

Replacement parts may no longer be available.



# Parts List

REF.		
NO.	PART NO.	DESCRIPTION
1		Assembly, Frame
2	NHN6419A	Kit, Housing; includes items 36 thru 51
3	NTN4956A	Kit, Front Cover; includes items
		45, 79 thru 86
4	3305260Q01	Nameplate, Front
6	1305564R01	Escutcheon, On/Off Volume
7	REX1151A	Kit, 99 Channel, Controller Flex;
		includes items 8, 9, 10, 13, 14, 67,
-		68, 69, 75, 77, 78
9		Assembly, Controller Flex; part of item 7
10		Shield, Center; Top Carrier Side;
11	0102706 100	part of item 7
12	0102706J99 0105951N79	Cover, Dust Assembly, Knob; Volume
14	01033311473	Shield, Center; Bottom Carrier Side;
17		part of item 7
15	0300136771	Screw, Phillips 2-56 x 3/16" (4 req'd)
16	1305563R01	Escutcheon, Display
	1305676R07	Escutcheon, 16 Channel
17	0405534R01	Washer, Flat; Octagonal (Volume Pot)
18	0205629L02	Nut, Hex; Volume Pot
19	0205163Q01	Nut, Spanner; Mode Select Switch
20	0405162Q02	Washer, Flat; Volume Pot
21	0405216L04	Washer, Flat, Antenna
22	0205764L02	Nut, Spanner
23	0205562R02	Nut, Plate
24 25	3205556R02	Seal, Nut Plate
23	0105958N64 0105951N41	Assembly, Control Top, 90 Channel Assembly, Control Top, 16 Channel
26	0305573R01	Screw, Phillips Hd.; 2-56 x 5/16"
27	3805558R02	Elastomer, Switch (2 req'd)
28	0405162Q01	Washer, Flat
29	7505561R01	Pad, LCD (2 req'd)
31	1805100Q04	Switch/Pot, On-Off/Volume (S1/R140)
32	3205141Q02	Gasket, "O" Ring; Control Top
33	3205141Q03	Gasket, "O" Ring; Mode Select Switch
34	3205082E01	Gasket, "O" Ring; Volume Pot
35	0300140369	Screw, Flat Hd.; 2-56 x 1/8" (5 req'd)
36	4605945K05	Contact Stud, Battery
37	3905237001	Contact, B+
38	3205082E24	Gasket, "O" Ring
39	RPX4636A	Battery Contact Replacement
41	2905124001	Lug (2 reg'd)
42 43	0400002625 4105944K01	Lockwasher, Split # (3 req'd) Spring, Battery Latch (2 req'd)
43 44	5505536P01	Latch
45	0300139444	Screw, Phillips; 2-56 x 5/32" (7 req'd)
46	3205082E03	Gasket, "O" Ring (2 reg'd)
47	6505214E05	Fuse (F1)
48	0400009761	Lockwasher, Split #4 (2 req'd)
49	0305941K01	Screw, Captive 4-40 (2 req'd)
		·

REF.		
NO.	PART NO.	DESCRIPTION
50	6405531P02	Plate, Base
51	4505535P01	Lever, PTT
52	0305137Q04	Screw, Phillips Hd.; 4-40 x 1/2 " (2 req'd)
53	0484345A06	Washer, Seal (2 reg'd)
56	3205231001	Seal, Dome (PTT); part of item 59
57	3205196Q01	Seal, Dome (Mon); part of item 59
58	3905834K04	Contact, Snap Dome; part of item 59
59	0105951N40	Assembly, B+/PTT Flex; includes items 56, 57, 58
64	0102704J74	Assembly, Main Back Shield, UHF
65	0300136783	Screw, Phillips Hd.; 2-56 x 5/16" (5 req'd)
67	0300138620	Screw, Phillips; 2-56 x 5/16" (2 req'd)
68	0905467R01	Jack (J2)
69	0905467R01	Jack (J1)
70	0105951P28	Assembly, Front Shield
71		Insulator, Flex
74 75	0105958N56	Assembly, Volume Pot Flex, 90 Channel
75 70	0905577P01	Jack (J3)
76	0105958N55	Assembly, Frequency Flex
77	0105950P96 0905577P01	Assembly, Frequency Flex, 16 Channel Jack (J4)
77 78	0905504R01	Jack (J4) Jack (J5)
70 79	3205141Q01	Gasket, "O" Ring
80	4205140Q01	Clamp, Speaker (3 req'd)
81	5005155Q03	Speaker (LS1)
82	6880309E50	Retainer, Microphone
83	1405299L01	Boot, Microphone; part of item 84
84	0102700J81	Assembly, Microphone Flex (MK1); includes items 81, 83, 89, and 90
85	7505564S01	Pad, Microphone Boot
86	7505501R03	Pad, Front Cover
87	0300132342	Screw, Phillips; 2-56 x 1/4"
88	3505152J01	Felt, Speaker
90		Cartridge, Microphone; part of item 84
91	4005101Q02	Switch (S3)
92	1405299 <b>Q</b> 01	Insulator, Speaker
93	7505501R02	Pad, Speaker
94		(P501) part of item 76
96	2605123S01	Shield, PC Board; Bottom
97		Assembly, Buffer Shield
98	0305103S01	Screw, Captive
99	3905178S01	Contact, Grounding
100	1405496R01	Insulator
101	0300139939	Screw, Phillips; 2-56 x 5/32"

Cancelled Product MT1000: Aftermarket support criteria has been met for spare parts. Items may no longer be available.





# Portable Accessories

# Chargers

Choose rapid or regular rate, single unit chargers or rapid rate, multiple unit charger. The rapid chargers are equipped with red and green lights to indicate rapid charging and charge complete. All desktop chargers will accept any of the battery sizes, with or without radio attached.



### Single Unit

**NTN4636A** Desktop, Regular Charge Rate, 220V, 50-60 Hz (supplied with 2-prong plug)

NTN4633C Desktop, Rapid Charge Rate, 117V

**NTN4634B** Desktop, Rapid Charge Rate 220V,50-60 Hz (supplied with 2-prong plug

## **Compact Chargers**

The charger's small size and light weight make it easy to transport.

**NTN4666B** Compact, Regular Charge Rate, 117V

**NTN4667A** Compact, Regular Charge Rate, 220V, 50-60 Hz (supplied with 2-prong plug)



# Chargers

### **Vehicular Chargers**

\*NTN5438A 12V DC, 16 Hour Charge Rate

**NKN6428A** 12V Cable Kit (Only required if not used with PAC◆RT)

**NTN5368A** RF Adapter, Utilizes Universal Connector (incompatible with audio accessories)



NTN5368A



NKN6408A RF Cable Kit

# **Charger Multi-Unit Mounts**

NLN7967A Wall Mount



NLN7967A

<sup>\*</sup> Not compatible with cable kits NKN6149A, NKN6150A, and NKN6151A





# Portable Accessories

# Battery Maintenance System Plus (BMS Plus)

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).

**WPLN4079BR** Six-Station, 110V AC, 50/60 Hz **WPLN4080BR** Six-Station, 230V AC, 50/60 Hz



BMS<sup>plus</sup> Adapter

TDN9441A Standard Adapter, MT1000

# 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 Adapters**

RL-71173 Standard Adapter, MT1000

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







# Portable Accessories

# 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.

**WPPN4009BR** 110V AC Base Charge Unit with adapter plates

**3080384G15** Cigarette Lighter Adapter Cord **RLN4814A** Mounting Bracket for single unit Motorola Conditioning Charger

# 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.



NTN5460B

## Standard

**NTN5460B** Leather Carry Case withT-Strap and Spacer, for High or Medium Capacity Battery (Snap)

### Swivel

**NTN5461B** Leather Carry Case withT-Strap, Spacer and 2-1/2" Swivel Belt Loop, for High or Medium Capacity Battery (Snap)

**NTN5883A** Leather Carry Case withT-Strap, Spacer, and Swivel Belt Loop for High or Medium Capacity Battery (Snap), Fits 3" Belt

**NTN5450B** Leather DTMF Swivel Carrying Case, Long (Snap), Fits 2-1/4" Belt

**NTN5884A** Leather DTMF Swivel Carrying Case, Long (Snap), Fits 3" Belt



NTN5461B

### **Carry Holders**

**NTN4814C** Belt Clip Carry Holder, Fits 2-1/4" Belt



# Portable Accessories

# Carrying Accessories

### Spacer

4305525R02 Spacer for Carry Case, Spare



**Chest Pack** 

**HLN6602A** Universal Chest Pack with radio holder, pen holder and velcro secured pocket

### 1505596Z02

Replacement strap for HLN6602

**RLN4570A** Break-A-Way Chest Pack; all of the same features as the original chest pack (HLN6602A) plus break-a-way tabs that allow that allow the entire pack to be pulled off with approximately 10 lbs of pressure.

#### RadioPAK™

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

**4280384F89** Universal RadioPAKTM belt lengthener; fits waists larger than  $40^{\circ\prime}$ 

### 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 2-3/4" **TDN9373A** Portable Radio Hanger, for Door Panels 2-3/4" to 3-1/4"

### **Belt Loops**

**4282421J06** Swivel Belt Loop, 2-1/2" **4205857B01** Swivel Belt Loop, 3"



4282421J06

# Carrying Accessories



**Belt Clips** 

NTN4916B Belt Clip, 1-1/2" NTN4924B Belt Clip, 2-1/4" NTN5602A Public Safety Size Belt Clip 3" Black Aluminum

#### Belt

4200865599 1-3/4" Belt, Black



4200865599

### Carrying Strap

NTN5243A Carrying Strap, Black



NTN5243A

# 7

4205386S01

### T-Strap

**4205386S03** T-Strap, Nylon for Leather Carrying Cases (Snap)

**4205386S01** T-Strap, Nylon for Leather Carrying Cases (Velcro)



**4205447R03** T-Strap, Urethane, for Carry Holder (Snap)

### 4205447R03

### **Button Back Cover**

NTN5497A T-Bar Button Back Cover Kit, Black







# Portable Accessories

# Audio Accessories

### Remote Speaker Microphone

Provides remote talk and listen capability. By attaching the microphone to the universal connector, located on the top of the radio, you can use the remote speaker microphone to transmit or receive while the radio remains comfortably on the belt or in the case.



**NMN6145B** Remote Speaker Microphone with Clip, Clip Cord and 2.5 mm Earphone Jack

NMN6156B Remote Speaker/Microphone with Clip and Coil Cord

**NTN5050A** Public Safety Remote Speaker/ Microphone with Velcro Back UHF Models Only (requires antenna and velcro patch, order separately)

**NTN5493A** Public Safety Remote Speaker Microphone with Clip Back, UHF Models Only (order required antenna separately)

# Antennas for Public Safety Speaker/Microphones

**8505309N09** Speaker/Microphone Antenna, 400-440 MHz

**8505309N10** Speaker/Microphone Antenna, 440-470 MHz

**8505309N11** Speaker/Microphone Antenna, 470-512 MHz



# **Audio Accessories**



**NLN8410A** Velcro Patch Pin Attachment

NLN8410A

## **Epaulet Strap**

Black leather epaulet straps secure remote speaker microphones to epaulet of shirts or jackets and attach around cord. Allows reliable communications in hostile environments with Velcro or clip style strap.





RLN4294A Epaulet Strap, Velcro

RLN4295A Epaulet Strap, Small Clip



# **Earpiece**

**5083693B01** Earpiece and Volume Control (requires NTN4812B 3.5mm Earpiece Jack Adapter)

**5083693B04** Earpiece and Volume Control (3.5 mm)

**5880378B84** 3.5 mm to 2.5 mm Jack Adapter



# Portable Accessories

# **Audio Accessories**

### Flexible Ear Receiver

BDN6717B Far receiver with 3.5 mm plug, to be used with adapter NTN4812





NTN4812B Earphone Jack Adapter

### Surveillance

NTN5075B Hirose Adapter for Two-and Three-Wire Surveillance Accessories

**ZMN6031A** Three-wire surveillance accessory with earpiece, microphone and push-to-talk as separate pieces. Factory Mutual Approved. Requires NTN5075B

**ZMN6032A** Two-wire surveillance accessory with earpiece, microphone and push-to-talk. Microphone and PTT are combined. Factory Mutual Approved. Requires NTN5075B





ZMN6032A

Single unit microphone and speaker worn in the ear. Eliminates the need for handheld microphones or conventional headsets. Compact. rugged design allows use under hearing protectors and protective clothing. Order cable separately.

RMN4001B Ear Mic

**Ear Mics** 



# Audio Accessories



0180359A39 Interface Cable

0180359A51 Optional PTT Ring Switch for RMN4001A only

0180356B97 Optional PTT Ring Switch for RMN4001B Only

#### 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



RLN4763A

**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





# Portable Accessories

# **Audio Accessories**

### Ear Microphone

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 95dB), Black

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





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

### Interface Module

**\*BDN6656B** Push-To-Talk Interface Module

**\*BDN6657B** Voice-Activated Interface Module

# Audio Accessories

### **Optional Accessories**

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

**0180300E25** Earguard with Adjustable Loop

**0180358B32** Earholder, Black, Size Small; Secures ear mic in ear



01 Se 01 Se

0180358B33

**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)

<sup>\*</sup> Intrinsically safe



# Portable Accessories

# Audio Accessories



### Headsets

High noise level headset (up to 125 dB) with noise cancelling microphone and push-to-talk switch located on ear cup. Vox module contained within headset on voice activated units. Factory Mutual Approved. *NOTE*: Can be worn with or without hard hat or fire helmet.

BDN6639A Radio Adapter Cable

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

**BDN6635B** Voice-Activated Headset with Boom Microphone, Requires Adapter Cable, Includes 110V Charger

**BDN6636B** Voice-Activated Headset with Throat Microphone, Requires Adapter Cable, Includes 110V Charger

**RMN4015A** Lightweight Headset with Swivel Boom Microphone, Single Speaker and In-line PTT



**0180357B05** Spare Vox Headset Charger **6881126E79** Instruction Manual for BDN6645A **6881126E78** Instruction Manual for BDN6635B and BDN6636B

# Vehicular Adapter

NSN6054A 12-Watt External Speaker



NSN6054A



HMN1056D

**HMN1056D** Microphone, Compact Palm

**HMN1035C** Microphone, Heavy-Duty Palm

HMN3013A Microphone, DTMF







# Antennas, Batteries

# Portable Antennas

### Heliflex Antenna

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

### Heliflex

#### \*NAB6064A

Heliflex, 30-50 MHz, 12"

### 8505816K22

Heliflex Molded, 136-150.8 MHz, 6.5"

### 8505816K21

Heliflex Molded, 150.8-162 MHz, 6"

### 8505816K23

Heliflex Molded, 162-174 MHz, 6"

### 8505816K24

Heliflex Molded, 403-433 MHz, 3"

### 8505816K25

Heliflex Molded, 440-470 MHz, 3"

#### 8505816K26

Heliflex Molded, 470-512 MHz, 3"





# Portable Batteries

### Nickel-Cadmium Premium

Part Number: NTN4823BR

Volts: 10 Avg. mAh: 550 Height: 2-7/16"

Intrinsically Safe: Yes



NTN4822BR

Part Number: NTN5447BR

Volts: 10 Avg. mAh: 1100 Height: 3-5/16"

Intrinsically Safe: No



NTN5447BR

Part Number: NTN5448BR

Volts: 10 Avg. mAh: 1100 Height: 3-5/16"

Intrinsically Safe: Yes

<sup>\*</sup>NAB6064A is an uncut antenna. Cutting instructions and chart supplied with anntenna



# Batteries, Tools

# Portable Batteries

### Nickel Metal Hydride Premium

Part Number: NTN7015A

Volts: 10 Avg. mAh: 950 Height: 2-7/16" Intrinsically Safe: No

### **Alkaline**

Part Number: NTN4870B

Volts: (NA)
Avg. mAh: 2100
Height: 3-1/4"
Intrinsically Safe: No

# Alignment Tool

### **Tuning Tool**

**6605106N01** Tuning Tool, Adjusts Tunable Coils, Preselector, Reference Oscillator Frequency, and Trimmer Capacitors

6605106N01

# Service Tools

# **Torque Screwdriver**



**RSX4043A** Torque Screwdriver, Order Bits Separately

**6680321B86** #0 Phillips Bit for Radio Screws

6680321B79 #1 Phillips Power Bit for Radio Screws

6680370B95 Spanner Bit, for Toggle Switch Spanner Nut

6680371B34 Spanner Bit, for Antenna Bushing

6680371B03 Nut Driver Bit for Volume Pot. Rotary Switch Nuts

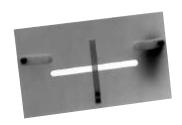






# Service Tools, Aids

# Service Tools



0180371B37

### Controller Flex Hold Down Fixture

Provides a secure mount for the MT1000 controller flex when removing and replacing I.C. chip carriers and chip components using the Surface Mount Service Center.

**0180371B37** Controller Flex Hold Down Fixture

# Service Aids

# **Cloning Cable**

Enables the frequencies, squelch codes, squelch and deviation settings to be duplicated from one radio to another. Only identical models and sub-models are compatible for cloning.

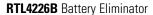


NKN6376A Cloning Cable

# Service Aids

### **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.





RTL4226B

### 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



0180357A57

### Wall Mounted Power Supply

Used to supply power to radio interface box RLN4008E.

RLN4008E

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

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



# Service Aids, Manuals

# 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



3080369B71

### Radio Test and Programming Cable

Used with Portable Radio Test Set, RTX4005, for transmitter, receiver alignment and performance checks. Also used in programming radio.

RTK4205C Test and Programming Cable



### **Controller Flex Extender**

Allows access to all electrical points on the controller flex and the interior of the RF board for troubleshooting purposes.

### **REN4000A**

Controller Flex Extender

# **Battery Adapter**

Replaces radio housing during servicing and provides easy mounting for battery eliminator, RTL4226A.

1580368B62 Battery Adapter



# Service Aids

### Field Modification Kit

Allows for quick field modification of RTX4005 "A" test sets to provide operation with the MT1000 Radio.

RPX4665A Field Modification, RTX4005A



### **Programming Software**

Utilizing your personal computer, this software enables you to add or reprogram frequencies as your requirements change. Compatible with IBM, XT, AT Model 30, 50, 60 and 80. Requires Radio Interface Box and proper cables, order separately.

**RVN4017K** Programming Software (includes manual and storage box)

# Manuals

6881067C40 VHF/UHF Service Manual
 6881061C35 Operating Instructions Manual
 0180305J46 Ear Microphone System and Temple

