Smart conference HD recording controller   TS -0663MC

Automatic recording control embedded software V3.11

Description

This is a conference recording and broadcasting system with a graphical menu operation interface. It adopts intelligent hardware equipment and embedded Linux operating system design. It is highly integrated with embedded ultra-high-definition video acquisition module, recording module, live broadcast module, director switching module, image segmentation and splicing module, and local echo output module. It realizes multiple functions such as video live broadcast, intelligent director, ultra-high-definition recording, remote control, image recognition and tracking, multi-party interaction, etc. It is the latest generation of multimedia information recording and dissemination equipment independently developed to meet the needs of small and medium-sized meetings, lecture halls, auditoriums, etc.

Features

*It uses domestic main control chip, integrated hardware design, embedded Linux operating system, highly integrated audio and video acquisition, encoding, decoding, professional directing, live broadcast, on-demand, recording and other system modules, easy to use, easy to maintain and highly secure. The controller comes with 2TB of storage space, and the recorded content can be stored for up to 2,000 class hours. It supports frequent use of the device for more than one year, and supports automatic deletion of old files when the hard disk memory is full, and loop recording;

*Display module: The controller has a 1.8-inch LCD screen to display the device's operating status, parameter information, hard disk capacity, audio status, resource channel recording status, and file copy progress. The controller has 4 shortcut buttons, supporting one-click recording, stop, live broadcast, and one-click copy of recorded files;

*Video input: 1-channel HDMI input interface, supports 3840x2160@30fps resolution image acquisition and HDMI audio acquisition, can be used to connect to a computer or camera; 2-channel 3G-SDI signal input interfaces, and the SDI interface has PoC function, supports PoC device adaptive identification, and realizes video transmission, PTZ control and power supply functions in one line. The PoC transmission distance can reach 100 meters. Supports Type-C video acquisition, maximum support 1920x1080@60fps;

*Video output: 2-channel HDMI output interfaces, 1-channel of which supports 3840x2160@30fps resolution and audio output; supports Type-C video output, up to 1920x1080@60fps;

*Rich audio interfaces: 3-channel 3.5mm audio input interface, 3-channel 3.5mm audio output interface, to meet various audio input and output needs;

*Rich control interfaces: 1 RS-232 Phoenix terminal interface and 1 RS-485 Phoenix terminal interface, which can be used for seamless signaling connection with other control systems; with built-in 12V power supply, it can connect to various serial protocol devices and power the devices; with a 4-inch touch panel, it can quickly operate recording, live broadcast and directing switching, easy to operate, and supports wall-mounted installation; the controller comes with a 2.4G remote control, which can be used as a teacher's interactive classroom, and can also control recording and directing functions through the remote control;

*Multiple external interfaces: 3 USB interfaces and 2 Type-C interfaces, which can be used to connect USB flash drives or keyboards and mice, video capture, file copying, and upgrades; 4-channel 802.3ab 1000Base-T Gigabit network interfaces, 3-channel of which support POE function, so that one network cable can be used for power supply and network supply; supports IPv4 addresses and IPv6 addresses;

*Based on B/S architecture, you can log in to the web terminal to realize functions such as directing, live broadcast management, signal management, group management, user management, file management, scheduled recording, central control management and system management;

*Video recording: supports H.264/H.265 video codec protocols and AAC audio encoding protocol to ensure accurate synchronous recording of audio and video with high audio restoration; supports up to 7-channel video stream recording, 1-channel PGM screen recording and 6-channel resource channel screen recording. The recorded file format supports standard MP4, AVI, MOV, FLV, TS and MKV and other formats. The bit rate supports 256kbps~20Mbps and the maximum resolution supports 3840x2160@30fps.

*Rich video input forms: 6-camera design to meet different conference application scenarios: 6-channel 3840x2160@30fps network cameras are connected and decoded at the same time, and 4-channel picture synthesis output can realize 4 pictures online preview at the same time;

*The recording and broadcasting controller has a built-in encryption algorithm to ensure that genuine machines need to be activated before they can be used, and supports the use of authorization dates;

*File preview: supports local video preview and playback function, can preview and view the currently recorded video, provides multiple playback switching, supports 0.5x, 0.75x, 1.5x, 2x, 3x video playback speed adjustment playback; supports web-side file preview, built-in VOD on-demand module, users can play, pause, jump and other operations of video files online through the network;

*Multi-terminal director: supports embedded director console, HDMI output recording and broadcasting director interface, real-time preview operation, and supports mouse/remote control; supports web-based web director; equipped with a four-inch touch control screen, you can click the control screen button to monitor the input source or switch the director, switch the recording and broadcasting mode, start and stop recording;

*A variety of personalized director applications: support screen layout, support three screens, four screens and dialogue screens and other 7 screen layouts, and support 2 custom screen layouts to meet personalized needs; recording segmentation, support custom segmentation recording, optional duration of 30-480, support up to 8 hours of uninterrupted recording, can be seamlessly connected to other manufacturers' non-linear editing tools; special effect switching, support switching special effects, including gradient, wipe, push, expand, fly in and other 12 screen switching special effects; support subtitle settings, users can customize the size of letters, font color provides red, green, blue, white, black selection, support mouse to drag the subtitle position; support adding title function, the title can choose the resource channel screen or customize the uploaded picture display, the uploaded picture format supports jpg, jpeg, png, bmp;

*Speech transcription: supports connecting to speech transcription servers to realize speech transcription function, transcribes speech into text and automatically generates subtitle files (only connects to third-party transcription servers, and does not bear account and traffic fees);

*Resource platform: supports docking with the internal resource platform to realize resource on-demand and shared application functions; supports viewing content by enterprise training theme, automatic caching and high-definition video playback; supports on-demand, drag and drop, replay, jump and other video content playback operations;

*Recording reservation: Supports the reservation recording function. After the reservation recording meeting is edited, it will be automatically recorded at the scheduled time, and the file name will be automatically generated with information such as venue, speaker and topic;

*Live broadcast management: Supports live broadcast function, 50 users can broadcast live at the same time; supports standard RTMP streaming protocol, 3-channel RTMP independent streaming, connects to third-party live broadcast platform for online live broadcast, supports custom start and end time of streaming;

*File upload: supports automatic upload of backup files, can cooperate with third-party FTP file servers, and courseware can be automatically pushed to the file server; file upload and download can automatically adjust the bandwidth to prevent network congestion;

*File repair: Supports repair of damaged video files caused by power supply abnormality. The supported file formats include but are not limited to MP4, AVI, MOV, FLV, MKV and other video packaging formats;

*Factory settings: Support one-key reset function to avoid system unusability due to file damage, IP address loss and administrator password loss; support one-key upgrade function, when the system has new function iterations, function upgrade can be achieved by importing firmware;

*Develop standard external control protocols: support software central control, fill in the central control instructions in the recording and broadcasting management interface, and then perform central control operations through the interface, and connect other devices for one-click control; support recording and broadcasting Android APP docking and control; support docking with private cloud platform servers. After successful docking, the cloud platform can uniformly control the devices, making it convenient to manage multiple recording and broadcasting devices;

*Audio management: support mixing settings management, each audio acquisition and output port supports individual volume control or mute;

*Conference tracking: Connect to the conference discussion system to track the conference unit speaker, control the camera to accurately shoot the speaker, and track the speeches of 126 table microphones. Support multi-screen synthesis mode, the screen switching of speaker tracking only switches the main screen, and other auxiliary screens remain unchanged;

*AI visual analysis: Built-in image visual tracking strategy algorithm, no need to configure additional tracking analysis controller. Achieve accurate tracking of movements such as people moving, speaking, standing up, etc. Supports free switching of tracking strategies to meet the needs of different tracking scenarios;

*AI visual analysis: supports free setting of speaker image tracking mode, and setting the size of the tracking target person image according to actual needs;

*AI visual analysis: supports setting the tracking lock release time. When the locked tracking target leaves the tracking area of the screen, the tracking lock will be automatically released after the tracking lock release time is reached, and the system will return to the default state and wait for the next person to enter the screen to start re-locking and tracking.

*AI visual analysis: supports setting tracking shielding areas, such as actively shielding large-screen LCD TVs and other places that are prone to interfere with the tracking effect. The system will not perform image analysis and tracking operations on the shielded areas to avoid these places interfering with the overall tracking effect;

*AI visual analysis: Tracking of participants supports locking the tracking object and multiple people appearing in the shooting picture, switching to a small panoramic picture;

*AI visual analysis: Speaker tracking supports height adaptation. After setting the close-up size, the system automatically identifies the speaker's height to center the person in the picture.

*Low-latency interaction: Built-in video interaction function, 4 recording and broadcasting controllers can interact at the same time; in discussion mode, the listening and speaking conference room can choose to speak or mute the microphone at will; in mute mode, the listening and speaking conference room cannot speak, but can watch the live broadcast of the speaker;

*Support address book function: In discussion mode, users can enter the device alias, short number or IP address in the top search box to search for the corresponding contacts that have been added, or they can add new contacts by clicking on the right side of the search box. The added contacts can be dialed, edited, deleted, etc. by the buttons on the right side.

*Support conference convening function: In the video conference interactive interface, the main venue can directly convene the venue terminals that have participated in the conference interaction with one click, without any additional configuration, which is convenient and fast ;

*Support permission control function: In the interactive mode of video conference, the main venue can set the opening and closing of the terminal screen and sound of the branch venue, and can set the screen layout of the conference interactive screen ;

*Support dual-screen dual-display function: In the interactive mode of video conferencing, the HDMI OUT2 interface outputs the images of the main venue and the branch venue. When the main venue opens auxiliary stream sharing, the HDMI OUT1 interfaces of the main venue and the branch venue both output the computer courseware content of the main venue; when the main venue does not open auxiliary stream sharing, the HDMI OUT1 interface of the main venue outputs the computer courseware content of the main venue, and the HDMI OUT1 interface of the branch venue outputs the computer courseware content of the branch venue ;

*Compatible with interactive platform: With interactive platform terminal, 50 recording and broadcasting controllers can be interactive. Supports multiple screen layouts, can display up to 16-channel screens at the same time, and can automatically poll the screens ;

*Dial-up call: supports dial-up function, and can realize audio and video interactive function by inputting terminal IP ;

*Supports customized video conference interactive frame rate and bit rate functions to ensure smooth interactive audio and video under various network conditions .

Specification

Video protocol	H.264 , H.265
Bit stream	256 Kbps~ 20 Mbps
Video output format	Support MP4/MOV/MKV/FLV/AVI /TS
Audio protocol	AAC
Live broadcast protocol	Support TS, RTSP and RTMP real-time protocol streaming
Network protocol	Support TCP, UDP, RTMP, RTSP, FTP, DHCP, HTTP protocols
Video input interface	1 HDMI video interface, 2 3G-SDI video interfaces (support POC power supply)
Video output interface	HDMI OUT 1 : Adjustable resolution, up to 4K30 with audio output, fixed PGM screen; HDMI OUT 2 : 1080P60 (fixed) with no audio output, fixed director interface output
Interaction	Bluetooth remote control /mouse/USB touch
Split-screen capability	Single screen, picture-in-picture, 2/3/4/5/6 screens
Input resolution	3840x2160@30fps, 2560*1600@60fps, 2560*1440@60fps, 2048*1152@60fps, 1920*1200@60fps, 1920x1080@60/50/30/25fps, 1680*1050@60fps, 1280*72 0@60fps
Output resolution	3840x2160 @ 30fps、 1920x1080 @ 60 /50/30/25fps
Audio input interface	3-channel 3.5mm audio input interface, 1-channel HDMI IN1 with audio input
Audio output interface	3 -channel 3.5mm audio output interface , 1-channel HDMI IN1 with audio output
Network port	4-channel 802.3ab 1000Base-T Gigabit network interfaces , 3-channel of which support POE power supply
USB interface	2 USB 2.0 ports , 1 USB 3.0 port , supports connecting to mouse/U disk/director switch

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Control interface	2-channel control interface , supporting RS-232 and RS-485
Recording method	Synchronous recording of audio and video
Storage space	2TB
Director function	Support video preview/live screen monitoring/video switching/live screen multi-split screen display/audio adjustment, etc.
Live broadcast and recording function	Supports real-time live broadcast/synchronous recording/movie mode recording/one-click streaming and recording/local channel playback/built-in player
Display	1.8-inch LCD display, supports real-time preview of common device status such as device operation status/parameter information/hard disk capacity/audio status, etc.
Button	Support one-key recording control /copying/live broadcast control; button to restore factory settings
Software reset function	Support factory reset
Software upgrade	Support USB upgrade , web-based network upgrade
Indicator lights	3*led, system operation, hard disk failure and recording prompt light
Power supply	DC 24V/5A
Power consumption	120 W
Operating temperature	-10℃-55℃ (ambient temperature under good ventilation conditions)
Relative humidity of working environment	20%~80% relative humidity, no condensation
Weight	3.89kg
Dimensions (L x D x H)	484 × 258 × 45 mm