



BP860

Professional DMR Radio

- GPS
- Ad Hoc*
- Multiple Alarms
- IP68 Protection
- Multiple Encryptions
- AI Noise Reduction
- 2.4 Inches HD Display
- Superheterodyne Circuit
- Single Frequency Repeater
- Bluetooth/Voice Recording/TF Card Encryption*

(*Represents optional functions)





OVERVIEW

BP860 is a new designed DMR radio with breakthrough advancements to cover a wider communication range, better audio effect, and quicker response. With user-friendly interactive design and excellent secure performance, BP860 brings simple, comprehensive, and efficient communication.

HIGHLIGHTS AND BENEFITS

AI Noise Reduction

BP860 can accurately eliminate the background and feedback noise through its AI noise reduction and acoustic model technology.

Superheterodyne Circuit

BP860 adopts high gain superheterodyne circuit design for excellent RF performance, better reception sensitivity, and wider communication range. Its unique customized shield cover can separate interference signals and strengthen communication stability.

Single Frequency Repeater

BP860 can work as a SFR (Single Frequency Repeater) which perfectly solved the deficiencies of short distance coverage and crosstalk. Its SFR features significantly reduced the maintaining cost and improved the efficiency.

HD Display

With 2.4 inches semi-transparent display, BP860 brings superior screen visibility even under a strong light. BP860 adopts a nine-panel grid user interface to demonstrate a clear and organized menu page, a masonry layouts to present intuitive dial group, call status, new message, sender ID, time, etc.

Multiple Encryptions

BP860 is a high secured radio that supports XOR encryption, AES256/ ARC4 encryption and optional TF card encryption for increased communication privacy.

Three Alarms

BP860 supports 3 types of alarms (lone worker/mandown/emergency alarm). In case of emergency, the alarms will be triggered manually or automatically. During the emergency period, the real positions and tracks will be sent back to the commanding center to guarantee safe and efficient rescue.

Bluetooth Technology (optional)

BP860 supports optional built-in Bluetooth5.0 module. Its excellent flexibility can connect to audio device, wireless PTT, and other multiple accessories to release your hands.

GPS Positioning

BP860 can detect terminal relative distance, location, and velocity by GPS module. It can also realize the visualized commanding and dispatching based on user dynamic and behavior information from dispatching system.



Ad hoc Networking (Optional)

Ad hoc networking function of BP860 supports multi-hop repeaters and any type networking topology. It allows BP860 fast establish communication networks for fringe areas and hazard environments.

Digital Recording (Optional)

With a built-in digital voice recording module, BP860 can support 100 hours voice recording with channel number and radio ID to help users query, play back, and analyze call histories.

IP68 Protection

BP860 is a rugged design radio that has passed MIL-STD-810H certificate. It is made of a non-slip texture case which brings comfortable grip and excellent abrasion resistance. With IP68 certification, this BP860 is a ruggedized radio that can maintain clear audio and stable communication even after 2 meters x 2 hours beneath water.

MAIN FUNCTIONS

- Full Duplex Call
- Networking/Talkaround
- Individual Call/Group Call/All Call
- Speed Dial
- Roaming/Scanning/SMS
- TDMA 2 Time-slot
- Caller Position
- Covert Mode
- TF Card Encryption
- Priority Interruption
- Programmable Button
- Squelch Setting
- Preset Message
- Power-Saving /Low Battery Alarm
- DMR Conventional/Trunking/Ad Hoc, SDC/SVT System



SPECIFICATION

General	
Frequency Range(Optional)	VHF: 136-174MHz / UHF: 400-480MHz / UHF2: 450-520MHz/UHF3: 350-400MHz
Channel Capacity	1024
Zones	128
Channel Spacing	25 KHz/12.5KHz
Working Voltage	DC 7.4V (±20%)
Battery Capacity	Standard 2400 mAh / Optional 3350 mAh
Battery Average Working Time (5/5/90)	2400mAh: Digital 21 Hours; Analog 16 Hours 3350mAh: Digital 30 Hours; Analog 23 Hours
Frequency Stability	±0.5ppm
Antenna Impedance	50Ω
Dimension	62 (L) * 36 (W) * 134 (H)mm
Display	LCD Screen, 320*240px, 262000 color, 2.4 inches, 10line
Weight	318.5g(battery include)
Transmitter	
Power Output	<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
Spurious Emission	-36dBm<1GHz/-30dBm>1GHz
Adjacent Channel Power	≤-60dB
Frequency Response	+1/-3dB
Audio Distortion	≤3%, (1.5% Typical)
Digital Vocoder	AMBE or NVOC
Voice Recording(optional)	≤24 Hour
Bluetooth(optional)	BT5.0

Receiver	
Digital Sensitivity	0.22μV /BER5%(0.16μV typical)
Analog Sensitive	0.22μV (12dB SINAD)
Intermodulation	65dB@12.5/25kHz
Adjacent Channel Selection	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 Power	1.0W
Maximum Audio Power	2.5W
Rated Audio Distortion	≤3%, (1.5% Typical)
Conduction Radiation	-57dBm
GPS Precision	Horizontal Accuracy <2.5m(with good signal)
TTFF(first location)Cold Boot	≤30s (with good signal)
TTFF(first location)Hot Boot	≤1s (with good signal)

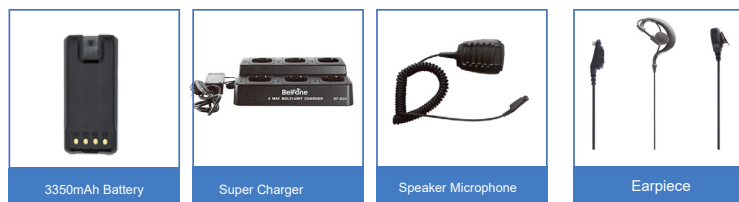
Environmental Specifications	
Operational Temperature	-30℃ ~ +70℃
Storage Temperature	-40℃ ~ +85℃
ESD(Electrostatic Protection)	IEC61000-4-2(Level 4) ±8kV(contact discharge) ±15kV(air discharge)
Moisture Proof	MIL-STD-810G
Shock & Vibration	MIL-STD-810G
Dust& Water Proof	IP68

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



OPTIONAL ACCESSORIES



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Belfone
Communications for Efficiency and Safety

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