

FMC664CC



FM BAND CONVERTER

The FMC664CC is a channel-for-channel FM-band converter with agile input and output frequency tuning in the 88-108 MHz band. Offset output frequency capability in the A-1 and A-2 band (108-120 MHz) is available upon special request. Both the input and output frequencies are field selectable and may be set to any frequency in the FM band without any special equipment.

Since the input and output power levels can differ greatly, the FMC664CC is composed of two separate modules that are housed in their own mainframes. Up to three FMC664CR receivers can fit in one PMS610 mainframe and up to three FMC664CT transmitters can fit in another PMS610 mainframe. Two mainframes will hold three FMC664CC converters, with one converter consisting of one FMC664CR receiver and one FMC664CT transmitter. The two boards are linked by an audio patch cable that carries the wide-band multiplex stereo. Each mainframe is 1.75" high, so one group of three converters occupies 3.5" of vertical rack space.

The advantage obtained by demodulating to baseband, rather than the more conventional I.F. conversion is that undesired adjacent channels can easily be filtered out and will not be passed through the system to interfere with any other channel, even when the adjacent channel is much stronger than the desired channel.

Unlike I.F. conversion this system will allow you to space output channels at 400 KHz spacing instead of the typical 800 KHz interstitial spacing found in off air transmission. This allows you to pack the channels in to less space than conventional I.F. conversion equipment. This spacing can be obtained because the RF output is adjustable, this lets you level the RF channel power reducing the possibility of cross-talk from channel to channel. When all the FM band channels are the same level the spacing between channels can be closer together.

A single set of Receiver and Modulator cards may be fitted into one mainframe if the input and output frequencies are not the same.

SPECIFICATIONS (RECEIVER CARD)

FREQUENCY BAND	88.1-107.9 MHz (Agile)
FREQUENCY STABILITY	CRYSTAL CONTROLLED PLL
RF BANDWIDTH	280 KHz (Multiplex)
FREQUENCY SELECT	100 KHz Steps
RF LEVEL	-20 TO +20 dBmv
DEVIATION	+/- 75 KHz
MODULATION	FM STEREO MULTIPLEX
AUDIO BANDWIDTH	80 KHz (Audio)
SQUELCH	FRONT PANEL ADJUSTABLE
SIGNAL INDICATOR	GREEN LED SQUELCH INDICATOR
POWER REQUIREMENT	-24 VDC (PMS610 MAINFRAME)
SPACE REQUIREMENT	1 CARD SPACE IN (PMS610)

SPECIFICATIONS (MODULATOR CARD)

FREQUENCY BAND	88.1-107.9 MHz (Agile)
AUDIO BANDWIDTH	80 KHz (Audio)
FREQUENCY SELECT	100 KHz Steps
RF LEVEL	+10 TO +45 dBmv
DEVIATION	+/- 75 KHz
MODULATION	FM STEREO MULTIPLEX
SIGNAL INDICATOR	RED LED PLL LOCK INDICATOR
PEAK MODULATION INDICATOR	AMBER LED PEAK FLASHER
POWER REQUIREMENT	-24 VDC (PMS610 MAINFRAME)
SPACE REQUIREMENT	1 CARD SPACE IN (PMS610)