DeviceWell®

Users' Manual

6-CH SWITCHER

HDS9336

VER 1.0

Preparation Before Installation

 Caution

●During transportation, handling, and installation of switchboard equipment, avoid collisions between the switchgear equipment and doors, walls, shelves, etc.

●When the equipment is unpacked and transported, it is strictly forbidden to put it down and drag it gently to avoid damage to the switchboard equipment.

●Do not place the switcher equipment in a flammable, explosive atmosphere or smoke environment. Do not perform any operation in this environment.

●Operating equipment should be kept away from water and moisture. The water in the switchgear or moisture will cause damage to the circuit of the switchgear equipment.

●A certain amount of heat will be generated during the operation of the switcher. Ensure that the switchgear equipment is ventilated and the switcher device can operate normally.

 Danger

●It is a fatal hazard that indirect contact with the power supply by wet objects is prohibited. Unregulated, incorrect high-voltage operation can cause accidents such as fire or electric shock.

●It is forbidden to install and remove the switchgear equipment and power cord. When the power cord is in contact with the conductor, an arc or spark may be generated, which may result in fire or electric shock.

Contents

1. **Overview**

1.1 Introduction

DeviceWell HD Video Switcher HDS9336, adopts a portable integrated design, an all-aluminum alloy shell, small size and light weight, and is suitable for video effects switching needs in outing scenes. The equipment integrates multiview processor, special effects generator, mixed audio processor, OSD menu, control keyboard, LCD panel and other common components of the switcher.

HDS9336 supports 4 channels of broadcast SDI and 2 channels of HDMI input for a total of 6 channels of video signals. In addition to the built-in liquid crystal display preview screen, external preview signals can be output synchronously, which is convenient for users to expand. HDS9336 supports SDI/HDMI embedded audio + external analog audio. After mixing, it can be embedded in the output SDI/HDMI signal or output from the analog port. The resolution of all input signals is automatically adapted, and the output signal resolution can be selected according to requirements. It is quite flexible. The six-channel switcher HDS9336 is suitable for live performances, course recording and studio guidance. The switcher has multiple functions, such as multiple Format video input and adaptive input resolution, analog audio input and output, audio embedding and de-embedding, mixing, keying, windowing, SD card recording, RJ45 network port live streaming, and remote upgrade ca

2. Functional characteristics

The DeviceWell HDS9336 6-channel HD video switcher is a multi-function switcher that requires no special knowledge and can be used for video switching and audio mixing with simple operation. This unit can be used in radio and television, live broadcast and various activities

- Portable integrated design
- High-grade black metal body, high strength
- Integrated control keyboard
- Comes with 15.6-inch guide screen monitoring
- Hidden interface design to prevent the interface from breaking
- Supports up to 4 SDI and 2 HDMI inputs
- Support 3.5mm analog audio output to monitor any channel of audio
- Support PIP/POP screen window function
- Audio supports follow and mix assignment modes
- Support Type-c interface UVC output
- Support SD card, U disk to record PGM screen, recording video quality can be selected
- Support network RTMP streaming 1 analog audio input; 1 analog audio output; support SDI audio de-embedding, external audio and SDI/HDMI de-embedding audio can be arbitrarily assigned output, support audio follow and mix switching function

- PGM output：2xSDI&1xHDMI MULTIVIEW OUT：1xHDMI&1xSDI
- Support 1 channel SDI output custom PGM/PVW
- Support MIX/FADE/WIPE switching effects; support CUT hard cutting, AUTO automatic switching and FTB emergency switching, the switching rate can be set
- Support PIP function, sub-window size and position can be adjusted arbitrarily, border thickness and color can be set
- Adjustable transition rate
- Support Tally interface to connect to the call system
- Built-in chassis temperature detection and fan intelligent control system
- Color bar test screen output can also be generated inside the device
- Support software online upgrade
- Support one-key vertical screen display
- Support one-key screen freeze function
- Support supporting DEVICEWELL TALLY lamp system

2.1 Size：362*215*43mm
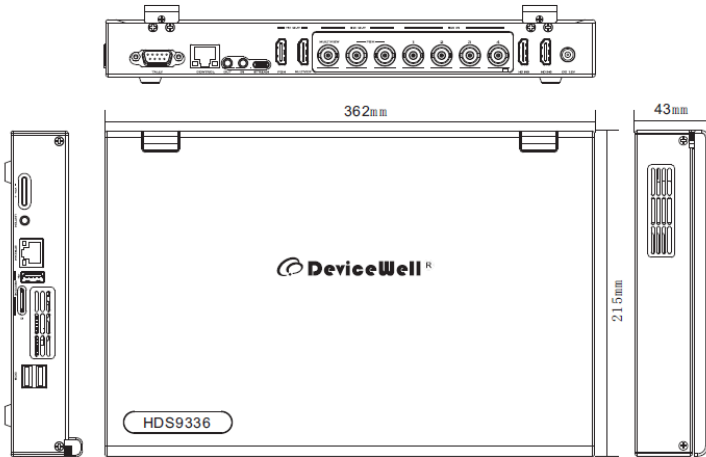
3. Interface Specification

3.1 Interface Introduction

The interface of DeviceWell HDS9336 is shown below

No.	Definition	Description
1	VOL	Monitor volume adjustment
2	PHONE	Audio monitor port
3	RJ45	RTMP Network stream
4	USB/SD Card	SD card/U Disck recording
5	DCB	Cascade equipment, supporting TALLY lamp module
6	TALLY	Direct broadcast call system (DB-15)
7	RJ45	Network upgrade
8	LINE IN/OUT	Analog stereo audio input/output
9	Type-C	UVC output
10	HDMI OUT	PGM output
11	MULTIVIEW OUT	MULTIVIEW output
12	SDI PGM OUT	PGM output, SDI OUT2 custom PGM/PVW output
13	SDI IN	4xSDI input
14	HDMI IN	2xHDMI input
15	DC POWER IN	DC12V/5A power input

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3.2 TALLY Interface
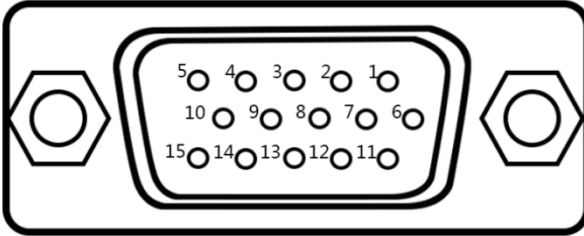
PIN	Function	PIN	Function
11	PGM-IN1	6	PVW-IN1
12	PGM-IN2	7	PVW-IN2
13	PGM-IN3	8	PVW-IN3
14	PGM-IN4	9	PVW-IN4
15	PGM-IN5	10	PVW-IN5
3	PGM-IN6	4	PVW-IN6
5	GND		

Note：PIN1 PIN2 not used.

TALLY : Online schematic：
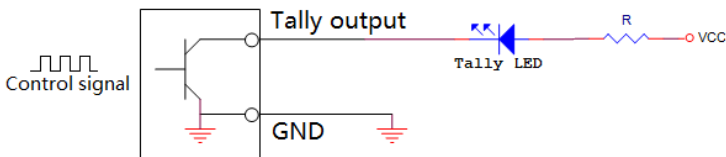
Note：Tally LED: for external display devices

Tally output : Active low (Tally LED is lit) High level is invalid (Tally out is off)

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3.3 Parameter

| Name	Portable Video Switcher	
Model	HDS9336	
Video Signal Input	Input signal	SDI/HDMI Video Signal
	Bit rate	270Mbps~10.2Gbps
	Connector	Standard
	Reflection loss	>15dB 5MHz~3GHz
	Signal amplitude	800mV±10%(SDI /HDMI)
	Impedance	100Ω (HDMI) 75 Ω(SDI)
	Equilibrium	Adaptive
Video Signal Output	Output signal	SDI/HDMI Video Signal
	Bit rate	270Mbps~10.2Gbps
	Connector	Standard
	Reflection loss	>15dB 5MHz~3GHz
	Signal amplitude	800mV±10%(SDI /HDMI/)
	Impedance	100Ω (HDMI) 75 Ω(SDI)
	DC offset	0V±0.5V
	Clock recovery	Optional
Common Parameters	Power supply	12V/DC
	Power	<20W
	Size	362*215*43mm
	Control panel	Support on-site production and integrate multiple buttons.
	Weight	2KG
	Operating temperature	0℃~50℃ No condensation
	Storage temperature	-20℃~75℃
	Working humidity	20%~70%RH
	Storage humidity	0%~90%RH， No condensation

4. Control Panel and Interface

Before using the HD Switcher , please take a few minutes to read this section. This chapter will introduce you the panel and interface of the HD switcher to facilitate your subsequent use and operation.

The new high-strength characteristics of the new aluminum alloy with high-strength characteristics improve the anti-drop, anti-shock and shock-proof capabilities of the whole machine, and effectively protect the internal components of the equipment. Ultra-lightweight features make the unit easier to transport and maintain without the need for additional equipment; it also offers unparalleled thermal performance.

In addition to the innovation of the case, the HD switcher has also been completely optimized for the interface connector. Environmentally friendly materials with new RoHS standards are More demanding in terms of durability and environmental protection, to provide customers with more stable, more environmentally friendly, more cost-effective products.

4.1 Control Panel
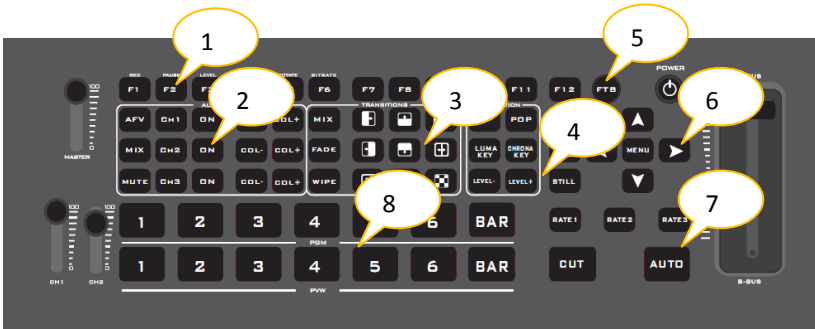
4.1.1 Area Description

NO.	Name	Description
1	Functional area	Currently supports F1-F7 functions
2	Audio Control	Mainly for Audio Follow and mix settings
3	Transition Effect Control	Select transition effects
4	Comprehensive control area	PIP&POP effects
5	FTB	FTB
6	Menu control area	Use keys to set menu information
7	Transition special effects control area	Control transition switching and transition rate adjustment
8	PVW& PGM Select	Live broadcast and preview selection

4.1.2 Key Description

4.1.2.1 Functional area

- F1---REC resolution control

  Press REC to start recording, the F1 button light is on, and the recording state of the guide screen starts to time, and the F1 button is pressed next time and the light is off, and the recording ends.

- F2---PAUSE Recording pause function

  Press the F2 button and the light is on, indicating that the recording is paused, press again and the light is off to continue recording;

  F3---LEVEV Recording rate function

  Press F3 repeatedly to quickly switch between low, medium, high, and ultra-high recording bit rate;

  （6M/12M/18/24M）

  - F4---STREAM   One-click streaming function through the network port

  Press F4 to start streaming. The RTMP character in the normal multi-screen state area of the streaming is displayed in red; the red light behind the RTMP character will always flash or report an error if the streaming is unsuccessful.

- F5—ROTATE One-key portrait function

  Press F5, the recorded screen and the streaming screen will rotate 90 degrees clockwise;

- F6---BITRATE Push stream bit rate setting function

  Press F6 repeatedly to switch the recording bit rate 1-10Mbps;

- F7--- Monitor source adjustment function

  Press F7 repeatedly to switch the monitor input channel

  IN1/IN2/IN3/IN4/IN5/IN6/PGM/PHONE。

4.1.2.2 Audio Control Area

Audio mode is divided into follow   and mixing assignment ;

Follow：The audio is output to the PGM live broadcast following the video, which means what is the audio coming in from the camera, and what is the audio output from the live broadcast of the switcher;

Mixing：Mixing three different audio live outputs at the same time means that I designate the audio of a camera as the live sound, and designate the audio of the camera as the audience applause, and then I use the audio from a mixer to embed it into my switcher; After the audio channel is fixed, the video channel can be switched at will.
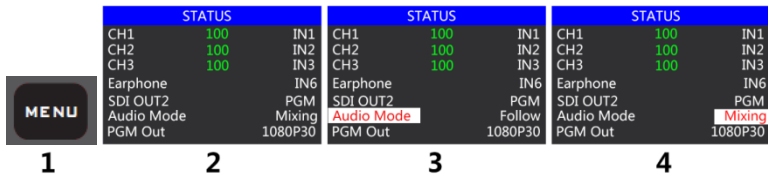
● **Audio mode switching**

Switch the audio mode through the menu button on the operation panel (as shown in Figure 1)

Corresponding to the menu in the lower right corner of the LCD screen (as shown in Figure 2)

Press the menu button to enter the Audio Mode option (as shown in Figure 3)

Press the menu button to enter the mode selection (as shown in Figure 4)

Menu button to select mixing or follow：

● **How to use audio follow mode**

1、First adjust the audio mode to follow through the menu button

Press the CH1 button (the button is on)

The channel of the audio follow mode is on, press COL+ ，Adjust the PGM output volume; switch a video signal with audio to the PGM window, then the audio meter of the PGM window will have sound column fluctuations

If you want to turn off the audio output, you can COL- Press to the end, or press the CH1 button (the button light goes out).

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2、Audio channel   IN1-SDI1、IN2-SDI2、IN3-SDI3、IN4-SDI4、IN5-HDMI5、IN6-HDMI6, Corresponding operation panel keys

3. The volume adjustment of the audio follow mode is controlled by the mixer of the operation panel; press the AFV button of the follow mode, the corresponding CH1 light will also light up, the more the audio fader is pushed up, the volume is Bigger.

Constantly adjust the position of the audio fader of CH1 up and down, the corresponding menu part can also display the current volume level.

4. Audio delay function, select in the menu, enter the main menu-system settings-audio delay-0-30 level (a value means 20 milliseconds).

● **How to use mix assignment mode：**

1. First adjust the audio mode to Mixing through the menu button (as shown in Figure 1)

The status bar of the corresponding LCD screen displays the audio channel source. The factory default of the device is CH1 source IN1, CH2 source IN2, and CH3 source IN3 (as shown in Figure 2)

Two audio channels can choose IN1, IN2, IN3, IN4, IN5, IN6, TRS_IN, TRS_IN means external audio interface input (as shown in Figure 3)
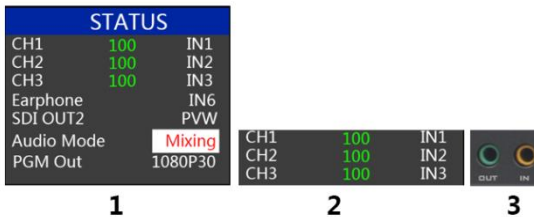
2. Operate the audio control area, press the CH1 button repeatedly to enter the first audio channel to select IN1, IN2, IN3, IN4, IN5, IN6, TRS_IN, and the corresponding menu status bar will change in real time according to your selection (as shown in Figure 1 Show)

After confirming the audio channel you selected, press the CH1 button (the button lights up in blue) (as shown in Figure 2)

Indicates to turn on the first audio channel, and finally turn on the MUTE button master switch (the button lights up in blue) (as shown in Figure 3)

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3. Operate the mixer control area, press the CH2 button repeatedly to enter the second audio channel selection IN1, IN2, IN3, IN4, IN5, IN6, TRS_IN, the corresponding menu status bar will change in real time according to your selection (as shown in the figure) As shown below)

After confirming the audio channel you have selected, press the CH2 button ON (the button is on)

Indicates to turn on the second audio channel, press the corresponding VOL-/VOL+ of the second channel to adjust the audio volume of the second channel. At this time, the audio output from the PGM live broadcast is fixed to the first and second audio channels you turned on .

4. Operate the audio control area, press the CH3 button repeatedly to enter the third audio channel. Select IN1, IN2, IN3, IN4, IN5, IN6, TRS_IN, and the corresponding menu status bar will change in real time according to your selection (as shown in the figure below) Shown)

After confirming the audio channel you have selected, press the ON button (the button is on)

Indicates to turn on the third audio channel, press the VOL-/VOL+ corresponding to the second channel to adjust the volume of the third audio. At this time, the audio output from the PGM live broadcast is fixed to the first, second, and Three-way audio.


● **How to use listen audio：**

Operate the audio control area, press the MUTE button repeatedly to select the monitoring source, the corresponding menu status bar will change in real time according to your selection (as shown in the figure below)

The factory default of the monitor source channel is PGM, the channel selection of the monitor source is IN1, IN2, IN3, IN4, IN5, IN6, PGM, TRS_IN, and the 3.5mm headphone hardware interface is on the side of the switcher

Select PGM for the earphone monitor channel, and adjust the earphone monitor volume through the red fader of the mixer; select the IN1, IN2, IN3, IN4, IN5, IN6, TRS_IN audio channel, and the earphone monitor fixed volume cannot be adjusted.

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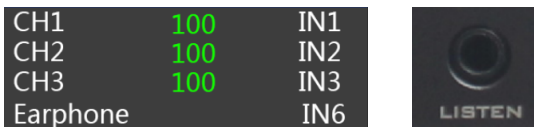
4.1.2.3 Transition control area

There are 12 transition modes:

MIX mixed special effects transition, FADE fade-in and fade-out transition, and WIPE wipe transition, as shown on the right
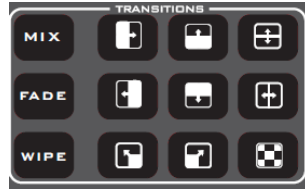
- ### MIX effects

The MIX effect is a transition effect. After setting, the original live screen will gradually fade in the main output of the transition, and then it will completely transition to the new live screen.

Click MIX **MIX** in the special effect control area (it shows a green light after pressing), then click the CUT button or use the T-Bar or AUTO to switch. The effect diagram is as follows

A ——————————————————> B
MIX transition effects, superimpose and gradually superimpose the B picture on the A picture, until the end of the transition, the picture is completely replaced by the B picture

- ### FADE in and fade out transition effects

Click FADE **FADE** in the special effect control area (it will show a green light when pressed), then click the CUT button or use the T-bar or AUTO to switch. The effect diagram is as follows


A ——————————————————> B
FADE in and fade out special effects, A gradually darkens the picture until it is completely black, and then gradually

Gradually change from black to B screen

- **WIPE special effects transition**

There are four transition methods for Wipe

Up transition: Click **WIPE** in the special effect control area (press and display a green light), then click in the special effect control area (press and display a green light), and then click the CUT button or use the T-bar or AUTO to switch. The effect diagram is as follows, the other three transition operations are the same.

A ——————————————→ B
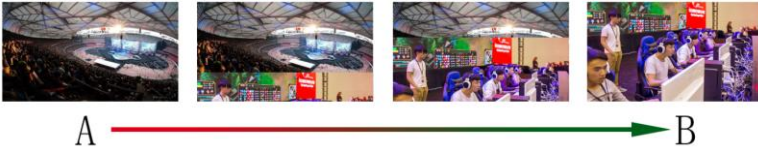
Up wipe transition effects, the A picture remains unchanged,
and the B picture moves through the upward direction.

- **Adjustment of transition rate**

When operating the transition special effect control area, you can control the transition rate by operating RATE1, RATE2, and RATE3 in the key panel. Note: The effect is only available when using AUTO transition
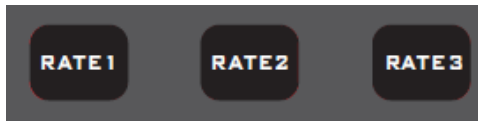
4.1.2.4 Integrated control area

Optimize the PIP/POP implementation method. When the PIP/POP function is turned on, the PGM main screen will be superimposed on the PVW preview screen, and then the live broadcast will be cut out;

- **PIP Picture in Picture Special Effects**

Picture-in-picture effect: Press **PIP** on the control panel (the green light will be displayed after pressing), then click the CUT button or use the T-Bar or AUTO to switch. The effect diagram is as follows

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The information on the LCD screen will switch to the PIP picture-in-picture setting, which can be set as required after pressing the knob. As shown on the right

PIP size and position

PIP	
Screen Select	1
Horizontal	0
Vertical	0
Display Size	Small
Border switch	ON
Border width	2
Border color	Green

You can use the knob to set the PIP picture-in-picture parameters, as follows (the horizontal position/vertical position size is based on the smallest display image).

Horizontal position setting: The value from the upper left end to the upper right end is 0-140, and the value will increase/decrease by 10 for each division of the knob.

Vertical position setting: The value from the upper left end to the lower left end is 0-810, and the value increases/decreases by 10 every time you turn the knob.

Display size setting: You can choose small/medium/large settings.

- **POP** Picture out picture effects

Picture out picture effect: Press **POP** on the control panel (the green light is displayed after pressing), then click the CUT button or use the T-bar or AUTO to switch. The effect diagram is as follows

The information on the LCD screen will switch to the POP picture outside picture setting, which can be set according to your needs after pressing the knob. As shown on the right

POP	
Screen Select	2
Horizontal	0
Vertical	270
Display size	Large
Border switch	ON
Border width	2
Border color	White

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POP size and position

You can use the knob to set the parameters of the POP picture outside picture, the situation is as follows

Picture selection setting: You can choose 1/2 pictures.

Horizontal position setting: the value from the upper left end to the upper right end is 0-960, and the value increases/decreases by 10 every time you turn the knob.

Vertical position setting: The value from the upper left end to the lower left end is 0-540, and the value increases/decreases by 10 every time you turn the knob.

● **Freeze screen function**

The STILL button is defined as the screen freeze function. Press the button to turn on the green light to turn on the screen freeze function, press the button to turn off the green light, and the screen freeze function to turn off;

● **FTB emergency black field**

The FTB button is defined as the emergency black field screen output, press the button and the green light flashes to turn on the FTB emergency black field output function, press the button to turn off the green light, and the FTB emergency black field function is off；

4.1.2.5 PGM and PVW

● **Introduction of multiview output window**

Preview and Program are pre-monitoring and live output respectively. As shown below

PVW   PGM

There are 6 windows at the bottom of the multiview, corresponding to the input source monitoring, respectively corresponding to buttons 1-6 on the switcher control panel. As shown below


- **PGM and PVW output signal**

After the device is connected to the video signal source, press 1 (PGM) and 2 (PVW) in the button panel, and the live and preview signal sources in the output multi-screen monitor are 1 (PGM) and 2 (PVW) respectively, the signal sources are SDI IN1 and SDI IN2 respectively. The effect diagram is as follows

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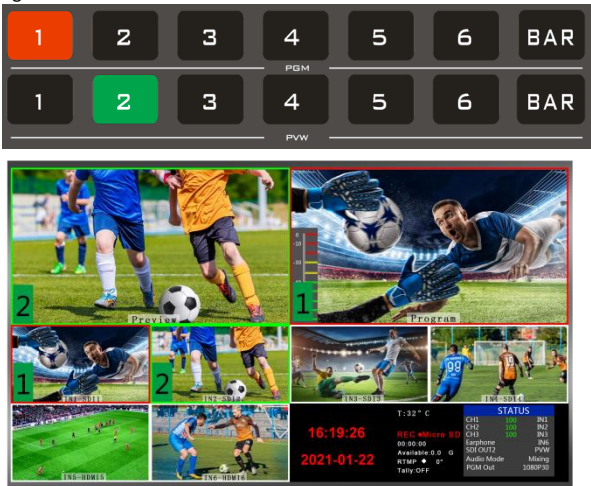
- ● **PGM and PVW source switching**

If you want to switch between live broadcast and preview signal sources in multiple screens (Live ⇌ preview)

Suppose you want to convert the live source 1 (PGM) and preview source 2 (PVW) in the multi-screen into 2 (PGM) and 1 (PVW), just press 2 (PGM) and 1 (PVW), then use the menu to switch. The live PGM signal source 1-6 can be switched freely with the preview PVW signal source. The effect diagram is as follows
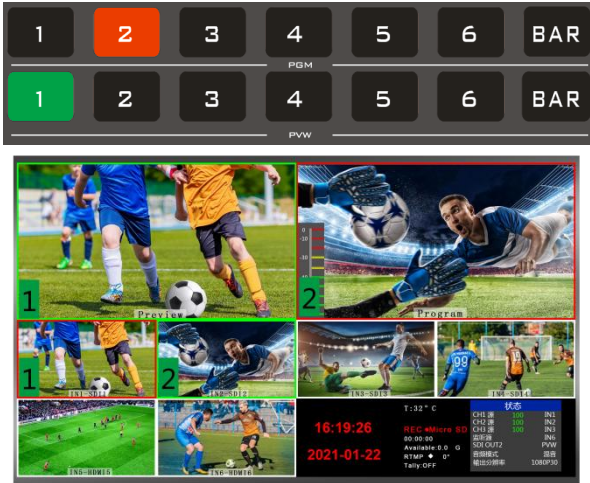
After pressing the button in the button panel, the screen will output color bars.

- ● **Luma Key**

Turning on this function will deduct the black part of the key source. Then overlap with the background image to achieve the purpose of keying and superimposing the background. This function is generally used for superimposing subtitles in a virtual studio.

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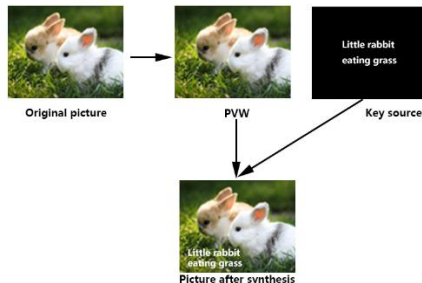
● **The panel realizes luma keying**

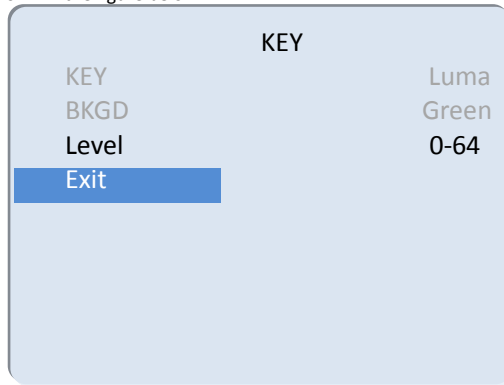Switch the white font video or picture with black background to the PVW preview window, turn on the brightness key function of KEY1, at this time a brightness key parameter setting interface will appear on the LCD, and then use CUT/AUTO/T-Bar to switch to superimpose the characters on PGM,

Luma key settings:

After pressing luma [LUMA KEY] Key, the display menu will display the current luma key information, as shown in the figure below.

```
                        KEY
        KEY                            Luma
        BKGD                           Green
        Level                          0-64
        Exit
```

Under the menu, you can set the key source, select the video source, press the menu, and then adjust various parameters through the menu

● **Chroma KEY**

Chroma key keying supports dynamic video source image and static source keying. Switching the opportunity to key out the blue or green part of the key source, keep other colors, and then overlap with the background image to achieve the purpose of keying and superimposing the background. This function generally used for superimposing subtitles in virtual studios.

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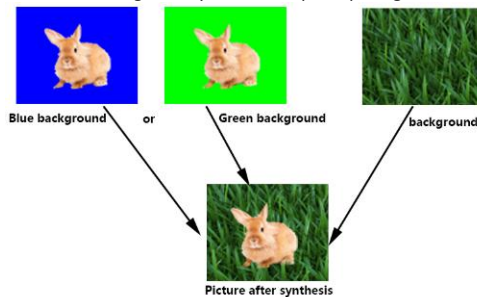
● **The panel realizes chroma keying**

Switch the blue background or green background to the PVW preview window, and then turn on the Chroma KEY function. At this time, a chroma key parameter setting interface will appear on the LCD screen. Use the knob to select the background of your keying. After selection, you can use CUT/AUTO/fader to achieve keying. At this time, the image you want to superimpose appears on the PGM live broadcast. In the picture.

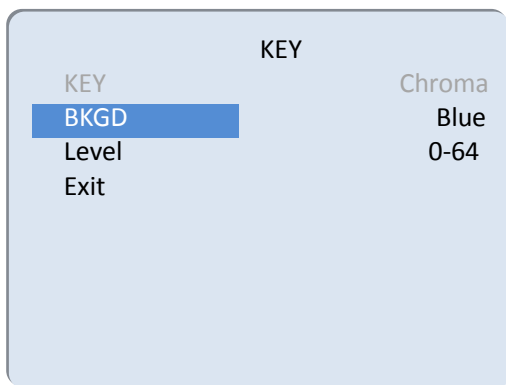When the key CHROMA KEY is pressed, the display menu will display the current chroma key keying information, as shown in the figure below.

```
                    KEY
   KEY                          Chroma
   BKGD                           Blue
   Level                          0-64
   Exit
```

The video source item can select the key source, the KEY type has chroma key_green and chroma key blue, and the level setting range is 0-64.

5. Stream instructions

1、HDS9336 is a hardware streaming device, which needs to be connected to the LAN through the STREAM interface on the side of the device; then enter the streaming settings in the device menu, there is a Stream ip corresponding to the IP address behind, this IP address is automatically obtained by connecting to the LAN IP address, you need to enter the WEB interface through this IP address;

```
        Stream Settings
   Stream Type           RTMP
   Steam Server        2-NONE
   Stream BitRate       6 Mbps
   Stream IP            0.0.0.0
   Return
```

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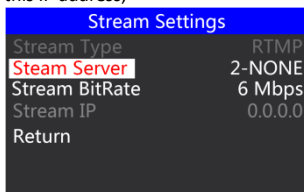
2. First, we need a computer, open the browser and enter the IP address in the push streaming setting menu of our device;

For example, in the following figure, we fill in the automatically obtained 192.168.1.233 IP address into the browser to search, and then enter the WEB interface;

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3、User setting

The screen rotates clockwise 0/90/180/270 degrees, the drop-down box selection takes effect immediately, and the recorded video and the streaming video rotate at the same time.

The recording bit rate corresponds to the same setting in the menu, low, medium, high, and super high levels.

The streaming code rate setting range is 1-10Mbps, and the drop-down box selection will take effect immediately;

4、Streaming settings

Index 1-8 groups means that 8 groups of stream addresses can be stored inside the device;

The user name means that each group of push addresses can be named by themselves, and the naming is only valid for letters and numbers; in the stream setting in the menu, you can see the stream name you saved on the WEB interface;

The streaming address is the streaming address of the live streaming platform, and the settings need to be saved after filling in; you can view the name of the streaming platform you saved in the device menu.

The push streaming status will be displayed in the multi-screen status bar when the streaming is enabled. The icon behind RTMP is always bright red, indicating that the streaming is successful; the 0 degree behind indicates the degree of screen rotation at this time; (the unsuccessful streaming icon is gray or flashing). As shown below

5、Analysis of WEB interface functions

1) When the recording function is turned on, the screen rotation, recording bit rate and other functions of the WEB interface are prohibited to be set, so please set the parameters before turning on the recording function.

2) When the push streaming function is enabled, the push streaming bit rate and screen rotation function can be changed at any time.

3) If the screen rotation parameters are changed, the recording and streaming functions will take effect accordingly. Therefore, the recorded video and the streaming video are all rotated images. Please confirm the parameters you want before setting.

4) The streaming code rate and recording level are unilaterally changed on the device side, and the state of the WEB interface will not be automatically refreshed. You need to manually press the F5 key of the keyboard to refresh the interface.

5) After connecting to the WEB interface, you can change the IP address in the interface. If you can't remember the IP address of the WEB interface for a long time, you can check the WEB interface IP address in the menu push settings.

6) To change the IP address and streaming settings, you need to save the settings under the parameter setting module.

7) The index in the stream settings can save 8 groups of streams, the user name only displays English characters and numbers, and the stream address is the address of the live broadcast platform.

8) You can connect the streaming address to the device through the WEB interface in advance, and save the live streaming platform address in the device in advance. The device can select the previously saved live streaming platform address to push streaming at any time on site.

9) In the WEB interface, the read settings under the push stream settings can read the push stream addresses saved in the device; for example, there are many groups of push stream addresses saved in the device, first select the index, and then click read, you can read it The streaming address previously saved in the device.

10) After the device is powered off, the screen rotation function of recording and streaming is not saved.

6. **System Menu Setting**

There is a status menu display in the lower right corner of the device's multiview, and the device status is displayed by default when it is turned on;

CH1/CH2/CH3 source indicates the current mixing channel status of the device;

The monitor source represents the audio channel currently being monitored;

The SDI OUT2 interface can customize the PGM/PVW output and switch through the knob;

The audio mode corresponds to the selection of mixing and following, which can be selected through the knob;

The output resolution is the PGM output of the corresponding device, which can be switched by the knob, 1080I50/60, and 1080P24/25/30/50/60;

In the power-on default state, press the knob to enter the main menu, as shown in the figure below.

Status		
CH1 SRC	100	SDI1
CH2 SRC	100	SDI2
CH3 SRC	100	SDI3
Listen SRC		PGM
SDI OUT 2		PGM
Audio Mode		MIX
Output resolution		1080P30

Main Menu
System Setting
IP Setting
Record Setting
Stream Setting
Device Info.
Exit

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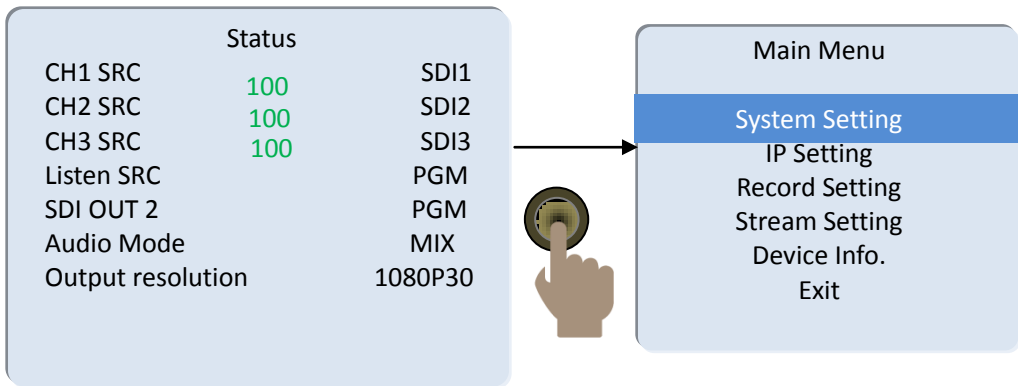
6.1 System Setting

After turning the knob to the system setting, you can click the knob to enter the system setting submenu, as shown below:

```
              System Setting
   Language selection          EN/CH
   Time display            Digital/analog
   F1    PIP/POP/KEY/ STREAM / STILL /OFF
   F2    PIP/POP/KEY/STREAM/STILL/OFF
   Audio delay                  0-30/ OFF
   Reset
   Exit
```
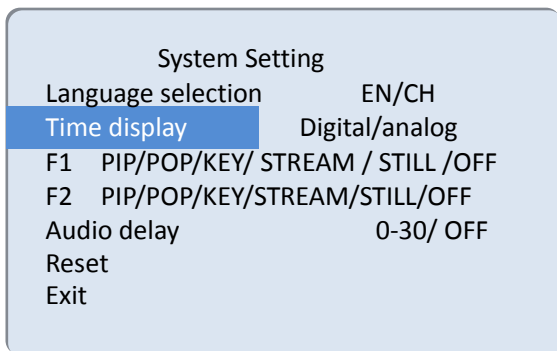
F1, F2: Mainly customize streaming and screen freezing functions;

The audio delay corresponds to the PGM output video, there are 0-30 values that can be adjusted, and one value means 20 milliseconds;

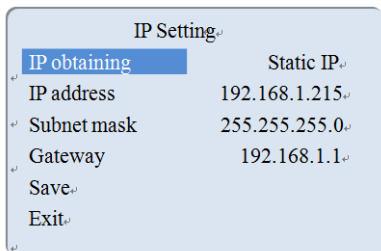Whether the date display switch is displayed on the analog clock;

6.2 IP Setting

```
           IP Setting
   IP obtaining            Static IP
   IP address          192.168.1.215
   Subnet mask         255.255.255.0
   Gateway               192.168.1.1
   Save
   Exit
```

There are two modes for obtaining an IP address. One is dynamic configuration, and the other is a static IP address that needs to be manually configured. Remember to save and exit after the setup is complete.

Note: When setting the device IP address, do not repeat the IP address to avoid address conflicts.

6.3 Record Setting

```
                    Record Setting
Rate Control                        VBR
Level            Low/Medium/High/Super High
Storage               Micro SD card
Exit
```

The level can be set in the recording settings, there are low, medium, high and super high to set.

6.4 Stream Setting

```
                    Stream Setting
Stream Type                         RTMP
Stream Server                       1-8-
Stream Rate              1-10Mbps
Stream IP           192.168.xxx.xxx
Exit
```

6.5 Device Information

```
                Device Information
S/N                 2f-21-24-17-13-
                    13-18-08-11-02
Exit
```

7. **Failure and Maintenance**

● **Common Faults and Solutions**

(1) The output image may be flickered by interference. The quality of the wire used may be poor, and the shielding layer of the wire is not well prepared. When there is a strong radio near the use environment, radio waves may interfere with the transmission of the signal, resulting in unstable signal flicker. Please use the wire produced by regular manufacturers, such as Belden, Jia Nai Mei.

(2) When plugging in the audio and video interface, if there is obvious static electricity, the device power ground wire may not be good grounding, please ground in the correct way; otherwise it will easily damage the host and shorten the life of the mainframe.

(3) When RJ45 (generally: Computer network port) cannot control the Switcher, check whether the communication port set by the control software corresponds to the serial port of the connected device; check if the communication port of the computer is good.

● **Maintenance**

Use a soft, dry cloth to clean the device. Do not use alcohol, paint thinner or benzene to clean. Make sure that the device is stored and operated in an environment away from liquids and stains.

● **Warranty information**

The company guarantees that the process and materials of the product are not defective within 12 months after purchase from the company or its authorized distributors, under normal use and service support. We offer a one-year warranty after sale.

8. More switcher options

No.	Model	Description
1	HDS9101	Portable 6-CH switcher（4xSDI+2xHDMI ,15.6"LCD）
2	HDS9105	Portable switcher（4HDMI +1DP）
3	HDS9105C	Portable switcher（4HDMI +1DP）
4	HDS9125	Portable switcher (4HDMI+1DP)
5	HDS9135	Portable switcher (4HDMI+1DP)
6	HDS9325	Portable switcher (4HDMI+1DP)
7	HDS9335	Portable switcher (4HDMI+1DP)
8	HDS9226	Portable switcher (4SDI+2HDMI)
9	HDS9236	Portable switcher (4SDI+2HDMI)
10	HDS9326	Portable switcher (4SDI+2HDMI)
11	HDS9336	Portable switcher (4SDI+2HDMI)
12	HDS9108	Portable switcher (4HDMI+4SDI)
13	HDS9106	Portable switcher (4SDI+2HDMI)
14	HDS9106MINI	MINI Portable switcher (4SDI+2HDMI)
15	HDS9110	Portable switcher (8 SDI+2 HDMI)

16	HDS9112	Portable switcher (12 SDI)
17	HDS6506	All-in-one switcher(6-CH)
18	HDS6110	All-in-one switcher (10-CH)
19	HDS6112	All-in-one switcher (12-CH)
20	HDS7105S	Simple switcher(4HDMI+1DP)
21	HDS7105	Simple switcher(4HDMI+1DP)
22	HDS7105P	HDS7105 with T-Bar
23	HDS7205S	Simple switcher(4HDMI+1DP)
23	HDS7205	Simple switcher(4HDMI+1DP)
25	HDS7106	Simple switcher(4SDI+2HDMI)