

## Decoder Model D9010



Decoder Model D9010

### 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.

### Data Output

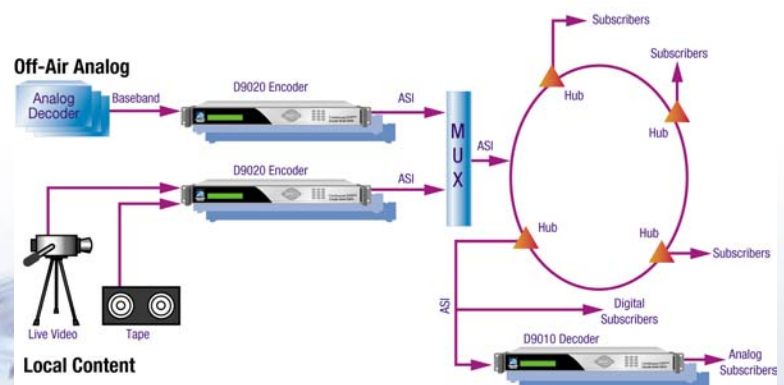
Asynchronous utility data up to 38.4 kb/s is available via RS-232 interface.

### Key Features

- DVB-ASI input
- 4:2:0 NTSC & PAL video decoding
- Dolby Digital® (AC-3) & MPEG audio decoding
- 2 stereo pairs of balanced audio outputs
- Utility data via RS-232
- Line 21 Closed Caption & V-chip support
- VBI support in PowerVu format
- DTMF cue tone & cue trigger outputs for ad-insertion
- Field upgradeable software via ASI input
- Front Panel LCD for control & monitoring
- DVB-ASI output

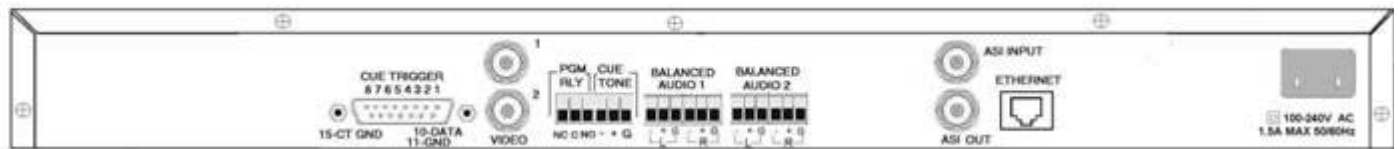
### Application

**Headend** Support legacy analog services during the migration to digital.



# Technical Specifications

<b>System</b>	MPEG-2/DVB Compatible	
<b>Digital Input &amp; Output</b>	MPEG-2 Transport Input EN 50083-9, DVB-ASI coaxial, 188/204 Byte Packets Rate: 50 Mbps	MPEG-2 Transport Output EN 50083-9, DVB-ASI coaxial, 188 Byte Packets
<b>Analog Outputs</b>	<p><i>Analog Video Output</i>  <b>Number of Channels:</b> One (two identical outputs)  <b>Video Decompression Type:</b> MPEG-2 4:2:0  <b>Video Format:</b> NTSC &amp; PAL  <b>Level:</b> 1.0Vpp ± 5%  <b>Frequency Response:</b>  <math>\leq \pm 1.5</math> dB at 4.8 MHz, 720 x 480/576 resolution  <b>Maximum Video Resolution:</b> 720 x 576  <b>Maximum Video Bit rate:</b> 15 Mb/s  <b>Chroma-luma Delay:</b> ± 30 ns  <b>Field Time Distortion:</b> ≤ 3%  <b>Line Time Distortion:</b> ≤ 3%  <b>Luminance Non-linearity:</b> ≤ 5%  <b>Differential Gain:</b> ≤ 3%  <b>Differential Phase:</b> ≤ 3°  <b>Signal-to-Noise Ratio:</b> ≥ 55 dB</p>	<p><i>Analog Audio Output</i>  <b>Number of Channels:</b> Two stereo pairs/four mono channels  <b>Audio decompression:</b> Dolby Digital (AC-3) &amp; MPEG  <b>Output Level:</b> Balanced, adjustable audio outputs are factory set for unity gain (0 dBm out for 0 dBm in). Output is adjustable at the front panel by ± 6.0 dB. Factory calibrated to +18 dBu (at 0dBFS).  <b>Frequency Response:</b> ± 0.5 dB, 20 Hz to 20 kHz  <b>Total Harmonic Distortion:</b> &lt; 0.3% at 1 kHz  <b>Dynamic Range:</b> 85 dB (CCIR/Arm weighting)  <b>Crosstalk:</b> 80 dB</p>
<b>VBI</b>	NTSC lines 10 to 22 fields 1 and 2 NABTS, AMOL I and II (Nielsen)	PAL lines 7 to 22 fields 1 and 2 WST
<b>Data Outputs</b>	RS-232 asynchronous data at rates up to 38.4 kb/s	
<b>Other Outputs</b>	<p><i>Cue Trigger Outputs</i>  <b>Number of Outputs:</b> 8  <b>Type:</b> Open Collector</p> <p><i>Programmable Relay Output</i>  Alarm or configurable to one of the 8 open collector outputs</p>	<p><i>Cue Tone Output</i>  Balanced audio output: -3.0 dBu ± 3 dB  Output Impedance: &lt; 50 Ohms</p> <p><i>Ethernet Output for Control &amp; Monitoring</i>  RJ-45, 10/100BaseT</p>
<b>Environmental/Physical</b>	<p><b>Operating Temperature:</b> 0°C to 50°C (32°F to 122°F)  <b>Storage Temperature:</b> -20°C to 70°C (-4°F to 158°F)</p>	<p><b>Physical Dimensions:</b> 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  <b>Weight:</b> 10 lbs (4.5kg) approx.</p>
<b>Power Requirements</b>	<p><b>Voltage Range:</b> 100V to 240V ac  <b>Line Frequency:</b> 50/60 Hz</p>	<p><b>Power Consumption:</b> 50W max.</p>



**D9010 Rear Panel**

Ordering Information	
<b>Part Number</b> 4003499	<b>Description</b> MPEG & DVB-ASI Baseband Decoder



Scientific-Atlanta, the Scientific-Atlanta logo and Continuum are registered trademarks of Scientific-Atlanta, Inc. Continuum DVP is a trademark of Scientific-Atlanta, Inc. Dolby, Dolby Digital, and AC-3 are trademarks of Dolby Laboratories Licensing Corporation. The DVB logo is a registered trademark of the DVB Digital Video Broadcasting Project. All other trademarks mentioned are trademarks of their respective companies. Specifications and product availability are subject to change without notice. © 2003 Scientific-Atlanta, Inc. All rights reserved.

Scientific-Atlanta, Inc.  
www.scientificatlanta.com

