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.
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.

**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: 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: 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

*X: Indicates intrinsically safe (i.e., will not cause a spark)

---

**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.
### GENERAL SPECIFICATIONS

#### COMPATIBLE RADIOS

<table>
<thead>
<tr>
<th>Series</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>APX 7000 SERIES</td>
<td>APX 6600 SERIES, APX 4000, APX 3000, SRX 2000</td>
</tr>
</tbody>
</table>

#### MICROPHONE ACOUSTICS

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model Type</td>
<td>IMPRES RSM with Dual Mic Noise Suppression, Omni-directional</td>
</tr>
<tr>
<td>Sensitivity</td>
<td>42dBV typical</td>
</tr>
<tr>
<td>Distortion (THD)</td>
<td>&lt; 3% from 300 to 3200Hz</td>
</tr>
</tbody>
</table>

#### SPEAKER ACOUSTICS

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diameter</td>
<td>45mm</td>
</tr>
<tr>
<td>Nominal Output Level</td>
<td>@ 1kHz, 0.5W, 30cm 89dB SPL</td>
</tr>
<tr>
<td>Maximum Output Level</td>
<td>@ 1kHz, max volume, 30cm 97dB SPL</td>
</tr>
<tr>
<td>Frequency Response</td>
<td>300 - 3200Hz</td>
</tr>
<tr>
<td>Distortion (THD)</td>
<td>&lt; 15% (RX)</td>
</tr>
</tbody>
</table>

#### BODY

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dimensions (W x L x D)</td>
<td>69mm x 95mm x 27mm (without clip)</td>
</tr>
<tr>
<td>Weight</td>
<td>235 grams, NMN6271; 248 grams NMN6274</td>
</tr>
</tbody>
</table>

#### POWER

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power Source</td>
<td>Radio battery</td>
</tr>
<tr>
<td>Radio Battery Life Impact</td>
<td>10% reduction 5/5/90 duty cycle</td>
</tr>
</tbody>
</table>

#### CABLE

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length</td>
<td>6-foot coiled cord</td>
</tr>
<tr>
<td>Flex Life</td>
<td>100,000 cycles</td>
</tr>
<tr>
<td>Pull Strength</td>
<td>40lbs, minimum tensile, in-line</td>
</tr>
</tbody>
</table>

### CONTROLS

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volume</td>
<td>Single up/down steps in 10 intervals</td>
</tr>
<tr>
<td>Top Button</td>
<td>Orange programmable button</td>
</tr>
<tr>
<td>Side Buttons</td>
<td>Push-to-talk and one programmable button</td>
</tr>
</tbody>
</table>

### ENVIRONMENTAL SPECIFICATIONS

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Temp</td>
<td>-30 C to +60 C</td>
</tr>
<tr>
<td>Storage Temp</td>
<td>-55 C to +85 C</td>
</tr>
<tr>
<td>Humidity</td>
<td>MIL STD 810G METHOD 507.5, PROCEDURE II</td>
</tr>
<tr>
<td>IP Rating</td>
<td>IP68 NMN6271, IP54 NMN6274</td>
</tr>
<tr>
<td>Immersion</td>
<td>MIL-STD 512.X/ I</td>
</tr>
<tr>
<td>Thermal Shock</td>
<td>-57 C to +80 C</td>
</tr>
<tr>
<td>Rain</td>
<td>IEC 60529</td>
</tr>
<tr>
<td>Salt/Fog</td>
<td>MIL STD 810G METHOD 509.5</td>
</tr>
<tr>
<td>Dust Procedure</td>
<td>1 IEC 60529</td>
</tr>
<tr>
<td>Vibration</td>
<td>MIL STD 810G METHOD 514.6, PROCEDURE I, CATEGORY 24</td>
</tr>
<tr>
<td>Mechanical Shock</td>
<td>MIL STD 810G METHOD 516.6, PROCEDURE I, V, VI</td>
</tr>
<tr>
<td>ESD</td>
<td>IEC61000-4-2</td>
</tr>
</tbody>
</table>

### 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 RSM
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.

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.

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 -10º C to +60º C
Storage Temp -55º C to +85º C
Humidity 95% RH @ 50º 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, 5/35/60
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 LiIon
NTTN4990 – D-ring Swivel Clip 12 per pack
RLN4941 – Receive-only Earpiece with Comfort Eartube
AARLN4885 – Receive-only Earbud
RLN5451 – Small EP7 Sonic Defender, use with RLN4941
RLN5612 – 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.

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)

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 IEC61000-4-2

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 – B-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
3075338B17 – Replacement coil cord for HMN4101, HMN4103 AND HMN4104

*APX 1000 is certified with HMN4101 only.
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.

**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: (Ø 1kHz, 0.5W) 90dB SPL  
Maximum Output Level: (Ø 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)

**POWER**
Power Source: Radio battery  
Radio Battery Life: Impact No Radio Degregation

**CABLE**
Flex Life: 50,000 cycles  
Full Strength: 40lbs, minimum tensile, in-line

**WINDPORTING RSMS FEATURES AND CONTROLS**

<table>
<thead>
<tr>
<th>Item Number</th>
<th>IMPRES</th>
<th>Volume High Low Toggle Switch</th>
<th>Top Orange Programmable Button</th>
<th>Non Threaded Earjack</th>
<th>Programmable Button</th>
<th>IP Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>PMMN4065</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>IP57</td>
</tr>
<tr>
<td>PMMN4069</td>
<td>•</td>
<td>•</td>
<td>3.5mm</td>
<td>•</td>
<td>•</td>
<td>IP55</td>
</tr>
<tr>
<td>PMMN4083*</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>3.5mm</td>
<td>IP68</td>
</tr>
<tr>
<td>PMMN4099*</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>•</td>
<td>IP55</td>
</tr>
</tbody>
</table>

*APX 1000 is certified with PMMN4066 and PMMN4069 only.

**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
In indoor environments, 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. NOISE CANCELING RSMs should not be used in environments where they are exposed to immersion or will be sprayed with water. They only perform well if the RSM is held directly in front of the user’s mouth during transmission as shown in image.

**GENERAL SPECIFICATIONS**

**COMPATIBLE RADIOS**
APX 7000 SERIES, APX 8000 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: (Ø 1kHz, 0.5W) 90dB SPL  
Maximum Output Level: (Ø 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)

**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  
PMMN4084 – IMPRES Noise Canceling RSM, IP54

**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  
RLN5511 – EP7 Sonic Defender, use with RLN4941  
RLN5512 – EP7 Sonic Defender, use with RLN4941  
RLN5513 – EP7 Sonic Defender, use with RLN4941  
RLN6075 – Replacement coil cord

**NOISE CANCELING RSMS FEATURES AND CONTROLS**

<table>
<thead>
<tr>
<th>Item Number</th>
<th>IMPRES</th>
<th>Volume High Low</th>
<th>Top Orange</th>
<th>Programmable</th>
<th>IP Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>PMMN4062</td>
<td>•</td>
<td>•</td>
<td>3.5mm</td>
<td></td>
<td>IP54</td>
</tr>
<tr>
<td>PMMN4084*</td>
<td>•</td>
<td>•</td>
<td>3.5mm</td>
<td>3.5mm</td>
<td>IP54</td>
</tr>
</tbody>
</table>

*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:

<table>
<thead>
<tr>
<th>IP RATING</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>IP54</td>
<td>provides protection from water sprayed from all directions; RSMs with this rating should never be used in firefighting applications.</td>
</tr>
<tr>
<td>IP55</td>
<td>protects against driving rain</td>
</tr>
<tr>
<td>IP57</td>
<td>protects against submersion in 1 meter of fresh water for 30 minutes</td>
</tr>
<tr>
<td>IP68</td>
<td>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.</td>
</tr>
</tbody>
</table>

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