



# CASTLES TECHNOLOGY

*UPT1000B, UPT1000B-LCNF POS Terminal*

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*Book 2*

***User Manual***

*UPT1000B*

*Version 1.9*

*Apr 2022*

***CRT-U1-04-27-V1.9-FCC-PTCRB***

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## Revision History

| <b>Version</b> | <b>Date</b> | <b>Descriptions</b>                                              | <b>Author</b> |
|----------------|-------------|------------------------------------------------------------------|---------------|
| 1.0            | 2020.02.13  | Initial creation.                                                | Jeffrey       |
| 1.1            | 2020.02.24  | Modify for certification                                         | Jeffrey       |
| 1.2            | 2020.03.18  | Add "Safety Warning for Power Source"                            | Jeffrey       |
| 1.3            | 2020.03.19  | Modify the temperature of the power source warning               | Jeffrey       |
| 1.4            | 2020.05.06  | Modify the "LED" to "Contactless LED Indicator"                  | Jeffrey       |
| 1.5            | 2021.08.03  | Add Canada IC Caution                                            | John          |
| 1.6            | 2021.09.15  | Add External antenna statement                                   | John          |
| 1.7            | 2021.09.17  | Replace External antenna statement with Detachable Antenna Usage | John          |
| 1.8            | 2022.01.18  | Add UPT1000F-LCNF title<br>Update terminal label                 | John          |

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# 1. Introduction

This document provides a guideline on operating and configuring Castles UPT1000B.

The scope of this document includes setting up the UPT1000B, basic operation, application life cycle, and some advance features.

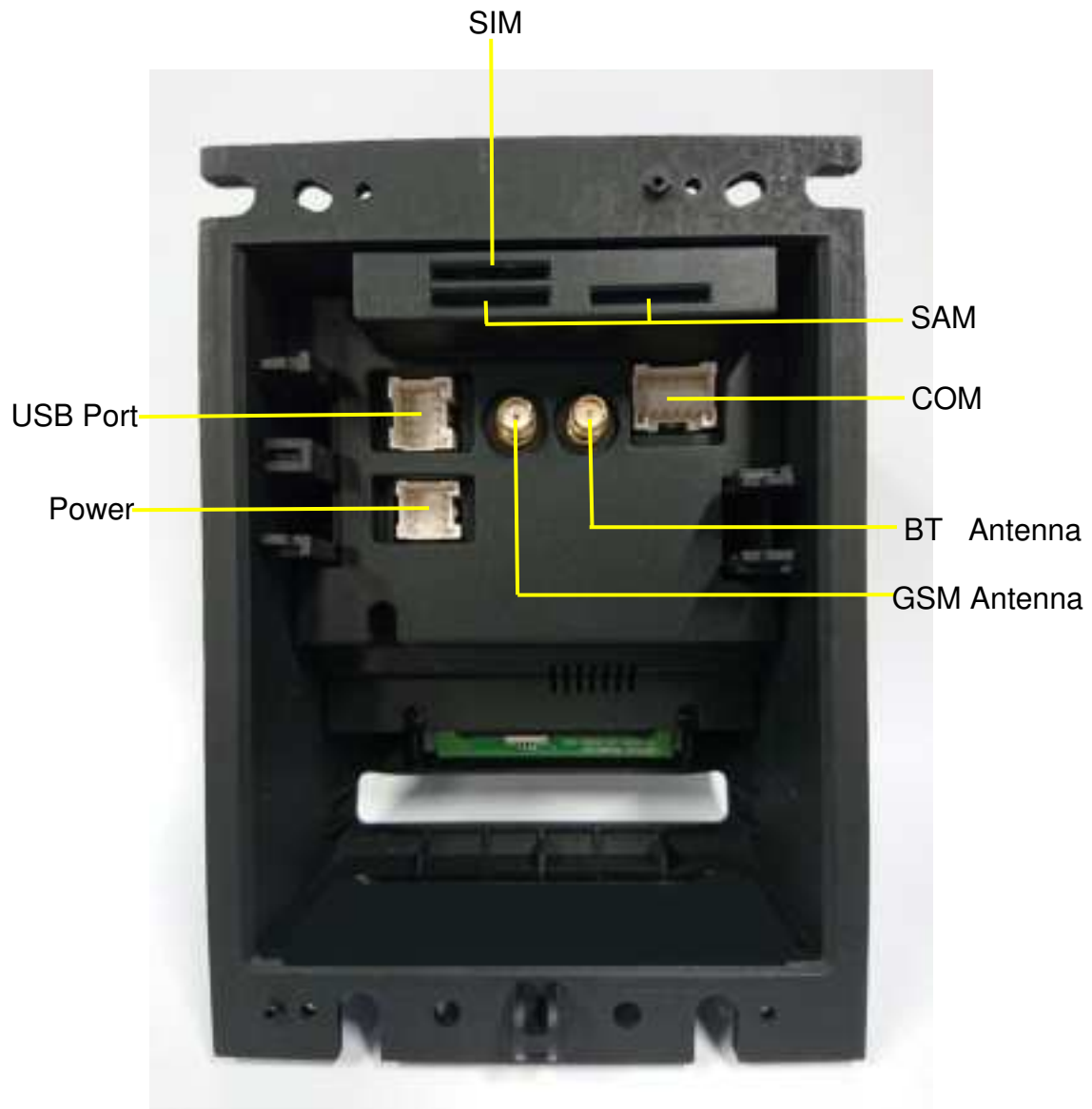
## 2. Hardware Setup

### 2.1. Parts of the UPT1000B

Front View



Rear View



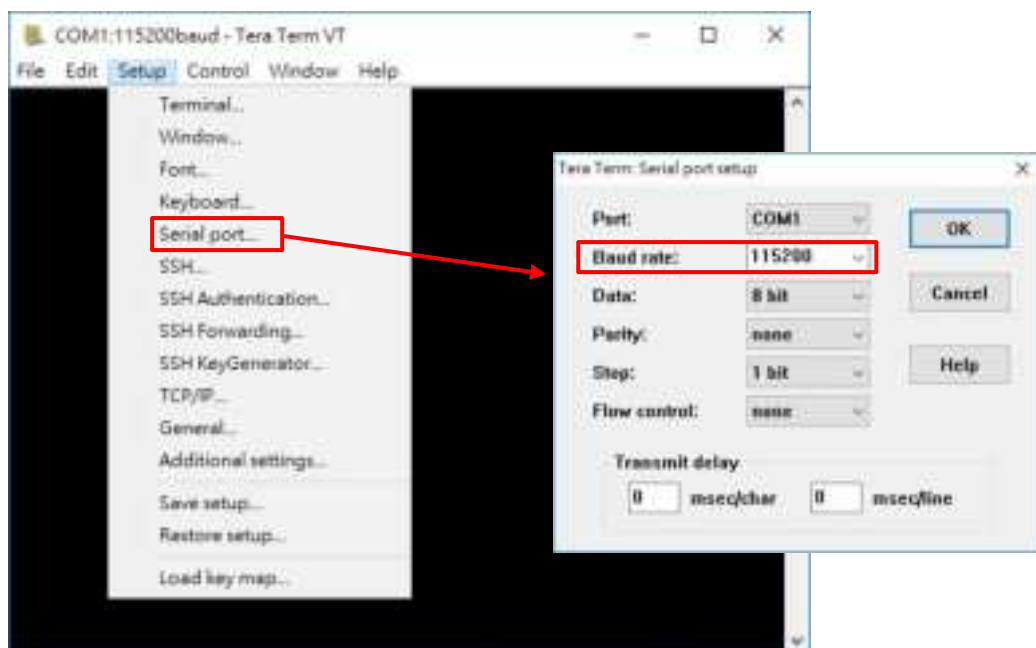
### 3. Program manager

The UPT1000B is the terminal without keypad. Please follow the steps below to connect PC and UPT1000B for controlling.

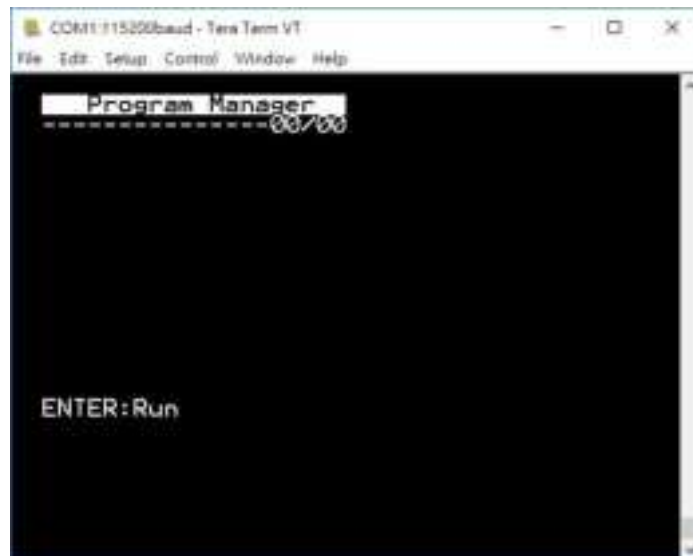
- Power on UPT1000B and connect COM Port to PC.



- Run the application program such as “TeraTerm” or “PuTTY” on PC.
- Select “Serial port” to set the com port. The baud rate should be set to “115200”.

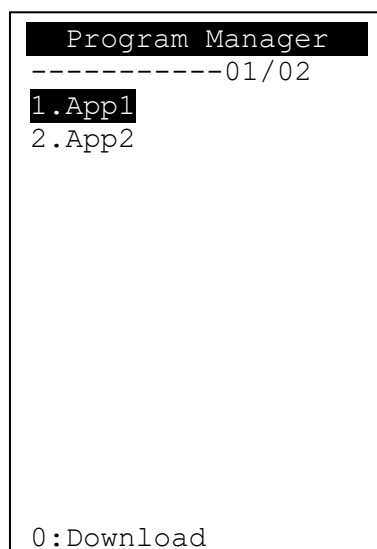


- Press any key on keyboard to refresh screen if doesn't show “Program Manager” on “Tera Term” or PuTTY“.



Once the power is on in normal status, UPT1000B will enter Program Manager if no default application selected. All user applications are listed in Program Manager. User can select an application and run the application, view the application info, delete the application, or set application to the default one to run once the power is on. Users may enter System Menu to configure UPT1000B settings.

#### Program Manager

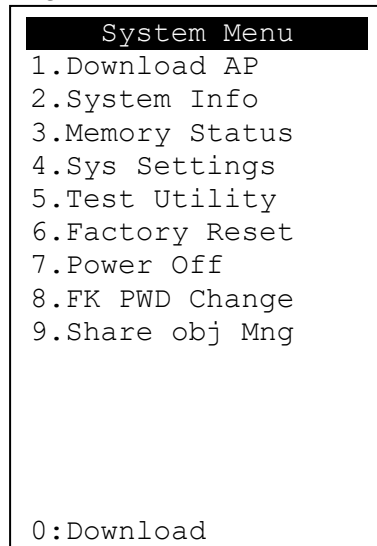


- Press [0] button to enter System Menu.
- Press [1] button to toggle default application selection.
- Press [2] button to delete application.
- Press [3] button to view application info.

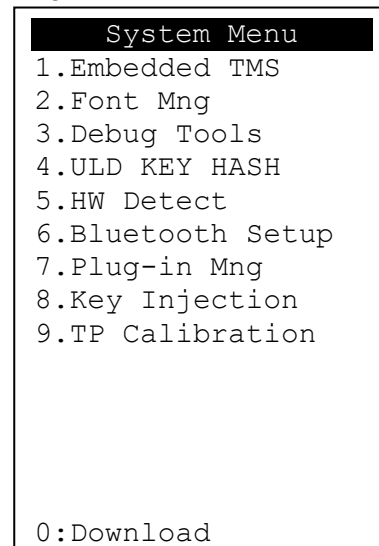
- Press [OK] button to run application.
- Press [ ↑ ] or [ ↓ ] as the up and down button to select application.

### System Menu

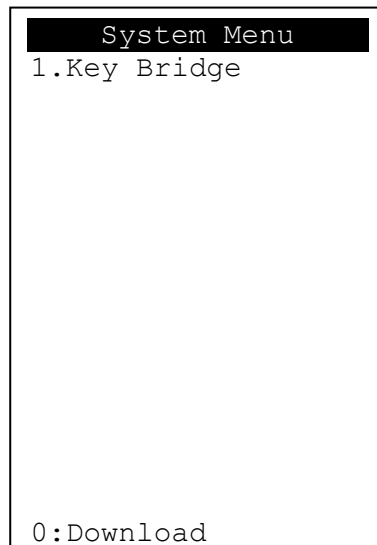
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- Press [ ↑ ] button to previous page.
- Press [ ↓ ] button to next page.

## 4. Appendix

### 4.1. FCC Warning

#### 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 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.

## 4.2. Safety Warning for Power Source

### Warning

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1. Warning: Power cord shall be connected to a socket-outlet with earthing connection.
2. The equipment is intended to be supplied by external power source (UL listed/ IEC 60950-1/ IEC 62368-1) which output complies with SELV, LPS, output rating 9-48Vdc, min. 1.5-0.5A, ambient temperature min. 65°C.
3. Warning: Risk of explosion if battery is replaced by an incorrect type. Dispose of expended battery in accordance with local disposal regulations.

### Attention

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1. Attention: le cordon d'alimentation doit être branché sur une prise secteur avec mise à la terre.
2. L'équipement est destiné à être alimenté par une source d'alimentation externe (répertoriée UL / CEI 60950-1 / CEI 62368-1) dont la sortie est conforme à la norme SELV, LPS, dont la tension nominale de sortie est 9-48Vdc, et le courant min. 1,5-0,5A et la température ambiante inférieure à 65° C.
3. **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.

### 4.3. 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 equipment complies with ISED radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with greater than 20cm between the radiator & your body.

**Déclaration d'exposition aux radiations:**

Cet équipement est conforme aux limites d'exposition aux rayonnements ISED établies pour un environnement non contrôlé. Cet équipement doit être installé et utilisé à plus de 20cm entre le radiateur et votre corps.

### 4.4. Detachable Antenna Usage

This radio transmitter [IC: 27350-U1B001] has been approved by Innovation, Science and Economic Development Canada to operate with the antenna types listed below, with the maximum permissible gain indicated. Antenna types not included in this list that have a gain greater than the maximum gain indicated for any type listed are strictly prohibited for use with this device.

Le présent émetteur radio [IC: 27350-U1B001] a été approuvé par Innovation, Sciences et Développement économique Canada pour fonctionner avec les types d'antenne énumérés ci-dessous et ayant un gain admissible maximal. Les types d'antenne non inclus dans cette liste, et dont le gain est supérieur au gain maximal indiqué pour tout type figurant sur la liste, sont strictement interdits pour l'exploitation de l'émetteur.

| Manufacturer              | Model | Antenna Type           | Max Gain (dBi) | Impedance ( $\Omega$ ) |
|---------------------------|-------|------------------------|----------------|------------------------|
| ARISTOTLE ENTERPRISES     | BT    | Fixed external antenna | -0.1 dBi       | 50 ohm                 |
| SPORTON INTERNATIONAL INC | NFC   | Loop antenna           | N/A            | 50 ohm                 |

|                    |              |       |                     |
|--------------------|--------------|-------|---------------------|
| Antenna Type       | Dipole       | Brand | Aristotle           |
| Antenna Connector  | SMA R/A PLUG | Model | RFA-US-T1000G-2M-A5 |
| Antenna Gain (dBi) | WCDMA Band 2 | 0.7   |                     |
|                    | WCDMA Band 4 | 0.7   |                     |
|                    | WCDMA Band 5 | 1     |                     |
|                    | LTE Band 2   | 0.7   |                     |
|                    | LTE Band 4   | 0.7   |                     |
|                    | LTE Band 5   | 1     |                     |
|                    | LTE Band 12  | 2     |                     |
|                    | LTE Band 13  | 2     |                     |
|                    | LTE Band 14  | 2     |                     |
|                    | LTE Band 66  | 0.7   |                     |

~ END ~