ADTEC Digital

edje-2200

Digital Audio Encoder
with Dolby Digital AC-3 Audio

DOLBY DIGITAL

DVB

Edje-2200

Overview

The edje-2200 is a real time MPEG 2 digital audio encoder designed specifically for digital television (DTV) systems. The edje-2200 is ideal for delivering digital radio channels into cable, terrestrial and IP distribution systems.

Applications

· Air DTH
· FM Local Encoding
· Terrestrial DTV (ATSC and DVB-T)
· MPEG 2 Transport over IP

Feature Highlights

· Real time MPEG 2 MP@ML audio encoding
· Supports two Dolby digital stereo channels
· Two DVB-ASI output streams
· Intelligent audio control and leveling
· High quality at low bit rates
· Stable, reliable, and simple operation
· Density of two encoders per rack unit

Benefits

> High Quality MPEG 2 Audio Encoding
Each edje-2200 encodes two channels of high quality MPEG 2 compressed Dolby digital or MPEG Layer 2 (Musicam) audio. The edje-2200 delivers stunning audio at low data rates.

> Dolby Digital AC-3 Audio Compression
The edje-2200 supports two Dolby digital stereos. Channel modes supported include 1/0, 2/0 and 5.1 pass through. Alternatively, the edje-2200-M supports two channels of MPEG Layer 2 (Musicam) audio encoding.

> Scalable Delivery of Multiple Audio Channels
Multiple audio channels can be added as desired by integrating Adtec's edje-3000 DVB-ASI multiplexers with edje-2200 encoders. The edje-3000 can multiplex single program transport streams from up to ten edje-2200 and/or re-multiplex up to ten multiple program transport streams received other edje-3000s, enabling effective delivery of vast numbers of audio channels.

> Stable MPEG 2 Transport Stream
The edje-2200 provides a stable accurate MPEG 2 Transport Stream compliant with the global DVB standard. Very stable jitter, rock solid sync, MPEG and DVB tables all delivered via the industry standard ASI interface.
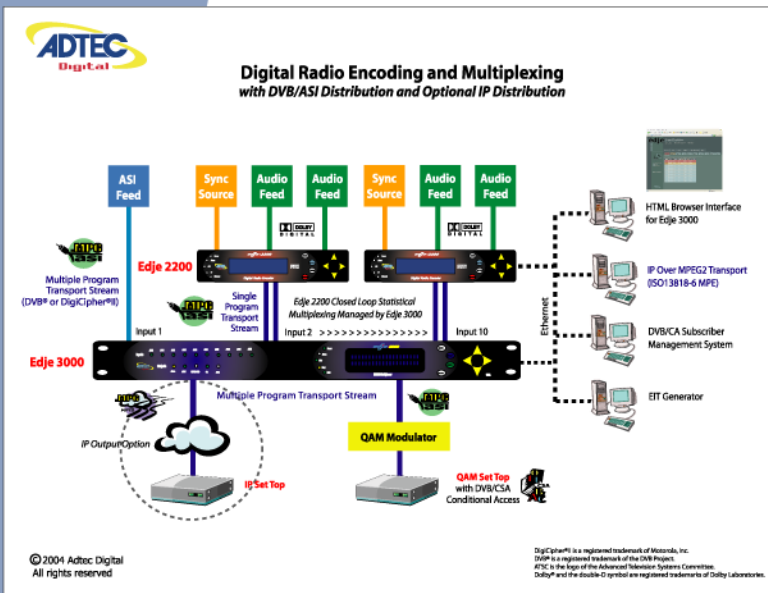
> Absolute Control
Controlling and configuring the edje-2200 is simple. With its integrated front panel keypad and LCD, Serial, Terminal or remote Ethernet, the edje-2200 responds rapidly and reliably to the desires of the operator.

> Reliable Operation
Adtec has delivered over thirty thousand MPEG devices globally. The edje-2200 continues the trend of providing reiability, low cost, and high performance.

Availability

The edje-2200 is available in a steel case (8.5" x 1.75" x 10.5"). Models are available to support either Dolby digital or MPEG Layer 2 (Musicam) audio encoding.

Digital Radio Encoding and Multiplexing
with DVB/ASI Distribution and Optional IP Distribution

edje-2200 Digital Radio Encoder

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 LED's
  Power, Alarm, ASI, IP, Ethernet

Sync Inputs
BNC
4 Pin Mini-Din

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*

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)
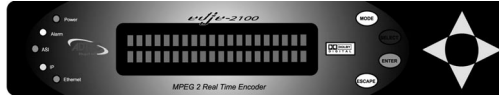
Power
12 VDC less than 24 watts

Physical
8.5" wide, 10.5" deep, 1.70" tall
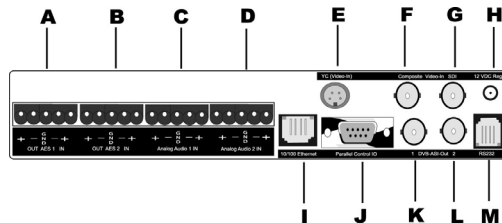
Environmental
Active cooling (Fan)
0 to 90 Degrees Fahrenheit
Less than 70% RH
Non-Condensing

*Note: Specifications subject to change
without written notice*

Edje 2200 Front Panel LED Status

Led	Status
Power	Green - On
Alarm	Green – No Alarms Yellow – Minor Red – Major (No Video In)
ASI	Green – MDE ASI and active Yellow – MDE ASI no output (same as alarm RED) Off – MDE IP
IP	Green – MDE IP and active Yellow – MDE IP no output (same as alarm RED) Off – MDE ASI
Ethernet	Green – Link Yellow Flash – Link and Busy Off – No connect

Edje 2200 Rear Panel I/O

Label	Description
A	AES-EBU Digital Audio IO Number 1
B	AES-EBU Digital Audio IO Number 2
C	Analog Audio Input Number 1
D	Analog Audio Input Number 2
E	Sync Input (4-Pin Mini-Din)
F	Sync Input (BNC)
G	N/A
H	Regulated 12 Volts DC Input
I	Ethernet (10/100)
J	Parallel I/O
K	DVB-ASI Output Number 1
L	DVB-ASI Output Number 2
M	Terminal RS232 Connector