

## RDR7x50 Portables



**RDR7350**

**RDR7550**

### Features and Options

- Analog DMR and Digital TII Conventional
- Prodigy™ Plus Mode\* and PRODIGI™ Plus Trunking\*
- PTT ID, All Call, Group and Private Calling
- Text Messaging and Status Messaging
- Scanning and Roaming\*
- Radio Check, Remote Monitor, Call Alert
- Radio Enable/Disable
- Priority Interrupt
- One Touch Access
- Emergency Alarms
- Lone Worker and Man Down\* Worker
- Advanced Digital Encryption Options\*
- Noise Cancelling\*
- GPS\*
- Up to 7 Programmable Function Keys
- IP67 Design
- 3 Year Warranty

\* Optional Features

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

The RCA PRODIGI™ RDR7x50 Series are high performance, feature rich, reliable handheld two-way radios for large organizations and teams who can not compromise. The RDR7350 and RDR7550 deliver crystal-clear communications in fringe areas and harsh environments, making them an ideal choice for a wide range of applications, where reliable communication is critical. Scalable and capable of operating across multiple modes, simply through software upgrades, the RDR7x50 handhelds are a future-proof investment that will adapt and evolve as your business does.

**ADVANCED MULTI-MODE FUNCTIONALITY** With different operating modes — Conventional Analog, Conventional Digital DMR Tier II, Digital PRODIGI™ Plus and PRODIGI™ Plus Trunking the mobile will truly meet even the most demanding communication needs of any large organization. The RCA RDR7x50 series digital handheld radios are designed to connect your workforce efficiently and provide reliable communication allowing the team to focus on their duties.

**CROSS-BRAND COMPATIBILITY** Utilizing the DMR Digital technology according to the ETSI TS 102 361-1,-2,-3 Standards the RDR7350 and RDR7550 handheld radios are compatible with all RCA models as well as DMR based digital equipment from all other major brands, such as Motorola, Kenwood, Hytera and Vertex series digital two-way radios and repeaters.

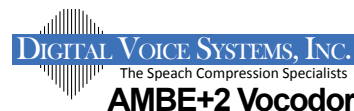
**INDUSTRIAL DURABILITY AND RELIABILITY** Your team needs radios that will not fail them, regardless of the working environment. Designed with durability in mind with lightweight and industrial-strength aluminum alloy die-cast chassis, high quality polycarbonate thermoplastic front panel housing with strengthened edges for superior toughness, the radios meet the Military 810C, D, E, F, G and the IP67 standards.

**FEATURE RICH AND VERSATILE** The RDR7x50 series portables come in 2 different models, the standard non-display RDR7350 unit; the upgraded RDR7550 with large, 2.0 inch TFT LCD Full Color Display and alphanumeric keypad. Businesses, Departments and Government Agencies can choose the best model for their needs, taking advantage of advanced features such as Caller ID, Group and Private Call, Radio Check, Radio Monitor, Radio Enable/Disable, Emergency, Man Down, Lone Worker Alerts, Text Messaging, Pre-saved Status Messaging, Encryption, Priority Interrupt and more.

**IMPROVED VOICE COMMUNICATION** The RDR7350 and RDR7550 Radios utilize the DMR digital technology allowing for the transmissions to stay clear from background noise regardless of the distance between two radio units, providing virtually no deterioration of the voice quality, thus increasing the usable coverage area where analog communication will be very poor or not possible at all.

**FULL SHIFT PERFORMANCE** The RCA PRODIGI™ RDR7x50 series handheld radios provide up to 40% improved battery performance in digital mode over analog, allowing for longer operating time on a single battery charge. With a typical duty cycle of 5 (Rx) – 5 (Tx) – 90 (Stand By), the non-display unit with 2400mAh Lithium Ion battery pack can provide up to 10 hours of operation in Analog mode and up to 14 hours of operation in Digital mode. For extended usage an optional 3400mAh Lithium Ion battery pack is available.

**INDUSTRY LEADING WARRANTY** The RCA RDR7x50 series handhelds are backed standard by an industry leading, hassle-free Three (3) Year Warranty.



### RDR7x50 SPECIFICATIONS

GENERAL	
<b>Frequency Bands</b>	400 - 470 MHz (UHF) / 136-174 MHz (VHF)*
<b>Dimensions (H x W x D)</b>	4.9" X 2.13" X 1.37" (125 x 54 x 35mm)
<b>Weight</b>	0.7 lbs / 320 g
<b>Battery Packs</b>	Standard 7.4V, 2400mAh (Li-Ion), Optional 7.4V, 3400mAh (Li-Ion) Analog: up to 12hours / Digital: up to 14hours (Standard Battery, 5-5-90 Duty Cycle)
<b>Channels</b>	1,024
<b>Channel Spacing</b>	12.5 / 25kHz
<b>LCD (RDR7550)</b>	51 mm. / 2.0in. TFT LCD (320x240 pixels, 262k colors)
<b>Frequency Stability</b>	± 0.5ppm
<b>Environmental Protection and Standards</b>	Designed to meet:  IP67 Dust & Water Intrusion MIL-STD-810 C,D,E,F,G Standard
<b>Operating Temperature</b>	-22°F (-30°C) / 140°F (60°C)
<b>Storage Temperature</b>	-40°F (-40°C) / 185°F (85°C)
<b>Vocoder</b>	AMBE+2
<b>Digital Protocol</b>	ETSI-TS102 361-1, -2,-3,-4

GPS SPECIFICATION	
<b>TIFF Cold Start</b>	< 120s
<b>TIFF Hot Start</b>	< 10s
<b>Horizontal Accuracy</b>	< 10m
<b>Acquisition Sensitivity</b>	< -140dBm
<b>Tracking Sensitivity</b>	< -152dBm

\* Contact your RCA Communications Systems Dealer for availability.

TRANSMITTER SPECIFICATION	
<b>RF Power Output</b>	Selectable Levels: UHF High: 4W Low: 1W VHF* High: 5W Low: 1W
<b>Audio Response</b>	+1 ~ -3dB
<b>Audio Distortion</b>	3% (Analog) / 5% (Digital)
<b>Hum and Noise</b>	49dB @ 25kHz Analog 43dB @ 12.5kHz Analog 55dB @ Digital
<b>Conducted/Radiated Emission</b>	-36dBm (<1 GHz) -30dBm (>1 GHz)
<b>Adjacent Channel Power</b>	70dB @ 25kHz 60dB @ 12.5kHz
<b>Transmission Deviation Limits</b>	5kHz @ 25kHz 2.5kHz @ 12.5kHz
<b>FM Modulation Mode</b>	12.5KHz: 11K0F3E
<b>4FSK Digital Mode</b>	12.5KHz Data: 7K60FXD 12.5KHz Data/Voice: 7K60FXW

RECEIVER SPECIFICATION	
<b>Analog Sensitivity</b>	-121dBm / 12dB SINAD (typical)
<b>Digital Sensitivity</b>	-121dBm/BER 5% (typical) -118dBm/BER 1% (typical)
<b>Adjacent Channel Selectivity</b>	70dB @ 25kHz (TIA603&ETSI) 60dB @12.5kHz (TIA603&ETSI)
<b>Spurious Rejection</b>	>70dB (TIA603 & ETSI)
<b>Blocking</b>	84dB (TIA603 & ETSI)
<b>Intermodulation</b>	>70dB (TIA603) >65dB (ETSI)
<b>Conducted Spurious Emission</b>	-57dBm (<1GHz) -47dBm (>1GHz)
<b>Hum and Noise</b>	49dB @ 25kHz Analog / 43dB @ 12.5kHz Analog 55dB @ Digital
<b>Rated Audio Output Power</b>	1.8W
<b>Rated Audio Distortion</b>	3% Analog / 5% Digital
<b>Audio Response</b>	+1 ~ -3dB



- |                                    |                       |
|------------------------------------|-----------------------|
| 1 Side Button 1*                   | 12 LCD Display        |
| 2 Push-To-Talk Button (PTT)        | 13 Menu / OK          |
| 3 Side Button 2*                   | 14 P1 / Answer / Call |
| 4 Channel Selector Knob            | 15 Speaker            |
| 5 Radio On-Off/Volume Control Knob | 16 Numeric Keypad     |
| 6 LED Indicator                    | 17 Settings           |
| 7 Microphone                       | 18 P2 / End / Home    |
| 8 Speaker                          | 19 Up / Down          |
| 9 Microphone                       | 20 Belt Clip          |
| 10 Antenna                         | 21 Accessory Jack     |
| 11 Top Button*                     | 22 Battery            |

Authorized Dealer:

