

# Top Hat III™ Camera Controller & TX

VTH-VMX-2000/5000

FCC TYPE: H25VMS2000



## Features

- ▲ Single box contains VHF RX, Analog Microwave TX, and Camera Control Functions
- ▲ Easily transported and replaced in many concealments
- ▲ Eliminates unreliable wiring and connections
- ▲ Standardizes on single means of connecting to multiple PTZ units and cameras
- ▲ DTC VMS/L-2000 analog video transmitter standard or a VMX-5000
  - 250mW / 2 Watt switch selectable
  - Ten user programmable channels, including video and two audio subcarriers
- ▲ DTC R99 VHF receiver standard
- ▲ Supports wireless DTMF tone decoding
- ▲ RF transmitter can be remotely turned on and off.
- ▲ Ten control channels in either 138-150 MHz or 150-174 MHz bands
  - User programmable from front panel
- ▲ Phoneline interface with auto answer
- ▲ Serial interface to Sony FCB series cameras
- ▲ Discrete line interface to all other PTZ controls and cameras
- ▲ Universal power supply, 12 VDC, 3.5 Amps from 90-240 VAC 50/60 Hz
- ▲ DC power output for powering accessories, eg installation monitor
- ▲ Remotely controllable/programmable video transmitter
- ▲ BNC Video input and output

## Top Hat III Model VTH-2000

Discussions with many of our customers about the ability to have a common video and control platform, capable of being moved between concealments, led DTC to develop the TopHat III. TopHat III combines a number of major functions into one compact box, including:

- A 250mW/2 Watt switchable VMS/L-2000 analog video transmitter or a VMS-5000 analog transmitter
  - Ten channels
  - User programmable video frequencies / audio subcarriers
  - No external heat sink required
  - Remote ON/OFF capability
- VHF receiver for receiving DTMF tone commands from a two way radio or specialized handheld controller, with 10 user programmable channels
- Telephone modem for dial up control using DTMF tones
- Pan/Tilt/Zoom interface board, which decodes the DTMF tones and controls servo motors individually, and outputs a serial data stream to control camera functions
- Universal power supply

On the front panel of the TopHat III, we've made communications and control easy. Each function above has its own clearly labeled section. You can reprogram or change your VHF and microwave channels, connect your dial up telephone line, and connect to your PTZ and camera controls via rugged Phoenix locking connectors. DC external output is available via a 2.5mm coaxial jack, enabling you to easily power your installation monitor or other peripheral device.

On the side of the TopHat III, you'll find rugged connections for your VHF and Microwave Antennas.

Here are just a few examples of how to use TopHat III:

- In a Utility Box or Pole Cam
- With an inverted dome camera, set it up inside a car or as a drop camera outdoors
- Set it up with a downward looking PTZ and camera system in a building's window

## Models

- ▲ VTH-VML-2000, 1700-1850 MHz operation
- ▲ VTH-VMS2-2000, 2200-2300 MHz operation
- ▲ VTH-VMS-2000, 2400-2500 MHz operation
- ▲ VTH-VML-5000, 1700-1850 MHz operation



## Specifications

### Control Receiver(DTMF RX)

Model	R99 10 Channel
Frequency Ranges	150-174 MHz or 138-150 MHz ,10 channels

### Microwave Transmitter (Video)

Model	DTC VMS/L-2000 standard DTC VMS/L-5000 optional
Power Output	250mW / 2 Watt switchable 2W/5W optional
Power Controls	Hi/Low switch on front panel
Frequency Ranges	1700-1850 MHz, 2200-2300 MHz, or 2400-2500 MHz
Number of Channels	10, user programmable (video frequency and two audio subcarriers)
Video Antenna	Dipole standard, via TNC side mounted connector Others optional, depending on requirement

### Motion Control Board

Control Structure	Microprocessor Based, Menu Driven
Control	Standard 16-Key DTMF keypad (All functions but the NIGHTSHOT and camera speed can be set with a 12 button keypad)
Menu Display	On Screen – analog superimposed
Menu Structure	Three Level
Telco	Auto Answer line interface TIP - RING
Photo Resistor Input	Auto NIGHTSHOT
DTMF Tone Input	Line Level
IR Illuminator	Switched ON When NIGHTSHOT is ON
AUX. Relay	Relay Contacts 2A
Video Outputs	Buffered 75 ohm (2) EIA-330-CCTV-A (1 Vp-p)
FAN	Activates Fan when temperature is above 70F
AUX. 12 VDC	Spare Power Taps
Video Input	(1 V p-p) 75 ohm from a conventional camera
PAN TILT Drivers	Up Down Left Right
Zoom Drivers	In / Out
Power Supply	12 VDC, 3.5 Amps from 90-240 VAC 50/60 Hz
Video Encryption	Ovation Micro Viewlock II option

### General

Antenna, Microwave	TNC Female (50 ohm)
Antenna, VHF	BNC Female (50 ohm)
Video Input/Output Conn.	BNC Female (75 ohm)
Power Connector	DC Phoenix Type 12 – 16 VDC
Power Connector	AC Phoenix Type 90-240 VAC 50-60 Hz
Current Drain	2 Amps DC, 300 mA AC
Housing Dims.	10" W X 4.5" H X 7.5" D
Weight	10 lbs
Storage Temperature	-40° C to +60° C
Operating Temperature	-20° C to +60° C

▲ VTH-VMS2-5000, 2200-2300 MHz operation

▲ VTH-VMS-5000, 2400-2500 MHz operation

Note: Specify 150-174 MHz or 138-150 MHz VHF control range.

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.