ASTRO 25
ACCESSORIES
AND
BATTERIES
FOR MOTOROLA PORTABLE AND MOBILE TWO-WAY RADIOS

PORTABLE RADIOS
XTS® 5000 / XTS 2500 / XTS 1500
MT™ 1500
PR1500

MOBILE RADIOS
XTL™ 5000 / XTL 2500
PM1500™
SAFETY DOESN’T END WITH THE RADIO

In an emergency, your radio is your lifeline and can mean the difference between survival and tragedy. Accessories are critical to that lifeline as well. Every Motorola battery, charger, audio accessory, carry case, mounting hardware, cable and antenna is best-in-class technology, designed and optimized specifically for the rugged connector on your ASTRO 25 portable and mobile radios.
It’s three weeks before an election, political fever is running high and a massive rally is planned. The communications director must ensure that his officers and security personnel have two-way radios and batteries that will keep working. Using the Motorola IMPRES Battery Fleet Management system, the department can automatically detect and replace all batteries that are unable to hold a full charge, enabling security to coordinate efforts to secure the event through a long day of crowd control.
GPS II REMOTE SPEAKER MICROPHONE

The GPS II microphones are engineered to significantly improve safety and response time. With increased accuracy to within 15 meters—95% of the time—and with polling rates as low as 30 seconds, they automatically track your people by satellite, anywhere outdoors. Programmable polling lets you determine how often to track your responders to better optimize accuracy, battery life and channel traffic. These GPS II microphones utilize power directly from the radio, so they never need to be charged separately. Both models have a channel selector, programmable button, emergency button and volume control.

For XTS 2500: Models I, 1.5, II, III and Rugged. XTS 2500 radios must have Tanapa version B hardware and a radio host code of R10.00.00.

For XTS 5000: Models I, II, III and Ruggedized. Radios must have a radio host code of R06.01.00 or later.

ASTRO Digital XTS 2500/5000
HMN4106  GPS II Remote Speaker Microphone, Windporting, IP57 Submersible (Rugged)
HMN4107  GPS II Remote Speaker Microphone with 3.5mm audio jack, Windporting

If an Intrinsically Safe model is required, please purchase our original GPS microphones:
HMN4080A  GPS Remote Speaker Microphone, IP57 Submersible (Rugged)
HMN4084A  GPS Remote Speaker Microphone with 3.5mm audio jack

WINDPORTING REMOTE SPEAKER MICROPHONES (RSM)

The windporting feature dramatically lessens background noise from high winds and other severe weather conditions. IP57 Submersible model tested at 1 meter for 30 minutes. These Remote Speaker Microphones have a 6-foot coiled cord assembly, swivel clip and quick disconnect latch.

PMMN4038A  Windporting Remote Speaker Microphone, IP57 Submersible
PMMN4051B  Windporting Remote Speaker Microphone with 3.5mm audio jack at the head of the microphone and threaded jack at the accessory connector
0104023J42 Replacement Coil Cord Assembly for PMMN4038A
0104034J91 Replacement Coil Cord Assembly for PMMN4051A

NOISE-CANCELING REMOTE SPEAKER MICROPHONES (RSM)

When a user speaks directly into a noise-canceling remote speaker microphone, the noise-canceling acoustics utilize a directional microphone that is designed to eliminate ambient noise–ideal for outdoor communication. This Remote Speaker Microphone is water-resistant and has a 6-foot coiled cord assembly, 3.5mm audio jack on the head of the microphone and threaded jack at the accessory connector, swivel clip and quick disconnect latch.

PMMN4045B  Noise-Canceling Remote Speaker Microphone
0104034J90 Replacement Coil Cord Assembly for PMMN4045A

REMOTE SPEAKER MICROPHONES–COMMANDER™ II SERIES

The Commander II Remote Speaker Microphone features an orange emergency button, volume control, and 2 programmable buttons. These microphones feature windporting technology and are ideal for firefighters and police. The Rugged submersible model exceeds industry standards for submargility and provides a higher level of water protection.

ASTRO Digital XTS 3000/5000
RMN5066B  Remote Speaker Microphone, Submersible (Rugged)
RMN5067B  Remote Speaker Microphone with 3.5mm audio jack
RMN5088B  Remote Speaker Microphone with Channel Selector, Submersible (Rugged)
RMN5089B  Remote Speaker Microphone with Channel Selector and 3.5mm audio jack

For a completely submersible radio/microphone system use RMN5066 or RMN5088 with XTS 3000R and XTS 5000R portable radios.

1 Intrinsically Safe: Motorola approved accessories are a critical part of the specific radio and accessory system certified by a recognized testing organization as intrinsically safe. Non-Motorola approved accessories are not certified as part of the overall Motorola portable radio system. Use of non-Motorola approved accessories could result in equipment that is unapproved or unsafe in a hazardous environment.

2 Rugged accessories and batteries exceed industry standards (IPx7) for submersibility and provide a higher level of water protection—MIL-STD-810E, Method 512.3 Immersion. These accessories and batteries meet the incremental requirement of submersion in 1 meter of fresh water that is 27°C colder than the product.

PAGE 2
REMOTE SPEAKER MICROPHONE WITH ORANGE PROGRAMMABLE BUTTON

This microphone offers high/low volume control and has a 3.5mm audio jack on the microphone head. Emergency activation from the RSM is delayed until programmed Mandown Pre-alert and Post-alert delays elapse. Depending on radio model, factory defaults or previous programming could set the delay times for as long as 8 to 120 seconds.

RMN5038A' Remote Speaker Microphone with Orange Programmable Button

REMOTE SPEAKER MICROPHONE AUDIO ACCESSORIES

The following earpieces are compatible with all Remote Speaker Microphones with a 3.5 mm audio jack on the head of the microphone.

RLN4941A' Receive-Only Earpiece with Translucent Tube and Rubber Eartip
AARLN4885B' Receive-Only Covered Earbud
WADN4190B' Receive-Only Flexible Earpiece
PMLN4620A' Receive-Only D-Shell Earpiece

PUBLIC SAFETY MICROPHONES (PSM)

Public Safety Microphones include straight cord assembly, swivel clip, quick disconnect latch, high/low volume toggle switch and 3.5mm audio jack. Use with radio's antenna, which must be ordered separately.

ASTRO Digital XTS 5000/3500/3000
3.5mm threaded audio jack is located at the radio connector
NMN6247A' UHF Public Safety Microphone with 30 inch Straight Cord. Requires RF adapter.
NMN6250A' UHF Public Safety Microphone with 24 inch Straight Cord. Requires RF adapter.
NMN6251A' UHF Public Safety Microphone with 18 inch Straight Cord. Requires RF adapter.
NTN8327B' RF Adapter. Required for use with all UHF Public Safety Microphones.
6685687A02 RF Adapter Tool

ASTRO Digital XTS 2500/1500, MT 1500 and PR1500
3.5mm non-threaded audio jack is located on the microphone head. Not for VHF use.
RMN5072B' Public Safety Microphone with 30 inch Straight Cord. RF adapter included.
RMN5073B' Public Safety Microphone with 24 inch Straight Cord. RF adapter included.
RMN5074B' Public Safety Microphone with 18 inch Straight Cord. RF adapter included.
RLN5918A Replacement RF Adapter

EPAULET STRAPS

Black leather Epaulet Strap secures Remote Speaker Microphone to epaulet on shirt or jacket and accommodates back clip in leather cut-outs. Snap closure secures cord to allow reliable communications in hostile environments.

RLN4294A Epaulet Strap, Velcro
RLN4295A Epaulet Strap, with Clip
SURVEILLANCE KITS AND ACCESSORIES

SURVEILLANCE KITS

Surveillance accessories allow the user to receive messages privately through the earpiece—ideal when discreet communication is required. The following surveillance accessories require the 3.5mm threaded adapter jack BDN6676D that attaches to the radio, unless being used with XTS 5000/3500/3000 UHF Public Safety Microphones.

1 - WIRE SURVEILLANCE KITS

BDN664A
Receive-Only Earpiece with Standard Earphone (1-Wire), Beige

BDN665A
Extra Loud Receive-Only Earpiece with Standard Earphone (1-Wire), Beige

BDN672A
Receive-Only Earpiece with Standard Earphone (1-Wire), Black

BDN677A
Extra Loud Receive-Only Earpiece with Standard Earphone (1-Wire), Black

BDN666A
Receive-Only Earpiece with Volume Control and Earloop (1-Wire), Beige

BDN678A
Extra Loud Receive-Only Earpiece with Volume Control and Earloop (1-Wire), Black

FOR XTS 2500/1500, MT 1500 and PR1500 only.

2 - WIRE SURVEILLANCE KITS

BDN667A
Earpiece with Microphone and Push-to-Talk Combined (2-Wire), Beige

BDN669A
Extra Loud Earpiece with Microphone and Push-to-Talk Combined (2-Wire), Beige

BDN672A
Earpiece with Microphone and Push-to-Talk Combined (2-Wire), Black

BDN673A
Extra Loud Earpiece with Microphone and Push-to-Talk Combined (2-Wire), Black

3 - WIRE SURVEILLANCE KITS

BDN668A
Earpiece with Microphone and Push-to-Talk Separate (3-Wire), Beige

BDN670A
Extra Loud Earpiece with Microphone and Push-to-Talk Separate (3-Wire), Beige

BDN673A
Earpiece with Microphone and Push-to-Talk Separate (3-Wire), Black

BDN674A
Extra Loud Earpiece with Microphone and Push-to-Talk Separate (3-Wire), Black

SURVEILLANCE KITS—WITH EXTENDED-WEAR COMFORT EARPIECE

These kits include an extended-wear comfort earpiece with rubber eartip and Quick Disconnect clear, comfortable acoustic tube. Users hear transmissions clearly, and the clear tube provides a discreet appearance.

RLN5314A
Comfort Earpiece, Receive-Only, Beige

RLN5313B
Comfort Earpiece, Receive-Only, Black

RLN5312B
Earpiece with Microphone and Push-to-Talk Combined (2-Wire), Black

QUICK DISCONNECT NOISE KITS

Extreme Noise Kits provide extra comfort and/or noise protection for users wearing surveillance accessories. Lightweight, translucent tube attaches to Motorola surveillance accessories to provide flexibility and comfort, which now includes a new quick disconnect adapter. The Quick Disconnect Adapter allows users, especially those in multiple shift operations, to easily remove or alternate acoustic tubes. Clothing clip prevents accessory from being pulled from the ear due to body movement or head rotation. For optimal performance, Extra Loud Earphones are recommended.

RLN6230A
Extreme Noise Kit. Includes 2 foam earplugs. For high-noise environments. Noise reduction = 24dB. Can be used with Clear Comfortable Earpieces, Black

RLN6231A
Extreme Noise Kit. Includes 2 foam earplugs. For high-noise environments. Noise reduction = 24dB. Can be used with Clear Comfortable Earpieces, Black

RLN6232A
Low Noise Kit—Clear Acoustic Tube Assembly. Includes 1 clear rubber eartip. For low-noise environments, does not provide hearing protection, Black

RLN6241A
Low Noise Kit—Clear Acoustic Tube Assembly. Includes 1 clear rubber eartip. For low-noise environments, does not provide hearing protection, Beige

5080369E39
Extra Loud Earphone, Beige

5080370E91
Extra Loud Earphone, Black

REPLACEMENT ACCESSORIES

RLN6242A
Quick Disconnect Acoustic Tube Replacement
5080384F72
Replacement Foam Plugs. Noise reduction = 24dB. Pack of 50. For RLN6230A and RLN6231A.

5080370E97
Replacement Standard Clear Rubber Eartips. Pack of 25. For RLN6232A and RLN6241A.

BDN6676D
3.5 mm Threaded adapter jack with Quick Disconnect Latch

\(^1\)Intrinsically Safe: Motorola approved accessories are a critical part of the specific radio and accessory system certified by a recognized testing organization as intrinsically safe. Non-Motorola approved accessories are not certified as part of the overall Motorola portable radio system. Use of non-Motorola approved accessories could result in equipment that is unapproved or unsafe in a hazardous environment.

\(^2\)Extra Loud Earphone (exceeds OSHA limits).
CLEAR COMFORTABLE EARPIECES
The Clear Comfortable Earpiece forms to the inside of the ear and is perfect for low noise environments. It's made of easy-to-clean, chemically-inert hypo-allergenic material.

RLN4760A  Small Custom Earpiece–Right Ear
RLN4761A  Medium Custom Earpiece–Right Ear
RLN4762A  Large Custom Earpiece–Right Ear
RLN4763A  Small Custom Earpiece–Left Ear
RLN4764A  Medium Custom Earpiece–Left Ear
RLN4765A  Large Custom Earpiece–Left Ear

COMPLETELY DISCREET WIRELESS EARPIECE KIT
Enables users to communicate with ease, in full privacy, without visible equipment. This miniaturized receiver is discreetly hidden in the ear, where it can be worn comfortably for long periods of time. Small as it is, it offers a full range of audio functions including automatic squelch, automatic gain control and noise filtering. Average battery life is approximately 100 hours and includes an end-of-life warning signal when the battery needs to be changed. Kit includes wireless receiver, inductive neckloop, 6 spare batteries and 5 spare earmuffs. For use with any standard 2 or 3-Wire Motorola Surveillance Kit. Simply remove the earpiece from any standard 2 or 3-Wire Surveillance Kit and plug in the neckloop, which is easily hidden under clothing.

RLN4922A  Completely Discreet Earpiece Kit
RLN4919A  Replacement Earmuffs. 5 per pack.

EAR MICROPHONE SYSTEMS (EMS)
This streamlined unit picks up sound through bone vibrations in the ear canal giving emergency personnel the ability to hear and speak directly to others on the scene. EMS may be worn with protective masks without reduction in clarity of sound. It's ideal for high-noise environments.

PMLN5464  Ear Microphone System with Bone Conduction

OPTIONAL ACCESSORIES

BDN6708  Legacy Replacement Interface Module
BDN6671  Legacy Replacement Interface Module
0180300E25  Earmuffs with Adjustable Loop
0180358B38  Remote Push-to-Talk Ring Switch
0180300E33  Remote Push-to-Talk Body Switch
0180358B34  Earholder. Black, size large. Secures Ear Microphone in ear.
4280369E44  Replacement Belt Clip with Screws
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**COMMPORT**

**COMMPORT: INTEGRATED MICROPHONE/RECEIVER SYSTEM**

The CommPort™ System’s advanced, self-adjusting microphone and miniature receiver connect to a two-way radio and make it possible to communicate under the most adverse conditions. A variety of push-to-talk options allow the user to customize the CommPort system for many applications.

- **NTN1624A** Integrated Ear Microphone/Receiver System with Palm Push-to-Talk Includes 3.5mm adapter BDN6676D.
- **NTN1625A** Integrated Ear Microphone/Receiver System with Push-to-Talk on Radio Adapter. Includes 3.5mm adapter BDN6676D.
- **NTN1663A** Integrated Ear Microphone/Receiver System with Ring Push-to-Talk. Includes 3.5mm adapter BDN6676D.
- **NTN1736A** Integrated Ear Microphone/Receiver System with Snap-On-Side Push-to-Talk. Includes 3.5mm adapter BDN6676D.
- **NNTN4186A** Integrated Ear Microphone/Receiver System with Body Push-to-Talk. Includes 3.5mm adapter BDN6676D.

**OPTIONAL ACCESSORIES FOR COMMPORT**

- **NKN6510A** Replacement Palm Push-to-Talk Cable for NTN1624A
- **NKN6512A** Replacement Ring Push-to-Talk Cable for NTN1663A
- **NKN6525A** Replacement Snap-On-Side Push-to-Talk Cable for NTN1736A
- **NNTN4188A** Replacement Remote Push-to-Talk Body Switch for NNTN4186A
- **NNKN6508A** Replacement Cable for NTN1625A
- **NTN8819B** Ear Microphone Assembly
- **NTN8821A** CommPort Maintenance Kit. Includes 10 replacement ear tubes, 10 microphone seal strips and 2 windscreens.
- **NTN8986A** Adhesive Pads. For secure attachment to ear. Pack of 90.
- **NTN8988A** Ear Straps. For secure attachment to ear. Pack of 10.
- **4265338B01** Replacement Collar Clip
- **4202006A01** Replacement Back Cover Clip
- **BDN6676D** 3.5mm jack adapter with Quick Disconnect Latch

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MISSION CRITICAL WIRELESS

This best-in-class Bluetooth wireless solution, designed specifically for first responders, provides a truly secure link, easy pairing on the go, and instant push-to-talk in an all-day comfortable and durable earpiece. A wireless push-to-talk is also available to allow you seamlessly and wirelessly connect with the Mission Critical Wireless Earpiece.

The earpiece and wireless push-to-talk require the Mission Critical Wireless Adapter. This adapter has a blue light around the push-to-talk to show it’s paired with your earpiece and a toggle switch allows you to re-route audio to your radio if needed. This adapter supports up to 2 wireless devices simultaneously.

PMLN5792  Mission Critical Wireless Adapter
NTN2573  Mission Critical Wireless Earpiece (9.5 inch cable)
NTN2570  Mission Critical Wireless Earpiece (12 inch cable)
NTN2571  Mission Critical Wireless Push-to-Talk

BLUETOOTH® WIRELESS HEADSET (FOR NON-MISSION CRITICAL APPLICATIONS)

This Bluetooth adapter enables connectivity with consumer off-the-shelf Bluetooth earpieces. We have certified operation with the H300 Bluetooth headset. The H300 Bluetooth headset and adapter are sold separately or as a kit.

RLN6379A  Bluetooth Kit. Includes H300 Bluetooth headset and adapter for radios.
98682H   H300 Bluetooth Headset
RMN5104A  Bluetooth adapter for radios

FLEXIBLE EAR RECEIVER

This receive-only earpiece contains a flexible earloop and speaker which rests external to the ear. It plugs directly into adapter BDN6676D or the audio jack on XTS 5000/3500/3000 UHF Public Safety Microphones.

BDN6719A  Flexible Ear Receiver with 3.5mm threaded plug, black
BDN6676D  3.5mm jack adapter with Quick Disconnect Latch
7580372E11  Replacement Foam Ear Cushion

PELLET-STYLE EARPIECES

Pellet-style earpieces allow users to receive communication discreetly and are comfortable for extended-wear use.

BDN6780A  Earbud with Microphone and Push-to-Talk. Requires adapter BDN6676D.
BDN6781A  Earbud, receive-only. Requires adapter BDN6676D.
BDN6676D  3.5mm jack adapter with Quick Disconnect Latch
7580372E70  Replacement Foam Cushion for Pellet Earpieces

TEMPLE TRANSDUCER–BONE CONDUCTION HEADSET

This innovative headset allows the user to receive audio without covering the ear, allowing users to wear hearing protection in noisy environments or leave their ears open to hear critical on-scene communications. It features an in-line push-to-talk and boom microphone.

RMN4049A  Temple Transducer–Bone Conduction Headset
0180305J46  Training CD-ROM. For Ear Microphone System and Temple Transducer.

RUGGED TEMPLE TRANSDUCER–BONE CONDUCTION HEADSET

The larger Rugged Temple Transducer comes equipped with all the features of the basic model and sports a bigger push-to-talk button and a larger omni-directional boom microphone. It is fully adjustable for different head sizes, making it comfortable for extended-wear. Over-the-head band allows users to wear helmets, hardhats and other head gear—and it really stays in place. Water-resistant boom microphone is ideal for use in blowing rain and the secure ring around the push-to-talk prevents accidental activation in mission critical situations.

RMN5049A  Rugged Temple Transducer
RECEIVE-ONLY HEADSETS

Receive-Only Headsets are the right choice for high-noise environments where users must hear information clearly, but seldom need to transmit. Dual-Muff headsets feature easily replaceable earseals filled with a liquid and foam combination to provide excellent protection from outside noise as well as comfort. They can be plugged directly into the radio when used with BDN6676D.

- **RMN4056B**: ASTRO Digital XTS 5000/3500/3000
  - Receive-Only Dual-Muff Headband Style Headset. For use with 3.5mm threaded jack. Can be plugged directly into radio with 3.5mm adapter BDN6676D.
  - Noise reduction = 24dB.

- **RMN4057B**: Receive-Only, Dual-Muff, Hardhat Headset. Mounts easily to hard hats with slots. Can be plugged directly into radio with 3.5mm adapter BDN6676D.

- **BDN6676D**: 3.5mm jack adapter with Quick Disconnect Latch

LIGHTWEIGHT HEADSETS

Lightweight headsets provide high-clarity, hands-free, discreet two-way communication, while maintaining the comfort necessary for extended-wear in moderate noise environments. Audio adapter BDN6676D required.

- **NMM6245A**: ASTRO Digital XTS 5000/3500/3000
  - Single-Muff Lightweight Headset with In-line Push-to-Talk Switch
  - Requires audio adapter BDN6676D.

- **NMM6246B**: Ultra-Light Headset with Boom Microphone, In-line Push-to-Talk Switch.
  - Earbud style receiver. Requires audio adapter BDN6676D.

- **BDN6676D**: 3.5mm jack adapter with Quick Disconnect Latch

Winning Quality

The same winning quality and dependability you see at professional football stadiums and speedways can be yours with Motorola headsets.
HEADSETS

NOISE-CANCELING HEADSETS WITH BOOM MICROPHONE
Ideal for two-way communication in extremely noisy environments. Dual-Muff, tactical headsets include 2 microphones on outside of earcups which reproduce ambient sound back into headset. Harmful sounds are suppressed to safe levels and low sounds are amplified up to 5 times original level, but never more than 82dB. Has on/off volume control on earcups. Easily replaceable ear seals are filled with a liquid and foam combination to provide excellent sealing and comfort. 3-foot coiled cord assembly included. Adapter Cable RKN4095A required.

RMN4052B Tactical Headband Style Headset. Gray, Noise reduction = 24dB.
RMN4053B Tactical Hardhat Mount Headset. Gray, Noise reduction = 22dB.
RKN4095A Adapter Cable with In-line Push-to-Talk
For use with RMN4051B/RMN4052A/RMN4053A.

REPLACEMENT EARSEALS
RLN4923B Replacement Earseals for RMN4051B/RMN4052A/RMN4053A
Includes 2 snap-in earseals.

HARDHAT MOUNT HEADSET WITH NOISE-CANCELING BOOM MICROPHONE
Ideal for two-way communication in high-noise environments, this headset mounts easily to hardhats with slots, or can be worn alone. Easily replaceable ear seals are filled with a liquid and foam combination to provide excellent sealing and comfort. 3-foot coiled cord assembly included. Noise reduction of 22dB. Separate in-line push-to-talk adapter cable RKN4095A required. Hardhat not included.

RKN4095A Adapter cable with In-line Push-to-Talk. For use with RMN4051B/RMN4052A/RMN4053A.

MEDIUM WEIGHT HEADSETS
Medium weight headsets offer high-clarity sound, with the additional hearing protection necessary to provide consistent, clear, two-way radio communication in harsh, noisy environments or situations.

NMN6258A\(^1\) Medium Weight, Dual-Muff, Over-the-Head Style Headset with In-line Push-to-Talk. Noise reduction rating = 24dB.
NMN6269A\(^1\) Medium Weight, Dual-Muff, Behind-the-Head Style Headset Can be worn with hardhat. Noise reduction rating = 24dB.

HEAVY-DUTY HEADSETS
Heavy-duty headsets include noise-canceling boom microphones and can be worn with or without a hardhat. The push-to-talk switch is located on the earcup. On voice-activated models, the VOX module is contained within the headset. Headsets are for use in noise levels up to 125dB.

PMLN5278B\(^1\) Push-to-Talk Headset with Boom Microphone Noise reduction rating = 24dB.

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LEATHER AND NYLON CARRYING CASES

Motorola carry cases were developed to meet the demands of public safety and other users who operate in the most rigorous of environments. A variety of carrying accessories are available for comfort and convenience and are available in sizes designed to fit radios with a battery and permit audio to be heard clearly. Leather cases are constructed of top grain, 8 ounce leather and all stainless steel hardware.

High-activity cases have a swivel D-ring button and belt loop. To remove case from belt loop, rotate case 180 degrees and slide case upward, out of the holder. Case stays on belt more securely in high-activity applications while allowing the radio to swing freely with body movements.

ASTRO Digital XTS 5000/3500/3000

**MODEL I RADIOS ONLY**
- NTN8387A Leather Carry Case with fixed belt loop, D-rings and T-strap
- NTN8385B High-Activity Swivel Leather Case Features 2.5 inch swivel belt loop, D-rings and T-strap.
- NTN8386B High-Activity Swivel Leather Case Features 3 inch swivel belt loop, D-rings and T-strap.
- NTN8725A High-Activity Nylon Case with fixed belt loop and T-strap

**MODEL II & III RADIOS ONLY**
- NTN8382B Leather Case with fixed belt loop, D-rings and T-strap
- NTN8380C High-Activity Swivel Leather Case Features 2.5 inch swivel belt loop, D-rings and T-strap.
- NTN8381C High-Activity Swivel Leather Case Features 3 inch swivel belt loop, D-rings and T-strap.
- NTN8725A High-Activity Nylon Case with fixed belt loop and T-strap
- NTN9184A Leather Case with Belt Loop. For Clamshell batteries only.

**CARRYING ACCESSORIES**

**CARRYING AND T-STRAPS**
- NTN5243A Adjustable, Black Nylon Carrying Strap. Attaches to D-ring on cases.
- NTN8383A Leather T-strap, Plain Action Snap
- NTN8384A Leather T-strap, Hard Action Snap. Provides additional strength at the snap.

**HIGH-ACTIVITY BELT LOOPS**
- NTN8039B 2.5 inch Leather Replacement Swivel Belt Loop
- NTN8040B 3 inch Leather Replacement Swivel Belt Loop

**BELT CLIPS AND D-BUTTONS**
- NTN8256B Standard Removable 2.25 inch Belt Clip Attachment
- NTN9212A D-button for Battery Pack
- NTN9179A D-button with Belt Loop
- HLN6853A 2.25 inch Spring Action Belt Clip
- HLN8844A 2 inch Removable Belt Clip Attachment
PORTABLE RADIO : ACCESSORIES
XTS 5000, XTS 2500, XTS 1500, XTS 3500, XTS 3000, MT 1500, PR1500

CHEST PACK
Motorola Original® Universal Chest Pack protects the radio and provides the freedom from holding it during standby communication mode. Universal Chest Pack fits virtually any radio.

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
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<tbody>
<tr>
<td>HLN6602A</td>
<td>Universal Chest Pack with Radio Holder, Pen Holder and Velcro Secured Pouch</td>
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<tr>
<td>1505596Z02</td>
<td>Replacement Strap for HLN6602A/RLN4570A</td>
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BREAK-A-WAY CHEST PACK
All the features of the original Universal Chest Pack (HLN6602A) plus break-a-way tabs that allow the entire pack to be pulled off with approximately 10 lbs. of pressure.

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<tr>
<td>RLN4570A</td>
<td>Break-a-Way Chest Pack with Radio Holder, Pen Holder and Velcro Secured Pouch</td>
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<tr>
<td>1505596Z02</td>
<td>Replacement Strap for HLN6602A/RLN4570A</td>
</tr>
</tbody>
</table>

UNIVERSAL RADIOPAK™
The RadioPAk is lightweight and comfortable. Worn around the waist, it keeps radios/phones at hand. It features a separate 6 x 8 inch zippered pouch for other on-the-job necessities. Adjustable woven nylon belt fits both men and women.

<table>
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<th>Part Number</th>
<th>Description</th>
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<tr>
<td>RLN4815A</td>
<td>RadioPAk Radio/Utility Case</td>
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<tr>
<td>4280384F89</td>
<td>RadioPAk Extension Belt</td>
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<td></td>
<td>For waists larger than 40 inches.</td>
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WATERPROOF BAG

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<th>Part Number</th>
<th>Description</th>
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<tr>
<td>HLN9985B</td>
<td>Waterproof Bag with Large Strap</td>
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PORTABLE RADIO HANGERS
Portable Radio Hangers slide over and hangs from the vehicle door panel allowing convenient, easy mounting. Radio belt clip required.

<table>
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<tbody>
<tr>
<td>TDN9327A</td>
<td>Portable Radio Hanger for door panels up to 2.75 inches.</td>
</tr>
<tr>
<td>TDN9373A</td>
<td>Portable Radio Hanger for door panels 2.75 to 3.25 inches.</td>
</tr>
</tbody>
</table>

Chest Packs
These versatile carry accessories fit virtually any radio. Lightweight and comfortable, each of these packs make an ideal companion for two-way radios.

RadioPAk
Unlike rigid holders, the universal-fit RadioPAk is lightweight and comfortable. An ideal companion for two-way radios.
BATTERIES

IMPRES™ BATTERIES

IMPRES batteries, when used with an IMPRES charger, provide automatic, adaptive reconditioning, end-of-life display and other advanced features. Data is stored in the battery and communicated to the charger via a unique IMPRES communication protocol which is designed to maximize talk-time and optimize battery cycle life—all automatically.

Battery Characteristics

NiCd batteries provide the maximum number of charge/discharge cycles and are best suited for temperature extremes.

NiMH batteries provide more talk-time per shift and are less prone to memory effect.

Li-ion batteries offer the best power-to-weight ratio of all chemistries, with no memory effect.

<table>
<thead>
<tr>
<th>Battery Type</th>
<th>Chemistry</th>
<th>Capacity (mAh)</th>
<th>Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>T5000/3500/3000</td>
<td>NiCd</td>
<td>1525</td>
<td>Intrinsically Safe1, IP672</td>
</tr>
<tr>
<td>T5000/3500/3000</td>
<td>NiMH</td>
<td>1700</td>
<td>Intrinsically Safe1, Rugged3</td>
</tr>
<tr>
<td>T2500/1500</td>
<td>NiCd</td>
<td>1525</td>
<td>Intrinsically Safe1</td>
</tr>
<tr>
<td>T2500/1500</td>
<td>NiMH</td>
<td>1700</td>
<td>Intrinsically Safe1, IP672</td>
</tr>
<tr>
<td>T1500</td>
<td>NiCd</td>
<td>1525</td>
<td>Intrinsically Safe1</td>
</tr>
<tr>
<td>T1500</td>
<td>NiCd</td>
<td>1525</td>
<td>Intrinsically Safe1</td>
</tr>
<tr>
<td>PR1500</td>
<td>NiCd</td>
<td>1525</td>
<td>Intrinsically Safe1</td>
</tr>
<tr>
<td>PR1500</td>
<td>NiCd</td>
<td>1525</td>
<td>Intrinsically Safe1</td>
</tr>
</tbody>
</table>

1 Intrinsically Safe: Motorola approved accessories are a critical part of the specific radio and accessory system certified by a recognized testing organization as intrinsically safe. Non-Motorola approved accessories are not certified as part of the overall Motorola portable radio system. Use of non-Motorola approved accessories could result in equipment that is unapproved or unsafe in a hazardous environment.

2 International Protection (IP) is a global standard for rating dust and water protection. The first digit IPx5 or IPx6 represents increased levels of dust protection, while the second digit IPx7 represents withstanding immersion in 1 meter of fresh water for 30 minutes.

3 Rugged batteries exceed industry standards (IPx7) for submergibility and provide a higher level of water protection—MIL-STD-810E, Method 512.3 Immersion. These accessories and batteries meet the incremental requirement of submersion in 1 meter of fresh water that is 27°C colder than the product.
PORTABLE RADIO : CHARGERS
XTS 5000, XTS 2500, XTS 1500, XTS 3500, XTS 3000, MT 1500, PR1500

**IMPRES™ SMART ENERGY SYSTEMS**

Our innovative IMPRES battery, charging and reconditioning system streamlines and automates battery maintenance. It draws on our exclusive technology to enable communication between your battery and charger to lengthen battery life and extend talk time. The IMPRES charger automatically monitors battery capacity, allowing these batteries to be left in their IMPRES chargers for extended periods without heat damage from the charger. These chargers charge compatible non-IMPRES batteries and supports multiple radio platforms including SABER, XTS and HT 1000 Series portables.

**IMPRES SINGLE-UNIT CHARGER**
WPLN4111AR IMPRES Single-Unit Charger, 110 Volt, US Plug

**IMPRES MULTI-UNIT CHARGER WITH DISPLAY MODULES**
Charger Display Modules provide powerful, “real time” analyzing information for IMPRES batteries, including current charge status, battery mAh, percent rated capacity and battery voltage. Readout displays battery kit number, serial number and chemistry and the time remaining to complete the charge for NiCd and NiMH batteries.

WPLN4130A IMPRES Multi-Unit Charger with Display Modules, 110 Volt, US Plug
NLN7967A Wall Mount for Multi-Unit Charger

**IMPRES MULTI-UNIT CHARGER**
WPLN4108BR IMPRES Multi-Unit Charger, 110 Volt, US Plug
NLN7967A Wall Mount for Multi-Unit Chargers

**IMPRES INDIVIDUAL CHARGER DISPLAY MODULE**
This module is compatible with the standard IMPRES™ Multi-Unit Charger WPLN4108BR, WPLN4109BR and WPLN4110BR. Up to 6 modules can be used per charger, one for each charging pocket. Includes detailed installation instructions.

RLN5382B Charger Display Module for IMPRES Multi-Unit Charger with Software version 1.3 or Later.

Note: Display Modules compatible with Multi-Unit Charger with Software version 1.2 or earlier require a software flash update.

Version number is located on label on the bottom of the IMPRES™ Multi-Unit charger. If no version is shown, it’s earlier than version 1.2. Version 1.2 will appear as V1.20, 1.3 as V1.30, etc.

**IMPRES BATTERY FLEET MANAGEMENT SOFTWARE**
This industry exclusive software application automatically collects and consolidates key IMPRES battery data through existing IMPRES chargers. These reports provide critical battery and charger data such as when IMPRES batteries are nearing end of life, identifying lost batteries and ensuring IMPRES chargers are appropriately distributed and use is maximized.

NNTN7676 IMPRES Battery Fleet Management Software
NNTN7677 Multi-Unit Charger Interface Unit. Attaches to an APX, XTS, MOTOTRBO and Professional Series IMPRES multi-unit charger to enable the data transfer to IMPRES Battery Fleet Management. A CIU is required for each IMPRES charger that reports data to IMPRES Battery Fleet Management.
HKVN4036 IMPRES Battery Fleet Management License Key

**IMPRES BATTERY READER**
The industry exclusive IMPRES Battery Reader provides IMPRES battery users the ability to access charging, reconditioning and key usage data that can affect overall battery performance. By keeping batteries in peak condition, talk time and cycle life are optimized, reducing battery replacement. Package includes IMPRES Battery Reader (fits XTS batteries), System Software, USB Cord, Adapter inserts for APX, MOTOTRBO and Professional Series radios.

NNTN7392 IMPRES Battery Reader

**IMPRES CD**
An interactive guide to the IMPRES Charging System. It outlines the benefits and gives examples of application usage.

0180305J70 IMPRES CD
SINGLE-UNIT, RAPID-RATE, UNIVERSAL CHARGER
This tri-chemistry charger supports Nickel Cadmium, Nickel Metal Hydride and Lithium-ion batteries. It will rapid charge most batteries to 90% capacity in one to two hours and employ trickle and maintenance modes that ensure batteries are safely charged to full-capacity.

NTN1667A Universal Charger, 110 Volt, US Plug

MOTOROLA CONDITIONING CHARGER (MCC)
The MCC features Instant Fault Detection technology that detects faulty batteries in seconds. You’ll know right away when a battery won’t operate at peak performance—saving you time and trouble. Each unit rapidly charges NiCd and NiMH batteries and optimizes battery performance. It’s patented negative pulse charging process minimizes overheating and overcharging, extending useful battery life. Batteries can be left on the charger for extended periods of time, without worry of heat build-up. Optional accessories are available that allow the MCC to be used in both AC and DC environments.

ASTRO Digital XTS 5000/3500/3000
WPLN4086CR Charger Kit, 110 Volt AC. Includes single-unit base and 7 Volt adapter plate.
WPPN4002BR 110 Volt AC Single-Unit Base Charger Only. Adapter plates sold separately.
WPPN4021CR 7 Volt Adapter Plate
WPPN4065BR Multi-Unit Conditioning Charger, 4-Station Base, 110 Volt. Adapter plates sold separately.

ASTRO Digital XTS 2500/1500, MT 1500 and PR1500
WPPN4002BR Base Charge Unit, 110 Volt AC. Adapter plates sold separately.
WPLN4168AR MCC Kit, 110 Volt AC. Includes single-unit base and adapter plate
WPPN4098AR Adapter Plate Only
WPPN4065BR Multi-Unit Conditioning Charger, 4-Station Base, 110 Volt. Adapter plates sold separately.

Motorola Conditioning Chargers not compatible with NiMH batteries RNN4006B/RNN4007AR or any Li-ion batteries.

VEHICULAR MOUNTING
RLN4814A Vehicular Mounting Bracket and Hard Wire Cable For Single-Unit Motorola Conditioning Chargers. Includes DC Hard Wire Cable 3080384M21.
3080384M21 DC Hard Wire Cable with 3 A in-line fuse.
BATTERY MAINTENANCE SYSTEM PLUS (BMS PLUS)
Using interchangeable battery adapters (sold separately), the BMS PLUS is capable of charging and discharging, analyzing, conditioning and cycle testing NiCd, NiMH and Li-Ion batteries. The BMS PLUS offers a 3-year warranty and includes serial printer* port (RS-232).

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>WPLN4079BR</td>
<td>6-Station BMS PLUS, 110 Volt AC, 50/60 Hz, US Plug</td>
</tr>
<tr>
<td>WPPN4085AR</td>
<td>BMS PLUS Li-ion Field Upgrade Kit. Upgrades WPLN4079AR, WPLN4080AR, WPLN4081AR. Allows units to support Li-ion batteries.</td>
</tr>
<tr>
<td>NDN4005B</td>
<td>3-Station BMS, 110 Volt AC, 50/60 Hz. Does not support Li-ion or 3-cell batteries.</td>
</tr>
<tr>
<td>NDN4006B</td>
<td>3-Station BMS, 230 Volt AC, 50/60 Hz. Does not support Li-ion or 3-cell batteries.</td>
</tr>
</tbody>
</table>

*Compatible with STAR Micronics SP200 series and printers with STAR printer emulation. STAR Micronics printers available at STAR Micronics distributors.

BATTERY MAINTENANCE SYSTEM PLUS (BMS PLUS) ADAPTERS

<table>
<thead>
<tr>
<th>Adapter</th>
<th>Compatibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>WPPN4019AR</td>
<td>NiCd batteries only.</td>
</tr>
<tr>
<td>WPPN4022AR</td>
<td>Both NiCd and NiMH batteries.</td>
</tr>
<tr>
<td>WPPN4086AR</td>
<td>NiCd, NiMH and Li-Ion batteries.</td>
</tr>
<tr>
<td>WPPN4097BR</td>
<td>NiCd and NiMH Adapter</td>
</tr>
<tr>
<td>PMLN5423A</td>
<td>Li-ion Adapter</td>
</tr>
</tbody>
</table>

BATTERY OPTIMIZING SYSTEM II (BOS II)
No other battery analyzer matches the speed, accuracy, versatility and ease-of-use of the BOS II in providing powerful analyzing capabilities. Users can select from 12 pre-programmed service programs making it quick and easy to get up and running. Because the BOS II is programmable, users can create custom programs to perform a wide variety of tasks specific to individual needs. New enhancements include new navigation keys and an improved, more intuitive menu system. Regular use of the BOS II can optimize battery performance and help extend battery life, helping reduce battery replacement costs.

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>WPLN4124BR</td>
<td>BOS II, 4-Station, 90-264 Volt AC, US Plug. Adapter Plates Required.</td>
</tr>
<tr>
<td>RL-75765</td>
<td>BOS II Battery Adapter. For use with ASTRO XTS 5000/3500/3000 radios.</td>
</tr>
<tr>
<td>WPLN4124BR</td>
<td>BOS II, 4-Station, 90-264 Volt AC, US Plug. Adapter Plates Required.</td>
</tr>
<tr>
<td>RL76341</td>
<td>Standard Battery Adapter. For use with XTS 2500 radios.</td>
</tr>
<tr>
<td>PMLN5416B</td>
<td>Tri-Chemistry Adapter (Li-ion, NiCd, NiMH). For use with XTS 2500 radios.</td>
</tr>
</tbody>
</table>

- Quicktest™ diagnostic feature measures a battery's state of health in approximately 2 to 5 minutes
- Supports NiCd, NiMH, Li-ion and SLA batteries
- Increased power-programmable from 100 mAh to 4 amps per station
- Programmable adapters allow customization of maintenance routines
- Proprietary reduction cycle restores NiCd and NiMH batteries
- Printer output for reports and labels with computer interface, includes both 9-pin serial and 25-pin parallel ports
- 100W Universal Power Supply (110-240 VAC) provides up to 4 amps of power per station
- Interchangeable adapter plates accommodate nearly all Motorola two-way batteries and other major brands
VEHICULAR TRAVEL CHARGER

A great traveling companion that ensures constant communication while on the road. Its small compact design allows the radio to be used while rapid charging in the charger base. Unit includes a voltage regulated vehicular charger adapter, custom charger base, mounting bracket and coil cord.

- RLN4884B: Vehicular Travel Charger
- RLNS914A: Universal Mounting Bracket for RLN4884B. Includes screws and nylon strap cord.

TRAVEL CHARGER TRANSFORMERS

- 2580600E05: Transformer, 120 Volt, US

IMPRES COMPATIBLE VEHICULAR CHARGER

The IMPRES compatible vehicular charger has full IMPRES charger to battery communication capability. This ensures continuity of IMPRES battery charge data logging in a vehicular environment, so the IMPRES battery will receive adaptive, automatic reconditioning and will qualify for the 6-month capacity warranty extension. It is important to note that the IMPRES compatible vehicular charger will not recondition IMPRES batteries due to the operational demands in a vehicle, but it will provide an indication when the reconditioning is required in an IMPRES desktop charger.

- WPLN4208B: IMPRES Compatible Vehicular Charger
VEHICULAR ADAPTERS

Allow users to adapt XTS 5000 portable radio for mobile operation. Providing in-vehicle rapid and trickle charging for NiCd, NiMH and Li-ion batteries, these units offer quick radio release, dead battery operation, and are powered by attaching the radio supply cable to the 12V battery located inside police cars, utility trucks or other vehicles. Connectors are provided for the vehicle’s external antenna, mobile microphone and optional amplified loudspeaker HSN1000B—all required to allow operation of the portable radio in a way that is similar to that of a mobile. Also included is a general interface connector for additional accessories. A colored LED indicates battery recharge status. For XTVA operation, a microphone and RF Switch NTN8327A are required.

ASTRO Digital XTS 5000
NTN8561G  Closed Face with Limited Keypad Access, Mini-UHF Connector
NTN8560G  Open Face with Limited Keypad Access, Mini-UHF Connector
NTN1607F  Closed Face, BNC Connector
NTN1608F  Open Face with Limited Keypad Access, BNC Connector

ADAPTER KITS FOR ACCESSORIES
NTN8941A  XTVA Data Cable Kit. Required for additional accessories.
NTN8943A  XTVA Accessory Adapter Kit. Required for additional accessories.

REQUIRED ACCESSORIES FOR VEHICULAR ADAPTERS
NTN8940B  Trunnion. Required for operation.
6685687A02  Tool Wrench for RF Switch. Required for operation.
NTN8327B  RF Switch. Required for operation.

OPTIONAL ACCESSORIES FOR VEHICULAR ADAPTERS
HMN4069F  Standard White Palm Microphone
PLN7737B  Hand Held Control Head
HSN1006A  External Speaker, Amplified, 6-Watt
HLN9330B  Emergency Foot Switch
GLN7280A  Emergency Push Button
NKN6455A  MTVA PA/Speaker Cable
PORTABLE RADIO: ACCESSORIES
XTS 5000, XTS 2500, XTS 1500, XTS 3500, XTS 3000, MT 1500, PR1500

ANTENNAS

FLEXIBLE WHIP
Flexible whip antennas have a one-piece finish and steel core for optimal radiation characteristics. They provide more comfort when radio is worn on the belt.

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>8505241U05</td>
<td>6 inch Flexible Whip Antenna, 403-520 MHz</td>
<td></td>
</tr>
<tr>
<td>8505241U03</td>
<td>7 inch Flexible Whip Antenna, 806-870 MHz</td>
<td></td>
</tr>
<tr>
<td>8505241U11</td>
<td>7 inch Flexible Whip, Dual Band Antenna, 764-870 MHz</td>
<td></td>
</tr>
</tbody>
</table>

ASTRO Digital XTS 2500/1500, MT 1500 and PR1500

HEXICAL
Helical antennas are sturdy and dependable. Each antenna is designed and built to quality standards. The skirt at the base of the connector helps to seal out damaging elements. The connector is made of plated brass material for long life.

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>8505644V01</td>
<td>7.5 inch Helical Antenna, 136-151 MHz</td>
<td></td>
</tr>
<tr>
<td>8505644V02</td>
<td>7 inch Helical Antenna, 151-162 MHz</td>
<td></td>
</tr>
<tr>
<td>8505644V03</td>
<td>6.5 inch Helical Antenna, 162-174 MHz</td>
<td></td>
</tr>
<tr>
<td>8505644V04</td>
<td>3.5 inch Helical Antenna, 403-435 MHz</td>
<td></td>
</tr>
<tr>
<td>8505644V05</td>
<td>3 inch Helical Antenna, 435-470 MHz</td>
<td></td>
</tr>
<tr>
<td>8505644V06</td>
<td>3 inch Helical Antenna, 470-520 MHz</td>
<td></td>
</tr>
</tbody>
</table>

ASTRO Digital XTS 2500/1500, MT 1500 and PR1500

WIDEBAND
Wideband antennas are ideal when the radio is used in different frequencies since one antenna will cover all ranges.

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>8505518V01</td>
<td>8 inch Wideband Antenna, 136-174 MHz</td>
<td></td>
</tr>
</tbody>
</table>

STUBBY
This quarterwave stubby antenna is ideal when the radio is worn on a belt because the short antenna is non-obtrusive. This broad band antenna can be used for both 800 and 900 MHz applications.

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>8505241U06</td>
<td>4 inch Stubby Antenna, 806-941 MHz</td>
<td></td>
</tr>
</tbody>
</table>

DIPLOLE
Dipole antennas are injection molded in lasting polyurethane. The wide skirt at the bottom of the connector protects against damaging environmental elements. The dipole antenna is ideal when strong and solid signal clarity is demanded.

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>NAF5039A</td>
<td>8 inch Dipole Antenna 806-870 MHz</td>
<td></td>
</tr>
</tbody>
</table>

Intrinsically Safe: Motorola approved accessories are a critical part of the specific radio and accessory system certified by a recognized testing organization as intrinsically safe. Non-Motorola approved accessories are not certified as part of the overall Motorola portable radio system. Use of non-Motorola approved accessories could result in equipment that is unapproved or unsafe in a hazardous environment.
# Mobile Microphones and Accessories

## XTL 5000–ASTRO Control Heads, XTL 1500/2500/5000 05 Control Heads, and PM1500

### Mobile Microphones

**HMN1079B**
- Water-Resistant Motorcycle Palm Microphone

**HMN4079D**
- Telephone Style Handset with Keypad and Hang-up Cup

**HKN1018A**
- Hang-up Handset with Normal Armored Cable (Old-style)

**HLN1457A**
- Handset with Hang-up Cup (Old-style)

**HMN1090B**
- Standard Palm Microphone

**HMN4089A**
- Visor Microphone, Remote Mount

**HMN1089B**
- Water Resistant Palm Microphone

**HMN1081A**
- Palm Microphone. For use with W9 Control Head.

**HMN1079B**
- Water-Resistant Motorcycle Palm Microphone

**HMN1080A**
- Standard Palm Microphone

**HMN4079E**
- Keypad Microphone

**HMN4097A**
- Telephone Style Handset with Keypad and Hang-up Cup

**HKN1018A**
- Hang-up Handset with Normal Armored Cable (Old-style)

**HLN1457A**
- Handset with Hang-up Cup (Old-style)
# MOBILE RADIO: ACCESSORIES

XTL 5000–ASTRO CONTROL HEADS, XTL 1500/2500/5000 05 CONTROL HEADS, AND PM1500

## SPEAKERS AND CONTROL STATION ACCESSORIES

### SPEAKERS FOR SIREN AND PUBLIC ADDRESS KITS

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>TDN6251A</td>
<td>Siren Speaker. Round with Chrome Finish</td>
</tr>
<tr>
<td>TDN6252A</td>
<td>Siren Speaker. Rectangular with White Finish</td>
</tr>
<tr>
<td>TDN6253A</td>
<td>Siren Speaker. Under hood with Gray Finish</td>
</tr>
<tr>
<td>TDN6254A</td>
<td>Siren Speaker. Round with Gray Finish</td>
</tr>
</tbody>
</table>

### SIRENS/DIRECT ENTRY KEYPAD (DEK)

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1336B</td>
<td>Siren/Public Address Kit with Direct Entry Keypad</td>
</tr>
<tr>
<td>H1500B</td>
<td>Siren with Public Address Kit (does not include Direct Entry Keypad)</td>
</tr>
</tbody>
</table>
| H1338A | Status/Message Direct Entry Keypad  
Includes 8 buttons, only applicable for Systems 3.X and Earlier. |

### EXTERNAL SPEAKER

Provides audio for high ambient noise environments.

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HSN4018C</td>
<td>Water Resistant Motorcycle Speaker (13W rated audio)</td>
</tr>
<tr>
<td>HSN4038A</td>
<td>Water Resistant Speaker (7.5W rated audio), Remote Mount</td>
</tr>
<tr>
<td>HSN4032B</td>
<td>Non Water-resistant Speaker (13W rated audio)</td>
</tr>
</tbody>
</table>

### CONTROL STATION ACCESSORIES

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>RMN5083A</td>
<td>Desktop Microphone</td>
</tr>
<tr>
<td>HPN4007C</td>
<td>Control Station Power Supply (110V, 15 amps 25-60W rated)</td>
</tr>
<tr>
<td>3060665A04</td>
<td>110V Line Cord</td>
</tr>
<tr>
<td>HLN6042A</td>
<td>Desktop Tray with Speaker</td>
</tr>
<tr>
<td>RMN6070A</td>
<td>Desktop Microphone</td>
</tr>
<tr>
<td>HLN6042A</td>
<td>Desktop Tray with Speaker</td>
</tr>
<tr>
<td>HLN6925A</td>
<td>Control Station Mount</td>
</tr>
<tr>
<td>HPN4007C</td>
<td>Control Station Power Supply, (110V, 15 amps 25-60W rated)</td>
</tr>
</tbody>
</table>
EMERGENCY SWITCHES
Enables user to send emergency messages to desktop consoles where signalling unit ID number is displayed, and alarm is sounded.

- XTL 5000–ASTRO Control Heads
  - HLN5113B Emergency Foot Switch
  - HLN5131C Emergency Push Button
  - GLN7278B Foot Switch Push-to-Talk

KEY LOCK MOUNTS

- XTL 5000–ASTRO Control Heads
  - HLN6025A Key Lock Mount

- ASTRO XTL 1500/2500/5000 05 Control Heads, PM1500
  - HLN6372A Key Lock Mount

ADAPTER CABLES
Allows mobile radio users to convert existing ASTRO Digital SPECTRA and ASTRO Digital SPECTRA Plus accessory cables for use with the XTL 5000 (ASTRO Control Heads).

- XTL 5000–ASTRO Control Heads
  - HKN6158A Audio Cable Adapter
  - HKN6159A Adapter Cable Data Power Cables
  - HKN4191B 10-Foot Mid Power Cable for dash mount installations
  - HKN4192B 20-Foot Mid Power Cable for remote mount installations

EXTENSION CABLES
Allows user to extend microphone cord length. Compatible with HMN1089A and HMN1090A only.

- ASTRO XTL 1500/2500/5000 05, PM1500
  - PMKN4033A Microphone Extension Cable–10 Foot
  - PMKN4034A Microphone Extension Cable–20 Foot

REMOTE MOUNT CABLES
Enable users to separate the mobile control head from the transceiver. This is beneficial when there is limited space in the dash or console for the mobile.

- XTL 5000–ASTRO Control Heads
  - YKN4261A 10-Foot Remote Mount Cable
  - YKN4246A 30-Foot Remote Mount Cable
  - YKN4248A 50-Foot Remote Mount Cable
  - YKN4249A 75-Foot Remote Mount Cable
  - YKN4256A 150-Foot Remote Mount Cable

  - ASTRO XTL 1500/2500/5000 05 Control Heads, PM1500
    - HKN6164A 131-Foot Remote Mount Cable
    - HKN6165A 115-Foot Remote Mount Cable
    - HKN6166A 75-Foot Remote Mount Cable
    - HKN6167B 50-Foot Remote Mount Cable
    - HKN6168B 30-Foot Remote Mount Cable
    - HKN6169B 17-Foot Remote Mount Cable
    - HKN6170A 10-Foot Remote Mount Cable

POWER CABLES

- ASTRO XTL 1500/2500/5000 05 Control Heads, PM1500
  - HKN4191B 10-Foot Mid Power Cable for dash mount installations
  - HKN4192B 20-Foot Mid Power Cable for remote mount installations
  - HKN6032A Motorcycle Power Cable
  - HKN6110B 100-Watt Power Cable

MISCELLANEOUS CABLES

- ASTRO XTL 1500/2500/5000 05 Control Heads, PM1500
  - GKN6271A Ignition Sense Cable
  - HKN6182A Keyloader Adapter for mobile microphone port (MMP), 1.5 inch cable

REMOTE MOUNT KITS

- XTL 5000–ASTRO Control Heads
  - H1803A Remote to Dash Mounting Kit
  - H1804A Dash to Remote Mounting Kit
  - HKN6161A 20-Foot RS232 Cable for Rear Accessory Port, remote mount installations
  - HKN6160A 6-Foot RS232 Cable for Rear Accessory Port, dash mount installations

TRUNNION KITS

- ASTRO XTL 1500/2500/5000 05 Control Heads, PM1500
  - HKN6186B Control Head Remote Mount Trunnion Kit
  - HLN6909A High Power Trunnion Kit (Quick Release with Lock)
  - HLN6861C Mid Power Trunnion Kit (Standard Bracket Installation)
LAIRD TECHNOLOGIES ANTENNAS

Laird Technologies designs and manufactures antennas to exacting electrical and mechanical specifications for critical applications in Defense, Public Safety, Transportation, Satellite, and Medical communications. These top quality mobile, portable and base antenna products utilize the latest patented technologies, lean manufacturing techniques, custom automation and vertical integration. These antennas are commonly used with wireless voice and data, asset tracking and two-way radios; they are widely employed throughout the security, military, public safety and other mission critical industries. Many of the Laird patented technologies offer solutions unavailable from other antenna manufacturers.

PHANTOM ELITE®

This exclusive low-profile, stealth antenna with Patented Field Diversity™ technology etched on a circuit board is for use with VHF, UHF, Dual Band and 2.4 GHz applications. Includes antenna only and attaches to the standard NMO ¾ inch mount–sold separately.

RDD5423A 150-155 MHz Unity Gain Phantom Elite, White
RDD5424A 150-155 MHz Unity Gain Phantom Elite, Black
RDE5797A 450-470 MHz 3dB Phantom Elite, White
RDE5798A 450-470 MHz 3dB Phantom Elite, Black
RDF5723A 806-866 MHz 3dB Phantom Elite, White
RDF5724A 806-866 MHz 3dB Phantom Elite, Black

PHANTOM®

Phantom true field diversity design ensures uninterrupted video and data transmissions in urban canyons and rural drop off areas 3dB MEG gain outperforms a 3dB whip in many applications. For mobile and fixed applications with NMO or permanent N female mount–sold separately.

Dual Band Antennas
RDG4479A 821-869/1850-1990 MHz 3dB Dual Band Phantom, White
RDG4480A 821-869/1850-1990 MHz 3dB Dual Band Phantom, Black

Single-Band Antennas
RAD4209A 142-160 MHz Tunable Phantom NMO mtg 60W, Black
RAD4210A 142-160 MHz Tunable Phantom NMO mtg 60W, White
RAD4207A 150-168 MHz Tunable Phantom NMO mtg 60W, White
RAE4167A 450-470 MHz 3dB Phantom NMO ¾ Mount, White
RAE4168A 450-470 MHz 3dB Phantom NMO ¾ Mount, Black
RDE5514A 450-470 MHz 3dB Phantom with ⅜ stud permanent mount N female, White
RAF4220A 806-866 MHz 3dB Phantom NMO ¾ Mount, White
RAF4217A 821-896 MHz 3dB Phantom NMO ¾ Mount, White
LAIRD TECHNOLOGIES ANTENNAS

A-BASE
Gold-plated push-pin contact provides the most corrosion resistance and power transfer over time. Longer tuning ferrule allows for greater freedom in frequency adjustment without trimming. Includes antenna only and attaches to the standard NMO 3/4 inch mount—sold separately.

- RDD5410A 150-174 MHz 1/4 Wave Chrome Center Tunable A-Base Whip
- RDD5408A 150-174 MHz 1/4 Wave Chrome Center Tunable A-Base Whip with Spring
- RDF5433A 806-896 MHz 3dB Chrome Open Collinear A-Base
- RDD5553A 118-896 MHz 1/4 Wave Chrome Tunable A-Base

QUARTERWAVE ANTENNAS
Quarterwaves are built with gold plated contacts for corrosion resistance and best power transfer. Stand up™ grommet will not degrade over time. High spring temper rod stays straighter longer. Stainless steel corona ball stays on the rod without dissimilar metal interaction. Includes antenna only and attaches to the standard NMO 3/4 inch mount—sold separately.

- RAD4229A 162-174 MHz 1/4 Wave Stainless Antenna
- RDD5227A 152-162 MHz 1/4 Wave Stainless Antenna
- RDD5228A 152-162 MHz 1/4 Wave Black Antenna
- RDE5485A 450-470 MHz 1/4 Wave Stainless Antenna
- RDE5486A 450-470 MHz 1/4 Wave Black Antenna
- RDF5436A 806-896 MHz 1/4 Wave Stainless Antenna
- RDF5439A 806-896 MHz 3dB Stainless Open Coil Flexible Antenna
- RDF5437A 806-896 MHz 1/4 Wave Black Antenna
- RDF5438A 806-896 MHz 3dB Black Open Coil Flexible Antenna
- RDF5617A 118-970 MHz 1/4 Wave Stainless Field Tunable Antenna
- RDF5657A 118-970 MHz 1/4 Wave Black Field Tunable Antenna

MOBILE LOAD COIL
Low loss coil form adds dimensional and frequency stability. ABS material is injection molded around solid brass inserts to create a housing that is virtually leak proof. All silver solder joints ensure electrically and mechanically secure connections. All NMO mountable. Includes antenna and attaches to the standard NMO 3/4 inch mount—sold separately.

- RDD5229A 132-525 MHz VHF Broadband 1/4 Wave with spring
- RDD5230A 144-174 MHz 1/4 Wave No ground Plane 2.4dB
- RDD5413A 144-174 MHz 1/4 Wave No ground Plane 2.4dB with spring
- RDD5231A 144-174 MHz 3dB Base Loaded 1/4 Wave
- RDD5414A 144-174 MHz 3dB Base Loaded 1/4 Wave with spring
- RDE5487A 450-470 MHz 3dB Base Loaded 1/4 Wave
- RDE5488A 450-470 MHz 5dB 1/4 Wave Closed Collinear
- RDE5785A 450-470 MHz 5dB Closed Collinear with spring
- RDF5440A 806-896 MHz 3dB Base Loaded 1/4 Wave
- RDB4499A 42-48 MHz Base Loaded Wideband
Laird Technologies land mobile radio antennas are the industry standard for public safety agencies, fleet and transportation networks. From 27 MHz to 5.8 GHz, Laird Technologies designs and manufactures a wide variety of mobile antennas with a multitude of mounting options. Multiple cable options, connectors, mounts and bracket products provide a complete antenna system.

MOBILE MOUNTING EQUIPMENT

All brass construction and gold plated contact design ensure the most corrosion resistance and best power transfer available. Silver soldered ground lug and contact virtually eliminate RF noise or static.

RRDN4927A ¾ inch Hole brass NMO Mount with 17’ RG58A/U cable, no connector
3G80384M48 ¾ inch Hole brass NMO Mount with 17’ RG58U cable, mini-UHF connector (not attached)
RRDN5461A ¾ inch Hole brass NMO Mount with 17’ RG58A/U cable, mini-UHF connector (not attached)
RRDN5628A ¾ inch Hole brass NMO Mount with 17’ Teflex–no connector
RRDN6063A ¾ inch Hole brass NMO Mount with 17’ RG58A/U cable, PL259 connector (not attached)
RRDN6945A ¾ inch Hole brass NMO Mount with 17’ RG58U cable, PL259 connector (not attached)
RRDN6946A ¾ inch Hole brass NMO Mount with 17’ RG58U cable, no connector
RRDN6798A ¾ inch or ¾ inch Hole (up to 1/2 inch thick) plate mount with 17’ RG58A/U cable, no connector
RRDN6847A Mobile-to-Base converter for VHF and UHF, N terminated
RRDN8848A Quarterwave Chrome Rain Cap for NMO Mount
RRDN8849A Quarterwave Black Rain Cap for NMO Mount
RRDN7132A Chrome Quarterwave Nut
RAN4049A ¾ inch Hole Mount O-ring 6-pack
RAN4052A ¾ inch Hole Brass Mount. For use with RG58 size cable (not included) no connector
### Mobile Antennas

A communication system is only as good as the mobile antenna used to transmit and receive—so whenever lives are on the line Motorola Original accessories should be the go-to choice.

<table>
<thead>
<tr>
<th>VHF Antennas</th>
<th>MHz</th>
<th>Gain</th>
</tr>
</thead>
<tbody>
<tr>
<td>HAD4006A</td>
<td>136-144</td>
<td>1/4 Wave</td>
</tr>
<tr>
<td>HAD4007A</td>
<td>144-150.8</td>
<td>1/4 Wave</td>
</tr>
<tr>
<td>HAD4008A</td>
<td>150.8-162</td>
<td>1/4 Wave</td>
</tr>
<tr>
<td>HAD4009A</td>
<td>162-174</td>
<td>1/4 Wave</td>
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<tr>
<td>HAD4017A</td>
<td>146-174</td>
<td>1/4 Wave</td>
</tr>
<tr>
<td>HAD4022A</td>
<td>136-174</td>
<td>3.0 dB</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>UHF Antennas</th>
<th>MHz</th>
<th>Gain</th>
</tr>
</thead>
<tbody>
<tr>
<td>HAE6012A</td>
<td>380-433</td>
<td>1/4 Wave</td>
</tr>
<tr>
<td>HAE6010A</td>
<td>380-433</td>
<td>3.5 dB Gain</td>
</tr>
<tr>
<td>HAE4012A</td>
<td>470-495</td>
<td>3.5 dB Gain</td>
</tr>
<tr>
<td>HAE4011A</td>
<td>450-470</td>
<td>3.5 dB Gain</td>
</tr>
<tr>
<td>HAE6011A</td>
<td>380-433</td>
<td>5.0 dB Gain</td>
</tr>
<tr>
<td>RAE4014ARB</td>
<td>450-470</td>
<td>5.0 dB Gain</td>
</tr>
<tr>
<td>HAE6013A</td>
<td>380-470</td>
<td>Wideband 2.0 dB</td>
</tr>
<tr>
<td>HAE4004A</td>
<td>470-512</td>
<td>1/4 Wave</td>
</tr>
<tr>
<td>HAE4013A</td>
<td>494-512</td>
<td>3.5 dB Gain</td>
</tr>
<tr>
<td>RAE4016ARB</td>
<td>494-512</td>
<td>5.0 dB Gain</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>700-800 MHz Antennas</th>
<th>MHz</th>
<th>Gain</th>
</tr>
</thead>
<tbody>
<tr>
<td>HAF4013A</td>
<td>762-870</td>
<td>3 dB Low Profile</td>
</tr>
<tr>
<td>HAF4014A</td>
<td>762-870</td>
<td>3 dB Elevated Feed</td>
</tr>
<tr>
<td>HAF4016A</td>
<td>762-870</td>
<td>1/4 Wave Thru-hole Mount</td>
</tr>
<tr>
<td>HAF4017A</td>
<td>762-870</td>
<td>3 dB Collinear Thru-hole Mount</td>
</tr>
<tr>
<td>HAF4015A</td>
<td>762-870</td>
<td>3 dB Motorcycle Thru-hole Mount</td>
</tr>
<tr>
<td>HAF4018A</td>
<td>762-870</td>
<td>Low Profile Motorcycle</td>
</tr>
</tbody>
</table>

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STREAMLINED SOLUTIONS FOR A SINGLE RADIO OR ENTIRE FLEET

Every Motorola two-way radio can be customized to suit your current and future communication needs. All Motorola Original accessories are built to the highest standards of quality, and are specially engineered to perfectly complement your radio's performance. So don't wait any longer to increase your productivity with optimum two-way radio performance.

Contact us today to enhance your two-way radio capabilities with high-performance Motorola Original accessories. For more information on our two-way radios and accessories, please visit us on the web at: www.motorolasolutions.com or access our global contact directory at: www.motorolasolutions.com/enterprisemobility/contactus