



IKUSI

High definition Dual modulator

Sends HD signals to TV sets using DVB-T/C and IP standards.



Dual HDMI input



Editable channel name
and information to be
shown on the TV set



Connecting a local or
remote web interface



DVB-T/C , IP
simultaneous
outputs

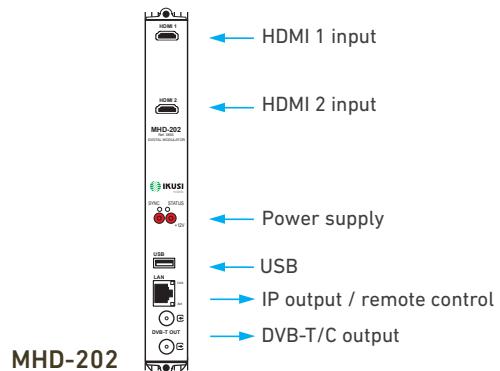
MHD-202 Modulator

Main features

- The MHD-202 is a module designed in-house and manufactured with our own technology, capable of modulating two HD audio and video sources to make up one or two high definition RF output channels (in accordance with the input bitrate) in DVB-T/C and in IP which can be active simultaneously.
- The unit is fitted with two HDMI digital audio and video inputs through HDMI connectors.
- The output stage is capable of generating two RF channels, one for each HDMI input.
- Moreover, the MHD-202 has a USB interface for automatic playback of SD and HD content from a pendrive.
- This function allows applications such as:
 - use in digital signage,
 - creation of an information channel,
 - integration of any video source in the existing TV network.
- The modulator is programmed by the end user using a local or remote web interface through an RJ-45 connector.
- This modulator is compatible with the application for PC:
"IKUSI HEADEND DISCOVERY"

MODEL		MHD-202	
REF.		3855	
Inputs		(2x) HDMI	
Video compression		MPEG2 MP@ML, H.264/MPEG4 AVC MP L4.1	
Audio compression		MPEG1 layer II	
Video quality		SD, HD (480i, 576i, 480P, 576P, 720p50, 720p, 1080i50, 1080i60, 1080p50, 1080p60)	
Maximum resolution		1080p60	
DVB-T / DVB-C outputs		DVB-T in accordance with ETSI EN 300 744 DVB-C in accordance with ETSI EN 300 429	
Bandwidth	MHz	6 / 7 / 8	
Number of carriers		2K / 8K	
MER	dB	≥ 40	
Central frequency	MHz	45 - 858	
Output level	dBµV	≥ 80	
Output attenuation	dB	0.5	
Level adjustment	dB	-25	
Frequency stability	ppm	≤±30	
Noise figure ($\Delta B = 8$ MHz)	dBc	≤-65	
Loopthrough frequency		45 MHz to 2,5 GHz	
DVB-C output symbol rate	Kbps	3000 - 8000	
Constellation		DVB-T: 16QAM, 64QAM DVB-C: 16QAM, 32QAM, 64QAM, 128QAM, 256QAM	

IP output		IEEE 802.3 10/100 Base T	
IP encapsulated type		According to ETSI TS 102 034 v.1.31(2007-10) and SMPTE ST 2022-2:2007	
Outflow IP		CBR/VBR	
IP Address		Unicast/Multicast	
Protocols		UDP/RTP	
IP encapsulated format		SPTS	
DVB processing		PAT, PMT, SDT, NIT	
NIT and SDT adaptation		Yes	
PSI/SI adaptation		PAT, PMT, SDT, NIT	
TS monitoring		Yes	
Network configuration		NID, ONID, TSID, Network name, Provider	
SID configuration		Yes	
LCN, TDT, TOT processing		Yes	
Channel name edition (EIT)		Yes (ex. "camera pool")	
Event description (EIT)		Yes (ex. "open from 9am to 18pm")	
Supply voltage	VDC	+12	
Firmware upgrade		web interface	
Playback from a USB		Yes	
Consumption	A	1.9	
Dimensions	mm	230 x 195 x 32	



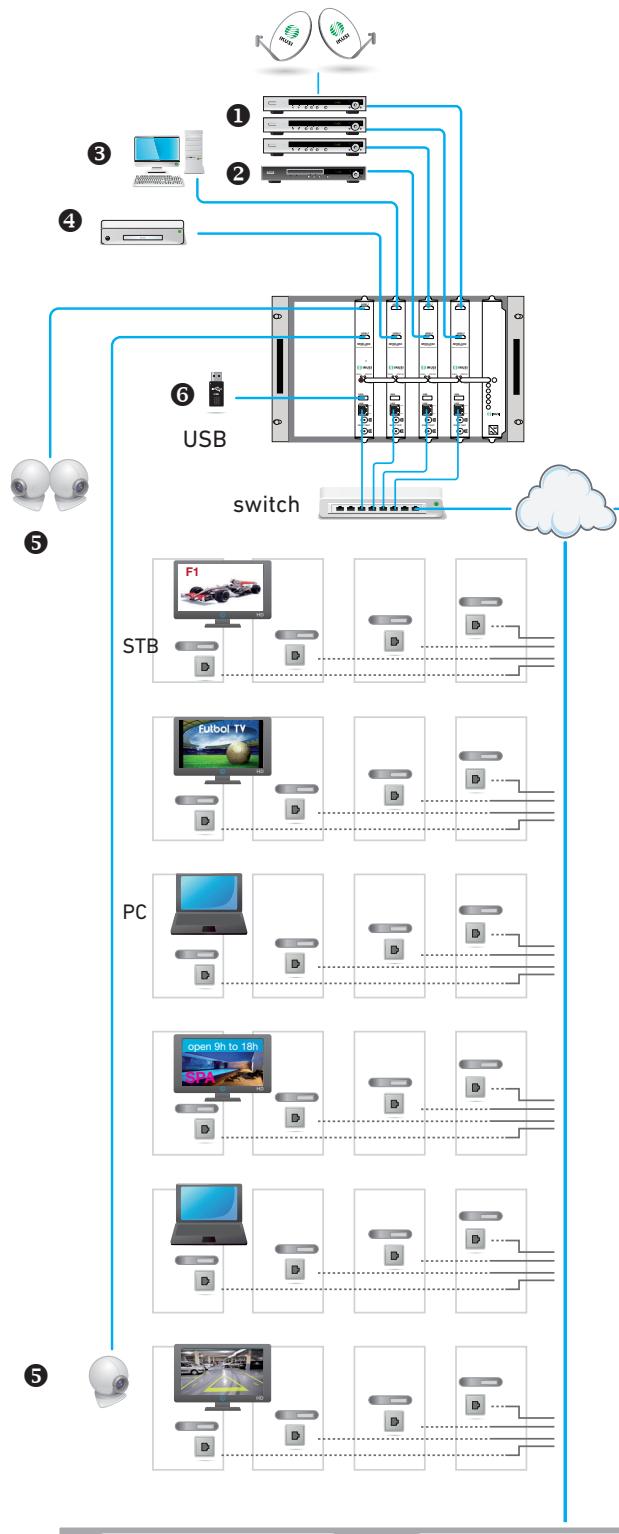
Services combinations at DVB-T/C output:

- Output modulator 1 : HDMI 1 or HDMI 1 + USB
- Output modulator 2 : HDMI 2

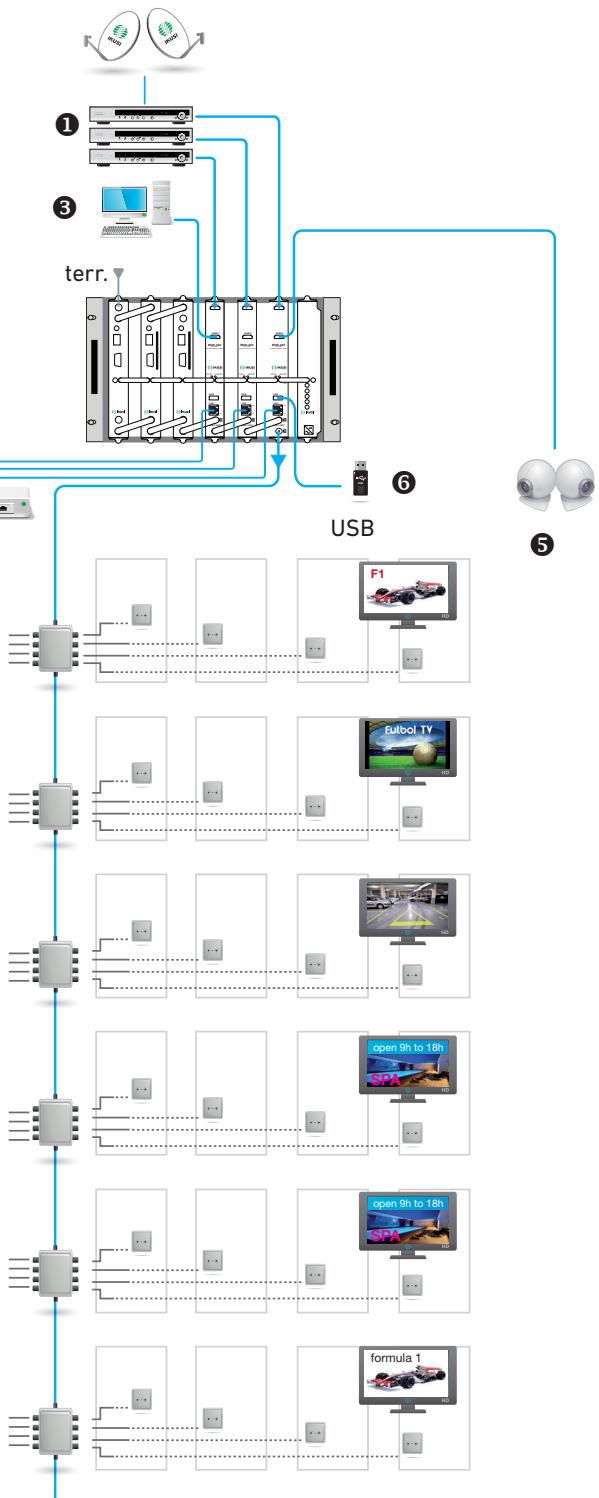
- ①. Satellite channel
- ②. Blu-ray channel
- ③. Information channel

- ④. DVD signal channel
- ⑤. Surveillance video channel
- ⑥. Advertising video channel

IP output



DVB-T and IP output



Advertising video channel. Used to generate an information and advertising channel easily and inexpensively.