

- Dual Channel Configuration: Consists of Two AN/PRC-148 Radios, Two Vehicle \ Adapters, 2-Channel 50 Watt Power Amplifier Unit, and Mounting Tray. Also available:
 - Single Channel Configuration
 - Without AN/PRC-148 Radios
- Contiguous 30-512 MHz Coverage
- 50 Watt Output from 30-87.975 MHz
- 20 Watt Output from 88-512 MHz
- Cable-free Radio Dismount Capability in Less Than 2 Seconds



Supports and Maintains All Functionality of All Configurations of the AN/PRC-148 Radio, Including MBITR and JTRS Enhanced MBITR (JEM)

AN/VRC-111 50 Watt Vehicle Adapter Amplifier

FOR THE AN/PRC-148 MULTIBAND INTER/INTRA TEAM RADIOS





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FOR THE AN/PRC-148 MULTIBAND INTER/INTRA TEAM RADIOS

The AN/VRC-111 Vehicle Adapter Amplifier (VAA) is a COTS/NDI electrical and mechanical fixture combining the functionality of the battle-proven AN/PRC-148 Multiband Inter/Intra Team Radio (all MBITR and JEM configurations) and Vehicle Adapter into a system that offers an alternative to existing SINCGARS vehicular installations. The AN/VRC-111 50 Watt VAA system comprises two Vehicle Adapter Units with two AN/PRC-148 Multiband Inter/Intra Team Radios affixed on a mounting tray that installs on a standard MT-6352/VRC or MT-6352A/VRC Electrical

Equipment Mounting Base and a dual channel 50 Watt Power Amplifier Unit that installs on a standard MT-6353/VRC RF Power Amplifier Mounting Base. The mounting tray includes a cable harness, a multi-pin electrical connector that interfaces to the MT-6352 base, and an optional locking mechanism that secures the radios when required. The Vehicle Adapter Unit contains a sleeve for the insertion of the AN/PRC-148 with a locking cam to fasten the radio into position once it is fully inserted and allows for rapid, cable-free removal in less than 2 seconds. The VAA with AN/PRC-148 inserted provides 50 Watts in SINCGARS transmit mode (30-87.975 MHz, FM) and 20 Watts in non-SINCGARS transmit mode (30-512 MHz AM and 88-512 MHz FM). The 50 Watt VAA system operates from the vehicular power supply (20-32V) provided through the MT-6352 base. The VAA is rugged, constructed to withstand harsh weather conditions and ballistic shock.

TECHNICAL SPECIFICATIONS

GENERAL SPECIFICATIONS

Supports the capabilities of the installed radios

Frequency Range

- > 30-512 MHz contiguous

Power Input

- > 20 to 32 VDC, MIL-STD-1275

Installations

- > Stand-alone dual power amplifier

Radio Unit

- > All variants of the AN/PRC-148 (MBITR and JEM) and PRC6809 MBITR

Electrical Interfaces

- > AN/VIC-1, AN/VIC-3, LS-671, MT-6352 Power, RS-232 Data

Weight

- > 60 lbs including radio unit, amplifier, and shock mount

Mechanical Interfaces

- > MT-6352, MT-6352A, MT-6353

ENVIRONMENTAL SPECIFICATIONS

Shock/Vibration, Sand/Dust, Salt Fog, Blowing Rain, Humidity

- > MIL-STD-810F

Operating Temperature

- > -31°C to +60°C

Near Strike Lightning

- > MIL-STD-464

Ballistic Shock

- > MIL-S-901

Altitude

- > 30,000 ft

- > Non-U.S. Government sales are subject to U.S. Government approval.
- > Specifications are subject to change without notice.

RF SPECIFICATIONS

RF Interface

- > 50 Ohms

FM Receive Sensitivity

- > -118 typical at 30-87.975 MHz
- > -121 typical at 88-512 MHz

Receive Spurious

- > > 58 dB

Harmonic Suppression

- > > 55 dBc

Output RF Power

- > 50 Watts from 30 to 87.975 MHz
- > 20 Watts from 88 to 512 MHz

Transmit Duty Cycle

- > 100% 50 W transmit both channels at 60°C

Co-site

- > 6 foot (1.83 meters) minimum antenna spacing at 15% frequency separation 30-87.975 MHz.

EMI Compliance

- > EMI/EMC: MIL-STD-461C

TEMPEST Compliance

- > NSTISSAM TEMPEST/1-92, level II
- > NACSEM 5112

Spurious Suppression

- > > 80 dBc



GENERAL INFORMATION

ACCESSORIES

A complete line of accessories to support the installed radios and Vehicle Adapters

SYSTEM COMPONENTS

AN/PRC-148 Family of Radio Equipment:

- > Dismounted/Fixed Site:
 - > 5 Watt Multiband Inter/Intra Team Radios (AN/PRC-148 JEM, AN/PRC-148 MBITR, and PRC6809 MBITR)
 - > 20 Watt Man Portable System
 - > 20 Watt and 50 Watt Base Stations
 - > 20 Watt Tactical Repeater
 - > Modular Universal Battery Charger
- > Vehicular:
 - > 20 Watt and 50 Watt Vehicle Adapters
 - > 20 Watt AN/VRC-111 Vehicle Adapter Amplifier
 - > 50 Watt AN/VRC-111 Vehicle Adapter Amplifier – Dual Channel
 - > 50 Watt Vehicle Adapter Amplifier – Single Channel
 - > 50 Watt Low Profile Vehicle Adapter
 - > 50 Watt AN/VRC-113 Cradle Vehicle Adapter
 - > 50 Watt SATCOM Low Profile Vehicle Adapter
 - > Mounted Soldier Cordless Communications System