



Functional description:

1.The terminal adopts a highly integrated design, enabling a single unit to perform audio and video capture, audio and video encoding/decoding, audio and video processing, video recording, video-on-demand, live video streaming, video production switching, remote interaction, and operational management control.

1.The terminal integrates multiple functions into a single unit, including high-definition touch display, wireless image transmission, audio/video capture, audio/video encoding and decoding, audio/video processing, video recording, video-on-demand, live video streaming, video production control, remote interaction, operation and maintenance management, HID reverse control, UVC/UAC support, built-in speakers, and wireless microphone functionality.

2.The terminal features a 15.6-inch IPS FHD A-grade high-definition touchscreen display. It adopts a desktop tablet design with an all-aluminum chassis for an elegant and sophisticated appearance. Equipped with a scratch-resistant tempered glass panel, the touchscreen allows direct preview of the director's view. It supports one-touch operations such as recording, live streaming, interactive functions, video playback, and video downloads via the touchscreen display.

3.The device incorporates a built-in wireless video transmission module, supporting wireless video transmission and reception capabilities. With dual wireless configurations, the wireless signal achieves a transmission distance of no < 120 meters in unobstructed, interference-free outdoor environments, with a maximum data rate of up to 300Mbps. It supports wireless auto-pairing and auto-networking.

4.Hidden antenna design reduces user antenna installation and removal actions while enhancing reliability.

5.The device features an embedded 4G connectivity module, supporting 4G internet access capabilities. It accommodates SIM cards from carriers such as China Telecom, China Mobile, and China Unicom. The device enables functions like live streaming and remote interaction via 4G connectivity. It also supports wired Ethernet and Wi-Fi 5 network access methods.

6.Built-in audio processing module supporting feedback suppression, echo cancellation, automatic mixing, noise reduction, and audio matrix functions; Remote interactive dual-speaker operation with no compression, no interruptions, and no volume fluctuations; Supports local amplification for wireless microphones and line-level audio inputs.

7.Built-in wireless microphone audio module supports various configurations such as handheld microphones and lapel microphones. It can modify frequency bands according to different environments to avoid interference and ensure communication quality.

8.Supports UVC/UAC for seamless integration with third-party audio-visual interaction systems, enabling online-offline convergence.

9.Supports HID functionality, enabling remote and local users to interact on the same screen or perform remote control.

10.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.

11.The terminal features a built-in high-speed, stable 1TB hard drive for local storage of recorded files, with support for storage expansion.

12.The terminal features a Reset button that supports hardware reset functionality, enabling full system restoration via the Reset button.

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, interactive features, and production control. Available 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, teacher close-up, teacher wide shot, student close-up, student wide shot, and interactive feeds. It also supports switching between feeds by clicking on the respective video windows.

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 format.

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 duration is reached.

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 or 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 8 channels simultaneously. It supports multiple streaming modes including 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 sets of scheduled streaming configurations.
- 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 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 ≥ 8 preset positions, meeting the need for rapid access during live production.
- 27.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.
- 28.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.
- 29.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.
- 30.Supports online speech-to-text transcription, enabling the conversion of speech into text and the automatic generation of subtitles;
- 31.Supports setting up to 5 preset subtitles, with customizable font, text size, and color. Allows dragging to adjust the subtitle display position.
- 32.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.
- 33.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.
- 34.The system interface features a built-in virtual soft keyboard, enabling input of Chinese, English, numbers, and symbols without requiring an external USB keyboard.
- 35.The system supports on-demand playback of video files, dragging the playback progress bar to control playback, and downloading video files.
- 36.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.
- The system supports importing and exporting terminal configuration files, facilitating upgrades, debugging, and subsequent maintenance for users.

Technical specifications:

Model	LB-8106M
Processor	ARM multi-core processor
Operating System	Domestically developed independent embedded operating system, neither Windows nor Android
Operating Voltage	DC 19V
Built-in battery	Built-in 150Wh high-capacity rechargeable battery, providing 6-8 hours of continuous operation.
Power consumption	< 65W
Microphone	Built-in high-sensitivity omnidirectional microphone captures ambient audio without requiring an external omnidirectional microphone.
Loudspeaker	Built-in 4Ω high-fidelity speaker for direct playback of recorded audio, interactive remote audio, and more.
Video Interface	1 HDMI input port; 2 HDMI output ports with audio output capability
Input/Output Interface Resolution	HDMI supports resolutions up to 4K and is backward compatible with standard resolutions such as 1080 and 720; SDI supports resolutions up to 1080 and is backward compatible with standard resolutions such as 720.
Audio Interface	3 audio inputs: 1 HDMI audio input, 1 line stereo audio input, and 1 UAC audio input; 5 audio outputs: 2 HDMI audio outputs, 2 line stereo audio outputs, and 1 UAC audio output.
Network Interface	1 x 1000M Ethernet RJ-45 port
Serial port	1-channel RS232 interface
USB port	4 USB ports, including 1 USB Type-A port and 3 USB Type-C ports
Hard disk	Built-in high-speed, stable 1TB hard drive with support for storage expansion
Dimensions	376.43mm*271.80mm*34mm
Weight	3.8kg