ENRICHING YOUR DIGITAL EXPERIENCE
NEW MEMBER TO WORLD'S MOST COMPLETE DMR PORTFOLIO
PD98X

www.hytera.com

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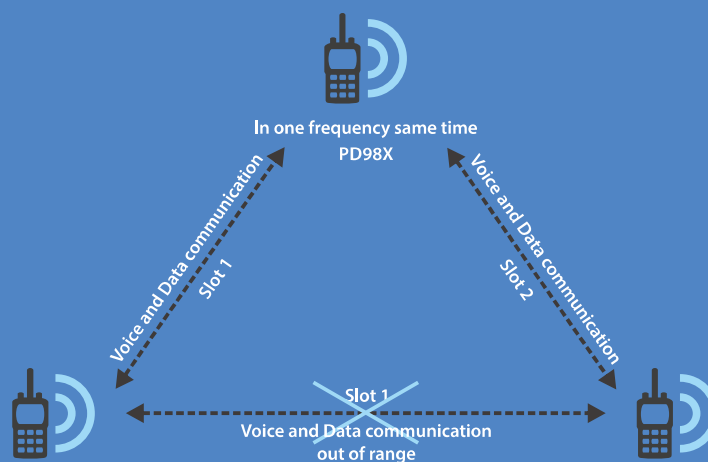
PD98X supports maximum 32G micro SD card, to record up to 576 hours digital/ analog voice.

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.

In one frequency same time
PD98X

Voice and Data communication
Slot 1

Voice and Data communication
Slot 2

Slot 1
Voice and Data communication
out of range

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

18' High Definition Display

Displaying clear contents.

IP68 Protection

Better Sensitivity and Frequency Stability

Enhanced Voice Quality

Longer Battery Life

Hytera

Digital channel 1

Menu   Options

DM

Digital channel 1

Bluetooth 4.0

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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

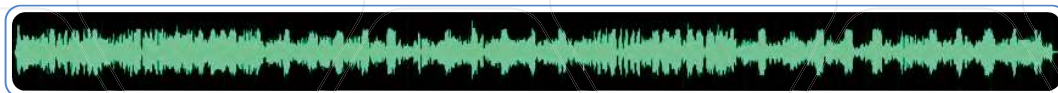**Windy environment**

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

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

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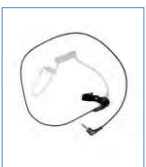
Specifications

General		
	Frequency Range	UHF:350-527MHz VHF:136-174MHz
	Channel Capacity	1024
	Zone Capacity	64 (maximum of 256 channels per zone)
	Channel Spacing	12.5kHz / 20kHz / 25kHz
	Operating Voltage	7.4V (rated)
	Battery	2000mAh (Li-ion Anti-fake or Smart Battery) 2500mAh (Li-ion Anti-fake or Smart Battery) 3000mAh (Li-ion Anti-fake or Smart Battery)
	Battery Life (5-5-90 Duty Cycle, High TX Power)	Digital: Analog: 19.5 Hours @2000mAh 14.5 Hours @2000mAh 24 Hours @2500mAh 18 Hours @2500mAh 27 Hours @3000mAh 21 Hours @3000mAh
	Frequency Stability	±0.5ppm
	Antenna Impedance	50Ω
	Dimensions (H × W × D) (with standard battery, without antenna)	131 x 54.5 x 36 mm (2000mAh) 131 x 54.5 x 41 mm (2500mAh) 131 x 54.5 x 41 mm (3000mAh)
	Weight (with antenna & standard battery)	350g (2000mAh), 361g (2500mAh), 366g (3000mAh)
	LCD Display	160 x 128 pixels, 65536 colors 1.8 inch, 6rows

Receiver			
	Sensitivity	Analog	0.22μV (12dB SIN AD), 0.22μV (Typical) (12dB SIN AD) 0.4μV (20dB SIN AD)
		Digital	0.22μV /BER5%
	Selectivity TIA-603 ETSI		60dB @ 12.5kHz / 70dB @ 20/25kHz (TIA-603) 60dB @ 12.5kHz / 70dB @ 20/25kHz (ETSI)
	Spurious Response Rejection TIA-603 ETSI		70dB @ 12.5/20/25kHz (TIA-603) 70dB @ 12.5/20/25kHz (ETSI)
	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 VHF High Power: 5W; VHF 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

GPS	Accuracy specs are for long-term tracking(95th percentile values>5 satellites visible at a nominal -130dBm signal strength)	
	TTFF (Time To First Fix) Cold Start	<1 minute
	TTFF (Time To First Fix) Hot Start	<10 seconds
	Horizontal Accuracy	<5 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
EAS03

Six-Unit
Switching Powe
PS7002

Programming Cable
(USB Port)
PC38

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)
EWN09

Receive-only
Earpiece
ESS10

Pictures above are for reference only
and may vary from actual products.

Contact your dealer for more accessories information.