

- Unencrypted Communications Payload Retransmits Encrypted Traffic
- Retransmission of Voice and Data
- 12.5 and 25 kHz Channel Bandwidth
- Simplex and Half Duplex Operation
- 116 Programmable Channels
- Selectable Power Output up to 5 Watts
- Convection Cooled
- Specifically Designed for Size, Weight, and Power Constrained Payloads and Platforms
- Can Be Purchased as a Complete Kit Including PRC6809 Radios or as an Upgrade for Existing Fielded Radios



## Expedient Retransmit Kit

FOR AIRBORNE SYSTEMS





# Expedient Retransmit Kit

The Expedient Retransmit Kit, designed for airborne applications, uses two PRC6809 Multiband Inter/Intra Team Radios (MBITR) without batteries. Developed to meet the more size, weight, and power (SWAP) dependent Unmanned Aerial Vehicle (UAV) uses, the Expedient Retransmit Kit provides full retransmission capabilities, including optional ECCM, in a minimum SWAP package to extend radio linkage or overcome obstacles that prevent line-of-sight operation. The repeater function is non-CCI and crypto transparent.

## TECHNICAL SPECIFICATIONS

### Frequency Range

- 30-512 MHz Contiguous

### Waveform/Mode Capabilities

#### Standard Features

- AM/FM
- Voice/Data
- Retransmission

#### Optional Feature

- Country Specific ECCM

### Frequency Stability Over Temperature

- +/- 2.5 ppm

### Receive Sensitivity

- FM: <-118 dBm 12 dB SINAD
- AM: <1.5 uV 10 dB SINAD (-103.5 dBm, 30% mod)

### Adjacent Channel Rejection

- Greater than 45 dB at ±25 kHz

### Spurious and Image Rejection

- Greater than 58 dB

### Third Order Intercept Point

- Greater than +5 dBm

### Receive Audio Distortion

- Less than 10% at Rated Audio Power

### 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: > 4,605 hours

### Programmable Channels

- 116 Memory Preset Channels
- Selectable 11 Groups
- User Programmable from PC Programmer

### Connectors

- Antenna: 50 Ohm (Female) TNC
- Power: Battery Eliminator with flying lead

### Physical Parameters (complete system)

- Weight: 2.83 pounds (1.286 kg)
- Volume: 65.25 cubic inches (1,070 cm<sup>3</sup>)

### Finish

- Anodized per MIL-A-8625F, Type III, Class 2

### Environmental Specifications

- Temperature:
  - Operating: -31° to +60° C
  - Storage: -33° to +71° C
- Humidity: 95% Non-condensing
- Shock: MIL-STD-810F
- Vibration: MIL-STD-810F
- Altitude: 16,000 Feet
- Fluid Contamination Exposure
- Explosive Atmosphere

### Power

- 28VDC nominal input, 50 Watt Max

### Control Interface

- RS-422 or RS-232

## AVAILABLE CONFIGURATIONS

### Expedient Retransmit Kit (1100745-502)

*Enables retransmission on two fielded handheld radios*

- Battery Adapter (4101441-501)
- Cable Assembly Retrains (3500850-501)

### Expedient Retransmit Kit with Handheld Radio (1100745-501)

- Battery Adapter (4101441-501)
- Cable Assembly Retrains (3500850-501)
- Handheld Radio (PRC6809-XXX)



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

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