

## CT-SFMM-\* Fixed Channel Micro Modulator

### Product Description

The CT-SFMM is a professional quality, channelized, heterodyne audio/video SAW filtered micro modulator. The unit provides a mono audio and video modulated RF carrier output on any single CATV channel from 2-13 & 14-88 (A-ZZZ). The CT-SFMM is ideal for placing audio and video onto any unused CATV channel. Different standard audio/video sources, such as satellite receivers, television cameras, video tape recorders, or television demodulators can be used.

The CT-SFMM takes baseband audio and video and modulates these signals onto the desired output channel. The heterodyne conversion process used in the CT-SFMM employs a crystal referenced, PLL synthesized local oscillator that guarantees a rock solid, no-drift output for the life of the modulator. The CT-SFMM also meets FCC Docket 21006 aeronautical frequency offset requirements. The modulator accepts standard composite video in the range of 0.7 to 2.5 V p-p.

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International Video Standards.**



### Features:

- Fixed channel SAW filtered micro modulator
- Available from Ch. 2-13 & 14-88 (A-ZZZ) CATV
- Die-cast chassis offers superior protection against ingress or egress
- Recessed front panel access to all level controls and indicators
- Use with Cabletronix CTPS-12 power supply and CTRC-12 rack chassis or with 3<sup>rd</sup> party power supplies and/or chassis depending upon configuration
- 1 year warranty with a 1 year loaner guarantee
- 3 year extended warranty available

# CT-SFMM-\*

## Fixed Channel Micro Modulator

### RF

Frequency Range	54-611 MHz fixed channel
Output Level - Min	+45 dBmV
Output Level Adjust	0 ~ -10db
Aural/Visual Carrier Ratio	-9 ~ -20db
Visual Carrier Frequency Tolerance	
Standard Channels	±10 kHz
FCC Aeronautical Channels	±5 kHz
Aural Carrier Frequency	+4.5 MHz
Offset from Visual Carrier	
Aural Carrier Accuracy, Settable	±1.5 kHz
Spurious Outputs	-60 dBc
C/N Ratio In Channel	60dB typical
Broadband Noise	-90dBc
Output Impedance	75 ohm
Output Return Loss	12 dB

### VIDEO

Input Level	0.5 Vp-p to 2.0 Vp-p
Frequency Response	±1.0 dB
fv-0.5 MHz to fv+4.2 MHz	
Video SNR Weighted	60 dB typical
Differential Gain	±4.0 %
Differential Phase	±2.0 °
Input Impedance	75 ohm

### AUDIO

Input Impedance:	5K Ohms
Baseband Input Level:	0.5 V p-p for 25 kHz peak dev.
Preemphasis:	75 microseconds
Flatness:	1.5 dB max. 50 Hz to 15 kHz

### Test Tone

Frequency	10.396 KHz ± 50Hz
Amplitude	0.5 Vp-p ± 10%

### Pre-Emphasis-Mono

Total Harmonic Distortion	1.00%
Input Impedance - Unbalanced	10 kΩ

### Sub-Carrier Audio

Frequency	4.5 MHz
Stability (typ.)	±5 kHz

### General

Power Requirements	
Voltage	+12 / +5 VDC
Current (Max)	170 / 35 mA
Power (Max)	2.25 W
Temperature Range	0 to +50 °C

### Mechanical

Dimensions (WxHxD):	1.15 x 3.5 x 10.25 in 29 x 89 x 260mm
Weight	0.65 lbs., 0.30 kg

### Connectors (Rear Panel)

Video Input	"F" Type, Female
Audio Input	RCA Type, Female
RF Output	"F" type, Female
Power	Header, 3 Pin

### Controls (Front Panel)

Video Level	Control
Aural Carrier Level	Control
Audio Level	Control
RF Output Level	Control

### Indicators (Front Panel)

Power ON	LED, Green
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The CT-SFMM fixed channel modulators are regulatory compliant. All product specifications are accurate at time of printing, but are subject to change.

Products are warranted for one year. Warranty can be extended to three years. The CT-SFMM is backed by a one-year loaner guarantee. Contact a sales engineer for details.