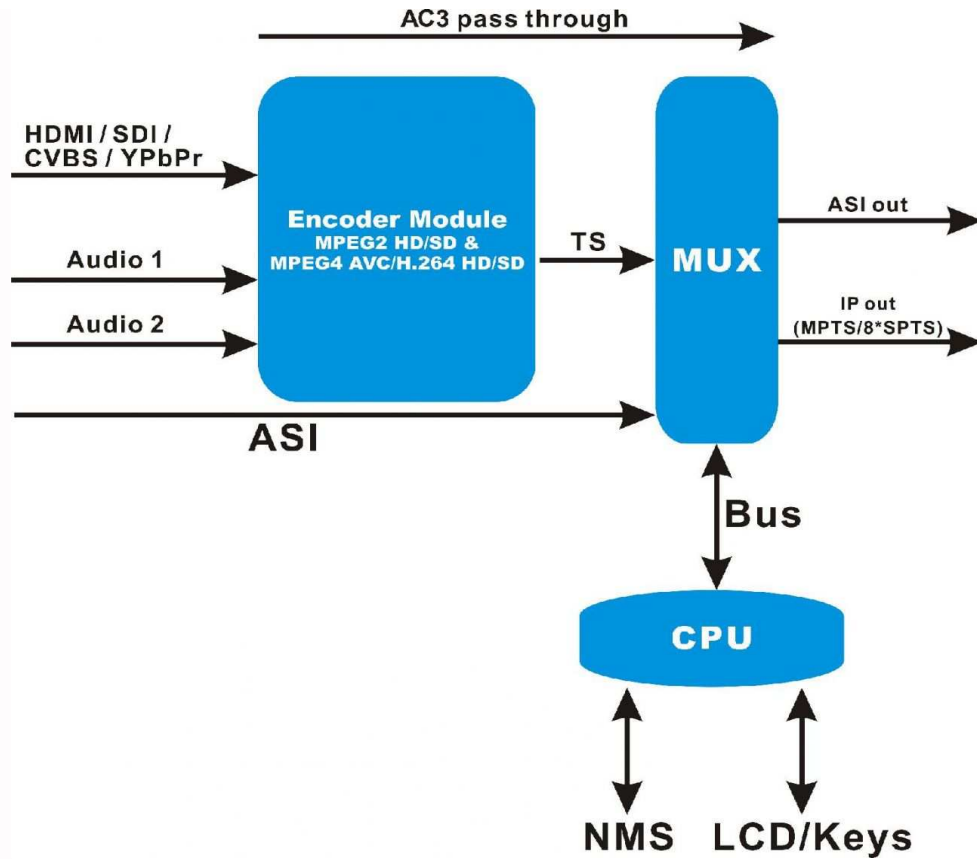# HPS801A MPEG-2/H.264 HD Encoder

Outline

HPS801A MPEG-2/H.264 HD Encoder is the new broadcasting audio & video encoding and multiplexing device with powerful functionality. It is equipped with multiple video input interfaces (SDI, CVBS, YPbPr and HDMI) and audio input interfaces (AES, RCA and XLR). It supports both MPEG-2 and MPEG-4 AVC/H.264 video encoding and MPEG1 Layer II, HE-AAC and LC-AAC audio encoding. Multiplexing function is also embedded to select the input programs and output stream through ASI/IP port in the same time.

Key Features

- ◆ MPEG-2 HD/SD and MPEG-4 AVC/H.264 HD/SD video encoding
- ◆ Support 720P, 1080I, 480I, 576I and various PIP video resolution
- ◆ MPEG1 Layer II, HE-AAC (v1&v2) and LC-AAC audio encoding
- ◆ Support 2 stereo or 4 Mono audio encoding
- ◆ Support AC3 pass through (for SDI in only)
- ◆ Support digital video + analog audio input and encode
- ◆ Support CC (closed caption), EIA 608 and EIA 708 (for SDI in only)
- ◆ Applicable for one Seg/ISDB-T utilization
- ◆ IP (MPTS/8*SPTS) Output; ASI Output
- ◆ Support UDP/RTP media transmission protocols & multicast/unicast output
- ◆ LCD / keyboard control and web management

Blocks Diagram

Specifications

Input		1×SDI, 1×CVBS, 1×YPbPr and 1×HDMI input	
		2×XLR, 2×RCA and 1×AES inputs	
		1×ASI input, BNC interface	
Video	Resolution	**Input**	**Output**
		1080i@60	1920×1080, 1440×1080, 1280×1080i
		1080i @59.94	
		1080i @50	
		720p@59.94	1280×720, 960×720p
		720p@50	
		576i	720×576, 704×576, 640×576, 544×576, 528×576,

		352×576
	480i	720×480, 704×480, 640×480, 544×480, 528×480, 352×480
	Encoding	MPEG-2 HD/SD; MPEG-4 AVC/H.264 HD/SD
	Bit-rate	0.25Mbps~60.5Mbps
	Rate Control	CBR/VBR
	GOP Structure	Auto, IP, IPB, IPBB, IPBBB, IPBBBB, IPBBBBB
	Aspect Ratio	4:3; 16:9; 1:1; 2.35:1
	Chroma	4:2:0; 4:2:2 (Applied to all resolution under MPEG2 compression)
	Advanced Pretreatment	De-interlacing, noise reduction, sharpening
Video (one-seg)	Resolution	96×96, 128×96, 128×128, 192×192, 352×240, 352×288, 416×240
	Encoding	MPEG-2; H.264; Auto (follow the main stream format: MPEG-2 or H.264)
	Bit-rate	0-1.0 Mbps
	Aspect Ratio	4:3; 16:9; Auto (follow the main stream)
Audio	Encoding	MPEG-1 Layer II, HE-AAC (v1&v2), LC-AAC AC3 Passthrough **(for SDI in only)**
	Sampling rate	48KHz
	Resolution	24-bit
	Bit-rate	32Kbps~384Kbps
Multiplexing		1 ASI input multiplexed with local 1 channels TS
Delay		1400ms - 5000ms
Stream output		2×ASI output ports, BNC interface
		MPTS/8*SPTS over UDP/RTP, 10/100 Base-T Ethernet interface (UDP/RTP multicast/unicast)
System function		LCD/keyboard and web management
		Language: English
		Ethernet software upgrade
General	Dimensions	482mm×405mm×44.5mm (W × D × H)
	Approx weight	4.5Kg
	Temperature	0~45℃(Operation), -20~80℃(Storage)
	Power requirement	AC110V±10%, 50/60Hz AC 220V±10%,50/60Hz
	Power consumption	21W