

RPM Series

RPM-050 30-50 MHz
RPM-150 146-174 MHz
RPM-450 450-470 MHz

PATRIOT[®]
BY RITRON

RUGGED CONSTRUCTION.

Rugged "Uni-Body" aluminum housing is virtually indestructible. The unique one-piece enclosure also provides an integral heatsink that keeps the electronics cool.

EXTERNAL SPEAKER CONNECTOR.

Allows the use of an optional 5 Watt audio output external speaker. The speaker can then be mounted in a location best suited for the user.

SYNTHESIZED, FIELD PROGRAMMABLE.

Enables quick reprogramming of channel frequencies, coded squelch and other characteristics of the radio. Provides the user maximum flexibility for future possible needs.

HIGH EFFICIENCY SPEAKER.

The high volume, front facing speaker delivers clear, crisp audio and has plenty of reserve volume to overcome noisy environments. An optional external speaker is also available.



VERSATILE MICROPHONE AND HANG-UP CLIP.

Heavy duty microphone and hang-up clip may be mounted in any location and do not require a separate ground wire or connection to a metal surface. An optional base station desk microphone is also available.

DUAL FUNCTION LED.

The TX/BUSY LED will glow red continuously, indicating that the transmitter is activated. A flashing LED indicates that the channel is busy.

CHANNEL CONTROL AND DISPLAY.

Easy-to-locate channel control and easy-to-read channel display allow fast, simple operation of the radio.

SELF-CHECK DIAGNOSTICS.

At power-up, the unit's microcontroller automatically performs a check of channel memory and the radio synthesizer. Proper operation is confirmed with a short tone.

MONITOR CONTROL AND INDICATOR LAMP.

Disables coded signalling on the selected channel and allows the unit to operate in carrier squelch. In the monitor mode, the indicator is lit.

CONTEMPORARY STYLING.

Modern styling and ultra compact size makes installation easy in almost any type of vehicle.

THE PATRIOT MOBILE 2-WAY RADIO. MORE FEATURES AND PERFORMANCE FOR LESS MONEY THAN THE COMPETITION.

NEW SOFTWARE FEATURES
AND
ENHANCED
AUDIO

FEATURES

16 CHANNEL CAPABILITY. Up to 16 channels, in any combination, can be programmed into the radio for simplex, half duplex or receive only operation. This gives you greater flexibility by enabling operation within several different radio systems.

WIDE BAND OPERATION. Enables operation anywhere in a particular FM band. (UHF 20MHz, VHF High Band 15MHz, VHF Low Band 2 MHz).

***MIL-STD 810 C & D CERTIFIED FOR SHOCK AND VIBRATION.** To receive certification, the radio must remain operational during and after rigorous controlled tests.

COMPACT AND LIGHTWEIGHT. At only 2.1"H x 5.8"W x 7.4"D in size and weighing only 2.5 pounds, the Patriot mobile radio can be installed in practically any vehicle.

CLONING CAPABILITY. A cloning cable connecting two radios via the microphone jacks makes programming additional radios fast and easy.

EASY FIELD PROGRAMMING. Programming is easy with either a PC compatible computer and appropriate Ritron software or via the hand microphone PTT button.

PROGRAMMABLE FEATURES. Channel frequencies, Coded squelch (CTCSS, Digital Coded Squelch and Two Tone Sequential Decode). Scan lists (Normal or Priority). Busy Channel Lock-Out. Channel Monitor Lock-Out. Transmitter Time-Out Timer.

BUSINESS APPLICATION SCAN RATE. Normal and/or Priority scan capability allows monitoring of several channels automatically and eliminates missed calls.

PAGING QUIET CALL PLUS. One programmable two-tone sequential decode frequency pair (see spec) or any of the 63 Paging Quiet Call codes. The programmable Paging Quiet Call feature enables selective paging of the radio in two-tone sequential equipped radio systems.

NOISE BLANKER FEATURE (LOW BAND). The Patriot RPM-050 low band mobile features a "noise blanker circuit" which eliminates atmospheric, vehicular and other man-made interference which can degrade the performance of low band radio systems.

ONE YEAR PARTS AND LABOR WARRANTY, SECOND AND THIRD YEAR WARRANTY OPTIONAL. See warranty statement for details.

*VHF/UHF Models Only.

STANDARD ACCESSORIES

RM-4 HAND MICROPHONE

Dynamic hand microphone with rugged coiled cord and modular plug.

RPMK-12 INSTALLATION KIT

Includes: Mounting bracket, mic. clip, 12 V power cable with in-line fuse, hardware, and instructions.

USER MANUAL

Complete instructional manual with warranty registration.

OPTIONS



RM-6T
Hand microphone with backlit 12 button Touch Tone Encoder.



RM-6
Base station microphone with PTT, locking monitor controls, and modular style connection to mobile.



RSP-5
External speaker with 5 Watt output and 10 ft. cable.

YOUR LOCAL DEALER IS:

www.ritron.com

© 1999 Ritron, Inc. All rights reserved. Ritron, RPM, Patriot and Quite call are registered trademarks of Ritron, Inc.

Ritron, Inc. 505 West Carmel Drive Carmel, Indiana 46032 (317) 846-1201

Fax: 317-846-4978

SPECIFICATIONS

GENERAL

FCC ID:
FCC Rule Parts:
Frequency Range:

RF Channels:

Controls:

Scanning:

Tone/Code Signaling (programmable):

Two-Tone Decode:

Power Supply:

Current Requirements:

Frequency Stability (RX/TX):

Synthesizer Channel Spacing (with no tuning adjustments):

Maximum Frequency Separation:

Antenna Connector:

Microphone Connector:

External Speaker Connector:

Accessory Equipment Connector:

Weight:

Dimensions:

TRANSMITTER

RF Output:

Modulation Type:

Spurious and Harmonics:

Audio Response:

Modulation Sensitivity:

Time-Out Timer:

RECEIVER

Receiving System:

Sensitivity:

Noise Squelch Sensitivity:

Selectivity:

Spurious Rejection:

Image Rejection:

Intermodulation Rejection:

Modulation Acceptance:

Audio Output:

LOW BAND

AIERPM-050
22, 90
RPM-050-M 30-38 MHz
RPM-050-N 38-50 MHz

16 channels

Front Panel-Volume-On-Off, Monitor, Channel Select, Microphone Hang-Up-Tone Squelch

Programmable multiple scan lists, priority and normal scan Note: Each scan list installed reduces available RX/TX channels.

Programmable CTCSS, Digital Coded Squelch, 2-Tone Sequential

One Two-Tone sequential pair. Range: 300-1500 (with 5% separation min. between 1st and 2nd tones). Duration: 1 sec., 2 sec., or any one of the 63 Paging Quiet Call codes.

+10.5 to 14.5 VDC

SAME

SAME

Standby 0.25, Receive 0.4A, Transmit 10A (measurements Typical @ 13.5 VDC)
+/-5PPM (-30 degrees to +60 degrees C)

Standby 0.3A, Receive 0.8A, Transmit 6.0A (measurements Typical @ 13.5 VDC)
SAME

Standby 0.3A, Receive 0.8A, Transmit 5.6A (measurements Typical @ 13.5 VDC)
SAME

5KHz (12.5 KHz programmable)

5KHz (12.5 KHz programmable)

12.5 KHz

2 MHz

15 MHz

20 MHz

SO-239, 50 Ohms

SAME

SAME

Modular Jack, 6 conductor

SAME

SAME

3.5 mm jack

SAME

SAME

9-pin (optionally installed on rear panel)

SAME

SAME

2.5 lbs. (40 oz.)

SAME

SAME

2.1" H x 5.8"W x 7.4"D

SAME

SAME

60 Watts minimum @ +13.5 VDC (programmable high or low power on a per channel basis)

30 W minimum @ +13.5 VDC (programmable high or low power on a per channel basis)

25W minimum @ +13.5 VDC (programmable high or low power on a per channel basis)

16KOF3E

SAME

SAME

Better than -65 dBc

Better than -58 dBc

Better than -57 dBc

Meets FCC requirements

SAME

SAME

10 to 12mV for 60% maximum deviation @ 1 KHz

SAME

SAME

3 minutes (programmable)

SAME

SAME

Fixed Tuned, Dual Conversion Superheterodyne 10.7 MHz/455 KHz

Track Tuned, Dual Conversion Superheterodyne 10.7 MHz/455 KHz

Track Tuned, Dual Conversion Superheterodyne 21.4 MHz/455 KHz

0.25 uV maximum @ 12 dB SINAD

0.3 uV @ 12 dB SINAD

0.3 uV @ 12 dB SINAD

Programmable (per channel), internal preset to 12 dB SINAD

75 dB minimum @ 20KHz (EIA)

70 dB minimum @ 30 KHz (EIA)

70 dB minimum @ 25 KHz (EIA)

75 dB minimum

70 dB minimum

70 dB minimum

80 dB minimum

70 dB minimum

70 dB minimum

75 dB minimum (EIA)

70 dB minimum (EIA)

70 dB minimum (EIA)

SAME

SAME

SAME

4 Watts to internal speaker

SAME

SAME

6 Watts to external speaker (2 Ohms)

SAME

SAME



PN#1450209 Rev. B99/12