# HCS-5300MA/80A Digital Infrared Wireless Conference Main Unit



#### **Features**

- Based on TAIDEN originated dirATC-digital infrared Audio Transmitting and Control technologies
- Supports up to 8 simultaneous interpretation language channels (incl. the original floor channel)
- Digital infrared audio processing and transmitting technologies ensure perfect sound quality
- Supports Dante, an uncompressed, multi-channel digital media networking technology, with near-zero latency and synchronization
- 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-5100Plus series digital infrared language distribution system, when cooperating with digital infrared language distribution system, enabling a larger audience to join in the conference
- Can be connected to HCS-4100/50 series Wired Congress Unit and Interpreter Unit, to implement 1+3 CHs wired simultaneous interpretation system and 1+7 CHs wireless simultaneous interpretation system
- Microphone sensitivity and EQ individually adjustable
- TCP/IP communication protocol in PC controlled mode, easy to carry out remote control
- Excellent immunity to RF interference from mobile phones and comparable devices

The digital infrared wireless conference main unit includes features for controlling delegate microphones, distributing simultaneous interpretation and conducting voting sessions, without an operator. With web page control function, the user can access the IP address of main unit from web browser to handle meeting management.

#### Functions

- Compliant with ISO 22259
- 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
  - Freq. Response: 50 Hz to 20 kHz
  - S/N: ≥90 dBA
  - ◆ THD: ≤0.05%
- Digital infrared transmission technology guarantees conference privacy. Users are released from worries about eavesdropping and radio interference inherent to radio wave-based wireless communications
- Operating the IR conference system does not require a radio frequency license all over the world
- Supports up to 8 simultaneous interpretation language channels (incl. the original floor channel)
- Controls up to 1000 contribution units
- Microphone sensitivity and EQ individually adjustable
- Compatible with HCS-5100Plus series digital infrared language distribution system, when cooperating with digital infrared radiator, enabling a larger audience to join in the conference
- Booth borrow function can be realized when cooperating with HCS-8600MIO Audio Input & Output Device and HCS-8685M Booth Manager.
- Implemented features in stand-alone mode:
  - Set the number (1/2/3/4) of delegates permitted to speak at the same time
  - "OPEN" mode, if Mic. active limit has been reached, next microphone cannot be turned on when pressing "Mic. On/Off" button
  - "OVERRIDE" mode, if Mic. active limit has been reached, when pressing "Mic. On/Off" button, next microphone is turned on and the first active microphone is turned off
  - "VOICE" mode, Mic. sensitivity and close time adjustable, built-in "Flash-on" technology for quick voice control
  - Simultaneous interpretation
- In combination with the corresponding software, multiform voting can be implemented:
  - For/Against (requires firmware version 5.00.03.04 or higher).
  - Parliamentary: YES/NO/ABSTAIN
  - Questionnaire: 1/2/3/4/5
  - Audience response: --/-/0/+/++
- USB interface realizing quality-lossless sound recording on PC and intact input of streaming audio into the system
- Automatic video tracking, when cooperating with camera and video switcher unit
- Advanced TCP/IP communication protocol in PC controlled mode, easy to carry out remote control
- Connection to central control system through RS232 interface for centralized control

#### **Controls and Indicators**

- 2.8" LCD displays status and menu of the system configuration, supporting multi language menu
- Standby switch with indicator
- Operation knob

# TAIDEN

## Interconnections

- Multiple audio in/out interfaces:
  - Balanced LINE OUT 1 interface (XLR-M) and unbalanced LINE OUT 2 interfaces (RCA×2) for floor audio line out
  - 8 interpretation audio output interfaces (0~7)
  - Balanced LINE IN 1 interface (XLR-F) and unbalanced LINE IN 2 interfaces (RCAx2) for connection to external audio devices
- Dante interfaces to connect to peripheral digital devices without losing any sound quality
- USB\_H interfaces to upgrade system and to save system parameters
- USB\_D interfaces for digital audio input/output
- 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/80A can connect up to 10 transceivers
- 1 interpreter unit / DCS interface: for connection to HCS-4100/50 series Wired Congress Unit or Interpreter Unit. By using HCS-8300MES, up to 200 congress units can be connected
- Power supply socket
- HF signal output interface (BNC socket) for connection to HCS-5100T/B Digital Infrared Radiator
- RS232 interface for connection to central control system

## **Technical Specifications**

## Electrical

Frequency response	50 Hz to 20 kHz
SNR	≥90 dBA
Dynamic range	
THD at 1 kHz	<u>≤</u> 0.05%
Isolation	
Power supply	
Power consumption	30 W
Max. consumption	500 W

#### **Audio inputs**

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

#### **Audio outputs**

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

# Interface data

Transceivers I/O terminal	6P-DIN socket × 6
Max. Quantity of transceivers	10 HCS-5300TD/80
	or 10 HCS-5300TH/80
	or 8 HCS-5300TWN/80
External control terminal	RS232 D-sub (9P, male), USB
	interface, RJ45 (ETHERNET,
	Dante)
Interpreter unit / DCS terminal	6P-DIN socket × 1
HF OUT (Radiator terminal)	BNC connector × 1
Alarm terminal	3.81 mm Phoenix connectors, 2-pole

## Mechanical

Dimensions (h x w x d)	88×480×418 mm
Weight	11.8 kg
Color	Dark grey (PANTONE 431 C)

Video switcher terminal \_\_\_\_\_\_ 3.81 mm Phoenix connectors, 4-pole

#### **Ordering Information**

HCS-5300MA/80A	_ Digital IR Wireless Conference
	System Main Unit (discussion, voting,
	1+7 CHs, with interface for
	HCS-4100/50 Wired Congress Unit
	and HCS-8385N/50 Interpreter Unit,
	Dante interface)

# **System Connection**

# [Wired/wireless discussion + digital simultaneous interpretation (1+7 CHs )+ voting + video tracking+ central control]

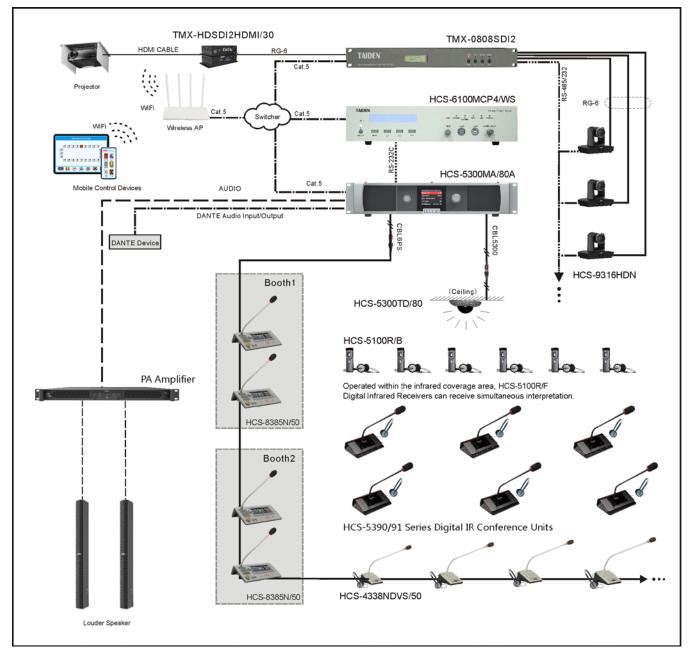


Table:	Maximum number of	f connections of	of wired units
--------	-------------------	------------------	----------------

Connection	Extended cable length between the first wired conferModelunit and the main unit		d conference		
		20 m	40 m	60 m	80 m
HCS-5300MA/80A	HCS-4338N/50	30 pcs	28 pcs	26 pcs	20 pcs
+ 10pcs HCS-5300TD/80 ( extention via HCS-5352 )	HCS-8385N/50	21 pcs	17 pcs	13 pcs	10 pcs

# Table: Maximum number of transceivers connected to the system

Model	HCS-5300TD/80	HCS-5300TH/80	HCS-5300TWN/80
HCS-5300MA/80A	10 pcs	10 pcs	8 pcs

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



## **Features**

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

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

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

## **Functions**

- Compliant with ISO 22259
- 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
  - Freq. Response: 50 Hz to 20 kHz
  - ◆ S/N: ≥90 dBA
  - THD: ≤0.05%
- Digital infrared transmission technology guarantees conference privacy. Users are released from worries about eavesdropping and radio interference inherent to radio wave-based wireless communications
- Operating the IR conference system does not require a radio frequency license all over the world
- Supports up to 8 simultaneous interpretation language channels (incl. the original floor channel)
- Controls up to 1000 contribution units
- Microphone sensitivity and EQ individually adjustable
- Compatible with HCS-5100Plus series digital infrared language distribution system, when cooperating with digital infrared radiator, enabling a larger audience to join in the conference
- Implemented features in stand-alone mode:
  - Set the number (1/2/3/4) of delegates permitted to speak at the same time
  - "OPEN" mode, if Mic. active limit has been reached, next microphone cannot be turned on when pressing "Mic. On/Off" button
  - "OVERRIDE" mode, if Mic. active limit has been reached, when pressing "Mic. On/Off" button, next microphone is turned on and the first active microphone is turned off
  - "VOICE" mode, Mic. sensitivity and close time adjustable, built-in "Flash-on" technology for quick voice control
  - Simultaneous interpretation
- USB interface realizing quality-lossless sound recording on PC and intact input of streaming audio into the system
- Automatic video tracking, when cooperating with camera and video switcher unit
- Advanced TCP/IP communication protocol in PC controlled mode, easy to carry out remote control
- Connection to central control system through RS232 interface for centralized control

### **Controls and Indicators**

- 2.8" LCD displays status and menu of the system configuration, supporting multi language menu
- Standby switch with indicator
- Operation knob

#### Interconnections

- Multiple audio in/out interfaces:
  - Balanced LINE OUT 1 interface (XLR-M) and unbalanced LINE OUT 2 interfaces (RCA×2) for floor audio line out
  - 8 interpretation audio output interfaces (0~7)
  - Balanced LINE IN 1 interface (XLR-F) and unbalanced LINE IN 2 interfaces (RCAx2) for connection to external audio devices
- USB\_H interfaces at front panel to upgrade system and to save system parameters
- USB\_D interfaces for digital audio input/output
- 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/80 can connect up to 10 transceivers
- 1 interpreter unit / DCS interface: for connection to HCS-4100/50 series Wired Congress Unit or Interpreter Unit. By using HCS-8300MES, up to 200 congress units can be connected
- Power supply socket
- HF signal output interface (BNC socket) for connection to HCS-5100T/B Digital Infrared Radiator
- RS232 interface for connection to central control system

# **Technical Specifications**

#### Electrical

## **Audio inputs**

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

## **Audio outputs**

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

#### Interface data

Transceivers I/O terminal	6P-DIN socket × 6
Max. Quantity of transceivers	10 HCS-5300TD/80
	or 10 HCS-5300TH/80
	or 8 HCS-5300TWN/80
External control terminal	RS232 D-sub (9P, male), USB
	interface, RJ45 (ETHERNET)
Interpreter unit / DCS terminal	6P-DIN socket × 1
HF OUT (Radiator terminal)	BNC connector × 1
Alarm terminal	3.81 mm Phoenix connectors, 2-pole
Video switcher terminal	3.81 mm Phoenix connectors, 4-pole

## Mechanical

Dimensions (h x w x d) 88×480×418	
Weight	11.8 kg
Color	Dark grey (PANTONE 431 C)

#### **Ordering Information**

HCS-5300MB/80A\_\_\_\_\_Digital IR Wireless Conference System Main Unit (discussion, 1+7 CHs, with interface for HCS-4100/50 wired congress unit and HCS-8385N/50 Interpreter Unit)

# **System Connection**

[Wireless discussion + digital simultaneous interpretation + video tracking + central control]

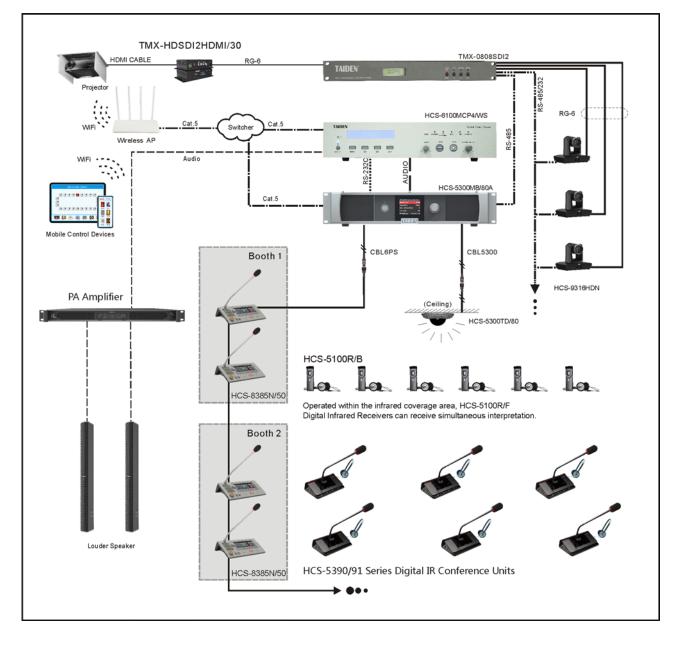


Table: Maximum number of connections of wired units

Connection	Model	Extended cable length between the first wired conference unit and the main unit			
		20 m	40 m	60 m	80 m
HCS-5300MB/80A	HCS-4338N/50	30 pcs	28 pcs	26 pcs	20 pcs
+ 10pcs HCS-5300TD/80 ( extention via HCS-5352 )	HCS-8385N/50	21 pcs	17 pcs	13 pcs	10 pcs

## Table: Maximum number of transceivers connected to the system

Model	HCS-5300TD/80	HCS-5300TH/80	HCS-5300TWN/80
HCS-5300MB/80A	10 pcs	10 pcs	8 pcs

# HCS-5300MC/80A Digital Infrared Wireless Conference Main Unit



## **Features**

- Based on TAIDEN originated 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-5100Plus 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 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 feature for controlling delegate microphones, without an operator.

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

## Functions

- Compliant with ISO 22259
- 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
  - Freq. Response: 50 Hz to 20 kHz
  - ◆ S/N: ≥90 dBA
  - ◆ THD: ≤0.05%
- 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
- Compatible with HCS-5100Plus series digital infrared language distribution system, when cooperating with digital infrared radiator, enabling a larger audience to join in the conference
- Implemented features in stand-alone mode:
  - Set the number (1/2/3/4) of delegates permitted to speak at the same time
  - "OPEN" mode, if Mic. active limit has been reached, next microphone cannot be turned on when pressing the "Mic. On/Off" button
  - "OVERRIDE" mode, if Mic. active limit has been reached, when pressing "Mic. On/Off", next microphone can be turned on and the first active microphone will be turned off
  - "VOICE" mode, Mic. sensitivity and close time adjustable, built-in "Flash-on" technology for quick voice control
- USB interface realizing quality-lossless sound recording on PC and intact input of streaming audio into the system
- Automatic video tracking, when cooperating with camera and video switcher unit
- Advanced TCP/IP communication protocol in PC controlled mode, easy to carry out remote control
- Connection to central control system through RS232 interface for centralized control

## **Controls and Indicators**

- 2.8" LCD displays status and menu of the system configuration, supporting multi language menu
- Standby switch with indicator
- Operation knob

#### Interconnections

- Multiple audio in/out interfaces:
  - Balanced LINE OUT 1 interface (XLR-M) and unbalanced LINE OUT 2 interfaces (RCA×2) for floor audio line out
  - Balanced LINE IN 1 interface (XLR-F) and unbalanced LINE IN 2 interfaces (RCAx2) for connection to external audio devices
- USB\_H interfaces at front panel to upgrade system and to save system parameters
- USB\_D interfaces for digital audio input/output
- 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 HCS-5300MC/80 can connect up to 8 transceivers
- Power supply socket
- HF signal output interface (BNC socket) for connection to HCS-5100T/B Digital Infrared Radiator
- RS232 interface for connection to central control system

# **Technical Specifications**

## Electrical

Frequency response	50 Hz to 20 kHz
SNR	
Dynamic range	
THD at 1 kHz	
Isolation	≥80 dB
Power supplyAC 100 V-120 V 60 Hz or AC	220 V-240 V 50 Hz
Power consumption	25 W
Max. consumption	200 W

# **Audio inputs**

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

# Audio outputs

LINE OUT 1	+20 dBu, BAL.
LINE OUT 2	+20 dBu, UNBAL.

# Interface data

Transceivers I/O terminal	6P-DIN socket × 6,
Max. Quantity of transceivers	8 HCS-5300TD/80
	or 8 HCS-5300TH/80
	or 6 HCS-5300TWN/80
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

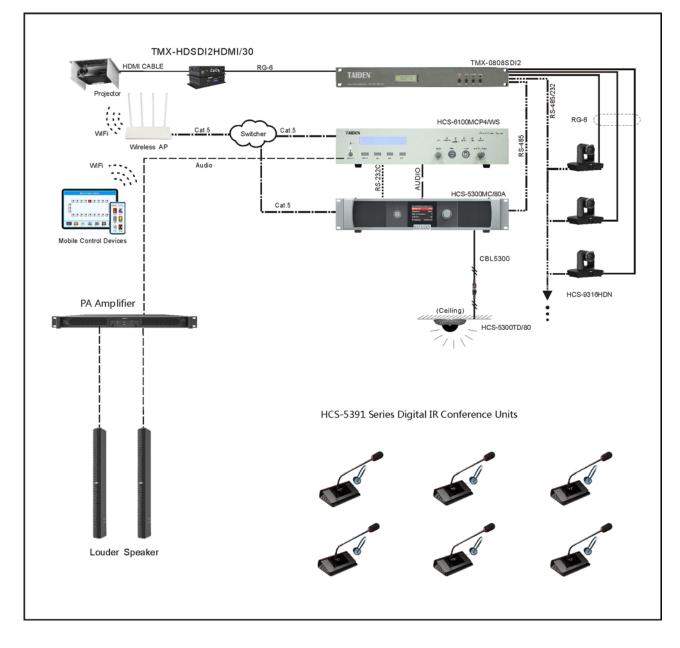
Dimensions (h x w x d)	88×480×418 mm
Weight	9.3 kg
Color	Dark grey (PANTONE 431 C)

# **Ordering Information**

HCS-5300MC/80A	Digital IR Wireless Conference
	System Main Unit (discussion)

# **System Connection**

[Wireless discussion + video tracking + central control]



# **Function list**

Type No.	Discussion	Voting	Simultaneous interpretation	Dante
HCS-5300MA/80A	$\checkmark$	$\checkmark$	1+7 CHs	$\checkmark$
HCS-5300MB/80A	$\checkmark$		1+7 CHs	
HCS-5300MC/80A	$\checkmark$			

# Maximum number of transceivers connected to the system

Model	HCS-5300TD/80	HCS-5300TH/80	HCS-5300TWN/80
HCS-5300MA/80A	10 pcs	10 pcs	8 pcs
HCS-5300MB/80A	10 pcs	10 pcs	8 pcs
HCS-5300MC/80A	8 pcs	8 pcs	6 pcs