

TAIDEN®

Certificate of Training

This certifies that

Andrei Ustica

with

DAAC System Integrator SRL

Has Completed the Training Courses for
TAIDEN Digital Conference System
And is Awarded This Certificate By

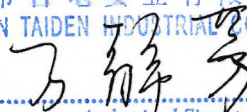
TAIDEN Industrial Co., Ltd.

Excellent solutions for conferences

Jan. 2020

For and on behalf of

深圳市合电实业有限公司
SHENZHEN TAIDEN INDUSTRIAL CO., LTD.



Authorized Signature(s)

Christy Fang General Manager

Certificate Number: 0001373

TMX-HDSDI2HDMI



Features

- Transfers SDI input into HDMI signal as digital audio and video output, and also into VGA signal at the same time, that is convenient for local monitor
- Mainly cooperates with HCS-3316HDB and SDI series matrix
- Output resolution is adjustable

Technical Specifications

Video

Input.....1 SD/HD-SDI, 3G HD-SDI on a BNC connector
Output.....1 SD/HD-SDI, 3G HD-SDI loop on a BNC connector;
 1 HDMI connector (unsupports CEC and HDCP),
 1 VGA 15-pin HDF connector
Input/output data rate.....1.485 Gb/s and 2.97 Gb/s

Audio

Output.....	1 3-pin Phoenix
Impedance.....	< 15 Ω
S/N.....	> 85 dB
Stereo channel separation.....	> 60 dB
Frequency response.....	30 - 20 kHz (-3 dB)

Control

COM (RS-232).....3-pin Phoenix; baudrate: 9600,
data: 8 bits, stop: 1 bit, no parity

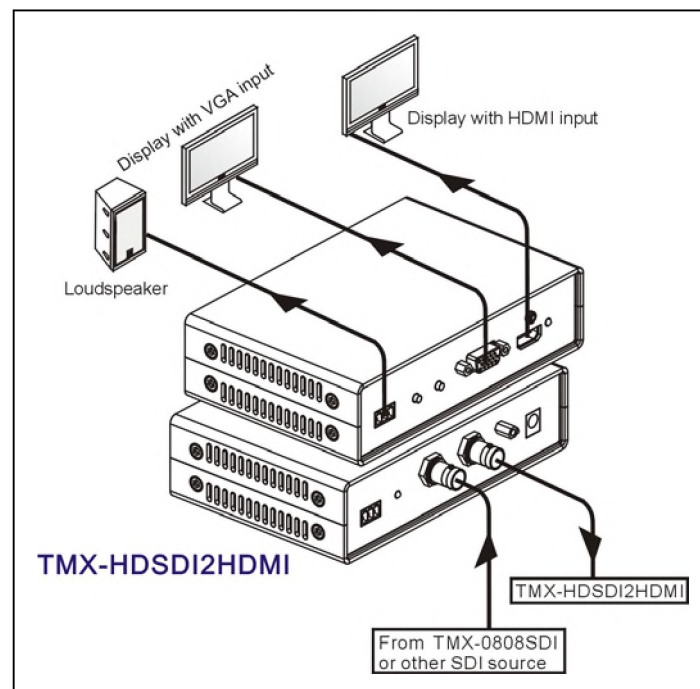
General specs

Power supply.....DC 9 V - 12 V, 0.7 A
Temperature.....Operating: 0 °C to + 50 °C;
storage: -20 °C to + 70 °C
Humidity.....Storage and operating: 10% to 90%
Dimensions h × w × d (mm).....40 × 150 × 100
Weight.....0.4 kg
Color.....Gray (PANTONE 425 C)

Ordering Information

TMX-HDSDI2HDMI_____3G HD-SDI to HDMI Converter

System Connection



EP-960AH Interpreter Headset with Microphone



Features

- Incorporated with interpreter unit for monitoring and speaking
- Excellent sound quality
- Interpreters can wear the headset according to their habits
- One sided wire, provide better user experience
- Greater headband adjustability, suitable for all the users
- 150 Ohm × 2, Ø 3.5 mm stereo plug (TRS) for headphone
- Ø 3.5 mm stereo plug (TRS, Ring: NC) for microphone
- Frequency response of headphone: 20 Hz to 20 kHz
- Sensitivity of headphone: ≥108 dBA/1 mW
- Polar pattern of microphone: Omnidirectional
- Frequency response of microphone: 50 Hz to 20 kHz
- Sensitivity of microphone: -48 dBV/Pa
- Impedance of microphone: <680 Ohm

Ordering Information

EP-960AH Interpreter Headset with Microphone (stereo, including a pair of Ø 58 mm Sponge Ear Pads and a pair of EP-960HD Detachable Earshells)

EP-960HD Detachable Earshells



Features

- Used for EP-960AH and EP-960BH
- Earshell is detachable and washable, convenient for cleaning
- Color: black

Ordering Information

EP-960HD Detachable Earshells for EP-960 (for EP-960AH/EP-960BH, 1 pair)

EP-960BH Interpreter Headset



Features

- Incorporated with interpreter unit for monitoring
- Excellent sound quality
- One sided wire, provide better user experience
- Greater headband adjustability, suitable for all the users
- 150 Ohm × 2, Ø 3.5 mm stereo plug (TRS) for headphone
- Frequency response of headphone: 20 Hz to 20 kHz
- Sensitivity of headphone: ≥108 dBA/1 mW

Ordering Information

EP-960BH Interpreter Headset (stereo, including a pair of Ø 58 mm Sponge Ear Pads and a pair of EP-960HD Detachable Earshells)

Sponge Ear Pads



Features

- Used for headphone
- 50 pairs per package
- Color: black

Ordering Information

Sponge Ear Pads for HCS-5100PA Sponge Ear Pads (thick, for new HCS-5100PA, 50 pairs/package)

EP-960SP-L Sponge Ear Pads (Ø 70 mm, for EP-960AH/EP-960BH, 10 pairs/package)

EP-960SP-S Sponge Ear Pads (Ø 58 mm, for EP-960AH/EP-960BH, 10 pairs/package)

HCS-853KS Transport Cabinet



Features

- Used for storing and transporting TAIDEN series main units

Technical Specifications

Mechanical

Dimensions h x w x d (mm)..... 890 × 590 × 545

Net weight..... 33.7 kg

Color..... Blue

Ordering Information

HCS-853KS..... Transport Cabinet (inner height 15U)

HCS-4385U/50 64-Channel Simultaneous Interpreter unit



Features

- Compliant to ISO 2603, ISO 4043 and IEC 60914
- "Closed Loop - Daisy Chain" connection topology
- Up to 64 interpretation channels including the original floor language
- Supporting 48 kHz audio sampling rate, all 64 channels perfectly reproducing audio frequencies between 30 Hz and 20 kHz
- Excellent immunity to RF interference from mobile phones
- Ergonomic design with features for visually impaired
- Adjustable microphone sensitivity
- Repeat function (REP. key)
- Graphic LCD with backlighting for bright information display in dark conditions
- 5 pre-select buttons for relay languages with activation indication at the display
- Gain and EQ of the activated microphone adjustable
- Built-in multi-channel intercom facility

HCS-4385U/50 Interpreter Unit provides up to 64 CHs language channels. It is composed of a graphic 256x64 LCD with back-lighting, built-in 64 CHs channel selector and loudspeaker, pluggable stem microphone and headphone/microphone jacks. LCD can display channel number, language name, input language, quality indication and short message, etc. Interpreter Unit's connection cable is compatible with the trunk-line cable, thus Interpreter Units can be easily inserted into system in place. It provides two operational modes: normal interpretation and relay interpretation with auto-relay.


Functions

- Fully digital audio technology, compliant to ISO 2603, ISO 4043 and IEC 60914
- "Closed Loop - Daisy Chain" connection topology for a high operational system reliability: breakdown or replacement of a congress unit and connection failure of a cable will not influence other congress units in the system
- Accommodates up to 64 interpretation channels (incl. floor channel)

- Supporting 48 kHz audio sampling rate, all 64 channels perfectly reproducing audio frequencies between 30 Hz and 20 kHz
- Integrated high-pass filter (low-cut switch) to cut low frequency elements from the audio when needed
- Direct and relay interpretation available
- Auto relay interpretation facility
- Presets language name either by the main unit or the application software
- Gain and EQ of the activated microphone adjustable either by the main unit or the application software
- Microphone can be unplugged during adjournment, easy to maintain
- Built-in IC-Card reader
- Automatic feedback prevention when listening to own interpretation
- Built-in loudspeaker with volume control. If all microphones in the same booth are off, the loudspeaker will play floor language or interpretation channel
- Built-in multi-channel intercom facility
- Permits only one microphone on a channel to be activated at any time, ensuring the uniqueness of language channels
- Three necessary modes between interpreter booths:
 - Interlock: blocks another interpreter from using the same channel in another interpreter booth.
 - Override: allows an interpreter to override another interpreter in another interpreter booth supplying the same interpretation channel.
 - BC-Override: allows B/C channel of an interpreter in a booth to override an occupied A channel in another booth, but supplying the same channel.
- Two necessary modes in an interpreter booth: Interlock and Override
- A maximum of six interpreter units can be installed in each booth

Controls and Indicators

- Uni-directional electret condenser microphone with illuminated ring
- Graphic 256x64 LCD with back-lighting to display:
 - Unit configuration information
 - Incoming/outgoing channel number and language name
 - Channel number and language name of loudspeaker output
 - Incoming language indication
 - ♦ If the monitoring language comes from the original floor channel, "FLOOR" is displayed on the corresponding language channel
 - ♦ If the monitoring language comes from the direct interpretation channel of the floor language, "+" is displayed
 - ♦ If the monitoring language comes from the indirect interpretation channel of the floor language, "-" is displayed
 - ♦ If the monitoring language comes from the indirect interpretation channel of an interpretation language, "--" is displayed
 - ♦ If the monitoring language comes from the output interpretation channel of current interpreter unit, "X" is displayed

- ◆ Note: the indication means to remind the interpreters to avoid using the relay interpretation as often as possible if the direct interpretation is available
- Short messages (administrator can send messages to all or part of participants, even a certain one)
- Multilingual menus available (Simplified/Traditional Chinese and English, etc.)
- Integrated real-time clock displays time on the LCD of the interpreter unit to inform interpreter to stay on schedule
- 5 pre-select buttons (a/b/c/d/e) for relay languages with active indication on LCD
- Rotary step control for fast selecting language channels
- A/B/C channel key with engaged indicator
- Mute facility prevents constrained voice being transmitted (MUTE key)
- Speak slowly facility to alert the current speaker to slow down (SLOW key)
- Call to an operator (CB key)
- Repeat function (REP. key)
- Interpreter unit's microphone can be turned off and A/B/C output channels can be switched by operator, when operating conference system management software
- Volume and bass/treble of the headphone adjustable
- Volume of the loudspeaker adjustable
- Floor channel ON/OFF switch
- Microphone ON/OFF switch
- When connected to PC and controlled by application software, call for help and help information will be displayed on status bar of the application software (HELP key)
- Set up an intercom channel directly to the chair (chairman or delegate), which is appointed by main unit (CALL key)
- Beeps function
- Message key ()

Interconnections

- Socket for pluggable microphone
- IC-Card socket
- Ø 6.4 mm headphone jack
- Ø 3.5 mm jack for headset
- Ø 3.5 mm socket for external microphone
- 1.5 m cable with 6P-DIN standard plug for connection with system CMU or the next Simultaneous Interpreter unit
- 0.6 m cable with 6P-DIN standard socket for loop-through interconnection

Technical Specifications

Electrical

Max. consumption.....2.8 W

Headphone connection

Frequency response.....30 Hz to 20 kHz

Earphone load impedance.....>16 Ohm

Earphone output.....10 mW

Recommended external microphone type (or headset microphone)

Transducer.....Electret-condenser
 Polar pattern.....Uni-directional
 Operating voltage.....5 VDC
 Sensitivity.....-46 dBV/Pa
 Frequency response.....50 Hz to 20 kHz
 Input impedance.....2 kOhm
 Directivity 0°/180°.....> 20 dB (1 kHz)
 Equivalent noise.....20 dBA (SPL)
 Maximum sound pressure level.....125 dB (THD<3%)

Interface data

Connector.....Ø 3.5 mm socket for external microphone
Ø 3.5 mm stereo jack for headphone
Ø 6.4 mm stereo jack for headphone

Mechanical

Mounting.....free-standing, flush-mounting or mounted on a table
 Dimensions (h x w x d) (w/o stem microphone).....78 x 290 x 126 mm
 Slope.....28 degrees
 Weight (incl. stem microphone).....0.9 kg
 Color.....Champagne (PANTONE 401 C)
 Stem length.....330 mm (standard version),
 240 mm, 410 mm, 470 mm

Ordering Information

HCS-4385U/50.....Fully Digital Congress System Interpreter Unit
 (64 CHs, IC-Card, 256x64 LCD, microphone,
 loudspeaker)

EP-960AH Interpreter Headset



Features

- Incorporated with interpreter unit for monitoring and speaking
- Excellent sound quality
- Interpreters can wear the headset according to their habits
- One sided wire, provides better user experience
- Greater headband adjustability, suitable for all the users
- 150 Ohm × 2, Ø 3.5 mm stereo plug (TRS) for headphone
- Ø 3.5 mm stereo plug (TRS, Ring: NC) for microphone
- Frequency response of headphone: 20 Hz to 20 kHz
- Sensitivity of headphone: ≥108 dBA/1 mW
- Polar pattern of microphone: Omnidirectional
- Frequency response of microphone: 50 Hz to 20 kHz
- Sensitivity of microphone: -48 dBV/Pa
- Impedance of microphone: <680 Ohm

Ordering Information

EP-960AH Interpreter Headset (stereo, including a pair of EP-960HD Detachable Earshells)

EP-960BH Interpreter Headphones



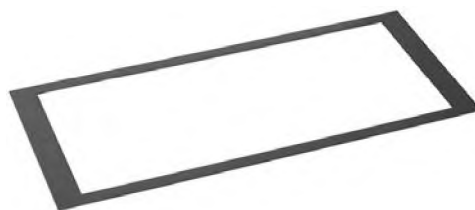
Features

- Incorporated with interpreter unit for monitoring
- Excellent sound quality
- Interpreters can wear the headset according to their habits
- One sided wire, provides better user experience
- Greater headband adjustability, suitable for all the users
- 150 Ohm × 2, Ø 3.5 mm stereo plug (TRS) for headphone
- Frequency response of headphone: 20 Hz to 20 kHz
- Sensitivity of headphone: ≥108 dBA/1 mW

Ordering Information

EP-960BH Interpreter Headphones (stereo, including a pair of EP-960HD Detachable Earshells)

HCS-4385MP Mounting Plate



Features

- Used for flush-mounting of HCS-4385U/50 Interpreter Unit

Technical Specifications

Mechanical

Dimensions (h x w x d) 1.5 x 328 x 144 mm
 Weight 44 g
 Color Gray (PANTONE Cool Gray 11 C)

Ordering Information

HCS-4385MP Flush-mounting Plate (for HCS-4385U/50)

HCS-5300 Series New Generation Digital Infrared Wireless Conference System

Overview

Wireless conference systems – portable, easy to install and convenient to use – are currently trend-setting. Wireless systems do not require structural measures inside a venue.

Two kinds of wireless conference systems are prevailing: RF (radio frequency) and IR (infrared) technology with analog audio transmission.

RF systems may be interfered (ISM band) or intercepted and operation either needs license or is confined to the public domain IEC 802.11x band.

Analog IR systems feature frequency responses which are too small for good intelligibility and also show lower S/N ratio.

System Theory

The core of the TAIDEN digital infrared wireless conference system – dirATC (digital infrared Audio Transmitting and Control technologies) - is a new technology originated by TAIDEN. It encodes and modulates audio and data signals digitally for transmission via infrared light, achieving both multi-channel audio signals and bidirectional data transmission and control. Digitalization and wireless transmission via infrared technology are combined to be an ideal solution for a wireless conference system. The digital infrared processing chip (TAIDEN TDIR04) originated by TAIDEN, integrates A/D (analog/digital) conversion circuit, digital encoding/decoding circuit, digital modulator/demodulator (DQPSK), as well as filtering and amplification circuit, and implements TAIDEN infrared audio transmission and control technology (dirATC). (figure 1)



Figure 1 TAIDEN TDIR04 digital infrared processing chip

TAIDEN digital infrared wireless conference system is composed of a main unit, one or more transceivers and conference units.

The infrared conference unit features built-in A/D and D/A conversion circuits, digital encoding/decoding and modulator / demodulator (DQPSK) circuits. The infrared conference system main unit has a built-in demodulator/modulator (DQPSK), a digital decoding/encoding circuit and a D/A converter circuit. A mixer circuit is inserted between the decoding circuit and the D/A converter. The main unit can be connected with several infrared transceivers, using a daisy chain or Y connection arrangement (figure 2 and figure 3)

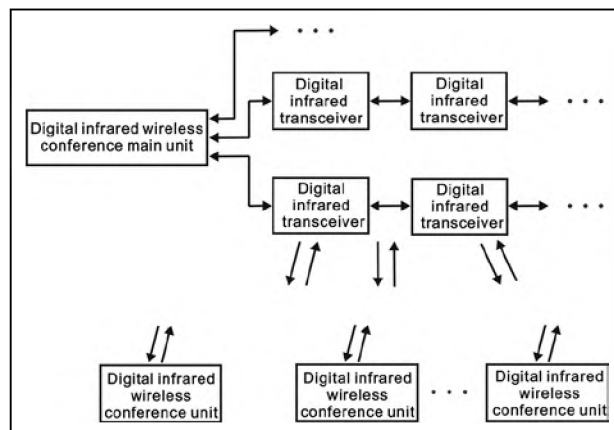


Figure 2 Block diagram of digital infrared conference system

The basic infrared conference unit version with discussion function includes microphone, microphone switch button, loudspeaker, battery, etc. The infrared discussion unit receives audio and control signals via infrared from the transceiver - signals previously generated by the main unit. The discussion unit transmits infrared control signals back to the transceiver which conveys all data to the main unit. When the microphone is turned on, the infrared discussion unit also sends infrared digital audio signals to the main unit. A system can consist of up to 1000 infrared discussion units with 4 units activated at the same time.

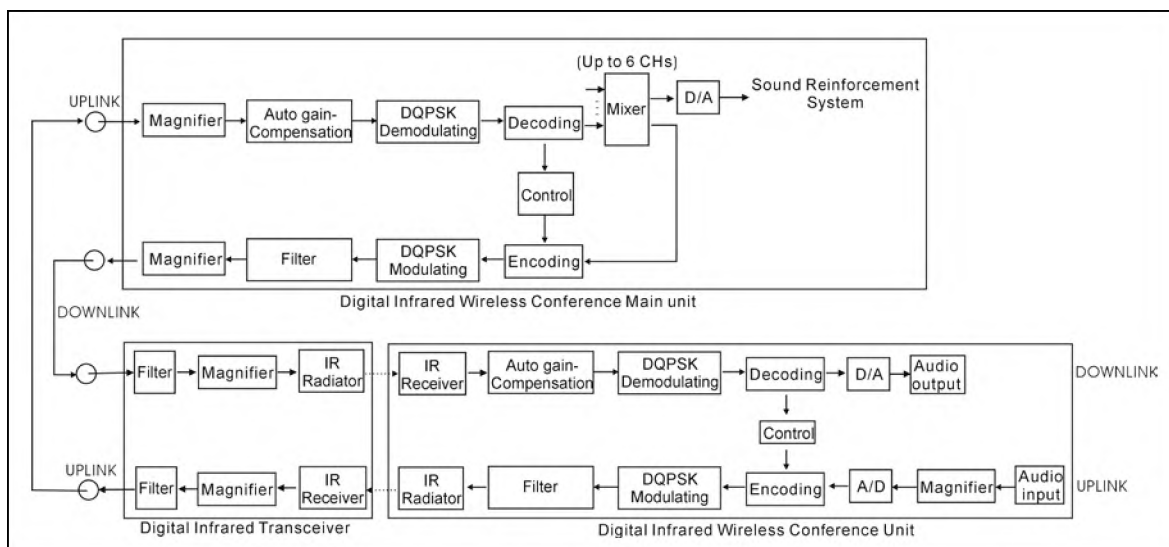


Figure 3 Schematic diagram of the digital infrared conference system

System Features

- The first digital infrared wireless conference system in the world
- Original dirATC -- digital infrared Audio Transmitting and Control technologies
- Wireless system, easy to set up and to remove
- Perfect sound quality as CD from the microphone
- Microphone sensitivity and EQ individually adjustable
- Isolated audio recording function for simultaneous interpretation (1+7 CHs)
- Privacy guarantee by infrared transmission
- Any quantity of infrared wireless conference systems within a building
- No worries about eavesdropping and radio interference, no radio radiation
- Full functions (discussion, voting and 1+7 CHs interpretation)
- No radio frequency license needed for operating an infrared system all over the world
- Adopts 1~8 MHz transmission frequency, undisturbed by HF driven light sources
- Excellent immunity to RF interference from mobile phones and RF devices
- Any quantity of infrared wireless conference systems within a building
- The infrared communication frees users from worries about eavesdropping and radio interference inherent to radio wave-based wireless communications
- No radio radiation
- No radio frequency license needed for operating an infrared system all over the world
- Adopts 1~8 MHz transmission frequency, undisturbed by HF driven light sources and mobile phones
- Works without errors, even in bright sunlight

Digital Infrared Audio Technology

- Digital infrared audio processing and transmitting technologies ensure superb sound quality:
 - ◆ Freq. Response: 20 Hz to 20 kHz
 - ◆ S/N: >85 dBA
 - ◆ THD: <0.06%

Full Functions

- Discussion
- Vote (5 keys)
- Simultaneous interpretation (1+7 CHs)
- Isolated audio recording function for simultaneous interpretation (1+7 CHs)
- Automatic video tracking
- USB interface realizing quality-lossless sound recording on PC and intact input of streaming audio into the system
- Compatible with HCS-5100Plus digital infrared language distribution system (HCS-5100R/F series digital infrared receivers can work with HCS-5300T/80 series transceivers)
- Built-in Web Server

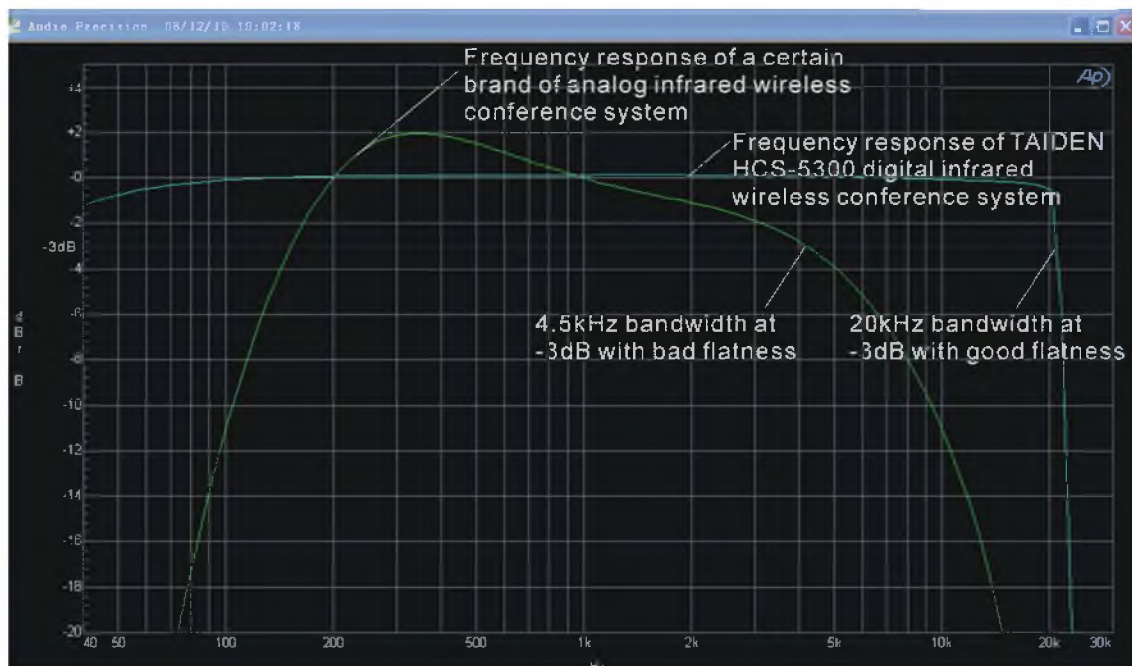
Wireless Conference System

- Quick setup and removal, free from troubles resulting from cable breaks and cable deteriorations
- Easy to set up a system for usage limited in time
- No impact on furniture, interior equipment or building structure

Infrared Transmission Technology

- Conference privacy is guaranteed as infrared signals do not pass through opaque walls or ceilings
- Wherever there is a partition between conference rooms, there is no interference

Frequency response measurement diagram of a TAIDEN HCS-5300/80 digital infrared wireless conference system compared with a customary conventional analog infrared wireless conference system. The system frequency response bandwidth of the TAIDEN digital infrared wireless conference system is large and flat, thus ensuring a perfect sound performance of the conference system.



Digital infrared wireless conference systems can be operated in adjacent rooms (including the upstairs and downstairs). The users do not need to worry about mutual interference or about the breach of confidentiality.

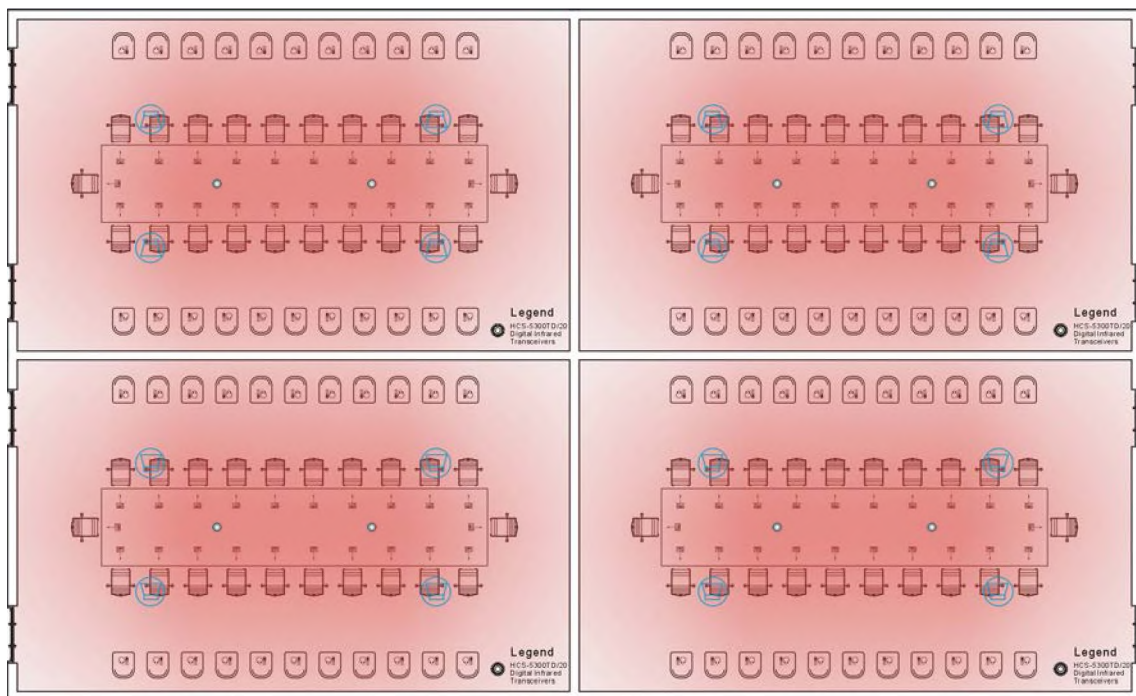


Figure 7 Conference rooms using IR systems free from interferences

Radio frequency (RF) systems in use in adjacent rooms (including the upstairs and downstairs) will interfere with each other. The more active units operated, the worse the interferences. As a result, a room could receive the signals of adjacent rooms, thus causing a breach of confidentiality.

In an existing application within a large Administration Center, nine installed RF wireless conference system sets often interfere with each other when operated. Therefore only alternating operation is possible - a great inconvenience for the user! RF wireless conference systems may interfere with WiFi devices, Bluetooth devices, wireless radio, cordless phones, wireless projectors, wireless mice, wireless keyboards and wireless touch panels of central control systems. These interferences are both space- and time-varying and a cause for the instability of RF wireless conference systems.

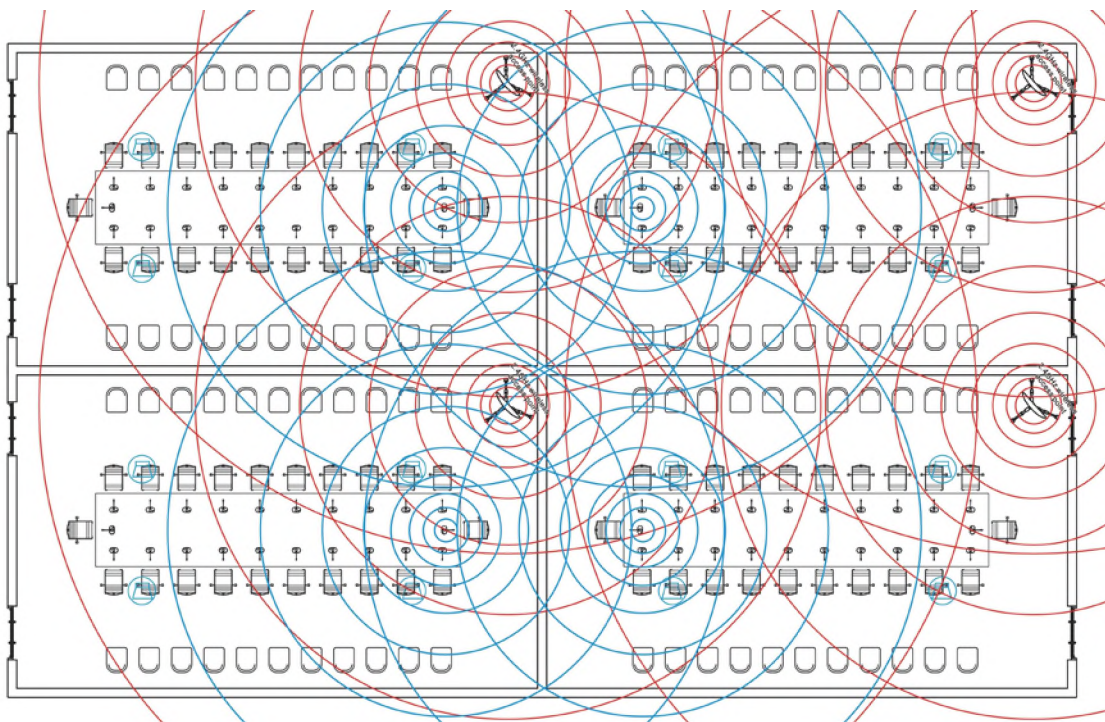


Figure 8 RF interference diagram

HCS-5300CE/80 Wireless Chairman Unit with Voting and Channel Selection



Features

- Table, stylish and ergonomic design
- Wireless unit, easy setup and removal
- Hi-Fi loudspeaker
- Priority button
- Pluggable microphone
- System controls up to 1000 contribution units
- 5 voting keys
- Transmitting up to 8 CHs high quality digital audio signals
- Built-in channel selector consists of up/down channel select keys and 2-digit channel indicator display
- Broadcast standard microphone and digital infrared audio processing and transmitting technologies ensure 20 Hz to 20 kHz perfect sound quality, extremely low distortion factor
- Digital infrared transmission technology guarantees privacy, no worries about eavesdropping and radio interference, no radiation, no radio frequency license needed
- Adopts 1~8 MHz transmission frequency, excellent immunity to RF interference from HF-driven lighting and mobile phones
- Microphone sensitivity and EQ individually adjustable
- Built-in rechargeable Lithium battery pack

The stylish and ergonomically designed chairman unit has all the necessary facilities to enable the user to chair a conference. Similar in appearance and function to HCS-5300DE/80 Delegate Unit, the HCS-5300CE/80 Chairman Unit includes an extra microphone priority button. When pressed, the priority button causes all currently active microphones to be switched off temporarily or permanently, allowing the chairman to take control of the meeting. Separate rechargeable Lithium battery packs can be removed and replaced in a matter of seconds, providing maximum flexibility in recharge scheduling.

Functions

- Compliant with IEC 60914
- Based on TAIDEN originated dirATC-digital infrared Audio Transmitting and Control technologies
- Infrared transmitting carrier frequency conforms to IEC 61603-7, DQPSK digital modulation/demodulation technology
- System controls up to 1000 contribution units
- Transmitting up to 8 CHs high quality digital audio signals
- Every delegate unit is assigned an individual ID for convenient setup and to avoid double ID forever
- Broadcast standard microphone and digital infrared audio processing and transmitting technologies ensure 20 Hz to 20 kHz perfect sound quality, extremely low distortion factor
- Digital infrared transmission technology guarantees privacy, no worries about eavesdropping and radio interference, no radiation, no radio frequency license needed
- Adopts 1~8 MHz transmission frequency, excellent immunity to RF interference from HF-driven lighting and mobile phones
- Stem microphone can be unplugged during adjournment, easy to maintain
- Mini-microphone, with foam windshield
- Hi-Fi loudspeaker, minimal feedback
- Ø 3.5 mm stereo headphone jack for headphone with controllable volume
- Microphone On/Off button, 5 voting keys
- Built-in channel selector (operable only when earphone is inserted)
- Microphone sensitivity and EQ individually adjustable
- System implements the following facilities when operated in stand-alone mode:
 - ♦ "ACTIVE MICS", set the number of delegates permitted to speak at the same time (1/2/3/4)
 - ♦ "OPEN" mode, if Mic. active limit has been reached, next microphone cannot be turned on when pressing "Mic. On/Off" button
 - ♦ "OVERRIDE" mode, if Mic. active limit has been reached, when pressing "Mic. On/Off" button, next microphone is turned on and the first active microphone is turned off
 - ♦ "VOICE" mode, Mic. sensitivity and close time adjustable, built-in "Flash-on" technology for quick voice control
 - ♦ Simultaneous interpretation
- In combination with the corresponding software modules, multiform voting can be implemented:
 - ♦ Parliamentary: YES/NO/ABSTAIN
 - ♦ Questionnaire: 1/2/3/4/5
 - ♦ Audience response: --/-/0/+/>++
- Key-press sign-in
- Automatic video tracking, when cooperating with camera and video switcher unit
- Activatable at any time provided that the total number of active microphones (including the active microphone of the chairman) is within the maximum of 4 active microphones allowed by the system
- Priority button to switch off or to mute the speaking units according to preset
- System supports up to 20 chairman units, while only 1 chairman unit has the control facilities listed above

- Built-in rechargeable Lithium battery operation duration: 14.4 hours when microphone is continuously on; 48 hours when microphone is off

Controls and Indicators

- Graphic 64×48 LCD with back-lighting for displaying channel number, language name, battery capacity and signal icon
- Built-in channel selector consists of up/down channel select keys and 2-digit channel indicator display
- Uni-directional electret condenser microphone with two-color illuminated ring
- Charging indicator
- Fully charged indicator
- Power switch
- Headphone volume control button
- Five voting keys with indicators
- Microphone On/Off button with indicator
- Priority button

Interconnections

- Socket for pluggable microphone
- Ø 3.5 mm stereo headphone jack
- Power adapter interface

Technical Specifications

Electrical

Headphone connection

Frequency response.....20 Hz to 20 kHz (-3dB)
Headphone load impedance.....≥16 Ohm × 2
Headphone output.....10 mW

Microphone

Transducer.....Electret-condenser
Polar pattern.....Uni-directional
Sensitivity.....-46 dBV/Pa
Frequency response.....30 Hz to 20 kHz
Directionality 0°/180°.....>20 dB (1 kHz)
Equivalent noise.....20 dBA (SPL)
Max. SPL.....125 dB (THD<3%)

Interface data

Connector.....Ø 3.5 mm stereo jack for headphone

Operation time of battery pack

When mic. is continuously on.....Approx. 14.4 hours
When mic. is off.....Approx. 48 hours

Mechanical

Mounting.....Tabletop
Dimensions (h x w x d) (w/o Mic.).....73 x 184 x 134 mm
Weight
Excl. battery.....0.5 kg
Incl. battery.....0.8 kg
Color.....Silver (PANTONE 428C) / Charcoal gray (PANTONE Cool Gray 11C)

Ordering Information

HCS-5300CE_S/80.....Digital IR Wireless Chairman Unit
(discussion, voting, 1+7 CHs, silver, excl. battery)
HCS-5300CE_G/80.....Digital IR Wireless Chairman Unit
(discussion, voting, 1+7 CHs, charcoal gray, excl. battery)

HCS-5301D/80

Wireless Discussion Unit with Dual Channel Selection



Features

- Table, stylish and ergonomic design
- Wireless unit, easy setup and removal
- Hi-Fi loudspeaker
- Pluggable microphone
- System controls up to 1000 contribution units
- Transmitting up to 8 CHs high quality digital audio signals
- Built-in dual channel selectors consist of up/down channel select keys and 2-digit channel indicator display
- The microphone on/off buttons provide dual delegate identification, used for individual delegate identification on the left and right respectively and easy for automatic video tracking
- Can be used as a dual delegate unit
- Broadcast standard microphone and digital infrared audio processing and transmitting technologies ensure 20 Hz to 20 kHz perfect sound quality, extremely low distortion factor
- Digital infrared transmission technology guarantees privacy, no worries about eavesdropping and radio interference, no radiation, no radio frequency license needed
- Excellent immunity to RF interference from HF-driven lighting and mobile phones
- Microphone sensitivity and EQ individually adjustable
- Built-in rechargeable Lithium battery pack

The multi-functional wireless delegate unit can be used by two delegates. It provides facilities for speaking, listening and selecting language channels and has excellent immunity to RF interference from mobile phones. It features two separate headphone connections with individual volume control, two separate microphone on/off buttons and two separate channel selectors on both sides of the unit, allowing one unit to serve two delegates. The loudspeaker offers superior acoustics with minimal feedback, for enhanced intelligibility.

Separate rechargeable Lithium battery packs can be removed and replaced in a matter of seconds, providing maximum flexibility in recharge scheduling.

Functions

- Compliant with IEC 60914
- Based on TAIDEN originated dirATC-digital infrared Audio Transmitting and Control technologies
- Infrared transmitting carrier frequency conforms to IEC 61603-7, DQPSK digital modulation/demodulation technology
- System controls up to 1000 contribution units
- Transmitting up to 8 CHs high quality digital audio signals
- Every delegate unit is assigned an individual ID for convenient setup and to avoid double ID forever
- Broadcast standard microphone and digital infrared audio processing and transmitting technologies ensure 20 Hz to 20 kHz perfect sound quality, extremely low distortion factor
- Digital infrared transmission technology guarantees privacy, no worries about eavesdropping and radio interference, no radiation, no radio frequency license needed
- Excellent immunity to RF interference from HF-driven light and mobile phones
- Stem microphone can be unplugged during adjournment, easy to maintain
- Mini-microphone, with foam windshield
- Hi-Fi loudspeaker, minimal feedback
- Two Ø 3.5 mm stereo headphone jacks for headphones with separate volume control
- With two separate microphone on/off buttons for individual microphone control and individual delegate identification
- Can be used as a dual delegate unit
- Built-in dual channel selectors (operable only when earphone is inserted)
- Microphone sensitivity and EQ individually adjustable
- System implements the following facilities when operated in stand-alone mode:
 - ◆ "ACTIVE MICS", set the number of delegates permitted to speak at the same time (1/2/3/4)
 - ◆ "OPEN" mode, if Mic. active limit has been reached, next microphone cannot be turned on when pressing "Mic. On/Off" button
 - ◆ "OVERRIDE" mode, if Mic. active limit has been reached, when pressing "Mic. On/Off" button, next microphone is turned on and the first active microphone is turned off
 - ◆ "VOICE" mode, Mic. sensitivity and close time adjustable, built-in "Flash-on" technology for quick voice control
 - ◆ Simultaneous interpretation
- Automatic video tracking, when cooperating with camera and video switcher unit

- Built-in rechargeable Lithium battery operation duration: 14.4 hours when microphone is continuously on; 48 hours when microphone is off

Controls and Indicators

- Two graphic 64×48 LCDs with back-lighting for channel number, language name, battery capacity and signal icon
- Built-in two channel selectors consist of up/down channel select keys and 2-digit channel indicator display
- Uni-directional electret condenser microphone with two-color illuminated ring
- Charging indicator
- Fully charged indicator
- Power switch
- Two headphone volume control buttons
- Two microphone On/Off buttons with indicator

Interconnections

- Socket for pluggable microphone
- 2 × Ø 3.5 mm stereo headphone jack
- Power adapter interface

Technical Specifications

Electrical

Headphone connection

Frequency response.....20 Hz to 20 kHz (-3dB)
 Headphone load impedance.....≥16 Ohm × 2
 Headphone output.....10 mW

Microphone

Transducer.....Electret-condenser
 Polar pattern.....Uni-directional
 Sensitivity.....-46 dBV/Pa
 Frequency response.....30 Hz to 20 kHz
 Directionality 0°/180°.....>20 dB (1 kHz)
 Equivalent noise.....20 dBA (SPL)
 Max. SPL.....125 dB (THD<3%)

Interface data

Connector.....2 x Ø 3.5 mm stereo jack for headphone

Operation time of battery pack

When mic. is continuously on.....Approx. 14.4 hours
 When mic. is off.....Approx. 48 hours

Mechanical

Mounting.....Tabletop
 Dimensions (h x w x d) (w/o Mic.).....73 x 184 x 134 mm
 Weight
 Excl. battery.....0.5 kg
 Incl. battery.....0.8 kg
 ColorSilver (PANTONE 428C) / Charcoal gray (PANTONE Cool Gray 11C)

Ordering Information

HCS-5301D_S/80	Digital IR Wireless Delegate Unit (discussion, 1+7 CHs, 2 channel selectors, dual predefined position, silver, excl. battery)
HCS-5301D_G/80	Digital IR Wireless Delegate Unit (discussion, 1+7 CHs, 2 channel selectors, dual predefined position, charcoal gray, excl. battery)

HCS-5300TD/80 Digital Infrared Transceiver



Ceiling-mounting



Wall-mounting



Tripod-mounting

Features

- Compliant with IEC 60914
- Infrared transmitting carrier frequency conforms to IEC 61603-7, DQPSK digital modulation/demodulation technology
- Transmitting in 1~8 MHz frequency band, eliminating the interference from HF-driven lights
- Tripod, wall or ceiling mounting, easy to install
- Inside the coverage area of infrared signals, also HCS-5100R/RA/F digital infrared receivers can be in operation simultaneously to receive (1+7 CHs) simultaneous interpretation

HCS-5300TD/80 digital infrared transceiver manages communication between main unit and conference units. It can be mounted onto the ceiling and wall for optional coverage or fixed onto a tripod at any appropriate spot.

Indicators

- Power indicating light

Interconnections

- Equipped with a 2.0 m specific cable with 6P-DIN male plug. For extension purposes, 6P-DIN extension cable can be used.

Technical Specifications

Electrical

Wavelength.....870 nm
 Modulation method.....DQPSK
 Carrier frequency.....1~8 MHz
 Voltage.....33 V DC (supplied from HCS-5300M)
 Current consumption.....Max. 410 mA
 Connector.....6P-DIN
 Cable.....2.0 m specific cable with 6P-DIN male plug

Mechanical

Mounting.....Ceiling, wall or tripod mounting
 Dimensions.....Ø 181 mm, 63 mm (height)
 Weight.....0.5 kg
 Color.....Silver (PANTONE Cool Gray 6 C) /
 Charcoal gray (PANTONE 426 C) /
 White (PANTONE Cool Gray 1 C)

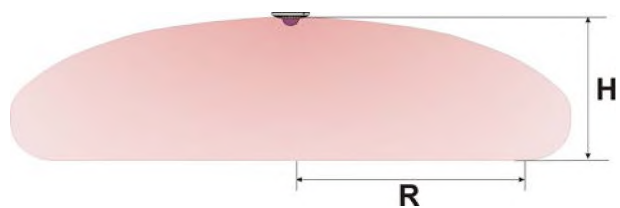
Ordering Information

HCS-5300TD_S/80.....Digital Infrared Transceiver (ceiling, wall or tripod-mounted, ceiling height less than 6 m, powered from HCS-5300M, excl. tripod when ordered, silver)

HCS-5300TD_G/80.....Digital Infrared Transceiver (ceiling, wall or tripod-mounted, ceiling height less than 6 m, powered from HCS-5300M, excl. tripod when ordered, charcoal gray)

HCS-5300TD_W/80.....Digital Infrared Transceiver (ceiling, wall or tripod-mounted, ceiling height less than 6 m, powered from HCS-5300M, excl. tripod when ordered, white)

Cutaway view of coverage area of HCS-5300TD/80 Digital Infrared Transceiver



Coverage area of HCS-5300TD/80 Digital Infrared Transceiver

Type No.	Mounting	Coverage area
HCS-5300TD_S/80	2.5 ~ 3.0 m	13 m
HCS-5300TD_G/80	3.5 ~ 4.5 m	11 m
HCS-5300TD_W/80	5.0 ~ 7.0 m	9 m

HCS-5300MB/80 Digital Infrared Wireless Conference Main Unit



Features

- Original dirATC-digital infrared Audio Transmitting and Control technologies
- Supports up to 8 simultaneous interpretation language channels (incl. the original floor channel)
- Digital infrared audio processing and transmitting technologies ensure perfect sound quality
- Digital infrared transmission technology guarantees conference privacy. Users are released from worries about eavesdropping and radio interference inherent to radio wave-based wireless communications
- Operating the IR conference system does not require a radio frequency license all over the world
- Compatible with HCS-5100 series digital infrared language distribution system, when cooperating with digital infrared language distribution system, enabling a larger audience to join in the conference
- Can be connected to HCS-4100/50 series Wired Congress Unit or Interpreter Unit, to implement 1+3 CHs wired simultaneous interpretation system and 1+7 CHs wireless simultaneous interpretation system
- Microphone sensitivity and EQ individually adjustable
- TCP/IP communication protocol in PC controlled mode, easy to carry out remote control
- Excellent immunity to RF interference from mobile phones and comparable devices

The digital infrared wireless conference main unit includes features for controlling delegate microphones and distributing simultaneous interpretation, without an operator.

With web page control function, the user can access the IP address of main unit from web browser to handle meeting management.

Functions

- Compliant with IEC 60914
- Based on TAIDEN originated dirATC-digital infrared Audio Transmitting and Control technologies
- Infrared transmitting carrier frequency conforms to IEC 61603-7, DQPSK digital modulation/demodulation technology
- Digital infrared audio processing and transmitting technologies ensure perfect sound quality

- Digital infrared transmission technology guarantees conference privacy. Users are released from worries about eavesdropping and radio interference inherent to radio wave-based wireless communications
- Operating the IR conference system does not require a radio frequency license all over the world
- Supports up to 8 simultaneous interpretation language channels (incl. the original floor channel)
- Controls up to 1000 contribution units
- Microphone sensitivity and EQ individually adjustable
- Compatible with HCS-5100Plus series digital infrared language distribution system, when cooperating with digital infrared radiator, enabling a larger audience to join in the conference
- Implemented features in stand-alone mode:
 - ◆ Set the number (1/2/3/4) of delegates permitted to speak at the same time
 - ◆ "OPEN" mode, if Mic. active limit has been reached, next microphone cannot be turned on when pressing "Mic. On/Off" button
 - ◆ "OVERRIDE" mode, if Mic. active limit has been reached, when pressing "Mic. On/Off" button, next microphone is turned on and the first active microphone is turned off
 - ◆ "VOICE" mode, Mic. sensitivity and close time adjustable, built-in "Flash-on" technology for quick voice control
 - ◆ Simultaneous interpretation
- USB interface realizing quality-lossless sound recording on PC and intact input of streaming audio into the system
- Automatic video tracking, when cooperating with camera and video switcher unit
- Advanced TCP/IP communication protocol in PC controlled mode, easy to carry out remote control
- Connection to central control system through RS232 interface for centralized control

Controls and Indicators

- Graphic LCD with back-lighting displays status and menu of the system configuration, supporting multi language menu
- Four buttons for configuration
- Power switch
- Standby switch with indicator
- Operation mode indicators
- LINE IN 1 electric level adjust knob
- Conference unit floor audio channel master volume adjust knob

Interconnections

- Multiple audio in/out interfaces:
 - ◆ Balanced LINE OUT 1 interface (XLR-M) and unbalanced LINE OUT 2 interfaces (RCA×2) for floor audio line out
 - ◆ 8 interpretation audio output interfaces (0~7)
 - ◆ Balanced LINE IN 1 interface (XLR-F) and unbalanced LINE IN 2 interfaces (RCA×2) for connection to external audio devices
 - ◆ Ø 3.5 mm jack for stereo monitor earphone
- USB_H interfaces at front panel to upgrade system and to save system parameters
- USB_D interfaces for digital audio input/output
- Ethernet interfac

- Video switcher interface
- Emergency signal interface: for connection to public emergency system. Pauses the conference automatically if the system is switched on and sends alarm signals to conference units
- 6 digital infrared transceiver interfaces, each interface can connect 4 transceivers if operating distributor HCS-5352, thus each HCS-5300MB/80 can connect up to 10 transceivers
- 1 interpreter unit / DCS interface: for connection to HCS-4100/50 series Wired Congress Unit or Interpreter Unit. By using HCS-8300MES, up to 200 congress units can be connected
- Power supply socket
- HF signal output interface (BNC socket) for connection to HCS-5100T/B Digital Infrared Radiator
- RS232 interface for connection to central control system

Ordering Information

HCS-5300MB/80.....Digital IR Wireless Conference System Main Unit (discussion, 1+7 CHs, with interface for HCS-4100/50 series Wired Congress Unit and Interpreter Unit)

Technical Specifications

Electrical

Frequency response.....20 Hz to 20 kHz (-3dB)
 SNR.....>85dBA
 Dynamic range.....>90 dB
 THD at 1 kHz.....<0.06%
 Isolation.....>80 dB
 Power supply.....AC 100 V-120 V 60 Hz or AC 220 V-240 V 50 Hz
 Power consumption.....Max. 160 W

Audio inputs

LINE IN 1.....+10 dBu, BAL.
 LINE IN 2.....+15 dBu, UNBAL.

Audio outputs

LINE OUT 1.....+20 dBu, BAL.
 LINE OUT 2.....+20 dBu, UNBAL.
 SI. OUTPUT (CH 0 ~ 7) RCA×8.....+10 dBu, UNBAL.

Interface data

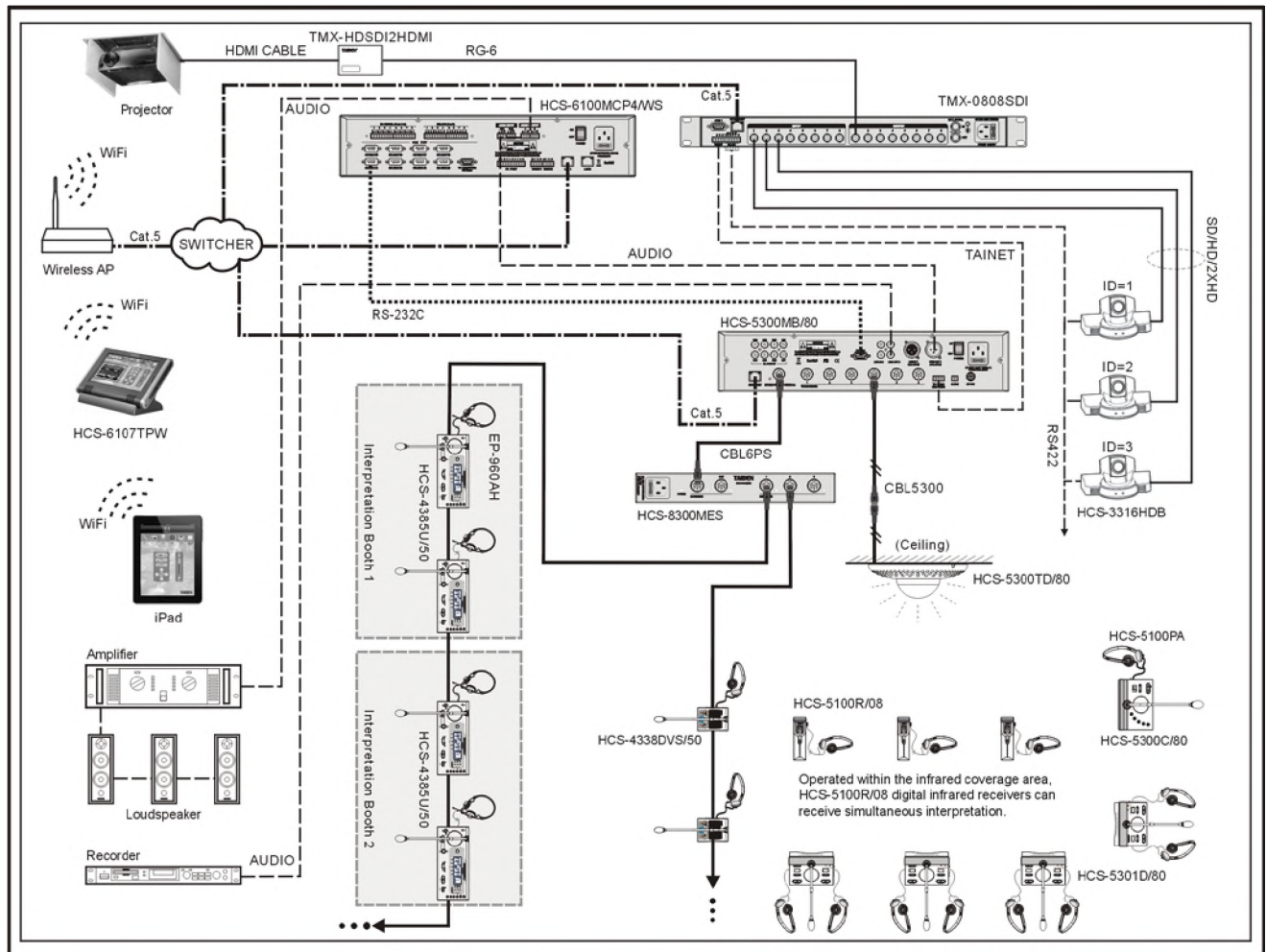
Transceivers I/O terminal6P-DIN socket × 6
 up to 10 transceivers
 External control terminal.....RS232 D-sub (9P, male), USB
 interface, RJ45 (ETHERNET)
 Interpreter unit / DCS terminal.....6P-DIN socket × 1
 HF OUT (Radiator terminal).....BNC connector × 1
 Alarm terminal3.81 mm Phoenix connectors, 2-pole
 Video switcher terminal3.81 mm Phoenix connectors, 4-pole

Mechanical

Mounting.....Tabletop or mounted in a 19" rack
 Dimensions (h x w x d)
 For table use, with feet.....99 x 430 x 325 mm
 For 19" rack use, with brackets.....89 x 478 x 350 mm
 Weight.....10.5 kg
 Color.....White (PANTONE 420 C)

System Connection

[Wired/wireless discussion + digital simultaneous interpretation + video tracking + central control]



HCS-5300BAT Lithium Rechargeable Battery Pack



Features

- Lithium rechargeable battery pack
- Used for supplying power to HCS-5300/80 series digital infrared wireless conference unit

Technical Specifications

Electrical

Nominal voltage.....11.1 V DC
Nominal capacity.....4400 mAh

Mechanical

Dimensions (h x w x d).....28 × 140 × 58 mm
Weight.....0.3 kg
Color.....Black

Ordering Information

HCS-5300BAT.....Lithium Rechargeable Battery Pack
(11.1 V DC, for HCS-5300/01/02 series conference unit)

HCS-5300CHG/08 Charging Unit



Features

- Used for charging HCS-5300BAT Lithium batteries
- Charges 8 pcs of HCS-5300BAT batteries per charging
- Uses universal power supply with automatic voltage matching

Controls and Indicators

- Power switch
- Charging indicator (red)
- Fully charged indicator or battery not inserted (green)

Interconnections

- Power output interface
- Power input interface
- Charging lattices

Technical Specifications

Electrical

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

Mechanical

Dimensions (h x w x d).....74 × 288 × 300 mm
Weight.....4.5 kg
Color.....White

Ordering Information

HCS-5300CHG/08.....Charging Unit (8 pcs/case)

CBL5300 Dedicated Transceiver Cable



Features

- Dedicated cable for HCS-5300/80 series Digital Infrared Transceiver/Receiver
- 1 × 6P-DIN plug
- 1 × 6P-DIN socket
- Ø 6 mm
- Color: black

Ordering Information

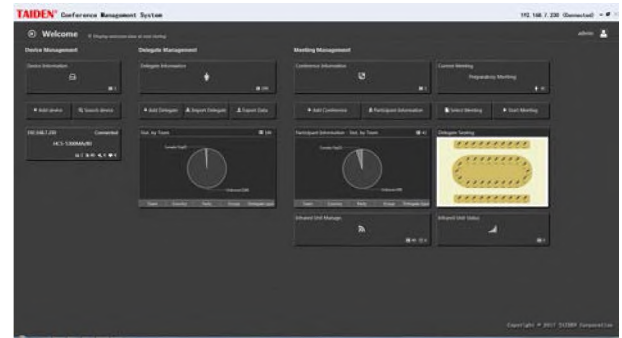
CBL5300-05	5 m Dedicated Transceiver Cable
CBL5300-10	10 m Dedicated Transceiver Cable
CBL5300-20	20 m Dedicated Transceiver Cable
CBL5300-30	30 m Dedicated Transceiver Cable
CBL5300-40	40 m Dedicated Transceiver Cable
CBL5300-50	50 m Dedicated Transceiver Cable
CBL5300-05CMP	5 m Dedicated Transceiver Cable (CMP)
CBL5300-10CMP	10 m Dedicated Transceiver Cable (CMP)
CBL5300-20CMP	20 m Dedicated Transceiver Cable (CMP)
CBL5300-30CMP	30 m Dedicated Transceiver Cable (CMP)
CBL5300-40CMP	40 m Dedicated Transceiver Cable (CMP)
CBL5300-50CMP	50 m Dedicated Transceiver Cable (CMP)

HCS-5300 Series Application Software

HCS-5300 application software is comprehensive, reliable and user-friendly. But it is also an easy care software system which helps the operator to manage the conference efficiently from the very beginning of a meeting until the post-meeting work. With the PC installed HCS-5300 application software connected into the conference system, the operator is able manage all aspects of the conference centrally. The operation turns out to be easy and efficient.

HCS-5300 application software is a modularized software with various functional modules:

- Basic System Setup Management Software Module (HCS-5310/80)
- Microphone Management Software Module (HCS-5313/80)
- Voting Management Software Module (HCS-5314/80)
- Video Control Software Module (HCS-5315/80)
- Simultaneous Interpretation Software Module (HCS-5316/80)
- Synchronous Audio Recording Management Software Module (HCS-5319/80)
- Multi-User Conference Control Software Module (HCS-5321/80)
- Digital HD Video Recording Management Software Module (HCS-5343/80)

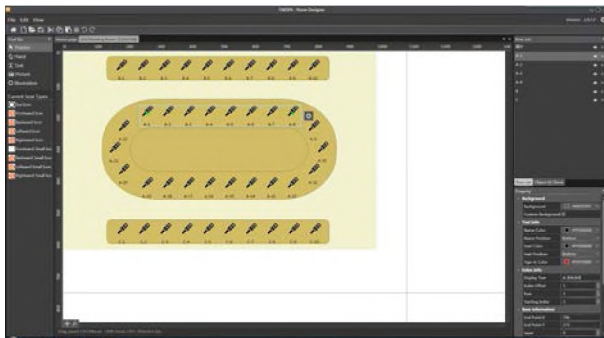


HCS-5310/80

Basic System Setup Management Module

The Basic Software Module consists of an amount of facilities, e.g. room management, meeting management, main unit configuration, contribution unit configuration, information display, report management and user management.

Room management



Room layout designer

Functions

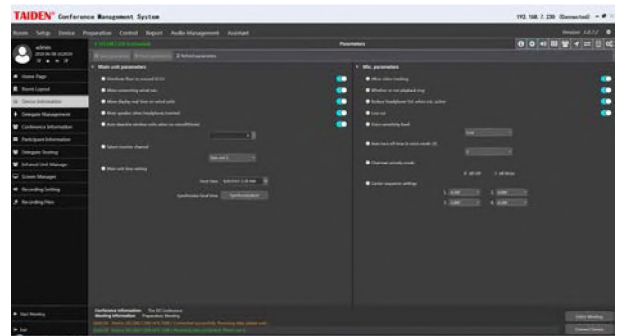
Supports importing room layout and designing a new room layout. Converts the venue seating into an intuitive, graphical and controllable interface as a basis for further use, according to the actual layout of the venue

- Self-designing the background picture and color, supporting pictures of any size
- Microphone number, amount of microphones per line, icon type - icon transparency optionally
- Freely drag and drop the microphone icon
- Save/open files for file management
- Suitable for any sized meeting room/hall

Main unit configuration facility



Main unit control panel



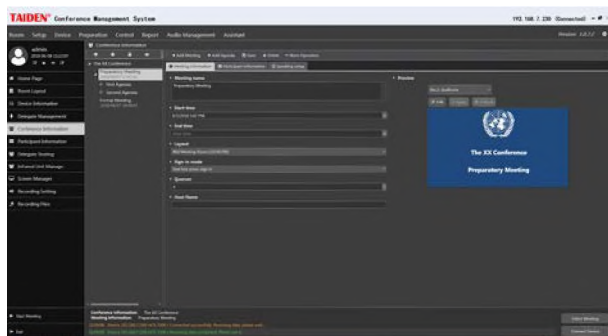
CMU parameters setup

Functions

Module provides **CMU control panel** and **CMU parameters setup** sub-modules.

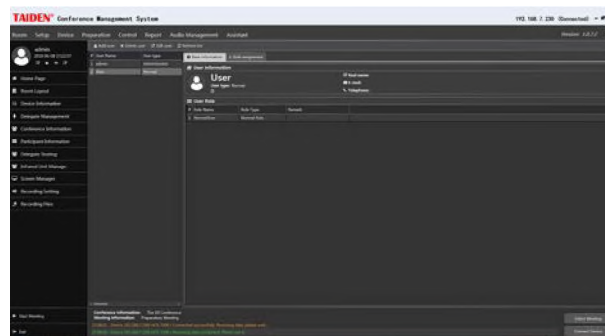
- **CMU control panel:** synchronously display and adjust the status of the conference main unit, for flexible control of the CMU by the operator
 - ◆ Active Microphones (1/2/3/4)
 - ◆ Operation mode (OPEN/OVERRIDE/VOICE/APPLY)
 - ◆ Original floor channel volume of the contribution unit
 - ◆ Original floor channel treble of the contribution unit
 - ◆ Original floor channel bass of the contribution unit
 - ◆ Line-in volume
- **CMU parameters setup-Main unit:**
 - ◆ Distribute floor to unused SI CH
 - ◆ Allow connecting wired mic
 - ◆ Allow display real-time on wired units
 - ◆ Mute speaker when headphone inserted
 - ◆ Auto deactivate when no voice: the microphone will be automatically switched off after a period of silence and the period shall be set up
 - ◆ Select monitor channel: select monitor channel
 - ◆ Main unit time setting
- **CMU parameters setup-Microphone:**
 - ◆ Allow video tracking
 - ◆ Playback ring when priority button pressed
 - ◆ Reduce headphone volume when microphone active
 - ◆ Low cut
 - ◆ Voice sensitivity (Low/Medium/High)
 - ◆ Auto off time in voice mode
 - ◆ Chairman priority mode (All Off / All Mute)
 - ◆ Carrier sequence settings

Conference information management



Conference information

User management



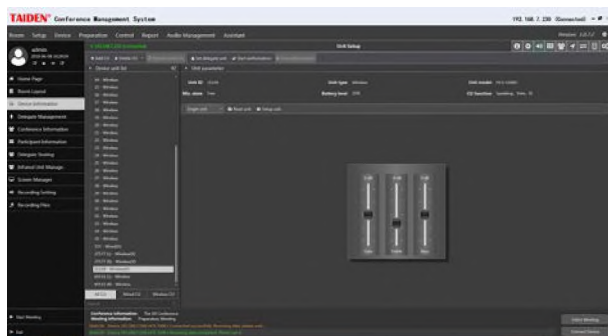
User management interface

Functions

Comprehensive conference information management facility, for clear and easy user management.

- Includes conference name, meeting information and agenda information
- Each conference consists of several meetings
- Each meeting consists of several agendas
- Creation of a new meeting for appointed conference
- Creation of a new agenda for appointed meeting
- Meeting:
 - ◆ Meeting content: meeting name, layout, meeting start time, sign-in mode, quorum and conference content
 - ◆ Locking a convoked meeting for meeting data protection
 - ◆ Speaking setup for appointed meeting
 - ◆ Freely switch between the meetings to manage
- Agenda:
 - ◆ Agenda content: agenda name
 - ◆ Speaking setup for appointed agenda

Contribution unit configuration facility



Set up contribution unit interface

Functions

Set up and reconfigure internal parameters of the contribution unit. Parameters include:

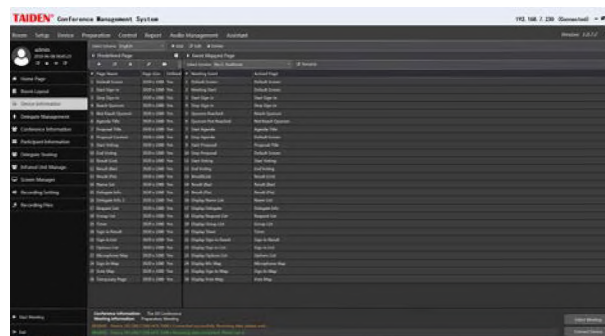
- Select contribution unit to set up
- Gain of the contribution unit
- Treble of the contribution unit
- Bass of the contribution unit

Functions

Module provides **User Information** and **User Role** sub-modules.

- **User Information**
 - ◆ Create a new user, and set his/her account, password, and role
 - ◆ Change user's password and role
 - ◆ Supports deleting a user
- **User Role**
 - ◆ Create a new role, and set its authority
 - ◆ Change role's name and authority
 - ◆ Supports deleting a role

Information display



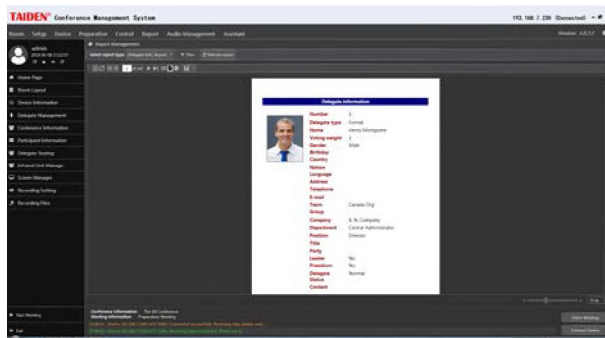
Screen management

Functions

Includes screen management: design of a screen and its related activated event.

- Set distinct screen projects for distinct conferences and languages
- Predetermination of screen page contents: includes page color, page name, page size, etc.
- Editing screen page contents: includes add text, picture, delegate's photo, voting results, etc.
- Select the page to display when conference event starts. Each conference event corresponds to a particular screen page
- Rename each screen for more convenience

Report system



Report system

Functions

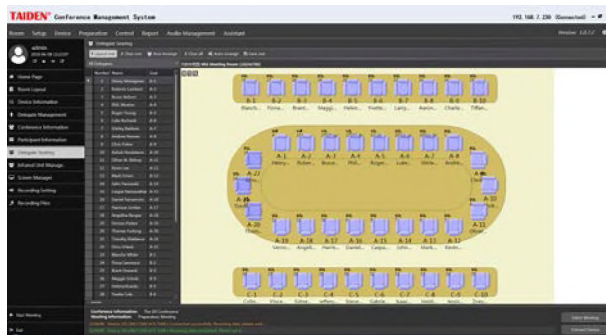
Conference information output from the software's database, for backup or printout purposes. The conference information includes:

- Delegate information report
- Seat sign-in report
- Seat sign-in name list
- Vote result report
- Vote name list

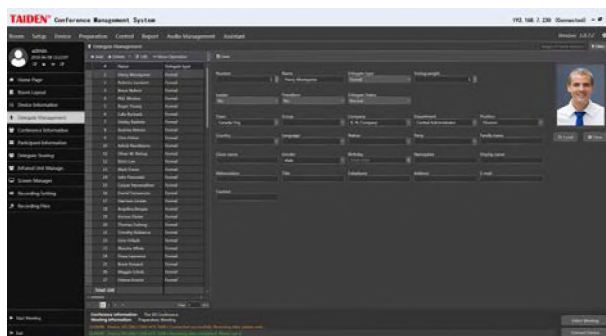
Ordering Information

HCS-5310/80...Basic System Setup Management Software Module

HCS-5313/80 Microphone Management Module



Seat arrangement



Delegate information



Microphone control

Functions

Seat arrangement, delegate management and microphone control sub-modules

- **Seat arrangement** facility includes delegate seating and unit arrangement function modules
 - ◆ Delegate seating is used to assign seats for the delegates, e.g.:
 - Assign a single seat for each delegate
 - Auto-arrange: automatically arrange the delegate to the room layout according to delegate number and seat number
 - Section seating, automatic seat assignment for a group of delegates, supports new assignment – in parts or entirely
 - Clear a single seat if required for a new assignment
 - Clear all seat if required for new assignment

- ◆ Unit arrangement: assign the conference units to the corresponding positions based on the true delegate seating, current cabling and layout:
 - Setup arrangement, assign the conference units to the true delegate seating
 - Delete arrangement, reassign the units
 - Locate seat position by menu operation
 - Operate the arranged units to check the arrangement
- **Delegate management** includes two sub-modules: delegate information and participant information
 - ◆ Delegate information: create and manage the delegate's database
 - Edit delegate information: number, type, name, voting weight, leader (yes or no), presidium (yes or no) etc. Supports individual picture in the database
 - Fast search and filter facility
 - Recover delegate from recycle bin
 - Database updatable
 - ◆ Participant information: select the delegates to participate in the conference from the database
 - Add participants by filter conditions (for example delegate type, team)
 - Check participant information by filter conditions (for example delegate type, team)
- **Microphone control**: combined with room layout design, seating arrangement, delegate management, meeting management and microphone setup, for controlling and monitoring current microphone status, as well as automatic video tracking. Facility includes:
 - ◆ Microphone on/off control
 - ◆ Close all active microphone
 - ◆ Delegate speech timing
 - ◆ Detailed information available from the delegate database for online display purposes
 - ◆ If cooperating with an automatic video tracking system, camera presets can be made for each discussion unit to transmit speaker's picture simultaneously to a hall display

Ordering Information

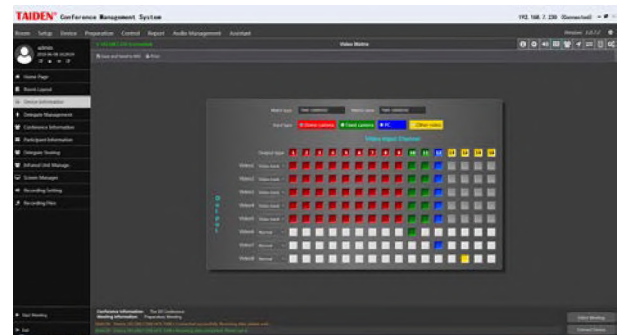
HCS-5313/80.....Microphone Management Software Module

- Fast search and filter facility
- Recover delegate from recycle bin
- Database updatable
- ♦ Participant information: select the delegates to participate in the conference from the database
 - Add participants by filter conditions (for example delegate type, team)
 - Check participant information by filter conditions (for example delegate type, team)

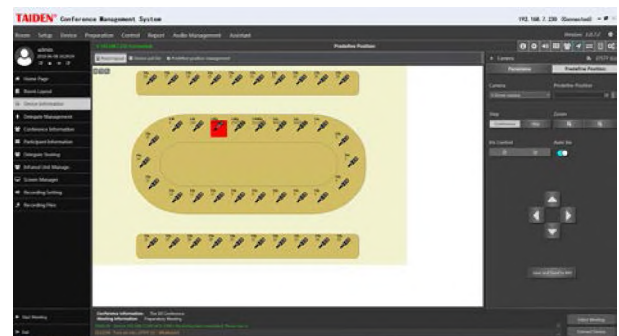
Ordering Information

HCS-5314/80___Voting Management Software Module (including delegate management, multiform voting)

HCS-5315/80 Video Control Module



Video matrix



Camera control

Functions

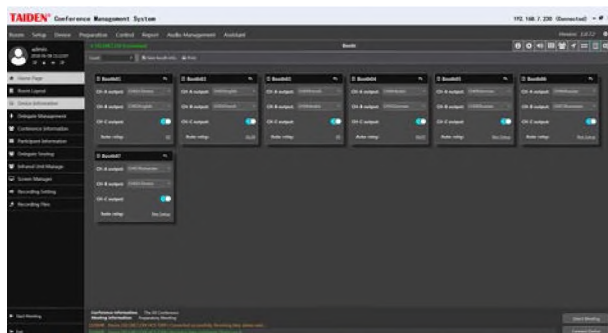
Carries out automatic video tracking when cooperating with camera and video switch unit.

- Set up video matrix: set input/output channels for computer, camera and other video apparatus according to the connections between video equipment and video switch unit. The configuration can be sent to the main unit for synchronization
- Video switch: switch among different input and output video signals according to the video matrix
- Camera preset: cooperating with microphone management module to set and adjust the camera preset for each seat/microphone and to transmit speaker's video picture simultaneously to a hall display
- Camera control: preset the panorama of the conference venue

Ordering Information

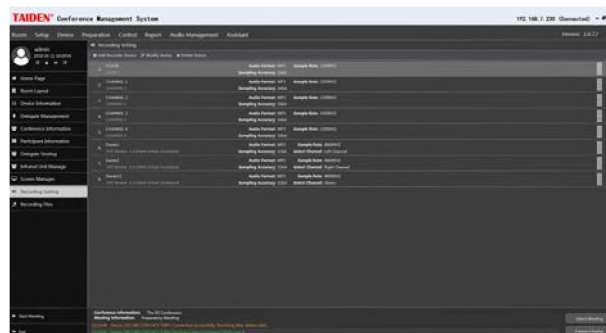
HCS-5315/80_____Video Control Software Module

HCS-5316/80 Simultaneous Interpretation Module

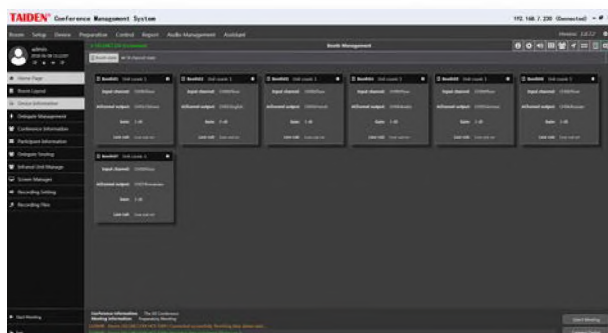


Interpretation channel setup

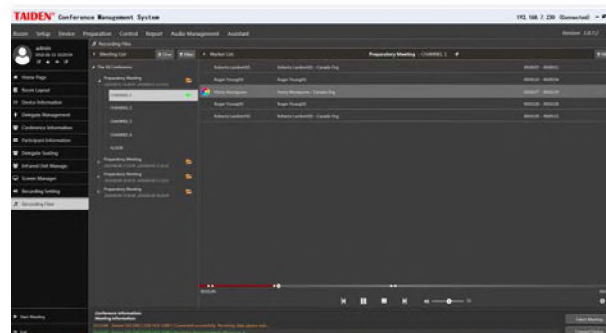
HCS-5319/50 Synchronous Recording Module



Recording setting



Booth management



Recording files

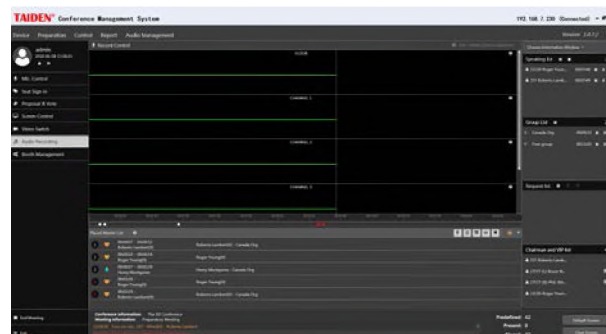
Functions

Set up the simultaneous interpretation channels, interpreter booth(s) and booth management:

- Simultaneous interpretation channel setup:
 - ◆ Set the channel count and language for each channel and save into the database
 - ◆ Set language and its abbreviation
 - ◆ Send the configuration to the Congress Main Unit for synchronization
 - ◆ Display Congress Main Unit configuration on the window
- Set up interpreter booth(s)
 - ◆ Set the count of interpreter booth, and save into database
 - ◆ Set the outgoing for channel A, B and C of each booth
 - ◆ Set the auto-relay booths for each interpreter booth
 - ◆ Send configuration to the Congress Main Unit for synchronization
- Booth management: synchronously control and communicate with the booth during the meeting, monitor booth state and SI channel state

Ordering Information

HCS-5316/80.....Simultaneous Interpretation Software Module



Audio recording

Functions

Records speakers' audio information:

- Integrated into **TAIDEN** conference management application software, easy to operate
- Recording setting:
 - ◆ Supporting local device and current main unit
 - ◆ Local device: recording mixing audio of floor channel and interpreter audio of SI channels, Dante virtual soundcard on PC and Dante interface on main unit are needed
 - ◆ Current main unit: recording mixing audio of floor and single microphone audio

HCS-3316HDN HD Videoconference Camera



Features

- Dedicated HD videoconference camera
- Built-in 1/2.8-type HD CMOS image sensor with 5M pixels, 20x zoom lens, providing 240x zoom ratio (20x optical plus 12x digital)
- Broadcast quality full HD image up to 1080p60
- Wide dynamic range, high S/N ratio and 2D/3D noise reduction algorithm reproducing clear images in poorly-illuminated environment
- H.265/H.264 video coding and G.711/G.7.26 audio coding for 1080p baseband streaming
- Reliable, fast and quiet PTZ operation
- Simultaneous transmission of 3G-SDI, HDMI and IP full HD video
- Versatile connectivity supports for VISCA or PELCO-D protocols via RS-485/RS-232, which allows for efficient remote camera control
- 10M/100M adaptive Ethernet port, for video and audio stream output and control data interaction
- Built-in conversion lens for wide viewing angle (61°)
- Support up to 64 presets, pan, tilt and zoom values can be saved even after reboot

HCS-3316HDN can deliver high quality video signals simultaneously through two HD video outputs. It also boasts of rapid, smooth and silent PTZ operation thanks to its direct drive motor. The camera covers a wide shooting range, with a wide pan range of 300° (±150°) and a tilt range of 120° (-30° to +90°). Both pan and tilt speeds are variable within the range of 0.1° to 200° and 0.1° to 150° respectively. Conference rooms everywhere are making the transition to HD and it makes this change effortless.

This unique camera employs a 1/2.8-type HD CMOS image sensor with five mega effective pixels and can be used in combination with any number of codecs and other systems to produce high-quality, high-resolution images. With its wide field of view, built-in 20x optical zoom lens, 16:9 aspect ratio video and high-speed, quiet pan/tilt operation, the camera can cover subjects across wide space with minimal disturbance. Combining convenient features such as auto focus/ auto exposure, 64-position presets, auto cruise, configurable scan mode, remote control, and external control via standard RS-485/232 interface, it is ideal for application including videoconferencing, distance learning, corporate training, etc.

Technical Specifications

Electrical

Image sensor	1/2.8-type HD CMOS sensor
Effective pixels	Five mega pixels
Signal system	HD: 1080p60, 1080p50, 1080p30, 1080p25, 1080i60, 1080i50, 720p60, 720p50, 720p30, 720p25
Shutter speed	1/60 s - 1/10000 s (60Hz), 1/50 s - 1/10000 s (50Hz)
Minimum illumination	0.5 lux (50IRE, F1.6)
Horizontal viewing angle	61° (wide)
Lens	20x Optical + 12x digital
Noise reduction	2D/3D noise reduction algorithm
SNR	≥55 dB
Synchronous mode	Inter-sync
Back light	On/Off/Auto
Pan speed	0.1°/s - 200°/s
Tilt speed	0.1°/s - 150°/s
Pan angle	-170° to +170°
Tilt angle	-30° to +90°
Preset position	255
(TAIDEN conference management software can preset, clear and recall 64 preset positions)	
Preset precision	0.1°
Video output	HD-SDI, HDMI
Multiple video outputs	Simultaneous output of 2 HD video and 1 IP video
Ethernet interface	10M/100M adaptive Ethernet port
Control protocol	PELCO-D, VISCA
Control interface	RS-485, RS-232
Baud rate	2400/4800/9600/19200/38400 bps
Video coding standard	H.265, H.264
Main stream resolution	1920x1080, 1280x720
Sub stream resolution	720x576, 720x480, 960x540
Bitrate	variable (128k-8192kbps)/fixed
Frame rate	50Hz: 1-50fps, 60Hz: 1-60fps
Address range	0 ~ 255
Operating temperature	0°C ~ +50°C
Storage temperature	-20°C ~ +70°C
RH operating range	0 - 95% relative humidity (non-condensing environment)
Power supply	DC 12 V
Power consumption	<10 W

Mechanical

Installation	Tabletop or ceiling-mounting
Dimensions (h x w x d)	170 × 260 × 163 mm
Color	Gray (PANTONE Cool Gray 11C)

Ordering Information

HCS-3316HDN_G.....HD Videoconference Camera (gray)

HCS-3316ZJ Tripod



Features

- Used for mounting HCS-3316HDB and HCS-3316HDN camera
- Max. adjustable height: 1.4 m
- Weight: 2.6 kg

Ordering Information

HCS-3316ZJ.....Tripod (for HCS-3316HDB and
HCS-3316HDN camera)

HCS-3316CK Camera Control Keypad



Features

- Working with HD video conferencing camera HCS-3316HDB and HCS-3316HDN, and compatible with a variety of professional cameras, such as, SONY, VBLOSSOM, Polycom, CISCO, etc.
- Preset 6-16 image functions, such as, doom position, lens position, white balance, mirror, frozen, etc.
- LCD with backlight, to display information and tips
- Control interface: six axis control lever, 28 function keys with backlight
- Control protocols: VISCA, PELCO-P, PELCO-D

Technical Specifications

Electrical

Power supply.....DC 12 V/1 A
 Power consumption.....2.7 W
 Control protocol.....PELCO-P, PELCO-P, VISCA
 Connectors:
 Camera control.....RS232, RS485
 DVR control.....RJ45 (RS485)
 Computer control.....USB2.0

Mechanical

Installation.....Tabletop or ceiling-mounting
 Dimensions (h x w x d).....155 × 355 × 150 mm
 Weight.....1.5 kg (excl. power adapter)
1.9 kg (with power adapter)

Ordering Information

HCS-3316CK.....Camera Control Keypad
 (for TMX-xxxxSDI2 Series
 HD Video Tracking Matrix
 Switcher)

WIRELESS MICROPHONES
iLive UHF Wireless Microphone Systems
 iLive 2X2 dual channel wireless microphone receivers

iLIVE 2X2

iLive 2X2 dual channel wireless receiver with 2 handheld transmitters, 32 selectable channels and automatic channel targeting. These universal dual channel receivers can be combined with handheld microphone or body pack transmitter together with lavalier or headset microphone. iLive 2X2 receivers can be used with all AMC iLive2 series hand held transmitters and body packs.



Technical Specifications	iLIVE 2X2
Carrier frequency range	606 MHz - 621 MHz
Power supply	12 - 15 DC, 1.25 A
Outputs	Balanced XLR, unbalanced 6,3 mm TS Jack
Receiver way	Two frequency conversion super heterodynes
Intermediate frequency	10,7 MHz
Antenna connector	BNC
T.H.D	< 0,7 %
Sensitivity	6 dB μ V
Image rejection	36 dB
Max audio output level	0 dBu
Dimensions	45 mm x 210 mm x 206 mm
Weight	1,4 kg
Material	Steel enclosure, aluminum front panel

MIXING PREAMPLIFIERS

iMIX Stereo Preamplifiers

Mixing preamplifiers for background music and voice.

iMIX 63

Mixing preamplifier for background music and public address. Six balanced COMBO XLR inputs with 6 selectable MIC/LINE inputs and 3 stereo RCA inputs. Phantom power is on the board and activated by external dip switch on each universal COMBO XLR input. Priority on the first universal input. For emergency operation, an external 24V DC power source can be used.



Technical Specifications		iMIX 63
Power supply	~ 230 V/ 50 Hz or DC 24V	
DC power consumption	9,6 VA	
AC power consumption	10,5 VA	
Phantom power voltage	20 V (max.)	
Input impedance	Microphone input 1,4 kΩ Line input 10 kΩ	
Output impedance	120 Ω	
Input gain	Combo XLR input (Mic level) - 52 dBu Combo XLR input (Live level) - 12 dBu RCA input - 4 dBu	
Maximum input level	Balanced XLR input (Mic level) - 15 dBu Balanced XLR input (Live level) + 12 dBu	
Maximum output level	Master output + 16 dBu / Mono output + 27 dBu Monitor output + 27 dBu / Rec output + 21 dBu	
Frequency response	20 Hz - 22 kHz	
THD	0,03 % @ 1 kHz	
Signal / Noise ratio	> 103 dBu	
Crosstalk (input to output)	- 82 dBu	
Priority inputs	Input 1	
Tone control	Low ± 10 dB @ 80 Hz, Mid ± 10 dB @ 2,5 kHz, High ± 10 dB @ 12 kHz"	
Dimensions	44 mm × 483 mm × 195 mm, 1U 19" Rack Mount	
Weight	2,9 kg	
Colour	Black (RAL 9017)	

