

edje[®] 2100 Real Time Distribution Encoder with Dolby Digital Audio

With over 40,000 devices deployed globally, Adtec's edje 2100 Encoders continue our trend of providing a reliable, low cost and high performance solution.



edje[®] The edje 2100 is a real time distribution encoder designed specifically for Digital and IP Television systems. Featuring advanced video filtering, compressed audio and a very stable jitter, the edje 2100 delivers an accurate and standard compliant MPEG transport stream.

Regardless of your distribution system, satellite, terrestrial, cable, or IPTV, the edje 2100 can be used to provide local encoding.



applications

- Satellite DTH
- Cable Local Encoding
- Terrestrial DTV (ATSC and DVB-T)
- MPEG 2 Transport over IP
- Digital Electronic News Gathering
- Surveillance and Security

benefits

• High Picture Quality at low MPEG-2 bitrates:

Produce true broadcast quality encoding with very stable jitter at low bitrates for an efficient and cost-effective transmission. With support for Composite, YC and optionally SDI digital video inputs, the edje 2100 delivers the highest quality compressed video and audio.

• **Advanced filtering and video resolutions:** Improve the quality of your images with high performance Analog to Digital conversion. Horizontal and vertical filtering produces broadcast quality images from non-ideal sources.

• **IPTV Multicast Output :** Directly output MPEG-2 IP Multicasts and eliminate the need for additional IP streaming equipment.

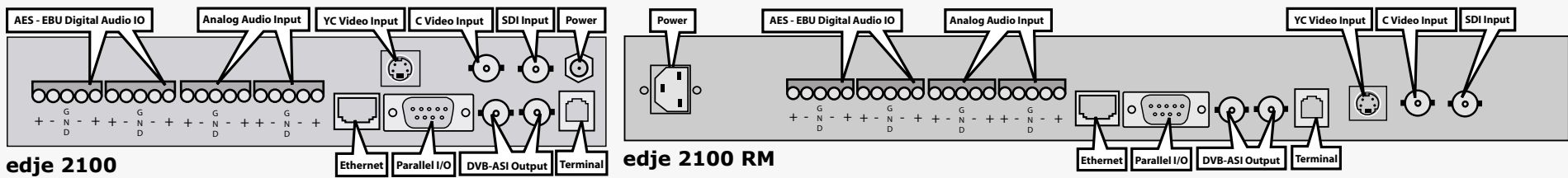
• **Dolby Digital AC-3 Audio Compression:** Encode your audio using Dolby Digital audio compression. Channel modes supported include 1/0, 2/0 and 5.1 pass through. Two concurrent Dolby Digital channels can be encoded when the second Dolby audio input option is employed.

• **Flexible Control:** Control and configure the edje 2100 using the integrated front panel keypad and LCD, Serial Terminal or remote Ethernet. Regardless of the method, the edje 2100 responds rapidly and reliably to the desires of the operator.

• **Stable MPEG Transport Stream:** Transport with confidence. The edje 2100 provides a stable, accurate MPEG 2 Transport Stream compliant with the global DVB standard. It outputs either ASI or IP, and provides very stable jitter and rock solid sync.

availability

		Rack Mount Chassis	# of Dolby Channels	SDI Video Input
models	edje - 2100		1	
	edje - 2100 - 2		2	
	edje - 2100 RM	●	1	
	edje - 2100 - RM - 2	●	2	
	edje - 2110		1	●
	edje - 2110 - 2		2	●
	edje - 2110 - RM	●	1	●
	edje - 2110 - RM - 2	●	2	●



Note: Models not supporting dual Dolby channels will not have AES-EBU Digital Audio IO.

specifications

Front Panel

- 8 – Button Tactile Raised keypad
Mode, Select, Enter, Escape, Up, Down, Left, Right
- Blue Translucent LCD
(20 character by 2 row)
- Front panel Host LEDs
Power, Alarm, ASI, IP, Ethernet

Video Inputs

- Composite (BNC)
- YC (4 Pin Mini-Din)
- Analog to digital conversion 9 bit with scaling
- Horizontal and Vertical 16 tap filters
- SDI (Option) (BNC)
Chroma filtering and full scaling

VBI Support

- Line 21-Closed Captioning DVS053 Rev 6
- V-Chip DVS157
- Teletext (NABTS) DVS053 Rev 6
- Neilson Source Identification (SID) DVS053
- Automated Measurement of Lineups (AMOL) DVS053

Video Encoding Profiles

- MPEG 1 SIF ISO 11172-2
- MPEG 2 AFF ISO13818 MP@ML

Video Encoder Filters

- Temporal
- Spatial Vertically and Horizontally
- Temporal and Horizontal Spatial can be concurrent

Video bit rates

- 300K-8 Mbs

Video Resolutions

- Per Macro Block (16x16)
Note: Non-standard Vertical resolutions may adversely effect STB decoders, PC decoders have more flexibility when scaling.
- Horizontal NTSC examples:
720x480 (Full D1 NTSC)
544x480
528x480
512x480
496x480
480x480
- Vertical NTSC examples:
352x480 (Half D1 NTSC)
- Vertical NTSC examples:
720x 464
Horizontal and Vertical example:
528x464 etc.
PAL resolutions examples:
720x576 (Full D1 PAL)
720x560
544x544

Multiplexing Formats

- Program
- Transport

Audio Inputs

- 24 Bit A-D Conversion
- Primary Stereo Balanced (5 Pin RST)
- SAP Balanced (Option 5 Pin RST)
- AES-EBU (5 Pin RST - 110 Ohm)
Dolby AC-3 encoding only, MPEG audio not supported via AES
- SDI (Option) (BNC with video per SMPTE 272M A, B, C)

Audio Encoding Profiles

- Dolby AC-3
- MPEG 1 Layer 1 ISO11172-3
- MPEG1 Layer 2 ISO 13818-3

Audio Delay

- Adjustable PTS delay up to 700 milliseconds

Audio Sampling

- 16, 22.05, 24, 32, 44.1 and 48 KHz

Audio Bit Rates

- 64-640 Kbs
- 64-384 Kbs for MPEG
- Up to 640 Kbs for AC-3

Ethernet

- 10/100 (RJ-45)
- Half Duplex
- Full Duplex
- Auto Negotiate

Ethernet Protocols

- Telnet
- XCP (Adtec encrypted UDP control protocol)
- FTP
- UDP (layer 3) IP Stream Multicast
- EMT
- FCMP (IP File Multicast)
- UDP/SPTS
SAP-SDP

IP Encapsulation

- ISO13818-6 Multi-Protocol Encapsulation (MPE)
- Up to 8 Mbps
MPE services output via ASI

Ad Insertion Cueing

- SCTE 35

DTV

- DVB-ASI (BNC x 2)

MPEG Table Compliance

- PAT, PMT (All PID's user definable)

DVB Table Compliance

- SDT, NIT (All PID's user definable)

Serial Communications

- RS232 (38400-115,200K, 8, 1 N)

Parallel Control and Tally

- 4 Data Inputs (User definable)
- 2 Data Outputs (User definable)

Power

- 12 VDC less than 24 watts
- 70-240 VAC switching power supply (RM models)
50/60 Hertz
Rated at 150 Watts
Nominal usage 40 Watts

Physical

- 8.5" wide, 1.70" tall, 10.5" deep
- 19" wide, 1.75" tall, 10" deep (RM models)

Environmental

- Active cooling (Fan)
- 0 to 90 Degrees Fahrenheit
- Less than 70% RH
- Non-Condensing

Note: Specifications subject to change without written notice

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