

WM800 Wireless Remote Speaker Microphone

Wireless and resilient. The WM800 RSM enables loud and intelligible communications in the noisiest environments, allowing seamless transmissions from any direction.

The mission critical WM800 Wireless Remote Speaker Microphone delivers ultra clear audio communications in a compact, wireless design. Built as a unified system with APX NEXT and N-line radios, the WM800 RSM redefines communication ensuring your voice is heard in every direction even in the most challenging environments.

Clarity, reliability and durability converge to empower your mission's success. Every feature on this RSM has been purposefully designed with all of the advanced capabilities of Mission Critical Wireless device including four high dynamic range microphones, adaptive noise suppression and enhanced security.





Key features overview

- Wire-free
- Secure NFC pairing
- Loud and clear speaker
- Multi-mic capability: four high dynamic range microphones for noise suppression
- Advanced windporting
- HazLoc rated by UL, Div 2 certified
- Enhanced ergonomic design
- Dedicated ViQi button
- Independent task-light control

Built tough & built to last

Its rugged and durable design guarantees reliable operation in the harshest conditions. The WM800 is ready to excel in demanding environments.

- IP68 rated (2 meters, 4 hours)
- Work-when-wet
- UL Div 2 certified
- 27 hours of battery life

Loud & clear audio

Maximizing your mission critical voice technology with 4 high dynamic range (HDR) microphones and adaptive noise suppression, the WM800 tracks your voice and filters out surrounding background noise for ultra-clear voice communications.

- Wideband speaker
- Multi mic noise suppression
- 100 phon loudness
- ViQi supported

Seamless usability

The WM800 liberates you from the constraints of cords, enabling effortless movement while staying focused on the task at hand. Its large, yet recessed push-to-talk and emergency buttons are easy to access and designed to prevent accidental activation. Additional features include a volume control, audio covert mode at system level and a task light at the bottom of the RSM to clearly inspect documents in dimly lit environments.

- Bluetooth range: 30 meters line of sight
- Bluetooth version 5.2
- Supports secure NFC pairing and Motorola Proximity Pairing (MPP)
- USB-C charging
- Low profile swivel clip with D-Ring



WM800 Product Features

Power button

2-dot programmable button

4 HDR Microphones for New Adaptive Noise Suppression

Windporting grill

3-dot ViQi button

Push-to-talk button

Speaker

Task light button

1-dot programmable button



Emergency button

Volume toggle



Rear mic

Battery latch

3.5mm audio jack

Bluetooth Pairing Location - secure NFC and blue dot

Low profile swivel clip with D-ring

Charging contact

Tasklight

USB C charging port



WM800 Wireless RSM Specifications

GENERAL INFORMATION

Part Number	PMMN4158
Compatible Radios	Portable radios: APX NEXT, APX NEXTi, APX N70, APX N50, APX N30, APX8000¹, APX6000 BN, APX900, APX6000XE, APX8000XE, APX8000H, APX8000HXE SRX2200 Mobile radios: APX8500, APX6500 BN, APX5500 BN, APX4500 BN, APX2500 BN, APX1500 BN (Is not compatible with PMMN4097 BT Gateway. Not supported with Standard APX radios in analog channel)
Dimensions (RSM Head only)	67.5 x 98 x 32 mm (without clip)
Weight (Full Kit)	180 +/- 5 grams
Color	Black
Power Source	Replaceable Battery
Standard Accessory Interface	3.5 mm Non-threaded
Non Incendiary	Div 2 Class I (Groups A, B, C, D) Class II (Groups F, G) Class III
Clip	360° Rotating Clip with D-Ring

MICROPHONE

Type	Beam Forming
Sensitivity	-42+/-3dBV
Distortion (THD)	<5% wideband
Noise Cancellation	4 Microphone Adaptive Noise Suppression Algorithm
Windporting Microphone	Yes
Adaptive Audio Engine	Enabled through radio

SPEAKER

Diameter	36mm
Speech Loudness @ 12in (300mm)	100 Phon
Rated Output Level	1W

CONTROLS

Top	Orange Emergency, Volume up/down, Power On/Off
Side	PTT, 2 Programmable (1-dot, 2-dot)
Front	1 Programmable (3-dot ViQi ²), Tasklight

POWER

Battery Capacity	2150 mAh
Battery Life	27 hours (5/5/90 working period)
Charge Time	2.5 hours approximately
Operating Voltage	3.88V
Type Acceptance	RED, FCC/IC, EME, UL DIV2

ENVIRONMENTAL

Operating Temperature	-20°C to +60°C (-4°F to +140°F)
Storage Temperature	-55°C to +85°C (-67°F to +185°F)
Mil Specs	MIL-STD 810H Method 506.4 (Rain), MIL-STD 810H Method 509.4 Procedure 1 (Salt Fog), MIL-STD 810H Method 510.4 Procedure 1 (Dust), MIL-STD 810H Method 514.5 Procedure 1 Category 24 (Vibration), MIL-STD 810H Method 516.5 Procedure 1 (Vibration)
ESD	IEC / EN 61000-4-2
IP Rating	IP68 (2 metres, 4 hours)
Impact Grill	Withstand 1.25 in (31.75 mm) Diameter Steel Ball Drop
Work-When-Wet	Yes

COMPATIBLE RADIO FIRMWARE

APX NEXT Radios	R07.30.00 and beyond
APX N70 Radio	R4.30.00 and beyond
Standard APX, APX N50, and APX N30 Radios	R34.02.00

RSM FIRMWARE

WM800	R02.60.00 and beyond
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¹ <https://learning.motorolasolutions.com/online/89041enus> (Page 54), ² Applicable for ViQi supported radio



Secondary audio accessories



PMLN8652

3.5mm Loud Audio Receive Only
Earpiece with Coiled Translucent Tube



PMLN8650

N-ear 360 Flexo Dynamic™ Braided
Fiber Cloth™ Earpiece

Additional accessories



PMMN4156

WM800 Wireless RSM device
only without battery



PMNN4846

Lithium-Ion, 2150 mAh,
Battery with Swivel Clip



PMPN4653

Dual-Unit Charger (DUC) with NA Power
Supply³ (other power plugs available)



PMKN4294

USB-C Charging Cable



PMLN8675

Swivel Molle Clip



PMLN8682

Coiled tethering kit
(pack of 5)



PMLN8312

360° Rotating Clip with
D-Ring

To learn more, visit: www.motorolasolutions.com



³ DUC with EU Power Supply PMPN4749, DUC with UK/Hong Kong Power Supply PMPN4752, DUC with Argentina Power Supply PMPN4751, DUC with Brazil Power Supply PMPN4750, DUC with Australia/New Zealand Power Supply PMPN4654

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