



RDU4100/RDV5100

RDX Series™ On-Site Two-Way Business Radios

Performance You Can Count On.

The Motorola RDX Series provides your business with a competitive communications edge, enhancing employee efficiency and overall profitability. Affordable and easy to use, the RDX Series helps keep your operations on schedule, maximize job-shift productivity, enhance security and increase overall customer satisfaction. Compatible with other radios operating on the same frequency and code, the versatile RDX Series also has a full complement of accessories for customizing the radio to suit your needs.



RDU4100



RDV5100

Exceptional Audio Quality

2000 mW audio output, speaker magnetic field reduction, wind-noise reduction and improved RF specifications deliver superior audio quality that is 30% louder than Motorola XTN and AX models.

Rugged and Water Resistant

Meets Military 810 C,D,E and F and IP54/55 specifications for shock, rain, humidity, salt fog, vibration, sand/dust, temperature shock, high and low temperature.

Customer Programming Software (CPS)*

Allows users to perform programming functions and provides access to new features such as Reverse Burst to eliminate unwanted noise, Radio Reporting to manage cloning and radio profiles, Manager Lock, Power Select, PL/DPL Defeat and two additional Time-Out Timers.

Power and Coverage**

4 Watt UHF—Coverage of up to 350,000 sq. ft., 30 floors.
5 Watt VHF—Coverage of up to 300,000 sq. ft., 18 floors.

Business Exclusive Frequencies

Operates on 89 UHF (expanded vs XTN and AX models) or 27 VHF business exclusive frequencies (varies by model) and features 122 codes to help ensure a clear signal.

Tri-Color LED Interface

Convenient interface allows users to identify different radio features and radio status.

Flexible and Durable Battery Life Solutions

The custom RDX Series Li-Ion battery packs are designed and manufactured to ensure durability. Radios come with an ultra high capacity battery. An alkaline battery kit is available as an optional accessory.

Easy Cloning

Quickly copy settings with the Radio-to-Radio Cloning Cable or Multi-Unit Charger. (Both accessories sold separately.)

Advanced Voice Activation (VOX)

Enables convenient hands-free operation when used with optional accessories.

General Features:

- Accessory Mic Gain
- Autoscan
- Battery Save
- 10 Channels
- USB CPS Interface
- Power Select—2/4 Watts (RDU4100); 2/5 Watts (RDV5100)
- Scan and Scan List
- Scramble
- Time-Out Timer
- Compatible with XTN Audio Accessories
- Compatible with AX Default Frequencies

* CPS is available as free download. Windows® XP/Windows 2000 compatible, separate USB cable required.

** Coverage will vary based on terrain, conditions and the radio model used.

General Specifications

	RDU4100	RDV5100
Frequency Range	UHF (438 to 470 MHz)	VHF (146 to 174)
Audio Output	2000 mW	
Channel Capacity	10 Channels	
Channel Bandwidth	12.5/25 kHz	
Dimensions (H" x W" x D") w/Ultra High Capacity Li-Ion Battery	4.5 x 2.2 x 1.8 inches (115.6 x 57.6 x 45.1 mm)	
Weight w/Ultra High Capacity Li-Ion Battery	10.3 oz (293g)	
Average Battery Life @ 5/5/90 (with Battery Save On): w/Ultra High 2400 mAh Li-Ion Battery w/Optional Alkaline Battery Accessory	Up to 18.5 Hours Up to 26 Hours	
Power Supply Voltage	7.2 Volts DC (Li-Ion Battery Pack or Alkaline)	

Transmitter

RF Output High Low	4 Watts 2 Watts	5 Watts 2 Watts
Frequency Stability	< 2 ppm	< 2.5 ppm
Spurs & Harmonics	< -50 dBc	
FM Hum & Noise	-40 dB @ 12.5 kHz -45 dB @ 25.0 kHz	
Modulation Limiting	±2.5 kHz @ 12.5 kHz ±5.0 kHz @ 25.0 kHz	
Adjacent Channel Power	60 dBc	
Radiated Spurious Emissions @ 12.5 kHz	< -20 dBm	
Radiated Spurious Emissions @ 25 kHz	< -13 dBm	
Audio Frequency Response (0.3 - 3.0 kHz)	+1 to -3 dB	
Audio Distortion	< 2%	

Receiver

Sensitivity (12 dB SINAD)	-122 dBm (0.18 µV)	
Adjacent Channel Selectivity	60 dB @ 12.5 kHz 65 dB @ 25.0 kHz	
Intermodulation Rejection	60 dB	
Spurious Response Rejection (blocking 1 MHz)	80 dB	
Audio Distortion	< 5%	
CSQ Hum & Noise @ 12.5 kHz	-50 dB	
PL Hum & Noise @ 12.5 kHz	-50 dB	
DPL Hum & Noise @ 12.5 kHz	-45 dB	
Radiated Spurious Emissions (< 1 GHz)	< -54 dBm	
Radiated Spurious Emissions (> 1 GHz)	< -52 dBm	
Audio Output @ < 5% Distortion	1.5 W @ 8 ohms	

Military Specifications

Standard	MIL 810 C Methods/Procedures	MIL 810 D Methods/Procedures	MIL 810 E Methods/Procedures	MIL 810 F Methods/Procedures
Low Pressure	500.1 / Procedure 1	500.2 / Procedure 2	500.3 / Procedure 2	500.4 / Procedure 1
High Temperature	501.1 / Procedure 1,2	501.2 / Procedure 1,2	501.3 / Procedure 1,2	501.4 / Procedure 1,2
Low Temperature	502.1 / Procedure 1	502.2 / Procedure 1,2	502.3 / Procedure 1,2	501.4 / Procedure 1,2
Temperature Shock	503.1 / Procedure 1	503.2 / Procedure 1	503.3 / Procedure 1	503.4 / Procedure 1
Solar Radiation	505.1 / Procedure 1	505.2 / Procedure 1	505.3 / Procedure 1	505.4 / Procedure 1
Rain	506.1 / Procedure 1,2	506.2 / Procedure 1,2	506.3 / Procedure 1,2	506.4 / Procedure 1
Humidity	507.1 / Procedure 2	507.2 / Procedure 2,3	507.3 / Procedure 2,3	507.4 / Procedure 3
Salt Fog	509.1 / Procedure 1	509.2 / Procedure 1	509.3 / Procedure 1	509.4 / Procedure 1
Dust	510.1 / Procedure 1	510.2 / Procedure 1	510.3 / Procedure 1	510.4 / Procedure 1
Vibration	514.2 / Procedure 8,10	514.3 / Procedure 1	514.4 / Procedure 1	514.5 / Procedure 1
Shock	516.2 / Procedure 1,2,5	516.3 / Procedure 1,4	516.4 / Procedure 1,4	516.5 / Procedure 1

Environmental Specifications

Operating Temperature	-30°C to +60°C (Radio)
Sealing	IP55
Shock & Vibration	Polycarbonate Housing passes EIA 603
Dust & Humidity	Satisfied EIA 603

Specifications subject to change without notice. All specifications shown are typical.
Radio meets applicable regulatory requirements.



MOTOROLA

MOTOROLA and the Stylized M Logo are registered in the U.S. Patent and Trademark Office. All other product or service names are the property of their registered owners. © Motorola, Inc. 2007
RDU-41/5100-NON-SPEC 10/07