CASTLES TECHNOLOGY

SATURN1000 POS Terminal

Book 2

User Manual

S1F4 PRO

Confidential

Version 1.0

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WARNING

Information in this document is subject to change without prior notice.

Revision History

Version	*Date*	*Descriptions*	*Author*
1.0	2024.08.26	Initial creation.	Yao

Contents

1. Introduction

This document provides a guideline for operating and configuring Castles SATURN1000 terminal.

The scope of this document includes setting up the terminal, basic operation, application lifecycle, and some advanced features.

Regulatory instruction of usage

- Before using the terminal, please check the does it has been disassembled, modified, or happened the abnormal situation. If yes, please do not continue to use.
- Please stay away from strong electromagnetic waves.
  (Example) Microwave ovens, magnets, shoplifting prevention devices, high-voltage wires, automatic doors, communication antennas, etc.
- Condensation can occur when moving from a cold place to a warm place. If condensation occurs, do not use the unit until the connected water droplets evaporate.
- Static electricity may occur in some places (such as where you are using a carpet).
- Please do not leave it in the sun for a long time.
- Please operate the unit carefully as it is a precision instrument. Do not apply impact, drop or heavy objects on top of the unit.
- Do not attach dust, oil, etc. to a part of the power terminal. Also, please do not scratch.

2. Hardware Setup

2.1. Parts of The Terminal

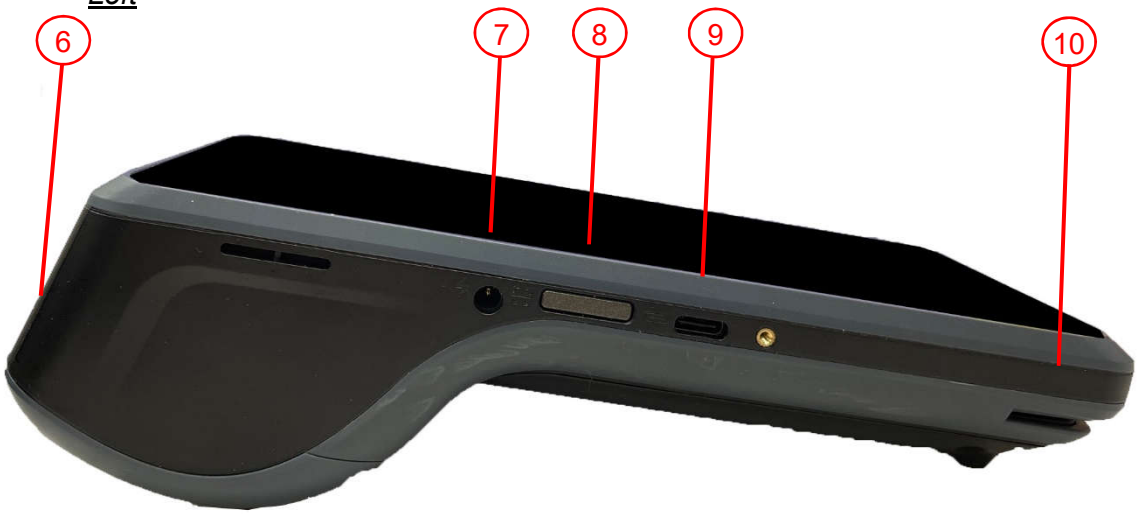
Front

1. **Front Camera**
2. **LCD Display**
3. **Smart Card Reader**

Rear

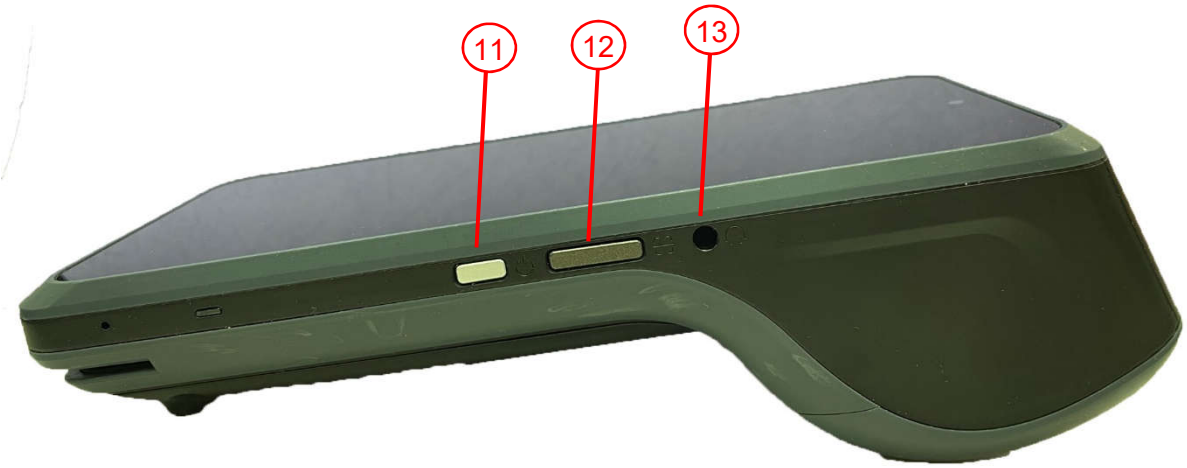
4. **Paper Roll Cover Handle**
5. **Product Label**

Left



6. **Contactless Card Landing Zone**
7. **12V Power Connector slot**
8. **Barcode scanner button**
9. **Type C USB slot**
10. **Magnetic Stripe Reader**

Right

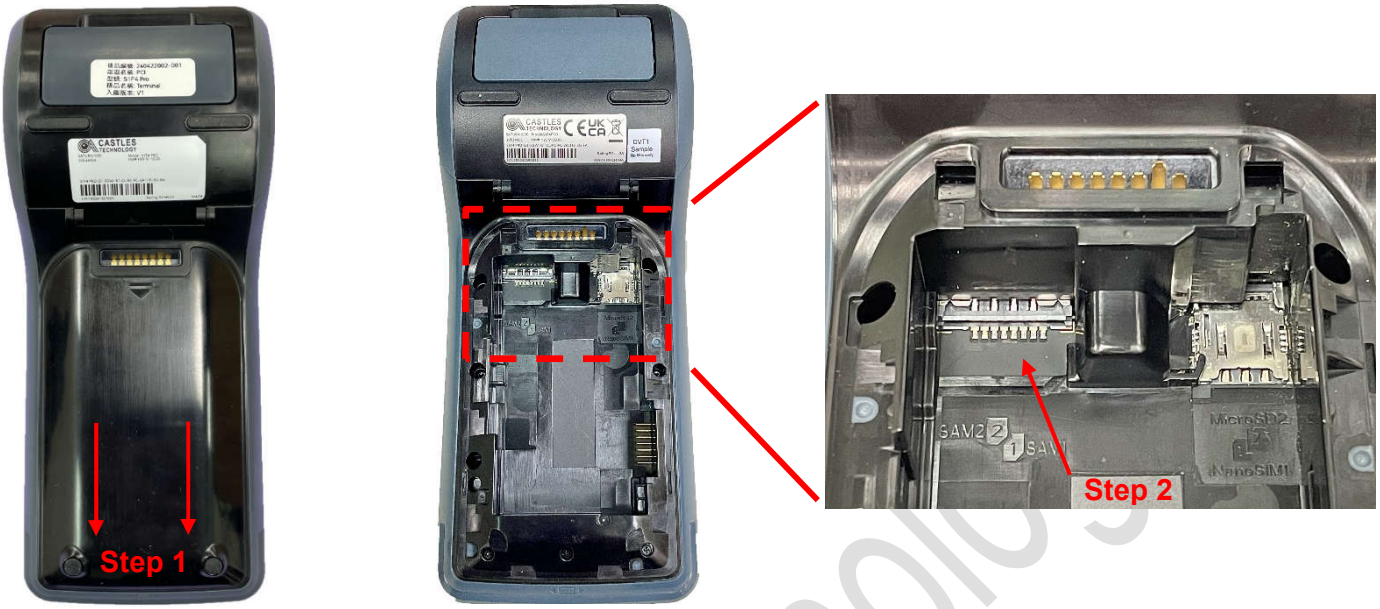


11. Power button

12. Barcode scanner button

13. Headphone jack

2.2. Insert SAM Card

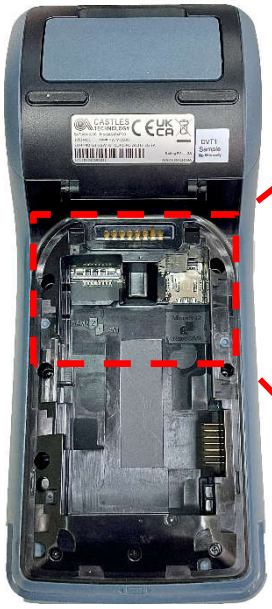


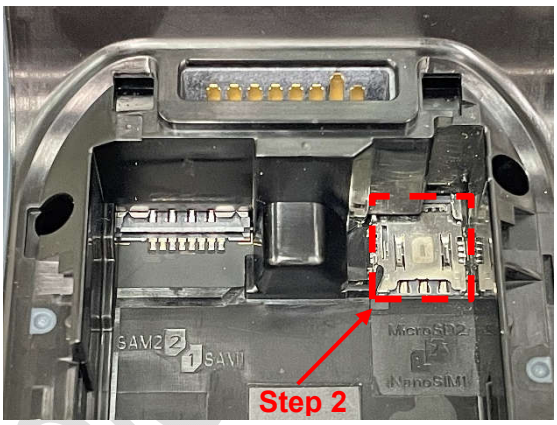
Step 1. Remove the back cover.

Step 2. Insert SAM card into the desired slot. SAM 1 slot is on the upper layer and SAM 2 slot is on the bottom layer. Gold contact of the SAM card is facing down and the cut corner is on right bottom side.

Step 3. Reverse the operation of step 1 to install the back cover.

2.3. Insert Nano SIM Card



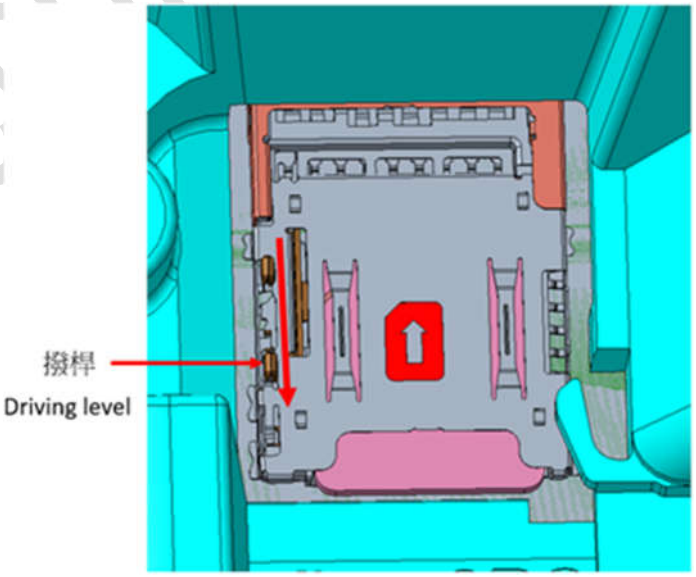


Step 1. Remove the back cover.

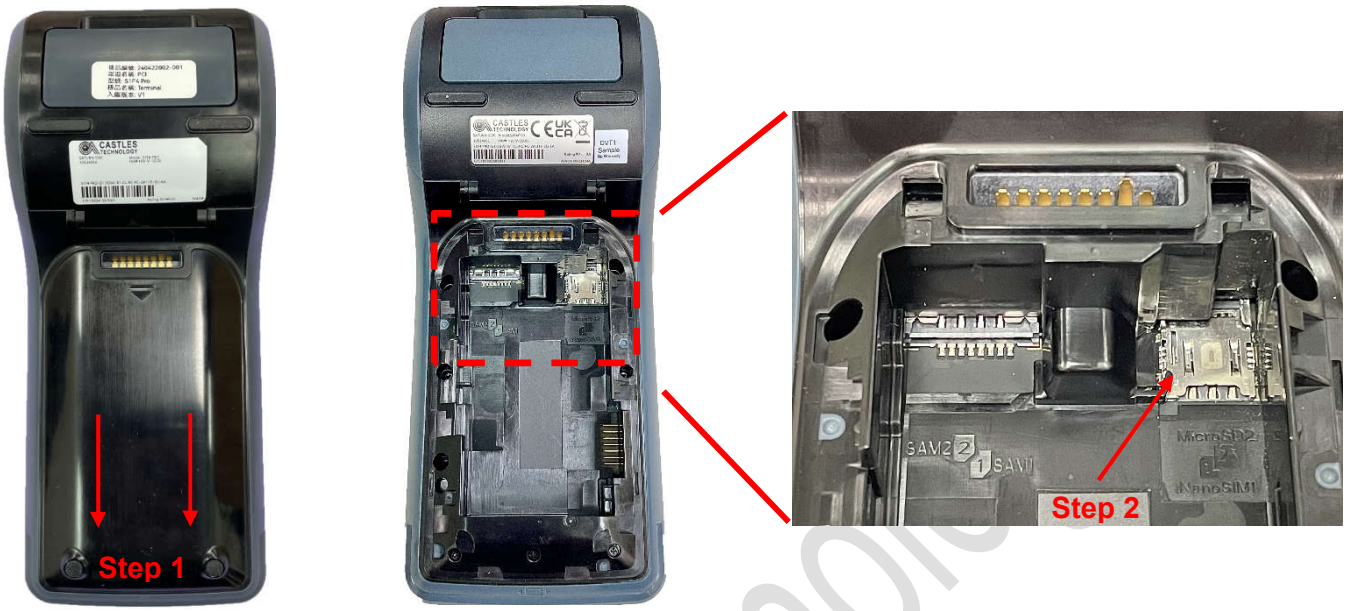
Step 2. Insert Nano SIM card into the slot. Nano SIM card slot is on the bottom layer. Gold contact of the Nano SIM card is facing down and the cut corner is on left upper side.

Step 3. Reverse the operation of step 1 to install the back cover.

Note: When removing the Nano SIM card, flicking the driving lever down to retrieve it.



2.4. Insert Micro SD Card



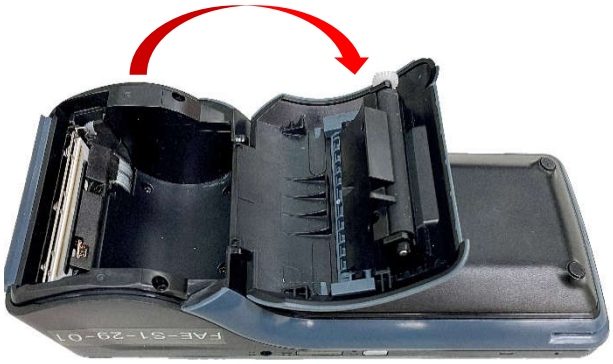
Step 1. Remove the back cover.

Step 2. Insert Micro SD card into the slot. Micro SD card slot is on the upper layer. Gold contact of the Micro SD card is facing down and the fin shape is on the right side.

Step 3. Reverse the operation of step 1 to install the back cover.

2.5. Replace Paper Roll

Step 1. Turn the terminal to the back side and pull the paper roll cover handle.



Step 2. Open the paper roll cover clock wisely.

Step 3. Insert the paper roll into paper roll slot and close the paper roll cover counter clock wisely.

Step 4. When closing the paper roll cover, make sure some portion of paper is out of the printer.

3. Appendix

3.1. FCC

Federal Communication Commission Interference Statement

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.

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 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.

FCC Caution:

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

- This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Radiation Exposure Statement:

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 United States.

During SAR testing, this device was set to transmit at its highest certified power level in all tested frequency bands, and placed in positions that simulate RF exposure in usage against the head with no separation, and near the body with the separation of 10 mm. 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.

The exposure standard for wireless devices employing a unit of measurement is known as the Specific Absorption Rate, or SAR.

The SAR limit set by the FCC is 1.6W/kg. The FCC has granted an Equipment Authorization for this model phone with all reported SAR levels evaluated as in compliance with the FCC RF exposure guidelines.
Note: The country code selection is for non-US model only and is not available to all US model. Per FCC regulation, all WIFI product marketed in US must fixed to US operation channels only.

3.2. IC

Industry Canada statement

This device complies with ISED's licence-exempt RSSs. 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.
Le présent appareil est conforme aux CNR d' ISED applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) le dispositif ne doit pas produire de brouillage préjudiciable, et (2) ce dispositif doit accepter tout brouillage reçu, y compris un brouillage susceptible de provoquer un fonctionnement indésirable.

Radiation Exposure Statement:

This EUT is compliance with SAR for general population/uncontrolled exposure limits in IC RSS-102 and had been tested in accordance with the measurement methods. This equipment should be installed and operated with minimum distance 10mm between the radiator and your body. This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter.

Déclaration d'exposition aux radiations:

Cette EUT est conforme au das pour la population générale/limites d'exposition non contrôlée dans IC RSS-102 et a été testée conformément aux méthodes de mesure. Cet appareil doit être installé et utilisé avec une distance minimale de 10mm entre l'émetteur et votre corps. Cet appareil et sa ou ses antennes ne doivent pas être co-localisés ou fonctionner en conjonction avec tout autre antenne ou transmetteur.

IC UNII-1 Indoor statement

i: The device for operation in the band 5150–5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems.
ii. The maximum antenna gain permitted for devices in the bands 5250-5350 MHz and 5470-5725 MHz shall be such that the equipment still complies with the e.i.r.p. limit.
iii. The maximum antenna gain permitted for devices in the band 5725-5850 MHz shall be such that the equipment still complies with the e.i.r.p. limits as appropriate.

iv. Be advised that high-power radars are allocated as primary users (i.e., priority users) of the bands 5250-5350 MHz and 5650-5850 MHz and that these radars could cause interference and/or damage to LE-LAN devices

i：L’appareil pour fonctionner dans la bande 5150-5250 MHz est uniquement pour une utilisation à l’intérieur pour réduire le potentiel d’interférence nuisible aux systèmes satellites mobiles co-canaux.
ii: Le gain en puissance d’antenne maximal autorisé pour les périphériques dans les bandes 5250 à 5350 MHz et 5470 à 5725 MHz doit respecter la limite EIRP
iii: Le gain en puissance d’antenne maximal autorisé pour les périphériques dans les bandes 5725 à 5850 MHz doit respecter les limites EIRP spécifiées pour les opérations point à point et non point à point le cas échéant.
iv. Sachez que les radars de haute puissance sont désignés comme utilisateurs principaux (c.-à-d. utilisateurs prioritaires) des bandes 5250 à 5350 MHz et 5650 à 5850 MHz, et que ces radars peuvent causer des interférences ou endommager les périphériques LE-LAN.

3.3. UL / IEC 62368-1

● Warning:
Power cord shall be connected to a socket-outlet with earthing connection.

● Warning:
Risk of explosion if battery is replaced by an incorrect type. Dispose of expended battery in accordance with local disposal regulations.

● Warning:
This product is intended to be supplied by a Listed Power Adapter "L.P.S." (Or "Limited Power Source") and is rated at 5V~9V Vdc, 2~1 A min., Tma = 50 degrees C.

● Warning:
The COM port is not used for connection to the telecommunication network.

● Attention:
le cordon d'alimentation doit être branché sur une prise secteur avec mise à la terre.

● Attention:
Risque d'explosion si la batterie est remplacée par une de type incorrect Éliminer la pile usagée conformément à la réglementation locale en vigueur.

● Attention:
Le produit est destiné à être alimenté par un adaptateur secteur répertorié « L.P.S. » (ou "Source d'alimentation limitée") et est évalué à 5V~9V Vdc, 2~1 A min., Tma = 50 degrés C.

● Attention:
Le port COM ne sert pas à la connexion au réseau de télécommunication.

~ END ~