

MICM-45S

Stereo Audio Video Modulator

The MICM-45S is a professional quality, channelized, heterodyne audio/video modulator with integrated stereo capability. The unit provides a stereo audio and video modulated RF carrier output on any single CATV channel from 2 to 135. The MICM-45S is ideal for placing stereo audio and video onto any unused CATV channel. Any standard audio/video source, such as satellite receivers, television cameras, video tape recorders, or television demodulators can be used.

The MICM-45S joins Blonder Tongue's family of modular headend components using the MIRC series rack chassis. The modulator utilizes SAW filtering with FCC group delay pre-distortion to provide true vestigial sideband selectivity. This makes the MICM-45S perfect for use in adjacent channel systems.

The MICM-45S takes baseband L/R audio and video and modulates these signals into the desired output channel. The heterodyne conversion process used in the MICM-45S employs a crystal referenced, PLL synthesized local oscillator that guarantees a rock solid, no-drift output for the life of the modulator. The MICM-45S also meets FCC Docket 21006 aeronautical frequency offset requirements. The modulator accepts standard composite video in the range of 0.7 to 2.5 V p-p.

- 860 MHz Channelized Audio/Video Modulator
- Stereo Capability Integrated into Single-Width Micro Modulator
- High Stereo Separation
- Stereo Indicator LED
- Die-cast Chassis Offers Superior Protection Against Ingress or Egress
- LED Over-Modulation Indicators for Easy Set Up

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○ Features and Benefits

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○ Specifications

RF

Frequency Range:
54-860 MHz (CATV 2-135)
Output Level: +45 dBmV
Output Level Range: 10 dB continuously adjustable
Aural/Visual Carrier Ratio:
-11 to -19 dB continuously adjustable
Visual Carrier Frequency Tolerance:
±10 kHz (standard channels)
± 5 kHz (aeronautical channels)
Aural Carrier: 4.5 MHz above visual
Aural Inter-carrier Stability: ±5 kHz (0° to +50° C), std.
Frequency Setting: ±1.5 kHz
Spurious Outputs: -60 dBc, minimum
C/N Ratio In Channel: 60 dB
Broadband Noise: -90 dB
Output Return Loss: 12 dB
IF (Internal) Frequency: 45.750 MHz

Video

Input Level: 1.0 V p-p for 87.5 % modulation
Frequency Response fv -0.5 MHz to fv +4.2 MHz: ±1.0 dB
Video C/N: 60 dB (4 MHz BW)
P-P Video to RMS Hum Ratio: 60 dB
Differential Gain: ±4.0 % @ 87.5% Modulation
Differential Phase: ± 2° @ 87.5% Modulation
Input Return Loss: 18 dB

Audio

Input Level: 140 mV RMS minimum
Input Impedance: 10kΩ, 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 Requirements
External: 12 VDC @ 160 mA
+5 VDC @ 180 mA
Temperature Range: 0° to +50° C

Mechanical

Dimensions (WxHxD): 1.20" x 3.5" x 7.50"
Weight: 0.65 lbs (0.30 kg)

Connectors/Impedance

L/R Audio Inputs: RCA Phono, female
Video Input: 75 ohm "F" type, female
RF Output: 75 ohm "F" type, female

Controls

Video Level: Pot
Audio Level: Pot
Aural Carrier Level: Pot
RF Output Level: Pot

Indicators

Power ON: LED, green
Video Over Modulation: LED, red
Audio Over Modulation: LED, red
Stereo Indicator: LED, red

○ Ordering Information

Model	Stock No.	Description
MICM-45S	7797S-550	HE-12 – HE-4 Series Channelized Audio/Video Modulator, Stereo Integrated, +45 dBmV, 54-600 MHz
MICM-45S	7797S-860	HE-12 – HE-4 Series Channelized Audio/Video Modulator, Stereo Integrated, +45 dBmV, 600-860 MHz

Available through **Multicom, Inc.** 1076 Florida Central Parkway, Longwood, FL 32750

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