//MACOM

PROFESSIONAL SERIES

A860

Agile Modulator

Re-broadcast quality performance specifications match those of fixed channel modulators

Integrated BTSC Stereo (optional)

60 dBmV minimum output for optimum carrier-to-noise performance

Precision SAW filter for superior adjacent channel performance enables drop-in channel expansion

State-of-the-art digital phase-locked loop (PLL) design guarantees precise frequency locking for solid drift-free operation

Superior design including automatic band-splitting filters for excellent carrier-to-noise ratio (>65 dB)

Bright LED bar graph provides simple modulation set-up

Microprocessor tuning control provides digital display with push-button channel selection for ease of installation, configuration and servicing
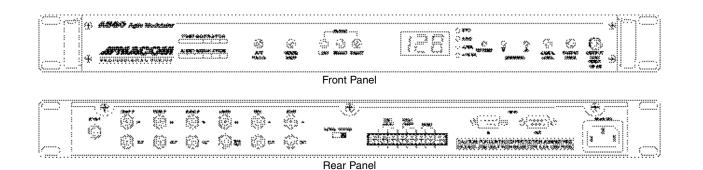
Rear panel interfaces accept baseband video and three audio formats to provide maximum installation flexibility

Composite and separate audio and video IF loops allow compatibility with encoders, ghost cancellers and video override applications

MPX stereo loop provides encoded stereo input and compatibility with Emergency Alert equipment

IRC and HRC input and output offset available for frequency setting in systems using offset channels

The **MACOM A860** agile modulator is a frequency agile audio/video professional re-broadcast grade, microprocessor controlled CATV modulator. Attractive and easy to operate, the sleek design highlights the useful front panel modulation bar-graphs and channel indicators. The simple push button tuning interface allows the **A860** to be configured for CATV standard, HRC, and IRC or North American broadcast channels with an RF output of 60 dBmV. The front panel output test point provides a quick reference test point prior to channel combining equipment, saving time and service interruption during setup and maintenance. The **A860** features rear panel interface connections for input of NTSC video and monaural and discrete left and right audio. The integrated stereo encoder (optional) will provide a BTSC stereo encoded output channel. MPX loop and 4.5 MHz (modulated) audio input connections are provided to bypass the internal stereo encoder for compatibility with external units; additionally, the MPX loop is useful when used with the **EAS-12B** emergency override system. A composite audio/video IF loop provides compatibility with scrambling encoders, ghost cancellers, and IF override applications. The unit conforms to FCC Docket 21006 for frequency accuracy. The **MACOM** line is backed by an industry leading 5-year limited warranty.

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Product Specifications

Front Panel

Rear Panel

RF Output

Frequency Range:	54-860 MHz
Level:	60 dBmV min
Level Adjustment:	20 dB
Impedance:	75 ohms
Frequency Stability:	±3 kHz
Audio/Video Ratio:	-10 to -20 dB Adjustable
Output Return Loss:	-18 dB
In Band Spurious:	-62 dB
Out of Band Spurious:	-65 dB
VSB Response:	-60 dB min
C/N (In-Band):	>62 dBc
C/N (Out-of-Band):	>65 dBc

IF Output

Video Level:	38 dBmV
Audio Level:	22 dBmV
Composite Level:	35 dBmV
Video Stability:	±3 kHz
Audio Stability:	±2 kHz
Impedance:	75 ohms

4.5 MHz Input

Level:	37 dBmV
Impedance:	75 ohms

Video Input

Level:	.7–1.0 V p-p
Frequency Response:	±1.0 dB max
Impedance:	75 ohms
Differential Gain:	<2% typ
Differential Phase:	<1° typ
Chrom / Lumin Delay:	±8 ns
Hum and Noise:	-60 dB

Audio Input

Level – Mono:	0.5 V p-p – 1 V p-p
Level – Left Audio:	0.5 V p-p – 1 V p-p
Level – Right Audio:	0.5 V p-p – 1 V p-p
Frequency Response:	±1.5 dB max
Impedance:	600 ohms
Preemphasis:	75 μs switchable

MPX/BTSC Stereo

Level:	2.2 V p-p
Impedance:	500 ohms
Frequency Response:	1 dB, 50 Hz – 14 kHz
Total Harmonic Distortion:	<0.3%
S/N:	75 dB
Separation:	35 dB, 50 Hz – 12 kHz

General

Power Input:	90-260 VAC, 28 W
Operating Temperature:	-10°C to 50°C
Dimensions:	19″(L) x 12″(D) x 1.75″(H)
Weight:	7.8 lbs.
Connectors:	RF & Video "F" type
Audio:	600 ohms terminal strip

Ordering Information

A860 Agile Modulator
A860S Agile Stereo Modulator

Related Products

D860 Agile A/V Stereo Demodulator
EAS-12B Emergency Override System
C860 Bi-Directional Combiner
L860 Bi-Directional Launch Amplifier
DSP806 HDTV Agile Channel Processor

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