



## M-369S Stereo Modulator Technical Specifications

- Selectable Channels 7-750 Mhz
- Output Channels T7 Through 118
- +60dBmV Output with Amplifiers
- Integrated BTSC Stereo Encoder

### Features

This Modulator is Microprocessor Controlled with Self-Diagnostic Monitoring. The Selectable Output Channels are T7-118 (7 MHz- 750MHz) Standard, HRC with Automatic 12.5KHz, or 25.0 KHz FCC Offsets. The Stereo Circuit is Engineered to Process Right and Left Analog Audio Signals and Baseband Composite Video to Generate a Stereophonic Composite Signal in Accordance with BTSC System Standards.

- Tunes Channels 2 - 118 by channel number and T Channels are designated by -7 indicating T7
- BAR Graph Modulation and Channel LED Readout
- Balanced Stereo Inputs - 600  $\Omega$
- Synthesized Oscillators - Crystal Referenced Phase Locked
- Non-Volatile Channel Selection
- RF Muted During Tuning
- +60dBmV Output Using Low-Distortion Hybrid Amplifiers
- Phase Lock Loop FM Audio
- Optional Aural Subcarrier and Baseband Audio Inputs
- External Separate Audio/Video & Composite IF Loop-Through
- Sound Carrier Level Adjustable -10dB to -20dB
- SAW Filtered IF: Designed for Adjacent Channel Operation
- Internal Switch Selects Standard or HRC Output
- RS 232 Control Option (Daisy Chain Capable)
- Video Delay Predistortion Network meets FCC 73.687
- Non-Volatile Memory Retains memory after Power Loss

### Video Section

Video Section	System M/N
Input: C3F Neg	NTSC
Input Impedance	75 ohms, unbalanced
Frequency Response	$\pm 0.5$ dB
Bandwidth	4.2 MHz
Differential Gain	3% max
Differential Phase	3 Deg max
Hum and Noise	-60 dBc

### Audio Section

Input: 50 Hz - 15 KHz	0 dBm (.8V)
Impedance	600 ohms, balanced
Frequency Response	$\pm 1.0$ dB
Frequency Tolerance $\pm 500$ Hz	4.5 MHz
Frequency Deviation	$\pm 25$ KHz
Harmonic Distortion	1% max
Preemphasis (mono)	75 $\mu$ s
Internally Defeatable	

### IF Section

Output Impedance	75 ohms, unbalanced
Bandwidth	6 MHz
Video IF Level	+37 dBmV, 0 V $\pm 97$ dB $\mu$ V
Audio IF Level	+22 dBmV, +82dB $\mu$ V
Return Loss	>14 dB
IF Frequency, Video Carrier	45.75 MHz
IF Frequency, Audio Carrier	41.25 MHz
Video-Sound Spacing	+4.5 MHz
Vestigial Sideband Width	0.75 MHz
Second IF Frequency	945.75MHz

### RF Section

Output Frequency	7-750 MHz
Frequency Tolerance	$\pm 3$ KHz
Output Level	+60 dBmV max +120 dB $\mu$ V
Output Impedance	75 ohms, unbalanced
Spurious Output	<-60 dBc
@+60 dBmV/+120 dB V	
Return Loss	>14 dB
Frequency Response	<2 dB

### Mechanical and Power

Rack Mounting	For Standard 19" Rack Mounts
Standard Dimensions	19"W x 1.75"H x 14"D
Metric Dimensions	(48.26cm x 4.44cm x 35.56cm)
Weight	12 pounds (5.4 kg)
Power	115/240 VAC 50/60 Hz 6 watts
Operating Temperature	40 to 110 degrees F