# HCS-5300 Series Digital Infrared Wireless Conference System

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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 lower S/R ratio.

**System theory**

The core of TAIDEN infrared wireless conference system – dirATC (Digital Infrared Audio Transmitting and Control Technologies) - is a new technology originated by TAIDEN. It digitally encodes and modulates audio and data signals 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 TDIR03) 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)

TAIDEN digital infrared wireless conference system is composed of 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 built-in demodulator/modulator (DQPSK), 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).

The basic infrared conference unit version with discussion function includes microphone, microphone switch button, loudspeaker and battery. The infrared discussion unit receives audio and control signals via infrared from the transceiver - signals previously generated by 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.
System devices
HCS-5300CE/DE has speaking, voting and simultaneous interpretation functions; HCS-5301D offers speaking and simultaneous interpretation functions with two channel selectors and two microphone IDs for two delegates: an economic and cost saving solution. HCS-5302C/D has speaking function with speaker and earphone socket.

Digital infrared transceiver types feature ceiling-, tripod-, wall- and suspension-mounting with a maximum radiation range of 13 meters.

Figure 4  TAIDEN HCS-5300 Series Digital Infrared Wireless Conference Units

Figure 5  TAIDEN HCS-5300T Series Digital Infrared Transceivers

Figure 6  TAIDEN HCS-5300M Digital Infrared Wireless Conference Main unit
System features

- The first digital infrared wireless conference system in the world
- Original dirATC -- digital infrared Audio Transmitting and Control technologies
- Wireless system, easy set up and removal
- Perfect sound quality as CD from the microphone
- Microphone sensitivity and EQ can be adjusted individually
- Independent MIC, synchronous recording
- Infrared transmission technology guarantees privacy
- Any quantity of infrared wireless conference systems can be installed within a building
- No worries about eavesdropping and radio interference, no radio radiation
- Full functions (discussion, voting and 1+3 CH interpretation)
- No radio frequency license needed for operating an infrared system all over the world
- Undisturbed by HF driven light sources
- Excellent immunity to RF interference from mobile phones and RF devices
- Vertical emission angle of conference unit selectable via LCD menu

Wireless Conference System

- Quick set up and removal, free from troubles resulting from cable breaks and cable deteriorations
- Easy to setup 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
- Any quantity of infrared wireless conference systems can be installed 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 2~8 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 ~ 20 kHz
  - S/N: >80 dBA
  - THD: <0.05%

Full Functions

- Discussion
- Vote (5 keys)
- Simultaneous interpretation (1+3 channels)
- Isolated audio recording function for all speakers
- Auto video tracking
- Compatible with HCS-5100 digital infrared language distribution system (HCS-5100R series digital infrared receivers can work with HCS-5300T series transceivers)
- Powerful application software

The following is the frequency response measurement diagram of TAIĐEN HCS-5300 digital infrared wireless conference system compare with a certain brand of analog infrared wireless conference system, you can see from this diagram that the system frequency response bandwidth of digital infrared wireless conference system is more wide and flat, thus ensuring a better sound performance of the whole conference system.
In a number of adjacent conference rooms, using digital infrared wireless conference system, you don’t need to worry about mutual interference between adjacent rooms (including the upstairs and downstairs), and the breach question.

In a number of adjacent rooms, using radio frequency (RF) wireless conference system, the systems of adjacent rooms (including the upstairs and downstairs) will interfere between each other (the more active units, the more serious interference), if improper or intentionally set, could cause the next room can receive the signal of this room, causing a serious breach.

One Shenzhen Administration Center installed nine sets of RF wireless conference system, often interfere with each other when working, they can only shift work, which gives customers a great inconvenience! Using RF wireless conference system, will interfere with WiFi devices, Bluetooth devices, wireless radio, cordless phones, wireless projector, wireless mouse, wireless keyboard and wireless touch panel of central control system, and this kind of interference will change with time, cause great destabilizing factors to the RF wireless conference system.
HCS-5300CE
Wireless Chairman Unit with Voting and Channel Selection

Features

■ Table, stylish and ergonomic design
■ Wireless unit, easy setup and removal
■ Hi-Fi loudspeaker
■ Priority key
■ Pluggable microphone
■ System controls up to 1000 contribution units
■ 5 voting keys
■ Transmitting up to 4 CHs high quality digital audio signals
■ Vertical emission angle selectable via LCD menu
■ 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 2~8 MHz transmission frequency, excellent immunity to RF interference from HF-driven lighting and mobile phones
■ Microphone stem can be unplugged during adjournment, easy to maintain
■ Hi-Fi loudspeaker, minimal feedback, automatically mutes when microphone is active
■ Two Ø 3.5 mm stereo headphone jacks for headphones with controllable volume independently
■ Microphone On/Off button, 5 voting keys
■ Built-in channel selector
  - Channel selector is operable only when earphone is inserted, built-in speaker will mute automatically on earphone insertion
■ Microphone sensitivity and EQ can be adjusted individually
■ System when operated in stand-alone mode can implement the following facilities:
  - "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 can be turned on and the first active microphone will be turned off
  - Simultaneous interpretation
■ In combination with the corresponding software modules, multiform voting can be implemented:
  - For/Against
  - Parliamentary: YES/NO/ABSTAIN
  - Multi choice/Opinion poll: 1/2/3/4/5
  - Audience response/Rating: --/-/0/+/++
■ Key-press sign-in
■ Automatic video tracking, when cooperating with camera and video switcher unit
■ Can be activated 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 key can switch off or mute the speaking units according to preset

Functions

■ Compliant to 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 4 CHs high quality digital audio signals
■ Vertical emission angle selectable via LCD menu
■ 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 ~ 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
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■ Key-press sign-in
■ Automatic video tracking, when cooperating with camera and video switcher unit
■ Can be activated 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 key can switch off or mute the speaking units according to preset
Controls and Indicators

- Graphic 96×64 LCD with back-lighting for displaying channel number, language name, battery capacity, signal icon and emission angle 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 (blue/red)
- Charging indicator
- Fully charged indicator
- Power switch
- Two headphone volume control buttons
- Five voting buttons with indicators
- Microphone On/Off button with indicator
- Priority key

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

Recommended external microphone type

- 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 × Ø 3.5 mm stereo jack for headphone

Operation time of battery pack

- When mic. is continuously on:
  - Not omnidirectional: Approx. 14.4 hours
  - Omnidirectional: Approx. 10 hours
- When mic. is off:
  - Approx. 48 hours
- 15% when mic. is on + 85% when mic. is off: Approx. 36 hours
HCS-5300DE
Wireless Discussion Unit with Voting and Channel Selection

Features
- Table, stylish and ergonomic design
- Wireless unit, easy setup and removal
- Vertical acceptance/emission angle selectable
- Hi-Fi loudspeaker
- Pluggable microphone
- System controls up to 1000 contribution units
- 5 voting keys
- Transmitting up to 4 CHs high quality digital audio signals
- Vertical emission angle selectable via LCD menu
- 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
- Excellent immunity to RF interference from HF-driven lighting and mobile phones
- Microphone stem can be unplugged during adjournment, easy to maintain
- Hi-Fi loudspeaker, minimal feedback, automatically mutes when microphone is active
- Two Ø 3.5 mm stereo headphone jacks for headphones with separate volume control
- Microphone On/Off button, 5 voting keys
- Built-in channel selector
  - Channel selector is operable only when earphone is inserted, built-in speaker will mute automatically on earphone insertion
- Microphone sensitivity and EQ can be adjusted individually
- System when operated in stand-alone mode can implement the following facilities:
  - "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 can be turned on and the first active microphone will be turned off
  - Simultaneous interpretation
- In combination with the corresponding software modules, multiform voting can be implemented:
  - For/Against
  - Parliamentary: YES/NO/ABSTAIN
  - Multi choice/Opinion poll: 1/2/3/4/5
  - Audience response/Rating: --/-/0/+/++
- Key-press sign-in
- Automatic video tracking, when cooperating with camera and video switcher unit
- Built-in rechargeable Lithium battery pack operation duration: 14.4 hours when microphone is continuously on; 48 hours when microphone is off

The multi-functional wireless delegate unit meets the demands of even the largest conferences and provides facilities for speaking, listening, voting and selecting language channels. It has excellent immunity to RF interference from mobile phones and features a channel selector and two headphone connections. Channel selection is automatically limited to the number of language channels available. The loudspeaker offers superior acoustics with minimal feedback, so increasing intelligibility. Separate rechargeable Lithium battery packs can be removed and replaced in a matter of seconds, providing maximum flexibility in recharge scheduling.
HCS-5300 Series Digital Infrared Wireless Conference System

Controls and Indicators

- Graphic 96×64 LCD with back-lighting for displaying channel number, language name, battery capacity, signal icon and emission angle 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 (blue/red)
- Charging indicator
- Fully charged indicator
- Power switch
- Two headphone volume control buttons
- Five voting buttons with indicators
- Microphone On/Off button 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

Recommended external microphone type
- 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
- Not omnidirectional: Approx. 14.4 hours
- Omnidirectional: Approx. 10 hours

When mic. is off
- Approx. 48 hours
- 15% when mic. is on + 85% when mic. is off: Approx. 36 hours

Mechanical

Mounting: Tabletop
- Dimensions (h x w x d) (w/o Mic.): 68 x 180 x 132 mm
- Weight
  - Excl. battery: 0.46 kg
  - Incl. battery: 0.78 kg
- Color: Silver/Gray

Ordering Information

HCS-5300DE_S .................. Digital IR Wireless Delegate Unit
(5 voting buttons, 1+3 CHs, silver)

HCS-5300DE_G .................. Digital IR Wireless Delegate Unit
(5 voting buttons, 1+3 CHs, gray)
HCS-5301D
Wireless Discussion Unit with Dual Channel Selection

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, so increasing intelligibility.

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

Functions

- Compliant to 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 4 CHs high quality digital audio signals
- Vertical emission angle selectable via LCD menu
- 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 ~ 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
- Microphone stem can be unplugged during adjournment, easy to maintain
- Hi-Fi loudspeaker, minimal feedback, automatically mutes when microphone is active
- 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
  - Channel selector is operable only when earphone is inserted, built-in speaker will mute automatically on earphone insertion
- Microphone sensitivity and EQ can be adjusted individually
- System when operated in stand-alone mode can implement the following facilities:
  - "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 can be turned on and the first active microphone will be turned off
  - Simultaneous interpretation

Features

- Table, stylish and ergonomic design
- Wireless unit, easy setup and removal
- Vertical acceptance/emission angle selectable
- Hi-Fi loudspeaker
- Pluggable microphone
- System controls up to 1000 contribution units
- Transmitting up to 4 CHs high quality digital audio signals
- Vertical emission angle selectable via LCD menu
- Built-in dual channel selectors consist of up/down channel select keys and 2-digit channel indicator display
- The microscope 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 stem can be unplugged during adjournment, easy to maintain
- Hi-Fi loudspeaker, minimal feedback, automatically mutes when microphone is active
- 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
  - Channel selector is operable only when earphone is inserted, built-in speaker will mute automatically on earphone insertion
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- System when operated in stand-alone mode can implement the following facilities:
  - "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 can be turned on and the first active microphone will be turned off
  - 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 96×64 LCDs with back-lighting for channel number, language name, battery capacity, signal icon and emission angle 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 (blue/red)
- 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

Recommended external microphone type
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 × Ø 3.5 mm stereo jack for headphone

Operation time of battery pack
When mic. is continuously on
- Not omnidirectional ...................................... Approx. 14.4 hours
- Omnidirectional ........................................... Approx. 10 hours
When mic. is off ............................................. Approx. 48 hours
15% when mic. is on + 85% when mic. is off ...... Approx. 36 hours

Ordering Information
HCS-5301D_S .............................................. Digital IR Wireless Delegate Unit
(1+3 CHs, 2 channel selectors, dual ID, silver)
HCS-5301D_G .............................................. Digital IR Wireless Delegate Unit
(1+3 CHs, 2 channel selectors, dual ID, gray)

Mechanical
Mounting .......................................................... Tabletop
Dimensions (h x w x d) (w/o Mic.) ......................... 68 x 180 x 132 mm
Weight
Excl. battery .................................................. 0.46 kg
Incl. battery .................................................... 0.78 kg
Color ............................................................. Silver/Gray
HCS-5302C
Wireless Chairman Unit

Features
- Table, stylish and ergonomic design
- Wireless unit, easy setup and removal
- Vertical acceptance/emission angle selectable
- Hi-Fi loudspeaker
- Priority key
- Pluggable microphone
- System controls up to 1000 contribution units
- Vertical emission angle selectable via LCD menu
- 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 can be adjusted individually
- Built-in rechargeable Lithium battery pack

Functions
- Compliant to 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
- Vertical emission angle selectable via LCD menu
- 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 ~ 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
- Microphone stem can be unplugged during adjournment, easy to maintain
- Hi-Fi loudspeaker, minimal feedback, automatically mutes when microphone is active
- Two Ø 3.5 mm stereo headphone jacks for headphones with separate volume control
- Microphone On/Off button
- Microphone sensitivity and EQ can be adjusted individually
- System when operated in stand-alone mode can implement the following facilities:
  - "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 can be turned on and the first active microphone will be turned off
- Automatic video tracking, when cooperating with camera and video switcher unit
- Can be activated 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 key can switch off or 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

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-5302D Delegate Unit, the HCS-5302C Chairman Unit includes an extra microphone priority key. When pressed, the priority key causes all currently active delegate microphones to be temporarily or permanently switched off, 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.
Controls and Indicators

- Graphic 96×64 LCD with back-lighting for displaying battery capacity, signal icon and emission angle icon
- Uni-directional electret condenser microphone with two–color illuminated ring (blue/red)
- Charging indicator
- Fully charged indicator
- Power switch
- Two headphone volume control buttons
- Microphone On/Off button with indicator
- Priority key

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

Recommended external microphone type
Transducer, Electret-condenser
Polar pattern, Uni-directional
Sensitivity, -46 dBV/Pa
Frequency response, 30 Hz to 20 kHz
Directionality, >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
Not omnidirectional, Approx. 14.4 hours
Omnidirectional, Approx. 10 hours
When mic. is off
Approx. 48 hours
15% when mic. is on + 85% when mic. is off, Approx. 36 hours

Mechanical

Mounting, Tabletop
Dimensions (h x w x d) (w/o Mic.), 68 x 180 x 132 mm
Weight
Excl. battery, 0.46 kg
Incl. battery, 0.78 kg
Color, Silver/Gray

Ordering Information

HCS-5302C_S, Digital IR Wireless Chairman Unit (silver)
HCS-5302C_G, Digital IR Wireless Chairman Unit (gray)
HCS-5302D Wireless Discussion Unit

Features

- Table, stylish and ergonomic design
- Wireless unit, easy setup and removal
- Vertical acceptance/emission angle selectable
- Hi-Fi loudspeaker
- Pluggable microphone
- System controls up to 1000 contribution units
- Vertical emission angle selectable via LCD menu
- 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
- Microphone sensitivity and EQ can be adjusted individually
- Built-in rechargeable Lithium battery pack

This wireless delegate unit meets the basic demands of most conferences. It provides facilities for speaking and listening and has excellent immunity to RF interference from mobile phones. The loudspeaker offers superior acoustics with minimal feedback, so increasing intelligibility. Separate rechargeable Lithium battery packs can be removed and replaced in a matter of seconds, providing maximum flexibility in recharge scheduling.

Functions

- Compliant to IEC 60914
- Based on TAIDEN originated dirATC-digital infrared Audio Transmitting and Control technologies
- Infrared transmitting carrier frequency conforms to IEC 61803-7, DQPSK digital modulation/demodulation technology
- System controls up to 1000 contribution units
- Vertical emission angle selectable via LCD menu
- 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 ~ 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
- Microphone stem can be unplugged during adjournment, easy to maintain
- Hi-Fi loudspeaker, minimal feedback, automatically mutes when microphone is active
- Two Ø 3.5 mm stereo headphone jacks for headphones with separate volume control
- Microphone On/Off button
- Microphone sensitivity and EQ can be adjusted individually
- System when operated in stand-alone mode can implement the following facilities:
  - "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 can be turned on and the first active microphone will be turned off
- 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

- Graphic 96x64 LCD with back-lighting for displaying battery capacity, signal icon and emission angle icon
- Uni-directional electret condenser microphone with two–color illuminated ring (blue/red)
- Charging indicator
- Fully charged indicator
- Power switch
- Two headphone volume control buttons
- Microphone On/Off button 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

Recommended external microphone type
- 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
Not omnidirectional: Approx. 14.4 hours
Omnidirectional: Approx. 10 hours
When mic. is off
Approx. 48 hours
15% when mic. is on + 85% when mic. is off: Approx. 36 hours

Mechanical

Mounting: Tabletop
- Dimensions (h x w x d) (w/o Mic.): 68 x 180 x 132 mm
- Weight:
  - Excl. battery: 0.46 kg
  - Incl. battery: 0.78 kg
- Color: Silver/Gray

Ordering Information
- HCS-5302D_S: Digital IR Wireless Delegate Unit (silver)
- HCS-5302D_G: Digital IR Wireless Delegate Unit (gray)

Conference Units Function list

<table>
<thead>
<tr>
<th>Type No.</th>
<th>Status</th>
<th>Discussion</th>
<th>Sign-in</th>
<th>Voting</th>
<th>Simultaneous interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>HCS-5300CE</td>
<td>chairman</td>
<td>√</td>
<td>√</td>
<td></td>
<td>1+3 CH</td>
</tr>
<tr>
<td>HCS-5300DE</td>
<td>delegate</td>
<td>√</td>
<td>√</td>
<td></td>
<td>1+3 CH</td>
</tr>
<tr>
<td>HCS-5301D</td>
<td>delegate</td>
<td>√</td>
<td></td>
<td></td>
<td>(1+3 CH)×2</td>
</tr>
<tr>
<td>HCS-5302C</td>
<td>chairman</td>
<td>√</td>
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<td></td>
<td></td>
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<tr>
<td>HCS-5302D</td>
<td>delegate</td>
<td>√</td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

Coverage area of Transceivers

<table>
<thead>
<tr>
<th>Type No.</th>
<th>Mounting height (H)</th>
<th>Coverage area radius (R)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HCS-5300TD-W</td>
<td>2.5 m</td>
<td>13 m</td>
</tr>
<tr>
<td>HCS-5300TD-N</td>
<td>5.0 m</td>
<td>9 m</td>
</tr>
<tr>
<td>HCS-5300TDS-W</td>
<td>3.0 m</td>
<td>11 m</td>
</tr>
<tr>
<td></td>
<td>3.5 m</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4.0 m</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4.5 m</td>
<td></td>
</tr>
<tr>
<td>HCS-5300TDS-N</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>6.0 m</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6.5 m</td>
<td></td>
</tr>
<tr>
<td></td>
<td>7.0 m</td>
<td></td>
</tr>
</tbody>
</table>
HCS-5300TD-W
Digital Infrared Transceiver

**Features**
- Compliant to IEC 60914
- Infrared transmitting carrier frequency conforms to IEC 61603-7, DQPSK digital modulation/demodulation technology
- Transmitting in 2 ~ 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, HCS-5100R/RA digital infrared receivers can be in operation as well simultaneously to receive (1+3 channels) simultaneous interpretation

**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: 2 ~ 8 MHz
- Voltage: 33 V DC (supplied from HCS-5300M)
- Current consumption: Max. 550 mA
- Connector: 6P-DIN
- Cable: 2.0 m specific cable with 6P-DIN male plug
- Acceptance/emission angle
  - Vertical: 150° (75°+75°)
  - Horizontal: 360°
- Communication area: Approx 13 m in radius from the point underneath the unit (ceiling height: 2.5 ~ 4.5 m)

**Mechanical**
- Mounting: Tripod, wall or ceiling mounting
- Dimensions: Ø 181 mm, 63 mm (height)
- Weight: 0.5 kg
- Color: Red and gray

**Ordering Information**
- HCS-5300TD-W, Digital Infrared Transceiver (tripod, wall or ceiling mounting, wide-angle)

Footprint of HCS-5300TD-W digital infrared transceiver (If H=2.5 ~ 3.0 m, then R= 13 m; if H=3.5 ~ 4.5 m, then R= 11 m)
HCS-5300TD-N
Digital Infrared Transceiver

Features

■ Compliant to IEC 60914
■ Infrared transmitting carrier frequency conforms to IEC 61603-7, DQPSK digital modulation/demodulation technology
■ Transmitting in 2 ~ 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, HCS-5100R/RA digital infrared receivers can be in operation as well simultaneously to receive (1+3 channels) simultaneous interpretation

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 .............................................. 2 ~ 8 MHz
Voltage ......................................................... 33 V DC (supplied from HCS-5300M)
Current consumption ............................................. Max. 550 mA
Connector ......................................................... 6P-DIN
Cable ................................................................. 2.0 m specific cable with 6P-DIN male plug
Acceptance/emission angle
Vertical ............................................................... 90° (45°+45°)
Horizontal ........................................................... 360°
Communication area ........................................... Approx 9 m in radius from the point underneath the unit (ceiling height: 5 ~ 7 m)

Mechanical

Mounting ............................................................ Tripod, wall or ceiling mounting
Dimensions ....................................................... Ø 181 mm, 63 mm (height)
Weight ............................................................... 0.5 kg
Color ................................................................. Red and gray

Ordering Information

HCS-5300TD-N ....................................... Digital Infrared Transceiver (tripod, wall or ceiling mounting)

Footprint of HCS-5300TD-N digital infrared transceiver (if H=5 ~ 7 m, then R= 9 m)
HCS-5300TDB Digital Infrared Transceiver

Features
- Compliant to IEC 60914
- Infrared transmitting carrier frequency conforms to IEC 61603-7, DQPSK digital modulation/demodulation technology
- Transmitting in 2 ~ 8 MHz frequency band, eliminating the interference from HF-driven lights
- Tripod-mounting, easy to install
- Inside the coverage area of infrared signals, HCS-5100R/RA digital infrared receivers can be in operation as well simultaneously to receive (1+3 channels) simultaneous interpretation

HCS-5300TDB digital infrared transceiver manages communication between main unit and conference units. It can be 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: 2 ~ 8 MHz
- Voltage: 33 V DC (supplied from HCS-5300M)
- Current consumption: Max. 550 mA
- Connector: 6P-DIN
- Cable: 2.0 m specific cable with 6P-DIN male plug
- Acceptance/emission angle
  - Vertical: 40°
  - Horizontal: 360°
- Communication area: Approx 8 m in radius from the unit

Mechanical
- Mounting: Tripod-mounting
- Dimensions: ø 181 mm, 63 mm (height)
- Weight: 0.5 kg
- Color: Red and gray

Ordering Information

HCS-5300TDB Digital Infrared Transceiver (tripod-mounting)

Footprint of HCS-5300TDB digital infrared transceiver
HCS-5300TDS-W
Digital Infrared Transceiver

**Features**
- Compliant to IEC 60914
- Infrared transmitting carrier frequency conforms to IEC 61603-7, DQPSK digital modulation/demodulation technology
- Transmitting in 2 ~ 8 MHz frequency band, eliminating the interference from HF-driven lights
- Suspension mounting, easy to install
- Inside the coverage area of infrared signals, HCS-5100R/RA digital infrared receivers can be in operation as well simultaneously to receive (1+3 channels) simultaneous interpretation
- Optional suspension length: 0.5 m, 1.0 m or 2.0 m

HCS-5300TDS-W 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: 2 ~ 8 MHz
- Voltage: 33 V DC (supplied from HCS-5300M)
- Current consumption: Max. 550 mA
- Connector: 6P-DIN
- Cable: 2.0 m specific cable with 6P-DIN male plug
- Acceptance/emission angle:
  - Vertical: 150° (75°+75°)
  - Horizontal: 360°
- Communication area: Approx 13 m in radius from the point underneath the unit (ceiling height: 2.5 ~ 4.5 m)

**Mechanical**
- Mounting: Suspension mounting
- Dimensions: Ø 201 mm, 100 mm (height)
- Weight: 0.63 kg
- Color: Red and gray

**Ordering Information**
- HCS-5300TDS-W, Digital Infrared Transceiver (suspension, wide-angle)
- Optional suspension:
  - HCS-5300TDP-05, Mounting Suspension of Digital Infrared Transceiver (0.5 m)
  - HCS-5300TDP-10, Mounting Suspension of Digital Infrared Transceiver (1.0 m)
  - HCS-5300TDP-20, Mounting Suspension of Digital Infrared Transceiver (2.0 m)

Footprint of HCS-5300TDS-W digital infrared transceiver (If H=2.5 ~ 3.0 m, then R= 13 m; if H=3.5 ~ 4.5 m, then R=11 m)
HCS-5300TDS-N
Digital Infrared Transceiver

Features

- Compliant to IEC 60914
- Infrared transmitting carrier frequency conforms to IEC 61603-7, DQPSK digital modulation/demodulation technology
- Transmitting in 2 ~ 8 MHz frequency band, eliminating the interference from HF-driven lights
- Suspension mounting, easy to install
- Inside the coverage area of infrared signals, HCS-5100R/RA digital infrared receivers can be in operation as well simultaneously to receive (1+3 channels) simultaneous interpretation
- Optional suspension length: 0.5 m, 1.0 m or 2.0 m

HCS-5300TDS-N 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: 2 ~ 8 MHz
- Voltage: 33 V DC (supplied from HCS-5300M)
- Current consumption: Max. 550 mA
- Connector: 6P-DIN
- Cable: 2.0 m specific cable with 6P-DIN male plug
- Acceptance/emission angle:
  - Vertical: 90° (45°+45°)
  - Horizontal: 360°
- Communication area: Approx. 9 m in radius from the point underneath the unit (ceiling height: 5 ~ 7 m)

Mechanical

- Mounting method: Suspension mounting
- Dimensions: Ø 201 mm, 100 mm (height)
- Weight: 0.63 kg
- Color: Red and gray

Ordering Information

- HCS-5300TDS-N, Digital Infrared Transceiver (suspension)
- Optional suspension:
  - HCS-5300TDP-05, Mounting Suspension of Digital Infrared Transceiver (0.5 m)
  - HCS-5300TDP-10, Mounting Suspension of Digital Infrared Transceiver (1.0 m)
  - HCS-5300TDP-20, Mounting Suspension of Digital Infrared Transceiver (2.0 m)

Footprint of HCS-5300TDS-N digital infrared transceiver

(If H=5 ~ 7 m, then R=9 m)
HCS-5300MA Digital Infrared Wireless Conference Main Unit

Features

- Original dirATC-digital infrared Audio Transmitting and Control technologies
- Supports up to 4 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
- Supports up to 4 simultaneous interpretation language channels (incl. the original floor channel)
- Controls up to 1000 contribution units
- Microphone sensitivity and EQ can be adjusted individually
- Speech can be recorded individually or the meeting can be recorded as a sum of all audio signals when connected to record devices
- 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
- Operating the IR conference system does not require a radio frequency license all over the world
- Supports up to 4 simultaneous interpretation language channels (incl. the original floor channel)
- Controls up to 1000 contribution units
- Microphone sensitivity and EQ can be adjusted individually
- Speech can be recorded individually or the meeting can be recorded as a sum of all audio signals when connected to record devices
- 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
- System when operated in stand-alone mode can implement the following facilities:
  - "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 can be turned on and the first active microphone will be turned off
- In combination with the corresponding software modules, multiform voting can be implemented:
  - For/Against
  - Parliamentary: YES/NO/ABSTAIN
  - Multi choice/Opinion poll: 1/2/3/4/5
  - Audience response/Rating: --/-/0/+/++
- Automatic video tracking, when cooperating with camera and video switcher unit
- Connection to central control system through RS-232 interface for centralized control

Controls and Indicators

- 256 × 32 LCD with back-lighting can display the main unit status and the menu of system configuration
- Four buttons for configuration
- Power switch with indicator (red)
- LINE IN electric level adjust knob
- Conference unit floor audio channel bass adjust knob
- Conference unit floor audio channel treble adjust knob
- Conference unit floor audio channel master volume adjust knob
- Microphone operation mode indicators (OPEN/OVERRIDE)
- Indicators of maximum active microphone number (1/2/3/4)

Functions

- Compliant to 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 4 simultaneous interpretation language channels (incl. the original floor channel)
- Controls up to 1000 contribution units
- Microphone sensitivity and EQ can be adjusted individually
- Speech can be recorded individually or the meeting can be recorded as a sum of all audio signals when connected to record devices
- 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
- System when operated in stand-alone mode can implement the following facilities:
  - "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 can be turned on and the first active microphone will be turned off
- In combination with the corresponding software modules, multiform voting can be implemented:
  - For/Against
  - Parliamentary: YES/NO/ABSTAIN
  - Multi choice/Opinion poll: 1/2/3/4/5
  - Audience response/Rating: --/-/0/+/++
- Automatic video tracking, when cooperating with camera and video switcher unit
- Connection to central control system through RS-232 interface for centralized control

The digital infrared wireless conference main unit includes features for controlling delegate microphones, distributing simultaneous interpretation and conducting voting sessions, without an operator. In combination with a PC, the main unit brings greater sophistication to conference control. Users can access an extensive range of software modules, each with a specific function in controlling and monitoring a conference, greatly expanding the capacity to manage a conference.
Interconnections

- USB interface
- Ethernet interface
- 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 main unit can connect up to 24 transceivers
- Balanced floor audio output interface (Ø 6.4 mm) for connection to PA
- Balanced LINE IN interface (Ø 6.4 mm) for connection to an external audio device
- Power supply socket
- Interpretation audio input interfaces (1 – 3)
- 4 single mic. output interfaces for recording speech individually
- 1 mixed audio output interface for recording the meeting
- HF signal output interface (BNC socket) for connection to HCS-5100T digital infrared radiator
- Interpreter’s unit interface for connection up to 3 HCS-850PB/10 interpreter units
- RS-232 interface for connection to central control system

Technical Specifications

Electrical

- Frequency response ........................................ 20 Hz to 20 kHz (-3dB)
- SNR ................................................................. ≥80 dBA
- Dynamic range ............................................... ≥80 dB
- THD at 1kHz ...................................................... ≤0.05%
- Isolation .......................................................... ≥80 dB
- Power supply
  - America, Japan ................................ AC 110 V ~ 120 V, 60 Hz
  - Asia, Europe .............................................. AC 220 V ~ 240 V, 50 Hz
- Power consumption ........................................ Max. 160 W

Audio inputs

- LINE IN ......................................................... +6 dBV, BAL.
- AUDIO INPUT (CH 1 ~ 3) RCA×3, -12 dBV ~ +12 dBV, UNBAL.

Audio outputs

- LINE OUT .................................................... +6 dBV, BAL.
- SINGLE MIC. OUTPUT RCA×4, -3 dBV, UNBAL.
- MIX (1~4) OUTPUT RCA×1 ................................ +6 dBV, UNBAL.

Interface data

- Transceivers I/O terminal .................................. 6P-DIN socket × 6
- External control terminal .................................. RS-232 D-sub (9P, male), USB interface, RJ-45 (ETHERNET)
- Interpreter’s unit terminal .................................. 25P-DIN socket × 1
- HF OUT (Radiator terminal) ............................... BNC connector × 1
- Alarm terminal .............................................. 3.81 mm Phoenix connectors, 2-pole
- Video switcher terminal ................................. 3.81 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 .......................................................... 8.3 kg
- Color ............................................................ White

Ordering Information

HCS-5300MA_..... Digital IR Wireless Conference System Main Unit
(voting, 1+3 CHs)
System Connection [Wireless discussion + 1+3 CHs digital simultaneous interpretation + voting + video tracking]
HCS-5300MB Digital Infrared Wireless Conference Main Unit

Features
■ Original dirATC-digital infrared Audio Transmitting and Control technologies
■ Supports up to 4 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
■ Microphone sensitivity and EQ can be adjusted individually
■ 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

Functions
■ Compliant to IEC 60914
■ Based on TAI DEN 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 4 simultaneous interpretation language channels (incl. the original floor channel)
■ Controls up to 1000 contribution units
■ Microphone sensitivity and EQ can be adjusted individually
■ Speech can be recorded individually or the meeting can be recorded as a sum of all audio signals when connected to record devices
■ 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
■ System when operated in stand-alone mode can implement the following facilities:
  ™ "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 can be turned on and the first active microphone will be turned off
  ™ Simultaneous interpretation
■ 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 RS-232 interface for centralized control

Controls and Indicators
■ 256 × 32 LCD with back-lighting can display the main unit status and the menu of system configuration
■ Four buttons for configuration
■ Power switch with indicator (red)
■ LINE IN electric level adjust knob
■ Conference unit floor audio channel bass adjust knob
■ Conference unit floor audio channel treble adjust knob
■ Conference unit floor audio channel master volume adjust knob
■ Microphone operation mode indicators (OPEN/OVERRIDE)
■ Indicators of maximum active microphone number (1/2/3/4)
Interconnections
- USB 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
- Ethernet interface
- Video switcher interface
- Balanced floor audio output interface (Ø 6.4 mm) for connection to PA
- 6 digital infrared transceiver interfaces, each interface can connect 4 transceivers if operating distributor HCS-5352, thus each main unit can connect up to 24 transceivers
- Balanced LINE IN interface (Ø 6.4 mm) for connection to an external audio device
- Power supply socket
- Interpretation audio input interfaces (1 ~ 3)
- 4 single mic. output interfaces for recording speech individually
- 1 mixed audio output interface for recording the meeting
- HF signal output interface (BNC socket) for connection to HCS-5100T digital infrared radiator
- Interpreter’s unit interface for connection up to 3 HCS-850PB/10 interpreter units
- RS-232 interface for connection to central control system

Technical Specifications

Electrical
- Frequency response: 20 Hz to 20 kHz (-3dB)
- SNR: ≥ 80 dBA
- Dynamic range: ≥ 80 dB
- THD at 1kHz: ≤ 0.05%
- Isolation: ≥ 80 dB
- Power supply:
  - America, Japan: AC 110 V ~ 120 V, 60 Hz
  - Asia, Europe: AC 220 V ~ 240 V, 50 Hz
- Power consumption: Max. 160 W

Audio inputs
- LINE IN: +6 dBV, BAL.
- AUDIO INPUT (CH 1 ~ 3) RCA×3: -12 dBV ~ +12 dBV, UNBAL.

Audio outputs
- LINE OUT: +6 dBV, BAL.
- SINGLE MIC. OUTPUT RCA×4: -3 dBV, UNBAL.
- MIX (1~4) OUTPUT RCA×1: +6 dBV, UNBAL.

Interface data
- Transceivers I/O terminal: 6P-DIN socket × 6
- External control terminal: RS-232 D-sub (9P, male), USB interface, RJ-45 (ETHERNET)
- Interpreter’s unit terminal: 25P-DIN socket × 1
- HF OUT (Radiator terminal): 3.81 mm Phoenix connectors, 2 pole
- Alarm terminal: 3.81 mm Phoenix connectors, 4 pole

Ordering Information
HCS-5300MB Digital IR Wireless Conference System Main Unit
(1+3 CHs)
System Connection [Wireless discussion + 1+3 CHs digital simultaneous interpretation + video tracking + central control]
HCS-5300MC Digital Infrared Wireless Conference Main Unit

Features

- Original dirATC-digital infrared Audio Transmitting and Control technologies
- 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
- Microphone sensitivity and EQ can be adjusted individually
- 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, without an operator. In combination with a PC, the main unit brings greater sophistication to conference control. Users can access an extensive range of software modules, each with a specific function in controlling and monitoring a conference, greatly expanding the capacity to manage a conference.

Functions

- Compliant to 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
- Controls up to 1000 contribution units
- Microphone sensitivity and EQ can be adjusted individually
- Speech can be recorded individually or the meeting can be recorded as a sum of all audio signals when connected to record devices
- 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
- System when operated in stand-alone mode can implement the following facilities:
  - "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 can be turned on and the first active microphone will be turned off
- 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 RS-232 interface for centralized control

Controls and Indicators

- 256 × 32 LCD with back-lighting can display the main unit status and the menu of system configuration
- Four buttons for configuration
- Power switch with indicator (red)
- LINE IN electric level adjust knob
- Conference unit floor audio channel bass adjust knob
- Conference unit floor audio channel treble adjust knob
- Conference unit floor audio channel master volume adjust knob
- Microphone operation mode indicators (OPEN/OVERRIDE)
- Indicators of maximum active microphone number (1/2/3/4)
### Interconnections
- USB interface
- Ethernet interface
- 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 main unit can connect up to 24 transceivers.
- Balanced floor audio output interface (Ø 6.4 mm) for connection to PA.
- Balanced LINE IN interface (Ø 6.4 mm) for connection to an external audio device.
- Power supply socket.
- 4 single mic. output interfaces for recording speech individually.
- 1 mixed audio output interface for recording the meeting.
- HF signal output interface (BNC socket) for connection to HCS-5100T digital infrared radiator.
- RS-232 interface for connection to central control system.

### Technical Specifications
#### Electrical
- Frequency response: 20 Hz to 20 kHz (-3dB)
- SNR: ≥80 dBA
- Dynamic range: ≥80 dB
- THD at 1kHz: ≤0.05%
- Isolation: ≥80 dB
- Power supply:
  - America, Japan: AC 110 V ~ 120 V, 60 Hz
  - Asia, Europe: AC 220 V ~ 240 V, 50 Hz
- Power consumption: Max. 160 W

#### Audio inputs
- LINE IN: +6 dBV, BAL.

#### Audio outputs
- LINE OUT: +6 dBV, BAL.
- SINGLE MIC. OUTPUT RCA×4: -3 dBV, UNBAL.
- MIX (1~4) OUTPUT RCA×1: +6 dBV, UNBAL.

#### Interface data
- Transceivers I/O terminal: 6P-DIN socket × 6
- External control terminal: RS-232 D-sub (9P, male), USB interface, RJ-45 (ETHERNET).
- HF OUT (Radiator terminal): BNC connector × 1
- Alarm terminal: 3.81 mm Phoenix connectors, 2 pole.
- Video switcher terminal: 3.81 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: 8.3 kg
- Color: White

### Ordering Information
HCS-5300MC---Digital IR Wireless Conference System Main Unit
**System Connection** [Wireless discussion + video tracking + central control]

- **HCS-5300MA**
  - Discussion: ✓
  - Voting: ✓
  - 1+3 CH

- **HCS-5300MB**
  - Discussion: ✓
  - 1+3 CH

- **HCS-5300MC**
  - Discussion: ✓

**Function list**

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<thead>
<tr>
<th>Type No.</th>
<th>Discussion</th>
<th>Voting</th>
<th>Simultaneous interpretation</th>
</tr>
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<td>1+3 CH</td>
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<td>✓</td>
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<td>1+3 CH</td>
</tr>
<tr>
<td>HCS-5300MC</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### HCS-5300BAT
Lithium Rechargeable Battery Pack

**Features**
- Lithium rechargeable battery pack
- Used for supplying power to HCS-5300 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 x 140 x 58 mm
- Weight: 0.32 kg
- Color: black

**Ordering Information**
HCS-5300BAT

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### HCS-ADP15V
Power Adapter

**Features**
- Used for supplying power to HCS-5300 series digital infrared wireless conference unit

**Technical Specifications**

**Electrical**
- Mains voltage: AC 100 ~ 240 V, 50/60 Hz
- Output: DC 15V, 2.2A
- Connector: UL, CE or VDE type, according to the territory of selling

**Mechanical**
- Cable length: 3 m
- Dimensions (h x w x d): 28 x 95 x 45 mm
- Weight: 0.3 kg
- Color: black

**Ordering Information**
HCS-ADP15V

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3.31
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 (green)

Interconnections
- Power output interface
- Power input interface
- Charging lattices

Technical Specifications

Electrical
- Mains voltage: America, Japan: AC 110 V to 120 V, 60 Hz; Asia, Europe: AC 220 V to 240 V, 50 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)

HCS-5352 1×4 Cable splitter

Features
- Has one in and four out structure
- Each main unit has 6 digital infrared transceiver interfaces, each interface can connect 4 transceivers if operating distributor HCS-5352, thus each main unit can connect up to 24 transceivers

Interconnections
- 4 × 6P-DIN sockets
- 1 m cable with 6P-DIN male plug

Technical Specifications

Electrical
- Voltage: 33 V DC (supplied from HCS-5300M)
- Number of I/O terminals: 1 in / 4 out

Mechanical
- Dimensions (h x w x d): 35 × 149 × 90 mm
- Weight: 0.32 kg
- Color: black

Ordering Information
HCS-5352, Cable Splitter (1 input & 4 outputs, for HCS-5300 series)
CBL5300 Dedicated Transceiver Cable

Features
- Dedicated cable for HCS-5300T series digital infrared transceiver
- 1 x 6P-DIN male plug
- 1 x 6P-DIN female 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
- CBL5300-50 .................................................. 50 m Dedicated Transceiver Cable

HCS-5300TZJ Tripod

Features
- Used for mounting HCS-5300TD or HCS-5300TDB
- Max. adjustable height: 1.4 m
- Weight: 2.55 kg

Ordering Information
- HCS-5300TZJ .................................................. Tripod
System Connection
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 FDCS, operator can 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 Module (HCS-5310/50)
- Professional Venue Design Module (HCS-5312/50)
- Microphone Management Module (HCS-5313/50)
- Voting Management Module (HCS-5314/50S)
- Video Control Module (HCS-5315/50)
- Simultaneous Interpretation Module (HCS-5316/50)
- Synchronous Audio Recording Management Module (HCS-5319/50)
- Synchronous Video Recording Management Module (HCS-5320/50)
- Multi-user Conference Control Management Module (HCS-5321/50)
- Dual PC Server Hot Spare Module (HCS-5322/50)
- Agenda Control Module (HCS-5323/50)
**HCS-5310/50 Basic Software Module**

Basic software module consists of an amount of facilities, e.g. venue design (normal edition), conference management, main unit configuration, contribution unit configuration, information display, system report and user management.

**Venue design facility**

![Venue design (normal edition)](image)

**Functions**

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
- Reconfiguration of the initialized settings, available at any time
- Save/open files for file management
- Especially suitable for small-scale and medium-sized meeting room/hall. The professional edition of venue design module offers more facilities described in HCS-5312/20 Professional Venue Design Module.

**Main unit configuration facility**

![CMU parameters setup](image)

**Functions**

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

- **CMU parameters setup:**
  - *Chairman priority mode:* enable *All off* or *All mute* operation when chairman presses priority button
    - *All off:* turn off all delegate microphones
    - *All mute:* temporarily mute all delegate microphones; the former state is restored once the button released
  - *Ring mode:* turn on/off all kinds of ring tones of conference units triggered when pressing priority key
  - *Automatically turn off microphone time:* the microphone will be automatically switch off after a period of silence and the period shall be setup
  - *Compression setup:* Setup dynamic range compression parameters. Function: when the sound pressure is exceeding the compression threshold value, the gain level for the audio signal will be reduced by a given ratio.
**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/APPLY)
- Original floor channel volume of the contribution unit (dB)
- Original floor channel treble of the contribution unit (dB)
- Original floor channel bass of the contribution unit (dB)
- Line-in volume (dB)
- Line-in mute

**Conference information management**

**Functions**

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

- Includes conference name and meeting information
- Each conference consists of several meetings
- Creation of a new meeting for appointed conference
- Meeting:
  - Meeting content: meeting name, meeting room name, meeting start time, sign in mode, quorum and conference content
  - Display of convoked meetings in distinct colors
  - Locking a convoked meeting for meeting data protection
- Freely switch between the meetings to manage

**Setup contribution unit interface**

**Functions**

Setup and reconfigure internal parameters of the contribution unit by the administrator.

Parameters include:

- Select contribution unit to setup
- Gain of the contribution unit (dB)
- Treble of the contribution unit (dB)
- Bass of the contribution unit (dB)

**User management**

**Functions**

Create/delete a user, change user password and authorization

- Create a new user, and set his/her account, password, authority
- Change user’s password and authorization
- Supports deleting a user
Information display

Screen management

Report system

Functions

Include 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
- Allocation of an alias for each screen for more convenience

Report system

Functions

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

- Conference information
- Proposal list
- Delegate information
- Sign-in report
- Voting result
- Summarizing voting results
- More reports

Ordering Information

HCS-5310/50 ................................. Basic Software Module
HCS-5312/50
Professional Venue Design Module

Functions

In distinction from the normal edition of the Venue Design Module, the professional version has additional powerful functions to design manifold layouts of venues. The main difference is the availability of functional buttons for file operation (toolbar buttons) and object operation (buttons below toolbar buttons) in the toolbars. In addition, the functions are also available in the file right-click pop-up menu. Moreover, the Object Properties dialog box is floating on the window for fast changing the properties of current object.

- **File operation:**
  - Venue design supports file operation, including: new, open, save as, and print
  - Create a new conference file: set the background color, room size and other parameters, including:
    - Background
    - Line number
    - Amount per line
    - Seat icon
    - Seat direction
    - Transparent icon or not
    - Show as MIC. icon or not
  - Re-arrange seat position or not
  - The parameters above can be changed at any time through “Configuration” menu on the toolbar
  - Add seat/microphone icons line by line, 8 seats/mics per line as default value. The amount of seats/microphones per line can be modified. While the normal edition can add only one seat at one go, the professional venue design module can add groups with more than one seat/microphone per group.
  - Shifting facility for complete layout

- **Define object:**
  - Picture library with default (customized and/or recurrent) objects
  - Modifiable object information, e.g. object name, image path, distinguishable colors for displaying object images in different states (e.g. signed-in etc.)
  - Powerful “object attribute” function: object attribute can be set and changed, including:
    - Set group name and object name
    - Set unique ID and ID display mode for every object, supporting different fonts and sizes
    - Set starting object status
    - Set a radian for the object group and design seat layout according to true seating positions
    - Set start index of the object group
    - Change the amount of the units in an object group
    - Set numbering increment
    - Set initial background color and whether transparent or not
    - Set start and end coordinates of object group

- Object ID check facilities
- Support object copy, cut, paste and delete operation
- Object arrangement can be changed

Ordering Information
HCS-5312/50,..................Professional Venue Design Module
HCS-5313/50
Microphone Management Module

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
    - 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
  - Unit arrangement: assign the conference units to the corresponding positions based on the true delegate seating, current cabling and layout:
    - Unit arrangement, assign the conference units to the true delegate seating
    - Delete unit, 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 participants
  - 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
    - Users can customize the options in the above items
    - Customer-specific options for above items
    - Supports customized delegate grouping
    - Fast search facility
    - Database updatable
  - Participants: select the delegates to participate in the conference from the database
    - List delegate information by group or by delegate type
    - Group adding function

- **Microphone control**: combined with venue design, seating arrangement, delegate management, conference 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
  - Record and save speaking
  - 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-5313/50 Microphone Management Module
HCS-5314/50S
Voting Management Module

Topics and Voting

Display voting result

Unit arrangement

Delegate information

Functions

Voting management, seat arrangement and delegate management sub modules.

■ Voting management:
  • Topics information management
    ▪ Setup, save, add or delete topics file before the meeting
    ▪ Open topics control interface and display topics content to large screen
    ▪ Printout the topics list and information and distribute to delegates as meeting information
    ▪ Multiple voting facilities available, suitable for various conferences, including:
      ◦ For/Against
      ◦ Parliamentary: YES/NO/ABSTAIN
      ◦ Questionnaire/Opinion poll: 1/2/3/4/5
      ◦ Audience response/Rating: --/-/+;++
    ▪ Calculation: predefined or in relation to the participants attending the meeting in person
  • Register mode: nominative/ballot
  • Validity mode: first key press valid/last key press valid
  • Pass rate: between 1% and 100%
  • Display voting result to large screen
  • Clear and vivid voting result display modes (numeric/bar/pie)
  • Print or save voting result
  • Sign-in before the voting to improve the security and validity of voting result
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
  - 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
- Unit arrangement: assign the conference units to the corresponding positions based on the true delegate seating, current cabling and layout:
  - Unit arrangement, assign the conference units to the true delegate seating
  - Delete unit, 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 participants

- 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
  - Customer-specific options for above items
  - Supports customized delegate grouping
  - Fast search facility
  - Database updatable
- Participants: select the delegates to participate in the conference from the database
  - List delegate information by group or by delegate type
  - Group adding function

Ordering Information
HCS-5314/50S.................................Voting Management Module

HCS-5315/50 Video Control Module

Video matrix

Camera control

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

- Setup 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-5315/50.................................Video Control Module
HCS-5316/50  
Simultaneous Interpretation Module

Functions
Setup the simultaneous interpretation channels:
- Simultaneous interpretation channel setup:
  - Set the channel number and language for each channel and save into the database
  - Set max. input level of each channel when HCS-850PB/10 is not in use
  - Send the configuration to the main unit for synchronization
- Display main unit configuration on the window

Ordering Information
HCS-5316/50, Simultaneous Interpretation Module

HCS-5319/50  
Synchronous Recording Module

Functions
Records speakers’ audio information:
- Integrated into TAI DEN conference management application software, easy to operate
- Automatic recording:
  - Begin/end automatic recording according to microphone on/off
  - Setup record audio quality
  - Once microphone enabled, speaking delegate’s voice is recorded in audio file (WAV or MP3 format)
  - Saved audio file available for copying, playback, etc.
  - When using automatic recording function, the number of active microphones is limited to one
- If automatic audio recording is not activated, operator manually starts/stops recording. Record file name display
- Audio playback:
  - Integrated file management
  - Search facilities, search audio record file needed to playback quickly (by conference ID, speaker, begin time, continuous time, etc.)
  - “Playback All”: recordings playback one by one
  - Recorded file playback, fast play, pause/stop etc.
  - General file format saving: saved file playback by conventional media player
  - Delete any recorded file or all recorded files

Ordering Information
HCS-5319/50, Synchronous Recording Module
HCS-5300 Series Digital Infrared Wireless Conference System

HCS-5320/50 Professional Digital Video & Audio Recorder Module

Includes layout, preview, record, connect DCS, DVR control, capture, playback, setup system parameters, setup channel parameters and DVR channel list functions

- **Layout**: setup layout of video preview sub screen – selection of 1, 4, 6, or 8 video preview sub screens
- **Preview**: preview video/audio signal of each channel
- **Record**: start/stop record for selected channel
- **Connect DCS**: connect to DCS server and DCS backup server, ensuring an undisturbed recording process
- **DVR control**: control DVR
- **Capture**: capture a picture for selected sub screen
- **Playback**:  
  - Select channel number for playback – select anyone or all
  - Select file content for playback: panorama, video track, simultaneous interpretation and other
  - Select file type for playback: including all files, remote files, local video files and local pictures (local = on PC)
  - Search facility: search a video for playback by meeting ID, speaker name, speaking time, etc.
  - Play Control: fast play, pause/stop, etc.

- **Setup system parameters**:  
  - Set display format (e.g. sampling rate) for audio and video
  - Set DVR parameters

- **Setup channel parameters**: set video and audio content for each channel, and record automatically according to conference status
  - **Video content**:  
    - Video track: start record when microphone is turned on and stop record when microphone is turned off
    - Panorama: start record when conference begins and stop record when conference ends
    - Other: start/stop record manually by operator
    - Simultaneous interpretation: connect SI output channel of DCS to input channel of DVR, and select language for recording manually
  - **Audio content**
    - Stream type: video only or video & audio composite
    - Video only: record only video signal
    - Video & audio: record video and audio composite signal

**Functions**

**TAIDEN** conference synchronous digital video & audio recorder integrates several techniques in the IT domain and realizes powerful video/audio compressing, video/audio recording and playback functions.

- Display of channel states, alarm states, connection status and DVR parameters (brightness, contrast, hue and saturation)

**Ordering Information**

HCS-5320/50 ........................ Professional Digital Video & Audio Recorder Module
HCS-5321/50
Multi-User Console Module

Functions
If more than one operator is involved, a multi-user console is available for controlling speaking and voting, apart the system application software. A maximum of 5 multi-user consoles can be connected at the same time.

Basic conference control module:
- Microphone control
- Sign-in management
- Voting management
- Connect Server
- System parameters setup and download venue files from the server

Ordering Information
HCS-5321/50, Multi-User Console Module

HCS-5322/50
Dual PC Server Hot Spare Module

Functions
HCS-5322/50 dual PC server hot-spare is a disaster protective structure. If the main operating computer breaks down during a conference, the backup computer immediately substitutes the main computer and continues conference management.

After connection to main operating computer, the backup console application first starts an automatic backup (incl. database and conference related information). If there is any change in the database, the backup console application will update backup automatically.

Ordering Information
HCS-5322/50, Dual PC Server Hot Spare Module
HCS-5323/50
Agenda Management Module

Functions
Agenda is a list of meeting activities in the order in which they are to be worked off. The agenda is prepared beforehand. It may include sign-in, voting and discussion. Agenda edit prepares all activities and their sequence to ensure convenience and a well arranged course of events. Agenda Management module consists of agenda information management and agenda control sub modules.

- **Agenda information management**: edit agenda content and sequence
  - Includes agenda name, agenda type and activity
  - Sequence of each activity can be adjusted - user can add, modify, delete an activity
- **Agenda control**: control the meeting process according to the pre-defined agenda content and sequence
  - Select an agenda from the agenda list and execute it
  - List the status of each agenda
  - Agenda can be edited, added, modified, or deleted during the meeting

Ordering Information
HCS-5323/50, Agenda Management Module