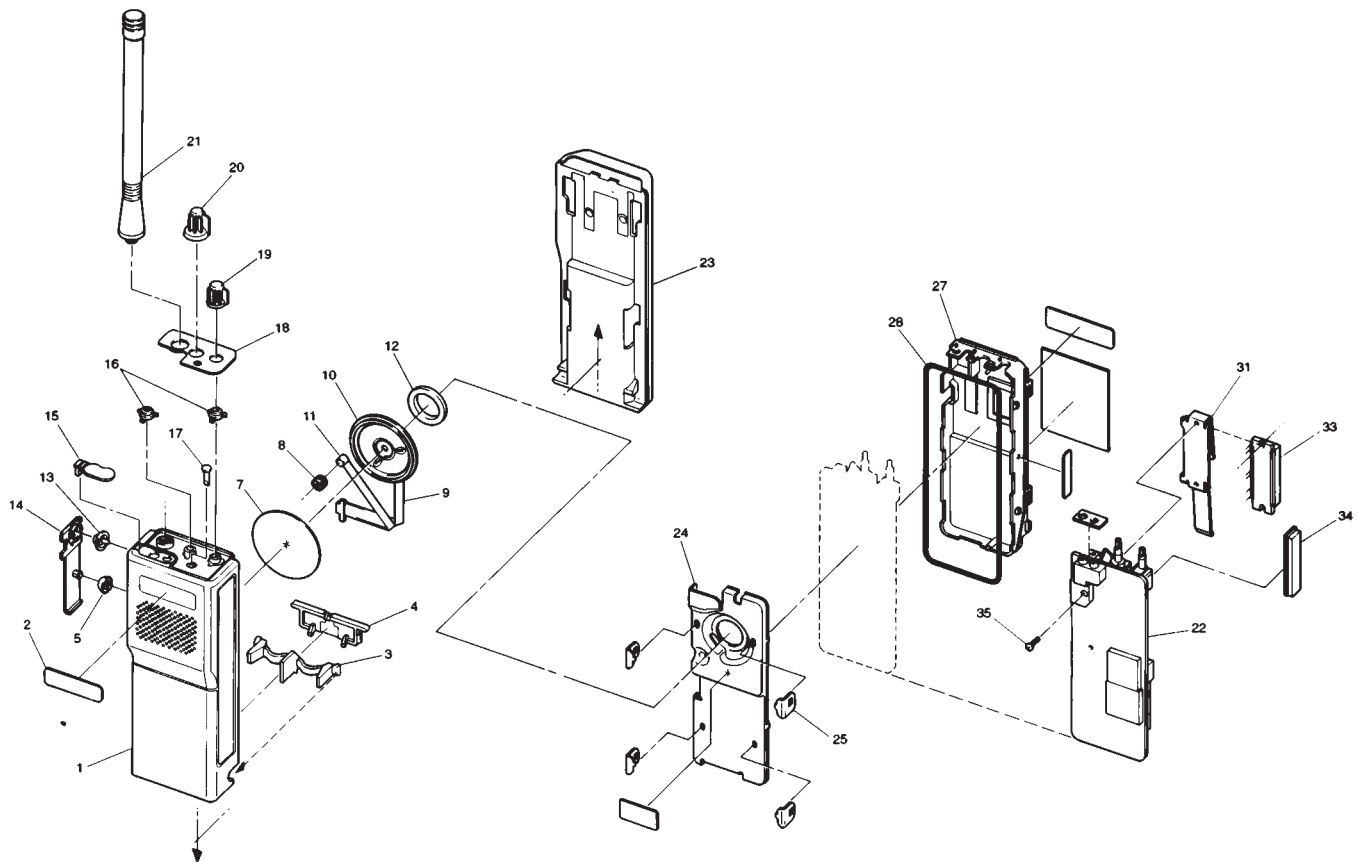




MOTOROLA

RADIUS P110 Series

Parts List



**MOTOROLA**

RADIUS P110 Series

Parts List

REF. NO.	PART NO.	DESCRIPTION
1	1580576B03	Housing, Radio
2	1380581B01	Label, Name
3	5580577B01	Battery Latch
4	6480585B01	Cover, Plate
5	3805296S01	Actuator, PTT
6	----	Not used
7	3580998Z04	Felt, Speaker
8	1405874T02	Boot, Mic.
9	3080560D01	Cable, Speaker/Mic.
10	5005589U05	Speaker
11	5080439B01	Microphone
12	7580107A02	Pad, Speaker
13	7580578B01	Monitor Key
14	1380580B01	Bezel, PTT
15	3880627C02	Dust Cap
16	3280960Y01	Seal
17	6180968Y01	Light-Pipe
18	1380582B01	Escutcheon, 2-Channel
	1380582B02	Escutcheon, 4-Channel
19	3680583B01	Knob, Volume
20	3680584B01	Knob, Freq., 2-Channel
	3680584B02	Knob, Freq., 4-Channel
21	----	Antenna (see accessories)

REF. NO.	PART NO.	DESCRIPTION
22	----	Main BD
23	----	Battery (see accessories)
24	2680532C01	Shield Front
25	4280190R04	Clip, Locking
27	2780549B01	Chassis
28	3280545C01	Gasket, Chassis
31	4280126S01	Clip, P.A.
33	----	P.A. Module
	VHF	
	5105385Y49	146-174 MHz
	UHF	
	5113829D03	403-433 MHz
	5105492X79	438-470 MHz
	5180110R03	465-495 MHz
	5180110R04	490-512 MHz
34	----	Receiver Module (for reference only)
35	0300136783	Screw

NON-REFERENCED ITEMS

2113740A41	33pF Chip capacitor soldered across the leads of the microphone (item 11).
3905468B01	Foil shield located on speaker magnet behind item 12.

American Communication Systems

Discover the Power of Communications™

TO ORDER—VISIT <http://www.ameradio.com>



MOTOROLA

RADIUS P110 Series 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.

HLN8153B Nylon Carry Case for Standard Battery

HLN9012A Leather Carry Case with Belt Loop for Standard Battery

HLN9013A Leather Carry Case with Swivel for Standard Battery

HLN9014A DTMF Leather Carry Case with Swivel for Standard Battery

Carry Holder

HLN9076B Carry Holder, Molded, Includes Belt Clip and 3" Spring Action



HLN9149AR

Waterproof Bag

HLN9985A Waterproof Bag with Wrist Strap

Belt Loop Adapter

HLN9149AR Belt Loop Adapter, Swivel (use with HLN8153B carry case)

Belt Clip

HLN9724A Belt Clip 2½"

HLN8255B Spring Action 3" Belt Clip

Belt Loop

4205857B01 Belt Loop, Swivel, 2"

HLN9035A Belt Loop, Swivel, 2½"



HLN6602A

Chest Packs

HLN8414A Chest Pack Carry Holder

HLN6602A Universal Chest Pack with Radio Holder, Pen Holder and Velcro Secured Pouch

1505596Z02 Replacement Strap for HLN6602A

CARRYING ACCESSORIES

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 RadioPAK™ belt lengthener; fits waists larger than 40"

Straps

NTN5243A Shoulder Carrying Strap, Adjustable

HLN8052A Wrist Strap

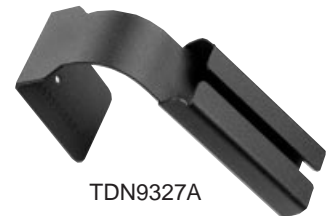
HLN9015A Replacement Strap for Leather Carry Cases



NTN5243A

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

TDN9327A Portable Radio Hanger for Door Panels up to 2¾"

TDN9373A Portable-Radio Hanger for Door Panels 2¾" to 3¼"

CONVERSION KIT

HLN9578A 25kHz to 12.5kHz conversion kit for P110

HOUSING KITS

HLN3005A 2-Channel Housing Kit with Speaker and Flex

HLN3006A 8-Channel Housing Kit with Speaker and Flex

HLN3044A 6-Channel Housing Kit with Speaker and Flex



MOTOROLA

RADIUS P110 Series Portable Accessories

CHARGERS

Choose from standard or rapid charge rates and single or multiple unit chargers. Also available in 110V, 220V or 240V.

Single Unit Standard

HTN9702A Single Unit, Standard Rate Charge, 120V

HTN9804A Single Unit, Standard Rate Charge, 220V (European Plug)

HTN9805A Single Unit, Standard Rate Charge, 240V (U.K. Plug)



HTN9702A

Rapid

Rapid chargers charge batteries in approximately one hour. Standard chargers charge batteries in approximately 16 hours.

HTN9042A Single Unit, Intellicharge* Rapid Rate Charge, 110V

HTN9043A Single Unit, Intellicharge* Rapid Rate Charge, 220V (European Plug)

HTN9044A Single Unit, Intellicharge* Rapid Rate Charge, 240V (U.K. Plug)

Multiple Unit

HTN9164B Multi-Unit, 90 Minute Charge, 110V

HTN9165A Multi-Unit, 90 Minute Charge, 220V

HTN9748C Multi-Unit, One Hour Rapid Rate Charge, 120V

HTN9811C Multi-Unit, One Hour Rapid Rate Charge, 220V (European Plug)

HTN9812C Multi-Unit, One Hour Rapid Rate Charge, 240V (U.K. Plug)



HTN9748C

CHARGERS

Multi-Unit Charger Conversion Kits

HLN9405A Multi-Unit Charger Conversion Kit, 120V (for use with HTN9167 and HTN9630)

HLN9406A Multi-Unit Charger Conversion Kit, 220V (for use with HTN9168 and HTN9802)

HLN9407A Multi-Unit Charger Conversion Kit, 120V (for use with HTN9803)



HLN9719A

Charger Adapter/ Bracket

HLN9719A Vehicular Charger Adapter/ Bracket, Rapid Rate Charge, 12 volt (for use with HTN9630, HTN9802, HTN9803, HTN9167, HTN9168, HTN9169, HTN9042, HTN9043, HTN9044)

Wall Mount

HLN9944A Wall Mount Bracket, Use with One Hour Multi-Unit Chargers (HTN9748, HTN9811 and HTN9812)

HLN9293A Wall Mount Bracket, Use with 90 Minute Multi-Unit Chargers

Vehicular Battery Eliminator

The battery eliminator helps save battery life by eliminating the need for a battery while in a vehicle.

NDN4014A Battery Eliminator



NDN4014A

American Communication Systems

Discover the Power of Communications™

TO ORDER – VISIT <http://www.ameradio.com>



MOTOROLA

RADIUS P110 Series Portable Accessories

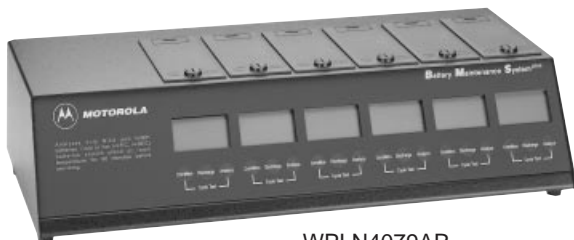
BATTERY MAINTENANCE SYSTEM^{PLUS} (BMS Plus)

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

Adapter

TDN9662A Standard Adapter, P110

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

Adapter

RL-71883 Standard Adapter, P110

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

WPPN4005AR 7 Volt Adapter only

WPLN4088AR MCC Kit, 110V AC; includes both base unit and 7V adapter

WPLN4089AR 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)



MOTOROLA

RADIUS P110 Series

Antennas

PORTABLE ANTENNAS

Heliflex Antennas

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

HAD9338AR

Heliflex, 136-162 MHz, 6"

NAD6502AR

Heliflex, 146-174 MHz, 6"

8505816K07

Heliflex Stubby,
400-440 MHz, 3"

8505816K09

Heliflex Stubby,
470-520 MHz, 3"



NAD6502AR



8505816K07

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.

NAE6483AR

Flexible Whip, 403-520MHz, 6"

PORTABLE ANTENNAS

Tunable VHF antenna

Tunable VHF antenna kit gives the best coverage.

HAD9728B

VHF Kit, 146-174MHz, 6"



HAD9728B

Stubby Antenna

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

HAD9742A

Stubby, 146-162MHz, 3"

HAD9743A

Stubby, 162-174MHz, 3"

8505816K08

Stubby, 438-470MHz, 3"



HAD9743A

American Communication Systems

Discover the Power of Communications™

TO ORDER – VISIT <http://www.ameradio.com>



MOTOROLA

RADIUS P110 Series

Batteries, Accessories

BATTERIES

Nickel-Cadmium

Part Number **HNN8148A**
Charge: Rapid
Volts: 7.5 V
Avg. MAH: 1200
Dimensions: 6"
FM Rating: (NA)



HNN8148A

Part Number **WPNN4042AR**
Charge: Rapid
Volts: 7.5 V
Avg. MAH: 1000
Dimensions: 6"
FM Rating: (NA)

Part Number **WPNN4039AR**
Charge: Rapid
Volts: 7.5 V
Avg. MAH: 1200
Dimensions: 6"
FM Rating: (NA)

Nickel Metal Hydride

Part Number **WPNN4041AR**
Charge: Rapid
Volts: 7.5 V
Avg. MAH: 1600
Dimensions: 6"
FM Rating: (NA)

AUDIO ACCESSORIES

Remote Speaker Microphone

Provides remote transmit and receive capability conveniently while radio remains in the case.

HMN9030A Remote Speaker Microphone with Coil Cord and Clip Back

HKN9094A Replacement Cord for HMN9030A



HMN9030A

Epaulet Strap



RLN4295A

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.

RLN4295A Epaulet Strap, Small Clip

Surveillance Accessories

Surveillance accessories allow the user to privately receive communications with the earpieces and are ideal for covert operations.

HMN9727BR Earpiece Without Volume Control

HMN9752BR Earpiece With Volume Control

HMN9754DR Two-piece Surveillance Microphone, Push-To-Talk and Microphone are Combined in One Piece

5080386B90 Rubber Ear Inserts for Surveillance Accessories (25 per pack)

BDN6720A Flexible Ear Receiver



HMN9754DR



MOTOROLA

RADIUS P110 Series Audio 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

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.



BDN6706B

BDN6646C* Ear Microphone for Standard Noise Levels (Up To 95 dB) With Push-To-Talk Interface Module

BDN6706B Ear Microphone for Standard Noise Levels (Up To 95 dB) With Voice-

Activated Interface Module

Optional Accessories

0180358B38*
Remote Push-To-Talk
Ring Switch



0180358B38

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)

American Communication Systems

Discover the Power of Communications™

TO ORDER – VISIT <http://www.ameradio.com>



MOTOROLA

RADIUS P110 Series Audio Accessories

AUDIO ACCESSORIES

Optional Accessories (cont'd)



0180358B33

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

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

Headsets

The broad line of headsets allows you to choose the right product for your application.

HMN9013A Lightweight Headset with Swivel Boom Microphone, Single Speaker. Radio PTT Button must be pressed to transmit.



HMN9013A

AUDIO ACCESSORIES

RMN4016 Lightweight Single Muff Headset with Swivel Boom Mic for left or right ear operation and in-line PTT button is FM and CE approved. **NOTE:** VOX must be turned off in the RSS (Radio Service Software) for the RMN4016 headset to operated with the radio.

5005125R02 Replaceable Ear Pad

BDN6647F Medium Weight Headset with Boom Microphone, Single Speaker. PTT Button on radio must be pressed to transmit.

BDN6648C Heavy Duty Headset with Noise Cancelling Boom Microphone, For Use Under Hardhat

HLN8096A Audio Accessory Security Clamp

HMN9021A Medium Weight, Over-the-Head Dual Muff Headset

HMN9022A Medium Weight, Behind-the-Head Dual Muff Headset; can be worn with hardhat



BDN6648C



MOTOROLA

RADIUS P110 Series Service Aids, Manuals

SERVICE AIDS

Radio Interface Box (RIB)

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 a 9 volt snap type battery (6088278J01), order separately.



RLN4008B

RLN4008B Radio Interface Box

Computer Interface Cable

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

3080369B71 Cable, RIB to 25 pin D

3080369B72 Cable, RIB to 9 pin D



3080369B71

Wall Mounted Power Supply

Used to supply power to the radio interface box, RLN4008B

0180357A57 Wall Mounted Power Supply, 110 Volts

0180358A56 Wall Mounted Power Supply, 220 Volts



0180357A57

SERVICE AIDS

Cloning Cable

HKN9755A Allows the radio to be duplicated from a master radio by transferring programmed data from one radio to another

Programming/Test Cable

HKN9857A Connects radio to RIB and can be used as a Battery Eliminator

AT to XT Computer Adapter

RLN4438A Allows 3080369B72 to plug into a XT style communications port

Test Set Cable

RKN4034 Connects radio to RTX4005 Test Box

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.

HVN9852J Programming Software, 3½" and 5¼" diskettes (includes manual and storage box)

REFERENCE MANUALS

6880902Z30	Service Manual
6880902Z28	Operator Manual

American Communication Systems
Discover the Power of Communications™

TO ORDER—VISIT <http://www.ameradio.com>