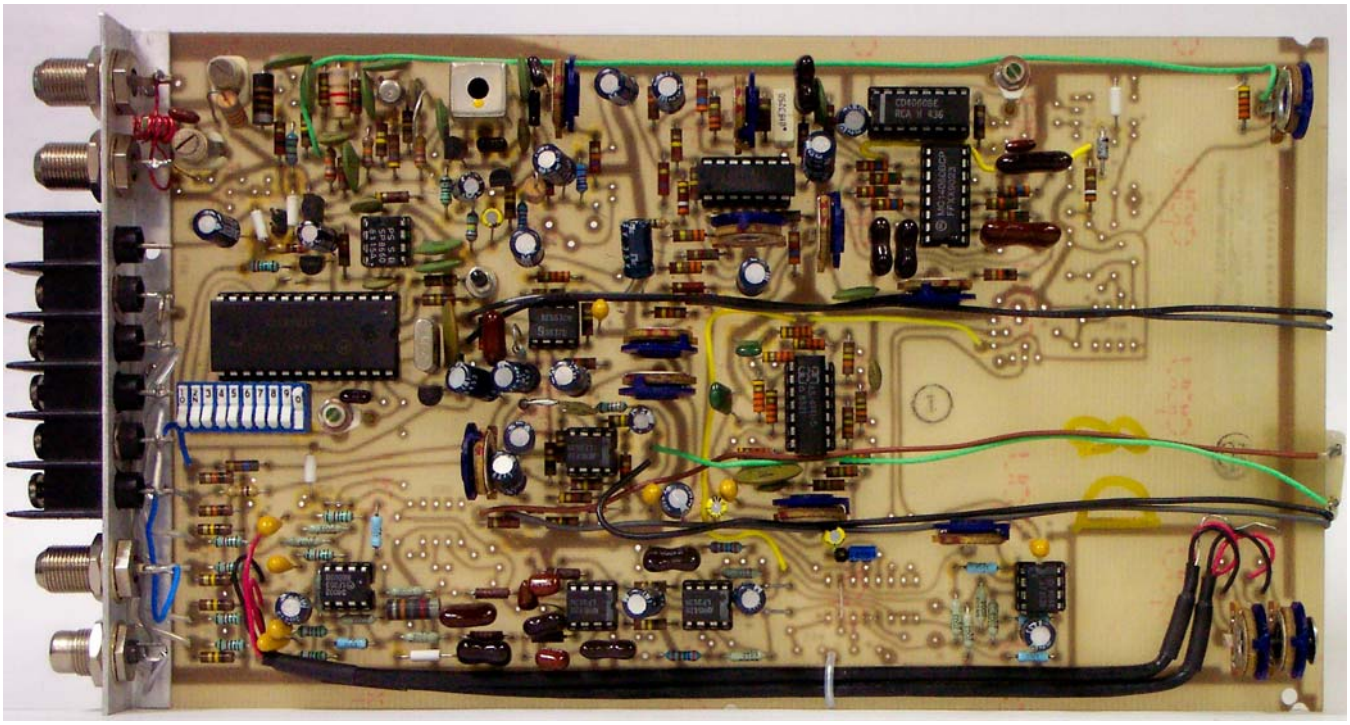
FMT615C



FREQUENCY AGILE WIDEBAND FM MODULATOR

The FMT615C is equipped to accept audio and modulate the program to the 88-108 MHz Stereo Broadcast Band. The audio input can be true stereo (separate Left and Right channels), mono, or synthesized (within the FMT615C) to stereo, as selected by a field-programmable jumper jack inside the unit. In addition to the FM band output, there is a composite stereo audio output to feed an additional microwave modulator to deliver the stereo program to a remote cable system. There is also a mono output to feed audio to the TV audio modulator.

The RF output frequency of these units, like other FM SYSTEMS, INC. products, is adjustable in the field without changing crystals. This state-of-the-art design uses a master crystal oscillator and a programmable phase-lock-loop (PLL) system to precisely set the output to any standard frequency in the FM Broadcast Band. Other frequencies outside the 88-108 MHz Band are available upon special request.

SPECIFICATIONS

OVERALL PERFORMANCE	SPECIFICATION
Deviation (100%)	75KHz peak, 10% (+/-7.5KHz)@ 19KHz
Frequency Response	20-15000 Hz +/-0.5dB
Pre-emphasis	75 microseconds
Total Harmonic Distortion	0.5% Maximum
Stereo Separation	40 dB @ 1KHz, 30 dB @ 15KHz
Signal to Noise Ratio	70 dB Minimum
AUDIO INPUT	
Format	True Stereo or Synthesized Stereo
Level (100%)	-10 dBm to +18 dBm, Adjustable
Impedance	Balanced Bridging (50K Ohms)
Indicator	Front Panel VU Meter
Connectors	6 Position Screw Terminal
STEREO GENERATOR	
Format	Standard Stereo Multiplex (19KHz pilot)
Synthesizer Type	Differential Phase Rotation
RF OUTPUT	
Frequency (FM Band or A1, A2)	88.1-107.9 MHz Other bands available
Stability	20 PPM, +/-1 KHz Typical
Level	+20 to +50 dBmV, Adjustable
Impedance	Directional coupler loop-through 75 Ohm
Connectors	F Type (female)
Harmonic Distortion	60 dB Below Carrier Level
AUDIO OUTPUTS	
Composite Stereo	3.5 Vpp (F female) Connector
Mono	+10 dBm 75 microseconds (RCA output)
MECHANICAL	
Power	-24 VDC 130mA (PMS610)
Mounting	Uses one space of three in the PMS610 Mainframe and power supply.