VISSONIC

Digital IR Language Distribution System

PRODUCT DATASHEET

VISSONIC ELECTRONICS LTD.

Think Solutions

Application diagram

VISSONIC
VIS-INT64
64-channel digital translation unit

VISSONIC
VIS-DCP2000-W
5G WIFI all digital network DSP
conference host

VISSONIC
VIS-VLI701A
High-performance
infrared radiation
panel

VISSONIC
VIS-VLI700A
16 channel digital infrared
transmitter

VISSONIC
VIS-VLI703A-32
32 Digital infrared receiver

RG59 coaxial cable

CAT5e network cable

New Generation **Digital Infrared** Language Distribution System

Digital infrared language distribution system, also known as infrared simultaneous interpretation system, is a system used in multilingual meetings. In order to help participants understand the contents of the meeting, the system transmits the voice of the mother tongue to the receivers and earphones in the hands of the participants. As infrared is used as the transmission medium, the principle of direct and diffuse reflection of light is used to realize signal coverage of the venue, and the participants can move freely without affecting listening, it is widely used in large, medium and small press conference halls, academic report halls, school halls, various international conference site etc.

As infrared ray is a kind of light, it has no penetration and has a high degree of security. It is also used in format desktop meetings that have security and require translation of language.

VISSONIC VLI series new generation digital infrared language distribution system has fully utilized our years of research and development experience and combined with the latest networking requirements to develop VLI series products with the following Features:

- Comply with international IEC61603-IEC60914 standards
- Compatible with other infrared simultaneous transmission systems conforming to IEC61603-7
- Standard and can used in cross-use
- Full-digital DQPSK digital modulation/demodulation technology ensures sound quality and gives excellent hearing experience
- Transmission of audio data in 2-8MHZ band eliminates interference from high-frequency lighting system
- Provide up to 32 voice channel options
- Beautiful ergonomic receiver design
- The friendly LCD interface displays the current language name, current channel, signal strength, battery power and other information
- The industry's original art-sharped large-angle and ultra-long distance radiation panel, covering a distance of 76 meters, is a sharp weapon for signal coverage of thousands of square meters of large venues
- Seamless integration between AUDIO-LINK network interface and VISSONIC conference system
- Open DANTE network interface to connect DANTE audio network

VIS-VLI700A-4/-8/16/-32

Digital Infrared Transmitter

The transmitter is the central device in the language distribution system. It accepts analogue or digital input, modulates these signals onto carrier waves and transmits these carrier waves to radiators located in the room.

Features

- Compliant to IEC 61603-7 and IEC 60914 and the latest national standard GB 50524-2010

- Compatible with any other IR simultaneous interpretation system compliant to IEC 61603-7

- DQPSK digital modulation/demodulation technology

- Transmitting in 2~8 MHz frequency band eliminates disturbance from high frequency lighting systems

- Capable of distributing of 4,8 or 16 audio channels

- Auxiliary mode for distribution of music to all channels during a break

- Slave mode for distribution of signals from another transmitter allows multiple rooms to be used

- Radiator and system status indication via display and indicators

- Each transmitter can be assigned a unique name by the installer for easy identification in a multi-transmitter system

- Automatic distribution of emergency messages to all channels

- Automatic synchronization to the number of channels in use by the CLEACON system

- Each audio channel can be assigned a language name for easy identification

- The sensitivity of each input is adjustable, the audio level can be fine-tuned, and the audio input level indication is supported

- 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 channel

- With 16 interpretation output channels for recording

- Universal power facility allows worldwide use

- 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

- Can directly connect with interpreter desk VIS-INT64

- With 16 channel analogue audio input and 16 channels analogue audio output.

- 2 transmitters can work as master and slaver mode for 32 channel language distribution

- Connecting to Dante network by optional Dante port

Control and Indicators

- Graphic LCD with back-lighting displays status and menu of the system configuration, supporting multi language menu

- Four buttons for configuration

- Channel active indicators

Interconnections

- 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 output connectors (phoenix sockets) for output multi-channel audio

- 16 audio signal input connectors (phoenix 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

- Audio-Link Port for connecting to Interpreter Unit or VIS-DCP2000 or VIS-DCP1000 conference controller

- DANTE port for connecting to Dante network for the digital audio(Optional VIS-DANTE module)

- Ethernet and RS232 ports for connection to computer

- Emergency signal interface: when the public emergency system is active, alarm signal can be fed to all channels automatically

- Power supply socket

Technical Specifications

System Specifications

Modulation…………………………DQPSK, according to IEC 61603-7

Modulation frequency…………………………**2 to 8** MHz Carriers 0 to 5:2 to 6 MHz, according to IEC 61603-7

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…………………………>90 dB

Weighted SNR…………………………>85 dBA

Electrical

Unbalanced audio inputs…………………………-12 dBV to +12 dBV nominal

Balanced audio inputs…………………………-6 dBV to +18 dBV nominal

Emergency switch connector ………………………… 2-PIN 3.81 mm

Phoenix connector, alarm signal control input

Headphone output…………………………32 Ohm to 2 kOhm

HF input/output…………………………75 Ohm

Power supply…………………………AC 100 V - 240 V, 50 Hz / 60 Hz

Power consumption…………………………Maximum 25 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 (mm) …………………………88H × 483L × 266W

Weight…………………………7.5 kg

Color…………………………Black

VIS-VLI703A

Digital Infrared Receivers 4/8/16/32 channels

These ergonomically designed pocket receivers incorporate the latest electronics technology. VIS-VLI703A series of IR receivers, which can receive up to 32 language channels and 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. The pocket receivers can be used for both language and music distribution.

Features

- Compliant to IEC 61603-7 and IEC 60914
- Compatible with any other IR simultaneous interpretation system compliant to IEC 61603-7
- Digital infrared processor with 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 or headphone for easy and comfortable use
- Can be hung over the neck via a nice strap or fit into pocket
- Free 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 battery life

- Environmentally-friendly lithium rechargeable battery pack

- No power consumption and auto-off when headphone is disconnected after 5 minutes

Controls and Indicators

- LCD displays 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

Modulation…………………………DQPSK, according to IEC 61603-7 Modulation frequency

Carriers 0 to 5…………………………2 to 6 MHz, according to IEC 61603-7

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

Input range…………………………-12 dBV ~ +12 dBV (adjustable)

Electrical

IR irradiance level…………………………4 mW/m2 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…………………………3V to 4.2V, nominal 3.7 V

Headphone jack unplugged after 5 minutes…………………………0 mA Battery life

Rechargeable battery pack …………………………24 hours

Mechanical

Dimensions (H x W x D) …………………………159 x 49 x 23 mm

Weight………………………… excluding battery 85 g, including battery 128g (0.27 lb)

Color…………………………black with silver

VIS-INT64

64 Channels Interpreter Desk

VIS-INT64 is 64 channels interpreter desk that enables direct and relay interpretation available in 63+1 languages to provide an easy and relax time during interpretation work.

Features

- Accommodates up to 64 interpretation channels (incl. floor channel)
- Digital audio technology, built-in high-speed DSP processing.
- Supporting 48 kHz audio sampling rate, 30 Hz to 20 kHz frequency response on all 64 channels
- Anti-interference by any RF signal with metal housing design.
- Hot plug and play, Removable microphone design
- The volume of Loudspeaker and earphone jack support separated adjustment.
- Direct and relay interpretation available
- Hearing protection direct and relay interpretation available
- Interpreter unit can set as operation unit and interpreter units support Internal communication with operator unit
- Language and system configuration from the interpreter desk's configuration menu
- Short message and tea service function
- COUGH key to mute the MIC to avoid the unnecessary sound to the output
- Two Interpreter dual user
- The speaker and the headset's volume should be regulated alone. If all microphones in the same booth are off, the loudspeaker will play floor language or interpretation channel
- Support the headset microphone and Pluggable gooseneck microphone.
- Channel interlock function permits only one microphone on a channel to be activated at any time, ensuring the uniqueness of language channels
- Two necessary modes within one interpreter booth: Interlock and Override
- A-B pre-select input key to quickly select Input channel
- The timing function for indicating the interpretation time.

Controls and Indicators

- Microphone mounted on a flexible stem, complete with a light ring
- Headphone volume controls knob
- Speaker volume controls knob
- A-B channel selector key for the quickly select the Input (interpreter hearing) language
- IN Select Knob with LCD indicating channel for fast switching between the original floor language and the channel set on the channel selector
- OUT Select Knob with LCD indicating channel for fast switching between the output channels
- Microphone activating key with LED status indicator
- Microphone 'COUGH' key to mute the MIC while pressing
- FLOOR-RELAY key to fast switch between floor language and relay language
- Call key (voice) to provide two-way communication between interpreter and operator

Interconnection

- 2 x Ø 3.5 mm earphone jack, 2 x Ø 3.5 mm Microphone jack
- 2xRJ45 port
- 1x2.5mm adapter port
- Connector for Pluggable gooseneck microphone

Technical Specifications

Electrical

Power…………………………   DC48V from main unit or adaptor

Power consumption…………………………3W

Microphone

Transducer …………………………Electret-condenser

Polar pattern………………………Uni-directional

Sensitivity………………………-46dBV/pa

Frequency response…………………………20Hz~20KHz

Input impedance………………………2.2kOhm

Earphone

Frequency Response………………………30~20KHZ

Earphone load…………………………>8ohm

Earphone volume………………………10mW

Directivity 0°/180° …………………………> 20 dB (1 kHz)

Equivalent noise …………………………20 dBA (SPL)

Maximum sound pressure level………………………125 dB (THD<3%)

Interface

Display………………………320x64 dot (blue white)

Connector………………………2 x Ø 3.5 mm earphone jack, 2 x Ø 3.5 mm Microphone jack,2xRJ45 port,1x2.5mm adapter port

Mechanical

Dimension h x w x d (mm)………………………280x128x55

Weight………………………1.5kg

VIS-VLI701A

Digital Infrared Radiator

These radiators are used to distribute infrared signals throughout the conference space, enabling delegates to listen to the proceedings by means of personal pocket receivers.

Features

- Compliant to IEC 61603-7 and IEC 60914
- Compatible with any other IR system compliant to IEC 61603-7
- Maximum radiation range up to 76 meters.
- Cable delay compensation for differences in cable lengths between transmitter and radiators
- Half-power / full-power the operating mode can be selected with a switch
- Synchronization on/off with transmitter
- Connect further radiators in a daisy chain
- Radiation angle ± 25°
- When the temperature of the radiator is too high, the system will automatically switch from full power to half power.
- For the use in conference rooms, even in daylight

Controls and Indicators

- Input signal indicated with the radiation LED
- Output power switch
- Delay compensation LCD
- 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 IEC61603-7

Modulation frequency

Carriers 0 to 5…………………2 to 6 MHz, according to IEC 61603-7

Carriers 6 to 7…………………Up to 8 MHz

Angle of half intensity…………………± 25°

HF input…………………Nominal 1 Vpp,75 Ohm

HF output…………………1 Vpp,6V DC,75Ohm

Power Supply………………………100V-240V AC 50/60Hz

Max. Power………………………36W

Static Power………………………3W

Automatic switching-on voltage level …………………………100mV Radiating signal

Radiation distance…………………………76m

Mechanical

Mounting…………………Wall mounting bracket VIS-RAM1, ceiling mounting, mounting plates for floor stands.

Dimension (mm)………………………… 208Hx453Lx230W

Weight………………………7KG

Color………………………… Deep Grey

VIS-TC50A

Charger and Storage box for Infrared Receiver

Features

- Can accommodate VIS-VLI703A series receivers
- Universal mains power facility allows use worldwide
- Rapid recharging: within 2 hours
- Capable of charging 50 receivers.
- The charging box also has the function of storing receiver

Controls and Indicators

Charging status indicators for every receiver

Interconnection

- Main input with loop-through facility;
- male and female socket
- 50 charging slots and compatible with VIS-VLI703A series pocket receivers

Technical Specifications

Electrical

Power…………………………   100V-240V AC

Max. Power…………………………150W

Static Power…………………………17W （no charging）

Mechanical

Dimension (mm)…………………………600Lx380Wx230H

Weight………………………5kg

Color…………………………Black

www.vissonic.com

VIS-HPD

Head phone for delegates

Overview

The VIS-HPD is high quality headset for chairman/delegate to listen the sound from unit directly.

Features

- To monitor conference units.
- To free from influence in conference system.
- With1.5m cable.
- Hi-fi quality.

Technical parameters

Unit Interface Dual Channel Plug
Frequency Response 80Hz – 2KHz
Sensitivity 90dB
Signal to noise ratio > 80dB
Distortion < 0.1dB
Impedance 32 Ω
Dynamic range > 85 dB
Output power 100mW

www.vissonic.com

VIS-HPI

Head phone for interpreter

Overview

The VIS-HPI is high quality headset for interpreter to translate, there is MIC input.

Features

- The shape is agile and fine, make the user feeling more comfortable.
- Listen and speak in the conference.
- Avoid being interfered in conference.
- 40mm advanced speaker.
- Build-in 2.2meter cable.
- Hi-fi audio quality.
- 32 Ω, 3.5mm monophonic plug.

Technical Parameters

Unit Interface Dual Channel Plug

Frequency Response 80Hz – 2KHz

Sensitivity 90dB

Signal to noise ratio > 80dB

Distortion < 0.1dB

Impedance 32 Ω

Dynamic range > 85 dB

Output power 100mW

VIS-LD10/ LD20/ LD30/ LD50/ LD100

RG59 Coaxial Cable

Features

- 75 Ohm for translation system radiator
- RoHS and CE
- ISO 9001:2000
- Coaxial cable RG59

Construction

Conductor	Solid Copper	0.81mm
Dielectric	Physical Foam Polyethylene	3.66mm
Shield	Bonded Aluminum Foil +Aluminum Braid	Nom.4.10
Jacket	PVC or Polyethylene	6.10mm

Technical Parameters

Impedance: 75 +/- 2ohms

Capacitance: 52 pF/m.max

Maximum voltage: 5000 Volts

Velocity of propagation: 85%

Operating Frequency: 1 GHz

Screening effectiveness: ≥ 40 dB (up to 1 GHz)

Insulation resistance: ≥$1*10^8$ MΩm

Max. operating voltage: ≤3.0 kVrms (at sea level)

Item Model for Order

VIS-LD10.................. 10 meter, RG59 cable for connecting radiators, BNC connector

VIS-LD20.................. 20 meter, RG59 cable for connecting radiators, BNC connector

VIS-LD30.................. 30 meter, RG59 cable for connecting radiators, BNC connector

VIS-LD50.................. 50 meter, RG59 cable for connecting radiators, BNC connector

VIS-LD100.................100 meter, RG59 cable for connecting radiators, BNC connector

About VISSONIC Electronics Limited

Our mission is to develop and manufacture the most comprehensive and innovative audio visual products for our clients. We provide the best performance/price ratio products because it could give you satisfaction just from the time you use them, we believe the good design with cutting edge technology on products will provide value to all our partners and end users. Listen to your demands, we fulfill it.

VISSONIC

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