

DCH-5500EC High Performance H.264/MPEG-2 SD/HD Encoder

The DCH-5500EC is a high performance single channel high definition MPEG2 and H.264 encoder. It has a wide range of digital/ analog video and audio inputs: CVBS, HD-SDI, HDMI, YPbPr and stereo audio. It can encode up to two stereo channels of audio using AAC, MPEG-1 layer II encoding or pass-through the audio data. The encoded video and audio transport stream is outputted from IP and ASI. With this full range audio and video format compatibility, the DCH-5500EC addresses versatile MPEG2 and H.264 encoding market in the bandwidth scale from 250Kb/s to 25Mb/s.



Main Feature

- Support MPEG-2 HD¹/SD or H.264 HD/SD video encoding
- MPEG-1 Layer II, or AAC LC / HE AAC audio encoding
- Multiple inputs HDMI, SDI, YPbPr, RCA(CVBS + L/R Audio), and S/PDIF
- Support 2 pairs of analog stereo audio encoding²
- Video encoding bit rate from 250Kb/s to 25Mb/s
- Video resolutions rescaling
- Multiple video resolution including 1080i, 720p, 576i and 480i
- Support VBR and CBR encoding mode
- ASI I/O and TS/IP output
- Support 10/100M TS/IP SPTS
- Optimized video pre-processing algorithm
- Remote Control and Supervision by HTTP WEB

Note1: extra license is needed.

Note2: audios should be input via HDMI or SDI.

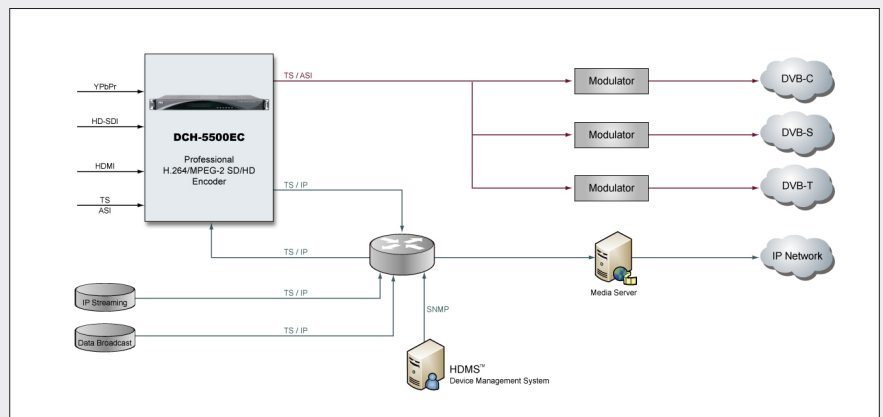
Multiple inputs HDMI, HD-SDI, YPbPr, and CVBS



10/100M TS/IP extension board option



Remote Control and Supervision by SNMP, HTTP WEB and Proprietary HDMS software



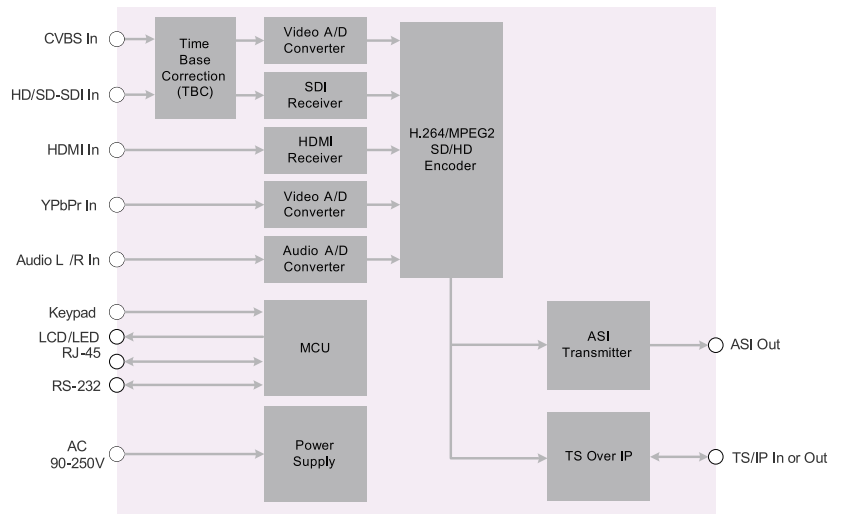
Specification

Video Compression	
Video Resolution	1080i (1920/1440 × 1080) @25Hz, 29.97Hz, 30Hz: SMPTE 292M 720p (1280 × 720) @50Hz, 59.94Hz, 60Hz: SMPTE 292M 480i (720 × 480) @29.97Hz: SMPTE 259M 576i (720 × 576) @25Hz: SMPTE 259M
Compression Standard	H.264: MP@L4.1, HP@L4.1 (HD); MP@L3.0, HP@L3.0 (SD) MPEG-2: MP@HL (HD); MP@ML (SD)
Aspect Ratio	4:3/16:9 selectable
Video Encoding Bit Rate	250Kb/s-20Mb/s
Audio Compression	
Audio Compression	MPEG-1 Layer II, AAC LC, HE AAC
Audio Input	SDI or HDMI Embedded Audio, Analog audio, and SPDIF
Audio Sampling Rate	32Kb/s, 44.1 Kb/s, 48 Kb/s
Audio Compression Bit Rate	192-384 Kb/s (MPEG-1 Layer II), 32-192Kb/s (AAC)
MUSICAM	Stereo, Dual Mono, Left Mono, Right Mono
Audio/Video Input Interface	
Analog Audio	RCA (L/R)
Digital Audio	1 × S/PDIF
Analog Video	YPbPr
Digital Video	HD-SDI, 1 × BNC Female, 75Ω HDMI 1 × HDMI 1.3
TS over IP	
Connector Type	1 × RJ-45, 10/100M for TS/IP

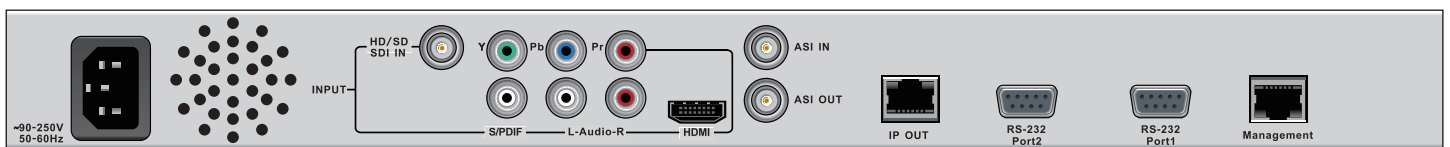
Useful Bit Rate	70Mb/s for 10/100M
Protocol	UDP / RTP, Multicast / Unicast,
Source	Encoder
ASI Output	
Connector Type	1 × BNC Female, 75Ω
Output Bit Rate	≤ 99Mb/s
Packet Length	188 / 204 Bytes
Signal Level	800mVpp ± 10%
Source	Encoder
Control & Monitoring	
Connector Type	1 × RJ-45, 10/100 Base-T, for equipment control
Remote Control	HTTP Web interface
Local Control	LCD display and 6-key keypad
Software Upgrade	Built-in FTP loader and Telnet
Physical	
Dimensions	483mm × 498mm × 44mm
Net weight	5Kg
Power supply	AC90 ~ 250V 50Hz/60Hz
Power Consumption	15W
Operating Temperature	0 ~ 45°C
Storage Temperature	-10 ~ 60°C
Humidity	10 ~ 90%, non-condensed
Certification	
EMC: EN 55024:1998+A1:2001+A2:2003, EN 55022:2006+A1:2007, EN 61000-3-2:2006, EN 61000-3-3:2008	
FCC: Part 15 Class B	
LVD: EN 60950-1:2006 + A11:2009	

Block Diagram

DCH-5500EC Functional Block Diagram



Back panel Interface



Order Information

Interface	Model	DCH-5500EC
SDI Input		•
HDMI Input		•
YPbPr Input		•
ASI TS Output		•
IP Output		•
RS232		•
Ethernet		•

- Standard