

ENRICHING YOUR DIGITAL EXPERIENCE

NEW MEMBER TO WORLD'S MOST COMPLETE DMR PORTFOLIO

PD98X



PD98X Highlight Brand New Features

01

Micro SD Card

Based on micro SD storage technology, PD98X helps customer to record and store critical voice call or data.

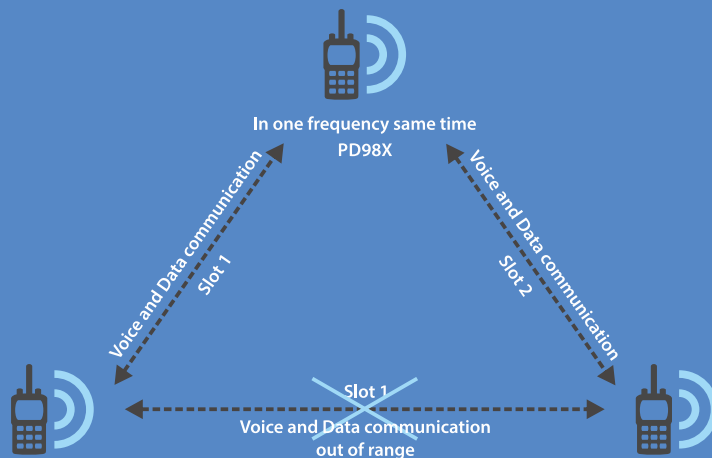
PD98X supports maximum 32G micro SD card, to record up to 576 hours digital/ analog voice.



02

Single Frequency Repeater Mode

Based on Interference cancellation technique, PD98X can use one slot to receive signal and another slot to transmit it in the same frequency at the same time in DMO mode to extend communication distance.



03

Bluetooth 4.0

PD98X has built in Bluetooth 4.0, which not only supports audio transmission, but also allows data transmission, such as programming via Bluetooth etc.

04

Full Duplex Call

PD98X can make full duplex call with PD98X, telephone or cell phone.

05

RTC Clock

RTC clock feature allows customers to check the accurate time of received message and call.

06

Smart Battery

Compared with PD78X, PD98X support smart battery, which makes it easier to monitor the battery status, such as battery life time and remaining charge time by smart battery charge. This also reduces the charging time dramatically.



Centered Antenna

Integrated GPS and RF antenna, more accurate positioning and receiving.

360 Degree Stepless Channel Knob



IP68 Protection



Enhanced Voice Quality

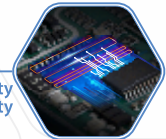


18' High Definition Display

Displaying clear contents.



Better Sensitivity and Frequency Stability



Longer Battery Life



Bluetooth 4.0



Micro SD Card



Single Frequency Repeater Mode



Full Duplex Call



RTC Clock



Smart Battery

PD98X Highlight Hardware Advantages



Better Sensitivity and Frequency Stability

Advanced technology improves receiving performance to enhance communication distance and reliability.



Sensitivity 26%

Compared with PD78X, PD98X adopts brand new hardware design enhance +26% Sensitivity.



Longer Battery Life

PD98X adopts new battery saving technology to guarantee longer communication time.



Battery life 33%

Compared with PD78X, PD98X adopts new battery saving technology extending +33% battery life.



IP68 Protection

IP68 Dust and Waterproof Standards ensures outstanding performance even in harsh environments.



360 Degree Stepless Channel Knob

With this kind of knob user can change channel and zone easily and comfortably.



Enhanced Voice Quality

Maximum 2.5W output speaker and new noise cancelling technology ensures clear and loud voice communication.

Noisy environment

Figure 1 Without noise cancellation

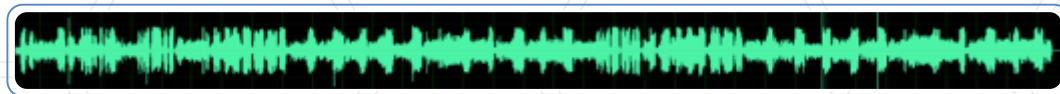


Figure 2 With noise cancellation



Windy environment

Figure 1 Without echo cancellation

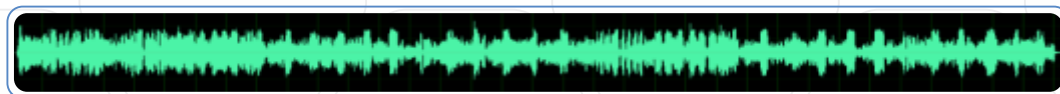


Figure 2 With echo cancellation



Features

Base Information

- Full Keypad, Color Screen, 1024 Channels
- Analog and Digital Dual Mode
 - Bluetooth (4.0) Audio
 - Bluetooth (4.0) Data*
- Integrated GPS
- Integrated GLONASS
- Pre-programmed Text Messaging
- Freeform Text Messaging
- Option Board
- Roaming
- Scan
- Voice Notification

Audio

- Auto Gain Control
- Acoustic Feedback Suppressor
- Loudness Quality Optimization
- Multi Band Equalization*
- Noise Reduction Technology

NOTES

- * Those feature will be available later by software upgrade
- Standard feature
- Optional feature

Safety

- Emergency Alarm
- Dedicate Emergency Button
- Alert Call
- Man Down
- Lone Worker
- Basic Encryption
- Enhanced Encryption(40bit)
- Enhanced Encryption(128/256bit)
- Multiple Key Encryption
- Priority Interrupt
- Remote Monitor
- Radio Enable/Disable
- Radio Check
- IP68 Dust and Waterproof
- Vibration
 - GPS SMS
 - GPS Location check

Systems

- Analog Conventional
- DMR Conventional
- IP Site Connect
 - MPT-1327
- DMR Simulcast System
- XPT Trunking
 - DMR Trunking

Advance Features














- Pseudo Trunk
- Telemetry
- Rent
- Phone Interconnect
- Full Duplex Call (DMR Tier 3 System)*
- Full Duplex Call (DMR Conventional System)*
 - Single Frequency Repeater Mode*
 - Micro SD Card*
 - Smart Battery*
- RTC Clock



Specifications

General	Frequency Range		UHF: 350-527MHz	
	Channel Capacity		1024	
	Zone Capacity		64 (maximum of 128 channels per zone)	
	Channel Spacing		12.5KHz / 20KHz / 25KHz	
	Operating Voltage		7.4V (rated)	
	Battery		2000mAh (Li-Ion)	
	Battery Life (5-5-90 Duty Cycle, High TX Power) High-capacity 2000mAh Li-Ion Battery		Analog:14.5h Digital: 19.5h	
	Frequency Stability		±0.5ppm	
	Antenna Impedance		50Ω	
	Dimensions (H×W×D) (with standard battery, without antenna)		131 X 54.5 X 36mm	
	Weight (with antenna & standard battery)		335g	
	LCD Display			160×128 pixels, 65535 colors 1.8 inch, 4 rows
Receiver	Sensitivity	Analog	0.22μV	
		Digital	0.22 μV / BER5%	
	Selectivity TIA-603 ETSI C		60dB @ 12.5KHz / 70dB @ 20/25KHz 60dB @ 12.5KHz / 70dB @ 20/25KHz	
	Spurious Response Rejection TIA-603 ETSI C		70dB @ 12.5/20/25KHz 70dB @ 12.5/20/25KHz	
	Blocking TIA-603 ETSI		84dB	
	Hum and Noise		40dB @ 12.5KHz; 43dB @ 20KHz; 45dB @ 25KHz	
	Rated Audio Power Output		0.5W	
	Rated Audio Distortion		≤3%	
	Audio Response		+1 ~ -3dB	
	Conducted Spurious Emission		< -57dBm	
	Transmitter	RF Power Output		UHF High Power: 4W; UHF Low Power: 1W
		FM Modulation		11K0F3E @ 12.5KHz 14K0F3E @ 20KHz 16K0F3E @ 25KHz
4FSK Digital Modulation		12.5KHz Data Only: 7K60FXD 12.5KHz Data & Voice: 7K60FXW		
Modulation Limiting		±2.5KHz @ 12.5KHz ±4.0KHz @ 20KHz; ±5.0KHz @ 25KHz		
FM Hum & Noise		40dB @ 12.5KHz 43dB @ 20KHz 45dB @ 25KHz		
Adjacent Channel Power		60dB @ 12.5KHz; 70dB @ 20/25KHz		
Audio Response		+1 ~ -3dB		
Audio Distortion		≤3%		
Digital Vocoder Type		AMBE++or SELPor NVOC		
Digital Protocol		ETSI-TS102 361-1,-2,-3		
Environmental Specifications		Operating Temperature		-30℃ ~ +60℃
		Storage Temperature		-40℃ ~ +85℃
	ESD		IEC 61000-4-2 (level 4) ±8kV (contact) ±15kV (air)	
	American Military Standard		MIL-STD-810 C/D/E/F/G	
	Dust & Water Intrusion		IP68 Standard	
	Humidity		Per MIL-STD-810 C/D/E/F/G Standard	
	Shock & Vibration		Per MIL-STD-810 C/D/E/F/G Standard	
	Accuracy specs are for long-term tracking(95th percentile values>5 satellites visible at a nominal -130dBm signal strength)			
	GPS	TTFF (Time To First Fix) Cold Start		<1 minute
		TTFF (Time To First Fix) Hot Start		<10 seconds
Horizontal Accuracy		<10 meters		

Optional Accessories

							
Remote Speaker Microphone (IP57) SM18N2	C-Earset EHN16	Swivel Earset EHN17	Earbud ESN12	3-Wire Surveillance Earpiece with Transparent Acoustic Tube (beige) EAN17	Receive-only Earpiece ESS08	Six-Unit Switching Powe PS7002	Programming Cable (USB Port) PC38
					<p>Pictures above are for reference only and may vary from actual products.</p> <p>Contact your dealer for more accessories information.</p>		
Battery Optimizing System MCA05	MCU Multi-unit Charger (for Thick Battery) MCA08	3-wire Surveillance Earpiece with Transparent Acoustic Tube(Black) EAN18	2-wire Earpiece with Wireless Earphone and Neck Loop(Beige) EWN06	Receive-only Earpiece ESS07			

