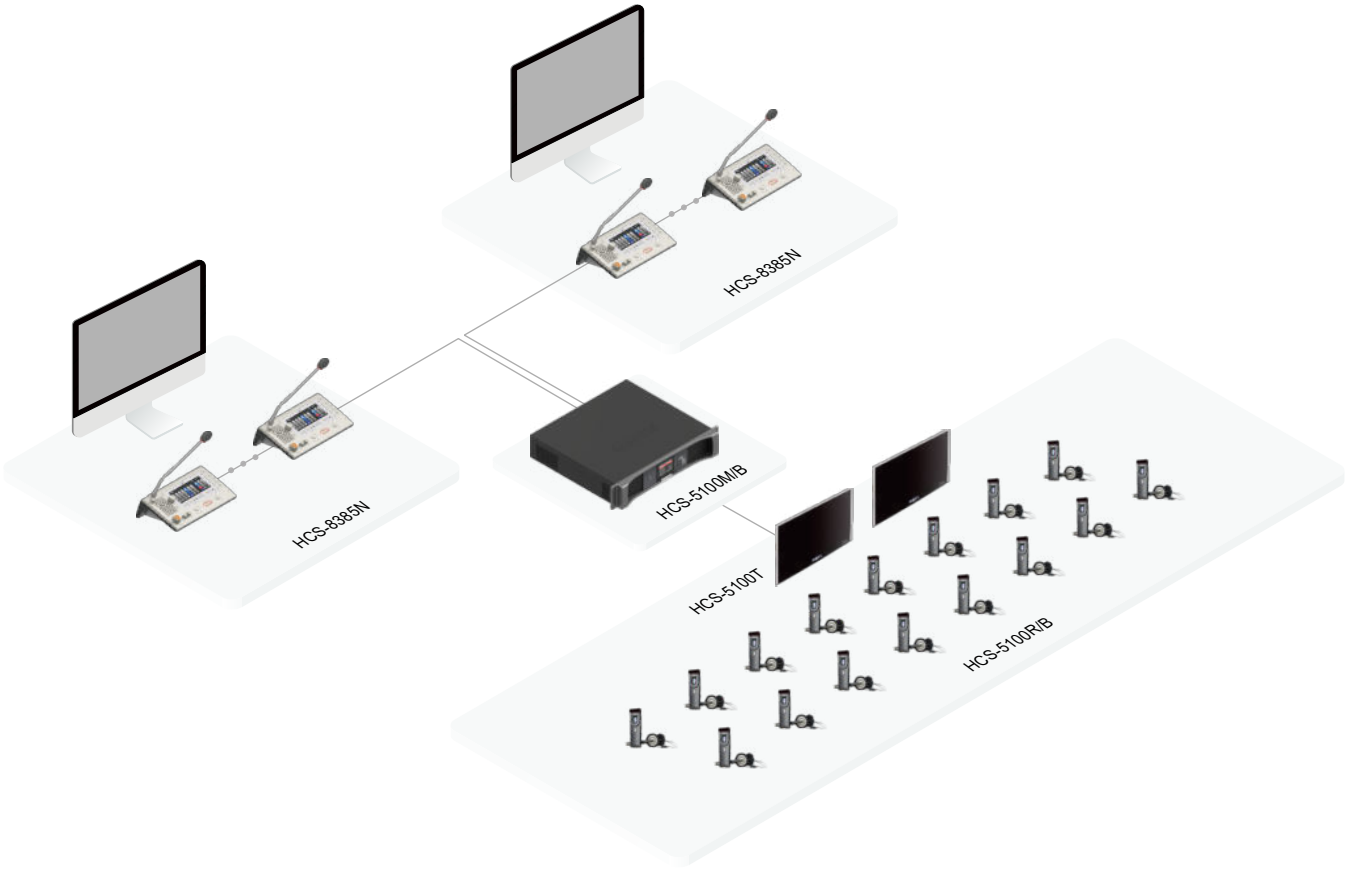


Connection Diagram for Digital IR Language Distribution System



TAIDEN®

Digital IR Language Distribution System



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Digital Infrared Language Distribution System

In 2008, TAIDEN successfully developed the digital infrared processing chip with independent intellectual property rights and launched the original HCS-5300 Series Digital IR Conference System and HCS-5100 Series Digital Infrared Language Distribution System in line with the international standard.

The system has superb sound quality and innovative features such as "language name display", "270° ultra-wide reception angle" and "transmitter combination mode", establishing the technical leadership of TAIDEN in the field of international conference systems.

Now, with the successful development of the new generation digital infrared processing chip, TAIDEN launches the HCS-5100Plus Digital IR Language Distribution System. This system supports at most 40 distributing channels and outshines with various advanced features.



System Products

HCS-5100M/B Series Digital Infrared Transmitter

HCS-5100T Series Digital Infrared Radiator

HCS-5100R/B Series Digital Infrared Receiver

HCS-8385N Interpreter Unit

System Advantages



Fully Certificated, Widely Compatible

- Compliant to IEC 61603-7 and ISO 22259
- Compatible with any other infrared simultaneous interpretation systems compliant to IEC 61603-7



Higher Security

- Infrared transmission signals cannot penetrate through walls and ceilings, ensuring strong confidentiality of the conference
- Transmitting in 1~8 MHz frequency band, which is not easy to be interfered by HF-driven lighting and can work without errors in bright sunlight



Superb Sound Quality

- Seamlessly connects with HCS-4100/50 Series, HCS-4800 Series, HCS-8300 Series, HCS-8600 Series and the simultaneous interpreter units
- From the speaking units, interpreter units to language distribution system, every link has high-quality digital audio signals with a frequency response of 20 Hz to 20 kHz and SNR ≥85 dBA



Original Language Name Display

- Digital Infrared Receiver has a LCD screen displaying the channel number and language name that delegates choose



270° Ultra-wide Reception Angle

- 270° ultra-wide reception angle with optimal sound everywhere



Various Audio Channels

- Push-button channel selector can receive up to 40 audio channels
- System automatically synchronizes the actual number of channels used while unused channel will be excluded



Digital Infrared Transmitter

HCS-5100M/B Series



≤0.05%

HCS-5100M/B Series Digital Infrared Transmitter adopts DQPSK digital modulation/demodulation technology to connect interpreter units to realize simultaneous interpretation, etc. Suitable for small, medium and large international conference halls or outdoor venues. Due to the high transmission frequency (1~8 MHz), it fully satisfies the user's demand for secure, confidential and interference-free meetings.

Rotary Step Control + 2.8" LCD Screen

- Rotary step control can quickly select and set the LCD menu, and the LCD screen displays status and configuration information

Independent Adjustability

- Built-in infrared emitters for audio monitoring, adjustable sensitivity for each audio input to enable fine tuning of audio levels

Customize Languages

- A language name can be assigned to each channel for easy identification, and the simultaneous interpretation language can be customized

Easy Management

- The main unit can be accessed through a computer browser, or be connected via Ethernet and RS-232 port
- RS-232 port also for connection to network central control system
- USB interfaces to upgrade system and save system parameters
- Radiators can be connected via 6 BNC output connectors and shutdown by the main unit remotely
- Bypass mode for distribution of signals to another transmitter for multiple rooms

Function Comparison

Model	Channel	Fiber Interface	DCS Interface	6-PIN Connector	Dante
HCS-5100MA/FS/08B	8 (1+7)	●	●	●	
HCS-5100MA/FS/16B	16 (1+15)	●	●	●	
HCS-5100MA/04B	4 (1+3)		●	●	
HCS-5100MA/08B	8 (1+7)		●	●	
HCS-5100MC/08BD	8 (1+7)				●
HCS-5100MC/16BD	16 (1+15)				●
HCS-5100MC/40BD	40 (1+39)				●
HCS-5100MC/40B	40 (1+39)				

Specifications

Standards and Specifications	
Standards	ISO 22259
Compatibility	Compatible with any other infrared simultaneous interpretation system compliant to IEC 61603-7
Audio Characteristics	
Frequency Response	20 Hz ~ 10 kHz (-3 dB) at standard quality 20 Hz ~ 20 kHz (-3 dB) at perfect quality
THD (@1 kHz)	≤0.05%
Isolation	≥85 dB
Dynamic Range	≥90 dB
SNR	≥85 dBA
Physical Characteristics	
Input Voltage	AC 100 V - 240 V, 50 Hz/60 Hz
Max. Power Consumption	25 W
Dimensions (h×w×d)	88×480×418 mm
Weight	7 kg (HCS-5100MA/FS/B Series) 6.8 kg (HCS-5100MA/B Series) 6.6 kg (HCS-5100MC/B Series)

Digital Infrared Receiver

HCS-5100R/B Series



HCS-5100R/B Series Digital Infrared Receiver adopts the digital infrared processing chip with independent intellectual property rights and DQPSK digital modulation/demodulation technology. Cooperated with HCS-5300/80 Digital Infrared Wireless Conference System to realize 1+7 channel infrared wireless simultaneous interpretation function. Using single earphone (EP-822, EP-830, EP-823L, EP-823R) or headphone (HCS-5100PA, EP-960BH) for easy and comfortable use.

Easy Management

- No limit to the receiver number within the infrared power radiation range
- When the signal is too low, the audio signal is automatically muted

Anti-interference

- Allows for simultaneous use in adjacent rooms
- Immune to radio and HF-driven lighting interference and works perfectly in direct sunlight

Push Button Channel Selection

- Receives 4, 8, 16, 32 or 40 audio channels

Flexible Operation

- Can be hung over the neck via a nice strap or fit into the shirt pocket
- Freedom of movement within the range of infrared power radiator

LCD Display

- LCD display with channel number, language name, battery and signal status indication

Ultra-wide Reception Angle

- 270° ultra-wide reception angle with perfect sound everywhere

Function Comparison

Model	Channel	LCD	Rechargeable Battery	AA Alkaline Battery
HCS-5100R/04B	4 (1+3)	●	●	●
HCS-5100R/08B	8 (1+7)	●	●	●
HCS-5100R/16B	16 (1+15)	●	●	●
HCS-5100R/32B	32 (1+31)	●	●	●
HCS-5100R/40B	40 (1+39)	●	●	●
HCS-5100RA/04B	4 (1+3)	●		●
HCS-5100RA/08B	8 (1+7)	●		●

Specifications

Standards and Specifications			
Compatibility	Compatible with any other infrared simultaneous interpretation systems compliant to IEC 61603-7		
Transmission Characteristics			
IR Radiation	Per carrier 4mW/m ²	Headset Output	450 mVrms
Receiving Angle	270°	SNR	≥85 dBA
Headset			
Output Frequency Response	20 Hz ~ 20 kHz	Output Impedance	32 Ω ~ 2 kΩ
Physical Characteristics			
Supply Voltage	2.5 V ~ 4.2 V, nominal 3.0 V		
Power Consumption	Nominal (3.0 V power supply) 38 mA (32 Ω headset) headset disconnected 0 mA		
Battery Duration	55 h (2×AA alkaline cells) 42 h (Li-ion rechargeable battery pack)		
Dimensions (h×w×d)	155×46×24 mm		
Weight	70 g (battery not included) 115 g (battery included)		
Color	Black (PANTONE 419 C)		

Digital Infrared Radiator

HCS-5100T Series



HCS-5100T Series radiator unit contains 25W and 35W transmission power models, and the maximum radiation range can reach 50 meters and 97 meters respectively which are available to suit venues of various sizes. It supports multiple installation methods, 13 adjustable launch angles, automatic gain control. It is an ideal choice for large and medium-sized conference venues.

Multiple Installation

- Support fixed installation, triangle bracket installation, etc. 13 adjustable launch angles

Three Status Indications

- Standby/Working/Failure indications and synchronized ON/OFF with transmitter

Overheat Protection

- LED indication at high temperature, automatically switch to half power
- Manual half-power switch is convenient to small conference venues

Cable Transmission Delay Compensation

- 20 Hz to 10 kHz (-3 dB) at standard quality
- 20 Hz to 20 kHz (-3 dB) at perfect quality

Function Comparison

Model	Transmission Power	Power Consumption	Radiation Length	Input Output	Half-transmitting Angle
HCS-5100T/25B	25 W	62 W	50 m	75 Ω	± 22°
HCS-5100T/35B	35 W	120 W	97 m	75 Ω	± 22°

Specifications

Standards and Specifications	
Compatibility	Compatible with any other infrared simultaneous interpretation systems compliant to IEC 61603-7
Physical Characteristics	
Input Voltage	AC 100 V ~ 240 V 50/60 Hz
Power Consumption (stand by)	3 W
Max. Power Consumption	62 W (HCS-5100T/25B) 120 W (HCS-5100T/35B)
Dimensions (h×w×d)	212×448×110 mm (HCS-5100T/25B) 272×498×110 mm (HCS-5100T/35B)
Weight	3.1 kg (HCS-5100T/25B) 4.2 kg (HCS-5100T/35B)
Color	Dark red (PANTONE 476 C)

Fully Digital Simultaneous Interpreter Unit

HCS-8385N



The design of HCS-8385N has extensively collected the requirements of interpreters and administrators from EU, UN, IMF, the World Bank, European Commission and other institutions. Tailored for 64 channels simultaneous interpretation, the structure is more ergonomic, with new functions such as password management, information display, and seamless connection with video devices.

Outstanding Sound Quality

- Able to display Channel ID of input/output channel, language, input quality indication and short messages
- Gain and EQ of the activated microphone adjustable either by the main unit or the application software
- Integrated high-pass filter (low-cut switch) to cut low frequency elements from the audio when needed
- Built-in loudspeaker with volume control and when the mic. is off, and the loudspeaker will play floor language or interpretation channel






64 Interpretation Channels

- Supporting 48 kHz audio sampling rate, all 64 channels with a frequency response of 30 Hz to 20 kHz
- Support direct and relay interpretation

Convenient Operation

- The host or application software can preset the name of each channel language
- Turn on the microphone in the same interpreter booth and turn off the microphone in the previous interpreter booth automatically

Optional Microphone Stems

	Foam windshield	Dual-flex gooseneck arm	Lotus-like sound head	Metal windshield	Large diaphragm
					
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	20 dBA (SPL)				20 dBA (SPL)
Max. SPL	125 dB (THD<3%)				139 dB (THD<3%)

Specifications

Standards and Specifications	
Standard	ISO 20109
Audio	
Output Frequency Response	30 Hz ~ 20 kHz
Max. Power Consumption	4.8 W
Headset	
Load Impedance	>16 Ω
Headset Output Interface	3×Ø 3.5 mm TRRS Stereo Plug
Physical Characteristics	
Dimensions (h×w×d)	83×320×148 mm (w/o stem microphone)
Weight	1.1 kg (incl. stem microphone)

Accessories

HCS-851A/02 Mobile Interpreter Booth



HCS-851A/03 Mobile Interpreter Booth



HCS-851K Interpreter Booth Shipping Case



HCS-851KT Interpreter Booth Shipping Case



HCS-851A Series Mobile Interpreter Booth is made of odorless, antistatic, fire-retardant materials, with sound-absorbing materials on the inner surface. Its aluminum alloy skeleton is easy to disassemble. It can accommodate two or three interpreters sitting comfortably side by side.

Ultra-low Noise

- Outward facing hinged door operates silently
- Using low-noise exhaust fan with ventilation system that renews the air at least 8 times an hour

Clear Sight

- The booth has front and side windows, which are 0.79 m above the ground

Function Comparison

Model	Accommodated Number	Shipping Case
HCS-851A/02	2	HCS-851K Interpreter Booth Shipping Case
HCS-851A/03	3	HCS-851K & HCS-851KT Interpreter Booth Shipping Case

Specifications

Standards and Specifications		
Standards	ISO 4043	
Model	HCS-851A/02	HCS-851A/03
Weighted Transmission Loss	>24 dB (1 kHz)	
Reverberation Time	Between 0.3 and 0.5 s (octave bands from 125 Hz to 4000 Hz, booth unoccupied)	
Observation Port-hole	0.20×0.20 m	
Front and Side Windows (height)	0.87 m	
Internal Dimensions (h×w×d)	200×160×160 cm	200×240×160 cm
External Dimensions (h×w×d)	204×172×172 cm	204×252×172 cm
Shipping Case Dimensions (h×w×d)	110×209×75 cm (HCS-851K)	110×209×75 cm (HCS-851K) 91×215×40 cm (HCS-851KT)
Shipping Case Weight (including the booth)	260 kg	350 kg

Accessories



EP-830 Single Earphone

- Used with the receiver or a congress unit
- Hi-Fi sound quality
- The earmuff can be removed from the headphone core and is washable
- 32 Ω , \varnothing 3.5 mm stereo plug (Tip and Sleeve, Ring: NC)
- Frequency response: 20 Hz to 20 kHz
- Sensitivity: ≥ 108 dBA/1 mW
- Weight: 25 g



EP-820AS Single Earphone

- Used with the receiver or a congress unit
- Hi-Fi sound quality
- \varnothing 3.5 mm stereo plug (TRS)
- 32 Ω (Tip and Sleeve, Ring: NC)
- Frequency response: 50 Hz to 20 kHz
- Sensitivity: ≥ 102 dBA/1 mW
- Weight: 20 g



EP-960AN Interpreter Headset

- Used with the interpreter unit
- Hi-Fi sound quality
- 2×150 Ω , \varnothing 3.5 mm TRRS plug
- Frequency response: 20 Hz to 20 kHz
- Sensitivity: ≥ 108 dBA/1 mW
- Frequency of microphone: 50 Hz to 20 kHz
- Sensitivity of microphone: -48 dBV/Pa
- Impedance of microphone: <680 Ω
- Weight: 95 g



EP-960BH Interpreter Headphone

- Used with the interpreter unit
- Hi-Fi sound quality
- 2×150 Ω , \varnothing 3.5 mm stereo plug
- Frequency response: 20 Hz to 20 kHz
- Sensitivity: ≥ 108 dBA/1 mW
- Weight: 90 g



HCS-5100PA Headphones (Stereo)

- Used with the receiver or a congress unit
- Hi-Fi sound quality
- 2×32 Ω , \varnothing 3.5 mm stereo plug (TRS)
- Frequency response: 20 Hz to 20 kHz
- Sensitivity: ≥ 108 dBA/1 mW
- Weight: 70 g



HCS-5100BAT-Li Li-ion Rechargeable Battery Pack

- Rechargeable battery pack
- 1500 mAh, 3.7 V lithium battery
- Dimensions (h×w×d) : 15×48×29 mm
- Weight: 45 g



HCS-5100CHG/60A IR Receiver Charging Case

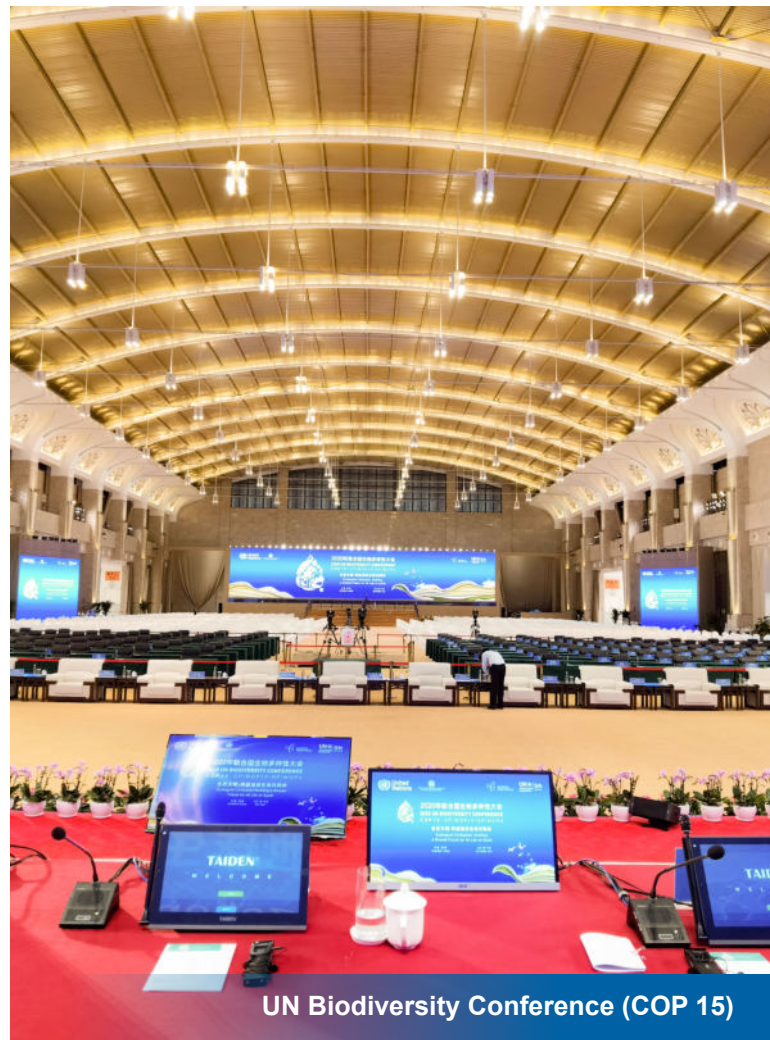
- Used for charging IR receivers (HCS-5100R series)
- Charges 60 pcs of IR receivers per charging
- Input voltage: AC 100 V-240 V, 50 Hz/60 Hz
- Power consumption:
 - 280 W (when 60 IR receivers are charging)
 - 7 W (stand by, with no IR receiver charging)
- Dimensions (h×w×d): 240×504×376 mm
- Weight: 11.3 kg (w/o infrared receiver)



HCS-5100KS IR Receiver Storage Case

- Used for storing and transporting IR receivers
- Every case can store up to 100 IR receivers
- Dimensions (h×w×d): 215×702×325 mm
- Net weight: 6 kg (w/o IR receiver)
- Gross weight: 14 kg (w/100 pcs IR receivers, w/o battery)

Selected Cases



UN Biodiversity Conference (COP 15)



G20 Summit



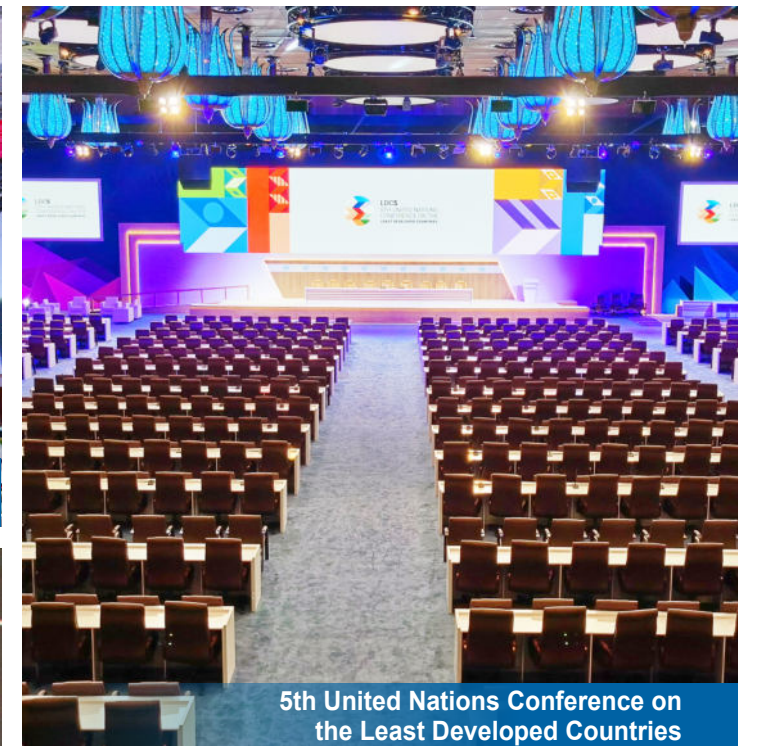
UN Global Sustainable Transport Conference



UNCCD Conference of the Parties (COP 13)



Annual Meetings of the IMF and the World Bank



5th United Nations Conference on the Least Developed Countries



G7 African Ministerial Meeting