

# FAxM Series

## Triple Channel Frequency Agile Audio/Video Modulators



### ○ Features & Benefits

- Rack Mountable - 1 EIA (1.75") Rack Space
- UL Listed with Three Year Product Warranty
- Supports All Broadcast and CATV Channels, Including HRC and IRC Assignments from 54 to 860 MHz
- Front Panel Accessible Level Controls for Easy Set-Up and Adjustments
- Fully Compatible With BTSC Encoded Stereo Audio

The FAxM Series is a professional quality, multiple channel agile audio/video modulator. This unit provides audio and video modulated RF carriers on any channel in the 54 to 860 MHz frequency range, using only one rack space. Any standard audio/video source can be used, such as satellite receivers, television cameras, video tape recorders, or television demodulators. Agile channel selection permits on-the-fly channel changes and reduces the need for large inventories of channelized products. Four modules are available with 2 basic distinctions. The FA3M-50-860, Stock No. 5961B, comes equipped with independent IF loops, which allows interfacing with video all-call and signal scrambling systems. IF loops are available in a triple channel configuration only. The FA1M; FA2M and FA3M, Stock No. 59711A, 59712A and 59713A respectively do not have IF loop capability.

### ○ Specifications

#### RF

Frequency Range: 54-806 MHz  
Channels: CATV, VHF, UHF (STD,HRC,IRC)  
FCC Offset (pre-programmed):  
0, +12.5, or 25 kHz  
Output Level - Combined Min: +50 dBmV  
Output Level Adjust: 15 dB  
Aural/Visual Carrier Ratio: -10 to -17 dB  
Visual Carrier Frequency Tolerance  
Standard Channels:  $\pm 5$  kHz  
FCC Aeronautical Channels:  
 $\pm 3$  max kHz  
4.5 MHz Aural Inter Carrier Frequency:  $\pm 1$  kHz  
Channel Selectivity  
Adjacent Aural and Below: -40 dB  
Adjacent Picture and Above: -50 dB  
Spurious Outputs: -60 dBc  
C/N Ratio In Channel: 63 dB  
Broadband Noise: -70 dBc  
Output Impedance: 75 ohm  
Output Return Loss: 12 dB

#### Video

Input Level: 1.0 V p-p  
Frequency Response  
fv-0.5 MHz to fv+4.2 MHz:  $\pm 1.0$  dB  
P-P Video to RMS Hum Ratio: 65 dB  
Video Signal-to-Noise Ratio,  
NTC-7 Weighted: 62 dB  
Differential Gain: 2.0 %  
Differential Phase: 1.0 °  
Over Modulation Indicator: 87.5,  $\pm 2.5$  %  
Input Impedance: 75 ohm  
Input Return Loss: 24 dB, min

#### Audio

Input Level: 140 mV RMS  
Ext. 4.5 MHz Input Level: 40  $\pm 1$  dBmV  
Frequency Range: 20 Hz to 20 kHz

Pre-Emphasis-Mono: 75  $\mu$ s  
Frequency Response:  $\pm 1.0$  dB  
IF Pre-Emphasis Defeated: +0.5 dB  
Audio Signal-to-Noise: 58 dB  
Total Harmonic Distortion: 0.6 %  
Over Modulation Indicator : 25,  $\pm 2$  kHz  
Input Impedance: Greater than 10 K  $\Omega$ ,  
Unbalanced

#### General

Power Requirements: 110 VAC to 260 VAC  
Frequency: 47 to 63 Hz  
Temperature Range: 0° to +50° C  
AC Current: 0.32 Amp for 115 VAC  
Output Voltage: +12 VDC, +5 VDC  
Max Current Output/Voltage: 0.7 Amp

#### Mechanical

Dimensions (WxHxD): 19 x 1.75 x 14.25 in  
Weight: 7 lbs (approx)

#### Connectors (Rear Panel)

Video Input: "F" Type, Female  
Audio Input: RCA Phono  
RF Output: "F" Type, Female

#### Connectors (Front Panel)

Frequency Selection: Push-Button Switches  
Video Level: Control  
A/V Ratio: Control  
Audio Level: Control  
RF Output Level: Control  
Channel Enter: Push-Button

#### Indicators (Front Panel)

Power ON/Status: 2 Color, LED, Red/Green  
Video Over Modulation: LED, Red  
Audio Over Modulation: LED, Red

Refer to product instruction manual for additional specification measurements and notes.

### ○ Ordering Information

Model	Stock No.	Description
FA3M-50-860-IF	5961B	Frequency Agile Modulator, Triple Channel Unit Agile Output 54-860 MHz, With Independent IF Loops
FA3M-50-860	59713A	Frequency Agile Modulator, Triple Channel Unit Agile Output 54-860 MHz, STD CATV, HRC, IRC, +50 dBmV
FA2M-50-860	59712A	Frequency Agile Modulator, Double Channel Unit Agile Output 54-860 MHz, STD CATV, HRC, IRC, +50 dBmV
FA1M-50-860	59711A	Frequency Agile Modulator, Single Channel Unit Agile Output 54-860 MHz, STD CATV, HRC, IRC, +50 dBmV
AMCM-860H	7766HA	Modular Agile Audio/Video Modulator (MIRC-4 Series) +45 dBmV, 54-860 MHz Agile

Order From:



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