



MPCM45

Universal-Chassis Single Channel A/V Mini-Modulator



- ▶ 125-Channel Range 54-806 MHz (CATV 2-125)
- ▶ 45 dBmV adjustable output for optimum carrier-to-noise performance
- ▶ Compatible with most manufacturers mini-modulator chassis
- ▶ Digital phase-locked loop (PLL) design guarantees precise frequency locking for solid drift-free operation
- ▶ BTSC stereo compatible pre-emphasis disable switch provides pass-through for stereo signals
- ▶ SAW (surface acoustic wave) filtered for superior adjacent channel performance enables drop-in channel expansion
- ▶ In-band carrier-to-noise ratio >60 dB ensures superior picture quality
- ▶ Front panel access to controls enables easy setup
- ▶ IRC and HRC offset available for frequency settings in systems using offset channels
- ▶ Optional PAL format channels available

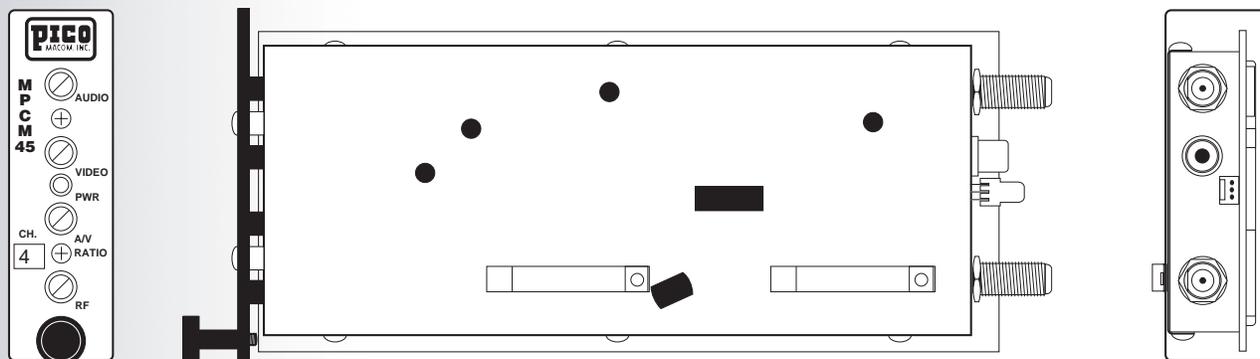
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The Pico Macom MPCM45 is a professional grade high-performance CATV mini-modulator. This modulator accepts any audio-video baseband television signal and provides a 45dBmV minimum output on CATV channels 2 to 125 (54-806 MHz) while accommodating HRC and IRC offset frequencies. The unit can be reconfigured to any output channel within band by qualified service centers. Up to 12 or 16 units can be installed "mix-and-match" in Pico Macom's MPC12, MPS12, MPC12R or MPC16 chassis with MPCMA agile mini-modulators or MPCD mini-demodulators. Its universal design enables it to be installed in other manufacturers' mini-mod chassis. The unit's phase-locked loop (PLL) circuitry and unique multi-stage output bandpass filtering ensure accurate and spurious-free output. In addition, the MPCM45 uses SAW filtering with FCC group delay correction circuitry to provide superior adjacent channel selectivity. The MPCM45 modulator is shipped with all internal adjustments preset. Pico Macom backs up this product with its industry leading 5-year limited warranty.

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RF

Channels:	125 Channels (CATV 2-125)
Frequency Range:	54-806MHz
Output Level:	35 to 45 dBmV adjustable from front panel
Output Impedance:	75 Ohms
Audio/Video Ratio:	Adjustable -10 to -25 dB below video carrier
Frequency Stability:	±5 kHz in aeronautical band Conforms to FCC Docket 21006
Spurious Output:	-60 dB below video carrier with A/V ratio @ -15 dB
Carrier-to-noise ratio (in-band):	>60 dB
Carrier-to-noise ratio (out-of-band):	>60 dB
Fv-1.5 MHz:	>55 dBc
Fv-6.0 MHz:	>60 dBc

Audio

Audio Input Impedance:	5k Ohms
Baseband Input Level:	0.5 V p-p for 25 kHz peak dev.
Preemphasis:	75 microseconds
Flatness:	1.5 dB max. 50 Hz to 15 kHz

Video

Input Level:	1 V p-p min for 87.5% mod.
Input Impedance:	75 Ohms
Input Level Range:	0.5 V to 1.5 V p-p
Differential Gain:	<5% (10 to 90% APL)
Differential Phase:	<5° (10 to 90% APL)
Chrominance Luminance delay:	See note

NOTE: Meets FCC group delay predistortion correction for color transmission.

General

Power Input:	+12 VDC, +5 VDC
Operating Temperature:	-10° C to +50° C
Dimensions:	1"(W) x 7 1/2"(D) x 3 1/2"(H)
Weight:	0.7 lbs.
Connectors:	RF: "F" type
	Power: 0.100" center 3-pin

Ordering Information

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