# Motorola Two-Way Portable and Mobile Radio Accessory and Battery Catalog





#### **PORTABLE**

ASTRO® Digital Saber

#### **MOBILES**

ASTRO® Digital SPECTRA™

ASTRO® Digital SPECTRA Plus™

SPECTRA

XTL™ 5000 (ASTRO® Control Heads)

# Motorola Quality...

# Motorola Original® Accessories let you make the most of your Motorola radio's capabilities.

You likely chose your Motorola portable or mobile radio for its ease of use and exceptional reliability — certainly a sound business decision. Choosing Motorola Original® accessories for your radio is also the right call to make.

For starters, every Motorola Original® accessory is performance-matched for Motorola radios — designed, built and rigorously tested to the same quality standards. So you can be sure that every product in this catalog will perfectly complement your radio's performance.

What's more, insisting on Motorola Original® accessories can help increase your productivity. That's because you can count on every accessory to do its job time after time. If you take a chance on a mismatched battery, a flimsy headset or an ill-fitting carry case, your radio may not perform at the moment you have to use it.

We're pleased to bring you this collection of proven Motorola Original® accessories for your important business communication needs. You'll find remote speaker microphones for more convenient control. Carry cases for ease when on the move. Earpieces to ensure privacy. Headsets for hands-free operation. High-capacity batteries to extend work time, and more. They're all ready to help you work smarter, harder, with greater confidence.



# table of contents...



The Ear Microphone System
may be worn with protective
masks without reduction in
sound clarity. It's ideal for
high-noise environments.

Available in PTT, like the
one shown here, or with
Voice-Activated Module.

#### How the Book is Organized

	Motorola Quality	
	Table of Contents	1
Po	ortable Radio	
	ASTRO® Digital SABER	. 2-17
M	obile Radios	
	ASTRO® Digital SPECTRA™	18-23
	ASTRO® Digital SPECTRA Plus™	18-23
	SPECTRA	18-23
	XTL™ 5000 (ASTRO® Control Heads)	24-29

# ASTRO® Digital SABER portable

#### **Police**

Whether in hot pursuit or investigating a cold case, communication can be made much easier with an Ear Microphone

System with PTT and VOX Interface Module.

#### Fire

It takes two hands for climbing ladders and controlling hoses, and solutions like our Chest Pack provide both welcome freedom and valued protection in the heat of the action.

#### **Emergency Response**

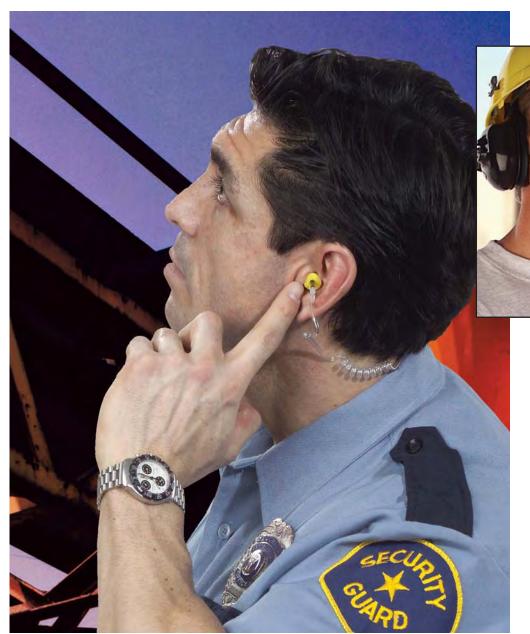
First responders deserve first-class tools for communicating their position and conditions, and our Lightweight Headsets help everyone quickly and clearly get the message.

#### **Security**

From crowd control to answering an alarm signaling illegal entry, a Remote Speaker Microphone lets professionals respond instantly without the need to reach for radio controls.







"Yes sir...

I just hoisted the

welding machine

up in the air, that

should keep it

safe tonight."

# consistent audio quality while you work in digital and analog...

ASTRO® Digital SABER radios work in both digital and analog environments for communication flexibility. All models are compatible with trunked systems including SECURENET®, SMARTNET Type II, Stat-Alert™ and SmartZone. Plus, they accept FLASHport™ software upgrades so you can add features as communication needs evolve.

# microphones and accessories

In the case.

Out of the case.

In. Out.

It's more efficient

to leave a radio

in place and

wear a microphone

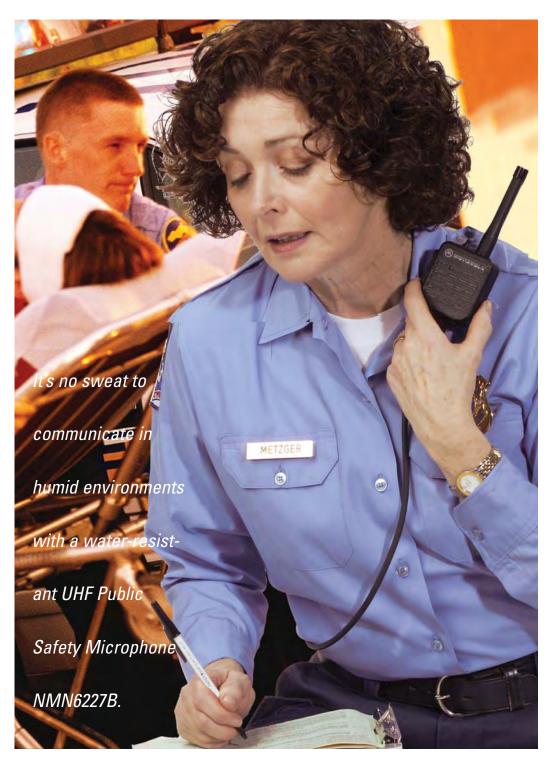
on a uniform jacket or

shirt collar — and

Motorola Original®

audio accessories

make it possible.





# narrow band operation...

#### Remote Speaker Microphone (RSM)

This Remote Speaker Microphone is water-resistant and allows talking and listening without removing the radio from the belt or case. It has a coiled cord and Push-to-Talk switch. Clothing clip on the microphone back clips securely onto shirt or collar. Ideal for high-noise environments.

NMN6217B\* Remote Speaker Microphone with 6-Foot Coil Cord

#### UHF Public Safety Microphones (PSM)

These water-resistant microphones have a high/low audio switch and straight cord. The external antenna provides additional antenna height for better radiation pattern.

UHF Public Safety Microphone with 30 Inch Straight Cord NMN6234B UHF Public Safety Microphone with 24 Inch Straight Cord NMN6236B UHF Public Safety Microphone with 18 Inch Straight Cord

Note: Not compatible with SABER or Systems SABER radios and not recommended for use with VHF. Utilizes the same antenna as the ASTRO SABER, sold separately.

#### Microphone Antennas for PSM

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

#### Velcro Patch

NI N8410A Velcro Patch Pin Attachment. For speaker/microphone assemblies.

#### Epaulet Straps

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

**RLN4294A** Epaulet Strap, Velcro RLN4295A Epaulet Strap, with Clip

#### Accessory Connector Cover

NTN7061A Universal Connector Cover







RLN4295A





5 \*Intrinsically Safe

# audio

#### Surveillance Kits

Surveillance accessories allow the radio user to privately receive messages with the earpiece. They are ideal when environments require discreet communication.

1-WIRE SURVEILLANCE KIT

NSN6050A\* Receive-Only Earpiece with Standard Earphone (1-Wire). Beige.

2-WIRE SURVEILLANCE KITS

ZMN6032A\* Earpiece with Microphone and Push-to-Talk Combined (2-Wire). Beige.

ZMN6038A\*† Extra Loud Earpiece with Microphone and Push-to-Talk Combined (2-Wire). Beige.

3-WIRE SURVEILLANCE KITS

ZMN6031A\* Earpiece with Microphone and Push-to-Talk Combined (3-Wire). Beige.

ZMN6039A\*\* Extra Loud Earpiece with Microphone and Push-to-Talk Combined (3-Wire). Beige.



Surveillance accessories allow the user to receive audio through the earpiece and are ideal when environments require discreet communication. These accessories require adapter NTN5664D (with keyload capability).

NTN5664D Adapter with Keyload Capability

#### Noise Kits

Extreme Noise Kits provide extra comfort and/or noise protection for users wearing surveillance accessories. Lightweight, translucent tube attaches to Motorola surveillance accessories to provide flexibility and comfort. Clothing clip prevents accessory from being pulled from the ear due to body movement or head rotation. For optimal performance, Extra Loud Earphones are recommended for Noise Kits.

NTN8370A Extreme Noise Kit. Includes 2 foam earplugs.

For high-noise environments. Can be used with Clear

Comfortable Earpieces. Noise reduction = 24dB.

NTN8371A Low Noise Kit - Clear Acoustic Tube Assembly

Includes 1 rubber eartip. For low noise environments,

does not provide hearing protection.

5080369E39 $^{\dagger}$  Extra Loud Earphone. Beige.

5080370E91<sup>†</sup> Extra Loud Earphone. Black.

SURVEILLANCE REPLACEMENT ACCESSORIES

5080384F72 Replacement Foam Plugs. Pack of 50.

For use with NTN8370A. Noise reduction = 24dB.

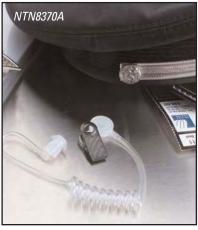
5080370E97 Standard Rubber Eartips, Clear. Pack of 25.

#### Clear Comfortable Earpieces

The Clear Comfortable Earpiece forms to the inside of the ear and is perfect for low noise environments. It's made of easy-to-clean, chemically-inert, hypoallergenic material. Compatible with NTN8371A and all Surveillance Kits.

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









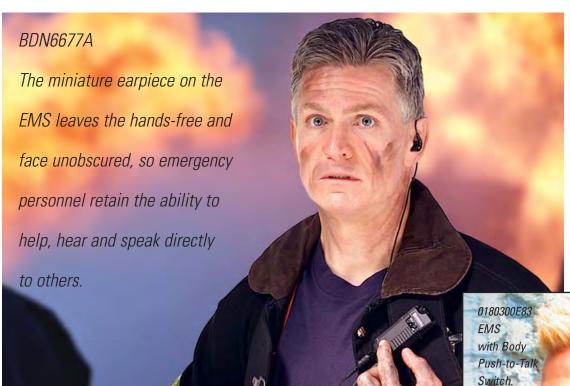
ZMN6032A



<sup>\*</sup>Intrinsically Safe



# mission critical essentials...



#### Ear Microphone Systems (EMS)

This compact, lightweight unit picks up sound through bone vibrations in the ear. The miniature earpiece leaves the hands-free and face unobscured, good for rescue and emergency personnel that must retain the ability to help, hear and speak directly to others...those not on the communication system. EMS may be worn with protective masks without reduction in sound clarity. It's ideal for high-noise environments. Available in PTT or Voice-Activated (VOX). Interface Module required, sold separately.

BDN6677A\* EMS with PTT Interface. Black. For standard noise levels (up to 95dB). BDN6678A\* EMS with PTT Interface. Beige. For standard noise levels (up to 95dB). BDN6641A\* EMS with PTT Interface. Grey. For high-noise levels (up to 105dB).

BDN6642B\* Push-to-Talk Only Interface Module

BDN6643B\* Push-to-Talk and Voice-Activated Interface Module

#### OPTIONAL ACCESSORIES FOR THE EMS

0180300E25 Earguard with Adjustable Loop
0180358B38\* Remote Push-to-Talk Ring Switch
0180300E83\* Remote Push-to-Talk Body Switch

0180358B32Earholder. Black, size small. Secures Ear Microphone in ear.0180358B33Earholder. Black, size medium. Secures Ear Microphone in ear.0180358B34Earholder. Black, size large. Secures Ear Microphone in ear.0180358B35Earholder. Clear, size small. Secures Ear Microphone in ear.0180358B36Earholder. Clear, size medium. Secures Ear Microphone in ear.0180358B37Earholder. Clear, size large. Secures Ear Microphone in ear.

0180358B37Earholder. Clear, size large. Secures Ear4280369E44Replacement Belt Clip with Screws5080358B28Eartips. Black, size medium. Pack of 10.5080358B29Eartips. Black, size large. Pack of 10.5080358B30Eartips. Beige, size medium. Pack of 10.5080358B31Eartips. Beige, size large. Pack of 10.



0180300E25

\*Intrinsically Safe 7

# audio

When seconds count,

Motorola Original®

Audio Accessories

can help assure critical

information gets

communicated right

the first time —

quickly, clearly,

and accurately.



#### Flexible Ear Receiver

This receive-only earpiece contains a flexible earloop and speaker which rests external to the ear. It plugs directly into adapter NTN5664D or the earjack on speaker microphones.

BDN6717B Flexible Ear Receiver with 2.5mm Plug

Adapter NTN5664D required

when used without speaker microphones.

NTN5664D Adapter with Keyload Capability

7580372E11 Replacement Foam Ear Cushion for BDN6717B.

### ASTRO® Digital SABER

# ORIGINAL

# essential for secure environments...

#### Lightweight Headsets

Lightweight headsets provide high-clarity, hands-free, discreet two-way communication, while maintaining the comfort necessary for extended-wear in moderate noise environments. Can be worn with a helmet or safety glasses as shown right, sold separately.

NMN6050B\* Lightweight Headset with Boom Microphone. Can be worn with

a helmet or safety glasses. Requires adapter cable NTN5913A.

NTN5913A\* Headset Adapter Cable with Bayonet Jack.

#### Heavy-Duty Headsets

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. On voice-activated models, the VOX module is contained within the headset. Heavy-duty headsets require radio adapter cable BDN6640A, sold separately. Hardhat not included.

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



BDN6645A



# carrying accessories

#### Leather Carrying Cases

You'd be surprised

A variety of carrying accessories are available for comfort and convenience. The carrying cases are available in sizes designed to fit radios with a battery and permit audio to be heard clearly. Motorola carry cases were developed to meet the demands of public safety and other users who operate in the most rigorous of environments.

how much time

can be saved in

Leather cases are constructed of top grain, 8 ounce leather and all stainless steel hardware. High-activity cases have a swivel D-ring button and belt loop. To remove case from belt loop, rotate case 180 degrees and slide case upward, out of the holder. Case stays on belt more securely in high-activity applications while allowing the radio to swing freely with body movements.

emergencies when

FOR MEDIUM CAPACITY NICO BATTERIES

Leather Standard Snap Case with Belt Loop and D-rings

T-strap sold separately.

NTN5644A each user's radio is

Leather Swivel Snap Case with D-rings

T-strap and swivel belt loop sold separately. High-Activity Leather Swivel Snap Case with D-rings NTN8124A

T-strap and swivel belt loop sold separately.

always in the

same place —

FOR ULTRA-HIGH CAPACITY NICO BATTERIES

Leather Standard Snap Case with Belt Loop and D-rings

NTN7572A NTN7573A

NTN7847A

NTN5578A

T-strap sold separately. Leather Swivel Snap Case with D-rings

made easy by this NTN8125A T-strap and swivel belt loop sold separately.

High-Activity Leather Swivel Snap Case with D-rings

T-strap and swivel belt loop sold separately.

versatile case selection

Nylon Swivel Snap Case

For use with 2.5 inch swivel belt loop and T-strap.

For use with ruggedized radios.

of Motorola Original®

NTN7529B Nylon Standard Snap Case with Belt Loop

Includes T-strap.

carry accessories.

#### Carrying Accessories

T-STRAPS

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

BELT LOOPS

4282421J06 2.5 Inch Leather Swivel Belt Loop 4205857B01 3 Inch 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 Nylon Carrying Strap

Attaches to D-ring on cases.







4205857B01



NTN5644A





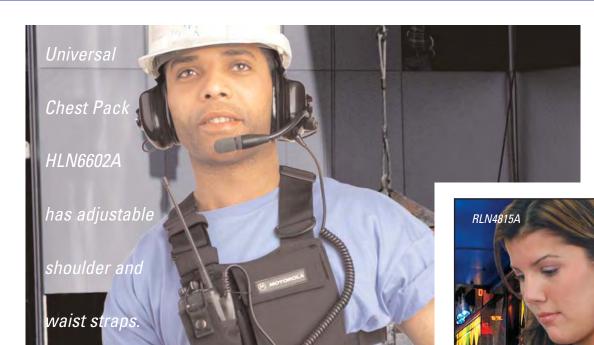


PHN6141A

4282421J06

#### ASTRO® Digital SABER





#### Chest Pack

1505596Z02

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

HLN6602A Universal Chest Pack with Radio Holder,

Pen Holder and Velcro Secured Pouch
Replacement Strap for HLN6602A/RLN4570A

#### Break-A-Way Chest Pack

All the features of the original Universal Chest Pack (HLN6602A) plus break-a-way tabs that allow the entire pack to be pulled off with approximately 10 lbs. of pressure.

RLN4570A Break-a-Way Chest Pack with Radio Holder,

Pen Holder and Velcro Secured Pouch

1505596Z02 Replacement Strap for HLN6602A/RLN4570A

#### Universal RadioPAk™

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

RLN4815A RadioPAk Radio/Utility Case 4280384F89 RadioPAk Extension Belt

For waists larger than 40 inches.

#### Waterproof Bag

HLN9985B Waterproof Bag with Large Strap

#### Portable Radio Hangers

Portable Radio Hangers slide over and hang from the vehicle door panel allowing convenient, easy mounting. Radio belt clip required.

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



TDN9327A, TDN9373A

Unlike rigid holders, the universal-fit

RadioPAk is lightweight and comfortable. An ideal companion for two-way

radios, as well as iDEN® portables and

cellular phones.

# batteries and chargers

#### **Battery Characteristics**

NiCd batteries provide the

maximum number of

charge/discharge cycles

and are best suited for

temperature extremes.

NiMH batteries

provide more

talk-time per shift

and are less prone

**Batteries** 

NTN4593DR

to memory effect.

NTN4595DR NTN4657AR

NTN4538DR NTN4596DR

NTN4992CR

Li-ion batteries offer

the best power-to-weight

ratio of all chemistries,

with no memory effect.

PREMIUM NICKEL CADMIUM - NiCd

NiCd, 1100 mAh 7.5 Volt NiCd, 1800 mAh 7.5 Volt NiCd, 1100 mAh 7.5 Volt. CSA.

NiCd, 1100 mAh 7.5 Volt. Intrinsically Safe, Submersible. NiCd, 1800 mAh 7.5 Volt. Intrinsically Safe, Submersible.

Class I, II, III; Div I; Group D, F, G.

NiCd, 1800 mAh 7.5 Volt. Intrinsically Safe, Submersible.

Class I, II, III; Div I; Group C, D, E, F, G.

NiCd, 1800 mAh 7.5 Volt. Intrinsically Safe, Submersible. NTN7058AR

PREMIUM NICKEL METAL HYDRIDE - NIMH

NTN7014BR NiMH, 1350 mAh 7.5 Volt NTN8251AR NiMH, 1650 mAh 7.5 Volt

PREMIUM LITHIUM ION - Li-ion

NTN8818A Li-ion, 1700 mAh 7.5 Volt

#### IMPRES™ NiCd Batteries

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

HNN9033B NiCd, 2000 mAh 7.5 Volt

HNN9034B NiCd, 2000 mAh 7.5 Volt. Intrinsically Safe.



NTN4596DR







# essential power...

#### Single-Unit, Rapid-Rate, Universal Chargers

These tri-chemistry 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 full-capacity.

NTN1667A Universal Charger, 110 Volt, US Plug NTN1668B Universal Charger, 220 Volt, Euro Plug

RPX4749B Universal Charger Base with Transformer, 230 Volt, UK Plug



NTN1667A

WPPN4065BR

#### Motorola Conditioning Chargers (MCC)

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

WPPN4002BR Base Charge Unit, 110 Volt AC. Adapter plates sold separately. WPPN4006AR Base Charge Unit, 220 Volt AC. Adapter plates sold separately.

WPPN4001BR Adapter Plate Only, 7 Volt

WPLN4096BR Charger Kit 110 Volt AC, includes Single-Unit base and 7 Volt adapter plate. WPLN4097BR Charger Kit, 220 Volt AC, includes Single-Unit base and 7 Volt adapter plate.

WPPN4065BR Multi-Unit Conditioning Charger, 4-Station Base, 110 Volt.

Adapter plates sold separately.



RLN4814A Vehicular Mounting Bracket and Hard Wire Cable For Single-Unit Motorola Conditioning Chargers

Includes DC Hard Wire Cable 3080384M21.

3080384M21 DC Hard Wire Cable with 3 AH In-line fuse.



#### WPPN4002BR

Single-Unit Base Charger and power supply shown with optional Vehicular Power Adapter 3080384G15.

#### Vehicular Power Adapter

3080384G15 Vehicular Power Adapter

#### Vehicular Adapter Charging Console

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

NTN7227E AVA/SVA Charging Console.

Includes illuminated front control panel, radio charger, latching mechanism with

lock and power cables.

NSN6054A 12-Watt External Speaker

Ideal for high-noise environments, it allows

speaker audio to be adjusted from console control panel.

HMN1056D Microphone, Compact Palm
HMN1035C Microphone, Heavy-duty Palm
NMN6150A Microphone with Full-featured Display

For use with all SABER Models except StartSite SABER SST/ATS.



# chargers



WPLN4111AR

# Display Readout



#### IMPRES™ Smart Energy Systems

Through the use of its advanced charging algorithm and automatic reconditioning features. the IMPRES Smart Energy System ensures maximum talk-time and optimized battery cycle life. This smart energy system automatically reconditions IMPRES batteries based on actual usage, keeping them in peak condition. Talk-time and cycle life are optimized and the need for manual maintenance programs is eliminated. 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 decrease battery cycle life. In addition, batteries left in the charger are kept fully charged so they are always ready when needed. This rapid-rate, tri-chemistry charging system will also charge compatible non-IMPRES batteries and supports multiple radio platforms including SABER, XTS and HT 1000 Series portables.

#### IMPRES™ Single-Unit Chargers

WPLN4111AR IMPRES Single-Unit Charger, 110 Volt, US Plug WPLN4112AR IMPRES Single-Unit Charger, 220 Volt, Euro Plug WPLN4113AR IMPRES Single-Unit Charger, 240 Volt, UK Plug 5889254E01 Battery Adapter. Required for NTN4538DR, NTN4593DR, NTN7014BR and NTN8818A batteries.

#### IMPRES™ Multi-Unit Chargers

IMPRES Multi-Unit Charger, 110 Volt, US Plug WPLN4108BR IMPRES Multi-Unit Charger, 220 Volt, Euro Plug WPLN4109BR IMPRES Multi-Unit Charger, 240 Volt, UK Plug WPLN4110BR

4385922B01 Battery Adapter. Required for NTN4538DR, NTN4593DR,

NTN7014BR and NTN8818A batteries.

NLN7967A Wall Mount for Multi-Unit Chargers

#### IMPRES™ Multi-Unit Chargers with Display Modules

Charger Display Modules provide powerful, "real time" analyzing information for IMPRES batteries, including current charge status, battery mAh, percent rated capacity and battery voltage. Readout displays battery kit number, serial number and chemistry and the time remaining to complete the charge for NiCd and NiMH batteries. It also forecasts the number of cycles to next reconditioning and more.

WPLN4130A IMPRES Multi-Unit Charger with Display Modules, 110 Volt, US Plug WPLN4131A IMPRES Multi-Unit Charger with Display Modules, 220 Volt, Euro Plug WPLN4132A IMPRES Multi-Unit Charger with Display Modules, 240 Volt, UK Plug 4385922B01 Battery Adapter. Required for NTN4538DR, NTN4593DR,

NTN7014BR and NTN8818A batteries. NLN7967A Wall Mount for Multi-Unit Charger

#### IMPRES™ Individual Charger Display Module

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

Charger Display Module for IMPRES Multi-Unit Charger RLN5382A

Version 1.3 or Later.

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

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

#### IMPRES™ CD

This CD provides an interactive guide to the IMPRES Charging System. It outlines the benefits and gives examples of application usage.

0180305J70 **IMPRES CD** 

#### Digital SA



#### Battery Maintenance System<sup>PLUS</sup> (BMS<sup>PLUS</sup>)

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

6-Station BMSPLUS, 110 Volt AC, 50/60 Hz, US Plug WPLN4079BR 6-Station BMS<sup>PLUS</sup>, 230 Volt AC, 50/60 Hz, Euro Plug WPLN4080BR 6-Station BMSPLUS, 230 Volt AC, 50/60 Hz, UK Plug WPLN4081BR

WPPN4085AR BMSPLUS Li-ion Field Upgrade Kit

Upgrades WPLN4079AR, WPLN4080AR, WPLN4081AR.

Allows units to support Li-ion batteries. 3-Station BMS, 110 Volt AC, 50/60 Hz

Does not support Li-ion or 3-cell batteries. NDN4006B

3-Station BMS, 230 Volt AC, 50/60 Hz Does not support Li-ion or 3-cell batteries.

\*Compatible with the STAR Micronics SP200 series printers and other printers with STAR printer emulation. STAR Micronics printers are available through STAR Micronics distributors.

#### Battery Maintenance System<sup>PLUS</sup> (BMS<sup>PLUS</sup>) Adapters

NiCd Adapter, 7.5 Volt TDN9450A

NDN4005B

TDN9434A NiCd Adapter, 7.5 Volt. For use with NTN7058AR (SABER R).

WPPN4087AR NiCd and NiMH Adapter, 7.5 Volt

WPPN4091AR Li-ion Adapter. Compatible with Li-ion batteries only.

#### Battery Optimizing System II (BOS II)

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

WPLN4124AR BOS II, 4-Station, 90-264 Volt AC, US Plug

Adapter Plates Required.

WPLN4125AR BOS II, 4-Station, 90-264 Volt AC, Euro/UK Plug

Adapter Plates Required.

RL71203 **BOS II Ruggedized Battery Adapter** RL72703 **BOS II Standard Battery Adapter** 

For use with NTN7058AR (SABER-R).

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







# antennas

#### **Antenna Characteristics**

Heliflex antennas are

engineered for maximum

output and coverage.

Stubby antennas are

non-obtrusive, ideal for

wearing the radio

on a belt.

Whip antennas are

one-piece with

#### Heliflex Antennas

a steel core for

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

#### Motorola Heliflex antennas

optimal radiation. 85

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

#### UHF BAND ANTENNAS

 8505644V04
 Helical Antenna, 403-433 MHz

 8505644V05
 Helical Antenna, 435-470 MHz

 8505644V06
 Helical Antenna, 470-520 MHz

 8505241U05
 Flexible Whip Antenna, 403-520 MHz

#### 8 0 0 MHz BAND ANTENNAS 8505241U03 Flexible Whip Antenna, 806-870 MHz

NAF4000B Dipole Antenna, 806-870 MHz 8505241U06 Stubby Quarterwave Antenna, 806-870 MHz

8505644V03 8505644V01 8505644V04 8505241U06



MOTOROLA A S T R O ® D i g i t a l S A B E R 17

# SPECTRA mobiles

#### **Public Safety**

Keeping people away from potential dangers is a task made easier with Siren and Public Address capabilities on board each vehicle.

#### **Customer Service**

One day you're in the field.

The next day has you behind a desk. Control

Station Accessories make it easy to convert your radio for inside use.

#### **Private Transportation**

Maximizing passenger safety
is a number one priority,
and an Emergency Switch is
a ready solution when an
alarm or help message
needs to be sent.

#### **Delivery Fleets**

Hear one number wrong,
and an important package
won't get where it's
needed on time. An
External Speaker
can help make
everything clear under
noisy conditions.







# convenient operation in both digital and analog environments...

ASTRO® Digital SPECTRA™, ASTRO® Digital SPECTRA Plus™ and SPECTRA mobile radios offer multiple modes of operation in a compact, space-saving footprint. All models support

Remote Control operation and accept FLASHport™ software upgrades so you can add features as your communication needs evolve.

## audio and control station

#### Microphones and Accessories

HMN1080A Standard Palm Microphone

HMN1053B DTMF Microphone

5084898K10 Noise-Cancelling Microphone

HMN1081A Palm Microphone

For use with Astro Digital Spectra

W9 radio.

HLN1220B Handset with Hang Up Box HMN1079A Water-Resistant Palm Microphone

#### Siren and Public Address Kit

H1336B Siren/Public Address Kit

Provides controlled tones for hi/low,

yelp and airhorn through supplemental housing.

#### Siren and Public Address Speakers

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







#### External Speaker

Provides audio for high ambient noise environments.

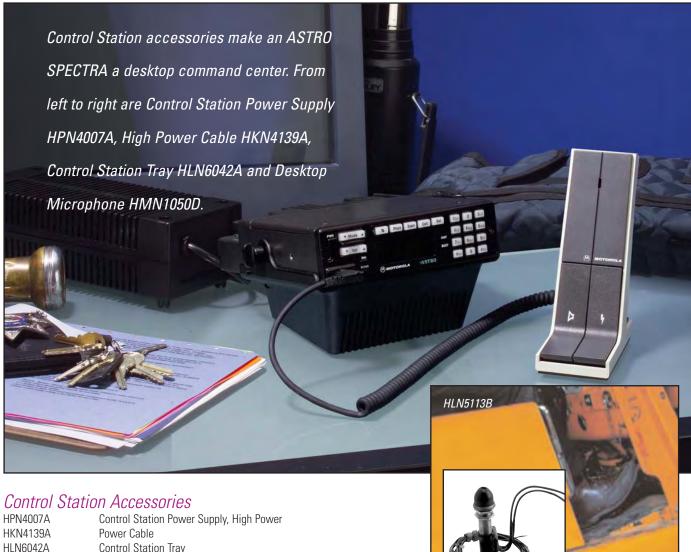
HSN4018B External Speaker



HSN4018B

#### ASTRO® Digital SPECTRA/SPECTRA Plus/SPECTRA





Control Station Tray HMN1050D Desktop Microphone

#### Emergency Foot Switch

Enables user to send an emergency message to a desktop console, where the signalling unit ID number is displayed and an alarm is sounded.

HLN5113B **Emergency Foot Switch** 

#### Quick Release Side Mount and Accessories

RLN4074A Quick Release Side Mount Kit

Includes radio and vehicle mount, mounting hardware.

RLN4075A Radio Mount with Hardware RLN4076A Vehicle Mount with Hardware

RLN4077A Angle Bracket. Features 20 Degrees Fixed and 50

Degrees Swivel Angle.

Flat Bracket with 50 Degrees Swivel Angle. RLN4078A

#### Miscellaneous Hardware

HLN6025A Key Lock Mount

HLN6008A Remote Mount Kit with 17-Foot Cable

The Emergency Foot Switch HLN5113B enables the user to send an emergency message to a desktop console.



# antennas

A communication

system is only

as good as

the mobile antennas

used to transmit

and receive -

so whenever

lives are on the line

Motorola Original®

accessories  $\Lambda r$ 

#### Antennas

should be the

HAF4002A RRA4983A

RRA4935A

RAF4003ARM

806-900 MHz, 1/4 Wave Roof Mount Antenna 806-900 MHz, 3dB, Roof Mount Antenna

go-to choice.

#### 900 MHz

800 MHz

890-960 MHz, 3dB Roof Mount Antenna with 14 ft. Cable 890-960 MHz, 3dB Roof Mount Antenna with 22 ft.

Low Loss Cable

#### V H F

HAD4006A HAD4007A HAD4008A HAD4009A RAD4010ARB 136-144 MHz, 1/4 Wave, Roof Mount Antenna 144-152 MHz, 1/4 Wave, Roof Mount Antenna 150.8-162 MHz, 1/4 Wave, Roof Mount Antenna 162-174 MHz, 1/4 Wave, Roof Mount Antenna 136-174 MHz, 3dB, Roof Mount Antenna

#### UHF

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





RRA4935A

HAE4003A

HAE4013A

22

#### ASTRO® Digital SPECTRA/SPECTRA Plus/SPECTRA



# RRA4935A RAD4010ARB

#### Low Profile Antennas

	UIII
RAE4162A	White 410-430 MHz, 3dB Gain Antenna
RAE4163A	Black 410-430 MHz, 3dB Gain Antenna
RAE4164A	Black 430-450 MHz, 3dB Gain Antenna
RAE4165A	White 430-450 MHz, 3dB Gain Antenna
RAE4166A	Black 470-490 MHz, 3dB Gain Antenna
RAE4167A	White 450-470 MHz, 3dB Gain Antenna
RAE4168A	Black 450-470 MHz, 3dB Gain Antenna
RAE4169A	White 470-490 MHz, 3dB Gain Antenna

#### VHF

RAD4207A	White 150-168 MHz, Unity Gain Antenna
RAD4208A	Black 150-168 MHz, Unity Gain Antenna
RAD4209A	Black 142-160 MHz, Unity Gain Antenna
RAD4210A	White 142-160 MHz Unity Gain Antenna

#### 800 MHz

RAF4217A	White 821-896 MHz, 3dB Gain Antenna
RAF4218A	Black 821-896 MHz, 3dB Gain Antenna
RAF4219A	Black 806-866 MHz, 3dB Gain Antenna
RAF4220A	White 806-866 MHz, 3dB Gain Antenna



RAF4220A

#### Low Profile Antennas Kits

Includes 3/4 Brass Mount and 17-foot RG58U Solid Center Conductor Cable.

#### UHF

RAE4162ARB	White 410-430 MHz, 3dB Gain Roof Mount Antenna
RAE4163ARB	Black 410-430 MHz, 3dB Gain Roof Mount Antenna
RAE4164ARB	Black 430-450 MHz, 3dB Gain Roof Mount Antenna
RAE4165ARB	White 430-450 MHz, 3dB Gain Roof Mount Antenna
RAE4166ARB	Black 470-490 MHz, 3dB Gain Roof Mount Antenna
RAE4167ARB	White 450-470 MHz, 3dB Gain Roof Mount Antenna
RAE4168ARB	Black 450-470 MHz, 3dB Gain Roof Mount Antenna
RAE4169ARB	White 470-490 MHz, 3dB Gain Roof Mount Antenna

#### VHF

RAD4207ARB	White 150-168 MHz, Unity Gain Roof Mount Antenna
RAD4208ARB	Black 150-168 MHz, Unity Gain Roof Mount Antenna
RAD4209ARB	Black 142-160 MHz, Unity Gain Roof Mount Antenna

#### 800 MHz

RAF4217ARB	White 821-896 MHz, 3dB Gain Roof Mount Antenna
RAF4218ARB	Black 821-896 MHz, 3dB Gain Roof Mount Antenna
RAF4219ARB	Black 806-866 MHz, 3dB Gain Roof Mount Antenna
RAF4220ARB	White 806-866 MHz, 3dB Gain Roof Mount Antenna

#### Antenna Mounts

AIILEIIIIA IVIUU	11115
3080384M44	Black Magnetic
	With 12 ft. of RG58A/U Cable, Mini-UHF Crimp
3080384M45	Chrome Magnetic
	With 12 ft. of RG58A/U Cable, Mini-UHF Crimp
3080384M46	Chrome Trunk Mount
	With 17 ft. of RG58A/U Cable, Mini-UHF Crimp
3080384M47	Black Trunk Mount
	With 17 ft. of RG58A/U Cable, Mini-UHF Crimp
3080384M48	3/4 Roof Mount
	With 17 ft. of RG58A/U Cable, Mini-UHF Crimp



3080384M48

# XTL™ 5000 (ASTRO® Control Heads)

#### **Public Safety**

Keeping people away from potential dangers is a task made easier with Siren and Public Address capabilities on board each vehicle.

#### **Customer Service**

One day you're in the field.

The next day has you behind a desk. Control Station Accessories make it easy to convert your radio for inside use.

#### **Private Transportation**

Maximizing passenger safety
is a number one priority,
and an Emergency Switch is
a ready solution when an
alarm or help message
needs to be sent.

#### **Delivery Fleets**

Hear one number wrong,
and an important package
won't get where it's
needed on time. An
External Speaker
can help make
everything clear under
noisy conditions.







# multiple frequencies aid operation in congested urban areas...

XTL™ 5000 (ASTRO® Control Heads) mobile radios can deliver optimum 512 channel operation in VHF, UHF and 700/800 MHz bands. That's why they're so often the radio of choice under crowded conditions and wider country regions alike. All models are capable of integrated voice and data service and accept FLASHport™ software upgrades so you can add features as your communication needs evolve.

# audio and control station



#### Microphones and Accessories

HMN1081A Palm Microphone

For use with W9 Radio.

HMN1079A Water-Resistant Palm Microphone

HMN1080A Standard Palm Microphone

## Speakers for Siren and Public Address Kits

TDN6251A Siren Speaker

Round with Chrome Finish

TDN6252A Siren Speaker

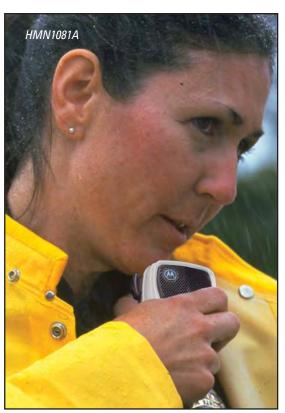
Rectangular with Chrome Finish

TDN6253A Siren Speaker

Underhood with Grey Finish

TDN6254A Siren Speaker

Round with Grey Finish









#### Sirens/ DEK

H1336B Mobile Siren/PA (Includes DEK) H1500B Siren PA (Does not include DEK)

H1338A 8 Status/Message

Message buttons included, only applicable for Systems

3.X and Earlier.

#### External Speaker

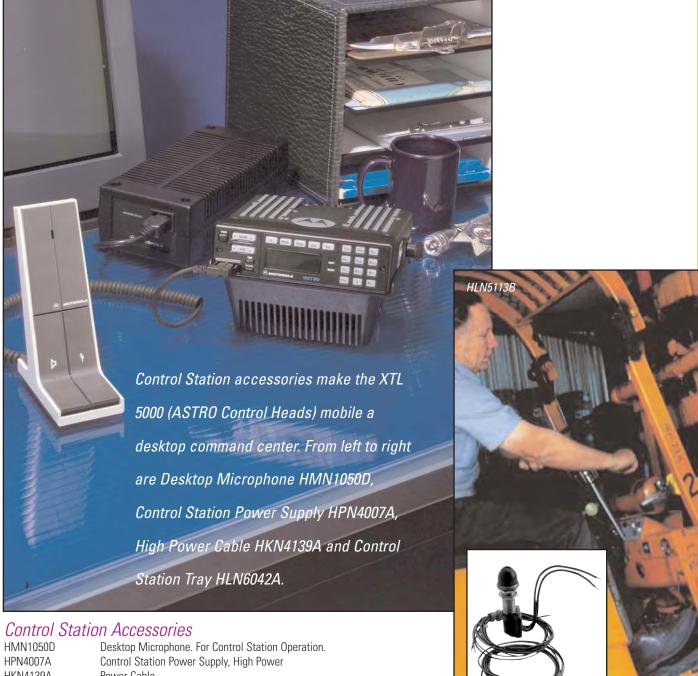
Provides audio for high ambient noise environments.

HSN4018B External Speaker



#### XTL<sup>TM</sup> 5000 (ASTRO® CONTROL HEADS)





HKN4139A Power Cable
HLN6042A Control Station Tray

#### Emergency Foot Switch

Enables the user to send an emergency message to a desktop console, where the signalling unit ID number is displayed and an alarm is sounded.

HLN5113B Emergency Foot Switch

#### Miscellaneous Hardware

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



HLN6025A

The Emergency Foot Switch HLN5113B enables the user to send an emergency message to a desktop console.

# antennas

A communication

system is only

as good as

the mobile antennas

used to transmit

and receive -

so whenever

lives are on the line

Motorola Original®

accessories

should be the

go-to choice.



#### Adapter Cables

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

HKN6158A Audio Cable Adapter HKN6159A Adapter Cable Data

#### Power Cables

HKN4191B 10-Foot Low-Mid Power Cable HKN4192B 20-Foot Low-Mid Power Cable

#### Remote Mount Cables

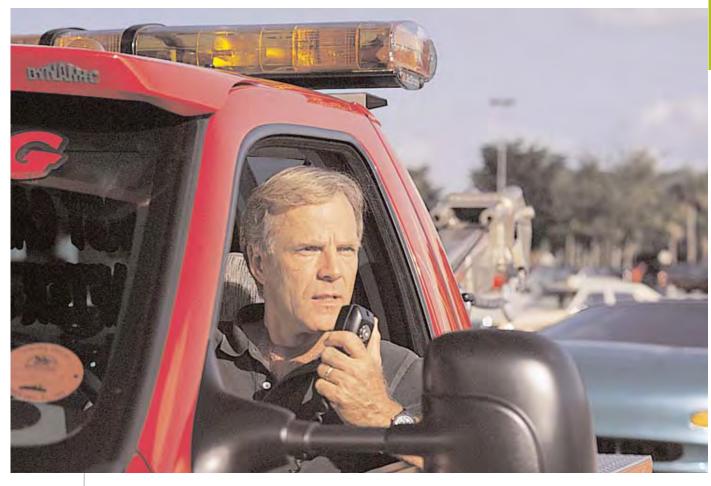
YKN4261A 10-Foot Front Control Head Cable
YKN4246A 30-Foot Front Control Head Cable
YKN4248A 50-Foot Front Control Head Cable
YKN4249A 75-Foot Front Control Head Cable
YKN4255A 115-Foot Front Control Head Cable
YKN4256A 150-Foot Front Control Head Cable

#### Remote Mount Kits

H1803A Remote to Dash Mounting Kit H1804A Dash to Remote Mounting Kit

#### XTL<sup>TM</sup> 5000 (ASTRO® CONTROL HEADS)







HAD4006A HAD5007A HAD4008A HAD4009A

HAE6012A HAE4003A HAE6010A HAE4012A HAE6011A RAE4014A HAE6013A

HAF4013A HAF4014A HAF4015A HAF4016A HAF4017A HAF4018A

#### VHF

136-144 MHz 1/4 Wave Roof Mount Antenna 144-152 MHz 1/4 Wave Roof Mount Antenna 152-162 MHz 1/4 Wave Roof Mount Antenna 162-174 MHz 1/4 Wave Roof Mount Antenna

#### UHF

380-420 MHz 1/4 Wave Roof Mount Antenna 450-470 MHz 1/4 Wave Roof Mount Antenna 380-420 MHz 3.5dB Gain Roof Mount Antenna 450-470 MHz 3.5dB Gain Roof Mount Antenna 380-420 MHz 5.0dB Gain Roof Mount Antenna 450-470 MHz 5.0dB Gain Roof Mount Antenna 380-470 MHz Wideband 700/800 MHz Antenna

#### 700/800 MHz

762-870 MHz 3dB Gain Low Profile Antenna 762-870 MHz 3dB Gain Elevated Feed Antenna 762-870 MHz 3dB Gain Motorcycle Antenna 762-870 MHz 1/4 Wave Roof Mount Antenna 762-870 MHz 3dB Gain Collinear Roof Mount Antenna 762-870 MHz Low Profile Motorcycle Antenna





PHONE: **1-800-422-4210** TTY PHONE: **1-866-522-5210** 

US FEDERAL GOVERNMENT: 1-800-826-1913

FAX: **1-800-622-6210** 

MOTOROLA ONLINE USERS: http://motorola.com/businessonline



MOTOROLA and the Stylized M Logo are registered in the US Patent & Trademark Office. All other product or service names are the property of their respective owners. © Motorola, Inc. 2006.