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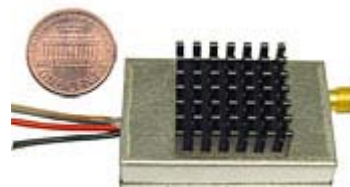
# MX-1700D

## AUDIO/VIDEO TRANSMITTER

### 1.7 GHz BAND

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The new 1.7 GHz Audio/Video transmitter is a special design for Military applications capable to work in extremely low or high temperature range. MX-1700D will give full 500 mW RF power. This special audio/video sender has been designed for Aeronautic or Space experiments. This transmitter has 8 selectable channels with indication.



|                           |                      |
|---------------------------|----------------------|
| Operating Frequencies:    | 1700 MHz- 1850 MHz   |
| Channels selection:       | On board selectable  |
| DC Voltage:               | 6 V DC               |
| RF power:                 | 550 mW/ 6 V          |
| Minimum required voltage: | 5 V                  |
| Battery power:            | 6 V                  |
| Video distortion:         | 2%                   |
| Maximum range:            | 5 miles from the AIR |
| Video Format:             | PAL, NTSC            |
| Current Consumption:      | 450 mA / 6 V         |
| Antenna:                  | N/A                  |
| Antenna Connector:        | SMA                  |
| Impedance:                | 50 ohms              |
| Video Connector:          | RCA F or open wire   |
| Video Impedance:          | 75 ohms              |
| Video level:              | 1 V                  |
| Audio level:              | 2 mV                 |
| Temperature Range:        | -40 +75* C           |
| Dimensions:               | 1.7" X 1" X 0.3"     |
| Weight:                   | 25 grams             |
| Modulation:               | WFM                  |



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#### MX-1700D MORE INFO:

##### **Operating Distance**

3000 ft line of sight (US / Canadian version), more or less depending on conditions, antennas used, elevation, etc. Government & Export version will have considerably more range.

##### **Operating Frequency**

1700 MHz – 1850 MHz in 8 user selectable channels. Up to 8 systems may be used in the same area simultaneously with VRX 1700 receiver.

##### **Transmission Type**

FM, Crystal referenced, synthesized phase locked loop. Frequency controlled by microprocessor.

|  |              |
|--|--------------|
| Frequency stability (-40 to +75°C,     | ± 0.003%     |
| Radiated power (US & Canadian version) | 500 mW / 6 V |
| Spurious & harmonic response           | < 50dBc      |

##### **Video System**

|                                     |  |
|-------------------------------------|--|
| Video level (internally adjustable) | NTSC or PAL                              |
| Impedance                           | 1.0 Volt p-p into 75 Ohms                |
| Video deviation                     | 75 Ohms                                  |
|                                     | ± 6 MHz (adjustable from ± 1 to ± 5 MHz) |

##### **Antenna US/Canada:**

3 dBi gain. Flexible helical type (Rubber Duck), SMA female connector

##### **Audio Modulation Type**

|   |            |
|---|------------|
| Maximum deviation                               | FM         |
| System signal to noise ratio at 50kHz deviation | ± 75 kHz   |
| Pre & deemphasis                                | 65 dBA     |
|   | 75µ Second |

##### **Audio Input & Outputs**

|  |  |
|--|--|
| Microphone input level (full gain to minimum gain) | All dB figures referenced to 0 dB = 0.774Vrms  |
| Microphone input impedance                         | -37 dB to -6 dB for ± 50 kHz deviation (5 mV)  |
| Power for Electret microphones (switchable)        | 2k Ohms  |
| Line input (full gain to minimum gain)             | +9 VDC @ 1mA max.  |
| Line input impedance                               | -4 dB to +22 dB for ± 75 kHz deviation   |
| Frequency response at 20 dB below full deviation   | 10k Ohms   |
| Total harmonic distortion (before limiting)        | 40 Hz to 15 kHz +1, -3 dB, 60 Hz to 10 kHz ± 1 dB (Option: may be extended to -3 @ 30kHz.) |
|  | 0.5% at 400 Hz (0.25% typical)   |

##### **Audio Carrier Offset from Video**

6.0 MHz

##### **Power**

6 V DC or 10 V-12 VDC using an external Regulator to 6 V



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## Mechanical

**Size** 1.7" X 1" X 0.3"

**Weight** 25 grams  
with antenna & bracket 35 grams

## Connectors

Power & Audio N/A  
Video IN BNC 75 Ohm  
Antenna SMA

## Environmental

Operating temperature -40°C to +60°C  
Storage temperature -40°C to +70°C (-40°F to + 158°F)  
Humidity (non-condensing) 90%

## Powerup

At powerup, the unit will retrieve the last used channel, program the PLL with this channel, and display the channel by blinking the LED the same number as the channel number.

## Displaying Current Channel

Push button is located on the top of the unit. To display the current channel, press the pushbutton once and release. The current channel will blink. After approx. 5 seconds, the current channel will again blink.

## Changing to a New Channel

To change to a new channel, press the pushbutton once and release. The current channel will blink. Press and release the pushbutton again **before** 5 seconds has elapsed and the channel will increment by 1 and the LED will blink the new channel. Repeat this step until the desired channel is reached, waiting for the blinking to stop each time before pressing the button again.

Once your desired channel is reached, wait 5 seconds until the LED again blinks your desired channel. Your new channel is now saved in memory.

**8 CHANNELS ARE AVAILABLE IN 1.7-1.85 GHz RANGE:**