

MICM SERIES

MICRO CHANNEL MODULATOR

MICM series of products are fixed-channel analog audio/video modulators available in the following models:

MICM-45C: The fourth generation of the MICM series, it is available in NTSC channels 2-135 (54-860 MHz) and the PAL B, G, and I channels in the same frequency range.

MICM-45D: Is the same as MICM-45C, but with audio AGC (Automatic Gain Control) that eliminates loudness level variations among program sources. It is available in NTSC channels 2-125 (54-806 MHz) and PAL B, G, and I channels in the same frequency range.

Optional stereo audio output is available for both MICM-45C and MICM-45D, but for NTSC models only.

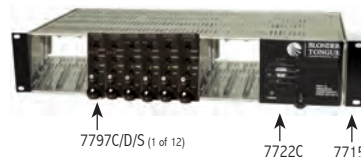


FEATURES

- Compact design allows for deployment of 12 channels in 2RU
- Integrated Stereo encoder available for NTSC channels
- Utilizes SAW filters for improved performance
- Die-cast chassis for RFI immunity

ORDERING INFORMATION

Model	Stock #	Description
MICM-45C	7797C 600	Fixed-channel Audio/Video Modulator, +45 dBmV, 54-600 MHz
MICM-45C	7797C 860	Fixed-channel Audio/Video Modulator, +45 dBmV, 600-860 MHz
MICM-45S	7797S 600	Fixed-channel Audio/Video Modulator, Stereo, +45 dBmV, 54-600 MHz
MICM-45S	7797S 860	Fixed-channel Audio/Video Modulator, Stereo, +45 dBmV, 600-860 MHz
MICM-45D	7797D 600	Fixed-channel Audio/Video Modulator, Audio AGC, +45 dBmV, 54-600 MHz
MICM-45D	7797D 806	Fixed-channel Audio/Video Modulator, Audio AGC, +45 dBmV, 600-806 MHz
MICM-45DS	7797DS 600	Fixed-channel Audio/Video Modulator, Audio AGC, Stereo, +45 dBmV, 54-600 MHz
MICM-45DS	7797DS 806	Fixed-channel Audio/Video Modulator, Audio AGC, Stereo, +45 dBmV, 600-806 MHz
MIRC-12V	7715	Rack Chassis (holds up to 12 modulators)
MIPS-12C	7722C	100-240 VAC; 50/60Hz power supply (one per chassis)



Revision Control: 090828

SPECIFICATIONS

INPUT

Video Connector: Impedance: Return Loss: Input Level: Frequency Response: Peak to Peak Video-to-RMS Hum Ratio: Signal-to-Noise Ratio: Differential Gain: Differential Phase: Chrominance/Luminance Delay:	"F" Female 75 Ω 20 dB 1.0 volt Peak-to-Peak (87.5% depth of modulation) 1.0 dB Peak-to-Valley (fv to fv+4.2 MHz) 64 dB 65 dB (Weighted; 4MHz bandwidth) 2.0% (87.5% depth of modulation) 2.0 degree (87.5% depth of modulation) Per FCC Requirements
Mono Audio (standard) Connector: Input Impedance: Input Level: (for 25 KHz deviation) MICM-45C MICM-45D Frequency Range: Frequency Response: Total Harmonic Distortion: Signal-to-Noise Ratio: MICM-45C MICM-45D	RCA Greater than 10 kΩ, unbalanced 0.4 volt peak-to-peak (min.) 0.5 to 4.0 volt peak-to-peak (constant AGC range) 50 Hz to 12 kHz ± 0.5 dB 1% @ 25 kHz deviation N/A 70 dB
Stereo Audio (optional) Connector: Input Impedance: Input Sensitivity: (for 55 kHz peak deviation) MICM-45C MICM-45D Frequency Response: Separation:	RCA Greater than 10 kΩ, unbalanced 1.0 volt peak-to-peak (with pilot tone) 0.5 to 4.0 volt peak-to-peak (AGC Range with pilot tone) +/- 0.75 dB (50 Hz to 12 kHz) 20 dB @ 50 Hz to 10 kHz

OUTPUT

Connector: Impedance: Return Loss: Frequency Range: MICM-45C MICM-45D Power Level: Power Level Range: Carrier-to-Noise: (In Channel) MICM-45C MICM-45D Broadband Noise: Spurious Outputs: Aural/Visual Carrier Ratio: 4.5 MHz Aural Inter-carrier Freq. Tolerance: Visual Carrier Frequency Tolerance Standard Channels: FCC Aeronautical Channels:	"F" Female 75 Ω 15 dB 54 to 860 MHz (NTSC CATV Ch. 2 -135) 54 to 806 MHz (NTSC CATV Ch. 2 -125) +45 dBmV 10 dB continuously adjustable 65 dB 63 dB -90 dBc (@ +45 dBmV output level, 4 MHz bandwidth) -66 dBc -11 to -19 dB continuously adjustable ±250 Hz; 32 to 122 °F (0 to 50 °C) ±10 kHz; 32 to 122 °F (0 to 50 °C) ±5 kHz; 32 to 122 °F (0 to 50 °C)
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GENERAL

Dimensions (W x D x H) MICM Modules: MIPS-12C Power Supply: MIRC-12V Chassis:	1.0 x 7.78 x 3.5 inches (25 x 198 x 89 mm) 4.6 x 7.5 x 3.5 inches (106 x 191 x 89 mm) 19 x 12.0 x 5.25 inches (483 x 305 x 133 mm)
Power MIPS-12C Power Supply:	100-240 VAC; 50/60 Hz
Power Dissipation:	~ 3 W (per MICM Module)
Weight MICM Module: Fully Loaded Chassis:	0.65 lbs (0.3 kg) 18.2 lbs (8.3 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-condensation
Storage Humidity:	0 to 95% RH @ 35 °C max, non-condensation

ALARMS/MONITORING/CONTROL

Front-Panel Indicators Power: Stereo: Video Over-modulation: Audio Over-modulation:	Green LED Red LED (when equipped) N/A N/A
Front-Panel Control Output Level : Video Level: Audio Level: Aural Carrier Level:	Potentiometer Potentiometer Potentiometer Potentiometer

RELATED PRODUCTS

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

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