P25 Public Safety Radios

3 YEAR WARRANTY PROTECTION PROGRAM

RPX4500 UHF / VHF
RPX4600 UHF / VHF

Guaranteed compatible with your current P25 radios.

RCA's RPX4500/RPX4600 handheld radios meet all Project 25 (P25) specifications for Police, Fire, Ambulance, and other emergency services. P25 radios meet Military Spec 810F for durability, droppage, and shock. Each handheld radio has 5W of power for maximum signal coverage and will last up to 11 hours on a single charge. RCA's 4 Year Warranty is the best in the industry, providing peace of mind when purchasing P25 equipment.

RPX4500 / RPX4600 FEATURES

MULTICOM™ TECHNOLOGY Provides cross-platform P25 Conventional and P25 Trunking system capability, as well as Analog Conventional and MPT1327 Trunking system capability

P25 CAP COMPLIANT Provides interoperability, integrating easily with any existing public safety analog, P25 Conventional and P25 Trunking Systems

MIXED MODE OPERATION Auto Sense option enables radios to auto-detect incoming analog or P25 Digital signals

AMBE+2TM VOCODER Advanced digital vocoder eliminates background noise, providing loud, crystal clear communication

ENCRYPTION OPTIONS DES-OFB 128-bit or AES 256-bit encryption in P25 Digital mode or Scrambler voice encryption in analog mode

LARGE CHANNEL, INDIVIDUAL AND TALKGROUP CAPACITY Radios have up to 1500 channels and up to 250 Individual/Talkgroup ID's

VOTING/SCANNING FUNCTIONS Dual mode scan, dual priority scan and trunked priority scan options with 240 Scan/Voting Groups

SAFETY/EMERGENCY FUNCTIONS Lone Worker, Stun/Kill/Revive, Emergency Alarm and optional GPS/Man Down

SIGNALING COMPATIBLE WITH LEGACY PUBLIC SAFETY SYSTEMS 2-Tone, 5-Tone, DTMF Encode/Decode and MDC1200 Encode/Decode which provide Public Safety essential functions such as: 2-Tone Paging, PTT ID, Individual/Group Call, Call Alert, Emergency Alarm, Remote Monitor, Radio Inhibit, Radio Check, Radio Mute/Unmute, Text Messaging

LARGE PTT BUTTON AND CHANNEL SELECTION KNOB Units are easy to use, even when wearing gloves

7 PROGRAMMABLE BUTTONS Customize your radio to meet your needs

EASY-TO-READ DOT-MATRIX DISPLAY Bright backlight makes it easy to navigate through the menu and radio functions

DURABLE AND RELIABLE Meets Military Specs (MIL-STD-810C/D/E/F) for durability, shock, droppage, extreme temperatures, solar radiation, vibration, rain, humidity, salt fog, blowing dust and sand.

5W OF POWER Maximum signal strength and coverage while lasting up to 11 hours on a single charge with typical 5:5:90 usage

IP67 RATED RCA's P25 handheld radios are completely waterproof (submersible 1 meter/30 minutes) and dust proof

MULTI-PIN SCREW-IN ACCESSORY CONNECTOR Secures audio accessories to the radio chassis to maintain watertight capabilities and to ensure reliable performance

MESSAGING RPX4600 can transmit and receive short messages and text messages

FREQUENCIES AND PART NUMBERS
VHF (136-174 MHz) - RPX4500V or RPX4600V;
UHF (400-480 MHz) - RPX4500U or RPX4600U;
UHF (440-520 MHz) - RPX4500U2 or RPX4600U2

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3 YEAR WARRANTY PROTECTION PROGRAM

P25 DIGITAL WIRELESS • SANS FIL NUMERIQUE • INALAMBRICO • DIGITAL

DIGITAL VOICE SYSTEMS, INC.
The Speach Compression Specialists
AMBE+2 Vocodor

P25 CAP

www.**RCACommunicationsSystems.com**

RPX4500 / RPX4600 SPECIFICATIONS

GENERAL			
Frequency Bands	136 - 174 MHz (VHF "V"); 400 - 480 MHz (UHF "U"); 440 - 520 MHz (UHF "U2")		
Dimensions	(H) 5.8 inches (147mm) x (W) 2.5 inches (63mm) x (D) 1.4 inches (36mm)		
Weight	14.4 ounces (408g) with 3000 mAh battery		
Battery	Li-ion 2200 mAh or 3000 mAh		
Battery Life	>10 hours, high transmit power 2200 mAh battery, 90:5:5 duty cycle		
Channel Stability	<1.5 ppm		
Display	102 x 64 pixels		
Switching Bandwidth	Full band		
Modulation	Pre-emphasized FM, C4FM		
Conformance	EN 300 086, EN 300 113, EN 300 219, EN 300 489, EN 60950, AS4295, FCC, IC P25CAP Compliant		
Environmental Protection	IP67 (Submersible/Dust Proof)		
Environmental Standards	**MIL-STD-810 F**	**Method**	**Procedure**
	Low Pressure (Altitude), Storage	500.4	I
	Low Pressure (Altitude), Operational	500.4	II
	High Temp, Storage	501.4	I
	High Temp, Operating	501.4	II
	Low Temp, Storage	502.4	I
	Low Temp, Operating	502.4	II
	Thermal Shock	503.4	I
	Solar Radiation	505.4	I(A2)
	Relative Humidity	507.4	
	Dust	510.4	I
	Sand	510.4	II
	General Vibration: Truck/trailer/tracked - restrained cargo	514.5	I Cat 24
	General Vibration: Minimum Integrity	514.5	I Cat 24
	Shock - Transit Drop	516.5	IV
Operating Temperature	-22°F (-30°C) - 140°F (60°C)		
Emission Designators	Analog	11K0F3E, 11K2F3E, 16K0F3E	
	Digital	8K00F1E, 8K10F1D/F1E, 11K0F1D, 11K2F1D, 16K0F1D	

TRANSMITTER SPECIFICATION	
Power Output	0.5 - 5 W, 3 programmable levels
Audio Distortion	<3% at 1 kHz, 60% deviation
Audio Frequency Response	+1 dB to -3 dB of pre-emphasized 300 to 3000 Hz on 25 kHz Channel (300 to 2550 Hz on 12.5 kHz Channel)
Tx/Rx switching time	<25 ms
Hum and Noise	>40 dB (12.5 kHz); >45 dB (25 kHz)

RECEIVER SPECIFICATION	
Sensitivity	<0.3 µV for 12 dB SINAD <0.3 µV for 5% BER
Selectivity	>73 dB (25 kHz) >65 dB (12.5 kHz)
Intermodulation	>70 dB
Audio Frequency Response	+1 dB to -3 dB of de-emphasized 300 to 3000 Hz on 25 kHz Channel (300 to 2550 Hz on 12.5 kHz Channel)
Audio Output	500 mW into 16 @ <5% distortion
Blocking	>95 dB at +/- 1 MHz
Hum and Noise	>40 dB (12.5 kHz); >45 dB (25 kHz)

ANALOG CONVENTIONAL

• CTCSS, DCS, FFSK, DTMF • 2-Tone Paging • MDC1200 • Sequential Tone (Selcall) • Status Calls • 240 Scan/Vote Groups • 250 Entry Phone Book • 1,000 channels • Analog Mode Including Scrambler

ANALOG TRUNKING

• MPT1327 • MPT1343 • 250 Entry Phonebook • Status • Status Calls • 1,024 Trunked Channels • Busy, Queued • Abbreviated Dialling • Normal, Priority, Emergency, Group, Broadcast • Diversion

P25 CONVENTIONAL AND TRUNKING

• P25 CAP Complaint • 40 Zones • 1,500 Channels • Trunked • Scanning • Voting • Individual Calls • Emergency Call • Status • Status Calls • CTCSS, DCS, DTMF • AMBE+2 Vocoder • DES OFB and AES 256 Bit Encryption

3 YEAR WARRANTY PROTECTION PROGRAM

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P25

DIGITAL VOICE SYSTEMS, INC.
The Speach Compression Specialists
AMBE+2 Vocodor

P25 CAP

ACCESSORIES & OPTIONS

Light Duty Speaker Mic
SM220-X43

Heavy Duty Speaker Mic
SM310-X43

Waterproof Speaker Mic with GPS
SM252WPG-X43

Nylon & Leather Holsters
For RPX4500 & RPX4600

Two-Wire Surveillance Kit In-Ear Style
SK21NE-X43

Light Duty Behind the Head Headset
HS21V-X43

High Noise Headset - Over the Head & Behind the Head
HS61NR-X43, HS71NR-X43

3" and 6" Antennas Available

2200mAH Lithium-Ion Battery
B4522LI

3000mAH Lithium-Ion Battery
B4530LI

Single Unit Charger
CH4501 PKG

6 Bank Charger
CH4506 PKG

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For Sales, Warranty and Customer Support please contact: