PayPro Max

Payment Terminal Manual

$12.50

TAP or INSERT

Introduction

This document provides a guideline for operating and configuring the *PayPro Max* payment 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 that it has been disassembled, modified, or shows abnormal situation. If yes, please do not use.

- Please stay away from strong electromagnetic waves. Examples include: 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 use 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.
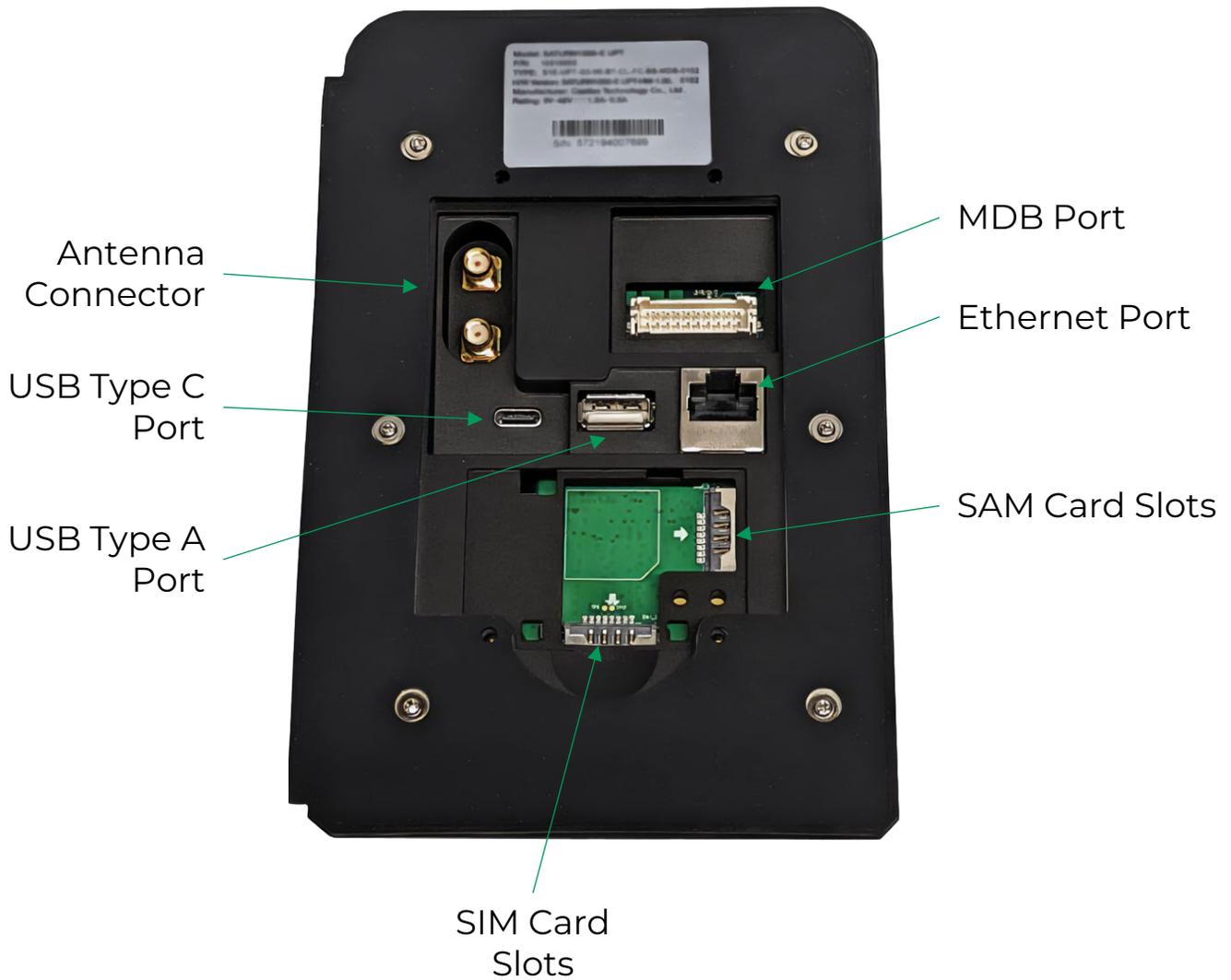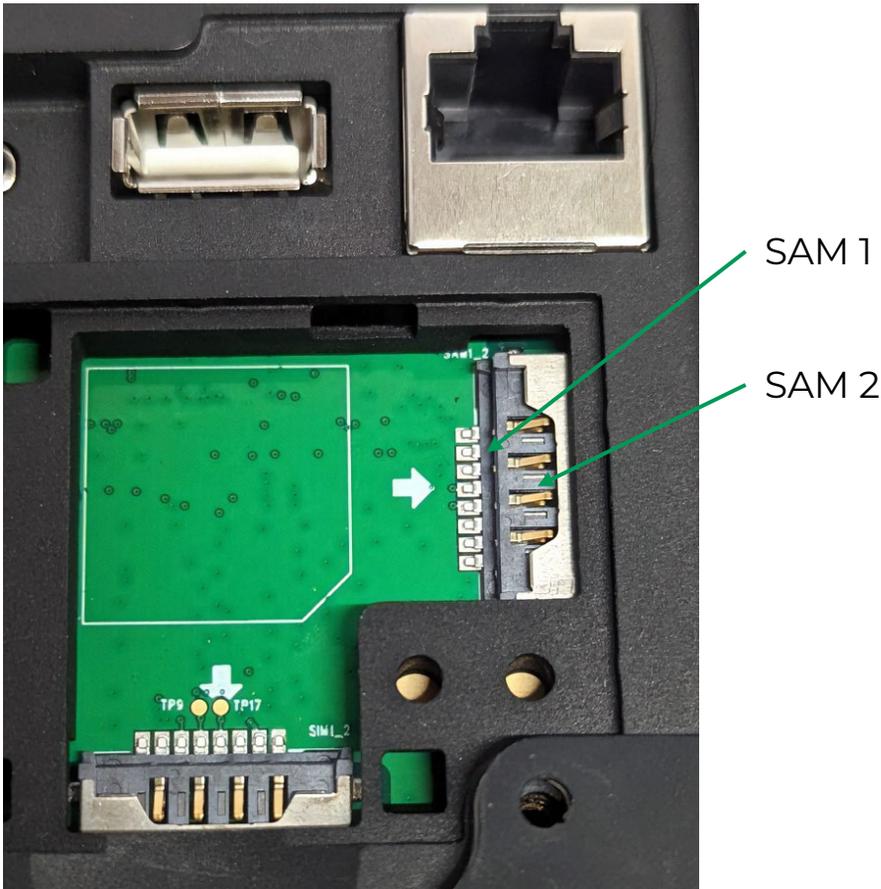
Hardware Setup

Parts of the Terminal

Contactless Card
Landing Zone

LCD Display

Barcode Scanner

Front Camera

Magnetic
Stripe Reader

Hardware Setup

Parts of the Terminal

Antenna Connector

USB Type C Port

USB Type A Port

MDB Port

Ethernet Port

SAM Card Slots

SIM Card Slots

Hardware Setup

Parts of the Terminal

Microphone

Aiming LED

Barcode Scanner

Illumination

Speaker

Hardware Setup

Insert SAM Card

SAM 1

SAM 2

Insert SAM card into desired slot.

- SAM 1: cut corner is on the upper left side.

- SAM 2: cut corner is on the bottom left side.

Hardware Setup

Insert SIM Card
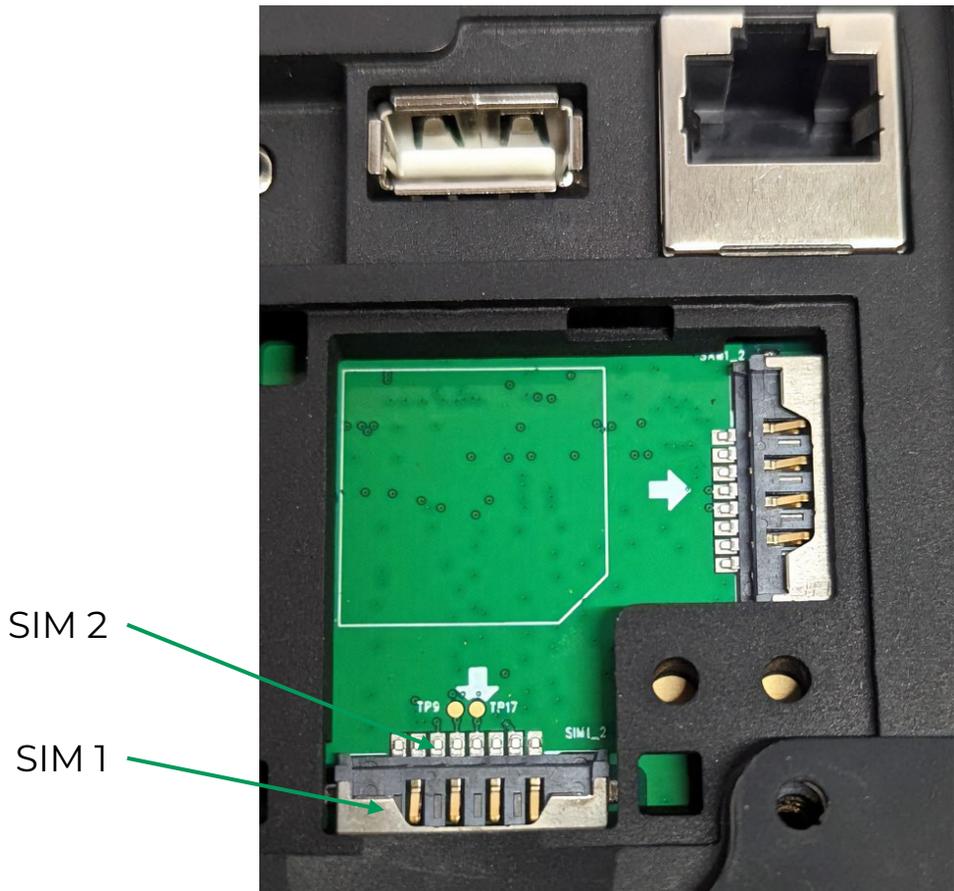
Insert SIM cards into desired slot.

- SIM 1: cut corner is on the upper left side

- SIM 2: cut corner is on the upper right side

Basic Operation

Once the power is on in normal status, the terminal will enter Launcher if no default application selected. All user applications are listed in the launcher. Users can click on an application and run the application.

Main Screen

On the terminal, it provides some features for developers, and also have the simple symbols let users know the feature (e.g. connection, battery, etc.)
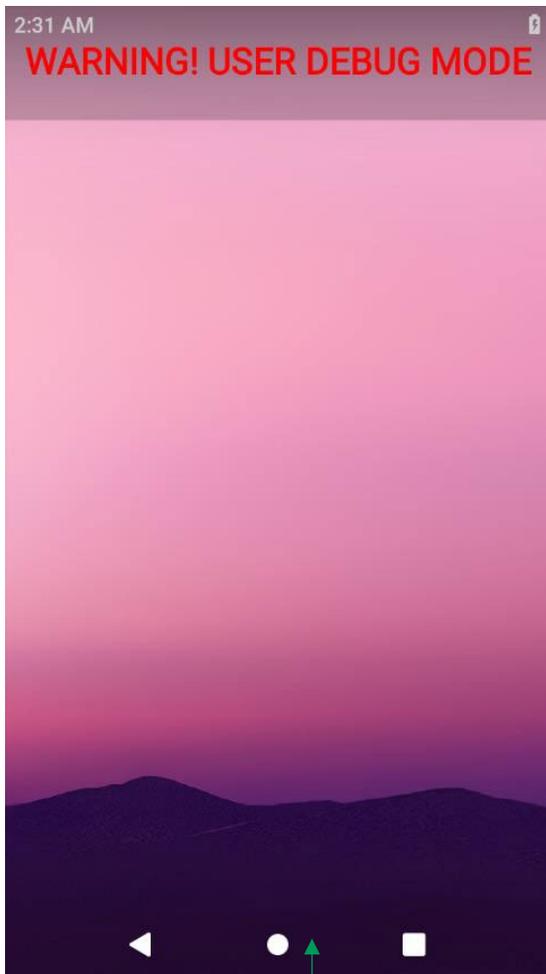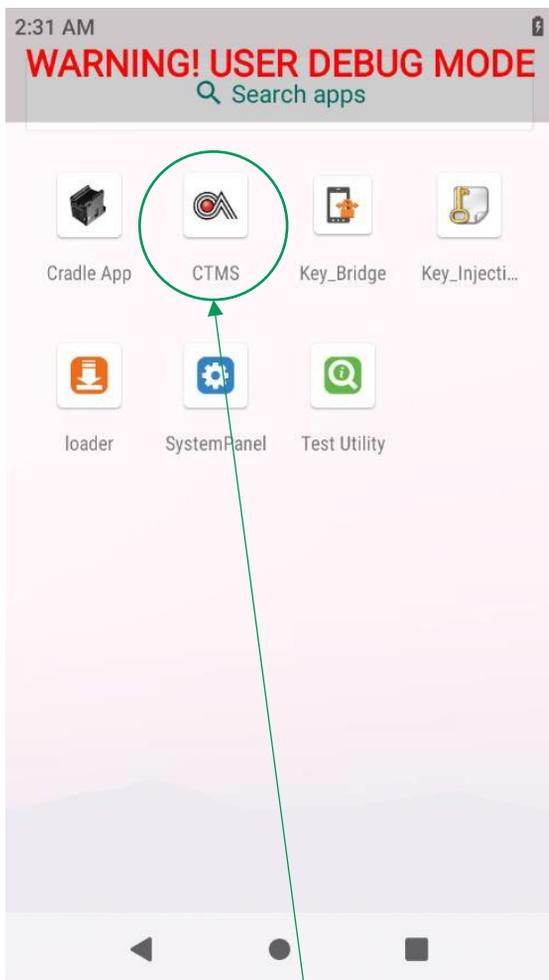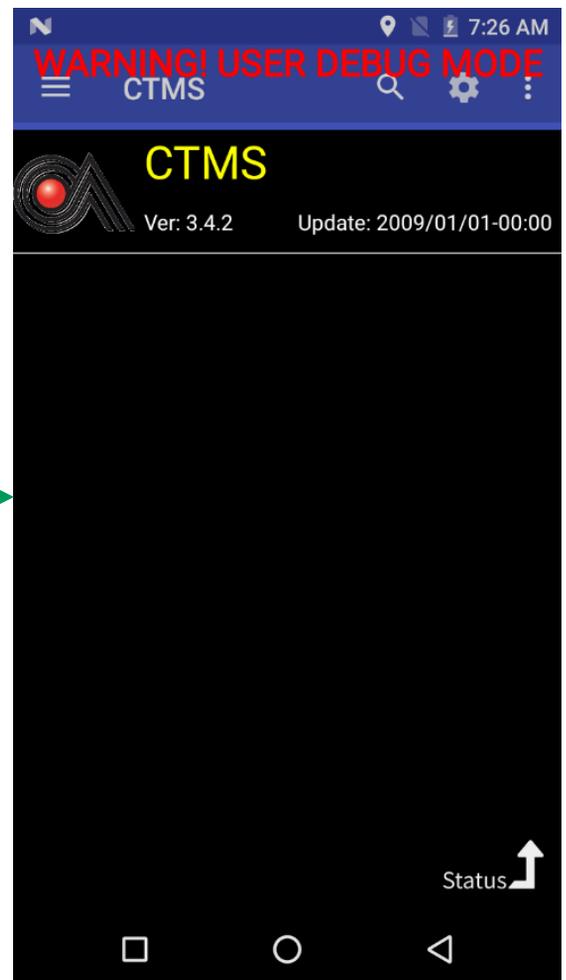

Slide up to open APP menu
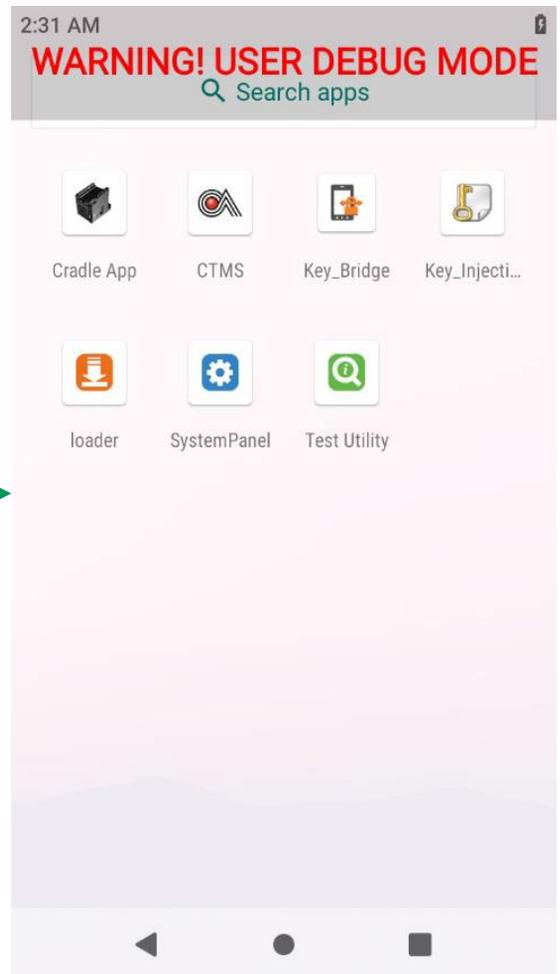
Basic Operation

CTMS

Connect to the CTMS (terminal management server) and manage the terminals update schedule.

CTMS

Basic Operation
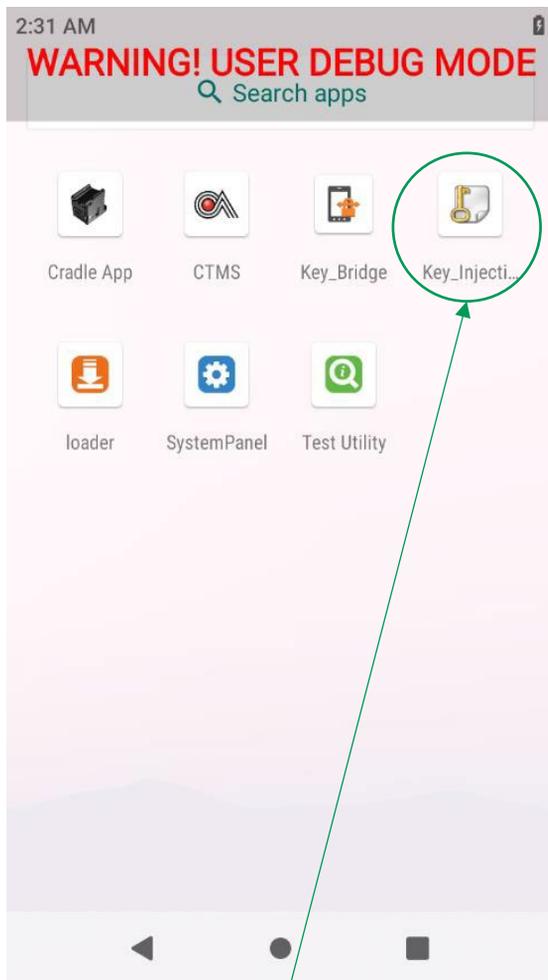
Key Bridge

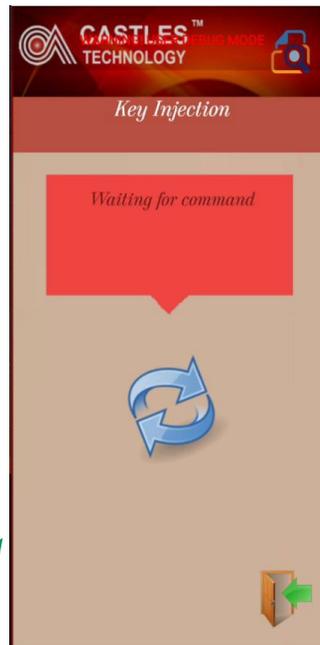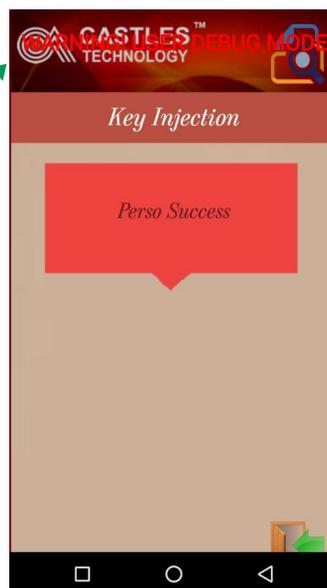Customize certain features

Key Bridge

Basic Operation

Key Injection

Use to test key injection functionality

If no keys are loaded, the screen will show *Waiting for Command*
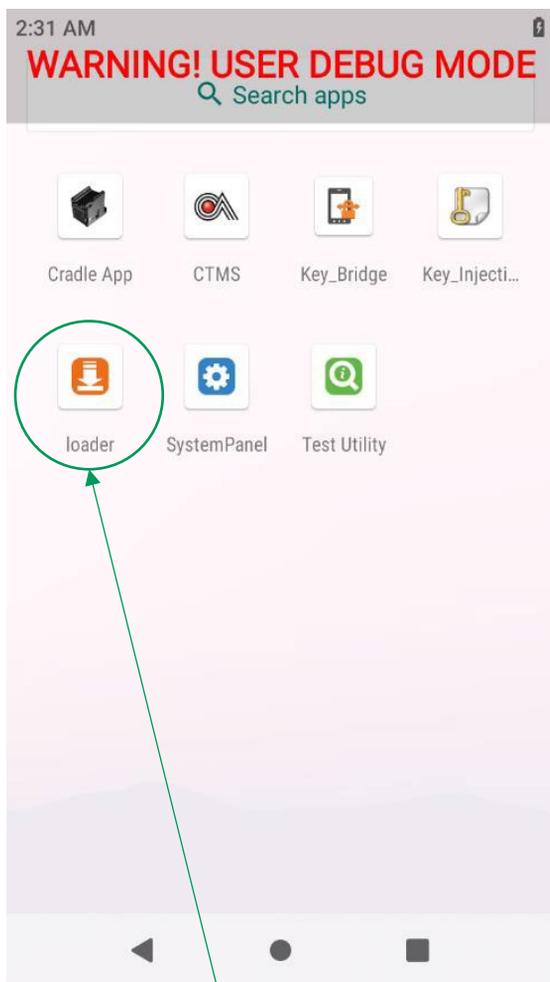

Key Injection

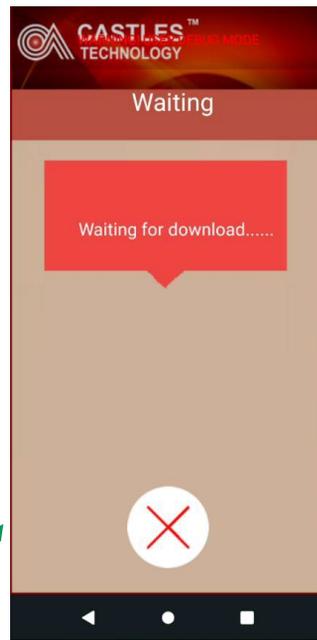If keys are loaded, the screen will show *Perso Success*

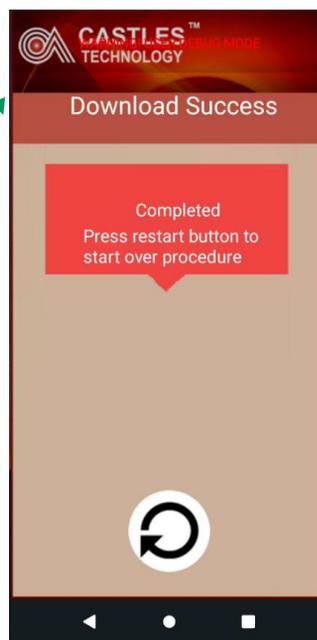# Basic Operation

Loader

Download user application, or update Android system and kernel modules firmware

Loader

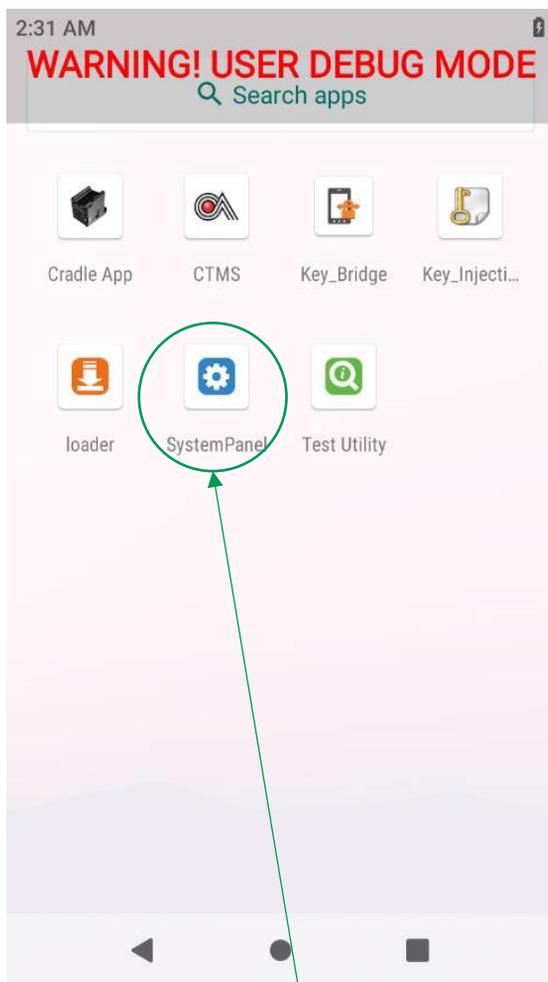The screen will show *Waiting for download*

If download is successful, the screen will show *Completed*

Note: If this tool cannot run or the download fails, go into the *System Panel* and disable the debug mode.
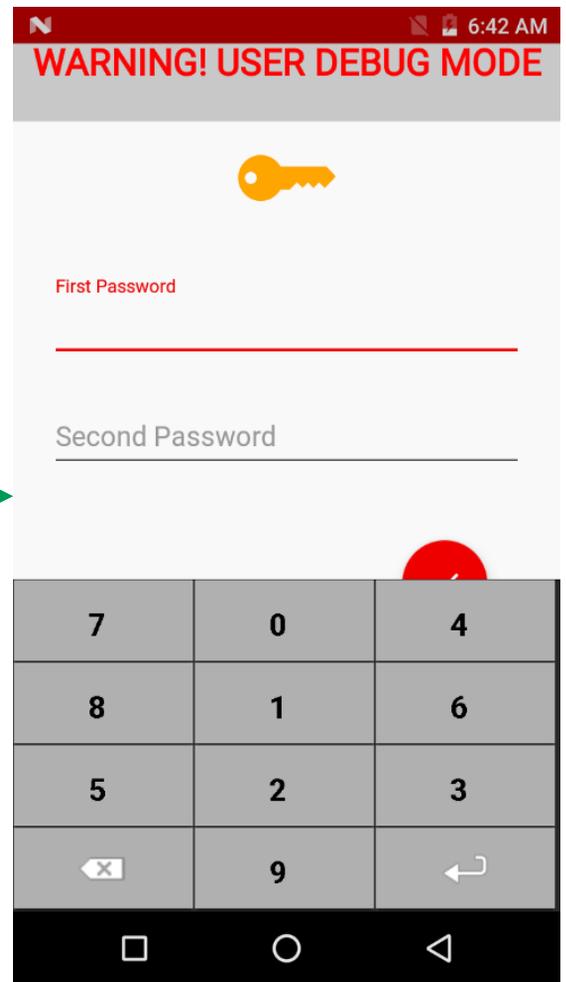
Basic Operation

System Panel

Set system settings and check system version

System Panel

Default password is 00000000 for both fields

Basic Operation

Screen Status Bar

- Status bar lock - show or hide the status bar at the top

- Navigation bar - show or hide the navigation bar at the bottom

- Home icon - show or hide home icon

- Back icon - show or hide back icon

- Search icon - show or hide search icon

Battery charging threshold

- Battery will start charging when the battery capacity is lower than sett threshold

Debug mode

- Enable or disable the ADB function

Auto reboot time

- Select the auto reboot time

Factory reset

- Reset the terminal to factory default: *00000000*

Enable user password

- Enable or disable user password when exiting default APP

System Panel

WARNING! USER DEBUG MODE

Device

Screen status Bar

Battery charging threshold
90%

System

Debug mode

Auto reboot time
0:00

Factory reset
Reset device to default state

Enable user password

Change user password

Change login password
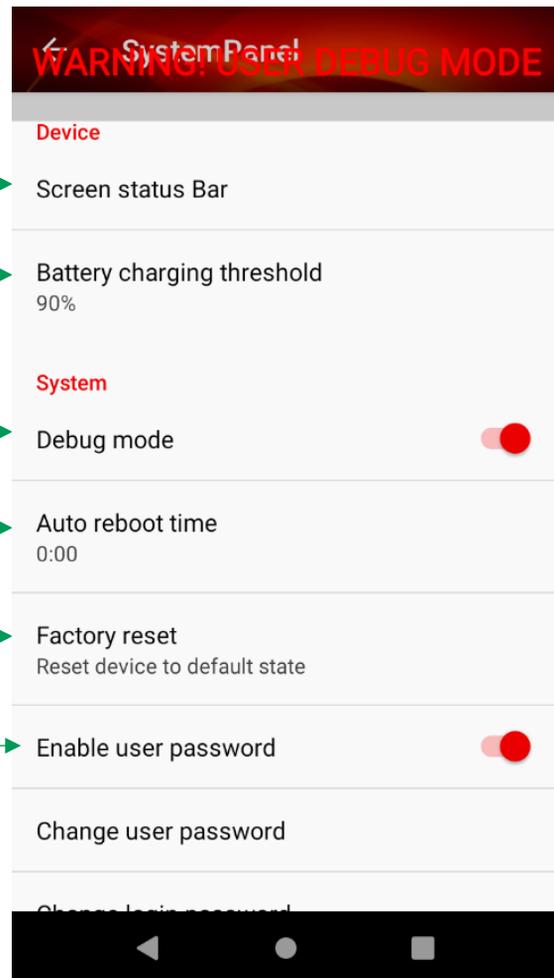
Basic Operation

Change user password

- Change user password from *00000000*

Change login password

- Change system panel login password from default *00000000*

Change factory password

- Change factory reset password (default is *00000000*)

Date & Time - set date and time

- Automatic date & time - enable or disable NTP auto-sync time

- NTP server - configure NTP server address

- Set date - set terminal date manually if disable automatic date & time

- Set time - set terminal time manually if disable automatic date & time

- Select time zone - select terminal time zone

- Use 24-hour format - select 12- or 24-hour format

System Panel
WARNING: USER DEBUG MODE

Factory reset
Reset device to default state

Enable user password

Change user password

Change login password

Change factory password

Date & Time

Select default application
N/A
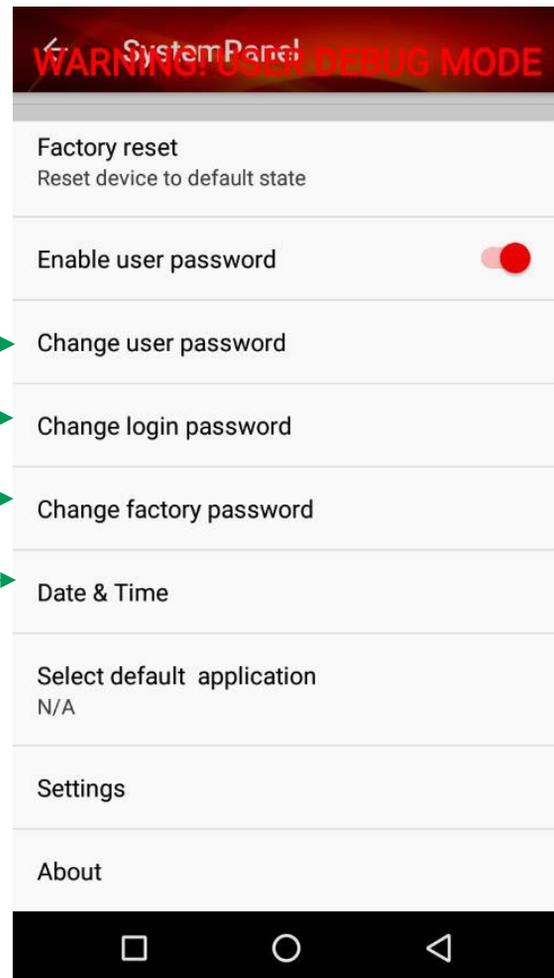
Settings

About

Basic Operation

Select default application

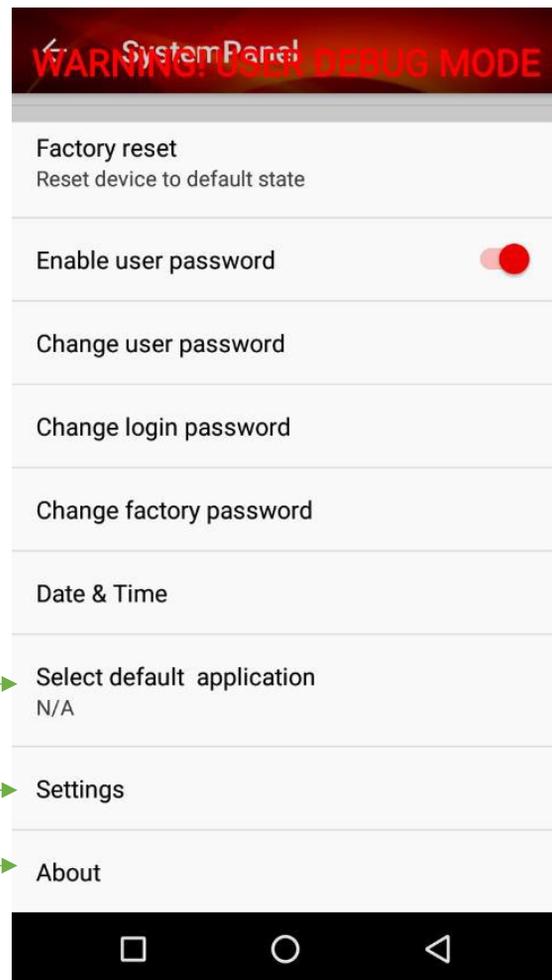- Select default application which will autorun after system boot up

Settings

- Various Android system settings (see details on the next page)
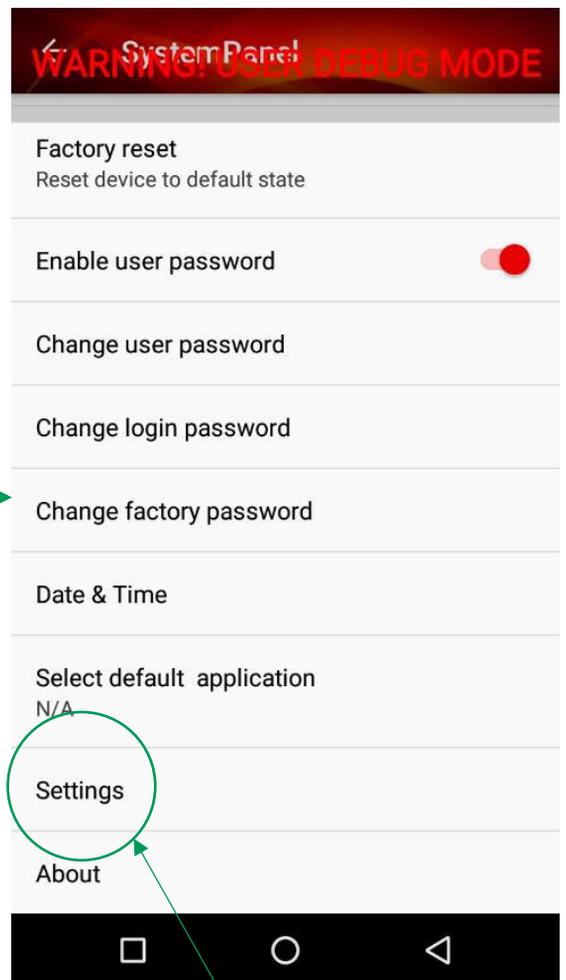
About

- Display system version

System Panel
WARNING! USER DEBUG MODE

Factory reset
Reset device to default state

Enable user password

Change user password

Change login password

Change factory password

Date & Time

Select default application
N/A

Settings

About

Basic Operation

Android System Settings

Set certain Android system settings
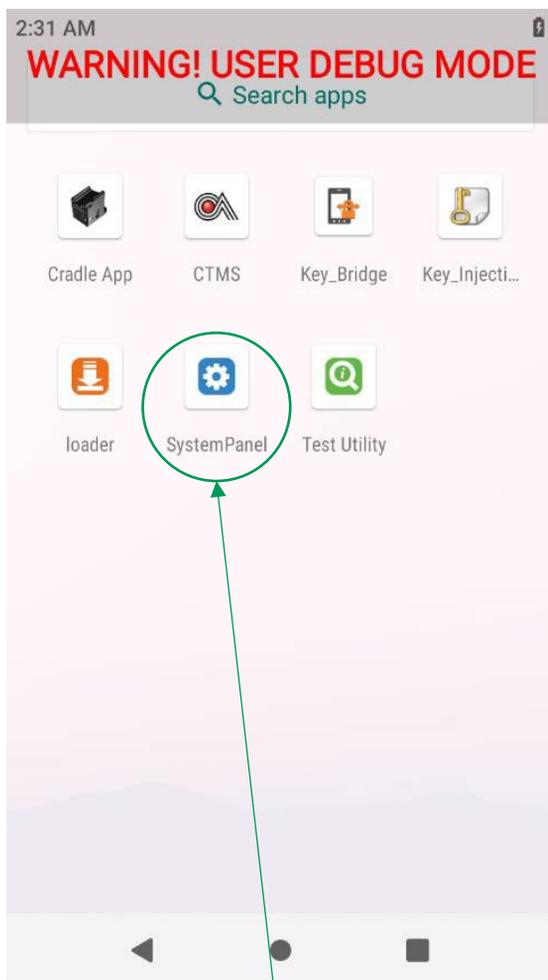
System Panel

Settings

Basic Operation

Network & Internet

- View available networks, SIM card configuration, check data usage

Connected devices

- USB configuration, Bluetooth and NFC configuration

Apps & notifications

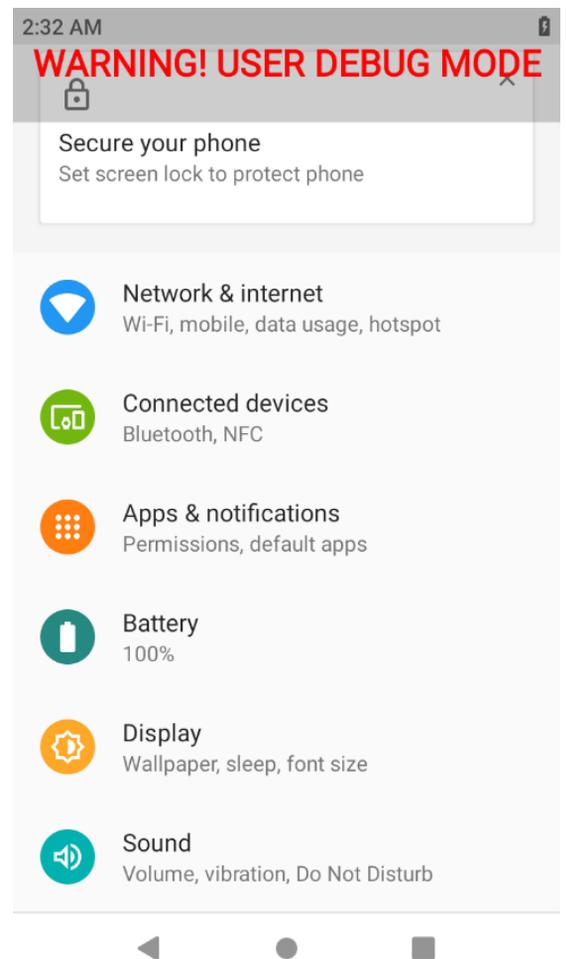- Set application permissions and notifications

Battery

- Check the battery voltage usage/charging status

Display

- Set the display screen configuration

Sound

- Set the sound volume

2:32 AM

WARNING! USER DEBUG MODE ✕

🔒
Secure your phone
Set screen lock to protect phone

Network & internet
Wi-Fi, mobile, data usage, hotspot

Connected devices
Bluetooth, NFC

Apps & notifications
Permissions, default apps

Battery
100%

Display
Wallpaper, sleep, font size

Sound
Volume, vibration, Do Not Disturb

Basic Operation

Storage

- View the size of storage space in use

Security & location

- Set the terminal security configuration and view app location history
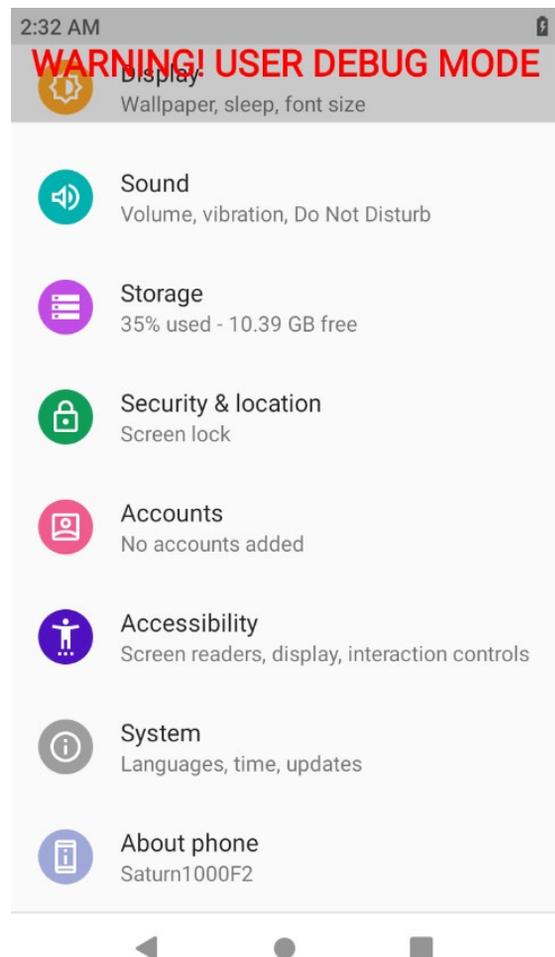
Accounts

- Add account

Accessibility

- Set up accessibility features

System

- Language & input configuration

About phone

- Phone information

Basic Operation

Connectivity Notes

The device only supports non "Just Work" parsing devices. The Bluetooth device must support security PIN code to connect.

For Bluetooth Smart (LE) Secure Connections, the device supports three association models, as shown below.

Just Works

- As implied by the name, this method works with no user interaction. This method is typically used by devices without display and keypad. This method provides no *Man in the Middle* (MITM) protection.
- The headphone / headset is designed for the situation where at least one of the pairing devices has neither a display, nor a keyboard for entering digits

Passkey Entry

- Method connecting a device with a display and a device with numeric keypad entry (such as a keyboard). The display is used to show a 6-digit numeric code to the user, who then enters the code on the keypad.
- Method connecting two devices with numeric keypad entry. The user of each device enters the same 6-digit number.
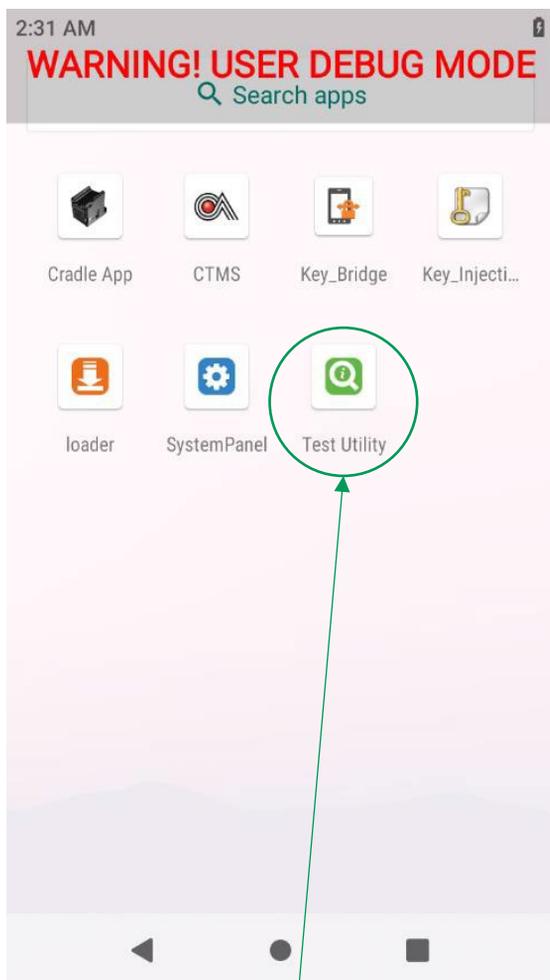- Both of these methods provide MITM protection.

Out of Band (OOB)

- A flexible option for developers that allows defining custom pairing mechanisms, so the security level depends on *Out of Band* protection capability. This method provides no *Man in the Middle* protection.
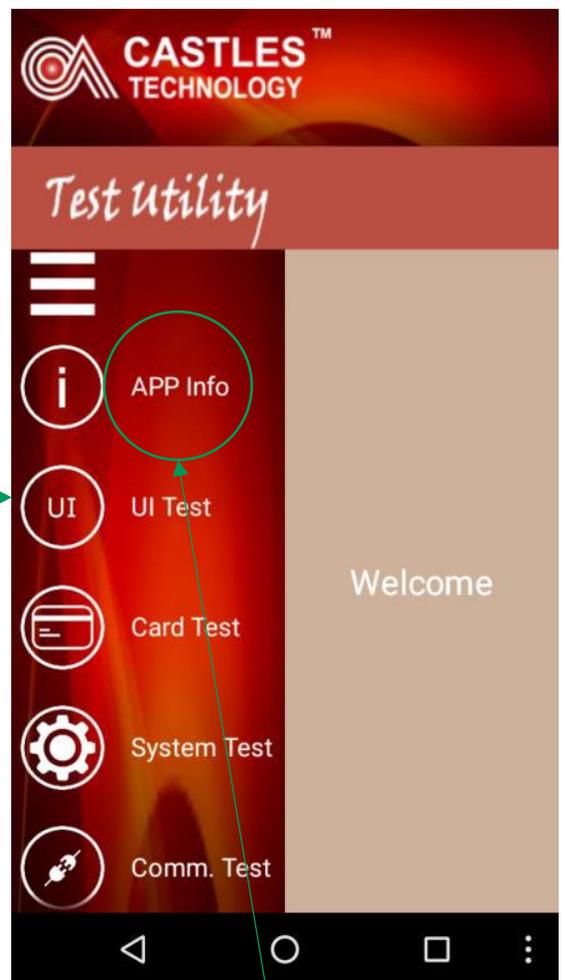
Basic Operation

Test Utility

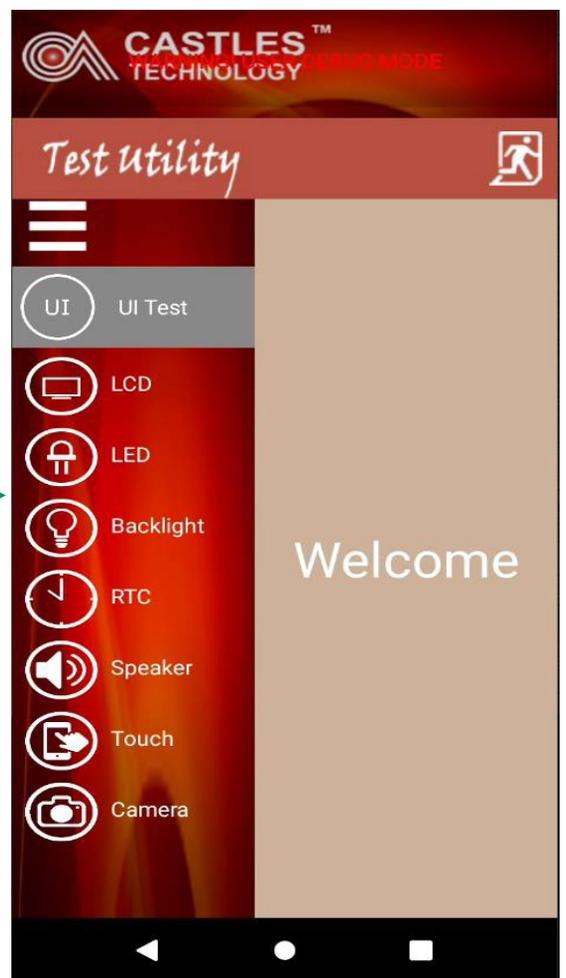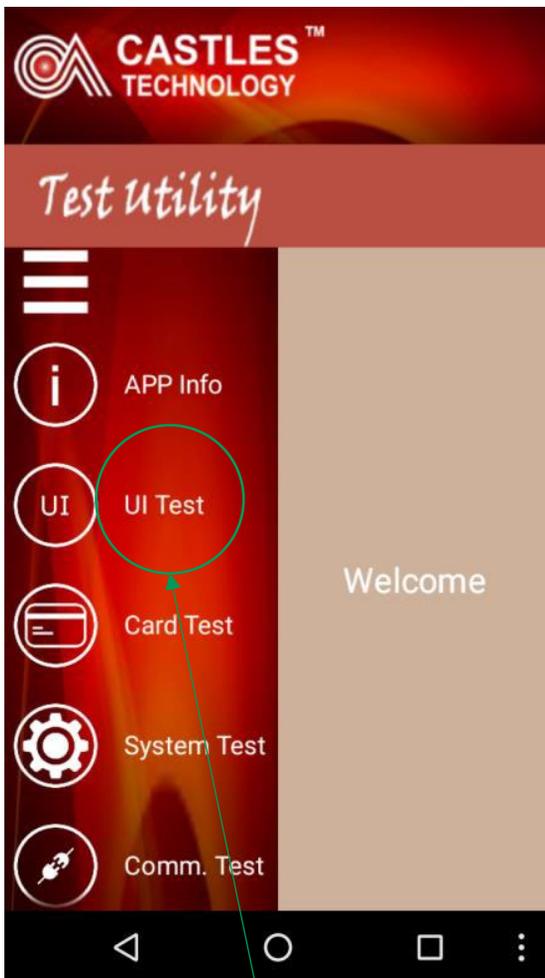Diagnose terminal hardware components

Test Utility

App Info

Revision - Display Android OS version
Size - Display memory size info

Basic Operation

UI Test

Diagnose the User Interface

UI Test

LCD - Diagnose the LCD display function
LED - Diagnose the rear side LED
Backlight - Brightness of the back light
RTC - Get system RTC info
Speaker - Diagnose the speaker
Touch - Diagnose the touch function
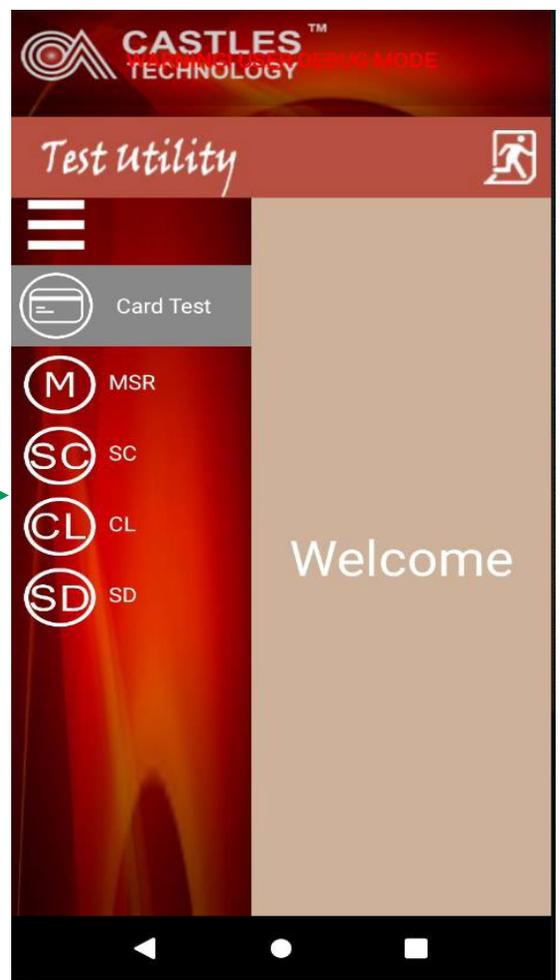*Camera* - Diagnose the rear camera

Basic Operation

Card Test

Diagnose the Card function
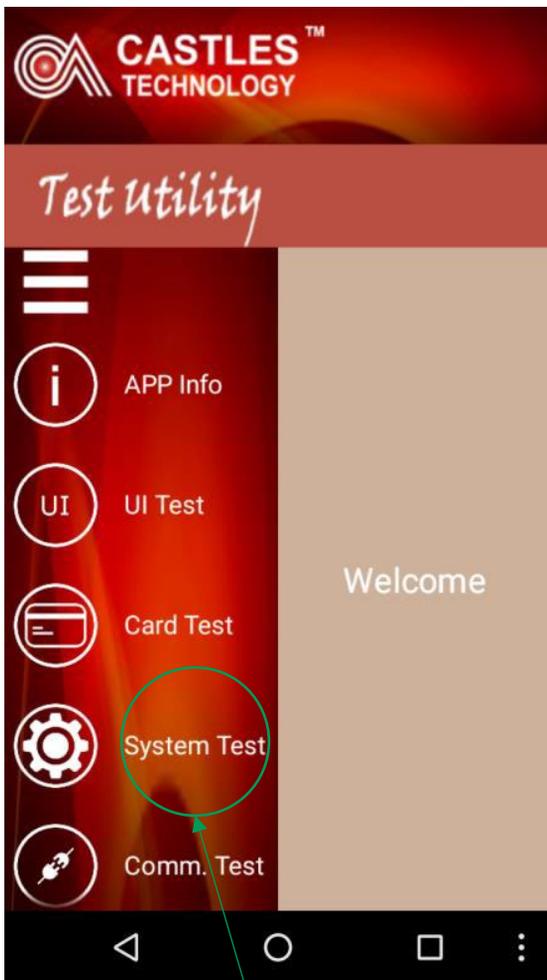

Card Test

MSR - Diagnose the MSR function
SC - Diagnose the Smart Card function
CL - Diagnose the Contactless card
SD - Diagnose the SD card function

Basic Operation

System Test

Diagnose the system

System Test

Battery - Get the battery operation info

Basic Operation

Comm Test

Diagnose the communications functionality

Comm Test

WIFI - Diagnose the WiFi
BT - Diagnose the Bluetooth
USB - Diagnose the USB
GPRS - Diagnose the GPRS
*Cradle* - Diagnose the Cradle function

Secure File Loading

The terminal features an interface named *User Loader* (ULD) that provides secure file loading to the system memory. The loader only applies to download the CAP file for the user application and the kernel firmware.
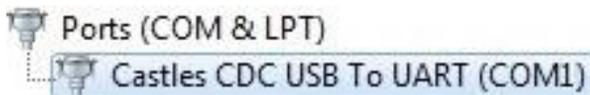
The *ULD Download Utility* is the official tool to download the CAP file into the terminal. The loader is located at:
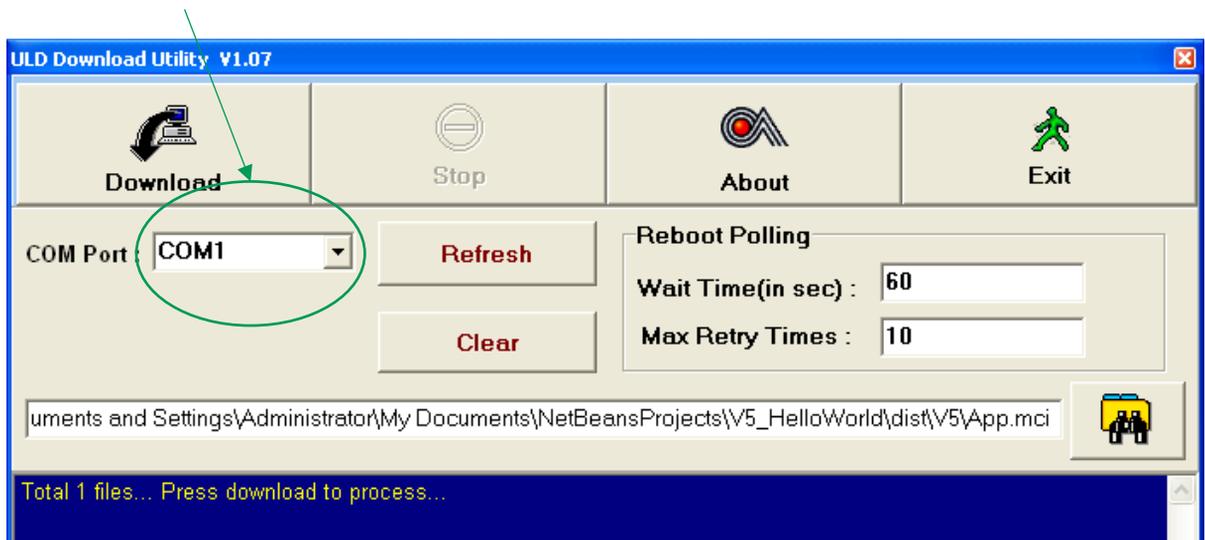
C:\Program Files (x86)\Castles\SATURN1000\tools\Loader

- Run *Loader.exe*

Loader.exe
20/08/2012 16:12
704 KB
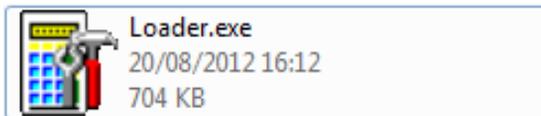
- Check the terminal com port in Device Manager

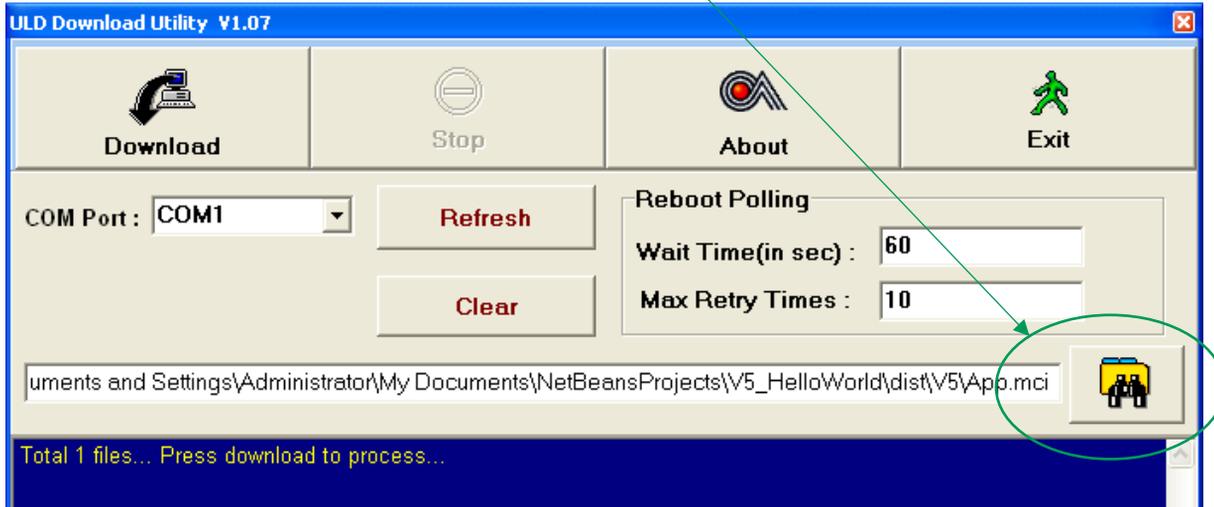Ports (COM & LPT)
Castles CDC USB To UART (COM1)
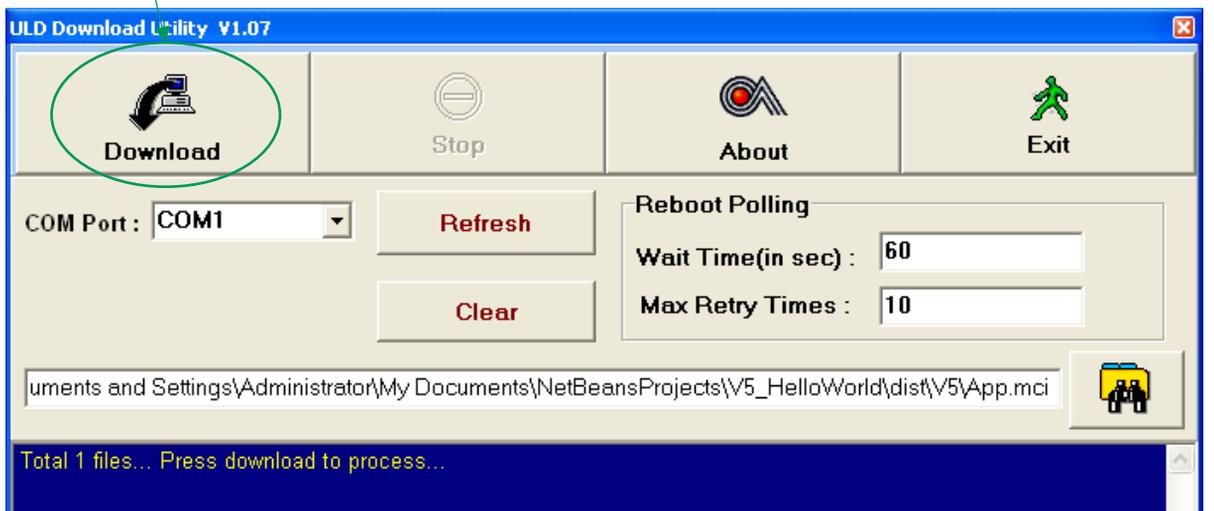
- Select the COM port

Secure File Loading

- Browse and select *mci* or *mmci* file

- On terminal side, please refer to the chapter *Basic Operation Loader* to set the terminal in the status of waiting for download

- Press *Download* to start the download

Secure File Loading

- Once the download has finished, the log screen will confirm with the message *Download OK*