





Motorola Original™

Two-Way Portable and Mobile

Accessory and Battery Catalog



HT750/HT1250/
HT1250 • LS/HT1250 • LS+/
HT1550 • XLS
MTX850/MTX8250/
MTX850 • LS/MTX950/
MTX9250
HT 1000, JT 1000,
MTX 8000, MTX 9000
VISAR
TC3000/TR3000
CDM750, CDM1250, CDM1550,
CDM1550 • LS, CDM1550 • LS+
MCS 2000
MAXTRAC
MARATRAC

**SPECTRA** 

EX500/EX600/EX600 • XLS

#### Why Buy From Us? Here are some reasons:

- Diverse Aftermarket Product Line
- Motorola Original Accessories
- Audio Accessories
- Antennas
- Batteries
- Carrying Cases
- Chargers
- Same Day Ship
- Replacement Parts
  - Proprietary and Non Proprietary
- Module Exchange Program
- Cosmetic Options
- Test Equipment
- Shop Supplies
- Site Equipment
- Radio Support Center Solutions
  - On Demand Repair
  - Radio Repair Bank
  - Depot Direct
- Express Service Plus (ESP)
- Value Added Special Program

For quality products, optimum performance, great value and support solutions, count on Motorola Radio Products and Services Division.



### THE MALCOLM BALDRIGE NATIONAL QUALITY AWARD. SYMBOL OF EXCELLENCE!



The Malcolm Baldrige National Quality Award is the United States Premier award for business excellence and quality achievement. Named after the Secretary of Commerce under President Ronald Reagan, the Malcolm Baldrige Award has been granted to just 49 organizations since its inception in 1984. We have been honored twice with the award:

1988– Motorola Inc. 2002–Motorola CGISS\*

Receiving a Baldrige Award gives our customers third-party validation that we are dedicated to improving business performance. The end result is consistent high-quality, high value products and services – from people who are truly committed to excellence.



<sup>\*</sup>Motorola Commercial, Government and Industrial Solutions Sector (CGISS) is a leading provider of integrated communications and information solutions with 65 years of experience in meeting the safety and security mission-critical requirements of of public safety, public service, government and enterprise customers worldwide.



### MALCOLM BALDRIGE AWARD: BEST PRACTICES

Choosing a communications/ information solution is a significant investment and we want our customers to be confident that selecting Motorola is the best decision they can make.

We hope our customers view the Baldrige recognition as further evidence of our commitment to constantly improving the way we serve them.

Companies that earn the Baldrige Award constantly seek excellence and improvement in all aspects of their business. The end result to customers is consistent high-quality, high value products and services from people who are truly committed to:

- Quality products that meet customer's challenging needs
- Outstanding customer service
- Best-in-class delivery and implementation performance
- Significant value

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#### Ways to Order



1-800-422-4210 U.S. Federal Government customers call: 1-800-826-1913 TTY: 1-866-522-5210



1-800-622-6210 U.S. Federal Government customers fax: 1-800-526-8641



<u>www.motorola.com/</u> <u>businessonline</u>

#### Support



1-800-227-6772





1-800-969-6680

1-888-736-8567



Expert Series

Both radios offer exceptional features and functionality for plenty of communication power, including:

- Comfortable, ergonomic design
- X-Pand™ Audio Enhancement
- Precision controlled signaling features
- Priority scanning capabilities
- Easy reprogramming capabilities



### Audio Accessories

#### REMOTE SPEAKER MICROPHONES (RSM)

JMMN4073A\* Remote Speaker Microphone with 2.5mm Audio Jack

The Remote Speaker Microphone is a water-resistant compact unit that allows the user to talk and listen without removing the radio from the belt case or charger. It has a coiled cord push-to-talk switch and clothing clip on the back cover.

#### RSM ACCESSORY

PMLN4393A Flexible Ear Receiver with 2.5mm Audio Plug — for use with Remote Speaker Microphone JMMN4073A



RECEIVE ONLY EARPIECE (1-WIRE)

BDN6664A\* Beige

BDN6665At\* Beige

BDN6726A\* Black

BDN6727At\* Black

RECEIVE ONLY EARPIECE WITH VOLUME CONTROL (1-WIRE)

BDN6666At\* Beige

BDN6728A\* Black

EARPIECE WITH MICROPHONE AND PUSH-TO-TALK COMBINED

(2-WIRE)

BDN6667A\* Beige

BDN6669At\* Beige

BDN6729A\* Black

BDN6731A \* Black

EARPIECE WITH MICROPHONE AND PUSH-TO-TALK SEPARATE

BDN6670At\* Beige

BDN6730A\* Black

BDN6732A t \* Black

(3-WIRE) BDN6668A\* Beige

Surveillance accessories allow the user to privately receive communications with the earpiece and are ideal when environments require discreet communications. The following surveillance accessories require the PMLN4455A (3.5mm adapter jack) that attaches to the radio, unless being used with speaker microphone.



JMMN4073A



SURVEILLANCE KIT REPLACEMENT ACCESSORIES

BDN6668A\* 3.5 mm Jack Adapter with Quick

Disconnect Latch

5080371E73 Standard Rubber Eartip, pack of 25,

Beige

5080371E75 Standard Rubber Eartip, pack of 25,

Black

<sup>†</sup> Extra Loud Earpiece (exceeds OSHA limits)

<sup>\*</sup> Intrinsically safe

# Audio Accessories



NTN8370A



#### **NOISE KITS**

NTN8370A Extreme Noise Kit, included 2 foam earplugs for loud environments

and provides 24dB of noise reduction

NTN8371A Low Noise Kit, includes rubber eartip for low noise environments;

does not provide hearing protection

5080384F72 Replacement Foam Plugs; for use with NTN8370A (pack of 50)

5080371E73 Replacement Standard Beige Rubber Eartips; for use with NTN8371A

(pack of 25)

5080371E75 Replacement Standard Black Rubber Eartips for use with NTN8371A

(pack of 25)

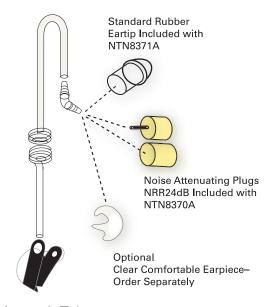
This lightweight translucent tube attaches to Motorola surveillance accessories to provide additional flexibility and comfort. Clothing clip prevents the accessory from being pulled from the ear due to body movement or head rotation.

#### CLEAR COMFORTABLE EARPIECES

<i>RLN4760A</i>	Small Custom Earpiece, Right Ear
RLN4763A	Small Custom Earpiece, Left Ear
<i>RLN4761A</i>	Medium Custom Earpiece, Right Ear
RLN4764A	Medium Custom Earpiece, Left Ear
<i>RLN4762A</i>	Large Custom Earpiece, Right Ear
RLN4765A	Large Custom Earpiece, Left Ear

The Clear Comfortable Earpiece forms to the inside of the ear and is perfect for low noise environments. Compatible with the NTN8371A, clear acoustic tube assembly, and surveillance kits (1, 2, 3 wire). The earpiece is made of easy-to-clean chemically inert, hypo-allergenic material. The following 3 items are required for this product:

- Clear Comfortable Earpiece
- Clear Acoustic Tube Assembly (NTN8371A)
- Surveillance Kit



Acoustic Tube with Earphone

## Audio Accessories

#### COMPLETELY DISCREET EARPIECE

RLN4922A Completely Discreet Earpiece Kit; includes Wireless Earpiece, Inductive

Neckloop, 6 Spare Batteries and 5 Spare Ear Wax Guards

RLN4919A Ear Wax Guards, 5 per pack RNN4005A 1.4V Battery, 6 per pack



RI N4922A

Remain discreetly in touch with this miniaturized receiver. All messages received through the user's two-way radio are inductively relayed to the Wireless Earpiece in the user's ear. Inductive Neckloop is easily hidden under the user's clothing for covert operations. Neckloop attaches to the user's Motorola Surveillance Kit, providing completely discreet two-way communications. Security operatives, public safety officials, and private investigators can communicate with ease without any visible equipment. Small as it is, it offers a full range of audio functions including automatic squelch, automatic gain control and noise filtering. Must be used in conjunction with a Motorola Surveillance Kit. Just remove the earpiece on any standard 2- or 3-wire Surveillance Kit and plug in the Neckloop for completely discreet communication.

#### FLEXIBLE EAR RECEIVER

BDN6719A Ear Receiver, Black (requires PMLN4455A audio adapter)

7580372E11 Replacement Foam Ear Cushion

The Flexible Ear Receiver contains a flexible ear-loop and speaker and rests external to the ear.

#### EAR MICROPHONE SYSTEM (EMS)

BDN6768A\* Standard Ear Microphone (for noise levels up to 95dB), Black,

requires JMMN4064A

BDN6769A\* Standard Ear Microphone (for noise levels up to 95dB), Beige,

requires JMMN4064A

BDN6770A\* High Noise Level Ear Microphone (up to 105dB), Gray,

requires JMMN4064A

0180358B38\* Remote Ring PTT Switch

0180300E83\* Remote Body PTT Switch

0180305J46 Training CD for Ear Mic and Temple Transducer

JMMN4064A\* PTT or Voice-Activated Interface Module

This compact unit picks up the voice through bone vibrations in the ear canal. The miniature earpiece leaves hands free and face unobscured when worn by rescue and hazard protection personnel, who still retain the ability for direct hearing and speaking. For personnel required to wear breathing apparatus, communications with protective masks are as clear as communications without. And its high speech clarity under noisy environments makes it ideal for high noise environments.



JMMN4064A



# Audio Accessories



#### PELLET STYLE EARPIECES

PMLN4519A\* Single earbud with Microphone and Push-to-Talk (requires 3.5mm audio adapter)

#### ACCESSORY AUDIO ADAPTER

PMLN4455A\* Accessory Audio Adapter with 3.5mm Plug

The Accessory Audio Adapter allows qualified Audio Accessories with 3.5mm plug to be used with the EX Series Radios.

#### LIGHTWEIGHT HEADSETS

NMN6246B\* Ultralight Headset with Boom Microphone and In-Line PTT

(Requires PMLN4455A audio adapter)

JMMN4006A\* Single Muff, Adjustable Lightweight Headset with Boom

Microphone and In-Line PTT

NMN6245A\* Single Muff, Adjustable Lightweight Headsets with Boom

Microphone and In-Line PTT, Earbud Style

RLN5590A Lightweight Headset with Boom Microphone

Allow for high clarity, discreet, two-way communications while adding the comfort necessary for extended wear in moderate noise environments.





JMMN4066A

RLN5590A

#### TEMPLE TRANSDUCER

PMLN4585A\* Temple Transducer. Compatible with EX500, EX600 and EX600 • XLS

two-way radios

0180305J46 Training CD for Temple Transducer and Ear Microphone System

The remarkable Temple Transducer headset lets EX Series two-way radio users listen to radio transmissions via their temples, not their ears. This lightweight, behind-the-head style headset features two temple receivers that convert audio into sound vibration, and transmits it directly into the inner ear. It's ideal for a wide range of users, including police on bicycle or mounted patrol, manufacturing, construction workers and entertainment industry personnel.

Designed for all-day comfort with a customizable headband and rubber covers on each transducer. In high noise environments, users can simply use foam earplugs as needed while the head-band remains in place. In standard noise environments, both of the user's ears are left uncovered to ensure all necessary external sounds are heard. Each model includes a noise-canceling boom microphone with replaceable windscreen, plus an in-line PTT with clothing clip. (FM approved.)

<sup>\*</sup>Intrinsically safe

### Audio Accessories

#### RACING HEADSET

RMN5015A Racing Headset; requires Adapter Cable RKN4093A; noise reduction

rating = 24dB

RKN4093A Radio Adapter Cable

Motorola is the official wireless equipment supplier of CART® (Championship Auto Racing Teams), so whether your playing field is a racetrack, construction site or other challenging environment, you can count on this racing headset for superior comfort and dependable operation.



RMN5015A



BDN6645B

#### HEAVY DUTY HEADSETS

BDN6645A Push-To-Talk Headset with Boom Microphone; requires Adapter

Cable RKN4093A; noise reduction rating = 24dB

RKN4093A Radio Adapter Cable

Heavyduty Headsets include Noise Cancelling Boom Microphones and can be worn with or without a hardhat. The Push-To-Talk switch is located on the earcup.



#### GENERAL ACCESSORIES

JMLN4638A Accessory Dust Cover — protects the audio side connector RLN4890A Assistive Turning Knobs

If your job requires you to wear large gloves, or if you have mobility or dexterity limitations, you will appreciate this added feature; set of two specially designed knobs for volume control and channel changing

# Carrying Accessories



PMLN4421B

#### EX500 CARRYING CASES

PMLN4421B Soft Leather Carry Case with fixed Swivel Clip — The case protects

the radio while allowing audio to be heard clearly

PMLN4471A Hard Leather Carry Case with Swivel and D-Rings

PMLN4470A Nylon Case with Belt Loop and D-Rings

#### EX600 CARRYING CASES

PMLN4520A Hard Leather Carry Case with Swivel and D-Rings

PMLN4521A Soft Leather Carry Case with fixed Swivel Clip and D-Ring

A variety of carrying accessories are available for your comfort and convenience. The Carrying Cases are available in sizes to fit your radio and battery and permit audio to be heard clearly.

#### CARRYING ACCESSORIES

JMZN4023A Plastic Carry Holster with Swivel Belt Clip, Lightweight Carry Holster

provides convenient means for carrying the radio; the Swivel Belt Clip provides the ability to rotate the radio to a comfortable position

JMZN4020A Radio Handstrap, attaches to the radio allowing it to be worn around

the wrist

*4200865599* 1.75" wide leather belt for all models

NTN5243A Adjustable black carrying strap attaches to "D" ring on case

#### WATERPROOF BAG

HLN9985B Waterproof Bag, includes large Carrying Strap



JMZN4023A

# Carrying Accessories



#### HLN6602A

#### **CHESTPACK**

HLN6602A Universal Chest Pack with Radio Holder

and Velcro Secured Pocket

1505596Z02 Replacement Strap for HLN6602A

#### BREAK-A-WAY CHEST PACK

RLN4570A Break-A-Way Chest Pack 1505596Z02 Replacement Strap for RLN4570A

All of the same features as the original Chest Pack (HLN6602A) plus break-a-way tabs that allow the entire pack to be pulled off with approximately 10 lbs. of pressure. Perfect for railroads, manufacturing locations, construction sites, and anywhere safety is a concern.





#### $RadioPAk^{TM}$

RLN4815A RadioPAk™ Radio/Utility Case

4280384F89 Universal RadioPAk™ Belt Lengthener; fits waists larger than 40"

It's different from all other holders or cases: more comfortable, more useful and more stylish. Worn around the waist, it holds two-way, iDEN portables or cellular phones at hand. Includes a separate  $6"\times 8"$  zippered pouch for other on-the-job necessities. Adjustable nylon weave belt; fits both men and women.

# Batteries, Antennas & Chargers











JMNN4023AR

PMAD4013A

NAF6483AR

NAD6502AR

#### **BATTERIES**

#### PREMIUM LITHIUM ION (Li-ion)

JMNN4023AR 1000 mAh, 7.5V (Slim) JMNN4024BR 1300 mAh, 7.5V

#### PREMIUM NICKEL METAL HYDRIDE (NIMH)

JMNN4025AR 700 mAh, 7.5V, Intrinsically Safe

Motorola Original Batteries are ruggedly designed for lasting durability and sytems tested with Motorola two-way radios to ensure optimum performance. We offer various chemistry and capacity alternatives, allowing the user to select the ideal battery for his or her needs.

#### **ANTENNAS**

#### STUBBY ANTENNAS

PMAD4012A VHF 9cm Stubby Antenna, 136-155 MHz PMAD4025A VHF 9cm Stubby Antenna, 150-161 MHz PMAD4013A VHF 9cm Stubby Antenna, 155-174 MHz PMAE4002A UHF 9cm Stubby Antenna, 403-430 MHz PMAE4006A UHF 9cm Stubby Antenna, 465-490 MHz 8504762J08 UHF 9cm Stubby Antenna, 438-470 MHz

Stubby Antennas are ideal when the radio is worn on the belt because the short antenna is non-obtrusive. These helical rugged antennas feature a capless sheath that allows for maximum flexiblity.

#### ANTENNAS CONT'D

#### **FLEXIBLE WHIP ANTENNAS**

8504762J01 VHF Whip Antenna, 136-155 MHz PMAD4023A VHF Whip Antenna, 150-161 MHz 8504762J02 VHF Whip Antenna, 155-174 MHz NAE6483AR UHF Flexible Whip Antenna, 403-512 MHz NAD6502AR VHF Whip Antenna, 146-174 MHz NAD6579A VHF Whip Antenna, 148-161 MHz

Flexible Whip Antennas have a one-piece finish, steel core, and spiral wound conductor for optimal radiation characteristics. Provides more comfort when the radio is worn on the belt.

#### SINGLE AND SIX UNIT CHARGERS

AAHTN3000D 120V Single Unit Rapid Rate Charger (US plug) AAHTN3003D 120V Six Unit Rapid Rate Charger NLN7967A Wall Mount Kit for Six Unit Charger

Single and multi-unit chargers can rapidly charge batteries on or off the radio in one to three hours. These tri-chemistry chargers feature rapid, trickle, and maintenance modes. The maintenance mode "revert to rapid" feature ensures batteries remain fully charged even when left on the charger for extended periods of time. Multi-unit chargers can be wall or rack mounted and are ideal for multi-shift operations. All chargers are specifically designed to meet the requirements of batteries manufactured by Motorola.

# Chargers & Accessories





#### BATTERY OPTIMIZING SYSTEM II (BOS II)

WPLN4124AR BOS II, Four Station, 100-240VAC

(US line cord)

WPLN4125AR BOS II, Four Station, 100-240VAC

(UK/Euro line cords)

No other battery analyzer matches the speed, accuracy, and versatility of the Battery Optimizing System II. Ideal for large fleet, public safety, and all other users who rely on their battery performance. Now with increased power, more sophisticated programming options, and easier to use navigation paths, optimizing your batteries was never easier. Key features include:

- Support for NiCd, NiMH, Li-ion, and SLA batteries
- 100-watt Power Supply programmable from 100 mA to 4 Amps per station
- Interchangeable Adapters accommodate all major brands
- Includes a variety of User Programs and allows for customizable programming
- Proprietary Recondition Cycle restores NiCd and NiMH batteries
- Increased processing power and testing resolution
   — including a Three-minute Quicktest that
   measures the batteries' State of Health (SoH)
- Printer Output for reports and labels
- Three-year Warranty

#### **BOS II BATTERY ADAPTER**

RL-77255 Adapter Plates

#### BATTERY MAINTENANCE SYSTEMPLUS (BMSPLUS)

#### INCREASE THE USEFUL LIFE OF YOUR BATTERIES.

 WPLN4079BR
 Six-Station, 110V AC, 50/60 Hz

 WPLN4080BR
 Six-Station, 230V AC, 50/60 Hz

WPPN4085AR BMS<sup>Plus</sup> field Upgrade Kit for WPLN4079AR, WPLN4080AR and

WPLN4081AR; allows these units to support Li-ion battery

chemistries

NDN4005B Three-Station, 110V AC, 50/60 Hz (does not support Li-ion or

3-cell batteries)

NDN4006B Three-Station, 230V AC, 50/60 Hz (does not support Li-ion or

3-cell batteries)

Using interchangeable battery adapters (sold separately), the BMS<sup>Plus</sup> is capable of charging and discharging, analyzing, conditioning, and cycle testing batteries. It supports NiCd, NiMH, and Li-ion battery chemistries and tracks battery voltage and capacity (mAh). The BMS<sup>Plus</sup> offers a 3-year warranty. Its easy-to-use design supports hundreds of 2-way, cellular, and camcorder batteries. Includes serial printer\* port (RS-232) \*Compatible with the STAR Micronics SP200 Series printers (and other printers with STAR emulation); available from any STAR Micronics distributor.

#### BMSPLUS ADAPTERS

WPPN4079AR Adapter compatible with both NiCd and NiMH batteries WPPN4080AR Adapter compatible with NiCd, NiMH, and Li-ion batteries,

requires Li-ion capable BMS<sup>Plus</sup>



These practical radios increase productivity by keeping users communicating

#### HT750

- Small, lightweight and durable
- 12.5/25 kHz Switchable Channel Spacing

#### HT1250

- X-Pand<sup>™</sup> Voice Compression
- Dual Priority Scan
- 128 Channels

#### HT1550

- 7 Programmable Buttons
- Telephone Interconnect
- · Voice Storage



### Audio Accessories

#### Remote Speaker Microphones (RSM)

AAHMN9052E\* Remote Speaker Microphone

AAHMN9053E\* Noise-cancelling Remote Speaker Microphone with 3.5mm

Audio Jack

HKN9055A Replacement Cable for Remote Speaker Microphone

The Remote Speaker Microphone is a water-resistant compact unit that allows the user to talk and listen without removing the radio from the belt, case or charger. It has a coiled cord, push-to-talk switch and clothing clip on the back cover.



#### Public Safety Speaker Microphones (PSM)

AAHMN9054C\* UHF Public Safety Speaker Microphone (includes UHF 450-470

MHz Antenna, Swivel Clip, Volume Toggle Switch, and 3.5mm

Earpiece Jack)

AAHMN9057C\* VHF Public Safety Speaker Microphone (includes VHF 148-174

MHz Antenna, Swivel Clip, Volume Toggle Switch, and 3.5mm

Earpiece Jack)

Public Safety Speaker Microphones are specially designed to help cancel ambient noise during transmission. Coverage is increased with included antenna.

#### RSM and PSM Accessories

AARLN4885B\* Receive-Only Earbud with Black Coiled Cord and 3.5mm Adapter,

for use with HMN3158A, AAHMN9053E, AAHMN9054C and

AAHMN9057C

RLN4941A\* Receive-Only Earpiece, with 3.5mm Plug, Translucent Tube and

Rubber Eartip for use with HMN3158A, AAHMN9053E,

AAHMN9054C and AAHMN9057C

WADN4190A\* Flexible Ear Receiver with 3.5mm Adapter for use with

HMN3158A, AAHMN9053E, AAHMN9054C and AAHMN9057C

## Audio Accessories



HLN3156A

### REMOTE SPEAKER MICROPHONE WITH BLUETOOTH™ WIRELESS TECHNOLOGY

HLN3156A Wireless Remote Speaker Microphone Kit; includes Remote Speaker

Microphone with Bluetooth Wireless Technology (HMN3158A) and Radio Adapter (HHLN4125A); Adapter-capable Battery (HNN9003AR)

is required but sold separately

HMN3158A Remote Speaker Microphone with Bluetooth Wireless Technology;

requires Radio Adapter (HHLN4125A) and Adapter-capable Battery

(HNN9003AR)

HHLN4125A Radio Adapter with Bluetooth Wireless Technology HNN9003AR Adapter-Capable NiMH Battery, 1200 mAh, 7.5v

RLN5321A Carry Case for Remote Speaker Microphone with Bluetooth

Wireless Technology

Work and communicate in a cord-free environment. Motorola is on the front line of Bluetooth Wireless Technology by providing users of two-way radios the first Wireless Remote Speaker Microphone. This Wireless Remote Speaker Microphone communicates to a two-way radio through an adapter equipped with Bluetooth Wireless Technology and an Adapter-capable Battery that is attached to a Motorola two-way radio. The user simply turns on the radio and the Wireless Remote Speaker Microphone — the Bluetooth Technology does the rest! The Adapter and Remote Speaker Microphone with Bluetooth Wireless Technology "connect" and link to each other wirelessly. Compatible with Motorola HT750 and HT1250 radios.



RLN5009A

#### **MICJACKETS**

RLN5008A MicJacket, compatible with AAHMN9052E

Remote Speaker Microphone

RLN5009A MicJacket, compatible with AAHMN9053E

Remote Speaker Microphone

RLN5010A MicJacket, compatible with AAHMN9054C

and HMN9057C Public Safety Speaker

Microphones

MicJackets provide speaker microphone users with a way to further protect the "head" of their microphone from dust, dirt, metal particles, sweat, body oils and other on-the-job grime. MicJackets also allow the user to handle or interact with the speaker microphone in a more hygienic way.

<sup>\*</sup>Intrinsically safe

### Audio Accessories



### SURVEILLANCE KITS RECEIVE ONLY EARPIECE (1-WIRE)

AARMN4021A\* Beige AARMN4028A\* Black

#### EARPIECE WITH MICROPHONE AND PUSH-TO-TALK COMBINED (2-WIRE)

AARMN4022A\* Beige AARMN4029A\* Black



ENMN4017A\* Beige EMNM4014\* Black

Surveillance accessories allow the user to privately receive communications with the earpiece and are ideal when environments require discreet communications. Rubber Eartip, pack of 25, Black



ENMN4017A

### SURVEILLANCE KITS WITH EXTENDED-WEAR COMFORT EARPIECE

### COMFORT EARPIECE WITH MICROPHONE AND PUSH-TO-TALK COMBINED (2-WIRE)

RLN5316A Comfort Earpiece with Microphone and PTT combined, (2-wire kit). Beige RLN5315A Comfort Earpiece with Microphone and PTT combined, (2-wire kit), Black

These kits include a comfort earpiece with a rubber eartip and clear comfotable acoustic tube. Users hear transmissions clearly, while the cler tube provides a discreet appearance.



5080371E73 Standard Rubber Eartip, pack of 25, Beige 5080371E75 Standard Rubber Eartip, pack of 25, Black





### Audio Accessories



NTN8370A



#### NOISE KITS

NTN8370A Extreme Noise Kit, includes 2 Foam Earplugs for loud environments;

provides 24dB of noise reduction

NTN8371A Low Noise Kit, includes Rubber Eartip for low noise environments;

does not provide hearing protection

5080384F72 Replacement Foam Plugs; for use with NTN8370A (pack of 50)

5080371E73 Replacement Standard Beige Rubber Eartips; for use with

NTN8371A (pack of 25)

5080371E75 Replacement Standard Black Rubber Eartips; for use with

NTN8371A (pack of 25)

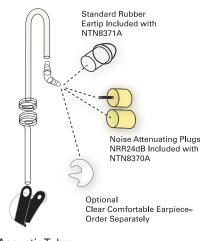
This lightweight translucent tube attaches to Motorola Surveillance Kits to provide additional flexibility and comfort. Clothing clip prevents the accessory from being pulled from the ear due to body movement or head rotation.

#### CLEAR COMFORTABLE EARPIECES

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

The Clear Comfortable Earpiece forms to the inside of the ear and is perfect for low noise environments. Compatible with the NTN8371A, Clear Acoustic Tube Assembly, and most Surveillance Kits (1, 2 and 3-wire). This Earpiece is made of easy-to-clean chemically inert, hypo-allergenic material. The following 3 items are required for this product:

- Clear Comfortable Earpiece
- Clear Acoustic Tube Assembly (NTN8371A)
- Surveillance Kit



Acoustic Tube with Earphone

\*Intrinsically safe

### Audio Accessories

#### COMPLETELY DISCREET EARPIECE

RLN4922A Completely Discreet Earpiece Kit; includes Wireless Earpiece,

Inductive Neckloop, 6 Spare Batteries and 5 Spare Ear Wax Guards

RLN4919A Ear Wax Guards, 5 per pack RNN4005A 1.4V Battery, 6 per pack

Remain discreetly in touch with this miniaturized receiver. All messages received through the user's two-way radio are inductively relayed to the Wireless Earpiece in the user's ear. Inductive Neckloop is easily hidden under the user's clothing for covert operations. Neckloop attaches to the user's Motorola Surveillance Kit, providing completely discreet two-way communications. Security operatives, public safety officials, and private investigators can communicate with ease without any visible equipment. Small as it is, it offers a full range of audio functions including automatic squelch, automatic gain control and noise filtering. Must be used in conjunction with a Motorola Surveillance Kit. Just remove the earpiece on any standard 2- or 3-wire Surveillance Kit and plug in the Neckloop for completely discreet communication.



#### FLEXIBLE EAR RECEIVER

ENMN4013A\* Flexible Ear Receiver
7580372E11 Replacement Foam Ear Cushions

The Flexible Ear Receiver contains a flexible ear-loop and speaker and rests external to the ear. Receive only.



## Audio Accessories



BDN6641A

#### EAR MICROPHONE SYSTEM (EMS)

BDN6677A\* Ear Microphone for Standard Noise Levels (up to 95dB), Black
BDN6678A\* Ear Microphone for Standard Noise Levels (up to 95dB), Beige
BDN6641A\* Ear Microphone for High Noise Levels (up to 105dB)
0180305J46 Training CD for Ear Mic and Temple Transducer

#### INTERFACE MODULES FOR EAR MICROPHONE SYSTEM

AARMN4044A\* Push-To-Talk Only Interface Module

AARMN4045A Push-To-Talk or Voice-Activated Interface Module (VOX

operational only on conventional channel)

This compact unit picks up the voice through bone vibrations in the ear canal. The miniature earpiece leaves the hands free and face unobscured when worn by rescue and hazard protection personnel, who still retain the ability for direct hearing and speaking. For personnel required to wear breathing apparatus, communications with protective masks are as clear as communications without. And its high speech clarity under noisy environments makes it ideal for high-noise environments. Available in PTT or Voice-Activated (VOX). Interface Module required.

## Audio Accessories

#### OPTIONAL ACCESSORIES FOR EAR MICROPHONE SYSTEM

UI IIUNAL A	COLOGOTILO I OTI LATI WITOTIOT TIONE OTOTEI
0180358B38*	Push-To-Talk Ring Switch
0180300E83*	Push-To-Talk Body Switch
0180300E25	Earguard with Adjustable Loop; secures ear mic in ear
0180358B32	Earholder, Black, size Small; secures ear mic in ear
0180358B33	Earholder, Black, size Medium; secures ear mic in ear
0180358B34	Earholder, Black, size Large; secures ear mic in ear
0180358B35	Earholder, Clear, size Small; secures ear mic in ear
0180358B36	Earholder, Clear, size Medium; secures ear mic in ear
0180358B37	Earholder, Clear, size Large; secures ear mic in ear
4202006A01	Replacement Back Cover Clip
4280369E44	Replaceable Belt Clip with Screws
4285838B01	Replacement Collar Clip
5080358B28	Eartips, Black, size Medium (pack of 10)
5080358B29	Eartips, Black, size Large (pack of 10)
5080358B30	Eartips, Beige, size Medium (pack of 10)
5080358B31	Eartips, Beige, size Large (pack of 10)

<sup>\*</sup>Intrinsically safe







0180358B33

0180300E25



#### TEMPLE TRANSDUCER

RMN4048A\* Temple Transducer

0180305J46 Ear Microphone System and Temple

Transducer CD Rom

The Temple Transducer represents a significant achievement in headset design and functionality. It allows the user to receive audio without covering the ear. The receiver portion of this accessory rests on the temples and is capable of converting the received audio from a two-way radio into sound vibration. The sound vibration is transmitted through the surrounding human tissue and bone directly into the inner ear, where it is received by the user. It features an In-Line PTT and noise cancelling boom microphone. The Temple Transducer enhances communication and safety by not impairing the user's hearing of external sound environment, such as from machinery and equipment, warning and fire alarms, the intercom, traffic and even casual conversations with co-workers.

## Audio Accessories





CommPort: INTEGRATED MICROPHONE/RECEIVER SYSTEM

NTN1722A*	Integrated Ear Microphone/Receiver System with PTT on Radio
	Adapter. Includes AAHLN9717A Radio adapter

NTN1723A\* Integrated Ear Microphone/Receiver System with Palm PTT. Includes AAHLN9717A Radio adapter

NTN1724A\* Integrated Ear Microphone/Receiver System with Ring PTT. Includes AAHLN9717A Radio adapter

NTN1737A\* Integrated Ear Microphone/Receiver System with Snap-on-Side PTT. Includes AAHLN9717A Radio adapter

NNTN4187A\* Integrated Ear Microphone/Receiver System with Body PTT. Includes AAHLN9717A Radio adapter

#### CommPort: REPLACEMENT PARTS

NKN6508A	Replacement Cable for NTN1722A
NKN6510A	Replacement Palm PTT Cable for NTN1723A
NKN6512A	Replacement Ring PTT Cable for NTN1724A
NKN6525A	Replacement Snap-on-Side PTT Cable for NNTN4187A
NTN4188A	Replacement Body PTT Cable for NNTN4187A
NTN8821A	CommPort Maintenance Kit, includes replacement ear tubes
	(nack of 10) windscreens (nack of 2) and microphone seal str

(pack of 10), windscreens (pack of 2) and microphone seal strips

(pack of 10)

NTN8986A Adhesive Pads for secure attachment to ear (pack of 90)
NTN8988A Ear Straps for secure attachment to ear (pack of 10)

RLN5037A Replacement Ear Tubes (pack of 10)

With the CommPort Integrated/Microphone System, users can speak in a whisper and hear in a crowd. CommPort contains a miniature microphone and receiver that connects to a Motorola Two-way radio and fastens securely to the ear. Using the latest in voice processing technology, the CommPort system makes it possible to hear and speak under the most adverse conditions, by picking up sound waves as they cross the face, enhancing voice clarity under high noise conditions. The minature mic that sits on the top of the earpiece picks them up, cutting through noise, delivering audio without blocking normal hearing. Its variety of push-to-talk options make it ideal for different applications, which include transmitting to firefighters in a burning building, S.W.A.T. or police in covert situations, or workers operating in a noisy environment.

<sup>\*</sup>Intrinsically safe

## Audio Accessories

#### RECEIVE-ONLY HEADSETS

RMN4054B Receive-Only Hardhat Mount Headset mounts easily to hardhats

with slots and provides 22dB of noise reduction; for use with AAHMN9053E, AAHMN9057C and AAHMN9054C (hardhat not

included)

RMN4055B Receive-Only Headband Style Headset provides 24dB of noise

reduction; for use with AAHMN9053E, AAHMN9054C and

AAHMN9057C







AARMN4018B

#### LIGHTWEIGHT HEADSETS

AARMN4018B\* Single Muff- adjustable Lightweight Headset with Boom

Microphone and In-Line PTT

AARMN4031B\* Lightweight Headset with Swivel Boom Microphone;

no In-Line PTT

ENMN4012A\* Ultra-Light Headset, behind the head style with flexible Boom

Microphone and In-Line PTT

AARMN4017A\* Ultra-Light Headset with Boom Microphone, Earbud Style

Receiver

REX4648A Replacement Foam Earpad and Windscreen Kit for AARMN4018A

and AARMN4031A

Allow for high clarity, discreet two-way communications while adding comfort necessary for extended wear in moderate noise environments.

<sup>\*</sup>Intrinsically safe

## Audio Accessories





ENMN4016A

RMN4051B

#### MEDIUM WEIGHT HEADSETS

AARMN4019A\* Medium Weight Headset, over-the-head with In-Line PTT and Noise

Cancelling Swivel Boom Microphone; provides 24dB of noise

reduction

AARMN4032A\* Medium Weight Headset, over-the-head with Noise Cancelling

Swivel Boom Microphone; provides 24dB of noise reduction (VOX

operational only on conventional channel)

ENMN4016A\* Medium duty, behind-the-head Headset with Swivel Boom,

Microphone and In-Line PTT, provides 24dB of noise reduction

RMN4051B Hardhat Mount Headset; mounts easily to hardhats with slots—

provides 22dB of noise reduction; requires RKN4097A adapter cable;

hardhat not included

RKN4097A Radio Adapter Cable with In-Line PTT for use with RMN4051B

#### MEDIUM WEIGHT HEADSETS REPLACEMENT ITEMS

1580376E32 Replacement Cloth Covers for Earseals (1 pair)

3280376E35 Replacement O ring for Windscreen

5080548E02 Replacement Windscreen for Boom Microphone

7580376E34 Replacement Foam Earseals (1 pair)

Medium-weight dual-muff Headsets offer high-clarity sound with the additional hearing protection necessary for providing consistent, clear, two-way radio communications in harsh, noisy situations.

### Audio Accessories



#### TACTICAL MEDIUM WEIGHT HEADSETS

RMN4052A Tactical Headband Style Headset, Grey; provides 24dB of noise

reduction; requires RKN4097A Adapter Cable

RMN4053A Tactical Hardhat Mount Headset; mounts easily to hardhats with

slots; provides 22dB of noise reduction; requires RKN4097A Adapter

Cable; hardhat not included

RKN4097A Radio Adapter Cable with In-Line PTT for use with RMN4052A and

RMN4053A

Same high-clarity sound and additional hearing protection as our standard Medium Weight Headsets, while including two microphones on the outside of each earcup, which reproduces the ambient sound back into the headset. Harmful sounds are suppressed to a safe level and low sounds are amplified up to 5 times, but never more than 82dB. Includes on/off volume control on earcups.

#### RACING HEADSET

RMN5015A Racing Headset (Adapter Cable RKN4091A required)

RKN4091A Adapter Cable

Motorola is the official wireless equipment supplier of the CART® (Championship Auto Racing Teams), so whether your playing field is a racetrack, construction site or other challenging environment you can depend on the comfort and dependability of the Racing Headset.



RMN5015A

#### HEAVYDUTY HEADSET

AARMN4020B\* Push

Push-To-Talk or Voice-Activated Headset with Noise Cancelling Boom Microphone; noise reduction rating=24dB (VOX operational only on conventional channel)

Heavyduty Headsets include Noise Cancelling Boom Microphones and can be worn with or without a hardhat. The Push-to-Talk switch is located on the earcup.

# Carrying Accessories





#### CARRYING CASES

#### HT750 STANDARD MODEL

HLIV9005A	Standard Leather Case with Belt Loop for use with Nico and Minh
	batteries
HLN9652A	Standard Leather Case with Belt Loop, for use with Li-ion batteries
HLN9676A	Standard Leather Case with Swivel for use with NiCd and NiMH
	batteries
HLN9670A	Standard Leather Case with Swivel for use with Li-ion batteries
HLN9701B	Nylon Case with Belt Loop with NiCd, NiMH, and Li-ion batteries

#### HT750 KEYPAD MODELS AND ALL HT1250 MODELS

HLN9689A	Standard Leather DTMF Case with Belt Loop for use with NiCd and
	NiMH batteries
HLN9677A	Standard Leather DTMF Case with Belt Loop for use with Li-ion batteries
HLN9694A	Standard Leather DTMF Case with Swivel for use with NiCd and NiMH batteries
HLN9690A	Standard Leather Case with Swivel for use with Li-ion batteries
HLN9701B	Nylon Case with Belt Loop with NiCd, NiMH, and Li-ion batteries

#### HT1250 LIMITED-KEYPAD MODELS

HLN9946A	Hard Leather Case with Belt Loop for use with NiCd and NiMH
	batteries
HLN9945A	Hard Leather Case with Belt Loop, for use with Li-ion batteries
HLN9998A	Hard Leather Case with Swivel Belt Loop, for use with NiCd and
	NiMH batteries
HLN9955A	Hard Leather Case with Swivel Belt Loop, for use with Li-ion
	batteries
HLN9701B	Nylon Case with Belt Loop with NiCd, NiMH and Li-ion batteries

# Carrying Accessories

#### HT1550•XLS STANDARD MODELS

HLN9698A Leather DTMF Case with Belt Loop, for use with NiMH and

NiCd batteries

HLN9695A Leather DTMF Case with Belt Loop, for use with Li-ion batteriesHLN9700A Leather DTMF Case with Swivel, for use with NiMH and NiCd batteries

HLN9699A Leather DTMF Case with Swivel, for use with Li-ion batteriesHLN9701B Nylon Case with Belt Loop with NiCd, NiMH, and Li-ion batteries

HLN9701BP Same as above, Resale Packaged

A variety of carrying accessories are available for your comfort and convenience. The carrying cases are available in sizes designed to fit your radio and battery and permit audio to be heard clearly. Belt loop and nylon cases feature "D" rings that allow the cases to be attached to a carrying strap. Swivel model cases secure to a belt loop and allow the case to swing freely from side to side. The swivel latch system also allows the radio and case to be removed from the belt loop by simply inverting the case and lifting it up and out of the belt loop.



HLN9701B



NTN8039B

#### CARRYING CASE BELT LOOPS

NTN8039B 2.5" High-Activity Swivel Belt Loop NTN8040B 3.0" High-Activity Swivel Belt Loop

#### **BELT**

4200865599 1.75" Wide Leather Belt for all Models

#### **BELT CLIPS**

HLN9714A Spring Action 2-1/2" Belt Clip HLN9844A Spring Action 2" Belt Clip

#### CARRYING STRAP

NTN5243A Shoulder Carrying Strap allows easy carrying of radio in a case when not wearing a belt

#### WATERPROOF BAG

HLN9985B Waterproof Bag includes large carrying strap

# Carrying Accessories

#### MISCELLANEOUS ACCESSORIES

#### **ASSISTIVE TURNING KNOBS**

RLN4890A Assistive Turning Knobs

If your job requires you to wear large gloves, or if you have mobility or dexterity limitations, you will appreciate this added feature; set of two specially designed knobs for volume control and channel changing.

#### UNIVERSAL HOLDER

RLN4943A Universal Holder with Gooseneck Bracket provides flexible

mounting solutions for portable radios

RLN4945A Universal Holder with Gooseneck Bracket with Wheelchair

Quick

Release Assembly

RLN4944A Wheelchair Quick Release Bracket



RLN4943A

#### CHESTPACK

HLN6602A Universal Chest Pack with Radio

Holder and Velcro Secured Pocket, (not for use with HT1250LS+,

700 MHz models)

1505596Z02 Replacement Strap for HLN6602A



HLN6602A

<sup>\*</sup>Intrinsically safe

# Carrying Accessories



### BREAK-A-WAY CHEST PACK RLN4570A Break-A-Way Chest Pack

All of the same features as the original Chest Pack (HLN6602A) plus break-a-way tabs that allow the entire pack to be pulled off with approximately 10 lbs. of pressure. Perfect for railroads, manufacturing locations construction sites and anywhere safety is a concern.

#### RadioPAk™

RLN4815A RadioPAk Radio/Utility Case

4280384F89 Universal RadioPAk Belt Lengthener; fits waists larger than 40"

It's different from all other holders or cases: more comfortable, more useful and more stylish. Worn around the waist, it holds two-way, iDEN portables or cellular phones right at hand. Includes a separate 6"x 8" zippered pouch for other on-the-job necessities. Adjustable nylon weave belt fits both men and women.



RLN4815A

# Batteries & Chargers



HNN9008AR

#### **BATTERIES**

#### PREMIUM NICKEL CADMIUM (NiCd)

HNN9011AR 1200 mAh, 7.5V, Intrinsically Safe

HNN9012AR 1300 mAh, 7.5V

#### PREMIUM NICKEL METAL HYDRIDE (NIMH)

HNN9008AR 1500 mAh, 7.5V HNN9009AR 1900 mAh, 7.5V

HNN9010AR 1800 mAh, 7.5V Intrinsically Safe

HNN9003AR 1200 mAh, 7.5V (for use with Bluetooth™ Remote Speaker

Microphone)

#### PREMIUM LITHIUM ION (Li-ion)

HNN9013DR 1500 mAh, 7.2V

#### POWER NICKEL METAL HYDRIDE (NIMH)

WPNN4045AR 1200 mAh, 7.5V

Motorola Original Batteries are ruggedly designed for lasting durability and system tested with Motorola two-way radios to ensure optimum performance. We offer various chemistry and capacity alternatives, allowing the user to select the ideal battery for his or her needs. NiCd is best suited for extreme-temperature operation, and provides the maximum number of charge/discharge cycles. Li-ion batteries offer extended duty cycles — providing more talk time per shift.



AAHTN3000D

#### SINGLE AND SIX-UNIT CHARGERS

AAHTN3000D 120V Single Unit Rapid Rate Charger

(US plug)

AAHTN3003D 120V Six-Unit Rapid Rate Charger

NLN7967A Wall Mount Kit for Six-Unit Charger

HLN9793A Charger Insert Spacer—compatible

with "A" version Chargers only

HLN9794B Charger Insert Spacer—compatible with "B", "C" and "D" version Chargers

Single and Multi-unit Chargers can rapidly charge batteries on or off the radio in one to three hours. These tri-chemistry Chargers feature rapid, trickle, and maintenance modes. The maintenance mode "revert to rapid" feature ensures batteries remain fully charged even when left on the charger for extended periods of time. Multi-unit Chargers can be wall or rack mounted. All Chargers are specifically designed to meet the requirements of batteries manufactured by Motorola.

## Chargers

#### MOTOROLA CONDITIONING CHARGERS (MCC)

WPLN4107BR MCC Kit, 110V AC (includes both Base Charger Unit and 7V

Adapter Plate)

WPLN4106AR MCC Kit, 220V AC (includes both Base Charger Unit and 7V

Adapter Plate)

WPPN4002BR 110V AC Base Charger Unit only

(order Adapter Plate separately)

WPPN4006AR 220V Base Charge Unit Only (order Adapter Plates separately)WPPN4065BR Multi Unit Conditioning Charger, Four-Station Base, 110V (order

Adapter Plate separately)

WPPN4082BR 7V Adapter Plate Only

3080384G15 Cigarette Lighter Adapter Cord

RLN4814A Vehicular Mounting Bracket and Hard-wire Cable for Single Unit

Motorola Conditioning Charger

3080384M21 DC Hard Wire Cable, for vehicular installation (included in RLN4814A)

The Motorola Conditioning Charger utilizes negative pulse charging technology that will help extend battery life and enhance battery operation. It will safely condition and charge your specified NiCd and NiMH batteries in approximately one to two hours. The MCC controls heat buildup due to its charging and termination algorithms, and the maintenance mode allows batteries to be safely left on the charger for extended periods of time. And now there is an Instant Fault Detection (IFD) feature which detects faulty radio batteries in seconds, then notifies the user that the battery will not operate at peak performance. Optional accessories are available allowing these chargers to be used in both AC and DC environments, providing optimal charging flexibility.





## Chargers

#### BATTERY MAINTENANCE SYSTEMPLUS (BMSPLUS)

#### INCREASE THE USEFUL LIFE OF YOUR BATTERIES.

WPLN4079BR Six-Station, 110V AC, 50/60 Hz WPLN4080BR Six-Station, 230V AC, 50/60 Hz

WPPN4085AR BMSPlus field Upgrade Kit for WPLN4079AR, WPLN4080AR and

WPLN4081AR; allows these units to support Li-ion battery chemistries.

NDN4005B Three-Station, 110V AC, 50/60 Hz (does not support Li-ion or

3-cell batteries)

NDN4006B Three-Station, 230V AC, 50/60 Hz (does not support Li-ion or

3-cell batteries)

Using interchangeable battery adapters (sold separately), the BMS<sup>Plus</sup> is capable of charging and discharging, analyzing, conditioning, and cycle testing batteries. It supports NiCd, NiMH, and Li-ion battery chemistries (Li-ion on six station models only) and tracks battery voltage and capacity (mAh). The BMS<sup>Plus</sup> offers a 3-year warranty. Its easy-to-use design supports hundreds of 2-way, cellular, and camcorder batteries. Includes serial printer\* port (RS-232)

\*Compatible with the STAR Micronics SP200 Series printers (and other printers with STAR emulation); available from any STAR Micronics distributor.



WPLN4079BR

#### BMSPLUS ADAPTERS

WPPN4079AR Adapter compatible with both

NiCd and NiMH batteries

WPPN4080AR Adapter compatible with NiCd,

NiMH, and Li-ion batteries, requires Li-ion capable BMS<sup>Plus</sup>

#### BATTERY OPTIMIZING SYSTEM II (BOS II)

WPLN4124AR BOS II, Four Station, 100-240VAC (US line cord)
WPLN4125AR BOS II, Four Station, 100-240VAC (UK/Euro line cords)

No other battery analyzer matches the speed, accuracy, and versatility of the Battery Optimizing System II. Ideal for large fleet, public safety, and all other users who rely on their battery performance. Now with increased power, more sophisticated programming options, and easier to use navigation paths,

optimizing your batteries was never easier. Key features include:

- Support for NiCd, NiMH, Li-ion, and SLA batteries
- 100-watt Power Supply programmable from 100 mA to 4 Amps per station
- Interchangeable Adapters accommodate all major brands
- Includes a variety of User Programs and allows for customizable programming
- Proprietary Recondition Cycle restores NiCd and NiMH batteries
- Increased processing power and testing resolution including a Three-minute Quicktest that measures the batteries' State of Health (SoH)
- Printer Output for reports and labels
- Three-year Warranty



WPLN4124AR

**BOS II ADAPTER** 

RL-76345 Standard Adapter

### Chargers

#### TRAVEL CHARGER

RLN4883A Travel Charger

A great traveling companion that ensures constant communication while on the road. Allows the battery to rapid charge while using the radio. Users can receive communication immediately once the charger is connected, and transmit from a previously "dead" battery in just 5 minutes. This light and compact unit includes a Voltage-regulated Lighter Adapter, Custom Charger Base, Mounting Bracket and Coil Cord. Ideal for public safety, utility and construction markets.

#### TRANSFORMER FOR TRAVEL CHARGER

 2580600E05
 Transformer, 120V (U.S.)

 2580600E06
 Transformer, 230V (Euro)

 2580600E07
 Transformer, 230V (U.K.)

 2580600E08
 Transformer, 220V (Argentina)

Travel Charger AC Transformer connects to the cigarette lighter adapter cord to allow it to be plugged into an AC wall outlet for indoor use.

#### TRAVEL CHARGER MOUNTING BRACKET

0780384K84 Universal Mounting Bracket for Travel Charger; includes screws and nylon cord (included with RLN4883A)



RLN4883A



RLN5233A

### VEHICULAR CHARGER RLN5233A Vehicular Charger

This 12V DC rapid rate charger is ideal for mobile customers. Capable of charging NiCd, NiMH, and Li-ion batteries. This durable unit comes with a metal mounting bracket. Its drop-in design makes it ideal for public safety users.



### **Antennas**



AAEN1006B

#### **VEHICULAR ADAPTERS**

AAEN1006B VHF, 136-174 MHz AAEN1007B UHF 403-470 MHz

5880367B23 Connector Adapter, BNC Female5880367B28 Connector Adapter, BNC Male

ENKN4002A Programming Cable (required for use with external speaker or

HT1250 • LS operation)

ENKN4003A Audio Service Cable (for use with HT1250 • LS RLN4460C test box)

GSN6059A External 13 Watt Speaker
GKN6270A Power Cable with 10A Fuse

Now customers working in areas such as Public Safety and Utilities can both charge and operate portable two-way radios inside a vehicle. These Vehicular Adapters detect the chemistry of the portable battery and select the optimum charging method while providing power for in-vehicle use. In addition, an Antenna Adapter allows automatic switching to an external Vehicle-mounted Antenna (sold separately) for extended range. These kits include the Vehicular Adapter, Microphone, RF Adapter, Battery Spacers, Technical Installation Manual, and Programming Software. 3 db gain antennas are recommended for use with these vehicular adapters.

#### REPLACEMENT ITEMS

ENLN4103A Replacement VHF Antenna Adapter, 136-174 MHz
ENLN4104A Replacement UHF Antenna Adapter, 403-470 MHz

GMN6146C Hand-held Mobile Microphone

ENLN4117A Vehicle Connector Kit
WALN4078A Battery Spacer Kit
8264934B01 Programming Software

6881093C78 User Manual 6881093C79 Technical Manual



ENLN4103A

### **Antennas**



#### **ANTENNAS**

#### FLEXIBLE WHIP ANTENNAS

8504762J01 Flexible Whip, 136-155 MHz
PMAD4023A Flexible Whip, 150-161 MHz
8504762J02 Flexible Whip, 155-174 MHz
NAE6483AR Flexible Whip, 403-520 MHz
NAD6502AR VHF Heliflex Antenna 146-174 MHz

NAB6064A Heliflex 29.7-50 MHz NAD6579A Flexible Whip 148-161 MHz

Flexible Whip Antennas have a one-piece finish, steel core, and spiral wound conductor for optimal radiation characteristics.



#### STUBBY ANTENNAS

 PMAD4012A
 Stubby, 136-155 MHz

 PMAD4025A
 Stubby, 150-161 MHz

 PMAD4013A
 Stubby, 155-174 MHz

 PMAE4002A
 Stubby, 403-433 MHz

 8504762J08
 Stubby, 438-470 MHz

Stubby antennas are ideal when the radio is worn on the belt because they are short and non-obtrusive. These helical rugged antennas feature a capless sheath that allows for maximum flexibility.

#### RETROFIT BOARDS

AAHLN9725C Voice Storage Option Board (Field Install Only)
AAHLN9729C DTMF Decode Option Board (Field Install Only)



MTX850, MTX850°LS, MTX8250, M

MTX8250,MTX8250·LS, NTX950 &, NTX9750

Motorola two-way radiocommunication you can count on

- 1 Trunked Zone (with 16 talkgroups), up to 16 conventional channels
- Emergency Button...Sounds an alarm in emergencies or can be programmed for specific features
- MDC-1200™ Signaling (Receive) features on LTR® Zones
- X-Pand Audio Enhancement...Crisper, clearer audio quality
- System/All Group/Auto Group Scanning...Define the frequency and type of transmission your radio scans



### Audio Accessories

#### REMOTE SPEAKER MICROPHONES (RSM)

AAHMN9052E\* Remote Speaker Microphone

AAHMN9053E\* Noise-cancelling Remote Speaker Microphone with 3.5mm

Audio Jack

HKN9055A Replacement Cable for Remote Speaker Microphone

The Remote Speaker Microphone is a water-resistant compact unit that allows the user to talk and listen without removing the radio from the belt, case or charger. It has a coiled cord, push-to-talk switch and clothing clip on the back cover.



#### **MICJACKETS**

RLN5008A MicJacket, compatible with AAHMN9052E Remote

Speaker Microphone

RLN5009A MicJacket, compatible with AAHMN9053E Remote

Speaker Microphone

RLN5010A MicJacket, compatible with AAHMN9054C and HMN9057C

Public Safety Speaker Microphones

MicJackets provide speaker microphone users with a way to further protect the "head" of their microphone from dust, dirt, metal particles, sweat, body oils and other on-the-job grime. MicJackets also allow the user to handle or interact with the speaker microphone in a more hygienic way.



### Audio Accessories



### SURVEILLANCE KITS RECEIVE ONLY EARPIECE (1-WIRE)

AARMN4021A\* Beige AARMN4028A\* Black

#### EARPIECE WITH MICROPHONE AND PUSH-TO-TALK COMBINED (2-WIRE)

AARMN4022A\* Beige AARMN4029A\* Black

#### EARPIECE WITH MICROPHONE AND PUSH-TO-TALK COMBINED (3-WIRE)

ENMN4017A\* Beige EMNM4014\* Black

Surveillance accessories allow the user to privately receive communications with the earpiece and are ideal when environments require discreet communications. Rubber Eartip, pack of 25, Black



ENMN4017A

### SURVEILLANCE KITS WITH EXTENDED-WEAR COMFORT EARPIECE

### COMFORT EARPIECE WITH MICROPHONE AND PUSH-TO-TALK COMBINED (2-WIRE)

RLN5316A Comfort Earpiece with Microphone and PTT combined, (2-wire kit), Beige RLN5315A Comfort Earpiece with Microphone and PTT combined, (2-wire kit), Black

These kits include a comfort earpiece with a rubber eartip and clear comfotable acoustic tube. Users hear transmissions clearly, while the cler tube provides a discreet appearance.



5080371E73 Standard Rubber Eartip, pack of 25, Beige 5080371E75 Standard Rubber Eartip, pack of 25, Black







### Audio Accessories



NTN8370A



#### NOISE KITS

NTN8370A Extreme Noise Kit, includes 2 Foam Earplugs for loud environments;

provides 24dB of noise reduction

NTN8371A Low Noise Kit, includes Rubber Eartip for low noise environments;

does not provide hearing protection

5080384F72 Replacement Foam Plugs; for use with NTN8370A (pack of 50)

5080371E73 Replacement Standard Beige Rubber Eartips; for use with

NTN8371A (pack of 25)

5080371E75 Replacement Standard Black Rubber Eartips; for use with

NTN8371A (pack of 25)

This lightweight translucent tube attaches to Motorola Surveillance Kits to provide additional flexibility and comfort. Clothing clip prevents the accessory from being pulled from the ear due to body movement

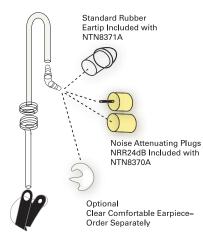
or head rotation.

#### CLEAR COMFORTABLE EARPIECES

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

The Clear Comfortable Earpiece forms to the inside of your ear and is perfect for low noise environments. Compatible with the NTN8371A, Clear Acoustic Tube Assembly, and Surveillance Kits (1, 2 and 3-wire). This Earpiece is made of easy-to-clean chemically inert, hypo-allergenic material. The following 3 items are required for this product:

- Clear Comfortable Earpiece
- Clear Acoustic Tube Assembly (NTN8371A)
- Surveillance Kit



Acoustic Tube with Earphone

### Audio Accessories

#### COMPLETELY DISCREET EARPIECE

RLN4922A Completely Discreet Earpiece Kit; includes Wireless Earpiece,

Inductive Neckloop, 6 Spare Batteries and 5 Spare Ear Wax Guards

RLN4919A Ear Wax Guards, 5 per pack

RNN4005A 1.4V Battery, 6 per pack

Remain discreetly in touch with this miniaturized receiver. All messages received through the user's two-way radio are inductively relayed to the Wireless Earpiece in the user's ear. Inductive Neckloop is easily hidden under the user's clothing for covert operations. Neckloop attaches to the user's Motorola Surveillance Kit, providing completely discreet two-way communications. Security operatives, public safety officials, and private investigators can communicate with ease without any visible equipment. Small as it is, it offers a full range of audio functions including automatic squelch, automatic gain control and noise filtering. Must be used in conjunction with a Motorola Surveillance Kit. Just remove the earpiece on any standard 2- or 3-wire Surveillance Kit and plug in the Neckloop for completely discreet communication.



#### FLEXIBLE EAR RECEIVER

ENMN4013A\* Flexible Ear Receiver
7580372E11 Replacement Foam Ear Cushions

The Flexible Ear Receiver contains a flexible ear-loop and speaker and rests external to the ear.

Receive only.



\*Intrinsically safe

### Audio Accessories



BDN6641A Shown with interface module

#### EAR MICROPHONE SYSTEM (EMS)

BDN6677A\* Ear Microphone for Standard Noise Levels up to 95dB, (requires AARMN4044A or AARMN4045A Interface), Black BDN6678A\* Ear Microphone for Standard Noise Levels up to 95dB, (requires AARMN4044A or AARMN4045A Interface), Beige BDN6641A\* Ear Microphone for High Noise Levels up to 105dB,

(requires AARMN4044A or AARMN4045A Interface), Grey

0180305J46 Training CD for Ear Mic and Temple Transducer

#### INTERFACE MODULES FOR EMS

AARMN4044A\* Push-To-Talk Only Interface Module

AARMN4045A\* Push-To-Talk or Voice-Activated Interface Module

This compact unit picks up the voice through bone vibrations in the ear canal. The miniature earpiece leaves the hands free and face unobscured when worn by rescue and hazard protection personnel, who still retain the ability for direct hearing and speaking. For personnel required to wear breathing apparatus, communications with protective masks are as clear as communications without. And its high speech clarity under noisy environments makes it ideal for high noise environments. Available in PTT or Voice Activated (VOX). Interface Module required.

#### OPTIONAL ACCESSORIES FOR EAR MICROPHONE SYSTEM

0180358B38\* Push-To-Talk Ring Switch 0180300E83\* Push-To-Talk Body Switch 0180300E25 Earguard with Adjustable Loop; secures ear mic in ear 0180358B32 Earholder, Black, size Small; secures ear mic in ear 0180358B33 Earholder, Black, size Medium; secures ear mic in ear 0180358B34 Earholder, Black, size Large; secures ear mic in ear Earholder, Clear, size Small; secures ear mic in ear *0180358B35* 0180358B36 Earholder, Clear, size Medium; secures ear mic in ear 0180358B37 Earholder, Clear, size Large; secures ear mic in ear 4202006A01 Replacement Back Cover Clip 4280369E44 Replaceable Belt Clip with Screws 4285838B01 Replacement Collar Clip 5080358B28 Eartips, Black, size Medium (pack of 10) 5080358B29 Eartips, Black, size Large (pack of 10)

Eartips, Beige, size Medium (pack of 10)

Eartips, Beige, size Large (pack of 10)



5080358B30

5080358B31

### Audio Accessories





CommPort: INTEGRATED MICROPHONE/RECEIVER SYSTEM

NTN1722A\* Integrated Ear Microphone/Receiver System with PTT on Radio

Adapter. Includes AAHLN9717A Radio adapter

NTN1723A\* Integrated Ear Microphone/Receiver System with Palm PTT. Includes

AAHLN9717A Radio adapter

Integrated Ear Microphone/Receiver System with Ring PTT. Includes NTN1724A\*

AAHLN9717A Radio adapter

NTN1737A\* Integrated Ear Microphone/Receiver System with Snap-on-Side PTT.

Includes AAHLN9717A Radio adapter

Integrated Ear Microphone/Receiver System with Body PTT. Includes NNTN4187A\*

AAHLN9717A Radio adapter

CommPort: REPLACEMENT PARTS

NKN6508A Replacement Cable for NTN1722A

NKN6510A Replacement Palm PTT Cable for NTN1723A NKN6512A Replacement Ring PTT Cable for NTN1724A

NKN6525A Replacement Snap-on-Side PTT Cable for NNTN4187A

NNTN4188A Replacement Body PTT Cable for NNTN4187A

CommPort Maintenance Kit, includes replacement ear tubes NTN8821A

(pack of 10), windscreens (pack of 2) and microphone seal strips

(pack of 10)

NTN8986A Adhesive Pads for secure attachment to ear (pack of 90)

NTN8988A Ear Straps for secure attachment to ear (pack of 10)

RLN5037A Replacement Ear Tubes (pack of 10)

With the CommPort Integrated/Microphone System, users can speak in a whisper and hear in a crowd. CommPort contains a miniature microphone and receiver that connects to a Motorola Two-way radio and fastens securely to the ear. Using the latest in voice processing technology, the CommPort system makes it possible to hear and speak under the most adverse conditions, by picking up sound waves as they cross the face, enhancing voice clarity under high noise conditions. The minature mic that sits on the top of the earpiece picks them up, cutting through noise, delivering audio without blocking normal hearing. Its variety of push-to-talk options make it ideal for different applications, which include transmitting to firefighters in a burning building, S.W.A.T. or police in covert situations, or workers operating in a noisy environment.

### Audio Accessories



#### RECEIVE-ONLY HEADSETS

RMN4054B Receive-Only Hardhat Mount Headset mounts easily to hardhats

> with slots and provides 22dB of noise reduction; for use with AAHMN9053E, AAHMN9057C and AAHMN9054C (hardhat not

RMN4055B Receive-Only Headband Style Headset provides 24dB of noise

reduction; for use with AAHMN9053E, AAHMN9054C and

AAHMN9057C

#### LIGHTWEIGHT HEADSETS

AARMN4017A\* Ultra Lightweight Headset with Boom Microphone,

Earbud-style Receiver

*REX4648A* Replacement Foam Earpad and Windscreen Kit for AARMN4018B

and AARMN4031A

ENMN4012A\* Ultra-Light Headset

AARMN4018B\* Lightweight Headset with Swivel Boom Microphone with In-Line PTT

AARMN4031B\* Lightweight Headset with Swivel Boom Microphone; no In-Line

PTT (VOX operational only on conventional channel)

Allow for high clarity, hands-free, two-way communications while adding comfort necessary for extended wear in moderate noise environments.



AARMN4017A



AARMN4018B

### Audio Accessories

#### MEDIUM WEIGHT HEADSETS

ENMN4016A\* Medium Weight, behind-the-head Headset with Swivel Boom

Microphone and In-Line PTT, provides 24dB of noise reduction

AARMN4019A\* Medium Weight, over-the-head Dual-muff Headset with In-Line

PTT and Noise Canceling Swivel Boom Microphone; provides

24dB of noise reduction

AARMN4032A\* Over-the-head Dual-muff Headset with Noise Canceling Swivel

Boom Microphone; provides 24dB of noise reduction

(no In-Line PTT)

*RMN4051B* 2-Way Hardhat-Mount Headset; mounts easily to hardhats with

slots; provides 22dB of noise reduction; requires RKN4097A

Adapter Cable. Hardhat not included; Black



ENMN4016A

#### **REPLACEMENT ITEMS**

1580376E32 Replacement Cloth Cover for Earseals (1 pair)

3280376E35 Replacement O Ring for Windscreen

5080548E02 Replacement Windscreen for Boom Microphone

7580376E34 Replacement Foam Earseals (1 pair)

Medium Weight, dual-muff Headsets offer high-clarity sound with the additional hearing protection necessary for providing consistent, clear two-way radio communications in harsh, noisy situations.



RMN4052A

#### TACTICAL MEDIUM WEIGHT HEADSETS

RMN4052A Tactical Headband Style Headset, noise reduction rating of

24dB—requires RKN4097A Adapter Cable: Grev

RMN4053A Tactical Hardhat Mount Headset, noise reduction rating of

22dB—requires RKN4097A Adapter Cable; Grey

RKN4097A In-Line PTT Adapter Cable for use with RMN4052A

and RMN4053A headsets

Ideal for two-way communication in extremely noisy environments. Dual-muff tactical Headsets include two microphones on the outside of the earcups which reproduce the ambient sound back into the Headset. Harmful sounds are suppressed to a safe level and low sounds are amplified up to 5 times the original level, but never more than 82dB(A). Includes on/off volume control on earcups and 3-foot coiled cord. Easily replaceable earseals are filled with liquid and foam combination to provide excellent sealing and comfort. Requires separate In-Line PTT Adapter Cable. Hardhat not included.

<sup>\*</sup>Intrinsically safe

### Audio Accessories



RMN5015A

#### RACING HEADSET

RMN5015A Racing Headset (Adapter Cable RKN4091A required)

RKN4091A Adapter Cable

Motorola is the official wireless equipment supplier of the CART® (Championship Auto Racing Teams), so whether your playing field is a racetrack, construction site or other challenging environment you can depend on the comfort and dependability of the Racing Headset.

#### **HEAVYDUTY HEADSETS**

AARMN4020B\*

Push-To-Talk or Voice-Activated Headset with Noise Cancelling Boom Microphone; noise reduction rating=24dB (VOX operational only on conventional channel)

Heavyduty Headsets include Noise Cancelling Boom Microphones and can be worn with or without a hardhat. The Push-To-Talk switch is located on the earcup.



AARMN4020B

### Audio Accessories



#### TEMPLE TRANSDUCER

RMN4048A\* Temple Transducer

0180305J46 Training CD for Temple Transducer and Ear Microphone System

The Temple Transducer represents a significant achievement in headset design and functionality. It allows the user to receive audio without covering the ear. The receiver portion of this accessory rests on the temples and is capable of converting the receive audio from a two-way radio into sound vibration. The sound vibration is transmitted through the surrounding human tissue and bone directly into the inner ear where it is received by the user. It features an In-Line PTT and Noise Cancelling Boom Microphone. In standard noise environments both of the user's ears are left uncovered to ensure all necessary external sounds are heard.

#### MISCELLANEOUS ACCESSORIES

#### **ASSISTIVE TURNING KNOBS**

RLN4890A Assistive Turning Knobs

If your job requires you to wear large gloves, or if you have mobility or dexterity limitations, you will appreciate this added feature; set of two specially designed knobs for volume control and channel changing

#### **UNIVERSAL HOLDER**

RLN4943A Universal Holder with Gooseneck Bracket provides flexible mounting

solutions for portable radios

RLN4945A Universal Holder with Gooseneck Bracket with Wheelchair Quick

Release Assembly

RLN4944A Wheelchair Quick Release Bracket



<sup>\*</sup>Intrinsically safe

### Carrying Accessories

#### CARRYING CASES

HLN9652A Standard Leather Case with Belt Loop, for use with Li-ion batteries HLN9670A Standard Leather Case with Swivel for use with Li-ion batteries HLN9677A Standard Leather DTMF Case with Belt Loop for use with Li-ion batteries Standard Leather Case with Swivel for use with Li-ion batteries HLN9690A Standard Leather Case with Belt Loop for use with NiCd and NiMH HLN9665A batteries HLN9676A Standard Leather Case with Swivel for use with NiCd and NiMH batteries Standard Leather DTMF Case with Belt Loop for use with NiCd and HLN9689A NiMH batteries Standard Leather DTMF Case with Swivel for use with NiCd and HLN9694A



Nylon Case with Belt Loop with NiCd, NiMH, and Li-ion batteries



HLN9701B

HLN9714A Spring Action 2-1/2" Belt Clip

NiMH batteries

#### CARRYING STRAP

NTN5243A Shoulder Carrying Strap allows easy carrying of radio in a case when not wearing a belt

#### CARRYING CASE BELT LOOPS

NTN8039B 2.5" High Activity Swivel Belt Loop NTN8040B 3.0" High Activity Swivel Belt Loop

#### WATERPROOF BAG

HLN9985B Waterproof Bag includes large carrying strap



### Carrying Accessories





HLN6602A

#### CHESTPACK

HLN6602A Universal Chest Pack with Radio Holder and Velcro Secured Pocket1505596Z02 Replacement Strap for HLN6602A

#### BREAK-A-WAY CHEST PACK

RLN4570A Break-A-Way Chest Pack

All of the same features as the original Chest Pack (HLN6602A) plus break-a-way tabs that allow the entire pack to be pulled off with approximately 10 lbs. of pressure. Perfect for railroads, manufacturing locations construction sites and anywhere safety is a concern.

#### RadioPAk™

RLN4815A Radio/Ak Radio/Utility Case

4280384F89 Universal RadioPAk Belt Lengthener; fits waists larger than 40"

It's different from all other holders or cases: more comfortable, more useful and more stylish. Worn around the waist, it holds two-way, iDEN portables or cellular phones right at hand. Includes a separate 6"×8" zippered pouch for other on-the-job necessities. Adjustable nylon weave belt; fits both men and women.

#### **BELT**

4200865599 1.75" Wide Leather Belt for all Models

# Batteries & Chargers



#### **BATTERIES**

#### PREMIUM NICKEL CADMIUM (NiCd)

HNN9011AR 1200 mAh, 7.5V Intrinsically Safe

HNN9012AR 1300 mAh, 7.5V

#### PREMIUM NICKEL METAL HYDRIDE (NIMH)

HNN9008AR 1500 mAh, 7.5V HNN9009AR 1900 mAh, 7.5V

HNN9010AR 1800 mAh, 7.5V Intrinsically Safe

#### PREMIUM LITHIUM ION (Li-ion)

HNN9013DR 1500 mAh, 7.5V

#### POWER NICKEL METAL HYDRIDE (NIMH)

WPNN4045AR 1200 mAh, 7.5V

Motorola Original Batteries are ruggedly designed for lasting durability and system tested with Motorola two-way radios to ensure optimum performance. We offer various chemistry and capacity alternatives, allowing the user to select the ideal battery for his or her needs. NiCd is best suited for extreme-temperature operation, and provides the maximum number of charge/discharge cycles. Li-ion batteries offer extended duty cycles — providing more talk time per shift.

#### **CHARGERS**

AAHTN3000D 120 V Rapid Rate Single-Unit Charger Kit U.S. 3-prong

(includes Transformer, Pocket, Spacer, Model Box and North

America/Latin America Manual)

AAHTN3003D 120 V Multi-Unit Rapid Rate Charger (includes Line Cord and

North America/Latin America Manual)

NLN7967A Wall Mount Kit for Six Unit Charger

HLN9793A Charger Insert Spacer—compatible with "A" version Chargers only

HLN9794B Charger Insert Spacer—compatible with "B", "C" and "D" version

Chargers

Single and Multi-unit Chargers can rapidly charge batteries on or off the radio in one to three hours. These tri-chemistry Chargers feature rapid, trickle, and maintenance modes. The maintenance mode "revert to rapid" feature ensures batteries remain fully charged even when left on the Charger for extended periods of time. Multi-unit Chargers can be wall or rack mounted and are ideal for multi-shift operations. All chargers are specifically designed to meet the requirements of batteries manufactured by Motorola.



AAHTN3000D

### Chargers





#### MOTOROLA CONDITIONING CHARGER (MCC)

WPLN4106AR MCC Kit, 220V AC (includes both Base Charger Unit and 7V

Adapter Plate)

WPLN4107BR MCC Kit, 110V AC (includes both Base Charger Unit and 7V

Adapter Plate)

WPPN4002BR 110V AC Base Charge Unit only (order Adapter Plates separately)

WPPN4082BR 7V Adapter Plate Only

WPPN4065BR Multi Unit Conditioning Charger, Four-Station Base, 110V

(order Adapter Plate separately)

The Motorola Conditioning Charger utilizes negative pulse charging technology that will help extend battery life and enhance battery operation. It will safely condition and charge your specified NiCd and NiMH batteries in approximately one-to-two hours. The MCC controls heat buildup due to its charging and termination algorithms, and the maintenance mode allows batteries to be safely left on the charger for extended periods of time. And now there is an Instant Fault Detection (IFD) feature which detects faulty radio batteries in seconds, then notifies the user that the battery will not operate at peak performance. Optional accessories are available allowing these chargers to be used in both AC and DC environments, providing optimal charging flexibility.

#### MISCELLANEOUS ACCESSORIES

*HLN9154A* Mounting Accessories, Non Locking Bracket

HLN9162A Mounting Accessories, 5" Goose Neck Mounting Bracket
 HLN9179A Mounting Accessories, Quick Release Mounting Bracket
 HLN9228A Mounting Accessories, Clam Shell Mounting Bracket

HLN9820A Accessory Dust Cover RLN4890A Assistive Turning Knobs

#### **VEHICULAR MOUNTING & ACCESSORIES**

RLN4814A Vehicular Mounting Bracket and

Hard-wire Cable for Single Unit Motorola

Conditioning Charger, includes 3080384M21, DC Hard-wire Cable

3080384M21 DC Hardware Cable, for Vehicular

Installation (included in RLN4814A)

3080384G15 Cigarette Lighter Adapter Cord for

Conditioning Chargers

### Chargers



#### BATTERY MAINTENANCE SYSTEMPLUS (BMSPLUS)

WPLN4079BR BMS<sup>Plus</sup> Six-Station, 110V AC, 50/60 Hz WPLN4080BR BMS<sup>Plus</sup> Six-Station, 230V AC, 50/60 Hz

WPPN4085AR BMS<sup>Plus</sup> Field Upgrade Kit for WPLN4079AR, WPLN4080AR

and WPLN4081AR; allows these units to support Li-ion battery

chemistries.

NDN4005B Three-Station, 110V AC 50/60 Hz

(does not support Li-ion or 3-cell batteries)

NDN4006B Three-Station, 230V AC 50/60 Hz

(does not support Li-ion or 3-cell batteries)

WPPN4079AR Adapter compatible with both NiCd and NiMH batteries WPPN4080AR Adapter compatible with NiCd, NiMH and Li-ion batteries,

requires Li-ion-capable BMSPlus

Using interchangeable battery adapters (sold separately), the BMS<sup>Plus</sup> is capable of charging and discharging, analyzing, conditioning, and cycle testing batteries. It supports NiCd, NiMH, and Li-ion battery chemistries (Li-ion on six station models only) and tracks battery voltage and capacity (mAh). The BMS<sup>Plus</sup> offers a 3-year warranty. Its easy-to-use design supports hundreds of 2-way, cellular, and camcorder batteries. Includes serial printer\* port (RS-232)

\*Compatible with the STAR Micronics SP200 Series printers (and other printers with STAR emulation); available from any STAR Micronics distributor.

### Chargers

#### BATTERY OPTIMIZING SYSTEM II (BOS II)

WPLN4124AR BOS II, Four Station, 100-240VAC (US line cord)
WPLN4125AR BOS II, Four Station, 100-240VAC (UK/Euro line cords)

No other battery analyzer matches the speed, accuracy, and versatility of the Battery Optimizing System II. Ideal for large fleet, public safety, and all other users who rely on their battery performance. Now with increased power, more sophisticated programming options, and easier to use navigation paths, optimizing your batteries was never easier. Key features include:

- · Support for NiCd, NiMH, Li-ion, and SLA batteries
- 100-watt Power Supply programmable from 100 mA to 4 Amps per station
- Interchangeable Adapters accommodate all major brands
- Includes a variety of User Programs and allows for customizable programming
- Proprietary Recondition Cycle restores NiCd and NiMH batteries
- Increased processing power and testing resolution including a
   Three-minute Quicktest that measures the batteries' State of Health (SoH)
- Printer Output for reports and labels
- Three-year Warranty



WPLN4124AR

#### (BOS II) BATTERY ADAPTER

RL-76345 BOS II Adapter Plate



#### TRAVEL CHARGER

RLN4883A Travel Charger

A great travelling companion that ensures constant communication while on the road. Allows the battery to rapid charge while using the radio. Users can receive communication immediately once the charger is connected, and transmit from a previously "dead" battery in just 5 minutes. This light and compact unit includes a Voltage-regulated Lighter Adapter, Custom Charger Base, Mounting Bracket and Coil Cord. Ideal for public safety, utility and construction markets.

#### TRAVEL CHARGER MOUNTING BRACKET

0780384K84 Universal Mounting Bracket for Travel Charger; includes screws and nylon cord

# Chargers & Antennas

#### VEHICULAR CHARGER

*RLN5233A* Vehicular Charger

This 12v DC rapid rate Charger is ideal for mobile customers. Capable of charging NiCd, NiMH and Li-ion batteries, this durable unit comes with a metal Mounting Bracket. Its drop-in design makes it ideal for public safety users.







8505241U06

### **ANTENNAS**

#### **FLEXIBLE WHIP ANTENNAS**

8505241U03 800 MHz 1/2 Wave Whip, 806-870 MHz 900 MHz 1/2 Wave Whip, 896-941 MHz 8505241U04 (Used with MTX850/950/8250/9250 only)

Flexible Whip Antennas have a one-piece finish and steel core for optimal radiation characteristics. Provides more comfort when the radio is worn on the belt.

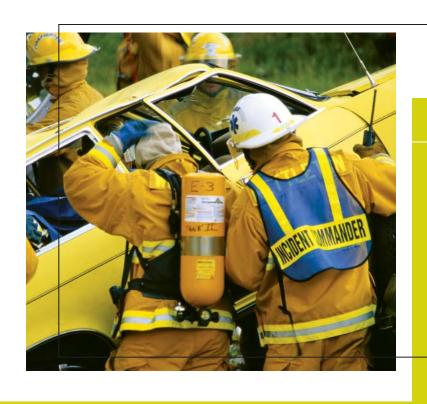
#### STUBBY ANTENNAS

8505241U06 800/900 MHz 1/2 Wave Stubby, 806-942 MHz

These quarterwave Stubby Antennas are ideal when radio is worn on the belt because the short antenna is non-obtrusive.

#### RETROFIT BOARDS

AAHLN9725C Voice Storage Option Board (Field Install Only)



COMPATIBLE WITH MT2000 AND MTS2000

HT 1000—Practical JT 1000—On the move MTX 8000/MTX 9000— Trunked and Talkaround



Compatible with MT2000 AND MTS2000

### Audio Accessories

#### REMOTE SPEAKER MICROPHONES (RSM)

NMN6193C\* Remote Speaker Microphone

NMN6191C\* Noise Cancelling Remote Speaker Microphone

0104010J46 Replacement Coil Cord Assembly for Remote Speaker Microphones

The Remote Speaker Microphone is a water-resistant compact unit that allows the user to talk and listen without removing the radio from the belt, case or charger. It has a coiled cord, push-to-talk switch and clothing clip on the back cover.



NMN6193C

#### RSM ACCESSORIES

#### **EPAULET STRAP**

RLN4294A Epaulet Strap, Velcro RLN4295A Epaulet Strap, small clip

Black leather epaulet strap secures remote speaker microphone to epaulet straps on shirt or jacket and accommodates back clip in leather cut-outs. Snap closure secures remote speaker microphone cord to allow reliable communications in hostile environments.



RLN4295A



NMN6228C

#### PUBLIC SAFETY SPEAKER MICROPHONES (PSM)

NMN6228C\* Noise-Cancelling Public Safety Speaker/Microphone, 30" straight cord NMN6243B\* Noise-Cancelling Public Safety Speaker/Microphone, 18" straight cord NMN6244B\* Noise-Cancelling Public Safety Speaker/Microphone, 24" straight cord

Public Safety Speaker Microphones include straight cord assembly, 3.5mm earjack, swivel clip, quick disconnect latch, antenna connector, and receiver, audio high/low volume push button. Antenna must be ordered separately.

#### **MICJACKETS**

RLN5002A MicJacket Kit, compatible with NMN6191C and NMN6193C remote speaker microphones

RLN5004A MicJacket Kit, compatible with NMN6228C, NMN6243B and NMN6244B public safety speaker microphones

The MicJackets provide speaker microphone users with a way to further protect the "head" of their microphone from dust, dirt, metal particles, sweat, body oils and other on-the-job grime. MicJackets also allow the user to handle or interact with the speaker microphone in a more hygienic way.

Compatible with MT2000 AND MTS2000

### Audio Accessories



#### RECEIVE ONLY EARPIECES

BDN6781A Pellet Style Earpiece

BDN6719A Flexible Ear Receiver; this flexible ear receiver contains a flexible

earloop and speaker and rests external to the ear

7580372E11 Replacement Foam Ear Cushions for BDN6719A

Plugged into the 3.5mm earjack on the RSM audio adapter, these audio accessories will mute the speaker on the RSM allowing the user to discreetly hear all incoming messages. Ideal for noisy environments. The following audio accessories can also be plugged directly into the radio with the BDN6676D audio adapter.

#### RECEIVE ONLY HEADSETS

RMN4056B Receive-Only Dual-Muff Headband Style Headset; provides 24dB of

noise reduction; for use with NMN6193C and NMN6191C (can be

plugged directly into radio with BDN6676D adapter)

RMN4057B Receive-Only Hardhat Mount Headset mounts easily to hardhats with

slots and provides 22dB of noise reduction; for use with NMN6193C and NMN6191C (can be plugged directly into radio with BDN6676D

adapter)



Compatible with MT2000 AND MTS2000

### Audio Accessories

#### SURVEILLANCE KITS

#### RECEIVE ONLY EARPIECE WITH STANDARD EARPHONE EARLOOP (1-WIRE)

 BDN6664A\*
 Beige

 BDN6665A†\*
 Beige

 BDN6726A
 Black

 BDN6727A†
 Black



BDN6666A\* Beige BDN6728A Black

#### EARPIECE WITH MICROPHONE AND PUSH-TO-TALK COMBINED (2-WIRE)

 BDN6667A\*
 Beige

 BDN6669A†\*
 Beige

 BDN6729A
 Black

 BDN6731A†
 Black

#### EARPIECE WITH MICROPHONE AND PUSH-TO-TALK SEPARATE (3-WIRE)

BDN6668A\* Beige BDN6670A†\* Beige BDN6730A Black BDN6732A† Black

Surveillance accessories allow the user to privately receive communications with the earpiece and are ideal when environments require discreet communications. The following surveillance accessories require the PMLN4455A (3.5mm threaded adapter jack) that attaches to the radio, unless being used with speaker microphone.

#### SURVEILLANCE KIT ACCESSORIES

BDN6676D\* 3.5mm Jack Adapter with Quick Disconnect Latch
5080371E73 Standard Rubber Eartips, pack of 25, Beige
5080371E75 Standard Rubber Eartips, pack of 25, Black



BDN6664A





BDN6676D

Compatible with MT2000 AND MTS2000

### Audio Accessories

#### SURVEILLANCE KITS WITH EXTENDED WEAR COMFORT EARPIECE

#### RECEIVE ONLY COMFORT EARPIECE

*RLN5314A* Beige *RLN5313A* Black

#### RECEIVE ONLY COMFORT EARPIECE WITH MICROPHONE AND PUSH-TO-TALK COMBINED (2-WIRE)

*RLN5311A* Beige *RLN5312A* Black

These kits include a comfort earpiece with a rubber eartip and a clear comfortable acoustic tube. Users hear transmissions clearly, while the clear tube provides a discreet appearance. The above surveillance accessories require the BDN6676D (3.5mm threaded adapter jack) that attaches to the radio, unless being used with speaker microphone.



RLN5312A



NTN8370A

# NTN8371A

#### NOISE KITS

Extreme Noise Kit, includes 2 Foam Earplugs for loud environments; NTN8370A

provides 24dB of noise reduction

NTN8371A Low Noise Kit, includes Rubber Eartip for low noise environments;

does not provide hearing protection

Replacement Foam Plugs; for use with NTN8370A (pack of 50) 5080384F72

5080371E73 Replacement Standard Beige Rubber Eartips; for use with

NTN8371A (pack of 25)

5080371E75 Replacement Standard Black Rubber Eartips; for use with

NTN8371A (pack of 25)

This lightweight translucent tube attaches to Motorola Surveillance Kits to provide additional flexibility and comfort. Clothing clip prevents the accessory from being pulled from the ear due to body movement or head rotation.

Compatible with MT2000 AND MTS2000

### Audio Accessories

#### CLEAR COMFORTABLE EARPIECES

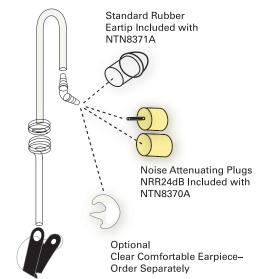
RLN4760A Small Custom Earpiece, Right Ear
RLN4763A Small Custom Earpiece, Left Ear
RLN4761A Medium Custom Earpiece, Right Ear
RLN4764A Medium Custom Earpiece, Left Ear
RLN4762A Large Custom Earpiece, Right Ear
Large Custom Earpiece, Left Ear

The Clear Comfortable Earpiece forms to the inside of the ear and is perfect for low noise environments. Compatible with the NTN8371A, clear acoustic tube assembly, and surveillance kits (1, 2, 3 wire). The earpiece is made of easy-to-clean chemically inert, hypo-allergenic material. The following 3 items are required for this product:

- Clear Comfortable Earpiece
- Clear Acoustic Tube Assembly (NTN8371A)
- Surveillance Kit



RLN4763A



Acoustic Tube with Earphone



#### COMPLETELY DISCREET EARPIECE

RLN4922A Completely Discreet Earpiece Kit; includes Wireless Earpiece,

Inductive Neckloop, 6 Spare Batteries and 5 Spare Ear Wax Guards

RLN4919A Ear Wax Guards, 5 per pack RNN4005A 1.4V Battery, 6 per pack

Remain discreetly in touch with this miniaturized receiver. All messages received through the user's two-way radio are inductively relayed to the Wireless Earpiece in the user's ear. Inductive Neckloop is easily hidden under the user's clothing for covert operations. Neckloop attaches to the user's Motorola Surveillance Kit, providing completely discreet two-way communications. Security operatives, public safety officials, and private investigators can communicate with ease without any visible equipment. Small as it is, it offers a full range of audio functions including automatic squelch, automatic gain control and noise filtering. Must be used in conjunction with a Motorola Surveillance Kit. Just remove the earpiece on any standard 2- or 3-wire Surveillance Kit and plug in the Neckloop for completely discreet communication.



RLN4922A

Compatible with MT2000 AND MTS2000

### Audio Accessories



#### PELLET STYLE EARPIECES

Single Earbud with Microphone and Push-To-Talk, requires adapter BDN6780A

*BDN6781A* Receive only Earbud, requires adapter BDN6676D 7580372E70 Replacement Foam Ear Cushions for Pellet Earpieces 3.5mm Jack Adapter with Quick Disconnect Latch BDN6676D

The pellet style earpiece allows the user to receive communication discreetly and is comfortable for extended wear.

#### EAR MICROPHONE SYSTEM (EMS)

BDN6677A\* Ear Microphone for Standard Noise Levels

(up to 95dB, Black)

BDN6678A\* Ear Microphone for Standard Noise Levels

(up to 95dB, Beige)

BDN6641A\* Ear Microphone for High Noise Levels (up

to 105dB)

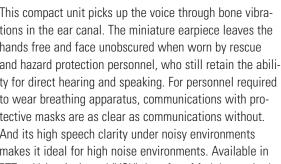
#### INTERFACE MODULES FOR EMS

BDN6708B\* Push-To-Talk Interface Module

BDN6671B\* Push-To-Talk or Voice-Activated Interface

Module

This compact unit picks up the voice through bone vibrations in the ear canal. The miniature earpiece leaves the hands free and face unobscured when worn by rescue and hazard protection personnel, who still retain the ability for direct hearing and speaking. For personnel required to wear breathing apparatus, communications with protective masks are as clear as communications without. And its high speech clarity under noisy environments makes it ideal for high noise environments. Available in PTT or Voice Activated (VOX). Interface Module required.





BDN6641A shown with BDN6671B interface module

<sup>\*</sup>Intrinsically safe

Compatible with MT2000 AND MTS2000

### Audio Accessories

#### OPTIONAL ACCESSORIES FOR EAR MICROPHONE SYSTEM

0180358B38*	Push-To-Talk Ring Switch
0180300E83*	Push-To-Talk Body Switch
0180300E25	Earguard with Adjustable Loop; secures ear mic in ear
0180358B32	Earholder, Black, size Small; secures ear mic in ear
0180358B33	Earholder, Black, size Medium; secures ear mic in ear
0180358B34	Earholder, Black, size Large; secures ear mic in ear
0180358B35	Earholder, Clear, size Small; secures ear mic in ear
0180358B36	Earholder, Clear, size Medium; secures ear mic in ear
0180358B37	Earholder, Clear, size Large; secures ear mic in ear
4202006A01	Replacement Back Cover Clip
4280369F44	Replaceable Belt Clip with Screws

4285838B01Replacement Collar Clip5080358B28Eartips, Black, size Medium (pack of 10)5080358B29Eartips, Black, size Large (pack of 10)5080358B30Eartips, Beige, size Medium (pack of 10)5080358B31Eartips, Beige, size Large (pack of 10)



Compatible with MT2000 AND MTS2000

### Audio Accessories

#### CommPort: INTEGRATED MICROPHONE/RECEIVER SYSTEM

NTN1625A\* Integrated Ear Microphone/ Receiver System with PTT on Radio Adapter (includes BDN6676D radio adapter)

NTN1624A\* Integrated Ear Microphone/ Receiver System with Palm PTT (includes BDN6676D radio adapter)

NTN1663A\* Integrated Ear Microphone/ Receiver System with ring PTT (includes BDN6676D radio adapter)

NTN1736A\* Integrated Ear Microphone/ Receiver System with Snap-on-Side PTT (includes BDN6676D radio adapter)

NNTN4186A\* Integrated Ear Microphone/ Receiver System w/Body Push-To-Talk (includes BDN6676D radio adapter)

#### CommPort: REPLACEMENT PARTS

NKN6508A
 NKN6510A
 NKN6512A
 NKN6512A
 Replacement Palm PTT Cable for NTN1624A
 NKN6512A
 Replacement Ring PTT Cable for NTN163A
 NKN6525A
 Replacement Snap-on PTT Cable for NTN1736A
 NNTN4188A
 Replacement Body Push to Talk Case for NNTN4186

NTN8821A CommPort Maintenance Kit; includes replacement ear tubes (pack of

10), windscreens (pack of 2) and microphone seal strips (pack of 10)

NTN8986A Adhesive Pads (pack of 90) for secure attachment to ear NTN8988A Ear Straps (pack of 10), for secure attachment to ear

RLN5037A Replacement Ear Tubes (pack of 10)

4285838B01 Replacement Collar Clip 4202006A01 Replacement Back Cover Clip

BDN6676D 3.5mm Jack Adapter with Quick Disconnect Latch

With the CommPort Integrated/Microphone System, users can speak in a whisper and hear in a crowd. CommPort contains a miniature microphone and receiver that connects to a Motorola Two-way radio and fastens securely to the ear. Using the latest in voice processing technology, the CommPort system makes it possible to hear and speak under the most adverse conditions, by picking up sound waves as they cross the face, enhancing voice clarity under high noise conditions. The minature mic that sits on the top of the earpiece picks them up, cutting through noise, delivering audio without blocking normal hearing. Its variety of push-to-talk options make it ideal for different applications, which include transmitting to firefighters in a burning building, S.W.A.T. or police in covert situations, or workers operating in a noisy environment.







NNTN4186A

Compatible with MT2000 AND MTS2000

### Audio Accessories



#### LIGHTWEIGHT HEADSETS

NMN6245A\* Single-Muff Lightweight Adjustable Headset with Boom Microphone

In-line Push-To-Talk Switch (requires BDN6676D adapter)

NMN6246B\* Ultra-light Headset with Boom Microphone and In-line Push-To-Talk

Switch; ear bud style receiver (requires BDN6676D adapter)

NMN1020A\* Lightweight Headset with Boom Microphone to be worn on a helmet

or safety glasses; includes NKN6498A adapter cable; requires

BDN6676D adapter

NKN6498A\* Headset Adapter Cable for use with NMN1020A
 5080574E02 Foam Earpads for use with NMN6245A (pack of 10)
 BDN6676D 3.5mm Jack Adapter with Quick Disconnect Latch

Lightweight headsets allow for high clarity, hands-free, discreet two-way communication, while adding comfort necessary for extended wear in moderate noise environments. Requires BDN6676D Audio Adapter.

#### TEMPLE TRANSDUCER

RMN4049A\* Temple Transducer
0180305J46 Temple Transducer and Ear Microphone System Training CD

The temple transducer represents a significant achievement in headset design and functionality. It allows the user to receive audio without covering the ear. The receiver portion of the accessory rests on the temples and is capable of converting the receive audio from a two-way radio into sound vibration. The sound vibration is transmitted through the surrounding human tissue and bone directly into the inner ear where it is received by the user. It features an in-line PTT and noise canceling boom microphone. The temple transducer enhances communications and safety by not impairing the user's hearing of external sound environment, such as from machinery and equipment, warning and fire alarms, the intercom, traffic, and even casual conversations with their co-workers.

\*Intrinsically safe

Compatible with MT2000 AND MTS2000

### Audio Accessories

#### MEDIUM WEIGHT HEADSETS

NMN6258A\* Medium Weight Headset, over the head with In-Line PTT, noise reduction rating = 24dB

NMN6259A\* Medium Weight Headset, behind the head with In-Line PTT, noise reduction rating = 24dB

RMN4051B Hardhat Mount Headset mounts easily to hardhats with slots and provides 22dB of noise reduction; requires RKN4095A adapter cable, hardhat not included

Medium Weight Headsets feature noise canceling Boom Microphones and offer high-clarity sound with the additional hearing protection necessary for providing consistent, clear two-way radio communications in harsh, noisy situations.

RMN4053A

\*Intrinsically safe



NMN6258A



RMN4052A

#### TACTICAL MEDIUM WEIGHT HEADSETS

RMN4052A Tactical Headband Style Headset, Grey; provides 24dB of noise reduction and

requires RKN4095A adapter cable Tactical Hardhat Mount Headset mounts

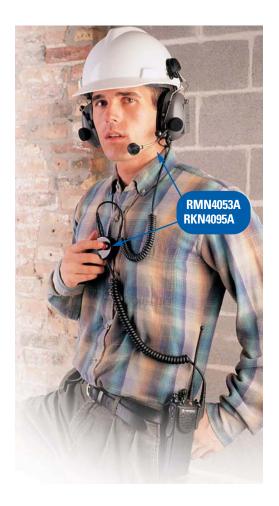
easily to hardhats with slots; provides 22dB of noise reduction and requires RKN4095A adapter cable, hardhat not

included

Radio Adapter Cable with In-Line PTT RKN4095A for use with RMN4051B, RMN4052A

and RMN4053A

Same high-clarity sound and additional hearing protection as our standard medium weight headsets while including two microphones on the outside of each earcup which reproduces the ambient sound back into the headset. Harmful sounds are suppressed to a safe level and low sounds are amplified up to 5 times but never more than 82dB. Includes on/off volume control on ear cups.



Compatible with MT2000 AND MTS2000

### Audio Accessories



RMN5015A

#### RACING HEADSET

RMN5015A Racing Headset For Two-way Radios

(adapter cable BDN6673B required)

BDN6673B Adapter Cable

Motorola is the Official Wireless Equipment supplier of CART® (Championship Auto Racing Teams), so whether your customers' playing field is a racetrack, construction site or other challenging environment, they can count on this Racing Headset for superior comfort and dependable operation.

#### HEAVY DUTY HEADSETS

BDN6645A\* Push-To-Talk Headset with Boom

Microphone; requires adapter cable BDN6673B; noise reduction rating=24dB

Voice-activated Headset with Boom

BDN6635B\*

Microphone; requires adapter cable BDN6673B; noise reduction rating=24dB

Voice-activated Headset with Throat

Microphone; requires adapter cable

BDN6673B; noise reduction rating=24dB

BDN6673B\* Radio Adapter Cable

Heavy duty headsets include noise-cancelling boom microphones and can be worn with or without a hardhat. The Push-To-Talk switch is located on the earcup. The VOX module is contained within the headset on voice activated units. Heavy duty headsets require radio adapter cable BDN6673B, to be ordered separately.

BDN6636B\*



<sup>\*</sup>Intrinsically safe

Compatible with MT2000 AND MTS2000

# Carrying Accessories

#### CARRYING CASES

#### STANDARD BELT LOOP CARRYING CASES

NTN7238A	Leather Carry Case with Belt Loop, "D" rings and T-Strap for use with
	high capacity battery

NTN7239A	Leather Carry Case with Belt Loop, "D" rings and T-Strap for use with
	ultra-high capacity battery

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<i>NDN4018B</i>	DTMF Leather Carry Case with Belt Loop and antenna strap for use

with high and ultra-high capacity batteries

NTN7247A Nylon Carry Case with Belt Loop and Strap for use with high and

ultra-high capacity batteries

#### HIGH ACTIVITY SWIVEL CARRYING CASES

NTN8035B Leather Carry Case with 2.5" High Activity Swivel Belt Loop, "	D'
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rings and T-Strap for use with high capacity battery

NTN8037B Leather Carry Case with 3.0" High Activity Swivel Belt Loop, "D"

rings and T-Strap for use with high capacity battery

NTN8036B Leather Carry Case with 2.5" High Activity Swivel Belt Loop, "D"

rings and T-Strap for use with ultra-high capacity battery

NTN8038B Leather Carry Case with 3.0" High Activity Swivel Belt Loop, "D"

rings and T-Strap for use with ultra-high capacity battery

NDN4017B Leather DTMF Carry Case with 3.0" High Activity Swivel Belt Loop

and Antenna Strap for use with high and ultra-high capacity battery

Motorola designed and engineered carrying cases are available in a variety of sizes to fit your radio and battery while permitting audio to be clearly heard. Constructed of top grain 8 oz. natural leather and all stainless steal hardware, Motorola carrying cases were developed to meet the demands of public safety, construction and other users who operate in the most rigorous environments.

Swivel carrying cases have a high activity swivel "D" 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 versus standard swivel cases while allowing the radio-to-swing freely with body movements.



NTN7247A



NTN8038B



NTN8036B



#### UNIVERSAL HOLDER WITH GOOSENECK BRACKET

RLN4943A Universal Holder with Gooseneck Bracket; provides flexible mounting

solutions for portable radios

RLN4945A Universal Holder with Gooseneck Bracket and wheelchair

quick-release assembly

RLN4944A Wheelchair guick-release bracket

Compatible with MT2000 AND MTS2000

# Carrying Accessories

#### CARRYING CASE ACCESSORIES

#### T-STRAP

NTN7782A T-Strap for Leather Carrying Cases NTN7376A T-Strap for Nylon carrying cases

#### **BELT LOOPS**

NTN8039B 2.5" High Activity Swivel Belt Loop NTN8040B 3.0" High Activity Swivel Belt Loop

#### HIGH ACTIVITY BUTTONS

NTN1534A High Activity "D" Button w/2.5" Belt Loop (NTN8039B)
NTN1535A High Activity "D" Button w/3" Belt Loop (NTN8040B)

NTN8063A High Activity "D" Button

#### **BELT CLIPS**

4205638V09 2.5" Contoured Spring Action Belt Clip 4205638V07 3.0" Contoured Spring Action Belt Clip



#### **BELT**

4200865599 1.75" Wide Adjustable Black Belt



#### CARRYING STRAP

NTN5243A Shoulder Carry Strap, allows easy carrying of radio in a case when not wearing a belt



NTN5243A



#### **SWIVELLER**

TDN9684A Swiveller, includes clip button, holster and belt

#### SWIVELLER REPLACEMENT

#### **ACCESSORIES**

TDN9690A Clip button, mounts on battery TDN9688A Holster, compatible with all buttons

TDN9687A 2" nylon belt

Compatible with MT2000 AND MTS2000

# Carrying Accessories

#### PORTABLE RADIO HANGER

TDN9327A Portable Radio Hanger for door panels up to 2.75" TDN9373A Portable Radio Hanger for door panels up to 3.25"

The portable radio hanger slides over and hangs from the door panel in a vehicle. The radio's belt clip slides onto the portable hanger allowing convenient, easy mounting. Two sizes are available to fit door panels.



TDN9327A TDN9373A



HLN6602A

#### CHEST PACK

HLN6602A Universal Chest Pack with Radio Holder, Pen Holder, and Velcro

Secured Pouch

1505596Z02 Replacement Strap for HLN6602A

Carry the radio mounted on chest with adjustable straps over shoulders and around waist.

#### BREAK-A-WAY CHEST PACK

RLN4570A Break-A-Way Chest Pack

All of the same features as the original chest pack (HLN6602A) plus break-a-way tabs that allow the entire pack to be pulled off with approximately 10 lbs. of pressure. Perfect for railroads, manufacturing locations, construction sites and anywhere safety is a concern.



Compatible with MT2000 AND MTS2000

### Carrying Accessories & Batteries



4280384F89 Universal RadioPAk™ Belt Lengthener; fits waists larger than 40"

RadioPAk™ Radio/Utility Case

It's different from all other holders or cases: more comfortable, more useful and more stylish. Worn around the waist, it holds two-way, iDEN portables or cellular phones at hand. Includes a separate 6"×8" zippered pouch for other on-the-job necessities. Adjustable nylon weave belt; fits both men and women.



#### WATERPROOF BAG

HLN9985B Waterproof Bag, includes large carrying strap



### **BATTERIES**

#### PREMIUM NICKEL CADMIUM (NiCd)

NTN7143CR 1200 mAh, 7.5V

NTN7150AR 1200 mAh, 7.5V, Intrinsically Safe (MSHA)

NTN7372AR 1200 mAh, 7.5V, Intrinsically Safe NTN7147AR 1300 mAh, 7.5V, Intrinsically Safe

NTN7149BR 1300 mAh, 7.5V, Intrinsically Safe (CSA)

NTN7341AR 1400 mAh, 7.5V, Intrinsically Safe

NTN7144CR 1500 mAh. 7.5V

#### impres™ NICKEL CADMIUM (NiCd)

*HNN9028AR* (impres<sup>™</sup>) 1500 mAh. 7.5V

HNN9029AR (impres™) 1500 mAh, 7.5V, Intrinsically Safe

#### PREMIUM NICKEL METAL HYDRIDE (NIMH)

WPNN4013A 2000 mAh, 7.5V

WPNN4037A 1900 mAh, 7.5V, Intrinsically Safe

Motorola Original Batteries are ruggedly designed for lasting durability and system tested with Motorola two-way radios to ensure optimum performance. We offer various chemistry and capacity alternatives, allowing the user to select the ideal battery for his or her needs. NiCd is best suited for extreme-temperature operation, and provides the maximum number of charge/discharge cycles. Li-ion batteries offer extended duty cycles – providing more talk time per shift.



NTN7143CR



WPNN4013AR



HNN9029AR

Compatible with MT2000 AND MTS2000

### Chargers

#### **CHARGERS**

#### SINGLE UNIT COMPACT RAPID RATE CHARGERS

RPX4747A Compact Rapid Rate Charger, 110V

RPX4748A Compact Rapid Rate Charger, 230V Euro plug RPX4749A Compact Rapid Rate Charger, 230V UK plug

These chargers have the power supply built into the line cord giving the user a smaller base unit for easier storage. It also utilizes an enhanced charging algorithm that will help maximize the life of your batteries. It will rapid rate charge both NiCd and NiMH batteries.

#### **MULTIPLE UNIT CHARGER (MUC)**

NTN1177D Six-Pocket, rapid rate, 110V

NTN1178D Six-Pocket, rapid rate, 220V (supplied with 2-prong cord)
NTN1179D Six-Pocket, rapid rate, 240V (supplied with 3 flat prong cord)

Multi-unit chargers offer six pockets that can be used to rapid charge 1 to 6 batteries simultaneously. The batteries can be charged with the radios or separately. They will rapid rate charge both NiCd and NiMH batteries.



#### **MUC ACCESSORIES**

NLN7967A Wall Mount Kit for Multi Unit Charger



WPLN4111AR

WPLN4130A

#### impres™ SMART ENERGY SYSTEM

WPLN4111AR impres™ Smart Energy System Single Unit Charger
WPLN4108BR impres™ Smart Energy System Multi Unit Charger (six bank)
WPLN4130AR impres™ Smart Energy System Multi Unit Charger with Displays



The impres smart energy system ensures maximum talk-time and optimized battery cycle life through the use of its advanced charging algorithm and automatic reconditioning features. The smart energy system reconditions impres batteries when they need it, automatically, keeping them in peak condition. It's advanced conditioning features allow batteries to be safely left on the charger for extended periods of time without incurring the damaging heat build-up which can rob batteries of cycle life. In addition, batteries left on the charger are kept fully charged so they are always ready when you need them. Talk time and cycle life are optimized and the need for manual maintenance programs reduced or eliminated. This rapid-rate tri-chemistry charging system will also charge existing legacy batteries and supports multiple radio platforms including Saber, XTS, and HT1000 series portables. impres™ Multi Unit Chargers with display modules provide valuable information about impres™ batteries. Due to its patented communication protocol, an impres™ battery's current mAh and % capacity are displayed "real time" by simply inserting a battery into a pocket. In addition, battery serial number, kit number, chemistry, charging status, voltage, and other valuable information are displayed. And, by pressing a toggle button, the display can be inverted for wall mounting.

Compatible with MT2000 AND MTS2000

### Chargers

#### impres™ BUNDLE PACKS

<i>RLN5265A</i>	impres <sup>™</sup> single unit charger with 2 HNN9029AR Batteries
RLN5266A	impres™ single unit charger with 2 HNN9028AR Batteries
<i>RLN5439B</i>	impres™ multi unit charger with 6 HNN9029AR Batteries
<i>RLN5440B</i>	impres™ single unit charger with 6 HNN9028AR Batteries

Provide significant savings on the impres products by bundling a charger and batteries together as a smart energy system package.

#### impres™ INDIVIDUAL CHARGER DISPLAY MODULE

RLN5382A Charger Display Module for impres™ Multi-Unit Charger Version 1.3 or Later

These modules are designed to be retrofittable with the standard impres Multi-Unit Charger WPLN4108BR. Up to six modules can be purchased per charger, one for each charging pocket. Includes detailed installation instructions. Note: The version number is referenced on the label located on the bottom of the impres Multi-Unit charger. If no version is shown, it is version 1.2 or earlier. For example, version 1.3 will appear as V1.30.

RLN5591A Charger Display Module for impres Multi-Unit Charger Version 1.2 or earlier

Compatible with Multi-Unit Charger version 1.2 or earlier. These modules require a software flash update from the Radio Support Center. Display modules added at the Radio Support Center. Details included with each shipment. Note: The version number is referenced on the label located on the bottom of the impres™ Multi-Unit charger. If no version is shown, it is version 1.2 or earlier. For example, version 1.2 will appear as V1.20.

#### impres™ CD

0180305J70 impres CD

This CD provides an interactive guide to the impres<sup>™</sup> Charging System, and provides benefit statements as well as application examples.



RLN5382A

Compatible with MT2000 AND MTS2000

### Chargers



WPPN4002BR Shown With Optional Cigarette Lighter Adapter

#### MOTOROLA CONDITIONING CHARGER (MCC)

WPLN4090BR MCC Kit, 110V AC; includes both base charger unit and

7V adapter plate

WPLN4091BR MCC Kit, 220V AC; includes both base charger unit and

7V adapter plate

WPPN4002BR 110V AC Base Charge Unit Only (order adapter plate separately)
WPPN4006AR 220V AC Base Charge Unit Only (order adapter plate separately)

WPPN4065BR Multi-Unit Conditioning Charger Four Station Base 110V

(order adapter plate separately)

WPPN4004BR 7 Volt Adapter Plate Only

3080384G15 15 Cigarette Lighter Adapter Cord; MCC multi-unit conditioning

charger

RLN4814A Vehicular Mounting Bracket and Hard Wire Cable for single unit

Motorola Conditioning Charger

3080384M21 DC Hard Wire Cable, for vehicular installation

(included in RLN4814A)

The MCC utilize negative pulse charging technology that will help extend battery life and enhance battery operation. It will safely condition and charge your specified NiCd and NiMH batteries in approximately one to two hours. The MCC controls heat buildup due to its charging and termination algorithms and the maintenance mode allows batteries to be safely left on the charger for extended periods of time. And now there is an Instant Fault Detection (IFD) feature which detects faulty radio batteries in seconds, which notifies the user that the battery will not operate at peak performance. Optional accessories are available allowing these chargers to be used in both AC and DC environments providing optimal charging flexibility.

Compatible with MT2000 AND MTS2000

### Chargers

### BATTERY MAINTENANCE SYSTEMPLUS (BMSPLUS)

WPLN4079BR Six-Station, 110V AC, 50/60 Hz WPLN4080BR Six-Station, 230V AC, 50/60 Hz

WPPN4085AR BMSPlus field Upgrade Kit for WPLN4079AR, WPLN4080AR and

WPLN4081AR; allows these units to support Li-ion battery

chemistries

NDN4005B Three-Station, 110V AC 50/60 Hz

(does not support Li-ion or 3-cell batteries)

NDN4006B Three-Station, 230V AC 50/60 Hz

(does not support Li-ion or 3-cell batteries)

Using interchangeable battery adapters (sold separately), the BMS<sup>Plus</sup> is capable of charging and discharging, analyzing, conditioning and cycle testing batteries. It supports NiCd, NiMH and Li-ion battery chemistries (Li-ion on 6 station model only) and tracks battery voltage and capacity (mAh). The BMS Plus offers a 3-year warranty. Its easy-to-use design supports hundreds of 2-way, cellular, and camcorder batteries. Includes serial printer\* port (RS-232).

The BMS<sup>Plus</sup> offers a 3-year warranty. Its easy-to-use design supports hundreds of 2-way, cellular, and camcorder batteries with printer port\* (Serial-RS-232C port—uses female 9-pin to male 25-pin cable).

\*Compatible with the STAR Micronics SP200 series printers (and other printers with STAR emulation) available from any STAR Micronics distributor.



WPLN4079BR



TDN9435C

BMSPLUS ADAPTER

TDN9435C Adapter Compatible with NiCd

batteries only

CDN6364A Adapter Compatible with both NiCd and

NiMH batteries

Compatible with MT2000 AND MTS2000

### Chargers

### BATTERY OPTIMIZING SYSTEM II (BOS II)

WPLN4124AR BOS II, Four-Station, 110-240VAC (US line cord) WPLN4125AR BOS II, Four-Station, 110-240VAC (UK/Euro line cords)

No other battery analyzer matches the speed, accuracy, versatility of the Battery Optimizing System II. Ideal for large fleet, public safety, and all other users who rely on their battery performance. Now with increased power, more sophisticated programming options, and easier to use navigation paths, optimizing your batteries was never easier. Key features include:

- Support for NiCd, NiMH, Li-ion and SLA batteries
- 100 watt power supply programmable from 100 mA to 4 Amps per station
- Interchangeable adapters accommodate all major batteries
- Includes a variety of user programs and allows for customizable programming
- Proprietary recondition cycle restores NiCd, & NiMH batteries
- Increased processing power and testing resolution-including a three minute Quicktest that measures the batteries State of Health (SoH)
- Printer output for reports and labels
- Three year warranty



WPLN4124AR

### **BOS ADAPTER**

RL-72403 Standard Adapter



Compatible with MT2000 AND MTS2000

### Chargers



### VEHICULAR CHARGER

TDN9816A Vehicular Charger

This 12V DC charger is ideal for mobile customers; it charges portable radio NiCd batteries in rapid charge mode (in less than 3 hours) until full charge is obtained and then switches to trickle charge mode. A microprocessor controls the charge rate. This durable unit comes with a metal mounting bracket and is PAC\_RT compatible

### VEHICULAR TRAVEL CHARGER

RLN4884B Vehicular Travel Charger

A great traveling companion that ensures constant communication while on the road; allows the battery to rapid charge while using the radio. Users can receive communication immediately once the charger is connected, and transmit from a previously "dead" battery in just 5 minutes. This light and compact unit includes a voltage regulated lighter adapter, custom charger base, mounting bracket, and coil cord; ideal for public safety, utility and construction markets.



### TRAVEL CHARGER AC TRANSFORMER

 2580600E05
 Transformer 120V (US)

 2580600E06
 Transformer 230V (Euro)

 2580600E07
 Transformer 230V (U.K.)

 2580600E08
 Transformer 230V (Argentina)

Travel Charger AC transformer connects to the cigarette lighter adapter cord to allow it to be plugged into an AC wall outlet for indoor use.

### TRAVEL CHARGER MOUNTING BRACKET

0780384K84 Universal Mounting Bracket for travel charger; includes screws and nylon cord

Compatible with MT2000 AND MTS2000

### Antennas

### **ANTENNAS**

Injection molded for rugged environments. Each antenna is tested and tuned to give maximum power and performance.

### **FLEXIBLE WHIP ANTENNAS**

8505241U03 Flexible Whip, 403-520 MHz, 6" 8505241U03 Flexible Whip, 806-869 MHz, 7" 8505241U04 Flexible Whip, 896-941 MHz, 7"

Antenna has a one-piece finish and steel core for optimal strength and better radiation characteristics.

#### **HELICAL ANTENNAS**

8505644V01 Helical, 136-151 MHz, 6" 8505644V02 Helical, 151-162 MHz, 6" 8505644V03 Helical, 162-174 MHz, 6" 8505644V04 Helical, 403-435 MHz, 3" 8505644V05 Helical, 435-470 MHz, 3" 8505644V06 Helical, 470-520 MHz, 3"

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

#### **DIPOLE ANTENNAS**

NAF4000B Dipole, 806-869 MHz, 8" 8505884R02 Dipole, 896-941 MHz, 8"

Dipole molded 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.

### **WIDEBAND ANTENNA**

8505518V01 Wideband, 136-174 MHz, 6"

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





Compatible with MT2000 AND MTS2000

### Antennas

#### STUBBY ANTENNA

8505241U06 Stubby, 806-941 MHz, 4" RAD4194A Stubby, 150-162 MHz

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



### 8505241U06

### MISCELLANEOUS ACCESSORIES

### **PUBLIC SAFETY TILT SWITCH**

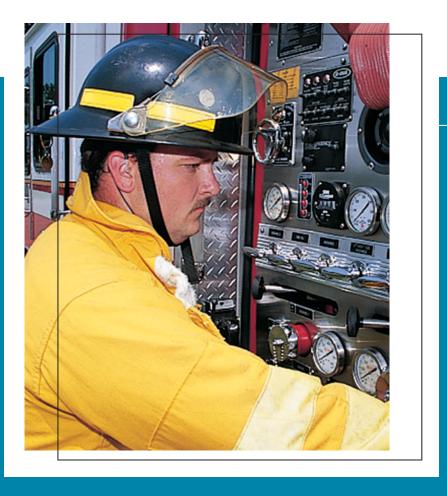
NTN7660B\* Public Safety Tilt Switch

An external emergency switch that is activated when the unit is tilted at a greater than 60 degree angle. Delay times are factory programmed for 8 seconds and are not field programmable. The emergency feature must be programmed into the radio to enable the tilt switch option. Not compatible with the JT1000.

### **OPTION BOARDS**

NTN8313A Analog Voice Scrambler Advantage Board, for use with HT1000 only—NOT APPROVED for installation in FM approved models

\*Intrinsically safe



### Full Band Operation

- Rotary On/Off Volume Control
- Electronic Up/Down Channel Controls
- 2-Digit Numeric Display/Scan Annunciator
- 3x4 Keypad Model with Backlighting
- Front Mounted Bi-Color LED Indicator
- Two Programmable Side Mounted Buttons.
- 3.5 mm Audio Jack
- Channel Scan Monitoring
- Full Band Operation



### Audio Accessories

### REMOTE SPEAKER MICROPHONE

NMN6196A\* Remote Speaker Microphone

The remote speaker microphone is a water-resistant compact unit that allows the user to talk and listen without removing the radio from the belt, case or charger; it has a coiled cord, push-to-talk switch and clothing clip on the back cover.







RSM ACCESSORIES

#### **EPAULET STRAP**

RLN4294A Epaulet Strap, Velcro RLN4295A Epaulet Strap with clip

Black leather epaulet straps secure remote speaker microphones to epaulet of shirts or jackets and attach around cord to back of microphone.

1121112007

### **MICJACKETS**

RLN4903A MicJacket, compatible with NMN6196 remote speaker microphone

MicJackets provide speaker microphone users with a way to further protect the "head" of their microphone from dust, dirt, metal particles, sweat, body oils and other on-the-job grime; MicJackets also allow the user to handle or interact with the speaker microphone in a more hygienic way

\*Intrinsically safe

### Audio Accessories



BDN6668A

### SURVEILLANCE ACCESSORIES

### RECEIVE ONLY EARPIECE (1-WIRE)

BDN6664A\* Beige BDN6665A\*† Beige BDN6726A\* Black BDN6727A\*† Black

### RECEIVE ONLY EARPIECE WITH VOLUME CONTROL (1-WIRE)

BDN6666A\* Beige BDN6728A\* Black



 BDN6667A\*
 Beige

 BDN6669A\*+
 Beige

 BDN6729A\*
 Black

 BDN6731A\*+
 Black



BDN6668A\* Beige BDN6670A\*† Beige BDN6730A\* Black BDN6732A\*† Black

Surveillance accessories allow the user to privately receive communications with the earpiece and are ideal when environments require discreet communications. The above 3.5 mm threaded surveillance accessories plug directly into the top of the radio. No additional adapter is required.

### SURVEILLANCE KIT REPLACEMENT ACCESSORIES

5080371E73 Standard Rubber Eartips, pack of 25, Beige 5080371E75 Standard Rubber Eartips, pack of 25, Black

\*Intrinsically safe †Extra Loud Earphone (Exceeds OSHA Limits)

### Audio Accessories

### NOISE KITS

NTN8370A Extreme Noise Kit, includes 2 Foam Earplugs for loud environments;

provides 24dB of noise reduction

NTN8371A Low Noise Kit, includes Rubber Eartip for low noise environments;

does not provide hearing protection

5080384F72 Replacement Foam Plugs; for use with NTN8370A (pack of 50)

5080371E73 Replacement Standard Beige Rubber Eartips; for use with

NTN8371A (pack of 25)

5080371E75 Replacement Standard Black Rubber Eartips; for use with

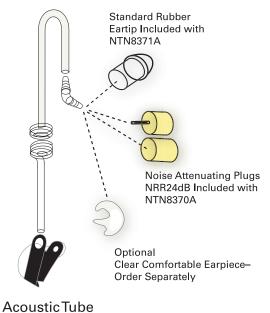
NTN8371A (pack of 25)

This lightweight translucent tube attaches to Motorola Surveillance Kits to provide additional flexibility and comfort. Clothing clip prevents the accessory from being pulled from the ear due to body movement or head rotation.



NTN8370A





with Earphone

### CLEAR COMFORTABLE EARPIECES

<i>RLN4760A</i>	Small Custom Earpiece, Right Ear
<i>RLN4763A</i>	Small Custom Earpiece, Left Ear
<i>RLN4761A</i>	Medium Custom Earpiece, Right Ear
<i>RLN4764A</i>	Medium Custom Earpiece, Left Ear
<i>RLN4762A</i>	Large Custom Earpiece, Right Ear
RLN4765A	Large Custom Earpiece, Left Ear

The Clear Comfortable Earpiece forms to the inside of the ear and is perfect for low noise environments. Compatible with the NTN8371A, clear acoustic tube assembly, and surveillance kits (1, 2, 3 wire). The earpiece is made of easy-to-clean chemically inert, hypo-allergenic material. The following 3 items are required for this product:

- Clear Comfortable Earpiece
- Clear Acoustic Tube Assembly (NTN8371A)
- Surveillance Kit

### Audio Accessories

### COMPLETELY DISCREET EARPIECE

RLN4922A Completely Discreet Earpiece Kit; includes

Wireless Earpiece, Inductive Neckloop, 6 Spare

Batteries and 5 Spare Ear Wax Guards

RLN4919A Ear Wax Guards, pack of 5 RNN4005A 1.4V Battery, pack of 6

Remain discreetly in touch with this miniaturized receiver. All messages received through the user's two-way radio are inductively relayed to the wireless earpiece in the user's ear. Inductive neckloop is easily hidden under the user's Clothing for covert operations. Neckloop attaches to the user's Motorola Surveillance Kit providing completely discreet two-way communications. Security operatives, public safety officials, and private investigators can communicate with ease without any visible equipment. Small as it is, it offers a full range of audio functions including automatic squelch, automatic gain control and noise filtering. Must be used in conjunction with a Motorola Surveillance Kit. Just remove the earpiece on any standard 2 or 3-wire surveillance kit and plug in the neckloop for completely discreet communication.





### PELLET STYLE EARPIECES

BDN6780A Earbud with Microphone and PTT BDN6781A Receive Only Earbud, Black

7580372E70 Replacement Foam Cushion for Pellet Earpieces

The pellet style earpiece allows the user to receive communication discreetly and is comfortable for extended wear.

### FLEXIBLE EAR RECEIVER

BDN6719A Flexible Ear Receiver
7580372E11 Replacement Foam Ear Cushion

The Flexible Ear Receiver contains a flexible earloop and speaker which rests external to the ear. Receive only.



BDN6780A

### Audio Accessories

### EAR MICROPHONE SYSTEM (EMS)

BDN6768A Ear Microphone, for standard noise levels up to 95dB, Black BDN6769A Ear Microphone, for standard noise levels up to 95dB, Beige BDN6770A Ear Microphone, for high noise levels up to 105dB, Grey

#### **INTERFACE MODULES**

BDN6771A Push-To-Talk Only Interface Module

BDN6779A Voice Activated and Push-To-Talk Interface Module

This compact unit picks up the voice through bone vibrations in the ear canal. The miniature earpiece leaves the hands free and face unobscured when worn by rescue and hazard protection personnel, who still retain the ability for direct hearing and speaking. For personnel required to wear breathing apparatus, communications with protective masks are as clear as communications without. And its high speech clarity under noisy environments makes it ideal for high noise environments. Available in PTT or Voice Activated (VOX). Interface module required.



### OPTIONAL ACCESSORIES FOR EAR MICROPHONE SYSTEM

0180358B38\* Push-To-Talk Ring Switch 0180300E83\* Push-To-Talk Body Switch 0180300E25 Earguard with Adjustable Loop; secures ear mic in ear 0180358B32 Earholder, Black, size Small; secures ear mic in ear 0180358B33 Earholder, Black, size Medium; secures ear mic in ear 0180358B34 Earholder, Black, size Large; secures ear mic in ear 0180358B35 Earholder, Clear, size Small; secures ear mic in ear 0180358B36 Earholder, Clear, size Medium; secures ear mic in ear 0180358B37 Earholder, Clear, size Large; secures ear mic in ear 4202006A01 Replacement Back Cover Clip 4280369E44 Replaceable Belt Clip with Screws

4285838B01Replacement Collar Clip5080358B28Eartips, Black, size Medium (pack of 10)5080358B29Eartips, Black, size Large (pack of 10)5080358B30Eartips, Beige, size Medium (pack of 10)5080358B31Eartips, Beige, size Large (pack of 10)









0180300E25

<sup>\*</sup>Intrinsically safe

### Audio Accessories



### LIGHTWEIGHT HEADSETS

NMN6245A\* Single Speaker Lightweight Headset with Boom Microphone and

In-Line Push-To-Talk Switch

NMN6246B Ultralite Headset with Boom Microphone and In-Line Push-To-Talk

Switch, earbud-style receiver

REX4648A Replacement Foam Earpad and windscreen Kit for NMN6245A

Lightweight headsets allow for high-clarity, hands-free, discreet two-way communications while adding comfort necessary for extended wear in moderate-noise environments. No adapter required.

<sup>\*</sup> Intrinsically safe

### Audio Accessories







NMN6261A

### MEDIUM WEIGHT HEADSETS

NMN6260A Medium Weight, Over-the-Head Dual-Muff Headset with In-line PTT

Switch; headset provides 24dB of noise reduction

NMN6261A Medium Weight, Behind-the-Head Dual Muff Headset with In-line PTT Switch; headset provides 24dB of noise reduction; can be worn

with hardhat

Medium weight headsets offer high-clarity sound with the additional hearing protection necessary for providing consistent, clear two-way radio communications in harsh, noisy situations.

### MEDIUM WEIGHT RECEIVE-ONLY HEADSETS

RMN4056B Receive Only Headband Style Headset; noise reduction rating=24dB Receive Only Hardhat Mount Headset; noise reduction rating=22dB RMN4057B (hardhat not included)

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 liquid and foam combination to provide excellent sealing and comfort. Two foot coil cord with 3.5mm threaded plug included.



<sup>\*</sup> Intrinsically safe

### Audio Accessories







BDN6636B BDN6635B BDN6645A

### **HEAVY DUTY HEADSETS**

 $BDN6645A^*$  Push-To-Talk Headset with Boom Microphone; requires adapter cable

BDN6772A

BDN6635B\* Voice-Activated Headset with Boom Microphone; requires adapter

cable BDN6772A

BDN6636B\* Voice-Activated Headset with Throat Microphone; requires adapter

cable BDN6772A

BDN6772A\* Radio Adapter Cable

Heavy duty headsets include noise-cancelling microphones and can be worn with or without a hardhat. The Push-to-Talk switch is located on the earcup. The VOX module is contained within the headset on voice activated units. Heavy duty headsets require radio adapter cable.

<sup>\*</sup>Intrinsically safe

### Carrying Accessories

### MISCELLANEOUS ACCESSORIES

RLN4943A Universal Holder with Gooseneck Bracket; provides flexible mounting

solutions for portable radios

RLN4945A Universal Holder with Gooseneck Bracket and Wheelchair Quick

Release Assembly

RLN4944A Wheelchair Quick Release Bracket







NDN4010A

TDN9657B



### CARRYING CASES

### **CARRYING CASES FOR MEDIUM CAPACITY BATTERIES**

NDN4010AHard Leather DTMF Carry Case with 2.5" Swivel Belt LoopNDN4011AHard Leather Carry Case with 2.5" Swivel Belt LoopTDN9659CSoft Leather Carry Case with Belt Loop and Wrist Strap

TDN9657B Nylon Carry Case with Belt Loop

Full coverage carrying cases provide a convenient way to carry your radio while protecting it from the environment. There are cases that are designed to fit all VISAR radios and battery configurations. You may select from nylon or leather construction and a variety of other accessories.

### Carrying Accessories



NTN7633A

### CARRY HOLDERS

NTN7632A Plastic Carry Holder with 1-1/2" Belt Clip, fits all VISAR radios and

battery configurations

NTN7633A Plastic Carry Holder with 2-1/2" Belt Clip, fits all VISAR radios and

battery configurations

### CARRYING ACCESSORIES

*TDN9675B* Soft Leather Wrist Strap 4200865599 Black Leather Belt, 1.75"

NTN5243A Adjustable Black Shoulder Carrying Strap, attaches to "D" rings

on case

### CARRYING CASES FOR HIGH AND ULTRA HIGH CAPACITY BATTERIES

NDN4012A Hard Leather DTMF Carry Case with 2.5" Swivel Belt Loop
NDN4013A Hard Leather Carry Case with 2.5" Swivel Belt Loop
TDN9660C Soft Leather Carry Case with Belt Loop and Wrist Strap

TDN9658B Nylon Carry Case with Belt Loop



NDN4013A



TDN9684A

### SWIVELLER CARRYING SYSTEM

TDN9684A Swiveller Kit, includes nylon belt, holster, utility strap, and clip button

TDN9687A Nylon Belt, 2" wide

TDN9688A Holster, compatible with all buttons

TDN9689A Utility Strap

TDN9690A Clip Button, mounts on carry holder

The swiveller secures your radio by locking into a belt mounted holster bracket. The swiveller keeps your radio secure while allowing it to swivel 360 degrees. The swiveller carrying system is available as a kit which consists of the nylon belt, holster, utility strap and button configuration or sold separately.

# Carrying Accessories

### CHEST PACKS

Universal Chest Pack with Radio Holder, Pen Holder and Velcro HLN6602A

Secured Pouch

1505596Z02 Replacement Strap for HLN6602A

### BREAK-A-WAY CHEST PACK

*RLN4570A* 

All of the same features as the original chest pack (HLN6602A) plus break-a-way tabs that allow the entire pack to be pulled off with approximately 10 lbs. of pressure; perfect for railroads, manufacturing locations, construction sites and anywhere safety is a concern





### RadioPAk™

RLN4815A RadioPAk™ Radio/Utility Case

4280384F89 Universal RadioPAk™ Belt Lengthener; fits waists larger than 40"

It's different from all other holders or cases: more comfortable, more useful and more stylish. Worn around the waist, it holds two-way, iDEN portables or cellular phones at hand. Includes a separate 6" × 8" zippered pouch for other on-the-job necessities. Adjustable nylon weave belt; fits both men and women.

### PORTABLE RADIO HANGERS

TDN9327A Hanger, fits door panels up to 2.75" wide TDN9373A Hanger, fits door panels up to 3.25" wide

The portable radio hanger slides over and hangs from the door panel in the vehicle. The radio's belt clip slides onto the portable hanger allowing convenient, easy mounting. Two sizes are available to fit door panels.



TDN9327A

TDN9373A

### **Batteries**







NTN7394CR

NTN7395BR

NTN7398BR

### **BATTERIES**

### PREMIUM NICKEL CADMIUM (NiCd)

NTN7395BR 1200 mAh, 7.5V

NTN7398BR 1200 mAh, 7.5V, Intrinsically Safe

### PREMIUM NICKEL METAL HYDRIDE (NIMH)

NTN7394CR 1300 mAh, 7.5V NTN7396BR 600 mAh, 7.5V

NTN7397CR 1300 mAh, 7.5V, Intrinsically Safe

Motorola Original Batteries are ruggedly designed for lasting durability and system tested with Motorola two-way radios to ensure optimum performance. We offer various chemistry and capacity alternatives, allowing the user to select the ideal battery for his or her needs. NiCd is best suited for extreme-temperature operation, and provides the maximum number of charge/discharge cycles. Li-ion batteries offer extended duty cycles — providing more talk time per shift.

### VEHICULAR BATTERY ELIMINATOR

NDN4003A Vehicular Battery Eliminator

The battery eliminator saves useful battery life by drawing power from a vehicle's battery; simply replace the portable battery with the battery eliminator and plug in the cigarette lighter adapter.



### Chargers

### DUAL UNIT ENHANCED DESKTOP CHARGERS

NTN1402A Dual Unit Desktop Charger, Rapid Charge, 120V, with three step charging cycle

NTN1403A Dual Unit Desktop Charger, Rapid Charge, 220V, with three step charging cycle

NTN1404A Dual Unit Desktop Charger, Rapid Charge, 240V, with three step

charging cycle

The dual unit charger is designed to sequentially charge two batteries and can charge each battery in one to three hours. The charger will ship with a power cord. The charger is designed to operate with the use of interchangeable plug-in line cords. Additional line cords may be purchased separately.



NTN1402A



3060665A04

### CHARGER LINE CORDS

3060665A04 Interchangeable Line Cord, 120V

3060665A05 Interchangeable Line Cord, 220V, 2-prong Euro plug 3002120F02 Interchangeable Line Cord, 240V, with 3-prong U.K. plug

The following charger line cords can be used on the dual unit rapid rate charger to provide versatility for worldwide charging capability.

### SIX-POCKET CHARGER

NTN7621D Six-Pocket Charger, Rapid Rate, 120V

NTN7622D Six-Pocket Charger, Rapid Rate, 220V, 2-prong Euro plug NTN7623D Six-Pocket Charger, Rapid Rate, 240V, 3-prong U.K. plug



NTN7621D

### Chargers

### MOTOROLA CONDITIONING CHARGER (MCC)

WPLN4100CR MCC Kit, 110V AC; includes both base charger unit and 7V

adapter plate

WPLN4101BR MCC Kit, 220V AC; includes both base charger unit and 7V

adapter plate

WPPN4002BR 110V AC Base Charge Unit Only (order adapter plate separately)WPPN4006AR 220V AC Base Charge Unit Only (order adapter plate separately)

WPPN4065BR Multi-Unit Conditioning Charger, Four-Station Base, 110V

(order adapter plates separately)

WPPN4003CR Adapter Only, 7V

3080384G15 Cigarette Lighter Adapter Cord

RLN4814A Vehicular Mounting Bracket and hard wire cable for single unit

Motorola Conditioning Charger

3080384M21 DC Hard Wire Cable, for vehicular installation

(included in RLN4814A)

The MCC utilize negative pulse charging technology that will help extend battery life and enhance battery operation. It will safely condition and charge your specified NiCd and NiMH batteries in approximately one to two hours. The MCC controls heat buildup due to its charging and termination algorithms and maintenance mode allows batteries to be safely left on the charger for extended periods of time. And now there is an Instant Fault Detection (IFD) feature which detects faulty radio batteries in seconds, which notifies the user that the battery will not operate at peak performance. Optional accessories are available allowing these chargers to be used in both AC and DC environments providing optimal charging flexibility.



WPPN4002BR Shown With Optional Cigarette Lighter Adapter



### Chargers



WPLN4124AR

### BATTERY OPTIMIZING SYSTEM II (BOS II)

WPLN4124AR BOS II, Four-Station, 110-240VAC (US line cord)
WPLN4125AR BOS II, Four-Station, 110-240VAC (UK/Euro line cords)

No other battery analyzer matches the speed, accuracy, versatility of the Battery Optimizing System II. Ideal for large fleet, public safety, and all other users who rely on their battery performance. Now with increased power, more sophisticated programming options, and easier to use navigation paths, optimizing your batteries was never easier. Key features include:

- Support for NiCd, NiMH, Li-ion and SLA batteries
- 100 watt power supply and programmable from 100 mA to 4 Amps per station
- Interchangeable adapters accommodate all major batteries
- Includes a variety of user programs and allows for customizable programming
- Proprietary recondition cycle restores NiCd, & NiMH batteries
- Increased processing power and testing resolution-including a three minute Quicktest that measures the batteries State of Health (SoH)
- Printer output for reports and labels
- Three year warranty

### **ADAPTER**

RL-73183 Standard Adapter, VISAR

### Chargers



WPLN4079BR

### BATTERY MAINTENANCE SYSTEMPLUS (BMSPLUS)

WPLN4079BR Six-Station, 110V AC, 50/60 Hz WPLN4080BR Six-Station, 230V AC, 50/60 Hz

WPPN4085ARNDN4005BBMS Plus field Upgrade Kit for WPLN4079AR and WPLN4080ARThree-Station, 110V AC 50/60 Hz (does not support Li-ion or 3-cell

batteries,

NDN4006B Three-Station, 230V AC 50/60 Hz (does not support Li-ion or 3-cell

batteries)

Using interchangeable battery adapters (sold separately), the BMS<sup>Plus</sup> is capable of charging and discharging, analyzing, conditioning and cycle testing batteries. It supports NiCd, NiMH and Li-ion battery chemistries and tracks battery voltage and capacity (mAh). The BMS Plus offers a 3-year warranty. Its easy-to-use design supports hundreds of 2-way, cellular, and camcorder batteries. Includes serial printer\* port (RS-232).

The BMS<sup>Plus</sup> offers a 3-year warranty. Its easy-to-use design supports hundreds of 2-way, cellular, and camcorder batteries with printer port\* (Serial-RS-232C port—uses female 9-pin to male 25-pin cable).

\*Compatible with the STAR Micronics SP200 series printers (and other printers with STAR emulation) available from any STAR Micronics distributor.

### BMS PLUS ADAPTERS

TDN9717A Battery Adapter, NiCd only CDN6141A Battery Adapter, NiCd and NiMH

### Antennas

### **ANTENNAS**

### **HELICAL ANTENNAS**

8505834W01 Helical, 136-150.8 MHz, 5" 8505834W02 Helical, 150.8-178 MHz, 5" 8505834W03 Helical, 162-178 MHz, 5" 8505644V04 Helical, 403-435 MHz, 3" 8505644V05 Helical, 435-470 MHz, 3" 8505644V06 Helical, 470-520 MHz, 3"

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



8505241U05 Flexible Whip, 403-520 MHz, 6" 8505241U03 Flexible Whip, 806-870 MHz, 7"

Flexible whip antennas have a one-piece finish and steel core for optimal radiation characteristics.

### STUBBY ANTENNAS

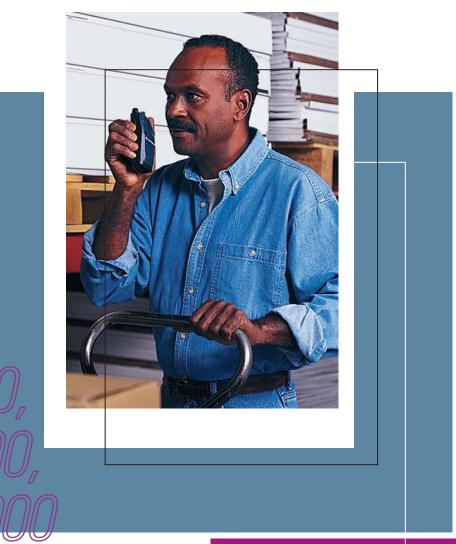
8505241U06 Stubby, 806-941MHz, is a 4" broad band antenna that operates in the 800/900MHz band

This stubby quarterwave antenna is ideal when radio is worn on the belt because the short antenna is non-obtrusive.





8505241U05 8505241U06



### TC3000/TR3000/TS3000 $TELARIO^{TM}$ digital communication system

- TELARIO communicator—the mobility of a cordless phone and the immediacy of a two-way radio call, all in one handset.
- TELARIO radio—instant push-of-a-button communications with other Telario radios or TELARIO communicators at your facility.
- TELARIO control station—provides extensive coverage and complete control of your digital communications system



### Audio Accessories



### REMOTE SPEAKER MICROPHONE (RSM)

HMN9067B Remote Speaker Microphone

The Remote Speaker Microphone is a water-resistant compact unit that allows the user to talk and listen without removing the radio from the belt, case or charger. It has a coiled cord, Push-To-Talk switch and clothing clip on the back cover.

### SURVEILLANCE KITS

HMN9069A Surveillance Kit with Microphone and PTT combined (2 wire)

Surveillance accessories allow the user to privately receive communications with the earpiece and are ideal when environments require discreet communications

#### NOISE KITS

NTN8370A Extreme Noise Kit, includes 2 Foam Earplugs for loud environments;

provides 24dB of noise reduction

NTN8371A Low Noise Kit, includes Rubber Eartip for low noise environments;

does not provide hearing protection

5080384F72 Replacement Foam Plugs; for use with NTN8370A (pack of 50)

5080371E73 Replacement Standard Beige Rubber Eartips; for use with

NTN8371A (pack of 25)

5080371E75 Replacement Standard Black Rubber Eartips; for use with

NTN8371A (pack of 25)

This lightweight translucent tube attaches to Motorola Surveillance Kits to provide additional flexibility and comfort. Clothing clip prevents the accessory from being pulled from the

ear due to body movement or head rotation.



NTN8370A



### Audio Accessories

### CLEAR COMFORTABLE EARPIECES

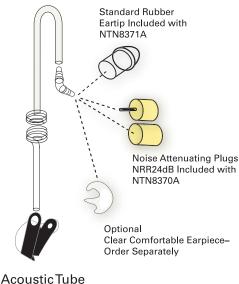
RLN4760A Small Custom Earpiece, Right Ear
RLN4763A Small Custom Earpiece, Left Ear
RLN4761A Medium Custom Earpiece, Right Ear
RLN4764A Medium Custom Earpiece, Left Ear
RLN4765A Large Custom Earpiece, Left Ear
Large Custom Earpiece, Left Ear

The Clear Comfortable Earpiece forms to the inside of the ear and is perfect for low noise environments. Compatible with the NTN8371A, clear acoustic tube assembly, and surveillance kits (1, 2, 3 wire). The earpiece is made of easy-to-clean chemically inert, hypo-allergenic material. The following 3 items are required for this product:

- Clear Comfortable Earpiece
- Clear Acoustic Tube Assembly (NTN8371A)
- Surveillance Kit

### GENERAL AUDIO ACCESSORIES

*HMN9070A* Earpiece with Slim-Line Boom Microphone *HMN9068A* Earbud with Clip Microphone and PTT



Acoustic Tube with Earphone

#### RECEIVE ONLY ACCESSORIES

HLN9787A Earpiece without Volume Control

HLN9788A Earbud, small rubber tip with earloop contour to either ear HMN9066A Flexible Ear Receiver; receive only ear piece contains a flexible

earloop and speaker which rests external to ear

These lightweight earpieces provide hands-free listening capabilities. They work best for users who need to hear information clearly, but seldom need to transmit.



### LIGHTWEIGHT HEADSET

HMN9065A Lightweight Headset with Swivel Boom Microphone

Lightweight headset maintains privacy and good audio quality in moderate noise levels. It's ideal for individuals in retail and front desk environments who need to communicate by radio or telephone without holding a handset. The headset is comfortable enough for extended hours of use.

# Carrying Accessories

### CARRYING CASES

### **CARRYING CASES FOR TC3000**

HLN9777A Soft Leather Open Keypad Carrying Case with Belt ClipHLN9786A Soft Leather Protected Keypad Carrying Case with Belt Clip

HLN9776A Plastic Carrying Holster with Swivel ClipHLN9782A Nylon Carrying Case with Beltloop

#### **CARRYING CASES FOR TR3000**

HLN9785A Hard Leather Carrying Case with Swivel Beltloop

HLN9783A Nylon Carrying Case with Beltloop

A variety of carrying accessories are available for your comfort and convenience. The carrying cases are available in sizes designed to fit your radio and battery and permit audio to be heard clearly.



HLN9777A



HLN6602A

### CHEST PACK

HLN6602B Universal Chest Pack with Radio Holder, Pen Holder and Velcro

Secured Pouch

1505596Z02 Replacement Strap for HLN6602A

Carry the radio mounted on chest with adjustable straps over shoulders and around waist.

### CARRYING ACCESSORIES

HLN9985A Waterproof Bag, includes large carrying strap

HLN9767B Wrist Strap

HLN9766A 1.5" Spring Action Belt Clip (for TR3000)

### Carrying Accessories, Batteries



### RadioPAk™

RLN4815A RadioPAk™ Radio/Utility Case 4280384F89 Universal RadioPAk™ Belt Lengthener; fits waists larger than 40"

It's different from all other holders or cases: more comfortable, more useful and more stylish. Worn around the waist, it holds two-way, iDEN portables or cellular phones at hand. Includes a separate  $6"\times 8"$  zippered pouch for other on-the-job necessities. Adjustable nylon weave belt; fits both men and women.

RLN4815A

### **BATTERY**

### PREMIUM NICKEL METAL HYDRIDE (NIMH) HNN9021A NIMH, 550 mAh, 3.6V

Motorola Original Batteries are ruggedly designed for lasting durability and system tested with Motorola two-way radios to ensure optimum performance. We offer various chemistry and capacity alternatives, allowing the user to select the ideal battery for his or her needs. NiCd is best suited for extremetemperature operation, and provides the maximum number of charge/discharge cycles. Liion batteries offer extended duty cycles — providing more talk time per shift.



HNN9021A

# Chargers & Power Supply

### **CHARGERS**

HTN3008B 120V Enhanced Desktop Rapid Charger with Power SupplyHTN3009B 120V Enhanced Multi-Unit Charger with Universal Power Supply

2580572V01 120V Power Supply for Desktop Charger

3085714L01 120V Line Cord

2580427B05 Multi-Unit Universal Charger Power Supply

Convenient desktop chargers simultaneously charge a TC3000 or TR3000 along with spare battery (up to six for the multi-unit model). Charges battery to full capacity in 75 minutes and a spare battery simultaneously to full capacity in 4 hours.



### TS3000 ACCESSORIES

HNN9014B Back-Up Battery
HAG9014A Remote Mount Antenna

HLN9789A 1.5" Trunnion

HKN9030A 75 Foot Power Extension Cable (plenum-rated)

HLN3263C Telco Retrofit Kit (1 extension model to 4 extension capabilities)

3085662M01 Site Survey Cable

RDN4394C 3/8" Extraflex Cable (per foot)

RDN4406A TNC Male 3/8" Extraflex Connector

RDN4400A TNC Female 3/8" Extraflex Connector

### CROSS CONNECT

HKLN4125A Adapter for TR3000/TC3000

HKLN4126A Adapter for GP300, P1225 and SP50 HKLN4127A Adapter for HT and MTX series

HKLN4128A Adapter for SP21

HKLN4129A Adapter for Fixed Base and Custom

HKKN4003A Cat 5 Crossover Cable, 6"

### POWER SUPPLY ACCESSORIES

2580427B06 TS3000 Power Supply 3085714L01 120V Line Cord



CDM750—Practical CDM1250-Versatile CDM1550-Sophisticated



- 4 Versatile Channel Spacing and X-Pand Audio Enhancement
- Private Line Capabilities and Easy Audio Programming
- Voice Operated Transmission (VOX)
- Lightweight, Compact Design
- Convenient Charging Adaptor

### Audio Accessories



### STANDARD COMPACT MICROPHONE

AARMN4025B Standard Compact Microphone provides basic Push-To-Talk

functionality and ships with all CDM Series mobile radios

NNTN4033A Earpiece with Microphone and Remote Push-To-Talk, Black

### ENHANCED KEYPAD MICROPHONE

AARMN4026B Enhanced Keypad Microphone includes a full keypad that enables you to dial phone numbers from the microphone; also has three customizable buttons that can be programmed with any of the control head features

### HEAVY-DUTY MICROPHONE

AARMN4038B Heavy-Duty Microphone for users who want a more durable microphone; also ideal for those who need a larger microphone that is easy to handle with gloves on

### **VISOR MICROPHONE**

AARMN4027A Visor Microphone for use with external Push-To-Talk accessories; microphone mounts to vehicle's visor for convenient hands-free operation of radio

### TELEPHONE STYLE HANDSET

AAREX4617A Telephone Style Handset is ideal for those who want the ability to conduct private radio conversations; you can transmit and receive messages through this ergonomically designed, easy-to-hold handset; includes cup and hardware





AAREX4617A

### Audio Accessories





RMN4050A

RBN4000A

### REMOTE SPEAKER MICROPHONE KIT WITH BLUETOOTH™ WIRELESS TECHNOLOGY

RBN4000A Remote Speaker Microphone Kit: Remote Speaker Microphone Plus with

BLUETOOTH Wireless Technology (RMN4050A), and Mobile Radio Adapter (RLN5328A), Adapter Cable (RKN4092A) and 3-Meter Cable (RKN4077A)

Remote Speaker Microphone Plus with BLUETOOTH Wireless Technology

RMN4050A RBN4001A Mobile Adapter Kit with BLUETOOTH Wireless Technology, Includes

Mobile Radio Adapter (RLN5328A), Adapter Cable (RKN4092A) and 3-

Meter Cable (RKN4077A)

Mobile Adapter Cable with BLUETOOTH Wireless Technology RKN4092B

*RKN4077A* 3-Meter Cable

Radio Adapter with BLUETOOTH Wireless Technology *RLN5328A* 

WADN4184A Headset with Push-To-Talk

### Audio Accessories

### HANDS-FREE ACCESSORIES

### PUSHBUTTON WITH PUSH-TO-TALK

RLN4857A

Pushbutton with Push-to-Talk Feature provides hands-free operation of radio in vehicle, allowing you to transmit messages without using a mobile microphone; must be used in conjunction with the visor microphone; push-to-talk button can be held in the hand or mounted in the vehicle with touch fasteners

#### FOOT SWITCH WITH PUSH-TO-TALK

RLN4856A

Foot Switch with Push-to-Talk Feature provides hands-free operation of radio in vehicle, allowing you to transmit messages without using a mobile microphone; foot switch mounts to the vehicles floor and must be used in conjunction with the visor microphone

#### GOOSENECK MOUNT WITH PUSH-TO-TALK

*RLN4858A* 

Gooseneck Mount with Push-to-Talk Feature provides hands-free operation of radio in vehicle, allowing you to transmit messages without using a mobile microphone; gooseneck Push-to-Talk button mounts to the steering wheel column and must be used in conjunction with the visor microphone

#### **EMERGENCY FOOT SWITCH**

RLN4836AR

Emergency Foot Switch enables you to notify the base station quickly and discreetly that you are in an emergency situation; pressing the foot switch sends a signal to the base station and activates the microphone, so you can communicate with the base station



HSN8145B

#### **SPEAKERS**

### **EXTERNAL 13-WATT SPEAKER**

RSN4001A External 13-Watt Speaker offers a higher level of radio volume output—beneficial if you operate in an extremely noisy environment

### **EXTERNAL 7.5-WATT SPEAKER**

HSN8145B External 7.5-Watt Speaker offers a higher level of radio volume output—beneficial if you operate in a highly noisy environment

### Mobile Accessories



### **MOUNTING ACCESSORIES**

#### LOW-PROFILE MOUNTING TRUNNION

GLN7324A Low-Profile Mounting Trunnion standard mounting bracket is ideal for vehicles with limited space for mounting the mobile radio

#### HIGH-PROFILE MOUNTING TRUNNION

GLN7317A High-Profile Mounting Trunnion standard mounting bracket is ideal for vehicles with limited space for mounting the mobile radio

### REMOVABLE SLIDE MOUNT

HLN8097A Removable Slide Mount is ideal if you frequently move the radio from one vehicle to another, or if you are concerned about radio theft; radio easily slips in and out of the slide mount





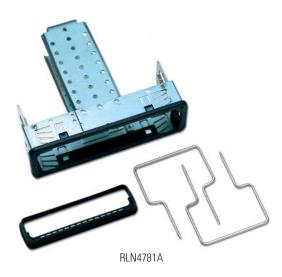
#### **KEY LOCK MOUNT**

RLN4779A Key lock Mount gives radio extra protection from theft by requiring use of a key to lock/unlock radio from its position in the mounting bracket

### THREE-POINT LOW BAND MOUNT

RLN4774A Three-Point Low Band Mount provides extra stability for mounting low band radio models

### Mobile Accessories



### DIRECT IN DASHBOARD MOUNTING KIT

RLN4781A Control Head compatible with CDM750, CDM1250 and CDM1550 VHF and UHF only

Direct In Dashboard Mounting Kit is ideal if you prefer to mount the radio directly into the dashboard for better appearance or to keep it from being an obstruction in the vehicle.

### REMOTE MOUNTING CABLES

RKN4077A 3m Remote Mount Cable RKN4078A 5m Remote Mount Cable RKN4079A 7m Remote Mount Cable

These Remote Mounting Cables are used to connect the radio chassis to the control head.

### REMOTE MOUNTING KITS

RLN4801A Remote Mount for CDM750 Control Head

RLN4802A Remote Mount for CDM1250, CDM1550 and CDM1550 LS

Control Heads

Remote Mounting Kits allow you to mount radio chassis in the trunk or under the seat and mount control head elsewhere in the vehicle. Ideal for vehicles with no convenient place to mount the complete radio near dashboard or where security may be of concern.

### CABLES TO BATTERY

 HKN4137AR
 12V, 1-45W Low-Power Cable

 HKN4191B
 12V, 40-60W High-Power Cable

 HKN4192B
 20-foot, 12V, 1-45W Power Cable

HKN9327BR Ignition Switch Cable

These cables are used to connect the battery to the radio chassis.

### Mobile Accessories



RLN5403A

HMN3000B



### CONTROL STATION

RLN5403A CDM Control Station

The radio mounts into the lightweight portable chassis, which contains a full range of front panel control buttons plus an integrated internal microphone and speaker.

### Quick User Guide:

- Front connector allows for a range of external audio accessories
- Compatible with headsets, desk microphones, Tone or DC remote adapters and telephone interconnects
- Has undergone extensive accelerated life testing

### CONTROL STATION ACCESSORIES

#### **DESKTOP POWER SUPPLIES**

HPN4002B 1-25 Watt Power Supply for use with low-power radios; provides

power for using the mobile from a desktop

HPN4001B 25-60 Watt Power Supply for use with low-power radios; provides

power for using the mobile from a desktop

#### **PUBLIC ADDRESS ACCESSORIES**

RLN5288A Public Address Kit Control Switch Panel for Public

Access with Cables (requires HSN1000B)

HSN1000B 6-Watt Public Address Speaker Amp

#### **PUBLIC ADDRESS SPEAKER CABLES**

HKN9324AR 15-ft. Cable

#### **DESKTOP MICROPHONE**

HMN3000B

Black Desktop Microphone makes transmissions easier when the mobile radio is being used from a desktop because the microphone and the Push-To-Talk button are larger; helps expedite transmissions because you do not have to keep picking the microphone up

### **DESKTOP TRAYS**

GLN7318A Desktop Tray without Speaker; ideal for securing the mobile in place

in a desktop environment

GLN7326A Desktop Tray with Speaker; ideal for securing the mobile in place in

a desktop environment—includes a speaker for increased volume

when receiving calls in high-noise areas

### CDM750, CDM1250, CDM1550 CDM1550•LS, CDM1550•LS+

## Mobile Data & Monitor Units

#### **BASE INTERFACE PACKAGES**

RDB4455A 30–36 MHz RDB4456A 36–42 MHz RDB4457A 42–50 MHz

Boost the output of CDM Series mobile two-way radios with Base Interface Packages. Designed for easy installation with existing base stations or repeaters, these convenient Base Interface Packages can enhance the coverage area of CDM Series mobile two-way radio systems by increasing RF output up to 100W. Ideal for users in agriculture, public safety, construction and utilities.

The Base Interface cabinet contains its own power supply and amplifier, so no external sources are required. Servicing is a breeze, with a removable front hinged panel that provides ready access to interior components. Can be used as a base station or repeater by adding a controller (sold separately).

Base Interface Packages feature a 50% transmit/50% receive extended duty cycle. Include multiple coded Squelch capabilities, and support MDC (Motorola Digital Calling) signaling. Can be programmed with optional software. Optional telephone interconnect capability is also available

### MOBILE DATA UNITS

### **MOBILE DISPLAY TERMINAL**

RDN7368A Mobile Status Reporting and Text Messaging Device

Mobile status reporting and text messaging device with internal data modem which will interface with Motorola CDM series radios; this unit features a 4x40 backlit LCD, 14-button status keypad, 5 serial ports for peripheral device interface and 6 auxiliary I/O's.

#### **MOBILE DISPLAY TERMINAL W/GPS\***

RDN7367A Mobile Display Terminal

Mobile display terminal equipped with an Automatic Vehicle Location (AVL) device compatible with Global Positioning System (GPS).

#### STANDALONE MODEM W/GPS\*

RDN7369A Standalone Modem with GPS

Standalone, cost efficient Automatic Vehicle Location (AVL) device compatible with Global Positioning System (GPS); provides serial ports and auxiliary I/O's.

\*U.S. maps optional with GPS units



RDN7368



### CDM750, CDM1250, CDM1550 CDM1550•LS, CDM1550•LS+

## Mobile Data & Monitor Units



RDN6011A

### PERIPHERALS CREDIT CARD READER

RDN7371A Magnetic Credit Card Reader
RDN7379A Credit Card Processing Software

This magnetic credit card reader is used to capture credit card data which is relayed to the mobile data unit for Point of Sales transactions; used with RDN7379A (credit card processing software).

#### **MOBILE PRINTER**

RDN7373A The Mobile Printer

The mobile printer provides users with a hard copy of the information transmitted from the base dispatch location; used with RDN7371A (credit card reader).

#### U.S. MAPS

RDN7377A U.S. Maps

### **ALL HARDWARE REQUIRES:**

RDN7378A AVL Messaging Status Software RDN7374A Programming Software

### POSITIONING MONITORS

Allows for remote control and monitoring of equipment and operations through two-way radio systems.

### **POSITION MONITOR UNIT—MASTER**

RDN6011A Master Unit

Master unit connects to a CDM mobile and can monitor up to 8 separate field units that are connected to CDM mobiles.

### **POSITION MONITOR UNIT—FIELD**

RDN6010A Field Unit

Two-way radio technology is used to monitor voluble equipment and operations and field units will immediately shut down in the event of a malfunction.

### MISCELLANEOUS BASE MODEM

RDN7364A

A radio channel controller and modem that interfaces with the base radio; required with every radio channel or wireless circuit used within the system

#### MOBILE PROGRAMMING HARDWARE

RDN7380A Interface Cable From PC to Mobile

Data Unit

### SERIAL BREAKOUT UNIT

RDN7738A Serial Breakout Unit needed for

multi-channel operations

### CDM750, CDM1250, CDM1550 CDM1550·LS, CDM1550·LS+

# Kits & Option Board

### **BUTTON KITS**

RLN4829A Button Kit for CDM750; replacement button kit includes buttons for

MON (monitor) and SCAN

RLN4830A Button Kit for CDM1250 and CDM1550; replacement button kit

includes buttons for ZONE, XPAND, HI/LO, EMERGENCY, and V STR  $\,$ 

RLN4831A Button Kit for CDM1250, CDM1550 and CDM1550 •LS; replacement

button kit includes buttons for MON (monitor), SCAN, CALL, PHONE

and HOME



### *MISCELLANEOUS*

### **VOICE STORAGE OPTION BOARD**

AAHLN9725C Voice Storage Option Board enables you to record and playback memos or incoming radio calls

### CDM750, CDM1250, CDM1550 CDM1550•LS, CDM1550•LS+

### Antennas

### **ANTENNAS**

HAE4004A

RAB4002ARB Low Band Antenna, 29.7-36.0 MHz,

1/4 Wave Base Loaded Antenna

RAB4003ARB Low Band Antenna, 39-42 MHz, Standard Roof Mount,

Low Band 1/4 Wave Base Loaded Antenna

RAB4004ARB Low Band Antenna, 42-50 MHz, Standard Roof Mount,

Low Band 1/4 Wave Base Loaded Antenna

UHF 470-512 MHz, 1/4-Wave Roof Mount

HAD4006A
 HAD4006A
 VHF 136-144 MHz, 1/4-Wave Roof Mount
 HAD4007A
 VHF 146-150.8 MHz, 1/4-Wave Roof Mount
 HAD4008A
 HAD4009A
 HAE4002A
 HAE4003A
 VHF 162-174 MHz, 1/4-Wave Roof Mount
 HAE4003A
 UHF 450-470 MHz, 1/4-Wave Roof Mount

The signals for these antennas are radiated vertically, making them ideal for urban environments where buildings might obstruct the signal.

RAD4000AMB Low Band VHF Antenna - VHF 3 dB Gain Magnetic Mount Antenna,

140-140-174 MHz

HAD4014AVHF 144-174 MHz, 3dB Gain Roof MountHAE4010AUHF 406-420 MHz, 3.5dB Gain Roof MountHAE4011AUHF 450-470 MHz, 3.5dB Gain Roof MountHAE4012AUHF 470-494 MHz, 3.5dB Gain Roof Mount

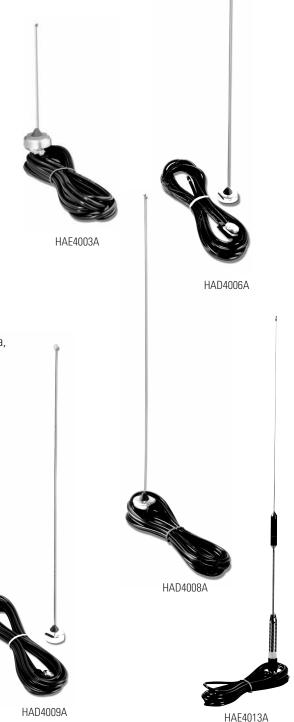
RAE4004ARB UHF 450-470 MHz, UHF 5 dB Gain Roof Mount Antenna

HAE4013A UHF 494-512 MHz, 5dB Gain Roof Mount

These antennas are designed to direct the signal more towards the horizon, making them ideal for applications in more geo-graphically flat regions where signal coverage is sparse and must cover a larger area.

### **GPS ANTENNAS**

RDN7372A Fixed Mount GPS Active Antenna RDN7375A Magnetic Mount GPS Active Antenna



### CDM750, CDM1250, CDM1550 CDM1550•LS, CDM1550•LS+

### **Antennas**

### LOW PROFILE ANTENNAS

L		•

<i>RAE4162A</i>	White 410-430 MHz
<i>RAE4163A</i>	Black 410-430 MHz
<i>RAE4164A</i>	Black 430-450 MHz
<i>RAE4165A</i>	White 430-450 MHz
<i>RAE4166A</i>	Black 470-490 MHz
<i>RAE4167A</i>	White 450-470 MHz
<i>RAE4168A</i>	Black 450-470 MHz
<i>RAE4169A</i>	White 470-490 MHz



<i>RAD4207A</i>	White 150-168 MHz
<i>RAD4208A</i>	Black 150-168 MHz
<i>RAD4209A</i>	Black 142-160 MHz
<i>RAD4210A</i>	White 142-160 MHz

#### 800MHZ

<i>RAF4217A</i>	White 821-896 MHz
<i>RAF4218A</i>	Black 821-896 MHz
<i>RAF4219A</i>	Black 806-866 MHz
<i>RAF4220A</i>	White 806-866 MHz



3/4" Brass Hole Mount (Top and Side View)

3080384M48



RAF4220A

### ANTENNA KITS

<i>RAE4162ARB</i>	White 410-430 MHz
<i>RAE4163ARB</i>	Black 410-430 MHz
<i>RAE4164ARB</i>	Black 430-450 MHz
<i>RAE4165ARB</i>	White 430-450 MHz
<i>RAE4166ARB</i>	Black 470-490 MHz
<i>RAE4167ARB</i>	White 450-470 MHz
<i>RAE4168ARB</i>	Black 450-470 MHz
<i>RAE4169ARB</i>	White 470-490 MHz

#### **VHF**

White 150-168 MHz
Black 150-168 MHz
Black 142-160 MHz
White 142-160 MHz

#### 800MHZ

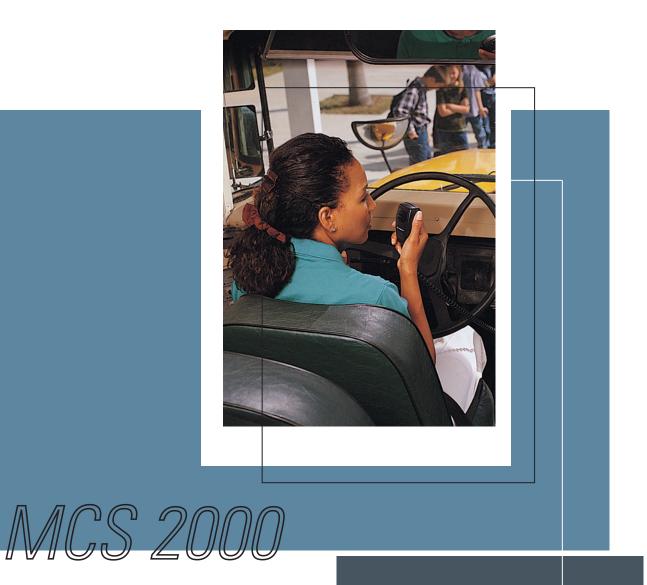
RAF4217ARB	White 821-896 MHz
RAF4218ARB	Black 821-896 MHz
RAF42I9ARB	Black 806-866 MHz
RAF4220ARB	White 806-866 MHz

### **MOUNTS**

3080384M44	Black Magnetic W/12 ft. of RG58A/U Cable
3080384M45	Chrome Magnetic W/12 ft. of RG58A/U Cable
3080384M48	3/4 Hole Mini UHF Crimp W/17 ft. of RG58A/U Cable
3080384M46	Chrome Trunk Mount W/17 ft. of RG58A/U Cable
3080384M47	Black Trunk Mount W/17 ft. of RG58A/U Cable

Includes 3/4 Brass Mount with 17 ft. of RG58U Solid Center Conductor Cable.





MCS 2000 MOBILE



- 8-character alphanumeric display with indicators
- 5 programmable buttons
- Dual mode Conventional and Trunked operation
- Telephone interconnect
- Remote or dash mounting

### Mobile Accessories



HMN4069E WITH 40 FT. CABLE

### **MICROPHONES**

HMN4069E Standard White Palm Microphone; includes 40 ft. cable

HMN4072E Classic White Palm Microphone

NMN6210D 3x4 Button Keypad Mic (includes 3 additional

programmable buttons)

GMN6147B Noise Cancelling Microphone

(includes 3 additional programmable buttons)

HMN1085B Handset with Hang Up Cup

### MICROPHONE ADAPTER CABLES

HKN6129A 17 Foot Adapter Cable for second microphoneHKN6130A 40 Foot Adapter Cable for second microphone

Allows a second microphone to be added via mobile accessory connector, requires ordering a second PTT microphone (HMN4069E or HMN4072E) to function.

### **VISOR MICROPHONES**

FMN1611C Dash Mount Hands-Free Visor Microphone

(requires GLN7279A or GLN7278A)

HKN6116A 1 foot Adapter Cable

HMN1073A Remote Mount Visor Microphone (requires GLN7279A or GLN7278A)

GLN7279A Gooseneck PTT, attaches to steering column of vehicle

GLN7278A Footswitch PTT

Allows user to have hands free communication with the use of a gooseneck PTT or footswitch PTT.

### INSTALLATION ACCESSORIES

HLN6356B Installation Hardware Kit



### Mobile Accessories



### **SPEAKERS**

HSN4038A 7.5W Water External Resistant Speaker (requires HKN6127

adapter cable for dash mounted compatibility)

HSN4039A 13W External Water Resistant Remote Speaker (requires

HKN6127 adapter cable for dash mounted compatibility)

HKN6127A Speaker Adapter Cable

### EMERGENCY SWITCH

GLN7280A Emergency Push Button HLN5113B Emergency Foot Switch

Enables the user to send an emergency message to a console where their unit ID can be displayed and an alarm sounded.

### REMOTE MOUNT KITS

H1634A Remote Mount Retrofit Kit—model I
H1635A Remote Mount Retrofit Kit—model II & III

Converts a low or mid power radio from dash to remote mount. Includes 17' control head cable, 20' power cable, 40' power cable, control head back plate and mounting hardware, front plate for the transceiver and an adapter for the speaker.

### REMOTE MOUNT KIT ACCESSORIES

HKN6111B 10 Foot Control Head Cable
HKN6112B 17 Foot Control Head Cable
HKN6113B 22 Foot Control Head Cable
HKN6118B 40 Foot Control Head Cable

### Mobile Accessories



HLN6404A

### CONTROL STATION ACCESSORIES

HMN3000B Desk Microphone, Black HMN1038E Desk Microphone, Beige

HLN6404A Desk Tray with Speaker Low Power, for use with model II & III

HLN6405A Rubber Desk Tray without Speaker Low Power, for use with model I

*HPN4001B* Power Supply and Cable 25-60 watt *HPN4002B* Power Supply Low Power 1-25 watt

HLN6580B Desk Tray with Speaker Mid Power, for use with model II & III HLN6581A A Hard Plastic Desk Tray without Speaker Low Power, for use

with model I

### **POWER CABLES**

HKN4191B 10 Foot Low/Mid Power CableHKN4192B 20 Foot Low/Mid Power CableHKN6110A 20 Foot High Power Only Cable

### MISCELLANEOUS ACCESSORIES

GLN7282A Alarm Buzzer

HLN6642A Alarm Relay and Cable
 HLN6372A Key Lock Mount
 HKN6128A Ignition Switch Cable
 GKN6262B Car Radio Mute Cable

### Antennas

### **ANTENNAS**

#### 800 MHZ

HAF4002A 1/4 Wave, Roof Top (806-900 MHz) RRA4983A 3dB, Roof Top (806-900 MHz)

### 900 MHZ

RRA4935A 3dB, Roof Top w/14 ft. cable (890-960 MHz) RAF4003ARM 3dB, Roof Top w/22 ft. Cable (860-960 MHz)

#### **VHF**

HAD4006A1/4 Wave, Roof Top (136-144 MHz)HAD4007A1/4 Wave, Roof Top (144-152 MHz)HAD4008A1/4 Wave, Roof Top (150.8-162 MHz)HAD4009A1/4 Wave, Roof Top (162-174 MHz)RAD4010ARB3dB, Roof Top (136-174 MHz)

#### UHF

HAE4002A1/4 Wave, Roof Top (403-430 MHz)HAE4003A1/4 Wave, Roof Top (450-470 MHz)HAE4004A1/4 Wave, Roof Top (470-512 MHz)HAE4010A3.5dB, Roof Top (406-420 MHz)HAE4011A3.5dB, Roof Top (450-470 MHz)HAE4012A3.5dB, Roof Top (470-495 MHz)HAE4013A3.5dB, Roof Top (494-512 MHz)





### **Antennas**

### LOW PROFILE ANTENNAS

RAE4162A	White 410-430 MHz
<i>RAE4163A</i>	Black 410-430 MHz
RAE4164A	Black 430-450 MHz
<i>RAE4165A</i>	White 430-450 MHz
<i>RAE4166A</i>	Black 470-490 MHz
RAE4167A	White 450-470 MHz
<i>RAE4168A</i>	Black 450-470 MHz
<i>RAE4169A</i>	White 470-490 MHz

### **VHF**

<i>RAD4207A</i>	White 150-168 MHz
<i>RAD4208A</i>	Black 150-168 MHz
<i>RAD4209A</i>	Black 142-160 MHz
RAD4210A	White 142-160 MHz

#### 800 MHZ

<i>RAF4217A</i>	White 821-896 MHz
<i>RAF4218A</i>	Black 821-896 MHz
<i>RAF4219A</i>	Black 806-866 MHz
RAF4220A	White 806-866 MH



3080384M48





RAF4220A

RAD4165A

### ANTENNA KITS

### UHF

<i>RAE4162ARB</i>	White 410-430 MHz
<i>RAE4163ARB</i>	Black 410-430 MHz
<i>RAE4164ARB</i>	Black 430-450 MHz
<i>RAE4165ARB</i>	White 430-450 MHz
<i>RAE4166ARB</i>	Black 470-490 MHz
<i>RAE4167ARB</i>	White 450-470 MHz
<i>RAE4168ARB</i>	Black 450-470 MHz
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RAF4217ARB	White 821-896 MHz
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RAF4220ARB	White 806-866 MHz

### **MOUNTS**

3080384M44	Black Magnetic W/12 ft. of RG58A/U Cable
3080384M45	Chrome Magnetic W/12 ft. of RG58A/U Cable
3080384M48	3/4 Hole Mini UHF Crimp W/17 ft. of RG58A/U Cable
3080384M46	Chrome Trunk Mount W/17 ft. of RG58A/U Cable
30803841/47	Black Trunk Mount W/17 ft of RG58A/U Cable

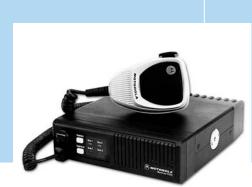
Includes 3/4 Brass Mount with 17 ft. of RG58U Solid Center Conductor Cable.





Up to 32 channel operation and widespaced separation

- Timeout timer automatically prevents the tying up of a channel due to inadvertent keying of the transmitter
- Exclusive PRIVATE LINE and DIGITAL PRIVATE LINE coded squelch for clearer reception
- User programmable scan list
- Telephone interconnect



### Mobile Accessories



HMN1035C



HMN1037B

### **MICROPHONES**

HMN1035C Palm Microphone, full size

HMN1037B Non-Backlit Touch Code Microphone with Hang Up Clip

HMN1056D Compact Palm Microphone

HMN4016A Noise Canceling Microphone, screens out background noise

HMN3013A Non-Backlit DTMF Microphone for 820/840 models

### MICROPHONE ACCESSORIES

HLN9073B Microphone Hang-Up Clip

HLN9559A 7' Coil Cord for microphones HMN1035C and HMN1056DHLN9560A 10.5' Coil Cord for microphones HMN1035C and HMN1056D

### **SPEAKERS**

HSN4019B External Speaker, 5-watt (requires 5-pin options connector)
HSN9326A External Speaker, 5-watt (requires 16-pin options connector)

Provides a separate speaker for high noise environments.

### **PUBLIC ADDRESS ACCESSORIES**

HLN3145CR Public Address Kit, control switch panel

for public address with cables (requires HSN1000B)

*HSN1000B* Public Address Speaker, 6-watt *HKN9324AR* Speaker Cable, public address, 15 ft.

HKN9325A Cable Extender Kit for PA



### Mobile Accessories





### IGNITION SWITCH CABLE

HKN4284A Ignition Switch Cable (5 pin connector)
HKN9327BR Ignition Switch Cable with Housing
Connector (16 pin connector)

#### MOUNTING HARDWARE

HLN4426A Key Lock Mount (VHF/UHF)

HLN9637A Key Lock Mount (for lowband and 800 MHz)

HLN5226B Extra Stability Mount, used with non-locking trunnion

HLN5189A Non-locking Trunnion (for 820/840 series only)
HLN9450A Floor Mount, 45 Degrees/60 Degrees Wedge

(for 100/300 model only)

HLN9404A Installation Sleeve Mounting Hardware (for 35 and 60 watt and low

band models) for use with HLN9450A

Multiple mounting options are available. Key lock mount secures the radio with a two-piece detachable trunnion that locks together. Extra stability mount provides added stability to help protect your radio from high vibration environments. Standard and floor mounts also available.

### QUICK RELEASE SLIDE MOUNT

RLN4091A Slide Mount Kit; includes vehicle mount (RLN4092A), radio mount

(RLN4093A), and mounting hardware

RLN4092A Vehicle Mount Only, with hardware RLN4093A Radio Mount Only, with hardware

RLN4077A Angle Bracket with 20 degrees Fixed Angle and 50 Degrees Swivel

RLN4078A Flat Bracket with 50 Degrees Swivel

The quick release slide mounts are easy to install and are available with a variety of mounting brackets which allow installation in any location within a vehicle.



### Mobile Accessories

### CONTROL STATION KITS

HLN3199C High Power Control Station Package (25-60 watt models)HLN3035C Low Power Control Station Package (1-25 watt models)

Allows you to operate the radio from the convenience of your desktop. Control Station Kit includes: power supply, adapter cable, black desk microphone and base tray.

### **ALARM ACCESSORIES**

HLN9328C External Alarm Relay Cable (MAXTRAC 300—16 pin connector and

800 MHz display models only)

HLN9374C External Alarm Relay Cable (MAXTRAC 100—5 pin connector and

800 MHz non-display models and 900 MHz models)

RLN5132A Emergency Alarm with Housing Connector

HLN9330B Emergency Alarm Footswitch



HLN9330B



HPN4002B





HLN5292BR

### CONTROL STATION ACCESSORIES

*HPN4002B* Power Supply (1- 25 watt) *HPN4001B* Power Supply (25-60 watt)

HMN3000B Standard Desktop Microphone, black

HMN1038E Desktop Microphone, beige

HLN5292BR Base Station Tray

HKN4139A Power Cable for Low Power Control Station

HKN9455A 10 feet Power Cable for High Power Control Station

### **MISCELLANEOUS**

HLN9457A Accessory Plug and 16 Pins HKN9557A Mini-UHF Adapter Cable



### Antennas

### **ANTENNAS**

#### 800 MHZ

HAF4002A 1/4 Wave, Roof Top (806-900 MHz) RRA4983A 3dB, Roof Top (806-900 MHz)

### 900 MHZ

RRA4935A 3dB, Roof Top w/14 ft. Cable (890-960 MHz) RAF4003ARM 3dB, Roof Top w/22 ft. Cable (860-960 MHz)

### **VHF**

 HAD4006A
 1/4 Wave, Roof Top (136-144 MHz)

 HAD4007A
 1/4 Wave, Roof Top (144-152 MHz)

 HAD4008A
 1/4 Wave, Roof Top (150.8-162 MHz)

 HAD4009A
 1/4 Wave, Roof Top (162-174 MHz)

 RAD4010ARB
 3dB, Roof Top (136-174 MHz)

#### **UHF**

HAE4002A1/4 Wave, Roof Top (403-430 MHz)HAE4003A1/4 Wave, Roof Top (450-470 MHz)HAE4004A1/4 Wave, Roof Top (470-512 MHz)HAE4010A3.5dB, Roof Top (406-420 MHz)HAE4011A3.5dB, Roof Top (450-470 MHz)HAE4012A3.5dB, Roof Top (470-495 MHz)HAE4013A3.5dB, Roof Top (494-512 MHz)

#### **LOW BAND**

RAB4002ARB 1/4 Wave Base Loaded Antenna (29.7-36.0 MHz)
RAB4003ARB 1/4 Wave Base Loaded Antenna (36-42 MHz )
RAB4004ARB 1/4 Wave Base Loaded Antenna (42-50 MHz)

### ANTENNA ADAPTER

5880367B22 Mini-UHF to UHF Antenna Adapter 2880376E84 Mini-UHF Antenna Connector



### Antennas



RAF4220A

### LOW PROFILE ANTENNAS

### **UHF**

RAE4162A	White 410-430 MHz
RAE4163A	Black 410-430 MHz
RAE4164A	Black 430-450 MHz
<i>RAE4165A</i>	White 430-450 MHz
<i>RAE4166A</i>	Black 470-490 MHz
RAE4167A	White 450-470 MHz
<i>RAE4168A</i>	Black 450-470 MHz
<i>RAE4169A</i>	White 470-490 MHz

### **VHF**

<i>RAD4207A</i>	White 150-168 MHz
RAD4208A	Black 150-168 MHz
<i>RAD4209A</i>	Black 142-160 MHz
<i>RAD4210A</i>	White 142-160 MHz

### 800MHZ

<i>RAF4217A</i>	White 821-896 MHz
<i>RAF4218A</i>	Black 821-896 MHz
<i>RAF4219A</i>	Black 806-866 MHz
RAF4220A	White 806-866 MHz



3080384M48

### ANTENNA KITS

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RAE4162ARB	White 410-430 MHz
<i>RAE4163ARB</i>	Black 410-430 MHz
<i>RAE4164ARB</i>	Black 430-450 MHz
<i>RAE4165ARB</i>	White 430-450 MHz
<i>RAE4166ARB</i>	Black 470-490 MHz
<i>RAE4167ARB</i>	White 450-470 MHz
<i>RAE4168ARB</i>	Black 450-470 MHz
<i>RAE4169ARB</i>	White 470-490 MHz

### **VHF**

<i>RAD4207ARB</i>	White 150-168 MHz
<i>RAD4208ARB</i>	Black 150-168 MHz
<i>RAD4209ARB</i>	Black 142-160 MHz
RAD4210ARB	White 142-160 MHz

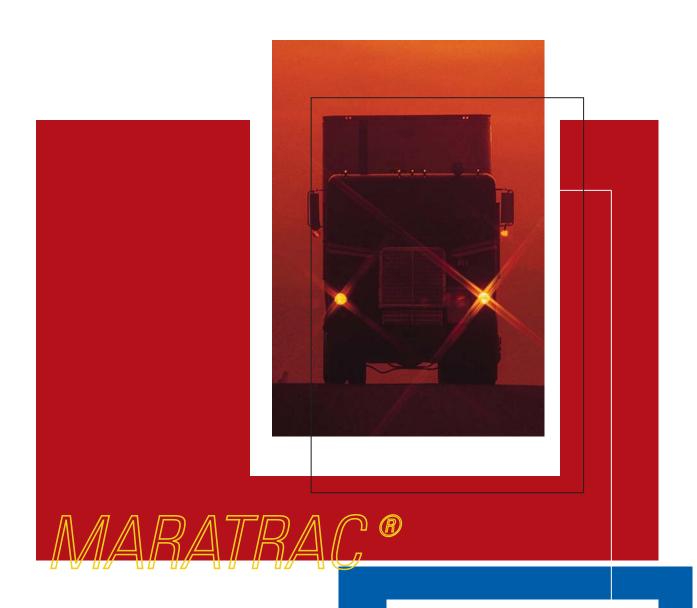
#### 800MHZ

<i>RAF4217ARB</i>	White 821-896 MHz
RAF4218ARB	Black 821-896 MHz
RAF4219ARB	Black 806-866 MHz
RAF4220ARB	White 806-866 MHz

### **MOUNTS**

3080384M44	Black Magnetic W/12 ft. of RG58A/U Cable
3080384M45	Chrome Magnetic W/12 ft. of RG58A/U Cable
3080384M48	3/4 Hole Mini UHF Crimp W/17 ft. of RG58A/U Cable
3080384M46	Chrome Trunk Mount W/17 ft. of RG58A/U Cable
3080384M47	Black Trunk Mount W/17 ft. of RG58A/U Cable

Includes 3/4 Brass Mount with 17 ft. of RG58U Solid Center Conductor Cable.



Up to 32 channel operation and widespaced separation

- Two piece radio with small control head
- Easy to read 2-digit LED display
- Program from 1-99 channels
- Priority scan



### **MARATRAC**

### Mobile Accessories



HMN1015A

### MICROPHONES/HANDSETS

HMN1015A Standard Palm Microphone for A2 and A3 models
 HMN1061A Standard Palm Microphone for A7 model
 HMN4013A Noise Cancelling Microphone for A7 models
 HMN1022B DTMF Microphone for A2 and A3 models
 HMN1032B DTMF Microphone for A7 model
 HLN1220B Hardset with Hang Up Box

A variety of microphones are available to add flexibility and ease of operation.



### **SPEAKERS**

*HSN4020B* External Speaker for use on MARATRAC A2 and A3 models *HSN4021B* External Speaker for use on MARATRAC A5 and A7 models

Adds external speaker—useful in high noise environments.

### SPEAKERS FOR SIREN

TDN6251A Siren Speaker, round with chrome finish
 TDN6252A Siren Speaker, rectangular with chrome finish
 TDN6253A Siren Speaker, round with grey finish
 TDN6254A Siren Speaker, rectangular with grey finish



### FRONT/REAR CONTROLS

HLN1398A Front and Rear Control, includes auxiliary handset, hang-up cup,

control box and power voice speaker (requires one of the following

control cables).

YKN4228A 17' Front and 40' Rear Control CableYKN4230A 17' Front and 80' Rear Control CableYKN4229A 25' Front and 40' Rear Control Cable

### **MARATRAC**

### Mobile Accessories



HLN4811A

### **EMERGENCY SWITCH**

HLN6555A Emergency Footswitch for A7 models

Enables user to send an emergency message to a console, where their unit ID can be displayed and an alarm sounded.

### BASIC CONTROL HEADS

HCN4033B A3 Clamshell Control Head, 8-channel with scan

HCN4034B A2 Clamshell Rotary Control Head HCN1089A VHF, UHF A7 Advanced Control Head

HCN1090A Lowband A7, 99-channel Advanced Control Head with Adjustable

Squelch Control, for use with radios shipped since 10/94

HCN1051A Hand Held A5 Control Head

### SIGNALING RETROFIT KITS

DTMF Decode Signaling Kit (for POST 1990 radios) HLN1400A

### ALARM

HKN1015A External Alarm Cable and Relay, VHF and UHF (for Horn and Lights) HLN3091A External Alarm Cable and Relay, Low Band (for Horn and Lights)

Note: Horn and Lights are not independently selectable on low band models.



### *MARATRAC*

### Antennas

### **MOBILE ANTENNAS**

#### LOW BAND

RAB4002ARA Low Band 1/4 Wave Base Loaded Antenna, 29.7-36 MHz
RAB4003ARA Low Band 1/4 Wave Base Loaded Antenna, 36-42 MHz
RAB4004ARA Low Band 1/4 Wave Base Loaded Antenna, 42-50 MHz

#### VHF

TAD6112A
 TAD6113A
 VHF 1/4 Wave Roof Mount Antenna, 144-152 MHz
 TAD6113A
 VHF 1/4 Wave Roof Mount Antenna, 150-162 MHz
 TAD6114A
 TAD6290B
 VHF Unity Gain, Roof Mount Antenna, 150-174 MHz
 RAD4010ARA
 VHF 3dB Gain, Roof Mount Antenna, 136-174 MHz

#### **UHF**

TAE6052A UHF 1/4 Wave Roof Mount Antenna, 450-470 MHz
TAE6072A UHF 3.5dB Gain, Roof Mount Antenna, 450-470 MHz

### LOW PROFILE ANTENNAS

#### UHF

RAE4162A White 410-430 MHz *RAE4163A* Black 410-430 MHz RAE4164A Black 430-450 MHz *RAE4165A* White 430-450 MHz *RAE4166A* Black 470-490 MHz White 450-470 MHz RAE4167A RAE4168A Black 450-470 MHz *RAE4169A* White 470-490 MHz



RAD4207A White 150-168 MHz RAD4208A Black 150-168 MHz RAD4209A Black 142-160 MHz RAD4210A White 142-160 MHz

### 800 MHZ

RAF4217A White 821-896 MHz
RAF4218A Black 821-896 MHz
RAF4219A Black 806-866 MHz
White 806-866 MH



RAF4220ARB



3080384M48

### ANTENNA KITS

#### UHF

RAE4162ARB White 410-430 MHz RAE4163ARB Black 410-430 MHz RAE4164ARB Black 430-450 MHz RAE4165ARB White 430-450 MHz RAE4166ARB Black 470-490 MHz RAE4167ARB White 450-470 MHz RAE4168ARB Black 450-470 MHz RAE4169ARB White 470-490 MHz

#### **VHF**

 RAD4207ARB
 White 150-168 MHz

 RAD4208ARB
 Black 150-168 MHz

 RAD4209ARB
 Black 142-160 MHz

 RAD4210ARB
 White 142-160 MHz

#### 800 MHZ

 RAF4217ARB
 White 821-896 MHz

 RAF4218ARB
 Black 821-896 MHz

 RAF4219ARB
 Black 806-866 MHz

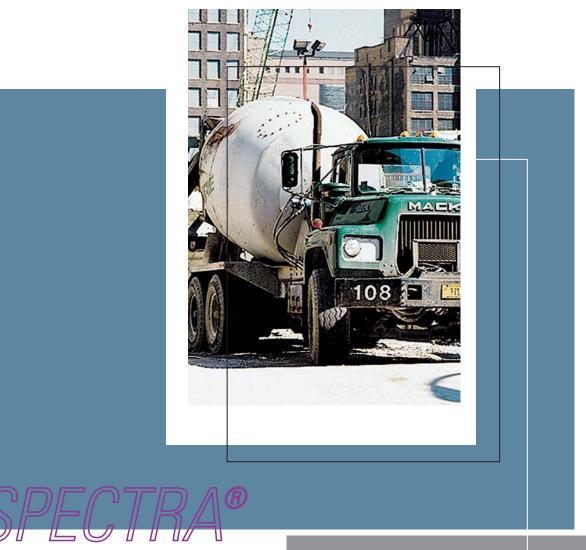
 White 806-866 MHz
 White 806-866 MHz

#### **MOUNTS**

3080384M44 Black Magnetic W/12 ft. of
RG58A/U Cable
3080384M45 Chrome Magnetic W/12 ft. of
RG58A/U Cable
3080384M48 3/4 Hole Mini UHF Crimp W/17 ft. of
RG58A/U Cable
3080384M46 Chrome Trunk Mount W/17 ft. of
RG58A/U Cable
3080384M47 Black Trunk Mount W/17 ft. of

Includes 3/4 Brass Mount with 17 ft. of RG58U Solid Center Conductor Cable.

RG58A/U Cable



### Designed for SMARTNET trunked operation

- Dynamic regrouping
- Fast system access
- Automatic call back
- Privacy
- Busy queing
- Automatic retry
- Emergency call
- Fail safe protection



### Mobile Accessories





### **MICROPHONES**

HMN1080A Standard Palm Microphone

HMN1053B DTMF Microphone

5084898K10 Noise Cancelling Microphone

HMN1050D Desk Top Microphone (for control station operation)

HLN1220B Handset with Hang Up BoxHMN1079A Water Resistant Palm Microphone

HMN1061A Palm Microphone for use with Astro Digital Spectra W9 Radio and

A7 Model

EXTERNAL SPEAKER
HSN4018B External Speaker

Provides Audio for High Ambient Noise Environments.



### Mobile Accessories



TDN6253A



TDN6254A

### SIREN

H1500B Siren/Public Address (steady tone operates via button on control head)H1336B Siren/Public Address, provides hi-lo, yelp, and airhorn tones controlled

through supplemental housing

H1337A Public Address Only

### SPEAKER FOR SIREN AND PUBLIC ADDRESS

TDN6251A Siren Speaker Round with Chrome Finish
 TDN6252A Siren Speaker Rectangular with Chrome Finish
 TDN6253A Siren Speaker Underhood with Grey Finish
 TDN6254A Siren Speaker Round with Grey Finish

### MISCELLANEOUS HARDWARE

HLN6025A Key Lock Mount

HLN6008A Remote Mount Kit with 17 Foot Cable

HLN6275A Deck Mounting Hardware



HLN6025A

### Mobile Accessories



### CONTROL STATION ACCESSORIES

HPN4001B Control Station Power Supply, 25-60 watt

HKN4139A Power CableHLN6042A Control Station TrayHMN1050D Desktop Microphone

### **EMERGENCY SWITCH**

HLN5131C External Emergency ButtonHLN5113B Emergency Footswitch

Enables user to send an emergency message to a console, where their unit ID can be displayed and an alarm sounded.



RLN4074B

### QUICK RELEASE SIDE MOUNT

RLN4074A Quick Release Side Mount Kit, includes radio mount, vehicle mount and mounting hardware

### QUICK RELEASE SIDE MOUNT ACCESSORIES

RLN4075A Radio Mount with Hardware RLN4076A Vehicle Mount with Hardware

RLN4077A Angle Bracket with 20 Degrees Fixed Angle and 50 Degrees Swivel

RLN4078A Flat Bracket with 50 Degrees Swivel

### **Antennas**



### **ANTENNAS**

#### 800 MHZ

HAF4002A 1/4 Wave, Roof Top (806-900 MHz) RRA4983A 3dB, Roof Top (806-900 MHz)

#### 900 MHZ

RRA4935A 3dB, Roof Top w/14 ft. Cable

(890-960 MHz)

RAF4003ARM 3dB, Roof Top w/22 ft. Cable

(890-960 MHz)

### VHF

 HAD4006A
 1/4 Wave, Roof Top (136-144 MHz)

 HAD4007A
 1/4 Wave, Roof Top (144-152 MHz)

 HAD4008A
 1/4 Wave, Roof Top (150.8-162 MHz)

 HAD4009A
 1/4 Wave, Roof Top (162-174 MHz)

 RAD4010ARB
 3dB, Roof Top (136-174 MHz)

### UHF

HAE4002A1/4 Wave, Roof Top (403-430 MHz)HAE4003A1/4 Wave, Roof Top (450-470 MHz)HAE4004A1/4 Wave, Roof Top (470-512 MHz)HAE4010A3.5dB, Roof Top (406-420 MHz)HAE4011A3.5dB, Roof Top (450-470 MHz)HAE4012A3.5dB, Roof Top (470-495 MHz)HAE4013A3.5dB, Roof Top (494-512 MHz)

### Antennas



RAF4220ARB



### LOW PROFILE ANTENNAS

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RAE4162A	White 410-430 MHz
RAE4163A	Black 410-430 MHz
RAE4164A	Black 430-450 MHz
<i>RAE4165A</i>	White 430-450 MHz
<i>RAE4166A</i>	Black 470-490 MHz
RAE4167A	White 450-470 MHz
<i>RAE4168A</i>	Black 450-470 MHz
RAE4169A	White 470-490 MHz

### **VHF**

<i>RAD4207A</i>	White 150-168 MHz
<i>RAD4208A</i>	Black 150-168 MHz
<i>RAD4209A</i>	Black 142-160 MHz
<i>RAD4210A</i>	White 142-160 MHz

### 800MHZ

<i>RAF4217A</i>	White 821-896 MHz
<i>RAF4218A</i>	Black 821-896 MHz
<i>RAF4219A</i>	Black 806-866 MHz
RAF4220A	White 806-866 MHz

### ANTENNA KITS

3080384M48

### **UHF**

RAE4162ARB	White 410-430 MHz
RAE4163ARB	Black 410-430 MHz
<i>RAE4164ARB</i>	Black 430-450 MHz
<i>RAE4165ARB</i>	White 430-450 MHz
<i>RAE4166ARB</i>	Black 470-490 MHz
<i>RAE4167ARB</i>	White 450-470 MHz
<i>RAE4168ARB</i>	Black 450-470 MHz
RAE4169ARB	White 470-490 MHz

#### **VHF**

<i>RAD4207ARB</i>	White 150-168 MHz
<i>RAD4208ARB</i>	Black 150-168 MHz
<i>RAD4209ARB</i>	Black 142-160 MHz
<i>RAD4210ARB</i>	White 142-160 MHz

### 800MHZ

<i>RAF4217ARB</i>	White 821-896 MHz
RAF4218ARB	Black 821-896 MHz
RAF4219ARB	Black 806-866 MHz
RAF4220ARB	White 806-866 MHz

### **MOUNTS**

3080384M44	Black Magnetic W/12 ft. of RG58A/U Cable
3080384M45	Chrome Magnetic W/12 ft. of RG58A/U Cable
3080384M48	3/4 Hole Mini UHF Crimp W/17 ft. of RG58A/U Cable
3080384M46	Chrome Trunk Mount W/17 ft. of RG58A/U Cable
3080384M47	Black Trunk Mount W/17 ft. of RG58A/U Cable

Includes 3/4 Brass Mount with 17 ft. of RG58U Solid Center Conductor Cable.



### Public Address



PDK504

### PA SPEAKERS

Used in paging and talk-back applications. Can be integrated with existing or new intercom systems. A full range of power capacities are available from 7.5 watts up to 75 watts for high noise environments. Even in high noise areas these PA Speakers provide maximum sound intelligibility.

### FOR LOW NOISE LEVEL ENVIRONMENTS

PDK503 Speaker, 4 ohm PDK504 Speaker, 8 ohm

With a power capacity of 7.5 watts and a frequency response of 350-13,000 Hz, these speakers are ideal for radios with 7 watts or less of PA output power. PDK503 and PDK504 measure 7-13/16" diameter and have a dispersion of 120°.

### PA SPEAKERS

Part Number:	PDK503	PDK504
Frequency Response:	350-13,000 Hz	350-13,000 Hz
Power Capacity	7.5 watt (rated)	7.5 watt (rated)
Voice Coil Impedance:	4 ohms	8 ohms
Power Program Peak	7 watts	7 watt
Dimensions:	7-13/16" dia.	7-13/16" dia.
Dispersion:	120°	120°

### Public Address



5080388A02

### PA SPEAKERS

Ruggedly constructed and weather resistant, these PA Speakers offer superior sound quality. They feature a voice coil that utilizes an aluminum foil bobbin. The design enables quick heat dissipation for protection against damage caused by input overload. Ideal for multiple uses in both indoor and outdoor environments.

Part Number:	5080388A01	5080388A02
Frequency Response:	450-4,500 Hz	450-4,500 Hz
Power Capacity	5 watt (rated)	5 watt (rated)
Program Material Peak:	10 watt	10 watt
Voice Coil Impedance:	8 ohms	4 ohms
Dispersion:	180°	180°
Sensitivity as Microphone:	-34 dBm	-34 dBm
Sound Pressure level (4 ft. on Axis, at rated power input):	107 dB	107 dB
Mounting:	U-Shape Bracket	U-Shape Bracket
Dimensions:	5-7/8" dia. X 5-7/8" deep	5-7/8" dia. X 5-7/8" deep
Color:	Blue	Blue

### **Public** Address



### 5080388A03

Part Number:	5080388A03	5080388A04
Frequency Response:	250-15,000 Hz	250-15,000 Hz
Power Capacity	15 watt (rated)	15 watt (rated)
Program Material Peak:	30 watt	30 watt
Voice Coil Impedance:	8 ohms	4 ohms
Dispersion:	140°	140°
Sensitivity as Microphone:	-20 dBm	-20 dBm
Sound Pressure level (4 ft. on Axis, at rated power input):	121 dB	121 dB
Mounting:	U-Shape Bracket	U-Shape Bracket
Dimensions:	8-3/8" dia. X 8-15/16" deep	8-3/8" dia. X 8-15/16" deep
Color:	Grey	Grey

### Siren Speakers & Loud Speakers



TDN6251A



### SIREN LOUDSPEAKERS

TDN6251A Siren Loudspeaker, 11 ohm, Round with Chrome/Brass Finish TDN6254A Siren Loudspeaker, 11 ohm, Round with Grey Enamel/

Aluminum Finish

Weather resistant, designed for electric siren, public address and high intelligibility communications. Suitable for mobile or stationary installations. Aero-dynamically styled horns can be mounted on roof, lightbar or fender. Rated at 100 watts and ruggedly constructed of all metal. Frequency response is rated at 375-8000 Hz.

### Siren Speakers & Loud Speakers



### WIDE ANGLE SIREN LOUDSPEAKER

*TDN6252A* Wide Angle Siren Loudspeaker, 100 watts, Rectangular with Chrome Finish

Can be used in the same applications as the TDN6251A and TDN6254A loudspeakers. Whether roof, lightbar or fender mounted, this siren loudspeaker is specifically designed to reduce wind resistance and enhance aesthetic appearance of vehicle.

### UNDERHOOD SIREN LOUDSPEAKER

TDN6253A Underhood Siren Speaker, 11 ohm, 100 watts, Grey Enamel/Steel Finish

Compact rectangular weather resistant, ideal for unmarked vehicles. Equipped with a durable metal horn, can be mounted behind grill, fender well or underhood.



## Terms and Conditions

### CUSTOMER SERVICE INFORMATION

### **CUSTOMER SERVICE**

If questions arise on back orders, order/billing discrepancies, or return authorizations call:

In the U.S. and Canada:

1-800-422-4210 (7 a.m. to 7 p.m. CST/CDT)

Outside the U.S.

1-847-538-8023 (8 a.m. to 4:30 p.m. CST/CDT)

or Fax: 1-847-576-3023 U.S. Federal Government

1-800-826-1913 (8:30 a.m. to 5 p.m. EST)

### ORDER DISCREPANCIES/RETURNS

If questions arise on order discrepancies and for return authorization, call:

In the U.S.: **1-800-422-4210**Outside the U.S.: **847-538-8023** or

Fax: 847-576-3023

U.S. Federal Government: 1-800-826-1913

Any order discrepancy must be brought to our attention within ten (10) days of shipment, sixty (60) days on orders outside the U.S. Authorization must be acquired from RPSD prior to return of any material.

Returns from outside the U.S. require form ERA (Equipment Return Authorization) which must be obtained before any return of goods.

The authorization number must be visible on the outside of your package. Mark all packages "Attn: Return Goods". Motorola RPSD offers free freight on returns by providing prepaid and pre-addressed labels, which are e-mailed, faxed or mailed at the time of the ERA request.

A tracking number is placed on the label for reference to each individual ERA request. It is important to maintain records of the tracking number until credit has been issued by Motorola.

Except for crystals and other specific items Motorola Radio Products and Services Services Division will accept the return of new and unused Motorola products in their original packaging material within 45 calendar days of the original shipment of the product. After 45 calendar days, a 20% restocking fee will be assessed. Restocking fees for tower hardware, site equipment and test stations will be applied per the individual supplier's policy as set forth in the suppliers' stated terms and conditions accompanying product packing slip, and products ordered to a specific frequency or code may not be returnable. Note: the 20% restocking fee applies to returns of new and unused computer and computer peripheral products, and no returns of computers or peripherals will be accepted beyond 45 days. After 90 days, no returns of new, unused equipment (tower, site and test equipment included) will be accepted by Motorola.

## Terms and Conditions

### **DEFINITIONS**

"Motorola" shall mean the Radio Products and Services Division of the Commercial, Government and Industrial Solutions Sector of Motorola, Inc. "Customer" shall mean the customer who purchases Products from Motorola. "Products" shall collectively mean the Replacement Parts, Batteries, Accessories, Test & Site Equipment, and Software ordered by the Customer from the Motorola Customer Care Services Division's then current Price and Availability List ("Price and Availability List").

### **CONFIRMING ORDERS**

If Customer chooses to send in a confirming order, the confirming order should be clearly marked "confirming". Motorola is not responsible for duplicate shipments sent out if the reason for the duplicate shipment was that a confirming order was not marked "confirming". If a confirming order differs in any way from the original order, the original order takes precedence.

### PRICING AND TAXES

The prices are located in the Price and Availability List and are subject to change without notice. Up-to-date Pricing and Availability can be found at www.motorola.com/businessonline. Orders will be charged at prices in effect the day an order is entered. Special Pricing may be available, call your local account manager to determine applicability. Programs, promotions, quoted or contract prices supersede the prices in the then current Price and Availability List, provided the quotation or the contract is current at the time the order is placed. Customers will be invoiced upon shipment. The prices set forth are exclusive of any amount for Federal, State and/or Local excise, sales, use, property, retailer's occupation or similar taxes. If any such excluded tax is determined to be applicable or if Motorola is required to pay any such tax, the prices set forth in the then current Price and Availability List shall be increased by the amount of such tax and any interest or penalty incurred, and Customer shall pay to Motorola the full amount of any such increase no later than ten (10) days after receipt of an invoice therefor.

### SHIPPING, DELIVERY, TITLE AND SECURITY

Delivery, Title and Security Shipping and handling charges shall be paid by the Customer. Customer agrees to pay such amount quoted without regard to the actual charges applicable at the time of shipment. Motorola will ship only to Customer's facility or the facility of one of Customer's affiliates. Motorola will not drop ship to third parties at the request of a Customer. Unless otherwise directed by the Customer, all shipments will be routed via United Parcel Service or common carrier depending on weight and size.

Emergency shipments will be routed by air or by the fastest method with consideration given to weight and size limitations and will be subject to an additional shipping fee. Shipments outside of the U.S. will be routed by air. Unless otherwise agreed to by Motorola, all deliveries are F.O.B. Factory shipping facility(ies) or F.O.B destinations

## Terms and Conditions

for state and local government entities and title and risk of loss to Products sold shall pass to Customer at the F.O.B. point. Shipping or delivery dates are best estimates only.

Motorola reserves the right to make deliveries in installments and these terms and conditions shall be severable as to such installments. Delivery delay or default of any installment shall not relieve Customer of its obligation to accept and pay for remaining deliveries. Claims for shipment shortages shall be deemed waived unless presented to Motorola in writing within forty-five (45) days of delivery of each shipment. Customer hereby grants to Motorola as security for all of Customer's obligations to Motorola, of any kind whatsoever, now or hereafter arising from this agreement or any other agreement with Motorola, a first priority security interest in all Products held in inventory or used as equipment by Customer, together with all contract rights, accounts, chattel paper and general intangibles relating thereto and all proceeds resulting therefrom.

Upon request, Customer agrees to cooperate in whatever manner necessary to assist Motorola in perfection of said security interest. Furthermore, Customer hereby irrevocably appoints Motorola as its attorney-in-fact to take any action and to execute any instrument which Motorola may deem necessary or advisable to accomplish the foregoing. Such power of attorney is coupled with an interest. Motorola has no obligation for payments of any applicable foreign import duties.

#### **PAYMENT**

The Customer shall make net payment to Motorola in accordance with the terms stated herein by mail to Motorola at P.O. Box 93042, Chicago, Illinois 60673-3042 or at such other place as Motorola may designate in writing or as reflected on an invoice.

Payment shall be made in ten (10) days after the date of invoice for each product, accessory, or other charge, unless otherwise agreed to in writing. Service charges at the maximum rate permitted by applicable law may be invoiced on accounts more than thirty (30) days past due and shall be due and payable upon receipt of invoice.

All payments made by Customer to Motorola in connection with this agreement or any other agreement with Motorola shall applied by Motorola, in its sole discretion, to such obligations or liabilities (whether arising under this agreement or any other agreement with Motorola) as Motorola shall direct.

### PATENT, COPYRIGHT AND TRADEMARKS

#### A. INDEMNIFICATION

Motorola agrees to defend, at its expense, any suits against Customer based upon a claim that any Motorola manufactured Products furnished hereunder directly infringe a U.S. patent or copyright and to pay costs and damages finally awarded in any such suit, provided that Motorola is notified promptly in writing of the suit and at Motorola's request and at its expense is given control of said suit and all requested assistance for defense of same, including all appeals thereof. If the use or sale of any such Product(s) furnished hereunder is enjoined as a result of such suit, Motorola, at its option and at no expense to Customer, shall obtain for

Customer the right to use or sell such Product(s) or shall substitute an equivalent Product reasonably acceptable to Customer and extend this indemnity thereto or shall accept the return of such Product(s) and reimburse Customer the purchase price therefor, less a reasonable charge for reasonable wear and tear. This indemnity does not extend to any suit based upon any infringement or alleged infringement of any patent or copyright by the combination of any such Product(s) furnished hereunder and other elements not furnished by Motorola nor does it extend to any Product(s) that are modified, changed or altered. The foregoing states the entire liability of Motorola for patent or copyright infringement.

IN NO EVENT SHALL MOTOROLA BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING FROM INFRINGEMENT OR ALLEGED INFRINGEMENT OF PATENTS OR COPYRIGHTS.

### B. COPYRIGHTS AND MASK WORKS

Works Laws in the United States and other countries preserve for Motorola certain exclusive rights, in the Motorola Software, mask works and other works of authorship furnished hereunder including without limitation the exclusive rights to prepare works derived from same, reproduce same in copies and distribute copies of same.

### C. LOGOS AND TRADEMARKS

- 1) The Products shipped under the terms and conditions hereof will carry Motorola's logo or such other logo as expressly agreed to by Motorola.
- 2) In order that Motorola may protect and preserve its trademarks, trade names, corporate slogans, corporate logo, goodwill and Product designations, Customer, without the express written consent of Motorola, shall have no right to use any such marks, names, slogans or designations of Motorola in the sale, lease or advertising of any Products or on any Product, Product container, component part, business forms, sales, advertising and promotional materials or other business supplies or materials, whether in writing, orally or otherwise.

### D. LICENSE DISCLAIMER

Except for the right to use the Motorola Software and Product for the purposes provided herein which arises by operation of law and except as expressly provided herein, nothing contained herein, or otherwise shall be deemed to grant to Customer either directly or by implication, estoppel or otherwise, any license or right under any patents, copyrights, trademarks or trade secrets of Motorola or any third party.

### **EXCUSABLE DELAY**

In addition to other limitations on liability set forth herein, Motorola shall not be liable for any delay or failure to perform due to any cause beyond its control. Causes include, but are not limited to, strikes, acts of God, acts of the Customer, interruptions of transportation or inability to obtain necessary labor, materials or facilities, default of any supplier, or delays in FCC frequency authorization or license grant. In the event Motorola is unable to wholly or partially perform because of any cause beyond its control, Motorola may terminate any order without any liability to Customer.

### **LIMITATIONS**

A. EXCEPT FOR PERSONAL INJURY AND EXCEPT AS PROVIDED FOR IN THE SECTION "PATENT, COPYRIGHT AND TRADEMARKS", MOTOROLA'S TOTAL LIABILITY ARISING OUT OF OR RELATED TO PURCHASE OF PRODUCTS, WHETHER FOR BREACH OF CONTRACT, WARRANTY, MOTOROLA'S NEGLIGENCE, STRICT LIABILITY IN TORT OR OTHERWISE, IS LIMITED TO THE PRICE OF THE PARTICULAR PRODUCTS SOLD HEREUNDER WITH RESPECT TO WHICH LOSSES OR DAMAGES ARE CLAIMED. CUSTOMER'S SOLE REMEDY IS TO REQUEST MOTOROLA AT MOTOROLA'S OPTION TO EITHER REFUND THE PURCHASE PRICE OR REPAIR OR REPLACE PRODUCTS THAT ARE NOT AS WARRANTED. IN NO EVENT, WHETHER FOR BREACH OF CONTRACT, WARRANTY, MOTOROLA'S NEGLIGENCE, STRICT LIABILITY IN TORT, OR OTHERWISE, WILL MOTOROLA BE LIABLE FOR INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES, INCLUDING, BUT NOT LIMITED TO, FRUSTRATION OF ECONOMIC OR BUSINESS EXPECTATIONS, LOSS OF PROFITS, LOSS OF DATA, COST OF CAPITAL, COST OF SUBSTITUTE PRODUCT(S), FACILITIES OR SERVICES, DOWNTIME COST OR ANY CLAIM AGAINST CUSTOMER BY ANY OTHER PARTY.

- **B.**IT IS FURTHER UNDERSTOOD THAT MOTOROLA IS NOT AN INSURER AND THAT CUSTOMER WILL OBTAIN ALL INSURANCE, IF ANY, THAT IS DESIRED AND THAT MOTOROLA DOES NOT REPRESENT OR WARRANT THAT MOTOROLA PRODUCTS WILL AVERT OR PREVENT OCCURRENCES, OR THE CONSEQUENCES THEREFROM, WHICH ARE MONITORED, DETECTED OR CONTROLLED WITH USE OF THE PRODUCTS.
- **C.** TIME TO SUE. EXCEPT FOR MONEY DUE UPON AN OPEN ACCOUNT, NO ACTION SHALL BE BROUGHT FOR ANY BREACH OF A CONTRACT TO PURCHASE PRODUCTS MORE THAN TWO (2) YEARS AFTER THE ACCRUAL OF SUCH CAUSE OF ACTION EXCEPT WHERE A SHORTER LIMITATION PERIOD IS PROVIDED BY APPLICABLE LAW.
- **D.** EXCEPT FOR MONEY DUE UPON AN OPEN ACCOUNT, NO ACTION SHALL BE BROUGHT FOR ANY BREACH OF A CONTRACT TO PURCHASE PRODUCTS MORE THAN TWO (2) YEARS AFTER THE ACCRUAL OF SUCH CAUSE OF ACTION EXCEPT WHERE A SHORTER LIMITATION PERIOD IS PROVIDED BY APPLICABLE LAW.
- **E.** WARRANTIES. IN ANOTHER SECTION OF THE PRICE AND AVAILABILITY LIST, MOTOROLA HAS PROVIDED CUSTOMER WITH ITS PRODUCT WARRANTY AND, IF APPLICABLE, ITS SOFTWARE LICENSE, WHICH WARRANTY AND LICENSE, TO THE EXTENT APPLICABLE, ARE INCORPORATED INTO AND MADE A PART OF THESE TERMS AND CONDITIONS. THIS WARRANTY IS GIVEN IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED WHICH ARE SPECIFICALLY EXCLUDED, INCLUDING, WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. CUSTOMER HEREBY ACKNOWLEDGES RECEIPT OF SUCH WARRANTIES AND LICENSE.

### PRODUCT EQUIPMENT COMPATIBILITY

Motorola agrees that the Product will perform in accordance with the specifications stated in Motorola's catalogue sheets. This does not extend to the performance of the Product as a part of a larger system generally nor specifically to the Product in combination with products, elements or components not supplied by Motorola.

### SALES TO GOVERNMENTAL ENTITIES

**A.** Third Party Sales. In the event that Customer elects to provide Products or services to a Governmental entity, or to a prime contractor selling to a Governmental entity, Customer does so solely at its own option and risk and agrees not to obligate Motorola as a subcontractor or otherwise to such Governmental entity. Customer remains solely and exclusively responsible for compliance with all laws governing such sales to such an entity. Further, Motorola makes no representations, certifications, or warranties whatsoever with respect to the ability of its goods, services, or prices to satisfy any such laws. The term "Governmental entity" as used above includes any U.S. Federal, State, or Local Government agency or instrumentality as well as any Foreign (non U.S.) Government agency or instrumentality.

**B.** Sales to Governments. In the event that Customer is a state or local government agency in the United States or instrumentality, a foreign (non U.S.) government agency or instrumentality, or a contractor to such an entity, Customer agrees to promptly advise Motorola of any special government terms or conditions of sale and/or of any state and/or local law, regulation or ordinance that may be applicable to this sale. Customer's offer is conditioned upon such notice and upon Motorola's acceptance, in writing, of any such special requirements.

### ACCESS TO RECORDS AND FACILITIES

Motorola reserves the right to control access to its facilities and records along with those of its subcontractors and suppliers. Such control must include the right to deny access to those facilities and records deemed to be confidential or proprietary.

### **EXPORT CONTROL PROVISION**

Customer must comply with all applicable export and reexport laws and regulations of Customer's country and the U.S.A. The exporting and reexporting of Products from the U.S.A. is subject to the U.S. Department of State Munitions Control Regulations. Certain of Motorola's communications products are controlled products and require special licensing. Specifically, but without limitation, Customer agrees that it will not resell or reexport any Motorola parts or associated software or technical data in any form without obtaining appropriate export or reexport licenses from the United States Government or other applicable licensing body. If, at the time or times of Motorola's performance hereunder, a validated export license is required to lawfully export any parts or associated technical data or software, then the issuance of such license to Motorola constitutes a condition precedent to Motorola's obligations hereunder.

Additional Terms and Conditions for International Transactions Customer bears all charges of whatever nature imposed at the time of or after delivery of the Products to the carrier at the F.O.B. point, including, but not limited to, freight, taxes, consular fees and custom duties. After delivery to the carrier at the F.O.B. point, Customer bears all risk of loss or damage to the Products.

Unless otherwise agreed to in writing by Motorola, payment to Motorola shall be in U.S. currency available in Schaumburg, Illinois, U.S.A., in advance of shipment or by a confirmed, irrevocable letter of credit acceptable to Motorola. Customer shall comply with all applicable export laws and regulations of Customer's country and the U.S.A. Specifically, but without limitation, Customer agrees that it will not resell or reexport any Motorola Products or associated software or technical data in any form without obtaining appropriate export or reexport licenses from the United States Government or other applicable licensing body.

If, at the time or times of Motorola's performance hereunder, a validated export license is required to lawfully export any parts or associated technical data or software, then the issuance of such license to Motorola shall constitute a condition precedent to Motorola's obligations hereunder. Customer shall effect or secure at its own cost all governmental permits, licenses and registrations required in connection with the importation into and any resale of the goods in Customer's country and comply with all other applicable laws and regulations. Motorola will not do business with any customer where Motorola reasonably knows or suspects such customer has engaged in legally questionable or unethical practices. Customer agrees to comply with this Motorola policy.

HEREUNDER SHALL BE GOVERNED BY AND INTERPRETED ACCORDING TO THE LAWS OF THE STATE OF ILLINOIS, U.S.A. EXCLUDING APPLICATION OF THE U.N. CONVENTION ON CONTRACTS FOR THE INTERNATIONAL SALES OF GOODS (1980).

### **GENERAL**

- (A) Customer acknowledges that is has read and understands the terms and conditions herein and agrees to be bound by them, that it is the complete and conclusive statement of the parties and understanding between the parties relating to the subject matter hereof and all understanding and agreements, oral and written, heretofore made between Motorola and Customer, are merged in this agreement which alone fully and completely expresses their agreement.
- **(B)** No modification of or additions to these terms and conditions shall be binding upon Motorola unless such modification is in writing and signed by an officer of Motorola.
- **(C)** If any term or provision of these terms and conditions is held by a court or other tribunal to be invalid, void, unenforceable, then that term or provision shall be inoperative and insofar as it is in conflict with law, but the remaining terms and provisions shall nevertheless continue in full force and effect and the rights and obligations of the parties shall be construed and enforced as if these terms and conditions did not contain the particular term or provision held to be invalid, void or unenforceable.

- **(D)** Section and paragraph headings used herein are for convenience only and are not to be deemed or construed to be part of these terms and conditions.
- **(E)** The failure of Motorola to insist, in any one or more instances, upon the performance of any of the terms, covenant or conditions of these terms and conditions, or to exercise any right herein, shall not be construed as a waiver or relinquishment of the future performance of any such term, covenant or condition or the future exercise of such right, but the obligation of the Customer with respect to such future performance will continue in full force and effect.
- **(F)** THESE TERMS AND CONDITIONS AND THE RIGHTS AND DUTIES OF THE PARTIES WILL BE GOVERNED AND INTERPRETED IN ACCORDANCE WITH THE LAWS OF THE STATE OF ILLINOIS.

This warranty applies within the fifty (50) United States, the District of Columbia and Canada.

LIMITED WARRANTY FOR CUSTOMER CARE SERVICES DIVISION ("RPSD") PRODUCTS LISTED IN THE PRICE AND AVAILABILITY LIST

### I. WHAT THIS WARRANTY COVERS AND FOR HOW LONG:

### A. RPSD PRODUCTS OTHER THAN BATTERIES:

The Radio Products and Services Division of the Commercial, Government and Industrial Solutions Sector of Motorola, Inc. or, if applicable, Motorola Canada Limited ("Motorola") warrants the Motorola, Inc. manufactured radio communications product, including original equipment crystal devices and channel elements ("Product"), against material defects in material and workmanship under normal use and service for a period of One (1) Year from the date of shipment. Motorola, at its option, will at no charge either repair the Product (with new or reconditioned parts), replace it with the same or equivalent Product (using new or reconditioned Product), or refund the purchase price of the Product during the warranty period provided purchaser notifies Motorola according to the terms of this warranty. Repaired or replaced Product is warranted for the balance of the original applicable warranty period. All replaced parts of the Product shall become the property of Motorola.

This express limited warranty is extended by Motorola to the original end user purchaser purchasing the Product for purposes of leasing or for commercial, industrial, or governmental use only, and is not assignable or transferable to any other party. This is the complete warranty for the Product manufactured by Motorola. Motorola assumes no obligations or liability for additions or modifications to this warranty unless made in writing and signed by an officer of Motorola. Unless made in a separate written agreement between Motorola and the original end user purchaser, Motorola does not warrant the installation, maintenance or service of the Product.

Motorola cannot be responsible in any way for any ancillary equipment not furnished by Motorola which is attached to or used in connection with the Product, or for operation of the Product with any ancillary equipment, and all such equipment is expressly excluded from this warranty. Because each system, which may use the Product, is unique, Motorola disclaims liability for range, coverage, or operation of the system as a whole under this warranty.

### B. RPSD Two-Way Rechargeable Batteries:

### 1. Capacity and Workmanship Warranty

MOTOROLA INC. ("MOTOROLA") warrants the MOTOROLA manufactured two-way radio batteries listed below ("Product"). Products will be replaced (with new or reconditioned parts) during the applicable Warranty Period if the battery capacity falls below 80% of rated capacity unless otherwise noted. For the workmanship defects listed below Motorola warrants against defects in workmanship under normal use and service for a period of time from the date of manufacture\* as scheduled below ("Warranty Period"):

CAPACITY/PRODUCT	WORKMANSHIP WARRANTY
Motorola Manufactured	24 month capacity/
NiCd impres™ Batteries	24 month workmanship
Motorola Manufactured	18 month capacity/
NiMH impres™ Batteries	24 month workmanship
Motorola Manufactured	18 month capacity/
Li-ion impres™ Batteries	24 month workmanship
Motorola Manufactured	18 month capacity/
NiCd Premium Batteries	24 month workmanship
Motorola Manufactured	12 month capacity/
NiMH and Li-ion Premium Batteries	24 month workmanship
Motorola Manufactured	12 month capacity/
NiCd, NiMH Power Batteries	12 month workmanship
MAGONE Competitive	12 month capacity/
Batteries (all manufacturers)	12 month workmanship

### EXCEPTIONS

The Motorola NiMH NTN7396AR prismatic battery is warranted for six (6) months capacity and twenty-four (24) months workmanship from the date of manufacture.XTS3500 mAh NiMH RNN4006BR, RNN4007AR 70% to minimum (3000 mAh) for 12 months and has a 24 month workmanship warranty.

NiCd impres™ Batteries when used with an impres™ charger qualify for a 24/24 month replacement warranty.

impres<sup>™</sup> NiMH/Li-ion used with a non-impres<sup>™</sup> charger qualify for a 12 month capacity/24 month workmanship warranty.

\*Date of manufacture is determined by the date code shown on the Product.

A Product will be replaced during the applicable 24 Month Workmanship Warranty Period if:

- 1. the battery develops leakage;
- **2.** the battery clip breaks due to poor workmanship
- 3. the battery's seam welds open; or
- **4.** the battery has contact problems with either the applicable two-way radio or battery charger due to misalignment or plastic residue blocking the battery's contacts. Motorola, at its option, will replace the Product (with new or reconditioned parts) at no charge during the applicable warranty period provided it is returned in accordance with the terms of this warranty. Replacement batteries are warranted for the balance of the original applicable warranty period.

Motorola, at its option, will replace the Product (with new or reconditioned parts) at no charge during the applicable warranty period provided it is returned in accordance with the terms of this warranty. Replacement batteries are warranted for the balance of the original applicable warranty period. This warranty is extended by MOTOROLA to the original end user purchaser only and is not assignable or transferable to any other party. This is the complete warranty for the Product manufactured by MOTOROLA. MOTOROLA assumes no obligations or liability for additions or modifications to this warranty unless made in writing and signed by an officer of MOTOROLA. MOTOROLA cannot be responsible in any way for any ancillary equipment not furnished by MOTOROLA which is attached to or used in connection with the Product, or for operation of the Product with any ancillary equipment, and all such equipment is expressly excluded from this warranty. For battery recycling information please call 1-800-422-4210 for details and request your RBRC shipper ID registration form.

### C. CELLULAR AND IDEN PHONE BATTERIES:

### **1.** 12 Month Warranty:

MOTOROLA INC. ("MOTOROLA") warrants the MOTOROLA manufactured cellular and iDEN batteries listed below ("Product") against defects in material and workmanship under normal use and service for a period of time from the date of manufacture\* as scheduled below ("Warranty Period"):

PRODUCT WARRANTY PERIOD

Motorola Manufactured

NiCd Batteries Twelve (12) Months

Motorola Manufactured

NiMH Batteries Twelve (12) Months

Motorola Manufactured

Li-ion Batteries Twelve (12) Months

### 2. 12 Month Workmanship Warranty:

For the workmanship defects listed below, Motorola warrants against defects in workmanship under normal use and service for a period of time from the date of manufacture\* as scheduled below ("Warranty Period"):

PRODUCT WARRANTY PERIOD

Motorola Manufactured

NiCd Batteries Twelve (12) Months

Motorola Manufactured

NiMH Batteries Twelve (12) Months

Motorola Manufactured

Li-ion Batteries Twelve (12) Months

A Product will be replaced during the applicable 12 Month Workmanship Warranty Period if:

- 1. the battery develops leakage;
- 2. the battery clip breaks due to poor workmanship
- 3. the battery's seam welds open; or
- **4.** the battery has contact problems with either the applicable two-way radio or battery charger due to misalignment or plastic residue blocking the battery's contacts. Motorola, at its option, will replace the Product (with new or reconditioned parts) at no charge during the applicable warranty period provided it is returned in accordance with the terms of this warranty. Replacement batteries are warranted for the balance of the original applicable warranty period.

<sup>\*</sup> Date of manufacture is determined by the date code shown on the Product

This express limited 12 month warranty is extended by MOTOROLA to the original end user purchaser only and is not assignable or transferable to any other party. This is the complete warranty for the Product manufactured by MOTOROLA. MOTOROLA assumes no obligations or liability for additions or modifications to this warranty unless made in writing and signed by an officer of MOTOROLA. MOTOROLA cannot be responsible in any way for any ancillary equipment not furnished by MOTOROLA which is attached to or used in connection with the Product, or for operation of the Product with any ancillary equipment, and all such equipment is expressly excluded from this warranty.

### II. GENERAL PROVISIONS:

This warranty sets forth the full extent of Motorola's responsibilities regarding the Product. Repair, replacement or refund of the purchase price, at Motorola's option, is the exclusive remedy. THIS WARRANTY IS GIVEN IN LIEU OF ALL OTHER EXPRESS WARRANTIES. MOTOROLA DISCLAIMS ALL OTHER WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT SHALL MOTOROLA BE LIABLE FOR DAMAGES IN EXCESS OF THE PURCHASE PRICE OF THE PRODUCT, FOR ANY LOSS OF USE, LOSS OF TIME, INCONVENIENCE, COMMERCIAL LOSS, LOST PROFITS OR SAVINGS OR OTHER INCIDENTAL, SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE SUCH PRODUCT, TO THE FULL EXTENT SUCH MAY BE DISCLAIMED BY LAW.

### III. HOW TO GET WARRANTY SERVICE:

Purchaser must notify Motorola's representative or call RPSD at 1-800-422-4210 within the applicable warranty period for information regarding warranty service.

### IV. WHAT THIS WARRANTY DOES NOT COVER:

- **A.** Defects or damage resulting from use of the Product in other than its normal and customary manner.
- B. Defects or damage from misuse, accident, water, or neglect.
- **C.** Defects or damage from improper testing, operation, maintenance, installation, alteration, modification, or adjustment.
- **D.** Breakage or damage to antennas unless caused directly by defects in material workmanship.
- **E**. A Product subjected to unauthorized Product modifications, disassemblies or repairs (including, without limitation, the addition to the Product of non-Motorola supplied equipment) which adversely affect performance of the Product or interfere with Motorola's normal warranty inspection and testing of the Product to verify any warranty claim.

- **F.** Product which has had the serial number removed or made illegible.
- **G.** Freight costs to the repair depot.
- **H.** A Product which, due to illegal or unauthorized alteration of the software/firmware in the Product, does not function in accordance with Motorola's published specifications or with the FCC type acceptance labeling in effect for the Product at the time the Product was initially distributed from Motorola.
- **I.** Scratches or other cosmetic damage to Product surfaces that does not affect the operation of the Product.
- **J.** That the software in the Product will meet the purchaser's requirements or that the operation of the software will be uninterrupted or error-free.
- K. Normal and customary wear and tear.
- **L.** Non-Motorola manufactured equipment unless bearing a Motorola Part Number in the form of an alpha numeric number (i.e., TDE6030B).
- **M.** Processing of date data from, into, and between the year 2000 and the year 2001.

### V. GOVERNING LAW

In the case of a Product sold in the United States and Canada, this Warranty is governed by the laws of the State of Illinois and the Province of Ontario, respectively.

### VI. PATENT AND SOFTWARE PROVISIONS

Motorola will defend, at its own expense, any suit brought against the end user purchaser to the extent that it is based on a claim that the Product or its parts infringe a United States patent, and Motorola will pay those costs and damages finally awarded against the end user purchaser in any such suit which are attributable to any such claim, but such defense and payments are conditioned on the following:

- **A.** that Motorola will be notified promptly in writing by such purchaser of any notice of such claim;
- **B.** that Motorola will have sole control of the defense of such suit and all negotiations for its settlement or compromise; and
- **C.** should the Product or its parts become, or in Motorola's opinion be likely to become, the subject of a claim of infringement of a United States patent, that such purchaser will permit Motorola, at its option and expense, either to procure for such purchaser the right to continue using the Product or its parts or to replace or modify the same so that it becomes noninfringing or to grant such purchaser a credit for the Product or its parts as depreciated and accept its return. The depreciation will be an equal amount per year over the lifetime of the Product or its parts as established by Motorola.

Motorola will have no liability with respect to any claim of patent infringement which is based upon the combination of the Product or its parts furnished hereunder with software, apparatus or devices not furnished by Motorola, nor will Motorola have any liability for the use of ancillary equipment or software not furnished by Motorola which is attached to or used in connection with the Product. The foregoing states the entire liability of Motorola with respect to infringement of patents by the Product or any its parts thereof.

Laws in the United States and other countries preserve for Motorola certain exclusive rights for copyrighted Motorola software such as the exclusive rights to reproduce in copies and distribute copies of such Motorola software. Motorola software may be used in only the Product in which the software was originally embodied and such software in such Product may not be replaced, copied, distributed, modified in any way, or used to produce any derivative thereof. No other use including, without limitation, alteration, modification, reproduction, distribution, or reverse engineering of such Motorola software or exercise of rights in such Motorola software is permitted. No license is granted by implication, estoppel or otherwise under Motorola patent rights or copyrights.

### TO OBTAIN WARRANTY SERVICE:

Replacement Parts/Kits/Accessories

To obtain warranty service on replacement parts/kits or test equipment, the item must be delivered, transportation prepaid to:

Motorola Radio Products and Services Division Attn: Warranty Dept 2222 Galvin Drive Elgin, Illinois 60123

Transportation charges for the return of the product to Purchaser shall be prepaid by Motorola by calling 1-800-422-4210. This warranty is void, as determined in the reasonable judgement of Motorola, if:

- (a) The product has not been operated in accordance with the procedures described in the operating instructions;
- (b) The seals on non-user serviceable components or modules are broken;
- (c) The product has been subject to misuse, abuse, damage, accident, negligence, repair or alternation.

Each shipment of returned items must include a Motorola Warranty Replacement Form, with each item being returned listed by quantity, type, frequency of code, defect code, radio model number and serial number (when returning items removed from a Motorola radio) sales or factory order number. Items returned with no manufacturer's date code will be assumed to be out of warranty and subject to charges for repair or replacement.

In the event that Motorola in its discretion elects to replace an item, and a replacement is ordered prior to the return of the defective product, credit for the defective product will be issued against the replacement order provided that the defective units covered by this warranty are returned within forty-five (45) days of the replacement order date and the replacement factory order number is properly provided.

After 45 days, Motorola's sole obligation is limited to replacement of the defective unit covered by this warranty with a unit that meets original factory specifications, and credit cannot be issued.

### CELLULAR MOTOROLA MANUFACTURED ACCESSORIES

Effective January 1, 2000, a new Limited Lifetime Warranty was instituted for the following accessories purchased after January 1, 2000: vehicle power adapters, carry cases, holsters, chargers (desktop bases and AC power supplies) and hands-free headsets. For all other accessories, and all accessories purchased prior to January 1, 2000, the warranty period begins on the date of the consumer purchase and lasts for twelve months. Proof of purchase documentation or the MSN/SN of the associated telephone determines the warranty period. Although the date codes are on some of the accessories or ancillary components such as batteries, there are no date codes on others such as antennas. Therefore, the best way to determine if an accessory is in warranty is to verify the consumer's proof of purchase. The proof of purchase documentation must be included for replacement under warranty. Accessories are not considered repairable.

Warranty policies for Cellular parts are indicated in the "Authorized Cellular Servicer Agreement". Test Equipment. Motorola manufactured items, including service monitors, should be returned to the Test Equipment Service Center and processed per the Test Equipment Products Limited Warranty on the following page. Third party manufactured items should be returned to the facility designated by the Manufacturer. Motorola will notify the customer who to contact for warranty service of said items. For further information call:

In the U.S. and Canada: 1-800-422-4210 Outside the U.S: 1-847-538-8023

U.S. Federal Government: 1-800-826-1913

# Warranty Service

### MOTOROLA TEST EQUIPMENT PRODUCTS LIMITED WARRANTY (EXCLUDES EXPORT SHIPMENTS)

Motorola Test Equipment Products, and Motorola Service Monitors, (herein the "product") that are manufactured or distributed by Motorola's Radio Products and Services Division are warranted by Motorola for a period of one (1) year from date of shipment against defects in material and workmanship. This express warranty is extended to the original purchaser only. In the event of a defect, malfunction, or failure during the period of warranty of a Motorola manufactured Test Equipment items, Motorola, at its option, will either repair or replace the product providing Motorola received written notice specifying the nature of the defect during the period of warranty, and the defective product is returned to: Motorola, Test Equipment Service, 2216 Galvin Drive, Elgin, IL 60123 transportation prepaid. Proof of purchase and evidence of date of shipment (packing list or invoice), must accompany the return of the defective product.

### For a RETURN AUTHORIZATION - PLEASE CALL 1-800-323-6967.

Transportation charges for the return of the product to Purchaser shall be prepaid by Motorola. This warranty is void, as determined in the reasonable judgement of Motorola, if:

- **(A)** The product has not been operated in accordance with the procedures described in the operating instruction;
- **(B)** The seals on non-user serviceable components or modules are broken;
- **(C)** The product has been subject to misuse, abuse, damage, accident, negligence, repair or alteration.

Many items manufactured by third parties are warranted directly by the manufacture. In such cases customers may be put in direct contact with the manufacturer's service facility for warranty repair or replacement. In no event shall Motorola be liable for any special, incidental or consequential damages. In the event Motorola elects to repair a defective product by replacing a module or subassembly, Motorola, at its option, may replace such defective module or subassembly with a new or reconditioned replacement module or subassembly. Only the unexpired warranty of the warranty product will remain in force on the replacement module or subassembly.

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