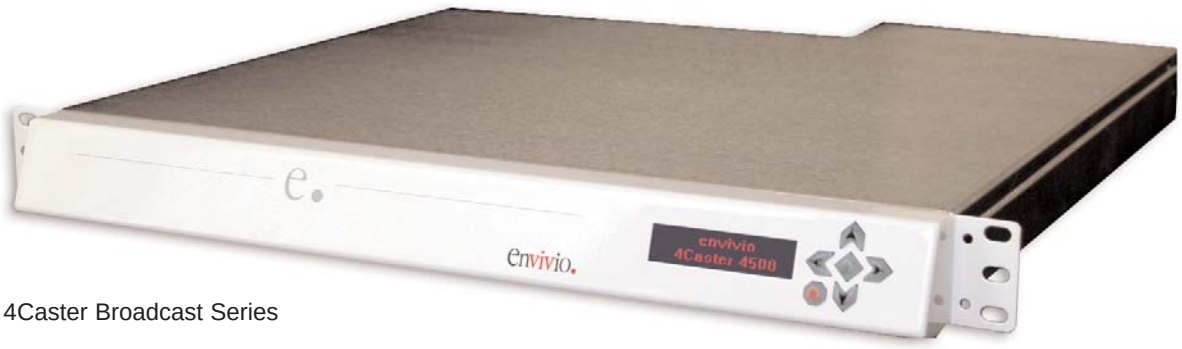
4Caster™ – Broadcast Series

Real-Time MPEG-4/H.264 Encoder for Media Transport and IPTV Solutions



4Caster Broadcast Series

- **Broadcast-quality, real-time MPEG-4/H.264 (AVC) encoder (SD resolution)**
- **Greatly reduced transmission costs compared to MPEG-2**
- **Variety of transport protocols, including MPEG-2 TS with DVB or IP interface**
- **Optimized for IP transport (ISMA compatible)**
- **Mobile broadcast (DVB-H and ARIB) ready**
- **High Efficiency AAC audio**
- **Store and forward**

Applications

- DSNG
- Video contribution over IP and ATM networks
- Broadband IPTV
- Cable TV
- Direct broadcast satellite

The 4Caster™ encoder from Envivio provides real-time MPEG-4/H.264 (AVC) encoding for full resolution, full frame rate video. It has been designed to meet the needs of all fixed and mobile professional video contribution and distribution applications over a variety of transport protocols, including MPEG-2 TS with DVB or IP interface, DVB-H, and ARIB. 4Caster is a key component of Envivio's carrier-grade solutions for deployment of IPTV.

Features

- Supports MPEG-4 Advanced Video Coding (AVC/H.264) Main and Baseline Profiles, and MPEG-4, Part 2, Simple Profile (SP) and Advanced Simple Profile (ASP) video encoding.
- Supports High Efficiency Advanced Audio Coding (HE-AAC).
- Front panel and web-based remote management with SNMP support.
- Integrated with network management system (4Manager™).
- Ability to perform store and forward operations (option).
- DVB-ASI output (4Caster Broadcast 3550 and 4550).
- IP outputs.
- Accurate rate control, variety of I/O, and simple and advanced mode settings.

Benefits

- Broadcast-quality video.
- Significant reduction in network bandwidth (satellite, ATM, broadband IP) compared to MPEG-2 encoding.
- Great efficiency over IP networks.
- One encoding scheme for all playback devices (TV, PC, PDA, mobile phone).
- Compact rack-mount design.
- MPEG-4 encoder upgradeability.
- Ability to record files locally.

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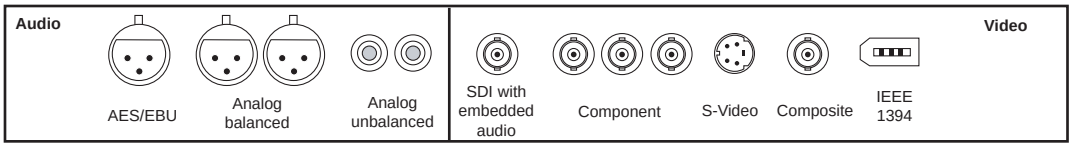

Input connectors (breakout cable) - 3500 Series

	4Caster Broadcast 3500 (ASP-SD + AVC-2CIF/IP Out)	**4Caster Broadcast 3550** (ASP-SD + AVC-2CIF/DVB-ASI)	**4Caster Broadcast 4500 / 4550** (AVC-SD/IP or DVB-ASI Out)
Inputs	*Video* SDI - Serial Digital Interface (625/525) IEEE 1394 DV S-Video, composite, component, analog composite (PAL, NTSC) *Audio* 2 channels (1 x stereo, 2 x mono), digital AES/EBU Analog balanced (XLR), analog unbalanced (RCA)		*Video* SDI - Serial Digital Interface (625/525) *Audio* Digital AES/EBU SDI embedded
Outputs	IP output: 1 x 10/100/1000 BaseT Ethernet ISMA-compliant multicast/unicast IP stream, SAP announcement, SDP file download	**DVB-ASI** DVB-ASI output parameters: configure PIDs, packet size, interbyte stuffing mode, external sync IP output: 1 x 10/100/1000 BaseT Ethernet ISMA-compliant multicast/unicast IP stream, SAP announcement, SDP file download	**DVB-ASI (model 4550)** DVB-ASI output parameters: configure PIDs, packet size, interbyte stuffing mode, external sync IP output: 1 x 10/100 BaseT Ethernet ISMA-compliant multicast/unicast IP stream, SAP announcement, SDP file download
Video Encoder	MPEG-4 AVC/H.264 MPEG-4 ASP levels 0-5 MPEG-4 SP levels 0-3 *Resolutions:* SIF (352 x 240/288) to 2CIF (352 x 480/576 pixels) for AVC/H.264 and to CCIR-601 (720 x 480/576 pixels) for ASP *Data rate:* 20 kbps to 6 Mbps (ASP); 20 kbps to 2 Mbps (AVC/H.264)		MPEG-4 AVC/H.264 *Resolutions:* SIF (352 x 240/288) to CCIR-601 (720 x 480/576 pixels) for AVC/H.264 *Data rate:* 20 kbps to 4 Mbps AVC/H.264
Audio Encoder	MPEG-4 Advanced Audio Coding (AAC) 8 to 128 kbps		MPEG-4 Advanced Audio Coding (AAC) and High Efficiency Advanced Audio Coding (HE-AAC) 8 to 128 kbps
Transport	ISMA Profile 0 and Profile 1 MPEG-2 TS		ISMA Profile 2 and Profile 3 (upcoming) MPEG-2 TS
Advanced Processing	Low delay mode Motion-compensated temporal filtering and deinterlacing Scene change detection with key frame (I-Frame) insertion		Low delay mode Noise filtering, deinterlacing Scene change detection with key frame (I-Frame) insertion
Control	*Local:* Front-panel LCD control *Remote:* Web-based remote management; SNMP alarms; pre-programmable setups (presets); network management system interface with 4Manager		
Physical and Power	**1RU 25″** 483 mm (W) x 635 mm (D) x 45 mm (H) 19” (W) x 25” (D) x 1.75” (H) *Weight:* 12 kg (26 lb) *Power in:* 100-240 VAC auto-ranging *Power consumption:* 150 W maximum	**2RU 25″** 483 mm (W) x 635 mm (D) x 90 mm (H) 19” (W) x 25” (D) x 3.5” (H) *Weight:* 23 kg (50 lb) *Power in:* 100-240 VAC auto-ranging *Power consumption:* 150 W maximum	**1RU 17″** 483 mm (W) x 432 mm (D) x 45 mm (H) 19” (W) x 17” (D) x 1.75” (H) *Weight:* 7 kg (15 lb) *Power in:* 100-240 VAC auto-ranging *Power consumption:* 150 W maximum
Environmental Conditions	Ambient temperature *Operating:* 5 to 35º C (41 to 95º F) *Non-operating/storage:* -40 to 70º C (-40 to 158º F) Relative humidity *Non-operating:* 95% at 30º C (86º F) non-condensing		