

**RF Energy Exposure and Product Safety Guide for Portable Two-Way Radios**

**ATTENTION**

Before using this product, read the RF Energy Exposure and Product Safety Guide that shipped with the radio which contains instructions for safe usage and RF energy awareness and control for compliance with applicable standards and regulation. This device complies with part 15 of the FCC Rules and Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device. This class B digital apparatus complies with Canadian ICES-003.

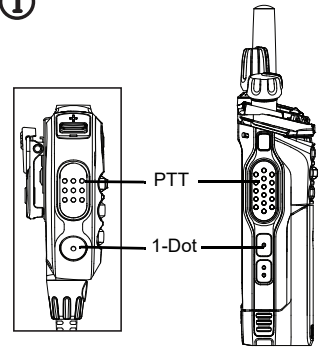
**Warranty**

Motorola Solutions offers warranty for your RSM. Refer to your Motorola Solutions dealer or point-of-purchase for detailed information.

**NOTE:** Warranty is void after customer replacement of any parts other than replacement parts listed. The warranty does not cover defects or damage from misuse, accident, water, or neglect that exceed the published product specifications.

**Open Source Software Legal Notices:**

This Motorola Solutions Product contains Open Source Software. For information regarding licenses, acknowledgments, required copyright notices, and other usage terms, refer to the Documentation for this Motorola Solutions Product at: <http://businessonline.motorolasolutions.com> Go to Resource Center > Product Information > Manual > Accessories > Remote Speaker Microphones



**Note:** Programmable buttons can be configured to other functions different than the same button on the radio. Refer to radio user manual for more information.

**XVN500 IMPRES™ Remote Speaker Microphone with DincX Noise Suppression PMMN4138\_**

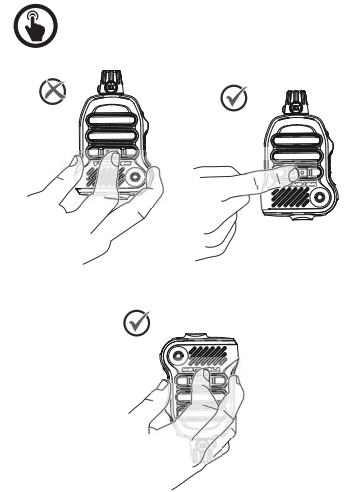
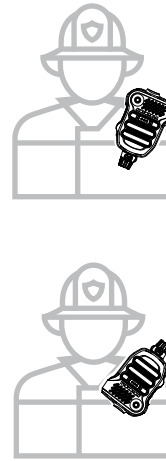
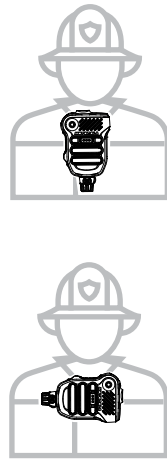
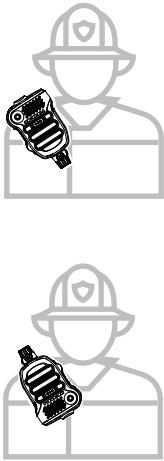
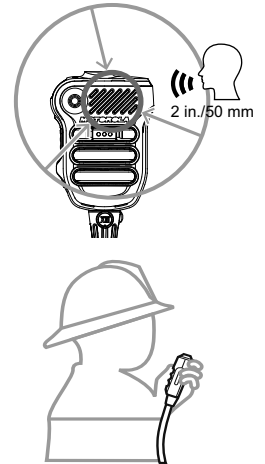
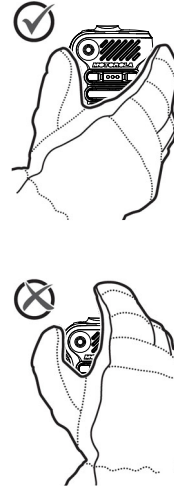
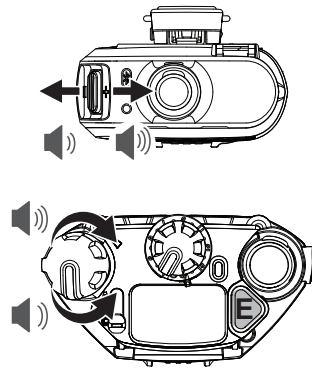
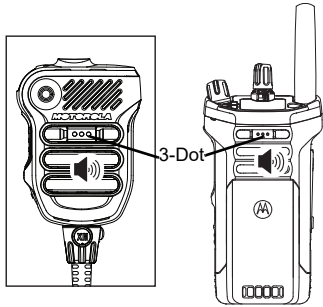


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Printed in



**Best Transmit Practices**

- Hold the XVN500 1–2 inches from mouth or SCBA voice port.
- Speak in a loud, clear, and controlled voice.
- Speak louder than the background noise.
- When practical, shake the XVN500 to clear water before transmitting.

**Attaching the RSM to the Radio**

Attach the RSM connector to the side connector of the radio. Then, secure the connection screw in a clockwise direction until tightened using a tool (for example, coin).

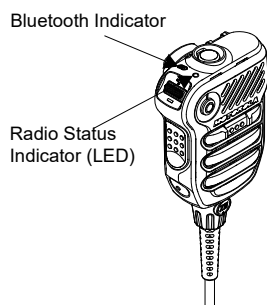
**Note:**

- To ensure proper operation, turn off the radio before connecting the RSM to the radio. Connecting the RSM to the radio disables the speaker of the radio, but does not disable the microphone and PTT of the radio.

**Detaching the RSM from the Radio**

Unscrew and detach the RSM connector from the radio side connector.

**Light Indicators**



State	Light	Indication
Powering Up	Strobe	Red LED illuminates until system initialization complete followed by blinking in white once
	Radio Status Indicator (LED)	Red LED blinks once
	Bluetooth Status Indicator (LED)	Bluetooth LED blinks once
	Orange Programmable Button	Orange LED blinks once

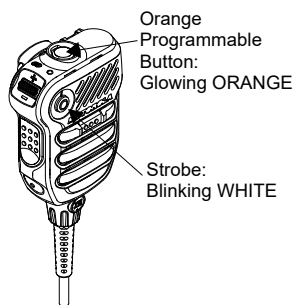
State	Light	Indication
Emergency	Strobe	White LED blinks in SOS pattern
	Orange Programmable Button	Orange LED solid ON
	Radio Status Indicator (LED)	Orange LED blinks.
Error	Strobe	Red LED solid ON
Radio low battery detected when torch light is ON	Strobe	White LED blinking slowly followed by turning off
Bluetooth link is active	Bluetooth Status Indicator (LED)	Bluetooth LED solid ON

**Note:**

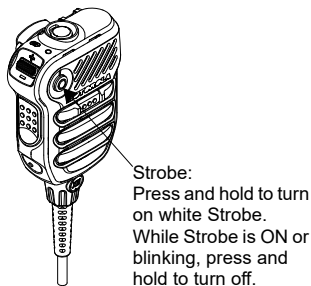
- The brightness of the Bluetooth Status Indicator is lower in non Hazard Zone mode compared to Hazard Zone mode.

- Refer to radio user manual for more details about Hazard Zone mode.

## Emergency Indicators



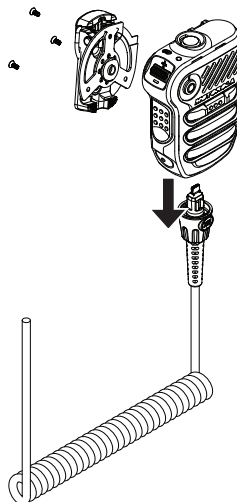
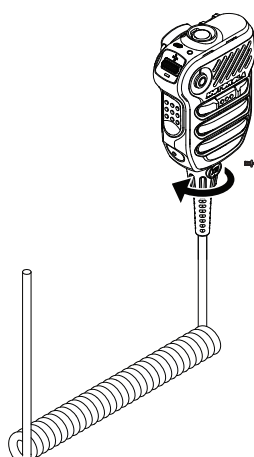
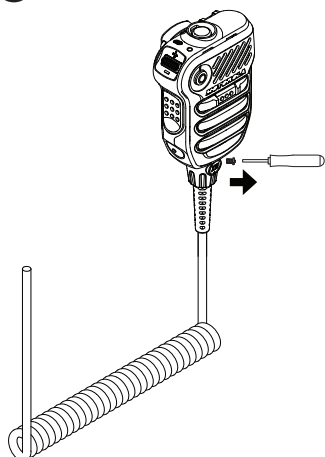
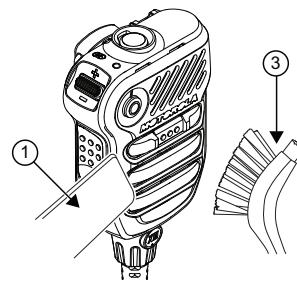
## To Disable Strobe:



## Cleaning Procedure

**Warning:**  
Do **NOT** use solvents to clean your RSM as most chemicals may permanently damage the RSM housing and textures. Do **NOT** submerge the RSM in the detergent solution.

- To clean the external surfaces of your radio, follow the next procedures:
1. Vacuum the front surface of the RSM. Avoid completely covering the speaker grill and microphone openings all at once with the nozzle.
  2. Mix one teaspoon of mild dish-washing detergent to one gallon of water (0.5 % solution) to clean the external surfaces of the RSM.
  3. Apply the solution sparingly with a stiff, non-metallic, short bristled brush, making sure excess detergent does not get entrapped near the connectors, controls or crevices. Dry the RSM thoroughly with a soft, lint-free cloth.



## Replacement Parts and Accessories

Part Number	Description
CB001073A01	Extreme Temperature Replacement Cable
PMLN9005A	Replacement Clip

## RSM Over Temperature Notice

- When the RSM is continuously exposed to high temperature for more than 30 seconds, or when the total cumulative period of the RSM exposed to high temperature is more than 10 minutes, the top LED on both of the radio and the RSM lights up in orange color.
- The over-temperature status is saved to the persistent storage of the RSM. So if the same RSM is attached to another radio, both the radio and the RSM shows the same indication.
- You must evaluate the RSM that went through the over-temperature condition to confirm if the RSM is still performing. If the RSM is still performing after the evaluation, you can clear the over-temperature status by using the APX NEXT XN Log Xtractor tool. Refer to the MN008402A01 *APX NEXT XN Log Xtractor User Guide* on ways to clear the over-temperature status.

## RSM Functionality Tests Before Over-Temperature Status is Reset

### Bluetooth and Strobe LED:

1. Attach the RSM to the radio.
2. Turn the radio ON.
3. Observe the bluetooth LED blinks once and Strobe LED turn on in Red, followed by Blink once in White.

### Talk and Listen:

1. Press the RSM PTT button.
2. Perform the Talk & Listen test with another radio to confirm the transmit and receive audio as well as indication functionality.

### Volume Button:

Increase and decrease the volume by pressing the RSM volume button.

### Orange Programmable Button:

1. Long press the button.

2. Observe the orange programmable button solid Orange LED ON.

### 1-Dot Button:

1. Press the 1-dot button.
2. Listen to the button tone.

### 3-Dot Button:

1. Press the 3-dot button.
2. Speak "VOLUME 9". Observe that the radio goes to volume 9 accordingly.

### Cable:

1. Extend the cable coil by 200% and hold the cable.
2. Perform Talk and Listen while holding the cable.
3. Check the appearance to ensure there are no exposed wires.

### Strobe Button:

Long press the button to turn the strobe light on and off.

If any of the RSM functionality is degraded, remove the RSM from Service.

## Disabling the RSM Over-Temperature Reporting

- You can disable the Over-Temperature reporting by the RSM to the radio with the Accessories Programming Software (APS). When the configuration is disabled, the RSM continues to monitor the temperature. When over-temperature is detected on the RSM, the RSM does not report the over-temperature status to the radio nor provides any notification.
- The supported APS version is APS 4.9.0 and later.

## RSM Firmware Upgrades Notice

- Radio checks the RSM firmware version automatically after power up.
- RSM firmware is upgraded automatically through the radio.
- RSM firmware upgrade process takes less than 20 seconds to complete.
- During firmware update, all buttons except PTT and orange programmable buttons do not function and RSM power up light may blink.
- The power up light turns off to indicate that the RSM enters normal operation mode.
- During the upgrade process, the RSM firmware upgrade is aborted by the PTT Transmit (Tx) or incoming Receive (Rx). Turn your radio off and on again to reinitiate the RSM firmware upgrade.

## RSM Firmware Requirement

- The RSM is only compatible with the APX NEXT XN Radios: minimum R04.20.00

Refer to manual MN008307A01 for other languages at:

- <https://learning.motorolasolutions.com>



## Notes

## Notes