





MMA860S Universal-Chassis Mini Stereo Agile Modulator

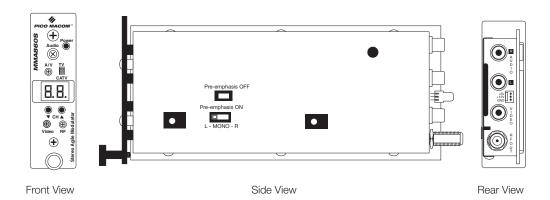
The MMA860S is a professional grade microprocessor-controlled stereo agile audio/video minimodulator. This modulator accepts any audio-video baseband television signal and provides a 45dBmV minimum output on CATV channels 2 to 135 (54-860 MHz). Channel selection is easily accomplished via channel up/down buttons located on the front panel. Up to 12 or 16 units can be installed "mix-and-match" in Pico Macom's MPC-12, MPC-12C, MPC-12R chassis with MPCM45 mini-modulators or MPCD mini-demodulators. Its unique design enables it to be installed in other manufacturers' mini-mod chassis. The unit's tracking filter technology and double-heterodyne conversion ensures accurate and spurious-free output. The MMA860S uses SAW filtering in conjunction with FCC group delay correction circuitry to provide superior adjacent channel selectivity. The unit's PLL circuitry in conjunction with the non-volatile memory contained in the microprocessor ensures easy and reliable channel selection and restoration. The MMA860S modulator is shipped with all internal adjustments preset. Pico Macom backs up this product with its industry leading 5-year limited warranty.

Features

- 135-Channel Range 54-860 MHz (CATV 2-135)
- >45dBmV min adjustable output for optimum carrier-to-noise performance
- Compatible with most manufacturers' mini-modulator chassis
- · State-of-the-art digital phase locked loop (PLL) design guarantees precise frequency locking for solid drift-free operation
- Microprocessor control enables quick digital push-button channel selection for ease of installation, configuration and improved system uptime
- SAW (surface acoustic wave), filtered for superior adjacent channel performance, enables drop-in channel expansion
- In-band carrier-to-noise ratio >65dB ensures superior picture quality
- Automatic selection of aeronautical offsets (12.5kHz, 25kHz) for trouble-free configuration
- Front panel access to controls enables easy setup

MMA860S





Specifications

 $\begin{array}{lll} \textbf{RF} \\ \textbf{Frequency Range} & \textbf{NTSC 54 to 860 MHz} \\ \textbf{Output Level} & +45 \text{ dBmV (minimum - 15dB adjustment range)} \\ \textbf{Output Impedance} & 75\Omega \\ \end{array}$

A / V Ratio 12/16dB(±2dB) select below visual carrier level

VISUAL CARRIER

Frequecny Tolerance ±5KHz 4.5MHz Aural Inter

FCC Offset

Accuracy settable to: ±200HZ

Spurious Outputs -60 dBc typical, -55dBc Min. measured at 16 dB A/V ratio and with

Modulator output level of + 45 dBmV

C/N 60dB typical(4MHz bandwidth)

Channels TV/CATV(STD)

AUDIO

Input Level 1.0Vp-p. for ±25KHz Dev. manual gain adjust with front panel

Input Impedance Greater than 10K Ohms, unbalanced

L/R Audio Frequency

Response ± 1 dB (50Hz to 10KHz)

Total Harmonic

 Distortion
 <1%</td>

 Stereo Separation
 20dB Min. @1KHz

 S/N
 50dB Min.

VIDEO

Input Level for 87.5%

Modulation: 1Vp-p. for 0~95% Modulation continuously

adjustable manual gain adjust with front

panel control

 $\begin{array}{ll} \text{Input Impedance} & 75\Omega \\ \text{Frequency Response} & \pm 1 \text{dB} \end{array}$

S/N 60dB typical
Differential Phase < 5°
Differential Gain: < 5%

GENERAL

Power Requirement +5W maximum

DC Power Input +12V 180 mA maximum

+5 V 570 mA maximum

Operating Temperature 0°C to + 40 °C ambient

Related Products

MOR-CS Headend Cooling System

MPC-12 12-Slot Universal Mini-Mod Chassis and

Power Supply

MPC-12R Universal Chassis & Hot-Swappable Redundant

Power Supply

PHC-12G 1GHz Broadband Passive Headend

12 Channel Combiner

PHC-24G 1GHz Broadband Passive Headend

24 Channel Combiner

Ordering Information

MMA860S Universal Chassis Stereo Agile Modulator