

CD-10 OPERATION MANUAL

a、 Terminal Introduction

- 1、 PTT key: Press this key and speak into the microphone when transmitting; release this key when receiving;
- 2、 Status Indicator Lights;
- 3、 Power On/Off Key: Short press to switch channel/volume mode; Long press to power on/off;
- 4、 Side Key 1: Its function can be set via programming software;
- 5、 Side Key 2: Its function can be set via programming software;

Notes:

- Side Keys 1 and 2 are used by default for adjusting volume and selecting channel when short-pressed.
 1. When you power on the device, pressing Side Keys 1 and 2 can be used to adjust the volume.
 2. After you turn on the device, press the PTT key once, then press the side key 1/2 to select the channel.
 - When you have set the function of Side Keys 1 and 2 via programming software, you need to long-press Side Keys 1 and 2 to activate this function.
- 6、 Charging Port: Connect the charging cable to charge the device;
 - 7、 Programming (Headphone) Port: Can be used to connect an externally purchased headset, or to connect a programming cable to perform read/write operations on the walkie-talkie via PC software; connect a charging cable to charge the device;



b、 Features

General Features

- 1、 High/Low Power Switching Function
- 2、 Area
- 3、 Transmission Allow
- 4、 Scan List
- 5、 Squelch Level
- 6、 Timeout (TOT)
- 7、 Chinese/English Voice Broadcast Function
- 8、 Power Saving Function
- 9、 Scanning Function

- 10、 Voice-activated VOX function
- 11、 Battery Level Indicator
- 12、 Standalone Operation Function
- 13、 Low Battery Reminder

- 14、 Read/Write Frequency Password
- 15、 Channel Lock
- 16、 Programmable Keys

Numeric Section

- 1、 Contacts
- 2、 Straight-through Dual Timeslot
- 3、 Color Code
- 4、 Digital Alarm Function
- 5、 Voice Encryption
- 6、 Voice One-Call
- 7、 Voice Group Call
- 8、 Voice All Call
- 9、 Remote Kill
- 10、 Activate
- 11、 Call Prompt
- 12、 Remote Monitoring
- 13、 Walkie-Talkie Detection

Analog Section

- 1、 QT/DQT sub-audio
- 2、 Wide/Narrow Band Selectable
- 3、 End-Sound Cancellation
- 4、 Monitoring Function

Programmable Keys Can Be Set to the Following Functions

- 1、 Area Switching
- 2、 Scan On/Off
- 3、 High/Low Power Selection
- 4、 Monitoring
- 5、 Battery Level Announcement
- 6、 Strict / Normal Squelch
- 7、 Voice Control On/Off
- 8、 Encryption On/Off
- 9、 Unused Channel (Temporary) Delete
- 10、 Repeater / Offline
- 11、 Standalone Operation On/Off (Standalone Operation must be checked on the overall device parameter page)
- 12、 All Alarm Tones On/Off
- 13、 Emergency Alarm On
- 14、 Emergency Alarm Off
- 15、 One-Touch 1
- 16、 One-Touch 2
- 17、 One-Touch 3

- 18、 One-Touch 4
- 19、 One-Touch 5
- 20、 One-Touch 6
- 21、 No
- 22、 CheckInquire about Direct Dual Timeslot Status
- 23、 Channel Lock
- 24、 All Sub-tones On/Off

c、 Features

■ Advanced Encrypted Communication

Digital mode supports three advanced encryption algorithms: ARC4, AES128, and AES256, which can encrypt voice and data signals, effectively ensuring the privacy of calls and the security of information.

d、 Product Specifications

Transmitter	
Output Power	≤1.2W
Power Tolerance Variation	+2/-3dB (extreme conditions)
Transmit Frequency Error	±1.0ppm
FSK Error	<5%
4FSK transmit bit error rate	≤1×10 ⁻⁴
4FSK modulation frequency deviation error	≤10.0%
Occupied bandwidth (DMR)	≤8.5kHz
Power Rise/Fall Time	≤1.5ms
Adjacent channel power (ACPR)	≤ -50dB @12.5KHz
Transient switching adjacent channel power (ACTR)	≤ -50dB @12.5KHz
FM modulation	11K0F3E @12.5kHz
4FSK digital modulation	12.5KHz (data only): 7K60FXD 12.5KHz (data + voice): 7K60FXE
Audio Distortion	≤3% @ 40% deviation
Audio Response	+1 ~ -3dB
FM hum and noise	40dB @12.5KHz 45dB @25KHz
Transmit Spurious Emissions	≤ -36dBm (9kHz ~ 1GHz) ≤ -30dBm (1GHz ~ 12.75GHz)

Receiver	
Sensitivity (Analog)	0.2μV(FM @ 12dB SINAD)
Sensitivity (Digital)	0.22μV(typ.) (@ 5% BER)
Adjacent Channel Selectivity	60dB @ 12.5kHz
Intermodulation Response Immunity	60dB @ 12.5kHz
Blocking	84dB @ 12.5kHz
Co-channel Rejection	-12dB@ 12.5kHz
Spurious Emission Response Immunity	65dB @ 12.5kHz
Audio Output Power	1.0W / 16Ω
Conducted Transmit Spurious Emissions	<-57dBm (9kHz ~ 1GHz) <-47dBm (1GHz ~ 12.75GHz)

General Specifications	
Frequency Range	400~470MHz
Channel Spacing	12.5KHz
Channel Capacity	256
Area Capacity	8 (Maximum 32 channels per area)
Power Requirements	3.8V (rated)
Battery	950mAh
Operating Time (5/5/90 duty cycles, high power transmit)	Analog: 6.7 hours; Digital: 7.4 hours
Vocoder Type	AMBE+2
Frequency Stability	±1.0ppm
Antenna Impedance	50Ω
Dimensions	67mm*32.5mm*27.5mm
Weight	Approximately 42g

Note: The above indicators are based on ETSI standard tests. Availability varies depending on the laws and regulations of each country. Unless otherwise stated, all specifications shown are typical and are subject to change without notice.

e、Accessories

Magnetic charging cable (Code: 29K-ZGCDX-2066 Material: Magnetic charging cable Specification: 2P-2.84 pitch magnetic cable) / Charging cable (Code: 29K-ZG05V-2069 Material: Switching power supply charging cable (USB) Zhizhen Specification: 2 core wires, 1A current (USB3.1 Type C), 3.5mm wire thickness) (Choose one)



Switching power supply (Code: 29K-0K158-2064 Material: Standard switching power supply plug Specification: K158 5V/1A (GFBA00500100WA))



Headphones (Code: 29E-VEEJX-0022 Material: Headphone cable_TYPE-C Specification: CA type (private network))

**FCC STATEMENT:**

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 condition that this device does not cause harmful interference.

RF Exposure Statement:

This radio complies with IEEE and ICNIRP exposure limits for occupational/controlled RF exposure environment at operating duty cycle of up to 50% and is authorized by the FCC for occupational/controlled use only. An appropriate warning label is affixed to all units. In order to comply with RF exposure requirements, a minimum distance of 0 cm must be maintained when limbs, and body-worn operations are restricted to the approved original accessories (belt clip), a minimum distance of 0 cm. Do not use this device when antenna shows obvious damages.

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.

WARNING: MODIFICATION OF THIS DEVICE TO RECEIVE CELLULAR RADIOTELEPHONE SERVICE SIGNALS IS PROHIBITED UNDER FCC RULES AND FEDERAL LAW.