



D6850 2.4G Wireless Digital Conference System for Conference Rooms

System Overview

- With the diversification of modern meeting formats, traditional conference systems are gradually unable to meet the needs for flexibility, convenience, and efficiency. The 2.4G wireless conference system, with its stable transmission capabilities and cable-free features, has become the ideal choice for an increasing number of conference rooms. This solution will provide you with a deployment plan for a meeting system based on 2.4G wireless technology, aimed at offering enterprises, institutions, and others a high-quality, easy-to-operate, and flexible meeting experience.



Design Objectives

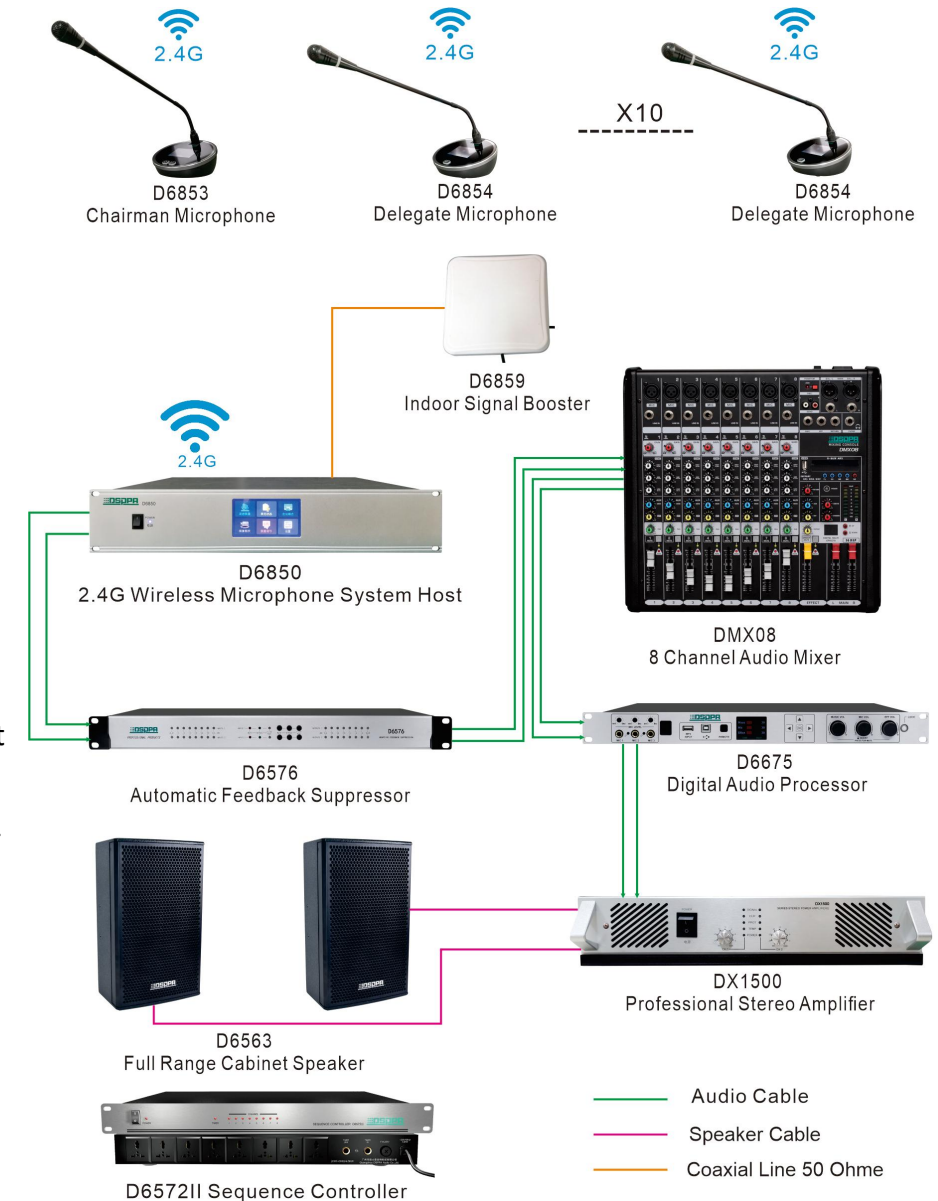
- **Stable Transmission:** The wireless audio transmission is stable and free from distortion, ensuring no signal loss or interference even in complex wireless environments.
- **Efficient Allocation:** The system is designed with rational wireless signal distribution to prevent signal attenuation or insufficient coverage due to excessive concentration or blind spots.
- **Scalability:** The system offers excellent scalability, allowing flexible addition or reduction of microphones, receivers, audio equipment, and other devices based on the size of the conference room, number of participants, and specific requirements.
- **User-Friendly Operation:** The system features a carefully designed interface with intuitive controls, avoiding complicated procedures, allowing conference hosts, participants and technical support staff to easily master the system.

Configuration Plan for a 120m² Conference Hall (10PCS)

No.	Model	Product Name	Quantity
1	D6850	2.4G Wireless Microphone System Host	1
2	D6859	Indoor Signal Booster	1
3	D6853	2.4G Wireless Chairman Microphone	1
4	D6854	2.4G Wireless Delegate Microphone	10
5	DMX08	8 Channel Audio Mixer	1
6	D6576	Automatic Feedback Suppressor	1
7	D6675	Professional Audio Processor	1
8	MX1500II	Professional Stereo Power Amplifier (8Ω; 2x230W)	1
9	D6563	8" Two-way Full Range Speaker	2
10	D6572II	Sequence Controller	1

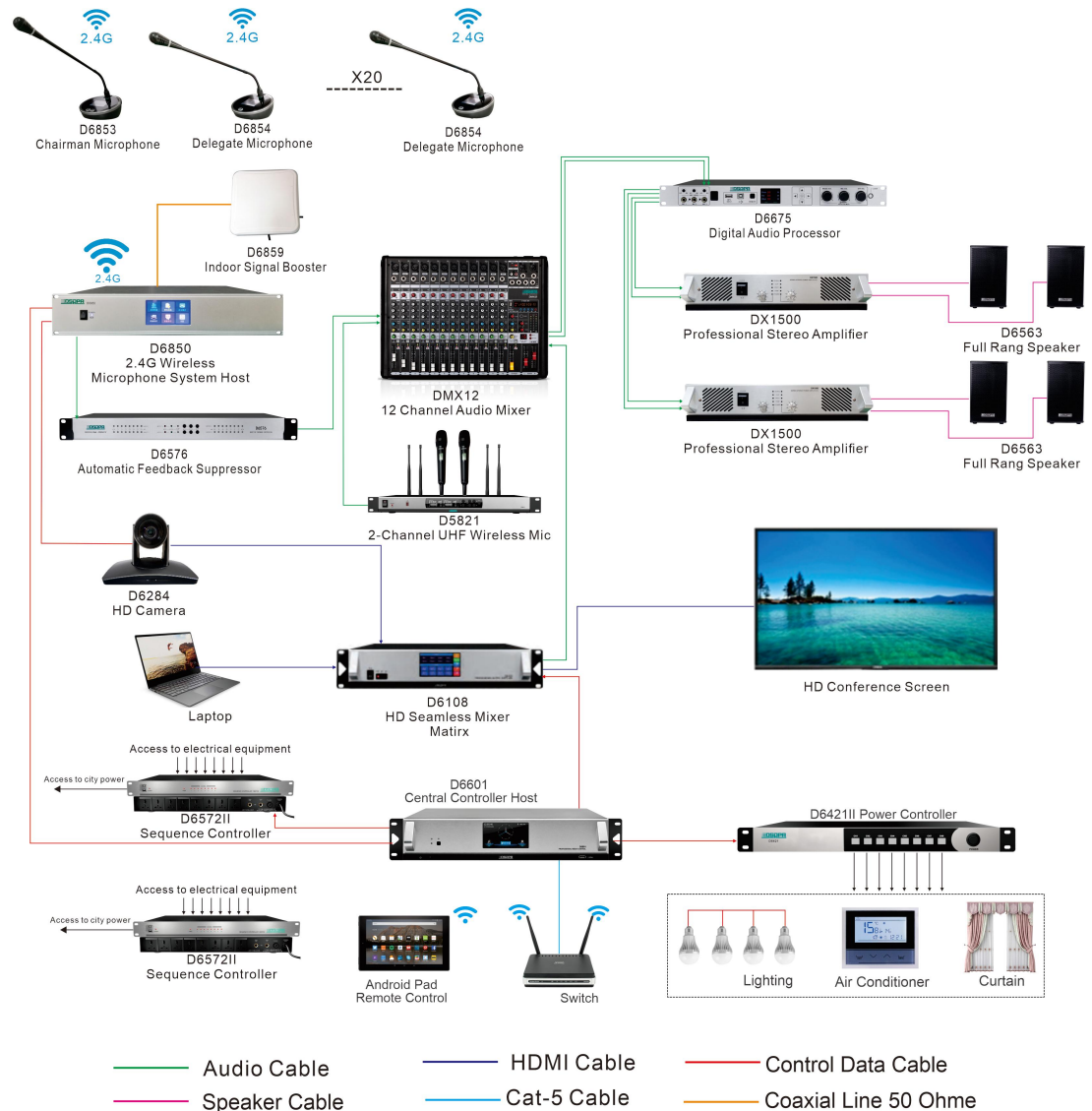
System Solution Configuration Description

- **System Components:** 2.4G Wireless Digital Conference System + Professional Sound Reinforcement System
- **System Functions:** This conference system integrates advanced equipment designed specifically for wireless speech and discussion, ensuring an efficient and stable meeting experience. **D6850 Wireless Digital Conference Host:** Utilizing 2.4G full-digital frequency-hopping technology, it offers strong anti-interference capability and adaptive frequency hopping to ensure stable data transmission. The system features encryption protection to prevent eavesdropping and supports a mute speech mode, allowing up to four units to speak simultaneously. **D6853/D6854 2.4G Wireless Chairman/Delegate Microphone:** Each unit has an independent ID and supports the chairman priority function. It features a color display, microphone volume adjustment, and resistance to mobile phone interference. Additionally, the system is equipped with professional audio processing devices to ensure high-quality sound in the venue, guaranteeing smooth and effective meetings.



Multi-Function Hall Solution Configuration (200m², 20 People)

No.	Model	Product Name	Quantity
1	D6850	2.4G Wireless Microphone System Host	1
2	D6859	Indoor Signal Booster	1
3	D6853	2.4G Wireless Chairman Microphone	1
4	D6854	2.4G Wireless Delegate Microphone	20
5	DMX12	12 Channel Audio Mixer	1
6	D6576	Automatic Feedback Suppressor	1
7	D6675	Professional Audio Processor	1
8	DX1500	Professional Stereo Power Amplifier (8Ω; 2x230W)	2
9	D6563	8" Two-way Full Range Speaker	4
10	D5821	2-Channel UHF Wireless Mic	1
11	D6284	HD Camera	1
12	D6108	2K HD Seamless Hybrid Matrix	1
13	D6601	Central Controller Host	1
14	D6421II	8-Channel High Current Power Controller	1
15	D6572II	Sequence Controller	1
16	Laptop	Laptop	1
17	HD Conference Screen	HD Conference Screen	1
18	Switch	Switch	1



■ Solution Configuration Description + Conference Room Layout Diagram

System Composition:

The system consists of a conference unit system, video matrix system, central control system, and professional sound reinforcement system.

System Function:

- **Audio Pickup:** The system adopts a 2.4G wireless conference system, utilizing the ISM frequency band with 2.4G full-digital frequency-hopping (DSSS) modulation technology, ensuring strong anti-interference capability and full coexistence with WiFi. The system features automatic camera tracking and video switching functions, as well as one-touch control of equipment, lighting, air conditioning, and curtain switches. It supports three speech modes: FIFO (First In, First Out), Normal Mode, and Chairman Mode, with a maximum of four microphone units active simultaneously, facilitating orderly meeting management. This system does not require complex cable installation and can be used without any frequency application during installation and operation. Its advanced 2.4G frequency-hopping modulation communication technology and digital transmission technology significantly reduce interference, ensuring stable system operation. With its unique 2.4G transmission characteristics, digital transmission technology, and comprehensive communication protocol, the system maximizes the security of conference content.
- **Control Section:** The system utilizes a digital mixer, digital audio matrix, and feedback suppressor to manage overall system control, ensuring clear sound reproduction without distortion or feedback. Additionally, various audio effects processing functions further enhance the audio experience.
- **Sound Reinforcement System:** Equipped with four 250W professional speakers, providing full venue coverage.



Product Introduction_D6850 Conference Host



Features:

- **4.3-inch capacitive touch screen with a graphical interface design, providing a clear view of all functions, settings, and basic working information of the units;** modern and elegant design. The touch control operation ensures highly user-friendly interaction.
- Operates in the ISM band (2400MHz–2525MHz) with fully digital frequency-hopping (DSSS) modulation communication technology, allowing seamless coexistence with WiFi and offering excellent anti-interference performance.
- Features true digital wireless transceiver separation and adaptive frequency-hopping technology, along with forward error correction and retransmission mechanisms to ensure no data loss.
- Encryption protection prevents eavesdropping and unauthorized access, ensuring the confidentiality of meetings.
- Full digital audio processing technology **with an audio sampling rate of 48kHz.**
- Supports connection of up to 255 wireless conference units.
- **Includes a one-button shutdown function to turn off all units.**
- Provides three conference modes: First-In-First-Out, Normal Mode, and Chairman Mode, with the ability to configure simultaneous speaking for 1/2/3/4 units.
- Equipped with one RS232 interface for seamless integration with central control systems.
- Includes one RS422 interface for centralized camera control.
- **Displays real-time information on channels, ID addresses, and battery levels of the units.**
- **Allows total volume adjustment and individual 4-channel volume control to regulate signal output levels.**
- The chairman unit features a **Chairman Mode with priority functions**, which are available on all chairman units.
- Supports speech timing and countdown reminders. The speech timing function allows setting the speaking time for units or disabling the timer for unlimited speaking.
- The system display supports Chinese and English languages.
- **Connects to the wireless transceiver via a professional communication cable, with the host providing power to the transceiver, eliminating the need for an external power source.**
- Offers four balanced audio output channels for connection to audio processors.
- Includes two unbalanced audio output interfaces for connection to preamplifiers, mixers, or professional amplifiers.

Product Introduction_D6850 Wireless Digital Conference System Host

Supports one-touch shutdown for all units.

With total volume and 4-channel volume adjustment, adjust the signal output size;

Features a 4.3-inch capacitive touchscreen with a graphical interface, offering clear visibility of all functions, settings, and unit status. The modern and stylish design, combined with intuitive touch controls, ensures a user-friendly experience.



Uses professional communication cables to connect with the wireless transceiver, with the host unit supplying power to the transceiver, eliminating the need for an additional power source.

RS422 Interface: For centralized control of cameras.

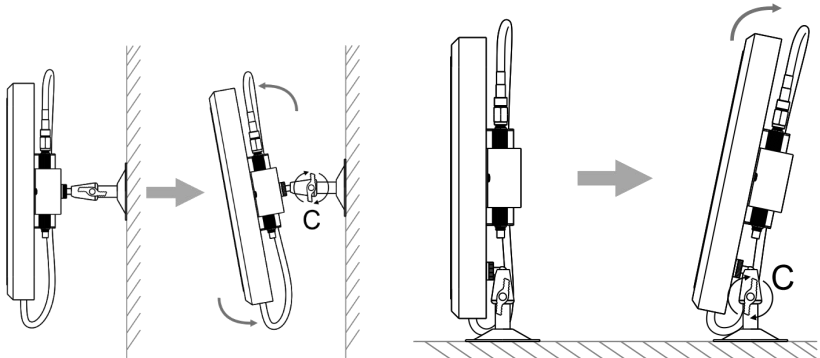
RS232 Interface: Connects to the central control system for controlling certain functions.

Product Introduction_D6859 Indoor Signal Booster



Features:

- Uses a 14dBi directional high-gain planar antenna in the 2.4-2.5G frequency band, with an input impedance of 50Ω.
- Built-in 2.4G ultra-low power wireless module with a 48K digital audio sampling rate.
- Utilizes 2.4G all-digital frequency-hopping modulation communication technology.
- Includes a powerful built-in wireless audio transmission protocol, employing numerous coexistence mechanisms to prevent wireless conference units from external interference.
- Built-in digital circuitry significantly amplifies the 2.4G wireless signal, enhancing communication stability for conference units.
- Full-range communication with adaptive frequency hopping, forward error correction, and retransmission mechanisms to ensure data is never lost.
- Connects directly to the host without the need for an external power supply, with both receiving and transmitting capabilities.
- Radiation range of up to 40 meters in a straight line.
- Equipped with a universal adjustable base for flexible installation on walls, desktops, and other locations.



Wall-Mounted Installation

Desktop Installation

Product Unit_2.4G Wireless Digital Conference Units D6851~D6854



D6851
Desktop Speaking Chairman Unit
(Square Microphone)



D6852
Desktop Speaking Delegate Unit
(Square Microphone)



D6853
Desktop Speaking Chairman Unit
(Gooseneck Microphone)

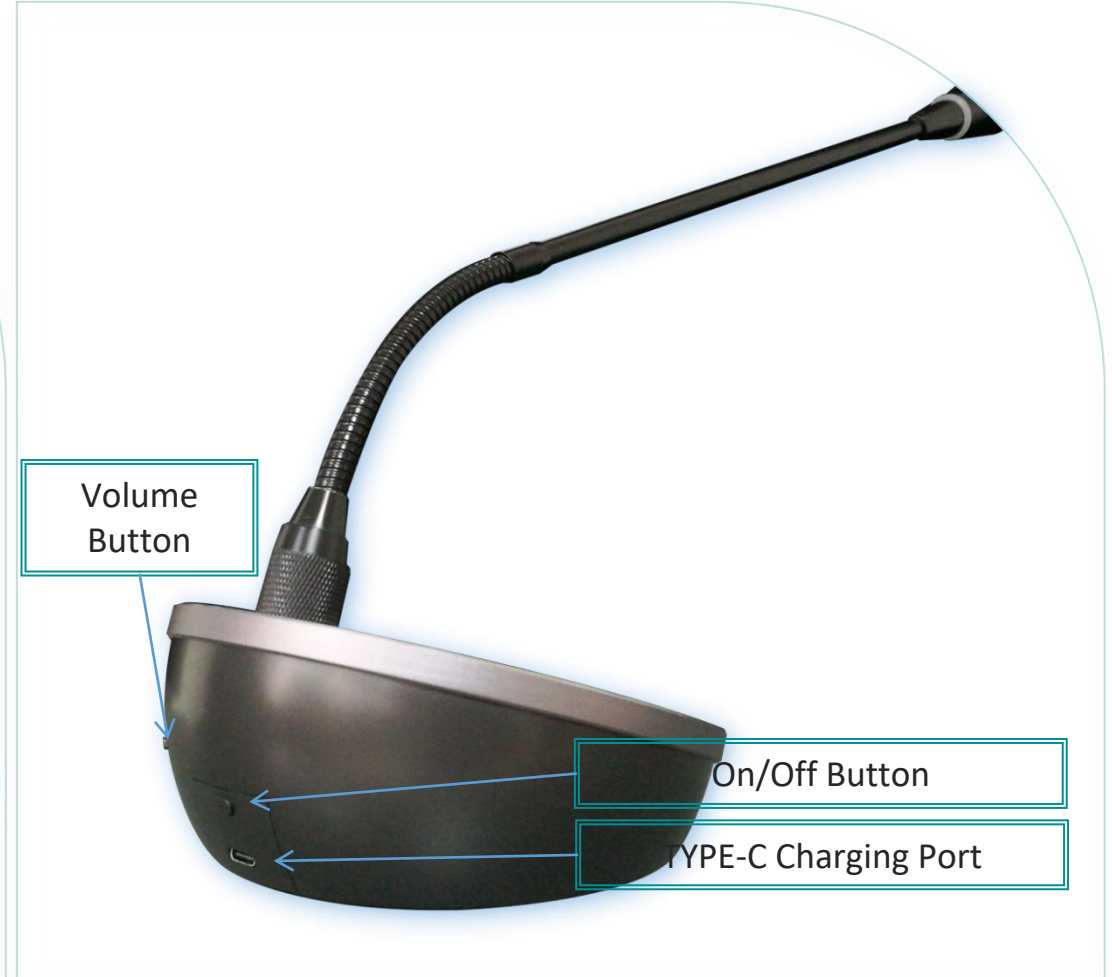


D6854
Desktop Speaking Delegate Unit
(Gooseneck Microphone)

Features:

- Conference unit with pure speech function.
- Each conference unit has a unique ID number.
- Equipped with a microphone on/off button, the chairman unit has a chairman priority button.
- **2.8-inch TFT color screen displaying unit ID, signal strength, battery level, time-limited speech, etc.**
- Electret cardioid condenser microphone, available in two models: **Square Mic Rod and Gooseneck Microphone.**
- **Adjustable microphone volume.**
- Strong anti-interference ability against mobile phone signals.
- **Simplified Chinese and English bilingual display** for unit information
- Full digital audio processing technology with **an audio sampling rate of 48kHz.**
- Encryption protection prevents eavesdropping and unauthorized access, ensuring the confidentiality of meetings.
- Supports automatic camera tracking when used with host settings and paired with a camera
- TYPE-C Charging Interface;

Product Introduction_D6851~D6854



■ Application Scenarios



Seminars



Conference Rooms



Multi-Function Halls



Mobile Conferences



Training Centers

The 2.4G wireless conference system is ideal for any meeting venue that requires flexibility, wireless connectivity, and high efficiency. It is especially suited for environments where easy installation, strong anti-interference capability, and convenient equipment mobility or configuration are essential.



CREATING THE BEST, SOUNDING THE WORLD



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