

## MTS 2000 Series

## Parts List

REF.		
NO.	PART NO.	DESCRIPTION
1	4505896U01	Lever, PTT
2	3205902U01	Seal, PTT, and Actuator for S404,
-	0100001000	S405, S406, and S408
ЗA	1505637V04	Cover, Front; Full Keypad
3B	1505637V05	Cover, Front; Limited Keypad
4		Label, Agency Approval; not field
		replaceable
5A	7505870U01	Keypad, 15-key
5B	7505870U02	Keypad, 6-key
6	5105238U83	Module, Display
7	3305183R55	Label, Motorola
8	3305409X05	Label, MTS2000
9	3505535X02	Felt, Speaker
11	0705470V01	Bracket, Speaker Retainer
13	1405330W02	Boot, Microphone
14	8405310W04	FLEX, Front Cover/Display
15	8405333W02	FLEX, Controls
16	3905517V01	Popple, PTT (p/o S406)
17	3605253V01	Knob, On/Off/Volume
18	3605636V01	Knob, Frequency
19	1305633V01	Ring, Concentric; Escutcheon
20	3605635V01	Knob, Concentric Ring
21	1305698V01	Escutcheon, Control Top
22	3205160W01	Seal, Actuator; for S101
23	2205159W01	Pin, Actuator; for S101
25	3205177Z01	Seal, Control Top
26	3205177Z01	Seal, Emergency Button

REF.		
NO.	PART NO.	DESCRIPTION
27	2705877U01	Housing, Switch
30	3905329W01	Popple, Emergency Button
33	1505632V01	Cover, Switch Housing
34		Spring, PA; not field replaceable,
		order front shield (item 41)
35	4205507X01	Strain Relief
36	8405247V01	FLEX, Jumper
38	3205820V01	Seal, Connector Plug
39		Label, Rear; Information; not field
		replaceable
40	3205176Z01	"O" Ring, Contoured/Seal, Antenna
41	2605891U02	Shield, Front
42	0705856V01	Bracket, RF Switch
43	1505520V01	Housing, RF Switch
44	4105266V01	Spring, RF Switch
45	4405524V01	Piston, RF Switch
46	8405523V01	Circuit Board, RF Switch
47	REX4575A	Chassis (Rear Cover)
48	3905838V01	Contact, Antenna Shield Ground
		(800 MHz and 900 MHz radios
		only)
49	2605898U01	Shield, PA (800 MHz and 900 MHz
		radios only)
50	0405717W01	Washer, PTT Seal
52	7505393N33	Pad, Shock



## MTS 2000 Series

## Portable Accessories

### **CHARGERS**

Single unit chargers are available in either desktop or compact styles for small system users. Multiple Unit chargers can be wall or rack mounted and are ideal for multi-shift operations. Rapid rate chargers fully charge the battery in less than three hours. Standard rate chargers fully charge the battery in approximately 16 hours.

### Single Unit Chargers, Rapid Rate

NTN1168A Enhanced Desktop, 117 Volts\*

**NTN1169A** Enhanced Desktop, 220 Volts (supplied with 2 prong cord)\*\*

**NTN1170A** Enhanced Desktop, 240 Volts (supplied with 3 flat prong cord)\*\*

NTN1171A Compact, 117 Volts\*



NTN1172A Compact, 220 Volts (supplied with 2 prong cord)\*\*

NTN1173A Compact, 240 Volts (supplied with 3 flat prong cord)\*\*

### Single Unit Chargers, Standard Rate

NTN1174A Desktop, 117 Volts\*

NTN1175A Desktop, 220 Volts (supplied with 2 prong cord)\*\*

**NTN1176A** Desktop, 240 Volts (supplied with 3 flat prong cord)\*\*

### **CHARGERS**

### Multiple Unit Chargers

NTN1177C Six Pocket, Rapid Rate, 117 Volts

NTN1178A Six Pocket, Rapid Rate, 220 Volts (supplied with 2 prong cord) NTN1177C

**NTN1179A** Six Pocket, Rapid Rate, 240 Volts (supplied with 3 flat prong cord)

NLN7967A Wall Mount

### Enhanced Charger Line Cords

Cords can be used on any Enhanced Single or Multiple Unit Rapid Charger to provide versatility for Domestic or International charging capability.

3060665A04 Exchangeable Line Cord, 110V

**3060665A05** Exchangeable European 2 Prong Line Cord, 220V

**3002120F02** Exchangeable United Kingdom 3 Prong Line Cord 240V

### Vehicular Charger

**TDN9816A** Vehicular Charger for Nickel-Cadmium Battery; includes mounting bracket



TDN9816A

\*Underwriters Laboratory Approved \*\*VDE Approved

## MTS 2000 Series

### **BATTERY MAINTENANCE SYSTEM PLUS (BMS Plus)**

Using interchangeable battery adapters (sold separately), the BMS Plus is capable of charging and discharging, analyzing, conditioning and cycle test on batteries; tracking battery voltage and capacity (mAh).

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

WPLN4079AR Six Station, 110V AC, 50/60 Hz

WPLN4080AR Six Station, 230V AC, 50/60 Hz



WPLN4079AR

### **Adapters**

**TDN9435C** Standard Adapter, MTS 2000, NiCd **CDN6364A** Standard Adapter, MTS 2000, NiCd and NiMH

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

## Portable Accessories

### **BATTERY OPTIMIZING SYSTEM (BOS)**

The Battery Optimizing System accommodates NiCD, NiMH, Li-Ion, and SLA. Four independent stations for simultaneous service of 4 batteries. Reads battery capacity in percentage of nominal rating; verifies voltage; measures battery temperature and displays battery impedance in milliohms. (Adapter sold separately).



WPLN4071AR

WPLN4071AR 4 Station, 110V AC, 50/60 Hz WPLN4073AR 4 Station, 230V AC, 50/60 Hz

### **Adapters**

RL-72403 Standard Adapter, MTS 2000

### **MOTOROLA CONDITIONING CHARGER (MCC)**

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.

WPPN4002AR 110V AC Base Charge Unit only

WPPN4006AR 220V AC Base Charge Unit only

WPPN4004AR 7 Volt Adapter only

**WPLN4090AR** MCC Kit, 110V AC; includes both base unit and 7V adapter

**WPLN4091AR** MCC Kit, 220V AC; includes both base unit and 7V adapter

3080384G15 Cigarette Lighter Adapter Cord

### MCC Multi-Unit Conditioning Charger

**WPPN4065AR** Four-station Base, 110V. (Order adapter plates separately)

# MTS 2000 Series Portable Accessories

### BATTERY DISCHARGE TESTER



Tester determines a battery's delivered capacity by discharging a fully charged battery. 'LED' indicates cycle status by turning "ON" when fully charged battery is placed in adapter and "OFF" when discharge is complete. Plug-in adapters allow one console to discharge most batteries. No AC power source required (console is powered by discharging battery).

RLN4201B

**RLN4201B** Single Unit Battery Discharge Tester, Requires Battery Adapter or Cable/Clip Lead

RLN4048A Battery Adapter, MTS 2000 RKN4037A Cable/Clip Lead, 7.5V

### VEHICULAR BATTERY ELIMINATOR

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



**RLN4335A** Vehicular Battery Eliminator

## Carrying Cases

Carrying cases provide a convenient way to carry your radio while protecting it from the environment. Cases are designed to fit your radio and are determined by the type of battery you select. You may select from durable leather or nylon construction, standard or swivel attachment and a variety of other accessories. The swivel attachment allows the radio to swing freely with body movements.

**CARRYING ACCESSORIES** 



### Standard Carrying Cases

NTN7238A Leather Carry Case with Belt Loop and T-Strap, for High Capacity Battery

**NTN7239A** Leather Carry Case with Belt Loop and T-Strap for Ultra High Capacity Battery

**NTN7247A** Nylon Carry Case with Belt Loop for High and Ultra High Capacity Batteries

**NDN4018B** DTMF Leather Carry Case with Belt Loop for use with high and ultra-high capacity batteries

NTN7247A

### Swivel Carrying Cases

**NTN7241A** Leather Carry Case with 2½<sup>"</sup> Swivel Belt Loop and T-Strap for High Capacity Battery

**NTN7242A** Leather Carry Case with 2½<sup>"</sup> Swivel Belt Loop and T-Strap for Ultra High Capacity Battery

**NTN7244A** Leather Carry Case with 3<sup>"</sup> Swivel Belt Loop and T-Strap for High Capacity Battery

**NTN7245A** Leather Carry Case with 3<sup>"</sup> Swivel Belt Loop and T-Strap for Ultra High Capacity Battery

## **MTS 2000 Series**

### **CARRYING ACCESSORIES**

The following carry cases have a new, high activity swivel "D" button and belt loop. Case stays on belt more securely. To remove case from belt loop, rotate case 180° and slide case upward, out of the holder.

NTN8035A Leather Carry Case with High Activity Swivel, 2½<sup>"</sup> Belt Loop and T-Strap for High Capacity Battery

NTN8036A Leather Carry Case with High Activity Swivel, 2½<sup>"</sup> Belt Loop and T-Strap for Ultra High Capacity Battery

**NTN8037A** Leather Carry Case with High Activity Swivel, 3<sup>"</sup> Belt Loop and T-Strap for High Capacity Battery

**NTN8038A** Leather Carry Case with High Activity Swivel, 3<sup>"</sup> Belt Loop and T-Strap for Ultra High Capacity Battery

NTN8039A 2½" Replacement Swivel Belt Loop for High Activity Swivel Cases

**NDN4017B** DTMF Leather Carry Case with High Activity Swivel Belt Loop for use with high and ultra-high capacity batteries

**NTN8040A** 3<sup>"</sup> Replacement Swivel Belt Loop for High Activity Swivel Cases

NTN1534A High Activity "D" Button and 21/2" Belt Loop

NTN1535A High Activity "D" Button and 3" Belt Loop

NTN8063A High Activity "D" Button Replacement

## Portable Accessories

### **CARRYING ACCESSORIES**

### T-Strap

NTN5574A T-Strap for Leather Carry Cases

NTN7376A T-Strap for Nylon Carry Cases



NTN5574A



### Belt Loops

4205857B01 Swivel Belt Loop, 2" 4282421J06 Swivel Belt Loop, 2½-

4205857B01

### Belt Clips

4205638V04 Belt Clip, 2½" 4205638V02 Belt Clip, 3"



### Belt

**4200865599** Black Leather Belt, 3"





NTN5243A

4200865599

### **Carrying Strap**

**NTN5243A** Shoulder Carrying Strap Allows Easy Carrying of Radio When Not Wearing a Belt



# MTS 2000 Series Portable Accessories

### **CARRYING ACCESSORIES**



### Chest Pack

Carry the radio mounted in a pouch on the chest. Adjustable straps go over shoulders and around waist.

TDN9326A Chest Pack

## TDN9326A

### HLN6602A

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



1505596Z02 Replacement Strap for HLN6602A

HLN6602A

### RadioPAK™

**RLN4815A** Universal RadioPAK<sup>™</sup> with Radio Holder. Worn around waist with adjustable belt. Includes attached 6" by 8" zippered pouch for other job necessities

**4280384F89** Universal RadioPAK<sup>™</sup> belt lengthener; fits waists larger than 40"

### Portable Radio Hanger

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<sup>3</sup>/<sub>4</sub>

**TDN9373A** Portable Radio Hanger for Door Panels  $2\frac{3}{2}$  to  $3\frac{3}{2}$ 



### AUDIO ACCESSORIES

### Remote Speaker/Microphones

Remote Speaker/Microphone allows remote transmit and receive capabilities conveniently while radio remains in the case. These microphones include: 6' Coiled Cord Assembly, 3.5 mm Earjack, Swivel Clip, and Quick Disconnect Latch.

NMN6193B Remote Speaker/Microphone

NMN6191B Noise Cancelling Remote Speaker Microphone

NMN6193B

### Public Safety Speaker/Microphones

Public Safety Speaker/Microphones include 4.5' Straight Cord Assembly, 3.5 mm Earjack, Swivel Clip, Quick Disconnect Latch, Antenna Connector, and Receive Audio High/Low Volume Push Button. Antenna must be ordered separately.

**NMN6228C** Noise-Cancelling Public Safety Speaker/Microphone

### Epaulet Strap

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

RLN4294A Epaulet Strap, Velcro RLN4295A Epaulet Strap, Small Clip





RLN4295A

## MTS 2000 Series

## Portable Accessories

### **AUDIO ACCESSORIES**

### Surveillance Accessories

**BDN6676B** 3.5 mm Threaded Jack Adapter with Quick Disconnect Latch. Required for use with Above Surveillance Accessories



**BDN6664A** Beige Earpiece Assembly with Standard Earphone and Urethane Earloop\*

**BDN6726A** Black Earpiece Assembly with Standard Earphone and Urethane Earloop\*

**BDN6665A** Beige Earpiece Assembly with Extra Loud Earphone (exceeds OSHA limits) and Urethane Earloop\*

**BDN6727A** Black Earpiece Assembly with Extra Loud Earphone (exceeds OSHA limits) and Urethane Earloop\*



**BDN6666A** Beige Earpiece Assembly with Volume Control and Urethane Earloop\*

**BDN6728A** Black Earpiece Assembly with Volume Control and Urethane Earloop\*

**BDN6667A** Beige Earpiece Assembly with Microphone and Push-To-Talk Combined\*

**BDN6729A** Black Earpiece Assembly with Microphone and Push-To-Talk Combined\*



### **AUDIO ACCESSORIES**



**BDN6668A** Beige Earpiece Assembly with Microphone and Push-To-Talk Separate\*

**BDN6730A** Black Earpiece Assembly with Microphone and Push-To-Talk Separate\*

**BDN6669A** Beige Extra Loud Earpiece (exceeds OSHA limits) with Microphone and Push-To-Talk Combined\*

**BDN6731A** Black Extra Loud Earpiece (exceeds OSHA limits) with Microphone and Push-To-Talk Combined\*

**BDN6670A** Beige Extra Loud Earpiece (exceeds OSHA limits) with Microphone and Push-To-Talk Separate\*

**BDN6732A** Black Extra Loud Earpiece (exceeds OSHA limits) with Microphone and Push-To-Talk Separate\*

**5080369E38** Standard Earpiece Assembly (Earphone, Earloop, Eartip)

**5080369E39** Extra Loud Earpiece Assembly (Earphone, Earloop, Eartip)

5080369E40 Plastic Urethane Earloop

5080369E41 Wire Earloop

5080371E69 Small Rubber Eartip

5080371E73 Standard Rubber Eartip



## MTS 2000 Series

## Portable Accessories

### **AUDIO ACCESSORIES**

### Noise Kits

Lightweight translucent tube **attaches to Motorola surveillance accessories.** Clothing clip prevents the accessory from being pulled from the ear due to body movement or head rotation.

**NTN8370A** Extreme Noise Kit, includes 2 foam earplugs for loud environments

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

**5080384F72** Replacement Foam Plugs. Pack of 50 (for use with NTN8370A)

### Earpiece

The clear comfortable earpiece forms to the inside of your ear and is perfect for low noise environments. Compatible with the NTN8371A, clear acoustic tube assembly, and most surveillance kits (1, 2 and 3 wire). This earpiece is made of easy-to-clean chemically inert, hypoallergenic material.

There are 3 items needed to make this product work:

- 1. Clear Comfortable Earpiece
- 2. Clear Acoustic Tube Assembly (NTN8371A)
- 3. Surveillance Kits

RLN4760A Small Custom Earpiece, right ear

RLN4763A Small Custom Earpiece, left, ear

RLN4761A Medium Custom Earpiece, right ear

RLN4764A Medium Custom Earpiece, left ear

RLN4762A Large Custom Earpiece, right ear

RLN4765A Large Custom Earpiece, left ear

### AUDIO ACCESSORIES



### Flexible Ear Receiver

**BDN6719A** Ear Receiver with 3.5 mm threaded plug, to be used with adapter BDN6676

### **Pellet Style Earpieces**

**BDN6780A** Single Earbud with Microphone and Push-To-Talk

**BDN6781A** Single Earbud, Receive only

### Ear Microphone System

This compact unit picks up the voice through bone vibrations in the ear canal. Ideal for use in high noise environments. Available in PTT or Voice-activated (VOX) capabilities for total hands free communications. Order Interface Module separately.





**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

### Interface Module

**BDN6708B**\* Push-To-Talk Only Interface Module **BDN6671B**\* Push-To-Talk/Voice-Activated Interface Module

## MTS 2000 Series

### **AUDIO ACCESSORIES**

Optional Accessories

0180358B38\* Remote Push-To-Talk Ring Switch



0180300B83 Bodyswitch, Push-To-Talk Accessory

**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

0180358B33

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)

### **AUDIO ACCESSORIES**

Portable Accessories

### Heavyduty Headsets

Heavyduty headsets include Noise-Cancelling 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 Radio Adapter Cable

**BDN6645A** Push-To-Talk Headset with Boom Microphone; Requires Adapter Cable BDN6673B

**BDN6635B** Voice-activated Headset with Boom Microphone; Requires Adapter Cable BDN6673B





## MTS 2000 Series

## Accessories, Antennas, Kits

### **AUDIO ACCESSORIES**

BDN6636B Voiceactivated Headset with Throat Microphone. **Requires Adapter Cable BDN6673B** 



BDN6636B

### Lightweight Headsets

Lightweight headsets have In-Line Push-to-Talk Switch Requires BDN6676B Audio Adapter

NMN6245A Single Speaker Lightweight Headset with In-Line Push-To-Talk Switch (requires BDN6676B audio adapter)

NMN6246A Ultralite Headset with Boom Microphone and In-Line Push-To-Talk Switch (requires BDN6676B adapter)

NMN1020A Lightweight Headset with Boom Microphone to be worn on a helmet or safety glasses. Includes NKN6498A adapter cable. Requires BDN6676B adapter. FM approved.

NKN6498A Headset Adapter Cable for use with NMN1020A

### **PORTABLE 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 belt.

8505241U05

Flexible Whip, 403-520 MHz, 6"

### Helical Antennas

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

8505644V01 Helical, 136-151MHz, 6"

8505644V02 Helical, 151-162MHz, 6"

8505644V03 Helical, 162-174MHz, 6"

8505644V04 Helical 403-435MHz. 3"

8505644V05 Helical, 435-470MHz, 3"

8505644V06 Helical, 470-520MHz, 3"

### 8505644V03

### Wideband Antenna

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

8505518V01 Wideband, 135-174MHz, 6"

### **REPLACEMENT KITS**

**REX4395A** 15 Key Cosmetic Replacement Kit REX4396A 6 Key Cosmetic Replacement Kit **REX4397A** Top Display Cosmetic Replacement Kit



## **MTS 2000 Series**

## **Batteries**

### PORTABLE BATTERIES

### Nickel-Cadmium

Part Number: NTN7143CR Charge: Rapid Volts: 7.5V Avg. MAH: 1200 Height: 6″ FM Rating: (NA)

Part Number: NTN7144AR Charge: Rapid Volts: 7.5V

Avg. MAH: 1400 Height: 6" FM Rating: (NA)



NTN7143CR

### Part Number: NTN7146AR Charge: Rapid Volts: 7.5V Avg. MAH: 1200 Height: 6″ FM Rating: IS & NI

NTN7147AR
Rapid
7.5V
1400
6″
IS & NI

Part Number: NTN7149BR Charge: Rapid Volts: 7.5V Avg. MAH: 1400 Height: 6″ FM Rating: CSA

Part Number: NTN7150A Charge: Rapid Volts: 7.5V Avg. MAH: 1200 Height: 6″ FM Rating: MSHA

# NTN7147AR

### PORTABLE BATTERIES

Part Number:	NTN7341AR
Charge:	Rapid
Volts:	7.5V
Avg. MAH:	1400
Height:	
FM Rating:	IS & NI

Part Number:	NTN7372AR
Charge:	
Volts:	7.5V
Avg. MAH:	1300
Height:	6″
FM Rating:	IS & NI



NTN7372AR

### Nickel Metal Hydride

Part Number: **WPNN4013A** Charge: Rapid Volts: 7.5V Avg. MAH: 2000 Height: 6″ FM Rating: (NA)

Part Number: **WPNN4037A** Charge: Rapid Volts: 7.5V Avg. MAH: 1900 Height: 6″ FM Rating: IS & NI

### Alkaline

Part Number: NTN8122AR Charge: (NA) Volts: 9V Avg. MAH: (NA) Height: 6″ FM Rating: (NA)



WPNN4013A



## **MTS 2000 Series**

## Service Aids

### SERVICE AIDS

### 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,



RLN4008B

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

RLN4008B Radio Interface Box



### Wall Mounted Power Supply

Used to supply power to radio interface box, RLN4008B.

0180357A57 Wall Mounted Power Supply, 110 Volts

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

### SERVICE AIDS

### 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



<sup>3080369</sup>B71

### **Battery Eliminator**



The Battery Eliminator acts like a battery with a cable to access a DC external power supply. It is ideal to inspect transmitters and receivers on incoming radios. Reverse supply polarity protection and input fuse protection are provided.

RLN1014A Battery Eliminator

RLN1014A

### 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

## MTS 2000 Series

### SERVICE AIDS

### **Cloning Cable**

Allows another radio to be duplicated from a master radio by transferring programmed data from one radio to another.

RKN4036D Cloning Cable

### **Test Fixture**

Used for trouble shooting radio when housing is removed.

RLN1018A Test Fixture



### SERVICE AIDS

Service Aids, Manuals

### **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.

RVN4097M Programming Software

### Key Loader Interface Cable

Interfaces Key Loader to radio for programming. **TDN9390D** Key Loader Interface Cable

### **REFERENCE MANUALS**

6881200C15	Theory and Troubleshooting Manual
6881200C25	Maintenance Manual
6881200C40	Maintenance Manual
6881072C15	Operator Manual I
6881072C45	Operator Manual II, III



HT1000. JT1000. MTX8000 & MTX9000 (Also Compatible)

### 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 6.0' coil cord assembly, 3.5mm eariack. swivel clip and quick disconnect latch. NMN6193B Remote Speaker Microphone NMN6191B Noise Cancelling Remote Speaker Microphone



### Public Safety Speaker Microphones (PSM)

Public Safety Speaker Microphones include NMN6193B straight cord assembly, 3.5mm earlack. swivel clip, quick disconnect latch, antenna connector, and receiver, audio high/low volume push button. Antenna must be ordered separately. Use radio antennas on page 34.

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

### **RSM Accessories**

### Epaulet Strap

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

RLN4294A Epaulet Strap. Velcro RLN4295A Epaulet Strap, small clip









BDN6666A Beige BDN6728A Black

> Earpiece Assembly with Microphone and Push-To-Talk Combined (2 Wire) BDN6667A Beige BDN6669A Beige\* BDN6729A Black BDN6731A Black\*

Urethane Earloop (1 Wire)

Surveillance Kits

Earloop (1 Wire) BDN6664A Beige BDN6665A\* Beige

BDN6726A Black

BDN6727A\* Black



Earpiece Assembly with Microphone and Push-To-Talk

Surveillance accessories allow the user to privately receive

BDN6676D (3.5 mm threaded adapter jack) that attaches to the radio.

Earpiece Assembly with Standard Earphone and Urethane

Earpiece Assembly (receive only) with Volume Control and

communications with the earpiece and are ideal when

environments require discrete communications.

The following surveillance accessories require the

unless being used with speaker/microphone.

Separate (3 Wire) BDN6668A Beige BDN6670A Beige\* BDN6730A Black BDN6732A Black\*

\*Extra Loud Earphone (exceeds OSHA limits)



BDN6676D 3.5mm Jack Adapter with Quick Disconnect Latch

2-WIRE





1-WIRE

Surveillance Kit Accessories

5080369E38 Standard Earpiece Assembly (earphone. earloop, eartip) 5080369E39 Extra Loud Earpiece Assembly (earphone, earloop, eartip) 5080369E40 Plastic Urethane Earloop 5080369E41 Wire Earloop 5080371E69 Small Rubber Eartip 5080371E73 Standard Rubber Eartip

**RLN4294A** 



### HT1000, JT1000, MTX8000, MTX9000 (Also Compatible)

### **Noise Kits**

Lightweight translucent tube attaches to Motorola surveillance accessories. Clothing clip prevents the accessory from being pulled from the ear due to body movement or head rotation. NTN8370A Extreme Noise Kit, includes 2 foam earplugs for loud environments. provides 24dB noise protection NTN8371A Low Noise Kit, includes rubber eartip for low noise environments 5080384F72 Replacement Foam Plugs; pack of 50 (for use with NTN8370A)

### **Clear Comfortable Earpiece**

The clear comfortable earpiece forms to the inside of your ear and is perfect for low noise environments. Compatible with the NTN8371A, clear acoustic tube assembly, and most surveillance kits (1, 2 and 3 wire). This earpiece is made of easyto-clean chemically inert, hypoallergenic material.

There are 3 items needed to make this product work:

1. Clear Comfortable Earpiece

2. Clear Acoustic Tube Assembly (NTN8371A)

3. Surveillance Kits

Acoustic Tube with Earphone

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

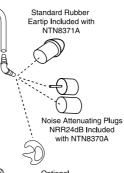
### Ear Microphone System (EMS)

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 95dB0, black BDN6678A\* Ear Microphone for Standard Noise Levels (up to 95dB0, beige BDN6641A\* Ear Microphone for High Noise Levels (up to 105dB) \*FACTORY MUTUAL APPROVED



NTN8370A



Clear Comfortable Earpiece Order Separately

Interface Module For EMS

BDN6708B\* Push-To-Talk Interface Module BDN6671B\* Push-To-Talk or Voice-Activated Interface Module \*FACTORY MUTUAL APPROVED

### **Optional Accessories For EMS**

0180358B38\* Remote Push-To-Talk Ring Switch (see photo below) 0180300E83\* Remote Push-To-Talk Body Switch 0180300E25 Earguard with Adjustable Loop; secures ear mic in ear 0180358B32 Earholder. black size small: secures ear mic in ear 0180358B33 Earholder, black, size medium; secures ear mic in ear 0180358B34 Earholder, black, size large; secures ear mic in ear 0180358B35 Earholder, clear, size small; secures ear mic in ear 0180358B36 Earholder, clear, size medium: secures ear mic in ear 0180358B37 Earholder, clear, size large; secures ear mic in ear 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)



BDN6708B

0180300E25



0180358B33

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



### Flexible Ear Receiver

Pellet Style Earpieces

BDN6719A Ear Receiver with 3.5 mm Threaded Plug, requires adapter BDN6676D unless being used with speaker microphone



BDN6780A Single Earbud with Microphone and Push-To-Talk, requires adapter BDN6676D, unless being used with speaker microphone

BDN6781A Single Earbud, receive only; requires adapter BDN6676D unless being used w/speaker microphone



BDN6641A

with NTN8370A Optional

## Audio Accessories

### CommPort: Integrated Microphone/Receiver System

The CommPort system contains 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 w/Palm PTT (includes BDN6676D 3.5mm Jack Adapter)

NTN1625A Integrated Ear

Microphone/Receiver System

(includes BDN6676D 3.5mm Jack Adapter) NKN6510A Replacement Cable for NTN1624

NKN6508A Replacement Cable for NTN1625

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

NTN8998A Ear Straps (Quantity 10), for secure attachment to ear 4285838B01 Replacement Collar Clip 4202006A01 Replacement Back Cover Clip

### **Lightweight Headsets**

Lightweight headsets have in-line push-to-talk switch. Requires BDN6676D Audio Adapter.

NMN6245A Single Muff Lightweight Headset with In-line Push-To-Talk Switch (requires BDN6676B adapter)

NMN6246A Ultralite Headset with Boom Microphone and In-line Push-To-Talk Switch; ear bud style receiver (requires BDN6676B adapter)

NTN1624A

NMN6245A

NMN1020A Lightweight Headset with Boom Microphone to be worn on a

helmet or safety glasses. Includes NKN6498A adapter cable. Requires BDN6676D adapter. FM approved.

NMN6246A

NKN6498A Headset Adapter Cable for use with NMN1020A



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

### **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

BDN6635B Voice-activated Headset with Boom Microphone; requires adapter



BDN6645A (shown with BDN6673B)

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



BDN6635B (shown with BDN6673B)



BDN6636B (shown with BDN6673B)



1-300-422-4210

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### HT1000, JT1000, MTX8000, MTX9000 (Also Compatible)

### **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 and battery and permit audio to be heard clearly.

### Standard Belt Loop Carrying Cases

NTN7238A Leather Carry Case with Belt Loop and T-Strap for use with high capacity battery NTN7239A Leather Carry Case with Belt Loop and T-Strap for use with ultra-high capacity battery NDN4018B DTMF Leather Carry Case with Belt Loop for use with high and ultra-high capacity batteries NTN7247A Nylon Carry Case with Belt Loop and Strap for use with high and ultra-high capacity batteries



NTN7247A



NTN8038A

NTN8036A

### High Activity Swivel Carrying Cases

The following carrying cases have a high activity swivel " D" button and belt loop. To remove case from belt loop, rotate case 180 degrees and slide case upward, out of the holder. Case stays on belt more securely in high activity applications versus standard swivel cases while allowing the radio to swing freely with body movements.

NTN8035B Leather Carry Case with 2.5" High Activity Swivel Belt Loop and T-Strap for use with high capacity battery

NTN8037B Leather Carry Case with 3.0" High Activity Swivel Belt Loop and T-Strap for use with high capacity battery

NTN8036B Leather Carry Case with 2.5" High Activity Swivel Belt Loop and T-Strap for use with ultra-high capacity battery

NTN8038B Leather Carry Case with 2.5" High Activity Swivel Belt Loop and T-Strap for use with ultra-high capacity battery

NDN4017B Leather Carry Case with 3.0" High Activity Swivel Belt Loop and T-Strap for use with high and ultra-high capacity battery Carrying Case Accessories *T-Strap* NTN7782A T-Strap for leather

Carry Cases NTN7376A T-S trap for nylon carry cases

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

Belt 4200865599 3.0" Wide Black Belt



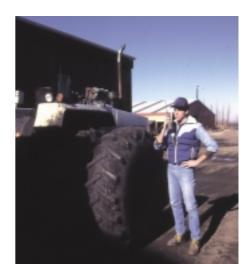
Carrying Strap NTN5243A

420086599

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



NTN5243A





## Carrying Accessories



### **Chest Pack**

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

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



HLN6602A

### Break-A-Way Chest Pack

All of the same features as the original chest pack (HLN6602A) plus break-a-way tabs that allow the entire pack to be pulled off with approximately 10 lbs. of pressure. Perfect for railroads, manufacturing locations, construction sites and anywhere safety is a concern. RLN4570A Break-A-Way Chest Pack



RLN4570A

## ORDER TODAY!

Federal Government Customers Call 1-800-826-1913





### **RadioPAK**<sup>™</sup>

**RLN4815A** Universal RadioPAK<sup>™</sup> with Radio Holder. Worn around waist with adjustable belt. Includes attached 6" by 8" zippered pouch for other job necessities.

**4280384F89** Universal RadioPAK<sup>™</sup> belt lengthener; fits waists larger than 40"

### Portable Radio Hanger

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 2.75"

TDN9373A Portable Radio Hanger for door panels up to 3.25"





RLN4815A



### HT1000, JT1000, MTX8000, MTX9000 (Also Compatible)

### **Nickel Cadmium**

Part Number: NTN7143CR Capacity Hiah Avg. mAh: 1200 Part Number: NTN7144AR Capacity Ultra High Avg. mAh: 1400 Part Number: NTN7146AR Capacity High Avg. mAh: 1200 FM Rating:\* IS & NI Part Number: NTN7147AR Capacity Ultra High Avg. mAh: 1400 FM Rating:\* IS & NI Part Number: NTN7149BR Capacity Ultra High Avg. mAh: 1400

Part Number: Avg. mAh: FM Rating:\* Part Number: Capacity Avg. mÁh: FM Rating:\* Part Number: Capacity Avg. mÅh: FM Rating:\*

NTN7150AR 1200 **MSHA** NTN7341AR Ultra High 1400 IS & NI NTN7372AR Ultra High 1300 IS & NI

FM Rating:\* IS = Intrinsically Safe NI = Non Incendiary CSA-MSHA

### **Nickel Metal Hydride**

Part Number: Capacity Avg. mÁh: FM Rating:

Part Number: Avg. mAh:

**WPNN4013A** Ultra High 2000 (NA)

FM Rating:

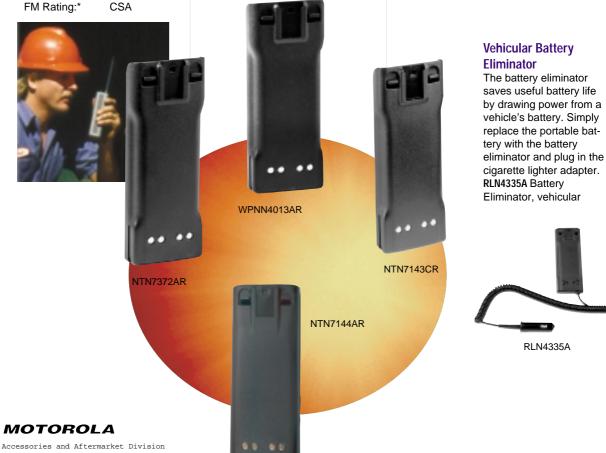
WPNN4037A 1900

IS & NI

### Alkaline

Part Number: Volts:

**NTN8122AR** 9V, 12 Cell Battery Pack



## Batteries and Chargers

### Chargers

Single unit chargers are available in either desktop or compact styles for small system users. Multiple 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. All chargers listed are rapid rate and will fully charge your battery in less than 3 hours.



### Single Unit Desktop Chargers— Rapid Rate

The desktop charger has the power supply built into the base unit and will charge both NiCd and NiMH batteries. NTN1168A Rapid Rate Desktop Charger, 110V NTN1169A Rapid Rate Desktop Charger, 220V (supplied with 2 prong cord) NTN1170A Rapid Rate Desktop Charger, 240v (supplied with 3 flat prong cord)

### Single Unit Compact Bi-Chemistry Chargers-Rapid Rate

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

RPX4747A Compact Bi-Chem Charger, 110V RPX4748A Compact Bi-Chem Charger, 230V Euro plug RPX4749A Compact Bi-Chem Charger, 230V UK plug

### Multiple Unit Charger (MUC)

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

NTN1177C Six Pocket, rapid rate110V

NTN1178C Six Pocket, rapid rate, 220V (supplied with 2 prong cord)

NTN1179C Six Pocket, rapid rate, 240V (supplied with 3 flat prong cord)

MUC Accessories NLN7967A Wall Mount



### Motorola Conditioning Charger (MCC)

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. WPPN4002AR 110V AC Base Charge Unit Only (order adapter plate separately) WPPN4006AR 220V AC Base Charge Unit Only (order adapter plate separately) WPPN4065AR Multi-Unit **Conditioning Charger** Four Station Base 110V (order adapter plate separately) WPPN4004AR 7 Volt Adapter Only WPLN4090AR MCC Kit,

110V AC; includes both base unit and 7V adapter WPLN4091AR MCC Kit.



WPPN4002AR

220V AC; includes both base unit and 7V adapter 3080384G15 Cigarette Lighter Adapter Cord; MCC multi-unit conditioning charger



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-300-122-12



### HT1000, JT1000, MTX8000, MTX9000 (Also Compatible)



WPLN4079AR

### 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 test on batteries; tracking battery voltage and capacity (mAh).

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

WPLN4079AR Six Station, 110V AC, 50/60 Hz WPLN4080AR Six Station, 230V AC, 50/60 Hz

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

**BMS**<sup>Plus</sup> Adapter

**Batteries** 

TDN9435C Adapter Compatible with NiCd Batteries Only CDN6364A Adapter Compatible with Both NiCd and NiMH



TDN9435C

### Battery Optimizing System (BOS)

No other battery analyzer matches the speed, effectiveness, accuracy, versatility and ease-of-use of the Battery Optimizing System. Best of all, the Battery Optimizing System helps lower your battery costs because you will get the maximum performance possible from each battery when it is maintained by the Battery Optimizing System.

- Accommodates NiCd, NiMH, Li-Ion and SLA
- Impedance-test checks battery condition in six seconds
- Proprietary recondition cycle restores NiCd and NiMH batteries
- Printer output for reports and labels, computer interface
- High power—programmable from I00mA to 2 amp per station
- Interchangeable adapters accommodate all major batteries
- Simple, intuitive user interface with keypad (adapter sold separately)

WPLN4071AR Four Station, 110V AC, 50/60 Hz WPLN4073AR Four Station, 230V AC, 50/60 Hz



BOS Adapter RL-72403 Standard Adapter



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## Chargers and Antennas

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

### **Flexible Whip Antennas**

Antenna has a one-piece finish and steel core for optimal strength and better radiation characteristics. Provides more comfort when radio is worn on the belt. 8505241U05 Flexible Whip, 403-520MHz, 6" 8505241U03 Flexible Whip, 806-869MHz, 7" 8505241U04 Flexible Whip, 896-941MHz, 7"

### **Helical Antennas**

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

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

### **Dipole Antennas**

Dipole molded antennas are injection molded in lasting polyurethane. The wide skirt at the bottom of the connector protects against damaging environmental elements. The dipole antenna is ideal when strong and solid signal clarity is demanded.

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

### Wideband Antenna

Wideband antenna is ideal when radio is used in different frequencies since one antenna will cover all ranges. 8505518V01 Wideband, 136-174MHz. 6"

### Stubby Antenna

This quarterwave stubby antenna is ideal when radio is worn on the belt because the short antenna is non-obtrusive. This is a broad band and antenna that can be used for both 800MHz and 900MHz applications. 8505241U06 Stubby, 806-941MHz, 4"

8505644V04

8505241U06

8505241U05

8505644V03



8505644V01



8505884R02