Recording Controller TS-0658

Automatic recording control embedded software V3.11

Description

It adopts an integrated hardware design, embedded Linux operating system, and highly integrated system modules such as image recognition and tracking, automatic directing, live broadcasting, VOD, acquisition, and recording. It is a new generation of fully automatic eight-camera recording controller that meets the needs of producing high-quality teaching videos, online learning, and interactive teaching.

Feature

* Adopt integrated hardware design, embedded Linux operating system, highly integrated system modules such as image recognition and tracking, automatic guidance, live broadcast,VOD, acquisition, recording, etc. It is easy to use, easy to maintain, and has high security.
* Based on the B/S architecture, you can log in to the web terminal to realize functions such as live broadcast management, signal management, group management, user management, file management, reservation recording, central control management, and system management.
* Adopt AAC HD audio encoding method, to realize accurate and synchronous audiovisual recording.
* Adopt H.264 video encoding method, adjustable bit rate, support video encoding 256kbps ~ 12Mbps, support resolution such as 3840x2160 and 1920x1080.
* The most advanced tracking algorithm is used to detect the vertical movement tracking of the face contour, ignoring other activities of the students, with an accuracy rate of more than 90%, intelligently presenting the focus of the classroom.
* Without installing auxiliary tracking analysis cameras, it can accurately track students with large height differences and adapt to the heights of students in different classes.
* The built-in encryption algorithm of the recording controller ensures that the genuine machine needs to be activated before it can be used, and supports the use authorization date.
* The built-in audio processing module supports functions such as environmental noise suppression, automatic equalization, intelligent sound mixing and echo cancellation, which can solve the problems of echo and noise in interactive recording classrooms.
* The built-in shortcut keys support one-key record, stop, live and one-key copy of recorded files.
* The built-in 2.2-inch LCD screen displays system hard disk space, version number, recording status, IP address and other device information.
* With 2TB of storage space, the recording content can be stored for up to 2000 class hours. Support frequent use of the device for more than one year; support automatic deletion of old files and loop recording.
* With 3 HDMI signal input interfaces, connected to a computer or a camera.
* With 4 SDI signal input interfaces, the SDI interface has the POC function, supports the self-adaptive identification of POC devices, and realizes the video transmission, PTZ control and power supply functions in one line.

* With 8-channel network signal inputs, using standard RTSP stream access to collect network camera signals.
* Support synchronous input of up to 8 video signals, and the signal type includes HDMI/3G-SDI/IP.
* With 3 HDMI video output interfaces, connected to external display devices.
* With 1 HDMI audio input interface, 2 unbalanced input phoenix interfaces for collecting external audio source signals; 8 balanced input phoenix interfaces, support 48V phantom power supply and 16-band EQ processing, connected to omnidirectional microphones or classrooms hanging microphone; 5 unbalanced input phoenix interfaces, used to connect other audio equipment.
* With a 3.5mm audio output interface, used for monitoring or connecting to external sound equipment.
* With 5 RS-232 control interfaces, used for seamless signaling connection with other control systems.
* With 5 USB ports, connected to U disk or keyboard and mouse.
* With 3 802.3ab 1000Base-T Gigabit network interfaces, support IPv4 address and IPv6 address.
* With a 2.4G remote control with laser pointer function, realize the remote one-key recording function, support the control of the teacher's computer to realize PPT operation, and perform PPT page turning, playback, exit and other operations.
* Support manual directing through the directing software, and work with the built-in automatic directing module for automatic directing.
* Support remote control of the control panel, and functions such as input source screen monitoring or switching, recording mode switching, recording and stopping, special effect switching and camera control can be realized by clicking the button on the panel.
* Support the rotation and zooming of up to 8 PTZ cameras at the same time, support the image tracking function with one click.
* Support single-stream single-screen/single-stream multi-screen/multi-stream multi-screen recording methods, each input signal can be saved as a separate file, up to 5 channels of video images can be recorded at the same time, and categories can be customized for classified recording and classified storage, and supports MP4, AVI, MOV, FLV and MKV and other formats.
* Support 7 screen layouts such as three-screen, four-screen and dialogue screen, and support two custom screen layouts to meet individual needs.
* Support custom segmented recording, with an optional duration of 30-480 minutes, and can seamlessly connect with non-linear editing tools from other manufacturers.
* Support PVW and PGM dual screen, support output switching effects when switching output display, including 12 transition effects such as fade, erase, push, expand, fly in, etc.
* Support subtitle setting, built-in subtitle template, users can customize the size, color and position of letters.
* Support online speech transcription function, realize transcribing speech into text and automatically generate subtitles.
* Support the function of adding a custom title, support uploading a custom title and customizes its display time.
* Support tagging of each video screen, distinguishing the screen to display different content.
* Support 2D keying function; cut out the characters from the green screen or blue screen background, merge with the two-dimensional virtual background picture, and synthesize one picture.
* Support the function of recording reservation. After the recording timetable is completed, the recording will be automatically performed at the scheduled time, and the file name will be automatically generated with information such as venue, speaker and theme.
* Built-in VOD module, support play, pause, jump and other operations of video files online through the network.
* Support live broadcast function, and support live broadcast to 50 users in the local area network at the same time; support standard RTMP streaming protocol, and can be connected to third-party live broadcast platforms for online live broadcast, convenient to expand the number of live broadcasts.
* Support the function of automatically uploading backup files, and work with a third-party FTP file server to automatically push the courseware to the file server; automatically adjust the bandwidth during file uploading and downloading to prevent network congestion.
* Support video file repair function. During recording, damaged video files caused by power outages can be repaired.
* Support one-key reset function to avoid file damage, loss of IP address and loss of administrator password, which will cause the system to become unusable.
* Support one-key upgrade function, when the system has new function iterations, the function can be upgraded by importing the firmware.
* Support software central control, fill in the central control instructions in the recording and broadcasting management interface, you can perform central control operations through the interface, and connect to other devices for one-key control.
* Support connecting with private cloud platform servers. After the connection, the cloud platform can manage and control the devices in a unified manner, convenient for the management of multiple recording and broadcasting devices.
* Support user group management function, assign account permissions to each user, users can watch live and VOD files after authentication, and corresponding users can only access corresponding files.

Specification

Video protocol	H.264
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	4 SDI HD video ports, 3 HDMI HD video ports
Video output port	3 HDMI HD video ports
Input resolution	3840x2160P30, 1920x1080P60/P50/I60/I50/P30/P25fps
output resolution	3840x2160P30, 1920x1080P60/P50/P30/P25fps, 1280x720P60/P50/P30/P25fps, 720X576P60/P50/P30/P25fps
Audio input port	1 HDMI with audio input, 15 phoenix terminal ports
Audio output port	1 3.5mm audio port, 5 Phoenix terminal ports
Network port	3 Gigabit Ethernet ports
USB port	5 USB 2.0 ports
Control port	5 RS-232 ports, 1 RS-485 port
Panel button	2 x switch buttons
Storage	2TB
Power supply	DC 24V/5A, DC 12V/2A
Power consumption	50W
Weight	5.6kg
Dimension	484×340×88mm (L×D×H)
Working temperature	-10℃~55℃ (ambient temperature under well-ventilated conditions)
Relative humidity	20%~80% relative humidity, no condensation