

Recording Controller TS-06515

Embedded DSP codec system V1.014



Description

The HD recording system with integrated human-computer interactive interface tablet adopts integrated hardware equipment and embedded Linux operating system design, and is highly integrated with built-in ultra-high-definition video capture module, recording module, live broadcast module, guide switching module, image segmentation and splicing module, and local echo output module to realize functions such as live video broadcast, intelligent guide, ultra-high-definition recording, and touch screen control. It is the latest generation of multimedia information recording and dissemination equipment independently developed for the practical training education industry, comprehensive live teaching, practical training and other needs.

Features

- *It adopts integrated hardware design, embedded Linux operating system, 17.3-inch capacitive touch screen, resolution of 1920*1080, 7H hardness of tempered glass surface of display screen, built-in 2W 4Ω built-in audio speaker, can monitor local audio, integrated image HD acquisition, live broadcast, on-demand, recording, video playback module.
- *The host comes with 2TB storage space, 8GB running memory, 16GB memory storage, ultra-high performance and ultra-large storage space enable the storage of recorded content up to 2000 class hours, supporting frequent use of the device for more than one year; it has the function of automatic deletion of old files for loop recording.
- *The video adopts H.264 and H.265 codecs, and the pure hardware DSP method collects, encodes and transmits high-definition video signals, which can realize 9-channel encoding recording.
- *It has the function of displaying multiple cameras on the same screen, which can realize the simultaneous access and decoding of 19 network cameras, the synthesis output of 16-channel screen display on the same screen, and the simultaneous online preview of 16 screens. It also has a variety of optional layout settings, such as single screen, dual screen, triple screen, and sixteen screen layouts. Users can adjust the appropriate layout according to their preferences and the number of screens, so that different input videos can be displayed on the same screen, and can quickly drag the video to the specified window according to the window screen.
- *It has 1 HDMI video input interface, which can realize synchronous audio and video acquisition and support 3840x2160@60fps resolution input.
- *It has 2 3G-SDI video input interfaces and supports POC power supply.
- *It has 2 HDMI video output interfaces and supports 3840x2160@30fps resolution output.
- *It has 3 USB Type-A interfaces and 2 USB Type-C interfaces, which can be used for video acquisition and operation and maintenance debugging. Type-C video acquisition supports 4K resolution.
- *Audio transmission adopts AAC high-definition encoding, 1 HDMI IN with audio input, 3 3.5mm audio input interfaces; 3 3.5mm audio output interfaces; 1 built-in audio speaker for sound amplification, supporting audio mixing output.
- *Supports audio management function, supports setting the volume of three 3.5mm audio inputs and HDMI audio inputs separately.
- *Built-in 4 Gigabit network ports, 3 of which support POE power supply, meet the dual network isolation, wired network and wireless network physical isolation.
- *It has 9-channel video stream recording, 1 PGM composite screen recording and 8-channel resource channel screen recording functions. The format of the recorded file meets the standard MP4, AVI, MOV, FLV and MKV formats, the bit rate is 12M, and the resolution is 3840x2160@30fps.
- *It has the function of custom segment recording, with segment length of 30-480 minutes optional, and can be seamlessly connected to non-linear editing tools of other manufacturers. During recording, users can view the recorded time through the recording host. Users can manually control the start/pause/resume and end of recording. If the recording is not manually ended, the recording will automatically end after 8 hours.
- *It has the function of automatic scheduled recording. After the scheduled recording schedule is edited, it will automatically record at the scheduled time, and automatically generate a file name with the venue, speaker and theme information. During the recording process, you can mark important knowledge points at the current time point, use color to distinguish correct and incorrect points, and you can mark the time of the marked video with text after the recording is completed.



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- *It has 1 RS-232 and 1 RS485 interface pan/tilt control function, supports gesture control of pan/tilt, zoom in and out, up and down, left and right, and stepless speed regulation to achieve smooth and low-latency control of camera rotation to cope with various training scenarios.
- *The host supports RST one-key reset function to avoid file damage, IP address loss, and administrator password loss that cause the system to be unusable
- *Built-in wireless transmission module, with receiver, can transmit live images in real time over a long distance of 100 meters through 5G channel, video delay ≤50ms, output resolution 3840x2160@30fps, and support wireless transmission of 2 wireless screen projectors at the same time.
- *The recording and broadcasting host has two display interface modes in Chinese and English.
- *With video annotation function, you can realize brush, graphics, erase, clear, undo and restore operations in the recording video interface. The software has 5 graphics, 5 brush line widths, 8 pen colors, and 3 eraser sizes. It can also realize live broadcast of annotation screen and save annotation screenshots.
- *With video projection function, you can project the video screen of Windows system to the training recording and broadcasting host.
- *With knowledge point saving function, for key training scenarios, you can take screenshots and save the current training results. After taking screenshots, you can use picture frames, brushes, and text annotation functions to annotate the pictures.
- *It has the function of video preview and playback, which can preview and view the currently recorded video, and provides 0.5x, 0.75x, 1.5x, 2x, and 4x video playback speed adjustment and playback, and provides screenshot annotation and dot review annotation functions for the currently played video.
- *It can automatically upload backup files in conjunction with a third-party FTP file server. It supports the rapid construction of a file server through FTP server tools, and the courseware is automatically pushed to the file server. File upload and download can automatically adjust the bandwidth to prevent network congestion.
- *It supports file repair of abnormal videos caused by abnormal power outages, and supports video file repair in video formats such as MP4, AVI, MOV, FLV, and MKV.
- *It supports RTSP, RTMP, RTP, and TS streaming media protocols, has a custom RTMP push streaming function, and can push streams in 3 channels at the same time.
- *It has watermark and subtitle settings to realize the setting of live screen background and image signal display background; it can realize one-click start of live broadcast; it can drag the video to the specified window according to the window screen.
- *Support video tag modification function. Users can edit the tag name arbitrarily, up to 6 characters. They can also choose whether to display the tag on the PGM screen. The position, size, color and font of the tag can be changed at will.
- *Support dynamic viewing of input audio. You can check whether there is audio access on the group training or demonstration teaching page, and you can also check whether there is audio access on the audio management of the settings page.
- *Support group training grouping function. Students can be grouped at any time. They can be divided into groups of two, three, four, five, six or eight people. After grouping, the student screen can be changed at any time.
- *Support remote control function. The data of the device can be managed through the web terminal, which can be used for file management, live preview and configuration settings.

Specification

Video protocol	H.264、H.265
Code stream	256Kbps~12Mbps
Video output format	MP4/MOV/MKV/FLV/AVI/TS
Audio protocol	AAC
Live protocol	Support TS, RTSP, RTP and RTMP real-time protocol streams
Network protocol	Support TCP, UDP, RTMP, RTSP, FTP, DHCP, HTTP protocols
Video input port	1 HDMI video interface, 2 3G-SDI video interfaces (supports POC power supply), 1 Type-C device capture
Video output port	2 HDMI HD video ports
Split screen capability	Single screen, picture in picture, 2/3/4/5/6/8/16 screen split screen
Input resolution	Support 3840x2160@60fps, 1920x1080@60/50/30/25fps
output resolution	3840x2160@30fps、1920x1080@60/50/30/25fps
Audio input port	3 3.5mm audio input interface, HDMI IN1 input with 1-way audio input
Audio output port	3 3.5mm audio output interface, 1 local sound reinforcement (synchronous output)
Network port	4 802.3ab 1000Base-T Gigabit network interfaces, 3 of which support POE power supply
USB port	2 USB 2.0 interfaces, 1 USB 3.0 interface, support mouse/U disk/director switcher
Control port	2 control interface, support RS-232, RS-485
Recording method	Simultaneous recording of sound and video
Storage	2TB SATA
Navigation function	Support video preview/live screen monitoring/video switching/multi-screen live screen display/audio adjustment, etc.
Live recording function	Support real-time live broadcast/synchronous recording/movie mode recording/one-click push streaming and
	recording/local channel playback/built-in player



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Software reset function	Support restoring factory settings
Software upgrade	Support USB upgrade
Internet function	Support local connection/automatically obtain IP address
Power supply	DC 24V/5A
Power consumption	45W
Reset button	Restore factory settings
Operating temperature	-10°C-55°C (ambient temperature under well-ventilated conditions)
Relative humidity of working environment	20%~80% relative humidity, no condensation
Weight	3.89kg
Dimensions (L×D×H)	401.8×257.3×38.8mm