

PRODIGI[™], the Intelligent Choice for Digital Two-Way Communication

RDR25x0 SERIES



RDR2500

RDR2550

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.

SELECTALK[™]
PRIVATE AND GROUP CALLING

ENHANCED
EMERGENCY
& SAFETY
FEATURES

2
YEAR
WARRANTY

X-SOUND+ HD
Enhanced Audio Clarity[™]

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

*Optional Features

RDR2500 / RDR2550 SPECIFICATIONS

GENERAL SPECIFICATIONS	
Model	RDR2500™ / RDR2550™
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
Analog 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%						
Emission Designator	<table border="1"> <tr> <td>Analog</td> <td>6K0F3E, 6K40F3E, 6K56F3E, 6K72F3E, 7K52F3E, 12K5F3E</td> </tr> <tr> <td>4FSK</td> <td>5K6F1D/F1W, 7K52F1D, 7K68F1D/F1W/F7W, 7K84F1D/F1W/F7W</td> </tr> <tr> <td>Digital</td> <td>/ 8K00F7W / 8K32F7W, 8K96F1D/F1W, 12K5F1D/F1W</td> </tr> </table>	Analog	6K0F3E, 6K40F3E, 6K56F3E, 6K72F3E, 7K52F3E, 12K5F3E	4FSK	5K6F1D/F1W, 7K52F1D, 7K68F1D/F1W/F7W, 7K84F1D/F1W/F7W	Digital	/ 8K00F7W / 8K32F7W, 8K96F1D/F1W, 12K5F1D/F1W
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