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AF4-04-008Rev.3



Accessories for a Customised Communication Solution

For Motorola Professional Series Portable Radios

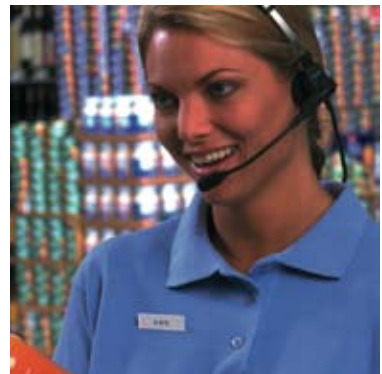


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Accessories for a Customised Communication Solution

For Motorola

GP328/GP338, GP329/GP339 & PTX700/760/780

Professional Portable Radio Series

2-way communication adds value to your work operations by integrating all functions seamlessly and delivering the right information to the right people at the right time.

Turn your professional radio system into a complete communications solution. Adding the proper accessories enhances the utility and productivity of your 2-way radio. Each Motorola original accessory ensures peak performance to match the standards you demand.



Batteries

Motorola original batteries are available in a variety of chemistries and capacities, designed to work hand-in-hand with your 2-way radios to ensure optimised performance and safety for your business.

NICKEL METAL-HYDRIDE

Part Number **PMNN4008AR**
(comes with spring clip HLN9844)
Capacity/ Size: High cap / standard
Avg mA: 1450mA
Dimension: 55 x 125 x 20 mm

Part Number **PMNN4045BR (MAG ONE)**
Capacity/ Size: High cap / standard
Avg mA: 1400mA
Dimension: 55 x 125 x 20 mm

Part Number **PMNN4009BR**
(comes with spring clip HLN9844)
Capacity/ Size: Ultra-High / standard
Avg mA: 1900mA
Dimension: 55 x 125 x 22 mm

Part Number **HNN9010AR**
Capacity/ Size: Ultra-High / standard
Avg mA: 1900mA
Dimension: 55 x 125 x 22 mm
FM Rating#: IS & NI

NICKEL CADMIUM

Part Number **PMNN4012BR**
(comes with spring clip HLN9844)
Capacity/ Size: High cap / standard
Avg mA: 1550mA
Dimension: 55 x 123 x 20 mm

Part Number **HNN9011BR**
Capacity/ Size: High cap / standard
Avg mA: 1550mA
Dimension: 55 x 125 x 20 mm
FM Rating#: IS & NI

LITHIUM-ION

Part Number **PMNN4023CR**
(comes with spring clip HLN9844)
Capacity/ Size: High cap / slim
Avg mA: 1500mA
Dimension: 55 x 125 x 16 mm

* Important note: PMNN4008_R and PMNN4023_R are NOT APPLICABLE for use with GP328/338 low band radios.

IS – Intrinsically safe (Div 1, Class I, II, III, Groups C, D, E, F, G)

NI – Non-incentive (Div 2, Class I Groups A, B, C, D)

ALKALINE CLAMSHELL BATTERY

Catering for radio users operating in remote areas without access to power source, this clamshell battery is powered by 12 “AA” alkaline cells for “always-on” communication.

The duty-cycle operation time at 5-5-90 is 10 hour (5 W Tx) and 30 hour (1 W TX) respectively which provides sufficient talk-time during remote emergency operation.

NNTN5332A Alkaline Clamshell Battery

Recommended AA Alkaline cells :

Part Number **6005310A01**
AA Cell, 4/PK Duracell
6080390B60
AA Cell, 4/PK Energizer

impres™ BATTERIES

impres batteries, when used with an impres charger, provide automatic, adaptive reconditioning, end of life display, and other advanced features. Data is stored in the battery and communicated to the charger via a unique impres communication protocol which is designed to maximize talk time and optimize battery cycle life – all automatically.

impres™ NICKEL METAL-HYDRIDE

Part Number **HNN4001A**
Capacity/Size: Ultra-High / standard
Avg mA: 1900mA

Dimension : 55 x 125 x 23 mm

Part Number **HNN4002A**
Capacity/Size: Ultra-High / standard
Avg mA: 1800mA
Dimension : 55 x 125 x 23 mm
FM Rating# : IS & NI

impres™ LITHIUM-ION

Part Number **HNN4003A**
Capacity/Size: Ultra-High / standard
Avg mA: 2000mA
Dimension : 55 x 125 x 23 mm



PMNN4008*
HLN9714 (order separately)



HNN9010



PMNN4023*
(not shown with clip)



NNTN5332



HNN4001



HNN4002

Charging Accessories

Designed to work as a total system with the 2-way radio and battery, Motorola original chargers maximise the battery life and keep batteries in tip-top condition. Choose from the single tri-chemistry single/multi unit charger to the sophisticated 6-slot battery maintenance system that provides battery health diagnostic and re-conditioning capabilities.

SINGLE UNIT TRI-CHEMISTRY, RAPID RATE

Utilise an enhanced charging algorithm that helps maximise the life of your batteries. Compatible for NiCd, NiMH and Lilon batteries. Nickel-based batteries will be fully charged in approximately 90 minutes (depending on battery capacity). Full charging of Lilon batteries may take approximately 3 hours. Allows battery only or radio/battery combination charging.

PMTN4024A **Single Unit Rapid Charger**
110V – US plug

PMTN4025A **Single Unit Rapid Charger**
230V – Euro plug

PMTN4026A **Single Unit Rapid Charger**
230V – UK plug

SINGLE UNIT CONDITIONING CHARGERS

Utilise enhanced pulse charging interspersed with regular discharge pulse current to minimise “memory-effect” and overheating of NiCd and NiMH batteries. A standard capacity battery takes approximately 90 minutes for a full charge. Pulse maintenance charging after a full charge maintains peak capacity for the battery.

WPLN4107BR **Single Unit Conditioning Charger**
110V –US plug (Battery adapter included)

WPLN4106BR **Single Unit Conditioning Charger**
230V –Euro plug (Battery adapter included)

3080384G15 **Cigarette Light Adapter**



WPPN4065BR



PMTN4025BR



WPLN4106BR

4-SLOT CONDITIONING CHARGERS

Choose also from the four slot multi-conditioning chargers that utilises regular pulse current to minimise “memory-effect” and overheating of Nickel-Based batteries. Full charging in approximately 90 minutes. Batteries must be removed from radios to perform conditioning charging since radio contacts must be used.

WPPN4065BR **4-Slot Multi Conditioning**
110V –US cord (Battery adapter not included)

WPPN4076BR **4-Slot Multi Conditioning**
230V –Euro cord (Battery adapter not included)

WPPN4082BR **GP328 Battery Adapter**
(Order separately)

impres™ SMART ENERGY SYSTEM

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. Its 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. Although complete smart features are realised only when using impres batteries and chargers, together impres chargers can also handle legacy batteries; in fact, the multi-unit chargers can simultaneously charge legacy and impres batteries.

impres™ SINGLE UNIT CHARGER

WPLN4182A impres™ Single Unit Charger 110V US Plug

WPLN4183A impres™ Single Unit Charger 230V UK Plug

WPLN4184A impres™ Single Unit Charger 230V EU Plug

WPLN4185A impres™ Single Unit Charger AUST Plug

impres™ MULTI-UNIT CHARGER

WPLN4187A impres™ Multi-unit Charger US Cord

WPLN4188A impres™ Multi-unit Charger UK Cord

WPLN4189A impres™ Multi-unit Charger EU Cord

WPLN4190A impres™ Multi-unit Charger AUST Cord

WPLN4145A impres™ Multi-unit Charger KOREA Cord



WPLN4182A



WPLN4187A

impres™ MULTI-UNIT CHARGER WITH DISPLAY MODULES

Motorola's impres multi-unit chargers are now available with a two line LCD display module that communicates important information. Charger Display Modules provide powerful "real time" analyzing information for impres batteries, including current charge status (charging or reconditioning), current battery mAh; percent rated capacity, battery voltage; battery kit number; battery serial number; battery chemistry; time remaining to charge complete; forecast number of cycles to next reconditioning; and more.

- WPLN4192A** impres™ Multi-unit Charger with Display Modules US Cord
- WPLN4193A** impres™ Multi-unit Charger with Display Modules UK Cord
- WPLN4194A** impres™ Multi-unit Charger with Display Modules EU Cord
- WPLN4195A** impres™ Multi-unit Charger with Display Modules AUST Cord
- WPLN4146A** impres™ Multi-unit Charger with Display Modules KOREA Cord



WPLN4192A



impres™ INDIVIDUAL CHARGER DISPLAY MODULE

These modules are designed to be retrofittable with the standard impres™ Multi-Unit Charger (WPLN4192/3/4/5/6). Up to six modules can be purchased per charger, one for each charging pocket. Includes detailed installation instructions.



RLN5382A

- RLN5382A** **Charger Display Module**

Vehicle Accessories

MOBILE VEHICLE ADAPTERS

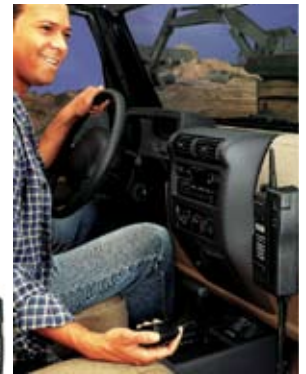
This range of vehicle adapters is specially designed for the use of portable radios in a mobile environment. Once installed in a vehicle, the portable turns into a virtual mobile radio. Key features include in-vehicle charging and power, innovative antenna adapter (frequency dependent) to provide extended coverage, in-vehicle programming capability and hands-free accessibility. For proper installation and software configuration, the ENLN4114 product manual must be ordered separately.

- EN1006A** **VHF Vehicle Adapter** (136MHz – 174MHz)
- EN1007A** **UHF Vehicle Adapter** (403MHz – 470MHz)
- EN1008A** **UHF Vehicle Adapter** (450MHz –527 MHz)

Above vehicle adapter models include ENLN4103 (136MHz –174MHz) or ENLN4104 (403MHz–470MHz) or ENLN4111 (450–527 MHz) antenna adapter respectively. Not compatible with impres batteries.

Battery spaces for different radio/battery sizes, installation kit, mounting bracket and user guide are all included in the package.

- GMN6146A** **Handheld Microphone**
- ENLN4114A** **Vehicle Adapter Product Manual**
- GSN6059A** **External Speaker, 13 W**



EN1006A

TRAVEL CHARGER

This 2-in-1 innovative travel charger combines the function of the battery eliminator and allows you to charge your battery. This keeps your portable working immediately when you need to operate away from the vehicle. With an audio accessory, it can be turned into a hands-free vehicle solution. The travel charger complete kit consists of a charger base, cigarette lighter adapter, a mounting bracket and an instruction manual.

- RLN4883A** **Travel Charger**



RLN4883A



Battery Maintenance System Plus (BMS Plus)

Using interchangeable battery adapters (sold separately), the BMS Plus is capable of charging and discharging, analysing, conditioning and performing cycle tests on batteries through tracking the battery's voltage and capacity (mAh).

Latest enhancements include a software upgrade on the equipment to safely charge and analyse Lithium Ion batteries using specified Lilon adapters. This six station BMSPlus can support hundreds of 2-way, cellular and camcorder batteries.

WPLN4079BR Six Station, Battery Maintenance System Plus
110V AC, 50/60Hz –US cord

WPLN4080BR Six Station, Battery Maintenance System Plus
230V AC, 50/60Hz – Euro cord

WPLN4081BR Six Station, Battery Maintenance System Plus
230V AC, 50/60Hz – UK cord

BMS PLUS ADAPTERS#

WPPN4079AR Battery Adapter (NiCd & NiMH)

WPPN4080AR Battery Adapter (NiCd, NiMH, Lilon compatible)

WPLN4085AR Lilon Field Upgrade Kit
(micro, extraction tool, manual)
For upgrading of WPLN4079AR / WPLN4080AR / WPLN4081AR.

#Belt clip may need to be removed from the battery to fit the adapters



WPPN4079AR



WPLN4080BR



Audio Accessories

Motorola's range of audio accessories integrates perfectly with the radio to provide a personalised two-way radio solution. Built to highest quality standards, Motorola accessories are specially engineered to ensure maximum performance of your radio.

Designed as a complete solution, our extensive range of audio accessories from remote speaker microphone, headset, covert surveillance kits and special application accessories provide you the flexibility of hands-free operations and personal safety.

SMART REMOTE SPEAKER MICROPHONE

Ideal for firefighters, police and other public safety professionals, this remote speaker microphone lets users talk and listen without removing the radio from the belt, case or charger. Designed with an exceptionally rugged housing for harsh environmental conditions. Controls include a Push-to-talk (PTT) Button and Hi-Low Volume Control. Includes coiled cord, clothing clip, and audio jack.

RMN5055A Heavy Duty Remote Speaker Microphone



RMN5055A



PUBLIC SAFETY MICROPHONE (PSM)

These public safety microphones are specially designed to cancel ambient noise during transmission. The integrated antenna provides additional antenna height for a better radiation pattern. Ideal for public safety, eg. Patrol police and emergency services. Plug in the optional receive-only earpiece to enjoy confidential listening without broadcasting the message.

AAHMN9054D UHF Public Safety Microphone

(includes UHF antenna, swivel chip, straight cord, volume toggle switch and 3.5mm jack.)

AAHMN9057D VHF Public Safety Microphone

(includes VHF antenna, swivel chip, straight cord, volume toggle switch and 3.5mm jack)

AARLN4885B Receive-only earpiece with 3.5mm plug

PMLN4620A D-Shell Receive-only earpiece with 3.5mm plug



D-Shell PMLN4620

REMOTE SPEAKER MICROPHONE

Remote speaker microphone provides greater operational flexibility to transmit and receive messages without removing the radio from the belt or carrying case. It performs even in noisy environments and is suitable for public safety, manufacturing, logistics and service industries. Plug in the optional receive-only earpiece to enjoy confidential listening without broadcasting the message.

PMLN4694A Remote Speaker Microphone

PMMN4021A Remote Speaker Microphone with 3.5mm Jack Audio

PMMN4027A Remote Speaker Microphone (IP57)

PMLN4620A D-Shell Receive-only earpiece with 3.5mm plug



PMLN4694

STANDARD EARPIECE/EARSET

Standard earpiece/earset provides hands-free mobility that matches your business budget. It also enhances the level of professionalism and image that customers expect from any organisation. It is suitable for users in retail, hotel, catering, hospitality and catering services.

PMLN4418B Earbud with combined Microphone / Push-To-Talk (PTT)

PMLN4653A D-hook Earset with flexible Microphone tube

Small earpiece that fits comfortably in the ear to ensure private conversations without being overheard. A clip-on thumb style, compact Microphone/PTT allows users easy access to conduct conversations.



PMLN4653A

FLEXIBLE EAR RECEIVER

The Flexible Ear Receiver contains a flexible ear-loop and speaker and rests external to the ear. Receive only.

ENMN4013A Flexible Ear Receiver

7580372E11 Replacement Foam Ear Cushions



ENMN4013

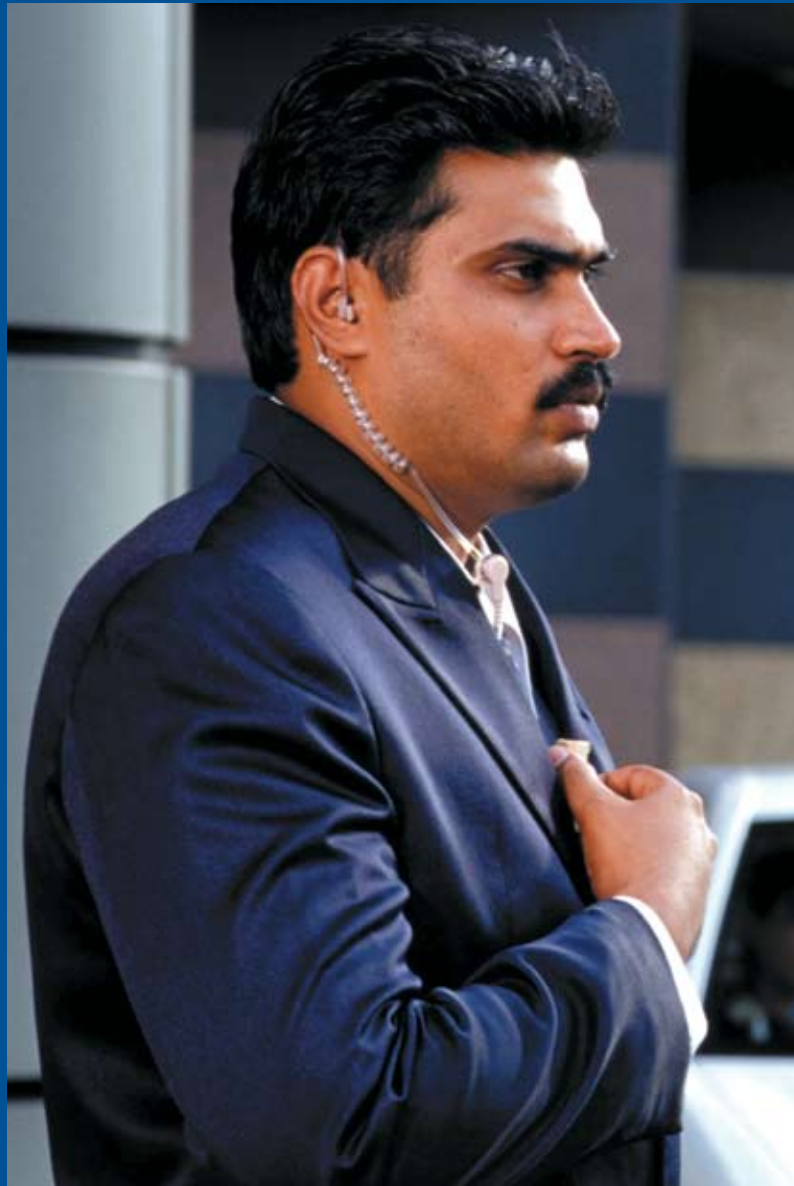
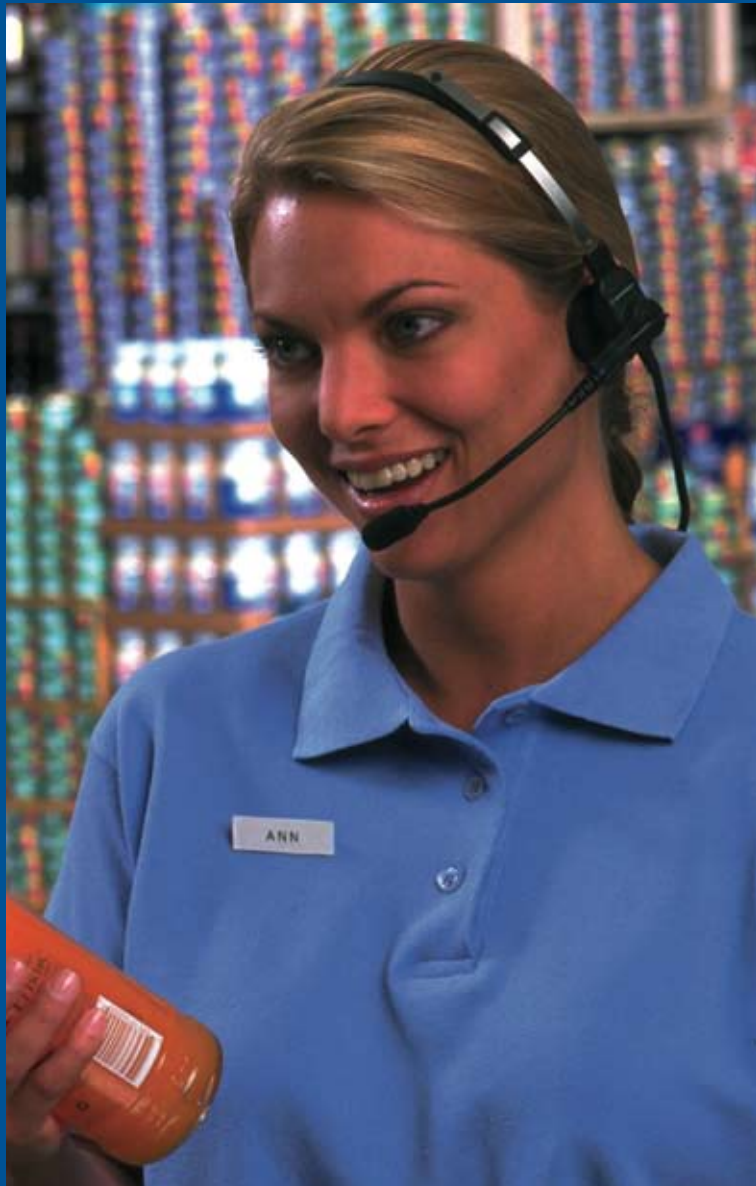


0180358B38
AZRMN4045
BDN6677

Remote Ring PTT Switch
VOX/PTT Radio Interface Module
Standard Ear Microphone (Black)

PMLN4694

Remote Speaker Microphone



AZRMN4018 Light Weight Headset with Boom Mic & In-line PTT



AZRMN4022 2-wire Surveillance Kit

HEADSETS

For moderate/noisy environments in high activity operations, the headset is designed to secure firmly on the head, an ideal companion for your hands-free needs. Choose from the light weight headsets that are suitable for use in low noise environment to the heavy duty headsets equipped with hearing protection.

LIGHT WEIGHT HEADSETS

The light weight headset sits firmly over the ear and ensures user comfort for prolonged communication. It is most suitable for users in entertainment, retail, sports and logistics industries.

AARMN4017A Ultralite Headset with Boom Microphone, earbud style receiver

ENMN4012A Behind-the-head Ultralite Headset (In-line PTT)

AZRMN4031A Light Weight Headset with Swivel Boom Microphone (compatible with internal VOX)

AZRMN4018A Light Weight Headset with Boom Microphone and In-Line PTT

MEDIUM DUTY HEADSETS

Medium duty dual-muff headsets offer hearing protection for consistent and clear two-way communications in harsh and noisy situations. Available in "over-the-head" designs, they are suitable for construction, manufacturing, petrochemical and air transport industries.

AZRMN4032A Medium Weight Dual-Muff Headset with Swivel Boom Microphone (over the head – 24dB noise reduction compatible with internal VOX)

AZRMN4019A Medium Weight Dual-Muff Headset with Swivel Boom Microphone and In-Line PTT (over the head – 24dB noise reduction)

ENMN4016A Medium Weight Behind-the-head headset with Swivel Boom Microphone and In-line PTT

HEAVY DUTY HEADSET

The Heavy-duty headset includes a noise-cancelling boom microphone with good hearing protection and external VOX function. This headset allows flexible "over-the-head" or "behind-the-head" fitting, can be worn with or without a hardhat and is suitable for use in noise levels up to 125dB. Suitable for mining, petro-chemical, marine and air transport industries.

AZRMN4020B Heavy Duty Headset with Noise-Cancelling Boom Microphone

RACING HEADSET

This heavy-duty headset can be worn with most hardhats. Ideal for high noise environments; racing teams like CART® use it in the pits for dependable communication. Adapter Cable required.

RMN5015A Racing Headset - Heavy Duty, behind the head Headset Noise Cancelling Swivel Boom Microphone. Noise Reduction Rating 24dB (adapter cable required and sold separately)

RKN4091A Racing Headset Adapter Cable

HARDHAT MOUNT HEADSET

Ideal for two-way communication in extremely noisy environments. Dual-muff, tactical headsets include 2 microphones on outside of earcups which reproduce ambient sound back into headset. Easily replaceable ear seals are filled with a liquid and foam combination to provide excellent sealing and comfort. 3-foot coiled cord assembly included. Noise reduction rating of --

RMN4051A Hardhat Mount Headset; Provides 22db of noise reduction; dual muff (adapter cable required and sold separately)

RKN4097A Hardhat Mount and Tactical Headset Cable of In-line PTT adapter for use with RMN4051 / RMN4053 / RMN4052



AZRMN4018



AZRMN4032



AZRMN4020



RMN5015



RMN4051

TACTICAL MEDIUM WEIGHT HEADSETS

Ideal for two-way communication in extremely noisy environments. Dual-muff, tactical headsets include 2 microphones on outside of earcups which reproduce ambient sound back into headset. Harmful sounds are suppressed to safe levels, and low sounds are amplified up to 5 times original level, but never more than 82dB. Has on/off volume control on earcups. Easily replaceable ear seals are filled with a liquid and foam combination to provide excellent sealing and comfort. 3-foot coiled cord assembly included. Adapter Cable required. Hardhat not included.

- RMN4052A** Tactical Headband Style Headset with Boom Mic Grey ;Noise Reduction Rating of 24db; (adapter cable required and sold separately) RMN4052
- RMN4053A** Tactical Hardhat Mount Headset, Grey; Noise Reduction Rating of 22db; (adapter cable required and sold separately)
- RKN4097A** Hardhat Mount and Tactical Headset Cable of In-line PTT adapter for use with RMN4051 / RMN4053 / RMN4052



RMN4052A

Surveillance Kits

Surveillance kits are unobtrusively designed, making them the ideal audio accessories for effective communication in covert operations. Most suitable for security forces, special intelligence, military, law enforcement and public safety.

COVERT SURVEILLANCE KITS

Surveillance kits come in beige or black colours and can be easily concealed and camouflaged to allow discrete communications. The earpiece is designed with expandable flexibility for use with optional accessories (noise kits/wireless discrete earpiece) to enhance discrete and mission critical operations.

1-wire Surveillance Kits provide only listening capability making them suitable for users who only need to receive instructions/messages.

- AZRMN4021A** 1-wire surveillance earpiece (Beige)
- AZRMN4028A** 1-wire surveillance earpiece (Black)

2-wire Surveillance Kits are equipped with combine microphone and PTT in a single housing for receiving and transmission of messages.

- AZRMN4022A** 2-wire surveillance earpiece with combined microphone/PTT (Beige)
- AZRMN4029A** 2-wire surveillance earpiece with combined microphone/PTT (Black)
- PMLN4607A** 2-wire surveillance kit with clear acoustic earpiece

3-wire Surveillance Kits come with a separate earpiece, microphone and a remote palm PTT that make them versatile and convenient for users to wear and communicate without being seen.

- ENMN4017A** 3-wire surveillance earpiece with separate microphone and Palm PTT (Beige)
- ENMN4014A** 3-wire surveillance earpiece with separate microphone and Palm PTT (Black)

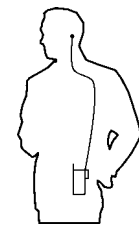
OPTIONAL ACCESSORIES FOR SURVEILLANCE KIT NOISE KITS

Ultra-light acoustic transparent tube that attaches to the surveillance kits by removing the existing earpiece. Clothing clip prevents the accessory from being pulled from the ear due to body movement or head-rotation.

- NTN8371A** Low Noise Kit. Includes rubber ear tip for low noise environments.
- NTN8370A** Extreme Noise Kit. Includes 2 foam ear plugs for noisy environments and provides 24dB of noise reduction.



AZRMN4021



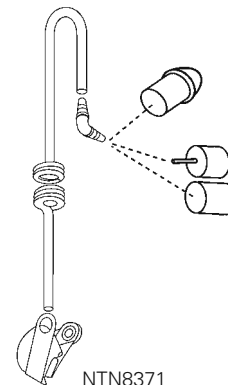
AZRMN4029



PMLN4607A



ENMN4017



NTN8371



NTN8370



WIRELESS DISCRETE EARPIECE

Enables users to communicate with ease, in full privacy, without any visible devices or wires. This miniature receiver is discretely hidden and fits the ear comfortably for extended use. It offers a full range of audio functions including automatic squelch, gain control and noise filtering.

Available in a kit that includes a wireless receiver and an inductive loop. For use, simply remove the earpiece on any standard 2 or 3-wire Motorola surveillance kit (sold separately) and plug in the neck loop. Spare batteries and earwax guards are also included.

RLN4922A Wireless Discrete Earpiece



RLN4922A

Ear Microphone System (Voiceducer)

This integrated earpiece/microphone utilises ear bone conduction to transmit voice thereby minimising external noise interference. The miniature earpiece/microphone enables hands-free operations and leaves the user's face unobscured especially when worn by personnel during rescue operations.

Two radio interface modules – PTT radio interface module or VOX/PTT radio interface module must be used with the integrated earpiece/microphone to operate the complete system. The latter VOX/PTT module allows total hands-free without the need to PTT (push-to-talk) by utilising the external VOX (Voice Activated Transmission) feature. Choose also from optional remote PTTs (ring PTT or body switch PTT) to increase the functionality of the ear microphone system.

Ideal for listening and speaking in high noise environment and applications that require wearing of breathing apparatus and protective masks. Target markets include Armed Forces, Police SWAT team, military defence teams, security teams, chemical rescue and industrial organisations.

BDN6677A Standard Ear Microphone (Black). For noise levels up to 95dB

BDN6678A Standard Ear Microphone (Beige). For noise levels up to 95dB

BDN6641A High Noise Ear Microphone (Grey). For noise levels up to 105dB

AZRMN4044A PTT only Radio Interface Module

AZRMN4045A VOX/PTT Radio Interface Module

0180300E83 Remote Body PTT Switch (Optional)

0180358B38 Remote Ring PTT Switch (Optional)



AZRMN4045 & BDN6677
(VOX/PTT Interface module shown with Ear Mic)



AZRMN4045 (VOX/PTT Interface module)



0180358B38

Commport Integrated Ear Microphone/Receiver System

This state-of-the-art Commport system contains a miniature microphone and receiver employing the latest sound wave and digital processing technology. Major benefits are superior sound quality and clarity as well as extreme comfort even for extended wear to hear and speak in high noise backgrounds. Available in different configurations (radio PTT adapter, ring PTT, palm PTT), the Commport system's robust construction is suitable for fire in the neck loop. Spare batteries and earwax guards are also included.

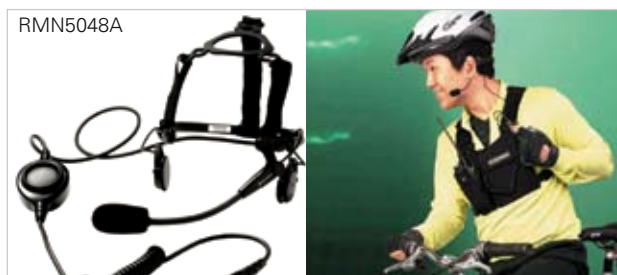
- NTN1724A** **Integrated Ear Microphone/Receiver System (Ring PTT & AAHLN9717A)**
- NTN1723A** **Integrated Ear Microphone/Receiver System (Palm PTT & AAHLN9717A)**
- NTN1722A** **Integrated Ear Microphone/Receiver System (Radio PTT Adapter & AAHLN9717A)**
- NTN1737A** **Integrated ear Microphone/Receiver System (Snap-on-side PTT & AAHLN9717A)**
- NNTN4187A** **Integrated ear Microphone/Receiver System (Body PTT adapter & AAHLN9717A)**
- NTN8986A** **Adhesive pads** (qty = 90)
for secure attachment to ear
- NTN8988A** **Ear Straps** (qty = 10)
for secure attachment to ear



NTN1724



ENMN4010



RMN5048A

Hands-Free Accessories for Special Applications

HELMET-COM AND NOISE-COM

The latest helmet-com is specially designed for users wearing any type of helmet (fire rescue, riot police, motorcycle, police troops) operating in harsh and hazardous conditions. Utilising a skull bone conduction microphone and effective speaker via a patented bracket system, it is connected to the 2-way radios via a large rugged fire retardant PTT that provides the electronic "brain" to optimise the amplification and acoustic filtering of the bone conduction microphone. This low profile PTT also meets water (splash) proof (IP55) and intrinsically safe standards.

The noise-com provides a cost effective, flexible, non-personal solution for users with existing hearing protectors/ear muffs operating in noisy environments. The noise-com unit easily fits to any hearing protector muff and can connect directly to the radio. Target markets are aviation, rail transport, heavy industry and manufacturing services.

- ENMN4018A** **Helmet-com with com-PTT system**
(ENMN4011A + ENLN4135A)
- ENMN4011A** **Helmet-com unit** (replacement item)
- ENLN4135A** **Com-PTT unit** (replacement item)
- ENMN4010A** **Noise-com** (direct connection to GP328 radio)

TEMPLE-TRANSDUCER HEADSET

Specially engineered for users with hearing loss or hearing impairment, this innovative temple-transducer headset converts receive sound signals to vibration pressure signals, which in turn is converted by the human brain as intelligible, listening messages. Since it no longer uses the human ear canal to receive sound, this headset is ideal for working environments that are subject to extreme high noise as well as for users who need to listen to external background. The "behind-the-neck" headset style makes it comfortable for extended wear and can be worn with hats or helmets.

- RMN4048A** **Temple Transducer headset with PTT**
- RMN5048A** **Rugged Temple Transducer headset with PTT**



ENMN4018

Carrying Accessories

Carrying accessories are available in varying sizes and materials designed to suit your operational needs. Use them together with the other accessories for added convenience and hands-free mobility. Tested to EME compliance.

CARRYING CASES FOR RADIO WITH SLIM LITHIUM ION BATTERY

- HLN9670A** **Hard Leather, swivel loop, non-keypad**
- HLN9690A** **Hard Leather, swivel loop, keypad**
- *HLN9652A** **Hard Leather, Belt loop, D-Ring, non-keypad**
- *HLN9677A** **Hard Leather, Belt loop, D-Ring, keypad**

CARRYING CASES FOR RADIO WITH ALL BATTERY SIZES

- PMLN4280A** **Soft Leather, Swivel chip, keypad**
- PMLN4281A** **Soft Leather, Swivel Chip, non-keypad**
- *HLN9701B** **Hard Nylon, Belt loop, D-Ring, non-keypad**
(Not compatible with ultra-high batteries and impres™ batteries)

*Not suitable for for ultra high cap batteries and impres batteries. Can be used with shoulder strap NTN5243A

UNIVERSAL CARRYING ACCESSORIES

- HLN6602A** **Universal Carrying Accessories Chest Pack**
Designed with a radio holder, pen holder, and velcro secured pocket.
(Not compatible with 900MHz and UHF Band radios)
- RLN4815A** **RadioPak™ Radio/Utility Case**
Comfortable, useful and stylish, it can be worn round the waist to hold the radios. Includes a separate 6" x 8" zippered pouch to hold the other on-the-job necessities. Adjustable nylon weave belt is suitable for both men and women.

OPTIONAL CARRYING ACCESSORIES

- HLN8414A** **Chest Pack Carry Holder**
- HLN9985B** **Waterproof Bag**
- HLN9844A** **Spring Belt clip** (for 1.5in Belt Width)
- HLN9714A** **Spring Belt clip** (for 2.0in Belt Width)
- NTN5243A** **Shoulder Carrying Strap**
(use with carrying cases with D-Rings)
- HLN9149AR** **Swivel Belt Loop Adapter**
(for use with HLN9652, HLN9677, HLN9665, HLN9689, HLN9701)



PMLN4280A



NTN5243A



HLN8414A



HLN6602A



HLN9844



Battery with Long Belt Clip attached (HLN9714 - order separately)



RLN4815

Antenna

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

FLEXIBLE WHIP AND HELICAL/STUBBY ANTENNA

Flexible antenna has a one-piece finish and steel core for optimal radiation characteristics. Provides more comfort when radio is worn with belt.

Helical antennas are sturdy and reliable for years of safe communication. Each antenna is designed and optimised for best coverage and EMC compliance. The skirt at the base of the connector helps to seal out damaging elements and it is made of brass material for maximum durability.

The stubby quarter wave antenna is ideal when the radio is worn with the belt, as the short antenna is non-obtrusive.



UHF

- PMAE4016A UHF Whip, 14cm to 16cm**
403 – 520mHz (standard package)
- PMAE4008A UHF Whip, 13cm**
470 – 520mHz
- PMAE4003A UHF Stubby Helical, 9cm**
430 – 470mHz
- PMAE4006A UHF Stubby Helical, 9cm**
465 – 495mHz
- PMAE4007A UHF Stubby Helical, 9cm**
490 – 527mHz
- PMAE4002A UHF Stubby Helical, 9cm**
403 – 433mHz



VHF

- NAD6502AR VHF Helical, 13cm** 146 - 174mHz
- NAD6579A VHF Whip, 15cm** 148 - 161mHz
- PMAD4023A VHF Whip, 14cm** 150 - 161mHz
- PMAD4025A VHF Stubby Helical, 9cm** 150 - 161mHz
- PMAD4014A VHF Helical, 14cm** 136 – 155mHz
- PMAD4015A VHF Helical, 14cm** 155 – 174mHz
- PMAD4012A VHF Stubby Helical, 9cm** 136 – 155mHz
- PMAD4013A VHF Stubby Helical, 9cm** 155 – 174mHz



LOW BAND

- NAB6064A LB Helical, 30cm**
(length of antenna can be cut to desired frequency band)
29 – 50mHz

OTHER BAND

- PMAD4009A Stubby Helical, 9cm** 336 – 368mHz
- PMAD4020A Stubby Helical, 9cm** 370 – 400mHz