## HCS-5300 Series Digital Infrared Wireless Conference System

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<th>Model</th>
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<td>Digital IR Wireless Chairman Unit (5 voting keys, 1+3 CHs, silver, excl. battery when ordered)</td>
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<td>HCS-5300CE_G/20</td>
<td>Digital IR Wireless Chairman Unit (5 voting keys, 1+3 CHs, charcoal gray, excl. battery when ordered)</td>
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<td>HCS-5300DE_S/20</td>
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<td>HCS-5300T_S/20</td>
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<td>HCS-5300TDP-10</td>
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<td>HCS-5300TDP-20</td>
<td>Mounting Suspension for Digital Infrared Transceiver (2.0 m)</td>
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<tr>
<td>HCS-5300MA/20</td>
<td>Digital IR Wireless Conference System Main Unit (discussion, voting, 1+3 CHs, with interface for HCS-4385U/50 Interpreter Unit)</td>
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<tr>
<td>HCS-5300MB/20</td>
<td>Digital IR Wireless Conference System Main Unit (discussion, 1+3 CHs, with interface for HCS-4385U/50 Interpreter Unit)</td>
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<td>HCS-5300MC/20</td>
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**HCS-5300 Series Application Software**

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HCS-5300 Series Digital Infrared Wireless Conference System

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/R 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 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 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 1  TAIDEN TDIR03 digital infrared processing chip

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 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.
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+3 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+3 CHs interpretation)
- 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
- 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 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
- 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 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 to 20 kHz
  - S/N: >80 dBA
  - THD: <0.05%

Full Functions

- Discussion
- Vote (5 keys)
- Simultaneous interpretation (1+3 CHs)
- Isolated audio recording function for simultaneous interpretation (1+3 CHs)
- Automatic 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 modules

Frequency response measurement diagram of a TAIDEN HCS-5300 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.

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 mouses, 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.
HCS-5300CE/20
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 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
- Stem microphone can be unplugged during adjournment, easy to maintain
- Mini-microphone, with foam windshield
- Hi-Fi loudspeaker, minimal feedback, mutes automatically when microphone is active
- Ø 3.5 mm stereo headphone jack for headphone with controllable volume
- Microphone On/Off button, 5 voting keys
- Built-in channel selector
  - Channel selector is 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
- 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

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 Delegate Unit, the HCS-5300CE Chairman Unit includes an extra microphone priority button. When pressed, the priority button causes all currently active delegate 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.
HCS-5300 Series Digital Infrared Wireless Conference System

Controls and Indicators
- 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 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
- 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: 50 Hz to 20 kHz
- Directionality: 0°/180°
- Equivalent noise: 20 dB (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:
  - Not omnidirectional: Approx. 14.4 hours
  - Omnidirectional: Approx. 10 hours
- When mic. is off:
  - Approx. 48 hours
  - 15% mic. on + 85% mic. off: Approx. 36 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 / Charcoal gray

Ordering Information
- HCS-5300CE_S/20, Digital IR Wireless Chairman Unit (5 voting keys, 1+3 CHs, silver, excl. battery when ordered)
- HCS-5300CE_G/20, Digital IR Wireless Chairman Unit (5 voting keys, 1+3 CHs, charcoal gray, excl. battery when ordered)
HCS-5300DE/20
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 light and mobile phones
- Stem microphone can be unplugged during adjournment, easy to maintain
- Mini-microphone, with foam windshield
- Hi-Fi loudspeaker, minimal feedback, mutes automatically when microphone is active
- Ø 3.5 mm stereo headphone jack for headphone with controllable volume
- Microphone On/Off button, 5 voting keys
- Built-in channel selector
  - Channel selector is 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
  - Simultaneous interpretation
- In combination with the corresponding software modules, multiform voting can be implemented:
  - Parliamentary: YES/NO/ABSTAIN
  - Questionaire: 1/2/3/4/5
  - Audience response: --/-/0/+/+/
- Key-press sign-in
- 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

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 a headphone connection. Channel selection is automatically limited to the number of language channels available. 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 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 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, mutes automatically when microphone is active
- Ø 3.5 mm stereo headphone jack for headphone with controllable volume
- Microphone On/Off button, 5 voting keys
- Built-in channel selector
  - Channel selector is 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
  - Simultaneous interpretation
- In combination with the corresponding software modules, multiform voting can be implemented:
  - Parliamentary: YES/NO/ABSTAIN
  - Questionaire: 1/2/3/4/5
  - Audience response: --/-/0/+/+/
- Key-press sign-in
- 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 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
- Charging indicator
- Fully charged indicator
- Power switch
- Headphone volume control button
- Five voting keys with indicators
- Microphone On/Off button with indicator

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 x 2
Headphone output ......................................................... 10 mW

Microphone

Transducer ................................................................. Electret-condenser
Polar pattern .............................................................. Uni-directional
Sensitivity ..................................................................... -46 dBV/Pa
Frequency response ....................................................... 50 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
- Not omnidirectional .............................................. Approx. 14.4 hours
- Omnidirectional ...................................................... Approx. 10 hours

When mic. is off
- Approx. 48 hours
- 15% mic. on + 85% mic. off .................................. Approx. 36 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 / Charcoal gray

Ordering Information

HCS-5300DE_S/20 ........................................ Digital IR Wireless Delegate Unit
(5 voting keys, 1+3 CHs, silver, excl. battery when ordered)

HCS-5300DE_G/20 ........................................ Digital IR Wireless Delegate Unit
(5 voting keys, 1+3 CHs, charcoal gray, excl. battery when ordered)
HCS-5301D/20
Wireless Discussion Unit with Dual 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
- 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 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 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 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, mutes automatically 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
- 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

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 backlighting 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

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, -48 dBV/Pa

Frequency response, 50 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% mic. on + 85% mic. off, Approx. 36 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 / Charcoal gray

Ordering Information

HCS-5301D_S/20, Digital IR Wireless Delegate Unit (1+3 CHs, 2 channel selectors, dual ID, silver, excl. battery when ordered)

HCS-5301D_G/20, Digital IR Wireless Delegate Unit (1+3 CHs, 2 channel selectors, dual ID, charcoal gray, excl. battery when ordered)
HCS-5302C/20
Wireless Chairman Unit

Features
- Table, stylish and ergonomic design
- Wireless unit, easy setup and removal
- Vertical acceptance/emission angle selectable
- Hi-Fi loudspeaker
- Priority button
- 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
- Stem microphone can be unplugged during adjournment, easy to maintain
- Mini-microphone, with foam windshield
- Hi-Fi loudspeaker, minimal feedback, mutes automatically when microphone is active
- Ø 3.5 mm stereo headphone jack for headphone with controllable volume
- Microphone On/Off button
- 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-5302D Delegate Unit, the HCS-5302C Chairman Unit includes an extra microphone priority button. When pressed, the priority button causes all currently active delegate 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 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 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, mutes automatically when microphone is active
- Ø 3.5 mm stereo headphone jack for headphone with controllable volume
- Microphone On/Off button
- 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
- 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 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
- Charging indicator
- Fully charged indicator
- Power switch
- Headphone volume control button
- 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, 50 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

- Not omnidirectional, Approx. 14.4 hours
- Omnidirectional, Approx. 10 hours
- When mic. is off, Approx. 48 hours
- 15% mic. on + 85% mic. off, Approx. 36 hours

Mechanical

Mounting, Tabletop
Dimensions (h x w x d) (w/o Mic.), 73 x 184 x 134 mm
- Excl. battery, 0.5 kg
- Incl. battery, 0.8 kg
Color, Silver / Charcoal gray

Ordering Information

HCS-5302C_S/20 Digital IR Wireless Chairman Unit (silver, excl. battery when ordered)
HCS-5302C_G/20 Digital IR Wireless Chairman Unit (charcoal gray, excl. battery when ordered)
HCS-5302D/20
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
- Stem microphone can be unplugged during adjournment, easy to maintain
- Mini-microphone, with foam windshield
- Hi-Fi loudspeaker, minimal feedback, mutes automatically when microphone is active
- Ø 3.5 mm stereo headphone jack for headphone with controllable volume
- Microphone On/Off button
- 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
- 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

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
- Charging indicator
- Fully charged indicator
- Power switch
- Headphone volume control button
- Microphone On/Off button with indicator

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, for enhanced intelligibility. Separate rechargeable Lithium battery packs can be removed and replaced in a matter of seconds, providing maximum flexibility in recharge scheduling.
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: 50 Hz to 20 kHz
- Directionality: 0°/180°
- 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:
  - Not omnidirectional: Approx. 14.4 hours
  - Omnidirectional: Approx. 10 hours
- When mic. is off:
  - Approx. 48 hours
- 15% mic. on + 85% mic. off: Approx. 36 hours

Mechanical

- Mounting: Tabletop
- Dimensions (h x w x d): 73 x 184 x 134 mm
- Weight:
  - Excl. battery: 0.5 kg
  - Incl. battery: 0.8 kg
- Color: Silver / Charcoal gray

Ordering Information

HCS-5302D_S/20…………..Digital IR Wireless Delegate Unit
  (silver, excl. battery when ordered)

HCS-5302D_G/20…………..Digital IR Wireless Delegate Unit
  (charcoal gray, excl. battery when ordered)

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>
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<tbody>
<tr>
<td>HCS-5300CE/20</td>
<td>chairman</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>1+3 CHs</td>
</tr>
<tr>
<td>HCS-5300DE/20</td>
<td>delegate</td>
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<td>√</td>
<td>√</td>
<td>1+3 CHs</td>
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<tr>
<td>HCS-5301D/20</td>
<td>delegate</td>
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<tr>
<td>HCS-5302C/20</td>
<td>chairman</td>
<td>√</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>HCS-5302D/20</td>
<td>delegate</td>
<td>√</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
HCS-5300TD 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.

**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, also HCS-5100R/RA digital infrared receivers can be in operation simultaneously to receive (1+3 CHs) 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

**Mechanical**

- Mounting: Ceiling, wall or tripod mounting
- Dimensions: Ø 181 mm, 63 mm (height)
- Weight: 0.5 kg
- Color: Silver/ Charcoal gray / White

**Ordering Information**

- HCS-5300TD_S: Digital Infrared Transceiver (ceiling, wall or tripod-mounted, excl. tripod when ordered, wide-angle, silver)
- HCS-5300TD_G: Digital Infrared Transceiver (ceiling, wall or tripod-mounted, excl. tripod when ordered, wide-angle, charcoal gray)
- HCS-5300TD_W: Digital Infrared Transceiver (ceiling, wall or tripod-mounted, excl. tripod when ordered, wide-angle, white)
Footprint of HCS-5300TD Digital Infrared Transceiver
HCS-5300TDS
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, also HCS-5100R/RA digital infrared receivers can be in operation simultaneously to receive (1+3 CHs) simultaneous interpretation
- Optional suspension length: 0.5 m, 1.0 m or 2.0 m

HCS-5300TDS digital infrared transceiver manages communication between main unit and conference units. It can be suspension mounted onto the ceiling at appropriate height.

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 |

| Mechanical |
|-----------------|-----------------|
| Mounting | Suspension mounting |
| Dimensions | Ø 201 mm, 100 mm (height) |
| Weight | 0.6 kg |
| Color | Silver |

Ordering Information

HCS-5300TDS_Digital Infrared Transceiver (suspension, wide-angle, silver)

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 digital infrared transceiver
## 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_S</td>
<td>2.5 m</td>
<td>13 m</td>
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<tr>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td>3.5 m</td>
<td></td>
</tr>
<tr>
<td>HCS-5300TD_G</td>
<td>4.0 m</td>
<td>11 m</td>
</tr>
<tr>
<td></td>
<td>4.5 m</td>
<td></td>
</tr>
<tr>
<td>HCS-5300TD_W</td>
<td>5.0 m</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5.5 m</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6.0 m</td>
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<td>HCS-5300TDS</td>
<td>6.5 m</td>
<td></td>
</tr>
<tr>
<td></td>
<td>7.0 m</td>
<td></td>
</tr>
</tbody>
</table>
HCS-5300MA/20 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 individually adjustable
- 4 audio effect modes are prestored: NORMAL/PRESS/THEATER/PARLIAMENT
- Built-in adjustable audio compression feature
- Compatible with HCS-5100 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
- 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/+-/++
- 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

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.

**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:
  - One balanced XLR-M for MIC. mixed audio output
  - One balanced XLR-M for floor audio line out
  - 3 interpretation audio input interfaces (1–3)
  - 4 interpretation audio output interfaces (0–3)
  - Balanced LINE IN 1 interface (Ø 6.4 mm) and LINE IN 2 interface (RCA) for connection to external audio devices
  - Ø 3.5 mm jack for stereo monitor earphone
HCS-5300 Series Digital Infrared Wireless Conference System

- 2 × USB interfaces at front panel to upgrade system and to save system parameters
- 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 HCS-5300MA/20 can connect up to 10 transceivers
- 1 interpreter unit interface: for connection to HCS-4385U/50 Interpreter Unit
- Power supply socket
- HF signal output interface (BNC socket) for connection to HCS-5100T Digital Infrared Radiator
- RS232 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 1 kHz: ≤0.05%
- 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: +10 dBu, UNBAL.
- SI. INPUT (CH 1 ~ 3): RCA × 3, -12 dBu ~ +12 dBu, UNBAL.

#### Audio outputs
- LINE OUT 1: +20 dBu, BAL.
- MIC. MIX (1~4) OUTPUT: +20 dBu, BAL.
- SI. OUTPUT (CH 0 ~ 3): RCA × 4, +10 dBu, UNBAL.

#### Interface data
- Transceivers I/O terminal: 6P-DIN socket × 6, up to 10 transceivers
- External control terminal: RS232 D-sub (9P, male), USB interface, RJ45 (ETHERNET)
- Interpreter unit terminal: 6P-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/20, ........ Digital IR Wireless Conference System Main Unit (discussion, voting, 1+3 CHs, with interface for HCS-4385U/50 Interpreter Unit)
System Connection [Wireless discussion + 1+3 CHs digital simultaneous interpretation + voting + video tracking]
HCS-5300MB/20 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 individually adjustable
■ 4 audio effect modes are prestored: NORMAL/PRESS/THEATER/PARLIAMENT
■ Built-in adjustable audio compression feature
■ Compatible with HCS-5100 series digital infrared language distribution system, when cooperating with digital infrared radiator, enabling a larger audience to join in the conference
■ 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.
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.

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:
  • One balanced XLR-M for MIC. mixed audio output
  • One balanced XLR-M for floor audio line output
  • 3 interpretation audio input interfaces (1~3)
  • 4 interpretation audio output interfaces (0~3)
  • Balanced LINE IN 1 interface (Ø 6.4 mm) and LINE IN 2 interface (RCA) for connection to external audio devices
  • Ø 3.5 mm jack for stereo monitor earphone
  • 2 × USB interfaces at front panel to upgrade system and to save system parameters
  • 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 HCS-5300MB/20 can connect up to 10 transceivers

1 interpreter unit interface: for connection to HCS-4385U/50 Interpreter Unit

Power supply socket

HF signal output interface (BNC socket) for connection to HCS-5100T Digital Infrared Radiator

RS232 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 1 kHz: ≤0.05%
- 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: +10 dBu, UNBAL.
- SI. INPUT (CH 1 ~ 3) RCA × 3: -12 dBu ~ +12 dBu, UNBAL.

**Audio outputs**

- LINE OUT 1: +20 dBu, BAL.
- MIC. MIX (1~4) OUTPUT: +20 dBu, BAL.
- SI. OUTPUT (CH 0 ~ 3) RCA × 4: +10 dBu, UNBAL.

**Interface data**

- Transceivers I/O terminal: 6P-DIN socket × 6, up to 10 transceivers
- External control terminal: RS232 D-sub (9P, male), USB interface, RJ45 (ETHERNET)
- Interpreter’s unit terminal: 6P-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-5300MB/20 ...... Digital IR Wireless Conference System Main Unit (discussion, 1+3 CHs, with interface for HCS-4385U/50 Interpreter Unit)
System Connection

[Wireless discussion + 1+3 CHs digital simultaneous interpretation + video tracking + central control]
HCS-5300MC/20 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
■ Controls up to 1000 contribution units
■ Microphone sensitivity and EQ individually adjustable
■ 4 audio effect modes are prestored: NORMAL/PRESS/THEATER/PARLIAMENT
■ Built-in adjustable audio compression feature
■ Compatible with HCS-5100 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 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 RS232 interface for centralized control

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 individually adjustable
■ 4 audio effect modes are prestored: NORMAL/PRESS/THEATER/PARLIAMENT
■ Built-in adjustable audio compression feature
■ Compatible with HCS-5100 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
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■ 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:
  ♦ One balanced XLR-M for MIC, mixed audio output
  ♦ One balanced XLR-M for floor audio line out
  ♦ Balanced LINE IN 1 interface (Ø 6.4 mm) for connection to external audio device
  ♦ Ø 3.5 mm jack for stereo monitor earphone
■ 2 × USB interfaces at front panel to upgrade system and to save system parameters
■ 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

The digital infrared wireless conference main unit includes feature 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.
- 6 digital infrared transceiver interfaces, each HCS-5300MC/20 can connect up to 6 transceivers
- Power supply socket
- HF signal output interface (BNC socket) for connection to HCS-5100T Digital Infrared Radiator
- RS232 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 1 kHz: ≤0.05%
- 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: +10 dBu, UNBAL.

**Audio outputs**

- LINE OUT 1: +20 dBu, BAL.
- MIC. MIX (1~4) OUTPUT: +20 dBu, BAL.

**Interface data**

- Transceivers I/O terminal: 6P-DIN socket × 6, up to 6 transceivers
- External control terminal: RS232 D-sub (9P, male), USB interface, RJ45 (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: 99 x 478 x 350 mm
- Weight: 8.3 kg
- Color: White

**Ordering Information**

- HCS-5300MC/20 ................. Digital IR Wireless Conference System Main Unit (discussion)
System Connection [Wireless discussion + video tracking + central control]

Function list

<table>
<thead>
<tr>
<th>Type No.</th>
<th>Discussion</th>
<th>Voting</th>
<th>Simultaneous interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>HCS-5300MA/20</td>
<td>√</td>
<td>√</td>
<td>1+3 CHs</td>
</tr>
<tr>
<td>HCS-5300MB/20</td>
<td>√</td>
<td></td>
<td>1+3 CHs</td>
</tr>
<tr>
<td>HCS-5300MC/20</td>
<td>√</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
HCS-5300MX
Digital IR Conference Room Switcher

Features
- Perfect solution for selectively combining or separating meeting rooms
- Flexibly and discretionary - according to situational conditions
- 4 inputs × 4 group outputs Digital IR Matrix Switcher, 5 outputs per group
- Up to 20 transceiver outputs per HCS-5300MX unit
- Able to merge up to 4 meeting rooms
- LCD to display real-time operation
- Front panel button control, easy to switch manually
- 2U high, full rack width

Controls and Indicators
- Graphic LCD with back-lighting displays configuration
- Four buttons for configuration
- Power switch with indicator
- Input channel selectors with indicators (4 inputs)
- Infrared signal output group selectors with indicators (4 groups, 5 outputs per group)

Interconnections
- Transceiver inputs from HCS-5300M Digital IR Wireless Conference System Main Unit: 4 channels input via 6P-DIN sockets
- Transceiver outputs to HCS-5300T Transceiver: 4 groups of infrared signal output via 6P-DIN sockets, 5 outputs per group
- 1 × RS232 port for connection to intelligent central control system and system diagnosis

Technical Specifications

Electrical
- Power supply: AC 100 V-120 V 60 Hz or AC 220 V-240 V 50 Hz
- Power consumption: 15 W

Mechanical
- Mounting: Tabletop or mounted in a 19" rack
- Dimensions (h x w x d):
  - For table use, with feet: 99 × 430 × 325 mm
  - For 19" rack use, with brackets: 89 × 478 × 350 mm
- Weight: 10.6 kg
- Color: White

Ordering Information
HCS-5300MX Digital IR Conference Room Switcher
### 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 × 140 × 58 mm
    - Weight: 0.3 kg
    - Color: Black

- **Ordering Information**
  - HCS-5300BAT (11.1 V DC, for HCS-5300/01/02 series conference unit)

### HCS-ADP15V

**Power Adapter**

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

- **Technical Specifications**
  - **Electrical**
    - Power supply: AC 100 V - 240 V, 50 Hz / 60 Hz
    - Output: 15 V DC, 2.2 A
    - Connector: UL, CE or VDE type, according to the sales area
  - **Mechanical**
    - Cable length: 3 m
    - Dimensions (h x w x d): 28 × 95 × 45 mm
    - Weight: 0.3 kg
    - Color: Black

- **Ordering Information**
  - HCS-ADP15V (15 V DC, 2.2 A)
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
- Power supply: AC 100 V-120 V 60 Hz or AC 220 V-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

Interconnections
- 4 × 6P-DIN sockets
- 2 m cable with 6P-DIN 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-5300T series)
HCS-5300TZJ Tripod

Features
- Used for mounting HCS-5300TD
- Max. adjustable height: 1.4 m
- Weight: 2.6 kg

Ordering Information
HCS-5300TZJ..................................................... Tripod

CBL5300
Dedicated Transceiver Cable

Features
- Dedicated cable for HCS-5300T series Digital Infrared Transceiver
- 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)
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 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-5310/50)
- Professional Venue Design Software Module (HCS-5312/50)
- Microphone Management Software Module (HCS-5313/50)
- Voting Management Software Module (HCS-5314/50)
- Video Control Software Module (HCS-5315/50)
- Simultaneous Interpretation Software Module (HCS-5316/50)
- Synchronous Audio Recording Management Software Module (HCS-5319/50)
- Synchronous Video Recording Management Software Module (HCS-5320/50)
- Multi-user Conference Control Management Software Module (HCS-5321/50)
- Dual PC Server Hot Spare Software Module (HCS-5322/50)
- Agenda Control Software Module (HCS-5323/50)
HCS-5310/50
Basic System Setup Management Module

The 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)](image1)

**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-5312/50 Professional Venue Design Module

Main unit configuration facility

![CMU parameters setup](image2)

**CMU parameters setup**

**Main unit control panel**

![Main unit control panel](image3)

**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 button
  - Automatically turn off microphone time: the microphone will be automatically switched off after a period of silence and the period shall be set up
  - Compression setup: Set up 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

- Conference information
- 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

### Contribution unit configuration facility

- Set up contribution unit interface
- Functions
  - Set up and reconfigure internal parameters of the contribution unit by the administrator.
  - Parameters include:
    - Select contribution unit to set up
    - Gain of the contribution unit (dB)
    - Treble of the contribution unit (dB)
    - Bass of the contribution unit (dB)

### User management

- User management interface
- 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

Report system

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
- Allocation of an alias for each screen for more convenience

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.Views.Basic System Setup Management Software Module
HCS-5312/50
Professional Venue Design Module

Functions

Unlike 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/microphones 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.)

Ordering Information

HCS-5312/50, Professional Venue Design Software 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 Software Module
HCS-5314/50
Voting Management Module

Functions
Voting management, seat arrangement and delegate management sub modules.

- **Voting management:**
  - Topics information management
    - Set up, 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:
      - Parliamentary: YES/NO/ABSTAIN
      - Questionnaire: 1/2/3/4/5
      - Audience response: --/-/0/+/
    - 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%
  - 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-5314/50 ….. Voting Management Software Module (including delegate management, parliamentary voting, multi voting)

HCS-5315/50 Video Control Module

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

Interpretation channel setup

Functions
Set up 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
  ✤ Send the configuration to the main unit for synchronization
■ Display main unit configuration on the window

Ordering Information
HCS-5316/50 Simultaneous Interpretation Software Module

HCS-5319/50
Synchronous Recording Module

Voice record interface

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
  ✤ Set up 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 Audio Recording Management Software Module
HCS-5320/50
Professional Digital Video & Audio Recorder Module

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

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

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**Ordering Information**

HCS-5320/50..........................Synchronous Video Recording Management Software Module
HCS-5321/50
Multi-User Console Module

The primary window of multi-user console

Functions
If more than one operator is involved, a multi-user console is available for controlling speaking and voting, apart from 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
- Set up system parameters and download venue files from the server

Ordering Information
HCS-5321/50, Multi-User Conference Control Software Module

HCS-5322/50
Dual PC Server Hot Spare Module

Start to backup interface

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 Software Module
HCS-5323/50
Agenda Control 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 adjustable - 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 Control Software Module