



CASTLES TECHNOLOGY

SATURN1000 POS Terminal

Book 2

User Manual

S1MINI2

Confidential

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Revision History

Version	Date	Descriptions	Author
1.0	2024.08.26	Initial creation.	Yao

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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.

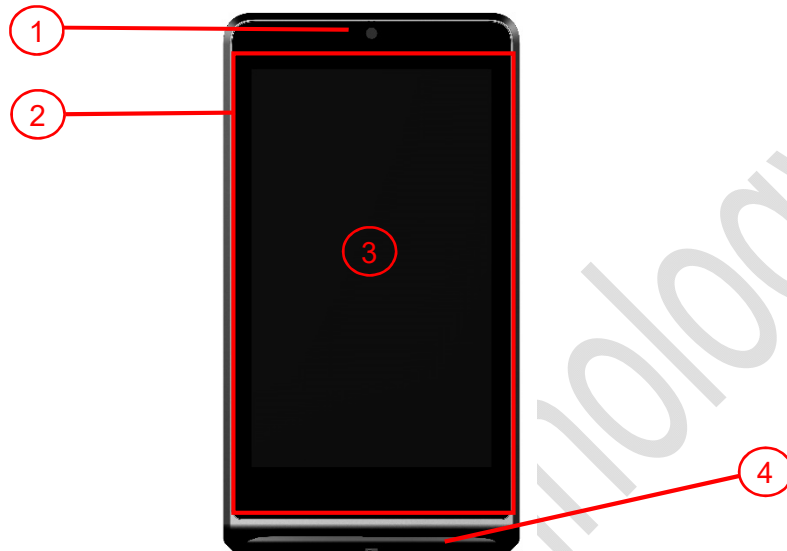
Regulatory instruction of usage

- 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. Camera
2. Contactless Card Landing Zone
3. LCD Display
4. Smart Card Reader

Rear



- 5. Speaker
- 6. Anti-Theft Lock
- 7. Charger Pins
- 8. Back Cover
- 9. Serial Number Label
- 10. SAM Card Slot
- 11. Product Label
- 12. GSM Micro SIM Card Slot

Right side



Bottom side



Upper side



- 13. Power Button
- 14. Smart Card Reader
- 15. USB Type-C

2.2. Insert Battery



Step 1: Push the back cover upward to remove it.

Step 2: Insert the battery into the compartment. Make sure the cut corners on the upper side of battery are match the compartment design. Battery with the specification information is facing outside.

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

Note: Please make sure the battery is installed before power on the terminal.

2.3. Insert SAM Card

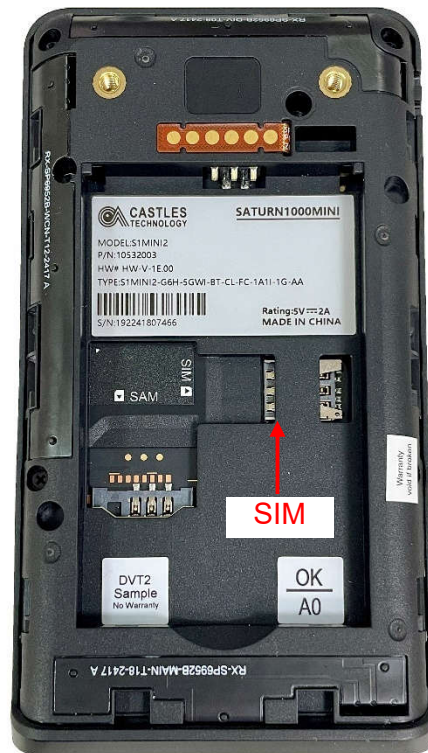


Step 1: Remove the back cover.

Step 2: Insert SAM card into the slot. Gold contact is facing down and the cut corner is on left side.

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

2.4. Insert GSM Micro SIM Card



Step 1: Remove the back cover.

Step 2: Insert GSM Micro SIM card into the slot. Gold contact is facing down and the cut corner is on right bottom side.

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

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.

FCC 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.

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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.

ISED 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 colocalisés ou fonctionner en conjonction avec tout autre antenne ou transmetteur.

L'appareil est réservé à l'intérieur seulement lorsqu'il fonctionne dans la gamme de fréquences 5150 à 5250 MHz.

Cet appareil doit être installé et utilisé avec une distance minimale de 10mm entre l'émetteur et votre corps.

- **Warning:**

The device is restricted to indoor use only when operating in the 5150 to 5250 MHz frequency range.

- **Attention:**

L' appareil est réservé à l' intérieur seulement lorsqu' il fonctionne dans la gamme de fréquences 5150 à 5250 MHz.

3.3. UL / IEC 62368-1

- Higher Over-Temperature Protection (Charging): 50 °C ±3 °C
- Lower Over-Temperature Protection (Charging): 0 °C ±3 °C

- 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 5Vdc, 2A min., Tma = 40 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 5Vdc, 2A min., Tma = 40 degrés C.
- Attention:
Le port COM ne sert pas à la connexion au réseau de télécommunication.

~ END ~