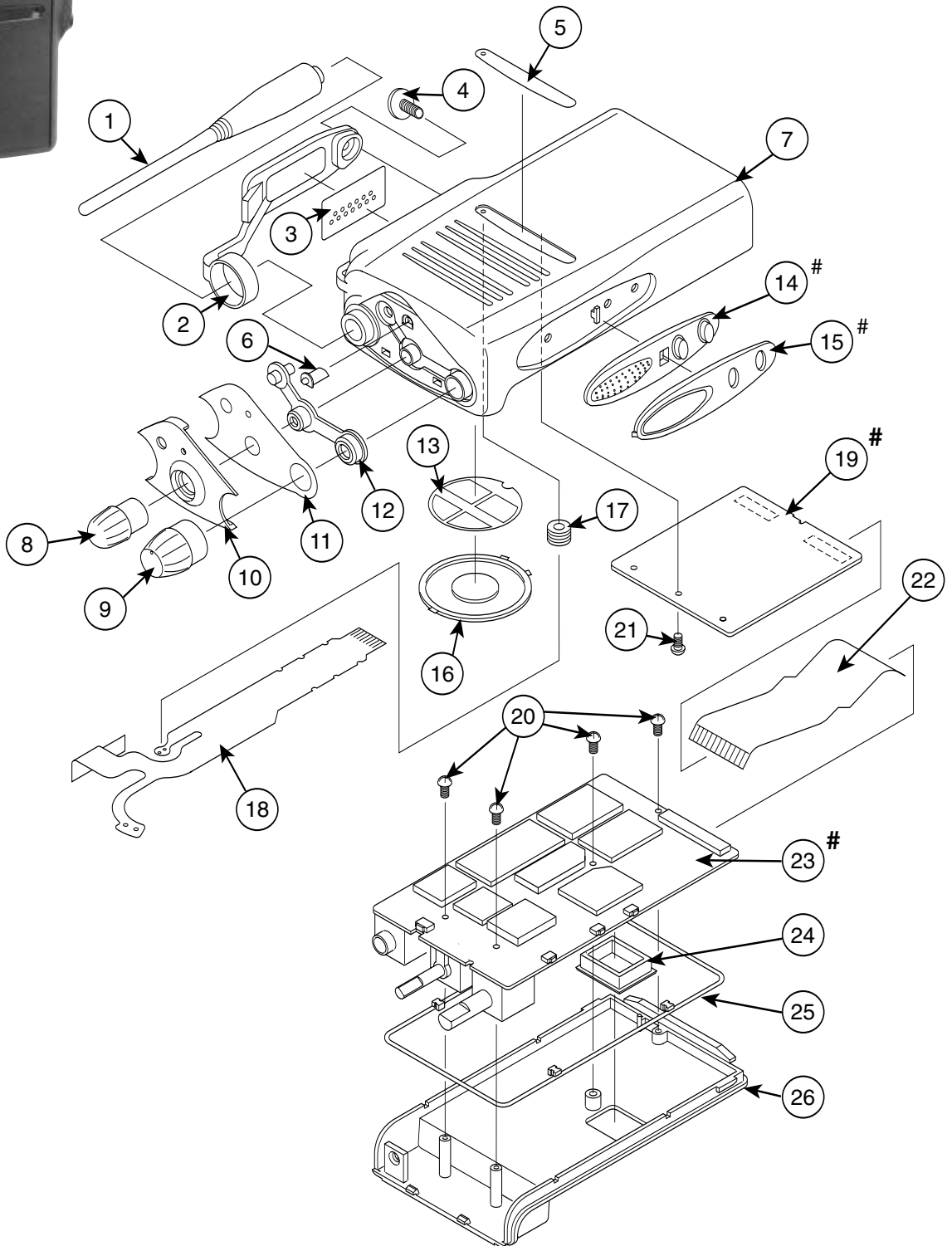


# EX500 Series



## Parts List



# EX500 Series

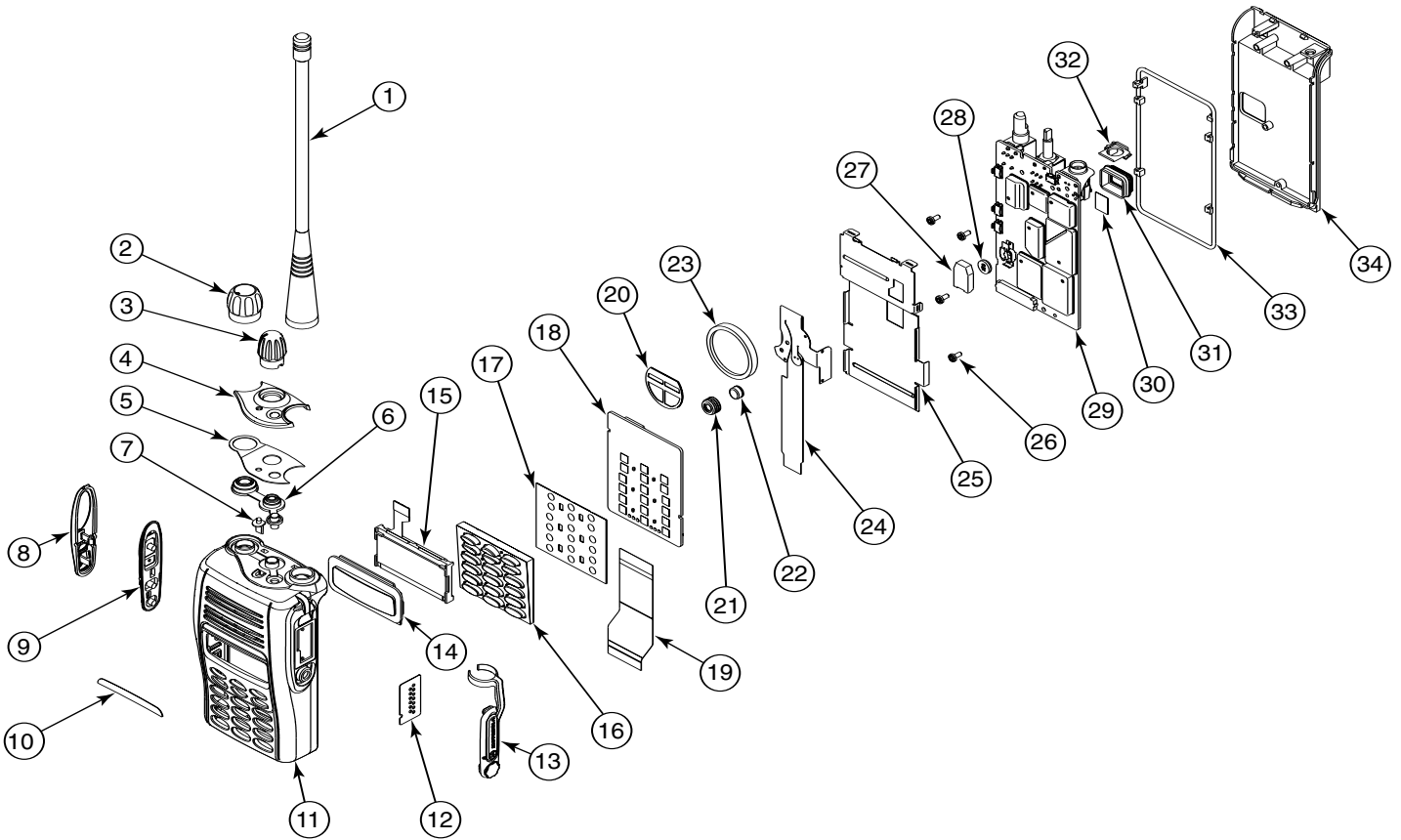
## Parts List

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
1	----	Antenna (refer to antenna section)	14	Part of item 7	PTT Rubber
2	<b>JMLN4638A</b>	Dust Cover	15	Part of item 7	PTT Plastic Cover
3	<b>1385905Z01</b>	Universal Connector Seal	16	<b>5005679X01</b>	Speaker
4	<b>0302020P03</b>	Screw for Dust Cover	17	<b>1480577C01</b>	Boot Microphone
5	<b>HKLN4054A</b>	EX500 Name Plate	18	<b>8404079G05</b>	Flex PCB Universal
6	<b>6102001P10</b>	Light Pipe	19	----	
7	<b>0104031G98</b>	EX500 Non Key Housing	20	<b>0385913Z02</b>	4 M2x4 Philips Screws
8	<b>3680530Z02</b>	Frequency Knob	21	<b>0385913Z02</b>	1 M2x1 Philips Screws
9	<b>3680529Z01</b>	Volume Knob	22	<b>8404078G03</b>	Flex PCB RF Controller
10	<b>1302012P06</b>	Top Plastic Plate	23	----	
11	<b>3385906Z01</b>	Top Sheet	24	<b>3280534Z01</b>	Seal Contact
12	<b>3202000P15</b>	Top Seal Rubber	25	<b>3285892Z01</b>	"O" ring
13	<b>3502416P03</b>	Speaker Mesh	26	<b>1502001P31</b>	Chassis

# EX600/600•XLS Series



## Parts List



# EX600/600•XLS Series

## Parts List

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
1	----	Antenna (refer to antenna section)	19	<b>8404078G03</b>	Flex RF Controller
2	<b>3680529Z01</b>	Volume Knob	20	<b>3586092Z01</b>	Speaker Felt
3	<b>3680530Z02</b>	Channel Selector Knob	21	<b>1480577C01</b>	Microphone Boot
4	<b>1386160Z01</b>	Top Plastic Plate (EX600)	22	<b>5013920A04</b>	Microphone
	<b>1386160Z02</b>	Top Plastic Plate (EX600•XLS)	23	<b>5086094Z01</b>	Speaker
5	<b>3385906Z01</b>	Top Sheet	24	<b>8486095Z01</b>	Flex, Universal Connector
6	<b>3286159Z01</b>	Control Top Seal	25	<b>4286097Z01</b>	Keypad Retainer
7	<b>6186158Z01</b>	Lightpipe	26	<b>0386104Z01</b>	Chassis Screw
8	<b>1386091Z01</b>	PTT Bezel	27	<b>1480503Z01</b>	Backup Battery Boot
9	<b>7586090Z01</b>	PTT Rubber	28	<b>6080656Z01</b>	Battery Backup
10	<b>HKLN4055A</b>	EX600 Nameplate	29	----	RF Board (must order back cover kit)
	<b>HKLN4187A</b>	EX600•XLS Nameplate	30	<b>7580556Z01</b>	Thermal Pad
11	<b>1586088Z01</b>	Front Cover Assembly	31	<b>3280534Z01</b>	Battery Module Seal
12	<b>1385905Z01</b>	Escutcheon, Universal Connector	32	<b>1485673Z01</b>	Antenna Nut Insulator
13	<b>JMLN4638A</b>	Dust Cover	33	<b>3285892Z01</b>	Main "O" Ring
14	<b>7580540Z01</b>	LCD Front Pad	34	<b>2786154Z01</b>	Chassis
15	<b>5104949J11</b>	LCD Module			
16	<b>7586096Z01</b>	Main Keypad			
17	<b>4086199Z01</b>	Keypad Polydome			
18	----	Controller Board (must order front cover kit)			

## EX500/600/600•XLS Series

## Portable Accessories

### CHARGERS

Single and multi-unit chargers can rapidly charge batteries on or off the radio in one to three hours. Multi-unit chargers can be wall or rack mounted and are ideal for multi-shift operations. All chargers are specifically designed to meet the requirements of batteries manufactured by Motorola.

**AAHTN3000D** 120V Rapid Rate Single Unit Intellicharger

**AAHTN3003D** 120V Six-Unit Rapid Rate Charger

**NLN7967A** Wall Mount Kit for Six-Unit Charger



AAHTN3003D

### Battery Optimizing System II (BOS II)



WPLN4124AR

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

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

**WPLN4124AR** BOS II, Four-Station, 100-240V AC (US line cord)

**WPLN4125AR** BOS II, Four-Station, 100-240V AC (UK/Euro line cords)

### **BOS II Adapter Plates**

**RL-77255** Adapter Plates

# EX500/600/600•XLS Series

## Portable Accessories

### Carrying Accessories

#### Carrying Cases

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

#### EX500 Carrying Cases

**PMLN4421B** Soft Leather Carry Case with Fixed Swivel Clip – The case protects the radio while allowing audio to be clearly heard

**PMLN4471A** Hard Leather Carry Case with Swivel and D-Rings

**PMLN4470A** Nylon Case with Belt Loop and D-Rings



PMLN4421B

#### EX600 Carrying Cases

**PMLN4520A** Hard Leather Carry Case with Swivel and D-Rings

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



JMZN4023A

#### Carrying Accessories

**JMZN4023A** Plastic Carry Hoster with Swivel Belt Clip – lightweight carry holster provides convenient means for carrying the radio; the swivel belt clip provides the ability to rotate the radio to a comfortable position

**JMZN4020A** Radio Handstrap – attaches to the radio allowing it to be worn around the wrist

**HLN9985B** Waterproof Bag, includes large carrying strap

#### Belt

**4200865599** 1.75" wide leather belt

#### Shoulder Carry Strap

**NTN5243A** Shoulder Carry Strap attaches to D-strap rings on carry cases to provide added comfort

### Carrying Accessories

#### Carry Packs

**HLN6602A** Universal Chest Pack with Radio Holder and Velcro Secured Pocket

**1505596Z02** Replacement Strap for HLN6602A



HLN6602A



RLN4570A

**RLN4570A** Break-A-Way Chest Pack. All 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



RLN4815A

**RLN4815A** RadioPAK™ Radio/Utility Case. It's different from all other holders or cases: more comfortable, more useful and more stylish. Worn around the waist, it holds two-way, iDEN portables or cellular phones 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

**4280384F89** Universal RadioPAK™ Belt Lengthener; Fits Waists Larger than 40"

# EX500/600/600•XLS Series

## Portable Accessories

### Audio Accessories

#### Remote Speaker Microphones (RSM)

Allows the user 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 clothing clip.

**\*JMMN4073A** Remote Speaker Microphone with 2.5mm audio jack

**PMLN4393A** Flexible Ear Receiver with 2.5mm connector for use with remote speaker microphone JMMN4073A



#### Epaulet Strap

Black leather epaulet strap secures remote speaker microphone to epaulet of shirts or jackets and attach around cord to back of microphone. Allows reliable communications in hostile environments with velcro or clip style strap.

**RLN4294A** Velcro epaulet strap

**RLN4295A** Small clip epaulet strap



### Audio Accessories

#### Completely Discreet Earpiece

Remain discretely 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 discrete 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 discrete communication.

**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



\* Intrinsicly safe

# EX500/600/600•XLS Series

## Portable Accessories

### Audio Accessories

#### Ear Microphone System (EMS)

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



JMMN4064A

**\*JMMN4064A** PTT or Voice Activated Interface Module

**\*BDN6768A** Standard Ear Microphone (for noise levels up to 95dB)–Black. Requires JMMN4064A



BDN6768A

**\*BDN6769A** Standard Ear Microphone (for noise levels up to 95dB) – Beige. Requires JMMN4064A

**\*BDN6770A** High Noise Level Ear Microphone (up to 105dB)– Gray. Requires JMMN4064A

### Audio Accessories

#### Ear Microphone Accessories



0180358B38

**\*0180358B38** Finger Push-To-Talk Switch



0180300E83

**\*0180300E83** Body Push-To-Talk Switch



0180300E25

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

**0180358B32** Earholder, black size small; secures ear mic in ear

**0180358B33** Earholder, black, size medium; secures ear mic in ear

**0180358B34** Earholder, black, size large; secures ear mic in ear

**0180358B35** Earholder, clear, size small; secures ear mic in ear

**0180358B36** Earholder, clear, size medium; secures ear mic in ear

**0180358B37** Earholder, clear, size large; secures ear mic in ear

**4280369E44** Replaceable Belt Clip with Screws

**5080358B28** Eartips, black, size medium (10 per pack)

**5080358B29** Eartips, black, size large (10 per pack)

**5080358B30** Eartips, beige, size medium (10 per pack)

**5080358B31** Eartips, beige, size large (10 per pack)

#### General Audio Accessories

**\*PMLN4519A** Earbud with Microphone and PTT combined, transmit and receive, black (2-wire); no adapter required

#### Accessory Audio Adapter

The accessory audio adapter with 3.5mm plug allows Visar audio accessories to be used with the EX500 and EX600 radios

**\*PMLN4455A** Accessory Audio Adapter with 3.5mm plug

*\* Intrinsically safe*



# EX500/600/600•XLS Series

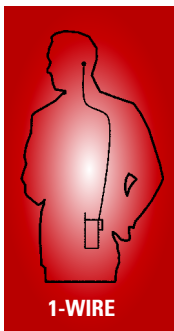
## Portable Accessories

### Audio Accessories

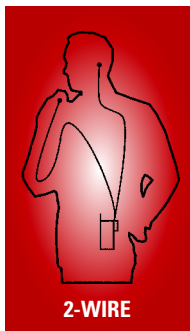
#### Surveillance Kits

Surveillance accessories allow the user to privately receive communications with the earpiece and are ideal when environments require discrete communications. Surveillance Kits require PMLN4455A Audio Adapter

- \***BDN6664A** Receive-only Earpiece (1-wire), beige
- \*†**BDN6665A** Receive-only Earpiece (1-wire), beige
- \*†**BDN6666A** Receive-only Earpiece with volume control (1-wire), beige
- \***BDN6726A** Receive-only Earpiece (1-wire), black
- \*†**BDN6727A** Receive-only Earpiece (1-wire), black
- \***BDN6728A** Receive-only Earpiece with volume control (1-wire), black
- \***BDN6667A** 2-wire Surveillance Kit with combined microphone and PTT button, beige
- \***BDN6729A** 2-wire Surveillance Kit with combined microphone and PTT button, black
- \*†**BDN6669A** Earpiece Assembly with microphone and PTT combined (2-wire), beige
- \*†**BDN6731A** Earpiece Assembly with microphone and PTT combined (2-wire), black
- \***BDN6668A** 3-wire Surveillance Kit with separate microphone and PTT button, beige
- \***BDN6730A** 3-wire Surveillance Kit with separate microphone and PTT button, black
- \*†**BDN6670A** Earpiece Assembly with microphone and PTT separate (3-wire), beige
- \***BDN6732A** Earpiece Assembly with microphone and PTT separate (3-wire), black



1-WIRE



2-WIRE



3-WIRE

### Audio Accessories

#### Flexible Ear Receiver

\***BDN6719A** Flexible Ear Receiver, black earpiece without volume control – flexible earloop and speaker which rests external to the ear; requires PMLN4455A audio adapter

#### Pellet Style Earpieces

- \***BDN6780A** Single Earbud with combined Mic/PTT; requires PMLN4455A audio adapter
- \***BDN6781A** Single Earbud Receive-only, black; requires PMLN4455A audio adapter

#### Noise Kits

- NTN8370A** Extreme Noise Kit Acoustic Tube; requires PMLN4455A audio adapter
- NTN8371A** Low Noise Kit Acoustic Tube; requires PMLN4455A audio adapter

#### Lightweight Headsets

This headset allows for high clarity discreet two-way communications while adding the comfort necessary for extended wear in moderate noise environments

- \***JMMN4066A** Lightweight Headset with Boom Microphone and In-Line PTT (no adapter required)
- RLN5590A** Lightweight Headset with Boom Microphone (no adapter required)



JMMN4066A

- \***NMN6245A** Ultralite Headset with Boom Microphone and In-Line PTT, earbud-style receiver; requires PMLN4455 audio adapter
- \***NMN6246B** Ultralite Headset with Boom Microphone and In-Line PTT; requires PMLN4455 audio adapter



NMN6246B

† Extra Loud Earpiece (exceeds OSHA limits)  
\* Intrinsicly safe

# EX500/600/600•XLS Series

## Portable Accessories

### Audio Accessories

#### 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.



*BDN6635B*

**BDN6635B** Voice-activated headset with boom microphone; requires adapter cable RKN4093A; noise reduction rating = 24 dB



*BDN6636B*

**BDN6636B** Voice-activated headset with throat microphone; requires adapter cable RKN4093A; noise reduction rating = 24 dB



*BDN6645A*

**BDN6645B** Push-to-talk headset with boom microphone; requires adapter cable RKN4093A; noise reduction rating = 24 dB

### Audio Accessories

#### Racing Headset



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** Racing Headset; requires adapter cable RKN4093A; noise reduction rating = 24 dB

**RKN4093A** Radio Adapter Cable

#### Miscellaneous Audio Accessories

**RLN4890A** Assistive Turning Knobs. If your job requires you to wear large gloves, or if you have mobility or dexterity limitations, you will appreciate this added feature. Set of two specially designed knobs for volume control and channel changing.



*RLN4890A*

**JMLN4638A** Accessory Dust Cover – protects the audio side connector

# EX500/600/600•XLS Series

## Antennas, Batteries

### Portable Antennas

#### Heliflex Antenna

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

**NAD6502AR** VHF Heliflex Antenna, 146-174 MHz

#### Stubby Antenna

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

##### **PMAD4012A**

VHF 9cm Stubby Antenna, 136-155 MHz

##### **PMAD4025A**

VHF 9cm Stubby Antenna, 150-161 MHz

##### **PMAD4013A**

VHF 9cm Stubby Antenna, 155-174 MHz

##### **PMAE4002A**

UHF 9cm Stubby Antenna, 403-430 MHz

##### **8504762J08**

UHF 9cm Stubby Antenna, 438-470 MHz

##### **PMAE4006A**

UHF Stubby Antenna, 465-490 MHz



#### Flexible Whip Antenna

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.

##### **8504762J01**

VHF Whip Antenna 136-155 MHz

##### **PMAD4023A**

VHF Whip Antenna 150-161 MHz

##### **8504762J02**

VHF Whip Antenna 155-174 MHz

##### **NAE6483AR**

UHF Flexible Whip Antenna 403-520 MHz

##### **NAD6579A**

Whip, 148-161 MHz



### Portable Batteries

#### Lithium-ion Premium

Part Number: **JMNN4023AR**

Volts: 7.2

Avg. mAh: 1000

Height: 4"

Intrinsically Safe: No

Part Number: **JMNN4024BR**

Volts: 7.2

Avg. mAh: 1300

Height: 4"

Intrinsically Safe: No

#### Nickel Metal Hydride Premium

Part Number: **JMNN4025AR**

Volts: 7.5

Avg. mAh: 700

Height: 4"

Intrinsically Safe: Yes

# EX500/600/600•XLS Series

## Service Aids, Manuals

### Service Aids

#### Test Set

Portable test set enables connection to audio/accessory jack. Allows switching from radio testing.

**RLN4460C** Test Box for Portables and Mobiles

#### Cables

**AAJMKN4124A** Cloning Cable

**AAJMKN4123A** Programming/Test Cable, Connects Radio to RIB

#### Radio Interface Box

Radio interface box enables communication between radio and computer's serial communications adapter.

**RLN4008E** Radio Interface Box (RIB)

**3080369B72** 9 Pin Computer Interface Cable, Connects Computer's Serial Communications Adapter to RIB



RLN4008E



0180357A57

**0180357A57** Wall Mounted Power Supply, 120V AC, Used to Supply Power to RIB (RLN4008E)

#### Programming Software

Due to licensing requirements, software cannot be ordered through the Motorola web site. At this time, please contact our representative by calling 1-800-422-4210 to place your order.

**HVN9025L** For EX Series Radios; Programs Customer Features/Frequencies (CPS CD-ROM format only)

### Manuals

<b>6881094C00</b>	Basic Service Manual EX500/EX600/EX600•XLS
<b>6881093C98</b>	User Manual EX500
<b>6881094C70</b>	User Manual EX600
<b>6881094C21</b>	EX500/EX600/EX600•XLS Detailed Service Manual
<b>6881095C10</b>	EX600•XLS User guide
<b>HKLN4118A</b>	EX500 User manual
<b>HKLN4119A</b>	EX600 User manual
<b>0180305J46</b>	Ear Microphone System and Temple Transducer CD-ROM