

Model D9010 Decoder

Description

The Continuum DVP™ Decoder is designed for Headend applications requiring the recovery of a program back to analog baseband format from a compressed digital format. The DVB-ASI input allows multi program transport streams to be connected to the decoder. The decoder offers the capability to select and decode one of the programs from the incoming DVB-ASI (MPEG-2) transport stream, and output baseband video, audio, cue tones, utility data and VBI.



Headend Consolidation

The Continuum DVP Decoder offers a cost- and space-efficient way to recover programs from an MPEG 2 transport stream at remote Hubs for the analog tier.

Instead of receiving and decoding satellite delivered programs for the analog tier at each Hub, programs can be received at the Master Headend site and transported in MPEG-2 compressed format to the Hub locations.

Ad-insertion for the Analog Tier

The decoder offers DTMF cue tone and eight open collector cue trigger outputs for analog ad-insertion at the Hub locations.

DVB-ASI Output

An active DVB-ASI output offers the ability to filter out a specific program from the incoming transport stream, or pass the complete transport stream for daisy chaining multiple decoders together.

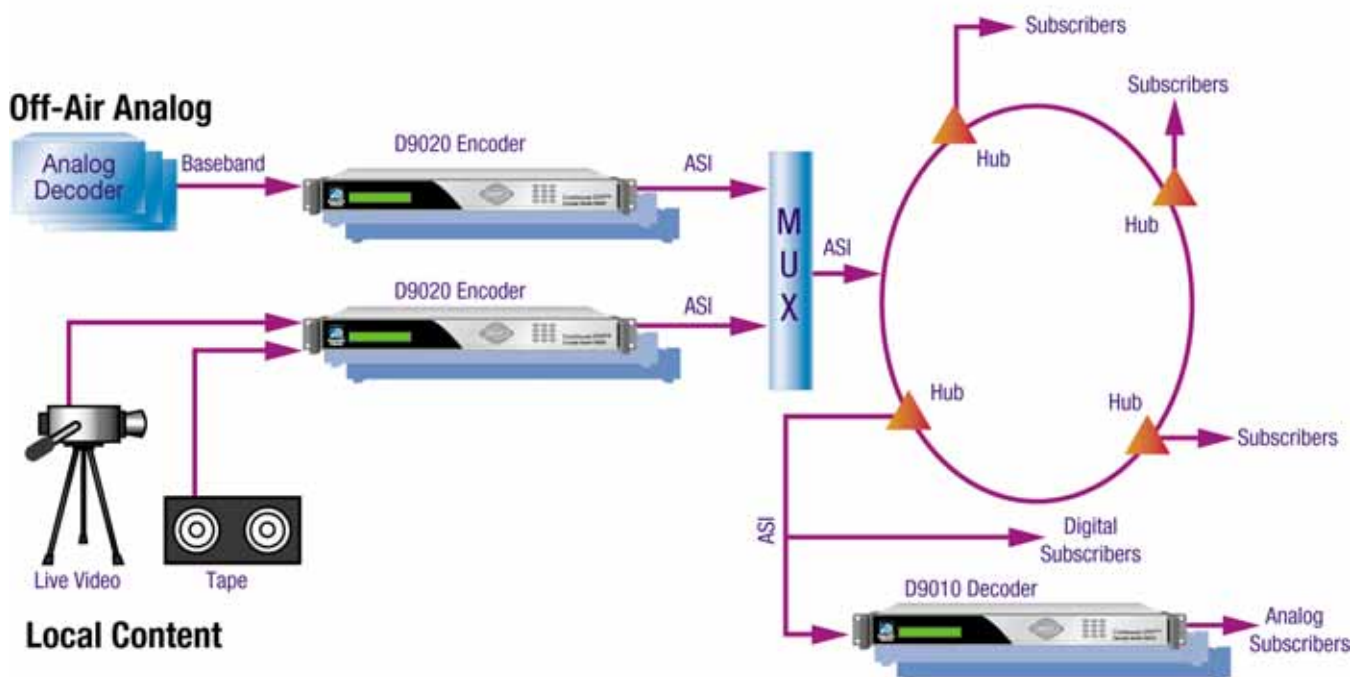
Key Features

- DVB-ASI input at up to 68.5 Mbps
- 4:2:0 NTSC & PAL (B/G/I/D/M/N) video decoding
- Aspect ratio conversion (4:3, 16:9 and 14:9)
- MPEG & Dolby® Digital (AC-3) audio decoding
- Four audio outputs providing either two stereo pairs (four mono channels) of balanced audio each with the ability to use part of their output for applications such as SAP, DTMF, etc.
- Line 21 closed caption and V-chip support
- DVB VBI (WST, WSS and VPS)
- PowerVu VBI - including North American Broadcast Teletext Standard (NABTS) and World System Teletext (WST)
- DVB or Imtext™ subtitling
- DTMF cue tone & cue trigger outputs for ad-insertion
- Field upgradeable software
- Front panel LCD for control & monitoring
- SNMP for access via a network management system
- Web browser interface for easy setup, control and monitoring
- DVB-ASI output



Application Diagram

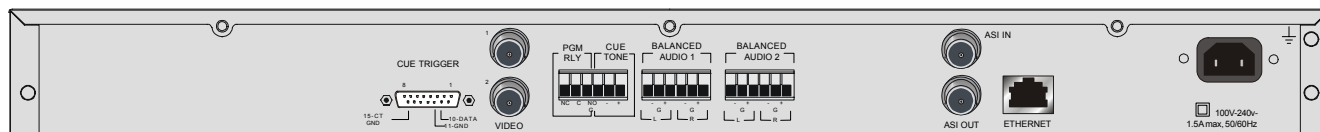
Headend Support legacy analog services during the migration to digital.



Specifications

Feature	Description	
System	MPEG-2/DVB Compatible	
Digital Input & Output	MPEG-2 Transport Input, up to 68.5 Mbps EN 50083-9, DVB-ASI coaxial, 188/204 Byte Packets	MPEG-2 Transport Output EN 50083-9, DVB-ASI coaxial, 188 Byte Packets
Analog Outputs	Analog Video Output Number of Channels: One (two identical outputs) Video Decompression Type: MPEG-2 4:2:0 Output Level: 1.0Vpp \pm 5% Output Impedance: 75 Ω Video Standard: NTSC & PAL B/G/I/D/M/N Frequency Response: NTSC: 0.0-4.2 MHz $<+0.5$ dB/ -0.75 dB PAL: 0.0-5.0 MHz $<+0.5/-1.25$ dB Maximum Video Resolution: 720 x 576 Maximum Video Bit rate: 15 Mb/s Chroma-luma Delay: \pm 30 ns Field Time Distortion: \leq 3% Line Time Distortion: \leq 3% Luminance Non-linearity: \leq 5% Differential Gain: \leq 3% Differential Phase: \leq 3° Signal-to-Noise Ratio: \geq 55 dB	Analog Audio Output Number of Channels: Two stereo pairs/ four mono channels Audio decompression: MPEG or Dolby Digital (AC-3) Output Level: Balanced, adjustable audio outputs are factory set for unity gain (0 dBm out over 600 Ω for 0 dBm in). Output is adjustable at the front panel by \pm 6.0 dB (ref., 100 K Ω). Factory calibrated to +18 dBu (at full scale). Frequency Response: \pm 0.5 dB, 20 Hz to 20 kHz (ref., 100 K Ω) Total Harmonic Distortion: $<$ 0.3% at 1 kHz (ref. 100 K Ω) Dynamic Range: 85 dB (CCIR/Arm weighting) Crosstalk: 80 dB at 1 kHz (typical)
VBI	NTSC lines 10 to 22 fields 1 and 2 Line 21 closed captions NABTS, AMOL I and II (Nielsen)	PAL lines 7 to 22 fields 1 and 2 WST, WSS, VPS
Data Outputs	RS-232 asynchronous data at rates up to 38.4 kb/s Rates: 300/1200/2400/4800/9600/19,200/38,400 b/s	Ethernet Output for IP data RJ-45, 10/100BaseT, up to 10 Mbps
Other Outputs	Cue Trigger Outputs Number of Outputs: 8 Type: Open Collector Cue Tone Output Balanced audio output: -3.0 dBu \pm 3 dB, 600 Ω Output Impedance: $<$ 50 Ω	Ethernet Output for Control & Monitoring RJ-45, 10/100BaseT MPEG-2 Transport Output EN 50083-9, DVB-ASI coaxial, 188 byte packets Programmable Relay Output Alarm or configurable to one of the 8 open collector outputs
Environmental /Physical	Operating Temperature: 0°C to 50°C (32°F to 122°F) Storage Temperature: -20°C to 70°C (-4°F to 158°F)	Physical Dimensions: 1.75 in. H x 19.0 in. W x 15 in. D (4.4 cm H x 48.3 cm W x 38.1 cm D) 1RU high, 19 in. EIA rack mountable Weight: 10 lbs (4.5 kg) approx.
Power	Voltage Range: 100 V to 240 V AC Line Frequency: 50/60 Hz	Power Consumption: 50 W max.

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D9010 Decoder Rear Panel

Ordering Information

For North America

Part Number	Description
4003499	MPEG & DVB-ASI Baseband Decoder with North American power cord

For Other Countries

Part Number	Description
4008906	MPEG & DVB-ASI Baseband Decoder with no power cord Note: Order one of the power cords below.
3993135	Europe power cord
3993137	UK power cord
3993136	Italy power cord
1001832	Australia power cord
1001790	Argentina power cord
1001800	Brazil power cord
745415	China power cord



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Scientific-Atlanta, Inc.
1-800-722-2009 or 770-236-6900
www.scientificatlanta.com

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