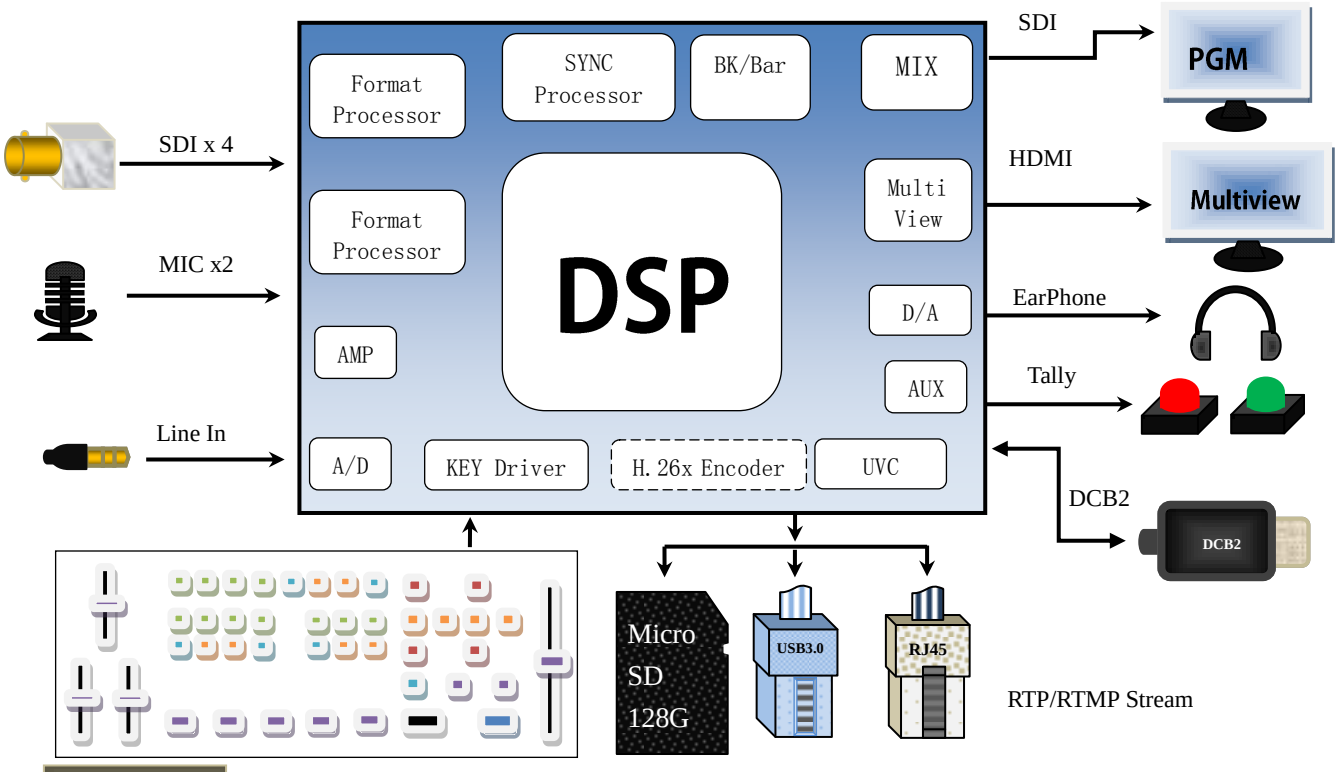
DeviceWell®
中帝威科技

Mini Video Switcher for Broadcast & TV/Studio

HDS6305(Simple Switcher 4xSDI)

Version:1.0

Functional Diagram



Introduction

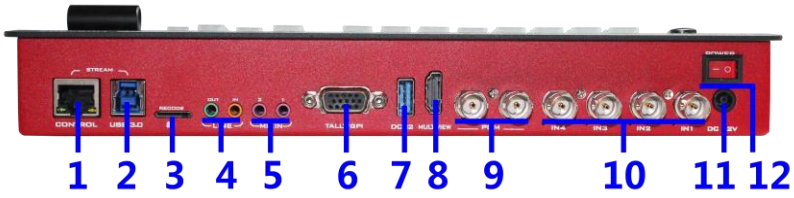
The HDS6305, a dedicated switcher for Broadcast & TV / studio, adopts a portable integrated design, metal shell, small size and light weight, which can be applied to the video special effect switching requirements of small scenes. The device integrates multiview processor, special effect generator, audio processor, control keyboard and other common switcher components.

HDS6305 conforms to the SMPTE standard and supports 4-CH SDI signal input, a total of 4-CH video signals. Simultaneous output of multiview and PGM signals. HDS6305 supports HDMI embedded audio + external analog audio. After mixed processing, it can be embedded into the output HDMI signal or output from the analog port. The resolution of all input signals is automatically adapted, and the resolution of output signals can be selected according to requirements, which is quite flexible. For broadcast and television, program production, on-site production of interviews and speeches, outdoor sports events, and other video switching requirements, the functions of HDS6305 can fully meet the needs.

Features

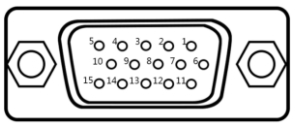
- ◆ Portable integrated design
- ◆ 4-CH SDI input
- ◆ TF card to record PGM screen
- ◆ Network RTMP streaming
- ◆ USB3.0 streaming
- ◆ DCB2 control + video expansion
- ◆ GPI control, support foot pedal, control handle, etc.
- ◆ MIC and LINE audio input
- ◆ Analog LINE audio output
- ◆ Audio follow, mix function
- ◆ One-key screen freeze（STILL） function
- ◆ PVW (multiview) and PGM (live)
- ◆ Special effects transition such as MIX/FADE
- ◆ CUT hard cut and AUTO special effect transition
- ◆ Support tally/network remote control
- ◆ Built-in chassis temperature detection and fan intelligent control system
- ◆ Support software online upgrade

Interfaces



No.	Definition	Description
1	Stream out	RTMP network port push stream
2	USB	USB3.0, UVC stream
3	TF Card	TF Card record
4	LINE IN/OUT	3.5mm stereo audio input/output
5	MIC IN	2-CH microphone input
6	TALLY/GPI	wireless intercom system（DB-15）/GPI control
7	DCB2	DCB2 control (device cascade/wireless tally/external keyboard)
8	MULTIVIEW	HDMI multiview output
9	SDI OUT	PGM live output
10	SDI IN	4-CH SDI input
11	DC 12V	power input
12	Power switch	Power switch button

TALLY_GPI Definition



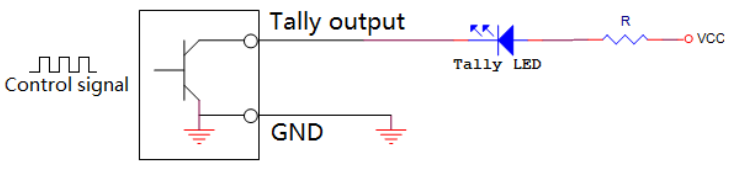
TALLY/GPI function table

PIN	（Tally）	PIN	（GPI）
11	PGM-IN1	1	GPI-IN1
12	PGM-IN2	2	GPI -IN2
13	PGM-IN3	3	GPI -IN3
14	PGM-IN4	4	GPI -IN4
6	PVW-IN1	10	GPI -IN5
7	PVW-IN2	15	GPI -IN6
8	PVW-IN3	5	GND
9	PVW-IN4		

GPI Optional feature list

GPI-Inx optional feature		Description
1	PGM1	Simulate PGM1 button messages
2	PGM2	Simulate PGM2 button messages
3	PGM3	Simulate PGM3 button messages
4	PGM4	Simulate PGM4 button messages
5	PGM_BAR	Simulate PGM_BAR button messages
6	CUT	Simulate CUT button messages
7	AUTO	Simulate AUTO button messages
8	MUTE	Simulate MUTE button messages
9	FTB	Simulate FTB button messages
10	STILL	Simulate STILL button messages

TALLY connection diagram：



Note：Tally LED：For an external display device

Tally output ： Low level is active (Tally LED is on) high level is invalid (Tally out is off)

GPI Control Schematic：

Foot Switch DJ Button

Parameters

Product Name	**4-CH SDI Video Switcher**				
Model	**HDS6305**				
Video Signal Input	Input signal	SDI video signal	**Control Parameter**	Serial control	RS232（Reserved）
	Rate	143Mbps~2.97Gbps		Control	9600 baud, 8 bits, 1 stop bit, no parity
	Connector	BNC complies with IEC169-8 standard		Connection	15-pin D-port, 2-RX, 3-TX, 5-GND
	Reflection loss	>15dB 5MHz~3GHz		Network control	RJ45,100M
	Signal amplitude	800mV±10%(SDI)	**General Parameter**	power supply	12V/DC
	Impedance	75 Ω(SDI)		Power rate	<25W
	Balance	100m Belden 1694A HD/200m Belden 8281A HD		Size	236mm*105mm*47mm
Video Signal Output	output signal	SDI/HDMI video signal		Weight	1Kg
	Code rate	270Mbps~3Gbps		Control Panel	Support on-site production, integration of a variety of buttons.
	Connector	Standard		Operating temperature	0℃~50℃, No condensation
	Return Loss	>15dB 5MHz~3GHz		Storage temperature	-20℃~75℃
	Signal amplitude	800mV±10%(SDI /HDMI)		Working humidity	20%~70%RH
	impedance	100Ω (HDMI) 75 Ω(SDI)		Storage humidity	0%~90%RH，No condensation
	DC offset	0V±0.5V			
	Clock recovery	Support			

Application