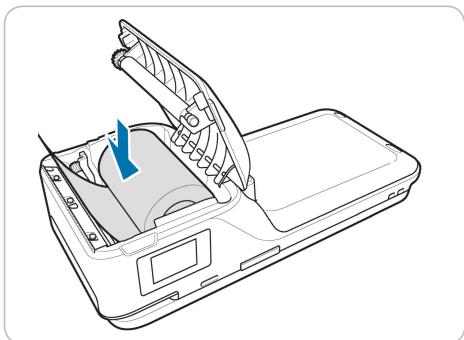


5.4 Installing a Paper Roll

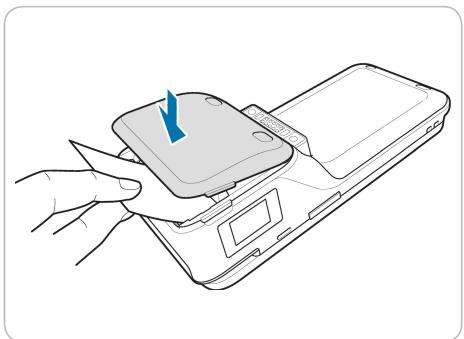
- 1 Open the printer cover by pulling both sides of the printer access points.



- 2 Loosen the leading edge of a new paper roll.
- 3 Place the paper roll into the printer tray in the direction indicated in the image below.



- 4 Close the cover with holding the leading edge of the paper roll.



Paper Roll Storage guidelines:

- Do not store in hot, humid environments (e.g., near air -conditioners or in areas with humidity levels above 85%).
- Avoid exposure to direct sunlight or ultraviolet light.
- Avoid contact with organic solvents (adhesive components)
- Avoid direct contact with materials containing plasticizers.
- Avoid direct contact with diazo paper.
- Prevent direct exposure to water.
- Avoid rubbing or pressing the paper too hard.



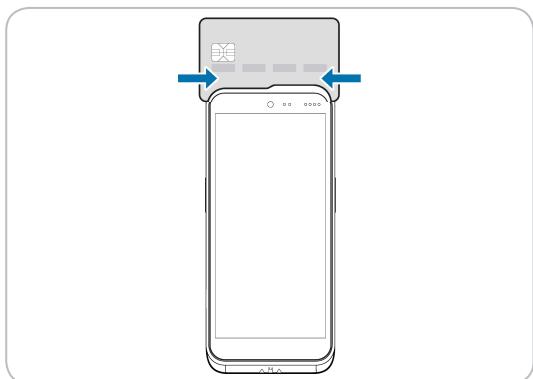
5.5 Making Payment

This device provides three different payment systems.

5.5.1 Using the Magnetic Card Reader

The magnetic stripe reader is located at the top of the device and can read the card in either direction (bi-directionally), with the magnetic stripe facing the front.

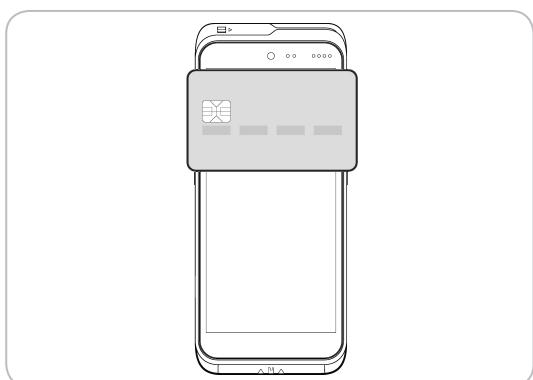
- 1 To ensure proper reading, slide the card smoothly through the reader slot, either from right to left or left to right, with the magnetic stripe facing the front.
- 2 Check the application for successful transaction.



5.5.2 Using the Contactless Card Reader

The contactless card reader is located on the front of the device, with the reading area approximately aligning with the upper half of the touchscreen. Ensure that the card is properly contacted to the reading area.

- 1 Tag a card or gently tap it on the surface of the contactless antenna.



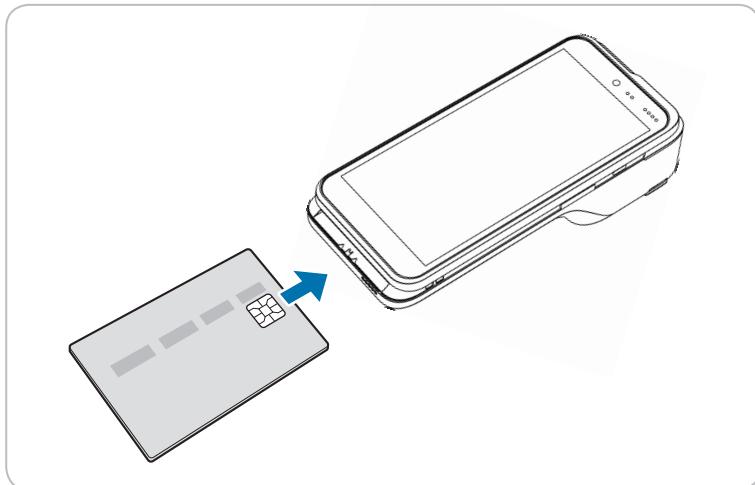
- 2 Once the payment is complete, the LED indicator will illuminate.



5.5.3 Using the Smart Card Reader

The smart card reader is located at the bottom of the device and is designed to read EMV smart cards.

- 1 Insert the card into the smart card reader with the metallic contacts facing upward. Ensure the card is fully inserted during the reading process.



- 2 Remove the card once the transaction has been successfully completed.

 The smart card transaction procedure may vary depending on the program.

Appendix A Device Specification



Performance Characteristics

CPU	2.0 GHz Octa Core Processor and Secure Processor
Operating System	Android 12 with Bluebird StoneWall™ Security
Memory	2 GB RAM + 32 GB FLASH (default) 4 GB RAM + 32 GB FLASH (optional)

Physical Characteristics

Dimensions (W x H x D)	183 x 78 x 52.5(grip 22.7) mm
Weight	Less than 350 g
Display	6.01" HD+, 720 x 1480, IPS, Incell
Touchpanel	Capacitive multi-touch, Stylus
Backlight	LED backlight
NIT	408 Nits
Power	Same as 3.8V 6840mAh, 7.6V 3420mAh (Optional) Batteryless configuration is supported
Expansion Slot	1 Micro SD Card, supports up to 512 GB
SIM/SAM	Default: 1 SIM / 2 SAM (SIM slot can also support SAM) Option: eSIM
Interface	Type C USB, supports OTG. 10-Pin Pogo Connector (Located on the back of the device)
Keypad	5 Keys: Power ON/OFF Volume+ Volume- 2 x Quick Scan button (left and right)
Voice and Audio	1 Buzzer / 1 Speaker / 1 Microphone

Appendix A Device Specification



Wireless Wan Data and Voice Communications

	(Optional) WorldWide
Radio Frequency Band	- 4G : B1/ B2/ B3/ B4/ B5/ B7/ B8/ B9/ B12/ B13/ B14/ B17/ B18/ B19/ B20/ B25/ B26/ B28/ B38/ B39/ B40/ B41/ B66 - 3G : B1/ B2/ B4/ B5/ B8/ B19 - 2G : 850/900/1800/1900
GPS	GPS/Glonass/Galileo/Beidou

Wireless LAN

Radio	802.11 a/b/g/n/ac
-------	-------------------

Wireless PAN

Bluetooth	Bluetooth v5.0 BLE, Class 2
-----------	-----------------------------

Wired LAN

Ethernet	w/ Charging and Communication Cradle or Ethernet Hub (Magic Box)
----------	--

Appendix A Device Specification



Data Capture

Scanning	(Optional) Professional 1D/2D Scanner
Camera	Front : 0.3MP FF Optional : 2MP/5MP FF Rear : 5MP AF Rear with Flashlight Optional : N.A/8MP/13MP AF Rear camera
NFC	Supported
Biometrics	(Optional) Optical Fingerprint FAP 10 (integrated)

Payment

MSR	Track 1/2/3, Bi-Directional
Contact	EMV LEVEL 1 & 2, ISO 7816, PBOC 3.0, ISO 7816, EMV LEVEL 1 & 2
Contactless	13.56MHz, ISO 14443, Type A&B, Felica, Mifare, EMV LEVEL 1&2 compliant Type A & B Card; Mifare Card; ISO/IEC 14443, qPBOC3.0; (Under Display Contactless Solution)
Security	PCI-PTS 6.x

Printer

Speed	Max 100 mm/second
Size	58 mm width x Ø 40 mm

User Environment

Operating Temperatures	-10°C to 50°C (14°F to 122°F)
Storage Temperatures	-20°C to 70°C (-4°F to 158°F)
Humidity	5% ~ 95% Relative Humidity, Non-Condensing



Please ask your sales representative for the specifications not listed above or for the future upgradeable specifications.

Appendix B Accessories



Cradles

- 1 Slot charging cradle kit: one charging slot
 - Supports USB-C Port for charging
- 1 Slot charging and communication cradle kit
 - 1 * USB-C port for Charging
 - 2 * USB-A ports for additional peripheral connection
 - 1 * RJ-45 port to support wired ethernet connections (100Mbps)

 Requires Power Adapter 5V/3A and Country Specific AC Adapter Plug

Battery

- Battery: 7.6V, 3,420mAh/26.34Wh

Power Adapter&Cable

- Power Adapter: 5V/3A power adapter Type B
 - Requires Country Specific Adapter Plug and USB Type C to A cable
- Cable: USB A to USB C communications and charging cable
 - Supports USB 3.0.

Other Accessories

- Printer Paper Roll
- Stylus pen & Stylus Tether

Appendix C Troubleshooting



Device fails to start or displays incorrectly.

- Check that the device has sufficient battery power, as low battery levels may cause startup issues.
- Ensure the device is connected to a dedicated power source.
- Make sure all cables are securely connected.
- Perform a device reset.

If the problem persists, please contact our customer service center.

Transaction fails to process.

- Transaction failures may be caused by various factors, including a damaged card, SAM card, faulty card reader, incorrect card swiping, etc.

The battery does not charge properly.

- Ensure that your device and the charging cable are connected.
- If the battery does not charge completely, it may be dead or defective. Replace the battery with a new one. (The warranty period for battery replacement is six months.)

The battery life got shorter.

When you use network data or peripheral device such as wireless LAN or Bluetooth that require more power, your device may use more battery than usual. If it happens for an extended period of time, your battery may be dead. Then replace it with a new battery.

I dropped the device in the water.

Turn off the device and take out the battery. Place the device and battery in a dry place. Let them dry completely for a considerable period of time, and then turn the device back on. If it does not turn back on, contact our service center.

My device gets too hot to touch.

It is normal for the device to warm up while it is receiving a poor signal, performing an intense workload, or charging. It should cool down if you stop using the device for a certain amount of time. If the problem continues, contact the manufacturer. It may result in a burst battery or fire.

How do I get the repair service?

You can contact your local sales representative or you can send the device via a delivery service to Bluebird's Korean headquarters. When sending the package, make sure you pay for the shipping fee in advance. When the repair is finished, Bluebird will cover the shipping cost.

Appendix D Safety Regulatory



FCC compliance information

This device complies with Part 15 of the FCC's Rules. Operation is subject to the following two Conditions:

- This device may not cause harmful interference, and
- This device must accept any interference received, including interference that may cause undesirable operation.

This device complies with part 15 of the FCC Rules. Operation is subject to the condition that this device does not cause harmful interference.

End users cannot modify this transmitter device. Any Unauthorized modification could void the user's authority to operate this device.

Part 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.

Modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment under FCC rules.

FCC 15.407 (g) states

Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the users manual.

Since this is an Indoor Only device (required for this band) you do not need to worry about the extreme frequency Stability over wide temperatures, but you can show that the frequency Generation portion of this device (from the schematic) has its own stated stability that would never allow the device to generate emissions or part of the spectrum outside of the authorized band (can be determined by looking at the Occupied BW plots to see how much margin to the band edge is available).

If the devices in the future use the other higher frequency UNII bands, and the devices can be used outdoors, you may need to provide details of stability over a much wider temperature range (depending on the use conditions stated in the manual).

Most compliance for this requirement is stated from the specification of the frequency generation portion of the device and not necessarily through additional testing.

Appendix D Safety Regulatory



IEC 60417-6044



Do not listen to sound at high volume for long periods. It may cause hearing damage. Also, only use compatible receiver, headphones, or earpieces with your device.

CE



Hereby, Bluebird Inc. declares that the radio equipment type SP500 is in compliance with Directive 2014/53/EU. This device can be operated in at least one Member state without infringing applicable requirements on the use of radio spectrum.

To comply with CE RF exposure requirements, the handset must be kept 0.20 inches (0.5cm) from the body without any reference to a particular side or edge.

Any beltclips, holsters, and similar accessories containing metallic components may not be used.

Body-worn accessories that cannot maintain 0.20 inches (0.5cm) separation distance between the user's body and the handset, and have not been tested for typical body-worn operations may not comply with CE RF exposure limits and should be avoided.

This device is compliant with the RED article 10.10 requirement because the information is available on the package.

5 150-5 350 MHz and 5945-6425 MHz Wi-Fi Restrictions. Restrictions or Requirements in following countries: indoor use only.

	BE	BG	CZ	DK	DE	EE	IE	EL	ES	FR	HR	IT	CY	LV	LT	LU	HU
MT	NL	AT	PL	PT	RO	SI	SK	FI	SE	UK	NO	IS	LI	CH	TR		

Regulatory Articles

- **Article 10(2):** Manufacturers shall ensure that radio equipment shall be so constructed that it can be operated in at least one Member State without infringing applicable requirements on the use of radio spectrum.
- **Article 10(10):** In cases of restrictions on putting into service or of requirements for authorisation of use, information available on the packaging shall allow the identification of the Member States or the geographical area within a Member State where restrictions on putting into service or requirements for authorisation of use exist. Such information shall be completed in the instructions accompanying the radio equipment. The Commission may adopt implementing acts specifying how to present that information. Those implementing acts shall be adopted in accordance with the advisory procedure referred to in Article 45(2).

European Union (EU) Waste of Electrical and Electronic Equipment (WEEE) directive



According to the European Union's WEEE directive, this symbol means that products sold into EU countries must dispose electrical device and/ or its battery separately from household waste. Disposing of the device separately will help conserve resources and energy and contribute to human health and environment protection.

Customers or end-users in EU countries should contact their local equipment supplier representative or service centre for information about the waste collection system in their country.

Appendix E Warranty and Support



Warranty certificate

Thank you for purchasing a product from Bluebird Inc.

- In case of accessories such as batteries, only those that match the sales list managed by the Customer Service Center will be eligible for customer service.
- A repair or an exchange of batteries that does not match the sales list of the Customer Service Center due to the carelessness of the customer will be fully charged.

Name of Product

Name of Model SP60

Date of Purchase

Manufacture Number

Place of Purchase

Term of Guarantee 1 year from purchase

Warranty information

- Bluebird Inc. (hereinafter referred to as Bluebird) provides the warranty service for its products in compliance with the Bluebird's warranty program.
- Upon receiving a notification on a defect of its product within the range of warranty during the warranty period, Bluebird will repair or replace the defective product according to its warranty policy.
- If the defective product within the range of warranty is not repairable or replaceable, Bluebird shall refund the purchasing price within a designated period from the date of receiving a notice of defect.
- Bluebird assumes no responsibility for repairing, replacement or refund until it receives the defective product from the customer. The replacement shall be equivalent to a new product in the aspect of performance.
- Bluebird products may contain the recycled products, components or materials equivalent to new products in the aspect of performance.
- This warranty is applied to software products only when the programming commands are not executed. Bluebird does not guarantee interruption-free or error-free performance.

Manufacturer

Bluebird Inc.

Head Office: Samsung Saengmyung-irwonyeok Building C-3F, 115, Irwon-ro, Gangam-gu, Seoul, Republic of Korea 06355

Factory: (SSang-young IT Twin tower-B 6~8F), 531, Dunchon-daero, Jungwon-gu, Seongnam-si, Gyeonggi-do, Korea, 13216

- Trade name: Bluebird Inc.
- Trade mark:



BLUEBIRD

Appendix E Warranty and Support



Customer support

Before asking for after-sales service, please back up the data on the device. We do not back up data from the products sent to the Customer Service Center. Therefore, we assume no responsibility for loss/deletion of data

Customer Service Center

#1103, Gplus Kolon Digital Tower 11F,
Digital-ro 26-gil 123, Guro-gu, Seoul, Republic of Korea(08390)

- Fax: +82-2-6499-2242
- Email: rma@bluebirdcorp.com
- Hours: 9:30 a.m. - 6:30 p.m. (GMT Time: +9 Hours)

 The center is closed on Saturdays, Sundays, and Korean national holidays

Registering for After-Sales Service

- We receive the products for our after-sales service through mail, delivery services and hand delivery only in principle.
- If you bought the product from a party other than Bluebird or an authorized Bluebird reseller, you need to register the product before using our after-sales service.
- Please enclose an evidence of purchase or the product receipt for our after-sales service.
- Please enclose your name, telephone number, address and details of the problem for a prompt service.
- You can ask for our after-sales service by contacting your authorized Bluebird dealer or the Customer Service Center in the head office.
- Do not intentionally damage the label on the product.
- A damaged label may result in a disadvantage to the customer.
- When you return the product to Bluebird for service, please put the product in a protective box.
- The warranty will not cover any damage which occurs during delivery. We advise you to use the box and protective cover supplied with the product.
- Make sure to deliver the product in a safe way. Bluebird assumes no responsibility for the loss of the product during delivery.

Appendix E Warranty and Support



Charged services

- In the following cases, it will be charged when requesting for after-sales service.
 - Service request due to inappropriate use of the device by the customer
 - Loss of PIN number
 - Use of programs that might affect the program (over-clock, forceful changes in the input of the system, personal developments)
- Faults caused by the customer.
 - Defect due to inappropriate or careless use of the product (dropping, submersion under water, shock, damage, unreasonable operations, etc.)
 - Defect due to a repair or unauthorized technician
 - Defect caused intentionally or by the carelessness of the customer
 - Defect due to the use of fraudulent parts or components
- Other cases
 - Defect due to nature (damage caused by fire, wind, flooding, etc.)
 - Accessories are out of warranty (accessories like battery/charger/cable/adapter, etc. have a warranty of 6 months)
- Regulations for repairs after charged services

If the same fault occurs in the part that has been repaired within a 1 month (30 days), the part will be repaired free of charge.



No refunds will be offered in the following situations:

- The product seal has been removed (if applicable).
- The product has been damaged due to careless use by the customer or due to a natural disaster (floods, rain, fire, etc.).
- Loss of product or other components (manual, connecting cables, etc).
- DOA (Dead on Arrival) policy

If your product is DOA (Dead on Arrival), or has malfunction within 30 days of purchase (DOA period), the product will either be exchanged or provided with after-sales service.



BLUEBIRD

BLUEBIRD CUSTOMER SERVICE

Operating Hours

Monday to Friday 9:30 A.M. - 6:30 P.M.
(GMT Time: +9 Hours)
The center is closed on Saturdays, Sundays, and
Korean national holidays.

Customer Service Center

#1103, Gplus Kolon Digital Tower 11F, Digital-ro
26-gil 123, Guro-gu, Seoul, Republic of
Korea(08390)

Bluebird constantly strives to bring
utmost satisfaction to all our customers.