



## LEGAL INFORMATION

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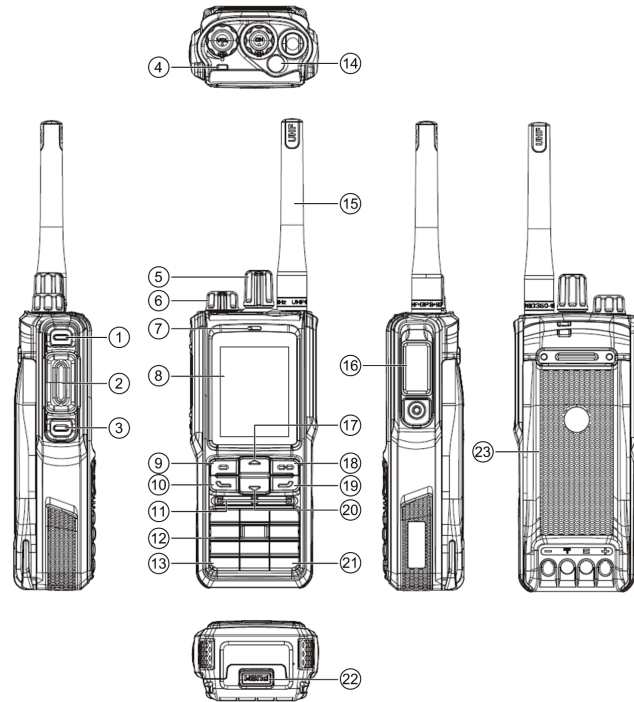
**Violators Will Be Prosecuted.**

ZTE Trunking Technology Corporation 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, refer to the actual product. The accessories provided with the product may vary with product models and functions.

## Get to know your PH790 VHF

### Components



No.	Name	No.	Name
1	Side key 1	13	* key
2	PTT key	14	Top key
3	Side key 2	15	Antenna
4	LED indicator	16	Accessory interface
5	Group call selection knob	17	Up key
6	Power/Volume knob	18	Back/Group call management key
7	Microphone	19	Hook key
8	LCD	20	Down key
9	OK/Menu key	21	# key
10	Call/Answer key	22	Push button
11	Speaker	23	Battery
12	Digit keypad		

### Programmable Keys

To facilitate operations, your PH790 VHF provides three programmable keys (**Side key 1**, **Side key 2**, and the **Top key**), and each programmable key can be assigned with one of the following functions by the product distributor through programming.

No.	Function	Description
1	Call release	Releases an ongoing call or stops establishing a call.
2	Keypad lock	Locks or unlocks the keypad immediately.
3	Power level	Adjusts the transmit power level quickly.
4	Private call contact	Opens the private call contact list directly.
5	Group call contact	Opens the contact list of a contact group directly.
6	Call logs	Opens the <b>Call Logs</b> menu directly.
7	Work mode	Opens the <b>Work Mode</b> menu directly.
8	Hunt	Opens the <b>Hunt</b> menu directly.
9	Manual Hunt	Restarts scanning and registration
10	BKG Hunt	Enables or disables <b>BKG Hunt</b> .

**NOTE:**

The functions of a programmable key may vary with the operation (press or press and hold). For details, contact the local distributor.

## Status Indication

### LCD icons

The following icons may be displayed on the LCD.

Name	Icon	Status
Signal strength		No signal
		The more the signal bars are, the stronger the signals are.
Message		SMS message unread
		The message box is full.
Hunt		Your PH790 VHF is in Hunt status. The icon is not displayed in <b>BKG Hunt</b> .
Roaming		Your PH790 VHF is in roaming status.
Transmit power		The current channel transmits signals in low power.
		The current channel transmits signals in high power.
Battery level		The longer the battery progress bar is, the higher the battery level is.
Speaker		The speaker is on.

### LED indicator

The LED indicator indicates the operating status of the PH790 VHF.

Indicator	PH790 VHF
Lit green	Your PH790 VHF is receiving voice signals.
Lit red	Your PH790 VHF is transmitting voice signals.
Flashing orange	Your PH790 VHF is in Hunt status.
Lit orange	After a call is established, there is no voice transmitted or received in the service channel. You can press the <b>PTT</b> key to initiate a call.

# Basic Operations

## Power On/off Your PH790 VHF

To power on your PH790 VHF, turn the **Power/Volume knob** clockwise until a click is heard.

To power off your PH790 VHF, turn the **Power/Volume knob** counterclockwise until a click is heard.

## Turn Up/down the Volume

After powering on your PH790 VHF, turn the **Power/Volume knob** clockwise can turn up the volume, and turning the **Power/Volume knob** counterclockwise can turn down the volume.

## Select a Group

You can add contacts in one group to manage the contacts efficiently. Your PH790 VHF supports up to 32 groups. One group contains up to 32 contacts.

You can select a group through one of the following ways:

- Menu

Press the **OK/Menu** key, select **Subgroup** from the displayed menu, press the **Up** or **Down** key to select a group as required. After entering the group, select **Set Default**, and press the **OK/Menu** key.

- Shortcut key

When the home screen is displayed, press the **Group call management** key to open the **Subgroup** menu, and then repeat the above operations.



**NOTE:**

By default, your PH790 VHF has one group list in which you can add 32 group contacts.

## Select a Group Contact

After your PH790 VHF is powered on and registered, you can select a group contact through one of the following three ways:

- Group call selection knob

Turn the **Group call selection knob** to select the group contact.

- Menu

Press the **OK/Menu** key, select **Subgroup** from the menu, and press the **Up** or **Down** key to select a group as required. After entering a group, select **Members** to enter the **Members** menu, and press the **Up** or **Down** key to select a group call contact.

- Shortcut key

If the distributor sets a **Group call contact** shortcut key, you can press this key to enter the group call list menu corresponding to the group, and then press the **Up** or **Down** key to select a group call contact.

## Lock/Unlock the Keypad

If the keypad is unnecessary temporarily, you can lock the keypad to prevent misoperations. You can lock or unlock the keypad through one of the following ways:

- Key combination

Press the **OK+\*** key combination. The keypad can be locked or unlocked.

- Programmable key

If your distributor sets a **Keypad Lock** shortcut key, you can press the shortcut key to lock or unlock the keypad.

- Menu

Enter the main menu, select **Setting > Radio Setting > Keypad Lock**, and select **Disable** or a time option.

After you select a time option, if you perform no operation within the specified period, the keypad is locked automatically.

If you select **Disable**, the keypad will not be locked automatically. You can press the key combination or the **Keypad Lock** shortcut key to lock or unlock the keypad.



**NOTE:**

If there is no **Keypad Lock** in the **Radio Setting** menu, you can ask your distributor to set the automatic keypad lock function.

## Call

To ensure that the called party can hear you the best, keep the microphone 2.5 cm to 5 cm away from your mouth.

## Private Call

### Initiate a private call

You can initiate a private call through one of the following ways. Your PH790 VHF plays a prompt tone before the called party answers the call.

- Initiate the call through **Contacts** or **Call Logs**

- Press the **OK/Menu** key to enter the home menu.
- Select **Contacts > Private Contact**, or select **Call Logs** to display **Outgoing** calls, **Incoming** calls, or **Missed** calls.
- Press the **Up** or **Down** key to select the contact that you want to call.
- Press the **PTT** key to initiate the private call.

- Dial the number that you want to call

- When the home screen is displayed, enter the private number that you want to call.
- Press the **Call/Answer** key, **PPT** key, or the **#** key to initiate the call.

- Initiate a call in **Missed calls**


In the **Missed** calls menu, select a missed call, and press the **Call** key or **PTT** key to initiate the call.



**NOTE:**

If your PH790 VHF is not registered or fails in registration, no call can be initiated.

### Answer a private call

After receiving a private call, your PH790 VHF plays a prompt tone. If you press the **Call/Answer** key or **PTT** key within the preconfigured duration, the call is answered. Your PH790 U(1) emits an announcement. If the call is not answered, the  icon is displayed on the LCD to notify you that you missed a call.

### End a private call

To end a private call, press the **Hook** key.



**NOTE:**

A private call can be ended by the calling or called party.

## Group Call

### Initiate a group call

You can initiate a group call through one of the following ways:

- Initiate a group call to a preset group contact

When the home screen is displayed, press the **PTT** key to initiate a group call to the group contact preset for the **Group call selection knob**.

- Through the address book in groups

- On the home screen, press the **OK/Menu** key and select **Subgroup**, or press the **Group call management** key to enter the **Subgroup** menu.
- Select **Members**, and press the **Up** or **Down** key to select the contact that you want to call.
- Press the **Call/Answer** key or **PTT** key to initiate the group call.

- Dial the number that you want to call

- On the home screen, enter the group call number that you want to call.
- Press the **Call/Answer** key, **PTT** key, or **#** key to initiate the group call.

### Answer a group call

The PH790 VHF answers a group call automatically. When a group call is answered, your PH790 VHF emits an announcement.

### Answer a call in delay

After a group call is established, a member who did not answer the call immediately can join in the group call during the call.

### End a group call

Press the **Hook** key to end the group call.



**NOTE:**

Only the calling party can end a group call.

## Appendix

### Specifications

	Bluetooth	VHF	GPS	Bluetooth LE
Frequency range	2402~2480MHz	136~174MHz	1575.42MHz	2402-2480MHz
Modulation mode	GFSK, 8DPSK, π/4-DQPSK	FM/4FSK	BPSK	GFSK
Channel spacing	-	12.5kHz	-	-
Max. transmit power	3.81dBm	5W/1W (Rated output power)	-	3.94dBm
Max. antenna gain	0dBi	0dBi	0dBi	-

### Manufacturer Address

ZTE TRUNKING TECHNOLOGY CORPORATION

R&D Building 1, ZTE Industrial Park, Xili, Nanshan District, Shenzhen, P. R. China, 518055

FCC Caution:

Any Changes or modifications not expressly approved by the party responsible for compliance could void

the user's authority to operate the 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.

FCC Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates 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

## Warning

The device is designed and tested to comply with a number of national and international standards and guidelines (listed below) for human exposure to radio frequency electromagnetic energy. This radio complies with the IEEE and ICNIRP exposure limits for occupational/controlled RF exposure environment at operating duty factors of up to 50% transmitting and is authorized by the FCC for occupational use only. In terms of measuring RF energy for compliance with the FCC exposure guidelines, your radio radiates measurable RF energy only while it is transmitting (during talking), not when it is receiving (listening) or in standby mode.

Hold the radio in a vertical position in front of face with the microphone (and the other parts of the radio, including the antenna) at least one inch (2.5 cm) away from the nose. Keeping the radio at the proper distance is important because RF exposures decrease with distance from the antenna. Antenna should be kept away from eyes.

## Warning

When worn on the body, always place the radio in ZTE approved clip, holder, holster, case, or body harness for this product. Using approved body-worn accessories is important because the use of other manufacturer's non-approved accessories may result in exposure levels, which exceed the FCC's occupational/controlled environment RF exposure limits.

The device complies with the following RF energy exposure standards and guidelines:

- United States Federal Communications Commission, Code of Federal Regulations; 47 CFR §§ 1.1307, 1.1310, 2.1091 and 2.1093
- American National Standards Institute (ANSI) / Institute of Electrical and Electronic Engineers (IEEE) C95. 1-1992
- Institute of Electrical and Electronic Engineers (IEEE) C95.1-1999 Edition