

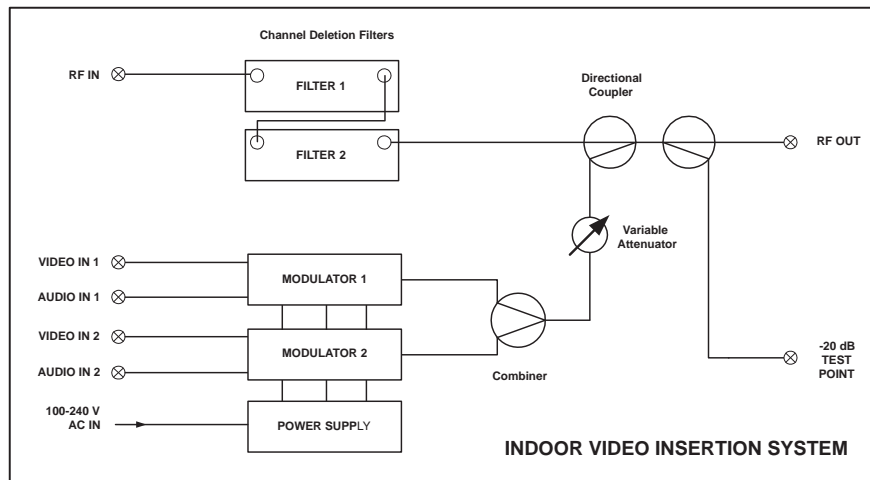


Indoor Deletion & Analog Insertion (IVIS):

Features:

- ▶ Fully integrated deletion filter(s) & modulator(s)
- ▶ Allows users to delete up to two 6 MHz analog and/or digital channels & then deliver up to two baseband A/V channels in analog format to the MDU in a cost-effective & efficient manner
- ▶ Modulator level control facilitates matching of new modulated channels to existing system channels
- ▶ Ideal for hotel applications where the select digital simulcast content needs to be supplied in analog format
- ▶ Rack or wall mount “single unit” solution
- ▶ Scalable from 1 to 2 input channels
- ▶ Access to modulator controls & easy access to channel deletion filters simplifies channel line up changes
- ▶ Optional housing can be provided for holding up to two set top boxes

Functional Schematic



Ordering Information

Part Number	Description
IVIS-AG-xx/yy	Indoor 2 Channel Agile Video Deletion / Insertion
IVIS-AG-xx	Indoor 1 Channel Agile Video Deletion / Insertion
IVIS-FX-xx/yy	Indoor 2 Channel Fixed Video Deletion / Insertion
IVIS-FX-xx	Indoor 1 Channel Fixed Video Deletion / Insertion
IVIS-AGMOD	Spare Agile Modulator for Indoor Video Insertion System
IVIS-FXMOD-xx	Spare Fixed Frequency Modulator for Indoor Video Insertion System

xx = Cable Television Channel 1 - indicate deleted channel ANALOG or DIGITAL
 yy = Cable Television Channel 2 - indicate deleted channel ANALOG or DIGITAL

Indoor Deletion & Analog Insertion (IVIS):

Indoor Video Insertion Specifications

GENERAL SPECIFICATIONS	
NUMBER OF MODULATORS	1 or 2 Modulators
NUMBER OF DELETION FILTERS	1 or 2 Deletion Filters
INPUT VOLTAGE	110 VAC
INPUTS	Video 1, Video 2, Audio 1, Audio 2, RF In, AC In
OUTPUTS	RF Out, -20 dB Test Point
MODULATOR OUTPUT LEVEL AT RF OUT PORT	3 to 33 dBmV
MODULATOR OUTPUT LEVEL CONTROL (In Total)	30 dB Attenuation
INSERTION LOSS RF IN - RF OUT (with 2 Installed Modulators)	< -4 dB @ 870 MHz
REQUIRED SYSTEM INPUT LEVEL AT RF IN PORT	4 to 34 dBmV
DELETION FILTER SPECIFICATIONS (CD-9002-R)	
IMPEDANCE	75 ohms
RETURN LOSS	> 16 dB
TEMPERATURE RANGE	+5°C to +35°C
OPERATING BANDWIDTH	870 MHz
INSERTION LOSS	< 1.5 dB
INSERTION LOSS (Lower Adjacent Audio) CHANNELS 2-78	3 dB
INSERTION LOSS (Upper Adjacent Video) CHANNELS 2-78	3 dB
INSERTION LOSS (Lower Adjacent Audio) CHANNELS >78	4 dB
INSERTION LOSS (Upper Adjacent Video) CHANNELS >78	4 dB
AGILE MODULATOR SPECIFICATIONS	
FREQUENCY RANGE	Agile, 54 through 864 MHz
FREQUENCY SELECTION	Standard CATV Channels 2 through 135 HRC and IRC options available by moving an internal jumper Broadcast TV Channels 2 through 69
OUTPUT LEVEL	+45 dBmV minimum, typically adjustable from +35 to +45 dBmV
OUTPUT IMPEDANCE	75 ohms, return loss typically 8 dB
A/V RATIO	Audio Carrier -22 to -12 dB, referenced to video carrier, adjustable
FREQUENCY STABILITY	+/- 5 KHz
INTERCARRIER FREQUENCY	4.5 MHz
FCC FREQUENCY OFFSETS	Automatic (+12.5 KHz, +25 KHz, or none as required for each channel)
SPURIOUS OUTPUTS (5-1000 MHz)	-60 dBc, measured at -15 dB A/V ratio and with modulator output level of +45 dBmV
IN CHANNEL C/N	65 dB typical, 4 MHz bandwidth
BROADBAND NOISE	-78 dBc typical, 4 MHz bandwidth @ 45 dBmV output
VIDEO	
INPUT LEVEL FOR 87.5% MODULATION	0.65 Vp-p to 1.5 Vp-p, manual gain adjustable with front panel control
INPUT IMPEDANCE	75 ohms, return loss of 26 dB minimum
FREQUENCY RESPONSE	20 Hz to 4.2 MHz, +/- 1 dB
C/L DELAY	within 50 nSec. of 0 nSec. (standard) F.C.C. predistortion available by special order
DIFFERENTIAL GAIN	+/- 3% (10 to 90% APL)
DIFFERENTIAL PHASE	+/- 3 degrees (10 to 90% APL)
AUDIO	
INPUT LEVEL FOR 25 kHz PEAK DEVIATION	125 mVrms to 2.5 Vrms. Manual gain adjustment with front panel control
INPUT IMPEDANCE	> 10K ohms, unbalanced
PRE-EMPHASIS	75 μ Seconds (Defeatable via rear panel switch for BTSC baseband stereo compatibility)
FREQUENCY RESPONSE	40 Hz to 15 kHz, +/- 1 dB referenced to 75 μ second pre-emphasis curve 40 Hz to 100 kHz, +/- 0.5 dB if pre-emphasis is defeated
SIGNAL TO NOISE RATIO	65 dB
TOTAL HARMONIC DISTORTION	1.0% maximum
GENERAL	
DC POWER INPUT	+12 VDC @ 200 mA, +5 VDC @ 350 mA
OPERATING TEMPERATURE	0°C to +50°C (+32°F to +122°F), ambient

Specifications subject to change without notice.

