



RPX4500 RPX4600



RPX4600







P25 CAP



P25 Public Safety Handhelds

Guaranteed compatible with other 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 Standard Spec 810F for durability, shock and droppage. RCA's P25 radios have up to 5W of power for maximum signal coverage while lasting up to 11 hours on a single charge. RCA's 4 Year Warranty is the best in the industry, giving you peace of mind when purchasing P25 equipment.

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 RADIOS 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

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 CAPACITYRadios 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 signaling systems capable of providing compatibility wiith essential legacy analog Public Safety functions

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

7 PROGRAMMABLE BUTTONS Customize your radio to your needs





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 P25 CAP Compliant				
Environmental Protection	IP67 (Submersible/Dust Proof)				
Environmental	MIL-ST	D-810 F	Method	Procedure	
Standards	Low Pressur Storage	re (Altitude),	500.4	I	
	Low Pressur 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 General Vibration: Truck/trailer/tracked - restrained cargo General Vibration: Minimum Integrity Shock - Transit Drop		510.4	II	
			514.5	I Cat 24	
			514.5	I Cat 24	
			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			

• Single and two-frequency simplex • 2-Tone Paging • MDC1200 • Sequential Tone (selcall) • 200 channels (RPX4500) • 1,000 channels (RPX4600) • 240 scan / vote groups (RPX4600) • CTCSS, DCS, FFSK, DTMF • Analog mode including scrambler

ANALOG TRUNKING

- Two-frequency simplex in MPT 1327 trunked systems
- 1024 trunked channels in 50 sub bands
- MPT 1327 MPT 1343

P25 CONVENTIONAL AND TRUNKING

- P25 CAP Complaint 40 zones 1,500 channel pool
- \bullet 5 Trunking systems \bullet Scanning \bullet Voting \bullet Emergency call
- DES OFB and AES 256 Bit Encryption Individual Calls
- CTCSS, DCS, DTMF 2 Tone, 5 Tone AMBE+2 Vocoder





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