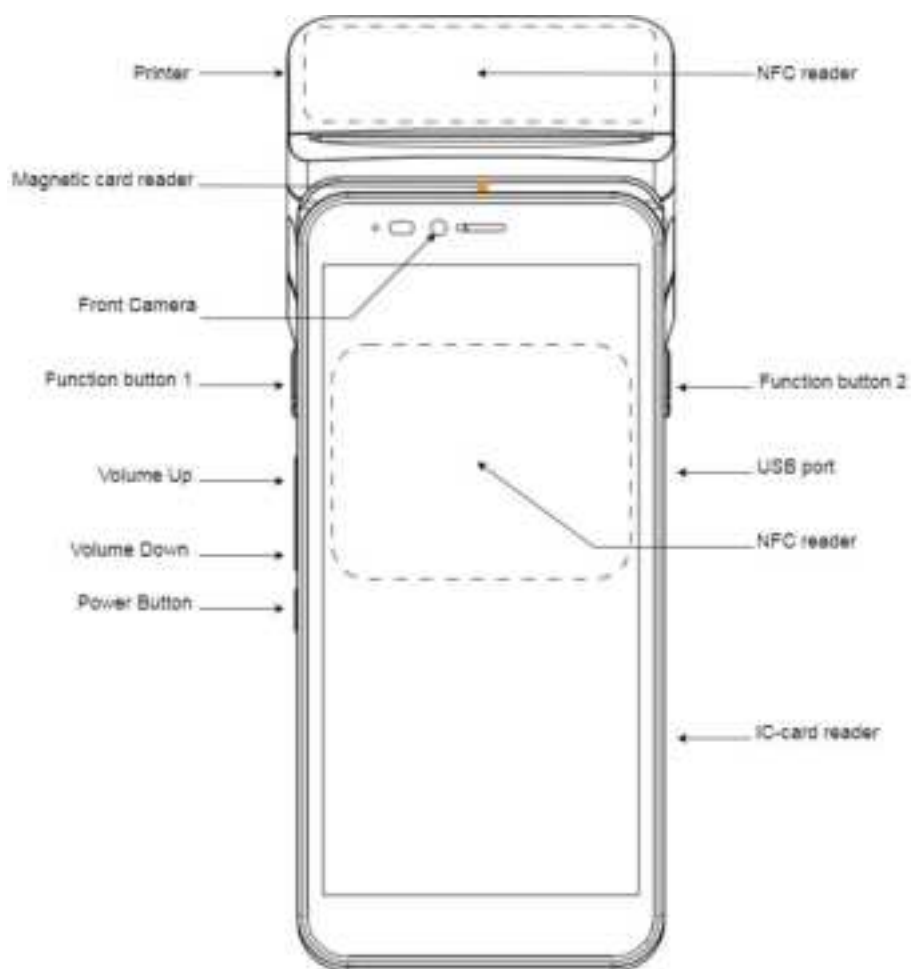


## S1 Plus User Manual V1.0

### 1. Function description



Power Button	Power off mode: Long press several seconds to turn on the terminal. Power on mode: Long press several seconds to turn off the terminal.
Volume Up & Down	For volume adjustment.
Function button 1 & 2	Configurable for specific function.
NFC reader	Perform transaction via NFC.
Magnetic card reader	Perform transaction via magnetic stripe.
IC-card reader	Perform transaction via smart card.
USB port	For battery recharging. Support OTG mode.

## 2. Turn On / Off Procedure

- If the terminal is equipped with charging battery during first time use, please connect the power adaptor and charge the battery for 3 hours.
- On – Power is on whenever plugged. If the terminal is unplugged, press the Power Button for several seconds to turn on the terminal. When the terminal displays the application idle screen, it is ready for operation.
- Off – Disconnect the power adaptor. Keep on pressing the Power Button for several seconds to turn off the terminal.

## 3. Rechargeable Battery Safety Guideline

3.1 Prohibition: Improper handling of the Li-Polymer or Li-ion battery is hazardous, the following forbidden activities must be avoided:

- . DO NOT use NON-SPECTRA provided battery in SPECTRA POS Terminal
- . DO NOT use a charger that is not specifically designed to charge Battery
- . DO NOT operate the terminal, charge up or store the battery under high temperature (under direct sunlight or inside a roasting vehicle) or close to heat source (fire, heater)
- . DO NOT store the battery in the external charger. After charging up, the battery should be removed, even though power is disconnected
- . DO NOT use damaged battery, e.g. Swelled case broken, strange odor and chemical leakage
- . DO NOT knock, crash or press the battery
- . DO NOT submerge the battery into water
- . DO NOT heat the battery or dispose in fire
- . DO NOT solder the battery
- . DO NOT disassemble the battery
- . DO NOT short or puncture the battery

3.2 Battery Operation & Charging Guideline

- . The best temperature for battery operation is 0°C ~ 45°C. DO NOT place the terminal in hot space or poor ventilated space. Ensure good ventilation for cooling
- . DO NOT leave battery un-attended when charging. You should closely monitor the charging process & react to potential problem should they occur
- . Do always check that batteries are physically and electrically undamaged before charge or discharge

- . Battery charging must be kept away from inflammable material and on a non conductive and nonflammable stable surface by:
  - > Terminal built-in charger: install battery to the terminal, then apply power.
  - > SPECTRA supplied external charger
- . When new terminal is received, please charge the battery fully up
- . If the battery gauge indicates battery low, charge up the battery at once
- . Battery always self-discharges. Long period of discharging will deteriorate the capacity and life of the battery. Please re-charge the battery weekly for normal operation

### 3.3 Terminal and Battery Storage Guideline

- . If the battery will not be used for a long period, please charge it to only 50% of the battery capacity (battery indicator displays half full, 2 units); remove it from the terminal and store in a cool place. This can minimize the life deterioration caused by self-discharge
- . DO NOT store bare battery together with metal, avoid humid and hot storage
- . During storage period, please recharge the battery once every 3 months

### 3.4 Accident Handling

- . During charging, if the battery or the charger exhibits any abnormality such as overheat, fuming, swelling & chemical leakage, disconnect power immediately, remove the battery from the charger, put it in a safe place and advise the supplier
- . Li-Polymer or Li-ion Battery does not contain liquid electrolyte. Just in case human body touches the electrolyte, rinse with water and seek medical advice immediately
- . Batteries having electrolyte leakage or chemical odor must be distant from fire source to prevent explosion
- . If accidentally short the battery, put it in a non-conductive container and keep it away from flammable objects

### 3.5 Battery Disposal

Protect your lovely Planet, please dispose the old batteries according to Government regulations

## 4. Safety and Maintenance

### 4.1 Basic Safety Practice

- . While using terminal and its accessories, please follow the safety instruction to avoid fire, electric shock and personal injury.
- . Read this instruction in detail
- . Disconnect the power and accessories before cleaning, use dry flannelette and soft brush for cleaning
- . Do not put the terminal near water
- . Do not spray any liquid onto the terminal
- . For desktop purpose, put the terminal on stable platform to avoid damage by drop
- . Keep the terminal away from high temperature and poor ventilation area
- . Ensure electricity supply is safe and stable
- . To avoid electric shock, do not disassemble the terminal by yourself. Send it to agency for repairing if necessary
- . Do not use terminal and its accessories during explosive gas leakage
- . For the following cases, disconnect power, other accessories and send for repairing,
  - ~ Damage on power cable or plug
  - ~ Liquid get into terminal
  - ~ Terminal gets wet in raining
  - ~ Still abnormal function after following all the instruction mentioned
  - ~ Terminal broken
  - ~ Terminal obvious abnormal

### 4.2 Safety Warning

- . Using the provided terminal power adaptor to power the terminal
- . During using wireless communication, keep human body at least 1.5 cm apart from the terminal. Keep the terminal away from other antenna or wireless device.
- . Do not touch the thermal printer head and paper cutter

### 4.3 Location for Installation

- . Should be safe and convenient for operators and users
- . Should be placed on stable working platform during desktop operation for ease of power and accessories connection
- . Good ventilation and should have 22cm space around the terminal
- . DO NOT expose the terminal in following environment
  - ~ Near electrical appliance with high frequency EM wave such as air conditioner, electric fan, motor, neon sign etc.
  - ~ Liquid container such as water trough, sink, pond etc.
  - ~ High temperature or humidity place
  - ~ High containing of VOC, salty and dusty area

- ~ Sunlight or high thermal radiation area
- ~ Near demagnetizing system and magnetic security system

## 4.4 Maintenance

Terminal has been designed to provide stable service for users with less maintenance.

In order to ensure best performance, we suggested the followings:

- . Avoid exposing in sunlight, high temperature, high humidity and dusty area
- . Keep in dry, clean and tidy environment
- . Do not keep in extreme hot and cold place
- . Do not disassemble the AC/DC power adaptor
- . Do not impact and thrash the terminal heavily
- . Do not disassemble the terminal (except opening the Battery Cover). Disassembling will erase all data and lead to abnormal running

### 4.4.1 Cleaning of terminal

- . Use flannelette to remove dust on terminal
- . Use mild alcohol to remove stubborn stains
- . If possible, use low pressure blower to blow out dust on keypad
- . Use flannelette or lens cleaning paper to clean the display

### 4.4.2 Printer Cleaning

- . Disconnect power cable from the terminal
- . Open printer cover, take out paper and roller
- . Remove dust and paper scrap inside paper tray . Use low pressure blower to clean the paper tray if possible.
- . Do not touch the thermal printer head and paper cutter during cleaning
- . Put back paper and roller into paper tray
- . Close the printer cover

### 4.4.3 Send for repairing

- . If it is necessary to send back terminal for repairing, please contact agency, pack the terminal properly (use original packing material if possible) to avoid damage during transportation

## 4.5 Trouble Shooting

Terminal has been designed to provide stable service for users. However, there would be some minor problems during in use. Before sending back for repairing, users can try the following simple procedures to fix the problems themselves.

## Terminal not function

- If it is powered by power adaptor, check whether the connection of power cord or power adaptor is connected properly
- If it is powered by power adaptor, try to check whether the AC source is error free by plugging with other electrical appliance
- If it is powered by power adaptor, try to replace the adaptor with another one
- If it is powered by power adaptor, try to replace the electric power socket with another one
- Try to adjust the LCD contrast
- Contact agency if problem cannot be solved

## Unsuccessful transaction

1. Try to use other magnetic card or IC card for transaction
2. Check whether the way of swiping card or inserting card is correct
3. Check whether all wire ends are connected properly
4. Contact agency if problem cannot be solved

## Malfunction on magnetic card reader

1. Check whether the way of card swiping is correct, speed is normal
2. Try to swipe in opposite direction
3. Try to use another card
4. Contact agency if problem cannot be solved

## Malfunction on IC card reader

1. Check whether the way of card insertion is correct, please refer to section 2.2
2. Check whether the card is completely inserted
3. Try to use another card
4. Contact agency if problem cannot be solved

## 5. Other Information

### Dimension and Weight

Size: 188(L) x 72(W) x 69(D) mm

Weight: 360g

### Power Input

DC 5V, 2A

### Operating environment

Temperature: 0°C - 45°C

Humidity: 5% - 95% (non-condense)

\*\*\* This manual is subject to change without prior notice \*\*\*

## FCC Statement

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

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 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.

## RF Exposure Information (SAR) :

This device meets the government's requirements for exposure to radio waves. This device is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by the Federal Communications Commission of the U.S. Government.

The exposure standard for wireless devices employs a unit of measurement known as the Specific Absorption Rate, or SAR. The SAR limit set by the FCC is 1.6 W/kg. \*Tests for SAR are conducted using standard operating positions accepted by the FCC with the device transmitting at its highest certified power level in all tested frequency bands.

Although the SAR is determined at the highest certified power level, the actual SAR level of the device while operating can be well below the maximum value. This is because the device is designed to operate at multiple power levels so as to use only the power required to reach the network. In general, the closer you are to a wireless base station antenna, the lower the power output.

The highest SAR value for the device as reported to the FCC when worn on the body, as described in this user guide, is 0.69 W/kg (Body-worn measurements differ among devices, depending upon available enhancements and FCC requirements.) While there may be differences between the SAR levels of various devices and at various positions, they all meet the government requirement. The FCC has granted an Equipment Authorization for this device with all reported SAR levels evaluated as in compliance with the FCC RF exposure guidelines. SAR information on this device is on file with the FCC and can be found under the Display Grant section of <http://www.fcc.gov/oet/fccid> after searching on FCC ID: VWZS1.

For handheld operating condition, SAR meets with limit 4.0W/kg.

For body worn operation, this device has been tested and meets the FCC RF exposure guidelines for use with an accessory that contains no metal and the positions the device minimum of 10 mm from the body .



S1 Plus



## SPECTRA TECHNOLOGIES HOLDINGS CO.LTD.

Unit 1301-09,19-20, Tower II, Grand Century Place,  
193 Prince Edward Road West, Kowloon, Hong Kong  
Tel : (852) 2319 2918  
Fax: (852) 2319 2631

[www.spectratech.com](http://www.spectratech.com)

