

14MM-OV50A

Wisi Topline II Headend Base Unit

For the best Headend, choose WISI Topline II. Already with an outstanding reputation, WISI Headends continue to dominate as the Headend of choice for quality and reliability. With an extensive range of modules to choose from, a WISI Headend is perfect for any scenario - from Channel Processors to Modulators, Transmodulators to Digital OFDM Demodulators. Every module is simple to install and even easier to configure. Use WISI today and drive your MATV System further.



The WISI Advantage

- Base Frame features a High Output GaAS amplifier
- Each base unit can house up to 10 modules
- Two high isolation 6-way splitters in each OV50A are used for distribution to module inputs
- NMS compatible for remote configuration or monitoring
- Backwards compatible with Topline I modules
- Wall mounting or 19-inch rack mountable
- Individual Microprocessor Control - no external programmer is required
- Fully Frequency Agile
- Highly selective SAW Filters, or Vestigial Side Band modulation and optional Adjacent Channel operation
- The headend used in the International Broadcast Centre Sydney Olympic Games - 86 Chs

14MM-OV52

WISI Commander Remote Control System

- Fits into the 14MM-OV50A Base Unit & allows PC based control of the WISI headend
- Connect your laptop directly or via dial-up modem enabling remote access to change settings on modules as though they were sitting in front of you
- Allows you to remotely monitor your installed WISI Headend



14MM-OV52 - IP addressable controller featuring SNMP

TECHNICAL DATA

Power supply	
Operating voltage	230Vac ±10%, 50/60Hz
Max. output power	124 Watts
Operating voltage/current	5 VDC/12 Amps 12 VDC /7.0 A 13.5 VDC /1.0 A
Security	LED voltage indication, short-circuit and overload-protected
Amplifier	
Connections	'F' type, 75Ω (all inputs/outputs)
Frequency range	45-862MHz
Gain/Adjustable attenuator	32/0-10dB
Test output	-20dB
Output level	110dBμV (10Ch/60dB IMA)
Isolation	≥18dB
Housing	
Module Position	10
Frame housing	aluminium, painted grey (WxHxD) 433 x 400 x 245mm
Splitter	Includes 2 splitters 6 Way, 47-2050MHz with DC bypass
Option	Steel front panel, OV 97/OV 99, 19-inch rack mount kit
Packing unit / Weight	1 piece ~11.5kg (without modules fitted)
Spare Parts Available	14MM-PSC/OV50A Power supply complete
	14MM-BOO/OV50A Amplifier only

I4MM-OV36A

Stereo Modulator

- Distribute In-house channels with Stereo Audio

I4MM-OV36A/6I

Stereo Modulator

- Distribute In-house channels with Stereo Audio
- Free programmable text up to 12 lines, up to 24 characters each line
- Video Generator fitted

I4MM-OV38

Dual Stereo Modulator - *Coming Soon*



TECHNICAL DATA

Product Code	OV36A
Modulator Type	Stereo
Output frequency	45-862MHz 0.25-MHz increments
Output level	84dB μ V (selectable attenuation of 10dB in 1dB steps)
Output SNR	60dB typical
Output TV Standards	PAL B/G, D/K, I, L, M, N
Input connection	BNC (video) RCA (audio) or 6-pin DIN (audio & video)
Features (All models)	Vestigial Side Band (VSB) for adjacent channel operation Test pattern generator, Audio level adjustment
Unique Features	OV35A Mono Input and Output OV36A Stereo Output (mono selectable) OV35A-SPECIAL Removes Macrovision, Mono Input and Output
Insertion loss (loop-through output)	0.8dB
Display/selection	4 keys with 4 line LCD readout
Operating Voltages	12VDC / 490mA
Operating ambient temperature	-30°C...55°C
Output connections	'F' Type 75 Ω (loop-through output)

ACCESSORIES

I4MM-OV97

Secure Coverplate for OV50A

- Complete with lock and key
- Prevent unwanted access to your WISI Headend
- Can be used in conjunction with OV99



I4MM-OV99

Rack Mount Kit

- Aluminium rails that fit OV50A Base Unit
- Allows easy installation into 19" Rack
- * Cage Nuts not included



I4MM-HEC6

High Isolation Combiner

- 6 Port High Isolation Combiner for WISI Topline Headends
- Insertion Loss \geq 19dB • Port to port isolation $>$ 40dB
- Return Loss all ports $>$ 18dB



HEADEND PRODUCTS

14MM-OV22

Band 2 FM Amplifier

- 4 adjustable frequency traps allowing limited balancing of the FM Band



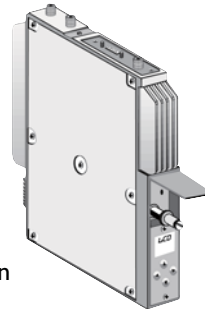
TECHNICAL DATA

Product Code	OV22	
Frequency range	87-108MHz	
4 adjustable frequency traps Bandwidth	5MHz	
Trapping depth	≥20dB	
Gain	25dB	
Output Level	≥87dB μ V	
Connections	Input - 75 Ω IEC (female)	Output - loop through output 'F' type
Thru loss	≤0.5dB	
Screening factor	≤450MHz ≥75dB, ≤950MHz 65dB, >950MHz 55dB	
Operating ambient temp.	0...50°C	

14MM-OV45D

Analogue/Digital Amplifier/Processor

- A single module for either Digital and Analogue
 - Flexible Operation
 - single channel amplifier or channel processor
 - Dual SAW Filters allowing adjacent channel operation on both input and output
 - 4 key operation with LCD Readout for fast configuration
- * WISI Fibre Optic Transmitter available - see section 20MM



14MM-OV62A

AV Demodulator Module

- Audio Video demodulator module for OV45D

TECHNICAL DATA

Product Code	OV45D	
Input/Output Frequency Range	Analogue	47-862MHz in steps of 0.25MHz
	Digital	47-862MHz in steps of 0.50MHz
Output Level with AGC	Analogue	84dB μ V (selectable attenuation of 10dB in 1dB steps)
	Digital	74dB μ V (selectable attenuation of 10dB in 1dB steps)
Input Level for AGC operation	Analogue	50-90dB μ V
	Digital	40-80dB μ V
Gain (AGC off)	0 - 40dB in 1dB steps	
Insertion loss (loop through output)	0.8dB	
TV Standards	PAL B/G, DVB-T(7/8), DVB-C(7/8). D/K, I, L,	
Display/selection	4 line LCD with 4 direction keys	
Input Frequency Offset	±125KHz with DVB-T(7)	
Sound Carrier Attenuation	0 - 10dB in analogue mode	
Adjacent Channel Suppression	≥ 60dB	
Display/selection	4 keys with 4 line LCD readout	
Operating Voltages	5VDC / 520mA, 12VDC / 340mA	
Operating ambient temperature	-25°C...55°C	
Phase Noise (processor mode)	>102dBc (1Hz)	
Connections	'F' Type 75 Ω (input and output)	

I4MM-OV75

QPSK - QAM transmodulator

I4MM-OV79A

DVB-T (COFDM) Demodulator

- Demodulate Digital Terrestrial signals into an analogue channel
- Distribute the highest quality Stereo Analogue signals
- Analogue output guaranteed to be ghost free & interference free



Also available

- I4MM-OV75A** DVB / QPSK - QAM transmodulator
- I4MM-OV75M-1121** Dual DVB-S transmodulator
- I4MM-OV75M-1131** Dual DUB-S transmodulator
- I4MM-OV75M-1121** Dual QAM DVB-S DVB-S2 transmodulator
- I4MM-OV66** WISI Audio / Video Decoder Module

TECHNICAL DATA

Product Code	OV75	OV79A
Input Frequency Range	950-2150MHz (1MHz steps)	49-862MHz (Digital)
Input Level	47-70dBμV	30-89dBμV(>55dB recom.)
AFC	±5 MHz	
Symbol Rate	3.45-6.9MS/s	
Output Frequency (0.25MHz steps)	45-862 MHz	45-862 MHz (Analogue)
Output Level (select atten. of 10dB in 1dB steps)		
- Loop through mode	84dBμV	84dBμV
- Single mode	94dBμV	94dBμV
Output SNR	56dB Typical	56dB Typical
Aspect Ratio	-	Selectable from 4:3, 16:9, Pan/Scam
Insertion Loss (looped through output)	0.8dB	
Display/selection	4 keys with 4 line LCD readout	
Operating ambient temperature	+5°C...+55°C	-25°C...+75°C
Connections	'F' Type 75Ω	
Output Modulation Scheme	16/32/64/128/256 QAM	
Operating Voltage	5VDC 450mA 12VDC 900mA	5VDC 530mA 12VDC 600mA

TUNING PARAMETERS

Product Code	OV75	OV79A
OFDM Spectrum Mode		8k, 2k
Modulations Scheme		64QAM, 16QAM, QPSK
Guard Interval		1/32, 1/16, 1/8, 1/4
FEC		1/2, 2/3, 3/4, 5/6, 7/8
Channel Bandwidth (selectable)		6, 7, 8MHz

• Stable demodulation of input levels below 55dBμV will depend on CNR, Flatness and BER

HEADEND PRODUCTS

WISI Compact Headend

I4MM-OK40 Base Unit 8/16 Channels

I4MM-OK34 Twin Modulator VSB 47-862MHz

I4MM-OK46 - Stereo upgrade module for OK34

I4MM-OK41 / I4MM-OK41A

Programmer / Programmer with Clone option & LED flash light

I4MM-OK40A

Base Unit 8/16 Channels with memory chip for clone options

Modules suitable for **I4MM-OK40A** are:

I4MM-OK22 - FM Amplifier 88-108MHz CCIR **I4MM-OK34A** - Stereo Dual AV Modulator

I4MM-OK45A - Dual TV Channel Converter Analogue and Digital

I4MM-OK89 - COFDM to PAL processor **I4MM-OK79** - Compact DVB-T Receiver CDFDM to PAL



TECHNICAL DATA

Product Code	OK40	OK40A
Input Frequency Range / Inputs	47-2150MHz / 4	920-2150MHz / 5
Output	47-862MHz	45-862MHz
Gain	6-9dB	
Input Level	70-90dB μ V	
Output Level (8/16 chs)	103/100dB μ V	
LNC SAT	(1 and 3) 13/18V DC, (2 and 4) 13V DC	
Return Loss	\geq 16dB	
Operating Voltage	180-265V AC	
Current Consumption	5.5V DC 7.5A, 12.5V DC 7.25A, 18.5V DC 0.6A	
Measurements (mm) / Weight	445 x 265 x 215 / 8.3kg	
Installation Type	wall/19" rack	
Programmer Socket	RJ11	

TECHNICAL DATA

Product Code	OK34/A	OK22	OK45A
Tuner	Channel A or B		
Input Level	1 V _{ss} / \pm 0.4 V		50-85dB μ V
Video Bandwidth	0.020-5.0 MHz		
Input Frequency Range		88-108MHz	47-862MHz
Input Offset Digital			\pm 166KHz
IF Bandwidth			switchable 7/8MHz
Output Frequency Range	45-862MHz	88-108MHz	47-862MHz
Channel Spacing	6-16MHz		
Output Level (60dB IMR)	100dB μ V	>108dB μ V	103dB μ V (Analogue) 93dB μ V (Dig.)
Output Level adjustment	0-10dB		
Video Level 1 Volt P.P.	-3/+3dB	-3/+3dB	
Audio Level / Impedance	-6/+6dB / 10K Ω - 600 Ω	-6/+6dB	
TV Standard	B/G, D/K, I, M/N, L		B/G, D/K, I, L
Test Pattern	On/Off		
Connectors	Video-BNC, Audio-Cinch	'F' Type	'F' Type
Output Type	Mono/Stereo with OK46 (OK34) Mono / Stereo (OK34A)	Mono / Stereo	
Operating Temp	-5 $^{\circ}$ C...+55 $^{\circ}$ C	0 $^{\circ}$ C...+55 $^{\circ}$ C	0 $^{\circ}$ C...+55 $^{\circ}$ C