

StreamCast

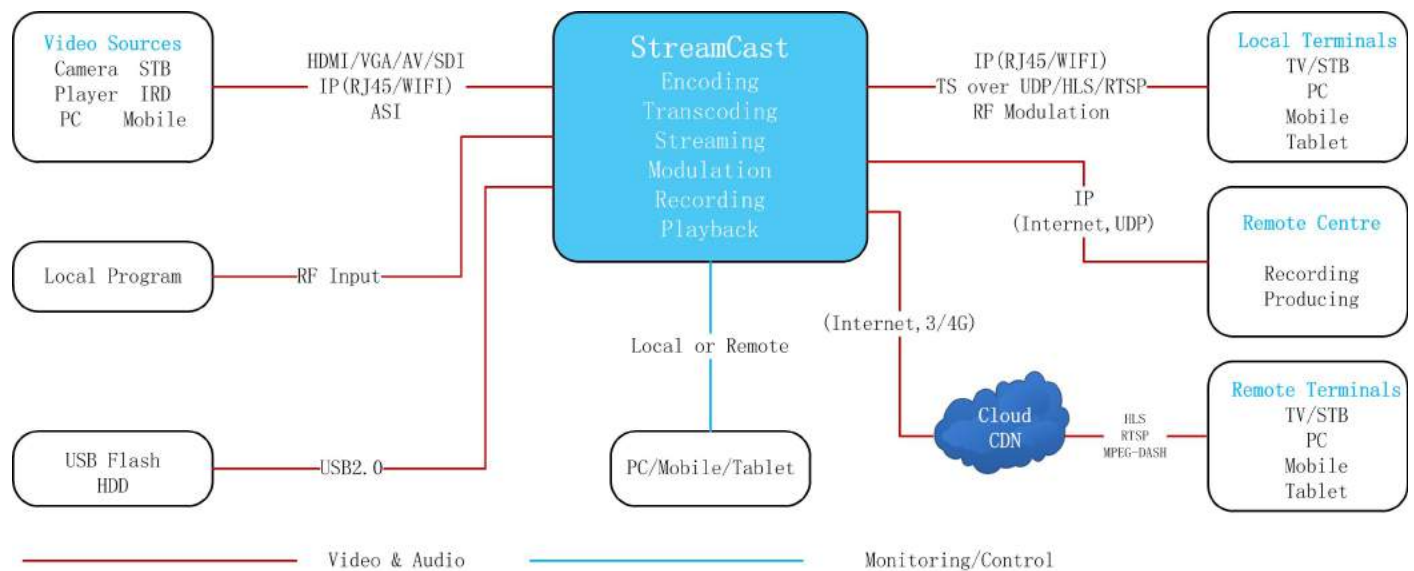
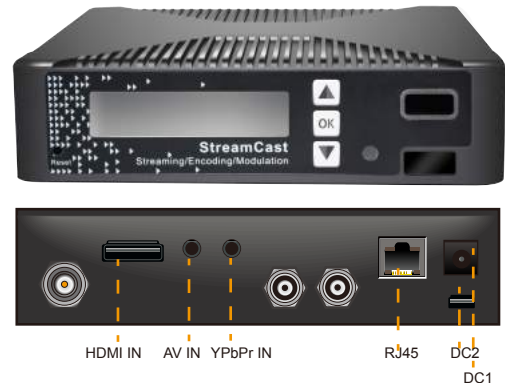
Network Encoding, Modulating and Streaming



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
	Remote monitoring of status and current program

Encoding	
H.264/AVC Profile (4:2:0)	SD: MP/HP@L3.0/3.1/3.2
	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
Rescaling	HD to SD down-conversion
Video Bit-rate	MPEG-2: 0.8 Mbps~14 Mbps
	H.264: 0.8 Mbps~14 Mbps
Rate Control	CBR/ VBR
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	144x118x38mm
	0.3Kg (0.66 lb)
Power	DC1: 12V DC port x 1
	DC2: micro USB x 1
	(warning: 2 DC ports can't plugged together)
	Max. 9W (non-modulation mode)
	Max. 15W (modulation mode)
Operating Temperature	10-40 °C
Humidity	≤ 95%
MTBF	≥100,000 hours