

Video Transmitters

250 mW Video Transmitter

VMX-250

The new power efficient 250 mW video transmitter from DTC features ten user programmable video frequencies. Two audio subcarriers are also user programmable on each video channel. Channel selection is made via a ten channel rotary select switch on the front panel of each unit.

Audio subcarriers are phase locked to ensure no drift into the video signal. Audio subcarriers are only activated when a microphone is attached. Audio quality is dramatically improved by the addition of AGC on the mic inputs. You will hear a clear difference.

Choose from operation in the 1700-1850 MHz, 2200-2300 or 2400-2500 MHz bands.

The switching power supply in the VMS/L series ensures minimal heat rise of the package and requires no additional heat sinking.

Designed to operate with 9-16 VDC, the VMS/L also provides a DC power output to your camera, simplifying cabling in many installations.

Your transmitter will ship with a rubber duck antenna, power cable, video cable, programming cable, and software at no additional cost.

Features

- ▲ User Programmable by channel
 - Video frequency
 - Two audio subcarriers from 6.0-7.5 MHz
- ▲ 10 channel select switch
- ▲ Audio subcarriers active only when mic attached
- ▲ Efficient switching power supply
 - Reduces power consumption
 - Reduces heat rise
- ▲ Stable frequency in body worn applications
- ▲ DC power loop through on Hirose connector for camera power
 - Simplifies installation
- ▲ Remote ON/OFF capability
- ▲ Optional encryption module with switch, mounts on transmitter
- ▲ Simple "Clear" or "Encrypted" switch

FCC TYPE: H25VXS250



Accessories

Part Number	Description
4045189-036	Video In/Ext Power/Cam. Power cable, 36" standard
4045173	Programming cable (Connects from the Multi I/O connector to the DB9 connector)
7011145-012	Microphone, 12" length
7011145-072	Microphone, 6' length
4045202	AA Non-rechargeable battery Pack with Molex Micro-fit Connector

Models

- ▲ VML-250 1750-1850 MHz operation
- ▲ VMS2-250 2200-2300 MHz operation
- ▲ VMS-250 2400-2500 MHz operation

Contact your DTC sales representative for other frequency bands which are not listed here

Add "ENC" to any of the above model numbers for Video Encryption

Add "ENC-AV" for Audio & Video encryption

Ordering Information

- ▲ Call for availability

Encryption Keys

DTC offers three layers of encryption keying

LevelA DTC has selected a standard key that is factory programmed for law enforcement. It provides video privacy without the hassles of key management. It is ideal for most state and local agencies.

LevelB DTC will program a key into the Micro Viewlock module that is unique to your agency. All your agencies equipment will interoperate, but not with other agencies.

LevelC DTC will provide you with software and programming instructions for you to program your own keys. This is the highest level of security we offer (ENC-AV only)



Specifications

Power Input Voltage	External 9-16 VDC
Power consumption	2.50W standard 2.75W encrypted
Reverse polarity protection	yes
Dimensions	2.5" x 2.1" x .512" (standard) 2.5" x 2.1" x .812" (encrypted)
Camera Power	Same as supply voltage going into the transmitter. Current limited to 200 mA.
Controls	10 channel select rotary switch panel mounted, slide ON/OFF switch
Connectors	2 pin Lemo: Mic 1, Mic 2 SMA: Antenna 6 pin Multi I/O: Video in, Data in, DC input 9-16 Vdc, camera power, Remote ON/OFF, Multiplexed Data out, Ground
Programmability Video:	250 KHz resolution steps over band
Audio:	User programmable from 6.0-7.5 MHz, in 10 KHz steps
Chassis notes	Machined, solid aluminum with rounded edges
AUDIO	
General	Mic level input (line level factory opt.) 50-3000 Hz. Phased locked AGC on both inputs. Subcarrier auto sensing, only active when microphone is attached.
Number of subcarriers	2
Subcarrier frequencies	6.0-7.5 MHz, user programmable per channel
Subcarrier ON/OFF control	Subcarriers are activated when mic is connected.
Subcarrier frequency stability +/-	0.003%, -30 to +70°C
Subcarrier Deviation	50 KHz peak
Audio S/N	45 dB min.
Frequency Response	BW1.5dB = 50-3000 Hz
Total Harmonic Distortion	<2%
Input Level	8 mVpp@400 Hz for 50 KHz peak dev.
Pre-Emphasis	75 uS
Input Impedance	10k ohm
VIDEO	
Video Frequency Response	BW1.5dB = 6 Hz - 5.0 MHz
Input Impedance	75 ohms
Input Level	1 Vp-p Max.
S/N	60 dB min.
Pre-Emphasis	Per CCIR 405 525 line curve
Differential Gain	5%
RF	
Operating Frequency	1700-1850 MHz, 250 KHz resolution steps (VML-250) 2200-2300 MHz, 250 KHz resolution steps (VMS2-250) 2400-2500 MHz, 250 KHz resolution steps (VMS-250)
Power output	250 mW min. @ nominal supply voltage, 25 Deg. C. 350 mW maximum
Output Impedance	50 ohms
Spurs and Harmonics	-50 dBC output
Encryption	Ovation Micro-Viewlock II
Temperature Range	-30° to +70°C (operating)
Humidity	90% non-condensing

