DSP9202

Quality Course Teaching Recording and Broadcasting Host

Description

Based on the stability requirements of the recording and broadcasting equipment, the recording and broadcasting system host must be designed with an embedded architecture, which does not accept the server and PC architecture, and does not use an encoding box. The host integrates image recognition and tracking, local video guide and online video guide, recording, live streaming, on-demand, video management, user management and digital audio, as well as amplifier functions. With Web remote management function, it can realize monitoring and video monitoring in real time. The recording and broadcasting system host should be beautiful, practical and easy to install. The recording and broadcasting system host should be designed to be ≤1U high, and the front panel is built in with a 2" LCD display screen to display the device model, classroom name, local IP address, working status, local temperature, date and time, and check the disk capacity, as well as set the network and system time for the host. In addition, the host is powered by 12V DC power supply.

Features

- Support ≥6 SDI high-definition inputs for connecting the teacher's close-up camera, teacher's panoramic camera, students' close-up camera, students' panoramic camera, blackboard close-up camera and signal compensation camera; support ≥3 HDMI inputs, ≥1 VGA input, ≥1 HDMI output, ≥1 VGA output, ≥2 USB ports (forwarding is not supported for the above interfaces), HD video and computer resolution of 1920*1080, and backward compatible.

- Support host local hard disk video file playback, USB video file playback, and remote RTSP video streaming player recording. Support 12 different split-screen layout modes and user-defined split-screen layout modes.

- Support automatic trigger switching of PPT signals of the teaching computer, without installing any auxiliary software and plug-ins in the computer.

- Support timed video recording according to the curriculum schedule, which is convenient for teachers to quickly record their own excellent courses.

- The host has built-in digital intelligent audio processing module to realize intelligent audio processing function without external audio processor equipment, and supports echo suppression/noise cancellation/automatic gain.

- The host supports ≥2 MIC inputs, 48V phantom power supply, ≥1 line input, and ≥1 line output.

- The host is built in with an amplifier module to support 4Ω 2×15W amplifiers, which can be directly connected to the speakers of the observation room, and no additional power amplifier is allowed.
- With 3 LED indicator lights for real-time access and early warning of the working status of the server, covering power indicator light (normally on after power-on), HDD indicator light (flashing for hard disk reading and writing), and program running status indicator light (flashing for program running).
- The recording and broadcasting system features simplicity, ease of use and high integration. With the integrated design of recording and broadcasting and tracking, the host is embedded with an image recognition and tracking module, which can realize the fully automatic image recognition and tracking function as well as the image clicking and tracking function without additional auxiliary analysis cameras and hardware devices (tracking host).
- The host supports one-key video guide. The video-guide mode can be full manual, semi-automatic or full automatic, which can be switched arbitrarily. The manual video guide mode supports video preview, live output preview, video switching, audio adjustment, recording mode switching and other functions; support manual PTZ control, and multiple preset settings for teacher's and students' videos.
- Support two recording modes: movie mode and movie plus resource mode; support 6 recording formats: MP4, AVI, FLV, MKV, MOV, TS; support H265MP and H264HP for video encoding.
- Other interfaces: ≥2 RS232 interface control, ≥2 RS485 interface control, ≥1 level control input/output interface, 1 gigabit network interface and 1 optical interface for dual network backup, and 2 USB ports.
- Support cloud platform access, uploading and sharing, as well as multi-user watching of live broadcasts. Online live broadcasts or on-demand videos can be watched on a standalone computer without a server or cloud platform, allowing up to 100 users.
- The host supports RTSP/RTMP streaming, which can be pushed to a third-party live broadcast platform for being watched.
- In teaching applications, if there is an unexpected power outage or network disconnection, it can automatically repair the recorded files and videos.
- With real-time adding and editing functions of OSD, corner mark, subtitle, title and ending, to enhance the appeal of courseware.
- The host meets the needs of daily recording, ensuring at least 1000 courses and 45 minutes per course, and it is equipped with a storage space of ≥2T, allowing a maximum of 8T.
- The host supports FTP/NFS mode to dock with a third-party network storage server for automatic uploading of recorded files to the network storage server with a larger space.

Specifications

Model	DSP9202
Housing Material	Anodized metal black spot paint 1.2mm thick, strong SGCC, dust-proof, shock-absorbing
Mounting Mode	Rack-mounted
Color	Black
Dimensions (D*W*H)	430×322×43mm
Power Requirements	Power adapter DC12V 5A
Power	60W
Gross Weight	6kg
Net Weight	5kg

Front Panel

1. Power Button

In the case of power failure, the power indicator light is off; when the machine is powered and turned on, the power indicator light is normally on and turns blue; when the machine is powered but turned off, the power indicator light is normally on and turns red.

2. USB Port

There are 2 USB ports, the upper one is USB3.0 port and the lower one is USB2.0 port, which are connected to keyboard and mouse equipment or USB flash drive.

3. Right Button

Mainly used for LCD screen operation. Press the right button to enter the next interface or move the cursor to the right.

4. Down Button

Mainly used for LCD screen operation. Press the down button to move the cursor down or modify the value.

5. Left Button

Mainly used for LCD screen operation. Press the left button to enter the previous interface or move the cursor to the left.

6. LCD Screen

Mainly used to display the information of the recording and broadcasting system host.

7. Home Button

Mainly used for LCD screen operation. Press the home button to return to the home page with one key.

8. Up Button

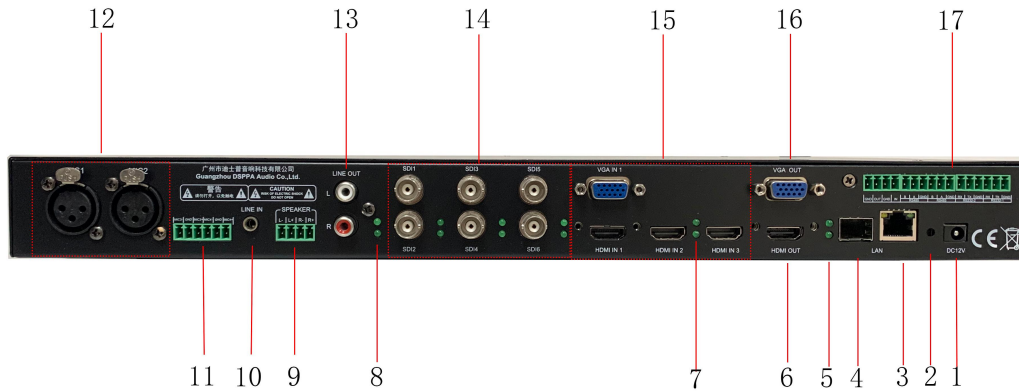Mainly used for LCD screen operation. Press the up button to move the cursor up or modify the value.

9. OK Button

Mainly used for LCD screen operation. Press the OK button to select and enter the next interface, or confirm the modified information.

10. Indicator Light

Including RUN light, REC light and HDD light. The RUN light is normally on, which indicates that the recording and broadcasting system host is running; the REC light is normally on, which indicates that the recording and broadcasting system host is recording files; the HDD light is flashing, which indicates that the hard disk is reading or storing data.

Rear Panel

1. Power Socket

DC12V power input interface. When connecting, please connect the power cord to the machine first, and then connect to the power grid.

2. Reset Button

The reset button of this machine. Long press for 5 seconds to automatically restore the factory settings. (IP: 192.168.1.2; Subnet Mask: 255.255.255.0; Gateway: 192.168.1.1)

3. Communication Network Port

The network communication port of the recording and broadcasting system host, which is used to connect to the switch.

4. Communication Optical Port

Optical port communication can be supported **(optical module should be purchased separately)**.

5. Communication Optical Port Indicator

When using the optical fiber to communicate, the communication port indicator light is on.

6. HDMI Output

This machine supports HDMI output, and the output shows the local video guide interface or PGM output interface of the recording and broadcasting system host, with adjustable resolution. (The default display is the PGM output interface, with the resolution of 1080P60.)

7. Video Input Signal Indicator

This port is used to indicate the presence or absence of 3-channel HDMI input signals and 1-channel VGA input signal. The indicator light is normally on when there is a signal and is off when there is no signal.

8. SDI Indicator

This port is used to indicate the presence or absence of 6-channel SDI input signals. The indicator light is normally on when there is a signal and is off when there is no signal.

9. Amplifier Output

This port is an amplifier output interface, with the power of 2*15W, for the sound reinforcement of the observation room only.

10. Line Input

This port is used for external audio input.

11. Microphone Phoenix Connector **(Not Available)**

This port is used for microphone access, MIC3 and MIC4 respectively.

12. Microphone XLR Connector

This port is used for microphone access, MIC1 and MIC2 respectively, powered by 48V phantom power supply.

13. Line Output

Connect the line output of other sound equipment.

14. SDI Signal Source

This machine supports 6-channel effective SDI inputs (SDI1-SDI6), and the supported input resolution is 1920*1080. It is mainly used to connect the teacher's close-up camera, teacher's panoramic camera, students' close-up camera, students' panoramic camera, blackboard close-up camera and signal compensation camera.

15. Video Input Signal Source

This machine supports 3-channel HDMI inputs and 1-channel VGA input, and the supported input resolution is 1920*1080.

16. VGA Output

This machine supports VGA output, and the output shows the local video guide interface or PGM output interface of the recording and broadcasting system host, with adjustable resolution. (The default display is the local video guide interface, with the resolution of 1080P60.)

17. Control Interface

Support RS232/RS485 two-way control **(IO port is not available)**.