

# MBT

## Multi-Band Video Transmitter

Model No. 1398VTS



The MBT is a hand-held unit that transmits real-time, full-motion video. Designed to work over the L, S and C bands. It can be used to test all bands of the MVR-IV video receiver or any other video receiver. It can be operated stand-alone using the built-in keypad and LCD display or controlled via a computer.



- ① antenna connector (TNC)
- ② power/backlight knob: Position 1 - no backlight, Position 2 - low backlight, Position 3 - high backlight
- ③ external video input
- ④ LCD display
- ⑤ numeric keypad: key in frequency in MHz (1800, 4400 etc.) + **ENTER**
- ⑥ Frequency Up / Down: ↑ to increase; ↓ to decrease
- ⑦ Recall / Preset: **RCL** + number (0 to 9) recalls preset frequency; **ALT** + **Pre** + number (0 to 9) stores currently displayed frequency
- ⑧ Clear key: clears error or exits a current mode
- ⑨ ALT key: allows use of secondary (yellow) key function
- ⑩ Enter / Lock key: **ALT** + **Lock** locks/disables the keypad
- ⑪ Mode key: *(future enhancement)*
- ⑫ Internal Camera

## Standard Accessories



12V 4.8 A-Hr Li-Ion rechargeable battery

Multi-Band Antenna



## Optional Accessories



helmet camera/night vision cameras

## Specifications

### RF

Frequency Ranges:	1700 to 1850 MHz 2200 to 2500 MHz 4400 to 5000 MHz 5250 to 5858 MHz
Frequency Resolution:	1 MHz
Frequency Selection:	Direct User Entry Programmable Presets
Band Select:	Automatic
Power Output:	L/S: 250 mW (+24 dBm) nominal C1/C2: 100 mW (+20 dBm) nominal 50Ω
Output Impedance:	50Ω
2nd Harmonic:	-50 dBc
Frequency Control:	Phase-locked to TCXO
Frequency Stability:	0.0001% (1 ppm)
Type of Modulation:	FM
Transmit Bandwidth:	18 MHz
Load Mismatch:	Infinite no damage, all angles

### VIDEO

Input Level:	1 Vp-p (NTSC)
Input Impedance:	75 Ω
Bandwidth:	4.5 MHz
Channel Capacity:	1
Internal Camera:	1/4" color CMOS pin-hole

### POWER REQUIREMENTS

Input Voltage:	+8.0 VDC min., +14 VDC max.
Current Draw:	400 mA nominal @ 12V
Battery:	Thales 12V Lithium Battery Pack or 9V 123 Battery Adapter
Battery Life:	10 hours nominal @ 12V
Reverse Polarity:	Protected

### ENVIRONMENTAL SPECIFICATIONS

Operating Temp.:	-20 to +60 degrees C minimum
Altitude:	Unlimited

### MECHANICAL SPECIFICATIONS

Size:	1.5" x 2.6" x 9.7" (excluding connectors or switches)
Weight:	approx. 2.0 lb (with batteries)

### CONNECTORS

RF:	TNC female
Video Input:	75 Ω BNC female



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