



NDS3544K

Multi-Channel Encoder



Product Overview

NDS3544K Multi-Channel Encoder is the new broadcasting audio & video encoding and multiplexing device with powerful functionality. It is equipped with 12 HDMI audio & video input interfaces, 12 CC input ports (Closed Caption) and 32 IP input over UDP and RTP through Data1.

It supports both MPEG-2 and MPEG-4 AVC/H.264 HD/SD video encoding and MPEG1 Layer II, MPEG2-AAC, MPEG4-AAC, Dolby Digital AC3 (2.0) audio encoding (Optional), and AC3 (2.0/5.1) pass through. Its high integration and cost-effective design make this device widely used in variety of digital distribution systems such as CATV digital head-end, satellite and terrestrial digital TV, etc.

Key features

- **12 HDMI inputs with MPEG2 & MPEG4 AVC/H.264 HD/SD Encoding**
- **Support 12 channel CC(Closed Caption) input**
- **MPEG1 Layer II, MPEG2-AAC, MPEG4-AAC, Dolby Digital AC3 (2.0) encoding (Optional), AC3 (2.0/5.1) passthrough**
- **Support 32 IP input(Data 1 port) over UDP and RTP**
- **Support 1 MPTS and 12 SPTS IP (DATA 1 and DATA2) output over UDP, RTP/RTSP**
- **Support ASI output as mirror of MPTS-Optional**
- **Support PID remapping/ accurate PCR adjusting/PSI/SI editing and inserting**



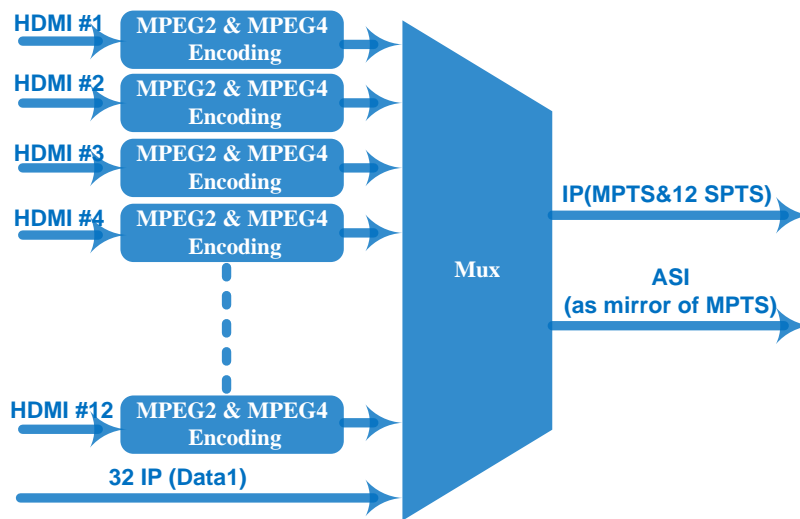
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- Control via web management, and easy updates via web

Principle Chart



Technical specification

Input	12 HDMI inputs		
	12 CC (closed caption) input, BNC interface		
	32 IP input over UDP and RTP through DATA 1 port		
Video	Resolution	Input	1920*1080_60p, 1920*1080_50p, 1920*1080_60i, 1920*1080_50i, 1280*720_60p, 1280*720_50P, 720*480_60i, 720*576_50i
		Output	1920*1080_60p, 1920*1080_50p, 1920*1080_60i, 1920*1080_50i, 1440*1080_60i, 1440*1080_50i, 1280*720_60p, 1280*720_50P, 720*576_50p, 720*576_50i, 720*576_30p, 720*576_25p, 720*480_60p, 720*480_60i, 720*480_30p, 720*480_25p, 320*240_60p, 320*240_50p, 320*240_30p, 320*240_25p, 320*180_60p, 320*180_50p, 320*180_30p, 320*180_25p, 960*540_50i, 704*576_50i, 704*480_60i, 640*576_50i, 640*480_60i, 544*576_50i, 544*480_60i,
	Encoding	MPEG2 & MPEG4 AVC/H.264	
	Bit-rate	0.8~19Mbps for H.264 encoding 1~19Mbps for MPEG-2 encoding	
	Rate Control	CBR/VBR	
	GOP Structure	GOP B Frame: 0-3, GOP P Frame: 0-6	
	Advanced Pretreatment	De-interlacing, noise reduction	
	Audio	Encoding	MPEG1 Layer II, MPEG2-AAC, MPEG4-AAC, Dolby Digital AC3 (2.0) encoding (Optional), AC3 (2.0/5.1) passthrough
Sampling rate		48KHz	
Resolution		24-bit	

	Bit-rate	64Kbps-320kbps each channel
Multiplexing	Maximum PID Remapping	180 input per channel
	Function	PID remapping (automatically or manually)
		Accurate PCR adjusting
	Generate PSI/ SI table automatically	
Stream output	1 MPTS and 12 SPTS IP output over UDP and RTP/RTSP, 2*1000M Base-T Ethernet interface, Data 1 and Data 2 1 ASI output as mirror of MPTS-Optional	
System function	Network management (WEB)	
	Ethernet software upgrade	
Miscellaneous	Dimension (W×L×H)	482mm×440mm×44mm
	Environment	0~45℃(work); -20~80℃ (Storage)
	Power requirements	AC 110V± 10%, 50/60Hz, AC 220 ± 10%, 50/60Hz

Technical Comparison

	NDS3544K	NDS3544KF	NDS3542L
Chipset	Vixs	Fujitsu	Hisilicon
Video Channel	2/4/6/8/10/12×HDMI optional	4/8/12/16/20/24×HDMI optional	4/8/12/16/20/24×HDMI optional
Video Encode	MPEG2 & MPEG4 AVC/H.264	MPEG-4 AVC/H.264	MPEG-4 AVC/H.264
CC Input	12 CC input ports	N/A	N/A
IP Input	32 ×IP	32× IP	N/A
Video Bit Rate	0.8~19Mbps for H.264 encoding 1~19Mbps for MPEG-2 encoding	0.8~19Mbps each channel	1Mbps~13Mbps each channel (Bit rate is with a high fluctuation, suitable for cable system, not suitable for satellite uplink)
GOP	GOP B Frame: 0-3, GOP P Frame: 0-6	IBBP	GOP Size=25 (without B Frame)
Resolution	Up to 1080p-60 (Resolution and frame rate downscale conversion)	Up to 1080p-60 (1080i/720p to 576p/480p downscale conversion)	Up to 1080P-30 (1080i/p-60/50 to 1080p-30/25 auto downscale conversion)
Audio Encode	MPEG1 Layer II, MPEG2-AAC, MPEG4-AAC, Dolby Digital AC3 (2.0) encoding (Optional), AC3 pass through	MPEG1 Layer II, (MPEG-2 AAC, MPEG-4 AAC Optional) AC3 pass through	MPEG-1 Layer II
Audio Gain	Yes	Yes	Yes
OSD Function	N/A	N/A	Yes
ASI output	Option as required	Option as required	Option as required
IP output	SPTS and 1MPTS	SPTS and 1MPTS	SPTS and 1MPTS(for 4/8/12 channel) SPTS or 1MPTS(for 16/20/24 channel)