PBI

Encoder and Transcoders

Brighten Your Digital View!

DCH-4000EC
H.264 SD Encoder and Transcoders

The DCH-4000EC is a high quality single channel standard definition MPEG4/H.264 encoder/trans-coder. It has a wide range of digital/analog video and audio inputs: CVBS, SDI, HDMI, YPbPr and stereo audio. The compressed MPEG4/H.264 signal is output to the ASI and IP port. It can also be used as MPEG-2 to H.264 trans-coder from IP or ASI port. The DCH-4000EC's re-multiplexing function enables creation of a new transport stream between the TS of encoder and the TS from ASI or IP port. The encoder/trans-coder output can be SPTS or MPTS over IP and over ASI. In trans-coding 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-4000EC one of the best solutions to meet the MPEG2 to MPEG4/H.264 migration in today's digital TV broadcast network.

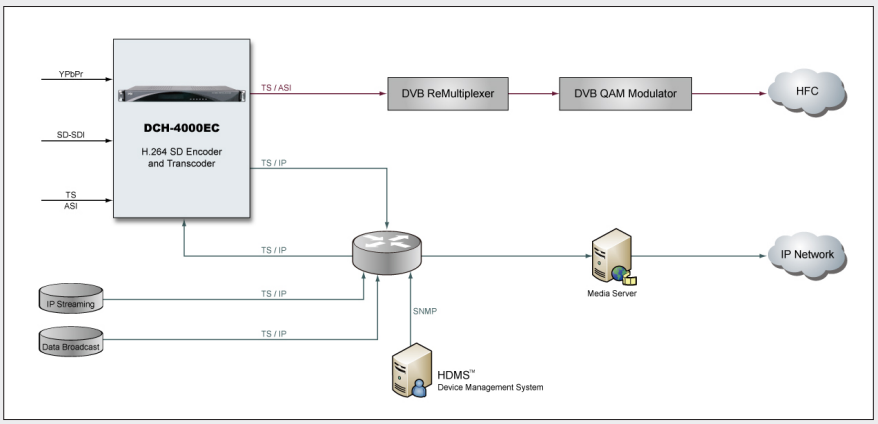
Main Feature

- Digital and analog inputs HDMI, SD-SDI, YPbPr, and CVBS
- ASI and TS/IP input for trans-coding from MPEG2 to H.264
- 10/100M TS/IP extension board for TS/IP option
- Support VBR and CBR encoding mode
- Built-in re-multiplexer between encoder and TS from ASI and IP
- Digital audio pass through for trans-coding
- Support 2 pairs of analog stereo audio encoding with optional extension board
- Remote Control and Supervision by SNMP, HTTP WEB and Proprietary HDMS software

Multiple inputs ASI, SD-SDI, YPbPr, and CVBS

10/100M TS/IP optional

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

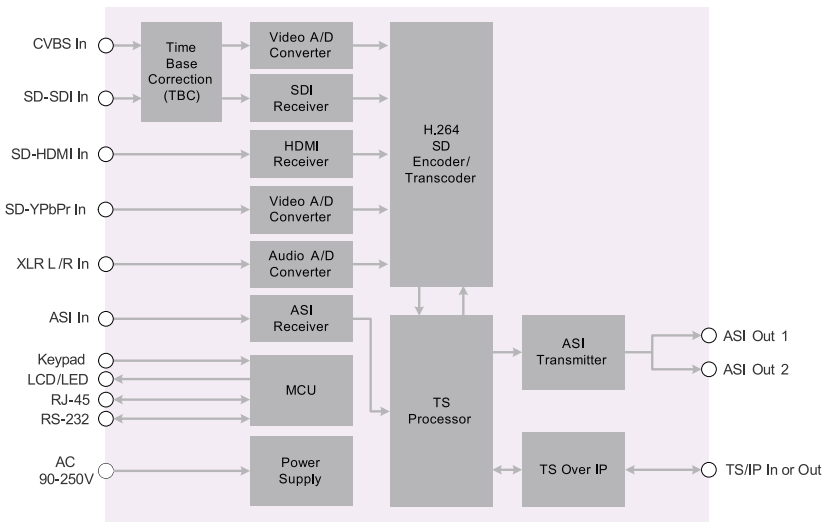


Specification

Video Compression	
Video Resolution	480i (720 × 480) @29.97Hz: SMPTE125M
	576i (720 × 576) @25Hz: ITU-R BT.656-4
Compression Standard	H.264, High Profile Level 4.0
Aspect Ratio	4:3/16:9 selectable
Video Encoding Bit Rate	2Mb/s-10Mb/s
Audio Compression	
Audio Input	Embedded Audio, Analog audio
Compression Standard	MPEG-1 Layer II
Audio Mode	Stereo, Joint Stereo, Dual Mono, Mono
Audio Sampling Rate	48KHz
Audio Compression Bit Rate	32 ~ 384Kb/s
Audio/Video Input Interface	
Analog Audio	1 × D-sub 9 Female male with XLR adaptor cables
Analog CVBS	1 × BNC Female, 75Ω
SD-SDI	1 × BNC Female, 75Ω
YPbPr	3 × RCA Female, 75Ω
HDMI	1 × HDMI 1.3
ASI Input	
Connector Type	1 × BNC Female, 75Ω
Input Bit Rate	≤ 100Mb/s
Packet Mode	Byte
Packet Length	188/204 Bytes
TS Processing	
TS Input Management	Remux and demux between ASI input and the SPTS encoded
TS Output Management	Remux and demux for mirrored ASI outputs
PSI/SI	PSI/SI table regeneration, NIT and SDT edition and insertion
Service and PID management	Remux, filtering and remapping
TS over IP	
Connector Type	1 × RJ45, 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, Encoded / Transcoded streaming
ASI Output	
Connector Type	2 × BNC Female, 75Ω
Output Bit Rate	≤ 99Mb/s
Packet Length	188 / 204 Bytes
Signal Level	800mVpp ± 10%
Source	Built-in Re-mux, ASI input, Encoded / Transcoded streaming
Control & Monitoring	
Connector Type	1 × RJ45, 10/100M, for equipment IP Control
Remote Control	SNMP, HTTP Web, Proprietary HDMS network Management Software
Local Control	Front Panel
Software Upgrade	FTP loader
Physical	
Dimension	44mm × 483mm × 340mm
Net weight	3.2Kg
Power supply	AC90 ~ 260V, 50Hz/60Hz
Power Consumption	Maximum 20W
Operating Temperature	0 ~ 45℃
Storage Temperature	-10 ~ 60℃
Humidity	10 ~ 90%, non-condensed

Block Diagram

DCH-4000EC Function al Block Diagram

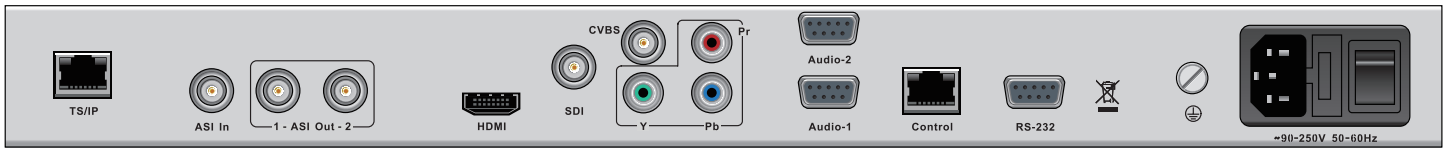


Order Information

Functionality / Model		DCH-4000EC-30	DCH-4000EC-40
Input	Analog Audio Input (Stereo L/R, RCA)	•	•
	SDI Input (BNC)	•	•
	CVBS Input (RCA)	•	•
	HDMI Input	•	•
	YPbPr Input	•	•
	ASI Input	•	•
Processing	Built-in Remuliplexer	•	•
Output	ASI Output (2 × mirrored)	•	•
TS/IP I/O	10/100M TS/IP Extension Board (Single RJ-456 Channel)		•

• Standard function

Back panel Interface



Room 401, Dingjun Plaza, No.75 SuZhou Street, Haidian District, Beijing, China 100080
Tel: +86-10-82617178 Fax: +86-10-82610263 E-mail: sales@pbicn.com