StreamCast

Network Encoding, Modulating and Streaming



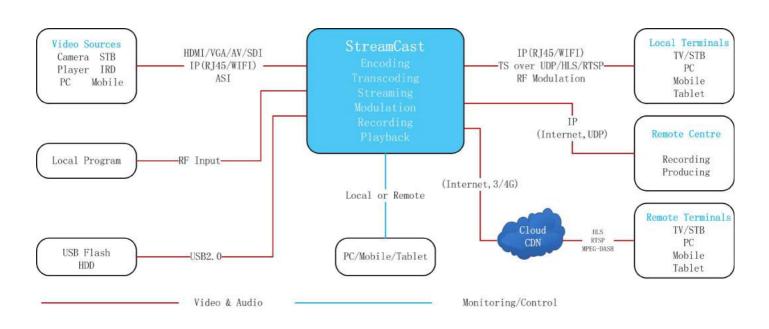
Introduction

StreamCast is a single-channel encoder/streamer for audio and video processing in a cost-effective way.

It supports professional encoding, modulation and IP streaming for live encoding & uploading, channel insertion, live broadcasting, AD/local program playback/streaming, remote meeting and more...







Order Information

Model	Description	
NB100-A0	HDMI/AV encoding (Standard version, HDMI In, AV In, Components In, RJ45, Micro USB (DC))	
NB100-A1	NB100-A0, with additional AAC and AC3 audio supporting	
NB100S-A1	NB100-A1 + SDI encoding	
NB100P1-A1	NB100S-A1 + modulation (Annex A/C)	

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Specifications

Channels						
Video	1 channel of H.264 HD/SD or MPEG-2 SD program encoding					
Audio	1 pair of MPEG1L2, AAC or AC3 audio					
Physical Interfaces						
Input	1 x HDMI (v1.4)					
	1 x YPbPr (components)					
	1 x CVBS (3.5mm)					
	1 x SDI (option of NB100S and NB100P1)					
	1 x RF In (option of NB100P1, for local QAM combination)					
Output	1 x RJ45					
	1 x RF Out					
Other I/O	Embedded Wi-Fi (for wireless accessing and data transmission)					
	2xUSB2.0 (storage and 3G/4G dongle)					
Control	LCD x 1, front button x 3, reset button x 1					
Streaming						
Protocols	Live: UDP/RTP, RTSP, RTMP, HLS					
Server Mode	Direct streaming to connected audiences					
	(Wi-Fi or RJ45, limited accessing numbers*)					
Modulation						
Standards	QAM, Annex A/C					
Output Range	66~858 MHz					
Constellations	16/32/64/128/256 QAM					
Symbol Rate	3~6.952 Ms/s					
Operating Modes						
Live	Encoding and IP streaming					
	Encoding and RF output					
Recording	Local: HDD, USB flash, storage card reader via USB					
	Format: TS					
	Circling recording (by time or size of file)					
Playback	Local: HDD, USB flash, storage card reader via USB					
	In-order, random, scheduled playlist					
	IP output					
Management						
Configuration	Web-GUI (easy or advanced mode) or front panel					
	Power-on and play (by pre-setup or last configuration)					
Status/Monitoring	LCD display of status					

Big							
HD: MP/HP@L4.0/4.1/4.2 MPEG-2 Profile (4:2:0) SD: MP@ML Resolution HD: 1920 x 1080@24p/25p/30p/50i/60i, 1280 x 720@50p/60p/25p/30p SD: 720 x 576@50i, 720 x 480@60i Sub-SD resolutions HD to SD down-conversion Video Bit-rate MPEG-2: 0.8 Mbps−14 Mbps H.264: 0.8 Mbps−14 Mbps	Encoding	Encoding					
MPEG-2 Profile (4:2:0) SD: MP@ML Resolution HD: 1920 x 1080@24p/25p/30p/50i/60i, 1280 x 720@50p/60p/25p/30p SD: 720 x 576@50i, 720 x 480@60i Sub-SD resolutions Rescaling HD to SD down-conversion Video Bit-rate MPEG-2: 0.8 Mbps-14 Mbps H. 264: 0.8 Mbps-14 Mbps H. 264: 0.8 Mbps-14 Mbps GOP Control Support Aspect Ratio Automatic or manual (4:3 or 16:9) Audio Profile MPEG-1 Layer II; AAC (HE/LC), AC3 Audio Bit-rate MPEG-1 Layer II; 64-384 Kbps AC-3: 128-448 Kbps AAC: 48-448 Kbps Audio Mode Stereo (2.0, including down-mix) Audio Sampling Rate 48KHz Audio Volume Leveling -12 ~ 12 dB Physical & Environment Dimensions Dimensions 144x118x38mm 0.3Kg (0.66 lb) 0.3Kg (0.66 lb) Power DC1: 12V DC port x 1 DC2: micro USB x 1 (warming: 2 DC ports can't plugged together) Max. 9W (non-modulation mode) Operating Temperature 10-40 C Humility ≤ 95%	H.264/AVC Profile (4:2:0	0)	SD: MP/HP@L3.0/3.1/3.2				
HD: 1920 x 1080@24p/25p/30p/50i/60i, 1280 x 720@50p/60p/25p/30p			HD: MP/HP@L4.0/4.1/4.2				
1280 x 720@50p/60p/25p/30p	MPEG-2 Profile (4:2:0)		SD: MP@ML				
SD: 720 x 576@50i, 720 x 480@60i Sub-SD resolutions	Resolution		HD: 1920 x 1080@24p/25p/30p/50i/60i,				
Sub-SD resolutions			1280 x 720@50p/60p/25p/30p				
Note			SD: 720 x 576@50i, 720 x 480@60i				
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DC1: 12V DC port x 1	Dimensions	144x118x38mm					
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Max. 15W (modulation mode) Operating Temperature 10-40 ℃ Humility ≤ 95%		(warning: 2 DC ports can't plugged together)					
Operating Temperature 10-40 ℃ Humility ≤ 95%	_		Max. 9W (non-modulation mode)				
Humility ≤ 95%			Max. 15W (modulation mode)				
	Operating Temperature 10-4		40 C				
MTBF ≥100,000 hours	Humility ≤		5%				
	MTBF	≥10	0,000 hours				

