Shanghai Huace Navigation Technology LTD.

HCE320 Handheld GNSS Data Collector

User Guide

Revision 1.0 March 2018



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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 that may cause undesired operation.

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Table of contents

1 Prod	uct Introduction	4
1.1	Brief Introduction	4
1.2	Product Accessories	4
1.3	Display Icon Introduction	5
1.4	LandStar 7 Software Introduction	5
2 Getti	ng Started	7
	Switch On/Off 7	
2.2	SIM/SD Card Installation	7
2.3	Keyboard Introduction	8
2.4	Data Controller Charging	8
2.5	Important Notification	9
3 Basic	c Functions1	
3.1	Data Storage and Data Transmission1	0
	Network Type Switch	
3.3	Restore Factory Setting	
3.4	Data Controller Function	3
4 Data	Controller Core Upgrade1	5

1 Product Introduction

1.1 Brief Introduction



Virtual function key:

• [Home]: Touch for returning to main screen when in any interface.

• [Back]: Touch for returning to previous interface.

• [Menu]: Touch for displaying current programs, users can click to open the program.

1.2 Product Accessories

HCE320 data controller

- Stylus
- Screen protection foil
- Strap
- ♦ USB data cable
 ¹/_↓
- DC power adapter

1.3 Display Icon Introduction

	Description		Description
9	The current battery status		Vibrate mode
([t-	Wifi status	A	Mobile signal strength
Ð	Alarm clock	Jan Star	Airplane mode
	Bluetooth status	<u>†</u>	Upload application
\$	WiFi sync download	Ŧ	Download application
N	USB connected successfully		

1.4 LandStar 7 Software Introduction

LandStar 7 is CHC latest field-proven software solution for Android. Designed for high precision surveying and mapping tasks for your daily work. Provides seamless work mode management, easy-to-use and easy-to-learn graphical user interface with simple operation. Extensive data import/export formats, multiple types of measurement and stakeout methods ensure instant productivity.

Following picture shows the interface:



Note: Users can call out E-manual by clicking the question mark at top-right corner of LandStar 7, please make sure you've installed LandstarHelp in HCE320 before.

2 Getting Started

2.1 Switch On/Off

Long press [Power] key for switch on HCE320.

In the state of power-on, short press [Power] key to enter sleep mode, long press [Power] key will pop-up select screen, select [Power Off] option to switch off.

2.2 SIM/SD Card Installation

• Single SIM card and SD card installation

User the head of stylus to take out the slot, put SIM card and SD card in the position as shown in left picture, and then insert the slot.

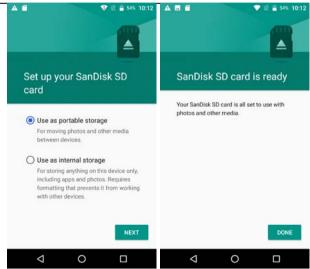
Dual SIM card installation

User the head of stylus to take out the slot, put SIM card in the position as shown in right picture, and then insert the slot.



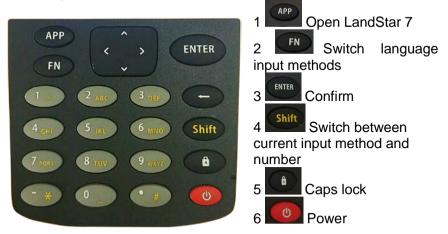


SD card activate process



Note: HCE320 supports to receive data not only via receiver network, but also PDA network.

2.3 Keyboard Introduction



2.4 Data Controller Charging

2.5 Important Notification

• Please use standard DC power adapter and USB data cable to charge HCE320.

• When HCE320 has low power, it has sound prompts, and then please charge it.

• When HCE320 has much lower power, it has secondly sound prompts, and then HCE320 will switch off automatically.

• HCE320 has shock and vibration proof, and supports 1.2 m fall onto concrete.

3 Basic Functions

3.1 Data Storage and Data Transmission

Data storage

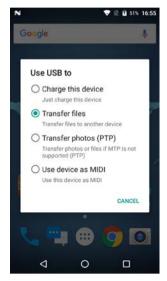
HCE320 supports external SD card, users can copy data of internal storage in SD card.

Data transmission

Pull down menu list and find [USB] icon, choose to transmit file.

Or double click [Computer] in computer desktop and double click

[HCE320], users can see and operate in both internal and external SD card storage.

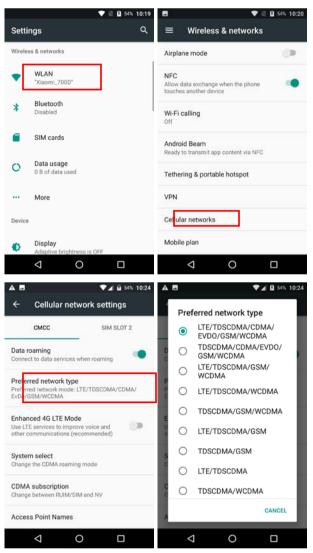


3.2 Network Type Switch

Click [Setting] to enter setting interface, and click [More] to find the [Mobile Network]. Finally, click [Preferred Network Type] and choose the

one you need.

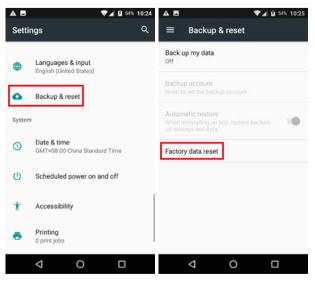
Note: In general, HCE320 will automatically choose the network type based on SIM card, users only need to switch network type while using intranet.

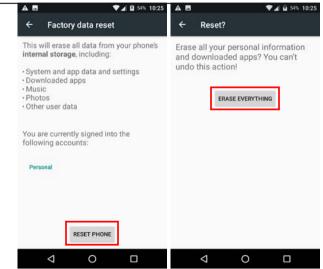


3.3 Restore Factory Setting

Enter the [Settings] \rightarrow [Backup & Reset] \rightarrow [Factory data reset] Press [Factory data reset] \rightarrow [Reset phone], data controller will automatically shut down and restart.

Note: after choosing [Erase everything], the memory data in data controller will be cleared!





3.4 Data Controller Function

Enter the [Settings], find [Location], choose one positioning mode and open it;

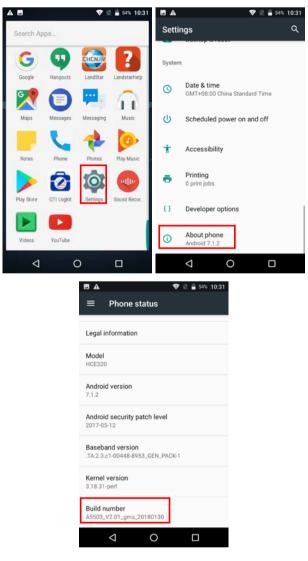
Open LandStar7 software, tap [Connect] in the [Configure], choose [Local] in the [Device Type], [Android Local] in the [Device Name], [Local] in the [Connection Type], tap [Connect]. It can be used to measure when the connection is successful.

Note: Must enlarge tolerance and untick [Fixed solution] in the measurement because the precision of handheld controller is meterlevel.

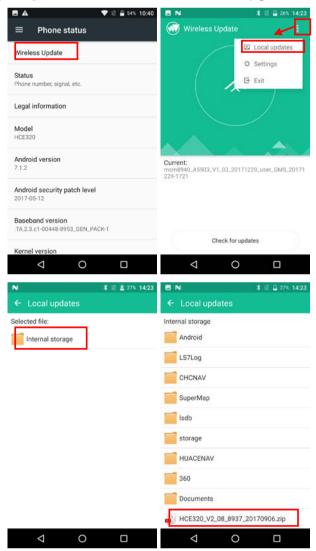
▲ ▼▲ ¥ 54% 10:25		10:26
Settings Q	← Location mode	
Memory Avg 1.0 GB of 1.8 GB memory used	High accuracy Use GPS, WLAN, and cellular networks to determine location	۲
Signed in as Owner	Battery saving Use WLAN and cellular networks to determine location	0
🔲 Фарау Тар & рау	Device only	
Personal	Use GPS to determine location	0
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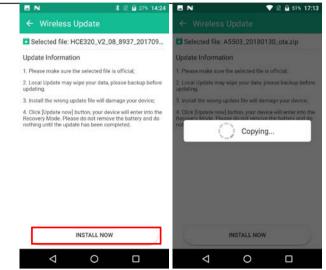
4 Data Controller Core Upgrade

• Enter the [Settings], find and tap [About Phone], check data controller core version firstly.



• Then tap [Wireless upgrade], tap upper right corner, choose [Local upgrade], choose the core version to be upgraded.





• Controller will restart automatically after upgrading, return to the mobile status interface to see the core version and check whether the upgrade is successful.

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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.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: 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 or more 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.

Caution: Any changes or modifications to this device not explicitly approved by manufacturer could void your authority to operate this equipment.

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.

Specific Absorption Rate (SAR) information:

This Smart Phone meets the government's requirements for exposure to radio waves. The guidelines are based on standards that were developed by independent scientific organizations through periodic and thorough evaluation of scientific studies. The standards include a substantial safety margin designed to assure the safety of all persons regardless of age or health.

FCC RF Exposure Information and Statement The SAR limit of USA (FCC) is 1.6 W/kg averaged over one gram of tissue. Device types: Smart Phone (FCC ID:) has also been tested against this SAR limit. The highest SAR value reported under this standard during product

certification is 0.962W/kg when properly worn on the body. This device was tested for typical body-worn operations with the back of the Smart Phone kept 00mm from the body. To maintain compliance with FCC RF exposure requirements, use accessories that maintain a 00cm separation distance between the user's body and the back of the Tablet PC. The use of belt clips, holsters and similar accessories should not contain metallic components in its assembly. The use of accessories that do not satisfy these requirements may not comply with FCC RF exposure requirements, and should be avoided.



very high volume, prolonged listening to a mobile phone can damage your hearing.