



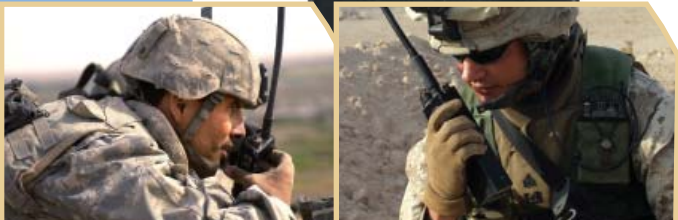
MBITR AN/PRC-148(V)(C)

Multiband Inter/Intra Team Radio



- Coverage Across the Full 30-512 MHz Frequency Range
- AM/FM; Voice/Data
- Selectable RF Output Power (0.1 - 5.0 Watts)
- Immersibility
 - 20 Meter Maritime Version
 - 2 Meter Urban Version
- Less Than 30.6 Ounces (867.5 gm)
- Encryption
 - NSA Endorsed Type I
 - Type III DES
- JITC Tested
- Available System Components Include
 - Vehicle Adapter
 - AN/VRC-111 Vehicle Adapter Amplifier
 - Man Portable System
 - Tactical Repeater
 - Base Station

Seamless, Risk-Free Upgrade to the JTRS-Enhanced MBITR (JEM) Configuration



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Multiband Inter/Intra Team Radio

PRC 6991



The MBITR is more capable than any dismounted radio system available today. In a ruggedized package weighing less than two pounds, the MBITR provides unprecedented interoperability with existing military and commercial legacy radio systems and, with software upgradeability, ensures future operation with the next generation of communication equipment. Seven programmable devices, supported by flash memory, are incorporated into the MBITR architecture, creating a truly software-based, handheld radio. The complete MBITR system solution also includes the 20-Watt Vehicle Adapter, dual-radio AN/VRC-111 Vehicle Adapter Amplifier with SINCGARS interface tray, Man Portable System with 20-Watt broadband amplifier, self-contained Tactical Repeater for range extension, and Base Station for fixed applications. **Technology for real world situations—proven.**

TECHNICAL SPECIFICATIONS

Frequency Range

- 30-512 MHz Contiguous
- 5 and 6.25 kHz Step Size

Modulation Types

- AM and FM (Single Channel)
- HAVEQUICK I/II, SINCGARS Single Channel and Frequency Hopping (ESIP), ANDVT (PSK)

Frequency Stability

- 5 ppm

Receive Sensitivity

- FM: -116 dBm 12 dB SINAD
- AM: < 1.5 uV 10 dB SINAD

Adjacent Channel Rejection

- Greater than 45 dB at ± 25 kHz

Spurious & Image Rejection

- Greater than 58 dB

Third Order Intercept Point

- Greater than +5 dBm

Receive Audio Distortion

- Less than 10% at Rated Audio Power

Acoustic Output Power

- Greater than 85 dB SPL

Transmit Output Power

- 0.1, 0.5, 1.0, 3.0 and 5.0 Watts (FM)
- 1.0 and 5.0 Watts (AM)
- User Selectable

Transmit Characteristics

- Radiated Spurious Output: < -13 dBm
- Audio Distortion: Less than 10%
- Adjacent Channel Power Ratio: > 62 dBc

Reliability

- MTBF: > 11,400 hours
- MTTR: < 8 minutes

Emergency Beacons and GPS

- AM Swept Tone Beacon
- GPS Interface to PLGR

TEMPEST Compliance

- NSTISSAM TEMPEST/1-92, Level II
- NACSEM 5112

Interoperability

- AN/PRC-68, AN/PRC-117, AN/PRC-77, AN/VRC-12 Series, AN/PRC-113, AN/PRC-139, AN/PRC-119, AN/PSC-5C/D
- Motorola LST-5B/C: (225.000-399.995 MHz), Motorola MX300 Series, Motorola Saber, Motorola XTS 3000 (plain text), Motorola XTS 5000 (plain text)

Programmable Channels

- 100 Memory Preset Channels
- Menu Selectable Groups
- Clear/Encrypted Mode Selection on a Channel-by-Channel Basis
- User Programmable From:
 - Front Panel Menu
 - PC Programmer
 - Radio-to-Radio Cloning

Controls

- On/Off/Volume/Whisper/Zeroize Knob
- 16-Position Channel Select Knob
- Large Tactile Push-To-Talk Switch
- Squelch Override Push-button
- Backlit 7-Button Keypad (NVG Compatible)
- Software Configurable Option Keys

Indicators

- 32 x 80 Pixel Backlit LCD (NVG Compatible)
- Intuitive Menu Driven User Interface
 - Channel Name/Frequency
 - Group Name
 - Clear/Secure Mode
 - Key Location
 - Battery Capacity
 - Transmit Power

Connectors

- 50 Ohm TNC Female (antenna)
- 10-pin Multi-function Immersion
- Sealed Top Connector (20 meter)
- 6-pin Multi-function Top Connector (2 meter)
- 18-pin Side Connector for Extended
- Capabilities and Upgrades

COMSEC

- US Type 1
- VINSON & FED-STD-1023
- Selective Key Zeroization
- Panic Radio Zeroization with Mechanical Interlock Protection
- Receive OTAR Compatible
- 6 Key Locations
- DES (Optional) 12kbps Voice

Physical Parameters (with battery)

- Length: 8.44 inches (21.44 cm)
- Width: 2.63 inches (6.68 cm)
- Depth: 1.52 inches (3.86 cm)
- Volume: 33.74 cubic inches (552.8 cubic cm)
- Weight: 30.6 ounces (867.5 gm)

Finish

- NBC Compatible
- Matte Black, Non-Reflective

Environmental Specifications

- Temperature
 - Operating: -31° to +60° C
 - Storage: -33° to +71° C
- Humidity: 95% Non-condensing
- Shock: EIA-603-1992
- Vibration: EIA-603-1992
- Altitude: 30,000 feet
- Immersion:
 - PRC-6991-ABR 20 meter version
 - PRC-6991-BBR 2 meter version

Batteries

- Rechargeable Lithium-Ion
 - 4800 mAH
 - >10 Hours Life at 5 Watts*
- Non-Rechargeable Battery Holder
 - Commercial Lithium Cells
 - 10 Hour Life at 5 Watts*

*Standard Duty Cycle (8:1:1)

Antenna Set

- 30-88 MHz
- 90-512 MHz

Accessories (partial list)

- Radio Holster
- Radio System Carrying Bag
- AC Powered Single-slot Battery Charger
- AC/DC Powered 6-slot Battery Charger
- AC Powered 6-slot Battery Charger
- DC Powered 2-slot Tactical Charger
- Non-rechargeable Battery Cell Holder
- Specialized Audio Accessories
- Cloning, Data, GPS, PDC, Programmer and Retransmission Cables
- PC Programmer

- Special Power Adapter Interface and Cables
- Remote Control with Integral GPS (available soon)

Available MBITR System Components

- Vehicle Adapter
- AN/VRC-111 Vehicle Adapter Amplifier
- Man Portable System
- Tactical Repeater
- Base Station



Photo Courtesy of U.S. Department of Defense

- Non-U.S. Government sales may be subject to U.S. Government approval and may require Government - to - Government agreements.
- Specifications are subject to change without notice.





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Multiband Inter/Intra Team Radio



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