eChat

e360

ENGLISH

Quick Start Guide

Broadband Portable Radio

LEGAL INFORMATION

CALTTA TECHNOLOGIES CO., LTD. reserves the right to make modifications on typographical errors or update specifications in this guide without prior notice.

The figures in this manual are for reference only. For the product structure and specifications of the battery and charger, please refer to the actual product. The accessories provided with the product may vary with product models and functions.

1. GET TO KNOW YOUR RADIO

1.1 Components

The e360 radio is a trunking voice intercom product based on the public network data service, which can be used in the LTE/WCDMA networks. With the help of 4G technology, the e360 achieves high-speed data connection, so that you can communicate with others in real time.
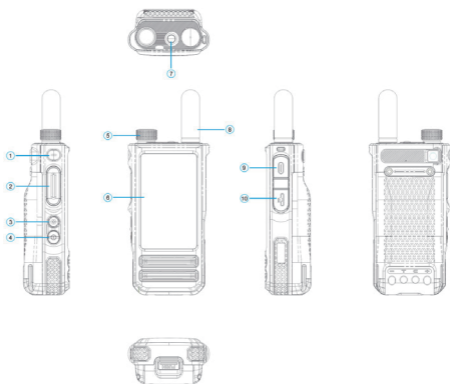

⚠ WARNING	NOTE: Before using the radio, read all the instructions contained in the manual and with special care, those relative to safety.

1.2 COMPONENT DESCRIPTIONS

No.	Name	No.	Name
1	F1 (Function 1) button	6	LCD screen
2	PTT button	7	SOS button
3	F2 (Function 2) button	8	Antenna
4	Power button	9	Earphone/USB Type-C Interface
5	Channel/Volume knob	10	Nano-SIM Card Slot

2. SYMBOLS DISPLAY
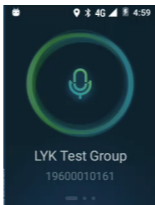
The main screen of Android system is the starting point for you to access all Android system functions on your radio. You may study the status of the radio by the status bar on the top of the screen. The following icons may be displayed on the LCD.

Icon	Status
📍	GPS location ON
⚡	Charging
🚫	No SIM Card

Icon	Status
🔇	Mute
◢	Signal indicator
4G ◢	Data service indicator
🎧	Earphone connected

2.1 LED INDICATOR

The LED indicator indicates the operating status of the radio.

No.	Working Status	LED Indicator	
		Color	Period
1	Charging	Red	Solid
2	Full charge	Green	Solid
3	Login failed	Red	Flashing
4	Group selecting mode	Green	Solid
5	Floor request successful	Red	Solid
6	Floor request fail	Red	Flashing
7	Answer the group call/half-duplex private call	Green	Solid
8	Power on progress	Green	Solid
9	Power off progress	Red	Solid
10	Extremely low power (less than 10%)	Red	Flashing

3. GETTING STARTED

3.1 Insert the battery

1. Insert the battery by pushing up from lower left corner in the back as shown in the figure.
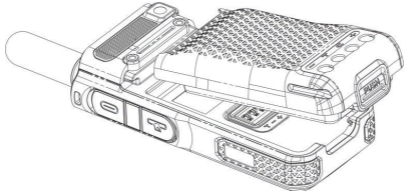
2. Install successfully, ensure the battery contacts match up with the contacts in the radio.
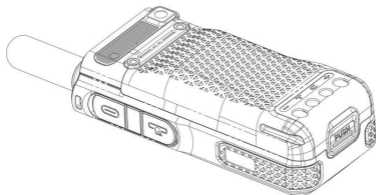
3.2 Insert Nano-SIM card

Insert a valid Nano-SIM card into the radio before using.

The Nano-SIM card can be used in any corresponding format radio (the new radio will automatically read the Nano-SIM card).

1. Power off the radio.

2. Open the cover of Nano-SIM card and insert it in the right direc-

tion.
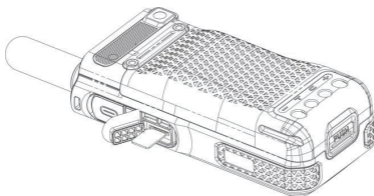
3. Close the cover of Nano-SIM card.
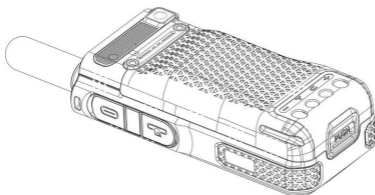
📝 NOTE:

- Please power off the radio before removing Nano-SIM card. It is inadvisable to insert or take out the Nano-SIM card if connected to external power source.
- Please avoid touching the metal plane area of the SIM card to prevent damaging the information held inside. Store the Nano-SIM card in a place away from electricity and magnetism.

3.3 Battery charging

There are two ways of battery charging, one is desktop charging, the other one is USB cable charging.

Desktop charging:

1. Place the radio in the desktop charger and the radio will be charged automatically.

2. After charging is completed, take out the radio.

USB cable charging:

3. Connect the charge/data cable to the USB Type-C interface of the radio.
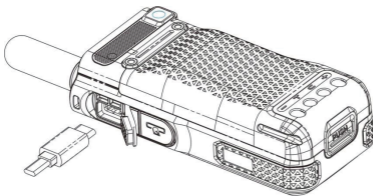
4. Connect the other end of charge/data cable to the charger, and then connect the charger to AC power socket. Battery, radio and charger will be moderately hot during charging, this is normal.

5. After charging, disconnect the charger from AC power source.

✏️ NOTE:

- Under the circumstance where data transmission is not supported, the in-built data cable is for charging only.

- The lithium ion battery attached with the radio can be used after unpacking. Be sure to fully charge for the first three times before thorough use, so that the battery can reach its optimum usage state.

- If the battery voltage is too low, the radio will automatically power

off.

- If the battery will be not used for a long period, please take it out from the radio and store it in a cool, dry place.

3.4 Power on

Press and hold the power button for 3~5s under the power off mode, after green indicator is lit, the LCD screen displays the power on picture, prompting that the radio is powering on.

3.5 Power off

Press and hold the power button for 3~5s under the standby mode, after red indicator is lit, the LCD screen displays the power off picture, prompting that the radio is powering off.

3.6 Adjust the volume

Rotate the channel/volume knob to adjust the volume under the standby mode, LCD screen displays the current volume level and the radio broadcasts the voice assistance at the same time.

3.7 Light up the screen

Press the Power on/off button to light up the screen.

4.   BASIC OPERATIONS

4.1 Log in eChat system

After the radio is powered on, it will automatically detect the data network and eChat account setting, then login eChat system after detection and voice prompt the user name and group name of the current account.

If the radio cannot login eChat system, please check the following information.

Problem type	Possible cause	Possible solution
Nano-SIM card	Nano-SIM card data service abnormal.	Please check whether the Nano-SIM card data service of the radio is normally activated and the data traffic balance is sufficient within the period of validity.
Account problem	Whether the eChat account and password are set in a wrong way. Whether the eChat account has a period of validity. Whether the eChat account has been occupied.	Please consult eChat service provider.

4.2 Initiate group call

4.2.1 Standby mode

1. Press PTT button to initiate voice call to the current group. The LCD screen will display relevant information whether the call is initiated successfully, together with prompt tone and indicator prompt.

2. When the call is initiated successfully, you may press and hold

9

the PTT button to talk.

3. Release PTT button to release the floor.

4.2.2 Group selecting mode

1. Press the channel/volume knob to switch to the group selecting mode.

2. Rotate the channel/volume knob to switch to the required group.

3. Press PTT button to confirm the current group selected or wait for 10 seconds to select the current group automatically.

4. Press PTT button to initiate voice call to the current group. The LCD screen will display relevant information whether the call is initiated successfully, together with prompt tone and indicator.

5. When the call is initiated successfully, you may press and hold the PTT button to talk.

6. Release PTT button to release the floor.

4.3 Answer the group call

The radio will join the PTT group call automatically when it receives the PTT group call.

4.4 Floor request

In the PTT call, press and hold the PTT button to request the floor to talk. There is PTT prompt tone and indicator in the floor request.

4.5 Initiate half-duplex private call

1. Press the channel/volume knob to switch to private call mode.

2. Rotate the channel/volume knob to select the required online member of the working group.

3. Press PTT button to initiate private call to the current member.

4. Press F2 button to end the private call and the radio will return to the last working group automatically.

4.6 Answer half-duplex private call

1. The radio will exit from the current working group immediately after receiving the private call.

2. The radio will join the half-duplex private call automatically and keep in the listening status.

4.7 Initiate full-duplex private call

1. Press the channel/volume knob to switch to private call mode.

2. Rotate the channel/volume knob to select the required online member of the working group.

3. Press and hold F1 button to initiate full-duplex private call to the current member.

4. Press F2 button to end the full-duplex private call and the radio will return to the last working group automatically.

4.8 Answer full-duplex private call

1. When receiving a full-duplex private call, there will be a voice assistance announcement and the LED goes green and flashing.

2. Press PTT button to answer the full-duplex private call.

3. Press F2 button to reject the full-duplex private call and the radio will return to the last working group automatically.

✏️ NOTE:

You may rotate the channel/volume knob to adjust the volume

during a private or full duplex call.

5. ADVANCED OPERATIONS

5.1 System software upgrade

1. The radio will automatically detect if there is a new version when it is connected to Wi-Fi or the data service is available.

2. In case of a new version, the radio will show and broadcast a prompt message. The user should start the version upgrade process in system settings.

3. When the upgrade progress has started, the LCD screen will show a prompt. If the radio is powered off in the upgrade process, the version update will fail.

5.2 eChat application upgrade

1. When the radio is connected to the network and logged in successfully, if the server has a new eChat application version, it will push to the radio automatically, and the radio will start to download the new version package in background.

2. When the package download completes, the radio will show a prompt message.

3. Please press PTT button within 5 seconds to confirm the upgrade and start to install the new version; if you don't press PTT button in 5 seconds, you will abort the upgrade.

4. After the new version is installed, the radio will delete the package and reboot the eChat application.

5.3 Wi-Fi network settings

e360 supports setting up Wi-Fi network via CPS, including add, delete and modify the specific Wi-Fi network. You can set up a maximum of 5 Wi-Fi networks. Please contact with solution provider to do the configuration.

6. SYSTEM SETTINGS

Press and hold F2 button under the standby mode to enter system settings, and the content that can be set up includes:

LCD level;

Network mode;

Wi-Fi;

Bluetooth;

APN information

Language;

System updates;

Voice assistance;

About phone;

✏️ NOTE:

The various settings are selected by rotating the channel/volume knob. Modified settings are saved when exit the settings.

The radio will exit the system settings when pressing PTT button to initiate or receive a call, and the current setting that has been modified will be saved.

6.1 LCD level

1. Press and hold F2 button to enter system settings under the standby mode.

2. Rotate the channel/volume knob to switch to LCD level setting.

3. Press the channel/volume knob to change the current LCD level, the modified LCD level will take effect immediately, totally 5 levels, press the channel/volume knob can set from 1-5 cyclically.

4. Press F2 button to exit the main menu.

6.2 Network mode

1. Press and hold F2 button to enter system settings under the standby mode.

2. Rotate the channel/volume knob to switch to Network mode setting.

3. Press channel/volume knob to view the network mode list and current network mode.

4. Rotate the channel/volume knob to choose other network mode, press channel/volume knob to set the network mode (system will define different network modes according to the inserted Nano-SIM card).

5. Press F2 button to go back/exit main menu.

6.3 Wi-Fi

1. Press and hold F2 button to enter system settings under the standby mode.

2. Rotate the channel/volume knob to switch to Wi-Fi setting.

3. Press channel/volume knob to enter the Wi-Fi setting.

4. Press channel/volume knob to turn on/off Wi-Fi.

5. If Wi-Fi is on, you can see the Wi-Fi list.

6. Rotate the channel/volume knob to select the Wi-Fi and press

knob to connect the Wi-Fi network which preset by the CPS.

7. Press F2 button to go back/exit main menu.

6.4 Bluetooth

1. Press and hold F2 button to enter system settings under the standby mode.

2. Rotate the channel/volume knob to switch to Bluetooth setting.

3. Press channel/volume knob to enter the Bluetooth setting.

4. Press channel/volume knob to turn on/off Bluetooth.

5. If Bluetooth is on, you can view the Bluetooth device list. Rotate the channel/volume knob to choose the right Bluetooth device and press the knob to connect.

6. Press F2 button to go back/exit main menu.

6.5 APN information

1. Press and hold F2 button to enter system settings under the standby mode.

2. Rotate the channel/volume knob to switch to APN information.

3. Press channel/volume knob to view the APN list and current APN information.

4. Rotate the channel/volume knob to select other APN options.

5. Press channel/volume knob to change to other APN.

6. Press F2 button to go back/exit main menu.

6.6 Language

1. Press and hold F2 button to enter system settings under the standby mode.

2. Rotate the channel/volume knob to switch to language setting.

3. Press channel/volume knob to view language list and current system language.

4. Rotate the channel/volume knob to select other language.

5. Press the channel/volume knob to change to other system language.

6. Press F2 button to go back/exit main menu.

6.7 System updates

1. Press and hold F2 button to enter system settings under the standby mode.

2. Rotate the channel/volume knob to switch to system updates.

3. Press channel/volume knob to enter sub-menu of system updates.

4. Rotate the channel/volume knob to select "Local update" or "Remote update".

5. Before select the "Local update", please prepare the update.zip file in SD card.

6. Press channel/volume knob to confirm "Local update".

7. If you select "Remote update", you will enter the remote system updates page.

8. Rotate channel/volume knob to select "ONLINE UPDATE" menu.

9. Press channel/volume knob to confirm "Remote upgrade", the system will checking updates, if there is new version it will update. If there is no new version, the radio will have a prompt of "Your software is up to date".

10. Rotate channel/volume knob to select "OK" and press to con-

firm.

11. Press F2 button to go back/exit main menu.

6.8 Voice assistance

1. Press and hold F2 button to enter system settings under the standby mode.

2. Rotate the channel/volume knob to switch to Voice assistance setting.

3. Press channel/volume knob to turn on/off Voice assistance.

4. Press F2 button to exit the main menu.

6.9 About phone

1. Press and hold F2 button to enter system settings under the standby mode.

2. Rotate the channel/volume knob to switch to About phone.

3. Press channel/volume knob to enter About phone menu and view current information.

4. Press F2 button to exit the main menu.

Press some buttons under standby mode to enter some function operations or other settings, these operations and settings include:

Message;

Default dispatcher;

Application version;

6.10 Message

1. Press F1 button to enter message list under the standby mode.

2. You will see the text messages and broadcast messages.

17

3. Rotate the channel/volume knob to see previous/next message.

4. Press F2 button to exit message list.

6.11 Default dispatcher

1. Press and hold F1 button to enter dispatcher list under the standby mode.

2. Rotate the channel/volume knob to view the dispatchers.

3. If there are more than one dispatchers, rotate the channel/volume knob to choose the dispatcher and press the knob again to set it as the default dispatcher.

4. Press F2 button to exit this settings.

6.12 Application version

1. Press F2 button to enter application version information.

2. The current application version will be displayed on LCD screen.

3. Press F2 button to exit.

MAIN TECHNICAL SPECIFICATIONS

Frequency	LTE	FDD-LTE: Band 1,3,4,5,7,8,20,28
	WCDMA	Band 1,4,5,8
Technologies	LTE/WCDMA/Bluetooth 4.0	
Size(H*W*D)	115.5 * 54.5 * 34.5 mm (Without Antenna)	
Weight	About 250g (with antenna and battery)	
Display	2.4inch color LCD, 240x320	
Battery	18.87Wh(5100mAh,3.7V)	
Interface	Type-C (Data/Audio/Charging)	

Memory (RAM+ROM)	512MB + 4GB
WLAN	802.11b/g/n,2.4GHz
Location	GPS/Glonass
Speaker	Front: 36mm Professional Speaker
Card Slot	Nano SIM x 1
Charging	Desktop Charger / USB Type-C(Optional)
Dust and Water Resistance	IP54

1. Risk of explosion if battery is replaced by an incorrect type.
Dispose of used batteries according to the instructions.

2. Adapter shall be installed near the equipment and shall be easily accessible.

3. The product shall only be connected to a USB interface of version USB Type-C.

4. This product can be used across EU member states.

SOFTWARE RELEASE

This radio is configured to work with the eChat software version 2.x (x means 0, 1, 2, 3,…9 Arabic numbers).

ACCESSORIES

This radio is designed to operate with the accessories supplied by CALTTA and included in the Standard Package.

This equipment is marked $C\mathcal{E}$

ENGLISH-EN

CALTTA declares that the radio equipment type e360 is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: http://www.caltta.com/en/download.aspx

Specific Absorption Rate (SAR)

Your mobile device is a radio transmitter and receiver. It is designed not to exceed the limits for exposure to radio waves recommended by international guidelines. These guidelines were developed by the independent scientific organization ICNIRP and include safety margins designed to assure the protection of all persons, regardless of age and health.

The guidelines use a unit of measurement known as Specific Absorption Rate, or SAR. The SAR limit for mobile devices is 2 W/kg and the highest SAR value for this device when tested 25mm front of face is 0.160W/kg*, and when tested at the body is 0.911 W/kg* with 5 mm distance. As mobile devices offer a range of functions, they can be used in other positions, such as on the body as described in the user manual.

As SAR is measured utilizing the device's highest transmitting power, the actual SAR of this device while operating is typically below that indicated above. This is due to automatic changes to the

power level of the device to ensure it only uses the minimum power required to communicate with the network.

* The tests are carried out in accordance with EN 50566, EN 62209-2, EN 62479.

SAFETY INFORMATION

	Do not make or receive radio calls while driving. Never text while driving.
	Keep your radio at least 5 mm away from your body while making calls.
	Small parts may cause choking.
	Your radio can produce a loud sound.
	To prevent possible hearing damage, do not listen at high volume levels for long periods. Exercise caution when holding your radio near your ear while the loudspeaker is in use.
	Avoid contact with anything magnetic.
	Keep away from pacemakers and other electronic medical devices.

	Turn off when asked to in hospitals and medical facilities.
	Turn off when told to on aircraft and at airports.
	Turn off when near explosive materials or liquids.
	Do not use at gas stations.
	Your radio may produce a bright or flashing light.
	Do not dispose of your radio in fire.
	Avoid extreme temperatures.
	Avoid contact with liquids. Keep your radio dry.
	Do not attempt to disassemble your radio.

	Only use approved accessories.
	For pluggable equipment, the socket-outlet shall be installed near the equipment and shall be easily accessible.
	Do not rely on your radio as a primary device for emergency communications.

BATTERY SAFETY INFORMATION

🔵 WARNING!

Using CALTTA-unapproved or incompatible battery, charger or power adapter may damage your device, shorten its lifespan or cause a fire, explosion or other hazards.

🔵 CAUTION:

operating temperature range: -20 to 55°C, Charging temperature range: 0 to 40°C and the storage temperatures are -30°C to +70°C. Extreme temperatures can damage the device and reduce the charging capacity and lifespan of your device and battery.

🔵 WARNING!

Do not disassemble, squeeze or puncture the device, as this can cause explosion or fire.

🔵 WARNING!

Do not place the device or the battery on or in heating equipment, such as microwave ovens, stoves or radiators. Keep the device and the battery away from excessive heat and direct sunlight. If not, the

device or the battery may overheat and cause explosion or fire.

✏ NOTES:

- Do not change or replace the battery in your device by yourself. The battery can only be changed or replaced by CALTTA or CALTTA authorized service provider.
- Please disconnect the charger when the battery is fully charged. Overcharging may shorten the battery life.
- When not using the device for a long period, please charge the battery about half and then store the device in a cool dry place.
- If the battery damages or shows signs of swelling or leakage, please stop use immediately and contact CALTTA or CALTTA authorized service provider for replacement.
- 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.

RF Exposure Information (SAR):

This product 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.

The SAR limit of USA (FCC) is 1.6 W/kg averaged over one gram of tissue. This device was tested for typical body-worn operations when the device used at 25mm from front of face and 0mm from the belt, for maintain compliance with FCC RF exposure requirements. 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.

FCC Note

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