



# RDU2020/RDV2020

## 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.



RDU2020

#### 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\*\*

2 Watt UHF—Coverage of up to 250,000 sq. ft., 20 floors.  
2 Watt VHF—Coverage of up to 220,000 sq. ft., 13 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 a standard Li-Ion battery. Accessories include a high capacity Li-Ion battery and an alkaline battery kit.

#### 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
- 2 Channels
- USB CPS Interface
- Power Select—1/2 Watts
- Radio Mic Gain
- Scan and Scan List
- Scramble
- Time-Out Timer
- Compatible with XTN Audio Accessories
- Compatible with XTN 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.



RDV2020

## General Specifications

	RDU2020	RDV2020
Frequency Range	UHF (450 to 470 MHz)	VHF (150.8 to 160)
Audio Output	2000 mW	
Channel Capacity	2 Channels	
Channel Bandwidth	12.5/25 kHz	
Dimensions (H" x W" x D") w/Standard Li-Ion Battery	4.5 x 2.2 x 1.6 inches (115.6 x 576 x 40.5 mm)	
w/High Capacity Li-Ion Battery	4.5 x 2.2 x 1.8 inches (115.6 x 576 x 45.1 mm)	
w/Ultra High Capacity Li-Ion Battery	4.5 x 2.2 x 1.8 inches (115.6 x 576 x 45.1 mm)	
Weight w/Standard Li-Ion Battery	8.6 oz (244g)	
w/High Capacity Li-Ion Battery	10.3 oz (293g)	
w/Ultra High Capacity Li-Ion Battery	10.3 oz (293g)	
Average Battery Life @ 5/5/90 (with Battery Save On):		
w/Standard 1100 mAh Li-Ion Battery	Up to 12 Hours	
w/High Capacity 2200 mAh Li-Ion Battery	Up to 24 Hours	
w/Ultra High 2400 mAh Li-Ion Battery	Up to 26 Hours	
w/Optional Alkaline Battery Accessory	Up to 26 Hours	
Power Supply Voltage	7.2 Volts DC (Li-Ion Battery Pack or Alkaline )	
FCC Designation	AZ489FT4879	AZ489FT3817
IC Designation	109U-89FT4879	

## Transmitter

RF Output		
High	2 Watts	
Low	1 Watt	
Frequency Stability	< 2.5 ppm	
Spurs & Harmonics	< -45 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 1,2	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.



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