

# **BF-TD512**

# **Enhanced Conventional Portable Radio**

- 2-Tone/5-Tone
- Integrated High Precision GPS
- IP67 for Dust & Water Protection
- ARC4 & AES256 Encryption (optional)
- Mandown, Lone Worker, Emergency Alarms
- DMO True 2-Slot, Allowing for 2 Talk Paths at 1 Frequency
- Transmit Interrupt/Radio Priority for Emergency or Urgent Communication





#### **OVERVIEW**

BF-TD512, an IP67 rated DMR radio, is featured with full color screen and half keypad which specially required by some customers. It brings advantages of audio quality, outstanding coverage, and long-lasting battery life. The virtual trunking technology greatly increases spectrum efficiency without any extra costs. It works with BelFone DMR conventional IP Connect system-SDC to realize more powerful features, delivering revolutionary capabilities to keep the team safer and more efficient.

#### HIGHLIGHTS AND BENEFITS

#### **DMO True 2-Slots**

In direct mode these radios support two voice calls simultaneously due to DMR two timeslots, which means two communication paths at 1 frequency with no extra costs or frequency license.

#### Digital/Analog Dual Modes

Receive both analog and digital signals on a single channel and can automatically switch into the needed mode for efficient communications.

#### **Personnel Safety**

Mandown: If some worker slips or falls, the mandown function will automatically activate and transmit a signal to other radios for help. Built-in Lone Worker, and Emergency alarms are also available in case of any accident.

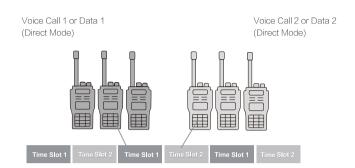
#### Automatic Roaming (Programmable)

In an IP multi-site network, this feature enables these radios to automatically roam among all sites and stay connected, delivering more flexibility and efficiency.

### Advanced Encryption with RC4 Technology

The RC4 encryption technology keeps your communications safe and private, optimizing your information safety.

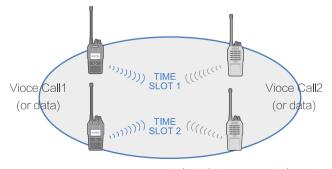






#### **Smart Virtual Trunking**

The DMO Smart Virtual Trunking(SVT) can enlarge the link capacity for higher effeciency



Solt 1, Solt 2 are automaticalty assigned to voice call 1 or voice call 2.



### Voice Recording (optional) (32G memory--can record over 400 hours' communications)

Support voice recording and you can play the recording on your radio. This is a radio with a good and long memory.

#### Radio Priority-Based Interruption

This function enables a radio with higher level to interrupt communications between radios with lower levels, giving higher priority to radios with higher levels. This means better dispatching efficiency.

#### **IP67 Protection**

Tightly sealed against dust, spills, sprays and unexpected showers, ensuring outstanding performance in tough environments.





## **STANDARD ACCESSORIES**











# **OPTIONAL ACCESSORIES**











### **SPECIFICATION**

	Genera <b>l</b>
Frequency Range	VHF:136-174 MHz UHF:350-390 MHz/UHF:400-480 MHz/UHF:450-520 MHz
Channel Capacity	512
Zones	32
Channel Spacing	12.5KHz/25KHz
Operating Voltage	DC 7.4V (±20%)
Battery Capacity	2000 mAh
Battery Life ( 5/5/90 )	Digital 22 Hours / Analog 16 Hours
Recording Time	400 Hours
Frequency Stability	± 1.5ppm
Antenna Impedance	50 Ω
Dimensions (L×W×H)	57 ( L ) * 32(W)* 119 (H)mm
Weight	239g(Including Battery)
Recording (optional)	400 hours
	Transmitter
RF Output Power	High Power: 4.5W / Low Power: 1W
4FSK Modulation	12.5kHz Only data: 7K60FXD / 12.5kHz data and audio: 7K60FXE
FM Modulation	12.5 kHz; 8K50F3E; 25 kHz; 16KΦF3E;
Modulation Limiting	+/- 2.5kHz @ 12.5kHz; +/- 5kHz @ 25kHz
FM Noise	<b>-</b> 40dB
Conducted Emission	-36 dBm≤1GHz/-30 dBm≥1GHz
Adjacent Channel Power	<-60dB
Audio Response	+1/-3 dB
Audio Distortion	3%
Digital Voice coder Type	AMBE
	Receiver
Digital Sensitivity	5% BER: 0.25 uV
Analog Sensitivity	0.25 uV (12 dB SINAD)
Intermodulation	60dB
Adjacent Channel Selectivity	60 dB
Spurious Response Rejection	60 dB
FM Noise	<b>-</b> 40dB
Audio Response	+1/ <b>-</b> 3 dB
Rated Audio output power	0.5W
Max Audio output power	1.3W
Audio Distortion	3% (Typical)
Conducted Spurious Emission	<b>-</b> 57dBm
GPS Accuracy	Horizontal Accuracy≤-10m ( with well signal )
TTFF (Time To First Fix) Cold Start	< 1 Minute ( with well signal )
TTFF (Time To First Fix) Hot Start	< 10 Second (with well signal)
	Environmental Specifications
Working Temperature	<b>-</b> 20℃—+60℃
Storage Temperature	-30℃—+85℃
Humidity	MIL-STD-810G Standard
Vibration & Shock	MIL-STD-810G Standard
Dustproof & waterproof	IP67

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