



MOTOROLA
intelligence everywhere™



Motorola Original™

***Two-Way Portable and Mobile
Accessory and Battery Catalog***



SABER
ASTRO® Digital SABER
ASTRO® Digital XTS 3000
ASTRO® Digital XTS 3500
ASTRO® Digital XTS 5000
ASTRO® Digital XTS 2500
MT2000™, MTS2000™
LTS 2000®
ASTRO® Digital SPECTRA
ASTRO® Digital SPECTRA Plus
SPECTRA
XTL 5000
MCS2000®
GTX
LCS2000®

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.
BEYOND QUALITY: BEST BUSINESS PRACTICES
TO EMULATE.



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.

*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 public safety, public service, government and enterprise customers worldwide.



MALCOLM BALDRIGE AWARD: SYMBOL OF EXCELLENCE

THE CRITERIA

Thousands of companies have used the Baldrige Criteria to assess performance and measure their progress relative to a recognized compilation of best practices.

To qualify for the Baldrige Award, organizations are evaluated along 7 dimensions:

- Leadership
- Strategic Planning
- Customer and Market Focus
- Information and Analysis
- Human Resource Focus
- Process Management
- Business Results

THE RESULT

These Baldrige Criteria were used to identify performance touchstones that deliver outstanding business value. As a result of the Baldrige evaluation, Motorola strengths were:

- Leading worldwide supplier with strong financial performance.
- Best-in-class supplier with quality ratings that are 21% higher than the nearest competitor
- Leading-edge product quality, cycle time and productivity
- Extensive and long term customer/industry association and involvement with customer user groups
- First ever OSHA Voluntary Protection Program participant with zero corrective items. VPP star recognition.



Index Page

Who We Are 1

Background on Buyer Services through Radio Products and Services Division

SABER

Audio Accessories 3-10

Carrying Accessories 10-12

Batteries 13

Chargers 14-19

Antennas 19

ASTRO® SABER

Audio Accessories 21-26

Carrying Accessories 27-28

Batteries 29

Chargers 30-36

Antennas 37

ASTRO® digital XTS 3000, XTS 3500, XTS 5000

Audio Accessories 39-47

Carrying Accessories 47-50

Batteries 51

Chargers 52-57

Antennas 58-59

ASTRO® digital XTS 2500

Audio Accessories 61-65

Carrying Accessories 66-68

Batteries 69

Chargers 69-72

Antennas 73

MT2000®, MTS 2000®

Audio Accessories 75-86

Carrying Accessories 87-90

Batteries 91

Chargers 91-97

Antennas 98-99

LTS 2000®

Audio Accessories 101-104

Carrying Accessories 105-106

Batteries 107

Chargers 107-111

Antennas 111

XTL 5000

Audio Accessories 113

Mobile Accessories 114-115

Cables 116

Antennas 117

ASTRO® Digital SPECTRA, ASTRO® Digital SPECTRA Plus, SPECTRA

Antennas 119

Mobile Accessories 120-121

Antennas 122-124

Mounts 125

MCS 2000®

Audio Accessories 127

Mobile Accessories 128-129

Antennas 130-132

GTX & LCS2000®

Audio Accessories 133

Mobile Accessories 134-135

Antennas 136-137

Terms and Conditions 138-144

Warranty 145-152

Warranty Service 153

Ways to Order

PHONE



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

FAX



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

INTERNET



[www.motorola.com/
businessonline](http://www.motorola.com/businessonline)

Support

RADIO SUPPORT CENTER



1-800-227-6772

FEDERAL GOVERNMENT TECHNICAL CENTER



1-800-969-6680

RADIO RENTAL



1-888-736-8567



SABER Radios

*Microcomputer-controlled
and field programmable!*

- Synthesized—Multiple-Channel Capability
- Custom integrated chip set
- Enhanced audio
- Battery saver
- Programmable mode select capabilities
- Program, tune and test without opening radio
- Wide bandwidth
- Easy access controls
- SECURENET® models available



SABER

Audio Accessories



NMN6128C



NMN6225B

REMOTE SPEAKER MICROPHONE (RSM)

- NMN6128C* Remote Speaker Microphone
- NMN6166C* Remote Speaker Microphone with 2.5 mm Earjack
- NMN6225B Remote Speaker Microphone with Coil Cord and Telco Plug
- 5005178K01 Receive Only Earpiece with 2.5mm plug for use with NMN6166C

Allows you to talk and listen without removing the radio from the belt, case or charger. This water resistant compact unit has a coiled cord, PTT switch and back cover clip.

UHF PUBLIC SAFETY MICROPHONE (PSM)

- NMN6129B* UHF Public Safety Microphone (antenna and Velcro patch must be ordered separately)
- NMN6154B UHF Public Safety Microphone with 2.5mm Earjack (antenna, earphone, and Velcro patch must be ordered separately)
- 5005178K01 Receive Only Earpiece with 2.5mm plug for use with NMN6154B

This water-resistant microphone includes a high-low audio switch and straight cord. The external antenna provides additional antenna height for better radiation pattern.



NMN6129B



NTN7061A



RLN4295A

RSM AND PSM ACCESSORIES

MICROPHONE ACCESSORIES ANTENNAS FOR PSM

- 8505309N09 400-430 MHz
- 8505309N10 440-470 MHz
- 8505309N11 470-512 MHz

EPAULET STRAP

- RLN4294A Epaulet Strap, Velcro
- RLN4295A Epaulet Strap, with clip

Black leather Epaulet Strap secures Remote Speaker Microphone to epaulet strap 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.

MISCELLANEOUS ACCESSORIES CONNECTOR COVER

- NTN7061A Universal Connector Cover



RLN5004A

MICJACKETS

- RLN4908A* MicJacket, compatible with NMN6128C
- RLN5001A* MicJacket, compatible with NMN6166C
- RLN5002A* MicJacket, compatible with NMN6225B
- RLN4911A* MicJacket, compatible with NMN6154B
- RLN5004A* MicJacket, compatible with NMN6129B

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.

SABER

Audio Accessories

SURVEILLANCE KITS

RECEIVE ONLY EARPIECE (1-WIRE)

NSN6050A Beige

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

ZMN6032A* Beige

ZMN6038A*† Beige

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

ZMN6031A* Beige

ZMN6039A*† Beige



ZMN6032A

SURVEILLANCE KIT ACCESSORIES

NTN5664D Adapter with Keyload Capabilities

5080371E73 Standard Rubber Eartips, pack of 25, Beige

5080371E75 Standard Rubber Eartips, pack of 25, Black

Surveillance accessories allow the user to privately receive communications with the earpiece and are ideal when environments require discreet communications. The above surveillance accessories require the NTN5664D adapter (with keyload capability) that attaches to the radio.



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 noise reduction

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

Lightweight translucent tube attaches to Motorola surveillance accessories and provides additional flexibility and control for the user. Clothing clip prevents the accessory from being pulled from the ear due to body movement or head rotation.

†Extra loud earphone (exceeds OSHA limits)

*Intrinsically Safe

ORDER TODAY! 1-800-422-4210
U.S. Federal Government Customers Call 1-800-826-1913



SABER

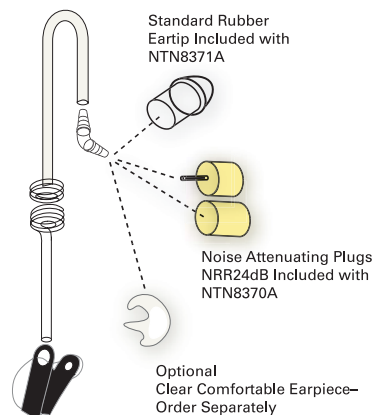
Audio Accessories

CLEAR COMFORTABLE EARPIECE

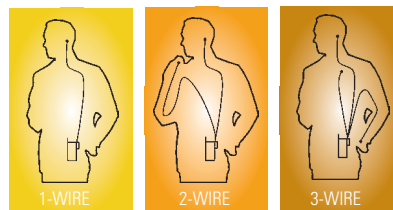
- RLN4760A* Small Custom Earpiece, right ear
- RLN4763A* Small Custom Earpiece, left ear
- RLN4761A* Medium Custom Earpiece, right ear
- RLN4764A* Medium Custom Earpiece, left ear
- RLN4762A* Large Custom Earpiece, right ear
- RLN4765A* Large Custom Earpiece, left ear

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, hypoallergenic material. Does not provide hearing protection. There are 3 items needed to make this product work:

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



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, pack of 5
- RNN4005A* 1.4V Battery, pack of 6



RLN4922A

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.

SABER

Audio Accessories

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), Grey

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 is required and must be ordered separately.



BDN6641A
SHOWN WITH
INTERFACE MODULE

INTERFACE MODULES FOR EMS

- BDN6642B*** Push-to-Talk Only Interface Module
BDN6643B* Push-to-Talk and Voice-Activated Interface Module

OPTIONAL ACCESSORIES FOR EMS

- 0180300E25** Earguard with Adjustable Loop
0180358B38* Push-to-Talk Ring Switch
0180300E83* Push-to-Talk Body Switch
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
4280369E44 Replaceable Belt Clip w/Screws
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)



0180300E83



0180358B33



BDN6643B

**Intrinsically Safe*

ORDER TODAY! 1-800-422-4210
U.S. Federal Government Customers Call 1-800-826-1913



SABER

Audio Accessories



BDN6717B

FLEXIBLE EAR RECEIVER

- BDN6717B** Ear Receiver with 2.5mm Plug, to be used with adapter NTN5212B, unless being used with speaker microphones.
- NTN5212B** Earjack Accessory Adapter; allows use of any audio accessory with a 2.5 mm connection.
- 7580372E11** Replacement Foam Ear Cushion

The flexible ear receiver contains a flexible earloop and speaker and rests external to the ear. It plugs directly into the NTN5212B adapter or the earjack on the speaker microphones.

CommPort: INTEGRATED MICROPHONE/RECEIVER SYSTEM

- NTN1623A*** Integrated Ear Microphone/ Receiver System w/Palm PTT. Includes NTN5664D adapter
- NTN1721A*** Integrated Ear Microphone/Receiver System w/Ring PTT Includes NTN5664D adapter
- NTN1738A*** Integrated Ear Microphone/Receiver System w/Snap On Side PTT Includes NTN5664D adapter
- NNTN4185A*** Integrated Ear Microphone/Receiver System w/Body PTT includes NTN5664D adapter

CommPort: REPLACEMENT PARTS

- NKN6524A** Replacement Ring PTT Cable for NTN1721A
- NKN6526A** Replacement Snap on side PTT Cable for NTN1738A
- NKN6507A** Replacement Palm PTT Cable for NTN1623A
- NNTN4189A** Replacement Remote Push-to-Talk Body Switch for NNTN4185A
- 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
- NTN5664D** Accessory Adapter (with Keyload Capacity)

The CommPort system contains a miniature microphone and receiver and connects to your two-way radio. The advanced, self-adjusting microphone and miniature receiver make it possible to communicate under the most adverse conditions. A variety of Push-to-Talk options allow the user to customize the CommPort system for any application.

**Intrinsically Safe*



NTN1721A

SABER

Audio Accessories



NMN6245A

LIGHTWEIGHT HEADSETS

- NMN6245A** Single Muff Lightweight Headset with In-Line Push-to-Talk Switch (requires BDN6676D audio adapter)
- NMN6246B** Ultra-Light Headset with Boom Microphone and In-Line Push-to-Talk Switch; Earbud style receiver (requires BDN6676D audio adapter)
- NMN1020A** Lightweight Headset with Boom Microphone to be worn on a helmet or safety glasses; included NKN6498A adapter cable (requires BDN6676D audio adapter)
- NKN6498A** Headset Adapter Cable for use with NMN1020A
- BDN6676D** 3.5mm Jack Adapter with Quick Disconnect Latch

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

HEAVY DUTY HEADSETS

- BDN6645A** Push-to-Talk Headset with Boom Microphone, requires adapter cable BDN6640A; noise reduction rating = 24dB
- BDN6635B** Voice Activated (VOX) Headset with Boom Microphone, requires adapter cable BDN6640A; noise reduction rating 24dB
- BDN6636B*** Voice Activated (VOX) Headset with Throat Microphone, requires adapter cable BDN6640A Noise reduction rating = 24dB
- BDN6640A*** Radio Adapter Cable

Heavy duty headsets include noise canceling boom microphones and can be worn with or without a hardhat. The push-to-talk switch is located on the earcup. The Voice Activated (VOX) module is contained within the headset on voice activated models. Heavy duty headsets require radio adapter cable BDN6640A to be ordered separately.



BDN6645A

**Intrinsically Safe*

ORDER TODAY! 1-800-422-4210
U.S. Federal Government Customers Call 1-800-826-1913



SABER

Audio & Carrying Accessories



NTN7227E



NSN6054A

VEHICULAR ADAPTER

NTN7227E AVA/SVA Charging Console includes illuminated front control panel, radio charger, latching mechanism with lock, and power cables.

NSN6054A 12-Watt external speaker is ideal for high noise environments. The audio level of the speaker can be adjusted from the console's control panel.

HMN1056D Microphone, compact palm

HMN1035C Microphone, heavy-duty palm

NMN6150A Microphone, full-featured display
(all other SABER Models except StartSite SABER SST/ATS)

NMN6169A Microphone, full-featured Systems SABER display
(compatible only with Systems SABER)

AVA/SVA console kits allow use of the portable radio in a mobile application. Order antenna separately.

CARRYING CASES

MEDIUM CAPACITY BATTERIES

NTN5577A Leather Standard Snap Carry Case Belt Loop with "D" rings
(order T-strap separately)

NTN5580A Leather Swivel Snap Carry Case with "D" rings
(order T-strap and swivel belt loop separately)

ULTRA HIGH CAPACITY BATTERIES

NTN5578A Leather Standard Snap Carry Case with Belt Loop and "D" rings
(order T-strap separately)

NTN5644A Leather Swivel Snap Carry Case with "D" rings
(order T-strap and swivel belt loop separately)

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.



NTN5580A



NTN5577A

NYLON CARRY CASES

NTN7062A Nylon Standard Carry Case with Belt Loop
(includes T-strap) for SABER-R only

SABER

Carrying Accessories



NTN5574A



4205857B01



NTN4741B



NTN5243A

CARRYING CASE ACCESSORIES

T-STRAPS

- NTN5575A Leather Snap T-Strap for system SABER only
- NTN5574A Leather Snap T-Strap for all other SABER models
- RLN5373A Leather Snap T-Strap for Carrying Case NTN5579A (for use with Li-ion battery)

BELT LOOPS

- 4282421J06 2.5" Leather Swivel Belt Loop
- 4205857B01 3" Leather Swivel Belt Loop

HIGH ACTIVITY BUTTON

- PLN7648A Removable D Button
Used in conjunction with high activity swivel belt loop

BELT CLIPS

- NTN4741B Removable Belt Clip Attachment,
- NTN4788B Removable Belt Clip Attachment, (SECURENET Radios)

CARRYING STRAP

- NTN5243A Adjustable Black, Carrying Strap attaches to "D" ring on case

SABER

Carrying Accessories



HLN6602A

CHEST PACK

- HLN6602A* Universal Chest Pack with Radio Holder, Pen Holder, and Velcro Secured Pocket
1505596Z02 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 that safety is a concern.



RLN4570A



RLN4815A

RadioPAK™

- RLN4815A* RadioPAK
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"x8" zippered pouch for other on-the-job necessities. Adjustable nylon weave belt; fits both men and women.

SABER

Batteries



HNN9033AR



NTN4596DR



NTN7058AR

BATTERIES

PREMIUM NiCd BATTERIES

- NTN4593DR* NiCd 1100 mAh 7.5V
NTN4595DR NiCd 1800 mAh 7.5V
NTN4657AR NiCd 1100 mAh 7.5V CSA
NTN4538DR NiCd 1100 mAh 7.5V Intrinsically Safe Submersible
NTN4596DR NiCd 1800 mAh 7.5V Intrinsically Safe Submersible,
(Class I,II,III; Div I; Group D,F,G)
NTN4992CR NiCd 1800 mAh 7.5V Intrinsically Safe Submersible,
(Class I,II,III; Div I; Group C,D,E,F,G)
NTN7058AR NiCd 1800 mAh 7.5V Intrinsically Safe Submersible Ruggedized

PREMIUM NiMH BATTERIES

- NTN7014BR* NiMH 950 mAh 7.5V
NTN8251AR NiMH 1650 mAh 7.5V

PREMIUM Li-ion BATTERIES

- NTN8818A* Li-ion 1700 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 three chemistry alternatives as well as various capacity offerings, 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. NiMH and Li-ion batteries offer extended duty cycles – providing more talk time per shift.

impres™ BATTERIES

impres NiCd BATTERIES

- HNN9033AR* NiCd 1800 mAh 7.5V
HNN9034AR NiCd 1800 mAh 7.5V Intrinsically Safe

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



NTN1667A

SINGLE-UNIT RAPID UNIVERSAL TRI-CHEMISTRY CHARGERS

- NTN1667A 110V Universal Charger
- NTN1668A 220V Universal Charger
- NTN1669A 240V Universal Charger

These chargers support Nickel Cadmium, Nickel Metal Hydride, and Lithium-ion batteries. They will rapid charge most batteries to 90% capacity in one to two hours and employ trickle and maintenance modes that ensure batteries are safely charged to their full capacity.

MOTOROLA CONDITIONING CHARGER (MCC)

- WPPN4002BR Single Unit Base Charger Only, 110V AC
(order adapter plates separately)
- WPPN4006AR Single Unit Base Charger Unit Only, 220V AC
(order adapter plates separately)
- WPPN4001BR Adapter Plate Only, 7V
- WPLN4096AR Charger Kit 110V AC (includes Single Unit base and 7V adapter plate)
- WPPN4065BR Multi-Unit Charger, Four-Station Base, 110V
(order adapter plates separately)
- 3080384G15 Cigarette Lighter Adapter Cord
- 3080384M21 DC Hard Wire Cable, for vehicular installation
(included in RLN4814)
- RLN4814A Vehicular Mounting Bracket and Hard Wire Cable for Single-Unit Motorola Conditioning Chargers



WPPN4065BR
SHOWN WITH
OPTIONAL ADAPTER
PLATES

The MCC utilize negative pulse charging technology that will help extend battery life and enhance battery operation. It will safely condition and charge your Nickel Cadmium (NiCd) and Nickel Metal Hydride (NiMH) batteries in one to two hours. The MCC controls heat buildup due to its charging and termination algorithms and its maintenance mode allows batteries to be safely left on the charger for extended periods of time. Optional accessories are available allowing these chargers to be used in both AC and DC environments providing optimal charging flexibility.



NTN5563B

Porta-Pocket™ CHARGER

NTN5563B Porta-Pocket Charger, 110V AC, regular rate, includes AC power supply/cable

NKN6289A 12V DC Ignition Wiring Cable, includes dash mount bracket

NKN6290B 12V Cigarette Lighter Receptacle Cable, includes dash mount bracket

The Porta-Pocket Charger provides a regular rate 16-hour charge to Nickel Cadmium (NiCd) batteries.

SABER

Chargers

impres[™] SMART ENERGY SYSTEM

WPLN4111AR *impres* Single Unit Charger, 110V
5889254E01 Battery Adapter (required for batteries NTN4538DR,
NTN4593DR, NTN7014BR and NTN8818A)

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. Its 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. The *impres* system reconditions batteries when they need it based on their usage pattern. 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 HT 1000 series portables.



WPLN4111AR



WPLN4108BR

impres[™] MULTI-UNIT CHARGER

WPLN4108BR *impres* Multi-unit Charger, 110V
WPLN4109BR *impres* Multi-unit Charger, 220V/240V
4385922B01 Battery Adapter (required for batteries NTN4538DR, NTN4593DR,
NTN7014BR, and NTN8818A)
NLN7967A Wall Mount for Multi-unit Charger

impres[™] MULTI-UNIT CHARGER WITH DISPLAY MODULES

WPLN4130A *impres* Multi-unit Charger with Display Modules, 110V
NLN7967A Wall Mount for Multi-unit Charger



WPLN4130A

Charger Display Modules provide powerful "real time" analyzing information for *impres* batteries, including current charge status; current battery mAh; percent rated capacity, battery voltage; battery kit number; battery serial number; battery chemistry; time remaining to charge complete (NiCd and NiMH); forecast number of cycles to next reconditioning; and more.

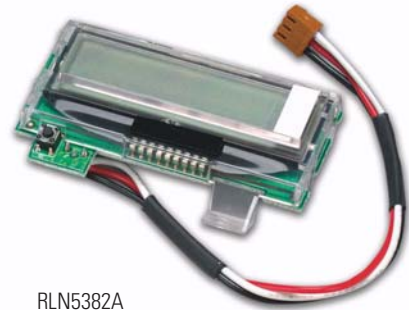
SABER

Chargers

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.



RLN5382A

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 are 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 Charging System, and provides benefit statements as well as application examples.

impres™ BUNDLE PACKS

RLN5261A impres Charger with two HNN9033AR batteries
RLN5264A impres Charger with two HNN9034AR batteries
RLN5442B impres Multi Unit Charger with six HNN9034AR batteries
RLN5444B impres Multi Unit Charger with six HNN9033AR batteries

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



WPLN4079BR



NDN4005B

BATTERY MAINTENANCE SYSTEM^{PLUS} (BMS^{PLUS})

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

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

WPPN4085AR BMS^{Plus} 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)

Increase the useful life of your batteries. Using interchangeable battery adapters (sold separately), the BMS^{Plus} 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 models only) and tracks battery voltage and capacity (mAh). Its easy-to-use design supports hundreds of 2-way, cellular, and camcorder batteries. The BMS^{Plus} offers a 3-year warranty and includes serial printer* port (RS-232).

**Compatible with the STAR Micronics SP200 series printers, and other printers with STAR emulation.*

BATTERY MAINTENANCE SYSTEM^{PLUS} (BMS^{PLUS}) ADAPTERS

TDN9450A NiCd Adapter, 7.5V

TDN9434A NiCd Adapter, 7.5V for use with NTN7058AR SABER R

WPPN4087AR NiCd and NiMH Adapter, 7.5V

WPPN4091AR Li-ion Only Adapter

SABER

Chargers & Antennas



WPLN4124AR

BATTERY OPTIMIZING SYSTEM II (BOS II)

WPLN4124AR	BOS II, Four Station, 90-264V AC (US) Adapter Plates Required
WPLN4125AR	BOS II, Four Station, 90-264V AC (Euro/UK) Adapter Plates Required
RL-71203	BOS II, Battery Adapter
RL-72703	BOS II, Battery Adapter, SABER-R

With its speed, accuracy and versatility the Battery Optimizing System II (BOS II) provides powerful analyzing capabilities. Users can select from 12 resident pre-programmed service programs making it quick and easy to get up and running. And, because the BOS II is programmable, users can create custom programs to perform a wide variety of tasks specific to their needs.

Features include:

- Quicktest™ diagnostic feature measures a battery's state of health in approx. 2 to 5 minutes
- Interchangeable adapter plates available for most Motorola Two-way radio batteries
- Accommodates NiCd, NiMH, Li-ion, and SLA
- 100-watt universal power supply provides up to 4 amps of power per station
- Ideal for service organizations, large fleet customers, and public safety users who rely on their battery performance

With increased power, more sophisticated programming options, and easier to use navigation paths, optimizing your batteries was never easier or faster.

HELIFLEX ANTENNAS

UHF BAND

8505816K24	403-430 MHz Heliflex
8505816K25	440-470 MHz Heliflex
8505816K26	470-512 MHz Heliflex

HIGH BAND

8505816K22	136-150.8 MHz Heliflex
8505816K21	150.8-162 MHz Heliflex
8505816K23	162-174 MHz Heliflex

Motorola Heliflex antennas are specifically engineered for maximum output and the greatest communication coverage.



ORDER TODAY! 1-800-422-4210
U.S. Federal Government Customers Call 1-800-826-1913





ASTRO® Digital SABER Radios

*Work in both digital and
analog environments*

- Compatible with Conventional, Stat-Alert™, SECURENET systems, SMARTNET Type II and SmartZone trunked systems.
- Mixed Analog/Digital Communication
- Narrow Band Operation
- Consistent Audio Quality
- Enhanced Encryption
-  FLASHport™ Software Upgrades



ASTRO Digital SABER

Audio Accessories

REMOTE SPEAKER MICROPHONE (RSM)

NMN6217B* Remote Speaker Microphone with 6' Coil Cord

Allows you to talk and listen without removing the radio from the belt, case or charger. Ideal for high noise level environments. This water resistant compact unit has a coiled cord, PTT switch and back cover clip.



NMN6217B

PUBLIC SAFETY MICROPHONE (PSM)

NMN6227B Public Safety Mic with Straight Cord, 30"

NMN6234B Public Safety Mic with Straight Cord, 24"

NMN6236B Public Safety Mic with Straight Cord, 18"

Note: The public safety speaker/mic is not compatible with SABER or Systems SABER radios and is not recommended for use with VHF. Antennas are not included with the public safety speaker/mic. The public safety speaker/mic utilizes the same antenna as the ASTRO SABER



NMN6236B



NTN7061A



RLN4295A

RSM AND PSM ACCESSORIES

ANTENNAS FOR PSM

8505309N09 400-430 MHz

8505309N10 440-470 MHz

8505309N11 470-512 MHz

VELCRO PATCH

NLN8410A Velcro Patch Pin Attachment for speaker/microphone assemblies

EPAULET STRAP

RLN4294A Epaulet Strap, Velcro

RLN4295A Epaulet Strap, with 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.

MISCELLANEOUS CONNECTOR COVER

NTN7061A Universal Connector Cover

*Intrinsically Safe

ORDER TODAY! 1-800-422-4210
U.S. Federal Government Customers Call 1-800-826-1913



ASTRO Digital SABER

Audio Accessories



NSN6050A



1-WIRE



2-WIRE



3-WIRE

SURVEILLANCE KITS

RECEIVE ONLY EARPIECE (1-WIRE)

NSN6050A Beige

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

ZMN6032A* Beige

ZMN6038A*† Beige

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

ZMN6031A* Beige

ZMN6039A*† Beige

SURVEILLANCE KIT ACCESSORIES

NTN5664D Adapter with Keyload Capabilities

5080371E73 Standard Rubber Eartips, pack of 25, Beige

5080371E75 Standard Rubber Eartips, pack of 25, Black

Surveillance accessories allow the user to privately receive communications with the earpiece and are ideal when environments require discreet communications. The above surveillance accessories require the NTN5664D adapter (with keyload capability) that attaches to the radio.

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 noise reduction

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

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

Lightweight translucent tube attaches to Motorola surveillance accessories and provides additional flexibility and control for the user. Clothing clip prevents the accessory from being pulled from the ear due to body movement or head rotation.



NTN8370A

†Extra loud earphone (exceeds OSHA limits)

*Intrinsically Safe

ASTRO Digital SABER

Audio Accessories

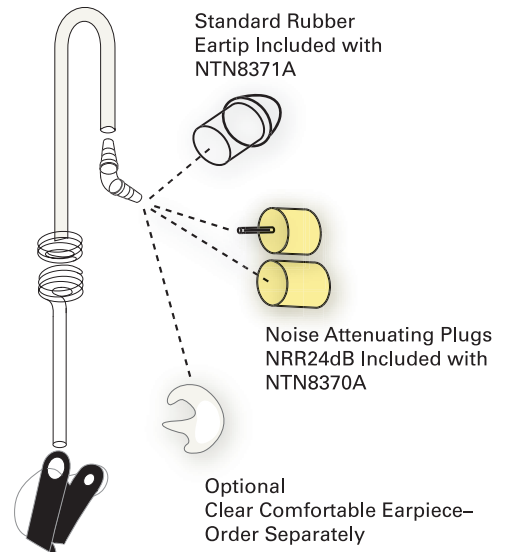
CLEAR COMFORTABLE EARPIECE

- 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
RLN4765A 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 most surveillance kits (1, 2 and 3-Wire). This earpiece is made of easy-to-clean chemically inert, hypoallergenic material. Does not provide hearing protection.

There are 3 items needed to make this product work:

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



Acoustic Tube
with Earphone



RLN4760A



RLN4762A

ASTRO

Digital SABER

Audio Accessories



BDN6641A
SHOWN WITH INTERFACE
MODULE

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), Grey

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 is required and must be ordered separately.

INTERFACE MODULES FOR EMS

- BDN6642B* Push-to-Talk Only Interface Module
- BDN6643B* Push-to-Talk and Voice-Activated Interface Module

OPTIONAL ACCESSORIES FOR EMS

- 0180300E25 Earguard with Adjustable Loop
- 0180358B38 Push-to-Talk Ring Switch
- 0180300E83 Push-to-Talk Body Switch
- 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
- 4280369E44 Replaceable Belt Clip with Screws
- 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)



0180300E25



0180300E83



0180358B38

**Intrinsically Safe*

ASTRO Digital SABER

Audio Accessories



NTN1721A

CommPort: INTEGRATED MICROPHONE/RECEIVER SYSTEM

- NTN1623A *** Integrated Ear Microphone/Receiver System w/Palm PTT. Includes NTN5664D adapter
- NTN1721A *** Integrated Ear Microphone/Receiver System w/Ring PTT Includes NTN5664D adapter
- NTN1738A *** Integrated Ear Microphone/Receiver System w/Snap on Side PTT Includes NTN5664D adapter
- NNTN4185A *** Integrated Ear Microphone/Receiver System w/Push-to-Talk Body Switch

CommPort: REPLACEMENT PARTS

- NKN6524A** Replacement Ring PTT Cable for NTN1721A
- NKN6526A** Replacement Snap on side PTT Cable for NTN1738A
- NKN6507A** Replacement Palm PTT Cable for NTN1623A
- NNTN4189A** Replacement Remote Push-to-Talk Body Switch for NNTN4185A
- 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
- NTN5664D** Surveillance Accessory Adapter (with Keyload Capability)

The CommPort system contains a miniature microphone and receiver and connects to your two-way radio. The advanced, self-adjusting microphone and miniature receiver make it possible to communicate under the most adverse conditions. A variety of Push-to-Talk options allow the user to customize the CommPort system for any application. ASTRO Digital SABER Radios require 4305909W01 coaxial antenna connector; must be ordered separately.

**Intrinsically Safe*

ORDER TODAY! 1-800-422-4210
U.S. Federal Government Customers Call 1-800-826-1913



ASTRO

Digital SABER

Audio Accessories

LIGHTWEIGHT HEADSETS

- NMN6050B*** Lightweight Headset with Boom Microphone, to be worn on a helmet or safety glasses; requires NTN5913A adapter cable
- NTN5913A*** Headset Adapter Cable with Bayonet Jack

Lightweight headset allow for high clarity, hands free, discreet two-way communications while adding comfort for extended wear in moderate noise environments.



BDN6645A



BDN6636B

HEAVY DUTY HEADSETS

- BDN6645A** Push-to-Talk Headsets with Boom Microphone; requires adapter cable BDN6640A; noise reduction rating=24dB
- BDN6635B** Voice Activated (VOX) Headset with Boom Microphone; requires adapter cable BDN6640A; noise reduction rating=24dB
- BDN6636B*** Voice Activated (VOX) Headset with Throat Microphone; requires adapter cable BDN6640A; noise reduction rating=24dB
- BDN6640A*** Radio Adapter Cable

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

**Intrinsically Safe*

ASTRO Digital SABER

Carrying Accessories

CARRYING CASES

MEDIUM CAPACITY NICKEL CADMIUM BATTERIES

- NTN5578A** Leather Standard Snap Carry Case with Belt Loop and "D" rings (order T-Strap separately)
- NTN5644A** Leather Swivel Snap Carry Case with "D" rings (order T-strap and swivel belt loop separately)
- NTN8124A** High Activity Leather Swivel Snap Carry Case with "D" rings (order with NTN8039 for swivel belt loop and T-strap separately)
- NTN7574B** Nylon Standard Snap Carry Case with Belt Loop (includes T-strap)

ULTRA HIGH CAPACITY NICKEL CADMIUM BATTERIES

- NTN7572A** Leather Standard Snap Carry Case with Belt Loop and "D" rings (order T-strap separately)
- NTN7573A** Leather Swivel Snap Carry Case with "D" rings (order T-strap and swivel belt loop separately)
- NTN8125A** High Activity Leather Swivel Snap Carry Case with "D" rings (order T-strap and swivel belt loop separately)
- NTN7391A** Nylon Standard Snap Carry Case for use with ruggedized radios (includes T-strap)
- NTN7847A** Nylon Swivel Snap Carry Case for use with ruggedized radios with 2.5" (swivel belt loop and T-strap included)
- NTN7529B** Nylon Standard Snap Carry Case with Belt Loop (includes T-strap)

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.

CARRYING CASE ACCESSORIES

T-STRAPS

- NTN7758A** Leather Case T-Strap
- NTN7846A** Nylon Case T-Strap

BELT LOOPS

- 4282421J06** 2.5" Leather Swivel Belt Loop
- 4205857B01** 3.0" Leather Swivel Belt Loop

HIGH ACTIVITY BUTTON

- PHN6141A** Removable "D" button used in conjunction with high-activity belt loop

BELT CLIP

- NTN7309A** Removable Belt Clip Attachment

CARRYING STRAP

- NTN5243A** Adjustable Black Carrying Strap, attaches to "D" rings on case



NTN5644A



NTN8124A



NTN7572A



4282421J06

ASTRO Digital SABER

Carrying Accessories



HLN6602A

CHEST PACK

HLN6602A Universal Chest Pack with Radio Holder, Pen Holder, and Velcro Secured Pocket.

1505596Z02 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 that safety is a concern.



RLN4570A



RLN4815A

RadioPAK

RLN4815A RadioPAK

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"x8" zippered pouch for other on-the-job necessities. Adjustable nylon weave belt; fits both men and women.

ASTRO Digital SABER

Batteries



NTN4596DR



NTN7058DR



NTN8251AR

BATTERIES

PREMIUM NiCd BATTERIES

NTN4593DR	NiCd 1100 mAh 7.5V
NTN4595DR	NiCd 1800 mAh 7.5V
NTN4657AR	NiCd 1100 mAh 7.5V CSA
NTN4538DR	NiCd 1100 mAh 7.5V Intrinsically Safe
NTN4596DR	NiCd 1800 mAh 7.5V Intrinsically Safe (Class I,II,III; Div I; Group D,E,F,G)
NTN4992CR	NiCd 1800 mAh 7.5V Intrinsically Safe (Class I,II,III; Div I; Group C,D,E,F,G)
NTN7058DR	NiCd 1800 mAh 7.5V Intrinsically Safe Ruggedized

PREMIUM NiMH BATTERIES

NTN7014BR	NiMH 950 mAh 7.5V
NTN8251AR	NiMH 1650 mAh 7.5V

PREMIUM Li-ion BATTERIES

NTN8818A	Li-ion 1700 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 three chemistry alternatives as well as various capacity offerings, 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. NiMH and Li-ion batteries offer extended duty cycles – providing more talk time per shift.

impres™ BATTERIES

impres NiCd BATTERIES

HNN9033AR	NiCd 1800 mAh 7.5V
HNN9034AR	NiCd 1800 mAh 7.5V Intrinsically Safe

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

VEHICULAR CONSOLE

NTN7227E	AVA/SVA Charging Console includes illuminated front control panel, radio charger, latching mechanism with lock, and power cables
----------	--

AVA/SVA console kits allow use of the portable radio in a mobile application. Order antenna separately.

NSN6054A	12-Watt external speaker is ideal for high noise environments. The audio level of the speaker can be adjusted from the console's control panel
HMN1056D	Microphone, compact palm
HMN1035C	Microphone, heavy duty palm
NMN6150A	Microphone, full featured display (all other SABER models excepts StartSite SABER SST/ATS)
NMN6169A	Microphone, full featured Systems SABER display (compatible only with Systems SABER)

ASTRO Digital SABER

Chargers



RLN4814A



WPPN4065BR
SHOWN WITH
OPTIONAL ADAPTERS
PLATES

MOTOROLA CONDITIONING CHARGER (MCC)

- WPPN4002BR** Single Unit Base Charge Only, 110V AC
(order adapter plates separately)
- WPPN4006AR** Single Unit Base Charge Unit Only, 220V AC
(order adapter plates separately)
- WPPN4001BR** Adapter Plate Only, 7V
- WPLN4096AR** Charger Kit, 110V AC
(includes Single Unit base unit and 7V adapter plate)
- WPLN4097BR** Charger Kit, 220V AC
(includes Single Unit base unit and 7V adapter plate)
- WPPN4065BR** Multi-Unit Charger, Four-Station Base, 110V
(order adapter plates separately)
- 3080384G15** Cigarette Lighter Adapter Cord
- 3080384M21** DC Hard Wire Cable, for vehicular installation
(included in RLN4814A)
- RLN4814A** Vehicular Mounting Bracket and Hard Wire Cable for Single-Unit
Motorola Conditioning Chargers

The MCC utilize negative pulse charging technology that will help extend battery life and enhance battery operation. It will safely condition and charge your Nickel Cadmium (NiCd) and Nickel Metal Hydride (NiMH) batteries in approximately one to two hours. The MCC controls heat buildup due to its charging and termination algorithms and its maintenance mode allows batteries to be safely left on the charger for extended periods of time. Optional accessories are available allowing these chargers to be used in both AC and DC environments providing optimal charging flexibility.

ASTRO Digital SABER

Chargers



NTN5563B

PORTA-POCKET CHARGER

NTN5563B Porta-Pocket Charger, 110V AC, regular rate, includes AC power supply/cable

NTN5793A Porta-Pocket Charger only, does not include AC power supply/cable

NKN6289A 12V DC Ignition Wiring Cable, includes dash mount bracket

NKN6290B 12V Cigarette Lighter Receptacle Cable, includes dash mount bracket

The Porta-Pocket Charger provides a regular rate 16-hour charge to Nickel Cadmium (NiCd) batteries.

SINGLE UNIT RAPID UNIVERSAL TRI-CHEMISTRY CHARGERS

NTN1667A 110V Universal Charger

NTN1668A 220V Universal Charger

NTN1669A 240V Universal Charger

These chargers support Nickel Cadmium, Nickel Metal Hydride, and Lithium-ion batteries. They will rapid charge most batteries to 90% capacity in one to two hours and employ trickle and maintenance modes that ensure batteries are safely charged to their full capacity.



NTN1667A

ASTRO Digital SABER

Chargers



WPLN4111AR



impres™ SMART ENERGY SYSTEM

WPLN4111AR impres Single Unit Charger, 110V
5889254E01 Battery Adapter (required for batteries NTN4538DR,
NTN4593DR, NTN7014BR and NTN8818A)

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. Its 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. The impres system reconditions batteries when they need it based on their usage pattern. 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 HT 1000 series portables.

ASTRO Digital SABER

Chargers



WPLN4108BR



WPLN4130A

impres™ MULTI-UNIT CHARGER

WPLN4108BR *impres* Multi-unit Charger, 110V

WPLN4109BR *impres* Multi-unit Charger, 220/240V

4385922B01 Battery Adapter (required for batteries NTN7014BR and NTN8818A)

NLN7967A Wall Mount for Multi-unit Charger

impres™ MULTI-UNIT CHARGER WITH DISPLAY MODULES

WPLN4130A *impres* Multi-unit Charger with Display Modules, 110V

NLN7967A Wall Mount for Multi-unit Charger

Charger Display Modules provide powerful “real time” analyzing information for *impres* batteries, including current charge status; current battery mAh; percent rated capacity, battery voltage; battery kit number; battery serial number; battery chemistry; time remaining to charge complete (for NiCd and NiMH); forecast number of cycles to next reconditioning; and more.



ASTRO

Digital SABER

Chargers

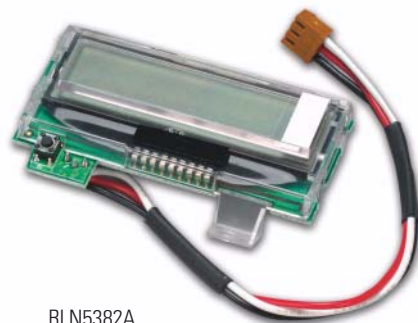
impres™ INDIVIDUAL CHARGER DISPLAY MODULE

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 are 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.



RLN5382A

impres™ CD

0180305J70 impres™ CD

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

impres™ BUNDLE PACKS

RLN5261A impres™ Charger with two HNN9033AR batteries

RLN5264A impres™ Charger with two HNN9034AR batteries

RLN5442B impres™ Multi Unit Charger with six HNN9034AR batteries

RLN5444B impres™ Multi Unit Charger with six HNN9033AR batteries

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

ASTRO Digital SABER

Chargers



WPLN4079BR



NDN4005B

BATTERY MAINTENANCE SYSTEM^{PLUS} (BMS^{PLUS})

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

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

WPPN4085AR BMS^{PLUS} 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)

Increase the useful life of your batteries. Using interchangeable battery adapters (sold separately), the BMS^{PLUS} 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). Its easy-to-use design supports hundreds of 2-way, cellular, and camcorder batteries. The BMS^{PLUS} offers a 3-year warranty and includes serial printer* port (RS-232).

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

BATTERY MAINTENANCE SYSTEM^{PLUS} (BMS^{PLUS}) ADAPTERS

TDN9450A NiCd Adapter, 7.5V

TDN9434A NiCd Adapter, 7.5V for use with NTN7058AR SABER R

WPPN4087AR NiCd and NiMH Adapter, 7.5V

WPPN4091AR Li-ion Only Adapter

ASTRO

Digital SABER

Chargers



WPLN4124AR

BATTERY OPTIMIZING SYSTEM II (BOS II)

WPLN4124AR BOS II, Four Station, 90-264V AC (US) Adapter Plates Required

WPLN4125AR BOS II, Four Station, 90-264V AC (Euro/UK) Adapter Plates Required

With its speed, accuracy and versatility the Battery Optimizing System II (BOS II) provides powerful analyzing capabilities. Users can select from 12 resident pre-programmed service programs making it quick and easy to get up and running. And, because the BOS II is programmable, users can create custom programs to perform a wide variety of tasks specific to their needs.

Features include:

- Quicktest™ diagnostic feature measures a battery's state of health in approx. 2 to 5 minutes
- Interchangeable adapter plates available for most Motorola Two-way radio batteries
- Accommodates NiCd, NiMH, Li-ion, and SLA
- 100-watt universal power supply provides up to 4 Amps of power per station
- Ideal for service organizations, large fleet customers, and public safety users who rely on their battery performance

With increased power, more sophisticated programming options, and easier to use navigation paths, optimizing your batteries was never easier or faster.

BOS ADAPTERS

RL-72703 Ruggedized Adapter, SABER-R

RL-71203 Standard Battery Adapter, SABER



RL-72703

ASTRO Digital SABER

Antennas



HELIFLEX ANTENNAS

VHF BAND

- 8505644V01 Helical 136-150.8 MHz
- 8505644V02 Helical 150-162 MHz
- 8505644V03 Helical 162-174 MHz
- 8505518V01 Helical 136-174 MHz

UHF BAND

- 8505644V04 Helical 403-433 MHz
- 8505644V05 Helical 435-470 MHz
- 8505644V06 Helical 470-520 MHz
- 8505241U05 Whip Antenna 403-520 MHz

Heliflex antennas are specifically engineered for maximum output and greatest communication coverage.

FLEXIBLE WHIP

800 MHZ BAND

- 8505241U03 806-870 MHz Whip Flex
- NAF4000B 806-870 MHz Dipole
- 8505241U06 806-870 MHz Stubby Quarterwave

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



ASTRO® Digital XTS 3000, XTS 3500, XTS 5000 Radios

*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



ASTRO Digital XTS 3000, XTS 3500, XTS 5000

Audio Accessories

REMOTE SPEAKER MICROPHONES (RSM)

- NMN6193C* Remote Speaker Microphone
- NMN6191C* Noise Canceling Remote Speaker Microphone
- 0104010J46 Replacement Coil Cord Assembly for Remote Speaker Microphone

Allows you to talk and listen without removing the radio from the belt, case or charger. Ideal for high noise level environments. These water resistant microphones include: 6.0" coiled cord assembly, 3.5mm Earjack, swivel clip, and quick disconnect latch.

REMOTE SPEAKER MICROPHONES COMMANDER™ SERIES

- RMN5021A* Commander Remote Speaker Microphone
- RMN5023A Commander+ Remote Speaker Microphone. Fully submersible design. For a complete submersibly radio/microphone system use with XTS 3000R, XTS 3500R and XTS 5000R portable radios.

The Commander™ Remote Speaker Microphone features an emergency button, volume control, 16-channel select knob with tactile feedback, 2 programmable buttons and a receive-only 3.5mm earphone jack, not included in submersible model. Users can access important controls without reaching for the radio. The Commander is ideal for firefighters, police and other professionals who frequently keep their XTS Two-way radio inside a case or under their clothing. Compatible with the XTS 5000, XTS 3000 and XTS 3500 Two-way radios only.



NMN6193C



RMN5021A

PUBLIC SAFETY SPEAKER/MICROPHONES (PSM)

- NMN6247A* Public Safety Microphone with Straight Cord, 30"; requires NTN8327A
- NMN6250A* Public Safety Microphone with Straight Cord, 24"; requires NTN8327A
- NMN6251A* Public Safety Microphone with Straight Cord, 18"; requires NTN8327A

Public safety speaker microphones include straight cord assembly, 3.5mm earjack, swivel clip, quick disconnect latch, antenna connector, and receive audio high/low toggle switch. Antenna must be ordered separately. Use radio antennas. Requires NTN8327A RF adapter.

PUBLIC SAFETY SPEAKER/MICROPHONES (PSM) ACCESSORY

- NTN7660B* Public Safety Tilt Switch. An external emergency switch that is activated when the unit is tilted at a greater than 60° angle; the emergency feature must be programmed in Radio to enable the tilt position

RSM AND PSM ACCESSORIES

EPAULET STRAP

- RLN4294A Epaulet Strap, Velcro
- RLN4295A Epaulet Strap with 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.

RF ADAPTER

- NTN8327A* RF Adapter; required for use with public safety microphone

*Intrinsically Safe

ORDER TODAY! 1-800-422-4210
U.S. Federal Government Customers Call 1-800-826-1913



ASTRO Digital XTS 3000, XTS 3500, XTS 5000

Audio Accessories

SURVEILLANCE KITS

RECEIVE ONLY EARPIECE WITH STANDARD EARPHONE

EARLOOP (1-WIRE)

BDN6664A* Beige

BDN6665A†* Beige

BDN6726A Black

BDN6727A† Black

RECEIVE ONLY EARPIECE WITH VOLUME CONTROL AND

EARLOOP (1-WIRE)

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 BDN6676D (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



BDN6667A



BDN6668A



BDN6676D

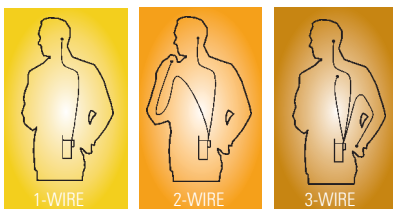
†Extra loud earphone (exceeds OSHA limits)

*Intrinsically Safe

ASTRO Digital XTS 3000, XTS 3500, XTS 5000

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.

†Extra loud earphone (exceeds OSHA limits)

**Intrinsically Safe*



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 noise reduction

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

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

Lightweight translucent tube attaches to Motorola surveillance accessories and provides additional flexibility and comfort for the user. Clothing clip prevents the accessory from being pulled from the ear due to body movement or head rotation.

ASTRO Digital XTS 3000, XTS 3500, XTS 5000

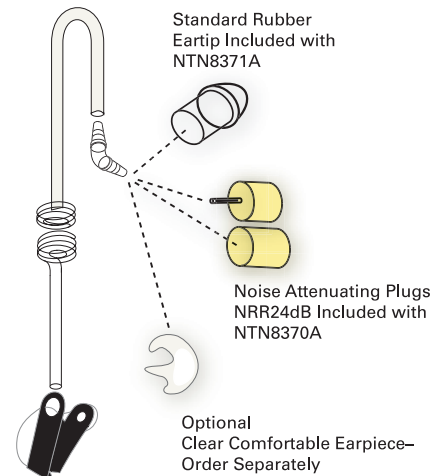
Audio Accessories

CLEAR COMFORTABLE EARPIECE

- 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
- RLN4765A 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, hypoallergenic material. Does not provide hearing protection. There are 3 items needed to make this product work:

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



RLN4760A

RLN4763A



RLN4922A

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.

ASTRO Digital XTS 3000, XTS 3500, XTS 5000

Audio Accessories



BDN6641A
SHOWN WITH
INTERFACE MODULE

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), Grey

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 is required and must be ordered separately.



0180358B33

INTERFACE MODULES FOR EMS

- BDN6708B* Push-to-Talk Only Interface Module
- BDN6671B* Push-to-Talk and Voice-Activated Interface Module

OPTIONAL ACCESSORIES FOR EMS

- 0180300E25 Earguard with Adjustable Loop
- 0180358B38* Push-to-Talk Ring Switch
- 0180300E83* Push-to-Talk Body Switch
- 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
- 4280369E44 Replaceable Belt Clip w/Screws
- 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)

FLEXIBLE EAR RECEIVER

- BDN6719A Flexible Ear Receiver with 3.5mm Threaded Plug, requires BDN6676D adapter unless being used with remote speaker/microphone.
- BDN6676D 3.5mm Jack Adapter with Quick Disconnect Latch

The flexible ear receiver contains a flexible earloop and speaker and rests external to the ear. It plugs directly into the BDN6676D adapter or the earjack on the speaker microphones.



BDN6719A

*Intrinsically Safe

ORDER TODAY! 1-800-422-4210
U.S. Federal Government Customers Call 1-800-826-1913



ASTRO Digital XTS 3000, XTS 3500, XTS 5000

Audio Accessories

PELLET STYLE EARPIECES

- BDN6780A** Earbud with Microphone and Push-to-Talk
(Requires BDN6676D Adapter)
- BDN6781A** Earbud, receive only. (Requires BDN6676D adapter unless being used
with speaker/microphone)
- 7580372E70** Replacement Foam Cushion for Pellet Earpieces
- BDN6676D** 3.5mm Jack Adapter with Quick Disconnect Latch

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

TEMPLE TRANSDUCER

- RMN4049A*** Temple Transducer
- 0180305J46** Ear Microphone System and Temple Transducer Training 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 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 communication and safety by not impairing the user's hearing of the external sound environment, such as machinery and equipment, warning, and fire alarms, the intercom, traffic and even casual conversations with co-workers.



RMN4049A

**Intrinsically Safe*

ASTRO Digital XTS 3000, XTS 3500, XTS 5000

Audio Accessories



NTN1663A

CommPort: INTEGRATED MICROPHONE/RECEIVER SYSTEM

- NTN1624A *** Integrated Ear Microphone/ Receiver System w/Palm PTT
(includes BDN6676D 3.5mm jack adapter)
- NTN1625A *** Integrated Ear Microphone/Receiver System w/PTT on Radio Adapter
(includes BDN6676D 3.5mm Jack Adapter)
- NTN1663A *** Integrated Ear Microphone/ Receiver System w/Ring PTT
(includes BDN6676D radio adapter)
- NTN1736A *** Integrated Ear Microphone/ Receiver System w/Snap-On Side PTT
(includes BDN6676D radio adapter)
- NNTN4186A *** Integrated Ear Microphone/ Receiver System w/Body PTT

CommPort: REPLACEMENT PARTS

- NKN6510A** Replacement Palm PTT Cable for NTN1624A
- NKN6508A** Replacement Cable for NTN1625A
- NKN6512A** Replacement Ring PTT Cable for NTN1663A
- NKN6525A** Replacement Snap-on PTT Cable for NTN1736A
- NNTN4188A** Replacement Remote Push-to-Talk Body Switch for NNTN4186A
- 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
- BDN6676B** 3.5 mm Jack Adapter with Quick Disconnect Latch.

The CommPort system contains a miniature microphone and receiver and connects to your two-way radio. The advanced, self-adjusting microphone and miniature receiver make it possible to communicate under the most adverse conditions. A variety of Push-to-Talk options allow the user to customize the CommPort system for any application.

**Intrinsically Safe*

ORDER TODAY! 1-800-422-4210
U.S. Federal Government Customers Call 1-800-826-1913



ASTRO Digital XTS 3000, XTS 3500, XTS 5000

Audio Accessories

RECEIVE ONLY HEADSETS

- RMN4056B** Receive only dual muff headband style headset, provides 24 dB of noise reduction for use with a 3.5mm threaded jack (can be plugged directly into radio with BDN6676D adapter)
- RMN4057B** Receive only hardhat mounts easily to hardhats with slots and provides 22dB of noise reduction, for use with all remote and public safety microphones with 3.5mm threaded jack (can be plugged into radio with BDN6676D adapter)
- BDN6676D** 3.5mm Jack Adapter with Quick Disconnect Latch

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.



LIGHTWEIGHT HEADSETS

- NMN6245A** Single Muff Lightweight Headset with In-Line Push-to-Talk Switch (requires BDN6676D audio adapter)
- NMN6246B** Ultra-Light Headset with Boom Microphone and In-Line Push-to-Talk Switch; Earbud style receiver (requires BDN6676D audio adapter)
- NMN1020A** Lightweight Headset with Boom Microphone to be worn on a helmet or safety glasses; included NKN6498A adapter cable (requires BDN6676D audio adapter)
- NKN6498A** Headset Adapter Cable for use with NMN1020A

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

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

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



HARDHAT MOUNT HEADSET WITH NOISE-CANCELLING BOOM MICROPHONE

- RMN4051B** Two-way Hardhat Mount Headset, Black

Ideal for two-way communication in high-noise environments; mounts easily to hardhats with slots, excellent noise reduction of 22dB. Easily replaceable earseals are filled with liquid and foam combination to provide excellent sealing and comfort. 3-foot coiled cord assembly. Requires RKN4095A separate in-line PTT adapter cable. Hardhat not included.

ASTRO Digital XTS 3000, XTS 3500, XTS 5000

Audio Accessories

HEAVY DUTY HEADSETS

- BDN6645A** Push-to-Talk Headset with Boom Microphone, requires adapter cable BDN6673B; noise reduction rating = 24dB
- BDN6635B** Voice Activated (VOX) Headset with Boom Microphone, requires adapter cable BDN6673B; noise reduction rating 24dB
- BDN6636B*** Voice Activated (VOX) Headset with Throat Microphone, requires adapter cable BDN6673B; Noise reduction rating = 24dB
- BDN6673B*** Adapter Cable

Heavyduty headsets include Noise-cancelling Boom Microphones and can be worn with or without a hardhat. Headsets are for use in noise levels up to 125dB. The Push-to-Talk switch is located on the earcup. The VOX module is contained within the headset on voice activated units. Heavyduty headsets require Radio Adapter Cable BDN6673B, to be ordered separately.



BDN6645A



BDN6635B



RMN5015A

RACING HEADSET FOR TWO-WAY RADIOS

- RMN5015A** Racing Headset (adapter cable required)
- BDN6673B** Adapter Cable for RMN5015A

Motorola is the Official Wireless Equipment supplier of CART®, 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.

NOISE-CANCELING HEADSETS WITH BOOM MICROPHONE

- RMN4052A** Tactical Headband Style Headset, Grey; Noise Reduction Rating of 24dB—Requires RKN4095A Adapter Cable
- RMN4053A** Tactical Hardhat Mount Headset, Grey; Noise Reduction Rating of 22dB—Requires RKN4095A Adapter Cable
- RKN4095A** In-Line PTT Adapter Cable for use with RMN4051B, 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. 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 RKN4095A separate in-line PTT adapter cable. Hardhat not included.



RMN4052A

*Intrinsically Safe

ORDER TODAY! 1-800-422-4210
U.S. Federal Government Customers Call 1-800-826-1913



ASTRO Digital XTS 3000, XTS 3500, XTS 5000

Carrying Accessories



NTN8385B



NTN8380C



NTN8381C



NTN9184A

CARRYING CASES

MODEL I RADIOS ONLY

- NTN8387A Leather Carry Case with Belt Loop, "D" rings, and T-Strap
- NTN8385B High Activity Swivel Leather Carry Case with 2.5" Swivel Belt Loop, "D" rings, and T-Strap
- NTN8386B High Activity Swivel Leather Carry Case with 3.0" Swivel Belt Loop, "D" rings, and T-Strap
- NTN8725A High Activity Nylon Carry Case with Belt Loop and T-strap

MODEL II & III RADIOS ONLY

- NTN8382B Leather Carry Case with Belt Loop, "D" rings, and T-Strap
- NTN8380C High Activity Swivel Leather Carry Case with 2.5" Swivel Belt Loop, "D" rings, and T-Strap
- NTN8381C High Activity Swivel Leather Carry Case with 3.0" Swivel Belt Loop, "D" rings, and T-Strap
- NTN8725A High Activity Nylon Carry Case with Belt Loop and T-Strap
- NTN9184A Leather Carry Case with Belt Loop for Clamshell Battery

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

ASTRO Digital XTS 3000, XTS 3500, XTS 5000

Carrying Accessories



NTN8039B



NTN8040B

CARRYING CASE ACCESSORIES

T-STRAPS

NTN8383A Leather T-Strap Plain Action Snap

NTN8384A Leather T-Strap Hard Action Snap
(provides additional strength at the snap)

HIGH ACTIVITY BELT LOOPS

NTN8039B 2.5" Leather Swivel Belt Loop

NTN8040B 3.0" Leather Swivel Belt Loop

NTN9179A High Activity 3.0" Swivel Belt Loop with "D" clip for battery

NTN9212A "D" clip for battery (only compatible with NTN9213A)

NTN9213A 3.0" Belt Loop, High Activity (for use with NTN9212A)

BELT CLIPS

NTN8266B Standard Removable Belt Clip Attachment (2.25")

NTN8460A Public Safety Belt Clip Attachment (3.0")

CARRYING STRAP

NTN5243A Adjustable Black Carrying Strap; attaches to "D" ring on case

CHEST PACK

HLN6602A Universal Chest Pack with Radio Holder, Pen Holder
and Velcro Secured Pocket.

1505596Z02 Replacement Strap for HLN6602A



HLN6602A



RLN4570A

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 that safety is a concern.

ORDER TODAY! 1-800-422-4210
U.S. Federal Government Customers Call 1-800-826-1913



ASTRO Digital XTS 3000, XTS 3500, XTS 5000

Carrying Accessories



RLN4815A

RadioPAk™

RLN4815A RadioPAk™

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"x8" zippered pouch for other on-the-job necessities. Adjustable nylon weave belt; fits both men and women.

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

ASTRO Digital XTS 3000, XTS 3500, XTS 5000

Batteries



NTN8299BR

BATTERIES

PREMIUM NiCd BATTERIES

NTN8294BR	NiCd 1525 mAh 7.5V
NTN8295AR	NiCd 1525 mAh 7.5V Intrinsically Safe
NTN8297AR	NiCd 1525 mAh 7.5V Intrinsically Safe Ruggedized

PREMIUM NiMH BATTERIES

NTN8299BR	NiMH 1700 mAh 7.5V Intrinsically Safe
NTN8923AR	NiMH 1800 mAh 7.5V
RNN4006B	NiMH 3500 mAh 7.5V
RNN4007AR	NiMH 3500 mAh 7.5V Intrinsically Safe

PREMIUM Li-ion BATTERIES

NTN8610BR	Li-ion 1650 mAh 7.2V Thin
-----------	---------------------------

PREMIUM ALKALINE BATTERY SHELLS

(12 AA Alkaline batteries required; order separately.)

NTN9177A	Disposable Battery Shell—Black
NTN9183A	Disposable Battery Shell—Orange

Motorola Original Batteries are ruggedly designed for lasting durability and system tested with Motorola two-way radios to ensure optimum performance. We offer three chemistry alternatives as well as various capacity offerings, 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. NiMH and Li-ion batteries offer extended duty cycles – providing more talk time per shift.

*impres*TM BATTERIES

***impres* BATTERIES**

HNN9031B	NiCd 1525 mAh 7.5V
HNN9032B	NiCd 1525 mAh 7.5V Intrinsically Safe
NNTN4435B	NiMH 2000 mAh (1800 min) 7.5V
NNTN4436B	NiMH 2000 mAh (1750 min) 7.5V Intrinsically Safe
NNTN4437B	NiMH 2000 mAh (1750 min) 7.5V Intrinsically Safe Ruggedized
NTN9862A	Li-ion 2000mAh 7.2V

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

ASTRO Digital XTS 3000, XTS 3500, XTS 5000

Chargers



NTN1667A

SINGLE UNIT UNIVERSAL TRI-CHEMISTRY CHARGERS

NTN1667A Single Unit, universal tri-chem rapid charge, 110V

NTN1668A Single Unit, universal tri-chem rapid charge, 220V

NTN1669A Single Unit, universal tri-chem rapid charge, 240V

These chargers support Nickel Cadmium, Nickel Metal Hydride, and Lithium-ion batteries. They will rapid charge most batteries to 90% capacity in one to two hours and employ trickle and maintenance modes that ensure batteries are safely charged to their full capacity.

MULTI-UNIT CHARGERS

NTN1177E Multi-Unit, rapid rate, 110V

Ideal charger for multi-shift operation or centrally located equipment rooms where spare batteries are always required. Can accommodate up to 6 batteries at once.

ASTRO Digital XTS 3000, XTS 3500, XTS 5000

Chargers



WPLN4111AR

impres™ SMART ENERGY SYSTEM

WPLN4111AR impres Single Unit Charger, 110V

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. The impres system reconditions batteries when they need it based on their usage pattern. 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 HT 1000 series portables.

impres™ MULTI-UNIT CHARGER

WPLN4108BR impres Multi-unit Charger, 110V

NLN7967A Wall Mount for Multi-unit Charger

impres™ MULTI-UNIT CHARGER WITH CHARGER DISPLAY MODULES

WPLN4130A impres Multi-unit Charger with Charger Display Modules, 110V

NLN7967A Wall Mount for Multi-unit Charger

Charger Display Modules provide powerful "real time" analyzing information for impres batteries, including current charge status; current battery mAh; percent rated capacity, battery voltage; battery kit number; battery serial number; battery chemistry; time remaining to charge complete (for NiCd and NiMH); forecast number of cycles to next reconditioning; and more.



WPLN4108BR



WPLN4130A

ORDER TODAY! 1-800-422-4210
U.S. Federal Government Customers Call 1-800-826-1913



ASTRO Digital XTS 3000, XTS 3500, XTS 5000

Chargers

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 Charging System, and provides benefit statements as well as application examples.



RLN5382A

impres™ BUNDLE PACKS

- RLN5262B** impres™ Charger with two HNN9032B batteries
- RLN5263B** impres™ Charger with two HNN9031B batteries
- RLN5441C** impres™ Multi Unit Charger with six HNN9032B batteries
- RLN5443C** impres™ Multi Unit Charger with six HNN9031BR batteries
- RLN5485B** impres™ Multi Unit Charger with two NNTN4435B batteries
- RLN5486B** impres™ Multi Unit Charger with two NNTN4436B FM batteries
- RLN5487B** impres™ Multi Unit Charger with two NNTN4437B batteries
- RLN5488C** impres™ Multi Unit Charger with six NNTN4435B batteries
- RLN5489C** impres™ Multi Unit Charger with six NNTN4436B FM batteries
- RLN5490C** impres™ Multi Unit Charger with six NNTN4437B batteries

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

ASTRO Digital XTS 3000, XTS 3500, XTS 5000

Chargers

BATTERY MAINTENANCE SYSTEM^{PLUS} (BMS^{PLUS})

- WPLN4079BR Six-Station, 110V AC, 50/60 Hz
- WPLN4080BR Six-Station, 230V AC, 50/60 Hz
- WPPN4085AR BMS^{PLUS} 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)

Using interchangeable battery adapters (sold separately), the BMS^{PLUS} 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). Its easy-to-use design supports hundreds of 2-way, cellular, and camcorder batteries. The BMS^{PLUS} offers a 3-year warranty and includes serial printer* port (RS-232).

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

BMS^{PLUS} ADAPTER

- WPPN4019AR Adapter Compatible with NiCd batteries only
- WPPN4022AR Adapter Compatible with both NiCd and NiMH batteries
- WPPN4086AR Adapter Compatible with both NiCd, NiMH and Li-ion batteries

MOTOROLA CONDITIONING CHARGER

- WPLN4086CR MCC Kit, 110V AC; includes single unit base and 7V adapter plate
- WPLN4087CR MCC Kit, 220V AC; includes single unit base and 7V adapter plate
- WPPN4021CR 7 Volt Adapter plate only
- WPPN4065BR Multi-Unit Conditioning Charger Four station Base, 110V;
(order adapter plates separately)
- 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 one to two hours. The MCC controls heat buildup due to its charging and termination algorithms and its 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, lettering users know 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.



WPLN4079BR



RLN4814A



WPPN4065BR
SHOWN WITH OPTIONAL
ADAPTER PLATES

ORDER TODAY! 1-800-422-4210
U.S. Federal Government Customers Call 1-800-826-1913



ASTRO Digital XTS 3000, XTS 3500, XTS 5000

Chargers



WPLN4124AR

BATTERY OPTIMIZING SYSTEM II (BOS II)

WPLN4124AR BOS II, Four Station, 90-264V AC (US) Adapter Plates Required

WPLN4125AR BOS II, Four Station, 90-264V AC (Euro/UK) Adapter Plates Required

With its speed, accuracy and versatility the Battery Optimizing System II (BOS II) provides powerful analyzing capabilities. Users can select from 12 resident pre-programmed service programs making it quick and easy to get up and running. And, because the BOS II is programmable, users can create custom programs to perform a wide variety of tasks specific to their needs.

Features include:

- Quicktest™ diagnostic feature measures a battery's state of health in approx. 2 to 5 minutes
- Interchangeable adapter plates available for most Motorola Two-way radio batteries
- Accommodates NiCd, NiMH, Li-ion, and SLA
- 100-watt universal power supply provides up to 4 Amps of power per station
- Ideal for service organizations, large fleet customers, and public safety users who rely on their battery performance

With increased power, more sophisticated programming options, and easier to use navigation paths, optimizing your batteries was never easier or faster.

BOS II ADAPTER

RL-75765 Adapter, ASTRO XTS 3000, XTS 3500, XTS 5000

With its speed, accuracy and versatility the Battery Optimizing System II (BOS II) provides powerful analyzing capabilities. Users can select from 12 resident pre-programmed service programs making it quick and easy to get up and running. And, because the BOS II is programmable, users can create custom programs to perform a wide variety of tasks specific to their needs.



RLN4884B

TRAVEL CHARGER

RLN4884B Travel Charger

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

ASTRO Digital XTS 3000, XTS 3500, XTS 5000

Chargers

VEHICULAR CHARGER

NTN9176B Vehicular Charger

This vehicular charger is a 12V DC unit that supports NiCd, NiMH, and Li-ion batteries for XTS3000, XTS3500 and XTS5000. A microprocessor senses the type of battery installed and controls the rate of charge accordingly. Batteries are charged at a rapid rate until fully charged at which point the unit reverts to a trickle charge. Batteries can be charged while on the radio or stand alone. The radio can be operated while in the charger and this unit is PAC RT compatible. The vehicular charger consists of a console, mounting hardware, and supply cable.



NTN9176B



NTN8560F

VEHICULAR ADAPTERS

NTN8561F XTS Vehicular Adapter. Closed Face with Limited Keypad Access, Mini-UHF

NTN8560F XTS Vehicular Adapter. Open Face with Limited Keypad Access, Mini-UHF

NTN1607F XTS Vehicular Adapter. Closed Face, BNC

NTN1606F XTS Vehicular Adapter. Open Face with limited keypad access, BNC

Adding accessories to the vehicular adapters requires one of the following two kits:

NTN8941A XTVA Data Cable Kit

NTN8943A XTVA Accessory Adapter Kit

Allows customers to adapt XTS3000, XTS3500 or XTS5000 portables for mobile operation. Provides in-vehicle rapid and trickle charging for Nickel Cadmium (NiCd), Nickel Metal Hydride (NiMH), and Lithium Ion (Li-ion) batteries. These units offer quick radio release and dead battery operation and are powered by attaching their supply cable to the 12V battery inside a police car, utility truck or other vehicle. Connectors are provided for the vehicle antenna, mobile microphone and optional amplified loudspeaker (HSN1000B). There is also a general interface connector for additional accessories. A color LED indicates battery recharge status. For XTVA operation, a microphone, and RF Switch (NTN8327A) are required. The required external antenna, mobile microphone, and optional loudspeaker allow for operation of the portable radio that is similar to that of a mobile.

ADDITIONAL ACCESSORIES FOR THE VEHICULAR ADAPTERS

HMN4069E Standard White Palm Microphone

PLN7737B Hand Held Control Head

NTN8940B Trunnion (Required)

HSN1000B External Speaker Amplified, 6 Watts

HLN9330B Emergency Foot Switch

GLN7280A Emergency Pushbutton

6685687A01 Tool Wrench for RF Switch (Required)

NTN8327A RF Adapter (Required)

NKN6455A MTVA PA/Speaker Cable

ASTRO Digital XTS 3000, XTS 3500, XTS 5000

Antennas

FLEXIBLE WHIP ANTENNAS

- 8505241U05 Flexible Whip, 403-520 MHz, 6"
- 8505241U03 Flexible Whip, 806-869 MHz, 7"
- 8505241U11 Flexible Whip, Dual Band, 764-870 MHz, 7"

Antenna has a one-piece finish and steel core for optimal strength and better radiation characteristics. Provides more comfort when radio is worn on the belt.



8505241U05



8505644V01

8505644V04

8505644V03

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.

ASTRO Digital XTS 3000, XTS 3500, XTS 5000

Antennas

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.

STUBBY ANTENNA

8505241U06 Stubby, 806-941 MHz, 4"

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 antenna that can be used for both 800MHz and 900MHz applications.



8505241U06



ASTRO[®] Digital

XTS 2500

High-performance, small-sized, digital

- Expanded Frequency—764-870 MHz
- Alternate Systems Configurations
- Trunking Standards Supported
- Convenience Features
- Enhanced Audio Features



ASTRO Digital XTS 2500

Audio Accessories



NMN6193C

REMOTE SPEAKER MICROPHONES (RSM)

- NMN6193C* Remote Speaker Microphone
- NMN6191C* Noise Canceling Remote Speaker Microphone
- 0104010J46 Replacement Coil Cord Assembly for Remote Speaker Microphone

Allows you to talk and listen without removing the radio from the belt, case or charger. Ideal for high noise level environments. These water resistant microphones include: 6.0' coiled Cord Assembly, 3.5mm Earjack, Swivel Clip, and Quick Disconnect Latch.

**Intrinsically Safe*

RSM ACCESSORIES

EPAULET STRAP

- RLN4294A Epaulet Strap, Velcro
- RLN4295A Epaulet Strap with 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.



RLN4294A



RLN4295A

ORDER TODAY! 1-800-422-4210
U.S. Federal Government Customers Call 1-800-826-1913



ASTRO Digital XTS 2500

Audio Accessories



BDN6641A
Shown with
Interface Module

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), Grey

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 is required and must be ordered separately.

INTERFACE MODULES FOR EMS

- BDN6708B* Push-to-Talk Only Interface Module
- BDN6671B* Push-to-Talk and Voice-Activated Interface Module

OPTIONAL ACCESSORIES FOR EMS

- 0180300E25 Earguard with Adjustable Loop
- 0180358B38 Push-to-Talk Ring Switch
- 0180300E83* Push-to-Talk Body Switch
- 0180358B32 Earholder, size small, Black; secures ear mic in ear
- 0180358B33 Earholder, size medium, Black; secures ear mic in ear
- 0180358B34 Earholder, size large, Black; secures ear mic in ear
- 0180358B35 Earholder, size small, Clear; secures ear mic in ear
- 0180358B36 Earholder, size medium, Clear; secures ear mic in ear
- 0180358B37 Earholder, size large, Clear; secures ear mic in ear
- 4280369E44 Replaceable Belt Clip with Screws
- 5080358B28 Eartips, size medium, Black (pack of 10)
- 5080358B29 Eartips, size large, Black (pack of 10)
- 5080358B30 Eartips, size medium, Beige (pack of 10)
- 5080358B31 Eartips, size large, Beige (pack of 10)



0180358B33



0180300E83

**Intrinsically Safe*

ASTRO Digital XTS 2500

Audio Accessories



NTN1663A

CommPort: INTEGRATED MICROPHONE/RECEIVER SYSTEM

- NTN1624A *** Integrated Ear Microphone/ Receiver System w/Palm PTT (includes BDN6676D 3.5mm jack adapter)
- NTN1625A *** Integrated Ear Microphone/Receiver System w/PTT on radio adapter (includes BDN6676D 3.5mm Jack Adapter)
- NTN1663A *** Integrated Ear Microphone/ Receiver System w/Ring PTT (includes BDN6676D radio adapter)
- NTN1736A *** Integrated Ear Microphone/ Receiver System w/Snap-On Side PTT (includes BDN6676D radio adapter)
- NNTN4186A *** Integrated Ear Microphone/ Receiver System w/Body PTT

CommPort: REPLACEMENT PARTS

- NKN6510A** Replacement Palm PTT Cable for NTN1624A
- NKN6508A** Replacement Cable for NTN1625A
- NKN6512A** Replacement Ring PTT Cable for NTN1663A
- NKN6525A** Replacement Snap-on PTT Cable for NTN1736A
- NNTN4188A** Replacement Remote Push-to-Talk Body Switch for NNTN4186A
- 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

The CommPort system contains a miniature microphone and receiver and connects to your two-way radio. The advanced, self-adjusting microphone and miniature receiver make it possible to communicate under the most adverse conditions. A variety of Push-to-Talk options allow the user to customize the CommPort system for any application.

**Intrinsically Safe*

ORDER TODAY! 1-800-422-4210
U.S. Federal Government Customers Call 1-800-826-1913



ASTRO Digital XTS 2500

Audio Accessories

TEMPLE TRANSDUCER

RMN4049A* 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 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. The Temple Transducer enhances communication and safety by not impairing the user's hearing of the external sound environment, such as machinery and equipment, warning, and fire alarms, the intercom, traffic, and even casual conversations with co-workers.



RMN4049A



BDN6780A

PELLET STYLE EARPIECES

BDN6780A* Single Earbud with Microphone and Push-to-Talk. Requires BDN6676D adapter

BDN6781A* Single Earbud, receive only. Requires BDN6676D adapter unless being used with speaker/microphone

BDN6676D 3.5mm Jack Adapter with Quick Disconnect Latch

7580372E70 Replacement Foam Cushion Ear Pellet Earpiece

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

HARDHAT-MOUNT HEADSET WITH NOISE-CANCELLING BOOM MICROPHONE

RMN4051B Two-way Hardhat-mount Headset, Black

Ideal for two-way communication in high-noise environments; mounts easily to hardhats with slots, excellent noise reduction of 22dB. Easily replaceable earseals are filled with liquid and foam combination to provide excellent sealing and comfort. 3-foot coiled cord assembly. Requires RKN4095A in-line PTT Adapter Cable. Hardhat not included.

**Intrinsically Safe*

ASTRO Digital XTS 2500

Audio Accessories



NMN6258A

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

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.

RACING HEADSET FOR TWO-WAY RADIOS

RMN5015A Racing Headset (adapter cable required)

BDN6673B Adapter Cable for RMN5015A

Motorola is the Official Wireless Equipment supplier of CART®, 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

NOISE-CANCELLING HEADSETS WITH BOOM MICROPHONE

RMN4052A Tactical Headband Style Headset, Grey; Noise Reduction Rating of 24dB—Requires RKN4095A Adapter Cable

RMN4053A Tactical Hardhat Mount Headset, Grey; Noise Reduction Rating of 22dB—Requires RKN4095A Adapter Cable

RKN4095A In-Line PTT Adapter Cable for use with RMN4051B, 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. 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 RKN4095A in-line PTT adapter cable. Hardhat not included.



RMN4053A

ORDER TODAY! 1-800-422-4210
U.S. Federal Government Customers Call 1-800-826-1913



ASTRO Digital XTS 2500

Carrying Accessories



BDN6645A
(Shown with BDN6673B)



BDN6635B

HEAVY DUTY HEADSETS

- BDN6645A** Push-to-Talk Headset with Boom Microphone; requires Adapter Cable BDN6673B; noise reduction rating=24dB
- BDN6635B** Voice-activated Headset with Boom Microphone; requires Adapter Cable BDN6673B; noise reduction rating=24dB
(Not Intrinsically Safe with XTS2500)
- BDN6636B** 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.

**Intrinsically Safe*

ASTRO Digital XTS 2500

Carrying Accessories



NTN7247A



HLN9844A

CARRYING CASES

CARRYING CASES

- NNTN4115A** High Activity Swivel Leather Carry Case with 3.0" Swivel Belt Loop, "D" Rings, and T-Strap
- NNTN4116A** High Activity Swivel Leather Carry Case with 2.5" Swivel Belt Loop, "D" Rings, and T-Strap
- NNTN4117A** Leather Carry Case with Belt Loop, "D" Rings, and T-Strap
- NTN7247A** Nylon Carry Case with Snap Belt Loop and T-Strap

BELT CLIPS

- HLN6853A** 2.25" Spring Action Belt Clip
- HLN9844A** 2" Removable Belt Clip Attachment

CARRYING STRAPS

- NTN5243A** Adjustable Black Shoulder Carrying Strap; attaches to "D" rings on case

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.

HIGH ACTIVITY BELT LOOPS

- NTN8039B** Leather Swivel Belt Loop, 2.5"
- NTN8040B** Leather Swivel Belt Loop, 3.0"

CHEST PACK

- HLN6602A** Universal Chest Pack with Radio Holder, Pen Holder and Velcro Secured Pocket
- 1505596Z02** Replacement Strap for HLN6602A



HLN6602A



RLN4570A

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 that safety is a concern.

ORDER TODAY! 1-800-422-4210
U.S. Federal Government Customers Call 1-800-826-1913



ASTRO Digital XTS 2500

Carrying Accessories



RLN4815A

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.

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

ASTRO Digital XTS 2500

Batteries & Chargers



NTN9815AR

BATTERIES

PREMIUM NiCd BATTERIES

NTN9815AR NiCd 1525 mAh 7.5

NTN9816AR NiCd 1525 mAh 7.5V Intrinsically Safe

PREMIUM NiMH BATTERIES

NTN9858AR NiMH 1800 mAh 7.5V

NTN9857AR NiMH 1800 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. NiMH batteries offer extended duty cycles – providing more talk time per shift.

SINGLE UNIT UNIVERSAL TRI-CHEMISTRY CHARGERS

NTN1667A Single Unit, universal tri-chem rapid charge, 110V

NTN1668A Single Unit, universal tri-chem rapid charge, 220V

NTN1669A Single Unit, universal tri-chem rapid charge, 240V

These chargers support Nickel Cadmium, Nickel Metal Hydride, and Lithium-ion batteries. They will rapid charge most batteries to 90% capacity in one to two hours and employ trickle and maintenance modes that ensure batteries are safely charged to their full capacity.



NTN1177E

MULTI-UNIT CHARGERS

NTN1177E Multi-Unit, rapid rate, 110V

Ideal charger for multi-shift operation or centrally located equipment rooms where spare batteries are always required. Can accommodate up to 6 batteries at once.

ORDER TODAY! 1-800-422-4210
U.S. Federal Government Customers Call 1-800-826-1913



ASTRO Digital XTS 2500

Chargers

MOTOROLA CONDITIONING CHARGER (MCC)

- WPPN4002BR** MCC, 110V AC; base charge unit only
WPLN4168AR MCC Kit, 110V AC; includes single unit base and adapter plate
WPPN4098AR Adapter plate only
WPPN4065BR Multi-Unit Conditioning Charger Four station Base, 110V;
(order adapter plates separately)
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 one to two hours. The MCC controls heat buildup due to its charging and termination algorithms and its 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, lettering users know 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.



RLN4814A



WPPN4065BR
SHOWN WITH OPTIONAL
ADAPTER PLATES



WPLN4111AR



impres™ RAPID RATE CHARGER

- WPLN4111AR** impres Single Unit Charger, 110V
WPLN4108BR impres Multi Unit Charger, 110V
NLN7967A Wall Mount for Multi-Unit Charger

The impres rapid-rate tri-chemistry charger supports existing legacy batteries and several radio platforms including SABER, XTS, and HT 1000/MTS 2000 series portables. Its advanced charging algorithm helps ensure optimal performance from the radio battery and allows batteries to be safely left on the charger (fully charged) for extended periods of time.



WPLN4108BR

ASTRO Digital XTS 2500

Chargers



WPLN4079BR



NDN4005B

BATTERY MAINTENANCE SYSTEM^{PLUS} (BMS^{PLUS})

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

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

WPPN4085AR BMS^{Plus} 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)

Increase the useful life of your batteries. Using interchangeable battery adapters (sold separately), the BMS^{Plus} 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 batter voltage and capacity (mAh). Its easy-to-use design supports hundreds of 2-way, cellular, and camcorder batteries. The BMS^{Plus} offers a 3-year warranty and includes serial printer* port (RS-232).

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

BATTERY MAINTENANCE SYSTEM^{PLUS} (BMS^{PLUS}) ADAPTERS

WPPN4097AR Battery Adapter (NiCd and NiMH)

ASTRO Digital XTS 2500

Chargers



WPLN4124AR

BATTERY OPTIMIZING SYSTEM II (BOS II)

WPLN4124AR BOS II, Four Station, 90-264V AC (US) Adapter Plates Required

WPLN4108BR impres™ Multi Unit Charger, 110V

With its speed, accuracy and versatility the Battery Optimizing System II (BOS II) provides powerful analyzing capabilities. Users can select from 12 resident pre-programmed service programs making it quick and easy to get up and running. And, because the BOS II is programmable, users can create custom programs to perform a wide variety of tasks specific to their needs.

Features include:

- Quicktest™ diagnostic feature measures a battery's state of health in approx. 2 to 5 minutes
- Interchangeable adapter plates available for most Motorola Two-way radio batteries
- Accommodates NiCd, NiMH, Li-ion, and SLA
- 100-watt universal power supply provides up to 4 Amps of power per station
- Ideal for service organizations, large fleet customers, and public safety users who rely on their battery performance

With increased power, more sophisticated programming options, and easier to use navigation paths, optimizing your batteries was never easier or faster.

BOS ADAPTERS

RL-79520 Standard Battery Adapter, XTS 2500

TRAVEL CHARGER

RLN4884B Travel Charger

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



RLN4884B

ASTRO Digital XTS 2500

Antennas

FLEXIBLE WHIP ANTENNAS

8505241U03 Flexible Whip, 806-870 MHz, 7"

8505241U11 Flexible Whip Dual Band, 764-870 MHz, 7"

Antenna has a one-piece finish and steel core for optimal strength and better radiation characteristics. Provides more comfort when radio is worn on the belt.

STUBBY ANTENNA

8505241U06 Stubby, 806-941 MHz, 4"

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 antenna that can be used for both 800MHz and 900MHz applications.



8505241U06



MT2000,™ MTS2000™

Compatible with HT1000, JT1000, MTX8000, MTX9000

*SECURENET
programmable*

- APCO 16 Feature Sets
- Encryption Capabilities
- Built-In Noise Reduction Microphones
-  **FLASHport™** Software Upgrades



MT2000, MTS2000

Compatible with HT1000, JT1000, MTX8000, MTX9000

Audio Accessories



NMN6193C

REMOTE SPEAKER MICROPHONES (RSM)

- NMN6193C* Remote Speaker Microphone
- NMN6191C* Noise Cancelling Remote Speaker Microphone
- 0104010J46 Replacement Coil Cord Assembly for RSM

Allows you to talk and listen without removing the radio from the belt case or charger. Ideal for high noise level environments. These water resistant microphones include 6.0' coil cord assembly, 3.5mm Earjack, swivel clip and quick disconnect latch.

RSM ACCESSORIES

EPAULET STRAP

- RLN4294A Epaulet Strap, Velcro
- RLN4295A Epaulet Strap with 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.



RLN4294A



RLN4295A

PUBLIC SAFETY SPEAKER MICROPHONES (PSM)

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

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. Use radio antennas on pages 98-99.

**Intrinsically Safe*

ORDER TODAY! 1-800-422-4210
U.S. Federal Government Customers Call 1-800-826-1913



MT2000, MTS2000

Compatible with HT1000, JT1000, MTX8000, MTX9000

Audio Accessories

SURVEILLANCE KITS

RECEIVE ONLY EARPIECE WITH STANDARD EARPHONE

EARLOOP (1-WIRE)

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

RECEIVE ONLY EARPIECE WITH VOLUME CONTROL AND

EARLOOP (1-WIRE)

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 BDN6676D (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	Replacement Standard Rubber Eartips, pack of 25, Beige
5080371E75	Replacement Standard Rubber Eartips, pack of 25, Black

*Intrinsically Safe

†Extra loud earphone (exceeds OSHA limits)



BDN6664A



BDN6667A



BDN6668A



BDN6676D

MT2000, MTS2000

Compatible with HT1000, JT1000, MTX8000, MTX9000

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.



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 noise reduction

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

Lightweight translucent tube attaches to Motorola surveillance accessories and provides additional flexibility and control for the user. Clothing clip prevents the accessory from being pulled from the ear due to body movement or head rotation.

MT2000, MTS2000

Compatible with HT1000, JT1000, MTX8000, MTX9000

Audio Accessories

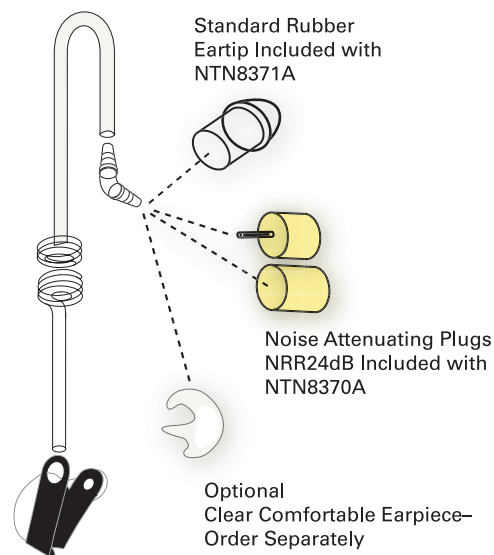
CLEAR COMFORTABLE EARPIECE

- 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
RLN4765A 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, hypoallergenic material.

There are 3 items needed to make this product work:

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



Acoustic Tube
with Earphone



RLN4760A

RLN4763A

MT2000, MTS2000

Compatible with HT1000, JT1000, MTX8000, MTX9000

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.

ORDER TODAY! 1-800-422-4210
U.S. Federal Government Customers Call 1-800-826-1913



MT2000, MTS2000

Compatible with HT1000, JT1000, MTX8000, MTX9000

Audio Accessories



BDN6641A

Shown with interface module



BDN6708B



0180358B38



0180300E25



0180300E83

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), Black

INTERFACE MODULE 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 is required and must be ordered separately.

OPTIONAL ACCESSORIES FOR EMS

0180358B38* Push-to-Talk Ring Switch
(see photo)

0180300E83* Push-to-Talk Body Switch

0180300E25 Earguard with Adjustable Loop; secures ear mic in ear

0180358B32 Earholder, size small, Black; secures ear mic in ear

0180358B33 Earholder, size medium, Black; secures ear mic in ear

0180358B34 Earholder, size large, Black; secures ear mic in ear

0180358B35 Earholder, size small, Clear; secures ear mic in ear

0180358B36 Earholder, size medium, Clear; secures ear mic in ear

0180358B37 Earholder, size large, Clear; secures ear mic in ear

4280369E44 Replaceable Belt Clip with Screws

5080358B28 Eartips, size medium, Black (10 per pack)

5080358B29 Eartips, size large, Black (10 per pack)

5080358B30 Eartips, size medium, Beige (10 per pack)

5080358B31 Eartips, size large, Beige (10 per pack)

MT2000, MTS2000

Compatible with HT1000, JT1000, MTX8000, MTX9000

Audio Accessories



BDN6719A

FLEXIBLE EAR RECEIVER

- BDN6719A** Flexible Ear Receiver with 3.5mm Threaded Plug, requires Adapter BDN6676D unless being used with speaker microphone
- 7580372E11** Replacement Foam Ear Cushion
- BDN6676D** 3.5mm Jack Adapter with Quick Disconnect Latch

The flexible ear receiver contains a flexible earloop and speaker and rests external to the ear. It plugs directly into the BDN6676D adapter or the earjack on the speaker microphones.



BDN6780A

PELLET STYLE EARPIECES

- BDN6780A** Earbud with Microphone and Push-to-Talk (requires Adapter BDN6676D)
- BDN6781A** Earbud, receive only (requires Adapter BDN6676D unless being used w/speaker microphone)
- 7580372E70** Replacement Foam Cushion for Pellet Earpieces

The Pellet Style Earpiece allows the user to receive communication discreetly and is comfortable for extended wear.

MT2000, MTS2000

Compatible with HT1000, JT1000, MTX8000, MTX9000

Audio Accessories



NTN1663A

CommPort: INTEGRATED MICROPHONE/RECEIVER SYSTEM

- NTN1625A*** Integrated Ear Microphone/ Receiver System with PTT on Radio Adapter (includes BDN6676D 3.5mm Jack Adapter)
- NTN1624A*** Integrated Ear Microphone/ Receiver System w/Palm PTT (includes BDN6676D 3.5mm Jack Adapter)
- NTN1663A*** Integrated Ear Microphone/ Receiver System w/Ring PTT (includes BDN6676D Radio Adapter)
- NTN1736A*** Integrated Ear Microphone/ Receiver System w/Snap-On Side PTT (includes BDN6676D Radio Adapter)
- NNTN4186A*** Integrated Ear Microphone/Receiver System w/Body PTT

CommPort: REPLACEMENT PARTS

- NKN6512A** Replacement Ring PTT Cable for NTN1663A
- NKN6525A** Replacement Snap-On PTT Cable for NTN1736A
- NKN6510A** Replacement Palm PTT Cable for NTN1624A
- NNTN4188A** Replacement Remote PTT Body Switch for NNTN4186A
- NKN6508A** Replacement Cable for NTN1625A
- 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 Tube (pack of 10)
- 4285838B01** Replacement Collar Clip
- 4202006A01** Replacement Back Cover Clip
- BDN6676D** 3.5mm Jack Adapter with Quick Disconnect Latch

The CommPort System contains a miniature microphone and receiver and connects to your two-way radio. The advanced, self-adjusting microphone and miniature receiver make it possible to communicate under the most adverse conditions. A variety of Push-to-Talk options allow the user to customize the CommPort system for any application.

**Intrinsically Safe*

MT2000, MTS2000

Compatible with HT1000, JT1000, MTX8000, MTX9000

Audio Accessories

LIGHTWEIGHT HEADSETS

- NMN6245A*** Single Muff Lightweight Headset with In-line PTT Switch (requires BDN6676D Adapter)
- NMN6246B*** Ultralite Headset with Boom Microphone and In-line PTT 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
- BDN6676A** 3.5mm Jack Adapter with Quick Disconnect Latch

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



NMN6245A



NMN6246B



NMN6258A

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

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.

**Intrinsically Safe*

ORDER TODAY! 1-800-422-4210
U.S. Federal Government Customers Call 1-800-826-1913



MT2000, MTS2000

Compatible with HT1000, JT1000, MTX8000, MTX9000

Audio Accessories



RMN5015A

RACING HEADSET FOR TWO-WAY RADIOS

RMN5015A Racing Headset (Adapter Cable required)

BDN6673B Adapter Cable for RMN5015A

Motorola is the Official Wireless Equipment Supplier of CART®, 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.

TEMPLE TRANSDUCER

RMN4049A* 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 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 communication and safety by not impairing the user's hearing of the external sound environment, such as machinery and equipment, warning, and fire alarms, the intercom, traffic and even casual conversations with co-workers.



RMN4049A

**Intrinsically Safe*



RMN4056B

RECEIVE ONLY HEADSETS

RMN4056B Receive only dual muff headband style headset, provides 24 dB of noise reduction for use with a 3-5mm threaded lack can be plugged directly into radio with BDN6676D adapter.

RMN4057B Receive only hardhat mounts easily to hardhats with slots and provides 22dB of noise reduction, for use with all remote and public safety microphones with 3.5mm threaded jack (can be plugged into radio with BDN6676D adapter)

BDN6676D 3.5mm Jack Adapter with Quick Disconnect Latch

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.

MT2000, MTS2000

Compatible with HT1000, JT1000, MTX8000, MTX9000

Audio Accessories

NOISE CANCELLING HEADSETS WITH BOOM MICROPHONE

RMN4052A Tactical Headband Style Headset, Grey; provides 24dB of noise reduction and requires RKN4095A Adapter Cable

RMN4053A Tactical Hardhat Mount Headset mounts easily to hardhats with slots; provides 22dB of noise reduction and requires RKN4095A Adapter Cable; hardhat not included

RKN4095A Radio Adapter Cable with In-Line PTT for use with RMN4051B, RMN4052A and RMN4053A

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. 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 RKN4095. Hardhat not included.



RMN4052A

HARDHAT MOUNT HEADSET WITH NOISE CANCELLING BOOM MICROPHONE

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

RKN4095A Radio Adapter Cable with In-Line PTT for use with RMN4051B, RMN4052A and RMN4053A

Ideal for two-way communication in high-noise environments; mounts easily to hardhats with slots, excellent noise reduction of 22dB. Easily replaceable earseals are filled with liquid and foam combination to provide excellent sealing and comfort. 3-foot coiled cord assembly. Requires RKN4095A in-line PTT Adapter Cable. Hardhat not included.



ORDER TODAY! 1-800-422-4210
U.S. Federal Government Customers Call 1-800-826-1913



MT2000, MTS2000

Compatible with HT1000, JT1000, MTX8000, MTX9000

Audio Accessories



BDN6645A



BDN6635B



BDN6636B
(shown with BDN6673B)

HEAVYDUTY HEADSETS

BDN6645A* Push-to-Talk Headset with Boom Microphone; requires Adapter Cable BDN6673B; noise reduction rating = 24dB

BDN6635B* Voice-activated Headset with Boom Microphone; requires Adapter Cable BDN6673B; noise reduction rating = 24dB

BDN6636B* Voice-activated Headset with Throat Microphone; requires Adapter Cable BDN6673B; noise reduction rating = 24dB

BDN6673B Radio Adapter Cable

Heavyduty headsets include noise-cancelling boom microphones and can be worn with or without a hardhat. Headsets are for use in noise levels up to 125dB. The Push-to-Talk switch is located on the earcup. The VOX module is contained within the headset on voice activated units. Heavyduty headsets require Radio Adapter Cable BDN6673B, to be ordered separately.

**Intrinsically Safe*

MT2000, MTS2000

Compatible with HT1000, JT1000, MTX8000, MTX9000

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
- NDN4018B** 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

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



NTN7247A



NTN8038B

NTN8036B

HIGH ACTIVITY SWIVEL CARRYING CASES

- NTN8035B** Leather Carry Case with 2.5" High Activity Swivel Belt Loop, "D" 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

These 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.

MT2000, MTS2000

Compatible with HT1000, JT1000, MTX8000, MTX9000

Carrying Accessories



4200865599



NTN5243A

CARRYING CASE ACCESSORIES

T-STRAP

NTN7782A T-Strap for Leather Carry Cases

NTN7376A T-Strap for Nylon Carry Cases

BELT LOOPS

NTN8039B 2.5" High Activity Swivel Belt Loop

NTN8040B 3.0" High Activity Swivel Belt Loop

HIGH ACTIVITY, BUTTON

NTN1534A High Activity "D" Button and 2.5" High Activity Swivel Belt Loop (NTN8039B)

NTN1535A High Activity "D" Button and 3.0" High Activity Swivel Belt Loop (NTN8040B)

NTN8063A High Activity "D" Button

BELT

4200865599 1.75" Wide Black Belt

BELT CLIPS

4205638V09 2.5" Belt Clip, Black

4205638V07 3.0" Belt Clip, Black Aluminum

CARRYING STRAP

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

WATERPROOF BAG

HLN9985B Waterproof bag. Includes a large carrying strap.

D ATTACHMENT

NTN7484A D attachment

HOLDERS AND QUICK RELEASE ASSEMBLY

RLN4943A Universal holder with gooseneck bracket provides flexible mounting solutions for portable radios

RLN4944A Wheelchair quick release assembly

MT2000, MTS2000

Compatible with HT1000, JT1000, MTX8000, MTX9000

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

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 Belt, 2" nylon



TDN9684A



TDN9687A



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.

ORDER TODAY! 1-800-422-4210
U.S. Federal Government Customers Call 1-800-826-1913



MT2000, MTS2000

Compatible with HT1000, JT1000, MTX8000, MTX9000

Carrying Accessories



RLN4570A

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 Universal RadioPAK with Radio Holder; worn around waist with adjustable belt; includes attached 6" by 8" zippered pouch for other job necessities

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



RLN4815A

MT2000, MTS2000

Compatible with HT1000, JT1000, MTX8000, MTX9000

Batteries & Chargers

BATTERIES

PREMIUM NiCd BATTERIES

NTN7143CR NiCd 1200 mAh 7.5V
NTN7372AR NiCd 1200 mAh 7.5V Intrinsically Safe
NTN7147AR NiCd 1300 mAh 7.5V Intrinsically Safe
NTN7149BR NiCd 1300 mAh 7.5V CSA
NTN7150AR NiCd 1200 mAh 7.5V MSHA
NTN7341AR NiCd 1400 mAh 7.5V Intrinsically Safe
NTN7144CR NiCd 1500 mAh 7.5V

PREMIUM NiMH BATTERIES

WPNN4013A NiMH 2000 mAh 7.5V
WPNN4037A NiMH 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. NiMH and Li-ion batteries offer extended duty cycles — providing more talk time per shift.

impres™ BATTERIES

***impres™* NiCd BATTERIES**

HNN9028AR NiCd 1500 mAh 7.5V
HNN9029AR NiCd 1500 mAh 7.5V Intrinsically Safe

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



NTN7143CR



NTN7144CR



HNN9028AR



NTN7372AR



WPNN4013A

MT2000, MTS2000

Compatible with HT1000, JT1000, MTX8000, MTX9000

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.

MOTOROLA CONDITIONING CHARGER (MCC)

- WPPN4002BR 110V AC Single Unit Base Charger Only
(order Adapter Plate separately)
WPPN4006AR 220V AC Single Unit Base Charger Only
(order Adapter Plate separately)
WPPN4065BR Multi-Unit Conditioning Charger Four Station Base 110V
(order Adapter Plate separately)
WPPN4004BR 7V Adapter Plate Only
WPLN4090BR MCC Kit, 110V AC; includes both base unit and 7V Adapter
WPLN4091BR MCC Kit, 220V AC; includes both base unit and 7V Adapter
3080384G15 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 NiCd and NiMH batteries in one to two hours. The MCC controls heat buildup due to its charging and termination algorithms and its 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, letting users know 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 3080384G15 (optional)

MT2000, MTS2000

Compatible with HT1000, JT1000, MTX8000, MTX9000

Chargers

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.



NTN1177D

MUC ACCESSORIES

NLN7967A Wall Mount



TDN9816A

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 micro-processor 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.



RLN4884B

ORDER TODAY! 1-800-422-4210
U.S. Federal Government Customers Call 1-800-826-1913



MT2000, MTS2000

Compatible with HT1000, JT1000, MTX8000, MTX9000

Chargers



WPLN4079BR



WPLN4079BR

BATTERY MAINTENANCE SYSTEM^{PLUS} (BMS^{PLUS})

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

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

WPPN4085AR BMS^{PLUS} 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^{PLUS} 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 models only) and tracks battery voltage and capacity (mAh). Its easy-to-use design supports hundreds of 2-way, cellular, and camcorder batteries. The BMS^{PLUS} offers a 3-year warranty and 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.*

BMS^{PLUS} ADAPTER

TDN9435C Adapter Compatible with NiCd Batteries Only

CDN6364A Adapter Compatible with both NiCd and NiMH Batteries

MT2000, MTS2000

Compatible with HT1000, JT1000, MTX8000, MTX9000

Chargers

BATTERY OPTIMIZING SYSTEM (BOS II)

WPLN4124AR BOS II, Four Station, 90-264V AC (US); Adapter Plates required

WPLN4125AR BOS II, Four Station, 90-264V AC (Euro/UK);
Adapter Plates required

With its speed, accuracy, and versatility, the Battery Optimizing System II (BOS II) provides powerful analyzing capabilities. Users can select from 12 resident pre-programmed service programs, making it quick and easy to get up and running. And, because the BOS II is programmable, users can create custom programs to perform a wide variety of tasks specific to their needs. Features include:

- Quicktest™ diagnostic feature measures a battery's state of health in approximately 2 to 5 minutes
- Interchangeable Adapter Plates available for most Motorola 2-way Radio Batteries
- Accommodates NiCd, NiMH, Li-ion and SLA
- 100-watt universal power supply provides up to 4 Amps of power per station
- Ideal for service organizations, large fleet customers, and public safety users who rely on their battery performance

With increased power, more sophisticated programming options, and easier to us navigation paths, optimizing your batteries was never easier or faster.



WPLN4124AR

MT2000, MTS2000

Compatible with HT1000, JT1000, MTX8000, MTX9000

Chargers



WPLN4111AR

impres™ SMART ENERGY SYSTEM

WPLN4111AR impres Smart Energy System Charger

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. Its 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. The impres System reconditions batteries when they need it based on their usage pattern. 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 CHARGER

WPLN4108BR impres™ Multi-unit Charger, 110V

NLN7967A Wall Mount for Multi-unit Charger

impres™ MULTI-UNIT CHARGER WITH CHARGER DISPLAY MODULES

WPLN4130A impres™ Multi-unit Charger with Charger Display Modules, 110V

NLN7967A Wall Mount for Multi-unit Charger

Charger Display Modules provide powerful “real time” analyzing information for impres batteries, including current charge status; current battery mAh; percent rated capacity; battery voltage; battery kit number; battery serial number; battery chemistry; time remaining to charge complete (for NiCd and NiMH); forecast number of cycles to next reconditioning; and more.



WPLN4108BR



WPLN4130A

MT2000, MTS2000

Chargers

Compatible with HT1000, JT1000, MTX8000, MTX9000

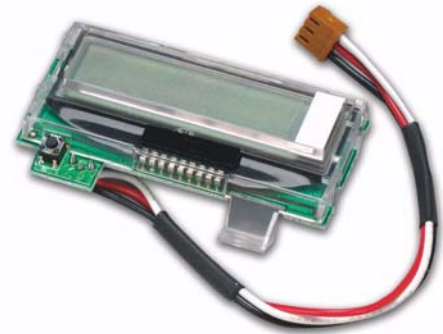
impres™ INDIVIDUAL CHARGER DISPLAY MODULE

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.



RLN5382A

impres™ CD

0180305J70 impres CD

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

impres™ BUNDLE PACKS

RLN5265A impres Charger with two HNN9029AR Batteries

RLN5266A impres Charger with two HNN9028AR Batteries

RLN5439B impres Multi-unit Charger with six HNN9029AR Batteries

RLN5440B impres Multi-unit Charger with six HNN9028AR Batteries

Provide significant savings on the impres products by bundling a charger and two or six batteries together as a Smart Energy System Package.

MT2000, MTS2000

Compatible with HT1000, JT1000, MTX8000, MTX9000

Antennas

ANTENNAS

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

FLEXIBLE WHIP ANTENNAS

8505241U05 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. Provides more comfort when radio is worn on the belt.



8505241U05



8505644V01

8505644V03

8505644V04

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.

MT2000, MTS2000

Compatible with HT1000, JT1000, MTX8000, MTX9000

Antennas

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.



NAF4000B

8505884R02



8505241U06

STUBBY ANTENNA

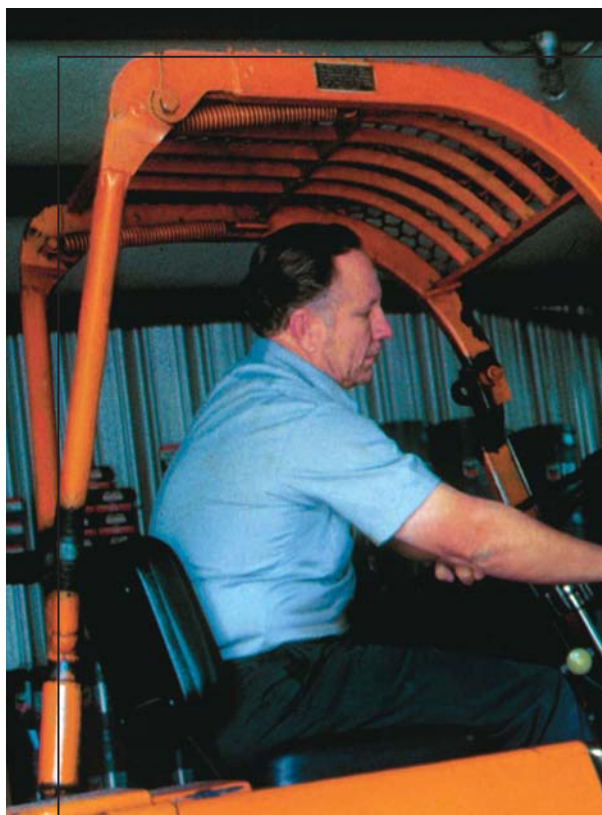
RAD4194A Stubby, 150-162 MHz, 3.55"

8505241U06 Stubby, 806-941 MHz, 4"

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 antenna that can be used for both 800MHz and 900MHz applications.

ORDER TODAY! 1-800-422-4210
U.S. Federal Government Customers Call 1-800-826-1913





LTS 2000®

Capable of 10 systems, 90 modes with 10 Conventional channels

- APCO 16 Feature Sets
- SMARTNET Plus Roaming
- Telephone Interconnect, Private Conversation, and Call Alert™
- Mil Std. 810 Specs



LTS 2000

Audio Accessories



HMN9030A

REMOTE SPEAKER MICROPHONE (RSM)

HMN9030A Remote Speaker Microphone with Coil Cord and Swivel Clip

HMN9094A Replacement Coil Cord for HMN9030A

Allows you to talk and listen without removing the radio from the belt, case or charger. Ideal for high noise level environments. This water resistant microphone includes: 6.0' Coiled Cord Assembly, and Swivel Clip.



RLN4294A



RLN4295A

RSM ACCESSORIES

EPAULET STRAP

RLN4294A Epaulet Strap, Velcro

RLN4295A Epaulet Strap with clip

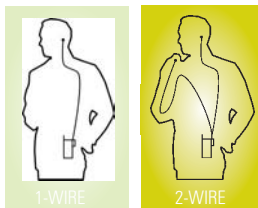
Black leather Epaulet Strap secures Remote Speaker Microphone to epaulet straps on shirt or jacket and accommodates back clip in leather cut-outs. Snap closure secures Remote Speaker Microphone cord to allow reliable communications in hostile environments.

SURVEILLANCE KITS

RECEIVE ONLY COMFORT EARPIECE (1-WIRE)

RLN5314A Beige

RLN5313A Black



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 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.

LTS 2000

Audio Accessories



NTN8371A



NTN8370A

NOISE KIT

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 reduction

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

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

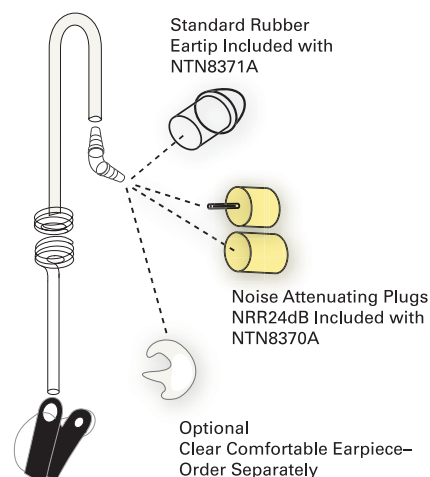
This lightweight translucent tube attaches to Motorola surveillance accessories to provide additional flexibility and comfort. Clothing clip prevents the accessory from being pulled from the ear due to body movement or head rotation.

CLEAR COMFORTABLE EARPIECE

- 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
- RLN4765A** 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, hypoallergenic material. There are three items needed to make this product work:

- Clear Comfortable Earpiece
- Clear Acoustic Tube Assembly (NTN8371A), and
- Surveillance Kits



Acoustic Tube with Earphone



RLN4760A



RLN4763A

LTS 2000

Audio Accessories



RLN4922A

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.



BDN6720A

FLEXIBLE EAR RECEIVER

- BDN6720A** Flexible Ear Receiver
- 7580372E11** Replacement Foam Ear Cushion

This receive-only Earpiece contains a flexible earloop and speaker which rests external to the ear.

LIGHTWEIGHT HEADSET

- RMN4016A*** Lightweight Single Speaker Headset with Swivel Boom Microphone for left or right ear operation and In-line PTT button
- REX4648A** Replacement Foam Earpad and Windscreen for RMN4016A

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

**Intrinsically Safe*



RMN4016A

ORDER TODAY! 1-800-422-4210
U.S. Federal Government Customers Call 1-800-826-1913



LTS 2000

Audio Accessories



BDN6646C

EAR MICROPHONE SYSTEM (EMS)

BDN6646C* Ear Microphone for standard noise levels (up to 95dB), with PTT Interface

BDN6706B* Ear Microphone for standard noise levels (up to 95dB), with Voice Activated and PTT Interface

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).

OPTIONAL ACCESSORIES FOR EMS

0180358B38* Push-to-Talk Ring Switch
(see photo)

0180300E83* Push-to-Talk Body Switch

0180300E25 Earguard with Adjustable Loop; secures ear mic in ear

0180358B32 Earholder, size small, Black; secures ear mic in ear

0180358B33 Earholder, size medium, Black; secures ear mic in ear

0180358B34 Earholder, size large, Black; secures ear mic in ear

0180358B35 Earholder, size small, Clear; secures ear mic in ear

0180358B36 Earholder, size medium, Clear; secures ear mic in ear

0180358B37 Earholder, size large, Clear; secures ear mic in ear

4280369E44 Replaceable Belt Clip with Screws

5080358B28 Eartips, size medium, Black (10 per pack)

5080358B29 Eartips, size large, Black (10 per pack)

5080358B30 Eartips, size medium, Beige (10 per pack)

5080358B31 Eartips, size large, Beige (10 per pack)



0180358B38



0180300E25



0180300E83

**Intrinsically Safe*

LTS 2000

Carrying Accessories



HLN9421A



HLN9428A

CARRYING CASES

STANDARD BELT LOOP CARRY CASES

- HLN9428A** DTMF Leather Carry Case with Belt Loop and "D" Rings for use with standard battery
- HLN9429A** DTMF Leather Carry Case with Belt Loop and "D" Rings for use with FM approved 1100 mAh battery
- HLN9431A** DTMF Leather Carry Case with Belt Loop and "D" Rings for use with FM approved 600 mAh slim battery

Carry Cases provide a convenient way to carry your radio while protecting it from the environment. The carry cases are available in sizes designed to fit your radio and battery and permit audio to be heard clearly.

HIGH ACTIVITY SWIVEL CARRY CASES

- HLN9421A** DTMF Leather Carry Case with High Activity Swivel Belt Loop for use with standard battery
- HLN9426A** DTMF Leather Carry Case with High Activity Swivel Belt Loop for use with FM approved 1100 mAh battery
- HLN9427A** DTMF Leather Carry Case with High Activity Swivel belt loop for use with FM approved 600 mAh battery

The High Activity Carry 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.

CARRY HOLDER

- HLN9076B** Molded Carry Holder (high capacity battery)
- HLN8044A** Strap for Molded Carry Holder, snap

CARRYING CASE ACCESSORIES

BELT LOOPS

- NTN8039B** 2-1/2" Replacement Swivel Belt Loop for High Activity Swivel Cases
- NTN8040B** 3" Replacement Swivel Belt Loop for High Activity Swivel Cases

BELT CLIPS

- HLN9724A** Belt Clip, 2-1/2"
- HLN8255B** Belt Clip, Spring action 3"

CARRYING STRAP

- NTN5243A** Adjustable Black Carrying Strap attaches to "D" ring on case

SWIVELLER

- TDN1002A** Swiveller, includes Holster Belt and Strap



NTN8039B

LTS 2000

Carrying Accessories

VEHICULAR HOLDER

TDN9327A Vehicular Holder for door panels up to 2.75"

TDN9373A Vehicular Holder for door panels up to 3.25"

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



TDN9327A TDN9373A



HLN6602A

CHEST PACK

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

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.



RLN4570A



RLN4815A

RadioPAk™

RLN4815A Universal RadioPAk with Radio Holder is worn around waist with adjustable belt; includes attached 6" by 8" zippered pouch for other job necessities

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

WATERPROOF BAG

HLN9985B Waterproof Bag; includes large carrying strap

LTS 2000

Batteries & Chargers

BATTERIES

PREMIUM NiCd BATTERIES

- HNN8308A* NiCd 600 mAh 7.5V, Slim
HNN9808B NiCd 600 mAh 7.5V Intrinsically Safe, Slim
HNN9628B NiCd 1200 mAh 7.5V
HNN9701A NiCd 1100 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.



HNN8308A



HTN9042A

SINGLE-UNIT CHARGERS

- HTN9042A* 120V Intellicharger Rapid Rate Charger, 110V
HTN9043A 220V Intellicharger Rapid Rate Charger, 240V
HTN9044A 400V Intellicharger Rapid Rate Charger, UK Plug, 240V

The Single-unit Intellicharger utilizes an enhanced charging algorithm that will help maximize the life of your batteries. It will rapid charge both NiCd and NiMH batteries in approximately 1 hour.

SINGLE-UNIT CHARGERS, STANDARD RATE

- HTN9702A* Single-Unit Standard Charger, 110V
HTN9804A Single-Unit Standard Charger, European plug, 220V
HTN9805A Standard Charger, United Kingdom plug, 240V

Single-unit standard chargers can charge NiCd batteries in approximately 16 hours.



HTN9702A

LTS 2000

Chargers



HTN9060A

MULTI-UNIT CHARGERS

- HTN9748C 120V, 6 Unit, 1 Hour Rapid Rate Charger (for NiCd batteries)
- HTN9811C 220V, 6 Unit, 1 Hour Rapid Rate Charger (for NiCd batteries)
- HTN9812C 240V, 6 Unit, 1 Hour Rapid Rate Charger (for NiCd batteries)
- HTN9060A 120V, 6 Unit, 90 Minute Rapid Rate Charger (for NiCd and NiMH batteries)
- HTN9061A 220V, 6 Unit, 90 Minute Rapid Rate Charger (for NiCd and NiMH batteries)

Multi-unit Chargers can charge up to six batteries in approximately one hour and are available in a variety of voltages.

TRAVEL CHARGER

RLN4833A 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.



RLN4833A



WPPN4002BR

MOTOROLA CONDITIONING CHARGERS (MCC)

- WPPN4002BR Single-unit Base Charger Only, 110V AC (order Adapter Plates separately)
- WPPN4006AR Single-unit Base Charger Only, 220V AC (order Adapter Plates separately)
- WPPN4005CR Adapter Plate only, 7V
- WPLN4088CR MCC Kit, 110V AC (includes Single Base Unit and 7V Adapter)
- WPLN4089CR MCC Kit, 220V AC (includes Single Base Unit and 7V Adapter)
- WPPN4065BR Four-Station Base, 110V (order Adapter Plates separately)
- 3080384G15 Cigarette Lighter Adapter Cord
- RLN4814A Vehicular Mounting Bracket and hard wire cable for Single-unit Motorola Conditioning Charger

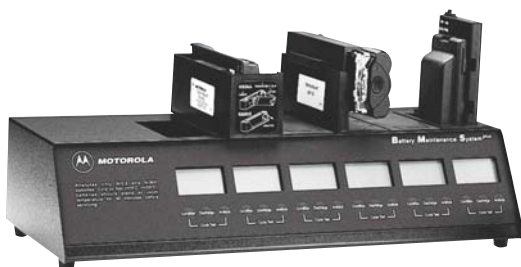


RLN4814A

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 an hour. The MCC controls heat buildup due to its charging and termination algorithms and its 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, letting users know 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.

LTS 2000

Chargers



WPLN4079BR



NDN4005B

BATTERY MAINTENANCE SYSTEM^{PLUS} (BMS^{PLUS})

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

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

WPPN4085AR BMS^{Plus} 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^{Plus} is capable of charging and discharging, analyzing, conditioning, and cycle testing batteries. It supports NiCd, NiMH, and Li-ion battery chemistries (Li-ion for 6 station models only) and tracks battery voltage and capacity (mAh). Its easy-to-use design supports hundreds of 2-way, cellular, and camcorder batteries. The BMS^{Plus} offers a 3-year warranty and 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.*

BATTERY MAINTENANCE SYSTEM^{PLUS} (BMS^{PLUS}) ADAPTERS

TDN9437A Adapter, for use with HNN9701A batteries

TDN9662A Adapter, for use with HNN9628A

TDN9438A Adapter, for use with HNN8308A and HNN9808B batteries

LTS 2000

Chargers

BATTERY OPTIMIZING SYSTEM (BOS II)

WPLN4124AR BOS II, Four Station, 90-264V AC (US); Adapter Plates required

WPLN4125AR BOS II, Four Station, 90-264V AC (Euro/UK);
Adapter Plates required

With its speed, accuracy, and versatility, the Battery Optimizing System II. (BOS II) provides powerful analyzing capabilities. users can select from 12 resident pre-programmed service programs, making it quick and easy to get up and running. and, because the BOS II is programmable, users can create custom programs to perform a wide variety of tasks specific to their needs. Features include:

- Quicktest™ diagnostic feature measures a battery's state of health in approximately 2 to 5 minutes
- Interchangeable Adapter Plates available for most Motorola 2-way radio batteries
- Accommodates NiCd, NiMH, Li-ion and SLA
- 100-watt universal power supply provides up to 4 Amps of power per station
- Ideal for service organizations, large fleet customers, and public safety users who rely on their battery performance

With increased power, more sophisticated programming options, and easier to use navigation paths, optimizing your batteries was never easier or faster.



WPLN4124AR

BOS II BATTERY ADAPTER

RL-71883 Standard Adapter

LTS 2000

Chargers & Antennas



HLN9719A

VEHICULAR CHARGERS

HLN9719A Vehicular Charger Adapter/Bracket, 12V

(for use with rapid rate chargers HTN9042A, HTN9043A, HTN9044A,

The Vehicular Charger is designed to easily charge your batteries in a vehicle adapting a single unit, rapid rate charger to the cigarette lighter adapter. This is ideal when a radio is used often in a vehicle.

ANTENNAS

FLEXIBLE WHIP ANTENNAS

8505241U03 Flexible Whip, 806-869 MHz

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

STUBBY ANTENNA

8505241U06* Stubby, 806-941MHz, 4"

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

**8505241U06 is a broadband antenna that operates in the 800/900 MHz band*



8505241U06



XTL 5000

Multiple frequency band solutions for perfect system optimization in congested urban areas



- Integrated voice and data capable
- Supports ASTRO SPECTRA legacy and existing ASTRO SPECTRA control heads
- Now available in 380 and 700/800 MHz
- Now capable of 512 channels on ALL control heads

XTL 5000

Audio Accessories



HMN1050D

MICROPHONES

<i>HMN1050D</i>	Microphone, Desk Top Microphone (For Control Station Operation)
<i>HMN1061A</i>	A Palm Mic for use with W9 Radio
<i>HMN1079A</i>	Water Resistant Palm Microphone
<i>HMN1080A</i>	Standard Palm Mic

XTL 5000

Mobile Accessories

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



TDN6253A



TDN6254A



HLN6025A

MISCELLANEOUS HARDWARE

- HLN6025A* Key Lock Mount

EXTERNAL SPEAKER

- HSN4018B* External Speaker

Provides Audio for High Ambient Noise Environments.



HSN4018B

XTL 5000

Mobile Accessories

CONTROL STATION ACCESSORIES

- HPN4001B Control Station Power Supply
- HKM4139A Power Cable
- HLN6042A Control Station Tray



HPN4001B



HLN5113B

EMERGENCY SWITCH

- HLN6188A Pushbutton External Emergency
- HLN5113B Emergency Foot Switch

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

XTL 5000

CABLES



HKN4192B

CABLES

ADAPTER CABLES

HKN6158A Audio Cable Adapter

HKN6159A Adapter Cable Data

POWER CABLES

HKN4191B 10 Foot Low/Mid Power Cable

HKN4192B 20 Foot Low/Mid Power Cable

Adapter cables that allow you to convert your existing ASTRO SPECTRA and ASTRO SPECTRA Plus accessory cables for use with the XTL 5000.

REMOTE MOUNT CABLES

YKN4261A 10 Foot Front Control Head Cable

YKN4246A 30 Foot Front Control Head Cable

YKN4248A 50 Foot Front Control Head Cable

YKN4249A 75 Foot Front Control Head Cable

YKN4255A 115 Foot Front Control Head Cable

YKN4256A 150 Foot Front Control Head Cable

XTL 5000

Antennas

LOW PROFILE ANTENNAS

VHF

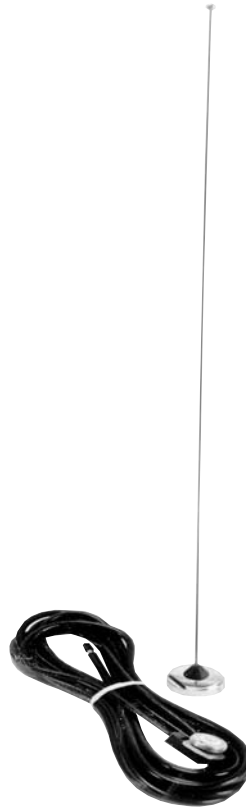
HAD4006A	136-144Mhz 1/4 Wave Roof Mount
HAD5007A	144-152Mhz 1/4 Wave Roof Mount
HAD4008A	152-162Mhz 1/4 Wave Roof Mount
HAD4009A	162-174Mhz 1/4 Wave Roof Mount

UHF

HAE6012A	380-420MHz 1/4 Wave Roof Mount
HAE4003A	450-470MHz 1/4 Wave Roof Mount
HAE6010A	380-420MHz 3.5dB Gain Roof Mount
HAE4012A	450-470MHz 3.5dB Gain Roof Mount
HAE6011A	380-420MHz 5.0dB Gain Roof Mount
RAE4014A	450-470MHz 5.0dB Gain Roof Mount
HAE6013A	380-470MHz Wideband

700/800 MHZ

HAF4013A	762-870Mhz 3db Gain Low Profile
HAF4014A	762-870Mhz 3db Gain Elevated Feed
HAF4015A	762-870Mhz 3db Gain Motorcycle Antenna
HAF4016A	762-870Mhz 1/4 Wave Roof Mount
HAF4017A	762-870Mhz 3db Gain Collinear Roof Mount
HAF4018A	762-870Mhz Low Profile Motorcycle Antenna



HAD4006A



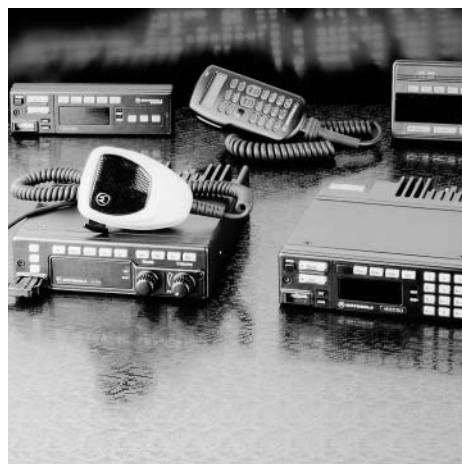
HAE4003A



ASTRO® Digital SPECTRA, ASTRO® Digital SPECTRA Plus, & SPECTRA

*Operate in both digital
and analog environments*

- Enhanced Encryption
- Data Capability
- 5 models to choose from
- VHF, UHF and 800 MHz Bands
-  **FLASHport™** Software Upgrades



ASTRO Digital SPECTRA, ASTRO Digital SPECTRA Plus, SPECTRA

Audio Accessories



HMN1053B



HLN1220B

MICROPHONES

<i>HMN1080A</i>	Standard Palm Microphone
<i>HMN1053B</i>	DTMF Microphone
<i>5084898K10</i>	Noise Cancelling Microphone
<i>HMN1061A</i>	Palm Microphone for use with Astro Digital Spectra W9 radio
<i>HLN1220B</i>	Handset with Hang Up Box
<i>HMN1079A</i>	Water Resistant Palm Microphone

SIRENS

<i>H1336B</i>	Siren/Public Address, provides hi-lo, yelp, and airhorn tones controlled through supplemental housing
<i>H1337A</i>	Public Address Only

ASTRO Digital SPECTRA, ASTRO Digital SPECTRA Plus, SPECTRA

Mobile Accessories

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



TDN6253A



TDN6254A



HLN6025A

MISCELLANEOUS HARDWARE

- HLN6025A Key Lock Mount
- HLN6008A Remote Mount Kit with 17 Foot Cable

EXTERNAL SPEAKER

- HSN4018B External Speaker

Provides Audio for High Ambient Noise Environments.



HSN4018B

ASTRO Digital SPECTRA, ASTRO Digital SPECTRA Plus, SPECTRA

Mobile Accessories

CONTROL STATION ACCESSORIES

<i>HPN4001B</i>	Control Station Power Supply
<i>HKN4139A</i>	Power Cable
<i>HLN6042A</i>	Control Station Tray
<i>HMN1050D</i>	Desktop Microphone



HMN1050D



HPN4001B



HLN5113B

EMERGENCY SWITCH

<i>HLN6188A</i>	Pushbutton External Emergency
<i>HLN5113B</i>	Emergency Foot Switch

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

ASTRO Digital SPECTRA, ASTRO Digital SPECTRA Plus, SPECTRA

Antennas

ANTENNAS

800 MHZ

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

900 MHZ

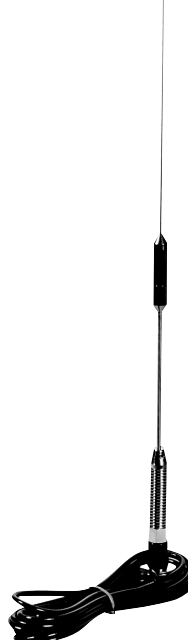
RRA4935A	3dB, Roof Top w/14 ft. Cable (890-960 MHz)
RAF4003ARM	3dB, Roof Top w/22 ft. Cable (890-960 MHz) w/ Low Loss Cable

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

HAE4002A	1/4 Wave, Roof Top (403-430 MHz)
HAE4003A	1/4 Wave, Roof Top (450-470 MHz)
HAE4004A	1/4 Wave, Roof Top (470-512 MHz)
HAE4010A	3.5dB, Roof Top (406-420 MHz)
HAE4011A	3.5dB, Roof Top (450-470 MHz)
HAE4012A	3.5dB, Roof Top (470-495 MHz)
HAE4013A	3.5dB, Roof Top (494-512 MHz)



HAE4013A



RRA4935A



RAD4010ARB



RRA4983A

ASTRO Digital SPECTRA, ASTRO Digital SPECTRA Plus, SPECTRA

Antennas



MOUNTS

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

ASTRO Digital SPECTRA, ASTRO Digital SPECTRA Plus, SPECTRA

Antennas



RAF4220A

LOW PROFILE ANTENNAS

VHF

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

UHF

<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

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

ANTENNA KITS

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

VHF

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

UHF

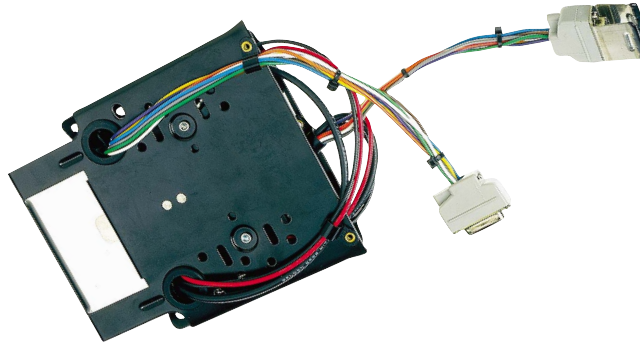
<i>RAE4162ARB</i>	White 410-430 MHz
<i>RAE4163ARB</i>	Black 410-430 MHz
<i>RAE4164ARB</i>	Black 430-450 MHz
<i>RAE4165ARB</i>	White 430-450 MHz
<i>RAE4166ARB</i>	Black 470-490 MHz
<i>RAE4167ARB</i>	White 450-470 MHz
<i>RAE4168ARB</i>	Black 450-470 MHz
<i>RAE4169ARB</i>	White 470-490 MHz

800MHZ

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

ASTRO Digital SPECTRA, ASTRO Digital SPECTRA Plus, SPECTRA

Mounts & Kits



RLN4074A

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



MCS 2000®

3 models available

- Narrow Band Operation
- Broad Band Operation
- Mobile Data Capability
- Portable Companion Radio - Compatible with the MTS 2000 portable radio series



MCS 2000

Audio Accessories



HMN4069E
WITH 40 FT. CABLE

MICROPHONES

- HMN4069E Standard White Palm Microphone
- 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 microphone
- HKN6130A 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 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.



HMN1073A

MCS 2000

Audio Accessories



HSN4038A

SPEAKERS

- HSN4038A* 7.5W Water External Resistant Speaker (requires HKN6127A 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

INSTALLATION ACCESSORIES

- HLN6356B* Installation Hardware Kit
- GKN6263A* Ignition Sense Cable

MCS 2000

Mobile Accessories



HLN6404A

CONTROL STATION ACCESSORIES

- HMN1038E* Desk Microphone, Beige
- HMN3000B* Desk Microphone, Black
- 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
- HPN4002B* Power Supply Low Power
- HLN6580B* Desk Tray with Speaker Mid Power, for use with model II & III
- HLN6581A* Hard Plastic Desk Tray without Speaker Low Power, for use with model I
- HPN4001B* Power Supply Mid Power

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

POWER CABLES

- HKN4191B* 10 Foot Low/Mid Power Cable
- HKN4192B* 20 Foot Low/Mid Power Cable
- HKN6110A* 20 Foot High Power Only Cable

MCS 2000

Antennas

ANTENNAS

800 MHZ

HAF4002A	1/4 Wave, Roof Top (806-900 MHz)
RR44983A	3dB, Roof Top (806-900 MHz)

900 MHZ

RR44935A	3dB, Roof Top w/14 ft. Cable (890-960 MHz)
RAF4003ARM	3dB, Roof Top w/22 ft. Cable (860-960 MHz) w/ Low Loss Cable

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

HAE4002A	1/4 Wave, Roof Top (403-430 MHz)
HAE4003A	1/4 Wave, Roof Top (450-470 MHz)
HAE4004A	1/4 Wave, Roof Top (470-512 MHz)
HAE4010A	3.5dB, Roof Top (406-420 MHz)
HAE4011A	3.5dB, Roof Top (450-470 MHz)
HAE4012A	3.5dB, Roof Top (470-495 MHz)
HAE4013A	3.5dB, Roof Top (494-512 MHz)



HAE4013A



HAE4003A

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
RAE4167A	White 450-470 MHz
RAE4168A	Black 450-470 MHz
RAE4169A	White 470-490 MHz

800 MHZ

RAF4217A	White 821-896 MHz
RAF4218A	Black 821-896 MHz
RAF4219A	Black 806-866 MHz
RAF4220A	White 806-866 MHz



RAF4220A



RAD4010ARB



HAF4002A

MCS 2000

Antennas

ANTENNA KITS

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

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

800 MHZ

RAF4217ARB	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

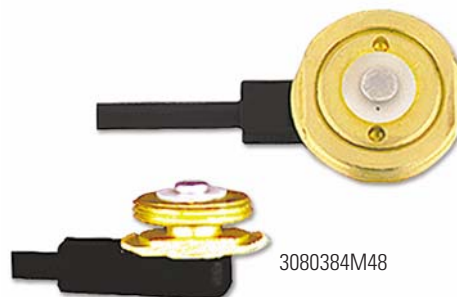
EMERGENCY SWITCH

GLN7280A	Emergency Push button
HLN5113B	Emergency Footswitch

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

MISCELLANEOUS ACCESSORIES

GLN7282A	Alarm Buzzer
HLN6642A	Alarm Relay and Cable
HLN6372A	Key Lock Mount
HKN6128A	Ignition Switch Cable
GKN6262B	Car Radio Mute Cable



3080384M48

ORDER TODAY! 1-800-422-4210
U.S. Federal Government Customers Call 1-800-826-1913





GTX & LCS 2000®



GTX & LCS 2000

Audio Accessories



HMN1035C



HMN3013A

MICROPHONES

- HMN3220B* Standard Compact Microphone
- HMN1035C* Full Size Palm Microphone
- HMN3013A* Non-Backlit Full Size DTMF Microphone

GTX & LCS 2000

Mobile Accessories

MOUNTING BRACKETS

GLN7317A Non-locking Bracket

CABLES

GKN6270A Standard Power Cable

GKN6271A Ignition Switch Cable

ALARMS

GKN6272AR External Alarm Relay Cable Kit

GLN7323A Emergency Foot Switch



GLN7317A



FSN5510A

SPEAKERS

FSN5510A 7.5W External Speaker

Provides audio for high ambient noise environments.

GTX & LCS 2000

Mobile Accessories



HPN4002B



HMN3000B

CONTROL STATION

HLN3067B Low Power Control Station Package, includes: adapter cable, base tray, black desk mic and power supply

Converts the mobile radio for desktop use for dispatch purposes.

CONTROL STATION ACCESSORIES

HPN4002B Control Station Power Supply
HLN6405A Rubber Desk Tray without Speaker, Low Power, for use with Model 1
HMN3000B Desk Microphone
HKN9088B Adapter Cable

GTX & LCS 2000

Antennas

ANTENNAS

800 MHZ

HAF4002A	1/4 Wave, Roof Top (806-900 MHz)
RRA4914B	3dB, Roof Top, Stainless Steel (806-900 MHz)
RRA4990A	3dB, Roof Top, Black Chrome (806-900 MHz)
RRA4983A	3dB, Roof Top, Low Loss, Stainless Steel (806-900 MHz)
RRA4986A	3dB, Roof Top, Low Loss, Black Chrome (806-900 MHz)

900 MHZ

RRA4935B	3dB, Roof Top with 14 ft. Cable (890-960 MHz)
RAF4003ARM	3dB, Roof Top with 22 ft. Cable (890-960 MHz) w/Low Loss Cable



RRA4935B



HAF4002A



HKN9557A



2880376E84

ANTENNA ADAPTERS

HKN9557A	Mini UHF to UHF Adapter Cable
2880376E84	Mini UHF Antenna Connector
HLN8027A	Mini UHF to BNC Connector

GTX & LCS 2000

Antennas



RAF4220A



3080384M48

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
RAE4171A	White 450-470 MHz
RAE4168A	Black 450-470 MHz
RAE4169A	White 470-490 MHz

800 MHz

RAF4217A	White 821-896 MHz
RAF4218A	Black 821-896 MHz
RAF4219A	Black 806-866 MHz
RAF4220A	White 806-866 MHz

ANTENNA KITS

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

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

800MHz

RAF4217ARB	White 821-896MHz
RAF4218ARB	Black 821-896MHz
RAF4219ARB	Black 806-866MHz
RAF4220ARB	White 806-866MHz

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

ORDER TODAY! 1-800-422-4210
U.S. Federal Government Customers Call 1-800-826-1913



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 be 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

Terms and Conditions

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 such Product(s) of Customer's design or formula, 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.

Terms and Conditions

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.

Terms and Conditions

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.

Terms and Conditions

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 it 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.

Warranty

(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.

Warranty

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"):

<i>CAPACITY/PRODUCT</i>	<i>WORKMANSHIP WARRANTY</i>
Motorola Manufactured NiCd impres™ Batteries	24 month capacity/ 24 month workmanship
Motorola Manufactured NiMH impres™ Batteries	18 month capacity/ 24 month workmanship
Motorola Manufactured Li-ion impres™ Batteries	18 month capacity/ 24 month workmanship
Motorola Manufactured NiCd Premium Batteries	18 month capacity/ 24 month workmanship
Motorola Manufactured NiMH and Li-ion Premium Batteries	12 month capacity/ 24 month workmanship
Motorola Manufactured NiCd, NiMH Power Batteries	12 month capacity/ 12 month workmanship
MAGONE Competitive Batteries (all manufacturers)	12 month capacity/ 12 month workmanship

Warranty

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.

NiCd impres™ Batteries when used with an impres™ charger qualify for a 24/24 month replacement warranty.

impres™ NiMH/Li-ion used with a non-impres™ 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.

Warranty

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

* Date of manufacture is determined by the date code shown on the Product

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.

Warranty

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.

Warranty

- 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.

Warranty

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.

Warranty

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.

EXCEPT AS SPECIFICALLY SET FORTH HEREIN, ALL WARRANTIES EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY, ARE EXCLUDED

Radio Products and Services Division
1313 E. Algonquin Rd.
Schaumburg, IL 60196
Phone: 1-800-422-4210
TTY: 1-800-522-5210
Fax: 1-800-622-6210
U.S. Federal Government customers:
Phone: 1-800-826-1913
Motorola On-line Users: www.motorola.com/businessonline



Motorola and the Stylized M logo are registered in the U.S. Patent and Trademark Office.
All other product or service names are the property of their respective owners.
© Motorola, Inc. 2003