

## DCH-5200EC

### Single Channel H.264 HD Encoder

The DCH-5200EC is a high quality single channel high definition MPEG4/H.264 encoder. It has a wide range of digital/ analog video and audio inputs: CVBS, HD-SDI, YPbPr and stereo audio. It can support up to high definition TV up to 1080P, and the compressed MPEG4/H.264 signal is outputted from the ASI and IP port. Compared to DCH-4000EC and 5000EC, it presents a unique function of Time Base Correction to ensure the audio and video synchronization, the feature necessary for the professional TV signal flow.

The DCH-5200EC's re-multiplexing function enables creation of a new transport stream between the TS of encoder and the TS from ASI or IP. The encoder/trans-coder output can be multiple SPTS or MPTS over IP, as well as over ASI. In transcoding mode, the digital audios are looped through and time stamping is automatically implemented to ensure the synchronization between video and audio. This unique encoder/trans-coder with built-in re-multiplexer architecture makes the DCH-5200EC one of the best solutions to meet the MPEG2 to MPEG4/H.264 migration in today's digital broadcasting market.



#### Main Feature

- Multiple video resolution including 1080p, 1080i, 720p, 576i and 480i
- Multiple inputs, HD-SDI, YPbPr, and CVBS
- Unique video and audio synchronization by time base correction
- Support 10/100M TS/IP SPTS and MPTS
- Built-in re-multiplexer for encoder loop
- Support VBR and CBR encoding mode
- Support 2 pairs of analog stereo audio encoding with optional extension board
- Remote Control and Supervision by SNMP, HTTP WEB

#### 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



#### Order Information

Interface		DCH-5200EC			
		-30	-32	-40	-42
Input	ASI	•	•	•	•
	CVBS	•	•	•	•
	SDI	•	•	•	•
	YPbPr	•	•	•	•
	HDMI	•	•	•	•
	Audio 1	•	•	•	•
Output	Audio 2		•		•
	ASI x2	•	•	•	•
	GigE Full Duplex			•	•
	Management	•	•	•	•
	RS-232	•	•	•	•

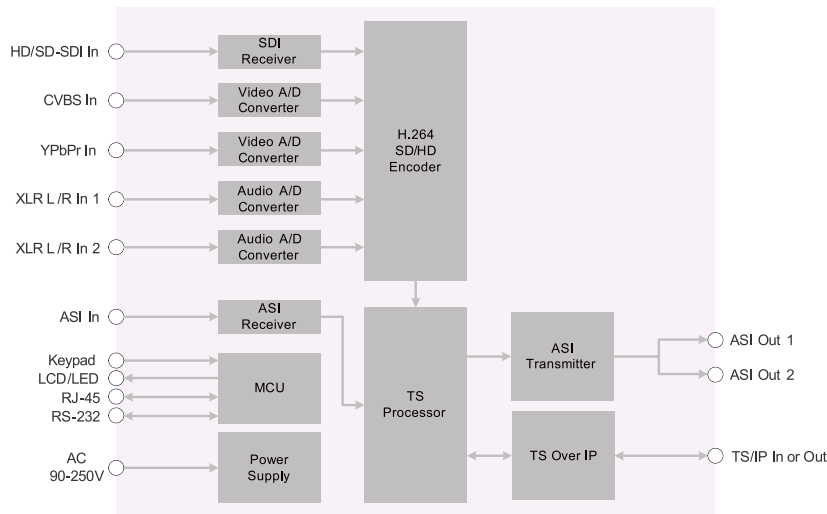
## Specification

<b>Video Compression</b>	
Video Resolution	1080p (1920x1080) @ 59.94 Hz, 50 Hz SMPTE296M: 6~30Mb/s 1080i (1920x1080) @25Hz, 29.97Hz SMPTE274M: 6~24Mb/s 1080i (1440x1080)@25Hz, 29.97Hz SMPTE274M: 5~24Mb/s 720p (1280x720) @50Hz, 59.94Hz SMPTE296M: 4~24Mb/s 480i (720x480) @29.97Hz: SMPTE656M: 2~10Mb/s 576i (720x576) @25Hz: SMPTE656M: 2~10Mb/s
Compression Standard	H.264, High Profile Level 4.0
Aspect Ratio	4:3/16:9 selectable
Video Encoding Bit Rate	2Mb/s-30Mb/s
<b>Audio Compression</b>	
Audio Input	Embedded Audio, Analog audio
Audio Channels	Maximum 2 pair of stereo
Audio Sampling Rate	48KHz
Audio compression Bit Rate	32 ~ 384Kb/s
<b>Audio/Video Input Interface</b>	
Analog Audio	1×D-sub 9 Female male with XLR adaptor cables
Analog CVBS	1×BNC Female, 75Ω
YPbPr	3×RCA Female, 75Ω
HDMI	1×HDMI 1.3
<b>ASI Input</b>	
Connector Type	1×BNC Female, 75Ω
Input bit rate	≤ 100Mb/s
Packet Mode	Byte
Packet Length	188/204 Bytes
<b>TS Processing</b>	
TS Output Management	Remux and demux for mirrored ASI outputs

TS Input Management	Remux and demux between ASI input and the SPTS encoded
Service and PID management	Remux, filtering and remapping
PSI/SI	PSI/SI table regeneration, NIT and SDT edition
<b>TS over IP</b>	
Connector Type	1×RJ-45, 10/100M for TS/IP
Useful bit rate	70Mb/s for 10/100M
Protocol	UDP / RTP, Multicast / Unicast, IGMPv2, ARP
Source	Built-in Re-mux, ASI input, Encoder
<b>ASI Output</b>	
Connector Type	2×BNC Female, 75Ω
Output bit rate	≤ 99Mb/s
Packet Length	188 / 204 Bytes
Signal Level	800mVpp±10%
<b>Control &amp; Monitoring</b>	
Connector Type	1×RJ-45, 10/100M, for equipment IP Control
Remote Control	SNMP, HTTP Web
Local Control	LCD display and 6-key keypad
Software Upgrade	Built-in FTP loader and Telnet
<b>Physical</b>	
Dimension	44mm×483mm×340mm
Net weight	3.2Kg
Power supply	AC90~250V, 50Hz/60Hz
Power Consumption	Maximum 20W
Operating Temperature	0 ~ 45°C
Storage Temperature	-10 ~ 60°C
Humidity	10 ~ 90%, non-condensed
<b>Certification</b>	
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-5200EC Functional Block Diagram



## Back panel Interface

