SERVICE FOR YOUR NADY COMMUNICATOR

(U.S.) Should your motorcycle communicator require service, please contact the Nady Service Department via telephone at (510) 652-2411 or e-mail to service@nadywireless.com for a Return Authorization (R/A) Number and a service quote (if out of warranty). Make sure the R/A Number is clearly marked on the outside of the package and enclose a cashier's check or money order (if not prepaid with a credit card). Ship the unit prepaid to: Nady Systems, Inc., Service Department, 6701 Shellmound Street, Emeryville, CA 94608. Include a brief description of the problems you are experiencing.

The warranty card enclosed with this system contains additional valuable warranty and service information. Keep it in a safe place for future possible reference. Do not attempt to service this unit yourself as it will void the warranty.

(International) For service, please contact the Nady distributor in your country through the dealer from whom you purchased this product.

Contact your dealer or Nady Systems for more information on our complete line of advanced products for your motorcycle communication needs.

NADY SYSTEMS, INC.
6701 Shellmound Street, Emeryville, CA USA 94608
Tel: 510/652-2411 Fax: 510/652-5075
www.nadywireless.com

NADY PRC-9

Motorcycle Lane-to Lane
Full Duplex Communicator
with Driver-Passenger Intercom

OWNER'S MANUAL

MOTORCYCLE INTERCOM

HOW TO USE YOUR NADY PRC-9 COMMUNICATOR

The Nady PRC-9 is a compact two-way hands-free radio communication system with a rider/passenger intercom. It is ideal for motorcycle communications and can also be used for many different recreational and industrial applications. The unit is ruggedly constructed of a durable high impact ABS plastic protecting advanced circuitry which will deliver years of use with proper care.

The Nady PRC-9 offers full duplex (simultaneous two-way) communication between two parties, or listen-only, one-way communication between one sender and any number of parties with their units in “STANDBY” mode. The PRC-9 also offers a unique “CALL” function that can alert you of incoming calls while conserving battery life. The intercom feature is full duplex, allowing both the rider and passenger simultaneous two-way communication with one other separate unit as well as with each other. To assure maximum performance of your communicator, read the instructions carefully and retain for future reference.

USE WITHOUT INTERCOM FOR UNIT-TO-UNIT OPERATION

OPERATING INSTRUCTIONS

Only two units can be operated simultaneously in duplex mode. Any number of additional units can be operated in “ST/BY” receive only mode to listen to one of the two parties engaged in the duplex conversation. Make sure your units are properly matched for compatible send/receive frequencies (Ch. “A to b” and Ch. “B to a”) as per the label on the rear of each unit. For specific operation follow the procedures below.

BATTERY INSTALLATION

Open the battery compartment (1) by pushing with your thumb towards the bottom of unit. Insert an alkaline 9V battery (Duracell MN1604 or equivalent) into compartment, noting polarity.

Replace the battery whenever the low battery LED indicator (2) begins to flash. A single flash when the unit is first turned on is normal and indicates usable battery strength. Note: Remove battery when unit is not in use for long periods of time.

PRC-9 SPECIFICATIONS

GENERAL

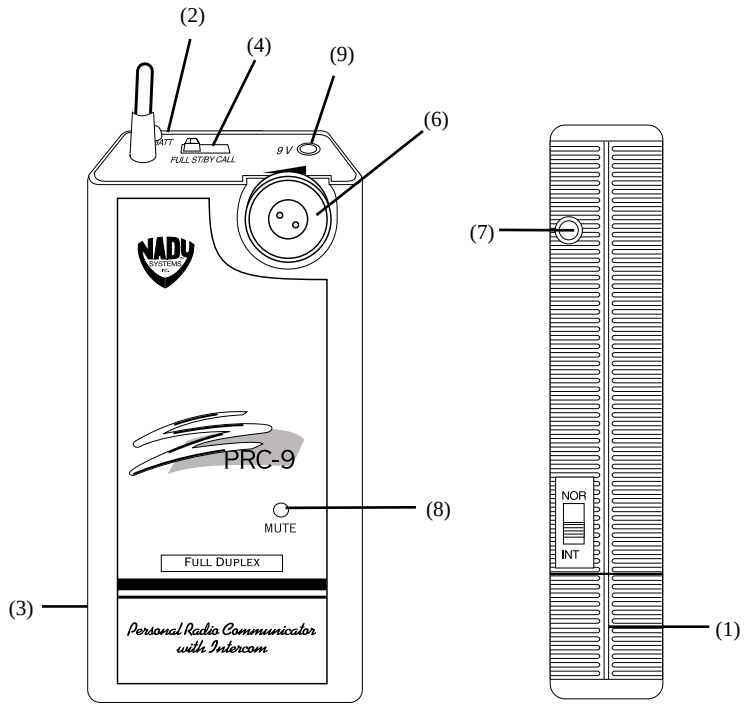
Power Source: 9V DC Alkaline
Frequency Range: 49.830-49.890 MHz
Current Drain: Receive only (Standby) 35 mA. Full Duplex: 70 mA max.
Service Area: 1/4 mile (400 meters) and up to 1/2 mile in optimum conditions
Size: 5.3"H x 1.25"W x 10"D (136x65x25 mm)
Weight: 9 oz (255 grams)

RECEIVER

Receiving System: FM Double Superheterodyne (Simultaneous full duplex with receive only standby option)
Sensitivity: (20 dB quieting): 1 uV (O dB)
Modulation Acceptance Bandwidth: 5 KHz
Spurious and Image Rejection: 20 dB min.
Frequency Stability: (0°c to + 40°c): 5 PPM
Headphone Impedance: 32 Ohm

TRANSMITTER

Transmitting System: Simultaneous full duplex
Output Power: 10,000 µV/m @3m (max. allowed by FCC)
Max. Frequency Deviation: 4.5 KHz
Spurious and Harmonic Emissions: 20 dB min. (FCC Part 15)
FM Hum and Noise: 40 dB
Frequency Stability: (0°c to + 40°c): 5 PPM
Microphone: Electret Condenser Microphone, 600 Ohm



(1) Battery Compartment
(2) Low Battery LED
(3) Power Switch
(4) FULL-ST/BY-CALL Switch
(5) INT-NOR Switch
(6) Headset Volume Control
(7) Passenger Headset Jack
(8) MUTE/SQUELCH Adjust
(9) EXT DC Jack

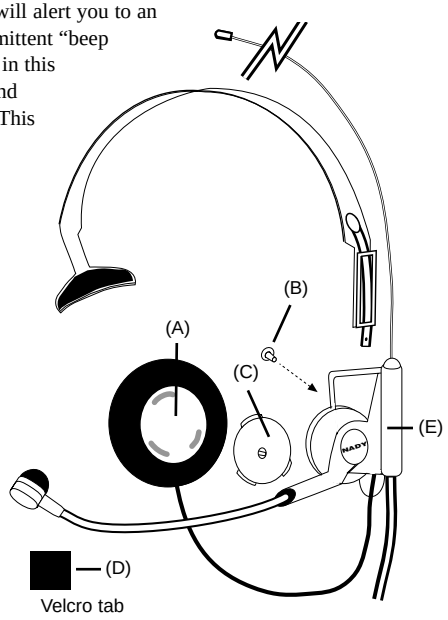
ANTENNA
The PRC-9 should be operated with the headset's whip antenna up and extended for maximum range.

ADJUST CONTROLS FOR DUPLEX OPERATION
Turn power switch (3) to the "ON" position, move the "FULL-ST/BY-CALL" switch (4) to the "FULL" position. Place the "INT-NOR" switch (5) in the "NOR" position. Rotate the volume knob (6) clockwise to desired volume.

"ST/BY" MODE
To receive only, place the "FULL-ST/BY-CALL" switch (4) in the "ST/BY" position. In this mode, any number of units on the proper channel can listen to a transmission, but only one unit at a time can converse with the sender in full duplex. When not conversing, place your unit in the "ST/BY" position to extend battery life.

"CALL" MODE
When not using the unit continuously, place the "FULL-ST/BY-CALL" switch (4) in the "CALL" position. This position will alert you to an incoming transmission with an intermittent "beep beep." The headset may be removed in this mode as the beeping signal is loud and can be easily heard from a distance. This mode will help conserve battery life without losing any incoming calls.

DRIVER AND PASSENGER HEADSETS
The PRC-9 comes with a Nady Snap-Apart headset for the driver, and a headset for the passenger, and a choice of passenger headsets. The driver's headset has a removable headband. This feature allows easy installation of the headset inside an open or closed face motorcycle helmet or similarly designed safety headgear. To install your headset inside a helmet:



Problem: Intermittent Operation

LOOSE BATTERY	Pull battery clip forward to make better contact.

Problem: Wind Noise Problems

WIND NOISE	Mic must be within one inch of the lips, with the open side of the "cup" facing the mouth. In severe cases, the foam should actually be touching the lips for best clarity.

Mute Instructions

Your PRC-9 has been equipped with the additional feature of an operator adjustable squelch. This will provide you with maximum flexibility and ease of operation in varying RF environments. If you experience unwanted noise bursts while in FULL or STAND BY mode and your partner is not transmitting, or if you experience false triggering of the CALL beeper: Insert a 1/8" blade screwdriver through the small hole on the front cover of the unit and engage the adjustment screw. Turning the screw clockwise will make the unit less susceptible to unwanted noise bursts and false triggering. Turning the screw counterclockwise will do the opposite.

IMPORTANT: The squelch adjust is a 3/4" turn screw. Any attempt to turn the screw past its stop will permanently damage the unit and void the warranty. Turn the screw until unwanted noise bursts disappear. Do not attempt to adjust further. In the full counter-clockwise position the unit will have maximum range, however the unit will never mute thus making the CALL mode unusable.

IMPORTANT: By making the unit less susceptible to unwanted break-in you will also decrease the usable range of the unit, therefore it is recommended not to over adjust the squelch.

	these items. 49 MHz band units are restricted as to output power to eliminate interference except by units located within their range. If interference is received, try units in another location.
INTERFERENCE FROM ENGINE	Install Resistor Sparkplugs.
MUTE SET INCORRECTLY	If the mute adjustment is set too far counter clockwise, you will hear bursts of static noise. See MUTE INSTRUCTIONS at end of checklist.
ANTENNA GROUDING	The operator of the unit should not touch the antenna or allow the antenna to touch the head-band or other objects.

Problem: Low Range

POSSIBLE CAUSE	**REMEDY**
MUTE SET INCORRECTLY	If mute is adjusted too far clockwise, the unit has virtually no range. See MUTE INSTRUCTIONS at end of checklist.

Problem: Distorted or Low Audio

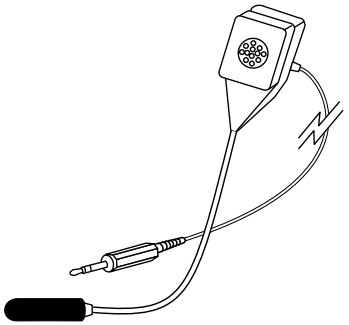
LOW BATTERY	Check battery, change to make sure. Use fresh alkaline batteries.
INCORRECT USE	Mic should be one inch or less from the lips for best audio.
ANTENNA GROUNDING	The operator of the unit should not touch the antenna or allow the antenna to touch the head-band or other objects.
INCORRECT BATTERY	Alkaline batteries must be used. Rechargeable batteries will not give enough power to run the unit.

Problem: "CALL" Doesn't Seem to Work

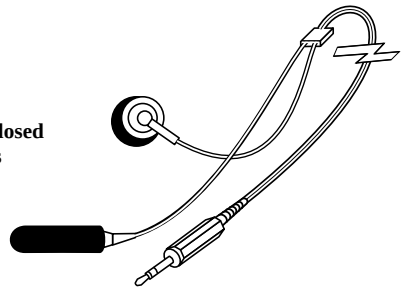
USER DOESN'T UNDERSTAND "CALL" FUNCTION	Note: CALL function puts unit into a receive only mode. CALL saves battery power, yet allows PRC-9 users to page each other. For example, if one person's radio is in CALL mode and another person with another radio starts transmitting, the radio in CALL mode will emit a beeping sound to alert the user that a transmission is being attempted, and the beeping radio can be switched out of CALL mode to allow it to transmit.

(A) Detach foam earpiece (Speaker) from the antenna mic housing.
(B) Using a small Phillips head screwdriver, remove upper screw located on the inside of antenna mic housing. This will release the headband.
(C) Turn the small knob on the inside of the earpiece counter clockwise and remove.
(D) Attach Velcro (included with headset) to both the inside of the earpiece and the antenna mic housing.
(E) Attach antenna mic housing to the outside of helmet with Velcro tape. Then attach earpiece to the inside of helmet with Velcro tape.
The PRC-9 also comes with a choice of two passenger headsets: the MO for open face helmets and the MC for closed face helmets. Both feature an adjustable microphone boom. Installation can be done quickly and easily with the included Velcro tabs, and requires no helmet modification.
Plug the passenger headset provided into the passenger headset jack (7) on side of unit.

ADDITIONAL OPERATING INSTRUCTIONS



MO Headset for Open Face Headsets



MC Headset for Closed Face Headsets

"INTERCOM" MODE
To use the PRC-9 as an intercom only, place the "INT-NOR" switch (5) in the "INT" position. This will allow two-way simultaneous communication between rider and passenger with the transceiver off.

To use the PRC-9 as both an intercom and transceiver, place the "INT-NOR" switch (5) in the "NOR" position. This will allow both rider and passenger to transceive.

MUTE/SQUELCH ADJUSTMENT
The PRC-9 has been equipped with an operator-adjustable squelch. This will provide you with maximum flexibility and ease of operation in varying RF environments. If you experience unwanted noise bursts while in "FULL" or "ST/BY" mode and your partner is not transmitting, or false triggering of the "CALL" beeper, insert a 1/8" blade screwdriver through the small hole in the front cover of the unit (8) and engage the adjustment screw. Turning the screw clockwise will make the unit less susceptible to unwanted noise bursts and false triggering. Turning the screw counterclockwise will do the opposite.

Important: The squelch adjust is a 3/4" turn screw. Any attempt to turn the screw past its stops will permanently damage the unit and void the warranty.
Turn the screw until unwanted noise bursts disappear and do not attempt to adjust further. In the full counterclockwise position the unit will have maximum range, however the unit will never mute, making the "CALL" mode unusable.
Important: By making the unit less susceptible to unwanted break-in, you will also decrease the usable range of the unit, therefore it is recommended not to overadjust the squelch.

EXTERNAL BATTERY PACK
For longer hours of continuous operation, an optional battery pack containing 6 AA batteries is available at the store where you purchased the unit. Plug into the "DC 9V" jack (9).

Note: If supplying your own source of external DC, be sure to use a 2.5 mm "MINI" plug with center polarity positive (+) and 9V DC only, otherwise it may cause damage to unit.

PRC-9 TROUBLE SHOOTING CHECK LIST

Thank you for choosing a Nady communicator. If you are not familiar with communicators, please review this checklist before you use your new Nady, and you will be best prepared to enjoy it right from the start.

Problem: No Audio

POSSIBLE CAUSE	**REMEDY**
LOW OR NO BATTERY	Check battery, change to make sure. Use fresh alkaline batteries.
BACKWARDS BATTERY	See diagram in battery compartment.
UNITS DON'T WORK TOGETHER	Units must be on opposite channels.
INCORRECT BATTERY	Alkaline batteries must be used. Rechargeable batteries will not give enough power to run the unit.

Problem: Not Transmitting

UNIT ON INTERCOM	When the PRC-9 INT-NOR switch is in INT position, this means the transmitter on the unit is turned off, and the unit operates in the intercom mode only. This conserves battery life when the unit does not need to transmit.
UNIT IN ST/BY	The full position of the FULL/ST/BY/CALL switch on top of the unit must be in the FULL position to transmit. ST/BY is to receive only.

Problem: Noise/Static

LOW BATTERY	Check battery, change to make sure. Use fresh alkaline batteries.
VOLUME CONTROL CAUSES CLICKING	You will hear a clicking sound when either of the volume buttons are pressed. This is normal, and indicates that one of the controlS has been activated.
OUT OF RANGE	The range is approx. 1/4 mile line of sight, less under adverse conditions. During the last 10% of range static increases rapidly.
LOCATION INTERFERENCE	These units operate on the 49 MHz communications band, an FCC allocated band for public use not requiring an FCC license. Since they share this band with cordless phones, radio toys, wireless microphones, etc., they can receive interference from