



edje-1123 MPEG2 Digital Video Player and Satellite Router



edje-1123

Overview

The edje-1123 integrates a built-in QPSK Satellite Data Receiver with its highly advanced digital video player and network appliance features. Designed for integration in satellite multimedia video networks, it supports MPEG video and audio, schedules and commands via DVB-MPE encapsulation. In addition to its small 1 rack unit size, its embedded technology offers reliability and performance that far exceeds PC based solutions.

Applications

Store and Forward Playback
Live Stream Distribution
POS, POP, Digital Signage

Benefits

Integrated Satellite Antenna Interface (L-Band)

The integrated QPSK demodulator provides a robust LNB power supply that can handle under or over current conditions without damage. The L-Band interface supports DiSEqC and 22 kHz Tone control for the LNB.

DVB-MPE PID Tuner (DVBridge)

The internal DVB Transport Stream interface manages Program Identification (PID) tuning. The IP data is encapsulated via a Digital Video Broadcasting-Multiprotocol Encapsulator (DVB-MPE) per ISO13818-6 and assigned a PID. The DVBridge tunes to the PID and extracts the IP data in its original form. Up to four PID's can be defined per service with as many as four concurrent services.

Forward Error Correction (FEC)

DVB Transport Streams utilize Reed Solomon and Viterbi FEC at the physical layer. Adtec offers application layer FEC in the form of redundant packet transmission, cyclical packet transmission, or advanced Turbo Coding. Partial Packet retransmission is supported in networks that utilize a back channel.

File Control Multicast Protocol Server (FCMP)

The FCMP server manages the IP multicasting of content to remote edje-1123's. It employs a very sophisticated group structure facilitating regionalization. The FCMP server used in conjunction with the edje-1123 provides an end-to-end solution for content distribution via one-way Satellite, with or without a back channel.

Fabulous Live Streaming Video

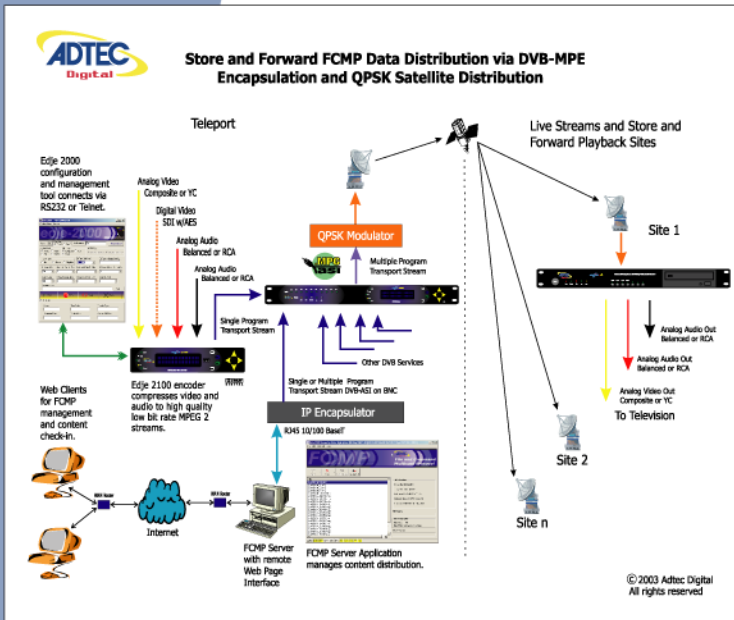
In addition to playing stored files from the local hard drive, the edje-1123 can receive live streams from Adtec's edje-2000 Real Time Encoder (RTE). The live streams can be configured to automatically override the stored playback and will resume once the live streaming ceases.

Reliable Content Delivery

Distribute content globally, on time, and in budget. The edje-1123 employs push, pull and mirror strategies. It delivers multimedia overnight at a fraction of the cost of guaranteed bandwidth network solutions. Its security features include the ability to decode and play encrypted video, built-in firewall protection, absolute virus immunity, and multi-password access. For remote network control and management, use Symphony Pro software from Adtec Digital.

Absolute Presentation Control

Orchestrate multimedia presentations with absolute control. Connect multiple players over Ethernet for frame-accurate video playback synchronization to a group of projectors or displays. Connect the edje-1123 to a power relay to switch-on a display, verify that it works, and then keep detailed play reports. It features a multi-threaded video transport OS, a powerful scripting language, trigger-sensitive macros, and an API for control over Ethernet, RS-232 or parallel lines



FEATURES

- Built-In QPSK Satellite Receiver
- FCMP Client (File Control Multicast Protocol)
- Broadcast Quality MPEG 2 Decoding
- BMP On Screen Display (OSD)
- MP@ML decoding up to 15 Mega bits per second
- Supports Constant and Variable bit rate MPEG
- Supports Full-D1, Half-D1 and SIF resolutions
- Composite, YC analog video
- Balanced and unbalanced analog audio
- Serial, Ethernet and Parallel control
- Robust API for developers
- QPSK Satellite data router
- LAN and WAN support
- TCP/IP Ethernet protocol
- FTP Client-Server (Concurrent)
- EMT (ADTEC LAN Multicast protocol)
- Supports control and data distribution via the Internet
- Front panel Decoder and Receiver LED status
- Supports NTSC, PAL, PALN and PALM standards
- Time Clock with NTP capabilities
- Scheduling and Play list support
- Compliant with most MPEG 2 program streams (*)
- Supports Elementary Stream Playback
- ADTEC embedded real time operating system
- NOT PC based
- 1 rack unit chassis
- CE certification

(*) Please note the required encoding parameters under the specifications and check our web site for updated file support.

SPECIFICATIONS

QPSK Satellite Data Receiver

Antenna Input

L-Band Input 950 – 2150 MHz
(F-Female, 75 Ohm)

Input Level

-65 dB to -25 dB

LNB Power

Automatic Polarity Sensing
(Horizontal - 14V-Vertical - 18V)
Automatic Over and Under Current Protection
22 KHz Tone
(High Frequency Block Up-convert)
DiSEqC

Symbol Rate

1 to 45 MS/s

Forward Error Correction (Physical)

DVB Viterbi FEC
Automatic Sensing
1/2, 2/3, 3/4, 5/6, 7/8
DSS Viterbi FEC
Automatic Sensing
1/2, 2/3, 6/7
Reed Solomon (16 bits)
Supports DVB and DSS

Receiver Service Configurations

Four Automatic Rotation Configurations

Four PID's per Service

DVB-MPE
DVB Video
DVB-Audio (2)

Data Gateway Feature (Router)

Routes IP Packets to 10/100 Ethernet Interface

Decoding Standards

MPEG 2 ISO/IEC 13818 MP@ML
MPEG 1 ISO/IEC 11172

Decoding Data Rates

MPEG 2 1 to 15 Mb/s
MPEG 1 400 Kbits/s to 5 Mb/s

Decoded Streams

MPEG 2 Program (CBR or VBR) or System
MPEG 1 System
Elementary Audio streams

Pictures Structure

I, IP, IBP, GOP from 1 to 15

Video Resolution NTSC

Horizontal: 720, 704, 640, 480, 352
Vertical: 480, 240
Color Frequency: 3,579,545 Hz

Video Resolution PAL

Horizontal: 720, 704, 640, 480, 352
Vertical: 576, 288
Color Frequency: 4,433,618.75 Hz

Video Resolution PAL-M

Horizontal: 720, 704, 640, 480, 352
Vertical: 480, 240
Color Frequency: 3,575,611.49 Hz

Video Resolution PAL-N

Horizontal: 720, 704, 640, 480, 352
Vertical: 576, 288
Color Frequency: 3,582,056.25 Hz

Video Sampling

4:2:0

Audio Type and Sampling

MPEG Layer 1 and Layer 2
44.1 KHz, 48 KHz
Mono, Dual Mono, Stereo or Joint Stereo

Audio Data Rates

MPEG Layer 1: 32 Kbits/s to 448 Kbits/s in 32 K steps
MPEG Layer 2: 64, 96, 112, 128, 160, 192, 224, 256, 320, 384 Kbits/s

On Screen Display

Static BMP or JPEG
Full Screen 720x480 (576 PAL)
24 Bit Color rendered
Crawl (Bottom-Middle-Top)

Platform

ADTEC Embedded system with:
Motorola Cold Fire 32 Bit RISC CPU
ADTEC Real Time Deterministic OS
10/100 Base T Ethernet
TCP/IP With FTP Server and Client
EMT (ADTEC LAN Multicast Protocol)
FCMP (ADTEC Satellite Multicast Client)
FCMP FEC (Advanced application FEC)
Serial RS422, RS232 (Loop through)
Parallel (4 Bit, BCD)
IDE drive host interface

Analog Video Outputs

Composite (2 BNC, 75 Ohm)
YC (4 Pin Din or 2 BNC, 75 Ohm)

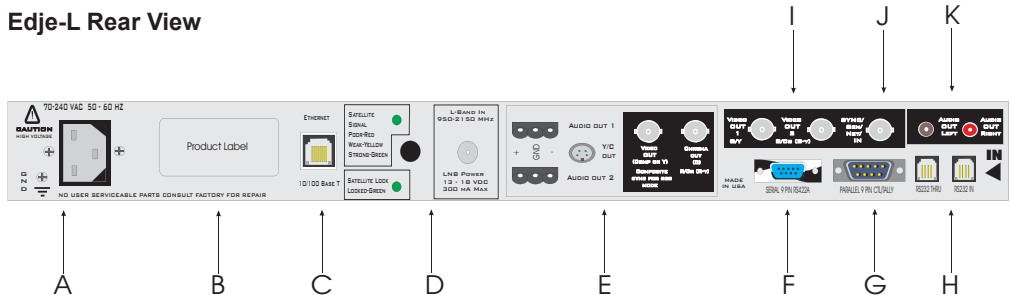
Analog Audio Outputs

Unbalanced Stereo (2 RCA, 56 K Ohm)
Balanced Stereo (2 RST, 600 Ohm)

Physical and Operational

1 Rack Unit
19" 1.75" 14" (WHD)
482 mm 44 mm 355 mm (WHD)
70-240 VAC 50-60 Hz
65-Watts maximum power consumption
50/90 Degrees F, 30/70 RH
CE Certified

Edje-L Rear View



Edje-L IO		F	RS 422 Control Port
A	AC Mains Power In	G	Parallel IO and Control Port
B	Product Label Area	H	RS232 In and Out Ports
C	Fast Ethernet RJ-45	I	Composite Video Out (2)
D	L-Band Input and LED indicators	J	Sync or Genlock In
E	Balanced Audio and YC Video Out	K	Unbalanced Audio Out



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