



### Model CMN-UHF

#### Description

Model CMN is a UHF TV channel mixing/dividing network for TV antenna systems. It is available for multiplexing 2 to 7 channels or frequencies into one output. Model CMN is available in LC and HR versions (see "frequency separation" below). It provides signal isolation with low insertion loss. Available for TV channels from 400 to 870 MHz - NTSC, ATSC or PAL.

#### Frequency Separation

The minimum frequency separation between channels required for channel mixing in one enclosure are as follows:

- >12 MHz (400 to 500 MHz) - mix up to 7 channels (LC)
- >18 MHz (500 to 650 MHz) - mix up to 7 channels (LC)
- >24 MHz (650 to 870 MHz) - mix up to 7 channels (LC)
- >6 MHz (400 to 500 MHz) - mix up to 6 channels (HR)
- >8 MHz (500 to 650 MHz) - mix up to 6 channels (HR)
- >10MHz (650 to 820 MHz) - mix up to 6 channels (HR)

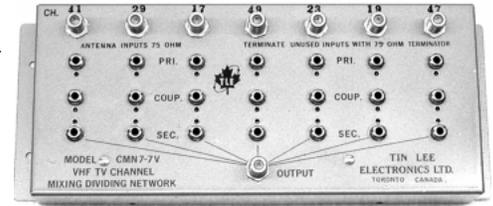
#### Specifications

- User specified TV Channels or frequencies
- Bandwidth: 4.5 or 6MHz (standard), or, from 2 to 10 MHz (user specified)
- Insertion Loss (I.L.): < 2.5 dB (suitable frequency separation)
- Return Loss: 16dB minimum (suitable frequency separation)
- Mutual Isolation: >20 dB (with the minimum frequency separation)
- Input Power: 1 watt
- Connectors: 75 ohms, F (female) standard

#### Options

- Optional: 10 watts per channel (total power: 50 watts max)
- Optional Connectors and Impedance: BNC (75 ohms) ; or BNC, SMA, or N (50 ohms).
- Input Gain Control (20dB adjustable attenuator 5-1000 MHz)
- Trap Enhanced Input Filter (for higher signal Isolation)
- Custom models available - inquire

CMN7- 7U -  
75 ohms, 7 channel combiner



CMN- 4U B50 -  
50 ohms, 4 channel combiner



CMN-2U N50 -  
50 ohms, N ports 2 channel UHF diplexer

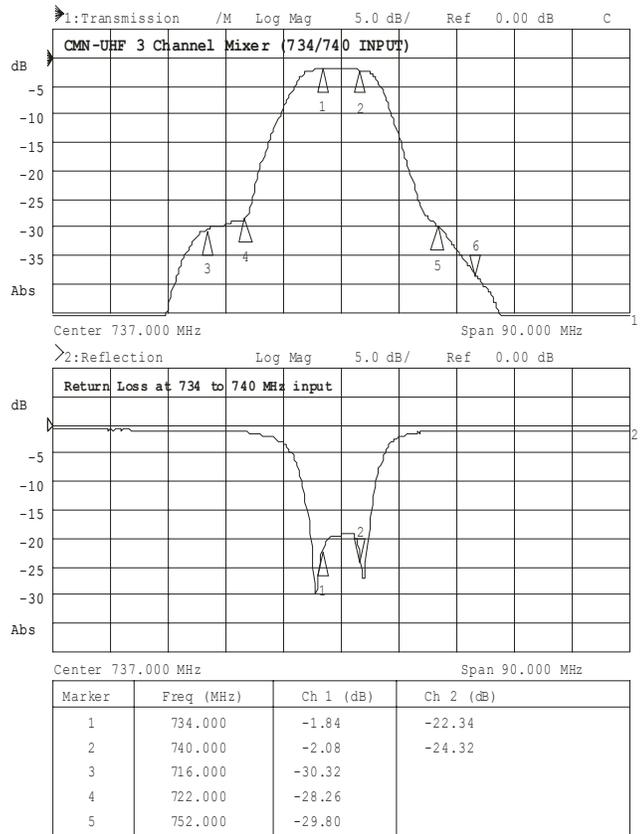


Fig.1 Example of frequency response of center channel of three channel (HR type) mixer. Typical Isolation, Insertion loss and Return Loss.