RDM2020/RDM2080d PORTABLE TWO-WAY RADIOS

Performance You Can Count On. The Motorola RDM Series MURS (Multi-Use Radio Service) radios provide your business with a competitive communications edge, enhancing employee efficiency and overall profitability. These radios use MURS frequencies which are exclusive to the United States and do not require FCC licensing.

Affordable and easy to use, RDM2020/2080d radios help keep your operations on schedule, maximize job-shift productivity, enhance security and increase overall customer satisfaction. And by using MURS frequencies, you can standardize the radio frequency used across all of your business locations, helping to streamline the procurement and implementation of two-way communication for your business.

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 radios.

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

Customer Programming Software (CPS)*
Allows users to perform programming functions and provides access to features such as Reverse Burst to eliminate unwanted noise, Radio Reporting to manage cloning and radio profiles, Manager Lock, PL/DPL Defeat and two additional Time-Out Timers.

Channel Aliasing – RDM2080d only
Provides the ability to give each channel a user-defined name.

Tri-Color LED Interface
Convenient interface allows users to identify different radio features and radio status.

Power and Coverage**
2 Watt MURS—Coverage of up to 220,000 sq. ft., 13 floors.

MURS Exclusive Frequencies
Operates exclusively on MURS (Multi-Use Radio Service) frequencies.

Flexible and Durable Battery Life Solutions
The custom RDM Series Li-ion battery packs are designed and manufactured to ensure durability. Radios come with a standard Li-ion battery. Optional accessories include a high capacity Li-ion battery and an alkaline battery kit.

Easy Cloning
Lets users quickly copy settings with the radio-to-radio Cloning Cable or Multi-Unit Charger. Both sold separately.

Advanced Voice Activation (VOX)
Enables convenient hands-free operation when used with optional audio accessories.

RDM2020 RDM2080d

General Features:
- Accessory Mic Gain
- Auto Scan
- Battery Save
- 2 Channels – RDM2020
- 8 Channels – RDM2080d
- USB CPS Interface
- Radio Mic Gain
- Scan and Scan List
- Scramble
- Time-Out Timer
- Compatible with RDX Audio Accessories

*CPS is available as free download. Windows® XP, Widows 2000 compatible, separate USB cable required.
**Coverage will vary based on terrain, conditions and the radio model used.

GENERAL SPECIFICATIONS

	RDM2020	RDM2080d
Channel Capacity	2 Channels	8 Channels*
Frequency Range	5 MURS frequencies (fixed)	
Audio Output	2000 mW	
Channel Bandwidth	Specific bandwidth for each of the MURS frequencies defined by the FCC	
Dimensions (H x W x D)		
Standard Li-ion Battery	4.5 x 2.2 x 1.6 inches (115.6 x 57.6 x 40.5 mm)	
High-Capacity Li-ion Battery	4.5 x 2.2 x 1.8 inches (115.6 x 57.6 x 45.1 mm)	
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		
Standard Li-ion Battery	8.6 oz (244g)	
High-Capacity Li-ion Battery	10.3 oz (293g)	
Ultra High-Capacity Li-ion Battery	10.3 oz (293g)	
Average Battery Life @ 5/5/90 (with Battery Save on)		
Standard 1100 mAH Li-ion Battery	Up to 12 Hours	
High-Capacity 2200 mAH Li-ion Battery	Up to 24 Hours	
Ultra High-Capacity 2400 mAH Li-ion Battery	Up to 26 Hours	
Optional Alkaline Battery Accessory	Up to 26 Hours	
Power Supply Voltage	7.2 Volts DC – Li-ion or Alkaline	
FCC Designation	AZ489FT3823	AZ489FT3823

TRANSMITTER

RF Output	2 W
Frequency Stability	< 2.5 ppm
Spurs and Harmonics	< -45 dBc
FM Hum and Noise	-40 dB @ 12.5 kHz
Modulation Limiting	±2.5 kHz @ 12.5 kHz
Adjacent Channel Power	60 dBc
Radiated Spurious Emissions @ 12.5 kHz	< -20 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
Intermodulation Rejection	60 dB
Spurious Response Rejection (blocking 1 MHz)	80 dB
Audio Distortion	< 5%
CSQ Hum and Noise @ 12.5 kHz	-50 dB
PL Hum and Noise @ 12.5 kHz	-50 dB
DPL Hum and 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	MIL810 E Methods/Procedures	MIL 810 F Methods/Procedures
Low Pressure	500.1 / 1	500.2 / 2	500.3 / 2	500.4 / 1
High Temperature	501.1 / 1, 2	501.2 / 1, 2	501.3 / 1, 2	501.4 / 1, 2
Low Temperature	502.1 / 1	502.2 / 1, 2	502.3 / 1, 2	501.4 / 1, 2
Temperature Shock	503.1 / 1	503.2 / 1	503.3 / 1	503.4 / 1
Solar Radiation	505.1 / 1	505.2 / 1	505.3 / 1	505.4 / 1
Rain	506.1 / 1, 2	506.2 / 1, 2	506.3 / 1, 2	506.4 / 1
Humidity	507.1 / 2	507.2 / 2, 3	507.3 / 2, 3	507.4 / 3
Salt Fog	509.1 / 1	509.2 / 1	509.3 / 1	509.4 / 1
Dust	510.1 / 1	510.2 / 1	510.3 / 1	510.4 / 1
Vibration	514.2 / 8, 10	514.3 / 1	514.4 / 1	514.5 / 1
Shock	516.2 / 1, 2, 5	516.3 / 1, 4	516.4 / 1, 4	516.5 / 1

ENVIRONMENTAL

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

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

*8 channel, display model supports multiple PL/DPL combinations on 5 unique MURS frequencies.

MOTOROLA

R3-4-2039