



Recording and Live Streaming Host [Regular Education Wall-Mounted (4+2)]

LB-8103M



Functional description:

- 1.The terminal adopts a highly integrated design, enabling a single unit to perform touchscreen display, audio/video capture, audio/video encoding and decoding, audio/video processing, video recording, video-on-demand, live video streaming, video production control, remote interaction, and operational management control.
- 2.The terminal housing is constructed from premium aluminum alloy, supports wall-mounted installation with a standard wall mount bracket included, and features a removable cable management box.
- 3.To ensure optimal audio-visual performance on the terminal, minimize environmental noise in recording classrooms, and maintain proper heat dissipation for the terminal host system, terminal noise level must be 26dB.
- 4.The terminal features a 15.6-inch capacitive touch LCD screen with no blue light hazard, utilizing full-lamination technology. It offers a resolution of 1920×1080 and a surface hardness of 8H. Users can preview the director's view directly on the screen and perform one-touch operations such as recording, live streaming, interaction, video playback, and video download via the display.
- 5.The terminal features a three-in-one function key that enables power on/off and energy-saving screen sleep modes. To prevent persistent screen illumination from disrupting classroom activities, users can configure automatic sleep options including 2 minutes, 5 minutes, 10 minutes, 15 minutes, custom settings, or always-on. After entering sleep mode, the terminal can be quickly reactivated via touchscreen input, mouse movement, or keyboard input.
- 6.The terminal supports intelligent networking, enabling plug-and-play operation for cameras. Cameras can function independently on separate network segments without affecting the existing network, operating autonomously without mutual interference.
- 7.The terminal supports multiple types of video signal inputs, including standard network video signals, high-speed digital signals, and USB video signals.
- 8.The terminal supports multiple power-on/off modes, including auto-startup upon power-up, scheduled startup, and conventional startup.
- 9.The terminal can be optionally equipped with built-in interactive capabilities, enabling remote interaction with up to ten participants without requiring additional cloud or local interaction servers. It also supports expansion with third-party interactive platform servers to accommodate large-scale interaction scenarios, scalable to applications involving over 10,000 participants.
- 10.The terminal features built-in HID control, enabling direct operation of the connected computer from the terminal itself.
- 11.The terminal features a Reset button that supports hardware recovery functionality, enabling full system restoration via the Reset button.
- 12.The terminal supports viewing real-time device status, firmware versions, and other information via an internet platform. It enables operational control functions such as powering devices on/off, toggling recording, and switching live streaming on/off. Additionally, it supports remote upgrades for individual terminals or batch terminals through the platform.
- 13.The system software must be installed on the terminal host. Based on a dual management interface architecture supporting both browser-based (B/S) and client-server (C/S) modes, it enables both local and remote production control. The production control interface features fast response times and low latency.
- 14.The system software integrates multiple functions including real-time video preview, video switching, camera control, recording/live streaming control, subtitles, station logos, OSD, opening/closing credits, live monitoring, and video-on-demand.
- 15.The system supports multiple control methods for managing terminal devices, including recording, live streaming, interaction, and production control. Control methods include: web backend, local production control, Android app, and PC client.
- 16.The system supports real-time viewing of at least seven video channels on the director interface, including movie, computer 1, computer 2, teacher close-up, teacher wide shot, student close-up, and student wide shot. It also supports switching between channels by clicking on the respective video feed.
- 17.The system supports selecting any video channel for recording, with the capability to record up to 7 channels simultaneously. It supports generating standard video files in MP4 or TS formats.
- 18.The system supports repairing corrupted video files caused by abnormal power loss or device crashes.
- 19.The system supports recording duration settings, automatically stopping recording once the set time is reached. A single recording session can last up to 24 hours.
- 20.The system supports power-on recording, automatic recording upon device activation, scheduled recording with support for up to 8 scheduled recording tasks, and a recording countdown feature.
- 21.The system supports loop recording. When storage capacity nears capacity, it automatically deletes older videos to make room for new recordings, preventing storage shortages that could disrupt recording operations.
- 22.Recorded video files can be stored locally on hard drives or uploaded to the platform via FTP. FTP uploads support scheduled, real-time, and idle upload modes. Users can also instantly play back recorded videos on the Recording and Live Streaming Host and copy them to portable drives or hard disks for download.
- 23.The system supports connecting external storage devices such as USB drives to the host, enabling synchronous video saving between the host and the USB drive. After the host completes normal recording and saves the file, it automatically copies the file to the USB drive for storage.
- 24.The system supports selecting any video channel for live streaming, with the capability to stream up to 7 channels simultaneously. It supports three distinct streaming modes—RTMP (push), RTMPS (push), and HLS streaming—to accommodate diverse live streaming scenarios. Features include automatic live streaming initiation upon host startup and scheduled streaming functionality, offering 8 preset scheduling groups.



Recording and Live Streaming Host 【Regular Education Wall-Mounted (4+2)】

LB-8103M

- 25.The system features built-in streaming broadcast capabilities, enabling real-time delivery of live video feeds to designated viewer groups over the network without requiring any platform server deployment. Viewers can watch high-definition live streams directly without any additional actions, supporting up to 50 concurrent connections.
- 26.The system features built-in directing algorithms, supporting multiple directing modes including manual directing mode, semi-automatic directing mode, and automatic directing mode. It enables seamless switching between modes based on different scenarios.
- 27.The automated director system supports flexible customization settings, allowing users to configure director priorities, director channels, default views, transition views, transition durations, and view dwell times according to their preferences. This effectively prevents poor viewing experiences caused by overly rapid scene changes or disorganized camera angles in the final video.
- 28.The system supports dual-channel HDMI multimedia computer screen detection algorithms. It automatically detects mouse movements and actions like flipping through courseware pages without requiring any software installation on the multimedia computer, seamlessly integrating the computer screen into the director's view. It allows customization of detection zones for the multimedia computer screen, supporting up to five designated detection areas to conveniently block pop-up windows and taskbar regions.
- 29.The system supports camera control, enabling functions such as zoom adjustment, pan/tilt/zoom (PTZ) control, and sensitivity settings for the camera's movement. It also allows each camera channel to configure and recall up to eight preset positions, facilitating quick access during live production.
- 30.The system supports manual mode mouse click tracking functionality. By clicking on the video director's screen, the system will center the camera movement around the click coordinates for rapid positioning. It also supports using the mouse scroll wheel to control camera zoom.
- 31.The system supports eight display layout modes, including single-screen, picture-in-picture, dual-split screen, triple-split screen, quad-split screen, and more. It also supports custom layouts to meet personalized needs.
- 32.The system supports 11 transition effects, including fade-in/fade-out, grid, up-cut, down-cut, left-cut, right-cut, and other mainstream transition effects, ensuring smooth and natural scene changes.
- 33.Supports online speech-to-text transcription, enabling the conversion of speech into text and the automatic generation of subtitles;
- 34.Supports setting up to 5 preset subtitles, with customizable font, text size, and color. Allows dragging to adjust subtitle display position.
- 35.Supports setting up to 5 preset station logos. The size ratio of station logos can be customized. Station logo display positions can be quickly set using built-in common position shortcuts. Additionally, custom drag-and-drop adjustments for logo size ratio and position are supported.
- 36.Supports setting up to 5 preset opening and closing sequences, with customizable duration for each. Additionally, supports using images stored on a USB drive as opening/closing sequence materials by connecting the USB drive to the terminal.
- 37.The system interface features a built-in virtual soft keyboard, enabling input of Chinese, English, numbers, and symbols without requiring an external USB keyboard.
- 38.The system supports on-demand playback of video files, dragging the playback progress bar to control playback, and downloading video files.
- 39.The system supports network detection functionality, enabling monitoring of the current terminal's network connection status, including: network connectivity, upload/download speeds, and other relevant information.
- 40.The system supports importing and exporting terminal configuration files, facilitating upgrades, debugging, and subsequent maintenance for users.

Technical specifications:

Model	LB-8103M
Processor	ARM multi-core processor
Operating System	Domestically developed independent embedded operating system, neither Windows nor Android
Operating Voltage	DC 19V
Power consumption	< 65W
Video Coding Standard	H.264, H.265
Coding rate	Supports adjustable speeds from 512 kbps to 20 Mbps
Video resolution	Supports adjustable resolutions from 640x360 to 3840×2160
Sampling rate	48KHz
Screen	The device features a 15.6-inch capacitive touchscreen LCD display with no blue light hazard, boasting a resolution of 1920×1080.
Video Interface	2 HDMI input ports with audio capture capability; 2 high-definition video outputs with audio output capability.
Input/Output Interface Resolution	Supports up to 4K resolution and is backward compatible with standard resolutions such as 1080p and 720p.
Audio Interface	2 stereo line-level audio inputs; 1 stereo line-level audio output supporting dual-channel output; 2 phantom-powered microphone inputs, both supporting 48V phantom power.
Network Interface	5 RJ45 ports, with 2 ports supporting 1000/100/10 Mbps auto-negotiation Ethernet, and 3 ports supporting POE.
Serial port	1-channel RS232 interface
USB port	4 USB ports
Hard disk	Built-in high-speed, stable 1TB hard drive with support for storage expansion
Dimensions	369.43mm*235.59mm*38mm
Weight	3.1kg