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**

<table>
<thead>
<tr>
<th>Model Type</th>
<th>Dual Microphone Noise Suppression, Omni-directional</th>
</tr>
</thead>
<tbody>
<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**

| 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 Intrusion¹ | 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**

- NN1N8575A – Xtreme Temperature Cable High Impact Green Housing
- NN1N8575ABLX – Xtreme Temperature Cable Black Housing
- NN1N8575AYLW – Xtreme Temperature Cable Yellow Housing

**RSM WITH STANDARD CABLE PART NUMBERS**

- NN1N8203A – Standard Cable High Impact Green Housing
- NN1N8203ABLX – Standard Cable Black Housing
- NN1N8203AYLW – Standard Cable Yellow Housing

**REPLACEMENT PART NUMBERS**

- 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.

GENERAL SPECIFICATIONS

COMPATIBLE RADIOS
APX 7000 SERIES, APX 6600 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

DUAL MIC NOISE SUPPRESSION

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 514.6, PROCEDURE I, CATEGORY 24
Dust Procedure 1 IEC 60529
Mechanical Shock MIL STD 810G METHOD 514.6, PROCEDURE I, V, VI
ESD IEC61000-4-2

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.

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, EUP

**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, 5/5/90
  - 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 LiIon
- 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
### APX RSMS

**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
- **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 buttons
- **HMN4103 & HMN4104**: Display with 8 characters
- **HMN4104**: Channel Selector

**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**

**ENVIROMENTAL 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**: 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)
- **RLN6424**: 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)
- **PMN4107**: Display RSM Interface Cable, 5-Pin Nexus Female Receptacle
- **PMN4112**: Display RSM Interface Cable 4-Pin Nexus Male Plug
- **PMN4113**: Display RSM Interface Cable, 12-Pin Hirose Male Connector
- **307533B17**: 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.

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**GENERAL SPECIFICATIONS**

**COMPATIBLE RADIOS**

- APX 7000 SERIES, APX 8000 SERIES, APX 4000, APX 3080, 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)

**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>
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<td></td>
<td></td>
<td>IP57</td>
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<tr>
<td>PMMN4069</td>
<td>●</td>
<td>●</td>
<td></td>
<td></td>
<td></td>
<td>IP55</td>
</tr>
<tr>
<td>PMMN4083*</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>3.5mm</td>
<td></td>
<td>IP68</td>
</tr>
<tr>
<td>PMMN4099*</td>
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<td>●</td>
<td>●</td>
<td>3.5mm</td>
<td></td>
<td>IP55</td>
</tr>
</tbody>
</table>

*APX 1000 is certified with PMMN4065 and PMMN4069 only.

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**ENVIROMENTAL 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
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 208 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 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

<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>Threaded Earjack</th>
<th>Programmable Button</th>
<th>IP Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>PMMN4062</td>
<td>•</td>
<td>•</td>
<td>•</td>
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<td>IP54</td>
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<tr>
<td>PMMN4084*</td>
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<td>3.5mm</td>
<td>3.5mm</td>
<td></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.