



CHCNAV HCE600 Data Controller

USER GUIDE



Survey & Construction | May 2026

Table of Content

1	Introduction	2
1.1	Technical Assistance	2
1.2	Your Comments	2
1.3	Safety Information	2
1.4	Warning and Cautions	2
1.5	Use and Care	3
1.6	FCC Regulations	3
1.7	CE Interference Statement	3
2	Overview	4
2.1	Features	4
2.2	Specifications	4
2.3	Front View	6
2.4	Back View	7
2.5	Bottom	7
2.6	Installation	8
3	Basic Operation	9
3.1	Insert SIM Card and power on	9
3.2	Language & input	11
3.3	Set Date & Time	12
3.4	Display	13
3.5	WIFI	14
3.6	Bluetooth	15
3.7	USB Connection	16
3.8	Use Camera	16
3.9	Login 4G	18
3.10	Location	18
3.11	Check the IMEI Number of the Device	19
3.12	Restore Factory Setting	20
4	Upgrading the Operation System	21

1 Introduction

Thank you for choosing CHC HCE600 GNSS Data Controller.

This Getting Started Guide will provide useful information about your controller. It will also guide you through your first steps of using HCE600 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 HCE600. Alternatively, please request technical support using the CHC Website (**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 a future revision. Please e-mail your comments to **support@chcnav.com**.

1.3 Safety Information

This manual describes CHC HCE600 GNSS Data Controller. Before using the HCE600, please make sure that you have read and understood this Getting Started Guide, as well as the safety requirements.

1.4 Warning and Cautions

WARNING: Charging this device below 0 °C may cause unexpected damage to the battery. A Warning or Caution information is intended to minimize the risk of personal injury and/or damage to the equipment.



WARNING - A Warning alerts you to a potential misused or wrong setting of the equipment.



CAUTION - A Caution alerts you to a possible risk of serious injury to your person and/or damage to the equipment.

1.5 Use and Care

CHCNAV HCE600 is a high-performance smart handheld terminal developed by CHC Navigation. Therefore, the HCE600 should be treated with reasonable care.

1.6 FCC Regulations

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 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.

Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate the equipment.

This device is restricted to indoor use only when operating in 5150 to 5250MHz frequency range.

This EUT is compliance with SAR for general population/uncontrolled exposure limits in ANSI/IEEE

C95.1-1999 and had been tested in accordance with the measurement methods and procedures

specified in OET Bulletin 65 Supplement C.

Body 1g SAR 0.88W/Kg(limt 1.6W/Kg), Extremity 10g SAR 0.377(limt 4W/Kg).

1.7 CE Interference Statement

Declaration of Conformity: Hereby, CHC Navigation Technology Ltd. declares that this HCE600 is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU. A copy of the Declaration of conformity can be found at Shanghai CHC Navigation Technology Ltd.



2 Overview

2.1 Features

CHCNAV HCE600 is a high-performance smart handheld terminal developed by CHC Navigation. Integrating 3GB RAM and 32GB flash memory, it brings you more powerful performance during the survey work. It possesses Android 10 operating system, being equipped with a 2.0GHz octa-core processor and with long battery life.

2.2 Specifications

PN	1101470012
Operating System	Android 10
CPU	MediaTek MT8768 2.0GHz Octa-core
RAM	3GB
Flash Memory	32 GB
Memory Extend	Micro SD, up to 128G
WIFI	802.11 a/b/g/n/ac/d/e/h/i/k/r/v/w, access point mode (2.4 G / 5G)
Cellular Modem	LTE FDD: B1/B2/B3/B4/B5/B7/B8/B12/ B17/B20/B28AB LTE TDD: B34/B38/B39/B40/B41 WCDMA: B1/B2/B4/B5/B8 CDMA-EVDO: BC0 GSM: 850/900/1800/1900
Bluetooth	V 5.0
USB	Type-C, OTG
Li-ion Battery	8000mAh
Battery Life	14 h
Charging Time	4 h (typical)
Camera	Rear 13MP Autofocus with flash

Physical specifications

Display

- Size: 5.5" IPS LTPS LCD capacitive multi-touch
- Resolution: 1440 × 720 pixels HD+ 296 ppi
- Brightness: 600 cd/m2
- Touchscreen: Dragon Trail™ scratch resistant glass
- Stylus: Mapping stylus with high degree of accuracy

Physical

- Dust proof and waterproof: IP68
- Shock: Survives 1.5 m (4.92 ft) fall on concrete
- Humidity: 5% - 95% RH (without condensation)
- Dimension: 224mm*80mm*15.4mm
- Weight: 408g (14.4 oz) (with battery)
- Operating temperature: -30°C to + 60°C (-22°F to +140°F)
- Storage temperature: -40°C to + 65°C (-40°F to +149°F)

Sensors

- NFC: Support
- G-sensor: Support
- Light sensor: Support
- E-compass: Support
- Gyroscope: Support
- GNSS (BDS, GPS, GLONASS) A-GPS support

2.3 Front View



Keypad		Instruction
Side button	1.Survey button	On right side of device, used for Landstar 8 survey Hotkey.
Main keypad	2.Power button	Turn on/off device
	3.Main keypad	Standard function keypads
	4.APP button	Quickly open customized app

2.4 Back View

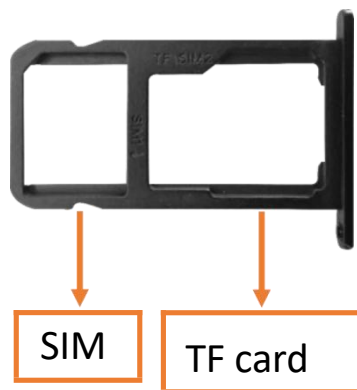


2.5 Bottom



2.6 Installation

Please insert the SIM card and the TF card in the direction of the diagram.



3 Basic Operation

3.1 Insert SIM Card and power on

Refer to **2.6 Installation** find the SIM card and TF cardslot, and then insert the cards into slots correctly.

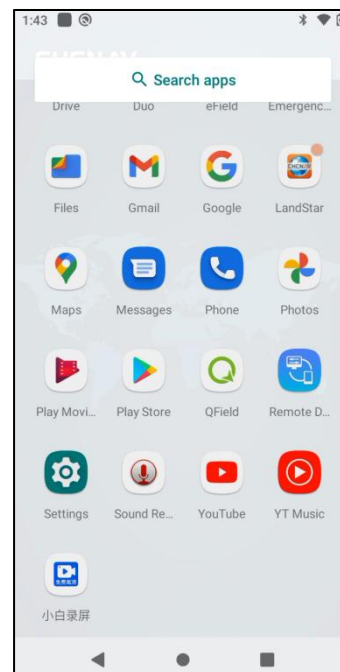
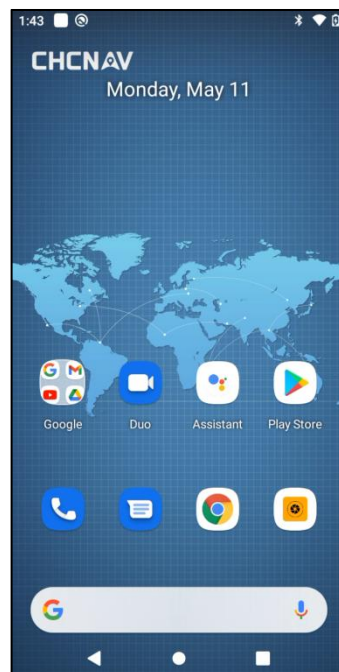
Before powering on HCE600, please make sure the battery has plenty of power. Then long press the power button to turn on HCE600 and enter its home screen.

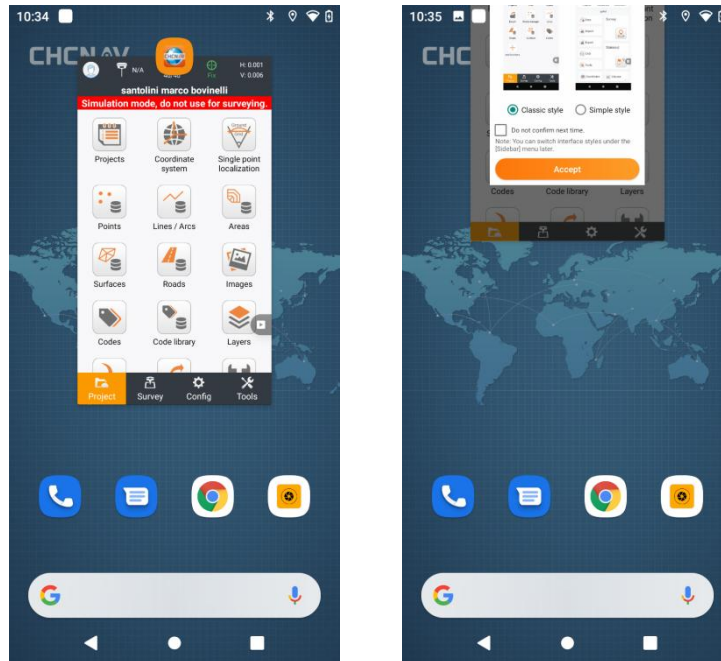
Click  to make a phone call.

Click  to access contacts information.

Click  to open message.

Click  to open browser.





Use virtual button key to facilitate your operation with HCE600.

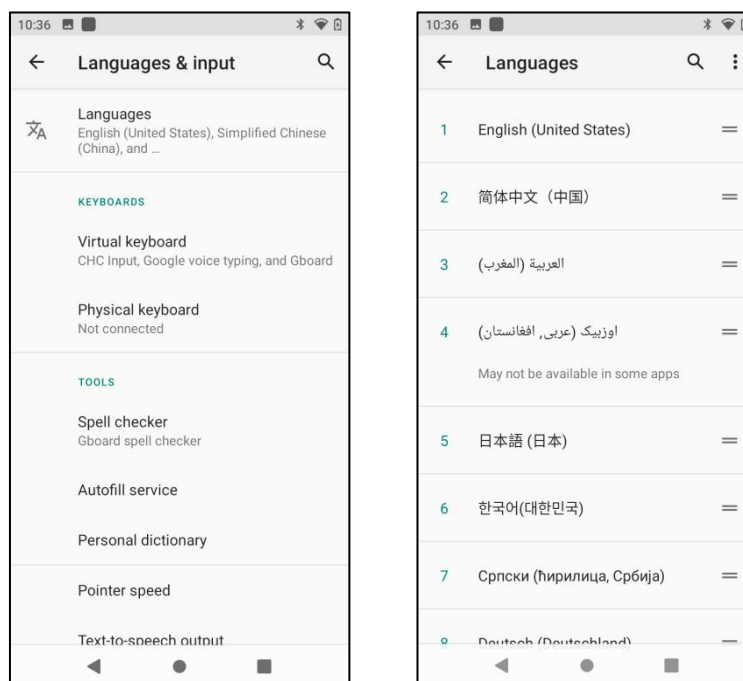
Click  to go back to previous menu.

Click  to return home screen.

Click  to see all the running apps, and you can stop apps by sliding them upward

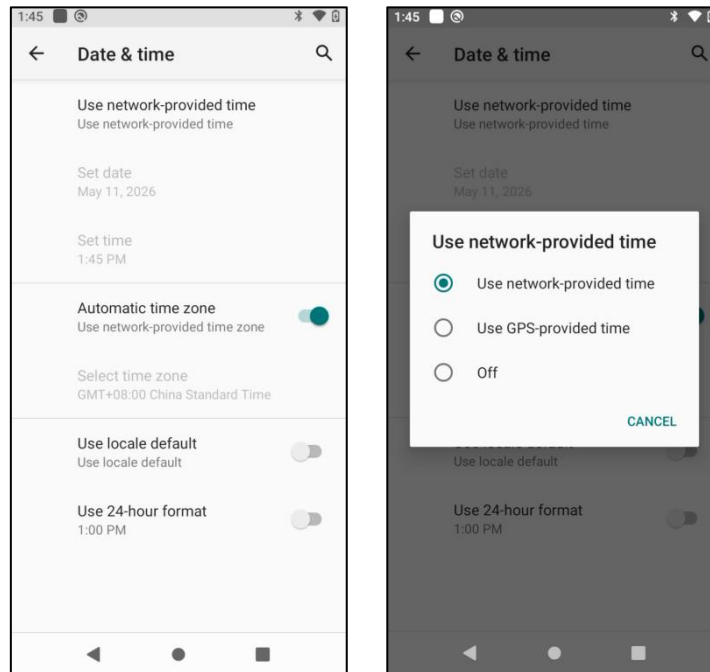
3.2 Language & input

Click **[Settings]** – **[System]** – **[Language & input]** – **[Languages]** to select language. If you have not found the language you want to choose, click **[Add a language]** to find the target language.

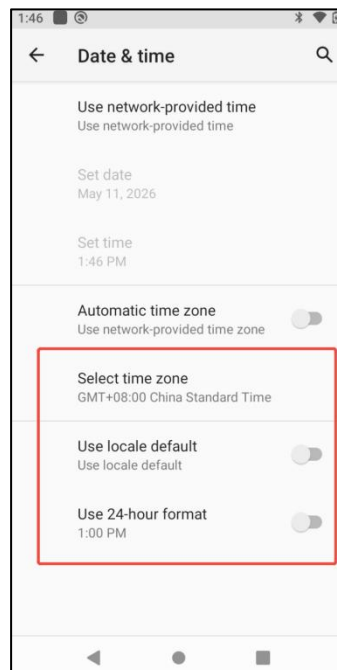


3.3 Set Date & Time

Click **[Settings]** – **[System]** – **[Date & time]** and enter **[Date & time]** interface.



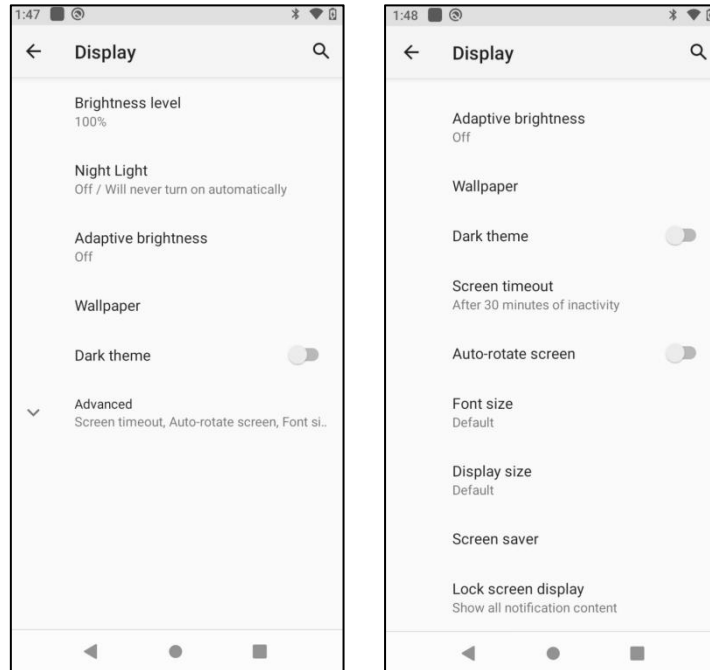
If you want to set date and time by yourself, please turn off the Use network-provided time and start your own settings.



You can also customize your time zone and choose whether to use 24-hour format in this interface.

3.4 Display

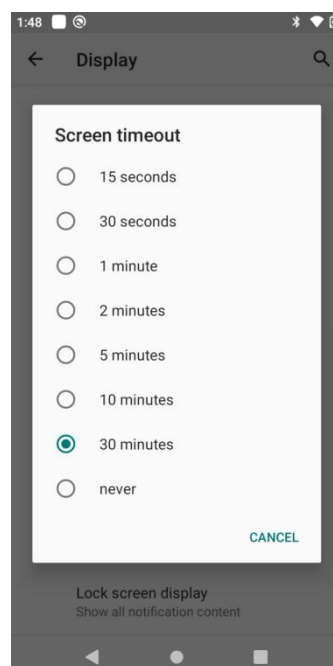
Click **[Settings]** – **[Display]** to enter Display interface. Click Advanced to view all the options.



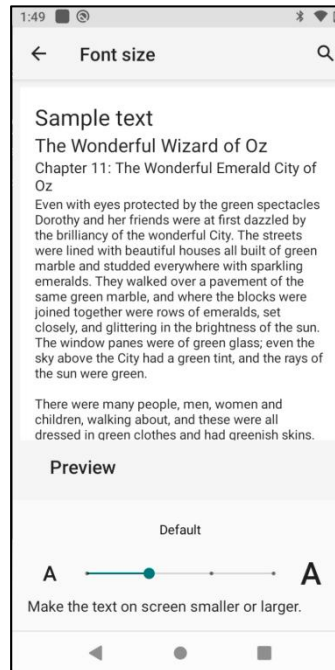
Brightness adjusting: Click **Brightness** level to adjust it according to your preference.



Screentimeout: Click to optimize the inactivity time HCE600 needs to close screen.

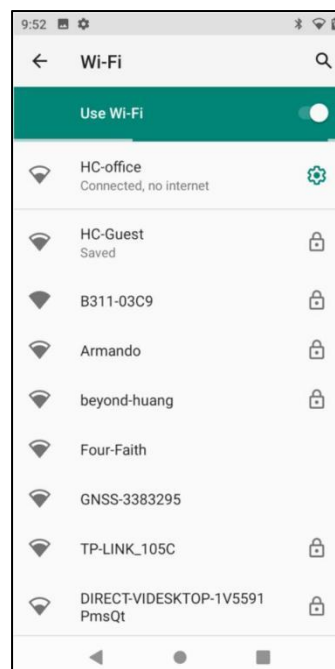


Font size: Slide the green dot to change the font size.

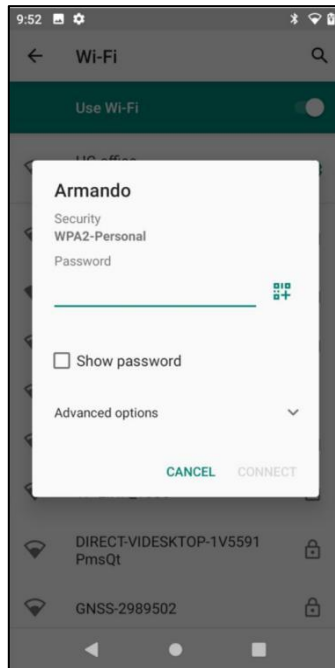


3.5 WIFI

Click **[Settings]** – **[Network & internet]** – **[WIFI]** to switch on the button.

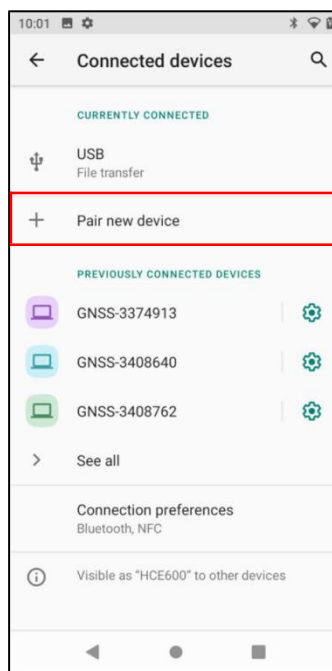


Select **WIFI** and type in its password to connect.



3.6 Bluetooth

Click **[Settings]** – **[Connected devices]** – **[Bluetooth]** to turn on the Bluetooth. Users can view paired device list. Meanwhile, users can pair new device by clicking **[Pair new device]** button.



Find nearby devices and pair with it.

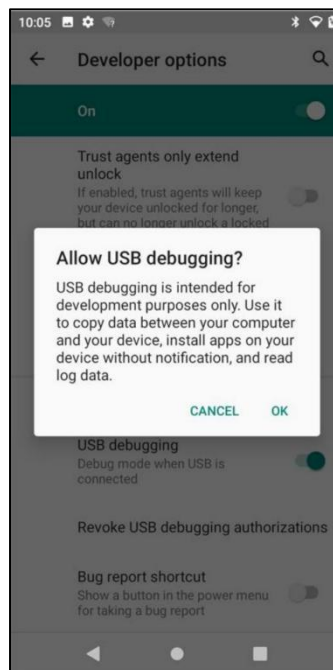


3.7 USB Connection

For connection or data transmission between HCE600 and personal computer, please use the USB data cable as shown below.



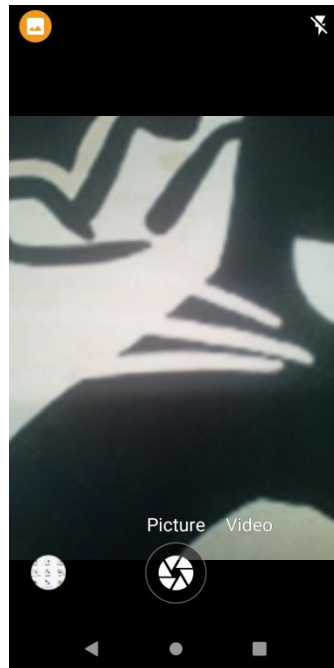
Click **[Settings]** – **[System]** – **[Advanced]** – **[Developer options]** – **[USB debugging]** to make sure this function is switched on. After USB data cable is connected to PC, wait until the Allow USB debugging dialogue pops up, click OK.



You can also use third party software to manage the documents and data stored in HCE600 and install software like GNSS Tool into it.

3.8 Use Camera

Make sure that the battery is charged. If the battery capacity is lower than 5% percent, the device is not allowed to use camera function.



You can slide to change Picture or Video.



button means take a photo



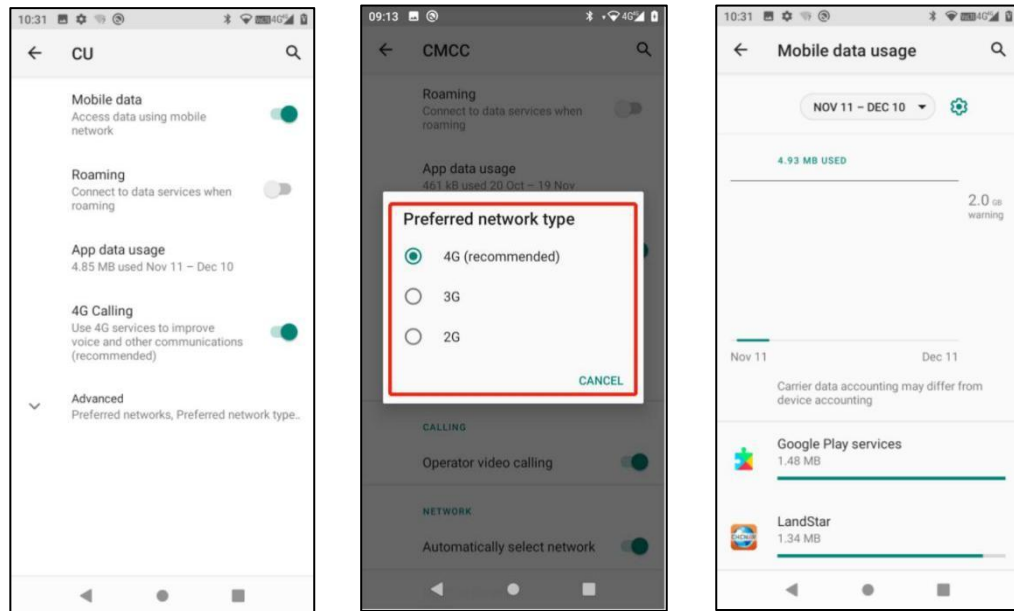
button means Camera Modes and



button means Settings and click the button to configure related parameters.

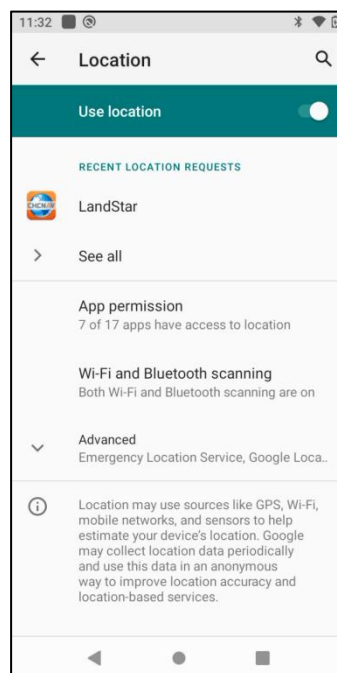
3.9 Login 4G

After inserting your SIM card, click **[Settings]** – **[Network & Internet]** – **[Mobile Networks]** – **[Advance]** – **[Preferred network type]** and select corresponding network type of your SIM card. Then turn on Mobile data and click App data usage to see data usage.



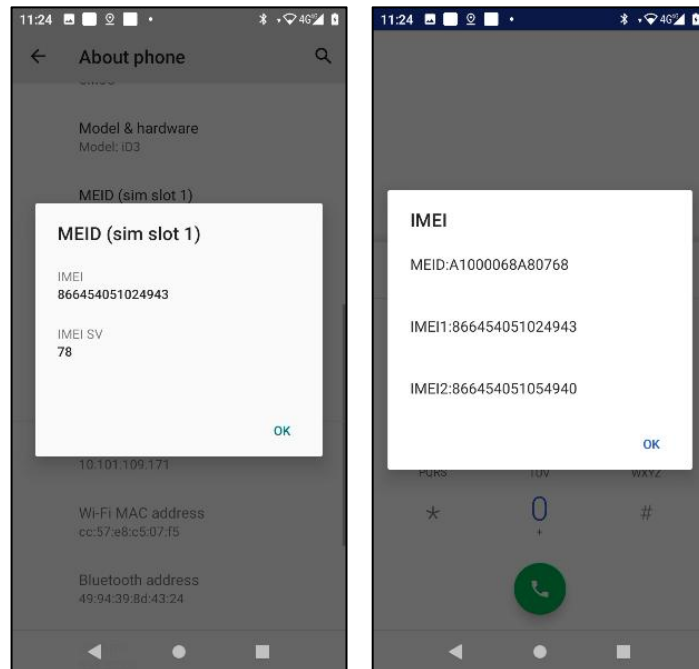
3.10 Location

Click **[Settings]** – **[Location]** to switch on location service.



3.11 Check the IMEI Number of the Device

Click **[Settings]** – **[About phone]** – **[IMEI]** Or enter the dialing panel, tap “*#06#”, the IMEI numbers show up automatically.

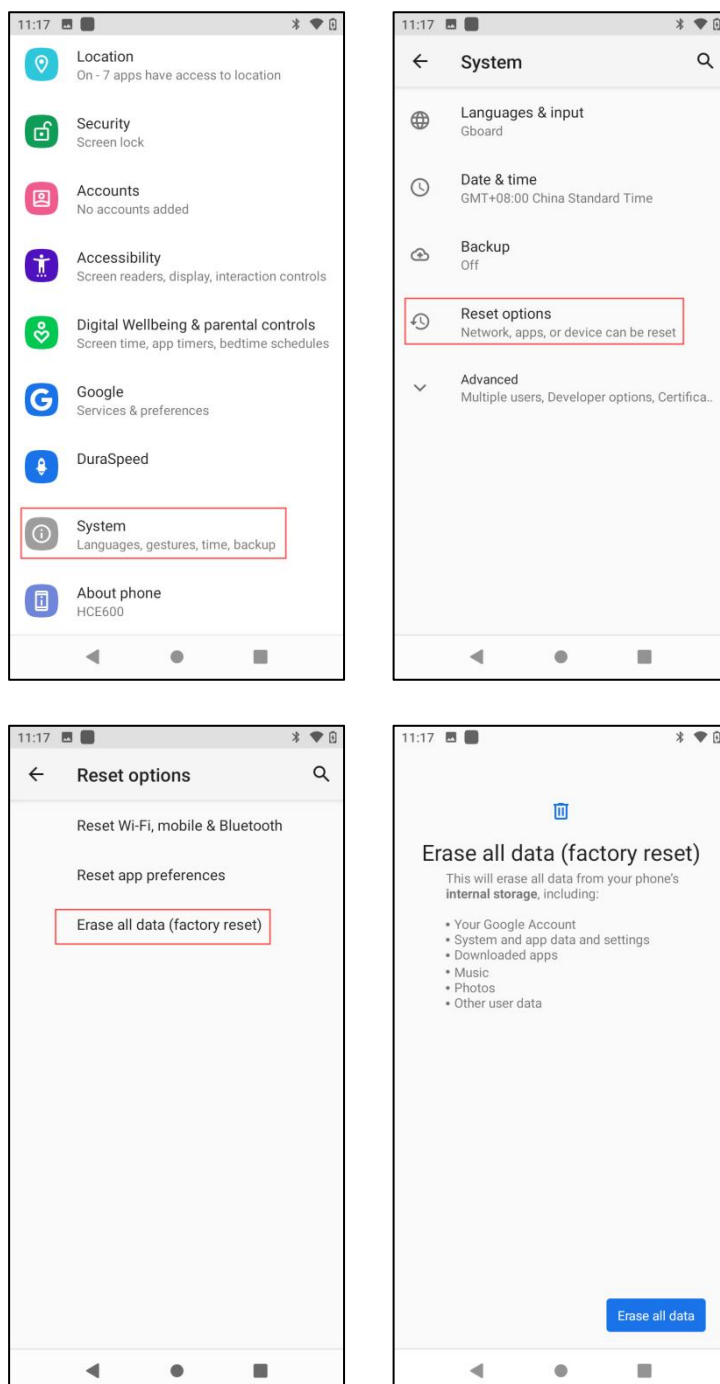


3.12 Restore Factory Setting

Enter the **[Settings]** – **[System]** – **[Reset options]** – **[Erase all data]**

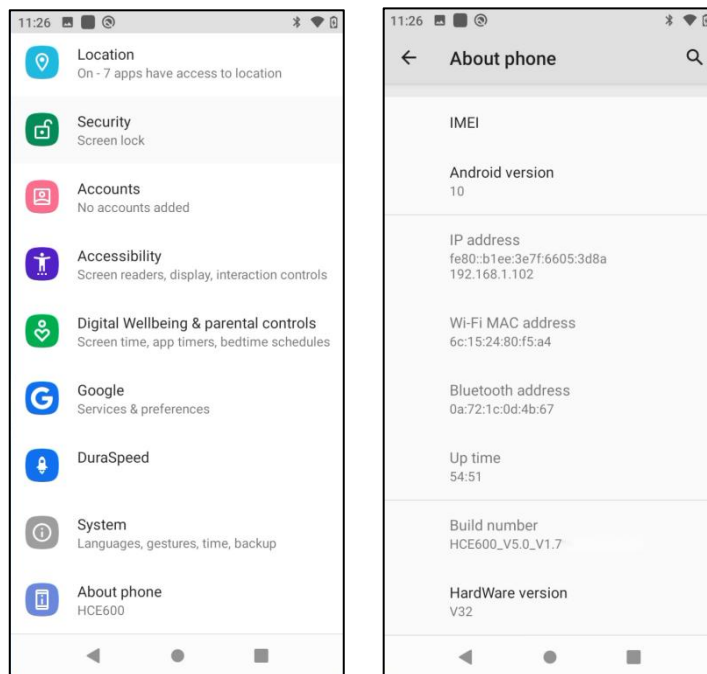
Press **[Erase all data]** – **[Delete all data]**, data controller will automatically shut down and restart.

Note: After choosing **[Delete all data]**, the memory data in data controller will be cleared!

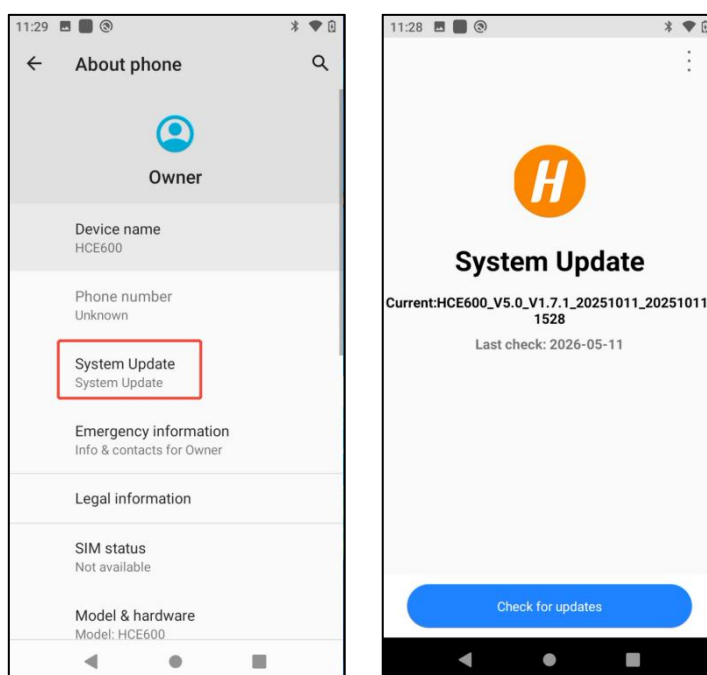


4 Upgrading the Operation System

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



Then tap **[System upgrade]**, then follow the tips to copy the upgrade package to the TF card. Then click **[upgrade]** to start.



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

CHC Navigation

Building C, 577 Songying Road, Qingpu, District,
201703 Shanghai, China

Tel: +86 21 542 60 273 | Fax: +86 21 649 50 963

Email: sales@chcnav.com | support@chcnav.com

Skype: chc_support

Website: www.chcnav.com

This document is intended for general information purposes only. It does not consider the reader's specific circumstances and environmental constraints of use of GNSS.