

Motorola Solutions NNTN8527A

Motorola Solutions APX Vehicular Adapter User Manual

Model: NNTN8527A
Brand: Motorola Solutions

INTRODUCTION

The Motorola Solutions APX Vehicular Adapter (VA) is designed to integrate your portable radio into a vehicle environment, providing enhanced communication capabilities and continuous power. This adapter utilizes the vehicle's 12-volt battery to power the radio and charge its battery, ensuring optimal performance both inside and outside the vehicle. Its compact design allows for easy installation and quick access to radio controls, while a mechanical locking feature secures the radio during transit and provides theft deterrence.

PACKAGE CONTENTS

Upon opening the package, verify that all components are present:

- APX Vehicular Adapter (NNTN8527A)
- Fused Power Cable
- Screws for attaching the VA to the trunnion
- Safety Leaflet / Quick Start Guide
- 2 Keys for the lock



Image: Contents of the APX Vehicular Adapter package. This includes the main adapter unit, a fused power cable, a small bag containing two keys and mounting screws, and a quick start guide/safety leaflet.

SETUP AND INSTALLATION

Follow these steps to properly install the APX Vehicular Adapter in your vehicle:

1. **Mounting the Adapter:** Securely attach the vehicular adapter to a suitable location within your vehicle using the provided screws and a trunnion mounting bracket (if not already present). Ensure the location allows for easy access to radio controls and clear line of sight for GPS functionality.
2. **Power Connection:** Connect the fused power cable to your vehicle's 12-volt battery. Ensure proper polarity (red to positive, black to negative) to prevent damage. The adapter is designed to draw power directly from the vehicle's battery.
3. **Inserting the Radio:** Gently slide your compatible APX portable radio into the vehicular adapter. The open-face design allows for rapid insertion and removal.
4. **Securing the Radio:** Once the radio is seated, engage the mechanical locking feature to hold the radio firmly in place. Use one of the provided keys to lock the radio, enhancing security and preventing accidental removal while driving.
5. **Accessory Connection (Optional):** If using external accessories such as mobile microphones, external push-to-talk buttons, or an external speaker, connect them to the appropriate ports on the vehicular adapter.



Image: The APX Vehicular Adapter with a portable radio securely inserted. This view highlights the compact design and how the radio fits into the adapter.

The APX Vehicular Adapter provides seamless operation of your radio while in the vehicle.

Charging Capabilities

The adapter features IMPRES functionality, allowing the radio to remain fully operational even with a completely discharged battery. The charge status and microphone operating modes are indicated by a dedicated LED on the adapter.

- **LED Indicators:** Observe the LED indicators on the adapter for real-time status updates on battery charging and radio operation.
- **Continuous Operation:** The radio will draw power from the vehicle's 12-volt battery, ensuring continuous operation and optimal battery capacity for use outside the vehicle.

Enhanced Communication

The APX VA supports various accessory options for improved communication while driving:

- **Mobile Microphones:** Connect a mobile microphone for hands-free communication, allowing you to keep your eyes on the road.
- **External Push-to-Talk Buttons:** Utilize external PTT buttons for convenient and safe communication.
- **External Speaker:** An optional external speaker can be connected to provide increased audio output, beneficial in loud environments.

Radio Features Supported

The adapter maintains support for critical radio features:

- **Mission Critical Wireless:** Continue to use your radio's internal Bluetooth for wireless earpieces or remote speaker microphones.
- **GPS Functionality:** The radio's compatible GPS antenna will continue to function, provided the VA is installed in a location with good GPS signal reception.



Image: The main view of the APX Vehicular Adapter with a radio, highlighting the LED indicators that display charging status and operational modes.

MAINTENANCE

To ensure the longevity and optimal performance of your APX Vehicular Adapter, follow these general maintenance guidelines:

- **Cleaning:** Periodically clean the exterior of the adapter with a soft, damp cloth. Avoid using harsh chemicals or abrasive cleaners. Ensure all ports and connectors are free of dust and debris.
- **Cable Inspection:** Regularly inspect the fused power cable for any signs of wear, fraying, or damage. Replace immediately if any damage is observed.
- **Lock Mechanism:** Ensure the mechanical locking feature operates smoothly. Keep the lock mechanism clean and free of obstructions.
- **Battery Care:** While the IMPRES functionality optimizes battery life, it is good practice to ensure your radio's battery is in good condition. Refer to your radio's manual for specific battery maintenance.

TROUBLESHOOTING

If you encounter issues with your APX Vehicular Adapter, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
Radio not charging or powering on in VA.	Loose power cable connection. Blown fuse in power cable. Vehicle's 12V battery issue. Radio not properly seated in adapter.	Check and secure all power cable connections. Inspect and replace the fuse if necessary. Verify vehicle battery health. Re-insert the radio, ensuring it clicks into place.
LED indicators not functioning.	No power to the adapter. Internal fault.	Verify power connection as above. If power is confirmed, contact Motorola Solutions support.
GPS signal loss when radio is in VA.	Poor installation location. Radio firmware outdated.	Relocate the VA to an area with better GPS signal reception (e.g., near a window). Ensure radio firmware is R13.00.00 or later.
Radio not communicating properly.	Incorrect accessory connection. VHF radio PCB revision.	Verify all accessory connections are secure. For VHF radios, ensure RF PCB revision is NUD7120DZ or later.

SPECIFICATIONS

Feature	Detail
Model Number	NNTN8527A
Item Weight	3.41 pounds (1.55 kg)
Product Dimensions	3 x 6 x 8 inches (7.62 x 15.24 x 20.32 cm)

Feature	Detail
Color	Black
Voltage	12 Volts (from vehicle battery)
Special Feature	Battery Strength Indicator, IMPRES Technology
Radio Compatibility	AXP6000, APX-7000, APX-8000, APX-8000XE, APX 7000XE, APX 6000XE, SRX2200
Battery Compatibility	NNTN7038, NNTN8092, PMNN4403, NNTN8182, PMNN4547, PMNN4485, PMNN4486, PMNN4504, NNTN8930
Required Firmware	R13.00.00 or later
Required VHF RF PCB Revision	NUD7120DZ or later (for VHF radios)

Environmental Specifications (MIL-STD-810D)

Condition	Standard
Low Temperature Operational	Method 502.5, Procedure II
High Temperature Operational	Method 501.5, Procedure II
Low Temperature Storage	Method 502.5, Procedure I, Category 3 (Severe Cold)
High Temperature Storage	Method 501.5, Procedure I-A1
Thermal Shock	Method 503.5, Procedure I - C
High Humidity Endurance	Method 507.5, Procedure I (507.5-7 Aggravated Temperature Cycle)
Shock Functional	Method 516.6, Procedure I
Shock Crash Hazard	Method 516.6, Procedure V
Shock Bench Handling	Method 516.6, Procedure VI
Life Cycle	100,000 Cycles

WARRANTY AND SUPPORT

Warranty Information

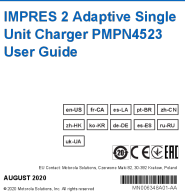

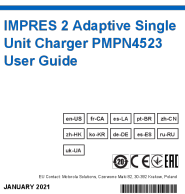

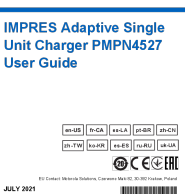

The Motorola Solutions APX Vehicular Adapter comes with a **1-year Manufacturer warranty**. Please retain your proof of purchase for warranty claims.

Customer Support

For further assistance, technical support, or warranty inquiries, please visit the official Motorola Solutions store or contact their customer service:

[Visit the Motorola Solutions Store on Amazon](#)

Related Documents - NNTN8527A

 <p>IMPRES 2 Adaptive Single Unit Charger PMPN4523 User Guide</p> <p>AUGUST 2020</p>	<p>IMPRES 2 Adaptive Single Unit Charger PMPN4523 User Guide - Motorola Solutions</p> <p>Comprehensive user guide for the Motorola Solutions IMPRES 2 Adaptive Single Unit Charger (PMPN4523). Learn about safe operation, charging features, battery maintenance, and troubleshooting for your Motorola communication equipment.</p>
 <p>IMPRES™ ADAPTIVE SINGLE UNIT CHARGER NNTN8845/NNTN9178 USER GUIDE</p>	<p>Motorola Solutions IMPRES Adaptive Single Unit Charger NNTN8845/NNTN9178 User Guide</p> <p>User guide for the Motorola Solutions IMPRES Adaptive Single Unit Charger (NNTN8845/NNTN9178), detailing safety instructions, operational guidelines, charging procedures, and troubleshooting for efficient battery management.</p>
 <p>IMPRES 2 Adaptive Single Unit Charger PMPN4523 User Guide</p> <p>JANUARY 2021</p>	<p>IMPRES 2 Adaptive Single Unit Charger PMPN4523 User Guide</p> <p>Explore the Motorola Solutions IMPRES 2 Adaptive Single Unit Charger (PMPN4523) with this comprehensive user guide. Learn about safe operation, charging procedures, battery management, troubleshooting, and authorized accessories for optimal performance.</p>
 <p>APX™ VEHICULAR ADAPTER</p> <p>QUICK START MANUAL: PRODUCT SAFETY, INSTALLATION, AND USER INFORMATION</p>	<p>Motorola APX Vehicular Adapter Quick Start Manual: Safety, Installation, and User Information</p> <p>Quick start guide for the Motorola APX Vehicular Adapter (APX VA), detailing product safety, installation procedures, and user information for APX6000 series radios in a mobile environment, including RF exposure compliance.</p>
 <p>IMPRES Adaptive Single Unit Charger PMPN4527 User Guide</p> <p>JULY 2021</p>	<p>IMPRES Adaptive Single Unit Charger PMPN4527 User Guide</p> <p>User guide for the Motorola Solutions IMPRES Adaptive Single Unit Charger PMPN4527, detailing safety instructions, charging procedures, troubleshooting, and compatible accessories.</p>
 <p>IMPRES™ ADAPTIVE SINGLE UNIT CHARGER</p> <p>USER GUIDE</p>	<p>IMPRES Adaptive Single-Unit Charger User Guide</p> <p>User guide for the IMPRES Adaptive Single-Unit Charger, detailing operational safety, charging procedures, initialization, reconditioning, troubleshooting, and service information for Motorola Solutions products.</p>

