



The ADV-4100EC 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/SD-SDI, HDMI, YPbPr and stereo audio. It can support up to high definition TV up to 1080P. The compressed MPEG4/H.264 signal is output via ASI and IP ports. ADV-4100EC 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 ADV-4100EC'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 can output SPTS or MPTS over IP as well as over ASI.

Multiple inputs: HDMI, HD/SD-SDI, YPbPr, and CVBS



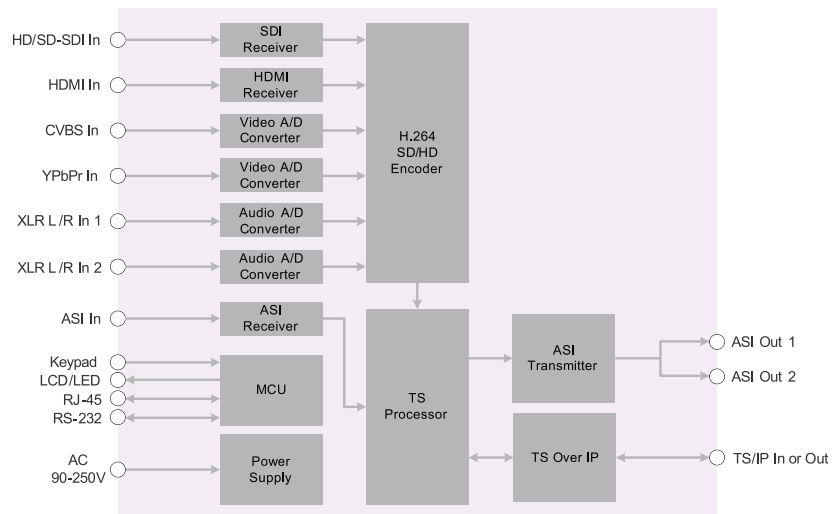
Remote Control and Supervision by SNMP, HTTP WEB and Proprietary HDMS software



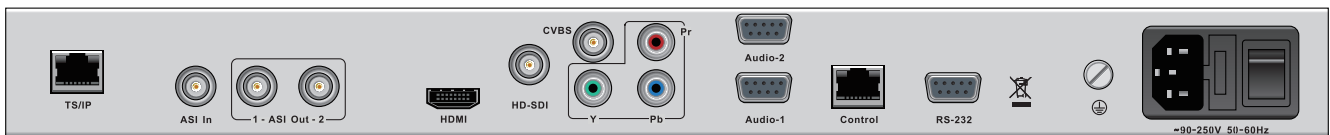
Main Features

- Multiple video resolutions including 1080p, 1080i, 720p, 576i and 480i
- Multiple inputs HDMI, HD/SD-SDI, YPbPr, and CVBS
- Audio inputs HDMI/SDI embedded, Analog
- ASI and IP (unicast and multicast) outputs
- Built-in re-multiplexer with ASI input for encoder loop
- Supports VBR and CBR encoding mode
- Supports 2 pairs of stereo audio encoding
- Unique video and audio synchronization by time base correction
- Remote Control by SNMP, HTTP WEB

Block Diagram



Back panel Interface



Specification

Video Compression			
Video Resolution	1080p (1920×1080) @50Hz, 59.94Hz, 60Hz: SMPTE 372M - for HDMI input only 1080i (1920/1440×1080) @25Hz, 29.97Hz, 30Hz, 50Hz, 59.94Hz, 60Hz: SMPTE 292M 720p (1280×720) @50Hz, 59.94Hz, 60Hz: SMPTE 292M 480i (720×480) @29.97Hz: SMPTE 259M 576i (720×576) @25Hz: SMPTE 259M	TS Input Management	Remux and demux between ASI input and the SPTS encoded
Compression Standard	H.264, High Profile Level 4.0	PSI/SI	PSI/SI table regeneration, NIT and SDT edition
Aspect Ratio	4:3/16:9 selectable	TS over IP	
Video Encoding Bit Rate	300Kb/s-45Mb/s	Connector Type	1×RJ-45, 10/100M for TS/IP
Audio Compression		Useful bit rate	70Mb/s for 10/100M
Audio Input	Embedded Audio, Analog audio	Protocol	UDP / RTP, Multicast / Unicast, IGMPv2, ARP
Compression Standard	MPEG-1 Layer II, AAC-LC	Source	Built-in Re-mux, ASI input, Encoder
Audio Channels	Maximum 2 pairs of stereo	ASI Output	
Audio Sampling Rate	48KHz	Connector Type	2×BNC Female, 75Ω
Audio compression Bit Rate	32-384Kb/s (MPEG-1 Layer II) 128-512Kb/s (AAC LC)	Output bit rate	≤ 99Mb/s
Audio/Video Input Interface		Packet Length	188 / 204 Bytes
Analog Audio	1×D-sub 9 Female male with XLR adaptor cables	Signal Level	800mVpp±10%
Analog CVBS	1×BNC Female, 75Ω	Control & Monitoring	
HD-SDI	1×BNC Female, 75Ω	Connector Type	1×RJ-45, 10/100M, for equipment IP Control
YPbPr	3×RCA Female, 75Ω	Remote Control	SNMP, HTTP Web
HDMI	1×HDMI 1.3	Local Control	LCD display and 6-key keypad
ASI Input		Software Upgrade	Built-in FTP loader and Telnet
Connector Type	1×BNC Female, 75Ω	Physical	
Input bit rate	≤ 100Mb/s	Dimension	44mm×483mm×340mm
Packet Mode	Byte	Net weight	3.2Kg
Packet Length	188/204 Bytes	Power supply	AC90~250V, 50Hz/60Hz
TS Processing		Power Consumption	Maximum 20W
TS Output Management	Remux and demux for mirrored ASI outputs	Operating Temperature	0 ~ 45°C
Service and PID management	Remux, filtering and remapping	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

Ordering Information

ADV-4100EC - H.264 (MPEG-4 AVC) HD/SD Encoder with HD/SD-SDI, HDMI, Component and Composite inputs, IP and ASI outputs