



Overview

Adtec is pleased to introduce the tiny giant in Real Time MPEG Encoding (RTE) technology. The edge-2000 RTE encoder finally offers a true broadcast contribution quality encoder for less than many PCI based encoder cards. Supporting IP platforms, the edge-2000 provides all the amenities of encoders costing five times its price and four times its size. The decode targets include Adtec MPEG decoders, STB, or the desktop.

Features

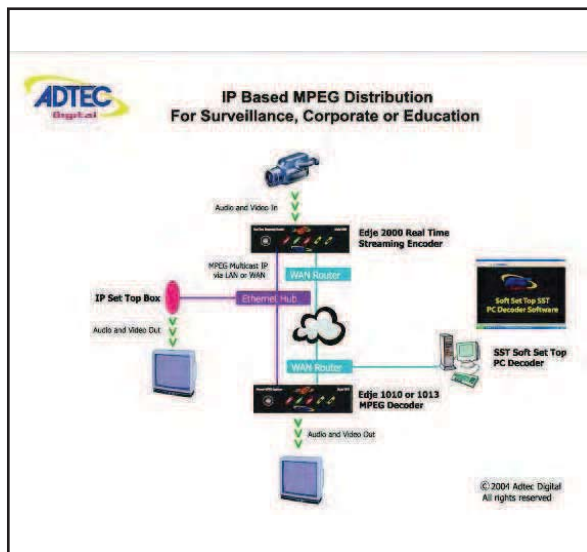
- ▶ High picture quality at low MPEG 2 bit rates
- > Advanced filtering and video resolutions
- > Support MPEG 1 (Musicam) and Dolby AC-3 audio encoding
- > Single Program Transport Stream (SPTS)
- > Support PES (Packetized ES), and ES (Elementary Streams)
- > Support DVB and IP platforms
- > Very small easy to deploy devices (4 per 1 RU on optional rack kit)
- > Very low power consumption and heat dissipation
- > Very LOW per channel cost
- > Very stable jitter
- > Composite and Y/C analog video input
- > SDI with embedded audio input option
- > 9 bit analog to digital video conversion
- > Horizontal video scaling per macro-block (16 lines)

Applications

- Broadcast Contribution
- Electronic News Gathering
- Cable Television Encoding (Distribution)
- Everything On Demand (Head End PVR)
- Digital Tier Ad Insertion Fulfillment
- Satellite Television Delivery
- Over the Air TV Cable Distribution
- Broadcast Proxy Web Streaming
- Broadcast DTV Conversion
- Surveillance and Security
- Remote Tele-Course (Distance Learning)
- Remote Tele-Medicine
- High Quality Video Conferencing
- Point-to-Point IP Video Distribution
- IP Based Television Infrastructures
- Business Television

Availability

The edge-2000 is available in an aluminum case (1.70" x 4" x 10") with 24 watt external power supply.



Video Inputs

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

VBI Support

- Line 21-Closed Captioning DVS053 Rev 6
- Adtec line shift Closed Captions

Video Encoding Profiles

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

Video Encoder Filters

- Temporal
- Spatial Vertically and Horizontally

Video bit rates

- 300K-5 Mbs MPEG 1
- 300K-8 Mbs MPEG 2

Video Resolutions

- MPEG 1
 - 96x96 to 352x240 NTSC and 352x288 PAL
- MPEG 2
 - 96x96 to 720x480 NTSC and 720x576 PAL

Note: Non-standard Vertical resolutions may adversely affect STB decoders, most PC decoders have more flexibility when scaling.

- NTSC resolution examples:
 - 720x480 (Full D1 NTSC)
 - 544x480
 - 528x480
 - 352x480 (Half D1 NTSC)
 - 352x240 (MPEG 2 at MPEG 1 resolution)

- PAL resolutions examples:
 - 720x576 (Full D1 PAL)
 - 544x576
 - 352x576 (Half D1 PAL)
 - 352x288 (MPEG 2 at MPEG 1 resolution)

Multiplexing Formats

- Program (System-MPEG 1)
- Transport

MPEG Table Compliance

- PAT and PMT

DVB Table Compliance

- SDT and NIT

PMT User defined Program Identifier (PID)

- PMT
- Video (PCR on video)
- Audio

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 (2.5 MM locking)

Physical

- 4" wide, 10" deep, 1.70" tall
- Up to 4 encoders can be mounted on 1 RU shelf

Environmental

- Passive cooling (No Fan)
- 0 to 90 Degrees Fahrenheit
- Less than 70% RH
- Non-Condensing

Audio Inputs

- 24 Bit A-D Conversion
- Two channels Un-balanced (RCAx2)
- Four channels Un-balanced (RCAx2) (Option)

Audio Encoding Profiles_

- MPEG 1 Layer 1 ISO11172-3
- MPEG 1 Layer 2 ISO 13818-3

Audio Sampling

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

Audio Bit Rates

- 64-384 Kbs

Ethernet

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

Ethernet Protocols

- Telnet
- FTP
- UDP (layer 3) IP Stream Multicast
- SDP and SAP support
- EMT
- FCMP (IP File Multicast)

