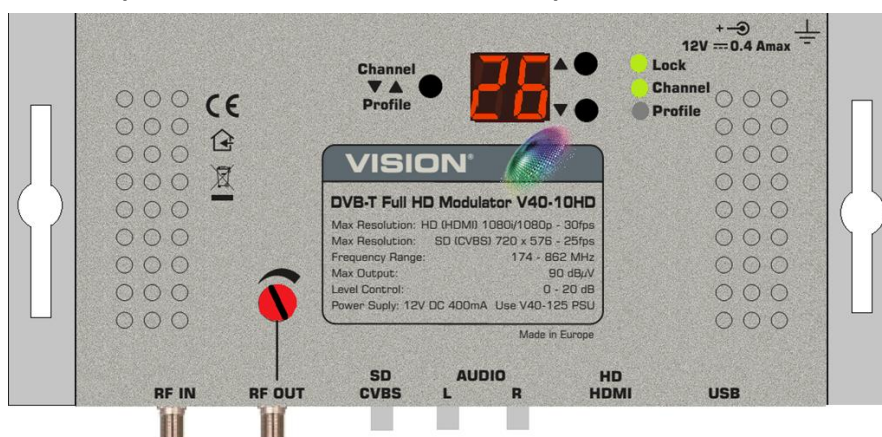


Datasheet

V40-10HD DVB-T FULL HD MODULATOR HDMI

ADVANCED INFORMATION

- HDMI and CVBS inputs with auto select
- HD signal up to 1080p and SD signal up to 720x576
- RF loop-through output to combine other modulators or RF signal sources
- Output Frequency 174 – 862MHz
- H.264 HD encoder 1-19Mb/s
- HDCP support
- Front panel user set-up for quick installation with four selectable pre-programmed “Profiles”
- Computer interface set up for advanced installation via USB port



Product description

Vision V40-10HD is a high quality professional modulator intended to produce High Definition television pictures up to 1080p from an HD source via the HDMI input in DVB-T2 COFDM format. This modulator can also accept standard definition signal sources via the CVBS input but will modulate these in DVB-T2 MPEG4 COFDM format.

The V40-10HD modulator is designed for a coaxial cable system with VHF/UHF television signals compatible with Freeview™ HD televisions and set-top box receivers with an HD tuner only**.

Using a screened aluminium ventilated housing for high interference immunity which is easy to mount, the V40-10HD is ideal for hotel, commercial and domestic applications where the output of a satellite receiver, DVD player or camera is required to be viewed on an MATV system over small, medium or large installation. (additional amplification may be required)

Powered with 12V DC at 400mA from a Vision V40-125 PSU the V40-10HD modulator is easy to set up from the front panel buttons and the 7-segment LED display. With front panel setup, the modulator will create a choice of 4 pre-programmed DVB-T2 profiles with pre-set LCN at any VHF/UHF TV channel compatible with UK Freeview™ TVs.

Using a suitable “Windows compatible” PC the user can enter the advanced setup mode for customised settings as desired. The advanced mode allows changes of the LCN, Programme and Provider names and parameters to be displayed in the EPG of any Freeview™ HD TV.

The modulator RF output is fitted with a loop-through for combining with modulators and signals from other sources such as an aerial and is provided with a 0 - 20dB level control to balance the modulator output with these other signals. This makes it easy to “cascade” up to four other V40-10HD modulators.

**** IMPORTANT! Some TVs and set top boxes (including some “HD Ready” products) DO NOT have an HD TV Tuner. These will not receive HD signals. In this case please use an SD modulator such Vision V40-1100.**

This product is intended for indoor use only and is RoHS compliant.

In the interests of continued product improvement and development we reserve the right to change specifications, design and dimensions without prior notice. Details correct at date of publication 12/02/2015

Vision Products (Europe) Ltd, Unit 5 Redbourne Park, Liliput Road, Brackmills, Northampton NN4 7DT

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Company Reg No: 05044212

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Datasheet

V40-10HD DVB-T FULL HD MODULATOR with HDMI & CVBS inputs

Technical Specification

Inputs

Video Coding	HD - 1 x HDMI SD - 1 x CVBS (RCA phono female)
Profile	MPEG-4 AVC/H.264
Resolution	High Profile 4
	1920x1080p at 30fps for HDMI
	PAL 720x576 at 25fps
HDCP	Supported
Audio	HDMI & Mono/stereo
Audio Standard	MPEG-1 Layer II
Audio bit-rate	64, 96, 128, 192, 256, 320, 384 kb/s
Audio level	0.5Vpp to 1.0Vpp fixed
H.264 Encoder	
Standard	MPEG-4 AVC/H.264
Bit-rate	1 – 19Mb/s adjustable

Configurable Parameters

Service Name, Service ID, Video PID,
Audio PID, PMT, PID, PCR PID

Transport Stream Processing

Automatic Regeneration
Configurable Parameters
NIT, PAT, CAT, SDT, PMTs EITs tables.
TS ID, Original Network ID,
Network ID, Provider Name

LCN Support
LCN Providers
Yes
Nordin, ITC / UK, EICTA / Europe, New Zealand

DVB-T Output

Standard	EN 300 744
Bandwidth Selectable	5, 6, 7, 8MHz
COFDM Mode	2K, 8K
Constellation	QPSK, 16QAM, 64QAM
Guard Interval	1/4, 1/8, 1/16, 1/32
Code Rate	1/2, 2/3, 3/4, 5/6, 7/8

RF Output

Type	RF DVB-T2 (COFDM)
Output Frequency Range	174MHz to 862MHz (1MHz steps)
Output Level / adjustment	90dBμV / 0 – 20dB output variable attenuator
MER	-35dB (typical)
Shoulder Attenuation	>45dB
Output Loop-Through Attenuation	<1dB
Connectors	2 x F-female 75Ω

Programming Interface
Seven Segment LED display with 3 button keypad
USB interface via Windows XP, Windows Vista, Windows 7 & 8 (32 & 64 bit).

General

Power Supply / Consumption	12V DC / 400mA with 2.1mm DC Jack (Plug 5.4mm x 14mm with 2.1mm centre) **We recommend Vision 12V 2.5A power supply V40-125 with DC plug adapter.
Operating Temperature	0°C to +50°C
Storage Temperature	-10°C to +70°C
Humidity	up to 90%
Dimension / Weight	205mm x 102mm x 41mm including mounting slots / 0.3kg

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Datasheet

V40-10HD DVB-T FULL HD MODULATOR with HDMI & CVBS inputs

Installation suggestions

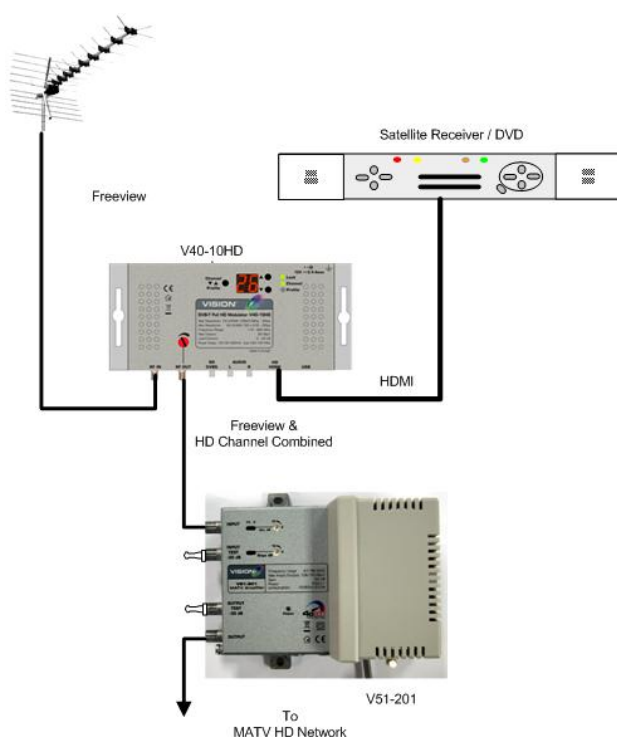


Fig 1: Single HD Modulator

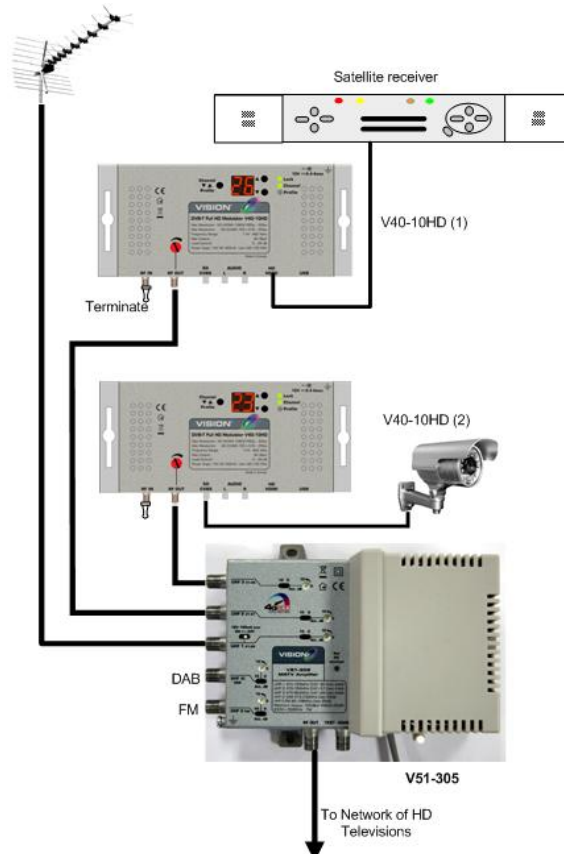


Fig 2: Multi HD modulator installation

When installing a single V40-10HD modulator (figure 1) use the modulator level control to balance the output with the aerial signal level. Where the aerial signal level is too low, a masthead pre-amplifier may be needed to increase the aerial signals to the level of the modulator.

In larger MATV systems, where several modulators are required (fig 2) it is often more practical to use a multi-input amplifier to mix the signals and control/adjust the levels independently.

Always terminate unused inputs and outputs at 75Ω.