

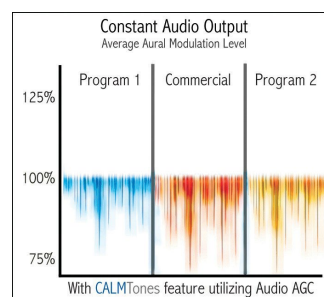
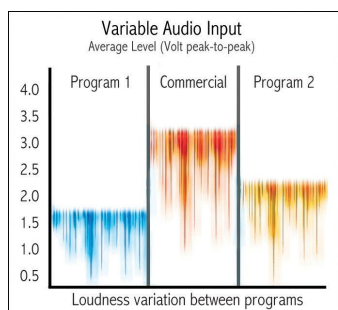


AMCM-860

AGILE MICRO CHANNEL MODULATOR

AMCM-860 is a frequency-agile analog audio/video modulator available in NTSC channels 2-135 (54-860 MHz). Models are available in both stereo and mono audio inputs.

This 4th generation of AMCM-860 is equipped with the **CALMTones** feature, utilizing Audio AGC (Automatic Gain Control) circuitry that eliminates variations in loudness level that may be present among various program sources.



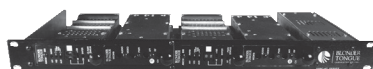
Features

- Audio AGC feature prohibits commercials that accompany broadcast programs from:
 - (i) having modulation levels substantially higher than the broadcast program; and
 - (ii) having an average maximum loudness substantially higher than that of the broadcast program.
- Audio AGC feature provides consistent audio level among all broadcast programs on different channels and among different programs within the same channel
- Compact design allows for deployment of 12 channels in 2RU
- Utilizes SAW filters for improved performance
- Die-cast chassis for RFI immunity

Ordering Information

Model	Stock #	Description
AMCM860D	7766D	Modular-Agile Audio/Video Modulator, +45 dBmV
AMCM860DS	7766DS	Modular-Agile Audio/Video Modulator, Stereo, +45 dBmV
MIRC-12V	7715	Horizontal Rack Chassis (Holds up to 12 modulators)
MIPS-12D	7722D	Horizontal 100-240 VAC 50/60 Hz Power Supply (1 per chassis)
MIRC4D	7711	Horizontal Rack Chassis equipped with Power Supply

Revision Control: 110614 (651204600J)



7766D (1 of 12) 7722D 7715

Specifications

INPUT

Video Connector:	"F" Female
Impedance:	75 Ω
Return Loss:	24 dB
Input Level:	1.0 volt peak-to-peak (87.5% depth of modulation)
Frequency Response:	1.0 dB peak-to-valley (fv to fv+4.2 MHz)
Peak-to-Peak Video-to-RMS Hum Ratio:	65 dB
Signal-to-Noise Ratio:	62 dB (Weighted; 4 MHz bandwidth)
Differential Gain:	2.0% (87.5% depth of modulation)
Differential Phase:	1.0 degree (87.5% depth of modulation)
Chrominance/Luminance Delay:	Per FCC Requirements
Mono Audio(standard) Connector:	RCA
Input Impedance:	Greater than 10 kΩ, unbalanced
Input Level:(for 25 kHz deviation)	0.5 - 4.0 volt peak-to-peak (constant AGC range)
Frequency Range:	50 Hz to 15 kHz
Frequency Response:	± 1 dB
Total Harmonic Distortion:	1% @ 25 kHz deviation
Signal-to-Noise Ratio:	66 dB
Stereo Audio (optional) Connector:	RCA
Input Impedance:	Greater than 10 kΩ, unbalanced
Input Sensitivity:(for 55 kHz peak deviation)	0.5 - 4.0 volt peak-to-peak (AGC range with pilot tone)
Frequency Response:	± 0.75 dB (50 Hz to 12 kHz)
Separation:	20 dB @ 50 Hz to 10 kHz

OUTPUT

Connector:	"F" Female
Impedance:	75 Ω
Return Loss:	12 dB
Frequency Range:	54 to 860 MHz (NTSC CATV Ch. 2 -135)
Power Level:	+45 dBmV
Power Level Range:	10 dB continuously adjustable
Carrier-to-Noise:(In Channel)	63 dB
Broadband Noise:	-75 dBc (@ +45 dBmV output level, 4 MHz bandwidth)
Spurious Outputs:	-60 dBc
Aural/Visual Carrier Ratio:	-11 to -19 dB continuously adjustable
4.5 MHz Aural Inter-carrier Freq. Tolerance:	±150 Hz; 77 °F (25 °C)
Visual Carrier Frequency Tolerance	
Standard Channels:	±10 kHz; 32 to 122 °F (0 to 50 °C)
FCC Aeronautical Channels:	±5 kHz; 32 to 122 °F (0 to 50 °C)

General

Dimensions (W x D x H)	
AVCM Modules:	1.0 x 7.78 x 3.5 inches (25 x 198 x 89 mm)
MIPS-12C Power Supply:	4.6 x 7.5 x 3.5 inches (106 x 191 x 89 mm)
MIRC-12V Chassis:	19 x 12.0 x 5.25 inches (483 x 305 x 133 mm)
MIRC-4D Chassis:	19 x 9.0 x 1.75 inches (483 x 229 x 44 mm)
Power	
MIPS-12C Power Supply:	100-240 VAC; 50/60 Hz
MIRC-4D Power Supply:	100-240 VAC; 50/60 Hz
Power Dissipation:	~ 5 W(max. per AVCM Module)
Weight	
AVCM Module:	0.8 lbs (0.36 kg)
Fully Loaded Chassis:	15.8 lbs (7.2 kg)
Operating Temperature:	32 to 122 °F (0 to 50 °C)
Storage Temperature:	-13 to 158 °F (-25 to 70 °C)
Operating Humidity:	0 to 95% RH @ 35 °C max, non-condensing
Storage Humidity:	0 to 95% RH @ 35 °C max, non-condensing

Alarms/Monitoring/Control

Front-Panel Indicator	
Channel No. & Mode:	2-Digit Red LED Display
+100 channel:	Red LED
Video Over-modulation:	Red LED
Audio Over-modulation	Red LED
Stereo:	Green LED
Front-Panel Controls	
Output Level:	Potentiometer
Video Level:	Potentiometer
Audio Level:	Potentiometer
Aural Carrier Level:	Potentiometer

Related Products

Model	Description
AM-60-860	Frequency-agile Audio/Video modulator, +60 dBmV, 54-860 MHz, 1RU
ACM	Frequency-agile Audio/Video modulator, +45 dBmV, 54-806 MHz, Twelve modulators in 2RU
MICM	Fixed-channel Audio/Video modulator, +45 dBmV, 54-860 MHz, Twelve modulators in 2RU