

XPossible DVB-T Modulator

XPSTM-860/XPHTM-860

Introduction

DVB-T is an abbreviation for Digital Video Broadcasting - Terrestrial and it is now adopted or proposed for digital television broadcasting by many countries. With the current hotel infrastructure, existing hotel TV channels are distributed by analog signal via coaxial network to guest rooms. The quality of TV program received in the guest rooms may be poor as the analog signal is susceptible to interference. Hotel is also unable to add high definition (HD) channels for their guest rooms as the existing analog delivery system is not capable of transmitting the HD signals.

So why use a DVB-T Modulator?

The DVB-T Modulator is a cost-effective solution to distribute digital quality TV programs to the guest room TVs via existing coaxial network. With many cable providers now offering high-definition and digital programs, hotels do not have to remove or rework their whole cable network to offer guests such programs. Just by using a DVB-T modulator (explained in the diagram below), guests will still be able to enjoy clear and sharp images even if your hotel is using old analog model TVs. There are 2 models of modulator, a SD model and HD model.

Overview

There are 2 models of modulator, a SD model (XPSTM-860) and HD model(XPHTM-80). The XPSTM-860 model is used when your source is in CVBS format (Red, White, Yellow cables) which comprises of data such as NTSC, PAL, and SECAM. While the XPHTM-860 model is utilized when your source is in HDMI (High-Definition Multimedia Interface) format.

This equipment performs channel encoding and COFDM (coded orthogonal frequency-division multiplexing) modulation of a MPEG-2 transport stream for different bit rates. The system transmits compressed digital audio, digital video and other data in an MPEG transport stream, using COFDM or OFDM modulation. One single unit allows you to feed a TV transmitter with a fully modulated DVB-T channel. Easy installation, setup and control through the local display allows user friendly operations and instantaneous status monitoring.

Product Features

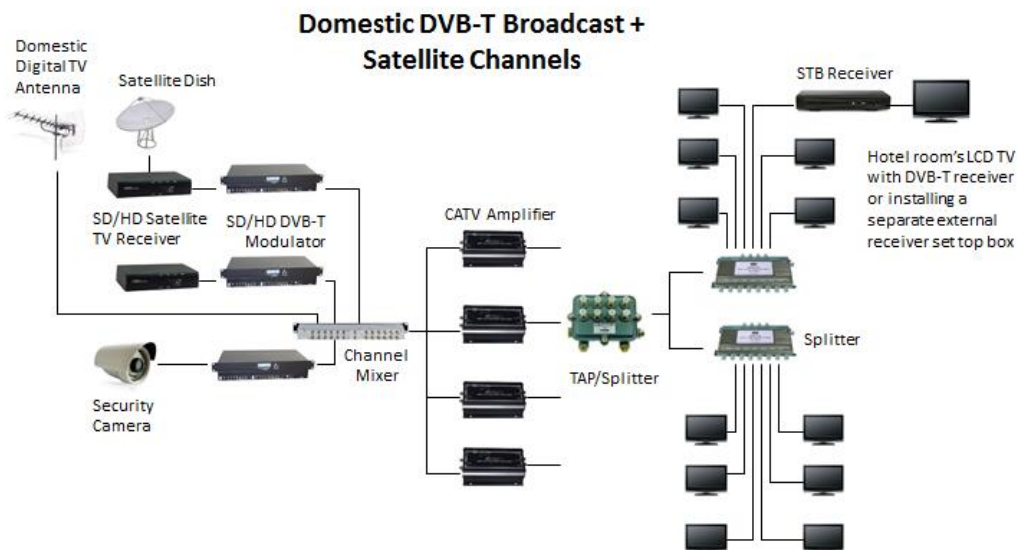
- Single channel
- Support channel bandwidth 6/7/8 MHz
- QPSK/16 QAM/64 QAM symbol mapping
- No hierarchical transmission
- 2K/8K FFT
- Configurable convolution rates
- Configurable guard interval : 1/4, 1/8, 1/16, 1/32
- MER 35dB
- Carrier suppression > 42dB



XPHTM-860



XPSTM-860



SPECIFICATIONS	XPSTM-860	XPHTM-860
Modulation		
Standard	DVB-T (ETSI EN 300 744)	
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	
FFT Carrier Mode	2K, 8K	
Bandwidth	6MHz, 7 MHz, 8MHz	
Power Supply	6W @ 5V	
Display	LCD panel with 2 x 16 characters (on front panel).	
Configuration	6 Local keys on front panel · OK Key : Select parameter, or menu · L / R Keys : Move menu, or characters · Up / down : Select value of the figure, or field · Menu keys : Select menu	
Temperature	Operation: 0 to 55 Degree Celsius Relative Humidity: up to 80% at 30 Degree Celsius	
Source Input		
Input Channel	1	1
Video	CVBS	HDMI
Video System	PAL/NTSC	480i/p, 576i/p, 720p, 1080i/p
Video Input Level	1Vpp @ 75 ohms	-
Audio Input Level	0.5 - 2Vpp @ 10Kohms	-
Audio System	2 x Mono (stereo)	HDMI
Bandwidth	20 Hz to 20 KHz	-
Compression		
Video	MPEG2 MP@ML	H.264 High profile level 3.2
Video Resolution	PAL : 720 x 576i (25fps) NTSC : 640 x 480i (30fps)	720p
Video Bit Rate	10Mbps@64QAM/16QAM 3Mbps@QPSK	12Mbps Max
Audio	MPEG 1 layer II(MP2)	MPEG 1 layer II(MP2)AAC
Audio Bit Rate	96 – 384 Kbit/s	192- 384 Kbit/s
DVB Insertion Tables	SDT, NIT	SDT, NIT
Editable Fields	Service Name/Transport-Stream_id,/network_id,	
Connections		
Video	RCA Female	HDMI In
Audio (L/R)	RCA Female	HDMI Pass Through
RF Output	1 DVB-T RF output with type F female, 75 ohm	
RF Output		
Type	1 Multiplex DVB-T with a digital TV service	
Frequency	177-858 MHz	
MER	35 dB, typically	
Output Level	100 dBuV	
Digital Gain/Attenuation	+5 ~ -10dB	
Attenuation Step	1dB per step	

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