



Tactical Repeater

For the AN/PRC-148 Multiband Inter/Intra Team Radios



- Contiguous 30-512 MHz Coverage
- 20 W RF Output
- Dual Antenna Configurations
- Rugged Transport Case
- Bi-directional Operation for Simplex Net Linking
- Removable Control Heads for Full Function Remote Operations
- Selectable AC and DC Power Input with Rechargeable Backup Battery
- Supports the Following Waveforms/Modes Dependent Upon Radio Installed (Implemented and Planned):
 - AM/FM
 - HAVEQUICK I/II
 - MIL-STD-188-241-1/-2 (SINGARS)
 - MIL-STD-188-181B (56kbps)
 - MIL-STD-188-181C, -182B, -183B (SATCOM IW)
 - ANDVT (LPC-10, MELP Vocoders)
 - Project 25
 - Over The Air Cloning (OTAC)
 - Retransmission

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



Tactical Repeater

For the AN/PRC-148 Multiband Inter/Intra Team Radios

TRC 6730

The Tactical Repeater is a suitcase configuration that houses two Vehicle Adapters functioning together as a repeater. Integrating two AN/PRC-148 handheld radios, it significantly increases the performance range of VHF/UHF radio net operations when extended radio linkage is required or where obstacles are present that normally preclude line-of-sight communications. The Tactical Repeater provides 20 Watts transmit power in dual antenna configuration and allows internal battery backup using two rechargeable Lithium-ion batteries. It is capable of supporting both voice and data, secure and clear operation. The repeater function is non-CCI and crypto transparent. **Commonality of components and the proven AN/PRC-148 core radio platform enable increased range performance.**

TECHNICAL SPECIFICATIONS

Supports the capabilities of the installed radio

Frequency Range

- 30-512 MHz contiguous

Transmit Output Power

- 5 and 20 Watts FM
- 20 Watts PEP AM
- 5 and 20 Watts PSK

Input Supply

- 13-32VDC
- 90-132VAC or 180-264VAC (47-440 Hz)
- Battery backup for 2 hours at 75:25 duty cycle

Physical Parameters

- Height: 11.7 inches (29.72 cm)
- Width: 24.6 inches (62.48 cm)
- Depth: 19.7 inches (50.04 cm)
- Volume: 5702.4 cubic inches (93445.6 cc)
- Weight: 82 pounds (37.2 kg)

Reliability

- (without radio installed)
- MTBF: > 2500 hours
 - MTTR: ≤ 45 minutes

Transmitter Characteristics

- Spurious Output
 - Harmonics: > 45 dBc
 - Other Spurious: > 56 dBc
- FM hum and noise degraded ≤ 1dB
- AM hum and noise degraded ≤ 6 dB

User Channels

- 100 presets with AN/PRC-148 MBITR installed
- 256 presets with AN/PRC-148 JEM installed

EMI Compliance

- EMI/EMC: MIL-STD-461C

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

External Controls

- Power, ON/OFF, RF Output Power, Mode Select, Display On/Off, Head Set Volume
- One touch, on-demand power source/battery state of charge

Indicators

- Transmit, Receive, Power, Fault-battery state of charge and power source

Receive Sensitivity

- Typical -115 dBm FM Receive Sensitivity

Co-site Characteristics

- 6 foot minimum antenna spacing at 15% frequency separation

Automatic Rate-selected Reclocking

- Supports 12 and 16 kbps signals
- Supports SINGARS frequency hopping

Environmental Specifications

- Temperature: with back-up batteries installed
 - -20°C to +55°C operating
 - -20°C to +60°C storage
- Temperature: without back-up batteries installed
 - -31°C to +55°C operating
 - -31°C to +60°C storage
- Humidity: 95% non-condensing
- Rain, Vibration/Shock. Salt Fog: MIL-STD-810E
- Altitude: 15,000 feet
- Drop: 1/2 Meter Drop

Available Accessories

- Masts, broadband antennas, band specific antennas

Complete AN/PRC-148 System Elements:

- 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
- 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



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