



PROFESSIONAL DIGITAL RADIO PRODUCTS SERIES





RDR2500 UHF / VHF RDR2550 UHF / VHF



The Intelligent Choice for Digital Two-Way Communication

VERSATILE & AFFORDABLE!



The RCA PRODIGI™ Radio Series is compatible with other DMR Digital radios on the market. Operational in both digital and analog modes, the PRODIGI™ Series delivers crystal clear, dependable communication. RDR2500 and RDR2550 are designed to be used in a wide range of applications. Industries such as manufacturing, warehousing, construction, security, hotels and schools all benefit from its basic push to talk functionality and advanced emergency features.

RDR2500 / RDR2550 FEATURES

SIMPLE AND RELIABLE COMMUNICATION The RCA RDR2500 and RDR2550 are simple and cost-effective Professional DMR Digital Radios designed to connect your workforce efficiently, providing reliable communication allowing your team to focus on growing your business.

CROSS-BAND COMPATIBILITY Designed strictly according to the Digital DMR ETSI Standard TS 102 361-1,-2,-3, the RDR25x0 Series portable radios are compatible with all RCA two-way radios as well as all other major brands, including digital equipment, such as the Motorola MotoTrbo™ and Vertex eVerge™ series two-way radios and repeaters.

upgrade to Digital at your own speed Analog and Digital operation will give you the flexibility to upgrade to Digital at your own speed, without sacrificing safety and keeping your business operations running smoothly during the transition period.

RELIABILITY, SAFETY, AND PRODUCTIVITY FIRST The RDR25x0 series provides a reliable, cost-effective communication solution with a simple, user-friendly operation that will help your employees connect, collaborate and coordinate in real time to get their job done safely and more efficiently.

FULL SHIFT PERFORMANCE Designed to be power efficient. When working in digital mode, the battery power consumption is lowered up to 40%, providing longer operating time which ensures that your employees will stay connected beyond a full working shift. The standard 1800mAh Lithium Ion battery provides up to 10 hours of operation in Analog mode and up to 14 hours of operation in Digital mode.

TRUE OPERATIONAL VERSATILITY The RDR25x0 series radios come in two (2) different models, the standard no display RDR2500 unit and the upgraded RDR2550 equipped with 16 character display and industry leading 7 programmable function buttons. Different departments, work crews, managers and employees can choose to use the best model for their needs, taking advantage of advanced features such as

Caller ID, Group and Private Call, Radio Check, Radio Enable/Disable, Emergency and Lone Worker Alerts, Text Messaging, Direct Mode Operation (DMO)*, Digital Encryption and many more.

CLEAR AUDIO, IMPROVED COVERAGE Designed with X-Sound+ HD™ for exceptional voice quality. The RDR25x0 series radios provide loud 1 Watt of power audio, at the same time eliminating background noise and static from the voice transmissions and delivering crystal clear voice message which results in a better, improved radio coverage.

INDUSTRY LEADING WARRANTY The RDR25x0 series radios are backed by an industry leading, hassle-free, Two (2) Year Warranty.





RDR2500

RDR2550













RDR2500 / RDR2550 SPECIFICATIONS

Features & Options

- 4 Programmable Keys (RDR2500)
- 9 Programmable Keys (RDR2550)
- Limited Keypad (RDR2500)
- 16-Character Alphanumeric Display (RDR2550)
- LED Indicator
- Voice Channel Announce (RDR2500)
- RSSI Indicator (RDR2550)
- · Battery Level Indicator
- CTCSS/DCS Encode/Decode
- DTMF Encode / Decode (RDR2550)
- VOX Voice Activated Transmission
- Scan and Priority Scan
- Mixed Mode (Analog / Digital) Scan
- Channel Activity Monitor
- Voice Channel Announce (RDR2500)
- Alert Tones On/Off
- RPT / Talkaround
- IP54 Design
- Designed to Meet MIL-STD 810 C,D,E,F,G

Digital Mode Specific Features

- Contact List for Up to 1,000 Records (RDR2550)
- All Call, Group Call, Private Call
- PTT ID Encode (RDR2500)
- PTT ID Encode/Decode (RDR2550)
- Basic Digital Encryption
- Advanced Digital Encryption*
- Radio Check
- Radio Kill / Active
- Remote Radio Monitor
- Emergency Alert
- Lone Worker Alert
- Direct Mode Operation (DMO)*
- Pre-Saved (Quick)Text Messaging
- One Touch Access

GENERAL SPECIFICATIONS				
Model		RDR2500 TM / RDR2550 TM		
Channel Numbers		32 / 1000		
Channel Spacing		Digital:12.5KHz / Analog:12.5Khz/25KHz		
Working Voltage		DC 7.4V		
Frequency		VHF: 136-174MHz / UHF: 400-470MHz		
Operating Temperature		-4°F~+140°F (-20°C~+60°C)		
Storage Temperature		-40°F~+122°F (-40°C~+50°C)		
Weight		318g / 0.7 lb. (with battery B2618LI)		
Size: HxWxD (inches)		5.3" x 2.3" x 1.3" (without antenna)		
Waterproof Level		IP54 Dust and Water Resistant		
Battery	Supplied	7.4V 1800mAh Lithium-Ion Battery; 13.32 Wh		

	RECEIVER
Frequency Stability	± 0.5 ppm
Anaglog Sensitivity	0.22μV / -120dBm (12dB SINAD)
Digital Sensitivity	0.2uV/-121dBm (BER 5%)
Intermodulation	60dB
Adjacent Channel Selectivity	65dB@12.5KHz
Co-Channel Rejection	12dB@12.5KHz
Spurious Response Rejection	70dB
Receive Spurious Radiation	-57dBm@<1GHz, -47dBm@>1GHz
Block	84dB
Rated Audio Power	1W @16 Ohms
Rated Audio Distortion	≤3%

TRANSMITTER				
Transmit Power		5W		
FM Noise		40dB@12.5KHz		
Intermodulation		60dB		
Transmit Spurious Radiation		-36dBm@<1GHz, -30dBm@>1GHz		
Adjacent Channel Power		-60dB@12.5KHz		
Modulation Limit		2.5KHz@12.5KHz		
Idle Slot Power		-57dBm		
Audio Response		+1dB(-3)dB		
Rated Audio Distortion		≤3%		
FSK Error		≤3%		
Funitaria	Analog	6K0F3E, 6K40F3E, 6K56F3E, 6K72F3E, 7K52F3E, 12K5F3E		
Emisson Designator	4FSK Digital	5K6F1D/F1W, 7K52F1D, 7K68F1D/F1W/F7W, 7K84F1D/F1W/F7W / 8K00F7W / 8K32F7W, 8K96F1D/F1W, 12K5F1D/F1W		

^{*}Optional Features

ACCESSORIES & OPTIONS



Medium Duty Speaker Mic SM220-X03S



Heavy Duty Speaker Mic SM310-X03S



Surveillance Kit D-Loop Style SK12DL-X03S



One-Wire Surveillance Kit Ear Hook Style SK12EH-X03S



One-Wire Surveillance Kit In-Ear Style SK12NE-X03S



Two-Wire Surveillance Kit In-Ear Style SK22NE-X03S



Light Duty Behind the Head Headset HS12V-X03S



Heavy Duty Behind the Head Headset HS65NR-X03S, HS75NR-X03S



Nylon Holsters For RDR2500 / RDR2550 / RDR2600



Leather Holsters For RDR2500 / RDR2550 / RDR2600



Battery Pack B2618LI Lithium-lon 7.4V 1800mAh 13.32 Wh



6 Bank Charger CHU6 - RDR2500 cup



www.rcacommunicationssystems.com products@rcacommunicationssystems.com (877) 822-2915

Authorized Dealer: