## Data Sheet: H-4ADHD-xxxx-xx 4CH HDMI / Component HD Encoder & Channel Modulator with CC and AC3 Audio



- 4x HD Video Encoders
- 5X Digital RF Modulator
- 4 HDMI Inuts
- 4 Component Video Inpits
- Closed Captioning
- AC3 Audio
- MPEG2 or H.264
- CATV QAM Output or ATSC
- Output
- ASI Output for TS contribution
- ASI input for TS multilexing
- IP Web controll
- Front panel LCD control



Digital HDTV modulators from Thor are used for converting live video & audio signals to standard television channels to simplify video distribution. These systems are compound devices that combine all of layers of equipment found in a cable television headend system. The H-4ADHD system is designed to meet the demand for features such as closed captioning, digital suround sound audio, and both component and HDMI input options. These systems are simple to configure and manage, and are designed to be controlled through a web browser. This simplifies larger systems with many units that might be in a difficult to access rack or cabinet location.

If no computer is available, all settings can also be made through the front panel. The H-4ADHD has four video inputs. These inputs can be either HDMI or Component video YPbPr. Each of the four channels can encode video from one of the input types. This modulator only accepts either analog or digital HD video signals; it will not encode standard definition SD video. The RF format, or the type of channels that are generated must be selected at the time of ordering. All world digital HDTV formats are supported; including DVB-T, DVB-C, US Cable (QAM), and US Free To Air ATSC (8VSB). The type of channel output is indicated in the model number. An additional option is Low Latency encoding, indicated by an LL in the model number. Low latency units are able to encode approximately 10x faster than standard units, making them better suited for live events or applications requiring low delay. In addition to digital television RF output; these systems also output two other useful formats. IPTV output is provided on a dedicated network port in the form of UDP MPEG-TS streams, and ASI output in the form of a serial program stream is provided for broadcasters, and broadcast contribution.

## **Common Applications :**

- 1-4 HDMI + Closed captioning to RF CATV QAM Channel
- 1-4 Component Video + Closed captioning to RF CATV QAM Channel
- 1-4 HDMI + Closed captioning to RF ATSC Channel
- 1-4 Component Video + Closed captioning to RF ATSC Channel
- 1-4 HDMI + Closed captioning to IP, (MPEG2 or H.264) -unicast / multicast
- 1-4 Component Video + Closed captioning to IP, (MPEG2 or H.264) unicast / multicast
- 1-4 HDMI + Closed captioning to ASI, (MPEG2 or H.264)
- 1-4 Component Video + Closed captioning to ASI, (MPEG2 or H.264)



## **Technical Specifications**

Inputs	4x HDMI, YPbPr, Toslink, & CC-608, ASI
Outputs	5x RF: DVB-T, DVB-C, QAM, or ATSC
	4x IPTV: UDP or RTP unique IP & Ports
Codecs	Video MPEG-2, H.264
	Audio MPEG1 Layer2, MPEG2 Layer2
	Dolby AC/3, HD-AAC V2, LC-AAC
ASI Input	1x BNC 188/204 Format up to 80 Mbps
ASI Output	1x BNC 188/204 Format MPTS or SPTS
Management	Dedicated web server on 10/100 Ethernet

Power
Enclosure RF Interface
Weight Environment
Warranty

120-240 VAC Auto Switching PSU Consumption < 75W 19 in standard equipment Rack Mount 75 Ohm Type-F Coax connector 1x Port Internal RF combiner provided 8.6 lb – 3.9 kg <90 Relative Humidity, non condensing 30 – 140 F; 0 – 60 C 5 Years, Full Parts and Service

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