



# MOTOTRBO™ Remote Speaker Microphones Enhance Communication

Introducing Remote Speaker Microphones that offer IMPRES™, Windporting, Noise-Canceling Acoustics and/or IP57 Submersibility features



PMMN4025



PMMN4046

The MOTOTRBO portfolio has a wide variety of RSM solutions that meet the specific needs of radio users:

#### Education and Hospitality Professionals

These compact microphones have an audio jack for discreet communication needs and enhanced audio features such as windporting and/or IMPRES audio for school security, rallies, conventions and outdoor events

**PMMN4024** – Remote Speaker Microphone with audio jack

**PMMN4025** – IMPRES Remote Speaker Microphone with audio jack

**PMMN4040** – Remote Speaker Microphone (IP57)

#### Manufacturing, Construction and Public Works Professionals

These durable RSMs have a larger speaker body making it ideal for users working at a job site or in the field. Windporting, IMPRES audio and/or IP57 submersibility help these users communicate even when Mother Nature is uncooperative.

**PMMN4046** – IMPRES Remote Speaker Microphone with volume control (IP57)

**PMMN4050** – IMPRES Remote Speaker Microphone with audio jack

Motorola's Remote Speaker Microphones (RSMs) are a vital two-way radio accessory solution for users who need to talk and listen without removing the radio from their belt or carry case. These RSMs boast new features that give users flexible solutions and the confidence of clear, understandable communication even in the most adverse conditions.

The MOTOTRBO portfolio has a wide range of RSMs that provide enhanced communications with advanced features such as the following:

- Motorola's state-of-the-art IMPRES technology allows communication between the radio and the audio accessory. The result is optimal audio performance and increased customization assuring the highest quality communication.
- The windporting feature dramatically lessens noise caused by high winds and other severe weather conditions.
- When a user speaks directly into the microphone, the noise-canceling acoustics utilize a directional microphone that is designed to eliminate the ambient noise.
- IP57 submersibility ratings provide reliable communications even in wet conditions.
- When injuries or emergencies strike, emergency-button equipped RSMs can be used to signal that the operator needs help.
- A volume switch allows the user to adjust the audio volume without having to access the radio.
- An audio jack located at the head of the microphone allows users to receive discreet audio communication, with an additional earpiece accessory.
- RSMs are available in both small and large housings. The small housing is compact and lightweight. The large housing is beneficial for users wearing gloves or in rugged conditions.

**PRODUCT SPECIFICATIONS**

	PMMN4046	PMMN4050	PMMN4024	PMMN4025	PMMN4040
<b>MICROPHONE ACOUSTICS</b>					
Microphone Type:	Omni-directional	Directional	Omni-directional	Omni-directional	Omni directional
Sensitivity:	-44dBV typical	-47dBV typical	-44dBV typical	-44dBV typical	-44dBV typical
<b>SPEAKER ACOUSTICS</b>					
Diameter:	45mm	45mm	45mm	45mm	45mm
Output power:	0.5W at rated audio	0.5W at rated audio	0.5W at rated audio	0.5W at rated audio	0.5W at rated audio
Output Level:	90dB SPL typical	90dB SPL typical	90dB SPL typical	90dB SPL typical	90dB SPL typical
Maximum Output Level:	≤ 120dB SPL at maximum volume	≤ 125dB SPL at maximum volume	≤ 120dB SPL at maximum volume	≤ 120dB SPL at maximum volume	≤ 120dB SPL at maximum volume
Frequency Response:	300Hz – 3200Hz	300Hz – 3200Hz	300Hz – 3200Hz	300Hz – 3200Hz	300Hz – 3200Hz
Distortion (THD):	<15% (RX)	<15% (RX)	<15% (RX)	<15% (RX)	<15% (RX)
<b>AUDIO JACK</b>					
Audio Jack Type:	None	3.5mm unthreaded jack	3.5mm unthreaded jack	3.5mm unthreaded jack	None
Compatible Earpieces:	N/A	AARLN4885, WADN4190, PMLN4620, RLN4941	AARLN4885, WADN4190, PMLN4620, RLN4941	AARLN4885, WADN4190, PMLN4620, RLN4941	N/A
Maximum Output Level:	N/A	≤ 118 dB SPL	≤ 118 dB SPL	≤ 118 dB SPL	N/A
<b>BODY</b>					
Dimensions (W x L x D):	60mm x 78mm x 28mm (without clip)	60mm x 78mm x 28mm (without clip)	55mm x 60mm x 27mm (without clip)	55mm x 60mm x 27mm (without clip)	55mm x 60mm x 27mm (without clip)
Weight:	220 grams	220 grams	194 grams	194 grams	194 grams
<b>POWER</b>					
Power Source:	Radio battery	Radio battery	Radio battery	Radio battery	Radio battery
<b>CABLE</b>					
Flex Life:	50,000 cycles	50,000 cycles	50,000 cycles	50,000 cycles	50,000 cycles
Pull Strength:	40lbs, minimum tensile, in-line	40lbs, minimum tensile, in-line	40lbs, minimum tensile, in-line	40lbs, minimum tensile, in-line	40lbs, minimum tensile, in-line
<b>CONTROLS</b>					
Emergency:	Orange button	None	None	Orange button	None
Volume:	Toggle switch	None	None	None	None
Side Button:	Programmable Option	None	None	None	None
<b>ENVIRONMENTAL SPECIFICATIONS</b>					
Operating Temp:	-30 C to +60 C	-30 C to +60 C	-30 C to +60 C	-30 C to +60 C	-30 C to +60 C
Storage Temp:	-55 C to +85 C	-55 C to +85 C	-55 C to +85 C	-55 C to +85 C	-55 C to +85 C
Humidity:	90-95% relative humidity at +50 C for 8 hours	90-95% relative humidity at +50 C for 8 hours	90-95% relative humidity at +50 C for 8 hours	90-95% relative humidity at +50 C for 8 hours	90-95% relative humidity at +50 C for 8 hours
Rain:	MIL810F Method 506.4	MIL810F Method 506.4	MIL810F Method 506.4	MIL810F Method 506.4	MIL810F Method 506.4
Salt/Fog:	MIL810F Method 509.4, Procedure 1	MIL810F Method 509.4, Procedure 1	MIL810F Method 509.4, Procedure 1	MIL810F Method 509.4, Procedure 1	MIL810F Method 509.4, Procedure 1
Dust:	MIL810F Method 510.4, Procedure 1	MIL810F Method 510.4, Procedure 1	MIL810F Method 510.4, Procedure 1	MIL810F Method 510.4, Procedure 1	MIL810F Method 510.4, Procedure 1
Vibration:	MIL810F Method 514.5, Procedure 1, Category 24	MIL810F Method 514.5, Procedure 1, Category 24	MIL810F Method 514.5, Procedure 1, Category 24	MIL810F Method 514.5, Procedure 1, Category 24	MIL810F Method 514.5, Procedure 1, Category 24
Mechanical Shock:	MIL810F Method 516.5, Procedure 1	MIL810F Method 516.5, Procedure 1	MIL810F Method 516.5, Procedure 1	MIL810F Method 516.5, Procedure 1	MIL810F Method 516.5, Procedure 1
ESD:	IEC/EN61000-4-2	IEC/EN61000-4-2	IEC/EN61000-4-2	IEC/EN61000-4-2	IEC/EN61000-4-2
IP Rating*:	IP57	IP54	IP54	IP54	IP57

\*IP54 – 4 stands for protection against water sprayed from all directions  
IP57 – 7 stands for submersibility tested at 1 meter for 30 minutes

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