

Futura II ASI+IPTM

Broadcast Grade, Magnum Chip Based, Superb Quality, High Profile 4:2:0 MPEG-2 and H.264 SD and HD Encoder with Composite, HDMI, SD-SDI, and HD-SDI In and ASI or IP Out (with FEC). Full Control from Front Panel Buttons and Included Alpha LCD. Video Preview via Built-in LCD. Supports All Industry Standard MPEG-2 and H.264 Video Compression Formats. Audio Support Includes AAC and AC-3 Encoding and Pass Through. Full Support for SNMP Management and 10/100 IP Output. One of the Best Quality Encoders on the Market for all Worldwide Broadcast Purposes.



Features

- Encodes Analog, HDMI, or HD/SD-SDI video to ASI and/or IP
- Inputs: Component, Composite, HDMI, HD/SD-SDI video
- Supports EIA-708 closed caption insertion via HD-SDI (SMPTE 334)
- Outputs: ASI, IP (UDP/IP or RTP/IP)
- Low latency – 800 milliseconds
- Digital, Analog and Serial Digital embedded audio inputs
- 5.1 channel SPDIF audio optical input (pass through)
- Auto detection of video resolution
- Magnum chip based – results in incredible quality
- Simultaneous outputting of mirrored ASI streams or UDP/IP or RTP/IP transport stream
- CBR or VBR outputs
- Audio encoding: Dolby® Digital® (AC-3), MPEG-1 Layer II, AAC-LC, HE-AAC
- User selectable resolution and bit rate
- Resolutions: 480i, 480p, 576i, 576p, 720p, 1080i 25, 29.97/30, 50, 59.94/60
- Chroma format: 4:2:0
- Supports PAT, PMT, SDT, NIT, VCT (TVCT, CVCT) and a dynamic PSIP insertion ASI port
- Control and monitoring via web browser, front panel, or SNMP
- Supports closed captioning with CEA-708

Applications

- Encoding uncompressed Broadcast or Cable
- Distribution of video in any setting

Overview

MPEG-2 is now the de facto standard codec for Broadcast, Satellite, and Cable content distribution in many parts of the world. H.264 is the emerging standard for broadcast.

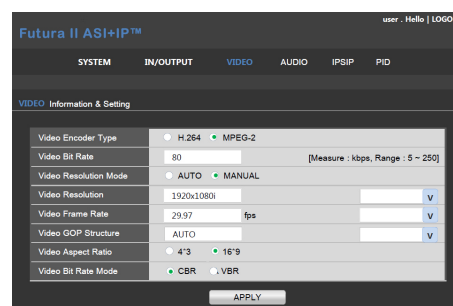
The Futura II ASI+IPTM is an affordable Broadcast oriented MPEG-2 or H.264 encoder that supports all of the standard broadcast formats used throughout the world, including all North American standards. It supports PSIP tables and has an ASI port for dynamic PSIP.

The unit supports HD-SDI, HDMI, YPbPr, and CVBS input and two identical ASI outputs, plus one IP output. The Futura II ASI+IP delivers MPEG-2 video at bit rates of 3.4 to 19.39 Mbps, and H.264 video at 2.5 to 19.39 Mbps.

Audio support includes Dolby® Digital® (AC-3), MPEG-1 Layer II, AAC-LC, and HE-AAC.

The Futura II ASI+IP is "Magnum Semi" chip based. Magnum Semiconductor created one of the best quality encoder chips. One look and you will be impressed.

Sample GUI



Video Settings

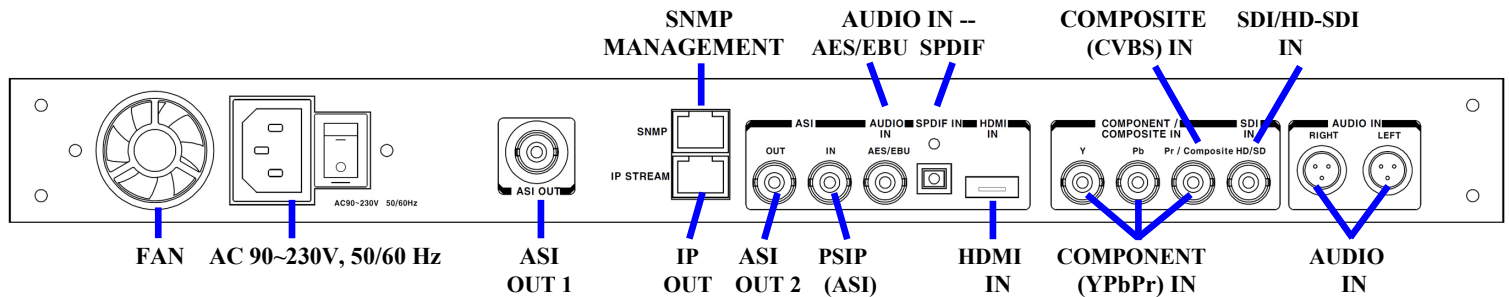


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Rear View



Specifications

Video Input

Analog:	Component (YPbPr), Composite (CVBS) Level: 1 Vp-p
Digital:	HDMI, SDI, HD-SDI Passes through VBI, AFD, Bar Data, VANC Levels: 1000 mVp-p (HDMI), 800mVp-p (SDI)
Resolutions:	480i 29.97/30, 576i 25, 720p 50/59.94/60, 1080i 25, 29.97/30, 50, 59.94/60
Aspect Ratios:	16:9 (Digital only), 4:3

Audio Input

Analog:	Input: One Stereo (Two channels) Frequency Range: 20 Hz ~20 KHz Impedance: 600 Ω/20 KΩ Connector: Mini XLR
Digital:	Inputs: AES-EBU, Embedded SDI/HDMI (2 stereo pairs, H.264 only) Sampling Rate: 32, 44.1, 48 KHz Connector: BNC (75Ω)/HDMI-19PIN
Optical Input:	SPDIF (5.1 Channel) (pass through)

Video Encoding

Encoding:	MPEG-2: HP@HL, MP@HL, MP@ML MPEG-4: H.264 HP@L4, MP@L3
Encoding Rate:	MPEG-2: 2~17.2 Mbps; MPEG-4 H.264: 0.5~17.2 Mbps
Chroma Format:	4:2:0
PSNR:	33 dB
Bit Rate Modes:	CBR, VBR
Latency:	800 milliseconds
Closed Captioning:	EIA-708, 608 in converts to 708

Audio Encoding – One Audio Pair

Sampling Rate:	32, 44.1, 48 KHz
Dolby® Digital® AC-3:	128, 192, 256, 384 Kbps
MPEG-1 Layer II:	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

Regulatory Certificates



Ordering Info

Futura II ASI+IP

Dynamic PSIP Input

Transport Stream:	One ASI port
Connector:	BNC (75Ω)
Packet Format:	188 Bytes
Input Level:	800mVp-p

ASI Output

Transport Stream:	Two ASI ports
Connectors:	BNC (75Ω)
TS Bit Rate:	MPEG-2: 3.4~19.39 Mbps; MPEG-4 AVC: 2.5~19.39 Mbps
Packet Format:	188 Bytes

IP Output

Output:	One port
Connector:	RJ-45
Ethernet Type:	10/100/1000 Base-T
Format:	UDP/IP, RTP/IP
IP Address Format:	Multicast, Unicast
TS Bit Rate:	MPEG-2: 3.4~19.39 Mbps; MPEG-4 AVC: 2.5~19.39 Mbps
TS Packet Rate:	188, 204 Bytes with FEC (2022-4)

Ancillary Data Type Standards Used

NTSC CC:	CEA 608, ETSI TS 101 154 V1.9.1 and A/53 Part4 2009
XDS Data:	100/100 Base-T
DTV CC:	CEA 708, ETSI TS 101 154 V1.9.1 and A/53 Part 4 2009
AFD and Bar Data:	ETSI TS 101 154 V1.9.1 and A/53 Part 4 2009
VITC Data:	SMPTE 12M including 12M-1 and 12M-2 (VANC)

Ethernet

Connector:	RJ45
Interface Type:	10/100 Base-T
Protocols:	SNMP

Control and Monitoring

Local:	Front panel operation, LCD display
Remote:	SNMP, HTTP (Web Interface)
LCD Video Preview:	Dimensions (WxH): 1.6 x 1.2 inches (40.56 x 30.48 mm) Pixels: 480 x 240 Format: SD (4:3)

Physical and Power

Power Supply:	AC 90~230V, 50/60 Hz
Power Consumption:	Max. 100W
Dimensions – WxHxD:	19 x 1.7 x 15 inches (482 x 44 x 383 mm)
Weight:	8.82 lbs (4 Kg)
Operating Temp.:	14 to 122 °F (-10~50°C)
Conformities:	FCC, CE, LVDS, RoHS