

# RDU2020/RDV2020

# RDX Series<sup>™</sup> 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



RDV2020

#### 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-lon battery packs are designed and manufactured to ensure durability. Radios come with a standard Li-lon battery. Accessories include a high capacity Li-lon 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<sup>®</sup> XP, Windows 2000 compatible, separate USB cable required.
- \*\* Coverage will vary based on terrain, conditions and the radio model used.

#### **General Specifications**

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 w/High Capacity Li-Ion Battery w/Ultra High Capacity Li-Ion Battery	4.5 x 2.2 x 1.6 inches (115.6 x 576 x 40.5 mm) 4.5 x 2.2 x 1.8 inches (115.6 x 576 x 45.1 mm) 4.5 x 2.2 x 1.8 inches (115.6 x 576 x 45.1 mm)			
Weight w/Standard Li-Ion Battery w/High Capacity Li-Ion Battery w/Ultra High Capacity Li-Ion Battery	8.6 oz (244g) 10.3 oz (233g) 10.3 oz (233g)			
Average Battery Life @ 5/5/90 (with Battery Save On): w/Standard 1100 mAH Li-Ion Battery w/High Capacity 2200 mAH Li-Ion Battery w/Ultra High 2400 mAH Li-Ion Battery w/Optional Alkaline Battery Accessory	Up to 12 Hours Up to 24 Hours Up to 26 Hours 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 Low	2 Watts 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	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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Name Company Name Street Address City, State, Zip Phone