# HCS-5100MAF/04N 4 CHs Digital Infrared Transmitter



The transmitter is the heart of the HCS-5100 system. HCS-5100MAF/04N accepts and modulates up to 4 unbalanced audio signals onto carrier waves which are transmitted to radiators located in the room. It can either be connected to HCS-8300M congress main unit and HCS-4100M/50 congress main unit directly, or be used as a stand-alone system for distributing external audio signals. HCS-5100MAF/04N is suitable for either tabletop or 19-inch rack mounting using. Four feet (for tabletop) and two brackets (for rack mounting) are supplied.

#### Features

- Compliant to IEC 61603-7 and IEC 60914
- Compatible with any other IR simultaneous interpretation system compliant to IEC 61603-7
- DQPSK digital modulation/demodulation technology
- Capable of distributing a maximum of 4 audio channels
- Conference hall privacy; the congress venue itself acts as a barrier to infrared signals escaping and being overheard, as infrared is unable to pass through opaque objects such as walls
- Suitable for various kinds (small/medium/large international) of conference halls and outdoor venues
- Transmitting in 2~8 MHz frequency band eliminates disturbance from high frequency lighting systems
- Each audio channel can be assigned a language name for easy identification
- Flexible configuration of channels and channel quality modes:
  - Mono, standard quality, maximum 4 channels
  - Mono, perfect quality, maximum 2 channels
  - Stereo, standard quality, maximum 2 channels
  - Stereo, perfect quality, maximum 1 channel
- Adjustable sensitivity for each input to enable fine tuning of audio levels
- Automatic synchronization to the number of channels in use by the system
- "Bypass" mode for distribution of signals from another transmitter allows multiple rooms to be used
- Combination mode: two N channel IR transmitters can be incorporated to make up a 2N channel system, at most 8 channels
- During adjournment, music mode can be used to feed music to all channels
- Independent test facility: self-generates diverse frequencies for system debugging
- Built-in infrared emitters in transmitter for audio monitoring in operating room
- With optical fiber interface, DCS interface and 6P-DIN connector for connecting to HCS-8300M or HCS-4100M/50 Congress Main Unit directly, moreover, with 4 interpretation output channels for recording
- Universal mains power facility allows worldwide use

#### **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
- Monitor channel select knob
- Monitor volume control knob
- Mini IR radiators

- Ø 3.5 mm jack for stereo monitor earphone
- 2 female XLR connectors for external audio inputs to connect auxiliary balanced audio signals such as music, floor language or emergency audio signal
- 4 audio signal output connectors (RCA sockets) for output DCS multi-channel audio
- 4 audio signal input connectors (RCA sockets) to connect external unbalanced audio input signals
- 6 BNC connectors for output HF signal to radiator. To each connector, up to 30 radiators can be connected
- 1 BNC connector for receiving HF signal from another transmitter
- 6P-DIN connector for connecting to HCS-4385K2/50 Interpreter Unit or HCS-8300M/HCS-4100M Congress Main Unit
- Optical fiber interface and DCS interface (RJ45 standard socket) for connecting to HCS-8300M/HCS-4100M Congress Main Unit
- 2 × USB interfaces to upgrade system and to save system parameters.
- Ethernet and RS-232 ports for connection to computer
- Emergency signal interface: when the public emergency system is active, alarm signal can be fed to all channels automatically
- Extension interface
- Power supply socket

#### **System Specifications**

Modulation	DQPSK, according to IEC 61603-7
Modulation frequency	
Carriers 0 to 5	2 to 6 MHz, according to IEC 61603-7
Carriers 6 and 7	up to 8 MHz
Frequency response	20 Hz to 10 kHz (-3dB) at standard quality;
	20 Hz to 20 kHz (-3dB) at perfect quality
THD at 1 kHz	<0.05%
Isolation	>80 dB
Dynamic range	>80 dB

Weighted SNR \_\_\_\_\_\_>80 dBA

#### Electrical

Unbalanced audio inputs	-12 to +12 dBV nominal
Balanced audio inputs	-6 to +18 dBV nominal
Emergency switch connector	Emergency control input
Headphone output	32 Ohm to 2 kOhm
HF inputNominal	1 Vpp, minimum 10 mVpp, 75 Ohm
HF output	1 Vpp, 6 V DC, 75 Ohm
Mains voltage	110 to 260 V, 50 to 60 Hz
Power consumption	Maximum 55 W
Power consumption (standby)	29 W

### Mechanical

MountingBrackets for 19" rack mounting or	fixing to a table top;
detachable feet for free-standing	use on a table top
Dimensions h x w x d (mm)	99 × 430 × 325
Weight	7.5 kg
Color	White

# **Ordering Information**

HCS-5100MAF/04N\_\_\_\_\_4 CHs Digital Infrared Transmitter (compatible with HCS-4385K2/50 or HCS-4100M/HCS-8300M, optical fiber interface)

# HCS-5100MAF/08N 8 CHs Digital Infrared Transmitter



The transmitter is the heart of the HCS-5100 system. HCS-5100MAF/08N accepts and modulates up to 8 unbalanced audio signals onto carrier waves which are transmitted to radiators located in the room. It can either be connected to HCS-8300M congress main unit and HCS-4100M/50 congress main unit directly, or be used as a stand-alone system for distributing external audio signals. HCS-5100MAF/08N is suitable for either tabletop or 19-inch rack mounting using. Four feet (for tabletop) and two brackets (for rack mounting) are supplied.

#### Features

- Compliant to IEC 61603-7 and IEC 60914
- Compatible with any other IR simultaneous interpretation system compliant to IEC 61603-7
- DQPSK digital modulation/demodulation technology
- Capable of distributing a maximum of 8 audio channels
- Conference hall privacy; the congress venue itself acts as a barrier to infrared signals escaping and being overheard, as infrared is unable to pass through opaque objects such as walls
- Suitable for various kinds (small/medium/large international) of conference halls and outdoor venues
- Transmitting in 2~8 MHz frequency band eliminates disturbance from high frequency lighting systems
- Each audio channel can be assigned a language name for easy identification
- Flexible configuration of channels and channel quality modes:
  - Mono, standard quality, maximum 8 channels
  - Mono, perfect quality, maximum 4 channels
  - Stereo, standard quality, maximum 4 channels
  - Stereo, perfect quality, maximum 2 channels
- Adjustable sensitivity for each input to enable fine tuning of audio levels
- Automatic synchronization to the number of channels in use by the system
- "Bypass" mode for distribution of signals from another transmitter allows multiple rooms to be used
- Combination mode: two N channel IR transmitters can be incorporated to make up a 2N channel system, at most 16 channels
- During adjournment, music mode can be used to feed music to all channels
- Independent test facility: self-generates diverse frequencies for system debugging
- Built-in infrared emitters in transmitter for audio monitoring in operating room
- With optical fiber interface, DCS interface and 6P-DIN connector for connecting to HCS-8300M or HCS-4100M/50 Congress Main Unit directly, moreover, with 8 interpretation output channels for recording
- Universal mains power facility allows worldwide use

#### **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
- Monitor channel select knob
- Monitor volume control knob
- Mini IR radiators

- Ø 3.5 mm jack for stereo monitor earphone
- 2 female XLR connectors for external audio inputs to connect auxiliary balanced audio signals such as music, floor language or emergency audio signal
- 8 audio signal output connectors (RCA sockets) for output DCS multi-channel audio
- 8 audio signal input connectors (RCA sockets) to connect external unbalanced audio input signals
- 6 BNC connectors for output HF signal to radiator. To each connector, up to 30 radiators can be connected
- 1 BNC connector for receiving HF signal from another transmitter
- 6P-DIN connector for connecting to HCS-4385K2/50 Interpreter Unit or HCS-8300M/HCS-4100M Congress Main Unit
- Optical fiber interface and DCS interface (RJ45 standard socket) for connecting to HCS-8300M/HCS-4100M Congress Main Unit
- 2 × USB interfaces to upgrade system and to save system parameters.
- Ethernet and RS-232 ports for connection to computer
- Emergency signal interface: when the public emergency system is active, alarm signal can be fed to all channels automatically
- Extension interface
- Power supply socket

#### **System Specifications**

Modulation	DQPSK, according to IEC 61603-7
Modulation frequency	
Carriers 0 to 5	2 to 6 MHz, according to IEC 61603-7
Carriers 6 and 7	up to 8 MHz
Frequency response	20 Hz to 10 kHz (-3dB) at standard quality;
	20 Hz to 20 kHz (-3dB) at perfect quality
THD at 1 kHz	<0.05%
	>80 dB
Dynamic range	>80 dB

Weighted SNR \_\_\_\_\_\_>80 dBA

#### Electrical

Unbalanced audio inputs	-12 to +12 dBV nominal
Balanced audio inputs	-6 to +18 dBV nominal
Emergency switch connector	Emergency control input
Headphone output	32 Ohm to 2 kOhm
HF inputNominal	1 Vpp, minimum 10 mVpp, 75 Ohm
HF output	1 Vpp, 6 V DC, 75 Ohm
Mains voltage	110 to 260 V, 50 to 60 Hz
Power consumption	Maximum 55 W
Power consumption (standby)	29 W

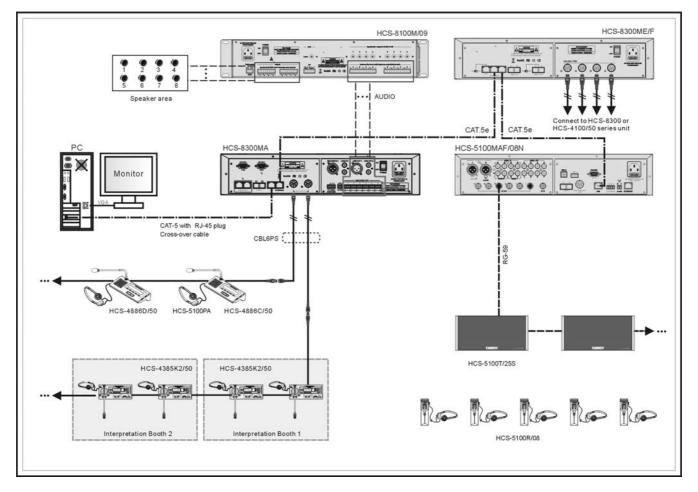
### Mechanical

MountingBrackets for 19" rack mounting or	fixing to a table top;
detachable feet for free-standing	use on a table top
Dimensions h x w x d (mm)	99 × 430 × 325
Weight	7.5 kg
Color	White

### **Ordering Information**

HCS-5100MAF/08N\_\_\_\_\_8 CHs Digital Infrared Transmitter (compatible with HCS-4385K2/50 or HCS-4100M/HCS-8300M, optical fiber interface)

# **System Connection**



# HCS-5100MA/04N 4 CHs Digital Infrared Transmitter



The transmitter is the heart of the HCS-5100 system. HCS-5100MA/04N accepts and modulates up to 4 unbalanced audio signals onto carrier waves which are transmitted to radiators located in the room. It can either be connected to HCS-8300M congress main unit and HCS-4100M/50 congress main unit directly, or be used as a stand-alone system for distributing external audio signals. HCS-5100MA/04N is suitable for either tabletop or 19-inch rack mounting using. Four feet (for tabletop) and two brackets (for rack mounting) are supplied.

#### Features

- Compliant to IEC 61603-7 and IEC 60914
- Compatible with any other IR simultaneous interpretation system compliant to IEC 61603-7
- DQPSK digital modulation/demodulation technology
- Capable of distributing a maximum of 4 audio channels
- Conference hall privacy; the congress venue itself acts as a barrier to infrared signals escaping and being overheard, as infrared is unable to pass through opaque objects such as walls
- Suitable for various kinds (small/medium/large international) of conference halls and outdoor venues
- Transmitting in 2~8 MHz frequency band eliminates disturbance from high frequency lighting systems
- Each audio channel can be assigned a language name for easy identification
- Flexible configuration of channels and channel quality modes:
  - Mono, standard quality, maximum 4 channels
  - Mono, perfect quality, maximum 2 channels
  - Stereo, standard quality, maximum 2 channels
  - Stereo, perfect quality, maximum 1 channel
- Adjustable sensitivity for each input to enable fine tuning of audio levels
- Automatic synchronization to the number of channels in use by the system
- "Bypass" mode for distribution of signals from another transmitter allows multiple rooms to be used
- Combination mode: two N channel IR transmitters can be incorporated to make up a 2N channel system, at most 8 channels
- During adjournment, music mode can be used to feed music to all channels
- Independent test facility: self-generates diverse frequencies for system debugging
- Built-in infrared emitters in transmitter for audio monitoring in operating room
- With DCS interfaces and 6P-DIN connector for connecting to HCS-8300M or HCS-4100M/50 Congress Main Unit directly, moreover, with 4 interpretation output channels for recording
- Universal mains power facility allows worldwide use

#### **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
- Monitor channel select knob
- Monitor volume control knob
- Mini IR radiators

- Ø 3.5 mm jack for stereo monitor earphone
- 2 female XLR connectors for external audio inputs to connect auxiliary balanced audio signals such as music, floor language or emergency audio signal
- 4 audio signal output connectors (RCA sockets) for output DCS multi-channel audio
- 4 audio signal input connectors (RCA sockets) to connect external unbalanced audio input signals
- 6 BNC connectors for output HF signal to radiator. To each connector, up to 30 radiators can be connected
- 1 BNC connector for receiving HF signal from another transmitter
- 6P-DIN connector for connecting to HCS-4385K2/50 Interpreter Unit or HCS-8300M/HCS-4100M Congress Main Unit
- DCS interfaces (RJ45 standard sockets) for connecting to HCS-8300M/HCS-4100M Congress Main Unit
- 2 × USB interfaces to upgrade system and to save system parameters.
- Ethernet and RS-232 ports for connection to computer
- Emergency signal interface: when the public emergency system is active, alarm signal can be fed to all channels automatically
- Extension interface
- Power supply socket

### **System Specifications**

Modulation	DQPSK, according to IEC 61603-7
Modulation frequency	
Carriers 0 to 5	2 to 6 MHz, according to IEC 61603-7
Carriers 6 and 7	up to 8 MHz
Frequency response	_20 Hz to 10 kHz (-3dB) at standard quality;
	20 Hz to 20 kHz (-3dB) at perfect quality
THD at 1 kHz	<0.05%

Isolation	>80 dB
Dynamic range	>80 dB
Weighted SNR	

# Electrical

Unbalanced audio inputs	-12 to +12 dBV nominal
Balanced audio inputs	-6 to +18 dBV nominal
Emergency switch connector	Emergency control input
Headphone output	32 Ohm to 2 kOhm
HF inputNominal	1 Vpp, minimum 10 mVpp, 75 Ohm
HF output	1 Vpp, 6 V DC, 75 Ohm
Mains voltage	110 to 260 V, 50 to 60 Hz
Power consumption	Maximum 55 W
Power consumption (standby)	29 W

## Mechanical

MountingBrackets for 19" rack mounting or	fixing to a table top;
detachable feet for free-standing	use on a table top
Dimensions h x w x d (mm)	99 × 430 × 325
Weight	7.5 kg
Color	White

### **Ordering Information**

HCS-5100MA/04N\_\_\_\_\_4 CHs Digital Infrared Transmitter (compatible with HCS-4385K2/50 or HCS-4100M/HCS-8300M)

# HCS-5100MA/08N 8 CHs Digital Infrared Transmitter



The transmitter is the heart of the HCS-5100 system. HCS-5100MA/08N accepts and modulates up to 8 unbalanced audio signals onto carrier waves which are transmitted to radiators located in the room. It can either be connected to HCS-8300M congress main unit and HCS-4100M/50 congress main unit directly, or be used as a stand-alone system for distributing external audio signals. HCS-5100MA/08N is suitable for either tabletop or 19-inch rack mounting using. Four feet (for tabletop) and two brackets (for rack mounting) are supplied.

#### Features

- Compliant to IEC 61603-7 and IEC 60914
- Compatible with any other IR simultaneous interpretation system compliant to IEC 61603-7
- DQPSK digital modulation/demodulation technology
- Capable of distributing a maximum of 8 audio channels
- Conference hall privacy; the congress venue itself acts as a barrier to infrared signals escaping and being overheard, as infrared is unable to pass through opaque objects such as walls
- Suitable for various kinds (small/medium/large international) of conference halls and outdoor venues
- Transmitting in 2~8 MHz frequency band eliminates disturbance from high frequency lighting systems
- Each audio channel can be assigned a language name for easy identification
- Flexible configuration of channels and channel quality modes:
  - Mono, standard quality, maximum 8 channels
  - Mono, perfect quality, maximum 4 channels
  - Stereo, standard quality, maximum 4 channels
  - Stereo, perfect quality, maximum 2 channels
- Adjustable sensitivity for each input to enable fine tuning of audio levels
- Automatic synchronization to the number of channels in use by the system
- "Bypass" mode for distribution of signals from another transmitter allows multiple rooms to be used
- Combination mode: two N channel IR transmitters can be incorporated to make up a 2N channel system, at most 16 channels
- During adjournment, music mode can be used to feed music to all channels
- Independent test facility: self-generates diverse frequencies for system debugging
- Built-in infrared emitters in transmitter for audio monitoring in operating room
- With DCS interfaces and 6P-DIN connector for connecting to HCS-8300M or HCS-4100M/50 Congress Main Unit directly, moreover, with 8 interpretation output channels for recording
- Universal mains power facility allows worldwide use

#### **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
- Monitor channel select knob
- Monitor volume control knob
- Mini IR radiators

- Ø 3.5 mm jack for stereo monitor earphone
- 2 female XLR connectors for external audio inputs to connect auxiliary balanced audio signals such as music, floor language or emergency audio signal
- 8 audio signal output connectors (RCA sockets) for output DCS multi-channel audio
- 8 audio signal input connectors (RCA sockets) to connect external unbalanced audio input signals
- 6 BNC connectors for output HF signal to radiator. To each connector, up to 30 radiators can be connected
- 1 BNC connector for receiving HF signal from another transmitter
- 6P-DIN connector for connecting to HCS-4385K2/50 Interpreter Unit or HCS-8300M/HCS-4100M Congress Main Unit
- DCS interfaces (RJ45 standard sockets) for connecting to HCS-8300M/HCS-4100M Congress Main Unit
- 2 × USB interfaces to upgrade system and to save system parameters.
- Ethernet and RS-232 ports for connection to computer
- Emergency signal interface: when the public emergency system is active, alarm signal can be fed to all channels automatically
- Extension interface
- Power supply socket

### **System Specifications**

Modulation	DQPSK, according to IEC 61603-7
Modulation frequency	
Carriers 0 to 5	2 to 6 MHz, according to IEC 61603-7
Carriers 6 and 7	up to 8 MHz
Frequency response	20 Hz to 10 kHz (-3dB) at standard quality;
	20 Hz to 20 kHz (-3dB) at perfect quality
THD at 1 kHz	<0.05%

Isolation	>80 dB
Dynamic range	<u>&gt;80 dB</u>
Weighted SNR	280 dBV

# Electrical

Unbalanced audio inputs	-12 to +12 dBV nominal
Balanced audio inputs	-6 to +18 dBV nominal
Emergency switch connect	ctorEmergency control input
Headphone output	32 Ohm to 2 kOhm
HF inputNo	minal 1 Vpp, minimum 10 mVpp, 75 Ohm
HF output	1 Vpp, 6 V DC, 75 Ohm
Mains voltage	110 to 260 V, 50 to 60 Hz
Power consumption	Maximum 55 W
Power consumption (stand	dby)29 W

### Mechanical

MountingBrackets for 19" rack mounting or	fixing to a table top;
detachable feet for free-standing	use on a table top
Dimensions h x w x d (mm)	99 × 430 × 325
Weight	7.5 kg
Color	White

### **Ordering Information**

HCS-5100MA/08N\_\_\_\_\_8 CHs Digital Infrared Transmitter (compatible with HCS-4385K2/50 or HCS-4100M/HCS-8300M)

# HCS-5100MC/04N 4 CHs Digital Infrared Transmitter



The transmitter is the heart of the HCS-5100 system. HCS-5100MC/04N accepts and modulates up to 4 unbalanced audio signals onto carrier waves which are transmitted to radiators located in the room. It can either be connected to HCS-8300M congress main unit and HCS-4100M/50 congress main unit directly, or be used as a stand-alone system for distributing external audio signals. HCS-5100MC/04N is suitable for either tabletop or 19-inch rack mounting using. Four feet (for tabletop) and two brackets (for rack mounting) are supplied.

#### Features

- Compliant to IEC 61603-7 and IEC 60914
- Compatible with any other IR simultaneous interpretation system compliant to IEC 61603-7
- DQPSK digital modulation/demodulation technology
- Capable of distributing a maximum of 4 audio channels
- Conference hall privacy; the congress venue itself acts as a barrier to infrared signals escaping and being overheard, as infrared is unable to pass through opaque objects such as walls
- Suitable for various kinds (small/medium/large international) of conference halls and outdoor venues
- Transmitting in 2~8 MHz frequency band eliminates disturbance from high frequency lighting systems
- Each audio channel can be assigned a language name for easy identification
- Flexible configuration of channels and channel quality modes:
  - Mono, standard quality, maximum 4 channels
  - \* Mono, perfect quality, maximum 2 channels
  - Stereo, standard quality, maximum 2 channels
  - Stereo, perfect quality, maximum 1 channel
- Adjustable sensitivity for each input to enable fine tuning of audio levels
- Automatic synchronization to the number of channels in use by the system
- "Bypass" mode for distribution of signals from another transmitter allows multiple rooms to be used
- Combination mode: two N channel IR transmitters can be incorporated to make up a 2N channel system, at most 8 channels
- During adjournment, music mode can be used to feed music to all channels
- Independent test facility: self-generates diverse frequencies for system debugging
- Built-in infrared emitters in transmitter for audio monitoring in operating room
- Universal mains power facility allows worldwide use

#### **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
- Monitor channel select knob
- Monitor volume control knob
- Mini IR radiators

- Ø 3.5 mm jack for stereo monitor earphone
- 2 female XLR connectors for external audio inputs to connect auxiliary balanced audio signals such as music, floor language or emergency audio signal
- 4 audio signal input connectors (RCA sockets) to connect external unbalanced audio input signals
- 6 BNC connectors for output HF signal to radiator. To each connector, up to 30 radiators can be connected
- 1 BNC connector for receiving HF signal from another transmitter
- 2 × USB interfaces to upgrade system and to save system parameters.
- Ethernet and RS-232 ports for connection to computer
- Emergency signal interface: when the public emergency system is active, alarm signal can be fed to all channels automatically
- Extension interface
- Power supply socket

# System Specifications

Modulation	DQPSK, according to IEC 61603-7
Modulation frequency	
Carriers 0 to 5	2 to 6 MHz, according to IEC 61603-7
Carriers 6 and 7	up to 8 MHz
Frequency response	20 Hz to 10 kHz (-3dB) at standard quality;
	20 Hz to 20 kHz (-3dB) at perfect quality
THD at 1 kHz	<0.05%
Isolation	>80 dB
Dynamic range	>80 dB
	>80 dBA

# Electrical

Unbalanced audio inputs	-12 to +12 dBV nominal
Balanced audio inputs	-6 to +18 dBV nominal
Emergency switch connector	Emergency control input
Headphone output	32 Ohm to 2 kOhm
HF inputNominal 1	Vpp, minimum 10 mVpp, 75 Ohm
HF output	1 Vpp, 6 V DC, 75 Ohm
Mains voltage	110 to 260 V, 50 to 60 Hz
Power consumption	Maximum 55 W
Power consumption (standby)	29 W

## Mechanical

MountingBrackets for 19" rack mounting or	fixing to a table top;
detachable feet for free-standing	use on a table top
Dimensions h x w x d (mm)	99 × 430 × 325
Weight	7.5 kg
Color	White

### **Ordering Information**

HCS-5100MC/04N\_\_\_\_\_4 CHs Digital Infrared Transmitter

# HCS-5100MC/08N 8 CHs Digital Infrared Transmitter



The transmitter is the heart of the HCS-5100 system. HCS-5100MC/08N accepts and modulates up to 8 unbalanced audio signals onto carrier waves which are transmitted to radiators located in the room. It can either be connected to HCS-8300M congress main unit and HCS-4100M/50 congress main unit through HCS-8300MO series audio output device, or be used as a stand-alone system for distributing external audio signals. HCS-5100MC/08N is suitable for either tabletop or 19-inch rack mounting using. Four feet (for tabletop) and two brackets (for rack mounting) are supplied.

#### Features

- Compliant to IEC 61603-7 and IEC 60914
- Compatible with any other IR simultaneous interpretation system compliant to IEC 61603-7
- DQPSK digital modulation/demodulation technology
- Capable of distributing a maximum of 8 audio channels
- Conference hall privacy; the congress venue itself acts as a barrier to infrared signals escaping and being overheard, as infrared is unable to pass through opaque objects such as walls
- Suitable for various kinds (small/medium/large international) of conference halls and outdoor venues
- Transmitting in 2~8 MHz frequency band eliminates disturbance from high frequency lighting systems
- Each audio channel can be assigned a language name for easy identification
- Flexible configuration of channels and channel quality modes:
  - Mono, standard quality, maximum 8 channels
  - Mono, perfect quality, maximum 4 channels
  - Stereo, standard quality, maximum 4 channels
  - Stereo, perfect quality, maximum 2 channels
- Adjustable sensitivity for each input to enable fine tuning of audio levels
- Automatic synchronization to the number of channels in use by the system
- "Bypass" mode for distribution of signals from another transmitter allows multiple rooms to be used
- Combination mode: two N channel IR transmitters can be incorporated to make up a 2N channel system, at most 16 channels
- During adjournment, music mode can be used to feed music to all channels
- Independent test facility: self-generates diverse frequencies for system debugging
- Built-in infrared emitters in transmitter for audio monitoring in operating room
- Universal mains power facility allows worldwide use

#### **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
- Monitor channel select knob
- Monitor volume control knob
- Mini IR radiators

- Ø 3.5 mm jack for stereo monitor earphone
- 2 female XLR connectors for external audio inputs to connect auxiliary balanced audio signals such as music, floor language or emergency audio signal
- 8 audio signal input connectors (RCA sockets) to connect external unbalanced audio input signals
- 6 BNC connectors for output HF signal to radiator. To each connector, up to 30 radiators can be connected
- 1 BNC connector for receiving HF signal from another transmitter
- 2 × USB interfaces to upgrade system and to save system parameters.
- Ethernet and RS-232 ports for connection to computer
- Emergency signal interface: when the public emergency system is active, alarm signal can be fed to all channels automatically
- Extension interface
- Power supply socket

# System Specifications

Modulation	DQPSK, according to IEC 61603-7
Modulation frequency	
Carriers 0 to 5	2 to 6 MHz, according to IEC 61603-7
Carriers 6 and 7	up to 8 MHz
Frequency response	20 Hz to 10 kHz (-3dB) at standard quality;
	20 Hz to 20 kHz (-3dB) at perfect quality
THD at 1 kHz	<0.05%
Isolation	>80 dB
Dynamic range	>80 dB
Weighted SNR	>80 dBA
	-12 dBV ~ +12 dBV (adjustable)

#### Electrical

Unbalanced audio inputs	-12 to +12 dBV nominal
Balanced audio inputs	-6 to +18 dBV nominal
Emergency switch conne	ctorEmergency control input
Headphone output	32 Ohm to 2 kOhm
HF inputN	ominal 1 Vpp, minimum 10 mVpp, 75 Ohm
HF output	1 Vpp, 6 V DC, 75 Ohm
Mains voltage	110 to 260 V, 50 to 60 Hz
Power consumption	Maximum 55 W
Power consumption (star	dby)29 W

#### **Mechanical**

MountingBrackets for 19" rack mounting or	fixing to a table top;	
detachable feet for free-standing use on a table top		
Dimensions h x w x d (mm)	99 × 430 × 325	
Weight	7.5 kg	
Color	White	

## **Ordering Information**

HCS-5100MC/08N\_\_\_\_\_8 CHs Digital Infrared Transmitter

# HCS-5100MC/16N 16 CHs Digital Infrared Transmitter



The transmitter is the heart of the HCS-5100 system. HCS-5100MC/16N accepts and modulates up to 32 unbalanced audio signals onto carrier waves which are transmitted to radiators located in the room. It can either be connected to HCS-8300M congress main unit and HCS-4100M/50 congress main unit through HCS-8300MO series audio output device, or be used as a stand-alone system for distributing external audio signals. HCS-5100MC/16N is suitable for either tabletop or 19-inch rack mounting using. Four feet (for tabletop) and two brackets (for rack mounting) are supplied.

#### Features

- Compliant to IEC 61603-7 and IEC 60914
- Compatible with any other IR simultaneous interpretation system compliant to IEC 61603-7
- DQPSK digital modulation/demodulation technology
- Capable of distributing a maximum of 16 audio channels
- Conference hall privacy; the congress venue itself acts as a barrier to infrared signals escaping and being overheard, as infrared is unable to pass through opaque objects such as walls
- Suitable for various kinds (small/medium/large international) of conference halls and outdoor venues
- Transmitting in 2~8 MHz frequency band eliminates disturbance from high frequency lighting systems
- Each audio channel can be assigned a language name for easy identification
- Flexible configuration of channels and channel quality modes:
  - Mono, standard quality, maximum 16 channels
  - Mono, perfect quality, maximum 8 channels
  - Stereo, standard quality, maximum 8 channels
  - Stereo, perfect quality, maximum 4 channels
- Adjustable sensitivity for each input to enable fine tuning of audio levels
- Automatic synchronization to the number of channels in use by the system
- "Bypass" mode for distribution of signals from another transmitter allows multiple rooms to be used
- Combination mode: two N channel IR transmitters can be incorporated to make up a 2N channel system, at most 32 channels
- During adjournment, music mode can be used to feed music to all channels
- Independent test facility: self-generates diverse frequencies for system debugging
- Built-in infrared emitters in transmitter for audio monitoring in operating room
- Universal mains power facility allows worldwide use

#### **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
- Monitor channel select knob
- Monitor volume control knob
- Mini IR radiators

- Ø 3.5 mm jack for stereo monitor earphone
- 2 female XLR connectors for external audio inputs to connect auxiliary balanced audio signals such as music, floor language or emergency audio signal
- 16 audio signal input connectors (RCA sockets) to connect external unbalanced audio input signals
- 6 BNC connectors for output HF signal to radiator. To each connector, up to 30 radiators can be connected
- 1 BNC connector for receiving HF signal from another transmitter
- 2 × USB interfaces to upgrade system and to save system parameters.
- Ethernet and RS-232 ports for connection to computer
- Emergency signal interface: when the public emergency system is active, alarm signal can be fed to all channels automatically
- Extension interface
- Power supply socket

#### **System Specifications**

Modulation	DQPSK, according to IEC 61603-7
Modulation frequency	
Carriers 0 to 5	2 to 6 MHz, according to IEC 61603-7
Carriers 6 and 7	up to 8 MHz
Frequency response	20 Hz to 10 kHz (-3dB) at standard quality;
	20 Hz to 20 kHz (-3dB) at perfect quality
THD at 1 kHz	<0.05%
Isolation	>80 dB
Dynamic range	>80 dB
	>80 dBA

### Electrical

Unbalanced audio inputs	-12 to +12 dBV nominal
Balanced audio inputs	-6 to +18 dBV nominal
Emergency switch connector	Emergency control input
Headphone output	32 Ohm to 2 kOhm
HF inputNominal 2	1 Vpp, minimum 10 mVpp, 75 Ohm
HF output	1 Vpp, 6 V DC, 75 Ohm
Mains voltage	110 to 260 V, 50 to 60 Hz
Power consumption	Maximum 55 W
Power consumption (standby)	29 W

## Mechanical

MountingBrackets for 19" rack mounting or	fixing to a table top;
detachable feet for free-standing	use on a table top
Dimensions h x w x d (mm)	99 × 430 × 325
Weight	7.5 kg
Color	White

# **Ordering Information**

HCS-5100MC/16N\_\_\_\_\_16 CHs Digital Infrared Transmitter

# **System Connection**

