<广播电视台/演播室专用>

DeviceWell®
中帝威科技

使用手册

Users' Manual

VER 2.0

六通道高清视频切换台　**6-CH HD SWITCHER**

语言 LANGUAGES

安全须知

如果忽视这些注意事项，可能导致人员伤害或伤亡，可能导致设备损坏、数据丢失、设备性能降低或不可预知的结果。

电器安全特性

- 为避免可能的电击造成严重损害，在搬动产品之前，请先将电源线暂时从产品电源接口处移除。
- 当您需要加入新的硬件到产品中或移除产品中现有硬件时，请务必先关闭产品电源。条件允许的情况下，建议将电源线暂时从产品接口处移除。
- 使用前应确认产品是否已接地，电源电压是否已调整到产品适用的范围内。否则将可能导致产品以外损坏、性能降低或不可预知的结果。
- 请勿使用松动或损坏的电源插座或在手潮湿的时候接触电源插座，否则将有触电和起火的危险。
- 若听到电源线和电源接口处有噪音，请立即拔下电源线，并向您的销售代表寻求帮助，否则将有起火或触电的危险。
- 若如有异物或液体进入产品或需要清洁产品时，请从产品上移开电源线以及其他的任何电缆线，否则将有触电、起火和损坏产品的危险。
- 若电源已损坏，请不要尝试自行修复。请联系专业技术服务人员或经销商来处理。

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.

由于产品功能的不断更新，您手中的用户手册可能会与实际应用有所出入，最新用户手册请从 Devicewell 官方网站下载，此用户手册更新日期为 2025 年 07 月 03 日。

Due to the continuous update of product functions, the user manual in your hand may differ from the actual application. Please download the latest user manual from the official website of Devicewell. The update date of this user manual is July.3, 2025.

注意：不同型号对应不同的产品功能，请根据您所购买型号按用户手册内型号对照表匹配所购买型号的参数，本说明书以 HDS9336 的功能参数为例展开说明。

Note: Different models correspond to different product functions. Please match the parameters of the purchased model according to the model comparison table in the user manual according to the model you purchased. This manual takes the function parameters of HDS9336 as an example to expand the description.

未来如有技术变动，恕不另行通知。

In the future, there will be technical changes without notice.

目录

1.概述

1.1 产品介绍

中帝威(DeviceWell)高清视频切换台，采用便携式一体化设计，HDS9226/HDS9326 自带 11.6 英寸高清监视屏，可以将多画面直接输出显示。标准尺寸：190mm*285mm*42.6mm；HDS9336 自带 15.6 英寸高清监视屏，可以将多画面直接输出显示。标准尺寸：362mm*215mm*42.6mm，全铝合金外壳，体积小重量轻，可适用于外出场景的视频特效切换需求。设备集成多画面预监处理器、特效发生器、混合音频处理器、OSD 菜单、控制键盘、液晶显示面板等切换台常用组件。

HDS9226/HDS9326/HDS9336 支持 4 路广播级 SDI 与 2 路 HDMI 输入，共计 6 路视频信号。除自带的液晶显示预监画面外，可同步输出外部预监信号，方便用户扩展。设备支持 SDI/HDMI 内嵌音频+外部模拟音频，混合处理后，可嵌入到输出的 SDI/HDMI 信号中，也可从模拟端口输出。所有输入信号的分辨率自动适应，输出信号分辨率可按需求选择，相当灵活,六通道切换适用于现场演出、课程录制与棚内导播等，该切换台具备多种功能，如多种格式视频输入且输入分辨率自适应，模拟音频输入输出，音频加嵌解嵌，混音，抠像，画面开窗，TF 卡录制,RJ45 网口推流，具备远程升级能力。

2.功能特性

中帝威六通道高清视频切换台是一款多功能切换台，无需专业知识，只需通过简单操作即可进行视频切换和音频混合。本机可在广电、直播和各种活动场所中使用。

- 便携式一体化设计
- 高级黑金属机身，强度高
- 集成控制键盘
- 自带 11.6 英寸/15.6 英寸导播画面监看
- 接口隐藏式设计，防止接口摔坏；
- 支持 4 路 SDI 和 2 路 HDMI 输入
- 支持 3.5mm 模拟音频输出监听任意一路音频
- 支持 PIP/POP 画面开窗功能
- 音频支持跟随和混音指派模式
- 支持 Type-c 接口 UVC 输出
- 支持 TF 卡、U 盘录制 PGM 画面，录制视频质量可选择
- 支持网络 RTMP 推流
- 1 路模拟音频输入；1 路模拟音频输出；支持 SDI 音频解嵌,外部音频和 SDI/HDMI 解嵌音频可任意指派输出，支持音频跟随以及混音切换功能
- PGM 输出：2 路 SDI 和 1 路 HDMI
- 多画面输出：1 路 HDMI 和 1 路 SDI
- 支持 1 路 SDI 输出自定义 PGM/PVW
- 支持 MIX/FADE/WIPE 切换特效；支持 CUT 硬切、AUTO 自动切换及 FTB 应急切换，切换速率可设置；
- 支持 PIP 功能，子窗口大小、位置可任意调整，边框厚度和颜色可设置。
- 转场速率可调整
- 支持 Tally 接口接通话系统
- 内置机箱温度检测及风扇智能控制系统
- 设备内部也可产生彩条测试画面输出
- 支持软件在线升级
- 支持一键画面冻结功能
- 支持配套中帝威 TALLY 灯系统
- 1 组 KEY，支持亮度键、色度键，抠像和叠加字符功能

2.1 HDS 系列 6 通道高清视频导播切换台型号功能对照表

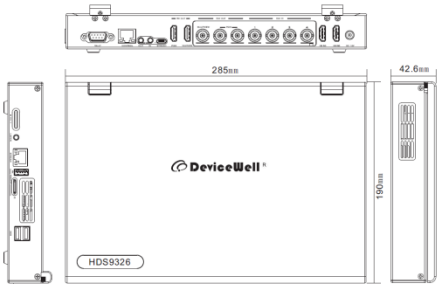
HDS9226/HDS9326

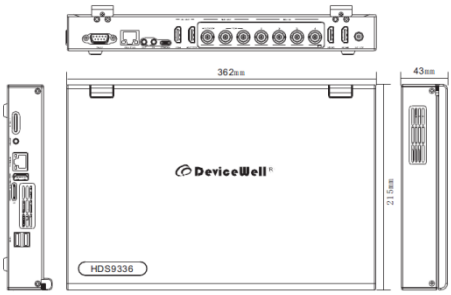
HDS9336

功能分区	功能介绍	HDS9226	HDS9326	HDS9336
产品接口	输入通道	4*SDI+2*HDMI	4*SDI+2*HDMI	4*SDI+2*HDMI
	PGM 输出	2*SDI+1*HDMI	2*SDI+1*HDMI	2*SDI+1*HDMI
	多画面预监输出	1*SDI+1*HDMI	1*SDI+1*HDMI	1*SDI+1*HDMI
	Type-C/ UVC 输出	√	√	√
	DCB 控制	√	√	√
	1 路 LINE IN 输入	√	√	√
	1 路 LINE OUT 输出	√	√	√
	3.5mm 模拟音频监听	√	√	√
	TF 卡/U 盘录制 PGM 画面	X	√	√
	网口 RTMP 推流	X	√	√
	T-bar 一键切换	X	X	√
	Tally/网络控制	√	√	√
	网口在线升级	√	√	√
	3 组音频控制推子	X	X	√
	液晶屏尺寸	11.6 寸	11.6 寸	15.6 寸
特效处理	色度键 Chroma Key	X	√	√
	亮度键 Luma Key	X	√	√
	音频跟随	√	√	√
	音频混音	√	√	√
	自定义横/竖屏显示输出多画面	√	√	√
	一键画面冻结	√	√	√
	风扇智能温控速率调节	√	√	√
	PC 软件控制	√	√	√
	MIX /FADE 特效切换	√	√	√
	3 种转场速率调节	√	√	√
	竖屏推流、录制画面	X	√	√
	画中画（PIP）	√	√	√
	画外画（POP）	√	√	√
	彩条信号输出	√	√	√
	分辨率支持	1080P	1080P	1080P
	输入分辨率自适应	√	√	√
	色域	RGB	RGB	RGB
	输出分辨率可调	√	√	√
	FTB 应急黑场	√	√	√

2.2 设备尺寸

HDS9226/HDS9326 尺寸：285mm*190mm*42.6mm　　HDS9336 尺寸：362mm*215mm*43mm



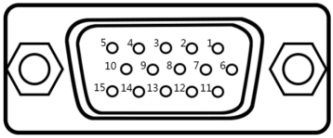


3.接口规格说明

3.1 接口介绍

序号	接口定义	说明
1	VOL	监听音量调节
2	PHONES	3.5mm 音频监听
3	RJ45	RTMP 网口推流
4	USB/TF 卡槽	TF卡/U盘录制
5	DCB	级联设备、配套 TALLY 灯模块
6	TALLY	接导播 TALLY 灯系统（DB-15）
7	RJ45	网络升级
8	LINE IN/OUT	模拟立体声音频输入/输出
9	Type-C	UVC 输出
10	HDMI OUT	PGM 直播输出
11	MULTIVIEW OUT	HDMI 与 SDI 多画面分割输出
12	SDI PGM OUT	PGM（直播）输出，SDI OUT2 自定义 PGM/PVW 输出
13	SDI IN	4 路 SDI 输入
14	HDMI IN	2 路 HDM 输入
15	DC 12V	DC 12V 电源

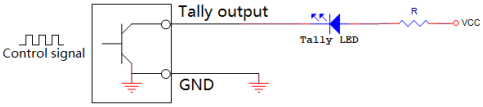
3.2 TALLY 接口



注：PIN1 PIN2 未使用

TALLY 联机示意图：

PIN	功能	PIN	功能
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		



注：Tally LED：为外接显示设备

Tally output ：低电平有效（Tally LED 亮灯）

高电平无效（Tally out 熄灯）

3.3 技术参数

产品名称	**便携式 4 路 SDI+2 路 HDMI 6 通道切换台**	
产品型号	**HDS9226/HDS9326/HDS9336**	
视频信号输入	输入信号	SDI/HDMI 视频信号
	码率	270Mbps~10.2Gbps
	连接器	标准
	信号幅度	800mV±10%(SDI/HDMI)
	阻抗	100Ω (HDMI) 75Ω (SDI)
	均衡	自适应

视频信号输出	输出信号	SDI/HDMI 视频信号
	码率	270Mbps~10.2Gbps
	连接器	标准
	信号幅度	800mV±10%(SDI/HDMI)
	阻抗	100Ω (HDMI) 75Ω (SDI)
	时钟恢复	可选
控制参数	控制协议	CAN 总线
	连接端口	15 针 D 型口
	网络控制	RJ45,100M
常规参数	电源	DC 12V
	功率	20W
	控制面板	支持现场制作，集成多种按键
	工作温度	0℃~50℃无冷凝
	存储温度	-20℃~75℃
	工作湿度	20%~70%RH
	存储湿度	0%~90%RH，不结露

4.控制面板及接口

在使用中帝威高清切换台 HDS9226/HDS9326 /HDS9336 设备前，恳请您能花几分钟时间阅读本章节。本章节将为您详细介绍中帝威高清切换台的面板及接口，以方便您后续的使用和操作。

中帝威高清切换台设备外壳使用新型金属材料制成，新型金属外壳具备高强度特性提升了整机的抗摔、抗压、抗震能力，有效保护了设备内部的元器件。超轻薄的特性使得设备在运输和维护过程中更加便捷，无需借助其它设备；同时也具有无可比拟的散热性能。

除了外壳的创新，中帝威高清切换台对接口连接器也做了全新的优化。采用全新 RoHS 标准的环保材料，在耐用程度和环境保护上要求更为苛刻，为您提供更稳定，更环保，性价比更高的产品。

4.1 控制面板

4.1.1 分区说明

序号	名称	说明
1	功能区	目前仅支持 F1-F7 功能
2	音频控制区	主要是对音频跟随混音进行设置及音频音量控制
3	转场特效控制区	选择转场特效
4	综合控制区	PIP、POP、抠像、竖屏、STILL 特效和分辨率设置
5	FTB	黑场
6	菜单控制区	使用按键设置菜单信息
7	PGM 与 PVW 选择区	直播与预监选择
8	转场控制区	控制转场切换和转场速率调整

4.1.2 按键说明

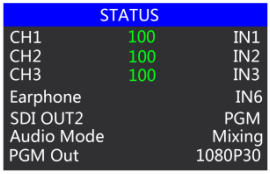
4.1.2.1 功能区

- F1--- REC 录制键
  按下 REC 录制开始，F1 按键灯亮，导播画面的录制状态开始计时，在次按下 F1 按键灯熄灭，录制结束。
- F2---PAUSE 录制暂停功能
  按下 F2 按键灯亮，表示录制暂停，再次按下灯熄灭继续录制；
- F3---LEVEL 录制码率功能
  循环按下 F3，快速切换录制码率低、中、高、超高；码率 6M/12M/18/24M
- F4---STREAM　网口一键推流功能
  按下 F4，开始推流，推流正常多画面状态区域 RTMP 字符显示红色；推流不成功 RTMP 字符后面的红色灯会一直闪烁或者报错提示。
- F6---BITRATE 推流码率设置功能
  循环按下 F6，切换录制码率 1-10Mbps;
- F7---LISTEN 监听源调整功能
  循环按下 F7，切换监听输入通道 IN1/IN2/IN3/IN4/IN5/IN6/PGM/ AUX_IN。

4.1.2.2 音频控制区

- **音频跟随模式的使用方法：**

1、按下操作面板的 AFV 按键，按键此时会亮绿色灯 ，对应多画面的菜单也会显示当前音频状态 ，菜单里面 Audio Mode 显示 Follow，表示音频处于跟随模式；如右图所示



（注意：图片中显示的按键颜色与实际效果图片有所偏差，请见谅）

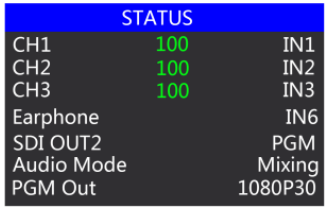
2、音频跟随模式的通道有 IN1-SDI1、IN2-SDI2、IN3-SDI3、IN4-SDI4、IN5-HDMI5、IN6-HDMI6，对应的操作面板的按键（此时按键面板中 PGM 的 2 亮起，表示正在操作 IN2 信号源）如下图所示

3、音频跟随模式的音量大小调整，通过操作面板的按键来控制 ；按下跟随模式的 AFV 按键（显示绿灯），会默认跟随 PGM 直播通道的音频，此时需要增加或是减少音量，只需要按 AFV 旁边的 VOL+（增加音量）和 VOL-（减少音量）来调整。或者不断上下调整 CH1 的音频推子的位置，对应的菜单部分也可以显示当前音量大小。

- **混音指派模式的使用方法：**

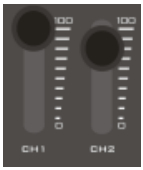
1、按下操作面板的 MIX 按键，按键此时会亮绿色灯，如右图所示

对应多画面的菜单也会显示当前音频状态 ，菜单里面 Audio Mode 显示 Mixing，表示音频处于混音指派模式，如右图所示

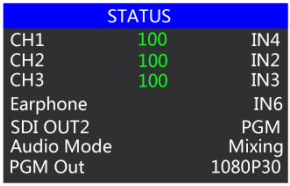


2、混音指派的通道有 IN1、IN2、IN3、IN4、IN5、IN6、AUX_IN 在混音指派模式下，多了两种音频加嵌功能；PHONE_IN 表示 3.5 音频接口，MIC_IN 表示 3.5mm 麦克风音频接口 ；PGM 直播输出可以同时任意混音两路音频，两路音频的音量大小也可以分别调整。

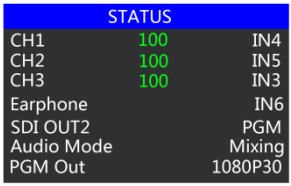
3、混音指派的音频通道调整：是通过面板上面的按键来调整的，其中包括音频控制区和菜单控制区来调整的。如下图所示



在默认状态栏的情况下，按方向键“下”后，状态栏中会出现光条。光条移动到 CH1 的时候，按下“MENU”键进入第一路音频的通道选择，使用菜单中的“上下”按键进行通道选择，可以从 IN1、IN2、IN3、IN4、IN5、IN6、AUX_IN 选择，确定选择后按下“MENU”退出；如右图所示第一通道的音频源从 IN1 变成了 IN4。



CH2 音频通道的选择跟 CH1 相同的操作方法；在默认状态栏的情况下，按方向键“下”后，状态栏中会出现光条。光条移动到 CH2 的时候，按下“MENU”键进入第二路音频的通道选择，再按下“MENU”按键进入第二路音频通道选择有 IN1、IN2、IN3、IN4、IN5、IN6、AUX_IN，确定选择后按下“MENU”退出；如右图所示第二通道的音频源从 IN2 变成了 IN5。

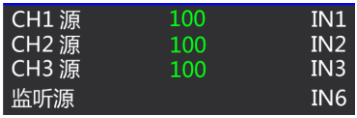


4、音频指派通道的音量调整：直接按下音频控制区 VOL+/VOL-键来控制音量大小，或者不断上下调整 CH1 和 CH2 的音频推子的位置，对应的菜单部分也可以显示当前音量大小。音量值在 0-100 范围，如右图所示第一路通道的音量从 44 增加到了 100。 第二路混音音量大小调整的操作同第一路混音音量调整操作一致。

音量推子 MASTER:表示总音量推子，在混音跟随模式下都需要把此推子推到最顶上。

- **监听音频的使用方法：**

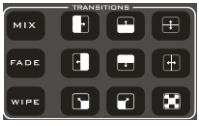
操作音频控制区域，循环按下 F7 按键选择监听源，对应菜单状态栏会实时根据你的选择进行变化（如图下图所示）



监听源通道出厂默认是 PGM，监听源的通道选择有 IN1、IN2、IN3、IN4、IN5、IN6、PGM、AUX_IN，3.5mm 耳机硬件接口在切换台侧面

监听耳机通道选择 PGM，耳机监听音量通过调音台红色推子进行调整；选择 IN1、IN2、IN3、IN4、IN5、IN6、AUX_IN 音频通道，耳机监听固定音量不可调整。

4.1.2.3 转场特效控制区



转场模式分为三种：

MIX 混合特效转场、FADE 淡入淡出转场、WIPE 划像转场

- **MIX 混合转场特效**

MIX 特效为混合转场特效，设置后转场在主输出会有原直播画面逐渐减淡，然后直到完全过渡到新的直播画面。

点击特效控制区的 MIX 

（按下后显示绿灯），然后点击 AUTO 或推杆或 CUT 便可以进行切换。效果图如下

MIX 混合过渡特效，在 A 的画面中叠加逐渐叠加 B 画面，直至转场到最后，画面完全替换为 B 画面

- **FADE 淡入淡出转场特效**

点击特效控制区的 FADE 

（按下后显示绿灯），然后点击 AUTO 或推杆或 CUT 便可以进行切换。
效果图如下

FADE 淡入淡出特效，A 逐渐画面变暗直至完全为黑色，再逐渐由黑色变为 B 画面。

- **9 种特效划像转场**

划像转场方式一共有 9 种转场方式

向上转场：点击特效控制区的 
（按下后显示绿灯）然后点击 AUTO 或推杆或 CUT 便可以进行切换。效果图如下，其他 8 种转场操作相同。

向上划像转场特效，A 画面不变，B 画面通过向上方向逐渐划入，直至画面完全变成 B 画面

- **转场速率调整**

在操作转场特效控制区时，还可以通过操作按键面板中的 RATE1、RATE2、RATE3 控制转场速率义，（rate1：640ms；rate2：1280ms；rate3：2560ms）注：只有使用 AUTO 转场时才有效果

4.1.2.4 综合控制区

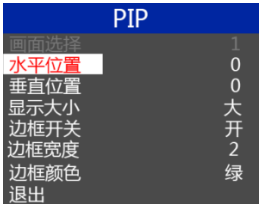
- **PIP 画中画特效**

画中画特效：按下控制面板的 

（按下后显示绿灯），

然后点击 AUTO 或 CUT 或推杆便可以进行切换。效果图如右图
此时的液晶屏上的信息会切换成 PIP 画中画设置，
按下菜单键后可根据需求设置。如右图所示

画中画大小与位置



可以使用菜单按键对 PIP 画中画的参数进行设置，情况如下（水平位置/垂直位置大小是以最小显示图像为例的）。
水平位置设置：从最左上端到最右上端的值是 0-1440，每按下按键一格数值增加/减少 10。
垂直位置设置：从最左上端到最左下端的值是 0-810，每按下按键一格数值增加/减少 10。
显示大小设置：可以选择小/中/大设置。
边框开关设置：可以选择开/关设置。
边框宽度设置：边框宽度可以选择 2-7 厚度边框，每按下按键一格数值增加/减少 1。
边框颜色设置：可以选择白/红/绿/绿设置边框颜色。

- **POP 画外画特效**

画外画特效：按下控制面板的 

（按下后显示绿灯），

然后点击 CUT 键或是使用推杆或者 AUTO 便可以进行切换。
效果图如右图

此时的液晶屏上的信息会切换成 POP 画外画设置，按下按键后可根据需求设置。如右图所示

画外画大小与位置

可以使用按键对 POP 画外画的参数进行设置，情况如下

画面选择设置：可以选择 1/2 两个画面。

水平位置设置：从最左上端到最右上端的值是 0-960，每按下按键一格数值增加/减少 10。

垂直位置设置：从最左上端到最左下端的值是 0-540，每按下按键一格数值增加/减少 10。

边框开关设置：可以选择开/关设置。

边框宽度设置：边框宽度可以选择 2-7 厚度边框，每按下按键一格数值增加/减少 1。

边框颜色设置：可以选择白/红/绿/绿设置边框颜色。

- **STILL 画面冻结功能**

画面冻结特效：按下控制面板的 STILL（按下后显示绿灯），然后输出的 PGM 视频动画将会进入冻结现象，再次按键即可解冻画面，效果图如右图所示。

- **FTB 应急黑场**

FTB 按键定义为应急黑场画面输出，按下按键红灯闪烁，开启 FTB 应急黑场输出功能，按下按键红灯熄灭，FTB 应急黑场功能关闭；

- **Reso 分辨率控制**

按下按键面板的 RESO 可以调整画面输出的分辨率，每按下一次调整一次输出分辨率，分辨有 1080P60Hz/1080P50Hz/1080P30Hz/1080P25Hz/1080P24Hz/1080I60Hz/1080I50Hz 可以选择。

- **自定义横/竖屏显示输出多画面**

按下按键面板的  ，可以自定义横屏或竖屏显示输出多画面模式，效果图如下图所示

竖屏显示

横屏显示

注意：当按下  按键切换成竖屏显示模式时，由于画面的大小和数量导致显示画面的左右两边会留有黑边，对应的菜单模式也很横屏显示时不一样。当两个 HDMI 接口同时输出多画面时，如果横/竖屏显示的 HDMI 接口切换成竖屏模式，那么另一个 HDMI 接口输出的多画面模式的菜单会跟竖屏显示的菜单一样，当菜单发生变化时，不是设备问题，这是两个多画面使用同一个菜单的结果

预监　　直播

4.1.2.5　PGM 与 PVW 的选择

- **多画面输出窗口介绍**

其中 Preview 和 Program 分别为预监和直播输出。下方有 4 个窗口对应的是输入源监看，分别对应切换台控制面板上的 1 –6 号按键

- **PGM 和 PVW 输出信号**

设备接入视频信号源后，按下按键面板中的 1（PGM）和 2（PVW），在输出的多画面监视器中的直播和预监信号源分别是 1（PGM）和 2（PVW），信号源分别是 SDI IN1 和 SDI IN2。
效果图如右图

- **PGM 和 PVW 源切换**

如果想让多画面中的直播与预监信号源切换（直播⇆预监）

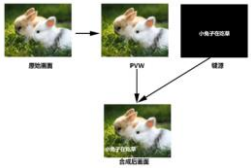
假设想要多画面中的直播信号源 1（PGM）和预监信号源 2（PVW）变换成 2（PGM）和 1（PVW），只需要按下按键面板中的 2（PGM）和 1（PVW），再点击 AUTO 或 CUT 切换即可。直播 PGM 信号源 1-6 可以和预监 PVW 信号源任意切换。

效果图如下：

按下按键面板中的 BAR 

按键后屏幕将输出彩条。

- **Luma KEY 亮度键**



开启本功能会抠去键源的黑色部分。然后与背景图像重叠从而达到抠像和叠加背景的目的，此功能一般用于虚拟演播室叠加字幕等。

- **面板实现亮度抠像**

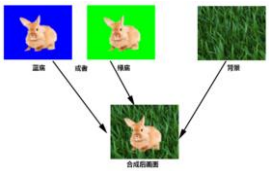
把黑色背景的白色字体视频或者图片切换到 PVW 预监窗口，开启 KEY 亮度键功能，此时液晶会出现一个亮度键参数设置界面，然后用 CUT/AUTO/T-Bar 切换都可以把字符叠加到 PGM，抠像色域设置：按下亮度抠像

后，显示菜单会显示当前亮度键抠像信息，如右图。

在菜单下可以设置键源，选择视频源按下菜单，再通过菜单来调节各种参数。

- **Chroma KEY 色度键**

色度键抠像支持动态视频源像与静态源抠像，切换台会抠去键源的蓝色或绿色部分，保留其它颜色，然后与背景图像重叠从而达到抠像和叠加背景的目的，此功能一般用于虚拟演播室叠加字幕等。



- **面板实现色度抠像**

把蓝色背景或者绿色背景切换到 PVW 预监窗口，再开启 Chroma KEY 色度键功能。此时液晶屏会出现一个色度键的参数设置界面，通过旋钮选择你抠像的背景，选择完后可以通过 CUT/AUTO/T-Bar 实现抠像，此时你要叠加的图像出现在 PGM 直播画面中。

当按下 

键时，显示菜单会显示当前色度键抠像信息，如下图。
视频源项可以选择键源，KEY 类型有色度键_绿和色度键_蓝，
级别设置范围在 0-64。

5. USB 接口对接 OBS 软件说明

步骤 1：通过 USB 数据线将单板与 WIN7 相连，WIN7 端识别后，设备列表会出现 HDS9336 Audio 和 HDS9336 Video，代表识别 ok.

如图 1 所示。图 1 设备管理器中 Audio 和 Video 节点。

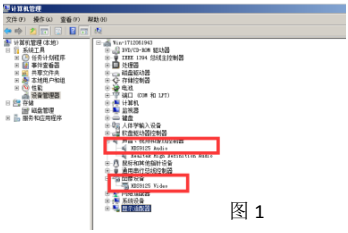


图 1

步骤 2：添加视频捕获设备

打开 OBS 软件，点击界面左下角的来源框的“+”然后点击“视频捕获设备”，如图 2 所示。

点击“视频捕捉设备”后将出现一个可以修改名称的界面，可以自定义名称。如图 3 所示。

图 2

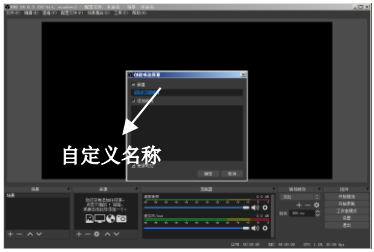


图 3

步骤 3：设置视频捕获设备属性

① 设置视频属性。

设备选择： HDS9336 Video；

分辨率/帧率 类型选择：自定义；分辨率可以选择：1920*1080、1280*720、640*360 如图 4 所示。

②下拉设置音频属性。

音频输出模式选择：输出桌面音频（WaveOut）；勾选使用自定义的音频设备

音频设备选择：Capture Input terminal(HDS9336 Audio)，如图 5 所示.

图 5

图 6

说明：

1.最新 OBS 版本 25.0.1 可以在视频格式选择 H264，这样图像质量会有所提升。

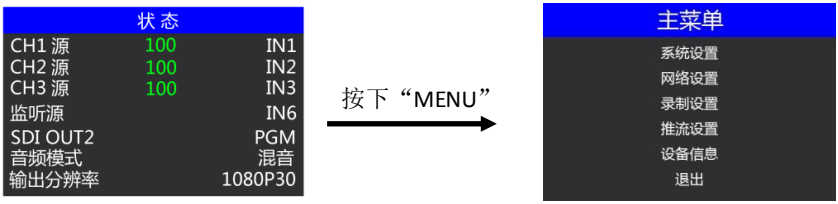
2.每次使用前需要先将设备与电脑连接，再打开 OBS 软件，否则 OBS 软件无法识别 USB 设备。

注意：USB 推流时，OBS 软件在选择帧率时需要与 PGM Out 的输出帧率一致，否则会影响录制和 RTMP 推流，导致录制和 RTMP 推流异常。

6.系统菜单设置

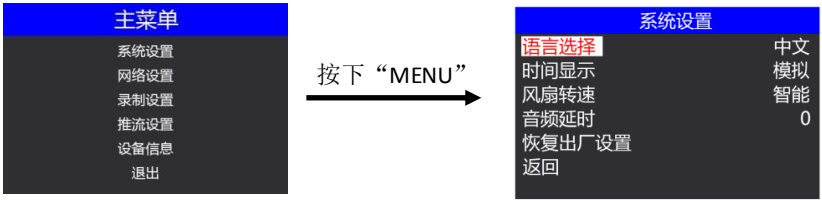
- **菜单显示**

在菜单栏中，您可以对设备进行 IP 设置、系统恢复出厂设置、更换语言等操作。在开机默认状态下，按下“MENU”，进入主菜单。如下图所示



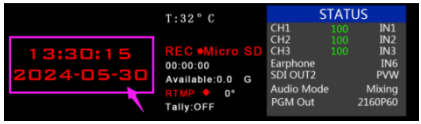
在状态栏下操作 MENU，可对音频模式、输出分辨率进行设置；音频模式；菜单选择混音或者跟随；输出分辨率：菜单即可操作，可选择 1080p60/1080p50/1080p30/1080p25/1080p24/1080i50/1080i60

- **系统设置**



在系统设置菜单内，您可以在语言选择中：选择中文或英文两种不同语言；日期显示开关在模拟时钟上面是否显示；风扇转速也可进行手动控制，设备出厂默认智能温控状态，也可以进入下一阶菜单进行手动选择 10 种转速；音频延时对应 PGM 输出视频，有 0-30 个数值可调整，1 个数值表示 20 毫秒；在使用过程中若遇到未知的错误，您可以选择恢复出厂设置，进行重置。日期显示画面如下图；

模拟



数字

- **网络设置**

在网络设置菜单内，您可以在 IP 获取中选择：动态 IP 或静态 IP，当选择了静态 IP 之后还可以对 IP 地址、子网掩码、网管设置进行相应的设置，之后保存返回即可。

- **录制设置**

录制设置中可以设置录制级别，有低、中、高和超高可设置，对应码率就是 6M/12M/18M/24M；存储的方式可以选择 TF 卡和 U 盘；U 盘录制支持格式 FAT32 和 exFAT

1.TALLY:OFF/ON

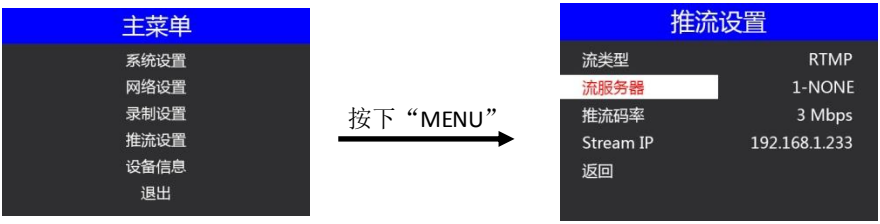
1.在录制时 LED 会闪烁，在切换台的状态显示栏会实时显示录制的状态。REC 显示红色，录制正在进行。

2.录制时长。

3.U 盘/TF 卡录制剩余空间。

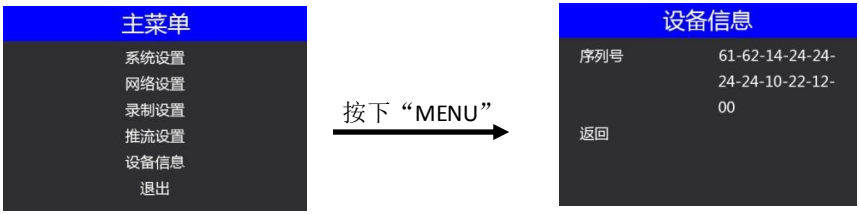
注意：录制前将 TF 卡格式化，格式必须为 exFAT 或者 FAT32。录制建议使用金士顿或者闪迪的 TF 卡。

- **推流设置**



推流设置界面的 Strean IP 是进入 WEB 界面添加推流地址的唯一途径，插上推流网口，设备会自动获取 IP 地址显示到推流设置菜单里面，将此 IP 地址填写到浏览器进行搜索进入 WEB 界面。

- **设备信息**



在设备信息菜单内，您可以看到设备的版本信息，此处不可以修改。

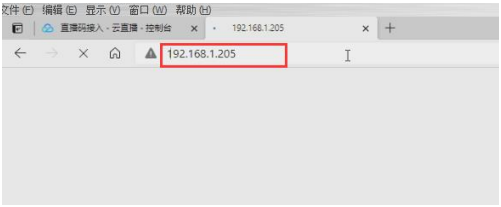
7.推流的使用说明

1、HDS9326/HDS9336 是硬件推流设备，需要通过设备侧面的 STREAM 接口连接到局域网；然后进入设备菜单里面的推流设置，有一项 Stream ip 对应后面的 IP 地址，这个 IP 地址是连接到局域网自动获取的 IP 地址，你需要通过这个 IP 地址进入 WEB 界面；

如下图自动获取 IP 地址是 192.168.1.205

2.首先我们需要一台电脑，打开浏览器输入我们设备推流设置菜单里面的 IP 地址；

例如下图，我们把自动获取的 192.168.1.205 IP 地址填写到浏览器进行搜索，就会进入 WEB 界面；



WEB 界面的使用方法：

1、用户设置

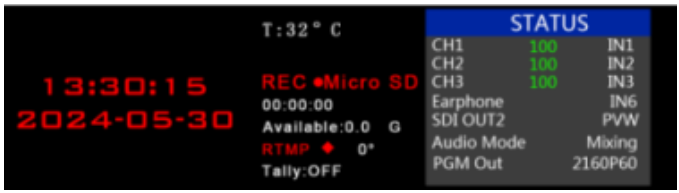
录制码率对应菜单里面设置的一样，低、中、高、超高等级。

推流码率设置范围 1-10Mbps,下拉框选择即刻生效；

2、推流设置

索引 1-8 组，表示可以保存 8 组推流地址在设备内部；

用户名是表示每组推流地址可以自己命名，命名只对字母和数字有效；在菜单里面的推流设置可以看到你在 WEB 界面保存的推流名称；



WEB 界面功能解析

1)开启录制功能的时候，WEB 界面的录制码率等功能是禁止设置的，所以在开启录制功能之前请设置好参数。

2)开启推流功能的时候，可以随时更改推流码率。

3)单方面在设备端更改了推流码率、录制等级，WEB 界面的状态不会自动刷新，需要手动按下键盘的 F4(STREAM)键刷新界面。

4)连接上 WEB 界面过后，可以在界面里面更改 IP 地址，如果时间久了记不住 WEB 界面的 IP 地址，可以去菜单推流设置里面查看 WEB 界面 IP 地址。

5)更改 IP 地址、推流设置，需要在参数设置模块下面进行保存设置。

6)推流设置里面的索引可以保存 8 组推流，用户名只显示英文字符和数字，推流地址就是直播平台的地址。

7) 可以提前把推流地址通过 WEB 界面连接设备，把直播平台地址提前保存到设备里面，设备在现场可以随时选择之前保存好的直播平台地址进行推流。

8)WEB 界面里面，推流设置下面的读取设置可以读取设备里面保存的推流地址；比如设备里面保存了很多组推流地址，先选择索引，然后点击读取，就可以读取到设备里面之前保存的推流地址。

9)设备断电过后，录制推流的画面旋转功能不保存。

8. 同步地区时间操作说明

1.到中帝威官网下载时间同步软件，www.devicewell.com 搜索关键词时间同步；

2.双击打开时间同步软件

3. 软件功能介绍，打开软件默认自动设置功能

设备插上网线，跟电脑在同一个局域网内，点击自动同步，电脑会自动去同步你的设备时间，下图中红框标记是你设备连接正常的 IP 地址；

4. 手动设置，如果自行更改时间，需要勾选手动设置功能；填写你需要设置的时间过后，点击手动确定；

9. 故障及维修

（1） 输出图像受干扰会闪烁，可能是使用的线材质量较差，线材的屏蔽层没有做好。当使用环境附近有强烈的无线电的时候，无线电波会干扰到信号的传输，导致信号闪烁不稳定。请使用正规厂家生产的线材，例如百通，佳耐美。

（2） 当拔插音视频接口时，如果感觉到有明显的静电，有可能设备电源地线没有良好接地。请按正确方法接地，否则容易损坏主机，缩短主机寿命。

（3） 当 RJ45 控制不了切换台时，检查控制软件所设定的通信口是否与所接设备的串口相对应；检查电脑的通信口是否良好。

- **维护**

请用柔软、干燥的抹布来清洁本设备。禁止用酒精、油漆稀释剂或汽油来清洁。确保本设备保存和工作在远离液体和污渍的环境中。用户没有自己处理的部件，所有服务和维修事项请联络本公司或者其它授权的分销商。

- **保修说明**

自购买之日起，DeviceWell 为本品提供 12 个月的保修服务。若本品在保修期内出现故障，DeviceWell 可为本品提供免费修理或更换零部件，在有必要的情况下可以进行更换缺陷产品的服务。为确保用户有权享受本保修条款中的服务，如遇产品出现故障请您务必在保修期内联系 DeviceWell 售后服务部，经确认后妥善安排保修事宜。缺陷产品，用户应将负责将产品包装并寄送到 DeviceWell 的指定服务中心进行维修，运费由用户承担并预先支付。若用户因任何原因退货，所有产生的运费、保险费、关税等各项税务以及其他费用均由用户自行承担。

- **保证限制和例外**

在上述的有限保证之外，本保修条款不适用于任何因使用、维护不当或保养不周造成的缺陷、故障或损坏。如产品因滥用，错误使用，疏忽，意外，异常的物理压力或者电压、未被授权的修改，窜改，改变或者由于本公司或它授权的代理以外其他人提供的服务造成的损坏，本公司将不用承担额外的义务。平常使用或者在该产品适用的应用中正确使用产品而引起的故障除外。根据本保修服务，DeviceWell 保修期内保修服务范围不包括以下内容：

1. 对由非 DeviceWell 专门人员进行的安装、维修或保养所造成的损坏进行维修，
2. 对因使用不当或连接到不兼容设备所造成的损坏进行维修，
3. 对因使用了非 DeviceWell 生产或提供的零部件所导致的损坏或故障进行维修，
4. 对经过改装或和其他产品进行组装的产品进行保养维修（产品经改装或组装后会增加保养维修所需时间或保养难度）。本保修条款由 DeviceWell 提供，它可取代所有其他明示或隐含的保修。DeviceWell 及其供应商对任何有关适销性及就特定用途的适用性等隐含保证不作任何担保。DeviceWell 负责为用户提供缺陷产品的维修或更换服务是完整和排他性补救措施，不论 DeviceWell 或其供应商是否事先获悉发生间接、特殊、偶然或必然损坏等损坏的可能性。若用户对本设备进行非法使用，DeviceWell 概不负责。对因使用本产品造成的一切损失，DeviceWell 概不负责。本产品的操作风险由用户自行承担。

以上所有内容，DeviceWell 保留一切权利，并拥有最终解释权。

Contents

1. Overview

1.1 Introduction

DeviceWell HD Video Switcher HDS9226/HDS9326/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.

Switcher 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. Switcher 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 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, TF card recording, RJ45 network port live streaming, and remote upgrade capability.

2. Functional characteristics

DeviceWell HDS9226 / HDS9326/HDS9336 6-CH HD video switcher is a multi-functional switcher, no professional knowledge is required, and video switching and audio mixing can be performed by simple operations. This machine can be used in broadcasting, live broadcast and various event venues.

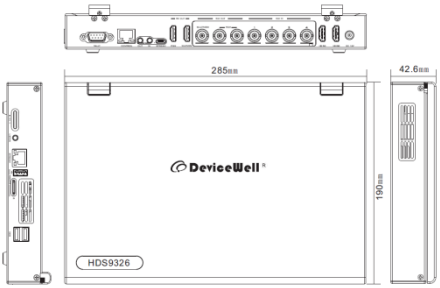
- Portable integrated design
- High-grade black metal body, high strength
- Integrated control keyboard
- Comes with 15.6-inch guide screen monitoring
- Hidden interface design to prevent the interface from breaking
- Supports up to 4 SDI and 2 HDMI inputs
- Support 3.5mm analog audio output to monitor any channel of audio
- Support PIP/POP screen window function
- Audio supports follow and mix assignment modes
- Support Type-c interface UVC output
- Support TF 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
- 1 group of KEY, support Luma key, chroma key, key image and superimposed character function

2.1 HDS 6-CH Portable Series HD Video Switcher Function Comparison

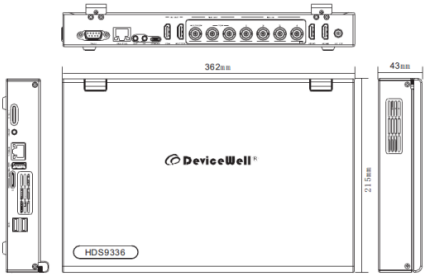
Function	Function Introduction	HDS9226	HDS9326	HDS9336
Interfaces	Input	4*SDI+2*HDMI	4*SDI+2*HDMI	4*SDI+2*HDMI
	PGM Output	2*SDI+1*HDMI	2*SDI+1*HDMI	2*SDI+1*HDMI
	Multiview Output	1*SDI+1*HDMI	1*SDI+1*HDMI	1*SDI+1*HDMI
	Type-C/ UVC Output	√	√	√
	DCB Control	√	√	√
	1 LINE IN Input	√	√	√
	1 LINE OUT Output	√	√	√
	3.5mm Analog Audio Monitoring	√	√	√
	TF Card/U Disk Recording PGM Screen	X	√	√
	Network Port RTMP Streaming	X	√	√
	T-bar One Click Switch	X	X	√
	Tally/Network Control	√	√	√
	Network Port Online Upgrade	√	√	√
	Three Groups Of Audio Faders	X	X	√
	LCD Screen Size	11.6 Inch	15.6 Inch	15.6 Inch
Special Effects	Chroma Key	X	√	√
	Luma Key	X	√	√
	Audio Follow	√	√	√
	Audio Mixing	√	√	√
	Custom Horizontal/Vertical Display Output Multiview	√	√	√
	One Click Screen Freezing(STILL)	√	√	√
	Fan Intelligent Temperature Control Speed Regulation	√	√	√
	PC Software Control	√	√	√
	MIX /FADE Special Effects	√	√	√
	Three Kinds Of Transition Rate Adjustment	√	√	√
	Vertical Screen Streaming And Recording	X	√	√
	Picture In Picture (PIP)	√	√	√
	Picture Out Picture (POP)	√	√	√
	Color Bar	√	√	√
	Resolution Support	1080P	1080P	1080P
	Input Resolution Adaptive	√	√	√
	Gamut	RGB	RGB	RGB
	Output Resolution Adjustable	√	√	√
	FTB Emergency Black Field	√	√	√

2.2 Size

HDS9226/HDS9326 Size：190mm*285mm*42.6mm



HDS9336 Size：362mm*215mm*43mm



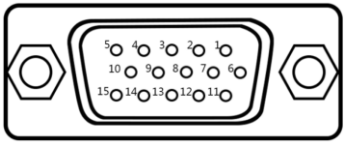
3. Interface Specification

3.1 Interface Introduction

The Switcher interface is shown below.

NO.	Definition	Description
1	VOL	Listen volume adjustment
2	PHONES	3.5mm audio listen
3	RJ45	RTMP Network stream
4	USB/TF card slot	TF card/U Disck recording
5	DCB	Cascade equipment, supporting TALLY lamp module
6	TALLY	Direct TALLY light 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	SDI and HDMI 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 power input

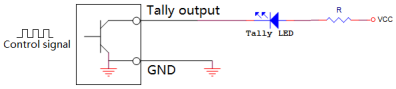
3.2 TALLY Interface



Note：PIN1 PIN2 not used.

TALLY Online schematic：

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：Tally LED: for external display device

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

3.3 Parameters

Name	**Portable Video Switcher**	
Model	**HDS9226/HDS9326/HDS9336**	
Video Signal Input	Input signal	SDI/HDMI video signal
	Bit Rate	270Mbps~3Gbps
	Connector	Standard
	Signal amplitude	800mV±10%(SDI /HDMI)
	Impedance	100Ω (HDMI) 75 Ω(SDI)
	Balance	Adaptive

Video Signal Output	output signal	SDI/HDMI video output
	Bit rate	270Mbps~10.2 Gbps
	Connector	Standard
	Signal amplitude	800mV±10%(SDI /HDMI)
	impedance	100Ω (HDMI) 75 Ω(SDI)
	Clock recovery	Optional
Control Parameter	Control	9600 baud, 8 bits, 1 stop bit, no parity
	Connection	15-pin D-port, 2-RX, 3-TX, 5-GND
	Network control	RJ45,100M
General Parameter	power supply	12V/DC
	Power rate	18w
	control panel	Support on-site production, integration of a variety of buttons.
	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 Mini 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	Function area	Currently supports F1-F7 function
2	Audio control area	Mainly set the audio follow-up mix and audio volume control
3	Transition effect control area	Select transition effects
4	Comprehensive control area	PIP、POP、STILL、vertically display、Keying effects and resolution settings
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 Function 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

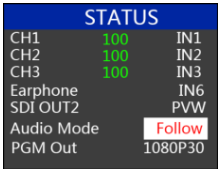
  Press F3 repeatedly to quickly switch between low, medium, high, and ultra-high recording bit rate;（6M/12M/18/24M）
- F4---STREAM One-click streaming function through the network port

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

  Press F6 repeatedly to switch the recording bit rate 1-10Mbps;
- F7--- LISTEN Monitor source adjustment function

  Press F7 repeatedly to switch the monitor input channelIN1/IN2/IN3/IN4/IN5/IN6/PGM/ AUX_IN.

4.1.2.2 Audio Control Area



- How to use the audio follow mode：

1. Press the AFV button on the operation panel, the button will light green at this time, and the corresponding multiview menu will also display the current audio status. The Audio Mode in the menu shows Follow, which indicates that the audio is in follow mode; as shown in the figure on the right
(Note: the color of the keys displayed in the picture is different from the actual effect picture.)

2. The channels of the audio follow mode are IN1-SDI1、IN2-SDI2、IN3-SDI3、IN4-SDI4、IN5-HDMI5、IN6-HDMI6 , and the corresponding operation panel keys (the button panel 2 lights up at this time, indicating that Operate the IN2-HDMI2 signal source as shown below.)

3. The volume adjustment of the audio follow mode is controlled by the keys on the operation panel. Pressing the AFV button in the follow mode (green light is displayed) will follow the audio of the PGM live channel by default. At this time, you need to increase or decrease the volume. Next to VOL + (increase volume) and VOL- (decrease volume) to adjust.

Keep clicking the VOL + and VOL- buttons, the corresponding menu section can also display the current volume value.

- How to use mix assignment:

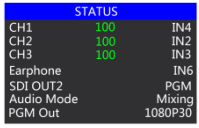
1、Press the MIX button on the operation panel.
Lights up green as shown on the right

The menu corresponding to the multiview will also display the current audio status. The Audio Mode in the menu displays Mixing, which indicates that the audio is in the mixing assignment mode, as shown in the right figure.

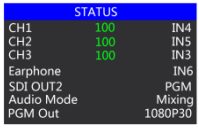
2. The mixing assigned channels are IN1, IN2, IN3, IN4, IN5, IN6, AUX_IN. Under the mixing assignment mode, there are two more audio embedding functions; PHONE _IN means 3.5mm stereo audio interface, MIC_IN means 3.5mm microphone audio interface; PGM live output can mix two audio channels at any time, and the volume of the two audio channels can also be adjusted separately.

3. Audio channel adjustment for mixing assignment: It is adjusted through the buttons on the panel, including audio control area and menu control area. As shown below.

In the default status bar, after pressing the down arrow key, a light bar will appear in the status bar. When the light bar moves to CH1, press the "MENU" button to enter the channel selection of the first audio channel, click "F7" to enter the audio source selection, audio The source can be selected fromIN1、IN2、IN3、IN4、IN5、IN6、AUX_IN, after confirming the selection, press "MENU" to exit; as shown in the right figure, the audio source of the first channel is from IN1 becomes IN4.



The second audio selection operation is the same. In the default status bar, after pressing the down arrow key, a light bar will appear in the status bar. When the light bar moves to CH2, press the "MENU" button to enter the channel selection of the second audio channel, the audio source of the second channel has changed from IN2 toIN5.



Note: When there is a white bar displayed in the menu, you can only exit by pressing the "up" button on the key panel, and you can only operate the operating system menu after exiting

4. Volume adjustment of the audio assigned channel: directly press the VOL+/VOL- button in the audio control area to control the volume, or adjust the position of the audio faders of CH1 and CH2 up and down, the corresponding menu part can also display the current volume. The volume value is in the range of 0-100. As shown in the figure on the right, the volume of the first channel has increased from 44 to 100. The operation of adjusting the volume of the second channel of mixing is the same as that of adjusting the volume of the first channel of mixing.

Volume fader MASTER: Represents the master volume fader, you need to push this fader to the top in the mix follow mode.

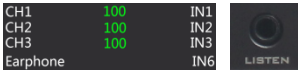
- **How to use listen audio:**

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, AUX_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, AUX_IN audio channel, and the earphone monitor fixed volume cannot be adjusted.

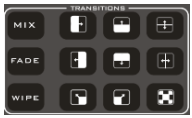
4.1.2.3 Transition Effect Control Area



There are 3 transition modes:

MIX transitions, FADE, and Wipes, where the Wipes include: up, down, left, and right.

- **MIX Transition**



MIX special effects are transition effects. After setting the transition, the main output will fade from the original live picture and then transition to the new live picture until it completely disappears.

Click 

in the special effect control area (green light is displayed after pressing), and then click AUTO or CUT or T-bar to switch. The effect is shown below.

MIX transition effects, superimposed on the A picture and gradually superimposed the B picture, until the transition to the end, the picture is completely replaced by the B picture

- **FADE Transition**

Click 

in the special effect control area (green light is displayed after pressing), and then click AUTO or CUT or T-bar to switch, the effect picture is below.

FADE in and fade out effects, A gradually darkens the picture until it is completely black, and then gradually changes from black to B picture.

- **Nine special effects wipe transitions**

There are nine types of transition modes in wipe:

Transition up: Click  in the special effect control area (green light is displayed after pressing), and then click AUTO or CUT or T-bar to switch. The other three transition operations are the same.

Wipe up the transition effect, the A picture is unchanged, and the B picture is gradually wiped in by the upward direction until the picture completely becomes B

- **Transition rate adjustment**

When operating the transition effect control area, you can also control the transition rate by operating the RATE1, RATE2, and RATE3 in the keypad (rate1: 640ms; rate2: 1280ms; rate3: 2560ms)

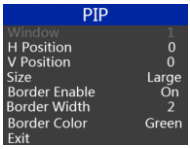
Note: Only when using AUTO transition effective.

4.1.2.4 Integrated control area

- **PIP picture-in-picture special effects**

PIP special effects: Press  on the control panel (the green light is displayed after pressing), and then click AUTO or CUT to switch. The effect is shown below.

At this time, the information on the LCD screen will be switched to the PIP setting. The control menu key can be set according to requirements, as shown below.



PIP size and position

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

Horizontal position setting: The value from the upper left end to the upper right end is 0-1440, and the value increases / decreases by 10 each time the knob is rotated.

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 each time the knob is rotated.

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

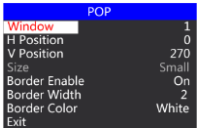
Bezel switch settings: You can choose on / off settings.

Border width setting: The border width can be selected from 2-7 thickness borders, and the value increases / decreases by 1 each time the knob is turned.

Border color setting: You can choose white / red / green / green to set the border color.

- **POP** Picture out picture effects

Picture out picture effect: Press  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



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 key.

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 key.

Border switch setting: You can choose the on/off setting.

Border width setting: The border width can be selected from 2-7 thickness borders, and the value will increase/decrease by 1 every time you turn the knob.

Border color setting: You can choose white/red/green/green to set the border color.

- **STILL screen freeze effects**

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 red light flashes to turn on the FTB emergency black field output function, press the button to turn off the red light, and the FTB emergency black field function is off;

- **Reso resolution control**

Press F1 on the keypad to adjust the screen output resolution. Each time you press the button, you can adjust the output resolution. The resolutions are 1080P60Hz / 1080P50Hz / 1080P30Hz / 1080P25Hz / 1080P24Hz / 1080I60Hz / 1080I50Hz.

- **Custom horizontal/vertical screen display output multiview**

Press  on the button panel, you can customize the horizontal or vertical screen display output multiview mode, the effect diagram is as shown in the figure below

vertical display

horizontal display

Note: When you press the F8 button to switch to the vertical display mode, there will be black borders on the left and right sides of the display due to the size and quantity of the screen, and the corresponding menu mode is also different when displayed in the horizontal screen. When two HDMI interfaces output multiple images at the same time, if the HDMI interface displayed on the horizontal/vertical screen is switched to the portrait mode, the menu of the multi-screen mode output by the other HDMI interface will be the same as the menu displayed on the vertical screen. When changing, it's not a device problem, it's two multi-screens Results of using the same menu

4.1.2.5 PGM and PVW selection

- **Introduction of multiview output window**

Among them Preview and Program are preview and live broadcast 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 signals**

After the device is connected to the video signal source, press 1 (PGM) and 2 (PVW) in the keypad. The live and preview signal sources in the output multiview monitor are 1 (PGM) and 2 (PVW), respectively. The signal sources are HDMI IN1 and HDMI IN2.

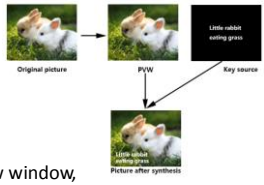
The effect diagram is as follows

If you want to switch between PGM and PVW video sources in multiview (PGM ⇌ PVW) Suppose you want to convert live signal source 1 (PGM) and preview signal source 2 (PVW) into 2 (PGM) and 1 (PVW) in a multiview. You only need to press 2 (PGM) and 1 (PVW), and then use the CUT or AUTO to switch. The live PGM signal sources 1-4 can be switched arbitrarily with the preview PVW signal source.

The effect diagram is as follows:

After pressing the BAR 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 purposeof keying and superimposing the background. This function is generally used for superimposing subtitles in a virtual studio.

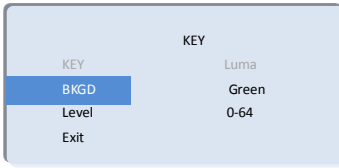
- **The panel realizes luma keying**

Switch the white font video or picture with black background to the PVW preview window, turn on the brightness key function of Luma Key, 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 Key 

, the display menu will display the current luma key information, as shown in the figure below.

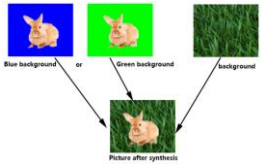


- **Chroma KEY**

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 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.

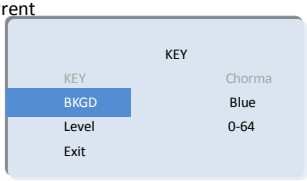
- **The panel realizes chroma keying**



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/T-Bar to achieve keying. At this time, the image you want to superimpose appears on the PGM live broadcast. In the picture.

When the key 

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

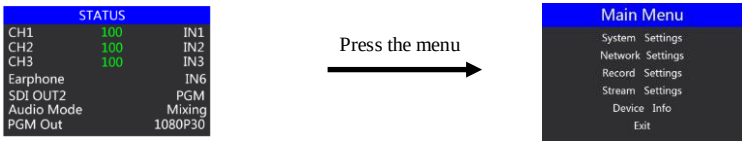


The video source item can select the key source, the KEY type has chroma key_green and chroma key_blue, and the level setting range is 0-64.

5. System menu settings

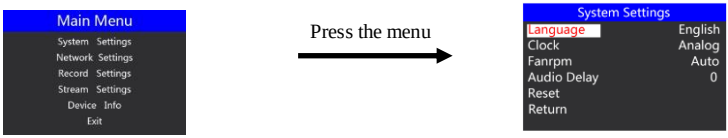
- **Menu display**

In the menu bar, you can perform IP settings on the device, restore the factory settings, and change the language.
In the default state of power on, press the menu to enter the main menu, as shown below.



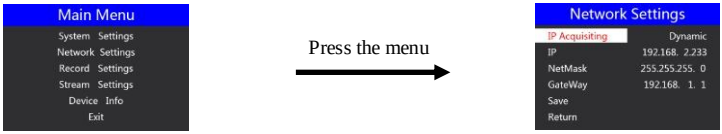
Press MENU under the status bar to set the audio mode and output resolution;Audio mode; menu to select mix or follow; Output resolution: menu can be operated, you can choose 1080p60 / 1080p50 / 1080p30 / 1080p25 / 1080p24 / 1080i50 / 1080i60

- **System settings**



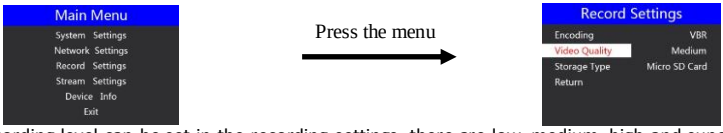
In the system setting menu, you can choose the language: select Chinese or English two different languages; whether the date display switch is displayed on the analog clock; the fan speed can also be manually controlled, and the factory defaults to the intelligent temperature control state, or Enter the next menu to manually select 10 speeds; the audio delay corresponds to the PGM output video, there are 0-30 values that can be adjusted, and 1 value means 20 milliseconds; if you encounter an unknown error during use, you can choose Restore factory settings and reset. The date display screen is as shown below

- **Network settings**



In the network setting menu, you can choose in the IP acquisition: dynamic IP or static IP. After selecting the static IP, you can also set the IP address, subnet mask, and network management settings accordingly, and save and return.

- **Record settings**



The recording level can be set in the recording settings, there are low, medium, high and super high to be set, the corresponding bit rate is 6M/12M/18M/24M;
The storage method can choose TF card and U disk; U disk recording supports format FAT32 and exFAT

1.TALLY:OFF/ON

2. The LED will flash during recording, and the recording status will be displayed in real time in the status display bar of the switcher. REC is red and recording is in progress.

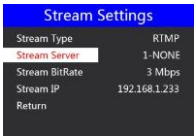
3. Recording time.

4. U disk/TF card recording free space.

Note: Format the TF card before recording, which must be exFAT or FAT32.

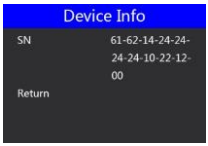
- **Stream settings**

Press the menu



- **Device information**

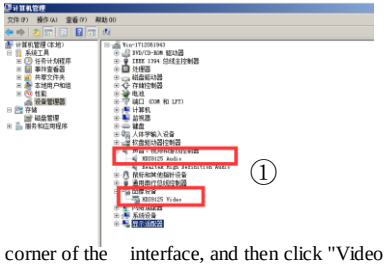
Press the menu



In the device information menu, you can read the serial number of the device. You cannot modify it here.

6. Instructions for UVC interface to OBS software

Step 1: Connect the board to WIN7 through the USB data cable. After the WIN7 end is identified, HDS9326 Audio/ HDS9336 Audio will appear in the device list.Interface and HDS9326 Video / HDS9336 Video represent ok.



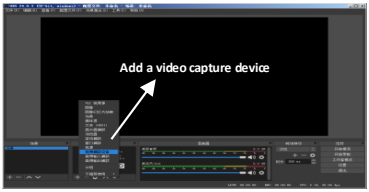
①

As shown in Figure ①. Figure ① Audio and Video nodes in the device manager.

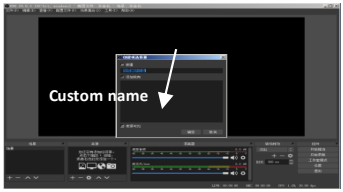
Step 2: Add a video capture device

Open the OBS software, click the "+" in the source box in the lower left corner of the interface, and then click "Video Capture Device", as shown in Figure ②.

After clicking "Video Capture Device", an interface for changing the name will appear, and you can customize the name. As shown in Figure ③



②



③

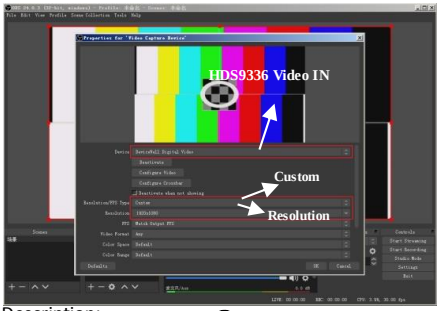
Step 3: Set video capture device properties

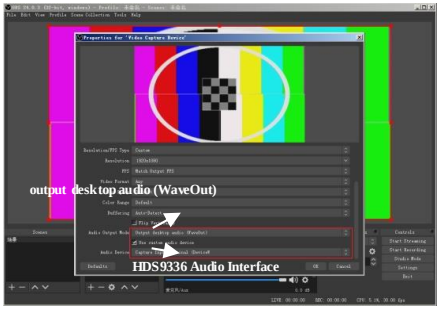
- Set the video attributes.

Device selection:HDS 9326 Video / HDS 9336 Video IN;Resolution / needle rate type can be customized; resolution can be selected: 1920 * 1080, 1280 * 720, 640 * 360, as shown in Figure ④.

- Pull down to set the audio properties.

Audio output mode selection: output desktop audio (WaveOut); tick Use custom audio device Audio equipment selection: Capture Input terminal (HDS9326 Audio/ HDS9336 Audio Interface), as shown in Figure ⑤





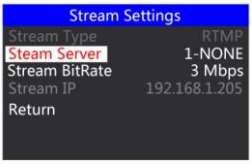
Description:

④ ⑤

1. The resolution setting needs to be customized to display the video. If there is no image display after setting, you need to set the video format and modify it to MJPEG. (The latest OBS version 25.0.1 can choose H264 in the video format, so the image quality will be improved)

2. Before each use, you need to connect the device to the computer before opening the OBS software, otherwise the OBS software cannot recognize the USB device.

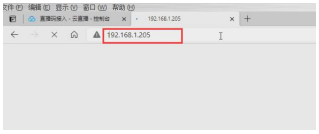
7. Stream instructions



1.HDS9326/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;

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 192.168.1.205 IP address into the browser to search, and then enter the WEB interface;



3.User setting

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;

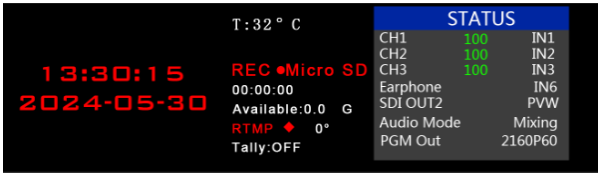
4.Streaming settings

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) 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 F4(STREAM) key of the keyboard to refresh the interface.

4) 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.

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

6) 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.

7) 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.

8) 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.

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

8. 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 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.

9. More switcher options

No.	Model	Description	No.	Model	Description
1	UHS7105	Simple 4K switcher (4 UHD +1DP)	17	HDS8102	Touch screen switcher (2* FHD)
2	UHS7108	Simple 4K switcher (4 UHD +4DP)	18	HDS8101	Touch screen switcher (4* FHD)
3	UHS6610	All-in-one 4K switcher(10-CH)	19	HDS8107	Touch screen switcher (4*HDMI)
4	UHS6508	All-in-one 4K switcher(8-CH)	20	HDS8301	Touch screen switcher (4* FHD)
5	UHS6610R	All-in-one 4K switcher(10-CH)	21	HDS8307	Touch screen switcher (4* FHD)
6	UHS6508R	All-in-one 4K switcher(8-CH)	22	HDS8325	Touch screen switcher (2* FHD)
7	UHS9610	Portable 4K switcher (4UHD+4DP+2SDI)	23	HDS8345	Touch screen switcher (4* FHD)
8	UHS9508	Portable 4K switcher (2UHD+2DP+4SDI)	24	HDS8347	Touch screen switcher (4* FHD)
9	UHS9610R	Portable 4K switcher (4UHD+4DP+2SDI)	25	HDS7105S	Simple switcher (4 FHD +1DP)
10	UHS9508R	Portable 4K switcher (2UHD+2DP+4SDI)	26	HDS7105	Simple switcher (4 FHD +1DP)
11	HDS9125	Portable switcher (4 FHD +1DP)	27	HDS7105P	HDS7105 with T-Bar
12	HDS9135	Portable switcher (4 FHD +1DP)	28	HDS7305	Simple switcher (4 FHD +1DP)
13	HDS9325	Portable switcher (4 FHD +1DP)	29	HDS7306	Simple switcher (4SDI+2 FHD)
14	HDS9335	Portable switcher (4 FHD +1DP)	30	HDS7308	Simple switcher (4Type C+4 FHD)
15	HDS9336	Portable switcher (4SDI+2 FHD)	31	HDS6105P	Simple switcher (4SDI)
16	HDS9106	Simple switcher (4SDI+2 FHD)	32	HDS6305	Simple switcher (4SDI)

产品保修卡 WARRANTY

保修须知：

Warranty Notice:

一：凡购买本公司的产品用户，凭本保修卡享受保修期内维修服务。

1.Customer who buys the product will be offered repair service during the warranty validity period.

二：本公司所有产品自出货之日起保修一年。保修服务仅限正常使用下有效。

2.The warranty period is one year form the date of shipment,Guarantee service is subject to normally using.

三：本保修卡不补发，保修期内请妥善保管，用户要求维修服务时，应出示保修卡和保修卡对应的机器。

3. This warranty card is not reissued. Please keep it properly during the warranty period. When the user requests repair services, the warranty card and the machine corresponding to the warranty card should be presented.

四：因以下情况损坏和出现故障的产品不能享受保修服务：

4.Damage and failures due to following conditions are not covered:

1).一切人为损坏、自行拆机、拆封标、使用不当的维修保管、意外或自然灾害所致之故障或损坏；

1) All man-made damage, self-dismantling, unsealing labels, improper use of maintenance and storage, failure or damage caused by accidents or natural disasters;

2).产品无保修卡或保修卡被涂改、内容无法辨认或内容与实物不符；

2）No product warranty card,warranty card has been alterd;content illegible or incompatible with the product.

3).产品超出保修期。

3）Validity period has expired.

保修单位(Warranty Party)：_____ 地　址(Address)：_____

联系电话(Tel)：_____ 邮　编(Post Code)：_____

产品型号(Mode)：_____ 产品编号(Item No.)：_____

型号选择:

Model Selection:

☐ **HDS9226**

☐ **HDS9326**

☐ **HDS9336**

产品合格证 CERTIFICATE

本合格证证明客户购买的产品是本公司生产，完全符合原厂服务要求。

This is to certificate that the product in the package is manufactured by the manufacture and in full complian with the specifications of the original service.

检验员(QC)：_____ 出厂日期(Date):_____

产品型号(Model):_____ 产品编号(Item No.)：_____

DeviceWell®

中帝威科技

www.devicewell.com