

DCH-3000EC Professional SD MPEG-2 Encoder

DCH-3000EC is a real-time single program 4:2:0 MPEG-2 encoder. It provides both analog and digital audio/video inputs like CVBS, S-Video and SDI. By making compression of the base band TV signal, the encoder outputs a single program transport stream (SPTS) to the ASI output port. Furthermore, DCH-3000EC has an ASI input port which can re-multiplex the encoded SPTS with an external MPTS and generate a new MPTS. As an option, the MPTS of the encoder can also be outputted through RJ-45 port over IP. User can use SNMP for equipment remote control and supervision. The configuration of an encoder with built-in re-multiplexer makes DCH-3000EC an ideal product for the digital TV Headend system where the high quality stable video/audio compression is needed.



Main Feature

- Compliant with 4:2:0 MPEG-2 MP@ML video compression standard
- Multiple video inputs S-Video, SDI, ASI and CVBS
- Multiple audio inputs Stereo, Balanced audio, and SDI embedded audio input
- Support PAL, NTSC, and SECAM analog TV standards
- User-configurable 4:3/16:9 aspect ratio
- Video compression bit rate from 1.5Mbps to 20Mbps
- Configurable GOP
- Built-in two-way Re-multiplexer
- Support PAT, PMT and SDT generation and NIT insertion
- SNMP based remote control system
- LCD display and user friendly operation menu
- Up to 6 MPTS or SPTS over multicast or unicast IP streaming output

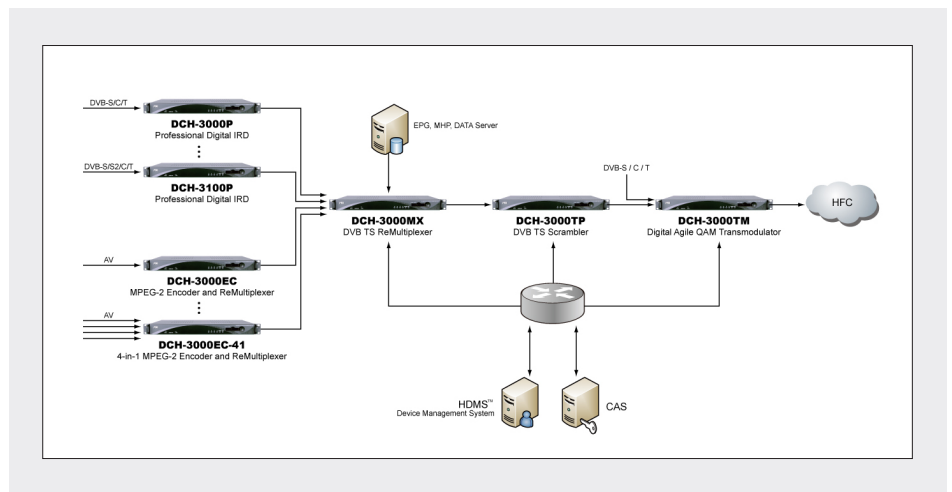
Multiple video inputs S-Video, SDI, ASI and CVBS



SNMP based remote control system and optional 100M TS/IP interface



LCD display and user friendly operation menu



Specification

Video Compression	
Analog Input	Analog NTSC, PAL and SECAM
Digital Input	SD-SDI (SMPTE-259M)
Compression Standard	MPEG-2 MP@ML
Video Resolution	480i (720 × 480) @29.97Hz: SMPTE125M 576i (720 × 576) @25Hz: ITU-R BT.656-4
Aspect Ratio	4:3/16:9 selectable
Video Compression bit rate	1.5~20Mb/s
Audio Compression	
Audio Channels	1 pair of stereo
Compression Standard	MPEG-1 Layer II
Audio Mode	Stereo, Joint Stereo, Dual Mono, Mono
Audio Sampling Rate	32, 44.1, 48 KHz
Audio Compression bit rate	32, 64, 128, 192, 256, 384 Kb/s
Audio/Video Input Interface	
Analog Audio	Balanced Audio XLR L / R
Analog CVBS	1 × BNC female, 75 Ω
S-Video	1 × S-Video female, 75 Ω
SD-SDI	1 × BNC female, 75 Ω
SDI embedded audio	Group 1 to 4 selectable
ASI Input	
Connector Type	1 × BNC Female, 75 Ω
Input bit rate	≤ 100Mb/s
Packet Mode	Byte or Burst
Packet Length	188/204 Bytes
TS Processing	
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 generation, NIT and SDT edition

TS over IP Output

Connector Type	1 × RJ-45, 10/100 Base-T for TS/IP
Useful bit rate	70Mb/s min
Protocol	UDP / RTP, Multicast / Unicast, IGMPv2, ARP
Source	Built-in Re-mux, ASI input, Encoder

ASI Output Interface

Connector Type	2 × BNC Female, 75 Ω
Output bit rate	≤ 99Mb/s
Packet Length	188 / 204 Bytes
Signal Level	800mVpp ± 10%
Source	Any one of Built-in Re-mux, ASI input and Encoder

Control & Monitoring

Connector Type	1 × RJ-45, 10/100 Base-T, for equipment IP Control
Remote Control	SNMP, HTTP Web, Proprietary HDMS Software
Local Control	Front Panel
Software Upgrade	Built-in FTP server + Telnet

Physical

Dimension	44mm × 483mm × 240mm
Net weight	2.8Kg
Power Supply	AC 90V ~ 250V, 50/60Hz
Power Consumption	Maximum 20W
Operating Temperature	0 ~ 45°C
Storage Temperature	-10 ~ 60°C
Operating Humidity	10 ~ 90%, non-condensed

Certification

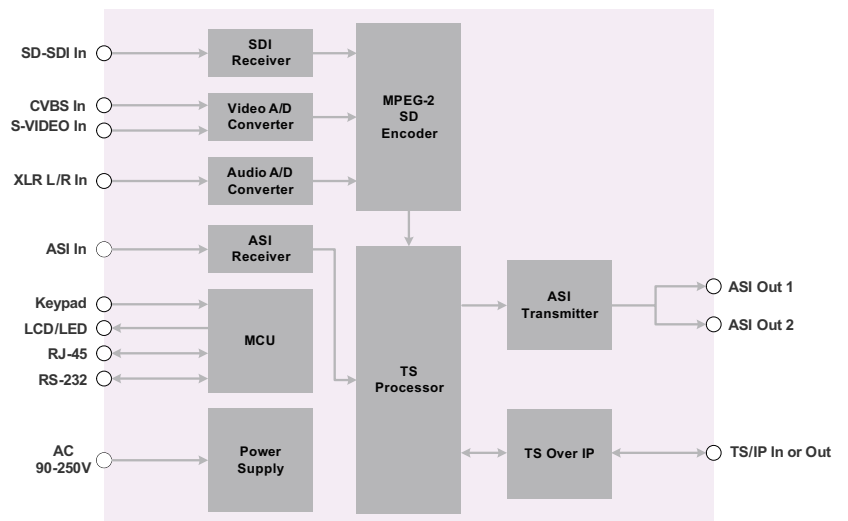
EMC: EN 55024:1998+A1:2001+A2:2003, EN 55022:2006+A1:2007, EN 61000-3-2:2006, EN 61000-3-3:2008

FCC: Part 15 Class B

LVD: EN 60950-1:2006 + A11:2009

Block Diagram

DCH-3000EC Functional Block Diagram



Order Information

Functionality	Model	DCH-3000EC-10	DCH-3000EC-30	DCH-3000EC-40
S-Video Input		•	•	•
CVBS Input (BNC)		•	•	•
SDI Input (BNC)			•	•
Balanced Audio XLR Input		•	•	•
ASI Input			•	•
Built-in Remultiplexer		•	•	•
ASI Output (mirrored)		•	•	•
10/100M TS/IP Extension Board (Single RJ-45, 6 Channel)				•

• Standard function

Back panel Interface



DCH-3000EC-40 back panel