MOTOROLA SOLUTIONS

DRAFT8

WM800 WIRELESS SOLUTIONS
Wireless RSM PMMN4156_/PMMN4158_
Wireless RSM Battery PMMN4846_
Dual-Unit Charger Base PMPN4652_
User Leaflet

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MN009955A01-AA

FCC: AZ489FT7173
IC: 109U-89FT7173

For other WM800 manuals, refer to our Learning
eXperience Portal:
https://learning.motorolasolutions.com

Accessory Manager App Introduction

Download and Install Accessory Manager application for future software upgrades and new feature releases.

You are recommended to install Accessory Manager to upgrade accessory firmware to the latest version for the first time before use.

Notice to Users (FCC and Industry Canada)

This device complies with part 15 of the FCC Rules and Industry Canada license-exempt RSS standard(s). Operation is subject to the following conditions:

• This device may not cause harmful interference.

• This device must accept any interference received, including interference that may cause undesired operation.

• Changes or modifications made to this device, not expressly approved by Motorola Solutions, could void the authority of the user to operate this equipment.

Supplier's Declaration of Conformity

Per FCC CFR 47 Part 2 Section 2.1077(a)

FC

Responsible Party
Name: Motorola Solutions, Inc.
Address: 2000 Progress Pkwy, Schaumburg, IL 60196, U.S.A.
Phone Number: 1-800-927-2744
Hereby declares that the product:
Model Name: **WM800**
conforms to the following regulations:
FCC Part 15, subpart B, section 15.107(a), 15.107(d), and section 15.109(a).

Class B Digital Device

As a personal computer peripheral, this device complies with Part 15 of the FCC Rules. This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following conditions:
1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.
Notice: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
• Reorient or relocate the receiving antenna.
• Increase the separation between the equipment and receiver.
• Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
• Consult the dealer or an experienced radio or TV technician for help.

Avis aux utilisateurs (FCC et Industrie Canada)

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence et à la partie 15 des règlements de la FCC :
• Cet appareil ne doit pas causer d'interférence nuisible.
• Cet appareil doit accepter toute interférence reçue, y compris les interférences pouvant entraîner un fonctionnement indésirable.
• Toute modification effectuée à cet appareil sans l'autorisation explicite de Motorola Solutions peut annuler l'autorisation d'utiliser cet appareil.
Déclaration de conformité du fourmisseur

Règlement CFR 47 partie 2 section 2.1077(a) de la FCC

FC

Partie responsable
Nom: Motorola Solutions, Inc.
Adresse: 2000 Progress Pkwy, Schaumburg, IL 60196, U.S.A.
Numéro de téléphone: 1-800-927-2744

Déclare par les présentes que le produit :
Nom de modèle: **WM800**
sont conformes aux réglementations suivantes:
Partie 15, sous-partie B, section 15.107(a), 15.107(d) et section 15.109(a) des règlements de la FCC

Appareil numérique de Classe B

En tant que périphérique d'ordinateur personnel, cet appareil est conforme aux stipulations de la partie 15 des règlements de la FCC. Cet appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. Son utilisation est assujettie aux deux conditions suivantes :
1. Cet appareil ne doit pas causer d'interférence nuisible.
2. Cet appareil doit accepter toute interférence reçue, y compris les interférences pouvant entraîner un fonctionnement indésirable.
AVIS: Cet équipement a fait l'objet de tests et a été déclaré conforme aux limites établies pour un appareil numérique de classe B, conformément à la section 15 des règlements de la FCC. Ces limites sont fixées afin d'offrir une protection suffisante contre des interférences nuisibles dans une installation résidentielle. Cet équipement génère, utilise et peut émettre de l'énergie de radiofréquence et, s'il n'est pas installé ou utilisé conformément aux instructions, il peut provoquer un brouillage nuisible aux communications radio. Cependant, il est impossible de garantir qu'il n'y aura aucune interférence dans une installation particulière.

Si cet appareil cause une interférence nuisible à la réception de la radio ou de la télévision, ce qui peut être déterminé en éteignant et en allumant l'appareil, vous êtes encouragé à remédier à la situation en prenant une ou plusieurs des mesures suivantes :
• Réorienter ou déplacer l'antenne réceptrice.

• Augmenter la distance entre l'équipement et le récepteur.
• Brancher l'appareil dans une autre prise sur un circuit différent de celui du récepteur.

Consulter un revendeur ou un technicien de radio ou de télévision chevronné pour obtenir de l'aide.

Caution

Before using this product, read this booklet which contains RF energy awareness information and operating instructions.
For information on product details, user manuals, and approved accessories, refer to www.motorolasolutions.com.
The WM800 RSM, when attached to the radio, is restricted to occupational use only to satisfy RF energy exposure requirements.

Compliance with RF Exposure Standards

National and international regulations require manufacturers to comply with the RF energy exposure limits for portable two-way radios before they can be marketed. Your Motorola Solutions two-way radio is designed, manufactured, and tested to comply with all applicable national and international regulations for human exposure to radio frequency electromagnetic energy. When two-way radios are used as a consequence of employment, applicable regulations may require users to be fully aware of and able to control their exposure to meet occupational requirements.

RF Energy Exposure Awareness and Control Information and Operational Instructions for Occupational Use

NOTE: This device is intended for use in occupational/controlled conditions where users are aware of their exposure and can exercise control over their exposure to meet the

requirements in national and international regulations. This radio device is **not** authorized for general population, consumer use.

For more information on what RF energy exposure is, and how to control your exposure to ensure compliance with established RF exposure limits, consult the following websites:
• https://www.fcc.gov/
• https://www.osha.gov/
• https://osha.europa.eu/en
• https://www.who.int/health-topics/electromagnetic-fields/
• http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf11467.html
• http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf01904.html

For additional user training information on exposure requirements, consult the following websites:
• http://responsibility.motorolasolutions.com/index.php/ourapproach/wirelesscommhealth/
• https://learning.motorolasolutions.com/

Information de sensibilisation et de gestion de l'exposition à l'énergie RF, et consignes relatives à l'utilisation professionnelle

Avis: Cet appareil a été conçu pour un usage professionnel dans un environnement contrôlé, où les utilisateurs sont pleinement conscients de l'exposition à l'énergie RF à laquelle ils sont soumis et peuvent exercer un contrôle sur cette exposition afin de respecter les limites établies par les règlements nationaux et internationaux. Cet appareil radio **n'est pas** autorisé pour l'utilisation par la population générale et les consommateurs.

Visitez les sites Web suivants pour obtenir plus de renseignements sur ce qu'est l'énergie RF et sur les moyens de contrôle à prendre afin de respecter les limites établies en matière d'exposition aux radiofréquences:
• https://www.fcc.gov/
• https://www.osha.gov/
• https://osha.europa.eu/en
• https://www.who.int/health-topics/electromagnetic-fields/
• http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf11467.html
• http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf01904.html

Pour plus de renseignements sur la formation des utilisateurs relativement aux limites d'exposition, consultez les sites suivants:
• http://responsibility.motorolasolutions.com/index.php/ourapproach/wirelesscommhealth/
• https://learning.motorolasolutions.com/

RF Exposure Compliance and Control Guidelines

To control your exposure, and ensure compliance with the relevant RF exposure limits, always adhere to the following guidelines:
• Do not remove any of the RF Exposure Labels if present from this device or its related accessories.
• Attach these instructions to the device when you transfer it to other users.
• Do not use this device if the operational requirements described herein are not met.

Operating Instructions

• Transmit no more than 50% of the time. To transmit (talk), press the **Push-To-Talk (PTT)** button. To receive calls, release the PTT button. Transmitting more than 50% of the time may cause RF exposure compliance requirements to be exceeded.

• Hold the microphone in a vertical position in front of the face with the microphone at least one inch (2.5 centimeters) away from the nose or lips.

• Body Worn Operation. When microphone is worn on the body, always use Motorola Solutions-approved clip for this product. Using approved body-worn accessories is important because the use of non-Motorola Solutions-approved accessories may result in exposure levels, which exceed the FCC occupational/controlled environment RF exposure limits.

• Use only Motorola Solutions-approved supplied or replacement batteries. Use of non-Motorola Solutions-approved batteries may exceed the applicable RF exposure guidelines (iEEE, ICNIRP, or FCC).

• For a list of Motorola Solutions approved accessories please refer to your user manual or visit www.motorolasolutions.com.

Acoustic Safety

Exposure to loud noises from any source for extended periods of time may temporarily or permanently affect your hearing. The louder the volume of the radio, the sooner your hearing will be affected. Hearing damage from loud noise is sometimes undetectable at first, and can have a cumulative effect. To protect your hearing:
• Use the lowest volume necessary to do your job.
• Turn up the volume only if you are in noisy surroundings.
• Turn down the volume before adding headset or earpiece.
• Limit the amount of time you use headsets or earpieces at high volume.
• When using the radio without a headset or earpiece, do not place the radio's speaker directly against your ear.
• If you experience hearing discomfort, ringing in your ears, or speeches that are muffled, you should stop listening to your radio through your headset or earpiece, and have your hearing checked by your doctor.

Medical Devices

If you use a personal medical device, such as a pacemaker or hearing aid, consult the manufacturer of your device to determine if it is adequately shielded from RF energy. Your physician may be able to assist you in obtaining this information.

Operational Warnings

The following explains the operational warnings:
For Vehicle With Air Bags

The following explains the operational warnings:

WARNING • Refer to vehicle manufacturer's manual prior to installation of electronic equipment to avoid interference with air bag wiring.
•DO NOT place a portable radio in the area over an air bag or in the air bag deployment area. Air bags inflate with great force. If a portable radio is placed in the air bag deployment area and the air bag inflates, the radio may be propelled with great force and cause serious injury to occupants of the vehicle.

Batteries

Caution Use only Motorola Solutions approved batteries.

• Risk of explosion if the battery is replaced by an incorrect type.
• Charge your battery using the approved Motorola Solutions charger.
• Connect the charger/power supply to a nearby and easily accessible power outlet.
• Use the battery in accordance with its water and/or dust Ingress Protection (IP) rating.
• Do not discard your battery into a fire.

• Do not replace the battery in any area labeled "Hazardous Atmosphere".
• Do not disassemble, crush, puncture, shred, or otherwise attempt to change the form of your battery.
• Do not dry a wet or damp battery with an appliance or heat source, such as a hair dryer or microwave oven.
• Do not allow conductive material such as jewelry, keys, or beaded chains to touch exposed battery terminals.
• Do not dispose of batteries with household waste.

Do Not Substitute Options or Accessories

The Motorola Solutions communications equipment certified as intrinsically safe by the approving agency (UL, CSA, CENELEC) is tested as a complete system which consists of the listed agency Approved portable, Approved battery, and Approved accessories or options, or both. This Approved portable and battery combination must be strictly observed. There must be no substitution of items, even if the substitute has been previously Approved with a different Motorola Solutions communications equipment unit. Approved configurations are listed by the Approving Agency (UL, CSA, CENELEC).

The Hazardous Location-Approved Label affixed to radio refers to the intrinsically safe classification of that radio product, and the approved batteries that can be used with that system.

The manual part number referenced on the Hazardous Location-Approved Label identifies the approved Accessories and or options that can be used with that portable radio unit.
Using a non-Motorola Solutions-Hazardous Location-Approved battery and or accessory with the Motorola Solutions approved radio unit will void the Hazardous Location approval of that radio unit.

Important Information

Caution • Do not charge your accessory in temperature below 0 °C (32 °F) or above 45 °C (113 °F). Do not store your accessory in direct sunlight or where expected temperatures can exceed this range such as inside a parked car.
• Storing your fully charged accessory in high temperature conditions may permanently reduce the life of the battery.
• Battery life may temporarily shorten in low-temperature conditions.
• The Remote Speaker Microphone (RSM) should be stored between 20 °C (68 °F) and 30 °C (86 °F) to minimize battery permanent capacity loss.
• To prevent injury, do not disassemble, puncture, or crush the RSM because this action can cause the battery to short-circuit.
• Do not expose or throw the RSM into heat or fire.
• Do not dispose the RSM into household waste.
• Do not fill the audio jack and USB charging port with water. If water enters the audio jack and/or USB charging port, remove water by shaking the RSM. Always cover the audio jack and USB charging port with a dust cap when not in use.

Battery Information

Battery is shipped with a nominal charge below 30%.

NOTES:
• To maximize your battery performance and lifespan, avoid depleting your battery completely.
• To minimize permanent capacity loss, store the battery within the temperature range of 20 °C (68 °F) and 30 °C (86 °F).

Chargers Safety Information

Important Safety Information

This document contains important safety and operating instructions. Please read these instructions carefully and save them for future reference.

Before using the battery charger, read all the instructions and cautionary markings on (1) the Dual-Unit Charger (2) the battery, and (3) on the Wireless Remote Speaker Microphone (WM800 RSM).

WARNING 1. To reduce risk of injury, charge only the rechargeable Motorola Solutions authorized batteries listed in Table 1. Other batteries may explode, causing personal injury and damage.
2. Use of accessories not recommended by Motorola Solutions may result in risk of fire, electric shock, or injury.
3. To reduce risk of damage to the electric plug and cord, pull by the plug rather than the cord when disconnecting the charger.
4. An extension cord should not be used unless absolutely necessary. Use of an improper extension cord could result in risk of fire and electric shock. If an extension cord must be used, make sure that the cord size is 18 AWG for lengths of up to 100 ft (30.48 m), and 16 AWG for lengths up to 150 ft (45.72 m).
5. To reduce risk of fire, electric shock, or injury, do not operate the charger if it has been broken or damaged in any way. Take it to a qualified Motorola Solutions service representative.
6. Do not disassemble the charger – it is not repairable and replacement parts are not available. Disassembly of the charger may result in risk of electric shock or fire.

7. To reduce risk of electric shock, unplug the charger from the AC outlet before attempting any maintenance or cleaning.
Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
• Reorient or relocate the receiving antenna.
• Increase the separation between the equipment and receiver.
• Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
• Consult the dealer or an experienced radio/TV technician for help.

Table 1: Motorola Solutions Authorized Battery

Part Number	Description
PMNN4846_	Wireless RSM Battery

Approved Accessories

This section provides the list of approved accessories to be used with your WM800 RSM.

Table 2: Approved Accessories

Part Number	Description
PMLN8120_	Rx-Only XL Clear Tube Earpiece, 3.5 mm Jack

Radio and Device Compatibility

The WM800 RSM is compatible with the following radio:

Table 3: Radios Compatibility

Part Number	Description
PNUW1100	APX NEXT

Firmware Upgrade

You can upgrade the WM800 RSM through the compatible radios. Refer to the radio user manuals for more information.

Alternatively, you can download and install the Accessory Manager application from the Google Play Store on your phone for future firmware upgrades and new feature releases.

Radio Firmware Requirement

WM800 RSM firmware upgrade is only compatible with the following software version and later:
• APX NEXT Radios: R04.80.00
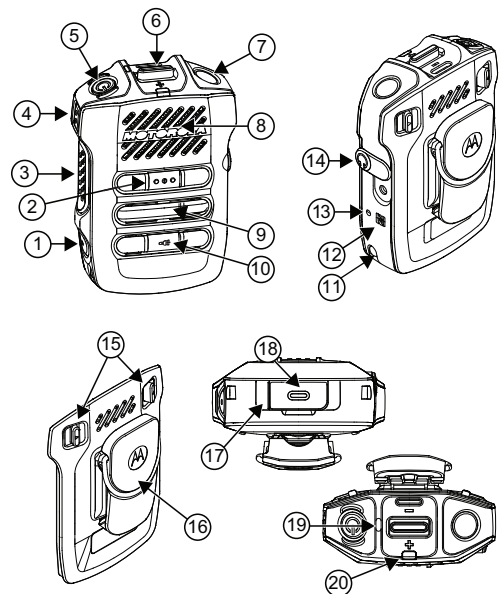• Accessory Manager: 1.0.15.

WM800 RSM Overview

Table 4: WM800 RSM Overview and Description

No.	Description
1	1-Dot Button
2	3-Dot Button
3	Push-To-Talk (PTT) button
4	2-Dot Button
5	Power Button
6	Volume Toggle
7	Emergency Button
8	Microphone
9	Speaker
10	Task Light Button
11	Charging Contact
12	Near Field Communication (NFC) Tag
13	Blue Dot
14	Audio Jack
15	Battery Latch
16	Swivel Clip
17	Task Light
18	USB-C Jack
19	Power Indicator
20	Audio/Bluetooth Indicator

WM800 RSM Feature Overview

Table 5: WM800 RSM Feature Overview and Description

Feature	Functionality
Power On/Off	• Turn on or off the WM800 RSM by pressing and holding the **Power** button for two seconds.
Auto Power Off	• Cancel auto powering off by pressing the **Power** button once.
Sign of Life	• Check the RSM battery and connection status by pressing the **Power** button once. • Power indicator blinking green twice when Battery at high level. • Power indicator blinking amber twice when Battery at medium level. • Audio/Bluetooth Indicator blinking blue twice when RSM is connected. • Voice or Tone Prompt are available.
Programmable Buttons	• You can program **1-Dot**, **2-Dot**, and **3-Dot** buttons to different functions. Refer to the radio or host device user manual for detail.
Voice Controls	• You can use the Voice Assistant (ViQi) when the WM800 RSM is paired with a radio supporting ViQi. • Activate by pressing and holding the **3-dot programmable** button.
Task Light Controls	• Turn the Task Light on or off by pressing the **Task Light** button for one second.

Table 5: WM800 RSM Feature Overview and Description

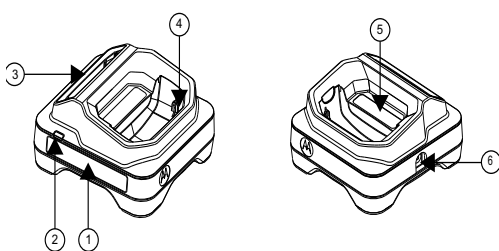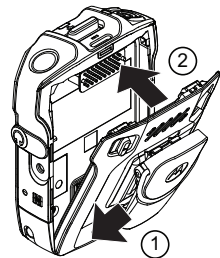| Feature	Functionality
Volume Controls	• Adjust the volume level by pressing the **+** or **-** button. • Ramp up or down the volume level by pressing and holding the **+** or **-** button.
Tone and Voice Prompt Selection	• Select tone or voice prompt when the RSM is in pairing mode by pressing the **2-dot** button. NOTE: This feature is only enabled when the RSM is not connected to any host device.
Clear Devices from Pairing List	• Remove host devices from the WM800 RSM pairing list by pressing and holding the **PTT** and **Power** buttons simultaneously.
Error Indication	• Occurs in the event of any product error. The WM800 RSM Power and Audio/Bluetooth Indicator is blinking red.

Dual-unit Charger Overview

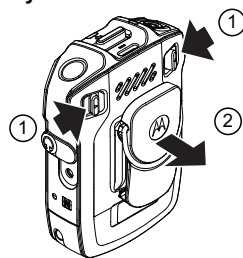### Table 6: Charger Overview and Description

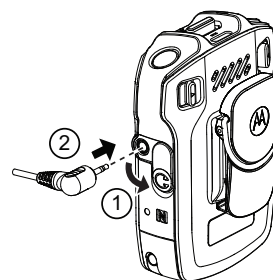| No.	Description
1	Charging Indicators Label
2	Charger Indicator for Battery
3	Battery charging pocket
4	RSM charging pocket
5	Battery Caution Label
6	Power supply input

Attaching the Battery

1. Slot in the bottom side of the battery to the RSM battery contact.
2. Press firmly in the middle to ensure both latches snap in place and fully locked.
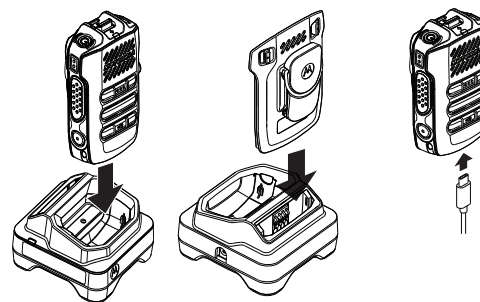
Detaching Battery

1. Pinch the left and right latches.
2. Pull out the clip to remove the battery.

Attaching Secondary Audio Accessory

Charging WM800 RSM and Battery

Getting Started

Before you start, fully charge the WM800 RSM.

Table 7: Power Indication

Power Indicator	Description
Blinking green for one second	Power On
Blinking green twice	Power Off
Blinking red twice	Power up error

Press the **Power** button once to get the battery status when the WM800 RSM is not charging.

Table 8: Battery Indication

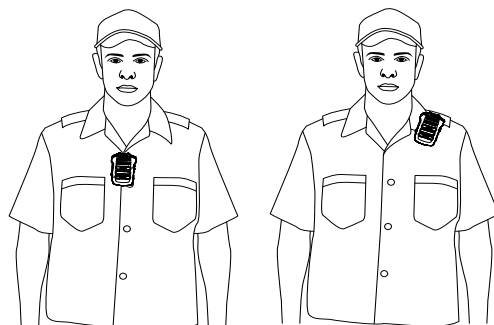| Power Indicator	Description
Off	Battery is medium or high level. NOTE: Refer to Sign of Life feature in Table 5 for more information about the battery status.
Blinking red	Battery at low level. NOTE: Voice and Tone Prompt are announced every two minutes until the device starts charging.
Rapid blinking red	Battery at critical level. Charge the RSM immediately to prevent flat-battery. NOTE: Voice and Tone prompt are announced every 30 seconds until the device starts charging.

Table 9: Charging Indication

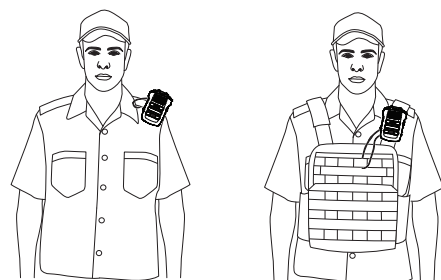| Power Indicator	Description
Solid red	Charging.
Blinking green	Charged up to 90% or more.
Solid green	Close to fully charged or fully charged.
Blinking amber	Battery is waiting to charge. (Either the battery voltage is too low or the battery temperature is too low or too high to allow charging. When this condition is corrected, the battery will automatically begin charging.)
Rapid blinking red	Charging error.

Table 10: Audio/Bluetooth Status

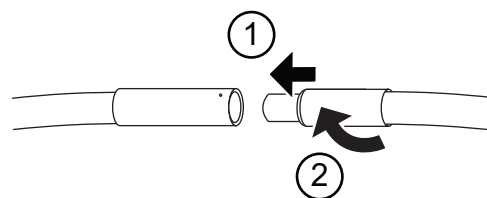| Audio/Bluetooth Indicator	Description
Blinking blue	Pairing mode
Solid blue	• Connecting • Reconnecting • Disconnected
Off	Connected NOTE: Refer to Sign of Life feature in Table 5 for more information about the connection status.

Recommended Wearing Positions

Recommended Wearing Positions: Using Tethering Accessory with Lanyard

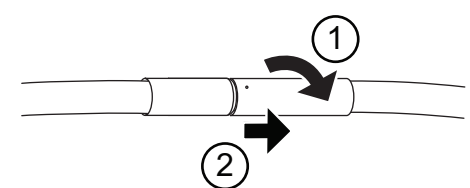# Recommended Wearing Positions: Using Tethering Accessory with Velcro and Lanyard

Locking the Tethering Accessory

1. Push in the clasp.
2. Twist the clasp to lock.

Unlocking the Tethering Accessory

1. Twist the clasp to unlock.
2. Pull out the clasp.

Replacement Parts And Accessories

Table 11: Replacement Parts and Accessories

Part Number	Description
PMMN4156_	Wireless RSM (without battery)
PMNN4846_	Wireless RSM Battery
PMPN4653_	DUC with Power Supply United States Plug
PMKN4294_	USB-C Cable (1 m)
PMLN9067_	Tethering Kit Accessory (Pack of 10)
PMLN8312_	Low Profile Swivel Clip with D-Ring
PMLN8120_	Rx-Only XL Clear Tube Earpiece, 3.5 mm Jack

Pairing Your WM800 RSM Through Bluetooth

1. While WM800 RSM is power off, press and hold the **Power** button until you hear "Power On" followed by

battery status and "Searching for Host" voice prompt, and the blue LED blinks during pairing mode.
2. From the compatible device, search and select "**WM800_xxxx**" from the Bluetooth list.

NOTES:
- You hear the "Connected" voice prompt and Pairing tone plays when the devices successfully paired.
- "xxxx" denotes the last 4 bytes of alphanumeric MAC address of your WM800 RSM.

3. If the pairing is unsuccessful, the WM800 RSM remains in pairing mode. You can repeat Step 2 to attempt pairing again.

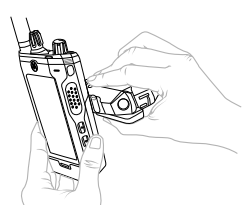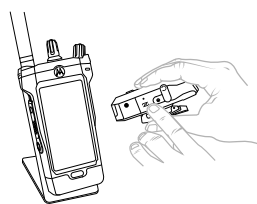**NOTE:** The WM800 RSM pairing mode times out in two minutes.

Pairing Your WM800 RSM Through Secure NFC (recommended for higher security level)

1. While WM800 RSM is power off, press and hold the Power button until you hear "Power On" followed by battery status and "Searching for Host" voice prompt, and the blue LED blinks during pairing mode.

2. Open the NFC widget and follow the instruction on the radio to complete the pairing process.

3. Align the NFC tag from the WM800 RSM and the M logo at the back of the radio together until you hear a beep tone (successful detection), but not successfully paired.

4. Observe the following in the radio and WM800 for a successful pairing:
- The WM800 has short beeps until devices are successfully paired.
- You hear the "Connected" voice prompt (if Language is selected).
- The Audio or Bluetooth LED blinks blue after a successful connection.

- If pairing is unsuccessful, the WM800 returns to pairing mode.

NOTE: The WM800 RSM pairing mode times out in two minutes.

Unpairing Your WM800 RSM

1. While WM800 RSM is power off, press and hold the Power button and PTT button. The blue LED blinks and a "Pairing Cleared" voice prompt from the WM800 RSM indicates that the paired device is deleted from the paired device list.

NOTES:
- Depending on the radio codeplug configuration and ways to pair the devices, the WM800 RSM paired device list is cleared when the WM800 RSM is turned off.
- Refer to the radio user manual for more details on the pairing programmable options.
- Always unpair the WM800 from the Bluetooth host and ensure that the paired device is removed from the paired device list before starting another pairing process.

Warranty Exclusion

Motorola Solutions does not warrant the installation, maintenance or service of the Product, accessories, batteries, or parts. Motorola Solutions will not be responsible in any way for problems or damage caused by any ancillary equipment or peripherals (specific examples include, but are not limited to: batteries, chargers, adapters, and power supplies) not furnished or manufactured by Motorola Solutions, which is attached to or used in connection with the Product. When the Product is used in conjunction with ancillary or peripheral equipment not supplied by Motorola Solutions, Motorola Solutions does not warrant the operation of the Product/peripheral combination and Motorola Solutions will not honor any warranty claim where the Product is used in such a combination and it is determined by Motorola Solutions that there is no fault with the Product. Upon open or dismantle the Product, warranty is immediately voided. Motorola Solutions specifically disclaim any responsibility for any damage in any way caused by improper installation by unauthorized personnel.