

# 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
- Secured NFC pairing
- Loud and clear speaker
- Multi-mic capability: four high dynamic range microphones for noise suppression
- Advanced windporing
- 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
- Work-when-wet
- UL Div 2 certified
- 27 hours of battery life

## Loud & clear audio

Maximize your mission critical voice technology with 4 high dynamic range (HDR) microphones and adaptive noise suppression technology, the WM800 tracks your voice and filters out surrounding background noise for ultra-clear voice communications. The WM800 RSM captures your voice while seamlessly filtering out ambient background noise, ensuring that your communications remain clear.

- Wideband speaker
- Multi mic quad beam
- 100 phon loudness
- ViQi supported

## Seamless usability

The WM800 liberates 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 jack, radio system covert mode and a task light under 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
- USB C Charging
- Low profile swivel clip with D-Ring



# WM800 Product Features

Power button

2-Dot 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

Low profile swivel clip with D-ring

3.5mm audio jack

Charging contact

Tasklight

USB C charging port



# WM800 Wireless RSM Specifications

## GENERAL INFORMATION

Part Number	PMMN4158
Compatible Radio	<p>Portable radios: APX NEXT, APX NEXTi, APX N70, APX N50, APX N30, APX8000<sup>1</sup>, APX6000 BN, APX900, APX6000XE, APX8000XE, APX8000H, APX8000HXE SRX2200</p> <p>Mobile radios: APX8500, APX6500 BN, APX5500 BN, APX4500 BN, APX2500 BN, APX1500 BN</p> <p>(Is not compatible with PMMN4097 BT Gateway. Not supported with Standard APX radios in analog channel)</p>
Dimensions (RSM Head only)	W67.5mm x L98mm x T32mm (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 <sup>2</sup> ), 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	-20C to +60C (-4F to +140F)
Storage Temperature	-55°C to +85°C (-67°F to +185°F)
Mil Specs	MIL810H Method 506.4 (Rain), MIL810H Method 509.4 Procedure 1 (Salt Fog), MIL810H Method 510.4 Procedure 1 (Dust), MIL810H Method 514.5 Procedure 1 Category 24 (Vibration), MIL810H Method 516.5 Procedure 1 (Vibration)
ESD	IEC / EN 61000-4-2
IP Rating	IP68 (2 metres, 4 hours)
Impact Grill	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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<sup>1</sup> <https://learning.motorolasolutions.com/online/89041enus> (Page 54), <sup>2</sup> 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 Supply



**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](http://www.motorolasolutions.com)



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