T.0X

SINGLE ENCODER/MODULATOR

Input: CVBS / YPbPr / HDMI **Output:** DVB-T (COFDM) / DVB-C (QAM Annex A)

REF.566001

Generate High Definition DTT channels

- Real HD: original source not downscaled
- Configurable DVB-T or DVB-C output
- Energy efficient due to its low power consumption
- Perfect synchronisation between audio & video

HDTV — REMOTE MANAGEMENT — LOW CONSUMPTION — H.264 STANDARD

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T.0X

ENCODER / MODULATOR HDTV TO DVB-T / DVB-C

DESCRIPTION

The single enconder/modulator ref. 566001 generates a digital multiplex from one audio/video source.

The input source may come from three different formats: composite CVBS, YPbPr video and HDMI.

The main parametres of the output signal can be configured: the video codecs, the LCN or the mode of the output modulation.

The digital multiplex can be also configured either as DVB-T (DTT channel) or as DVB-C (QAM Annex A) to use in cable TV operator networks (CATV) in Annex A QAM format.

The configuration is carried out through a web interface built into the module, or alternatively through the universal remote control (Ref. 7234).

A power supply and a wall bracket, which enables you to wall mount the module in the absence of a rack, are also included in the kit.

- Compatible with many formats, resolutions and TV screen dimensions.
- Three different input formats: (HDMI, CVBS and YPbPr).
- Output video encoding: MPEG-2 or MPEG-4 (H.264).
- Output modulation COFDM or QAM.
- Integrated input RF loop through.
- High quality output MER>40dB.
- Two alternative installations: rack or wall (accessories included in the kit)

REF.	DESCRIPTION	EAN 13
566001	T.0X ENCODER SING. HDMI-COFDM/QAM + 18V PSU	8424450180723

HIGHLIGHTS

- **Perfect synchronisation between audio and video**
- **Configurable through a web interface**
- High output level with no need for extra amplification
- Multi-standard output format
- Monitorisation of the device and the signal through LEDs on the unit
- Energy efficient due to its low power consumption

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APPLICATION EXAMPLE

Generation of several digital outputs with a single analogue or digital source (HDMI).

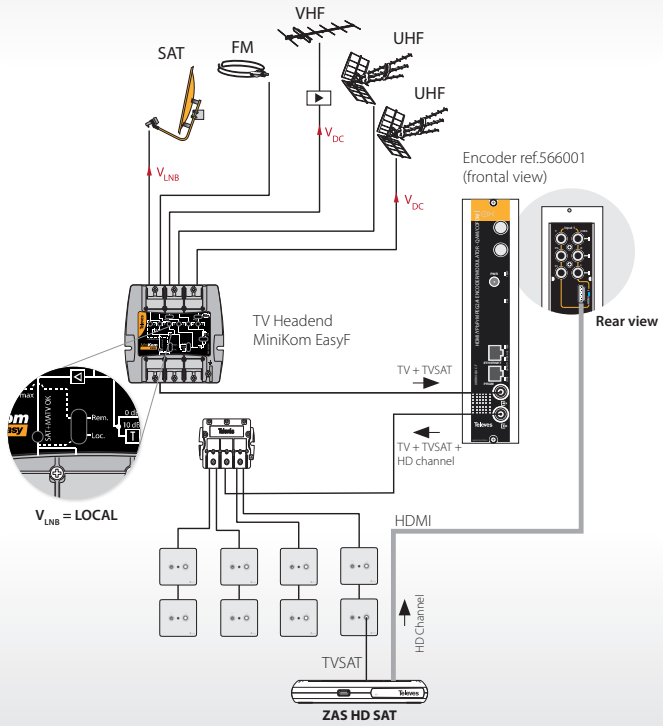
A/V analogue sources and/or HDMI:

- SAT receiver
- Android TV
- DVD / Computers
- Tablets
- Video game console
- DVR (CCTV)

One service in one MUX DVB-T or DVB-C

Modulation and encoding a HD channel created from a satellite receiver (source).

The channel is available in all the sockets therefore there is no need to install any other satellite receiver.



CONFIGURATION OPTIONS

CONFIGURATION THROUGH THE INTEGRATED INTERFACE WEB

ADVANCED CONFIGURATION FOR THE UNIT ID 2817922

#	Model	Serial Number	MAC ADDRESS	IP ADDRESS
1	566001 - Single HDMI COFDM/QAM		00:0E:7C:2A:FF:82	192.168.254.174

Unit Status:

Temp	CH1	CH2	CH3	CH4	OUT	RF Loop	Resolution/Framerate	Version Info
NORMAL	LOCK	n/a	n/a	n/a	NORMAL	ON	C1 1080P/60 C2 /	Hardware - 1.01.00007 Software - 1.01.00202 Boot - 1.00.00002 O.S. - 1.02.00053 User Interface - 1.02.00148

Input Configuration:

Enabled	Video Input	Video Codec	Video Bitrate (Mbps)	Aspect Ratio	GOP	Audio Input	Audio Bitrate (Kbps)	Audio Level
I1 ☑	HDMI	H264	20,00	PASS	15	HDMI	384	14

Transport Configuration:

TS ID	NETWORK ID	NETWORK NAME	ORIGINAL NETWORK ID	NIT VS.	SDT VS.	LCN	LCN Number	IN Name	IN SVID	CH. Name	SERVICE ID	Video PID	Audio PID
1	1	TELEVES	1	Auto	Auto	Generic	C1 1	n/a	n/a	TVES C1	1	1001	1002

Output Configuration:

Table	Channel	Freq. Adj.	Level	Mode	BW	Guard Interval	FEC	CELL ID	Baudrate	Output	RF Loop
CCIR N.Z.Ind	C21	n/a	99	COFDM(64QAM)	8 MHz	1/32	7/8	0	n/a	NORMAL	☑

NOTE: The IP address of the modulator and the computer must belong to the same network in order to have communication between them through the ethernet port.

To do so, copy the first three octets of the modulator's IP address and use it to create the IP address of your computer; the forth octet should be different. For example if the modulator has the IP 172.020.022.201, the IP of your computer should look like 172.020.022.100.

CONFIGURATION THROUGH THE UNIVERSAL REMOTE CONTROL

SPECIFICATIONS

ENCODER/MODULATOR

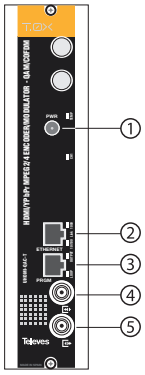
INPUT			
Video			3 x RCA (Y, Pb, Pr)
			1 x RCA (CVBS)
Audio			2 x RCA (L, R)
Video + Audio			1 x HDMI
VIDEO ENCODER			
Output format			MPEG-2 / H264
Resolution			480i, 480p, 576i, 576p, 720p, 1080i & 1080p Input resolution Auto-scan [1]
Aspect ratio			4:3, 16:9 & pass through
GOP			10, 12, 15, 16, 18, 20, 24 ó 30
AUDIO ENCODER			
Output format			Dolby Digital AC-3 (only Digital Loop) or MPEG1 Layer2 (analogue input or HDMI PCM)
Sampling rate		kHz	48
OUTPUT			
Frequency bands		MHz	46...862
Maximum output level		dBµV	115 (103 with active loop-through)
MER		dB	>40
Spurious		dBc	-60
QAM	Modulation		16, 32, 64, 128, 256
	BaudRate	Mbaud	6.9
	Roll-off	%	15
	Code		Reed Solomon
	Spectrum mode		Normal / Inverted
	Frequency steps	kHz	250
COFDM	Modulation		QPSK, 16QAM, 64QAM
	Guard interval	µS	1/4, 1/8, 1/16, 1/32
	FEC		1/2, 2/3, 3/4, 5/6, 7/8
	Bandwidth	MHz	6, 7, 8
	Cell_id		Editable
	Frequency steps	kHz	125 / 166
PSI	Transport Stream ID		Editable
	Original Network ID		Editable
	Network ID		Editable
	LCN		Editable
	NIT		Manual / Automatic
	SDT		Manual / Automatic
	Tipo LCN		Generic / UK / NorDig V1 / NorDig V2
	Network Name		Editable
	Service PID		Editable
	Service Name		Editable
	Service ID		Editable
GENERAL			
Voltage		Vdc	12 ... 24
Consumption		W	<16
Protection Index		IP	20
Working temperature		ºC / ºF	0 ... 45 / 32 ... 113
Dimensions (W x H x D)		mm in.	50 x 216 x 180 1,97 x 8,50 x 7,09
Weight		gr.	1050

[1] *The output resolution is the same as the input resolution (signal source)*

DESCRIPTION

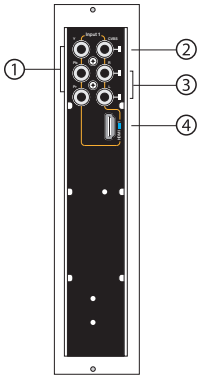
REF.566001

FRONT VIEW



1 Power supply connection
2 Ethernet connection
3 Programmer connection
4 Input RF loop through
5 RF Output

REAR VIEW



1 YPbPr video inputs
2 CVBS composite video inputs
3 Analogue audio input (L/R)
4 HDMI input

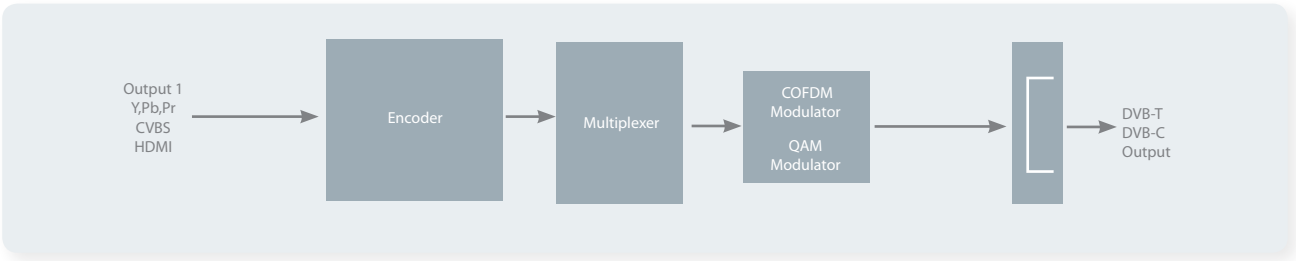
KIT COMPONENTS

- Encoder modulator
- Power supply (Ref. 562801)
- Wall bracket (Ref. 567401)
- Connection accessories

POWER SUPPLY

Input voltage	V~	99 - 254
Frequency	Hz	50 - 60
Output voltage	Vdc	18
Max. Output current	A	1.25

BLOCK DIAGRAM



JUNE 2016