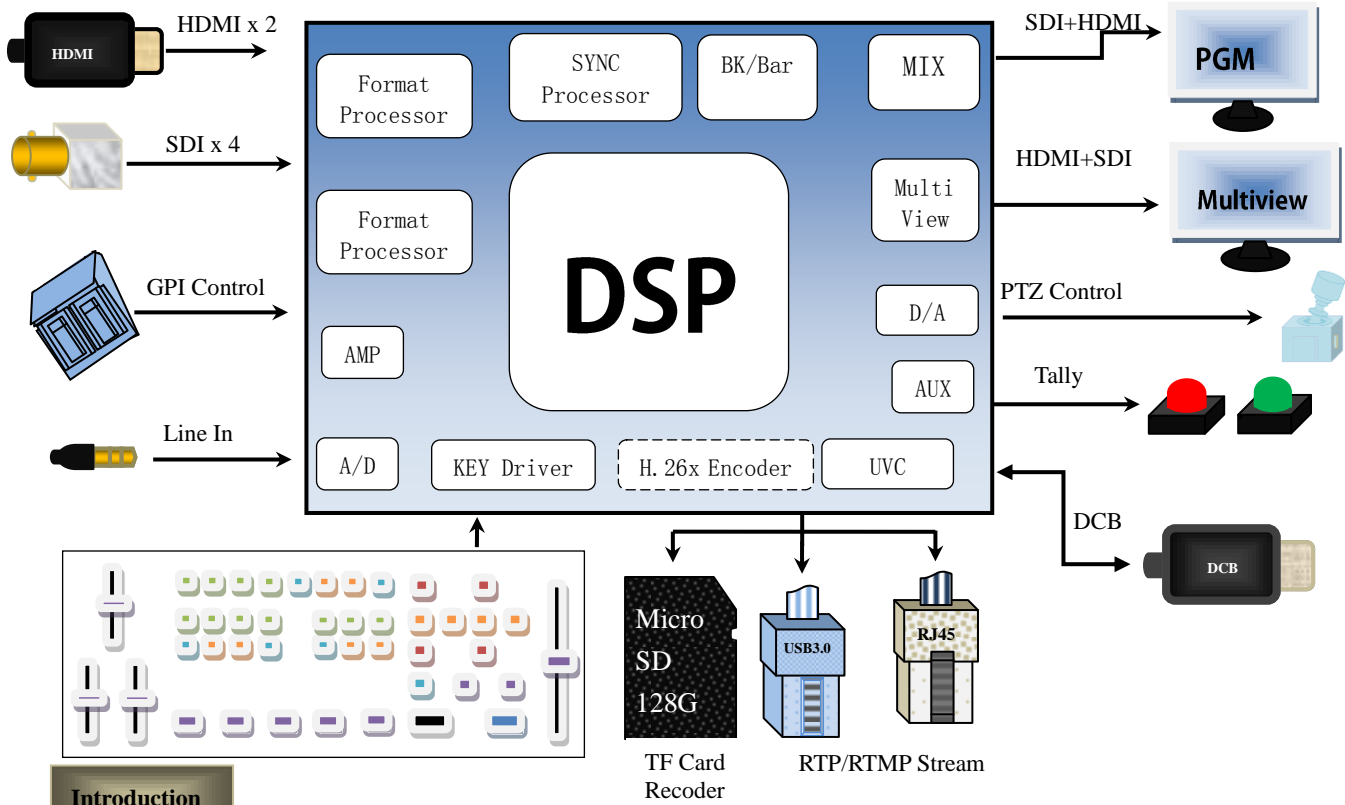


HDS7306(4xSDI+2HDMI+RECORD+STREAM)

Version:1.0



Functional Diagram



Introduction

The HDS7306, 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.

HDS7306 conforms to the SMPTE standard and supports 4-CH SDI+2-CH HDMI signal input, a total of 6-CH video signals. Simultaneous output of multiview and PGM signals. HDS7306 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 HDS7306 can fully meet the needs.

## Features

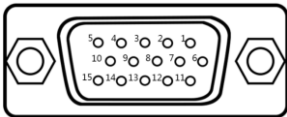
- Metal aluminum alloy material, high strength and light weight.
- A separate PATTERN KEY can be set with various irregular patterns, and the position, size, and quantity of images can be adjusted. There are hundreds of special effects such as circular, diamond, fan, plum blossom, and louver
- Support joystick and camera control
- Industrial grade mechanical buttons with professional feel
- Support RJ45 remote control
- Support DCB control
- Radio and television standard Tally interface
- Support GPI control
- Support foot pedal, control handle and other inputs
- Support 4xSDI+2xHDMI input
- PGM output: 2xSDI and 1x HDMI
- MULTIVIEW output: 1x HDMI and 1xSDI
- Support 1xSDI output for custom PGM/PVW
- Supports USB3.0 streaming, lossless, non compressed transmission
- Support TF card recording, with selectable video quality for recording
- Support network RTMP streaming
- 1xLINE IN
- 1xLINE OUT
- supports audio following and mixing functions
- Support for SDI audio deblocking
- Support for HDMI audio deblocking
- Support for special effects switching such as MIX/FADE
- Support for CUT hard switching and AUTO special effects switching
- Color bar test screen output can also be generated inside the device
- One-key screen freeze ( STILL ) function
- Supports one click FTB emergency black field function
- Support PIP/POP screen window function
- 1 group of KEY, support Luma key, chroma key, key image and superimposed character function
- Supporting the supporting Devicewell TALLY light system

## Interfaces



No.	Definition	Description
1	TALLY	wireless TALLY system (DB-15)
2	DCB	DCB control (device cascade/wireless tally/external keyboard)
3	GPI	GPI control
4	RS422	PTZ Camera Control
5	RJ45	Network interface control
6	USB 3.0	USB3.0, UVC stream
7	TF Card	TF Card Record
8	LINE IN/OUT	3.5mm stereo audio input/output
9	HDMI OUT	PGM live output
10	MULTIVIEW	HDMI+SDI multiview output
11	SDI PGM OUT	PGM output, SDI OUT2 custom PGM/PVW output
12	SDI IN	4-CH SDI input
13	HDMI IN	2-CH HDMI input
14	DC 12V	power input

## TALLY\_GPI Definition



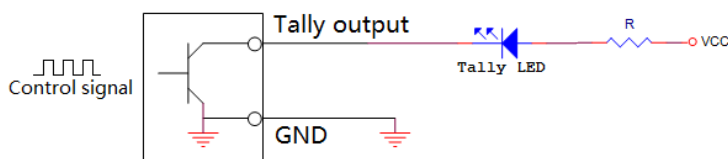
TALLY/GPI function table

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:



## GPI Control Schematic:



Foot Switch

DJ Button

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)

## Parameters

Product Name	6-CH Video Switcher					
Model	HDS7306					
Video Signal Input	Input signal	SDI /HDMI video signal		Control Parameter	Remote control	GPI
	Rate	143Mbps~2.97Gbps			Connection	15-pin D-port
	Connector	BNC complies with IEC169-8 standard			Network control	UDP
	Reflection loss	>15dB 5MHz~3GHz		General Parameter	Connection port	RJ45,100M
	Signal amplitude	800mV ±10%(SDI)			power supply	12V/DC
	Impedance	100Ω (HDMI) 75 Ω(SDI )			Power rate	<25W
	Balance	100m Belden 1694A HD/200m Belden 8281A HD			Size	328mm*156mm*48mm
Video Signal Output	output signal	SDI/HDMI video signal		Weight	1.8Kg	
	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

