



## Envivio Broadcast Series 4View D1

### Standard Definition MPEG-4 AVC/H.264 Main Profile Decoder

#### Targeting Broadcast Contribution, and IPTV / Mobile TV Monitoring Applications

Envivio® 4View™ D1 is a professional standard definition (SD) MPEG-4 AVC/H.264 Main Profile decoder. The system also supports AVC Baseline Profile as well as ASP and SP video decoding, and MPEG-4 AAC/HE-AAC audio decoding. 4View D1 is ideal for all fixed and mobile professional video contribution and primary distribution applications. It replaces the successful 4View 4500.

The decoder includes dual Ethernet inputs with optional support for DVB-ASI. The system also offers a choice of transport protocols with support for MPEG-2 TS over IP and Pure IP\*\*. Both transport mechanisms can be delivered over UDP and RTP/UDP\*. The decoder is store and forward enabled and includes an internal hard drive which can be used to receive content files transferred from any standards-based MPEG-4 encoder. Once the files have been stored they can be decoded on command. The 4View D1 is controlled using a comprehensive and intuitive web-based system management interface.

4View D1 is a key component of Envivio media transport solutions and is a companion product to the 4Caster™ Broadcast and Mobile Series of encoders. The professional decoder may also be deployed with any open standards-based SD MPEG-4 encoding system. In addition to high-resolution broadcast applications, 4View D1 supports a non-scaled output option allowing mobile video streams to be displayed in their native resolution. Combined with the Envivio encoders, 4View D1 provides low latency and high network resilience and offers superior video quality at half the bandwidth required by MPEG-2.

### Features

- MPEG-4 AVC/H.264 Main and Baseline, ASP and SP video decoding
- MPEG-4 AAC (HE and LC) audio decoding
- Supports 1 video stream, 4 stereo audio streams, and closed captioning
- Dual Ethernet inputs support MPEG-2 TS over IP\* and Pure IP\*\*
- Optional DVB-ASI input
- Digital and analog video and audio outputs
- Advanced user interface control
- SNMP support\*
- Includes 80 GByte internal storage



### Product Highlights

- SD and mobile MPEG-4 AVC/H.264 Main and Baseline Profile decoder
- Companion product to Envivio Broadcast and Mobile Series of encoders
- Provides low-latency operation for live applications
- Robust IP transport with excellent audio synchronization
- Ability to decode content from onboard disk or VOD server for store and forward playback\*
- Decodes DVB-H / ISDB-T mobile video from encoders such as the Envivio Mobile Series encoders

### Applications

Broadcast contribution for point-to-point transmission

Broadcast to handheld signal monitoring

IPTV video headend monitoring



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### Input

#### IP Input

2 x Ethernet (10/100/1000 Base T)  
RTP/UDP; IP Unicast or Multicast  
Configurable max packet size  
SAP and SDP Announcements  
MPEG-2 Transport Stream over UDP or RTP

#### DVB-ASI Input

Dual DVB-ASI inputs (with optional module)

#### File Input

ISO MPEG-4  
MPEG-2 TS

### Output

#### Video

Digital SDI output (8-bit SMPTE-259M)  
Component YPbPr  
Analog composite

#### Audio

Up to 4 x 48 kHz stereo pairs  
(4 stereo pairs with Embedded SDI, 2 pairs with AES, 1 pair with unbalanced audio)

### Decoder

#### Video

H.264 Main Levels 1-3  
H.264 Baseline Levels 1-3  
MPEG-4 ASP Levels 0-5  
MPEG-4 SP Levels 0-3  
Resolutions: QCIF (176 x 144 pixels) to  
CCIR-601 (720 x 480/576 pixels)  
Data rate: 20 kbps to 6 Mbps

#### Audio

MPEG-4 Advanced Audio Coding (AAC-LC)  
MPEG-4 HE-AAC (with Parametric Stereo)  
MPEG-2 AAC  
MPEG-2 HE-AAC (with Parametric Stereo)

#### Supported Standards

ISMA Profile 0, 1, 2, 3  
DVB AVC capability A, B, C, D  
ISDB-T Mobile Segment  
ISMA and MPEGIF certification marks

### Advanced Processing

#### Post-filtering

Deblocking filters (MPEG-4 only)  
Spatial filters (MPEG-4 only)

### Advanced Features

Store and Forward\*  
Closed Captioning

### Control

#### Local

Front panel

#### Remote

Web-based interface  
SNMP control MIB and monitoring\*  
RS-232 serial interface

### Physical and Power

#### Dimensions

1RU  
431 mm (W) x 504 mm (D) x 44 mm (H)  
17" (W) x 19.8" (D) x 1.73" (H)

#### Weight

11 kg (24 lbs)

#### Power In

100-240 VAC auto-ranging

#### Power Consumption

135 W maximum

### Operating Conditions

#### Ambient Temperature

Operating: 0 to 50° C (32 to 122° F)  
Non-operating/storage: -40 to 70° C (-40 to 158° F)

#### Relative Humidity

Non-operating: 95% at 30° C (86° F) no-condensing

\* check availability

\*\* Pure IP transports raw elementary streams directly over RTP/UDP rather than first embedding them within an MPEG-2 Transport Stream (TS). IP-based broadcasting has been adopted by the DVB (Digital Video Broadcasting) and ISMA (Internet Streaming Media Alliance) standards bodies. Pure IP offers higher bandwidth efficiency and more robust transport of video and audio signals over IP networks than MPEG-2 TS over IP.

### For More Information

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