



## Mil Series Microwave Video and Audio Receiver



Mil 100 Series Receiver

- ❑ High Performance Microwave Video Receiver
- ❑ Up to Two Audio Channels Available
- ❑ Main/Aux Video Outputs
- ❑ L, S, C, and X – Band Models
- ❑ Multi-Channel Selection in 1 MHz Steps
- ❑ Integral LNA
- ❑ NTSC or PAL Standard
- ❑ Optional cut-and-rotate scrambling
- ❑ Rugged Packaging
- ❑ Compact Size

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## MIL Series Microwave Video and Audio Receiver

The MIL Series from AIRLINX Communications brings a new level of performance and reliability to video and audio reception. Available in L, S, and C-bands, the MIL-100 provides high quality demodulation of NTSC or PAL standard video signals. The integral LNA and high-selectivity IF filters guarantee reliable receiver operation in harsh RF environments. Frequency selection is controlled by a push-button selector switch or by RS-232 remote control in 1 MHz steps. Two balanced audio subcarriers may be factory selected to any frequency between 5.5 to 7.5 MHz and output at line level. Video and audio de-emphasis may be set to either the NTSC or PAL standard. Packaged in a compact and rugged aluminum housing, the single-board electronics construction lends the MIL Series to applications where severe environmental conditions are the norm. An optional cut-and-rotate scrambler is integral to the receiver. A comprehensive front panel 25-pin connector provides quick and easy integration into any system without expensive specialized connectors. The MIL Series receiver is well suited for applications in Homeland Security, surveillance, law enforcement, military UAV and RPV, remote broadcast, video production, and airborne data/telemetry.

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## Technical Specifications

### Electrical:

- Frequency Range
  - MIL Analog 100L – 1.7 to 1.9 GHz
  - MIL Analog 100S – 2.2 to 2.5 GHz
  - MIL Analog 100C1 – 3.1 to 3.5 GHz
  - MIL Analog 100C2 – 4.4 to 5.0 GHz
  - MIL Analog 100X – 8.2 to 8.6 GHz
- Input Impedance – 50  $\Omega$
- Tuning Step – 1 MHz
- Frequency Stability –  $\pm 0.002\%$
- Sensitivity – -78 dBm: 35 dB SNR un-weighted
- Video Output Impedance – 75  $\Omega$  unbalanced
- Video Output Response – 10 Hz to 4.5 MHz
- Video Output Level – 1 V p/p
- Audio – any two between 5.5 to 7.5 MHz
  - Phase Lock Loop
  - 20 Hz to 20 kHz  $\pm 1.5$  dB
    - 600  $\Omega$  Balanced Output
    - Line Level +4 dBm
- De-emphasis – NTSC or PAL

### Environmental:

- Operating temperature: -10 to +65  $^{\circ}\text{C}$
- Relative humidity: 0 to 95%, non-condensing

### Mechanical:

- 25-pin full function I/O connector
- Dimensions – 1.2 H x 5.8 W x 6.4 L inches
- Video Output – BNC female
- Housing – milled aluminum
- Weight – 1.1 lbs.
- RF Input – SMA female

### Power:

- Operating voltage: +11 - +14 Vdc
- Current: 500 mA

### Options:

- VID-1 NTSC format
- VID-2 CCIR format
- FRQ-0 Fixed Frequency Single Channel
- SUB-1 Any frequency between 5.5 to 7.5 MHz
- SUB-2 Any frequency between 5.5 to 7.5 MHz
- SCRAM-1 Fixed code cut-and-rotate video scrambler
- SCRAM-2 Configurable code cut-and-rotate video scrambler

### Accessories:

Antennas: A complete line of antennas for a variety of applications is available.

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