

**Professional Audio Video Manufacturer** 

### CLEACON V2 Wi-Fi Wireless Conference System PRODUCT DATASHEET

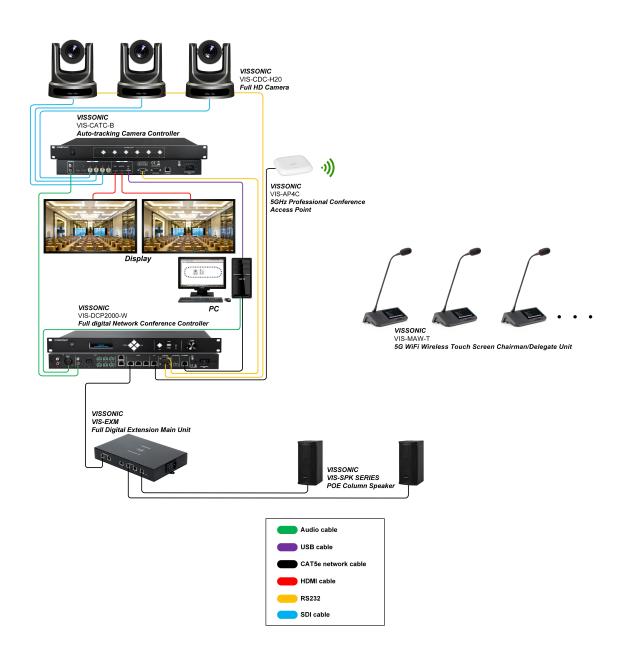


#### VISSONIC ELECTRONICS LTD.

**Think Solutions** 



# Application diagram



## New CLEACON V2 Generation **5GHz Wi-Fi Wireless** Conference System, with High Tech in DSP unique Sound Processing CLEACON V2 5GHz Wi-Fi Wireless Conference System

#### **Standard Wi-Fi Communication**

Our CLEACON wireless conference system is an innovative system based on standard Wi-Fi technology and selfadjustment technology. The system work in the 5GHz band and get the 44 channels for communication to coexist with other Wi-Fi network. The unique self-adaptive technology is strong anti-interference ability ensure the system interference-free and highly flexible for different application. The standard Wi-Fi Technology make the system can work in around the world and no ISM limit.

#### Ease of Use

The system is no additional cabling and testing and run under the 25-meter radius of Wi-Fi signal which is full 360degree coverage. All microphone units automatically identify the access point and communicate with WPA2 secure connection to ensure the conferencing safety.

#### Compact yet versatile design

The product design reflects the elegant, yet compact and easy to use features. Conference unit features a graphical interface operating area, including lighting reminder, anyone can get started quickly. Easy to install, user-friendly to use, and is designed to ensure higher productive meetings.

#### **Excellent legibility sound**

Advanced voice processing technology, with the unique design of the microphone head, this unit can be accurate pickup and restore the human voice through a high-quality built-in speakers or an external PA system, original AUDIO-LINK digital ring network technology, Automatic Gain Control Volume(AGC) / automatic frequency control(AFC) technology help reach higher volume without triggering the howling effect, ensures clear sound to every person in the room.

#### High tech intelligence platform

Timing function, overtime speaking reminder, voting results multi-platform synchronization, network control and meeting management, conference Smart reservation, worldwide firmware real-time updates, the integration of IT technologies ensures smart conferencing platform, the CLEACON is one of them.

### VIS-DCP2000-W

Full Digital Networked DSP Conference Processor



#### **Features**

- The unique AUDIO-LINK digital ring network technology achieve full-digital signal transmission and processing
- One CAT5e cable to transmit up 64 channels audio and other signals.
- All microphone units support audio, ID independent output. Working with voice recognition system to achieve voice role separation.
- High-fidelity sound quality by lossless audio transmission technology, 48K audio sampling rate and 20Hz ~ 20KHz frequency response
- A single conference controller can realize the independent control and merging of 4 conference rooms, can handle the cascade of multiple conference controllers to realize the merging and separation of larger conference rooms (Optional).
- "Hand-in-Hand-Loop-Network" connection makes the system always working perfectly no matter changing discussion unit or having any malfunctioned units
- The sensitivity of the unit microphone and 8 segment equalizer EQ adjusted independently.
- Conference controller can output 16 segment equalized EQ to achieve sound field adjustment; pressure limit, which can recognize the noise gate passed by human voice. AGC automatic volume gain control; AFC automatic feedback suppression and auto-mix technology.
- Sound output by separated zones function, each zone is automatically adjusted according to the volume of the position of the microphone, achieve longer distances pickup without whistle.
- Echo cancellation, remote two-way real-time call with another conference controller or another third-party video conferencing terminal.
- USB recording, controller monitor, advanced noise cancellation technology to realize clearer recording.
- System date, time management, and support count-down speech.
- Optional DANTE output module with other DANTE equipment used.
- Can drive 2x120W POE speaker, through extension main unit, support up to 16 POE speakers.

#### **Functions**

- Compliance with IEC 60914, GBT 15381-94
- Connect with VIS-EXM full-digital extension main unit, it can expand to 5200 discussion units
- "Hand-in-Hand-Loop-Network" connection and the system assigned to each unit independently ID to avoid ID conflict.

Page 4

- Both wired/wireless discussion units can connect to the controller, fast and easily to adding delegate of meetings.
- Up to 8 wireless microphones to be turned on at the same time, adaptive avoiding interference technology to achieve stronger anti-interference ability, compliance with IEEE 802.11n standard Wi-Fi both for 5GHz.
- 2 channel audio input, XLR or RCA type, for local audio input or remote video-conferencing input.
- Maximum 8-channel audio output, XLR, RCA or Phoenix type, can be connected to simultaneous interpretation output or partitioned output.
- Add the audio input box, the system can be connected to other condenser microphones or dynamic microphones, more choices for users.
- Built-in multi-way internal communication function.
- TCP/IP connection between controller and PC
- RS232 central control, realize microphone switch, priority, volume and other controls.
- RS232 or RS485 to send the PELCO/VISCA protocol to realize camera auto-tracking function.
- Hot plug-and-play, and auto-recovery function.
- Wide range of voltage from 100V~240VAC
- By using RFID card to identify, can realize voting with names.

#### **Control & Indicators**

LCD display to show all the operations and results 4-Way button for menu operate One-button press to start recording light indicator Master volume control knob

#### Interfaces

Front panel USB recording interface 3.5mm headphone for monitoring 1x RCA audio input 1x XLR audio input 1x RCA audio output 1x XLR audio output 6x Phoenix audio output connector 2x RJ45 digital audio connection 2x RJ45 for chairman unit, delegate unit, unit translators and other connection 1x RJ45 for wireless AP or router 1x DP9 male interface for external control 1x DP9 female interface for camera 1x three-pin phoenix interface for camera control keyboard 1x RJ45 for computer connection or network switcher 1x grounding screw 1x 100 ~ 240V AC Power Interface

#### **Technical Parameters**

Power 100V / 240V AC Static power consumption 12W Maximum power consumption 150W Frequency Response 20Hz ~ 20KHz Noise ratio (S / N) >96dBA Total harmonic distortion <0.05% Channel Crosstalk> 85dB Dynamic range >94dB RS-232 control: 1×9-pole Sub-D female socket 1×9-pole Sub-D male socket Ethernet control: RJ45 connected to PC Mounting: 19" standard rack Dimensions (mm) 483L x 260W x43.6H Weight: 3kg Black color

Max. audio inputs LINE IN 1: +10dBu LINE IN 2: +10dBu Max. audio outputs LINE OUT 1: +12dBu BAL. LINE OUT 2: +12dBu BAL. LINE OUT 3: +12dBu BAL. LINE OUT 4: +12dBu BAL.

Transmission technology: WIFI 802.1n Encryption technology: WPA2-PSK AES Working frequency: 5.2-5.8 GHZ Output impedance: >1kΩ PC communication method: TCP/IP Camera control method: RS-232/UDP Network Interface: RJ45 Display: LCD1602 Limit on the number of speakers: 1/2/4, max in 6 persons Camera Tracking Protocol: PELCO-P/PELCO-D/VISCA

Operating temperature:  $0 \sim 45^{\circ}$ C

Storage temperature:  $20 \sim 50^{\circ}$ C

#### Item Model for Order

VIS-DCP2000-W..... Full digital network DSP conference processor Page 6

#### **CLEACON V2 Series VIS-MAW-T**

WiFi Wireless Touch Screen Unit



#### **Features**

- 4.3-inch capacitive color touch screen with stylish and low-profile design
- Built-in NFC card reader for quick identification of participants
- All-in-one touch screen conference unit can be configured into one chairman unit, delegate unit, VIP unit or dual delegate unit according to the different needs of each meeting
- The integration of 5G WiFi wireless and wired network, dual connection to communicate makes the meetings be not interrupted
- Three charging methods: replaceable battery power supply, microphone base charging, wired POE network charging. The battery intelligent visual management is carried out in three ways: unit display screen, web server and PC software
- Wireless communication, setting up all system in few minutes to be ready for using, and put them away in short time as well
- Detachable battery pack is easy to replace and charge. The battery can provide 20 hours of runtime after it is fully charged
- Internal high-fidelity loudspeaker
- Pluggable microphone and long-range sound pickup ability, support different length of microphone.
- Head-set interface in both sides with volume adjust
- Line-in interface which allows microphone or other line-in device like cell phone, laptop to pass audio through to perform teleconference
- Full-digital signal transmission and processing, completely avoid the RF interference from cell phone or similar devices.

• The unit showing time/date on the screen. Timer on display to set certain time for each delegate to speak, will Page 7

remind user or close the MIC automatically.

Easily expand functions by setting software modules •

#### **Functions**

- Compliance with IEC 60914, GBT 15381-94
- Standard Wi-Fi technology is compatible with other Wi-Fi networks, support 5GHz on all channels. •
- Full-digital transmission and processing technology in uncompressed audio, professional microphone to achieve perfect sound quality at 20Hz  $\sim 20$ KHz;
- ullet128 bits digital encryption technology, with WAP2 secure connection, MAC address filtering, SSID-hiding to prevent wiretapping and unauthorized access from delegate unit
- One AP can work with more than 40 wireless units, and more units can be connected by extension APs •
- 6 wireless units can be activated at the same time by the users
- Support more AP working together to increasing the Wi-Fi coverage range for wireless MIC units working in a large conference room or multi-rooms
- With our HD PTZ camera and video matrix switcher, using RS485 or RS232 protocol to send the PELCO/VISCA protocol to realize camera auto-tracking function
- Precise cardioid directional microphone capsule with anti-wind microphone foam, with two-color LED • indicator
- Button for MIC ON/OFF, Priority & Apply Answer button for chairman unit •
- Built-in high-fidelity speakers, it automatically mutes to prevent howling when press MIC ON
- Head-set interface in both sides with volume adjustment. •
- AGC (Automatic Gain Control)/AFC (Adaptive Feedback Cancellation)/ANC (Active Noise Cancellation)/ Mix (Auto-Mix) technology
- Build-in functions for intercom
- Contains five optional function modules:
  - Voting: three-button / two-button voting
  - NFC identification: Sign in with NFC card to accurately identify user information.
  - Simultaneous interpretation channel: There are 2 language channel selectors and each selector has 64 languages independent selection
  - Dual users: Support two participants sharing one unit to achieve camera tracking at two locations; enabling two delegates to vote on one unit
- Without using PC software, our conference controller still owns following settings:
  - Limit on the number of speaking persons: By Setting the number of active units at the same time (Number is 1/2/4/6/ units)
  - Discussion modes:

"OPEN" Free for all, limited by the active units setting by controller, "OVERRIDE" First in First out, "VOICE" Can activate MIC by detecting sound without press button, "APPLY" To apply then to speak

- The unit showing real time on the screen, and count-down timer for speaking person. •
- Detachable battery pack is easy to replace and charge. The battery can provide 20 hours of runtime after it is fully charged. Power-saving technology enables the microphone to be continuously used for 20 hours and standby for 35 hours.

Combined with camera and camera tracking controller, it has an automatic camera tracking function. Page 8

- Built-in MCU, support wireless upgrade of all units.
- With voice control function, you can adjust the sensitivity of voice control, intelligently turn on the microphone and set the off time.
- Added Type-C interface and side charging contacts for mobile device charging.

#### **Control & Indicators**

Microphone with two-color LED ring, red indicates speaking status, green indicates request to speak. **4.3-inch capacitive touch display** Indicator for Volume adjustment Indicator for MIC ON/OFF Chairman unit with priority button and consent button for the delegates Power ON/OFF button is hiding on the left side

#### Interfaces

Pluggable gooseneck microphone base 2x 3.5mm stereo headphone jack 1x 3.5mm stereo input jack 2x RJ45 connectors Contactor for battery pack DC Connector for power adaptor

#### **Technical Parameters**

Screen size :109.22 mm (4.3 inches) Resolution: 800x480 Screen type: Capacitive and color multi-touch Contactless NFC cards in following standards: ISO / IEC14443 Type A Connection method: CAT5 / CAT6 cable + WiFi wireless + buckle Sound Pickup: heart type capacitance

Electrical parameters Power: 48V DC Power saving mode consumption: 1.4W Maximum power consumption: 3.8W(connection with wireless and wired together) Frequency response :20~2000Hz THD at rated level <0.1% Dynamic range> 90 dB S / N ratio≥96dB THD at rated level <0.1%

#### Audio input

Nominal microphone input 80 dB SPL in accordance with IEC60914 Maximum sound pressure 125dB (THD <3%), in line with IEC60914 Sensitivity: -46 dBV / Pa Page 9



#### Audio output

Headphone load:  $16\Omega$ Headphone volume: 10mW Headphone jack: 3.5mm stereo Input impedance:  $2k\Omega$ 

#### **Mechanical parameter**

Installation: desktop Dimensions (mm, without microphone):  $217.5L \times 138.5W \times 69H$ Color: Black Main material: ABS Weight (without microphone): 1.0 KG Environmental parameters Operating temperature 5 °C to +55 °C Relative humidity <90%

#### Item Model for Order

VIS-MAW-T	.WiFi wireless touchscreen unit, battery and microphone are not included
VIS-WBTY3	.Battery pack for each unit,7.2VDC,5000mA
VIS-WBTY3-H	Battery pack for each unit,7.2VDC,6500mA
VIS-WCH3	Charger for battery
VIS-M220	.Pluggable Gooseneck Microphone 220mm, unique design
VIS-M330	.330mm Microphone, with anti-wind foam cover
VIS-M410	.410mm Microphone, with anti-wind foam cover
VIS-M485	.485mm Microphone, with anti-wind foam cover
VIS-M600	.600mm Microphone, with anti-wind foam cover

#### **Optional function license**

VIS-ALGE	. Dual 64-channel selector software module
VIS-AVOTE	Vote software module
VIS-AIDEN	. NFC identification software module
VIS-ADUAL	. Dual user software module



#### **VIS-ICARD**

Contactless IC card



#### **Features**

- Proven, Reliable Technology Offers extremely consistent read range
- Fast Processing and Data Communication
- True Credit Card Thickness

#### **Technical Parameters**

Dimensions: 2.125 x 3.375x .03" (5.4 x 8.57 x 0.076 cm) Weight: 6g Typical Maximum Read Range: Up to 4" (10cm) Operating Frequency: 13.56MHz RF Interface: ISO/IEC 14443A/MIFARE, Parts 1-3 Transaction Time: < 100ms Baud Rate: 106 kbps Data Retention: 10 years min.



#### VIS-ALGE/VIS-AVOTE/VIS-AIDEN/VIS-ADUAL

Software modules for WiFi Wireless Touch Screen Unit



#### **Features**

- VIS-ALGE: License active to realize new feature for Dual language selector
- VIS-AVOTE: License active to realize new feature for voting function •
- VIS-AIDEN: License active to realize new feature for IC card identification •
- VIS-ADUAL: License active to realize new feature for dual user •

#### **Functions**

- VIS-ALGE for simultaneous interpretation channel: There are 2 language channel selectors and each selector has 64 languages independent selection
- VIS-AVOTE for voting: Three-button / two-button voting •
- VIS-AIDEN for RFID card identification: Sign in or voting with RFID card to accurately identify user information
- VIS-ADUAL for dual user: Two participants share one wireless touch screen unit to achieve camera tracking • at two locations. It also enables two delegates to vote on one unit

#### Item Model for Order

VIS-ALGE	. Dual 64-channel selector software module
VIS-AVOTE	Vote software module
VIS-AIDEN	. NFC identification software module
VIS-ADUAL	. Dual user software module

VIS-AP4C 5GHz Conference Access Point



#### Features

- Connect with the Wi-fi conference processor VIS-DCP2000-W, or with the switch to extend more conference AP in the same system.
- Typical coverage range 30m
- Each AP can connect up to 50 conference units.
- Install on ceiling, wall or with stand rack mount
- 128 bits AES digital encryption technology, with WAP2 secure connection, MAC address filtering, SSIDhiding to prevent wiretapping and unauthorized access from delegate unit

#### **Functions**

- LED indicator for signal/power
- 5GHz dual band communication
- LAN support POE power supply
- RJ45 for LAN connection

#### **Technical Parameters**

RF			
WLAN Standard	IEEE802.11ac, IEEE802.11a, IEEE802.11g, IEEE802.11b		
RF Frequency Bands	5GHz UNII		
Max Transmission Power	27dBm		
Antenna Type	Four built-in 5dBi antennas		
POWER			
Supply Type	Power Over Ethernet, 802.3at, DC 12V 1.5A		
Supply Voltage(at Power Consumption)	≤13W		

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NETWORK	
Interface	1×Gigabit WAN/POE Port, 1×Gigabit LAN Port
Link Speed	1200Mbps
Networking Addressing Capability	DHCP or Manual IP address
Cable Length	100m (max)
Cable Type	$\geq$ Cat5e (shielded / unshielded)
Connector Type	1× RJ45
Connector LED	WAN/POE Port (UP LED), LAN Port (Down LED)
USER INTERFACE	
LED Status Indication	Power, Network Audio, Wireless (Yellow / Blue)
Reset	Push button for Factory Reset
MECHANICAL	
Dimensions	220L×220W×45H(mm)
Color	White
Weight	0.3KG
Mounting Type	Ceiling, Wall or Stand Rack

#### Item Model for Order

VIS-AP4C..... 5GHz Conference Access Point (White)

### VIS-WBTY3/VIS-WBTY3-H

Rechargeable Battery pack for wireless touchscreen unit



#### **Features**

- Long life and lasting stability of charging performance
- After fully charged it can use 20 hours (with power save mode)
- Four hours needed to fully charge
- Efficient lithium batteries
- 6 charging contacts, support standing charging

#### **Functions**

Contactor by pop-up pins Buckle housing to prevent poor contact or dropping

#### **Technical Parameters**

Battery capacity: VIS-WBTY3: 5000mAh/ VIS-WBTY3-H: 6500mAh Output voltage: 7.2VDC Weight: 240g Operation temperature: -20°C~60°C

#### Item Model for Order

VIS-WBTY3	Battery pack for wireless units,5000mA 7.2VDC
VIS-WBTY3-H	Battery pack for wireless units,6500mA 7.2VDC
VIS-WCH3	Charger for battery, 10 pcs VIS-WBTY3 at one time



VIS-WCH3

Charger for battery



#### **Features**

- 4 hours needed to fully charge
- Integrate web page to get the battery status remotely
- MAX 10 pcs battery charging at one time
- Wide range power input: 110V~240V AC
- Buckle housing to prevent poor contact or dropping, light in weight for easy moving

#### **Functions**

Contactor by pop-up pins Buckle housing to prevent poor contact or dropping

#### **Technical Parameters**

Input: 110 ~ 240VAC 50 ~ 60HZ Output: 7.2V/1000mA Power consumption: 20W Size: 530Lx200Wx52H(mm) Weight: 2KG

#### Item Model for Order

VIS-WBTY3	Battery pack for wireless units, 5000mA 7.2V DC
VIS-WBTY3-H	Battery pack for wireless units,6500mA 7.2VDC
VIS-WCH3	Charger for battery, 10 pcs VIS-WBTY3 at one time

#### VIS-WCH2-F

Trolley Case



#### **Functions**

For: 10 pcs conference units + 10 pcs gooseneck mics Conference units:VIS-MAW-T Gooseneck mic:VIS-M410/VIS-M485 *Technical Parameters* Dimensions: 400L×350W×620H(mm) Color: Black

Power consumption: 80~96W Net weight: 17KG Material :Aluminum alloy frame



#### VIS-M600/VIS-M485/VIS-M410/VIS-M330/VIS-M220

Pluggable Gooseneck Microphone



#### **Features**

- Precise directional microphone head with Mini design
- Two color LED ring indicator
- anti-wind microphone foam cover
- Strong audio collection ability to work with different length of microphone

#### **Functions**

- Two-color LED indicator on microphone, red for speaking, green means need acceptance from chairman to speak
- Screw lock socket to connect removable microphone

#### **Technical Parameters**

Item	VIS-M600	VIS-M485	VIS-M410	VIS-M330	VIS-M220
Directivity	Cardioid				
Sensitivity	-46dBV/Pa				
Frequency response	30Hz~20KHz				
Equivalent noise	20dBA (SPL)				
Signal-To-Noise Ratio Ref	≥96dB				
Microphone Type	Condenser				
Maximum SPL (1 kHz at 1% THD, 1 kΩ load)	125dB ( THD<	3%)			
Conference unit connection	Mini 6 pin.				
Input impedance	2 kΩ				

Working temperature	0~45°C				
Storage temperature	-20~50°C				
Weight	80g	80g	60g	60g	60g
Length	600mm	485mm	410mm	330mm	220mm
Color	black				

#### Item Model for Order

VIS-M220	.Pluggable Gooseneck Microphone 220mm, unique design
VIS-M330	.330mm Microphone, with anti-wind foam cover
VIS-M410	.410mm Microphone, with anti-wind foam cover
VIS-M485	.485mm Microphone, with anti-wind foam cover
VIS-M600	.600mm Microphone, with anti-wind foam cover

#### **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.



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