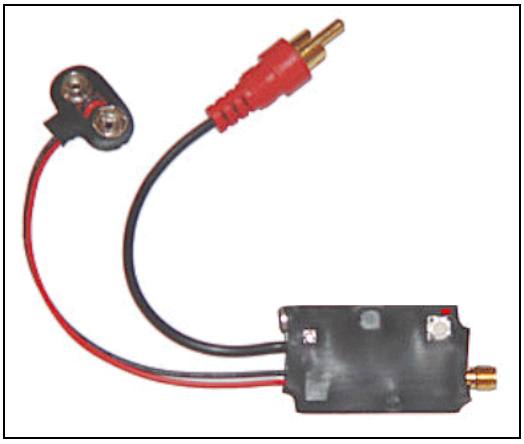
MX-3000
AUDIO/VIDEO TRANSMITTER
ISM BAND 2.4 GHz

The new 2.4 GHz Audio/Video transmitter is a special design for Military applications capable to work in extremely low or high temperature range. This special audio/video sender has been designed for Aeronautic or Space experiments. This transmitter has 8 selectable channels with indication.



Technical Specifications	
Operating Frequencies:	2400 MHz- 2500 MHz
Channels:	On board selectable
DC Voltage:	12 V
RF power:	50 mW/ 9 V
Minimum required voltage:	9 V
Battery power:	12 V
Video distortion:	3%
Maximum range:	N/A
Video Format:	PAL, NTSC
Current Consumption:	160 mA / 12 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
Temperature Range:	-40 +75* C
Dimensions:	1.5" X 1" X 0.3"
Weight:	7.5 grams
Modulation:	WFM

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MX 3000B 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
2400 MHz – 2500 MHz in 4 user selectable channels. Up to 4 systems may be used in the same area simultaneously with VRX 24L receiver.

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

Frequency stability (-40 to +75º`C,	± 0.003%
Radiated power (US & Canadian version)	50mW- 80 mW (9V – 12V)
Spurious & harmonic response	< 50dBc
Video System	NTSC or PAL
Video level (internally adjustable)	1.0 Volt p-p into 75 Ohms
Impedance	75 Ohms
Video deviation	± 6 MHz (adjustable from ± 1 to ± 5 MHz)
Antenna US/Canada:	3 dBi gain. Flexible helical type (Rubber Duck), reverse polarity SMA female connector
Audio Modulation Type	FM
Maximum deviation	± 75 kHz
System signal to noise ratio at 50kHz deviation	65 dBA
Pre & deemphasis	75µ Second
Audio Input & Outputs	All dB figures referenced to 0 dB = 0.774Vrms
Microphone input level (full gain to minimum gain)	-37 dB to -6 dB for ± 50 kHz deviation (5 mV)
Microphone input impedance	2k Ohms
Power for Electret microphones (switchable)	+9 VDC @ 1mA max.
Line input (full gain to minimum gain)	-4 dB to +22 dB for ± 75 kHz deviation
Line input impedance	10k Ohms
Frequency response at 20 dB below full deviation	40 Hz to 15 kHz +1, -3 dB, 60 Hz to 10 kHz ± 1 dB (Option: may be extended to -3 @ 30kHz.)
Total harmonic distortion (before limiting)	0.5% at 400 Hz (0.25% typical)
Audio Carrier Offset from Video	6.0 MHz
Power	9 V-12 VDC Nominal. See below for details.

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Transmitted power levels, current consumption and maximum voltage

Type of Transmitter: CVT-1000	**Transmitted Power Levels**	**Current Consumption / Maximum Voltage**
US & Canada version	80mW	135 mA / 14.4V Max
Government & Export version		
	POWER AMP VERSION	

Mechanical

Size	1.7" X 1" X 0.3"
Weight	10 grams
with antenna & bracket	12.8 grams

Connectors

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

Environmental

Operating temperature	-40ºC to +60ºC
Storage temperature	-40ºC to +70ºC (-40ºF to + 158ºF)
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.

4 CHANNELS ARE AVAILABLE IN 2.4 GHz RANGE:

CH5 2410 MHz CH6 2433 MHz CH7 2452 MHz CH8 2481 MHz