

Stereo Agile Modulator

HE-12/HE-4 Series - AMCM-860S



○ Features & Benefits

- Integrated Stereo Encoder
- Meets FCC Docket 21006 Aeronautical Frequency Offset Requirements
- Front Panel Accessible Level Controls for Easy Set-Up and Adjustments
- Die-Cast Chassis Offers Superior Protection Against Ingress or Egress
- Supports All Broadcast and CATV Channels, Including HRC and IRC Assignments from 54 to 860 MHz

The AMCM-860S provides modulated aural and visual carriers on any channel in the 54 to 860 MHz range. Standard CATV, IRC, HRC and Broadcast channel frequency plans are all accommodated. Pre-programmed FCC 21006 offsets provides frequency compliance on all mandated channels automatically.

Setting the desired output channel is easily accomplished with the LED channel display and using push button up/down switches. Once the desired channel is reached on the display the "enter" push button must be depressed to evoke the change. This feature prevents interference to other channels in the headend by going directly to the desired output channel rather than stepping through channels as indicated on the display. The enter button feature also guards against accidental up/down button touches that would otherwise cause inadvertent channel change. Should the "enter" button not be pushed within 30 seconds, the display will return to the original channel in memory.

The modulator utilizes SAW filtering with FCC group delay pre-distortion to provide true vestigial sideband selectivity and superior adjacent channel performance. The AMCM-860S takes baseband L/R audio and video from any standard source such as satellite receivers, video tape recorders, DVD players or television demodulators and modulates to the desired output channel.

○ Specifications

RF

- Frequency Range: 54-860 MHz
- Channels: CATV, VHF, UHF (STD,HRC,IRC)
- FCC Offset (pre-programmed):
0, +12.5, or 25 kHz
- Output Level - Min: +45 dBmV
- Output Level Adjust: 15 dB
- Aural/Visual Carrier Ratio: -10 to -17 dB
- Visual Carrier Frequency Tolerance
Standard Channels: ± 5 kHz
FCC Aeronautical Channels: ± 3 max kHz
- 4.5 MHz Aural Inter Carrier Frequency:
 ± 150 Hz
- Channel Selectivity:
Adjacent Aural and Below: -40 dB
Adjacent Picture and Above: -50 dB
- Spurious Outputs: -60 dBc
- C/N Ratio In Channel: 65 dB
- Broadband Noise: -76 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: ± 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, ± 2.5 %
- Input Impedance: 75 Ohm
- Input Return Loss: 24 min, dB

Audio

- Input Level: 140 mV RMS minimum
- Input Impedance: 10k Ω , Unbalanced
- Total Harmonic Distortion (%): 1.0
- Stereo Separation:
50 Hz - 100 Hz: 15 dB
100 Hz - 1 kHz: 25 dB
12 kHz: 18 dB

General

- Power Requirement: 5 W
- Voltage:
12 VDC @235 mA
5 VDC @425 mA
- Temperature Range: 0 to +50 ° C

Mechanical

- Dimensions (WxHxD):
1.15 x 3.5 x 7.5 in
29 x 89 x 191 mm
- Weight: 0.8 lbs, .36 kg
- Connectors (Rear Panel)
- Video Input: "F" Type, Female
- L/R Audio Input: RCA Phono (2)
- RF Output: "F" Type Female

Controls (Front Panel)

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

Indicators (Front Panel)

- Channel Indicator: 2 Digit LED, Red
- Power ON: LED, Green
- Video Over Modulation: LED, Red
- Audio Over Modulation: LED, Red
- Stereo Indicator: LED, Red

○ Ordering Information

Model	Stock No.	Description
AMCM-860S	7766S	Modular Agile Stereo Audio/Video Modulator (HE 12 Series) +45 dBmV, 54-860 MHz Agile