LT30 | GETTING STARTED GUIDE

GPS/GIS HANDHELD CONTROLLER

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Safety Warnings
The Global Positioning System (GPS) is operated by the U.S. Government, which is solely responsible for the accuracy and maintenance of the GPS network. Accuracy can also be affected by poor satellite geometry and obstructions, like buildings and heavy canopy.

FCC interference statement
This equipment has been designed to comply with the limits for a class B digital device, pursuant to part 15 of the FCC Rules in the Portable Mode. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

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.

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1. INTRODUCTION

Thank you for choosing LT30 GPS handheld computer.

This Getting Started Guide will provide useful information about your receiver. It will also guide you through your first steps of using LT30 in the field.

1.1. TECHNICAL ASSISTANCE

If you have a problem and cannot find the information you need in the product documentation, contact your local dealer from which you purchased the LT30. Alternatively, please request technical support using the CHC Website at (www.chcnav.com) or CHC technical support email support@chcnav.com

1.2. YOUR COMMENTS

Your feedback about this Getting Started Guide will help us to improve it in future revision. Please e-mail your comments to support@chcnav.com

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2. OVERVIEW

2.1. FEATURES

LT30 is a handheld GPS receiver and GIS data collector that incorporate an SBAS-enabled, high-sensitivity GPS receiver as well as Microsoft Windows Mobile® 6.1 operating system. LT30 comes in a rugged design suitable for all your mapping applications and handheld computer use. LT30 allows you to choose the Windows Mobile compatible software that is right for you.

2.2. SPECIFICATIONS

GNSS characteristics

- High-sensitivity SiRF III chipset
- 20 channel, GPS L1 code CA
- SBAS support (WAAS, MSAS and EGNOS)
- Update Rate: 1Hz
- Time to first fix
    - Cold Start < 50 s
    - Warm Start < 35 s
    - Hot Start <10 s
- External Antenna support

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Performance specifications (1)

- Standalone GPS : < 2.5 m RMS
- With SBAS : < 2 m RMS

System configuration

- Windows Mobile 6.1 operating systems
- 3.7” VGA sunlight readable screen
- 624 MHz Intel X-Scale processor
- Internal memory : 256 MB internal flash storage
- Micro SD card slot up to 16 Gb
- 3.2 megapixel camera with autofocus

Communications

- GSM/GPRS (850/900/1800/1900 MHz) phone and data transmission
- Bluetooth V2.1 Class 3
- 802.11 b/g wireless LAN
- Mini-USB client
- Built-in microphone and speaker
- NMEA 0183 protocol support

Physical

- Size (LxWxH): 158 mm x 85 mm x 25mm
- Weight: 0.280 Kg with battery
- Working Temperature: -20 °C to +60 °C
- Storage Temperature: -30 °C to +70°C
- Dust proof: IP65
- Shock : survive a 1 meters drop onto concrete

Electrical

- Li-ion battery capacity : 3000 mAh
- Battery life : up to 20 hours

Package content

- LT30 GPS handheld
- Li-Ion battery
- 2 GB Micro SD Card
- USB data cable
- AC adapter
- Stylus
- Hand strap

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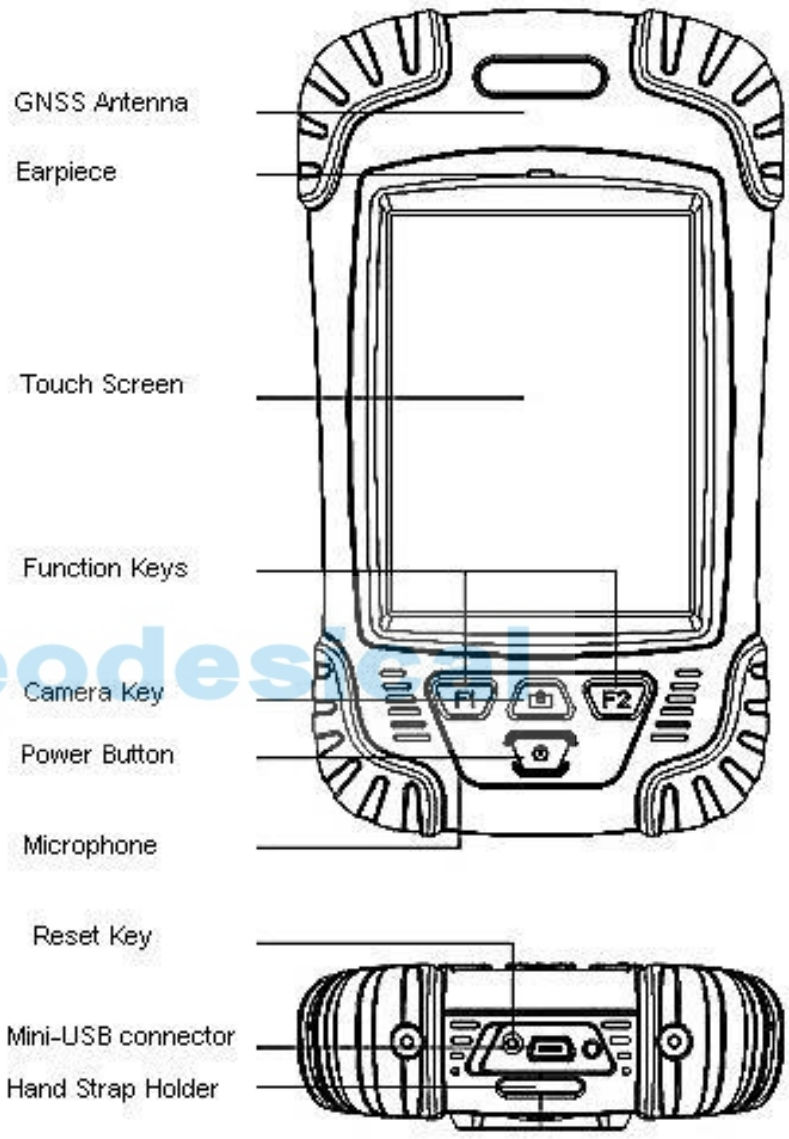
3. DESCRIPTION

Front view



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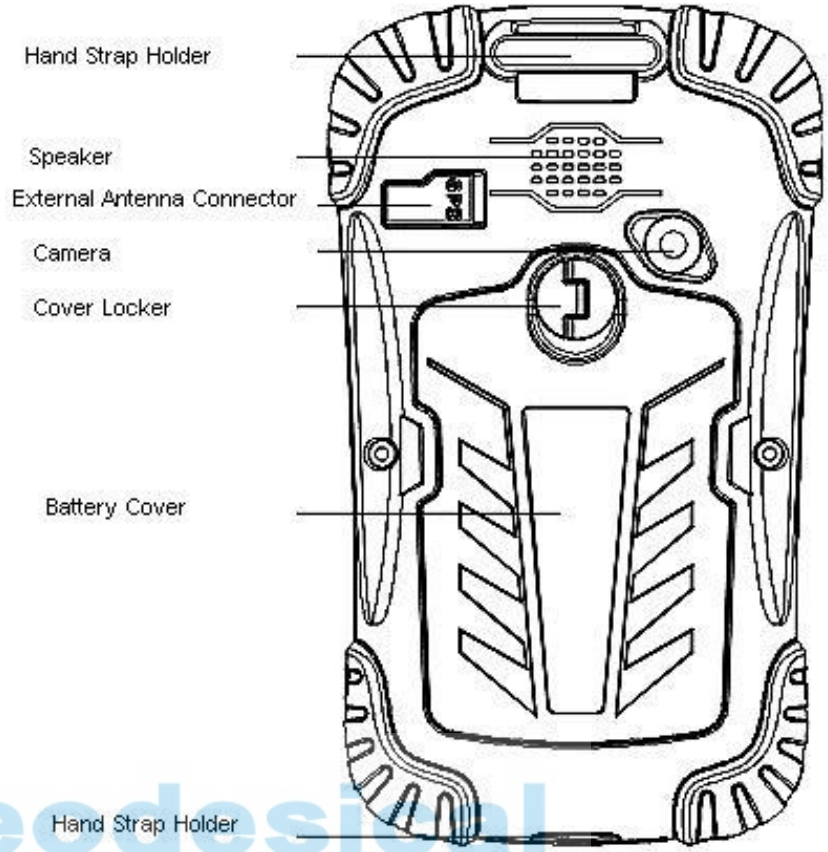
Rear view



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4. First-Time Use

4.1. Inserting battery, SD card and SIM card

- Lift the latch of the battery door and turn it counter-clockwise to the unlock position (vertical). Then, detach the door from the device. See Figure 1.

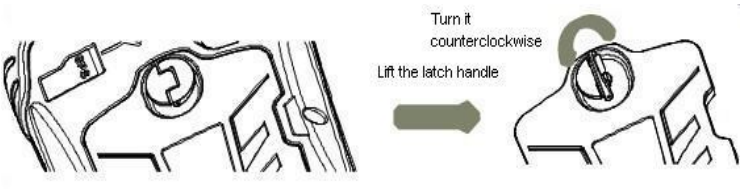

Figure 1

- Two slots are located at the top of battery compartment. The SIM card slot on the left and TF card slot on the right. Please insert the cards according to the Figure 2.

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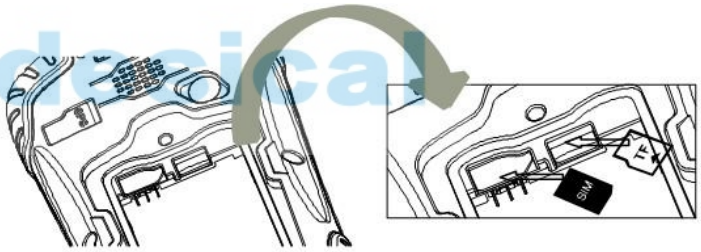

Figure 2

Note: the SIM card's beveled corner shall be placed on the right down side.

- Insert the Li-Ion battery into the battery compartment.
- Put the battery door back into place by first inserting the bottom side of the door into the receiver case at an angle. Then with the latch still in the unlock position (vertical), insert the latch handle into place. Finally, secure the door by turning the latch clockwise to the lock position.

4.2. Charging the Battery

- Fix the appropriate plug to the AC Adapter and connect the USB cable.
- Connect the AC adapter to a power plug.
- Connect Mini-USB to the LT30 to start charging the battery.
  - If the receiver is off, a charging icon will display on the screen.
  - If the receiver is on, a charging icon will show on the top right corner of the screen.

Note: You can also connect LT30 to your computer via Mini-USB cable to charge the receiver but charging time will be longer.

4.3. Turning the Receiver ON/OFF

- Make sure that the receiver battery is charged or that the LT30 is connected to PC via Mini-USB cable (internal battery shall always be installed).
- Press the power button for 3-5 seconds to turn on/off the device.

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Note: If you need to perform software reset, use the stylus to press the **Reset** key (located beside the Mini-USB connector). This will re-boot the Windows Mobile operating system.

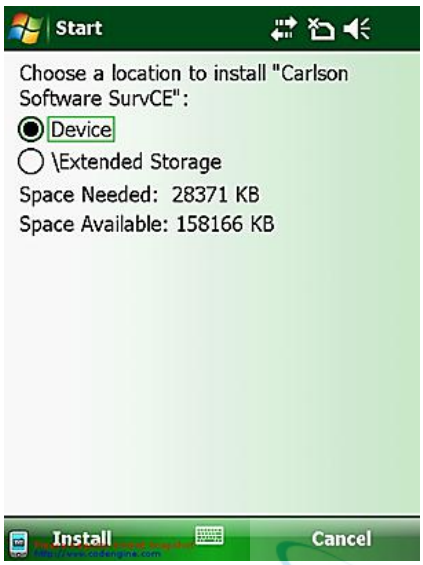
4.4. Connect to Office Computer

- To install software or access to the LT30, you can use your office computer and a Microsoft ActiveSync connection to transfer the installation files from the computer to LT30.
- This means Microsoft Mobile Center or ActiveSync should first be installed on your computer. You can download this software for free from the Microsoft website.

Note : choose the ActiveSync version that is suitable for your computer.

- Connect the USB data cable between the LT30 and a USB port on your computer.
- Turn on LT30. Wait the computer to start automatically the connection through the synchronization software.

- Sync icon will appear at the bottom right corner of your computer screen. Simultaneously a Synchronization Setup Wizard window will pop up, you can close it to continue by clicking **Cancel.**
- You can click Explore on the Microsoft Sync window to explore the folders on LT30, and exchange data between LT30 and your computer.



4.5. Installing Software

- First, make sure LT30 is connected and synchronized with your computer.
- Select and click on the installation file to install, or if the installation file runs only on LT30, please copy the file to LT30, double click it to install. You can also copy files to LT30's relevant location to save it.
- Choose a location to install the program, click the Install icon to start installation.

Note: CHC recommends installing 3rd party software on *Device Memory* and select the *Extended Storage SD card* to save your projects data.

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4.6. Using the GPS

- To make use of the GPS data with 3rd party software installed on the LT30, you shall go to Start→Settings→System, click External GPS to GPS Settings (take ArcPad software for example).
  Programs→Choose GPS program port: COM7,
  Hardware→Choose GPS hardware port: COM3, Baud rate: 4800,
  Access, tick the Manage GPS automatically (recommended).

4.7. Using the Camera

- Press the Camera key to enter in the picture taking mode.
- Press the Camera Key again to take a picture.
- Click the OK icon on the top right corner to exit.

4.8. Establishing Wireless connection (Bluetooth /Wi-Fi)

- Using Bluetooth

1） Go to *Start*→*Settings*→*Connections*→*Wireless Manager*.
2） Click on the icon on the right side of Bluetooth to open Bluetooth function.
3） Go to *Start*→*Settings*→*Connections*→*Bluetooth*.
4） Click *Add new device*, the system will search for Bluetooth Devices.
5） Select a device to connect with and tap *Next*, Enter a password.
6） Click *Next*. In the external Bluetooth device, input the same password. The external Bluetooth device connection is now completed.

Note: The password used for pairing Bluetooth devices can be freely defined (e.g., 1234). Just make sure the same PIN code is entered for two devices to be paired.

- Using WIFI connection

1） Go to *Start*→*Settings*→*Connections*→*Wi-Fi*
2） Choose one available network
3） Follow the process to finish the settings as prompt by the configuration software.

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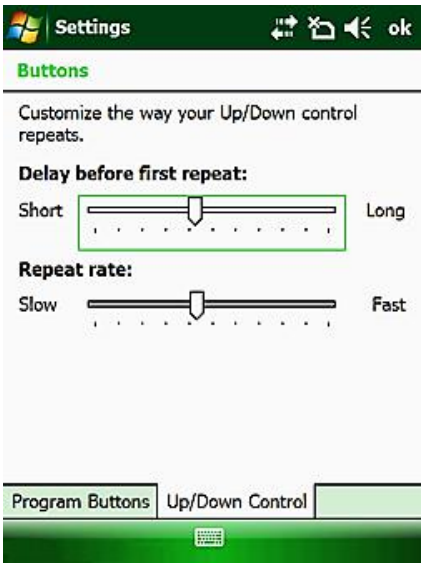

4.9. Using the Hot Keys

1) Go to *Start*→*Settings*→*Personal*→*Buttons*→*Program Buttons*.
2) Select a Button from Camera, F1 and F2
3) Assign a program or action, and click *OK* to accomplish the setting. Then the direct link to the appointed program or action from the Hot Keys has been set up.
4) If the Hot Keys have been assign the function of <Scroll Down> and <Scroll Down>, *Up/Down Control* can customize the way Up/Down control repeats.

5. Frequent Settings

- **Stylus Setting**
  Go to Start→Settings→System→Screen
  Click Align Screen to start the stylus setting.

- **Backlight Setting**
  Go to Start→Settings→System →Backlight,
  Adjust settings according to your requirements.

- **Power Setting**
  Go to Start→Settings→System→Power→Advanced,
  Adjust settings according to your requirements.

- **Remove Programs**
  Go to Start→Settings→System→Remove Programs,
  Choose the relevant program then click Remove.

- **Boot cleaning / Restore Factory Default**
  Go to Start→Settings→System→Clean Boot,
  Follow the instructions as pompted.

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WARNING: Cleaning boot will erase all the data stored on the receiver; uninstall all software and restore settings to factory defaults.

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