starcomm wireless

RCA
Communications Systems

prodigi® SERIES

PROFESSIONAL DIGITAL RADIO PRODUCTS

2 YEAR WARRANTY PROTECTION PROGRAM

RDR2500 UHF / VHF
RDR2550 UHF / VHF
RDR2580 UHF / VHF

DMR
DIGITAL MOBILE RADIO ASSOCIATION

The Intelligent Choice for Digital Two-Way Communication

VERSATILE & AFFORDABLE!

prodigi® PROFESSIONAL DIGITAL RADIO PRODUCTS

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, RDR2550 and RDR2580 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 / RDR2580 FEATURES

Simple and Reliable Digital Two-Way Communication The RDR25x0 series is the newest addition to the PRODIGI™ line of Professional DMR Digital Radios. Simple and cost-effective, the RCA digital radios are designed to connect your workforce efficiently and provide you with reliable communication allowing you 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 with RDR2500 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 three different models, the standard no display RDR2500 unit; the upgraded RDR2550 equipped with 16 character display and industry leading 7 programmable function buttons and the advanced RDR2580 unit equipped with 16 character display and full keypad. 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) and many more.

Crystal Clear Audio Quality, 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

RDR2580

SELECTALK™ PRIVATE AND GROUP CALLING

2 YEAR WARRANTY PROTECTION PROGRAM

DMR DIGITAL MOBILE RADIO ASSOCIATION

ENHANCED EMERGENCY & SAFETY FEATURES

X-sound HD Enhanced Audio Clarity™

RDR2500 / RDR2550 / RDR2580 SPECIFICATIONS

Features & Options

- 4 Programmable Keys (RDR2500/RDR2580)
- 7 Programmable Keys (RDR2550)
- Limited Keypad (RDR2550)
- Full Keypad (RDR2580)
- 16-Character Alphanumeric Display (RDR2550/ RDR2580)
- LED Indicator
- Voice Channel Announciation (RDR2500)
- RSSI Indicator (RDR2550 / RDR2580)
- Battery Level Indicator (RDR2550/RDR2580)
- CTCSS/DCS Encode/Decode
- DTMF Encode (RDR2500)
- DTMF Encode / Decode (RDR2550/RDR2580)
- Mixed Mode (Analog / Digital) Scan
- Priority Scan
- Channel Activity Monitor
- Alert Tones On/Off Option
- 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 / RDR2580)
- All Call, Group Call, Private Call (RDR2550/RDR2580)
- Manual Private Call Dial (RDR2580)
- PTT ID Encode (RDR2500)
- PTT ID Encode/Decode (RDR2550/RDR2580)
- Basic Encryption
- DMRA ARC4 Encryption*
- Radio Check
- Radio Enable/Disable
- Remote Radio Monitor
- Emergency Alert
- Lone Worker Alert
- Direct Mode Operation (DMO)
- Pre-Saved (Quick)Text Messaging
- Free Text Messaging (RDR2580)
- One Touch Access
- Keypad Lock (RDR2580)

*** Optional Features**

GENERAL SPECIFICATIONS		
Model		RDR2500 / RDR2550 / RDR2580
Channel Numbers		32 / 1000 / 1000
Channel Spacing		Digital: 12.5KHz / Analog: 12.5KHz/25KHz
Working Voltage		DC 7.4V
Frequency		VHF: 136-174MHz / UHF: 400-470MHz
Operating Temperature		(-20°C)~+50°C / (-4°F)~+122°F
Storage Temperature		(-40°C)~+80°C / (-40°F)~+176°F
Weight		318g / 0.7 lb. (with battery B2518LI)
Size: HxWxD (inches)		5.3" x 2.3" x 1.3" (without antenna)
Environmental Protection and Standards		IP54 Design MIL-STD-810 C,D,E,F,G Standard
Battery	**Supplied**	7.4V 1800mAh Lithium-Ion Battery; 13.32 Wh
	Upgrade	7.4V 2300mAh Lithium-Ion Battery; 17.02 Wh

RECEIVER	
Frequency Stability	± 0.5 ppm
Anaglog Sensitivity	0.22µV / -120dBm (12dB SINAD) (typical)
Digital Sensitivity	0.20uV/-121dBm (BER 5%) (typical)
Intermodulation	>60dB
Adjacent Channel Selectivity	65dB@12.5KHz
Co-Channel Rejection	12dB@12.5KHz
Spurious Rejection	>70dB
Receive Spurious Radiation	-57dBm@<1GHz, -47dBm@>1GHz
Blocking	84dB
Rated Audio Power	1W @16 Ohms (Internal)
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%
Emisson Designator	**Analog**	6K0F3E, 6K40F3E, 6K56F3E, 6K72F3E, 7K52F3E, 12K5F3E
	4FSK Digital	5K6F1D/F1W, 7K52F1D, 7K68F1D/F1W/F7W, 7K84F1D/F1W/F7W / 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 Headsets
HS65NR-X03S (Over-The-Head)
HS65NRHH-X03S (Hard Hat)
HS75NR-X03S (Behind-The-Head)

Nylon Holsters
For RDR2500 / RDR2550 / RDR2580

Leather Holsters
For RDR2500 / RDR2550 / RDR2580

Battery Upgrade
B2523LI
Lithium-Ion
7.4V 2300mAh 17.02 Wh

6 Bank Charger
CH2506

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