CASTLES TECHNOLOGY

S1EB Cradle

User Manual

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Confidential

Version 1.6

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CERT-SATURN1000-08-02-02-V1.6

Castles Technology Co., Ltd.

6F, No. 207-5, Sec. 3, Beixin Rd., Xindian District,

New Taipei City 23143, Taiwan R.O.C.

http://www.castech.com.tw

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Revision History

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Contents

1. Introduction 5
2. Hardware Setup 6
2.1. Parts of S1EB 6
2.2. Turn on S1EB 8
2.3. Charge with S1EB 9
2.4. S1EB Cradle app 10
2.4.1. S1EB Connection mode USB 10
2.4.2. S1EB Connection mode (Wi-Fi) 11
2.4.3. S1EB Connection to Ethernet 13
3. Appendix 15
3.1. S1EB Specifications 15
3.2. FCC Statement 16
3.3. CE Statement 17
3.4. UL 62368 Safety Warning: 17
3.5. Safety Warning for External Power Source 17
3.6. Canada IC Warning 18

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1. Introduction

This document provides a guideline for operating and configuring of S1EB.

1) **Waring: Power cord shall be connected to a socket-outlet with earthing connection.**
2) **This product is intended to be supplied by a Listed Power Adapter(Lucent Trans Electronics Co Ltd, type PW04-945A) "L.P.S." (or "Limited Power Source"), rated 9 Vdc, 4.5 A minimum, Tma = 40 degree C minimum.**
3) **CAUTION: To reduce the risk of fire, use only 26 AWG or larger (e.g., 24 AWG) UL Listed Telecommunication line cord.**

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2. Hardware Setup

2.1. Parts of S1EB

Front/Top

S1EB

1. **Magnetic Stripe Reader**
2. **Charger pin**
3. **Power Indicator**

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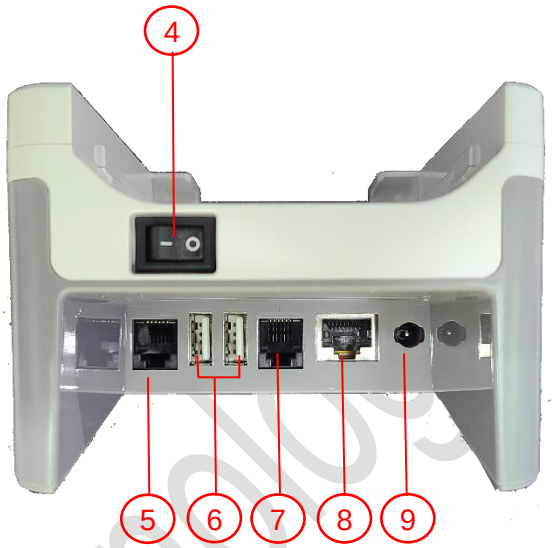
Rear /Bottom



S1EB

4. **Power Switch Button**
5. **Modem Port (reserved for engineering usage only)**
6. **USB Port1/2**
7. **COM Port**
8. **Ethernet Port**
9. **Power Connector**

Left side

Right side

S1EB

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2.2. Turn on S1EB

Step 1

Step 2

S1EB

Step 3

S1EB

Step 1: Plug in Power Supplies.

Step 2: Turn on the power

Step 3: The power indicator flashes Yellow light when starting up.
After S1EB initializes, it will continuous green light.

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2.3. Charge with S1EB

S1EB

Insert SATURN1000E into S1EB, then S1EB will start charging SATURN1000E.

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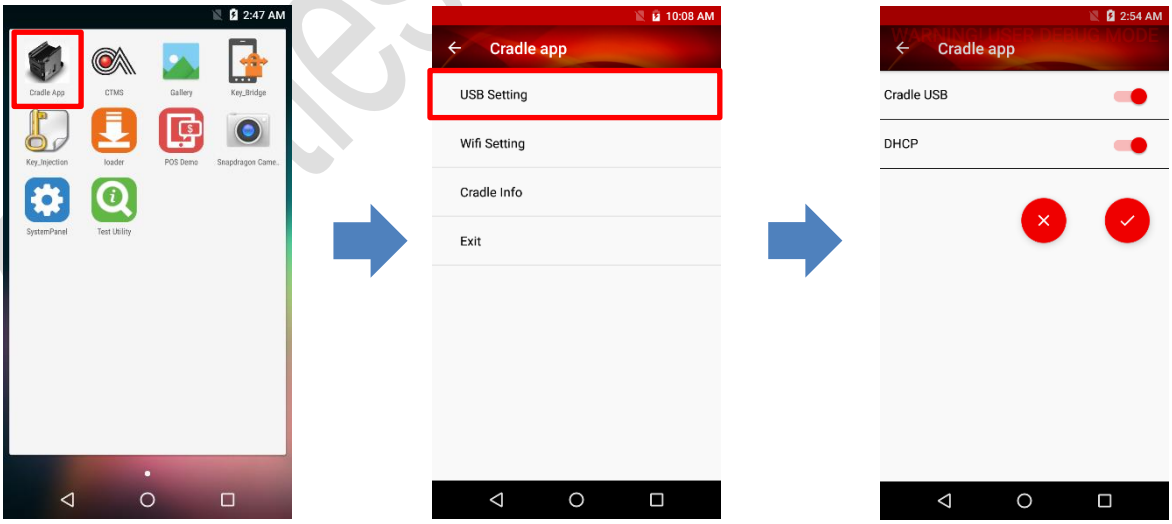
2.4. S1EB Cradle app

User can use “Cradle app” to set up connection between Terminal and Cradle. Connection from Terminal to Ethernet via Wi-fi.

2.4.1. S1EB Connection mode USB

Step 1. Open “Cradle app” and Click into “USB Setting”. Select your requirements.



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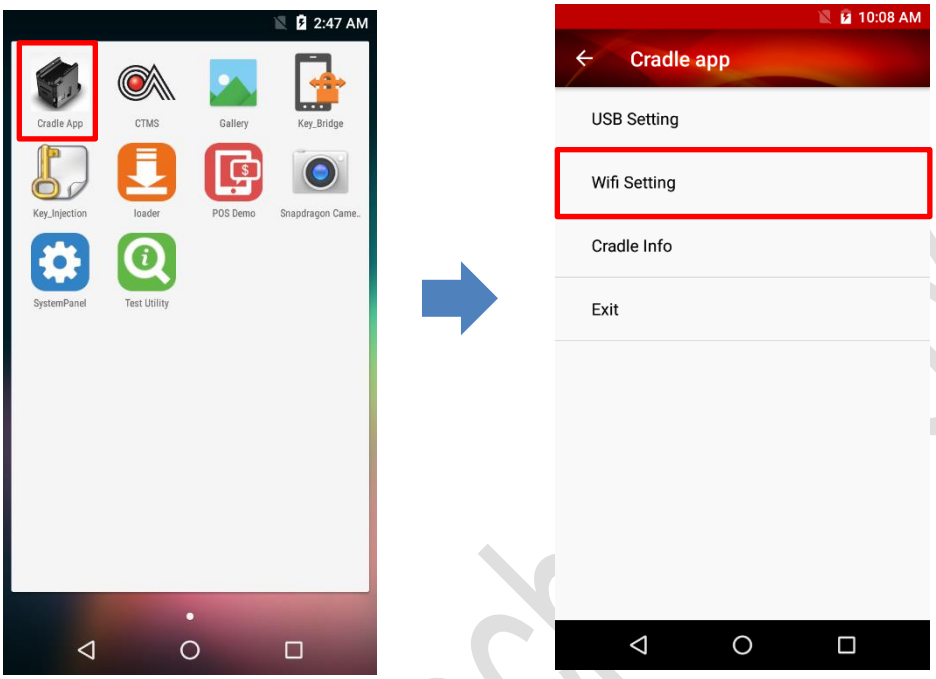
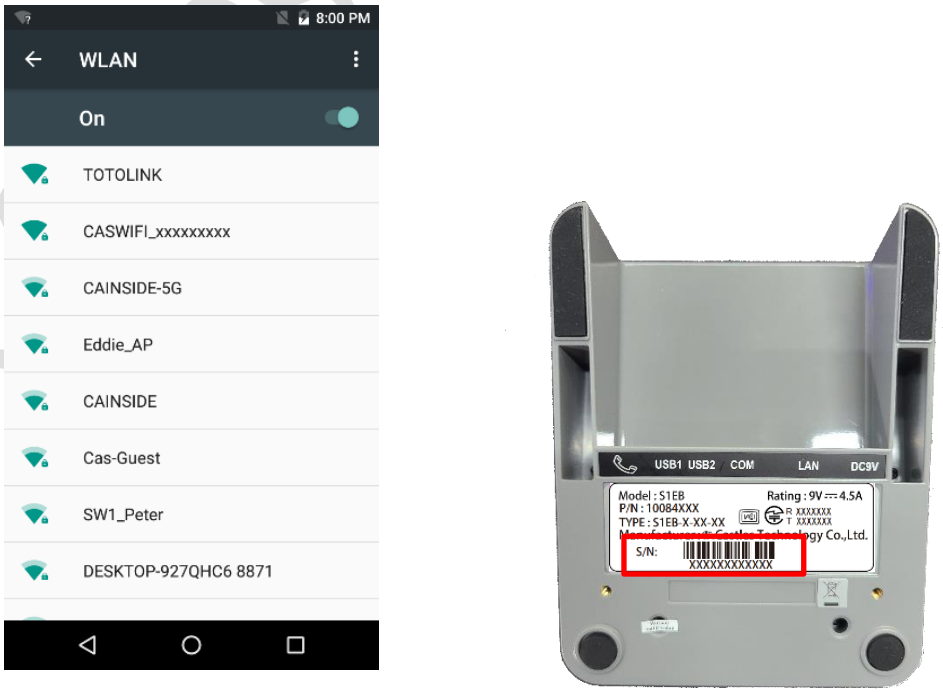
2.4.2. S1EB Connection mode (Wi-Fi)

Step 1: Select Cradle App



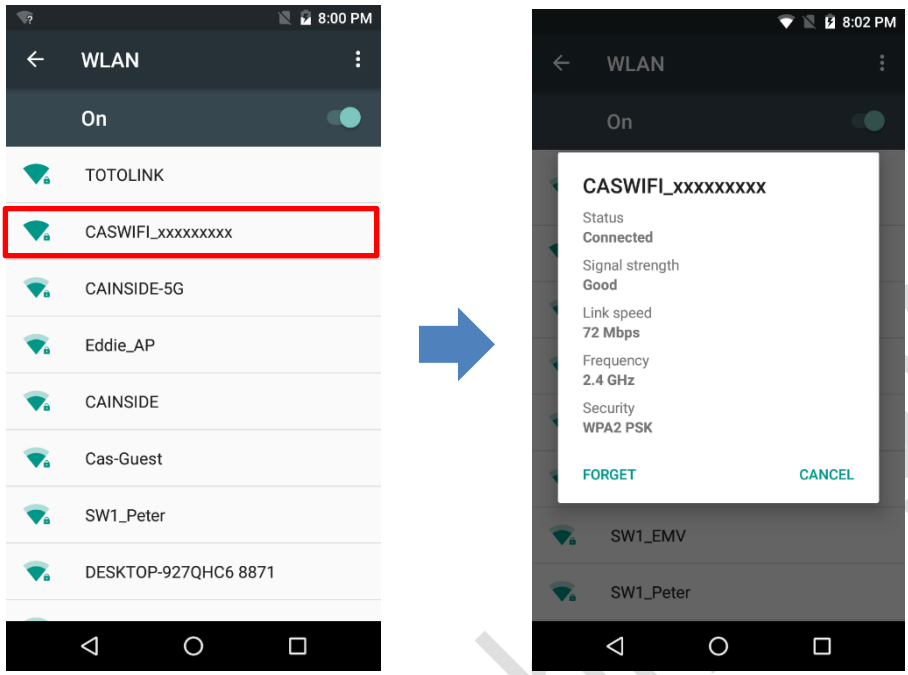
S1EB

Step 2: Click into “Wi-Fi Setting” and Check the Serial Number of S1EB



S1EB

Step 3: Find S1EB Name and enter Wi-Fi password on SATURN1000F



Note: Default Name for S1EB Wi-Fi is "CASWIFI_xxxxxxxxx(S/N)".

Default password for S1EB Wi-Fi is "9876543210".

Security: WPA2 PSK

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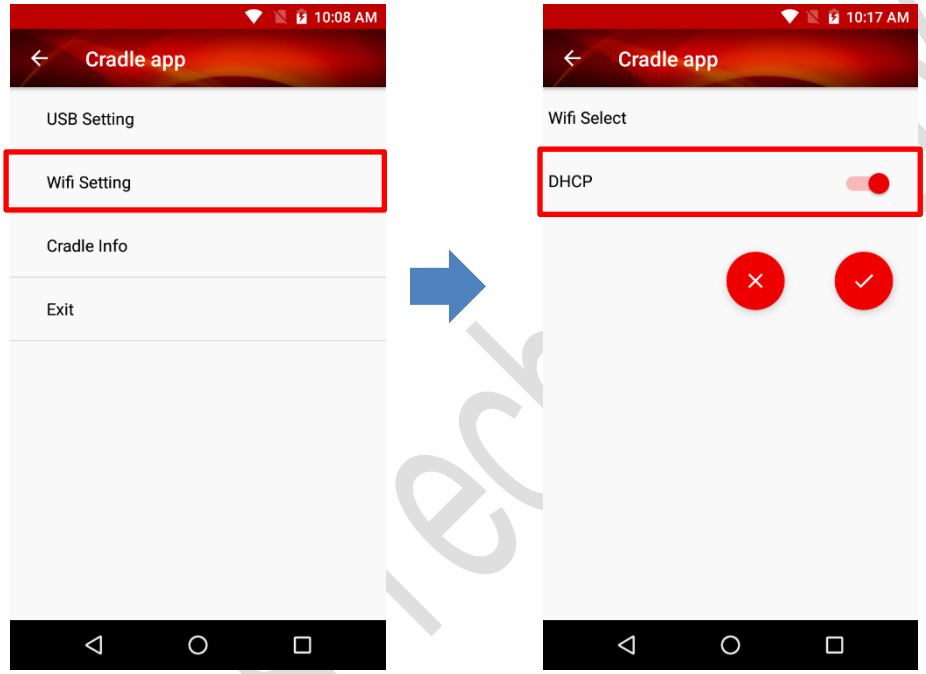
2.4.3. S1EB Connection to Ethernet

Step 1: Make Sure the Wi-Fi connection between Android terminal and Cradle, For more information, please refer to 2.4.2 S1EB Connection mode(WiFi).

Step 2: After confirming connection between Android terminal and Cradle, go back to “Cradle app” main menu and select “Wi-Fi Setting”.



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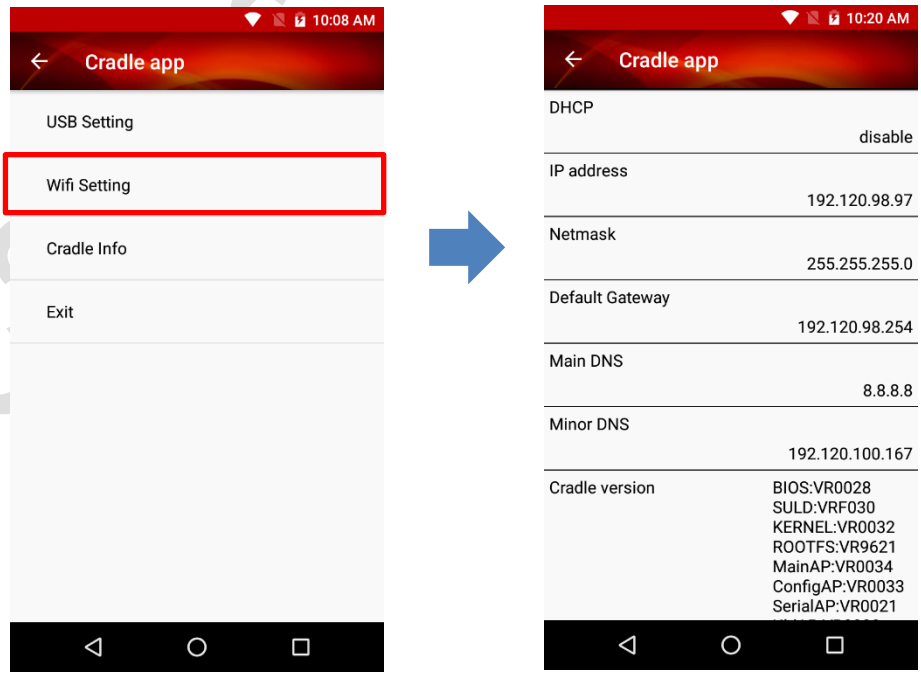
Step 3(Optional): The default setting of “DHCP” is On, if you want to set Static IP address, switch off the “DHCP”.

S1EB

After connected to Ethernet, you can get the Information by clicking “Cradle Info”



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3. Appendix

3.1. S1EB Specifications

Object	Specification
MCU	• Secure System on Chip *with 1.18 D*MIPS 400MHz • Internal Memory ROM 128KB, SRAM 256KB
Memory (Flash/RAM)	• ROM from 128MB up to 256MB NAND Flash ROM • RAM from 64MB up to 128MB DDR SDRAM
Communication	• Wi-Fi 802.11 b/g/n • Ethernet 10/100 • Modem x 1 • USB Type A x 2 • RS232 x 1
Indicator	• LED x 1
Power	• DC Input: 9V/4.5A
Environment	• Temperature: ■ Operating: 0˚C~50˚C, ■ Storage: -20˚C ~70˚C • Humidity: ■ Operating: 5%~90% non-condensing ■ Storage: 5%~90% non-condensing

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3.2. FCC 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 equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

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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3.3. CE Statement

This is a Class B product in a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

3.4. UL 62368 Safety Warning:

- Warning: Power cord shall be connected to a socket-outlet with earthing connection.
- CAUTION: RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE DISPOSE OF USED BATTERIES ACCORDING TO THE INSTRUCTIONS

3.5. Safety Warning for External Power Source

To reduce potential safety issues, only the AC adapter provided with the product, a replacement AC adapter provided by agency, or an AC adapter purchased as an accessory from agency should be used with the product.

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3.6. Canada IC Warning

ISED

Canadian Notice

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

1. *This device may not cause interference.*
2. *This device must accept any interference, including interference that may cause undesired operation of the device.*

Avis Canadien

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

1. *L'appareil ne doit pas produire de brouillage;*
2. *L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.*

Caution:

Exposure to Radio Frequency Radiation.

1. To comply with the Canadian RF exposure compliance requirements, this device and its antenna must not be co-located or operating in conjunction with any other antenna or transmitter.
2. To comply with RSS 102 RF exposure compliance requirements, a separation distance of at least 5 mm must be maintained between the antenna of this device and all persons.

Attention: exposition au rayonnement radiofréquence.

1. Pour se conformer aux exigences de conformité RF canadienne l'exposition, cet appareil et son antenne ne doivent pas être co-localisés ou fonctionnant en conjonction avec une autre antenne ou transmetteur.
2. Pour se conformer aux exigences de conformité CNR 102 RF exposition, une distance de séparation d'au moins 5 mm doit être maintenue entre l'antenne de cet appareil et toutes les personnes.

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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.
La bande 5 150-5 250 MHz est réservés uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux.

For the frequency 5600-5650 MHz, no operation is permitted
Pour la fréquence 5600-5650 MHz, aucune opération est autorisée.

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