MDU Solutions®

Outdoor Deletion & Analog Insertion (OVIS):

Application:

This Power Passing filter housing is excellent for use in MDUs that require one or more channels to be deleted and reinserted for security camera monitoring or special channel reinsertion through the use of up to two channel deletion filters and two agile or fixed video modulators mounted in the housing. Video and audio connectors for the two channels are available on four “F” ports on the outside of the housing. The modulated video signals are combined and coupled internally with the remainder of the CATV spectrum. The housing can be strand, wall or pedestal mounted and provides an extremely efficient method for implementing any deletion/ reinsertion application.

Features:

- Integrated channel deletion filter(s) & modulator in one housing
- AC power passing capability on all ports
- High performance modulator specifications
- AC power input/output port
- AC power directing to input/output
- Plug in pad and EQ for RF signal conditioning
- 20 dB post insertion test point
- Allows users to delete up to two 6 MHz analog or digital channels & then deliver up to two baseband A/V channels in analog format to the MDU in a cost-effective & efficient manner
- Ideal for hotel applications where the select digital simulcast content needs to be supplied in analog format
- “Single unit” solution provided in an outdoor power passing housing that can be wall, strand, or pedestal mounted
- Powered from the CATV network
- Scalable from 1 to 2 A/V input channels
- Easy access to modulator controls & channel deletion filters simplifies channel line up changes

Filter Specifications

The extended temperature filter will delete an entire television channel and allow a new channel to be reinserted over a temperature range of -20°C to +50°C (-4°F to +122°F)

(see web site for Extended Temperature Channel Deletion Filter specifications and ordering information - www.atxnetworks.com)

Outdoor Housing Specifications

SPECIFICATIONS		
NUMBER OF MODULATORS		1 or 2
NUMBER OF DELETION FILTERS		1 or 2
INPUT VOLTAGE		60-90 VAC
INPUTS		Video 1, Video 2, Audio 1, Audio 2, RF In, AC In
OUTPUTS		RF Out, -20 dB Test Point
MODULATOR OUTPUT LEVEL MEASURED AT RF OUT PORT		25 to 35 dBmV
INSERTION LOSS		<-7 dB @ 870 MHz
REQUIRED SYSTEM INPUT LEVEL AT RF IN PORT		34 to 44 dBmV
TEMPERATURE RANGE		-40°C to +50°C (-40°F to +122°F)
RETURN LOSS		> 16 dB
HUM MODULATION		-70 dBc @ 15 Amps
VOLTAGE RATING		90 VAC RMS @ 1 to 60 Hz
CURRENT RATING	RF PORTS	15 Amps RMS continuous, 25 Amps for 2 hrs
	AC PWR PORT	30 Amps RMS continuous, 50 Amps for 2 hrs (NOTE: 15 Amp RMS max. out each leg)
EMI/RFI ISOLATION		> 100 dB
SURGE RATING		IEEE C62.41 Category B3 (6kV, 3kA Combination Wave)
AUDIO/VIDEO INPUT PORTS		F-type Connectors
SIZE		22"W x 5.5"H x 10"D
WEIGHT		19.7 lbs

Outdoor Deletion & Analog Insertion (OVIS):

Modulator Specifications

	AGILE MODULATOR	FIXED MODULATOR
RF		
FREQUENCY RANGE	Agile, 54 through 860 MHz	601 through 860 MHz (VMM860) 601 through 806 MHz (VMM806)
FREQUENCY SELECTION	Thumbwheel Switch	Set at the factory to one of the following channels: Cable Channels 87 through 126 (VMM806) Cable Channels 87 through 135 (VMM860) or UHF TV Channels 36 through 69
OUTPUT LEVEL	+45 dBmV minimum, typically adjustable from +35 to +45 dBmV	+45 dBmV minimum, typically adjustable from +30 to +45 dBmV
RETURN LOSS	18 dB typical	12 dB
SPURIOUS OUTPUTS (5-1000 MHz)	-60 dBc, measured at -15 dB A/V ratio and with modulator output level of +45 dBmV	-65 dBc, measured at -15 dB A/V ratio and with modulator output level of +45 dBmV
BROADBAND NOISE	-78 dBc typical, 4 MHz bandwidth @ 45 dBmV output	-95 dBc (4 MHz bandwidth, +/- 12 MHz offset)
VIDEO		
INPUT IMPEDANCE	75 Ohms, return loss of 26 dB minimum	75 Ohms, return loss of 18 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)	
C/L DELAY	within 50 nSec. of 0 nSec. (standard)	
AUDIO		
INPUT LEVEL FOR 25 kHz PEAK DEVIATION	125 mV (RMS) to 2.5 V (RMS). Manual gain adjustment with front panel control	140 mV minimum. Manual gain adjustment with front panel control
INPUT IMPEDANCE	>10K Ohms, unbalanced	
PRE-EMPHASIS	75 m Seconds (Defeatable via rear panel switch for BTSC baseband stereo compatibility)	75 m Seconds (Defeatable via internal jumper for BTSC baseband compatibility)
FREQUENCY RESPONSE	40 Hz to 15 kHz, +/- 1 dB referenced to 75 mSec pre-emphasis curve. (40 Hz to 100 kHz, +/- 0.5 dB if pre-emphasis is defeated)	20 Hz to 15 kHz, +/- 1 dB referenced to 75 m Seconds pre-emphasis curve. (20 Hz to 100 kHz if pre-emphasis is defeated)
TOTAL HARMONIC DISTORTION	1.0% maximum	
GENERAL		
DC POWER INPUT	+12 VDC @ 200 mA, +5 VDC @ 350 mA	+12 VDC @ 170 mA, +5 VDC @ 75 mA
OPERATING TEMPERATURE	0°C to +50°C (+32°F to +122°F), ambient	

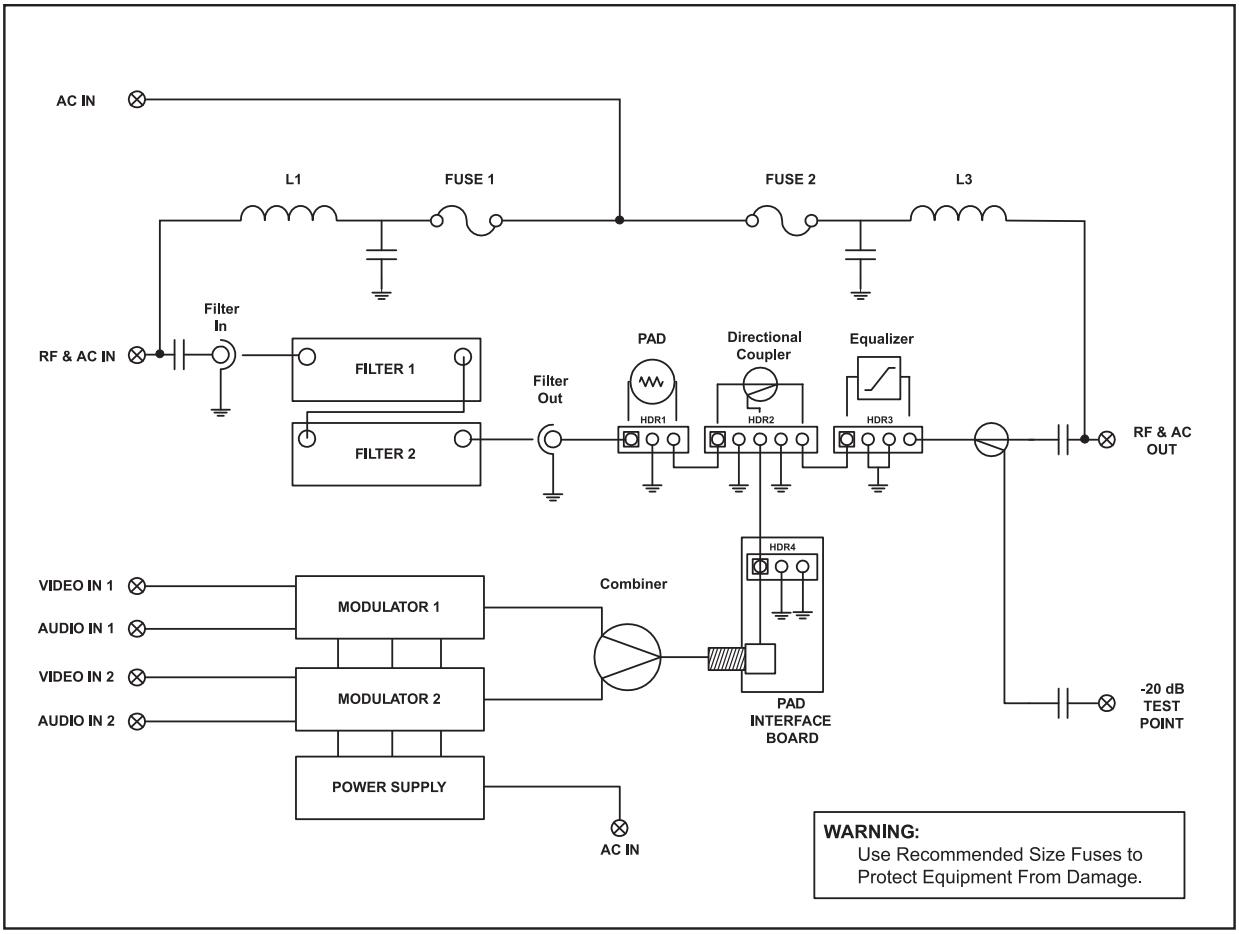
Ordering Information

Part Number	Description
OH-CDFM xx-cc-ee	Outdoor Housing with One Channel Deletion Filter and One Fixed Channel Video Modulator
OH-CDAM xx-cc-ee	Outdoor Housing with One Channel Deletion Filter and One Agile Channel Video Modulator
OH-CDFM xx/yy-cc-ee	Outdoor Housing with Two Channel Deletion Filters and Two Fixed Channel Video Modulators
OH-CDAM xx/yy-cc-ee	Outdoor Housing with Two Channel Deletion Filters and Two Agile Channel Video Modulators
CD-9002ET-X	Extended Temperature Channel Deletion - MDU Solution
CD-9002-2R	Two Channel Deletion Filters - Rack Mount
CD-9002-3R	Three Channel Deletion Filters - Rack Mount
PLCxx	Plug-in Coupler
PLExx	Plug-in Equalizer
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
YY = Cable Television Channel 2
CC = Coupler Value (0, 4, 7, 10, 13, & 16 dB)
EE = Equalizer Value (0, 2, 4, 6, 8, 10, 12, 14, 16, 18, & 20 dB)

Outdoor Deletion & Analog Insertion (OVIS):

Functional Schematic



Specifications subject to change without notice.

ISO 9001 REGISTERED