



HD video terminal NT90MB (Specification B500-8)

HD video conference with MCU terminal embedded software V2.3



Description

The new 4K split-type high-definition video conferencing terminal supports H.265 technology, can achieve ultra-high-definition 4K effect with ultra-low bandwidth, integrates rich audio and video interfaces, and is suitable for various small and medium-sized meeting places

Features

- *It adopts a split structure, has a built-in hardware video processing unit, and supports dual systems (Linux/Android).
- *It supports ITU-T H.323 and SIP standard protocols and has good compatibility. It supports H.239 and BFCP dual-stream protocols, and both the main and auxiliary streams can reach 4K60. At the same time, both the main and auxiliary screens can output 4K60 resolution signals.
- *The call bandwidth supports 64Kbps-8Mbps; supports CIF, 4CIF, 720P, 1080P, and 4K video resolutions.
- *Support 1280×720@60fps/50fps/30fps/25fps, 1920×1080@60fps/50fps/30fps/25fps, 3840×2160@60fps/50fps/30fps HD video signal input.
- *Supports 1024×768@60fps, 1280×720@60fps, 1920×1080@60fps/30fps, 3840×2160@60fps/30fps HD video signal output.
- *Supports H.261, H.263, H.263+, H.264, H.264 HP, H.265 video codec protocols, supports G.711, G.722, G.722.1, G.722.1C, OPUS audio codec protocols, with sound quality up to 48KHz.
- *Built-in MCU function module, supports holding 8-party conferences, supports smooth expansion to 16-point built-in MCU function; supports built-in MCU conference to hold mainstream auxiliary stream conferences, supports PC version or mobile terminal to join the meeting.
- *The terminal can be controlled via 2.4G remote control, web, touch, mouse and keyboard, and remote control flying mouse control mode is supported.
- *Supports opening and closing the remote video at will, and supports dragging and dropping to change the window position of the video in the screen layout.
- *The terminal adopts B/S management architecture and can be managed remotely by accessing the browser to log in to the web, supporting switching between Chinese and English; and the terminal web page supports real-time echo of the conference screen and the conference audio can be played.
- *The terminal UI interface can set the web terminal switch and modify the web password.
- *Supports full-screen display or composite display of auxiliary streams in conferences; supports composite display of two main streams to the remote end, with optional screen layout.
- *The presentation interface supports plug-and-play function, and supports one-key presentation sending or ending and screen layout switching via the remote control.



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- *It supports single-screen dual display and dual-screen dual display application functions, can realize multi-screen layout, and supports various common layout types such as picture-in-picture.
- *Supports PTZ control of remote venues.
- *Supports switching of mainstream video signal sources, as well as audio input and output during meetings;
- *It has a USB interface and supports access to USB storage devices. It supports conference recording function and can directly record the video and audio during the meeting. It supports program upgrades and data packet capture through USB storage devices.
- *Supports video polling function, where you can select the polling window, polling time interval, and polling participants; supports voice activation function, where you can set the voice activation window, and the venue with the loudest voice will automatically switch to this window;
- *Support wireless sharing function. You only need to install a software on your computer and connect it to the terminal through the network to realize the wireless sharing function without external hardware devices.
- *No registration is required. You can join the corresponding meeting by simply entering the meeting number. You can choose to join in the interactive meeting mode or the live broadcast mode.
- *Support third-party systems to call the terminal through API to adjust the camera, set banners, switch screen layouts, control the speaking rights of each venue, etc.
- *It has rich audio and video interfaces, with 4-channel audio input interfaces, including HDMI×1, 3.5mm port×2, and RJ45×1; 2-channel audio output interfaces, including HDMI×1, 3.5mm port×1; as well as 3-channel HD video input interfaces and 2-channel HD video output interfaces, both of which support 4K60.
- *It supports the repair mechanism when IP network packet loss occurs. When the network packet loss rate is 30%, the sound is clear and continuous, and the video is clear and smooth without any lag or mosaic. When the network packet loss rate is 80%, the sound is clear and smooth and can be accurately understood.
- *Super strong network adaptability, automatically adjusting the resolution according to the network to ensure smooth meetings.
- *Supports automatic noise suppression, automatic gain control, automatic echo cancellation, lip synchronization and other audio processing functions.
- *It supports venue mute and block functions, and the venue sound output volume is adjustable.
- *Support voice priority and QoS policy mode.
- *It supports IPV4 and IPV6 protocols, supports NAT traversal, has the ability to cross routers and firewalls to ensure system security; and supports national encryption algorithms.
- *It has good management and maintainability, supports local audio and video loop diagnosis functions; one-click local audio and video testing; supports network ping testing on the operation interface; supports query of call logs and historical records.
- *Supports viewing media information of audio, mainstream video, and auxiliary video, including protocol, format, bit rate, number of sent and received packets, amount of sent and received packet data, packet loss rate, number of lost packets, jitter, delay, sending and receiving addresses, whether encrypted, etc.
- *Supports power management of the device's power-on startup and fan switch, and can configure whether the device automatically starts up and enables the fan.
- *The terminal has built-in data conferencing functions such as electronic whiteboard, electronic voting, and file sharing to meet the application needs of scenarios such as remote training and teaching.
- *With the banner function, you can add a banner on the terminal screen and set whether to enable the banner and the font size, font color, and background color of the banner.
- *It has the function of annotation on auxiliary streams. Real-time annotations can be made on the auxiliary stream screen when sending or receiving auxiliary streams. Three brushes of different thicknesses and five brush colors can be set, as well as annotation graphics such as circles, squares, arrows, and lines. When sending auxiliary streams, you can set whether to open annotation permissions to the participants for joint annotation.
- *It has the function of web interactive electronic whiteboard. You can operate the electronic whiteboard on the terminal control web. You can set three different brush thicknesses, ten brush colors, and annotation graphics such as circles, squares, arrows, and lines; set a solid color background or a picture background; when operating the electronic whiteboard on the web, the terminal output screen will synchronously follow the display of the electronic whiteboard content; you can set the electronic whiteboard to be pushed on the same screen, and other participating terminals can view the same whiteboard content. The electronic whiteboard supports paging and can support 5 pages.
- *It has a real-time subtitle function that can display real-time conference subtitles and translated subtitles at the same time, or display them separately. The subtitle size, color, and background color can be set without the need for additional equipment.
- *It has the function of simultaneous interpretation, which can translate the remote voice and play it back, with optional playback multiples and timbre, without the need for additional equipment.
- *The built-in image interpolation algorithm can interpolate 30-frame video into 60 frames to improve video smoothness.
- *The built-in image super-resolution algorithm can super-resolution 1080P video signals into 4K video signals, improving picture clarity while saving bandwidth.



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*The device application store provides downloads of mainstream video conferencing software such as Tencent Meeting Rooms, DingTalk, ZOOM, Microsoft Teams, etc. (Android system).

*You can view forms, documents and other materials through your device (Android system).

*Supports packet loss alarm function, and a prompt box pops up when receiving packet loss.

*By pairing with a specific camera, it supports the infrared transparent transmission function and supports the infrared remote control to transmit infrared signals to the terminal through the camera, thereby achieving the purpose of remotely controlling the terminal with the infrared remote control.

Specification

Framework agreement	Comply with ITU H.323 and SIP protocols
Video input	3-channel HDMI video input interface
Video output	2-channel HDMI video output interface
Audio input	4-channel audio input interface, MIC IN×1 (supports 48V phantom power), LINE IN×1, HDMI×1, RJ45×1
Audio output	2-channel audio output interface, HDMI×1, LINE OUT×1
Network	1 Gigabit Ethernet port, RJ45×1; 1 WIFI network (optionally 5G network)
USB interface	1 USB2.0 port and 1 USB3.0 port, which can be used to connect expansion devices or online upgrades
Video protocol	Support H.261, H.263, H.263+, H.264, H.264 HP, H.265 video standard protocols
Dual-stream protocol	Support H.239 and BFCP dual-stream protocols
Display mode	Supports 4:3 and 16:9
Cooling method	Built-in cooling fan
Environmental requirement temperature	0°C ~ 35°C (working state) -40°C ~ 55°C (non-working state)
Relative humidity	10% ~ 80% (working state) 0% ~ 95% (non-working state) (no condensation)
Device size	327mm×180mm×37.5mm (including machine feet)
Power supply	DC 12V
Weight	1.54kg