





# Parts List

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REF.		
NO.	PART NO.	DESCRIPTION
1	3305630Z01	Label,Motorola Bottom (part of item 2)
2	1585468D07	Assembly, Model I Housing (Standard Models)
	or	(includes items 1, 3, 4, 5, 16, 17, and 65 thru 67)
	1585468D10	Assembly, Model I Housing (R Models)
	or	(includes items 1, 3, 4, 5, 16, 17, and 65 thru 67)
	1585468D13	Assembly, Model I Housing (Yellow R Model)
		(includes items 1, 3, 4, 5, 16, 17, and 65 thru 67)
3	3285757D01	Membrane, Microphone (part of item 2)
4	3385221D01	Label, Motorola Front (part of item 2)
	or	
	3385221D02	Label, Motorola Front (R Model) (part of item 2)
	or	
	3385221D03	Label, Motorola Front (Yellow R Model)
-	4505570704	(part of item 2)
5	1505579Z01	Cover, Universal Connector (part of item 2)
6	3605371Z01	Knob, Volume Insert, Volume Knob Retainer
7 8	4305372Z01 3205379W01	"O"-Ring, Volume Torque
9	6105376Z01	Lightpipe, Indicator
10	4505375Z01	Lever, Secure
11	4305373Z02	Insert, Frequency Knob Retainer
12	1305374Z03	Escutcheon, Frequency Dial
13	3605370Z01	Knob, Frequency
14	8505241U03	Antenna, 800MHz Whip (806-870MHz)
	or	, ,
	8505241U06	Antenna, 800MHz Stubby1/4 Wave (806-870MHz)
	or	
	8505241U11	Antenna, 700/800MHz Whip (764-870MHz)
16	3585340D01	Mesh, Speaker (part of item 2)
17	3305574Z01	Label, Motorola back (part of item 2)
	or	
	3305574Z02	Label, Motorola back (Yellow R Model)
	_	(part of item 2)
18	0105956T85	Assembly, Controls Universal Flex (includes items
4.0		19, 21, 22, 24 thru 28, and 30 thru 34)
19	5085272D01	Speaker (part of item 18)
21		Microphone, Electret (part of item 18)
22		(not field replaceable)
22		Capacitor, 56pF (part of item 18) (not field replaceable)
23	0300140332	Screw, Tapping - 28 x 3/16
24	0660076A93	Resistor, $68k\Omega$ (part of item 18)
25	0660076A96	Resistor, 91k $\Omega$ (part of item 18)
20		

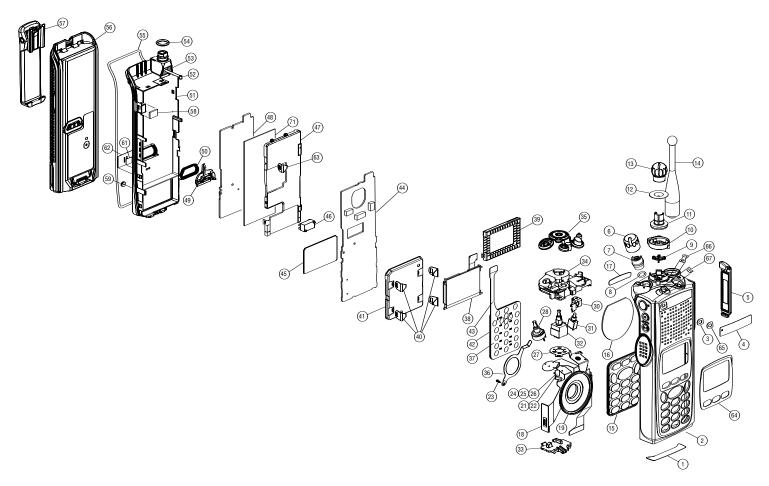
REF.		
NO.	PART NO.	DESCRIPTION
26	0660076B05	Resistor, 150k $\Omega$ (part of item 18)
27	4805729G99	LED, Green/Red (5 reg'd) (part of item 18)
28	1805629V04	Potentiometer, Volume (part of item 18)
30	1486164A02	Boot, Microphone Boot (part of item 18)
31	4005572W04	Switch, Toggle, 3 Pos. A/B/C (part of item 18)
32	4002622J04	Switch, Frequency (part of item 18)
33	0705357Z01	Bracket, Controls Bottom (part of item 18)
34	0705352Z01	Bracket, Controls (part of item 18)
35	3205354Z02	Seal, Controls
36	4285400D01	Retainer, Speaker
40	4205631Z01	Clip, Control Locking (Part of item 41) (4 req'd)
41	2685567D01	Shield, Controller Front (Includes items 40 and 42)
42	4285288D01	Retainer (Part of item 41)
44	NTN9564C	Kit, VOCON Board
45		Kit, Encryption UCM II
46	2885866A01	Connector, Compression, 26-Pin
47	2685220D06	Shield, RF with Insulator and Clip (Includes item 63)
48	NUF3577A	Kit Transceiver Board, 700/800MHz
49	0985973B01	Assembly, B+
	or	
		Assembly, B+ (R Models)
50	3205351Z01	Seal, B+
	or	
	3205351Z02	Seal, B+ (R Models)
51	2785219D01	Assembly, Casting
	or	
	2785219D04	Assembly, Casting (R Models)
52	3005664Z01	Assembly, Coaxial Cable
53	7505487Z01	Pad, Coaxial
54	3205082E96	Gasket, O-Ring Bushing
55	3205349Z03	Seal, Main
56		Battery, NiCd, Ultra-High Capacity
57	NTN8266B	Kit, Belt Clip
58	3262737D01	Pad, Thermal
59	3285688D01	Plug, Vacuum Test Port
61	3285877B02	Seal, Port
62	3385873B01	Label, Seal
63	4285704D01	Clip, RF Locking (Part of item 47)
65	3585741D01	Mesh, Microphone (part of item 2)
66	3385658D01	Escutcheon, Concentric Switch (part of item 2)
67	3385657D01	Escutcheon, Toggle (part of item 2)
71	7585936D01	Pad















# Parts List

# Model II & III

REF.			REF.		
NO.	PART NO.	DESCRIPTION	NO.	PART NO.	DESCRIPTION
1	3305630Z01	Label, Motorola Bottom (part of item 2)	25	0660076A96	Resistor, 91k $\Omega$ (part of item 18)
2	1585468D08	Assembly, Model II Housing (Standard Models)	26	0660076B05	Resistor, 150k $\Omega$ (part of item 18)
	or	(includes items 1, 3, 4, 5, 16, 17, and 64 thru 67)	27	4805729G99	LED, Green/Red (5 req'd) (part of item 18)
	1585468D11	Assembly, Model II Housing (R Models)	28	1805629V04	Potentiometer, Volume (part of item 18)
	or	(includes items 1, 3, 4, 5, 16, 17, and 64 thru 67)	30	1486164A02	Boot, Microphone Boot (part of item 18)
	1585468D14	Assembly, Model II Housing (Yellow R Model)	31	4005572W04	Switch, Toggle, 3 Pos. A/B/C (part of item 18)
		(includes items 1, 3, 4, 5, 16, 17, and 64 thru 67)	32	4002622J04	Switch, Frequency (part of item 18)
	1585468D09	Assembly, Model III Housing (Standard Models)	33	0705357Z01	Bracket, Controls Bottom (part of item 18)
	or	(includes items 1, 3, 4, 16, 17, and 64 thru 67)	34	0705352Z01	Bracket, Controls (part of item 18)
	1585468D12	Assembly, Model III Housing (R Models)	35	3205354Z02	SealL, Controls
	or	(includes items 1, 3, 4, 16, 17, and 64 thru 67)	36	4285400D01	Retainer, Speaker
	1585468D15	Assembly, Model III Housing (Yellow R Model)	37	2685567D03	Assembly, Keypad Flex, Model III
		(includes items 1, 3, 4, 5, 16, 17, and 64 thru 67)		or	(Includes items 41 and 43)
3	3285757D01	Membrane, Microphone (part of item 2)		2685567D02	Assembly, Keypad Flex, Model II
4	3385221D01	Label, Motorola Front (part of item 2)			(Includes item 41 and 43)
	or		38	7285726C01	Module, LCD
	3385221D02	Label, Motorola Front (R Models) (part of item 2)	39	7585189D01	Pad, Display Locator
	or		40	4205631Z01	Clip, Control Locking (part of item 41) (4 req'd)
	3385221D03	Label, Motorola Front (Yellow R Models)	41	2685567D01	Shield, Controller Front (Includes items 40 and 42)
		(part of item 2)	42		Retainer (Part of item 41)
5	1505579Z01	Cover, Universal Connector (part of item 2)	43	8485188D01	Flex, Keypad, Model III (part of item 37)
6	3605371Z01	Knob, Volume		or	
7	4305372Z01	Insert, Volume Knob Retainer		8485187D01	Flex, Keypad, Model III (part of item 37)
8	3205379W01	"O"-Ring, Volume Torque	44	NTN9564C	Kit, VOCON Board
9	6105376Z01	Lightpipie, Indicator	45		Kit, Encryption UCM II
10	4505375Z01	Lever, Secure	46	2885866A01	Connector, Compression, 26-Pin
11	4305373Z02	Insert, Frequency Knob Retainer	47	2685220D06	Shield, RF with Insulator and Clip (Includes item 63)
12	1305374Z03	Escutcheon, Frequency Dial	48	NUF3577A	Kit, Transceiver Board, 700/800MHz
13	3605370Z01	Knob, Frequency	49	0985973B01	Assembly, B+
14	8505241U03	Antenna, 800MHz Whip (806-870MHz)		or	
	or				Assembly, B+ (R Models)
	NAF4000B or	Antenna, 800MHz Dipole (806-870MHz)	50	<b>3205351Z01</b> or	Seal, B+
	8505241U06	Antenna, 800MHz Stubby1/4 Wave (806-870MHz)		3205351Z02	Seal, B+ (R Models)
	or		51	2785219D01	Assembly, Casting
	8505241U11	Antenna, 700/800MHz Whip (764-870MHz)		or	
15	7585104D01	Keypad, Model III		2785219D04	Assembly, Casting (R Models)
	or		52	3005664Z01	Assembly, Coaxial Cable
	7585104D02	Keypad, Model II	53	7505487Z01	Pad, Coax
16	3585340D01	Mesh, Speaker (part of item 2)	54	3205082E96	Gasket, O-Ring Bushing
17	3305574Z01	Label, Motorola Back (part of item 2)	55	3205349Z03	Seal, Main
	or		56		Battery, NiCd, Ultra-High Capacity
	3305574Z02	Label, Motorola Back (Yellow R Models)	57	NTN8266B	Kit, Belt Clip
		(part of item 2)	58	3262737D01	Pad, Thermal
18	0105956T85	Assembly, Controls Universal Flex (includes items	59	3285688D01	Plug, Vacuum Test Port
		19, 21, 22, 24 thru 28, and 30 thru 34)	61	3285877B02	Seal, Port
19	5085272D01	Speaker (part of item 18)	62	3385873B01	Label, Seal
21		Microphone, Electret (part of item 18)	63	4285704D01	Clip, RF Locking (Part of item 47)
		(not field replaceable)	64	3385419C01	Bezel, Display (part of item 2)
22		Capacitor, 56pF (part of item 18)	65	3585741D01	Mesh, Microphone (part of item 2)
		(not field replaceable)	66	3385658D01	Escutcheon, Concentric Switch (part of item 2)
23	0300140332	Screw, Tapping - 28 x 3/16	67	3385657D01	Escutcheon, Toggle (part of item 2)
24	0660076A93	Resistor, $68k\Omega$ (part of item 18)	71	7585936D01	Pad







# Portable Accessories

# Chargers

### Single Unit Universal Tri-Chemistry Chargers

Tri-Chem chargers support Nickel Cadmium, Nickel Metal Hydride and Lithium-ion batteries.

**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

## **Multi-Unit Chargers**



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

**NTN1177D** Multi-Unit, rapid rate, 110V; supports NiCd and NiMH batteries

**NTN1178D** Multi-Unit, rapid rate, 220V (not for Lithium-ion) **NTN1179D** Multi-Unit, rapid rate, 240V (not for Lithium-ion)

# Motorola Conditioning Charger

The MCC will help extend battery life and enhance battery operation. It will safely condition and charge your specified Nickel Cadmium (NiCd) and Nickel Metal Hydride (NiMH) batteries in approximately an hour.



**WPLN4086CR** MCC Kit, 110V AC; includes both base unit and 7V adapter

**WPLN4087CR** MCC Kit, 220V AC; includes both base unit and 7V adapter

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 for single unit Motorola Conditioning Charger

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

**HLN9179A** Quick-Release Attachment for Mounting Bracket RLN4814

**HLN9228A** Mounting accessories — Clam shell mounting bracket



# Portable Accessories

# Battery Maintenance System plus (BMS plus)

#### 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 and tracks battery voltage and capacity (mAh). The BMS<sup>plus</sup> offers a 3-year warranty. Its easy-to-use design supports hundred of 2-way, cellular, and camcorder batteries. Includes serial printer\* port (RS-232)



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

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

**WPPN4085AR** BMS<sup>plus</sup> field Upgrade Kit for WPLN4079AR, WPLN4080AR and WPLN4081AR; allows these units to support Li-ion battery chemistries.

**NDN4005B** Three-station 110V AC, 50/60 Hz (does not support Li-ion or 3-cell batteries)

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

# BMS<sup>plus</sup> Adapters

WPPN4019AR Adapter, NiCd only

WPPN4022AR Adapter, NiCd and NiMH

WPPN4086AR Adapter, NiCd, NiMH and Li-ion

# 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 mAH to 4 amps per station
- Interchangeable adapters accomodate 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**

**RL-75765** Adapter, XTS5000

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







# Portable Accessories

# Chargers

### impres™ Smart Energy System



WPLN4111AR

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 HT1000 series portables.

**WPLN4111AR** impres Smart Energy System Charger **WPLN4108BR** impres Smart Energy System Multi-Unit Charger

# impres™ Multi-Unit Charger with Display Modules

The impres Multi-Unit Charger with Charger Display Modules has a two-line LCD screen for each of its six charger pockets that provides users with a host of valuable battery information. When a calibrated impres battery is inserted into a pocket, it provides the current battery mAh and percent of rated capacity which allows the user to immediately know the status of the battery without having to charge and discharge the battery. Additionally, the unit displays the remaining charge time which lets the user know when the impres battery will be ready for use. Additional information displayed includes: battery serial and part number information, battery chemistry, voltage and charge status including the version of the charger and display modules.

WPLN4130AR Multi-Unit Charger with Display Modules

**RLN5382A** Charger Display Module for impres multi-unit charger version 1.3 or later

**RLN5591A** Charger Display Module for impres multi-unit charger version 1.2 or earlier (Requires unit to be sent to the Rockford Service Center — instruction sheet provided)



# Chargers

## impress™ Bundle Packs

Provide significant savings on the impess™ products by bundling a charger and batteries together as a Smart Energy System package.

RLN5263A impress Charger with two HNN9031AR batteries

**RLN5262A** impress Charger with two HNN9023AR batteries

**RLN5486A** impres Charger with two NNTN4436AR Intrinsically Safe (FM) batteries.

**RLN5487A** impres Charger with two NNTN4437AR ruggedized batteries.

**RLN5441B** impress Multi-Unit Charger with six HNN9032AR batteries

**RLN5443B** impress Multi-Unit Charger with six HNN9031AR batteries

**RLN5489B** impres Multi-unit Charger with six NNTN4436AR batteries

**RLN5490B** impres Multi-unit Charger with six NNTN4437AR batteries

# Vehicular Charger

This vehicular charger is a 12V DC that supports nickel cadmium (NiCd), nickel metal hydride (NiMH), and Lithium Ion (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

NTN9176B

in the charger and this unit is PAC RT compatible. The vehicular charger consists of a console, mounting hardware, and a supply cable.

NTN9176B Vehicular Charger



# Portable Accessories

# Chargers

### Travel Charger

This compact Travel Charger mounts inside a vehicle for convenient battery charging throughout the workday, helping to assure users that they will never be out of touch due to lack of power. It has a voltage-



regulated lighter adapter that plugs into the vehicle's socket, and includes a mounting bracket with nylon strap to hold the Two-way radio in place. Designed to charge batteries on or off the radio; users can use their radio while charging. A maintenance mode keeps batteries charged without damaging heat buildup, and the charging algorithm provides for cool charging of the battery. A recharge mode rapid charges batteries to compensate for capacity loss caused when radios are kept in receive or transmit mode.

RLN4884B Travel charger

# **Vehicular Adapters**

Allows customers to adapt XTS3000, XTS3500 and 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 mobile microphone and optional loudspeaker allow for operation of the portable radio that is similar to that of a mobile.

NTN8561F XTS Vehicular Adapter, Closed Face, 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



# Chargers

#### 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



# Portable Accessories

# Carrying Accessories

## **Carrying Cases**

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

### Model I Radios Only

**NTN8387A** Leather Carry Case with Belt Loop and T-Strap

**NTN8385B** High Activity Swivel Leather Carry Case with 2.5" Swivel Belt Loop and T-Strap

**NTN8386B** High Activity Swivel Leather Carry Case with 3.0" Swivel Belt Loop and T-Strap

**NTN8725A** High Activity Nylon Carry Case with Belt Loop and T-Strap



NTN8385B

#### Model II & III Radios Only



**NTN8382B** Leather Carry Case with Belt Loop and T-Strap

**NTN8380C** High Activity Swivel Leather Carry Case with 2.5" Swivel Belt Loop and T-Strap



**NTN8381C** High Activity Swivel Leather Carry Case with 3.0" Swivel Belt Loop and T-Strap Nylon Carry Case

**NTN8725A** High Activity Nylon Carry Case with Belt Loop and T-Strap

**NTN9184A** Leather Carry Case with Belt Loop for Clamshell Battery



# Carrying Accessories

#### Carrying Case Accessories

### T-Straps

NTN8383A Leather T-Strap Plain Action Snap NTN8384A Leather T-Strap Hard Action Snap

#### **High Activity Belt Loops**



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

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



**NTN9212A** "D" clip for battery (for use with NTN9213A only)

NTN9213A 3.0" Belt Loop, High Activity

NTN8040B

#### **Belt Clips**

**NTN8266A** Standard Removable Belt Clip Attachment **NTN8460A** 3.0" Removable Belt Clip Attachment

#### Belt

**4200865599** 1.75" wide leather belt

# 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 HLN6602



HLN6602A



# Portable Accessories

# Carrying Accessories



#### **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** Break-A-Way Chest Pack



## **RadioPAK™**

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

**RLN4815A** RadioPAK™ Radio/Utility Case

**4280384F89** Universal RadioPAK™ Belt Lengthener; fits waists larger than 40″

# Portable Radio Hanger

RLN4815A

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** Portable Radio Hanger for door panels up to 2-3/4"

**TDN9373A** Portable Radio Hanger for door panels 2-3/4" to 3-1/4"



# Audio Accessories

#### Remote Speaker Microphones (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: a coiled cord, 3.5mm earjack, swivel clothing clip, and quick disconnect latch.

\*NMN6193C Remote Speaker Microphone

**\*NMN6191C** Noise Canceling Remote Speaker Microphone

**0104010J46** Replacement Coil Cord Cable Assembly for remote speaker microphones



NMN6193C

### Public Safety Speaker/Microphones (PSM)

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 on page 572. Requires NTN8327A RF adapter.



- \*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







# Portable Accessories

# Audio Accessories

### XTS Series Commander™ Remote Speaker Microphone

The Commander Remote Speaker Microphone is enhanced with controls normally found only on the radio itself. You can take command of communication with a Push-to-Talk (PTT) Button. Emergency Button, Volume Control, 16-Channel Select Knob and 2 Programmable Buttons. This water resistent Remote Speaker Microphone also features a receive-only 3.5mm earphone jack to allow for discrete conversations. What's more, the controls are specially designed for users who wear large gloves: the buttons are large, and the channel selector knob provides tactile feedback at each position. Compatible with XTS3000, XTS3500 and XTS5000 two-way radios. Intrinsically Safe (FM) when used with Intrinsically Safe XTS3000, XTS3500 and XTS5000 radios.

\*RMN5021A Commander Remote Speaker Microphone

#### RSM and PSM Accessories

## Epaulet Strap

Black leather epaulet strap secures remote speaker microphone to epaulet straps on shirt or jacket and accommodates back clip in leather cutouts. Snap closure secures remote speaker microphone cord to allow reliable communications in hostile high movement applications.

RLN4294A Epaulet Strap, Velcro RLN4295A Epaulet Strap, small clip

# RF Adapter

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







RLN4295A

# Audio Accessories

## Ear Microphone System (EMS)

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 needs to be ordered separately for EMS to work.

\*BDN6677A Ear Microphone for standard noise levels (up to 95 dB), black

\*BDN6678A Ear Microphone for Standard Noise Levels (up to 95 dB), beige

\*BDN6641A Ear Microphone for High Noise Levels (up to 105 dB), grey



Requires interface module sold separately

#### Interface Modules For EMS

\*BDN6708B Push-To-Talk Interface Module

\*BDN6671B Push-To-Talk and Voice-Activated Interface Module

#### Optional Accessories for EMS



0180358B33

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

<sup>\*</sup> Intrinsically Safe



# Portable Accessories

# Audio Accessories

**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)

### CommPort: Integrated Microphone/Receiver System

The CommPort system conatains a miniature microphone and receiver, and connects to your two way radio, making it possible to hear and speak under the most adverse conditions.

\*NTN1624A Integrated ear microphone/receiver system with palm PTT (includes BDN6676D 3.5mm jack adapter)

\*NTN1625A Integrated ear microphone/receiver system with PTT on radio adapter (includes BDN6676D 3.5mm jack adapter)

\*NTN1663A Integrated ear microphone/receiver system with ring PTT (includes BDN6676D 3.5mm jack adapter)

\*NTN1736A CommPort integrated microphone/receiver with snap on side Push-To-Talk (includes BDN6676D 3.5mm jack adapter)

**NNTN4186A** Integrated Microphone/Receiver System with Remote Push-To-Talk Body Switch (includes BDN6676D 3.5mm jack adapter)

NTN1624A

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

**NTN8821A** CommPort Maintenance Kit, includes replacement ear tubes (quantity 10), windscreens (quantity 2) and microphone seal strips (quantity 10)

NTN8986A Adhesive Pads (quantity 90) for secure attachment to ear

NTN8988A Ear Straps (quantity 10) for secure attachment to ear

4285838B01 Replacement Collar Clip

4202006A01 Replacement Back Cover Clip

RLN5037A Replacement Ear Tubes (pack of 10)

# **Audio Accessories**

### **Temple Transducer**

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 inline PTT and noise canceling boom microphone. The temple transducer enhances communication and safety by not impairing the user's hearing of external sound environment, such as from machinery and equipment, warning, and first alarms, the intercom, traffic and even casual conversations with their co-workers.

\*RMN4049A Temple Transducer

### Racing Headset for Two-Way Radios

Motorola is the official wireless equipment supplier of CART®, so whether your custmers' playing field is a racetrack, construction site or other challenging environment, they can count on this Racing Headset for superior comfort and dependable operation.

**RMN5015A** Racing headset for two-way radios (Adapter Cable required)

**BDN6673B** Adapter Cable for XTS2500, XTS3000, XTS3500 and XTS5000





<sup>\*</sup> Intrinsically Safe



# Portable Accessories

# **Audio Accessories**

### **Medium Weight Headsets**

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.

\*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

7580376E34 Replacement Foam Earseals, 1 pair

1580376E32 Replacement Cloth Covers for Earseals, 1 pair



NMN6258A

**3280376E35** Replacement O-ring for Windscreen

**4204004K01** Replacement Adjustable Headstrap for NMN6259A

# **Audio Accessories**

### Noise-Canceling Headsets with **Boom Microphone**

Ideal for two-way communication in extremely noisy environments. Dual-muff tactical headsets include two microphones on the outside of the earcups which reproduce the ambient sound back into the headset. Harmful sounds are suppressed to a safe level and low sounds are amplified up to 5 times the original level, but never more than 82dB(A). Includes on/off volume control on earcups and 3-foot curly cord. Easily replaceable earseals are filled with liquid and foam combination to provide excellent sealing and comfort. Requires separate in-line PTT adapter cable RKN4095A. Hardhat not included.

**RMN4052A** Tactical Headband Style Headset, grey; noise reduction rating of 24dB





RMN4052A

RMN4053A Tactical Hardhat Mount Headset, grey; noise reduction rating of 22dB

RMN4053A

# Hardhat Mount Headset with Noise-Canceling **Boom Microphone**

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 curly cord assembly. Requires separate in-line PTT adapter cable RKN4095A. Hardhat not included.

RMN4051B Two-Way Hardhat Mount Headset, black

### Adapter Cables

RKN4095A In-Line PTT Adapter Cable. For use with RMN4051, RMN4052, and RMN4053.



RMN4051B

<sup>\*</sup> Intrinsically safe





NTN8294BR

# Audio Accessories

### **Heavyduty Headsets**

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 125 dB. 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 Push-To-Talk Headset with Boom Microphone; requires adapter cable BDN6673B; noise reduction rating = 24dB

BDN6645A

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



BDN6635B



\*BDN6636B Voice-activated Headset with Throat Microphone; requires adapter cable BDN6673B; noise reduction rating = 24dB

**\*BDN6673B** Radio Adapter Cable

## Batteries

#### Nickel-Cadmium Premium

Part Number: NTN8294BR

Volts: 7.5 Avg mAh: 1525 Height: 6-1/8" Intrinsically Safe: No

Part Number: NTN8295AR

Volts: 7.5 Avg mAh: 1525 Height: 6-1/8" Intrinsically Safe: Yes



Volts: 7.5
Avg mAh: 1525
Height: 6-1/8"
Intrinsically Safe: Yes
Ruggedized: Yes



Part Number: HNN9031AR

Volts: 7.5 Avg mAh: 1525 Height: 6-1/8" Intrinsically Safe: No

Part Number: HNN9032AR

Volts: 7.5 Avg mAh: 1525 Height: 6-1/8" Intrinsically Safe: Yes

# Nickel Metal Hydride impres™

Part Number: NNTN4436AR

Volts: 7.5

Avg. mAh: 2000 (1800 min.)

Height: 6-1/8" Intrinsically Safe: Yes

Part Number: NNTN4437AR

Volts: 7.5

Avg. mAh: 2000 (1800 min.)

Height: 6-1/8" Intrinsically Safe: Yes Ruggedized: Yes

\* Intrinsically Safe





# Batteries, Antennas, Miscellaneous

# Batteries

### Nickel Metal Hydride Premium

Part Number: NTN8299BR

Volts: 7.5
Avg mAh: 1700
Height: 6-1/8"
Intrinsically Safe: Yes

Part Number: NTN8923AR

Volts: 7.5 Avg mAh: 1800 Height: 6-1/8"

Intrinsically Safe: No



NTN8299BR

Part Number: RNN4006B

Volts: 7.5
Avg mAh: 3500
Height: 6-1/8"
Intrinsically Safe: No

Part Number: RNN4007AR

Volts: 7.5 Avg mAh: 3500 Height: 6-1/8" Intrinsically Safe: Yes

#### Lithium-ion Premium

Part Number: NTN8610BR

Volts: 7.5 Avg mAh: 1650 Height: 6-1/8" Intrinsically Safe: No

#### Alkaline Premium Battery Shells

NTN9177A Disposable Battery Shell – Black
NTN9103A Disposable Battery Shell – Orange

#### Antennas

### 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 helt

**8505241U03** Flexible Whip, 1/2 Wavelength, 806-870MHz, 7"

**8505241U11** Flexible Whip, Dual Band, 700-800MHz

# Stubby Antenna

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

8505241U06 Stubby,

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



# Miscellanoeous

#### **Public Safety Tilt Switch**

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

<sup>\*</sup> Intrinsically safe



# Service Tools, Aids, Manuals

# Service Tools

#### **Battery Eliminator**

The Battery Eliminator acts like a battery with a cable to access a DC external power supply.

**REX4424A** Battery Eliminator

#### Radio Interface Box

Links radio programming cable and computer interface together. Provides required voltage shift to enable communications between radio and



computer. Requires computer interface cable, radio test and programming cable, and 9 volt snap type battery (6082728J01), order separately.

RLN4008E Radio Interface Box

# AC ADAPTOR AC ADAPTOR CAUTION

0180357A57

### Wall Mounted Power Supply

Used to supply power to radio interface box, RLN4008E.

**0180357A57** Wall Mounted Power Supply, 110 Volts

**0180358A56** Wall Mounted Power Supply, 220 Volts

# Computer Interface Cable

Used to connect computer's serial port to Radio Interface Box.

**3080369B71** Cable, RIB to 25 pin D

**3080369B72** Cable, RIB to 9 pin D



3080369B71

# Radio Test and Programming Cable

Used with Portable Radio Test Set, RTX4005B, for transmitter, receiver alignment and performance checks. Also used in programming radio.

**RKN4035D** Radio Test and Programming Cable

# Service Aids

#### **Programming Cable**

**RKN4105A** Programming Cable, USB, XTS2500 **RKN4106A** Programming Cable, RS232, XTS2500

#### Test Box

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

**RLN4460C** Test Box

#### **Probes**

RTL4208A RF Probe, 50 ohm High Frequency

RT-5144/48/0 Needle-Fine Test Probes for

High Density Circuitry (Black)

RT-5144/48/2 Needle-Fine Test Probes for High Density Circuitry (Red)

# **Programming Software**

Utilizing your personal computer, this software enables you to add or reprogram frequencies as your requirements change. Requires interface box and appropriate cables, must be ordered separately.

**RVN4181H** Radio Service Software

# Manuals

6881074 <b>C</b> 70	VHF, UHF, 800MHz Radio Service
	Software Manual

**6881083C70** I VHF, UHF, 800MHz User's Guide **6881083C75** II and VHF, UHF, 800MHz User's Guide

**6881083C85** Basic Service Manual **6881083C90** Detailed Service Manual

**0180305J46** Ear Microphone System and Temple

Transducer CD-ROM

**0180305J70** impres™ System CD-ROM

