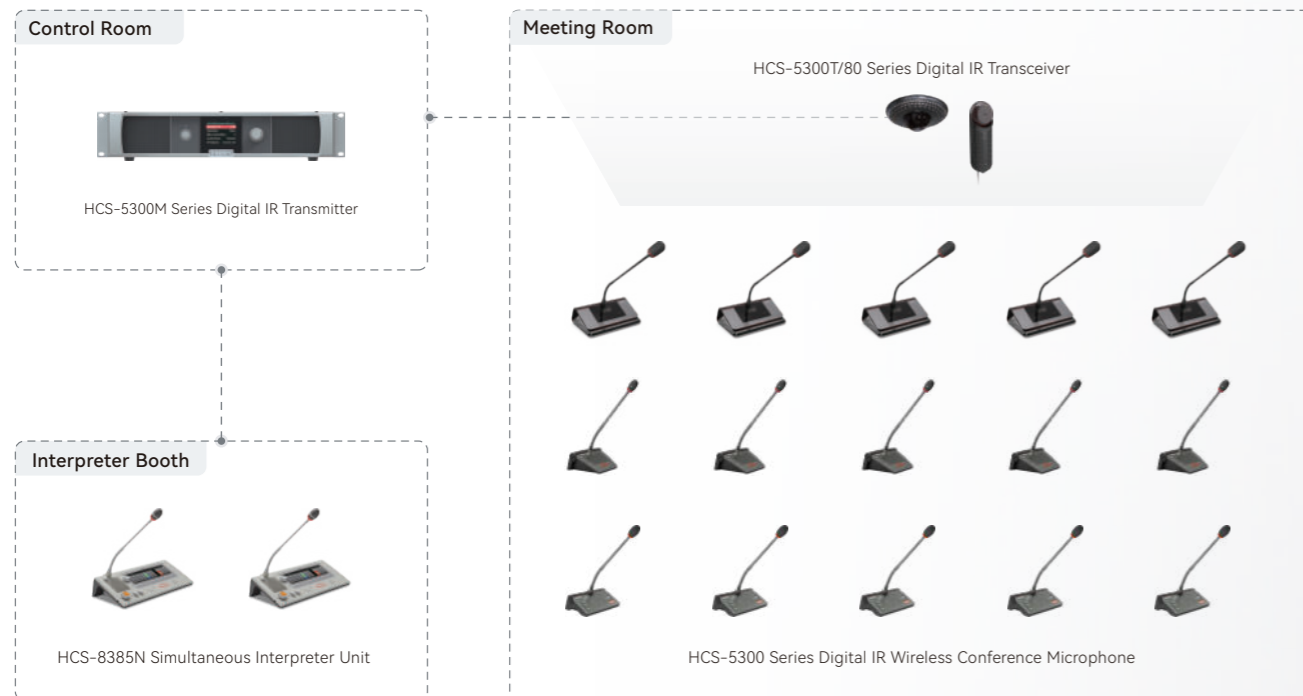


# TAIDEN®

## Digital IR Wireless Conference System

### Connection diagram



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## About Us

As one of the world's renowned providers of conferencing solutions, TAIDEN is not only favored by numerous prestigious institutions including the World Bank, IMF and European Commission, but also invited to develop ISO and Chinese national standards on conference system and classroom multimedia system as one of the technical experts.

In 2015, TAIDEN introduced its digital infrared technology into the field of multimedia teaching and released a series of classroom audio systems that offer excellent audio clarity, great immunity to interference and convenient management, fully satisfying the needs for sound reinforcement, interactive recording and web casting, and centralized management of all the multimedia equipment in classrooms. The wireless microphone of digital IR technology provides safe and RF radiation free use, while making it easier to maintain and charge the microphone.

TAIDEN classroom audio system has been chosen by many famous universities and schools, including Tsinghua University, Zhejiang University, Shanghai Jiao Tong University, Wuhan University, Huazhong University of Science and Technology, South China University of Technology, providing teachers and students with high-quality and environmentally friendly classroom audio solutions.



**1996**

Founded in Shenzhen, China



**200+**

Core Intellectual Property



**2000+**

Favored by colleges and institutions



**70000+**

Equipped classrooms



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## Digital IR Wireless Conference System

Security Guaranteed Perfect Acoustics Interference Free

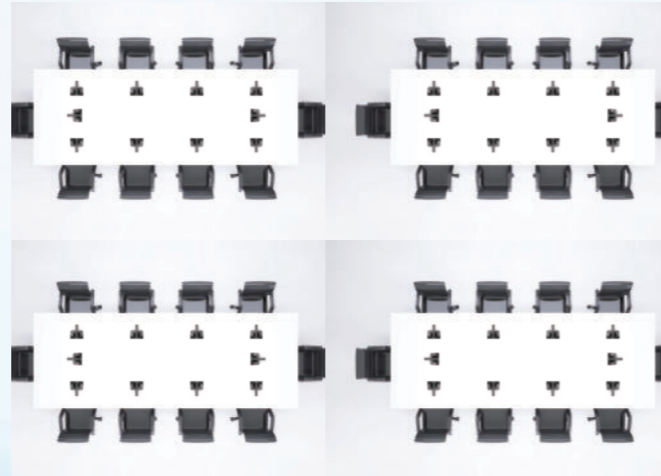
Wireless conference systems are currently trend-setting as they are portable, easy to install, and convenient to use. In addition, wireless systems do not require structural measures inside a venue. TAIDEN Digital IR Wireless Conference Systems integrate the advantages of digitalization, wireless and infrared transmission technologies, being the ultimate wireless solutions for conferences.

# Digital IR Wireless Conference System

## HCS-5300 Series

### Security guaranteed

Thanks to TAIDEN proprietary dirATC - Digital Infrared Audio Transmitting and Control technologies, signals can't penetrate walls or ceilings. Multiple sets of infrared wireless conference systems can be installed in the same building without eavesdropping and information leakage, ensuring the privacy and security of the conference.



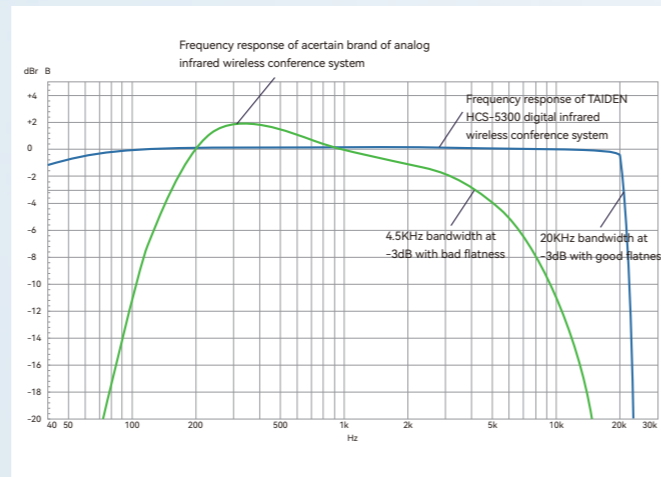
### Interference free

The system transmits signals via infrared and adopts 1~8 MHz transmission frequency, undisturbed by HF driven light sources. It can work normally under sunlight without electromagnetic radiation.



### Perfect acoustics

The system features a frequency response of 80 Hz to 20 kHz, S/N ratio equal or greater than 90dB, and THD equal or less than 0.05%, ensuring perfect acoustics. Whether in a presentation, discussion or voting session, every participant can hear clear, natural voices of speakers.



### Easy to install

The Digital IR Wireless Conference System can be applied in various types of conference rooms and venues. With desktop wireless conference units, there is no need to drill holes in the desk, avoiding complicated wiring. The removable system is free from troubles resulting from cable breaks and cable deterioration. It can be quickly set up without structural measures.



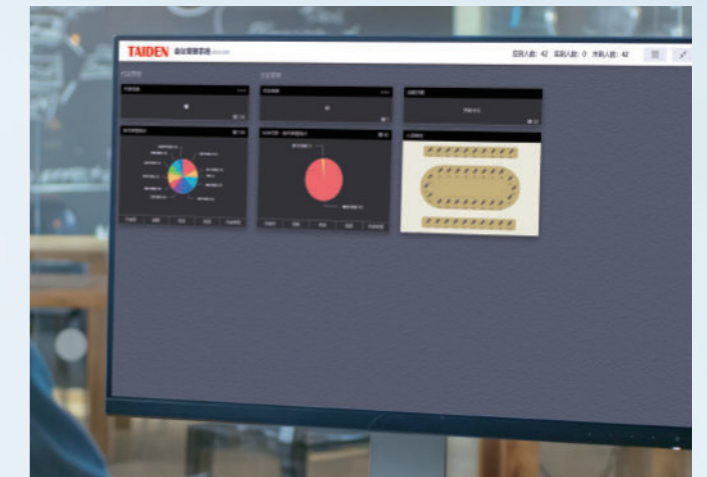
### Fully functional

The system features powerful functions including multiple speech modes, 5 voting keys, simultaneous interpretation (1+7 CHs), isolated audio recording function for SI, automatic video tracking, compatibility with HCS-5100Plus Digital Infrared Language Distribution System, etc. It can meet various meeting needs and ensure the smooth conference.



### Convenient management

Operators can access and control the main unit via a Web browser to manage the system remotely. This allows you to operate and manage the conference system at any time and anywhere. The great flexibility and convenience of the system enable you to manage meetings more efficiently.



# Product Overview

## Digital IR Wireless Conference Units



HCS-5390 Series



HCS-5381 Series



HCS-5300/80 Series

## Digital IR Transceivers



HCS-5300TD/80



HCS-5300TH/80



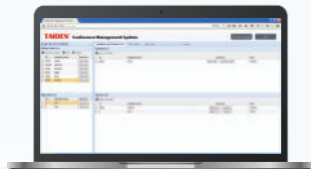
HCS-5300TWN/80

## Digital IR Wireless Conference Main Units



HCS-5300M/80A Series

## Software



HCS-5300WS  
Web Control Software



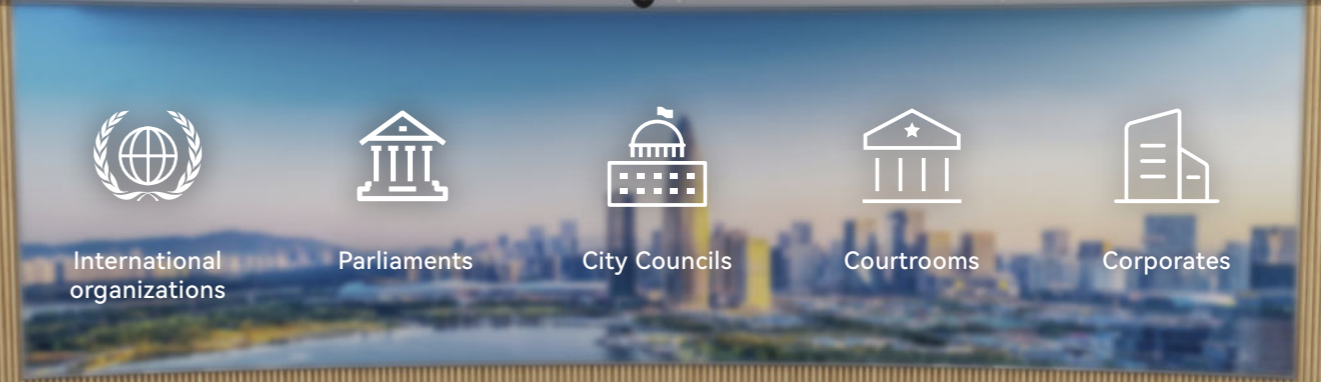
HCS-5300/80  
Conference Management System

## Digital IR Conference Room Switcher



HCS-5300MX/20

# Scenarios



# Digital IR Wireless Conference Units

## HCS-5390 Series

The HCS-5390 Series Digital Infrared Wireless Conference Units feature innovative and minimalist design, incorporating all the necessary functionalities to meet users' demands. The units are also easy to operate and capable of providing an excellent conference experience.



- Tabletop, innovative and minimalist design embodies a bridge of communication between participants, inspired by the shape of a book
- Flexible choice between rectangular columnar microphone and gooseneck microphone
- Hi-Fi loudspeaker, minimal feedback
- Microphone sensitivity and EQ are individually adjustable
- Delicate 160×80 OLED for displaying channel number, language name, signal icon, battery capacity, headphone volume, sign-in/vote icon, alarm status, charging status
- 5 voting keys. Braille is present for physical buttons
- Used with HCS-5300BAT Lithium rechargeable battery, its operation duration is 14.4 hours when microphone is continuously on and 48 hours when microphone is off

### Function List

Model	Function	Type	Discussion	SI	Voting	Microphone
HCS-5390CE		Chairman	•	1+7 CHs	•	Pluggable microphone (Ordered separately)
HCS-5390DE		Delegate	•	1+7 CHs	•	
HCS-5391CE		Chairman	•			
HCS-5391DE		Delegate	•			

### Technical Specifications

IR transceiver	
Wavelength	870 nm
Modulation method	DQPSK
Reception/emission angle	Vertical: 125°, Horizontal: 120°
Electrical	
Output	Built-in loudspeaker: 4Ω, 600 mW Headphone: Ø 3.5 mm headphone jack
Headphone load impedance	≥16 Ω
Headphone output	10 mW
Mic. gain adjustable range	-12 dB ~ +12 dB
Mechanical	
Dimension (h×w×d)	57×201×135 mm (w/o Mic.)
Weight	0.54 kg (w/o battery), 0.83kg (with battery)

# Digital IR Wireless Conference Units

## HCS-5381 Series

The HCS-5381 series Digital Infrared Wireless Conference Units are equipped with pluggable microphones, feature a 5-pin microphone socket and are compatible with MS\*\*E type stem microphones. The units are easy to operate and are the best choice in all types of conference rooms to meet the discussion needs.



- Stem microphone can be unplugged during adjournment, easy to maintain (HCS-5381C, HCS-5381D)
- Microphone On/Off button
- Hi-Fi loudspeaker, minimal feedback
- Microphone sensitivity and EQ individually adjustable
- With built-in Lithium rechargeable battery, its operation duration is 14.4 hours when microphone is continuously on and 48 hours when microphone is off

### Function List

Model	Function	Type	Discussion	Microphone
HCS-5381C		Chairman	•	Pluggable microphone (Ordered separately)
HCS-5381D		Delegate	•	

### Technical Specifications

IR transceiver	
Wavelength	870 nm
Modulation method	DQPSK
Reception/emission angle	Vertical: 125°, Horizontal: 120°
Electrical	
Output	Built-in loudspeaker: 4Ω, 1W Headphone: Ø 3.5 mm headphone jack
Headphone load impedance	≥16 Ω
Headphone output	10 mW
Mic. gain adjustable range	-12 dB ~ +12 dB
Mechanical	
Dimension (h×w×d)	75×143×138 mm (w/o Mic.)
Weight	0.9 kg

# Digital IR Wireless Conference Units

## HCS-5300/80 Series

HCS-5300/80 Series Digital Infrared Wireless Conference Units are desktop microphones, easy to install and move. The units are equipped with a 5-pin microphone socket and compatible with MS\*\*E type stem microphones, which can be ordered separately on demands. The units support discussion, simultaneous interpretation, voting, and other functions, being the ideal choice for large-scale international conferences.



- Graphic 64×48 LCD with back-lighting for displaying channel number, language name, battery capacity, and speaker volume
- 5 voting keys. Multifunction voting can be implemented in combination with the corresponding software
- Hi-Fi loudspeaker, minimal feedback
- Microphone sensitivity and EQ are individually adjustable
- Built-in channel selector (1+7 CHs), realizing 8 CHs simultaneous audio when cooperating with HCS-5100Plus series
- Used with HCS-5300BAT Lithium rechargeable battery, its operation duration is 14.4 hours when microphone is continuously on and 48 hours when microphone is off

### Function List

Model	Function	Type	Discussion	SI	Voting	Microphone
HCS-5300C/80		Chairman	•	1+7 CHs	•	Pluggable microphone (Ordered separately)
HCS-5300D/80		Delegate	•	1+7 CHs	•	
HCS-5301D/80		Delegate	•	(1+7 CHs)×2		
HCS-5302C/80		Chairman	•			
HCS-5302D/80		Delegate	•			

### Technical Specifications

IR transceiver	
Wavelength	870 nm
Modulation method	DQPSK
Reception/emission angle	Vertical: 125°, Horizontal: 120°
Electrical	
Output	Built-in loudspeaker: 4Ω, 1W Headphone: Ø 3.5 mm headphone jack
Headphone load impedance	≥16 Ω
Headphone output	10 mW
Mic. gain adjustable range	-12 dB ~ +12 dB
Mechanical	
Dimension (h×w×d)	73×184×134 mm (w/o Mic.)
Weight	0.5 kg (w/o battery), 0.8 kg (with battery)



# Digital Infrared Transceivers

## HCS-5300T/80

HCS-5300T/80 Series Digital Infrared Transceivers are used to send and receive infrared signals, transmitting in 1~8 MHz frequency band and eliminating the interference from HF-driven lights. Within the coverage area of infrared signals, HCS-5100R/F Digital Infrared Receivers can be used simultaneously to receive (1+7 CHs) simultaneous interpretation.



HCS-5300TD/80 Series

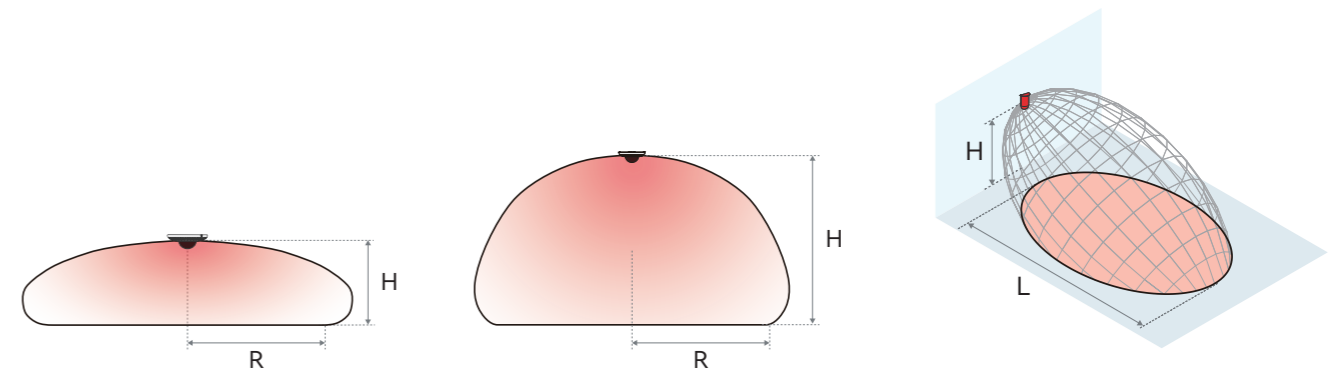


HCS-5300TH/80



HCS-5300TWN/80

## Coverage Area



Cutaway view of coverage area of HCS-5300TD/80 Series

Cutaway view of coverage area of HCS-5300TH/80

Footprint of HCS-5300TWN/80

## Function List

Model	Mounting height (H)	Coverage area radius (R)	Coverage area distance (L)
HCS-5300TD_S/80	2.5~3.0 m	13.0 m	---
HCS-5300TD_W/80	3.5~4.5 m	11.0 m	---
	5.0~7.0 m	9.0 m	---
HCS-5300TH/80	6.0 m	9.0 m	---
	9.0 m	11.0 m	---
	12.0 m	9.0 m	---
HCS-5300TWN/80	≤5.0 m	---	15.0 m

Note: The above coverage area is based on a single transceiver. Please install the necessary number of transceivers according to venue's size and the environment in actual use. The advised distance between the transceivers is 7~7.5 meters.

## Technical Specifications

Model	HCS-5300TD/80	HCS-5300TH/80	HCS-5300TWN/80
Carrier frequency	1-8 MHz	1-8 MHz	1-8 MHz
Dimensions	Ø181×63 mm	Ø160×65 mm	114×34×323 mm
Weight	0.5 kg	0.6 kg	0.9 kg

# Digital IR Wireless Conference Main Units

## HCS-5300M/80A Series

Based on TAIDEN originated dirATC - Digital Infrared Audio Transmitting and Control technologies, HCS-5300M/80A Series Digital Infrared Wireless Conference Main Units provide reliable audio transmission. The main units can connect to interpreter units and wired congress units, supporting discussion, voting, simultaneous interpretation, conference management, etc.



- 2.8'' LCD displays status of the main unit and menu of the system configuration
- Microphone sensitivity and EQ individually adjustable
- 6 digital infrared transceiver interfaces. Used with HCS-5352, the main unit can connect up to 10 transceivers
- Can connect to interpreter units to support up to 8 simultaneous interpretation language channels (including the floor channel)
- Can connect to wired congress units to better satisfy conference needs
- Compatible with HCS-5100Plus Series Digital Infrared Language Distribution System, enabling more audience to join in the conference
- Can interconnect with major video conference software to reduce echo and feedback
- Can connect to PC via the Ethernet interface for remote control of the main unit

### Function List

Model	Function	Discussion	SI	Voting	Dante
HCS-5300MA/80A		•	1+7 CHs	•	•
HCS-5300MB/80A		•	1+7 CHs		
HCS-5300MC/80A		•			

### Technical Specifications

Electrical	
Frequency response	80 Hz~20 kHz (-3 dB)
SNR	≥90 dBA
THD	≤0.05%
Interface	
Audio input	1 × XLR BAL.; 1 × RCA UNBAL.
Audio output	1 × XLR BAL. ; 1 × XLR UNBAL.
Transceivers I/O terminal	6 × 6P-DIN socket for connection to transceivers
Interpreter unit/DCS terminal	1 × 6P-DIN socket
External control terminal	1 × RS-232 for connection to central control system 1 × USB interface 1 × RJ45 for connection to PC to realize remote control 2 × Dante for connection to Dante network
Alarm terminal	1 × 2-pole 3.81 mm Phoenix
Video switcher terminal	1 × 4-pole 3.81 mm Phoenix
Mechanical	
Dimensions (h×w×d)	88×480×418 mm
Weight	11.8 kg

## Digital IR Conference Room Switcher

### HCS-5300MX/20

HCS-5300MX/20 Digital IR Conference Room Switcher can combine or separate meeting rooms. Each switcher can connect up to 20 digital infrared transceivers and combine up to 4 meeting rooms. There is LCD to display real-time operation. The front panel button control is convenient for manual switch.



#### Technical Specifications

Interface	
Input/output	4 inputs × 4 group outputs Digital IR Matrix Switcher, 5 outputs per group
Serial interface	1 × RS232 interface for connection to intelligent central control system or Room switch software
Reception/emission angle	Vertical: 125°, Horizontal: 120°
Electrical	
Dimension (h×w×d)	99 × 430 × 325 mm (for table use, with feet) 89 × 478 × 350 mm (for 19" rack use, with brackets)
Weight	10.6 kg

## Web Control Software

### HCS-5300WS

HCS-5300WS Web Control Software is built in HCS-5300M/80A Series Digital Infrared Wireless Conference Main Units. This software has powerful functions and is easy to use. It enables the operator to remotely control and manage the conference main unit via the web browser, including handling the meeting management, monitoring the conference, controlling the speech, etc.



- **CMU Setting:** set up the microphone's operation mode, active microphones, volume adjustment, etc.
- **Microphone Control:** conference units configuration, managing speaking and request list (such as turning off the microphone, approving/denying request), etc.
- **Video Tracking:** used with camera and video tracking matrix, realizing functions such as video matrix, video switch, camera preset, camera control, etc.
- **SI Setting:** set up SI channel, the booth, language for each booth, etc.

# Application Software

## HCS-5300/80 Series

HCS-5300/80 Series Application Software provides unified management and centralized control to enhance the efficiency and convenience of conferences. Through the intuitive and user-friendly interface, users can easily perform operations such as conference setup, speech control, voting management, etc. The software is suitable for a variety of conferences and can improve the efficiency of operation and maintenance.

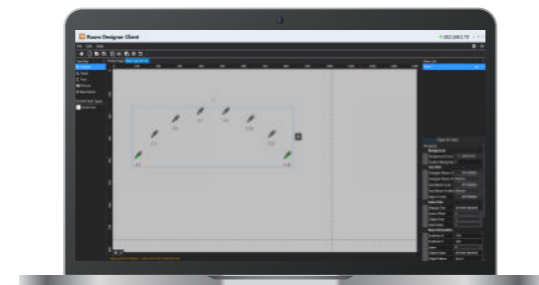
### HCS-5310/80 Basic System Setup Management Software

Functions include room management, meeting management, main unit configuration, contribution unit configuration, information display, report management and user management.



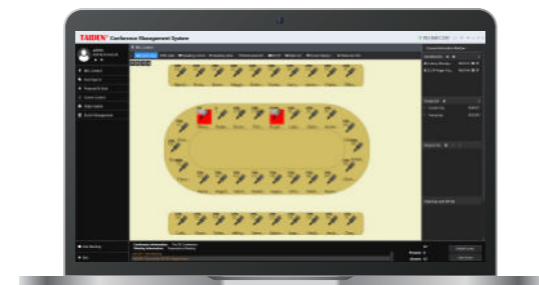
### HCS-5312/80 Professional Venue Design Software

Used for designing manifold layouts of venues. Unlike the normal edition of venue design software, HCS-5312/80 Professional Venue Design Software allows for file operation and object operation. Meanwhile, users can change the properties of the current object.



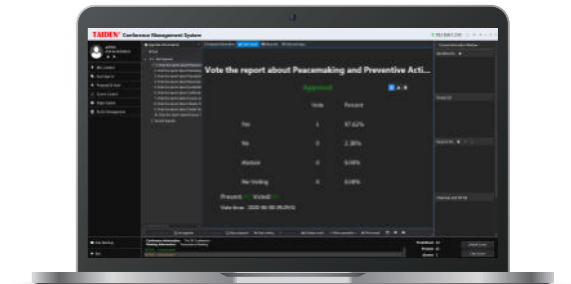
### HCS-5313/80 Microphone Management Software

Functions include seat arrangement, delegate management, and microphone control modules.



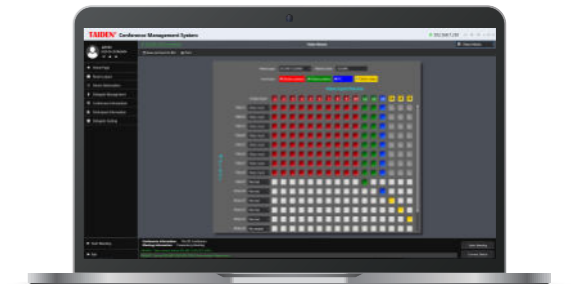
### HCS-5314/80 Voting Management Software

Functions include voting management, seat arrangement, and delegate management modules.



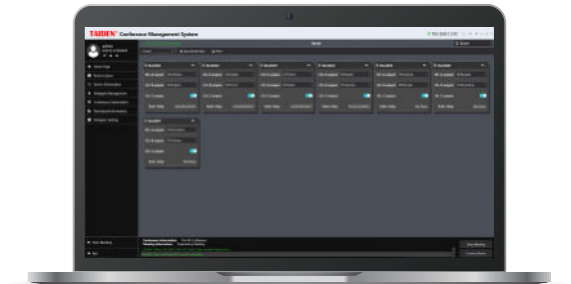
### HCS-5315/80 Video Control Software

Carries out automatic video tracking when cooperating with camera and video switch unit.



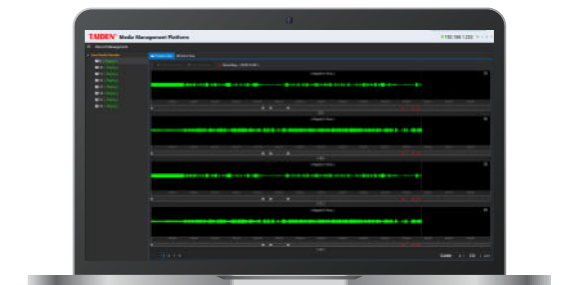
### HCS-5316/80 Simultaneous Interpretation Software

Sets up the simultaneous interpretation channels, interpreter booth(s), and booth management.



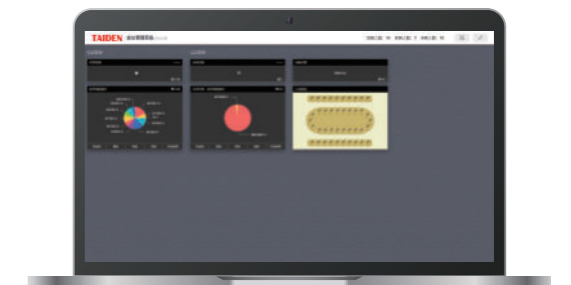
### HCS-5319/80 Synchronous Recording Software

Records speakers' audio information synchronously.



### HCS-5321/80 Multi-User Console Software

Enables more than one operator to control the conference and makes it easier for conference management.



## Accessories

### HCS-5352 1×4 Cable Splitter

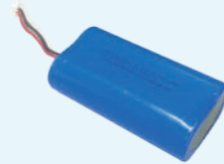
- Power supply: 33 V DC (supplied from HCS-5300M/80)
- 1 in and 4 out structure
- Interface: 4×6P-DIN sockets +2 m cable with 6P-DIN plug
- Dimensions (h×w×d): 35×149×90 mm
- Weight: 0.3 kg



### HCS-5380BAT

#### Lithium Rechargeable Battery Pack

- Lithium rechargeable battery pack, used for supplying power to HCS-5380/81 series digital infrared wireless conference units
- Nominal voltage: 3.7 V DC
- Nominal capacity: 5200 mAh
- Dimensions (h×w×d): 14×67×37 mm
- Weight: 93 g



### HCS-5300BAT

#### Lithium Rechargeable Battery Pack

- Lithium rechargeable battery pack, used for supplying power to HCS-5300/HCS-5301/HCS-5302/HCS-5390/HCS-5391 series digital infrared wireless conference units
- Nominal voltage: 11.1 V DC
- Nominal capacity: 4400 mAh
- Dimensions (h×w×d): 28×140×58 mm
- Weight: 0.3 kg



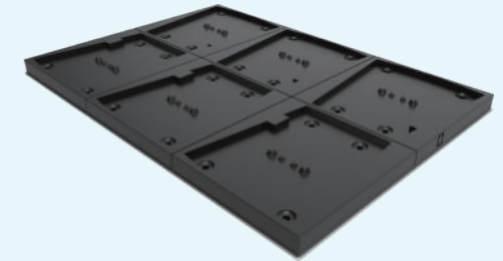
### HCS-5300CHG/08 Charging Unit

- Power supply: AC 100 V- 240 V, 50 Hz/60 Hz
- Power consumption: Max. 380 W
- Charging time: Approx. 6 hours
- Charging capacity: 8 HCS-5300BAT batteries
- Dimensions (h×w×d): 74×288×300 mm
- Weight: 4.5 kg



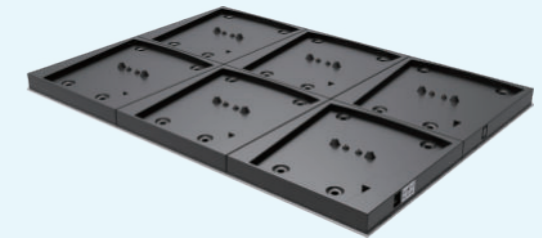
### HCS-5300CHG/06 Charging Unit

- Power supply: 9 V DC, 6 A adapter
- Power consumption: Max. 50 W
- Charging time: Approx. 4 hours
- Charges 6 pcs of HCS-5380, HCS-5381C/D units per charging
- Dimensions (h×w×d): 21×448×316 mm
- Weight: 0.4 kg



### HCS-5300CHG/06A Charging Unit

- Power supply: 9 V DC, 6 A adapter
- Power consumption: Max. 50 W
- Charging time: Approx. 4 hours
- Charges 6 pcs of HCS-5380, 5381C/D units per charging
- Dimensions (h×w×d): 21×448×316 mm
- Weight: 0.4 kg








### HCS-5300TZJ2 Transceiver Stand

- Used for HCS-5300TD/TH/TWN Transceivers
- Height: 1.1 m~2.7 m, adjustable
- Weight: 3.9 kg



### Optional Microphone Stems

	Foam windshield	Dual-flex gooseneck arm	Lotus-like sound head	Metal windshield	Large diaphragm
Product Image					
Length	33/41/47 cm	50/60/70 cm	33/41/47 cm		
Microphone Type	Cardioid electret				Cardioid electret, 14mm gold-plating capacitance sound head
Sensitivity	-46 dB (0 dB=1V/Pa)				-37 dB (0 dB=1V/Pa)
Frequency Response	50 Hz~20 kHz				20 Hz~20 kHz
Directionality 0°/180°	≥ 20 dB (1 kHz)				≥ 20 dB (1 kHz)
Equivalent noise	20dBA (SPL)				20dBA (SPL)
Max. SPL	125 dB (THD<3%)				139 dB (THD<3%)

## References

