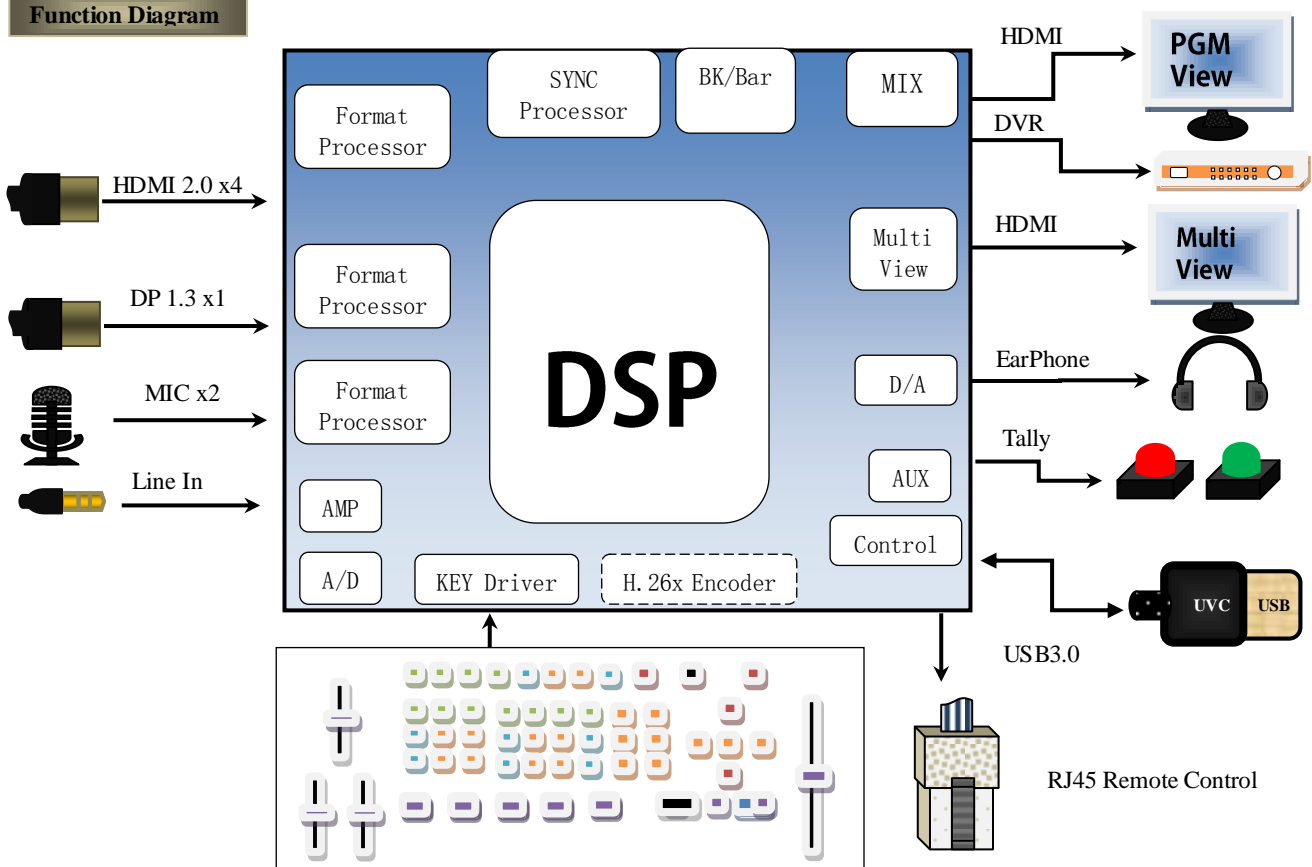




Function Diagram



Introduction

It is a dedicated video switcher for broadcast & TV, supporting up to 5-CH 4K60 signals. The device integrates HDMI decoder, DP decoder, the highest resolution supports 4K60HZ, backward compatible with 1080P/720P high-definition video signal such as 3G SDI, built-in format converter, adaptive front-end different video signal input, built-in special effect generator, audio processor, video streaming processing and other common components of switcher.

The video signal interface supports 4-CH HDMI+1-CH DP, total 5-CH video input and 3-CH HDMI output.

The audio signal interface supports 2-CH MIC input, 1-CH LINE input, and 1-CH Line output.

Support DCB control system and tally output.

It adopts high-strength aluminum alloy shell, which is easy to carry. It can be applied to broadcast and TV station studios and the needs of switching video effects on location. For professional users, the control keyboard can be expanded through the DCB interface.

Features

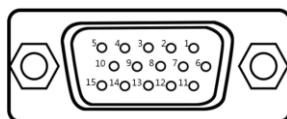
- ◆ Aluminum alloy material, high strength and light weight
- ◆ A separate PATTERN KEY, which can set various special-shaped patterns. The position, size and number of images can be adjusted.
- ◆ Hundreds of special effect wipes such as circle, rhombus, fan, plum blossom, shutter, etc.
- ◆ Support RJ45 remote control
- ◆ DCB control
- ◆ Broadcast & TV standard Tally interface
- ◆ Support GPI control
- ◆ Support pedal, control handle and other input
- ◆ 4HDMI+1DP input
- ◆ MULTIVIEW output: 1-CH HDMI
- ◆ PGM output: 2-CH HDMI
- ◆ 2-CH MIC input
- ◆ 1 LINE IN input
- ◆ 1 LINE OUT output
- ◆ Support USB3.0 Stream
- ◆ Audio follow and mix function, HDMI audio de-embedding
- ◆ MIX / FADE and other special effects transition
- ◆ CUT hard cutting and AUTO special effect switching
- ◆ Color bar output, One-key screen freezing function
- ◆ Support PIP/POP function
- ◆ FTB emergency blackout function
- ◆ Luma Key & Chroma Key

Interfaces



No.	Definition	Description
1	LINE IN/OUT	Stereo audio input/output
2	MIC IN	2 MIC inputs
3	RJ45	Network upgrade/Remote Control
4	USB	USB3.0, UVC stream
5	HDMI out	Record live streaming image output
6	DCB	DCB interface, support cascade equipment, director tally light system
7	DC 12V	DC 12V power supply
8	Tally /GPI	Connected to director tally light system (DB-15)/GPI control
9	HDMI IN/DP IN	4 HDMI+1 DP input, the first input can be switched to DP input
10	HDMI OUT	Multiview OUT
11	HDMI OUT	2HDMI PGM OUT

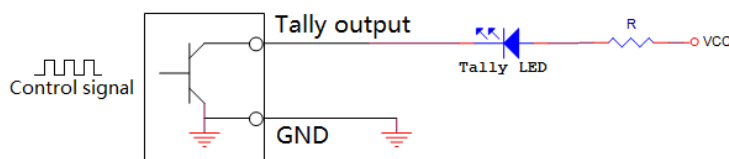
TALLY_GPI Definition:



TALLY /GPI feature lis

PIN	Function(TALLY)	PIN	Function(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		

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 Optional feature list

PIN	Function	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

GPI Control Schematic:



Foot Switch



DJ Button

Parameters

Product Name	4K UHD Switcher	
Model	UHS7105	
Video Signal Input	Input Signal	HDMI/DP video signal
	Code Rate	270Mbps~18Gbps
	Connector	Standard
	Return Loss	>15dB 5MHz~3GHz
	Signal Amplitude	800mV ±10% (HDMI)
	Impedance	100Ω (HDMI)
	Balance	Adaptive
	DVD HDMI input support	480i/576i,480p/576p,720p,1080i,1080p,2160p
	Computer HDMI input support	3840x2160,1920x1080,1680x1050,1600x900,1440x1050,1366x768,1360x768,1280x1024,1280x960,1280x800,1280x768,1280x720,1280x600,1152x864,1024x768,800x600
Video Signal Output	Output Signal	HDMI video signal
	Code Rate	270Mbps~18Gbps
	Connector	Standard
	Return Loss	>15dB 5MHz~3GHz
	Signal Amplitude	800mV ±10% (HDMI)
	Impedance	100Ω (HDMI)
	DC offset	0V±0.5V
	Clock Recovery	Support
Common Parameters	Power Supply	12V/DC
	Power	50W
	Size	282*175*48mm
	Control Panel	Support on-site production, integrate a variety of buttons
	Operating Temperature	0°C~50°C no condensation
	Storage Temperature	-20°C~75°C
	Working Humidity	20%~70%RH
	Storage Humidity	0%~90%RH, no condensation

Application

