

MPEG HD Encoder Modulator

EN2497HD



HD Encoder & Modulator

Latency **150ms**

Chroma Depth **4:2:0 4:2:2(10bit)**

Resolutions **HD 1080p**

Introduction

Supporting selectable MPEG-2 and MPEG-4 AVC (H.264), DMP-9724M Mediaplex is the professional and high-class combination of ultra low 150 ms latency HD Encoder and Digital Modulator. This high technology product is designated to make the whole digital transmission system be compact and efficient.

Competitiveness

- Retain your viewers with the best performance compression and flawless picture quality
- Wide use in many projects with high compatibility supporting various formats
- Best choice for broadcasting of racing, sports via real time encoding with ultra low latency at 150ms
- Reduce the cost of transmission as supporting wide range of bit-rate control and advanced video coding techniques
- Able to secure space with compact size for installing

Feature

- Component, Composite, HDMI and HD/SD-SDI video inputs
- Ultra low latency as 150ms
- Up to 1080p Resolution
- 4:2:0 and 4:2:2(10bit)
- Digital, Analog and SDI embedded audio(8channel) inputs
- 5.1 channel Dolby Digital (AC-3) encoding
- 7.1 channel SPDIF audio optical input(pass through)
- Additional 1xASI input for supporting of insertion of externally generated PSIP into the transport stream
- Provides internally generated PSI and PSIP
- Control of Frame rate, Image enhance, Phase Noise, Correction of Color and Gamma
- Selectable MPEG-2 HD or H.264 HD real-time video encoding
- Integrated excellent IP converter
- PCR Jitter : $\leq \pm 200\text{ns}$
- Excellent RF output performance
- Scaling function with integrated advanced Scaler
- Phase Noise VHF -105 dB@20KHz, UHF -103 dB@20KHz
- Frequency: 54 ~ 1002MHz
- MER After Equalizer: 42dB

Options

- QAM(Annex A, B and C) Modulation
- DVB-T Modulation
- Redundancy Dual Power
- Video Confidence Monitoring

Specifications

	ITEM		CHARACTER
Video Input	Analog	Input	Component , Composite
	Digital	Input Level	HDMI , HD-SDI 1000 mVp-p (HDMI) / 800 mVp-p (HD-SDI)
	Resolutions		480i29.97, 576i25, 720p50/59.94, 1080i25/29.97
	Aspect Ratio		4:3, 16:9
Audio Input	Analog	Input Freq. Range Impedance	Stereo 20 Hz ~ 20 KHz 600 Ω/ 20 KΩ
	Digital	Input Sampling Rate	AES-EBU Embedded SDI/HDMI (4 Stereo 8 Channel) 32,44.1,48 KHz
TS Input	Optical	Input	SPDIF (7.1Channel) Pass Through
	Transport Stream Packet Format		ASI 1 Port 188 Byte
Video Encoder	Encoding		MPEG-2 MP@HL , MP@ML H.264 HP@L4, MP@L3
	Encoding Rate		MPEG-2 : 0.6~55 Mbps , H.264 : 1.6~50 Mbps
	Chroma Format		4:2:0, 4:2:2 (8 bit/10 bit)
	PSNR		38 dB
	Bit Rate Mode		CBR,VBR
	Latency		150 ms~
Audio Encoder	Sampling Rate		48 KHz
	Dolby Digital® AC-3(5.1CH)		128,192,256,384,448,512,576,640 Kbps
	MPEG-1 Layer II		64,96,112,128,160,192,224,256,320,384 Kbps
	MPEG-4 AAC-LC		32~384 Kbps
	MPEG-4 HE-AAC v1		32~192 Kbps
	MPEG-4 HE-AAC v2		32~96 Kbps
RF Output	Frequency Range		50~1002 MHz
	Impedance		75 Ω
	Output Level		50 ± 5 dBmV
	Level Control Range		0 ~ -15 dB
	MER After Equalizer		42 dB
	MER Before Equalizer		37 dB
	Phase Noise		VHF -105 dB@20KHz, UHF -103 dB@20KHz
	Adjacent Channel Carrier/Attenuation Characteristic		≤ -45 dB (Out of band)
	Spurious		≤ -63 dB
	Return Loss		≥ 17 dB
	Frequency Response		± 0.5 dB
	Frequency Tolerance		± 2 ppm
	Group Delay		± 20 ns
PCR Jitter		≤ ± 200 ns	
TS Output	Transport Stream		ASI 1 port
	TS Bit Rate		MPEG-2 : 2.5~55 Mbps , H.264 : 2.5~55 Mbps
	Packet Format		188 Byte
IP TS Output (Option)	Output		1 Port
	Connector		RJ-45
	Ethernet type		10/100/1000 Base-T
	Stream Protocol		UDP/IP, RTP/IP
	Broadcasting		Multicast, Unicast
	TS Bit Rate		MPEG-2 : 2.5~55 Mbps , H.264 : 2.5~55 Mbps
Ethernet	Connector		RJ-45
	Interface Type		10/100 Base-T
	Protocols		SNMP
General	Power Requirements		AC 90~230 V, 50/60 Hz
	Power Consumption		Max. 100 W
	Weight		4 Kg
	Operating Temperature		-10~50 °C
	Dimensions (W x H x D)		483 x 44 x 383 mm

Configuration

