



APX™ REMOTE SPEAKER MICROPHONES (RSMs)

LOUDER, CLEARER WHEN IT COUNTS MOST

If you're an officer coordinating stadium security or a battalion chief commanding the fireground, you not only need to hear messages, but be heard continuously in the noisiest environments.

Our robust portfolio includes a variety of Remote Speaker Microphones designed for the noisiest and most extreme environments, along with options that perform in your everyday environment. All are innovatively engineered to give you greater capabilities and clearer communications than ever before. To help significantly improve response time and responder safety.

RUGGED SPECIFICATIONS FOR ADVERSE AND EXTREME CONDITIONS

Many of our RSMs and PSMs meet tough specs – IP57 submersibility ratings – to withstand water immersion longer. Even if you drop them in a puddle or wear them in the rain, you'll stay connected. Our rugged accessories take toughness further –exceeding IP57 standards for submersibility and providing an optimal level of water protection even if you get drenched by a hose, it will stand up.



FIRE RSM WITH DUAL MIC NOISE SUPPRESSION FOR THE MOST EXTREME ENVIRONMENTS

The XE RSM, designed for fire fighters and the XP RSM for public safety professionals, feature dual microphone technology that ensures you can communicate in the loudest environments where you can't even hear yourself speak. The dual microphones locate the talker and cancel out the background noise, so that you can be heard even when you can't hear yourself.



XE REMOTE SPEAKER MICROPHONE (RSM)

This Microphone, with Dual Mic Noise Suppression also features exaggerated controls you can operate with bulky gloves and an asymmetrical shape so you can find the controls you need without looking. The optional Xtreme Temperature cable is formulated with a proprietary blend of materials that offer a significantly higher jacket material melting temperature than standard cables.

DESIGNED BY FIREFIGHTERS FOR FIREFIGHTERS.



GENERAL SPECIFICATIONS

COMPATIBLE RADIOS

APX 7000 SERIES, APX 6000 SERIES

MICROPHONE ACOUSTICS

Model Type	Dual Microphone Noise Suppression, Omni-directional
Sensitivity	-42dBV typical
Distortion (THD)	< 3% from 300 to 3200Hz

SPEAKER ACOUSTICS

Diameter	45mm
Nominal Output Level	(@ 1kHz, 0.5W, 30cm) 90dB SPL,
Maximum Output Level	(@ 1kHz, max volume, 30cm) 97dB SPL
Frequency Response	300 - 3200Hz
Distortion (THD)	< 15% (RX)

BODY

Dimensions	(W x L x D) 75mm x 100mm x 33mm (without clip)
Weight	265 grams

POWER

Power Source	Radio battery
Radio Battery Life Impact	10% reduction 5/5/90 duty cycle (without the strobe)

CABLE

Length	6-foot coiled cord
Flex Life	50,000 cycles
Pull Strength	40lbs, minimum tensile, in-line

CONTROLS

Volume	Single up/down steps in 10 intervals
Top Button	Orange programmable button
Side Buttons	Push-to-talk and one programmable button
Front Buttons	One strobe light control

ENVIRONMENTAL SPECIFICATIONS

Operating Temp	-30 C to +60 C
Storage Temp	-55 C to +85 C,
Humidity	MIL STD 810G METHOD 507.5, PROCEDURE II
ESD	IEC/EN61000-4-2
Water and Dust Intrusion ¹	IP68 and MIL-STD's noted above
Immersion	MIL-STD 512.X/I
Intrinsic Safety*	FM
Thermal Shock	-57 C to +80 C
Rain	IEC 60529
Salt/Fog	MIL STD 810G METHOD 509.5
Dust Procedure	1 IEC 60529
Vibration	MIL STD 810G METHOD 514.6, PROCEDURE I, CATEGORY 24
Mechanical Shock	MIL STD 810G METHOD 516.6, PROCEDURE I, V, VI

RSM WITH EXTREME TEMPERATURE CABLE PART NUMBERS

NNTN8575A – Xtreme Temperature Cable High Impact Green Housing
NNTN8575ABLK – Xtreme Temperature Cable Black Housing
NNTN8575AYLW – Xtreme Temperature Cable Yellow Housing

RSM WITH STANDARD CABLE PART NUMBERS

NNTN8203A – Standard Cable High Impact Green Housing
NNTN8203ABLK – Standard Cable Black Housing
NNTN8203AYLW – Standard Cable Yellow Housing

REPLACEMENT PART NUMBERS

NNTN8271AS – Replacement clamping clip and D-ring
30009402001 – Standard Cable
30009402002 – Xtreme Temperature Cable for upgrade or replacement

POLICE RSM WITH DUAL MIC NOISE SUPPRESSION FOR THE MOST EXTREME ENVIRONMENTS



APX™ XP REMOTE SPEAKER MICROPHONE

This Remote Speaker Microphone with its thin design and optimized ergonomics is ideal for police officers and other public safety users. With Dual Mic Noise Suppression, you will be heard despite traffic noise and sirens in the background. The XP RSM is designed to perform well even in the rain. When it gets dirty, just wash the microphone head to ensure your communication is not compromised.

DUAL MIC NOISE SUPPRESSION



GENERAL SPECIFICATIONS

COMPATIBLE RADIOS

APX 7000 SERIES, APX 6000 SERIES, APX 4000, APX 3000, SRX 2000

MICROPHONE ACOUSTICS

Model Type	IMPRES RSM with Dual Mic Noise Suppression, Omni-directional
Sensitivity	42dBV typical
Distortion (THD)	< 3% from 300 to 3200Hz

SPEAKER ACOUSTICS

Diameter	45mm
Nominal Output Level	(@ 1kHz, 0.5W, 30cm) 89dB SPL,
Maximum Output Level	(@ 1kHz, max volume, 30cm) 97dB SPL
Frequency Response	300 - 3200Hz
Distortion (THD)	< 15% (RX)

BODY

Dimensions (W x L x D)	69mm x 95mm x 27mm (without clip)
Weight	235 grams, NMN6271; 248 grams NMN6274

POWER

Power Source	Radio battery
Radio Battery Life Impact	10% reduction 5/5/90 duty cycle

CABLE

Length	6-foot coiled cord
Flex Life	100,000 cycles
Pull Strength	40lbs, minimum tensile, in-line

CONTROLS

Volume	Single up/down steps in 10 intervals
Top Button	Orange programmable button
Side Buttons	Push-to-talk and one programmable button

ENVIRONMENTAL SPECIFICATIONS

Operating Temp	-30 C to +60 C
Storage Temp	-55 C to +85 C,
Humidity	MIL STD 810G METHOD 507.5, PROCEDURE II
IP Rating:	IP68 NMN6271, IP55 NMN6274
Immersion	MIL-STD 512.X/ I
Thermal Shock	-57 C to +80 C
Rain	IEC 60529
Salt/Fog	MIL STD 810G METHOD 509.5
Dust Procedure	1 IEC 60529
Vibration	MIL STD 810G METHOD 514.6, PROCEDURE I, CATEGORY 24
Mechanical Shock	MIL STD 810G METHOD 516.6, PROCEDURE I, V, VI
ESD	IEC6100-4-2

PART NUMBERS

NMN6274 – XP RSM with Dual Mic Noise Suppression, 3.5 mm Audio Jack

NMN6271 – XP RSM with Dual Mic Noise Suppression, IP68

Compatible Earpieces for the NMN6274: BDN6726, BDN6727, BDN6728, BDN6781, BDN6664, BDN6665, BDN6666, BDN6719, RLN5313, RLN5314, RMN4056, RMN4057

MISSION CRITICAL WIRELESS RSMS

YOUR RADIO, UNLEASHED

The **APX wireless remote speaker microphone (RSM)** cuts the cord so public safety users no longer need to worry about tangled cords and can now work safer and more efficiently. This RSM features all of the advanced capabilities of Mission Critical Wireless including enhanced security, fast push-to-talk and quick touch pairing with voice prompts that confirm pairing actions.



APX MISSION CRITICAL WIRELESS RSM

Every feature on this RSM has been purposefully designed. 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 and task light that allows you to read items such as a driver's license in the dark. This RSM also features a removable and rechargeable battery that enables easy multi-shift usage. Charge the RSM on the go with the vehicular charger or in the office with the dual-unit desk charger.

A SAFER, SMARTER WORK ENVIRONMENT



RLN6554



GENERAL SPECIFICATIONS

COMPATIBLE RADIOS

APX 7000 SERIES, APX 6000 SERIES, APX 4000, APX 3000

SPECIFICATIONS

Standard Range	10 meters + line of sight
Security	128 bit
Microphone	Omni directional, Windporting equivalent
Rated Audio/distortion	0.5W @<10%
Protocol	Bluetooth 3.0
Type Acceptance	CE, FCC/IC, EPP2, EME, CMM, WEEE, EFUP

MICROPHONE ACOUSTICS

Model Type	windporting equivalent
Sensitivity	-42.0 dBV/Pa (+/-3dB)
Distortion	(THD) 0.5W @ <10%

SPEAKER ACOUSTICS

Diameter	36mm
Nominal Output Level	94.0±3dB @ 1kHz
Maximum Output	118dB SPL
Frequency Response	300Hz to 3000Hz
Distortion (THD)	1W @ <15% over 300Hz to 3000Hz

PHYSICAL

Dimension	88x26x63 mm
Weight	158g

CONTROLS

Volume	Toggle Switch
Top Button	Orange Programmable button
Side Buttons	Task light
Power Button	On/Off

ENVIRONMENTAL

Operating Temp	-10° C to +60° C
Storage Temp	-55° C to +85° C
Humidity	95% RH @ 50° C for 48 hrs
ESD	IEC 61000-4-2
Water and Dust Intrusion	IP55 (with dust cover closed)
Salt/Fog	MIL810F Method 509.4, Procedure 1
Vibration	MIL810F Method 514.5, Procedure 1, Category 24
Mechanical Shock	MIL810F Method 516.5, Procedure 1

POWER

Battery	1800 mAh Lithium Ion
Battery Life	30+ hours typical, 5/5/90 12+ hours typical, 5/35/60
Charge time continuous from 0%	3 hours
Operating Voltage	3.6V DC

PART NUMBERS

RLN6554 – APX Wireless RSM with battery, clip, dual-unit charger and power supply

REPLACEMENT PARTS

PMLN6716 – Vehicular Charger
PMLN7120 – Dual-unit charger with power supply
RLN6544 – Wireless RSM with battery and clip
PMNN4461 – Battery, 1800mAh Lilon
NNTN4990 – D-ring Swivel Clip 12 per pack
RLN4941 – Receive-only Earpiece with Comfort Eartube
AARLN4885 – Receive-only Earbud
RLN6511 – Small EP7 Sonic Defender, use with RLN4941
RLN6512 – Medium EP7 Sonic Defender, use with RLN4941
RLN6513 – Large EP7 Sonic Defender, use with RLN4941



DISPLAY REMOTE SPEAKER MICROPHONES

Our Display RSMs with Windporting technology were designed with easy to read screens that let you see **zone and channel information at-a-glance**. Since the display mirrors the one on top of your portable, it delivers the information you need, when you need it. This RSM allows you to attach a Boomless Temple Transducer or a Receive only earpiece with clear eartube while maintaining the IP68 water intrusion rating.

INSTANT ACCESS TO KEY RADIO INFORMATION



GENERAL SPECIFICATIONS

COMPATIBLE RADIOS

APX 7000 SERIES, APX 6000 SERIES, APX 4000, APX 3000, APX 1000, SRX 2200

MICROPHONE ACOUSTICS

Model Type	Windporting, Omni-directional
Sensitivity	42dBV typical
Distortion (THD)	< 3% from 300 to 3200Hz

SPEAKER ACOUSTICS

Nominal Output Level	(@ 1kHz, 0.5W, 30cm) 90dB SPL,
Maximum Output Level	(@ 1kHz, max volume, 30cm) 94dB SPL
Frequency Response	300 - 3000Hz
Distortion (THD)	< 15% (RX)

BODY

Dimensions (W x L x D)	68mm x 106mm x 31mm (without clip)
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POWER

Power Source	Radio battery
Radio Battery Life	Impact 8% reduction 5/5/90 duty cycle

CABLE

Flex Life	50,000 cycles
Pull Strength	40lbs, minimum tensile, in-line

CONTROLS

Volume	12-steps
Top Button	Orange programmable button
Side Buttons	Push-to-talk and two programmable button
HMN4103 & HMN4104:	Display with 8 characters
HMN4104:	Channel Selector

ENVIRONMENTAL SPECIFICATIONS

Operating Temp	-30 C to +60 C
Storage Temp	-55 C to +85 C
Intrinsic Safety*	FM
IP Rating:	IP68
Rain	IEC 60529
Salt/Fog	MIL STD 810G METHOD 509.5
Dust Procedure	1 IEC 60529
Vibration MIL	MIL STD 810G METHOD 514.6, PROCEDURE I, CATEGORY 24
Mechanical Shock MIL	MIL STD 810G METHOD 516.6, PROCEDURE I, V, VI
ESD	IEC6100-4-2

PART NUMBERS

HMN4101 – IMPRES RSM with Audio Jack - no display
HMN4103 – IMPRES Display RSM with Audio Jack
HMN4104 – IMPRES Display RSM with Audio Jack & Channel Selector

ACCESSORIES & REPLACEMENT PARTS

RMN5116 – 8-Pin FM Receive and Transmit Boomless Temple Transducer, over-the-head (for HMN4104, HMN4103 and HMN4101 only)
RLN6511 – Small EP7 Sonic Defender, use with RLN6424
RLN6512 – Medium EP7 Sonic Defender, use with RLN6424
RLN6513 – Large EP7 Sonic Defender, use with RLN6424
RLN6424 – 8-Pin FM Receive-Only Earpiece with translucent tube and clear rubber eartip (for HMN4104, HMN4103 and HMN4101 only)
PMKN4107 – Display RSM Interface Cable, 5-Pin Nexus Female Receptacle
PMKN4112 – Display RSM Interface Cable 4-Pin Nexus Male Plug
PMKN4113 – Display RSM Interface Cable, 12-Pin Hirose Male Connector
3075336B17 – Replacement coil cord for HMN4101, HMN4103 AND HMN4104



*APX 1000 is certified with HMN4101 only.

WINDPORTING RSMS

The Windporting feature is specifically designed for windy outdoor environments. Windporting dramatically reduces the noise caused by howling winds and harsh weather. And it prevents water from clogging the microphone and distorting your transmission.

WINDPORTING, FOR WINDY OUTDOOR ENVIRONMENTS



GENERAL SPECIFICATIONS

COMPATIBLE RADIOS

APX 7000 SERIES, APX 6000 SERIES, APX 4000, APX 3000, APX 1000*, SRX 2200

MICROPHONE ACOUSTICS

Type	Windporting, Omni-directional
Sensitivity	44dBV typical
Distortion (THD)	< 3% from 200 to 3200Hz

SPEAKER ACOUSTICS

Nominal Output Level	(@ 1kHz, 0.5W) 90dB SPL,
Maximum Output Level	(@ 1kHz, max volume) 94dB SPL
Frequency Response	300 - 3000Hz
Distortion (THD)	< 15% (RX)

BODY

Dimensions (W x L x D)	60mm x 78mm x 28mm (without clip)
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POWER

Power Source	Radio battery
Radio Battery Life	Impact No Radio Degregation

CABLE

Flex Life	50,000 cycles
Pull Strength	40lbs, minimum tensile, in-line

ENVIRONMENTAL SPECIFICATIONS

Operating Temp	-30 C to +60 C
Storage Temp	-55 C to +85 C,
Humidity	90-95%, relative humidity at +50 C for 8 hours
ESD	IEC/EN61000 4-2
Intrinsic Safety*	FM

PART NUMBERS

PMMN4065 – IMPRES Windporting RSM, IP57
PMMN4069 – IMPRES Windporting RSM, IP55
PMMN4083 – IMPRES Windporting RSM, IP68
PMMN4099 – IMPRES Windporting RSM, IP55

ACCESSORIES AND REPLACEMENT PART NUMBERS

RLN6511 – Small EP7 Sonic Defender, use with RLN4941
RLN6512 – Medium EP7 Sonic Defender, use with RLN4941
RLN6513 – Large EP7 Sonic Defender, use with RLN4941
RLN4941 – Receive-Only Earpiece with translucent tube and rubber eartip, clear
WADN4190 – Receive-Only Flexible Earpiece
AARLN4885 – Receive-Only Earbud
RLN6075 – Replacement coil cord

WINDPORTING RSMS FEATURES AND CONTROLS

Item Number	IMPRES	Volume High Low Toggle Switch	Top Orange Programmable Button	Non Threaded Earjack	Programmable Button	IP Rating
PMMN4065	•	•	•		•	IP57
PMMN4069	•			3.5mm		IP55
PMMN4083*	•					IP68
PMMN4099*	•	•	•	3.5mm	•	IP55

*APX 1000 is certified with PMMN4065 and PMMN4069 only.

NOISE CANCELING RSMS FOR THE EVERYDAY NOISE

The **Noise Canceling Acoustics** on select RSM models reduce background noise so your voice comes through loud and clear anytime you speak into the microphone. To optimize the audio, the RSM should be held directly in front of the user's mouth during transmission as shown in image. The Noise Canceling (IP54) feature is not intended for fire markets.



GENERAL SPECIFICATIONS

COMPATIBLE RADIOS

APX 7000 SERIES, APX 6000 SERIES, APX 4000, APX 3000, APX 1000*, SRX 2200

MICROPHONE ACOUSTICS

Type	Noise Canceling - Directional
Sensitivity	-37dBV typical
Distortion (THD)	< 3% from 200 to 3200Hz

SPEAKER ACOUSTICS

Nominal Output Level	(@ 1kHz, 0.5W) 90dB SPL
Maximum Output Level	(@ 1kHz, max volume) 94dB SPL
Frequency Response	300 - 3000Hz
Distortion (THD)	< 15% (RX)

BODY

Dimensions (W x L x D)	60mm x 78mm x 28mm (without clip)
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POWER

Power Source	Radio battery
Radio Battery Life	Impact No Radio Degregation

CABLE

Flex Life	50,000 cycles
Pull Strength	40lbs, minimum tensile, in-line

ENVIRONMENTAL SPECIFICATIONS

Operating Temp	-30 C to +60 C
Storage Temp	-55 C to +85 C,
Humidity	90-95%, relative humidity at +50 C for 8 hours
ESD	IEC/EN61000 4-2
Intrinsic Safety**	FM

PART NUMBERS

PMMN4062 – IMPRES Noise Canceling RSM, IP54 NOT INTENDED FOR FIRE MARKETS

PMMN4084 – IMPRES Noise Canceling RSM, IP54 NOT INTENDED FOR FIRE MARKETS

ACCESSORIES AND REPLACEMENT PART NUMBERS

RLN4941 – Receive-Only Earpiece with translucent tube and rubber eartip, clear

WADN4190 – Receive-Only Flexible Earpiece

AARLN4885 – Receive-Only Earbud

RLN6075 – Replacement coil cord

RLN6511 – EP7 Sonic Defender, use with RLN4941

RLN6512 – EP7 Sonic Defender, use with RLN4941

RLN6513 – EP7 Sonic Defender, use with RLN4941

RLN6075 – Replacement coil cord

NOISE CANCELING RSMS FEATURES AND CONTROLS

Item Number	IMPRES	Volume High Low Toggle Switch	Top Orange Programmable Button	Non Threaded Earjack	Threaded Earjack	Programmable Button	IP Rating
PMMN4062	•		•	3.5mm			IP54
PMMN4084*	•			3.5mm	3.5mm		IP54

*APX 1000 is certified with PMMN4062 only.

**Intrinsic Safety Rating: Motorola-approved accessories are a critical part of the overall radio system, certified by a recognized testing organization as intrinsically safe. Non-Motorola approved accessories may not be certified for APX and if used, could result in equipment that is NOT approved or unsafe in a hazardous environment.

Motorola Remote Speaker Microphones are the only ones tested and certified for use with APX radios. Our accessories endure rigorous testing to help keep you safer and perform in harsh environments. All Motorola RSMs meet specific IP ratings and many exceed the industry standards to ensure you have the right microphone for your tough environments.

IP Rating is the international standard for rating dust and water protection. The first digit represents the level of dust protection: 5 provides excellent protection from dust. The second digit represents water protection:

IP RATING	DESCRIPTION
IP54	provides protection from water sprayed from all directions; RSMs with this rating should never be used in firefighting applications.
IP55	protects against driving rain
IP57	protects against submersion in 1 meter of fresh water for 30 minutes
IP68	exceeds industry specs. Product is Ruggedized and is heated at 27°C higher than the water temperature for 2 hours then immediately immersed to a depth of 1 meter for another 2 hours.

All specifications subject to change without notice. Version 5, 11/14.

Motorola Solutions, Inc. 1301 East Algonquin Road Schaumburg, Illinois 60196, U.S.A. 800-367-2346 motorolasolutions.com

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