



**RCA**  
Communications Systems

**prodigi**™ SERIES  
PROFESSIONAL DIGITAL RADIO PRODUCTS



**RDR2500 UHF / VHF**  
**RDR2550 UHF / VHF**



**The Intelligent Choice for  
Digital Two-Way Communication**

**VERSATILE & AFFORDABLE!**

**prodigi**<sup>™</sup>  
PROFESSIONAL DIGITAL RADIO PRODUCTS

The RCA PRODIGI<sup>™</sup> Radio Series is compatible with other DMR Digital radios on the market. Operational in both digital and analog modes, the PRODIGI<sup>™</sup> 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<sup>™</sup> and Vertex eVerge<sup>™</sup> 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<sup>™</sup> 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

**SELECTTALK**<sup>™</sup>  
PRIVATE AND GROUP CALLING

**2** YEAR  
WARRANTY  
PROTECTION PROGRAM

**DMR**  
DIGITAL MOBILE RADIO ASSOCIATION

**ENHANCED**  
EMERGENCY  
& SAFETY  
FEATURES

**X-SOUND+HD**  
Enhanced Audio Clarity<sup>™</sup>



# 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

\*Optional Features

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

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

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

# ACCESSORIES & OPTIONS



**Medium Duty Speaker Mic**  
SM220-X03S



**Heavy Duty Speaker Mic**  
SM310-X03S



**One-Wire 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-Ion  
7.4V 1800mAh 13.32 Wh



**6 Bank Charger**  
CHU6 - RDR2500 cup



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