BF-TD935

Professional DMR Portable Radio

DMR
DIGITAL MOBILE RADIO ASSOCIATION

- Intelligent Noise Reduction
- Full Duplex Calls
- IP68 Protection
- Multiple Alarms
- Common-Frequency Broadcasting System
- Dual Encryption of Software and Hardware
- *Positioning/Recording/Bluetooth
- *Rich Communication Version Options

（*Represents optional functions）

BelFone

Communications for Efficiency and Safety

OVERVIEW

BF-TD935 professional DMR portable radio, with its advanced intelligent noise reduction technology, excellent RP performance and customized design for different industries, realizes the perfect combination of performance and user experience. Based on the efficient command and large area communication coverage of industry users, it provides powerful digital application services, rich version options and flexible networking solutions, which help users' response speed and collaborative operation ability in complex environments, and provide strong support for the stable operation of various industries.

HIGHLIGHTS AND BENEFITS

AI Noise Reduction

BF-TD935 adopts advanced AI noise reduction technology and Deep Learning algorithm, effectively filtering 90% of background noise to extract human voice under chaotic environments, upgrading call quality and guaranteeing users' voice clarity in extreme environments.

Full Duplex Calls

Equipped with full duplex calls,BF-TD935 completely solved the half-duplex call robbing, latency problem, especially in the need for rapid coordination of multi-party calls to ensure the emergency instructions are conveyed in real-time, effectively improving communication efficiency.

Single Frequency Repeater

BF-TD935 has a Single Frequency Repeater function through intelligent signal forwarding technology, effectively solving the communication distance bottleneck of traditional radios. This technology establishes an automatic trunking channel on a single point, which can realize signal transmission without complex frequency planning, saving frequency sources and expanding signal coverage.

Dual encryption of software and hardware

BF-TD935 supports TF Card encryption and provides multiple encryption technologies such as simple XOR cipher, AES256 and ARC4 advanced algorithm technology, further enhancing communication privacy and information security.

Bluetooth Connection*

BF-TD935 can be easily connected to a Bluetooth headset and wireless PTT, etc., the user does not need to hold the radio to realize the free operation of both hands, which is convenient user operation without wired constraints.

Voice Recording*

BF-TD935 is equipped with 24 hours and 6 hours recording function, and can record communication on the radio during the calls, providing a guarantee for the review of critical tasks and information forensics.

IP68 Protection

BF-TD935 meets IP68 and MIL-STD-810 military protection standards, can withstand 2 meters of fall and shock at multiple angles, and can still be used normally after being immersed in 2 meters of water for 2 hours, which ensures that the equipment can be used stably for long time in rain, snow, high temperature and humid environments, and gives the user a more reliable protection at the critical moment.

Dual Positioning System

BF-TD935 supports pure Beidou, GPS + Beidou dual positioning systems, and supports voice call embedded positioning information, displaying the real-time relative position of the two sides of the communication information. When accessing the communication system, it can quickly and accurately lock the position information of the personnel, to deal with all kinds of emergencies more easily.

Rich Communication Version Options

BF-TD935 provides rich, flexible communication version options, supporting adjust various communication systems: DMR/PDT standard mode, DMR/PDT Trunking system, same frequency relay, Ad-hoc system, SVT Trunking system, SDC system, meet the different scenarios from daily communication to group collabora- tions, and create an ideal communication solution for users in different industries, providing the best solutions for users in different industries.

FUNCTIONS

- Alias display
- Vibration mode
- Full Duplex Calls
- Original battery inspection
- Scan/Monitor/Roaming
- ○ *SDC/SVT/PDT Trunking/DMR Trunking/Ad hoc network

- Speed dial
- One-key Alarm
- Preset text sending
- Interface position display
- ARC4/AES256 encryption

- Covert mode
- ○ *Lone worker
- Mandown
- Prioritize interruptions
- Private call/Group call/All call

（○Represents optional functions）

APPLICATIONS

Military   Mountain rescue   Railway   Mine Area   Petrochemical

SPECIFICATION

General	
Frequency Range(Optional)	VHF：136-174MHz UHF3：350-400MHz UHF：400-480MHz
Channel Capacity	1024
Zones	64
Channel Spacing	12.5KHz/25KHz
Working Voltage	DC 7.4V（±20%）
Battery Capacity	standard:2600 mAh optional:3350mAh
Battery Average Working Time (5/5/90)	2600mAh: Digital 21 hours/ Analog 15 hours 3350mAh:Digital 30 hours/ Analog 23 hours
Frequency Stability	±1.5ppm
Antenna Impedance	50Ω
Dimension	57（L）* 35（W）* 131（H）mm
Display	LCD screen, 320*240px, 262000 chromatic number, 2.0 inch, 10 lines
Weight	330g (include battery)
Recording(Optional)	≤24hours
Bluetooth(Optional)	BT5.0

Transmission	
Output Power	≤5W
4FSK Modulation	12.5kHz(data only)：7K60FXD 12.5kHz(data and voice)：7K60FXE
FM Modulation	12.5 kHz: 8K50F3E; 25 kHz: 16K0F3E
Modulation Limitation	±2.5kHz@12.5kHz ±5.0kHz@25kHz
FM Noise	40dB@12.5kHz/45dB@25kHz
Conducted Emission	−36 dBm≤1GHz/−30 dBm≥1GHz
Adjacent Channel Power	≤−60dB
Frequency Response	+1/−3 dB
Audio Distortion	≤3%
Digital Voice Codec	AMBE/ NVOC compatible

Receiver	
Digital Sensitivity	0.22 μV /BER5%
Analog Sensitivity	0.22uV (12dB SINAD)
Intermodulation	65dB@12.5/25kHz
Adjacent Channel Selectivity	60dB@12.5kHz/70dB@25kHz
Spurious Suppression	70dB@12.5/25kHz
FM Noise	40dB @ 12.5kHz；45dB @ 25kHz
Frequency Response	+1/−3 dB
Rated Audio Output Power	1.0W
Max Audio Output Power	2.5W
Audio Distortion	≤3%
Conducted Spurious Emission	−57dBm

Positioning	
Satellite Positioning Precision	<2.5m（CEP50，with well signal）
TTFF(First Location)Cold Boot	< 30 Seconds（with good signal）
TTFF(First Location) Hot Boot	<1Second（with good signal）

Environmental Specifications	
Operation Temperature	−30℃～+70℃
Storage Temperature	−40℃—+85℃
ESD (Electrostatic discharge)	IEC61000-4-2(Level 4) ±8kV(contact discharge) ±15kV(air discharge)
Dustproof& Waterproof	IP68

Note: The above specification is tested by the trial standard. Due to the continuous development of technology, the data provided are for reference only.

STANDARD ACCESSORIES

Battery

Belt Clip

Hand Strap

Stubby Atenna

Charger

OPTIONAL ACCESSORIES

Earpiece

Programming Cable

Air Duct Earphone

Fujian BelFone Communications Technology Co., Ltd

Add: A-15 Huaqiao Economic Development Zone, Luojiang, Quanzhou, Fujian, China
Email: overseas@belfone.com
Phone: +86 595 28396717
Fax: +86 595 22771635

Dedicated to increasing the efficiency and reliability of missioncritical communications, BelFone is always on the way to offer responsive, flexible and reliable products. For more information about our products and solutions, contact us or visit us at www.belfone.com.

BelFone
Communications for Efficiency and Safety

SGS ISO CE FC CCC