TAIDEN

HCS-5100 Series Digital IR Language Distribution System

HCS-5100T/15/25/35 Digital Infrared Radiator

HCS-5100M Digital Infrared Transmitter

HCS-5100R Digital Infrared Receiver (4/8/16/32 CHs)
HCS-5100PA Stereo Headphone

HCS-5100 Series Digital Infrared Language Distribution System

HCS-5100 Series Digital Infrared Language Distribution System

After the launch of HCS-4100 fully digital conference system, TAIDEN has now enhanced its existing product lines with HCS-5100 digital Infrared language distribution system. This system adopts TAIDEN independent intellectual property chipset and is compliant to international standard for digital IR systems, providing superb sound quality. HCS-5100 system also features complete language name display, 270° super wide reception angle and transmitter combination mode, making it the world's most advanced IR language distribution system. Interpretations will always arrive in perfect condition, as the digital infrared language distribution system integrates seamlessly TAIDEN HCS-4100M/20 fully digital conference system and simultaneous interpretation unit.

Fully Certificated, Comprehensive Compatibility

HCS-5100 series is compliant to IEC 61603-7 and IEC 60914，moreover, compatible with any other IR system compliant to IEC 61603-7.
IEC 61603: Transmission of audio and/or video and related signals using infrared radiation
IEC 61603-Part 7: Digital audio signals for conference and similar applications
IEC 60914: Conference systems - Electrical and audio requirements

Features

- Compliant to IEC 61603-7 and IEC 60914
- Compatible with any other IR system compliant to IEC 61603-7
- Capable of distributing a maximum of 4, 8, 16 or 32 audio channels
- Immune to interference from HF-driven lighting
- Flexible configuration of channels and channel quality modes
- LCD receiver display shows channel number and complete language name
- Automatic synchronization: number of available channels is the same as number of channels in use by the system
- 270° super wide reception angle
- Works without errors, even in bright sunlight
- Combination mode
- Bypass mode, used for signal distribution to multiple rooms
- Delay compensation for cable transmission
- Audio frequency response: 20 Hz ~ 20 kHz (Perfect mode), weighted S/N >80 dBA
- Freedom of movement within the range of IR power radiator
- Conference privacy is guaranteed as infrared signals do not pass through opaque walls or ceilings
- The infrared communication frees users from worries about eavesdropping and radio interference inherent to radio wave-based wireless communications

HCS-5100MA/04
4 CHs Digital Infrared Transmitter

The transmitter is the heart of HCS-5100 system. HCS-5100MA/04 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-4100/20 conference main unit directly, or be used as a stand-alone system for distributing external audio signals. HCS-5100MA/04 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 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 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 digital audio input connector for connecting to HCS-4100/20 series main unit directly, moreover, with 4 interpretation output channels for recording
- Universal mains power facility allows use worldwide

Controls and Indicators

- 256×32 LCD can display the status of the transmitter and the menu of system configuration
- Four buttons for configuration
- Power switch with indicator (red)
- Monitor channel select knob
- Monitor volume control knob
- Mini IR radiators

Interconnections

- Ø 3.5 mm jack for stereo monitor earphone
- 4 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 other transmitter
- 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
- Digital audio output (6P-DIN) connector for connecting to HCS-4100/20 series conference units
- Digital audio input (6P-DIN) connector for connecting to HCS-4100/20 series main unit directly
- Audio signal output connectors for output DCS multi-channel audio
- 4 audio signal input connectors to connect external unbalanced audio input signals
- 2 female XLR connectors for external audio inputs to connect auxiliary balanced audio signals such as music, floor language or emergency audio signal
- Extension interface

Technical Specifications

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%
Crosstalk attenuation at 1 kHz	>80 dB
Dynamic range	>80 dB
Weighted SNR	>80 dBA
Input range	-12 dBV ~ +12 dBV (adjustable)

System Environmental Conditions

Transport temperature	-40 ºC ~ +70 ºC
Operating temperature	0 ºC ~ +45 ºC
Max. relative humidity	<95%
Safety	Compliant to EN 60065
EMC emission	Compliant to EN 61000-6-3, EN 55022
EMC immunity	Compliant to EN 61000-4-3
EMC approvals	CE, FCC
Static resistance	Compliant to EN 61000-4-2
Power harmonics	Compliant to EN 61000-3-2
Surge resistance	Compliant to EN 61000-4-5
EFT test	Compliant to EN 61000-4-4
Transient power-off test	Compliant to EN 61000-4-11

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 input	Nominal 1 Vpp, minimum 10 mVpp, 50 Ohm
HF output	1 Vpp, 6 V DC, 50 Ohm
Mains voltage	110 to 260 V, 50 to 60 Hz
Power consumption	Maximum 55 W
Power consumption (standby)	29 W

Mechanical

Mounting	Brackets 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/04	4 CHs Digital Infrared Transmitter (with 6-pin connector, compatible with HCS-4100M/20)

HCS-5100MA/08
8 CHs Digital Infrared Transmitter

The transmitter is the heart of HCS-5100 system. HCS-5100MA/08 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-4100/20 conference main unit directly, or be used as a stand-alone system for distributing external audio signals. HCS-5100MA/08 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 digital audio input connector for connecting to HCS-4100/20 series main unit directly, moreover, with 8 interpretation output channels for recording
- Universal mains power facility allows use worldwide

Controls and Indicators

- 256×32 LCD can display the status of the transmitter and the menu of system configuration
- Four buttons for configuration
- Power switch with indicator (red)
- Monitor channel select knob
- Monitor volume control knob
- Mini IR radiators

Interconnections

- Ø 3.5 mm jack for stereo monitor earphone
- 4 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 other transmitter
- 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
- Digital audio output (6P-DIN) connector for connecting to HCS-4100/20 series conference units
- Digital audio input (6P-DIN) connector for connecting to HCS-4100/20 series main unit directly
- Audio signal output connectors for output DCS multi-channel audio
- 8 audio signal input connectors to connect external unbalanced audio input signals
- 2 female XLR connectors for external audio inputs to connect auxiliary balanced audio signals such as music, floor language or emergency audio signal
- Extension interface

Technical Specifications

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%
Crosstalk attenuation at 1 kHz	>80 dB
Dynamic range	>80 dB
Weighted SNR	>80 dBA
Input range	-12 dBV ~ +12 dBV (adjustable)

System Environmental Conditions

Transport temperature	-40 ºC ~ +70 ºC
Operating temperature	0 ºC ~ +45 ºC
Max. relative humidity	<95%
Safety	Compliant to EN 60065
EMC emission	Compliant to EN 61000-6-3, EN 55022
EMC immunity	Compliant to EN 61000-4-3
EMC approvals	CE, FCC
Static resistance	Compliant to EN 61000-4-2
Power harmonics	Compliant to EN 61000-3-2
Surge resistance	Compliant to EN 61000-4-5
EFT test	Compliant to EN 61000-4-4
Transient power-off test	Compliant to EN 61000-4-11

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 input	Nominal 1 Vpp, minimum 10 mVpp, 50 Ohm
HF output	1 Vpp, 6 V DC, 50 Ohm
Mains voltage	110 to 260 V, 50 to 60 Hz
Power consumption	Maximum 55 W
Power consumption (standby)	29 W

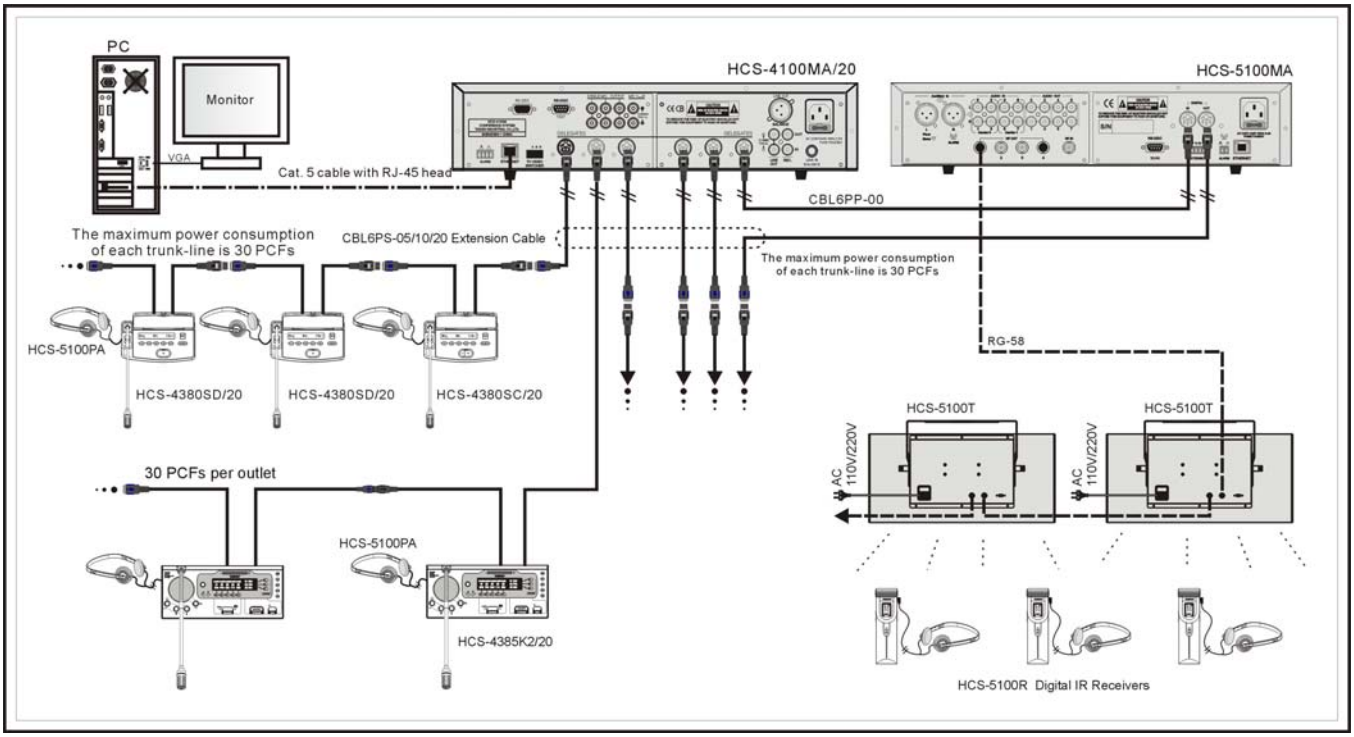
Mechanical

Mounting	Brackets 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/08	8 CHs Digital Infrared Transmitter (with 6-pin connector, compatible with HCS-4100M/20)

System Connection



HCS-5100MB/04
4 CHs Digital Infrared Transmitter

The transmitter is the heart of HCS-5100 system. HCS-5100MB/04 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-850PB/10 interpretation desks and HCS-4100/20 conference main unit through HCS-4110M/20, or be used as a stand-alone system for distributing external audio signals. HCS-5100MB/04 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 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 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 25Pin D-SUB interface for connecting up to 3 HCS-850PB/10 interpretation desks
- Universal mains power facility allows use worldwide

Controls and Indicators

- 256×32 LCD can display the status of the transmitter and the menu of system configuration
- Four buttons for configuration
- Power switch with indicator (red)
- Monitor channel select knob
- Monitor volume control knob
- Mini IR radiators

Interconnections

- Ø 3.5 mm jack for stereo monitor earphone
- 4 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 other transmitter
- 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
- 4 audio signal input connectors to connect external unbalanced audio input signals
- 2 female XLR connectors for external audio inputs to connect auxiliary balanced audio signals such as music, floor language or emergency audio signal
- Interpretation desk interface for connecting up to 3 HCS-850PB/10 interpretation desks
- Extension interface

Technical Specifications

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%
Crosstalk attenuation at 1 kHz	>80 dB
Dynamic range	>80 dB
Weighted SNR	>80 dBA
Input range	-12 dBV ~ +12 dBV (adjustable)

System Environmental Conditions

Transport temperature	-40 ºC ~ +70 ºC
Operating temperature	0 ºC ~ +45 ºC
Max. relative humidity	<95%
Safety	Compliant to EN 60065
EMC emission	Compliant to EN 61000-6-3, EN 55022
EMC immunity	Compliant to EN 61000-4-3
EMC approvals	CE, FCC
Static resistance	Compliant to EN 61000-4-2
Power harmonics	Compliant to EN 61000-3-2
Surge resistance	Compliant to EN 61000-4-5
EFT test	Compliant to EN 61000-4-4
Transient power-off test	Compliant to EN 61000-4-11

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 input	Nominal 1 Vpp, minimum 10 mVpp, 50 Ohm
HF output	1 Vpp, 6 V DC, 50 Ohm
Mains voltage	110 to 260 V, 50 to 60 Hz
Power consumption	Maximum 55 W
Power consumption (standby)	29 W

Mechanical

Mounting	Brackets 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-5100MB/04	4 CHs Digital Infrared Transmitter (with 25-pin connector, compatible with HCS-850PB/10)

HCS-5100MB/08
8 CHs Digital Infrared Transmitter

The transmitter is the heart of HCS-5100 system. HCS-5100MB/08 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-850PB/10 interpretation desks and HCS-4100/20 conference main unit through HCS-4110M/20, or be used as a stand-alone system for distributing external audio signals. HCS-5100MB/08 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 25Pin D-SUB interface for connecting up to 7 HCS-850PB/10 interpretation desks
- Universal mains power facility allows use worldwide

Controls and Indicators

- 256×32 LCD can display the status of the transmitter and the menu of system configuration
- Four buttons for configuration
- Power switch with indicator (red)
- Monitor channel select knob
- Monitor volume control knob
- Mini IR radiators

Interconnections

- Ø 3.5 mm jack for stereo monitor earphone
- 4 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 other transmitter
- 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
- 8 audio signal input connectors to connect external unbalanced audio input signals
- 2 female XLR connectors for external audio inputs to connect auxiliary balanced audio signals such as music, floor language or emergency audio signal
- Interpretation desk interface for connecting up to 7 HCS-850PB/10 interpretation desks
- Extension interface

Technical Specifications

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%
Crosstalk attenuation at 1 kHz	>80 dB
Dynamic range	>80 dB
Weighted SNR	>80 dBA
Input range	-12 dBV ~ +12 dBV (adjustable)

System Environmental Conditions

Transport temperature	-40 ºC ~ +70 ºC
Operating temperature	0 ºC ~ +45 ºC
Max. relative humidity	<95%
Safety	Compliant to EN 60065
EMC emission	Compliant to EN 61000-6-3, EN 55022
EMC immunity	Compliant to EN 61000-4-3
EMC approvals	CE, FCC
Static resistance	Compliant to EN 61000-4-2
Power harmonics	Compliant to EN 61000-3-2
Surge resistance	Compliant to EN 61000-4-5
EFT test	Compliant to EN 61000-4-4
Transient power-off test	Compliant to EN 61000-4-11

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 input	Nominal 1 Vpp, minimum 10 mVpp, 50 Ohm
HF output	1 Vpp, 6 V DC, 50 Ohm
Mains voltage	110 to 260 V, 50 to 60 Hz
Power consumption	Maximum 55 W
Power consumption (standby)	29 W

Mechanical

Mounting	Brackets 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-5100MB/08	8 CHs Digital Infrared Transmitter (with 25-pin connector, compatible with HCS-850PB/10)

HCS-5100MB/16
16 CHs Digital Infrared Transmitter

The transmitter is the heart of HCS-5100 system. HCS-5100MB/16 accepts and modulates up to 16 unbalanced audio signals onto carrier waves which are transmitted to radiators located in the room. It can either be connected to HCS-850PB/10 interpretation desks and HCS-4100/20 conference main unit through HCS-4110M/20, or be used as a stand-alone system for distributing external audio signals. HCS-5100MB/16 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
- With 25Pin D-SUB interface for connecting up to 11 HCS-850PB/10 interpretation desks
- Universal mains power facility allows use worldwide

Controls and Indicators

- 256×32 LCD can display the status of the transmitter and the menu of system configuration
- Four buttons for configuration
- Power switch with indicator (red)
- Monitor channel select knob
- Monitor volume control knob
- Mini IR radiators

Interconnections

- Ø 3.5 mm jack for stereo monitor earphone
- 4 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 other transmitter
- 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
- 16 audio signal input connectors to connect external unbalanced audio input signals
- 2 female XLR connectors for external audio inputs to connect auxiliary balanced audio signals such as music, floor language or emergency audio signal
- Interpretation desk interface for connecting up to 11 HCS-850PB/10 interpretation desks
- Extension interface

Technical Specifications

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%
Crosstalk attenuation at 1 kHz	>80 dB
Dynamic range	>80 dB
Weighted SNR	>80 dBA
Input range	-12 dBV ~ +12 dBV (adjustable)

System Environmental Conditions

Transport temperature	-40 ºC ~ +70 ºC
Operating temperature	0 ºC ~ +45 ºC
Max. relative humidity	<95%
Safety	Compliant to EN 60065
EMC emission	Compliant to EN 61000-6-3, EN 55022
EMC immunity	Compliant to EN 61000-4-3
EMC approvals	CE, FCC
Static resistance	Compliant to EN 61000-4-2
Power harmonics	Compliant to EN 61000-3-2
Surge resistance	Compliant to EN 61000-4-5
EFT test	Compliant to EN 61000-4-4
Transient power-off test	Compliant to EN 61000-4-11

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 input	Nominal 1 Vpp, minimum 10 mVpp, 50 Ohm
HF output	1 Vpp, 6 V DC, 50 Ohm
Mains voltage	110 to 260 V, 50 to 60 Hz
Power consumption	Maximum 55 W
Power consumption (standby)	29 W

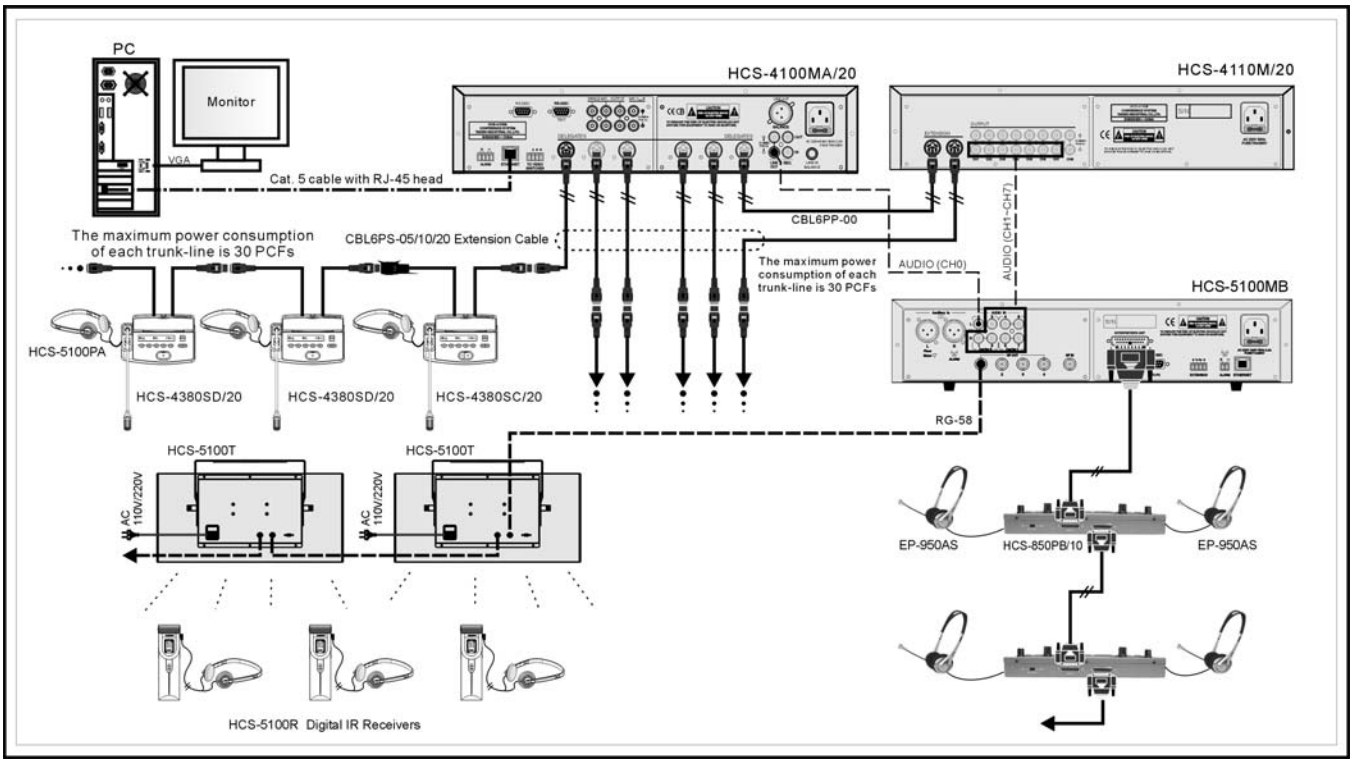
Mechanical

Mounting	Brackets 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-5100MB/16	16 CHs Digital Infrared Transmitter (with 25-pin connector, compatible with HCS-850PB/10)

System Connection



HCS-5100MC/04
4 CHs Digital Infrared Transmitter

The transmitter is the heart of HCS-5100 system. HCS-5100MC/04 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-4100/20 conference main unit through HCS-4110M/20, or be used as a stand-alone system for distributing external audio signals. HCS-5100MC/04 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 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 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 use worldwide

Controls and Indicators

- 256×32 LCD can display the status of the transmitter and the menu of system configuration
- Four buttons for configuration
- Power switch with indicator (red)
- Monitor channel select knob
- Monitor volume control knob
- Mini IR radiators

Interconnections

- Ø 3.5 mm jack for stereo monitor earphone
- 4 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 other transmitter
- 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
- 4 audio signal input connectors to connect external unbalanced audio input signals
- 2 female XLR connectors for external audio inputs to connect auxiliary balanced audio signals such as music, floor language or emergency audio signal
- Extension interface

Technical Specifications

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%
Crosstalk attenuation at 1 kHz	>80 dB
Dynamic range	>80 dB
Weighted SNR	>80 dBA
Input range	-12 dBV ~ +12 dBV (adjustable)

System Environmental Conditions

Transport temperature	-40 ºC ~ +70 ºC
Operating temperature	0 ºC ~ +45 ºC
Max. relative humidity	<95%
Safety	Compliant to EN 60065
EMC emission	Compliant to EN 61000-6-3, EN 55022
EMC immunity	Compliant to EN 61000-4-3
EMC approvals	CE, FCC
Static resistance	Compliant to EN 61000-4-2
Power harmonics	Compliant to EN 61000-3-2
Surge resistance	Compliant to EN 61000-4-5
EFT test	Compliant to EN 61000-4-4
Transient power-off test	Compliant to EN 61000-4-11

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 input	Nominal 1 Vpp, minimum 10 mVpp, 50 Ohm
HF output	1 Vpp, 6 V DC, 50 Ohm
Mains voltage	110 to 260 V, 50 to 60 Hz
Power consumption	Maximum 55 W
Power consumption (standby)	29 W

Mechanical

Mounting	Brackets 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/04	4 CHs Digital Infrared Transmitter

HCS-5100MC/08
8 CHs Digital Infrared Transmitter

The transmitter is the heart of HCS-5100 system. HCS-5100MC/08 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-4100/20 conference main unit through HCS-4110M/20, or be used as a stand-alone system for distributing external audio signals. HCS-5100MC/08 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 use worldwide

Controls and Indicators

- 256×32 LCD can display the status of the transmitter and the menu of system configuration
- Four buttons for configuration
- Power switch with indicator (red)
- Monitor channel select knob
- Monitor volume control knob
- Mini IR radiators

Interconnections

- Ø 3.5 mm jack for stereo monitor earphone
- 4 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 other transmitter
- 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
- 8 audio signal input connectors to connect external unbalanced audio input signals
- 2 female XLR connectors for external audio inputs to connect auxiliary balanced audio signals such as music, floor language or emergency audio signal
- Extension interface

Technical Specifications

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%
Crosstalk attenuation at 1 kHz	>80 dB
Dynamic range	>80 dB
Weighted SNR	>80 dBA
Input range	-12 dBV ~ +12 dBV (adjustable)

System Environmental Conditions

Transport temperature	-40 ºC ~ +70 ºC
Operating temperature	0 ºC ~ +45 ºC
Max. relative humidity	<95%
Safety	Compliant to EN 60065
EMC emission	Compliant to EN 61000-6-3, EN 55022
EMC immunity	Compliant to EN 61000-4-3
EMC approvals	CE, FCC
Static resistance	Compliant to EN 61000-4-2
Power harmonics	Compliant to EN 61000-3-2
Surge resistance	Compliant to EN 61000-4-5
EFT test	Compliant to EN 61000-4-4
Transient power-off test	Compliant to EN 61000-4-11

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 input	Nominal 1 Vpp, minimum 10 mVpp, 50 Ohm
HF output	1 Vpp, 6 V DC, 50 Ohm
Mains voltage	110 to 260 V, 50 to 60 Hz
Power consumption	Maximum 55 W
Power consumption (standby)	29 W

Mechanical

Mounting	Brackets 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/08	8 CHs Digital Infrared Transmitter

HCS-5100MC/16
16 CHs Digital Infrared Transmitter

The transmitter is the heart of HCS-5100 system. HCS-5100MC/16 accepts and modulates up to 16 unbalanced audio signals onto carrier waves which are transmitted to radiators located in the room. It can either be connected to HCS-4100/20 conference main unit through HCS-4110M/20, or be used as a stand-alone system for distributing external audio signals. HCS-5100MC/16 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 use worldwide

Controls and Indicators

- 256×32 LCD can display the status of the transmitter and the menu of system configuration
- Four buttons for configuration
- Power switch with indicator (red)
- Monitor channel select knob
- Monitor volume control knob
- Mini IR radiators

Interconnections

- Ø 3.5 mm jack for stereo monitor earphone
- 4 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 other transmitter
- 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
- 16 audio signal input connectors to connect external unbalanced audio input signals
- 2 female XLR connectors for external audio inputs to connect auxiliary balanced audio signals such as music, floor language or emergency audio signal
- Extension interface

Technical Specifications

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%
Crosstalk attenuation at 1 kHz	>80 dB
Dynamic range	>80 dB
Weighted SNR	>80 dBA
Input range	-12 dBV ~ +12 dBV (adjustable)

System Environmental Conditions

Transport temperature	-40 ºC ~ +70 ºC
Operating temperature	0 ºC ~ +45 ºC
Max. relative humidity	<95%
Safety	Compliant to EN 60065
EMC emission	Compliant to EN 61000-6-3, EN 55022
EMC immunity	Compliant to EN 61000-4-3
EMC approvals	CE, FCC
Static resistance	Compliant to EN 61000-4-2
Power harmonics	Compliant to EN 61000-3-2
Surge resistance	Compliant to EN 61000-4-5
EFT test	Compliant to EN 61000-4-4
Transient power-off test	Compliant to EN 61000-4-11

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 input	Nominal 1 Vpp, minimum 10 mVpp, 50 Ohm
HF output	1 Vpp, 6 V DC, 50 Ohm
Mains voltage	110 to 260 V, 50 to 60 Hz
Power consumption	Maximum 55 W
Power consumption (standby)	29 W

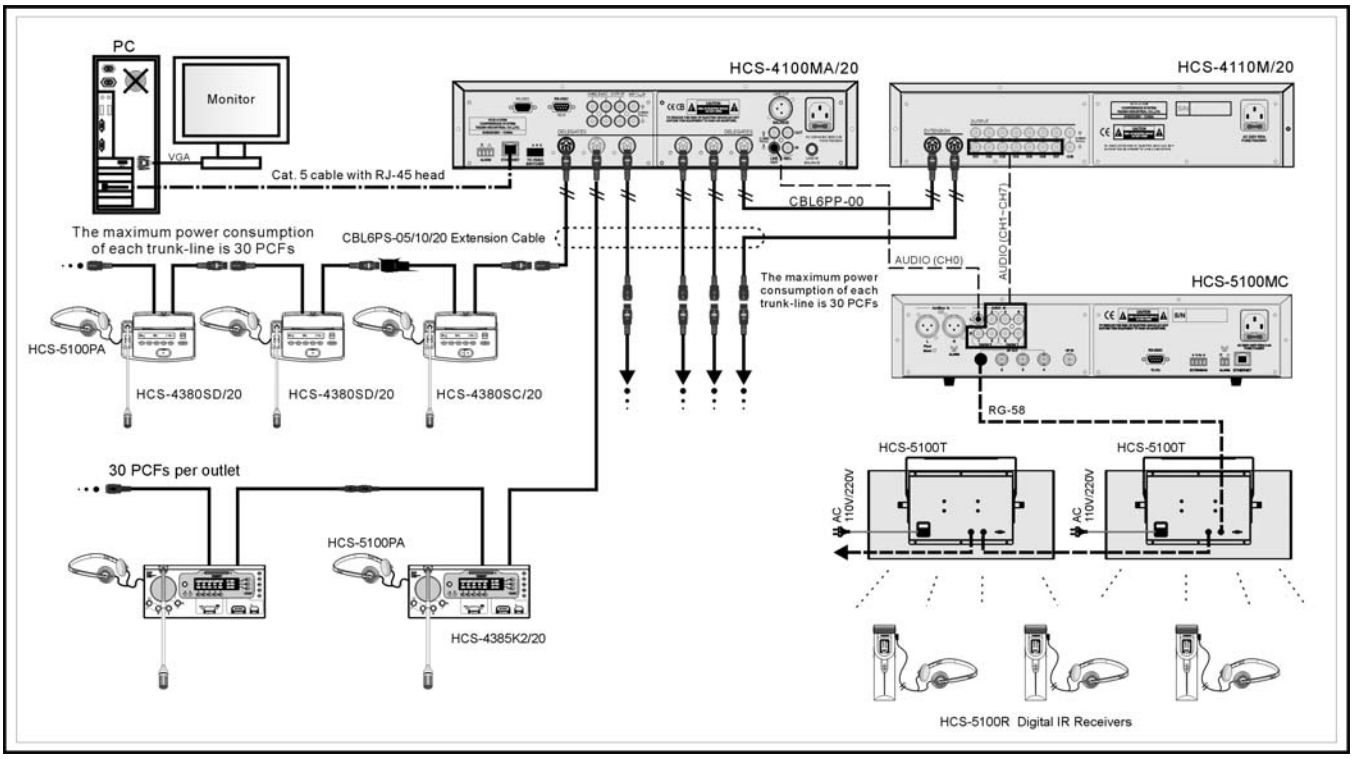
Mechanical

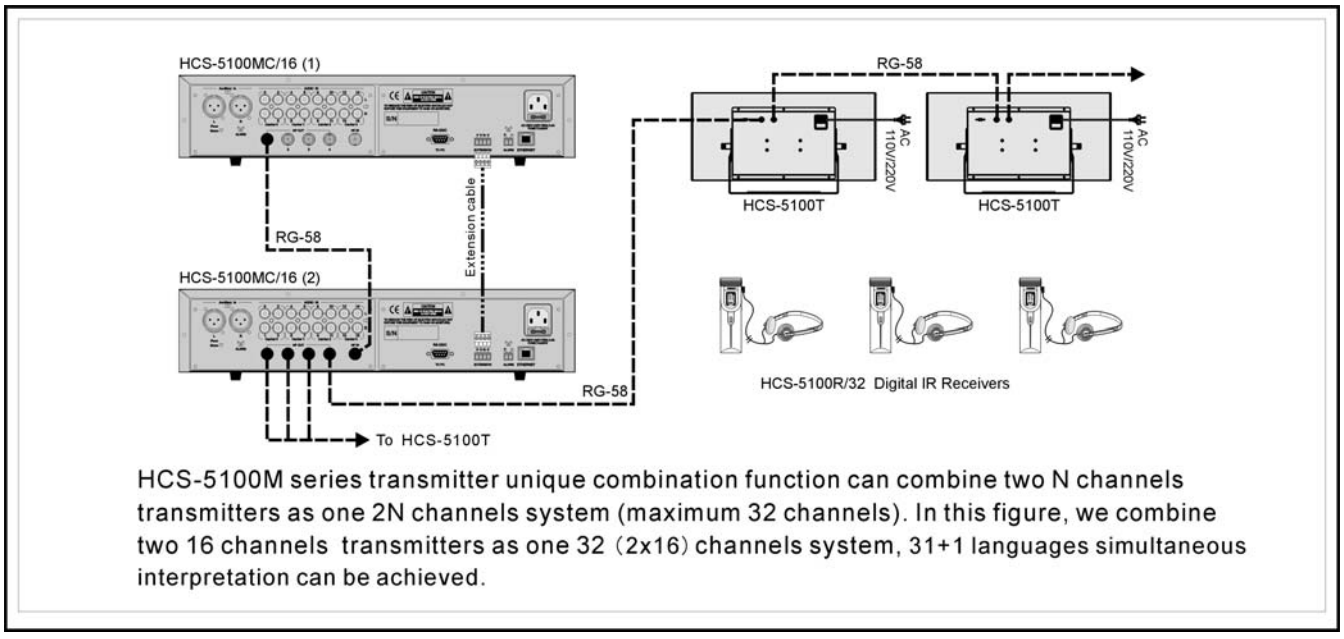
Mounting	Brackets for 19″ rack mounting or fixing to a table top; detachable feet for free-standing use on a table top
Dimensions h x w x d (mm)	99 × 430 × 325
Weight	7.5 kg
Color	White

Ordering Information

HCS-5100MC/16	16 CHs Digital Infrared Transmitter

System Connection





HCS-5100M series transmitter unique combination function can combine two N channels transmitters as one 2N channels system (maximum 32 channels). In this figure, we combine two 16 channels transmitters as one 32（2x16）channels system, 31+1 languages simultaneous interpretation can be achieved.

HCS-5100T/15
Multi-Channel Digital Infrared Radiator

Features

- Compliant to IEC 61603-7 and IEC 60914
- Compatible with any other IR simultaneous interpretation system compliant to IEC 61603-7
- Standby indication, working indication, failure indication
- Installation: fixed up by bracket or tripod (various mounting methods supported), 10 radiation angles
- Half-transmitting angle : ±22°
- Emission power: 15 W
- Power consumption: 35 W
- Maximum radiation range: 30 meters
- Synchronization ON/OFF with transmitter
- Automatic gain control
- Temperature control: if temperature is too high, control switches to half-power with LED indication
- Manual half-power switch on the rear, convenient for small conferences
- Delay compensation for differences in cable lengths between transmitter and radiators

The radiator receives carrier signals generated by the transmitter and emits infrared radiation, carrying up to 32 audio distribution channels. Radiators are connected to the HF (BNC) connectors of the IR transmitter. A maximum of 30 daisy chained radiators can be connected to each output.

Controls and Indicators

- Power indicator
- Temperature protection indicator
- Input signal indicator
- Fault indicator
- Output power switch
- Delay compensation indicator
- Delay compensation buttons (-/+)

Interconnections

- HF input and output connectors (2 x BNC) for connection to transmitter and loop-through to other radiators

Technical Specifications

Electrical and optical

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
Angle of half intensity	$\pm 22^0$
HF input	Nominal 1 Vpp, minimum 10 mVpp, 50 Ohm
HF output	1 Vpp, 6 V DC, 50 Ohm
Mains voltage	110/220 V, 50 to 60 Hz
Power consumption	35 W
Power consumption (standby)	8 W

Mechanical

Mounting	Suspension bracket for direct ceiling mounting; mounting plates for floor stands; wall mounting bracket HCS-5100TBZJ can be used for fixing radiator to wall surfaces
Dimensions h x w x d (mm)	145 × 450 × 245
Weight	5.0 kg
Front color	Red

Ordering Information

HCS-5100T/15	Multi-channel Digital Infrared Radiator (15 W)

HCS-5100T/25
Multi-Channel Digital Infrared Radiator

Features

- Compliant to IEC 61603-7 and IEC 60914
- Compatible with any other IR simultaneous interpretation system compliant to IEC 61603-7
- Standby indication, working indication, failure indication
- Installation: fixed up by bracket or tripod (various mounting methods supported), 10 radiation angles
- Half-transmitting angle : ±22°
- Emission power: 25 W
- Power consumption: 75 W
- Maximum radiation range: 50 meters
- Synchronization ON/OFF with transmitter
- Automatic gain control
- Temperature control: if temperature is too high, control switches to half-power with LED indication
- Manual half-power switch on the rear, convenient for small conferences
- Delay compensation for differences in cable lengths between transmitter and radiators

The radiator receives carrier signals generated by the transmitter and emits infrared radiation, carrying up to 32 audio distribution channels. Radiators are connected to the HF (BNC) connectors of the IR transmitter. A maximum of 30 daisy chained radiators can be connected to each output.

Controls and Indicators

- Power indicator
- Temperature protection indicator
- Input signal indicator
- Fault indicator
- Output power switch
- Delay compensation indicator
- Delay compensation buttons (-/+)

Interconnections

- HF input and output connectors (2 x BNC) for connection to transmitter and loop-through to other radiators

Technical Specifications

Electrical and optical

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
Angle of half intensity	$\pm 22^0$
HF input	Nominal 1 Vpp, minimum 10 mVpp, 50 Ohm
HF output	1 Vpp, 6 V DC, 50 Ohm
Mains voltage	110/220 V, 50 to 60 Hz
Power consumption	75 W
Power consumption (standby)	8 W

Mechanical

Mounting	Suspension bracket for direct ceiling mounting; mounting plates for floor stands; wall mounting bracket HCS-5100TBZJ can be used for fixing radiator to wall surfaces
Dimensions h x w x d (mm)	145 × 450 × 245
Weight	5.0 kg
Front color	Red

Ordering Information

HCS-5100T/25	Multi-channel Digital Infrared Radiator (25 W)

HCS-5100T/35
Multi-Channel Digital Infrared Radiator

Features

- Compliant to IEC 61603-7 and IEC 60914
- Compatible with any other IR simultaneous interpretation system compliant to IEC 61603-7
- Standby indication, working indication, failure indication
- Installation: fixed up by bracket or tripod (various mounting methods supported), 10 radiation angles
- Half-transmitting angle: ±22°
- Emission power: 35 W
- Power consumption: 150 W
- Maximum radiation range: 97 meters
- Synchronization ON/OFF with transmitter
- Automatic gain control
- Temperature control: if temperature is too high, control switches to half-power with LED indication
- Manual half-power switch on the rear, convenient for small conferences
- Delay compensation for differences in cable lengths between transmitter and radiators

The radiator receives carrier signals generated by the transmitter and emits infrared radiation, carrying up to 32 audio distribution channels. Radiators are connected to the HF (BNC) connectors of the IR transmitter. A maximum of 30 daisy chained radiators can be connected to each output.

Controls and Indicators

- Power indicator
- Temperature protection indicator
- Input signal indicator
- Fault indicator
- Output power switch
- Delay compensation indicator
- Delay compensation buttons (-/+)

Interconnections

- HF input and output connectors (2 x BNC) for connection to transmitter and loop-through to other radiators

Technical Specifications

Electrical and optical

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
Angle of half intensity	$\pm 22^0$
HF input	Nominal 1 Vpp, minimum 10 mVpp, 50 Ohm
HF output	1 Vpp, 6 V DC, 50 Ohm
Mains voltage	110/220 V, 50 to 60 Hz
Power consumption	150 W
Power consumption (standby)	8 W

Mechanical

Mounting	Suspension bracket for direct ceiling mounting; mounting plates for floor stands; wall mounting bracket HCS-5100TBZJ can be used for fixing radiator to wall surfaces
Dimensions h x w x d (mm)	145 × 500 × 305
Weight	6.5 kg
Front color	Red

Ordering Information

HCS-5100T/35	Multi-channel Digital Infrared Radiator (35 W)

HCS-5100TBZJ
Wall Mounting Bracket

Features

- Wall mounting bracket, can be used for fixing radiator to wall surfaces

Technical Specifications

Mechanical

Dimensions h x w x d (mm)	203× 200 × 285
Weight	1.55 kg
Color	Silver

Ordering Information

HCS-5100TBZJ	Wall-mounting Bracket

HCS-5100R
Digital Infrared Receivers

HCS-5100R is a series of IR receivers, which can receive up to 32 language channels. Both rechargeable NI-HM battery and disposable battery can be used. The receiver is equipped with channel selector, volume control, power switch, Ø 3.5 mm stereo earphone jack, and charging circuit on the PCB. A LCD displays channel number with language name, received signal intensity, battery capacity and volume.

Features

- Compliant to IEC 61603-7 and IEC 60914
- Compatible with any other IR simultaneous interpretation system compliant to IEC 61603-7
- Independent intellectual property chipset for digital infrared processor, and DQPSK digital modulation/demodulation technology
- Transmitting in 2~8 MHz frequency band eliminates disturbance from high frequency lighting systems
- Channel selection via up/down button, at most 4,8,16 or 32 channels available
- LCD display with channel number, language name, battery and signal status indication
- Number of available channels is always the same as the number of channels in use by the system, eliminating the need to scroll through unused channels
- Adjustable volume
- Unique 270º super wide reception angle, ensuring perfect sound quality even when casually placed
- Audio signal automatically muted when signal is too low, ensuring that the user receives only high quality audio
- Ergonomically compact and elegant design
- Lightweight and handy receiver in conjunction with single earphone (EP-820AS/EP-820BS) or headphone (HCS-5100PA) for easy and comfortable use
- Can be hung over the neck via a nice strap or fit into the shirt pocket
- Freedom of movement within the range of IR power radiator
- No limit to the receiver number within the IR power radiation range
- Works without errors, even in bright sunlight
- Built-in high precision rechargeable circuitry to prolong the battery life
- Can be used with disposable batteries (2×AA alkaline batteries, not included) or environmentally-friendly Ni-MH rechargeable battery pack (not included)
- No power consumption when headphone is disconnected
- Measurement mode for easy checking of radiator coverage
- Can be equipped with alarm system to prevent loss
- Can work with HCS-5300 digital infrared wireless conference system and achieve up to 1+3 channels infrared wireless simultaneous interpretation

Controls and Indicators

- LCD can display channel number, language name, battery capacity, signal intensity and volume
- Power switch
- Channel selector buttons
- Volume control buttons

Interconnections

- Ø 3.5 mm stereo earphone jack
- Charging contacts

Technical Specifications

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%
Crosstalk attenuation at 1 kHz: >80 dB
Dynamic range: >80 dB
Weighted SNR: >80 dBA
Input range: -12 dBV ~ +12 dBV (adjustable)

Electrical

IR irradiance level: 4 mW/m^2 per carrier
Angle of sensitivity: 270º
Headphone output level at 2.4 V: 450 mVrms (speech at maximum volume, 32 Ohm headphone)
Headphone output freq. range: 20 Hz to 20 kHz
Headphone output impedance: 32 Ohm to 2 kOhm
Max. SNR: >80 dBA
Supply voltage: 1.8 to 3.6 V, nominal 2.4 V
Power consumption
- Normal (at 2.4 V): 38 mA (32 Ohm headphone)
- Headphone jack unplugged: 0 mA

Battery life
- 2×AA alkaline cells: 70 hours
- Rechargeable battery pack: 52 hours

Mechanical

Dimensions h x w x d (mm)	155 × 46 × 24
Weight	
Excl. batteries	80 g
Incl. batteries	135 g
Color	Gray

Ordering Information

HCS-5100R/04	4 CHs Digital Infrared Receiver (LCD, language display, optional rechargeable battery pack or 2xAA alkaline cells)
HCS-5100R/08	8 CHs Digital Infrared Receiver (LCD, language display, optional rechargeable battery pack or 2xAA alkaline cells)
HCS-5100R/16	16 CHs Digital Infrared Receiver (LCD, language display, optional rechargeable battery pack or 2xAA alkaline cells)
HCS-5100R/32	32 CHs Digital Infrared Receiver (LCD, language display, optional rechargeable battery pack or 2xAA alkaline cells)

HCS-5100RA
Digital Infrared Receiver

HCS-5100RA is a series of IR receivers, which can receive up to 32 language channels, only for disposable battery. The receiver is equipped with channel selector, volume control, power switch, Ø 3.5 mm stereo earphone jack. A LCD displays channel number with language name, received signal intensity, battery capacity and volume.

Features

- Compliant to IEC 61603-7 and IEC 60914
- Compatible with any other IR simultaneous interpretation system compliant to IEC 61603-7
- Independent intellectual property chipset for digital infrared processor, and DQPSK digital modulation/demodulation technology
- Transmitting in 2~8 MHz frequency band eliminates disturbance from high frequency lighting systems
- Channel selection via up/down button, at most 4,8,16 or 32 channels available
- LCD display with channel number, language name, battery and signal status indication
- Number of available channels is always the same as the number of channels in use by the system, eliminating the need to scroll through unused channels
- Adjustable volume
- Unique 270º super wide reception angle, ensuring perfect sound quality even when casually placed
- Audio signal automatically muted when signal is too low, ensuring that the user receives only high quality audio
- Ergonomically compact and elegant design
- Lightweight and handy receiver in conjunction with single earphone (EP-820AS/EP-820BS) or headphone (HCS-5100PA) for easy and comfortable use
- Can be hung over the neck via a nice strap or fit into the shirt pocket
- Freedom of movement within the range of IR power radiator
- No limit to the receiver number within the IR power radiation range
- Works without errors, even in bright sunlight
- Can be used with disposable batteries (2×AA alkaline batteries, not included)
- No power consumption when headphone is disconnected
- Measurement mode for easy checking of radiator coverage
- Can be equipped with alarm system to prevent loss
- Can work with HCS-5300 digital infrared wireless conference system and achieve up to 1+3 channels infrared wireless simultaneous interpretation

Controls and Indicators

- LCD can display channel number, language name, battery capacity, signal intensity and volume
- Power switch
- Channel selector buttons
- Volume control buttons

Interconnections

- Ø 3.5 mm stereo earphone jack

Technical Specifications

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%
Crosstalk attenuation at 1 kHz	>80 dB
Dynamic range	>80 dB
Weighted SNR	>80 dBA
Input range	-12 dBV ~ +12 dBV (adjustable)

Electrical

IR irradiance level	4 mW/m^2 per carrier
Angle of sensitivity	270º
Headphone output level at 2.4 V	450 mVrms (speech at maximum volume, 32 Ohm headphone)
Headphone output freq. range	20 Hz to 20 kHz
Headphone output impedance	32 Ohm to 2 kOhm
Max. SNR	>80 dBA
Supply voltage	1.8 to 3.6 V, nominal 2.4 V
Power consumption	
Normal (at 2.4 V)	38 mA (32 Ohm headphone)
Headphone jack unplugged	0 mA
Battery life	70 hours

Mechanical

Dimensions h x w x d (mm)	155 × 46 × 24
Weight	
Excl. batteries	80 g
Incl. batteries	135 g
Color	Gray

Ordering Information

HCS-5100RA/04 ..... 4 CHs Digital Infrared Receiver
(LCD, language display, 2xAA alkaline cells)

HCS-5100RA/08 ..... 8 CHs Digital Infrared Receiver
(LCD, language display, 2xAA alkaline cells)

HCS-5100RA/16 ..... 16 CHs Digital Infrared Receiver
(LCD, language display, 2xAA alkaline cells)

HCS-5100RA/32 ..... 32 CHs Digital Infrared Receiver
(LCD, language display, 2xAA alkaline cells)

HCS-5100CHG
IR Receiver Charging Case

Features

- Used for charging IR receivers (HCS-5100R)
- Charges 48 pcs of IR receivers per charging
- Uses universal power supply with automatic voltage matching

Controls and Indicators

- Power switch
- Charging indicator on the receiver

Interconnections

- Power output interface
- Power input interface
- Charging lattices

Technical Specifications

Electrical

Mains voltage	AC 110 V ~ 120 V/220 V ~ 240 V
Power consumption	270 W (48 receivers charging)
Power consumption (standby)	7 W (no receiver in charging case)

Mechanical

Dimensions h x w x d (mm)	240 × 516 × 386
Net weight	12.3 kg (w/o IR receiver)
Color	Blue

Ordering Information

HCS-5100CHG	IR Receiver Charging Case (48 pcs/case)

HCS-5100KS
IR Receiver Storage Case

Features

- Used for storing and transporting IR receivers
- Every case can store up to 100 IR receivers

Technical Specifications

Mechanical

Dimensions h x w x d (mm)	205 × 669 × 307
Net weight	6 kg (w/o IR receiver)
Gross weight	14 kg (w/100 pcs IR receivers, w/o battery)
Color	Blue

Ordering Information

HCS-5100KS	IR Receiver Storage Case (100 pcs/case)

HCS-5100PA Headphone (stereo)

Features

- Used with the receiver or a conference unit
- Hi-Fi sound quality
- 32 Ω × 2，Ø 3.5 mm stereo plug
- Frequency response: 20 Hz to 20 kHz
- Sensitivity: ≥108 dBA/1 mW

Ordering Information

HCS-5100PA ..... Headphone (stereo)

EP-820AS Single Earphone

Features

- Used with the receiver or a conference unit
- Hi-Fi sound quality
- Ø 3.5 mm stereo plug
- 32 Ω (Tip and Sleeve, Ring: NC)
- Frequency response: 50 Hz to 20 kHz
- Sensitivity: ≥102 dBA/1 mW

Ordering Information

EP-820AS ..... Single Earphone

EP-920BS Inner Earphone (stereo)

Features

- Used with the receiver or a conference unit
- Hi-Fi sound quality
- 16 Ω × 2，Ø 3.5 mm stereo plug
- Frequency response: 50 Hz to 20 kHz
- Sensitivity: ≥108 dBA/1 mW

Ordering Information

EP-920BS ..... Inner Earphone (stereo)

EP-820BS Single Earphone

Features

- Used with the receiver or a conference unit
- Hi-Fi sound quality
- Ø 3.5 mm stereo plug
- 32 Ω (Tip and Sleeve, Ring: NC)
- Frequency response: 20 Hz to 20 kHz
- Sensitivity: ≥108 dBA/1 mW

Ordering Information

EP-820BS ..... Single Earphone

HCS-5100BAT-16
Ni-MH Rechargeable Battery Pack

Features

- Ni-MH rechargeable battery pack
- Suitable for HCS-5100R series digital infrared receiver

Technical Specifications

Electrical

Voltage	2.4 V
Capacity	1600 mAh

Mechanical

Dimensions h x w x d (mm)	53 × 29 × 15
Weight	55 g
Color	Green

Ordering Information

HCS-5100BAT-16	Ni-MH Rechargeable Battery Pack

RG-58 Coaxial-cable

Features

- Equivalent impedance: 50 Ohm
- Ø 5 mm
- Length of per roll：200 meter

Ordering Information

RG-58	Coaxial-cable

BNC Connector

Ordering Information

BNC Connector	BNC Connector

HCS-836
Burglarproof Detection System (for IR Receiver)

Features

- High sensitivity, low failure rate
- Adopts multiple advanced techniques, such as PLL simultaneous reduction filtering, noise suppression circuit, etc
- User-friendly design with two ring tones and three volume levels optional
- Easy to install, debug and use
- Novel and unique appearance

Technical Specifications

Electrical

Maximum scan bandwidth	7.7 MHz ~ 8.7 MHz
Scan frequency	162/171/180/189 Hz
Signal sampling period	21.8 μs
Detection range	≤1.2 m
Tag detection frequency	≥2 m/s
Frequency optional	8.2 MHz/10.5 MHz
Alarm volume optional	High/medium/low

Mechanical

Dimensions h x w x d (mm)	1650 × 340 × 85
Weight	22 kg
Color	Black

Ordering Information

HCS-836	Burglarproof Detection System (for IR receiver)

HCS-851A Interpreter Booth

Features

- Compliant to ISO 4043
- Odorless, antistatic, fire-retardant material
- Optimum insulation and sound absorption
- Hinged door (with observation window 0.20 m × 0.22 m), opens outwards, operates silently
- Two/Three front windows and two side windows (dimensions: 0.76 m × 0.85 m each); lower edge of the window: 0.80 m from booth floor
- Booth to hall (and vice versa) - sound pressure level difference: >18 dB (1 kHz)
- Reverberation time inside the booth: between 0.3 s and 0.5 s (octave bands from 125 Hz to 4000 Hz, booth unoccupied)
- Sound pressure level inside the booth by ventilating system ≤40 dBA
- Shipping needs HCSS-851K (interpreter booth shipping case)
- Two types optional:
  - Internal dimensions h × w × d (cm): 200 × 167 × 160, accommodates two interpreters (HCS-851A/02)
  - Internal dimensions h × w × d (cm): 200×250×160, accommodates three interpreters (HCS-851A/03)

Ordering Information

HCS-851A/02	Interpreter Booth (accommodates 2 interpreters)
HCS-851A/03	Interpreter Booth (accommodates 3 interpreters)