



Video Conference Solution for Company Senior Management

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■ System Description

Remote video conference system can achieve collaborative work and remote training with quick response, which can improve work efficiency and reduce operating costs, such as time and business travel costs. It enables people to enter a planned meeting without distance constraints and avoids long-distance business travel.

Also, it can send meeting materials, training and work guidance to the video conference system for others to learn on demand after the meeting, reducing the repetitive workload, improving work quality and efficiency, realizing internal experience sharing and training at any time, and further improving the work capabilities of office staff.

All video conference terminals and servers configured in the system have flexible and powerful functions.

The user can organize various conferences according to their specific application requirements: **point-to-point conferences, MCU-based multipoint conferences, etc.**

7 System Highlights

- 1. Real-time audio and video interaction function:** HD8000 video conference system provides high-definition video and no-latency voice calls. The video supports up to **1080P** and provides high-quality cloud conference effects.
- 2. Synchronous playback of multimedia files:** HD8000 video conference system supports simultaneous playback of multimedia files in any standard format to other participants, **with clear and smooth effect**, which **enriches the way of expression of the meeting**, and enhances the function and market value of cloud meetings.
- 3. Conference management function:** Support multiple conferences at the same time. Different meeting rooms can enter different meeting modes as required, and the number of meeting rooms can be increased as needed.
- 4. Conference recording and playback function:** HD8000 video conference system can **record all the audio and video information**, screen information, document sharing, and collaborative browsing during the conference in real time, which can truly reproduce the actual situation of the conference when **you watch the video after the conference**.

5. **Voting function:** Combined with HD8000 video conference system and D6201 digital conference system, it can realize voting. The conference speaker can initiate a voting during the voting process, and the voting options can be entered online or pre-programmed. After voted by the attendees, the conference speaker clicks the broadcast result to directly display the voting result, and at the same time, the system can set the storage path for the voting result and save it in XML file format.

6. **Video loop function:** When the number of videos received by the user is greater than the number of split screens in the window, the video loop mode can be used. The loop interval can be set freely. When the broadcast loop is used, the video loop screens in all the branch conference venues are the same as that in the main conference venue. When the local loop is used, only the local conference venue can watch the loop screens, and can support the real-time round tour of all branch conference venues, and freely selected round tour of the branch conference venues.

7. **Conference locking function:** The system supports conference locking. In this way, other users can be prevented from entering the conference system to interfere with the normal progress of the conference and prevent the leakage of conference confidential information. When the meeting room is locked, even if you have the account and password of the meeting room, you cannot enter the meeting room, and only be allowed to enter the meeting room after obtaining the approval of the administrator.

■ System Applications

This system can hold a whole network video conference attended by the main venue and all branch venues. It can be used for the whole unit or the whole region of a certain department to hold meetings, such as work meetings, publicity and education activities, experience promotions and work reports, etc.





Corporate



Hotel



Healthcare



Finance



Government



Transportation

■ Main Devices

HD8000 (9 Channels) Multi-point Control Unit (MCU)



1. Adopt an embedded system architecture with **strong compatibility**.
2. Support high-definition mixed network mixed speed, H.261, H.263, H.264, H.264 HP, H.265 protocol conversion.
3. ★**Support multi-stream technology**, can provide video streams with different resolutions and different frame rates at the same time as needed.
Support H.323 and SIP mixed network conference; support 1080P HD videos encoding and transmission under 1M bandwidth.
4. Support H.323, SIP, RTSP and RTMP protocols. Support H.239 and BFCP dual-stream protocols.
5. ★**Supportable and settable video codec protocols**: H.263/H.263+ CIF, 4CIF, H.264 CIF(30 fps)/4CIF(30 fps)/720p(30 fps, 60 fps)/ 1920x1080P (30 fps, 60 fps) video standards. Support 64K-8Mbps call broadband.
6. The MCU conference control mode supports cascading and multi-group conferences. Under the director mode, it can realize broadcasting in the venue, select videos, support automatic round tour, invite the terminal to join the meeting, support multiple split screens, force the terminal to withdraw from the meeting, and close the meeting.

7. Support multi-user and multi-role management mode. Support audio mixing, mute, online upgrades, and other functions.
8. **MCU has the function of virtual conference special service number.** Each leader or department can have a separate virtual conference special service number. Each conference terminal only needs to dial the corresponding number to join the corresponding independent conference, no need for support form the administrator.
9. **Display the conference name and rolling notification subtitles;** support 2, 3, 4, 5+1, 9, 8+2, 12+1, 16 split screens, no less than 16 split screens conference function. Can arbitrarily select the display venue in the split screen under the multi-split screen mode, and support three selection modes: manual control, voice activation and venue round tour.
10. **Support the main venue round tour function,** which can browse the scenes of each sub-venue in real time; support the broadcaster round tour function, which can speak in each venue in turn.
11. **With monitoring and diagnosis function,** it can do real-time monitoring and diagnosis of the network and terminal in the video conference.
12. The number of access points of this MCU is 9 channels of 1080P30. A single 1.5U chassis MCU supports 4 groups of meetings at the same time, which can be upgraded to 40 channels of 1080p30 meetings, while a single 2U chassis MCU supports 6 groups of meetings at the same time, which can be **upgraded to 128 channels of 1080p30 meetings.** The device supports cascading and unlimited expansion of the number of conference channels, and the extender supports SIP protocol voice conference to join the conference, with 200 joining points.
13. **Support the display of the conference venue name,** which is convenient for users to distinguish between different venues. With adjustable subtitle color, background color, transparency, and scrolling speed of the venue name. Support static and dynamic Chinese and English subtitles, which is convenient for users to transmit instant information.

HD8102

HD video conference camera



- Standard protocols for interwork a) Support standard SIP and H323, compatible with mainstream industry standard terminals and network peripheral equipment.
- Low bandwidth and high definition a) Support H.264BP, H.264HP and H.265 coding standards.
- Multiple microphone access methods a) Support three audio inputs of digital microphone, USB microphone and analog microphone, HDMI and analog audio output solution, applicable to different application scenes to meet more audio requirements.
- HD video input and output a) Mainstream 1080P60 input, 1080P60 output, sub stream 1080P60 input, 1080P60 output.
- Embedded solution a) Embedded hardware solution, with high efficiency and low latency.
- User-friendly interface design a) Support one-key access and one-key hang-up function, with real-time display of conference venue information (IP address, conference time, conference venue name, etc.), and support multiple video conference screen layouts (one large and two small layout, picture-by-picture layout, far-end mainstream full-screen layout, near-end mainstream full-screen layout, near-end sub-stream full-screen layout, far-end sub-stream full-screen layout)
- Good network adaptability b) Can adapt to different network environments while ensuring good video image effect when the network packet loss rate reaches 20%.
- Support WEB remote management, support TV UI control through 2.4G remote controller.

HD8014

Desktop Omnidirectional Microphone



- Sensitivity: -26dBFS
- SNR: 64dB Frequency
- Response Range: 20Hz-15kHz
- With MIC mute, speaker mute, volume mute, volume down, volume up function
- 16kHz uplink audio sampling rate, 48kHz downlink sampling frequency
- Build-in high-performance 3A algorithm, effective pickup radius of 6 meters.
- Support multi-interface output, Type-C, USB, AUX 3.5mm headphone interface.
- Touch key and multi-color function recognition.
- Support all kinds of video conference software, Cloud Room, BizConf, Tencent meeting, ZOOM, Ding Talk, HST, Vidyo, Webex, Skype for business, Google hangout and other meeting software.

With HD Camera Remote Audio Video Terminal



- Using 1/2.8-inch 5 megapixels, imaging pixels: 2.1-megapixel high-quality image sensor, maximum resolution up to 1920×1080 , the output frame rate up to 60fps.
- Using 72.5° ultra-wide angle, distortion-free camera, optical zoom up to 12 times, support 10 times digital zoom; advanced auto-focusing algorithm makes the lens complete auto-focusing quickly, accurately and stably.
- Using high-precision stepping motor and precise motor drive controller to ensure the low-speed movement of the PTZ without noise; 8.1/2.8-inch high-quality CMOS sensor, low-noise CMOS effectively ensure the ultra-high SNR of the camera video. The use of advanced 2D and 3D noise reduction technology further reduces noise while ensuring image definition.
- Brand-new H.265 encoding and decoding capabilities, supporting up to 2K 60fps ultra-high-definition dual-stream experience; combined with DSPPA unique audio and video compression technology, 45% bandwidth can be saved, and ultra-high-resolution high-quality images can be achieved, compatible with multiple resolutions downwards.

- Support high-definition sub-stream input and quick expanding of collaboration capability; meet rapid integration and deployment, an ideal choice for remote interactive communication scenarios such as large and medium-sized conference rooms, administrative offices, and remote education.
- Support H.264HP, H.264BP and H.265 video encoding and decoding standard, and camera video input audio protocols.
- Security, network adaptability super error correction (SEC), packet loss and retransmission (NACK), video forward error correction (FEC), security management TLS and SRTP encryption; meeting access encryption, meeting control password, administrator password; SSH/HTTPS, dual-stream encryption.
- 2.4G remote controller and web login settings, embedded hardware solutions, high-efficiency meeting control services.
- Video input interface 2×HDMI, 1×built-in camera input; video output interface 2×HDMI. Audio input interface 1×3.5mm; audio output interface 1×3.5mm.
- Input voltage DC 12V, input current TBD, working temperature: -10° C ~ 40° C, storage temperature: -40° C ~ 60° .

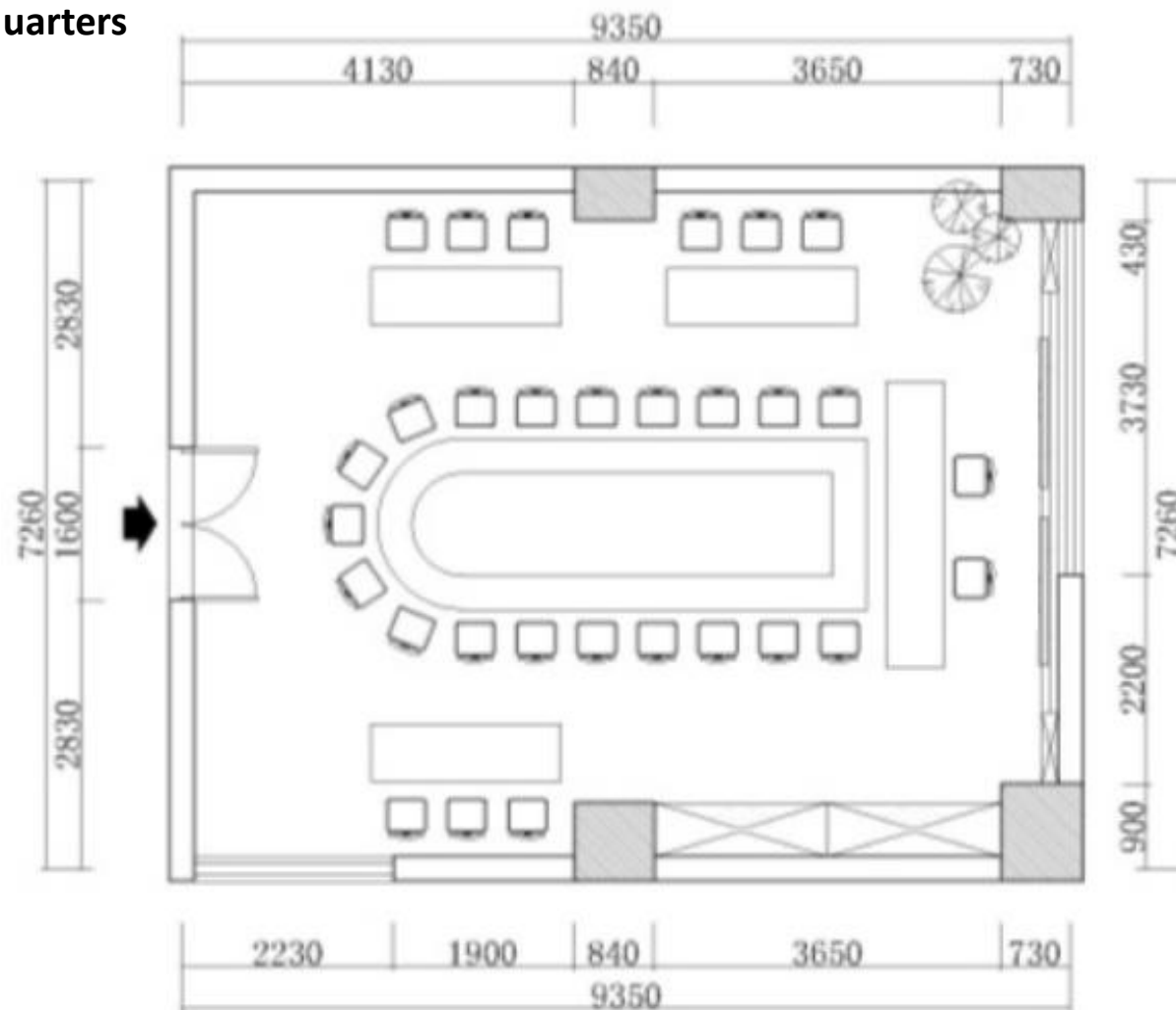
■ Solution Example

Layout drawing of the meeting room for company headquarters

In meetings of **various sizes**, it has abundant and flexible meeting functions to meet different meeting needs.

A listed company is required to have a video conference with the senior management of its subsidiaries in other regions to make a report, seeking an affordable video conference system equipment design plan. In order to meet the needs of use, our company combines HD8000 remote video conference system and D6201 digital conference system with D6108 video matrix system to create a remote video conference system across network segments, with simple wiring and easy to operate.

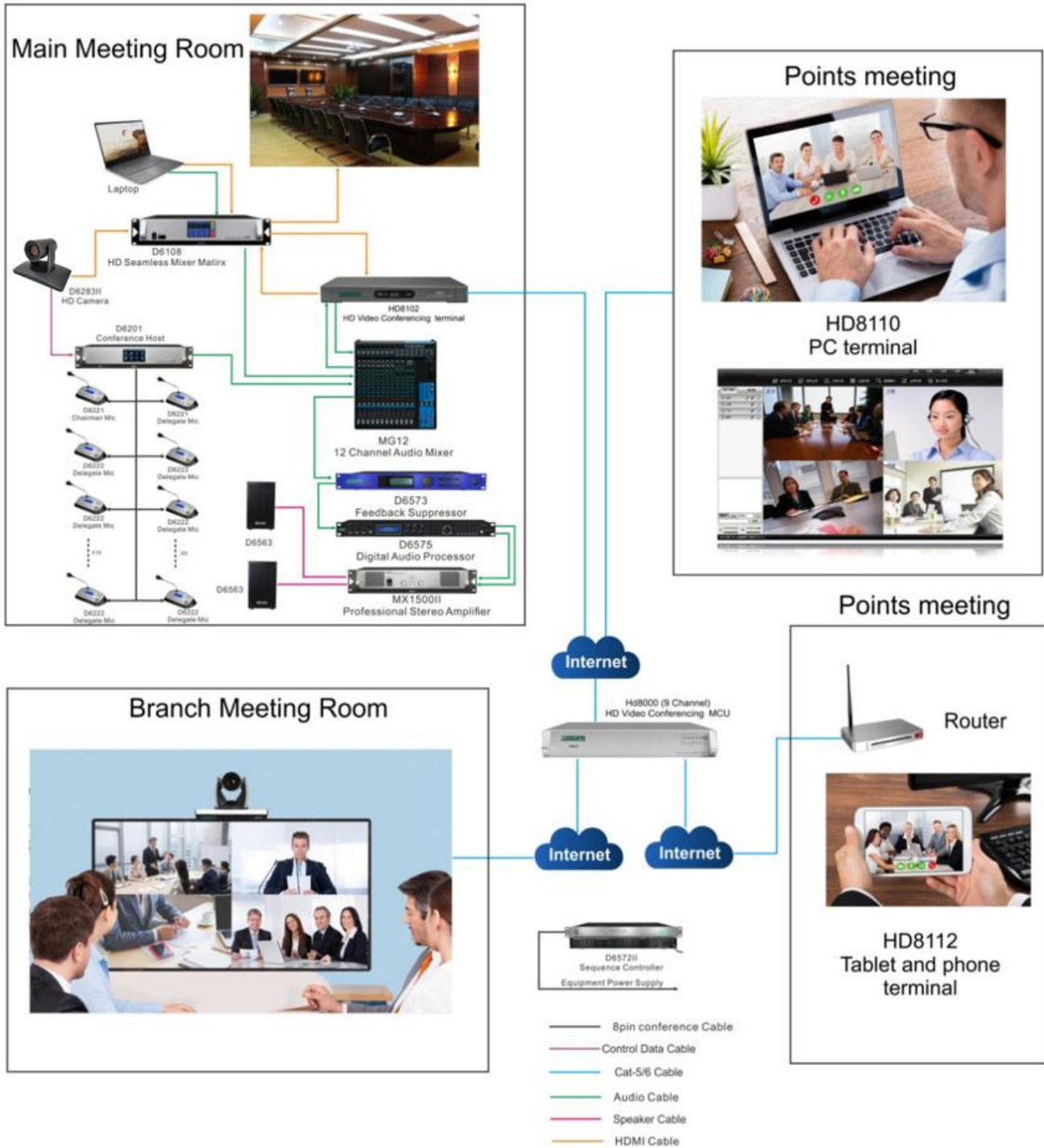
It is located at the west end of the second floor of the municipal government office building, with total renovation **area of 68m²**, and **3.1m in height**.



Installation Site Renderings



Connection Diagram



Remote Video Conference System HD8000



Conference Room B



Conference Room C



Conference Room A



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