MPEG Corona™

Real Time, Easy To Use, Affordable, 
1 RU, Standard Definition, Full D1 Res, 
Hardware Based, 4:2:0 MPEG-2 
Transport Stream Encoder with SDI, 
Composite, and Y/C Inputs and IP and 
DVB-ASI Outputs. Encodes at 0.8 to 20 
Mbps. Controllable via LCD Front 
Panel or Network Management.

Features

- Encodes Composite (CVBS), Y/C, or SDI video to ASI and/or IP
- Inputs: Composite, Y/C, or SDI
- Outputs: Two DVB-ASI outputs, one IP output (UDP unicast/multicast)
- Fully MPEG-2 4:2:0 MP@ML video compliant
- MPEG-1 Layer II audio encoding
- Advanced video pre-processing algorithms
- Encoding selectable from 0.8 Mbps to 20 Mbps transport stream bit rates
- Supports MPEG-2 frame/field motion estimation and DCT
- Encoding parameters set up via LCD front panel or network management
- Supports Video/Audio/PMT/PCR PID settings
- Supports balanced and unbalanced analog audio inputs
- Supports AES/EBU, SD-SDI digital audio input
- Supports PAL and NTSC SD video
- Supports D1, HD1, 2/3 D1, 3/4 D1 resolutions
- Program/Service Provider name setting
- Complies with ISO/IEC 11172 (MPEG-1) and ISO/IEC 13818 (MPEG-2) standards
- Sub-pixel precision encoding
- TS stream PCR synchronization

Applications

- Encoding analog video for transmission over satellite uplinks or cable
- Delivery of live video program streams to the head-end or production studio
- General Head End encoder

Overview

The MPEG Corona encodes analog or SDI video and audio into MPEG-2 Transport Streams – from video to DVB-ASI and/or IP. It accommodates both PAL and NTSC video formats.

The MPEG Corona compresses and encodes SDI, composite, or S-Video signals and stereo audio in real time, using MPEG-2 4:2:0 video and MPEG-1 Layer-II audio compression. It then multiplexes the video and audio streams into either one or two DVB-compliant MPEG-2 Transport Streams, and/or an IP transport stream.

This is a cost-effective solution for converting analog video to ASI for transmission over standard DVB satellite uplinks or redistribution throughout a cable system.

The MPEG Corona delivers excellent broadcast-quality video. It is fully compliant with the stringent DVB standards.

The MPEG Corona is simple to configure and operate. The LCD front-panel interface provides easy setup without the use of a computer or any other external equipment. The system can also be remotely controlled via network management.
Inputs/Outputs

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<tr>
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<th>IP (UDP)</th>
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Specifications

**Inputs**
- **Video:**
  - Analog composite video (CVBS), BNC interface
  - S-Video (Y/C) interface
  - SD-SDI, BNC interface

- **Audio:**
  - Analog stereo audio (balanced), XLR interface
  - Analog stereo audio (unbalanced), BNC interface
  - AES/EBU digital audio, XLR interface
  - SD-SDI embedded audio

**Video Encoding**
- Resolutions:
  - 720 x 480 60i, 720x576 50i (D1)
  - 544 x 480 60i, 544x576 50i (3/4D1)
  - 352x480 60i, 352x576 50i (HD1)
  - 480x480 60i, 480x576 50i (2/3D1)

- Encoding: MPEG-2 MP@ML (4:2:0)
- Bit Rate: 0.8 Mbps~20 Mbps
- Rate Control: CBR/VBR
- GOP Structure: IBBP
- Advanced Pretreatment: De-interlacing, noise reduction, sharpening

**Audio Encoding**
- Encoding: MPEG-1 Layer II
- Sampling Rate: 48 KHz, 44.1 KHz, 32 KHz
- Resolution: 24-bit
- Bit Rate: 64 Kbps to 384 Kbps

**Transport Stream Outputs**
- **ASI:**
  - Two DVB-ASI outputs, BNC interface
- **IP:**
  - SPTS over UDP, 10/100Base-T Ethernet interface (UDP unicast/multicast)

**Administration**
- **Access:** LCD front panel, network management
- **Upgrades:** Ethernet software upgrade

**Physical and Power**
- **Dimensions:** 18.9 x 17.96 x 1.77 inches (W x D x H)
  - 480 x 456 x 45 mm (W x D x H)
- **Weight:** 10 lbs (4.54 kg)
- **Power Requirements:**
  - AC 110V±10%, 50/60 Hz
  - or AC 220V±10%, 50/60 Hz
- **Temperature Range:**
  - Operating: 0°C ~ +45°C
  - Storage & Shipping: -20°C ~ +80°C
- **Conformities:** FCC, CE, RoHs

**Typical Application**

**Ordering Info**

MPEG Corona

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