# HCS-8300MAD/FS/50 Congress Main Unit



### Features

- Based on ingenious CongressMatrix<sup>™</sup> technology, integrated n×8 audio matrix processor
- Integrated 8 channels group output function, easy to combine/split conference rooms
- Connectable to multi channel audio input or output devices for versatile expansion of the system
- High system reliability guaranteed by "Closed Loop -Daisy Chain" connection topology
- Adopted fully digital audio transmitting technology between the main units and congress units
- Perfect sound quality on all 64 simultaneous interpretation channels: frequency response 30 Hz to 20 kHz
- Supports Dante, an uncompressed, multi-channel digital media networking technology, with near-zero latency and synchronization
- Equipped with optical fiber interface to combine two widely separated conference rooms to form one unique coherent system
- Dual connection backup via optical fiber and Cat.5 cable between Congress Main Unit and Congress Extension Main Unit
- Connection facility for an additional condenser or dynamic microphone, expanding user's application spectrum
- Integrated USB interfaces for system upgrading and saving system parameters. Convenient for system maintenance
- TCP/IP communication protocol in PC control
- Remote control, remote diagnosis and remote update
- Voting facilities without PC intervention
- Built-in multi-channel intercom facility
- Plug and play for all units
- Excellent immunity to RF interferences from mobile phones and comparable devices
- System power controllable by central control system

The Congress Main Unit includes features for controlling delegate microphones, distributing simultaneous interpretation and conducting voting sessions, without an operator.

In combination with a PC, the Congress Main Unit brings greater sophistication to conference control. Users are able to 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. In the event of PC failure, the Congress Main Unit will revert to its stand-alone operation mode, enabling the conference to proceed.

The Congress Main Unit also provides power supply to the Congress units (except paperless multimedia congress terminals).

#### Functions

- Compliant to IEC 60914
- Based on ingenious CongressMatrix<sup>TM</sup> technology, integrated n×8 audio matrix processor (n is the number of microphones connected in the system)
  - 8 discrete audio outputs, including:
    - Line 1 output: 15 band graphical EQ + 8 band parameterized EQ + DRC (dynamic range compressor)
    - Line 2 output: 5 band graphical EQ + DRC (dynamic range compressor)
    - Group output 1~6: 5 band graphical EQ + DRC (dynamic range compressor) + time delay (maximum delay time for 32 kHz sampling rate is 1.5 s, maximum delay time for 48 kHz sampling rate is 1 s)
  - Connectable to a multi channel independent PA system (up to 8 channels). Each channel is supplied with its proper audio signal. The audio signal of each microphone can be routed to any speaker at any ratio, thus "N-1" function can be realized easily: when the microphone in one area is turned on, its audio signal is only routed to all areas except to its own, avoiding acoustic feedback (howl) when audio transmission gain is increased
  - 8 channels group output function
  - Supports combining/separating meeting rooms by split/merge function
  - Recording by group function
  - Gain and EQ (5 band) of each microphone adjustable separately, fitting the individual orator's voice to achieve perfect speech pickup any time
  - Displays audio signal spectrum to determine howling frequency which can be suppressed by adjusting EQ parameters
  - 2 audio line in (analog, digital, Dante) or 1 audio line in (analog, Dante) + 1 microphone input, gain and EQ for each input adjustable separately. +24 V phantom power supply at microphone input, condenser microphone can be connected directly
  - Connectable to multi channel audio input or output devices for versatile expansion of the system

- "Closed Loop Daisy Chain" connection topology for a high operational system reliability: breakdown or replacement of a Congress Unit and connection failure of a cable will not influence other Congress Units
- Embedded high performance DSP for audio signal processing, supporting 48 kHz and 32 kHz audio sampling rate. All 64 channels feature perfect sound quality with a frequency response of 30 Hz to 20 kHz
- Based on TAIDEN originated MCA-STREAM digital audio processing and transmitting technology
- Adopted fully digital audio transmitting technology between the main units and congress units
- Every delegate unit is assigned an individual ID for convenient setup and to avoid double ID allocation forever
- Set any delegate unit to be VIP unit, VIP unit can be activated as long as the total of active microphones is not beyond 6
- Built-in multi-channel intercom facility
- Connection facility for additional condenser or dynamic microphones, expanding user's application spectrum (HCS-8300MI series audio input interface required)
- If additional contribution units are connected for system expansion, additional Congress Extension Main Units HCS-8300ME or HCS-8300ME/FS are required:
  - 4096 discussion or voting units
  - 378 interpreter units (with maximum 63 booths, each booth with maximum 6 interpreter units)
  - Any quantity of channel selectors
- With the 8 channel digital/analog audio output device (several units cascadable), multi-channel digital/analog audio signals are available as output signals for infrared language distribution system or recording
- Automatic video tracking implementation when cooperating with cameras and video switcher unit; preset positions on PC
- Implemented features in stand-alone mode:
  - Set the number (1/2/3/4) of delegates permitted to speak at the same time
    - Set-up of speaking time limitation (1~240 minutes)
    - Speak mode: OPEN/OVERRIDE/VOICE/APPLY/PTT
      - "OPEN" mode, microphone On/Off button with request-to-speak registration (AUTO)
      - "OVERRIDE" mode, microphone On/Off button control with override of the active microphones (FIFO)
      - "VOICE" mode, acoustic active sensitivity and automatic switch-off time can be adjusted continuously, built-in "flash-on" technology, immediate microphone activation on speaking
      - "APPLY" mode, delegate applies to speak by pressing microphone On/Off button, delegate can speak only when operator or chairman approved his application
    - "PTT" mode, press microphone On/Off button to talk
    - Parliamentary voting (YES/NO/ABSTAIN)
    - 64 (1+63) channels simultaneous interpretation function. Cooperates with channel selector or infrared language distribution system enabling a larger audience to follow the conference

- In combination with the corresponding software modules, more functions can be implemented:
  - Centralized microphone management
  - Multiform voting:
    - For/Against
    - Parliamentary: YES/NO/ABSTAIN
    - · Questionnaire: 1/2/3/4/5
    - Audience response: --/-/0/+/++
    - Parliamentary (NPPV): Yes/No/ABSTAIN/NPPV
    - Appraisal:
      - Satisfied (four keys voting:

perfectly satisfied/satisfied/basically satisfied/unsatisfied)

(three keys voting:

- satisfied/basically satisfied/unsatisfied)
- (two keys voting: satisfied/unsatisfied)
- Qualified (four/three/two keys voting)
- Competent (four/three/two keys voting)
- Several sign-in modes: entrance sign-in/seat sign-in
- Depending on the purchased HCS-8300 software modules, user gains access to additional conference control & management functions
- Advanced TCP/IP communication protocol in PC controlled mode, easy to carry out remote control, remote diagnosis and remote update
- Supports Dante, an uncompressed, multi-channel digital media networking technology, with near-zero latency and synchronization
- Dual connection backup between Congress Main Unit and Congress Extension Main Unit via optical fiber and Cat.5 cable
- Hot spare dual server structure: another Congress Main Unit is set up as backup Congress Main Unit and connected to the system and takes over automatically if the main Congress Main Unit fails
- Multi-room configuration: Congress Main Unit(s) can be used as Congress Extension Main Unit(s) to carry out multi-room configuration flexibly. Multiple Congress Main Unit configuration allows all connected multiple rooms to be operated either as one unique system or as independent systems
- Integrated real-time clock displays time on the LCD of the interpreter unit to inform interpreter to stay on schedule
- Fully compatible with TAIDEN HCS-4100/50 Fully Digital Congress System: HCS-4100/50 series Congress Units can be connected to the HCS-8300 system (exclusive functions only available with HCS-8300 series contribution units)
- Built-in unit detection facilities: detect the unit's microphone, speaker, LEDs and voting keys prior to start of the meeting
- Automatic recovery facility, supporting "PnP" (plug and play)
- If the PC is broken down, Congress Main Unit enters the stand-alone state automatically, carrying out basic conference control, ensuring the consistency of the conference
- System power controllable by central control system

### **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 electric level adjust knob
- Congress Unit floor audio channel master volume adjust knob

#### Interconnections

- Multiple audio in/out interfaces:
  - One balanced XLR-F for microphone input or audio LINE IN
  - Two symmetrical RCA input interfaces for audio LINE IN
  - One balanced XLR-M for audio LINE OUT
  - Two symmetrical RCA output interfaces for audio LINE OUT
  - 6 channels group output on 3-pin 3.81 mm Phoenix connectors
  - One headphone output socket (Ø 3.5 mm) for monitoring channel languages
- 2 x RS232 port for connection to central control system and system diagnosis each
- AES/EBU digital input/output
- Duplex SC single-mode optical fiber interface to combine two widely separated conference rooms and to operate as one unique coherent system
- Dante interface to connect to peripheral digital devices without losing any sound quality
- 1 x RJ45 standard socket for connection to Ethernet interface (LAN)
- 1 x RJ45 standard socket (output) for connection with a Congress Extension Main Unit (EXTENSION)
- 2 × outlet (6P-DIN) trunk-line cable outlet
- 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 Congress Units
- Mixer interface: for connection to HCS-8301MD Digital Audio Mixer for Conference
- 2 x USB interface at front panel to upgrade system and to save system parameters.

### **Technical Specifications**

### Electrical

Frequency response	30 Hz to 20 kHz
SNR	>96 dBA
Dynamic range	>94 dB
Isolation	>85 dB
THD	<0.05%
Power supplyAC 100 V-120	V 60 Hz or AC 220 V-240 V 50 Hz
Power consumption	200 W
Total supply power	120 W
RS232 connection	2 × 9-pole Sub-D female socket

#### Max. audio inputs

LINE IN 1	+10 dBu, BAL.
LINE IN 2	+10 dBu, UNBAL.
AES/EBU IN	1 FFS

## Max. audio outputs

LINE OUT 1	+20 dBu, BAL.
LINE OUT 2	
GROUP OUT (16)	+20 dBu, BAL.
AES/EBU OUT	1 FFS

# Mechanical

Mounting	Tabletop or mounted in a 19" rack
Dimensions ( $h \times w \times d$ )	
For table use, with feet	99 × 430 × 325 mm
For 19" rack use, with brackets	<u>89 × 478 × 350 mm</u>
Weight	7.8 kg
Color	White (PANTONE 420 C)

# **Ordering Information**

HCS-8300MAD/FS/50\_\_\_\_\_Fully Digital Congress System Main Unit (discussion, voting, 64 CHs, single-mode optical fiber interface, AES/EBU digital input/output, Dante interface, Mixer interface, Mic. group output)

# HCS-8300MB/50 Congress Main Unit



# Features

- Based on ingenious CongressMatrix<sup>™</sup> technology, integrated n×8 audio matrix processor
- Integrated 8 channels group output function, easy to combine/split conference rooms
- Connectable to multi channel audio input or output devices for versatile expansion of the system
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- Dual connection backup via optical fiber and Cat.5 cable between Congress Main Unit and Congress Extension Main Unit
- Connection facility for an additional condenser or dynamic microphone, expanding user's application spectrum
- Integrated USB interfaces for system upgrading and saving system parameters. Convenient for system maintenance
- TCP/IP communication protocol in PC control
- Remote control, remote diagnosis and remote update
- Voting facilities without PC intervention
- Built-in multi-channel intercom facility
- Plug and play for all units
- Excellent immunity to RF interferences from mobile phones and comparable devices
- System power controllable by central control system

The 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 Congress Main Unit brings greater sophistication to conference control. Users are able to 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. In the event of PC failure, the Congress Main Unit will revert to its stand-alone operation mode, enabling the conference to proceed.

The Congress Main Unit also provides power supply to the Congress units (except paperless multimedia congress terminals).

#### Functions

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  - Connectable to a multi channel independent PA system (up to 8 channels). Each channel is supplied with its proper audio signal. The audio signal of each microphone can be routed to any speaker at any ratio, thus "N-1" function can be realized easily: when the microphone in one area is turned on, its audio signal is only routed to all areas except to its own, avoiding acoustic feedback (howl) when audio transmission gain is increased
  - 8 channels group output function
  - Supports combining/separating meeting rooms by split/merge function
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  - Gain and EQ (5 band) of each microphone adjustable separately, fitting the individual orator's voice to achieve perfect speech pickup any time
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  - 2 audio line in or 1 audio line in + 1 microphone input, gain and EQ for each input adjustable separately. +24 V phantom power supply at microphone input, condenser microphone can be connected directly
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- Built-in multi-channel intercom facility

- Connection facility for additional condenser or dynamic microphones, expanding user's application spectrum (HCS-8300MI series audio input interface required)
- If additional contribution units are connected for system expansion, additional Congress Extension Main Units HCS-8300ME or HCS-8300ME/FS are required:
  - 4096 discussion or voting units
  - 378 interpreter units (with maximum 63 booths, each booth with maximum 6 interpreter units)
  - Any quantity of channel selectors
- With the 8 channel digital/analog audio output device (several units cascadable), multi-channel digital/analog audio signals are available as output signals for infrared language distribution system or recording
- Automatic video tracking implementation when cooperating with cameras and video switcher unit; preset positions on PC
- Implemented features in stand-alone mode:
  - Set the number (1/2/3/4) of delegates permitted to speak at the same time
  - Set-up of speaking time limitation (1~240 minutes)
  - Speak mode: OPEN/OVERRIDE/VOICE/APPLY/PTT
    - "OPEN" mode, microphone On/Off button with request-to-speak registration (AUTO)
    - "OVERRIDE" mode, microphone On/Off button control with override of the active microphones (FIFO)
    - "VOICE" mode, acoustic active sensitivity and automatic switch-off time can be adjusted continuously, built-in "flash-on" technology, immediate microphone activation on speaking
    - "APPLY" mode, delegate applies to speak by pressing microphone On/Off button, delegate can speak only when operator or chairman approved his application
    - "PTT" mode, press microphone On/Off button to talk
  - Parliamentary voting (YES/NO/ABSTAIN)
  - 64 (1+63) channels simultaneous interpretation function. Cooperates with channel selector or infrared language distribution system enabling a larger audience to follow the conference
- In combination with the corresponding software modules, more functions can be implemented:
  - Centralized microphone management
  - Multiform voting:
    - For/Against
    - Parliamentary: YES/NO/ABSTAIN
    - Questionnaire: 1/2/3/4/5
    - Audience response: --/-/0/+/++
    - Parliamentary (NPPV): Yes/No/ABSTAIN/NPPV
    - Appraisal:
    - Satisfied (four keys voting:
  - perfectly satisfied/satisfied/basically satisfied/unsatisfied) (three keys voting:
    - satisfied/basically satisfied/unsatisfied)
    - (two keys voting: satisfied/unsatisfied)
    - Qualified (four/three/two keys voting)
    - Competent (four/three/two keys voting)
  - Several sign-in modes: entrance sign-in/seat sign-in
  - Depending on the purchased HCS-8300 software modules, user gains access to additional conference control & management functions

- Advanced TCP/IP communication protocol in PC controlled mode, easy to carry out remote control, remote diagnosis and remote update
- Dual connection backup between Congress Main Unit and Congress Extension Main Unit via optical fiber and Cat.5 cable
- Hot spare dual server structure: another Congress Main Unit is set up as backup Congress Main Unit and connected to the system and takes over automatically if the main Congress Main Unit fails
- Multi-room configuration: Congress Main Unit(s) can be used as Congress Extension Main Unit(s) to carry out multi-room configuration flexibly. Multiple Congress Main Unit configuration allows all connected multiple rooms to be operated either as one unique system or as independent systems
- Integrated real-time clock displays time on the LCD of the interpreter unit to inform interpreter to stay on schedule
- Fully compatible with TAIDEN HCS-4100/50 Fully Digital Congress System: HCS-4100/50 series Congress Units can be connected to the HCS-8300 system (exclusive functions only available with HCS-8300 series contribution units)
- Built-in unit detection facilities: detect the unit's microphone, speaker, LEDs and voting keys prior to start of the meeting
- Automatic recovery facility, supporting "PnP" (plug and play)
- If the PC is broken down, Congress Main Unit enters the stand-alone state automatically, carrying out basic conference control, ensuring the consistency of the conference
- System power controllable by central control system

### **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 electric level adjust knob
- Congress Unit floor audio channel master volume adjust knob

### Interconnections

- Multiple audio in/out interfaces:
  - One balanced XLR-F for microphone input or audio LINE IN
  - Two symmetrical RCA input interfaces for audio LINE IN
  - One balanced XLR-M for audio LINE OUT
  - Two symmetrical RCA output interfaces for audio LINE OUT
  - 6 channels group output on 3-pin 3.81 mm Phoenix connectors
  - One headphone output socket (Ø 3.5 mm) for monitoring channel languages
- 2 x RS232 port for connection to central control system and system diagnosis each
- 1 × RJ45 standard socket for connection to Ethernet interface (LAN)

- 1 x RJ45 standard socket (output) for connection with a Congress Extension Main Unit (EXTENSION)
- 2 × outlet (6P-DIN) trunk-line cable outlet
- 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 Congress Units
- 2 × USB interface at front panel to upgrade system and to save system parameters.

# **Technical Specifications**

# Electrical

Frequency response	30 Hz to 20 kHz
SNR	>96 dBA
Dynamic range	>94 dB
Isolation	>85 dB
THD	<0.05%
Power supplyAC 100 V-120	V 60 Hz or AC 220 V-240 V 50 Hz
Power consumption	200 W
Total supply power	120 W
RS232 connection	$2 \times 9$ -pole Sub-D female socket

# Max. audio inputs

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

### Max. audio outputs

LINE OUT 1	+20 dBu, BAL.
LINE OUT 2	+20 dBu, UNBAL.
GROUP OUT (16)	

# Mechanical

Mounting	Tabletop or mounted in a 19" rack
Dimensions ( $h \times w \times d$ )	
For table use, with feet	99 × 430 × 325 mm
For 19" rack use, with brackets	89 × 478 × 350 mm
Weight	7.8 kg
Color	White (PANTONE 420 C)

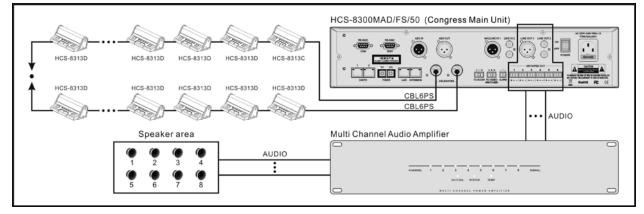
## **Ordering Information**

HCS-8300MB/50 Fully Digital Congress System Main Unit (discussion, voting, 64 CHs, Mic. group output)

# HCS-8300 and HCS-4100/50 Series Congress Main Units Function list

Type No.	Speech	Voting	Graphic LCD	64CHs SI	Mic. group output	Optical fiber interface	Dante interface	Mixer interface	AES/EBU interface
HCS-8300MAD/FS/50	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
HCS-8300MB/50	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$				
HCS-4100MA/FS/52	$\checkmark$	$\checkmark$	$\checkmark$						
HCS-4100MB/52	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$					
HCS-4100MC/52	$\checkmark$	$\checkmark$	$\checkmark$						

# System Connection [discussion+ group output]



# HCS-8300ME/FS Congress Extension Main Unit



The maximum capacity of HCS-8300M series CMU is 60 contribution units. If extra contribution units are needed, HCS-8300ME/FS or HCS-8300ME Congress Extension Main Unit(s) must be added. The outlet connectors of both are identical. Each HCS-8300ME/FS or HCS-8300ME has two EXTENSION IN interfaces used to connect HCS-8300M series CMU or a preceding Congress Extension Main Unit, and an EXTENSION OUT interface for the next Congress Extension Main Unit.

# Functions

- Compliant to IEC 60914 and CE
- Cooperates with HCS-8300M or HCS-4100M/52 series Congress Main Unit for system capacity extension
- Based on TAIDEN company originated MCA-STREAM digital audio processing and transmitting technology
- Sync power on/off with the Congress Main Unit
- In cooperation with the Congress Main Unit and a central control system, central control of the whole system power can be realized

# Interconnections

- 4 × (6P-DIN) trunk-line cable outlet
- 2 x RJ45 standard socket (input) for connection with the Congress Main Unit or with a preceding Congress Extension Main Unit
- 1 x RJ45 standard socket (output) for connection with the next Congress Extension Main Unit
- Equipped with two duplex SC single-mode optical fiber interfaces

# **Technical Specifications**

# Electrical

Power supply	AC 100 V-120 V 60 Hz or AC 220	) V-240 V 50 Hz
Power consumpti	on	450 W

# Mechanical

Mounting	Tabletop or mounted in a 19" rack
Dimensions ( $h \times w \times d$ )	
For table use, with feet	99 × 430 × 325 mm
For 19" rack use, with brackets	89 × 478 × 350 mm
Weight	10.0 kg
Color	White (PANTONE 420 C)

## **Ordering Information**

HCS-8300ME/FS	Fully Digital Congress System Extension
	Main Unit (with 2 single-mode optical
	fiber interfaces, 4 congress unit outlets)

# HCS-8300ME Congress Extension Main Unit



The maximum capacity of HCS-8300M series CMU is 60 contribution units. If extra contribution units are needed, HCS-8300ME/FS or HCS-8300ME Congress Extension Main Unit(s) must be added. The outlet connectors of both are identical. Each HCS-8300ME/FS or HCS-8300ME has two EXTENSION IN interfaces used to connect HCS-8300M series CMU or a preceding Congress Extension Main Unit, and an EXTENSION OUT interface for the next Congress Extension Main Unit.

# **Functions**

- Based on TAIDEN company originated MCA-STREAM digital audio processing and transmitting technology
- Compliant to IEC 60914 and CE
- Cooperates with HCS-8300M or HCS-4100M/52 series Congress Main Unit for system capacity extension
- Sync power on/off with the Congress Main Unit
- In cooperation with the Congress Main Unit and a central control system, central control of the whole system power can be realized

### Interconnections

- 4 × 6P-DIN trunk-line cable outlet
- 2 x RJ45 standard socket (input) for connection with the Congress Main Unit or with a preceding Congress Extension Main Unit
- 1 x RJ45 standard socket (output) for connection with the next Congress Extension Main Unit

# **Technical Specifications**

# Electrical

Power supply	AC 100 V-120 V 60 Hz or AC 2	20 V-240 V 50 Hz
Power consump	tion	450 W

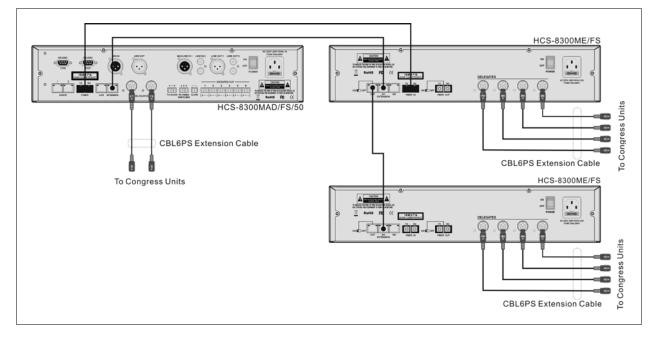
# Mechanical

Mounting	Tabletop or mounted in a 19" rack
Dimensions ( $h \times w \times d$ )	
For table use, with feet	99 × 430 × 325 mm
For 19" rack use, with brackets	89 × 478 × 350 mm
Weight	10.0 kg
Color	White (PANTONE 420 C)

# **Ordering Information**

HCS-8300ME Fully Digital Congress System Extension Main Unit (4 congress unit outlets)

# **System Connection**



# Low power consumption design

All congress units of HCS-8300 and HCS-4100/50 series (except paperless multimedia congress terminals) are supplied by the main unit's 6P-DIN interface. Since the power capacity of the 6P-DIN interface is limited, it must be ensured during installation that the added up values of a) the total power consumption of all congress units connected in each path and b) the power loss in connection cables do in no case exceed the maximum possible value delivered by each 6P-DIN interface. Otherwise the system will not work properly or automatic protection will be triggered. Refer to the table 1 for the max. connection number of congress units.

# Note:

- The total added up cable length from the main unit to the furthest congress unit shall not exceed 250 m.
- Any connection cable length should be less than 80 meters (incl. the cable between the main unit and the next congress unit and the cable between any two sequential congress units), otherwise it will affect the signal quality. In case the length exceeds 80 m, cable splitter HCS-4352T/50 is needed; and the length of an individual extension cable following HCS-4352T/50 must not exceed 70 meters.
- The extension cable between the main unit and the first congress unit is always carrying the maximum current, induced by the totality of the congress units connected to the dedicated socket. Due to Ohm's law the available supply voltage at the opposite end of this cable is lower than on the socket. This voltage drop is dependent on the cable length and the current. The number of overall connectable congress units to the main unit is therefore a function of the cable length and vice versa. However, when the cable is connected between the last two congress units, the influence is insignificant.

		The extension cable length between the CMU(EMU) and the first Congress Unit connected to the socket					
Туре	Type No.	20 m	40 m	60 m	80 m	80 m + HCS-4352T/50 +70 m	80 m + HCS-4352T/50 + 70 m + HCS-4352T/50 + 70 m
Equipped with E-ink Nameplate,	HCS-48U7/U8/U9/U10	11	10	9	8	5	
speaker and microphone	/4886N+HCS-1080	11	10	9	0	5	-
Equipped with 256×64 LCD, speaker and microphone	HCS-4385U/50	14	12	11	9	6	4
Equipped with 7.2" LCD,	HCS-8385/70	8	8	7	7	5	4
	2 HCS-8385/70 +	3	3	2	2	1	
	HCS-8385HDMI	0	0	-	-	•	
speaker and microphone	3 HCS-8385/70 +	2	2	1	1	-	
	HCS-8385HDMI						
	4 HCS-8385/70 +	2	2	1	1	-	-
	HCS-8385HDMI						
	HCS-4886						
Equipped with 256×32 LCD, speaker and microphone	HCS-4887					8	
	HCS-48U7	40	40	40			5
	HCS-48U8	16	13	12	11		
	HCS-48U9						
	HCS-48U10						
Equipped with OLED and microphone	HCS-48U6						
	HCS-4338N/50						
	HCS-4860/50						
	HCS-4865/50						
	HCS-4866/50	22	19	17	15	9	6
Equipped with speaker and	HCS-4888						
microphone, without 256×32	HCS-4330/50						
LCD	HCS-4332/50 HCS-4326/50						
Equipped with 256-221 CD	HCS-4320/50						
Equipped with 256×32 LCD, without speaker nor microphone	HCS-4368/50	30	26	24	22	15	10
without speaker nor microphone	HCS-8313						
Equipped with microphone,	HCS-8314						
without 256×32 LCD nor	HCS-8315	30	27	24	22	17	12
speaker	HCS-4325/50	50	21	27	22		12
speaker	HCS-4326/50						
Only equipped with retractable	HCS-4851/50	14	13	13	12	7	4
microphone array						icrophone array: 6	
Without 256×32 LCD, speaker				.,			
nor microphone	HCS-4368SDT/50	30	29	26	24	19	14
<b>_</b>	HCS-8335	6	6	5	4	-	-
Equipped with 10" LCD	HCS-8336	_	_				
	HCS-8335-NP	5	5	4	3	-	-
	HCS-4340A/50	10	9	9	9	7	6
HCS-4340/50 series	HCS-4340DT/50						
Multi-function connector	HCS-4340B/50	9	8	8	8	6	5
	HCS-4340UN/52	11	10	9	8	5	-
	HCS-4340U/50	16	13	12	11	8	5
		42	38	34	30	-	-
E-ink Nameplate	HCS-1080/50	Note: the	e connecti	on numbe	r of HCS-	1080T is no more that	n 15 for each 6P-DIN interfac

 Table 1
 Quick lookup table for the max. number of connected congress units

# HCS-8300MES Congress Extension Unit



## **Functions**

- Based on TAIDEN company originated MCA-STREAM digital audio processing and transmitting technology
- Compliant to IEC 60914 and CE
- Cooperates with HCS-8300M or HCS-4100M/52 series Congress Main Unit for system capacity extension
- Sync power on/off with the Congress Main Unit
- In cooperation with the Congress Main Unit and a central control system, central control of the whole system power can be realized

#### Interconnections

- 3 × 6P-DIN trunk-line cable outlet, connection cable length should be less than 80 meters
- 1 x 6P-DIN socket (input) for connection with the Congress Main Unit or with a preceding Congress Extension Main Unit, connection cable length should be less than 80 meters
- 1 x 6P-DIN socket (output) for connection with the next HCS-8300MES, connection cable length should be less than 80 meters

### **Technical Specifications**

## Electrical

Power supply	AC 100 V - 240 V, 50 Hz / 60 Hz
Power consumption	150 W

### Mechanical

Dimensions (h x w x d	)42 × 296 × 133 mm
Weight	1.5 kg
Color	Black (PANTONE 419 C)

### **Ordering Information**

HCS-8300MES\_\_\_\_\_Fully Digital Congress System Extension Unit (3 congress unit outlets)

# HCS-8300MCLS Loop switcher and Cabinet installation accessory



#### **Functions**

- For "Closed Loop Daisy Chain" connection
- Please set main unit LCD menu "Close Loop Setting -> HCS-8300MCLS AS Loop Switcher" as "Yes"
- Automatic judgment of the opening or closing of a loop
- Loop switcher open: open indicator on (Red)
- Loop switcher closed: close indicator on (Green)
- When the loop switcher is used, the number of CMU/EMU loads is halved
- Mounting bracket (mounted in a 19" rack) can be choosen

#### Interconnections

- 1.5 m cable with 6P-DIN plug to connect to the primary CMU or EMU
- 0.6 m cable with 6P-DIN plug to connect to the secondary CMU or the congress unit

### **Technical Specifications**

#### Mechanical

Dimensions (h × w × d)	68 × 100 × 40 mm
Weight	347 g
Color	Black (PANTONE 419 C)

#### **Ordering Information**

HCS-8300MCLS Loop switcher HCS-8300MCLS Cabinet installation accessory

4 HCS-8300MCLS Loop switchers can be installed

Table 2	Quick lookup table of H	CS-8300MES	oad capability		
Туре	Туре No.	The extension cable length between the HCS-8300MES and the first Congress Unit connected to the socket			
		20 m	40 m	60 m	80 m
Equipped with E-ink Nameplate, speaker and microphone	HCS-48U7/U8/U9/U10/ 4886N+HCS-1080	8	7	6	5
Equipped with 256×64 LCD, speaker and microphone	HCS-4385U/50	10	9	8	7
Equipped with 7.2" LCD,	HCS-8385/70	7	7	6	6
	2 HCS-8385/70 + HCS-8385HDMI	3	3	2	2
speaker and microphone	3 HCS-8385/70 + HCS-8385HDMI	2	2	1	1
	4 HCS-8385/70 + HCS-8385HDMI	2	2	1	1
Equipped with 256×32 LCD, speaker and microphone	HCS-4886 HCS-4887 HCS-48U7 HCS-48U8 HCS-48U9 HCS-48U10	12	11	10	9
Equipped with OLED and microphone	HCS-48U6 HCS-4338N/50 HCS-4860/50 HCS-4865/50 HCS-4866/50				
Equipped with speaker and microphone, without 256x32 LCD	HCS-4888 HCS-4330/50 HCS-4332/50 HCS-4326/50	18	16	14	12
Equipped with 256×32 LCD, without speaker nor microphone HCS-4368/50					
Equipped with microphone, without 256x32 LCD nor speaker	HCS-8313 HCS-8314 HCS-8315 HCS-4325/50 HCS-4326/50	24	22	20	18
Without 256x32 LCD, speaker nor microphone	HCS-4368SDT/50				
Equipped with 10" LCD	HCS-8335 HCS-8336	5	5	4	3
	HCS-8335-NP	4	4	3	2
	HCS-4340A/50 HCS-4340DT/50	9	8	8	8
HCS-4340/50 series	HCS-4340B/50	8	7	7	7
Multi-function connector	HCS-4340UN/52	8	7	6	5
	HCS-4340U/50	12	11	10	9
					-
E-ink Nameplate	HCS-1080/50		27 ection number of H DIN interface.	27 ICS-1080T is no	25 more than 15 for

Table 2 Quick	ookup table of HCS-8300MES load capability	