AdvancedDigital Inc.

H.264 HD/SD Video/Audio Encoder with HDMI, DVI-D, Component inputs and IP output

Model: AVN441

AVN441

MADE IN THE USA

OVERVIEW

AVN441 IPTV encoders can turn video from HDMI, DVI-D, Component (YPbPr or RGB) sources into full-screen, full resolution Internet Protocol digital video in real time.

The AVN441 encodes high or standard definition video in an h.264 stream (MPEG-4 Part 10/AVC). It's used in a Media Processing Platform (MPP), a high density rack mount system. Plug a video source directly into the blade, plug into the network via the RJ-45 connection, and stream real-time high or standard definition video over your LAN or WAN. The MPP with AVN441 blades is suitable for all applications requiring cost-effective, low bit rate, high or standard definition video distribution over IP networks.

FEATURES

Modular Flexibility

The AVN441 features modular firmware architecture, which lowers the base price by allowing the user to purchase only those features they need at the moment, while maintaining the flexibility to upgrade in the future as requirements change. The list of optional add-on-modules currently include 720p, 1080i (with 1080p @24 support), 1080p @60, and Forward Error Correction (FEC).

Superior Audio/Video Quality

h.264 (MPEG-4 Part 10/AVC) hardware compression and Visionary Solutions' optimized transmission technology provide a high or standard definition, full frame rate, IP video stream. The stream can be viewed by an unlimited number of clients on a LAN or WAN provided that bandwidth is available. Image resolutions are configurable based upon purchased modules. The base model includes 480i SD encoding, with Closed Captioning (CC) support. Optional modules allow FEC support and image resolutions to be configured up to 720p, 1080i (with 1080p @24 support) or full 1080p at 60 frames per second. The total bit rate can be configured from 5 to 20 Mbps for HD and 2 to 10 Mbps for SD. The audio compression is either AAC (128 to 512 kbps audio encoding, average bitrate) or MPEG-1 Layer 2 (64 to 384 kbps audio encoding) with up to 48 kHz sample rate.

Forward Error Correction

For superior image quality and reliability in the most demanding network video environments, the AVN441, with optional FEC module, incorporates SMPTE-2022 Pro-MPEG FEC Code of Practice # 3, Release 1 and 2. This allows FEC enabled receivers to monitor the stream and recover missing packets.

Closed Captioning

The AVN441 allows Closed Captioning of SD signals using the Composite input. EIA-608 is supported.

Video Inputs

The AVN441 includes three BNC connectors for component YPbPr, RGB, or Composite and one HDMI input (DVI-D with optional adaptor cable) for connecting video and audio source equipment.

Audio Inputs

A terminal block connector provides audio inputs for Balanced and Unbalanced connections. This allows for easy onsite connections regardless of the cabling outputs of the audio source. There are also two RCA audio connectors (L/R) which support only unbalanced connections, and the HDMI input carries audio as well. The AVN441 features user control of audio parameters, including mute, pre-amp and volume.

External Device Connections

The AVN441 includes a serial connection via an RJ-45 connector. This connector can be used as an RS-232 port (full-duplex, no hand shaking) or an RS-422 (full-duplex) port. These ports allow the AVN441 to interface with external devices such as terminal emulation equipment.

Management & Configuration

of the device is accomplished by any of four methods: PackeTV™ Manager (2nd generation), console menus, a Web interface, or the AVN Control Protocol API. TCP/ IP, HTTP and other Internet-related protocols are supported.

The IPTV Media Processing Platform is a high density rack mountable blade system.

The MPP1700 platform with optional dual redundant power scheme, will hold up to seventeen single slot encoder blades, or a combination of dual and single slot blades.

The MPP200 has a single power source and can hold two single slot encoder blades or one dual slot blade.

Each Media Processing Platform will incorporate a growing family of modules to support transport, switching, transcoding and monitoring of IPTV.

MPP1700

MPP200

Contact info: sales@advanceddigital.ca **WEB:** http://www.advanceddigital.ca Tel: +1 416 479 0480
+1 416 848 0715

AdvancedDigital Inc.

H.264 HD/SD Video/Audio Encoder
with HDMI, DVI-D, Component inputs and IP output

Model: AVN441

MADE IN THE USA

AVN441
h.264 high-definition encoder blade

SPECIFICATIONS

Input/Output

- Component YPbPr or RGB
  3 x BNC connectors
  RCA supported via adaptors
- HDMI or DVI-D with optional adaptor cable
- Terminal block audio connector for Balanced and Un-Balanced Stereo
- RCA Stereo Audio
- RJ-45 Ethernet 10/100
- RJ-45 Serial RS-232C or RS-422

HD Video Encoding

- h.264 MPEG-4 AVC Compression
- High Profile at level 4 (HP@L4)
- 5Mbps to 20Mbps

SD Video Encoding

- h.264 MPEG-4 AVC Compression
- Main Profile at Level 3 (MP@L3)
- 2Mbps to 10Mbps

Closed Captioning (CC)

- Composite (SD) – EIA-608 only

Video Resolutions

- 1080p 60 – (requires 1080p60 module)
- 1080p 24 – (requires 1080i module)
- 1080i 59.94/60 – (requires 1080i module)
- 1080i 50 – (requires 1080i module)
- 720p 59.94/60 – (requires 720p module)
- 720p 50 – (requires 720p module)
- 576i 50
- 480i 59.94

Audio Encoding

- MPEG-1 Layer II stereo
- 64kbps to 384kbps
- MPEG-2 AAC stereo
- 128kbps to 512kbps (average bitrate)

Dimensions

(W x D x H)
40 x 131 x 175 (1.6" x 5.2" x 6.9")

Weight

230g or .51 lb. (approximate)

Forward Error Correction (FEC)

- SMPTE-2022 Pro-MPEG FEC Code of Practice # 3, Release 1 and 2 – (requires FEC module)

Power Input

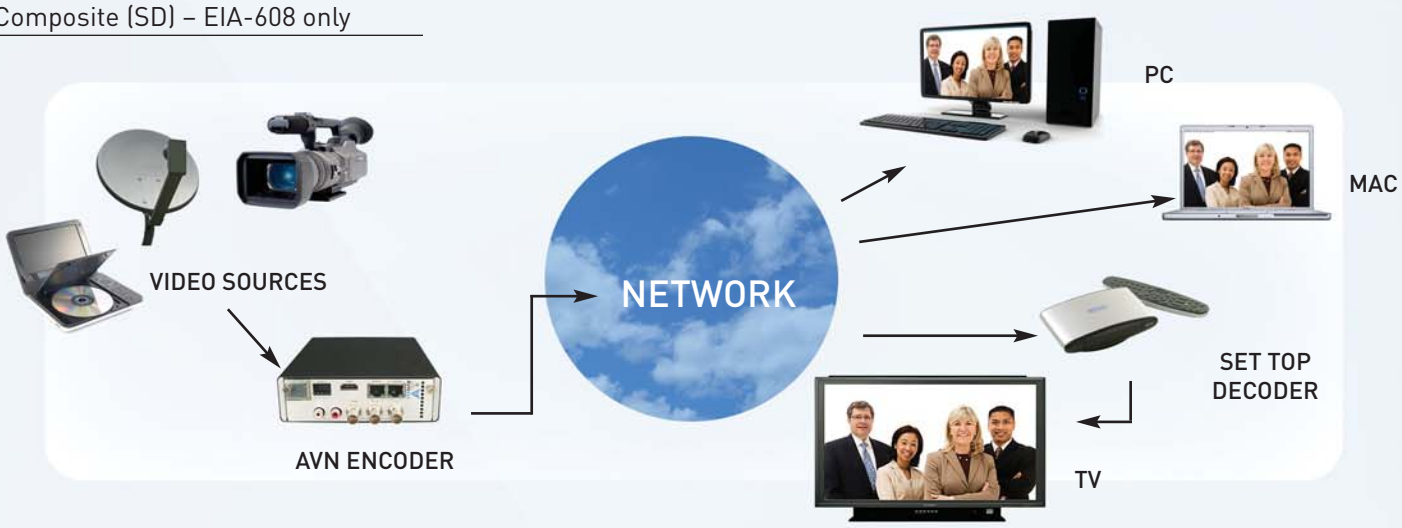
- DC Input 4.25 Watts
- MPP200 Chassis 100-240VAC 50/60Hz Adapter
- MPP1700 Chassis 100-240VAC 50/60Hz

Environmental

- Operating Temperature -10°C to 50°C (14°F to 122°F)

Compliance

- CE, UL Listed I.T.E E257717
- EMC: FCC Part 15 Class A or B [MPP200] Class B, EN55022 [MPP1700] Class A, EN55022 EN61000-3-2, EN61000-3-3, EN55024
- SAFETY: EN60950-1



Contact info: sales@advanceddigital.ca **WEB:** http://www.advanceddigital.ca Tel: +1 416 479 0480
+1 416 848 0715

AdvancedDigital Inc.

H.264 HD/SD Video/Audio Encoder with HDMI, DVI-D, Component inputs and IP output

Model: AVN441

MPP1700 - Multi-slot chassis for AVN-series encoder blade

Capacity

Holds up to 17 AVN 220/420/422 encoder blades or up to 8 AVN441 or AVN443 blades, or a combination

Requires 1 or 2 PSA200 power supplies

Dimensions

(W x D x H) 482.6 x 241.3 x 133.4
(19" x 9.5" x 5.25")
3 RU (rack units) high

Weight

1130g or 2.5 lbs. (approximate)

Power

AC Input: 100-240 V~ (VAC), 3A; 50-60 Hz

Rating Information: 100-240V~, 50-60 Hz, 3A

Fuse Rating: 250V, 3.15A, SlowBlow
Double pole/neutral fusing.

IEC C13/14

Compliance

CE, UL Listed I.T.E. E257717

EMC: FCC Part 15 Class B

Includes

US IEC Power Cable

RS-232 cable

Optional

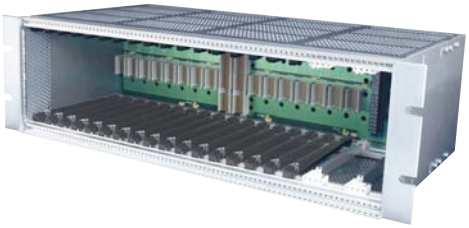
PSA200 power supply (one or two)

Unbalanced audio cable for AVN series blades

Single blanker plate

Double blanker plate

Extended Product Warranty



MPP200 - 2-slot chassis for AVN-series encoder blade

Capacity

Holds 1 or 2 AVN 220/420/422 encoder blades or 1 AVN441 or AVN443 blade

Dimensions

(W x D x H)
142.5 x 196.3 x 43.2
(5.61" x 7.37" x 1.74")

1 RU (rack unit) high

Weight

1130g or 2.5 lbs. (approximate)

Power

External power supply 5V DC, 4A (power brick)

2 pin jack w/ screw locks

Compliance

CE, UL Listed I.T.E. E257717

EMC: FCC Part 15 Class B

Includes

DC Power Supply

US IEC Power Cable

RS-232 Cable

Optional

Unbalanced audio cable for AVN series blades

MPP200 Rack Mount Kit

Extended Product Warranty

ORDERING INFORMATION

AVN441 - H.264 SD Video/Audio encoder blade with HDMI, DVI-D, Component inputs and IP output

Available Options:

FEC - Forward Error Correction option
720p - 720p encoding option
1080i - 720p and 1080i encoding option
1080p - 720p, 1080i and 1080p encoding option

MADE IN THE USA

MPP200 - 2-slot chassis with external power supply - holds 1 AVN441 encoding blade
MPP1700 - Multi-slot chassis with one PSA200 power supply - holds up to 8 AVN441 blades

Contact info: sales@advanceddigital.ca **WEB:** http://www.advanceddigital.ca Tel: +1 416 479 0480
+1 416 848 0715