

DCS-3021C

User Manual



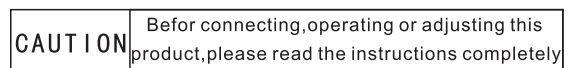
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Safety Notes

1. Please carefully read this document before installing and using the equipment.
2. Please keep this document for future reference.
3. Observe “Cautions” in all operation guides.
4. Observe the rules and principles in all operation guides.
5. Clean equipment: before cleaning the equipment, power it off and then disconnect all units of the equipment. Use dry soft cloth to clean the equipment.
6. Do not use any nonconforming accessory or fitting without approval from the Company. It is likely to cause hazardous accident.
7. Do not put the equipment in humid places so as not to cause equipment damage or danger.
8. Do not place the equipment on an unstable table; prevent equipment vibrating during transportation to avoid damage to the equipment. Select proper package or original package for transportation.
9. Keep the equipment room ventilated so as to prolong the service life of the equipment.
10. Service voltage: America and Japan: AC 110V – 120 V and 60 Hz Eurasia: AC 220V – 240 V and 50 Hz
11. Power socket: three–pin Ground Socket.
12. Do not place heavy objects on extension cables necessary for equipment connection. Make a detour if routing is required to ensure normal operation of the system.
13. Connect all conference units in the system based on system requirements; if not, all equipments in the whole system may run abnormally. Contact GONSIN after–sale service center in case of special requirements. Technical support Tel: 0757–22360959.
14. Unless permitted by the Company, do not disassemble shell and avoid any hard conductor or liquid from leaving or permeating into the shell.
15. Do not disassemble the equipment on your own when your equipment needs service. Contact the customer service center of GONSIN: 400–883–1138.
16. All GONSIN products shall be maintained against the warranty card based on system category, except for product issues resulting from manmade reasons or force majeure, for example:
 - A. Equipment is dropped and broken due to manmade reasons;
 - B. Equipment is damaged due to misoperation by operators;
 - C. Some equipment spare parts are damaged or missing due to arbitrary disassembly;
 - D. Equipment is dropped and broken due to natural disasters.
17. Use specific cables to connect equipment.
18. Turn off the power switch and remove the plug in case that the equipment is not used for a long time.
19. Keep the Warranty Card in appendix safe. The card serves as a basis for future maintenance free of charge.



Caution: do not open the cover; otherwise, there is a risk of electric shock.

Before connecting, operating or adjusting this product, read this document carefully.

This label is attached to the back of the equipment to save area.



The lightning sign reminds users that hazardous voltage that is not insulated is likely to trigger electric shock.



The exclamation mark in the equilateral triangle reminds users to operate and maintain the equipment based on the accompanied operation and maintenance instructions.



Caution: do not expose the equipment to rain or humid places to avoid fire and electric shock.

Note: only qualified electrical engineers are allowed to install equipment.



Remove the power plug: the equipment is powered on when power cable is inserted into the power socket irrespective of a power switch or not; however, the equipment cannot be operated until the ON/OFF button is switched to “On” . The power cable is the main power source for cutting off all units.

Precautions for Lithium Battery Use

In case of the following abnormality during use, turn off the power switch, take out the battery, and keep the equipment away from fire; if not, there is a risk of fire or explosion.

—The battery is leaking, changing color, deformed, or damaged.

—The battery is smoking or smelly.

Do not weld or modify the battery or change its form; otherwise, the battery circuit may be damaged, resulting in a fire, leakage, even explosion.

Avoid the battery shorting (anode and cathode) by electric wire or metal and do not place the battery and metal (e.g. chain or key) together for storage or transportation; otherwise, the battery may be heated up, resulting in leakage, fire or explosion.

Do not heat the battery or throw the battery into fire; otherwise, the safety valve or protective circuit of the battery may be damaged, resulting in fire or explosion.

Do not set the battery in water or moisten the battery anode/cathode; otherwise, the battery will be corroded and heated up, resulting in, leakage, fire, or explosion.

Use specified charger to charge the equipment. Avoid reversing the battery anode and cathode; otherwise, the battery may be heated up, resulting in leakage, fire or explosion.

Do not place the battery near fire or expose the battery to high-temperature environment (60°C; e.g. in car); otherwise, the battery circuit may be damaged and heated up, resulting in fire, leakage, even explosion.

The battery must be used on specified equipment model; if not, the battery may be heated up, resulting in leakage, fire or explosion.

Do not drop or vibrate the battery; otherwise, the battery circuit may be damaged and heated up, resulting in a fire, leakage, even explosion.

In case the battery leakage enters eye, use clean water to flush the eye and seek medical care immediately; if not, blurred vision may occur.

In case the battery leakage stains clothes or skin, use clean water to flush it; if not, skin may be damaged.

Battery capacity will be too low if the lithium batteries are left unused for a long time, which will damage the batteries. Remove the batteries and make sure they are fully charged every three months.

Notes:

GONSIN reserves the right to change this document without prior notice.

To obtain more documentary materials, contact the local after-sale service center. GONSIN welcome your feedback.

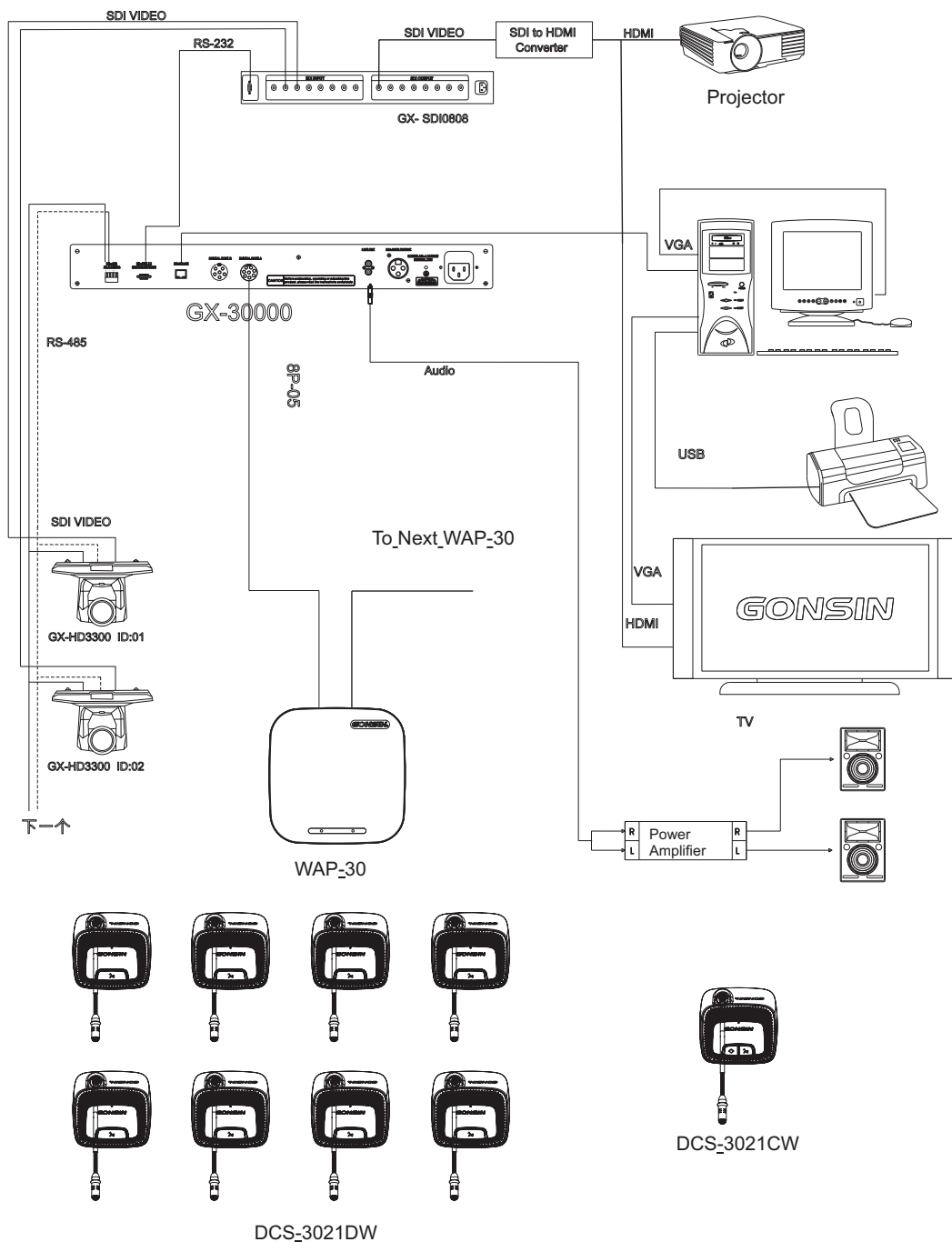
Chapter 1 Introduction

GONSIN DCS congress system boasts superior performance, and it is applicable to conferences of different sizes. The congress terminal is easy to operate: press the speaking key to speak and rotate the volume knob in two directions (“+” and “-”) to adjust the volume of the built-in loudspeaker; system maintenance does not need much skill as well: technicians can operate the terminal after a short period of training.

System composition:

The DCS congress system is composed of the congress server, wireless congress terminals (for the chairman and delegates), wireless AP WAP-30, HUB-D45, PC (optional), conference management software (optional), high-speed dome cameras (optional), and audio devices and display devices.

The following figure shows the system wiring diagram:



This document is applicable to the following product models:

Congress server

GONSIN30000

Wireless AP

WAP-30

Pluggable Gooseneck Microphone Stem

MIC-310* $\varnothing$ 14. 5-Y 310mm Pluggable Microphone Stem (Black)

MIC-410* $\varnothing$ 14. 5-Y 410mm Pluggable Microphone Stem (Black)

MIC-510* $\varnothing$ 14. 5-Y 510mm Pluggable Microphone Stem (Black)

MIC-310* $\varnothing$ 14. 5-Y 310mm Pluggable Microphone Stem (Silver)

MIC-410* $\varnothing$ 14. 5-Y 410mm Pluggable Microphone Stem (Silver)

MIC-510* $\varnothing$ 14. 5-Y 510mm Pluggable Microphone Stem (Silver)

Headphone

TC-D3 Stereo Headphone

Chapter 2 Congress Server

2.1 Overview

The DCS congress server GONSIN30000 is the core of a congress system. It can be connected to WAP-30 or WAP-30I (for increasing the number of listening units and simultaneous interpretation units) as well as HD matrix, mixer, power amplifier, and PC over corresponding interface. The server acts as a bridge to connect system hardware and control software. It can work independently or be connected with a PC to allow operator to use the conference management software for management and control.

Product model:

GONSIN30000

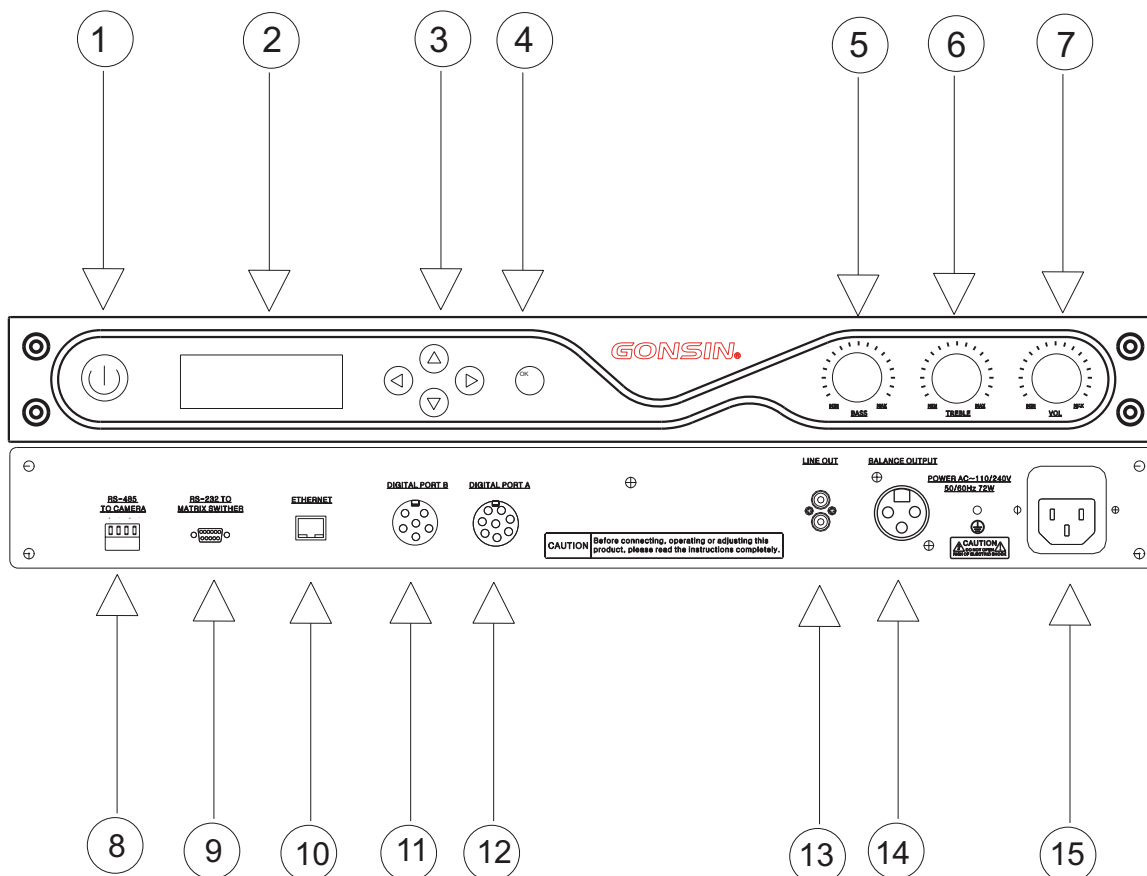
Congress server (with discussion and automatic camera tracking functions)

2.2 GONSIN30000 Functions and Indicators

2.2.1 Basic Functions

1. Use 2.4GHz frequency hopping technology to automatically detect 2.4GHz RF resources and use reliable frequency hopping mechanism to avoid co-channel interference if it is combined with software.
2. Use high-efficiency digital audio compression algorithm to maximize utilization rate of wireless carriers. Mutual interference will not be caused if multiple systems are used in a building.
3. Support 8*1/8*8 HD automatic camera tracking function.
4. Support AUTO and FIFO speaking modes.
5. Support up to four speakers at the same time (one chairman terminal and three delegate terminals).
6. Support volume/tune of congress terminals to be adjusted in batch.
7. Support congress terminals to be shut down in batch, which helps effectively reduce workload.

2.2.2 Indicators



Front side

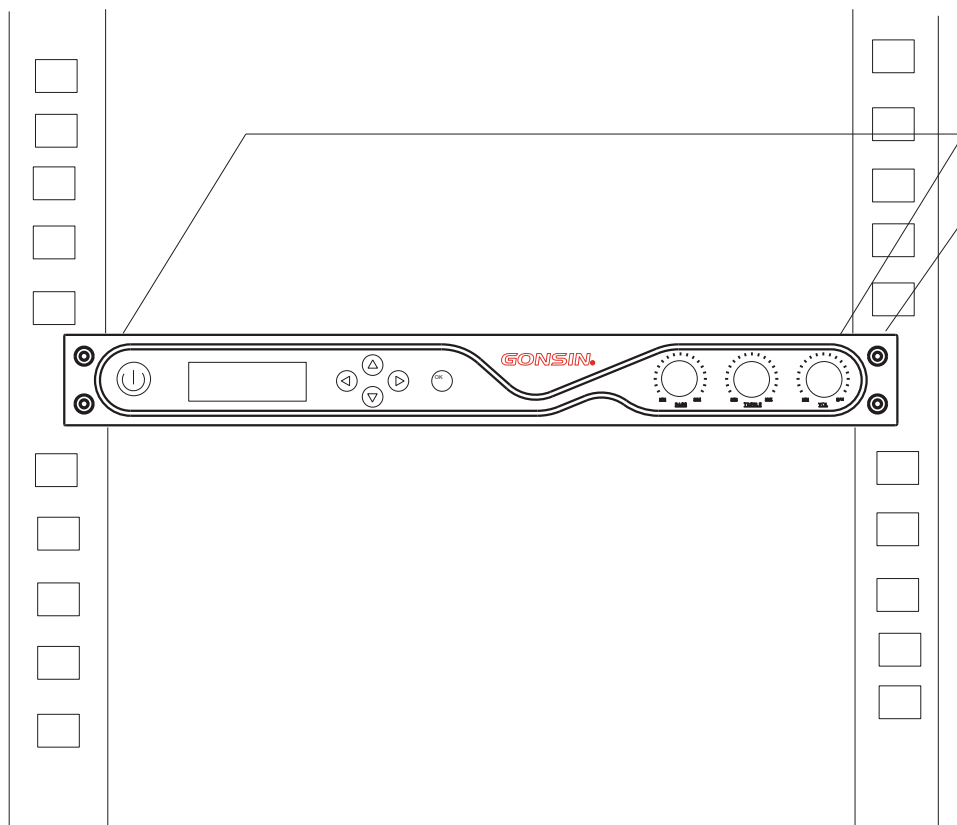
1. Power switch (POWER);
Note: The server takes a period of time to start up. Before the server is fully started up, do not operate the congress terminals.
2. Backlight LCD
Show various kinds of information (such as operation mode and language) and provide a plurality of languages to allow users to set the system.
3. Operation buttons: up/down/left/right arrow buttons
4. OK button
5. Bass adjustment knob (BASS)
6. Treble adjustment knob (TREBLE)
7. Volume knob (VOL)

Back side:

8. RS-485 interface (RS-485 TO CAMERA). This interface has two pairs of connection terminals and it is used for connecting to cameras that support SONY\PELCO-P.
9. RS-232 serial port. This interface is used for connecting to a PC for software control.
10. Network interface; this interface is used to connect to a PC or backup server.
11. One-channel 6P interface. This interface is used for connecting to WAP-30I (for increasing the number of listening units and simultaneous interpretation units).
12. One-channel 8P interface. This interface is used for connecting to WAP-30 (with discussion function).
13. One group of RCA balanced audio output
14. One-channel XLR balanced audio output
15. Power interface (AC 110-220V 50Hz)

2.3 Installation

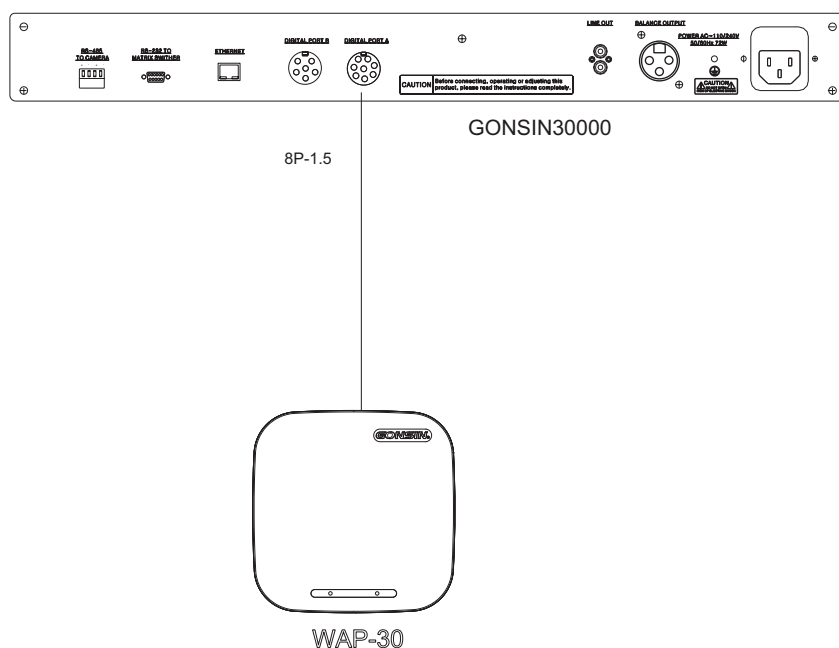
The congress server is 1U high, and therefore it can be installed in a 19-inch rack. It has two accompanied brackets. Screw up the bracket fixed in two sides of the congress server, put the congress server into the rack, then screw up it with the rack screws, as shown in the following figure:



2.4 Connection

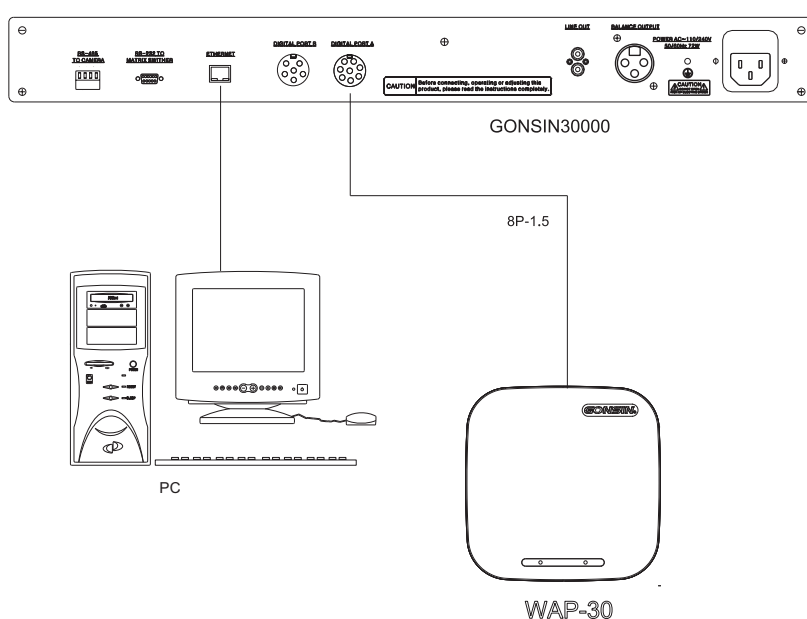
2.4.1 Connection with Congress Terminal

To connect the congress server with a wireless terminal, use an 8PS-03/05/10/20/40 extension cable to connect the 8P interface (female connector) of the congress server to a WAP-30 AP, with one male connector of the cable connected to congress server and the other male connector to the WAP-30 AP, as shown in the following figure:



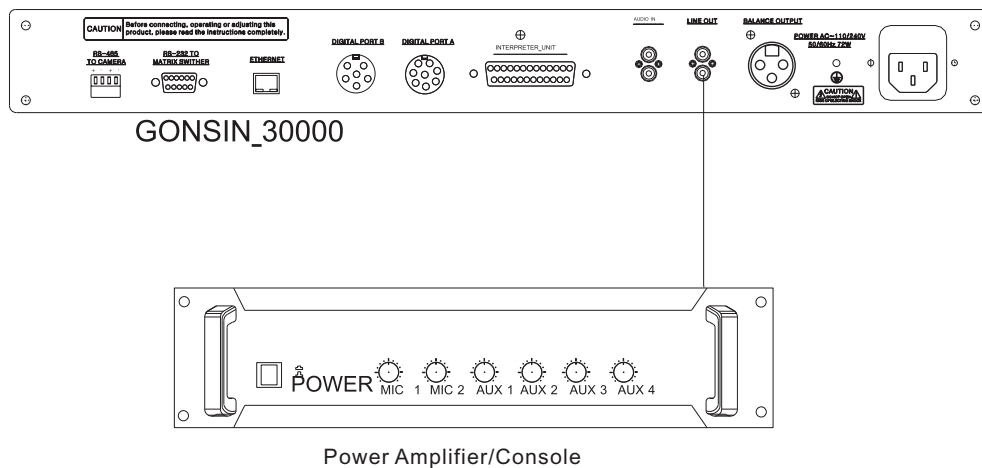
2.4.2 Connection with Wireless AP and Control PC

The successful communication between the congress server and a wireless terminal must be supported by a wireless AP WAP-30 to perform signal conversion. The congress server is connected to a PC over the RJ-45 connector. The following figure shows the wiring diagram:



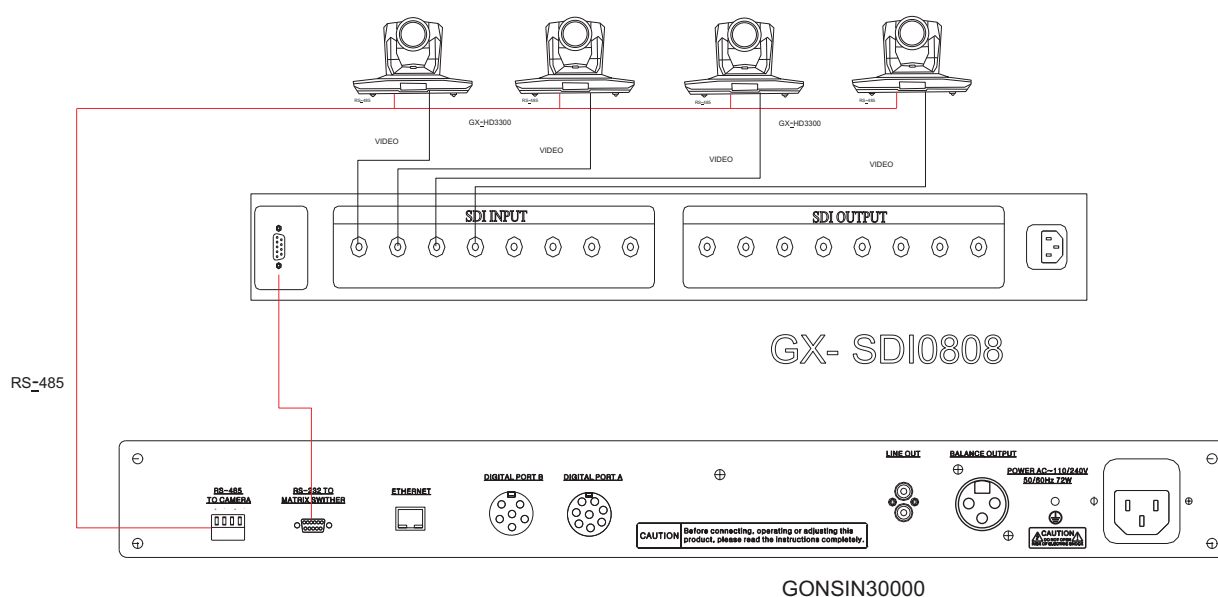
2.4.3 Connection with Mixer or Amplifier

The audio output interface of the server is used to connect to a mixer or an amplifier for loud speaking. Use an audio cable to connect the “LINE OUT” RCA interface of the server with corresponding interface of a mixer or an amplifier. The following figure shows the wiring diagram:

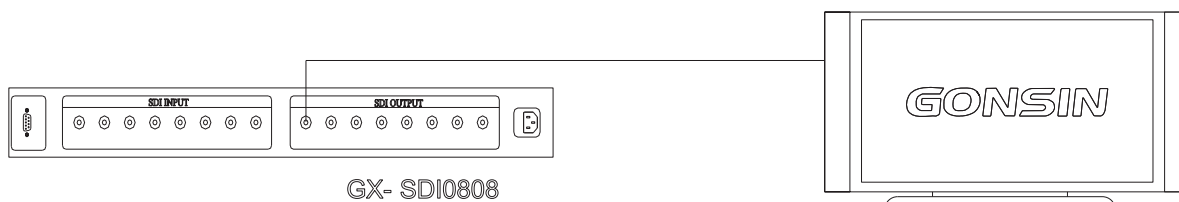


2.4.4 Connection with Camera

Among the three groups of wiring from the camera (for details on camera operation, refer to the camera operation guide), two groups of wiring are used for connecting to the congress server (power of the camera is supplied directly from the control room). One group is the HD video wiring, which is implemented by connecting the video output of the dome camera to the SDI INPUT of the HD matrix over an RGB connector; where, number 1—input 1; number 2—input 2. The panoramic preset position and the video tracking of the chairman terminal are completed by number 1 camera. The other group is the RS-485 wiring. Generally, use network cables for communication and select a pair of wires as the “A” and “B” of the RS-485 cable. Refer to the following figure:



Use 8I+8O HD matrix with the SDIOUTPUT connected with an RGB connector. Connect the matrix to a display device (such as monitor or converter) using an HD video cable. Refer to the following figure:



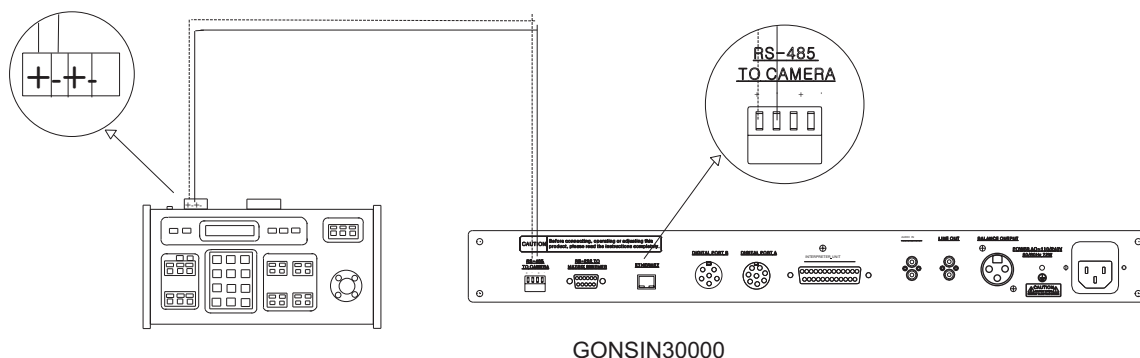
When connecting the congress server to a SONY EVI-D70/D70 camera, set the COM mode of the camera to RS-422 and baud rate to 9600bps; connect RS-485 "A" to RXD IN- and "B" to RXD IN+.

Note: for details on how to set video tracking, refer to the software operation guide.

2.4.5 Connection with the Dome Controller

Make sure that the GX-KB01 dome controller's protocol and baud rate are already preset (please see dome controller user manual for the settings). Use a 2-pin twisted pair cable to connect 485+ and 485- of dome controller to 485+ and 485- of central control unit. Please note that the RS485 control cable of dome camera is already connected with RS485 control cable of central control unit.

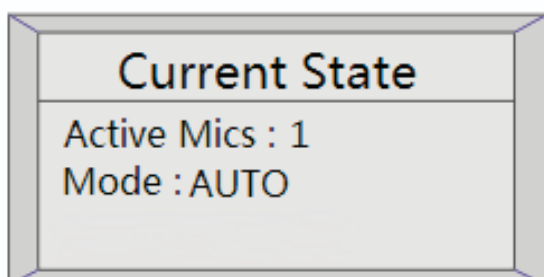
The control cable of dome controller can also be connected to control cable of dome camera.



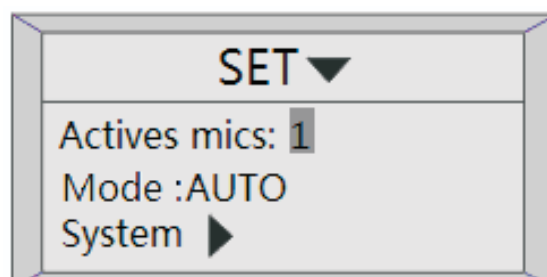
2.4.6 Congress Server Setting and Operation

The LCD screen has five keys: ▲, ▼, ►, ◀, and "OK". After entering the setting interface, the current option is displayed on a contrast background. The leftward and rightward arrow keys are used to enter or exit a menu.

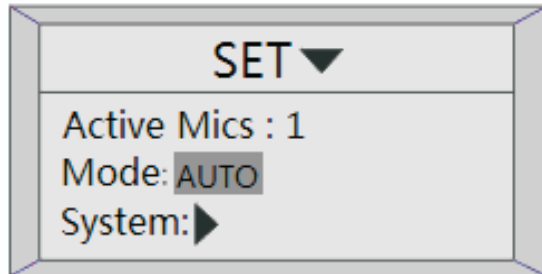
(1) Current status: when the system works normally, the OLED shows the number of active microphones and speaking mode, as shown in the following figure:



(2) Active MIC setting: Press OK to enter the setting interface, press arrow keys to select the value after Active MICs, and then press ▲ or ▼ to change the number of MICs (1/2/3) that can be activated at the same time.



(3) Speaking mode setting: on the setting interface, press arrow keys to select the value after Mode and press ▲ or ▼ to change a speaking mode: AUTO or FIFO.

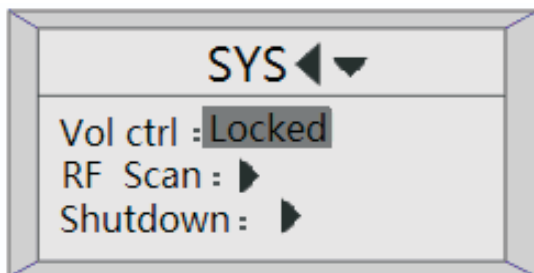


(3) System setting: on the setting interface, press arrow keys to select and enter the "System" setting interface. The interface has the following parameters for users to set:

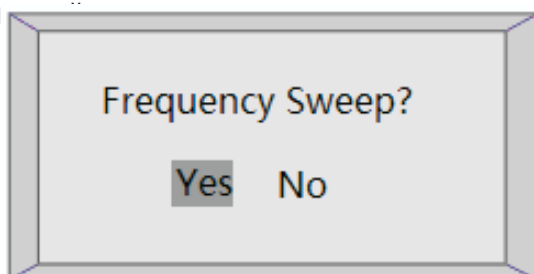
① Volume control lock

If volume control is locked, rotating the volume knob will not work.

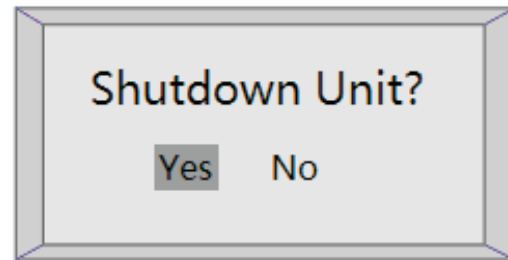
If volume control is unlocked, rotating the volume knob will work.



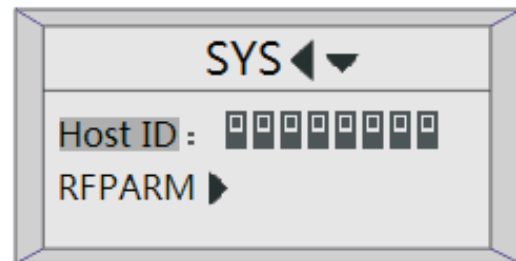
② Frequency sweep: enter the "Frequency sweep" interface and select "Yes" to conduct frequency sweep. The system will scan and select five optimal frequencies for the system to use. If you select "No", the system goes back to the



② Batch shutdown: Enter the "Batch shutdown" interface and select "Yes". The system will shut down all congress terminals; if you select "No", the system goes back to the preceding menu.

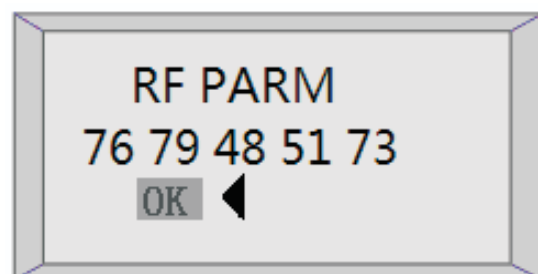


④ HostID: enter the "HostID" interface to set the host ID of the system. The default host ID is 000.



Functional description: host ID is a code used within a system for internal communication. Communication can be successful only when the host ID of the system is consistent with that of a congress terminal. Within a building, set different host IDs for multiple wireless congress systems to avoid mutual interference.

⑤ Frequency point: enter the "Frequency parameter" interface. The current RFs are shown. Select "SET" to rearrange the five optimal frequencies; select "FIX" to restore to default frequencies. Select "OK" to return to preceding menu.



Chapter 3 Compositions of the Wireless Conference System

3.1 Functions and Indicators of the Wireless Congress Terminal

3.1.1 Overview

The congress terminal is essential for a conference participant and it connects with a congress server via the wireless AP. Functions available to participants vary with the type of a conference unit, including listening, speaking, and requesting to speak.

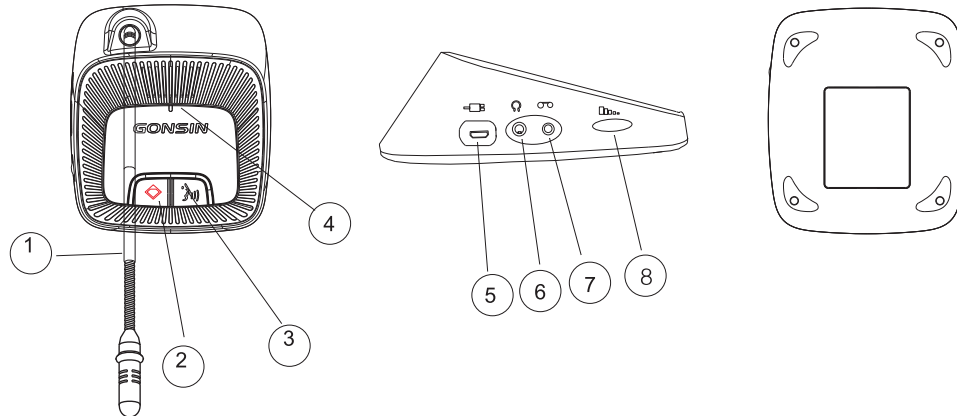
Product models:

DCS-3021C-W	Chairman terminal with basic discussion
DCS-3021D-W	Delegate terminal with basic discussion

3.1.2 Basic Functions

1. Battery capacity detection
2. Low-voltage alarm and automatic shutdown
3. Hold and press the MIC button on the MIC gooseneck to turn on/off the terminal
4. RUN indicator
5. Attendance registration by button pressing or prosthesis registration
6. Speaking mode: AUTO or FIFO; hear a speaker via the headphone or built-in loudspeaker; volume is adjustable
7. Automatic video tracking and panoramic preset position; in support of SD and HD video tracking
8. Micro USB interface for charging; lithium battery is removable for batch charging

3.1.3 Basic Functions



Front side:

1. Microphone gooseneck
2. Priority key (red)
Press this key to close all active congress terminals. This key is available for the chairman terminal only.
3. MIC ON/OFF key
8. Indicator Light; it blinks when the congress terminal is matching with the congress server, it lights for a while when the congress terminal matches with the congress server successfully. It lights green with sufficient power, otherwise it would light red.

Left side:

4. Micro USB interface for charging; the lithium batteries can be removed and charged in batch.

5. 3.5mm jack. Headphone output interface with a 3.5mm jack
6. 3.5mm jack ; Audio output interface with a 3.5mm jack
7. Volume knob

Bottom:

9. terminal number setting: Like the dial-up setting, the default is dialing up, namely 00000000.

Function description: host ID is a code used within a system for internal communication. Communication can be successful only when the host ID of the system is consistent with that of a congress terminal. Within a building, set different host IDs for multiple wireless congress systems to avoid mutual interference.

3.2 Functions and Indicators of Wireless AP

The wireless AP can transmit signal and is the transit device between the GONSIN30000 server and DSC-3021 congress terminals. The device utilizes the advanced selecting-hopping technology. The wireless AP has super-strong emissivity and anti-interference capacity. It can transmit at all directions and is immune to any obstacle.

Notice: one congress server can be connected with one wireless AP. At the same time. The system can connected with WAP-30I wireless simultaneous interpretation AP in order to realize the simultaneous interpretation function. The system is recommended to use in the medium or small conference room.

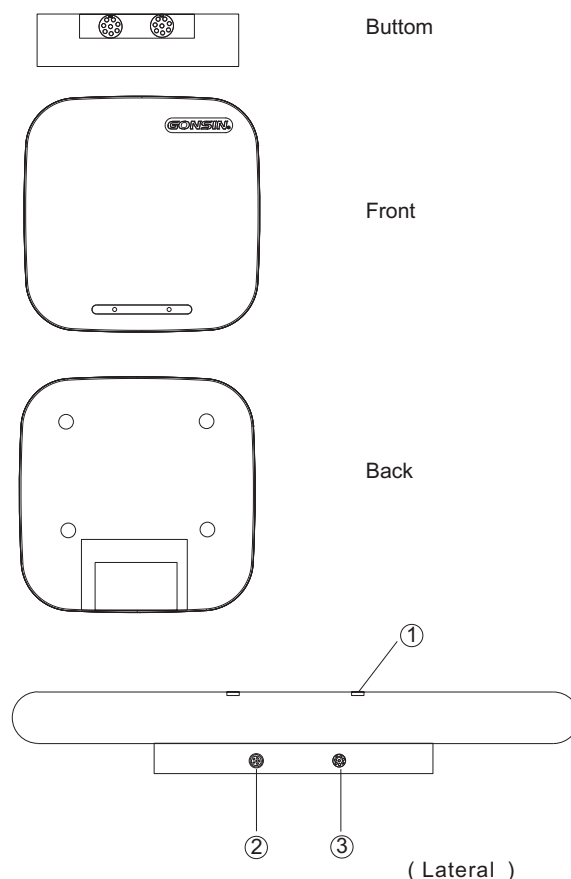
Product model:

WAP-30

3.2.1 Basic Functions

- 1、 RUN indicator
- 2、 Powered by the congress server
- 3、 Wall mounting, bracket supporting, and ceiling mounting

3.2.2 Indicators



- 1.Signal indicator (when a microphone is connected to the wireless access point, this indicator will flash)
- 2.6P socket, for connecting with WAP-30I (for adding listening and simultaneous interpretation functions)
- 3.8P socket, for connecting with WAP-30(discussion function only)

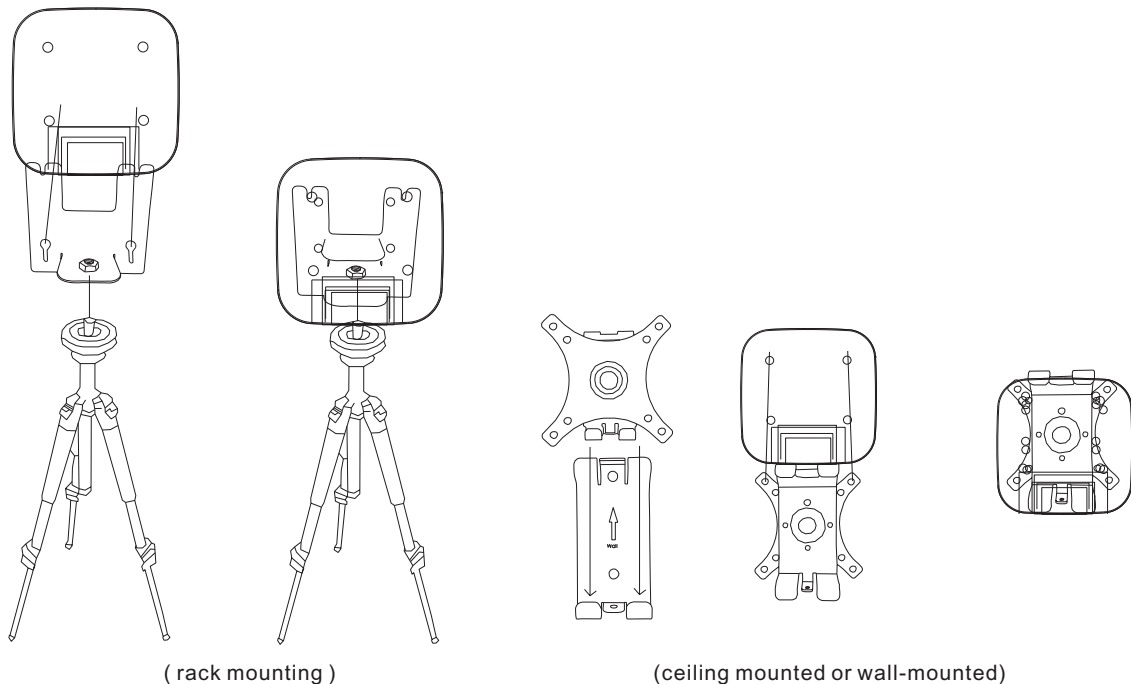
3.2.3 WAP-30

3.2.3.1 WAP-30 Wireless Conference AP Installation

Wireless transmission is at all directions and can not be affected by visible rays. So this wireless AP could be used outdoors. Because of the all-direction transmission, that wireless AP could be installed in the control room directly and make the deployment easier. The longest connection distance between the wireless access point and the server can reach 40m. Theoretically speaking, wireless AP could be installed in any place of the control room. The best way is to wall hung 2m above ground.

Notice: It should not have any metal within one meter of the installation site, otherwise, the signal transmission would weaken to some extent

3.2.3.2 WAP-30 Wireless Conference AP Installation



3.3 Functions and Indicators of Charging Case

The charging case can charge 16 batteries at the same time. It is powered by the universal power supply and automatically matched by the voltage of the city power. Each charging grid has a charging indicator light. The charging circuit can automatically detect the battery and control the charging process.

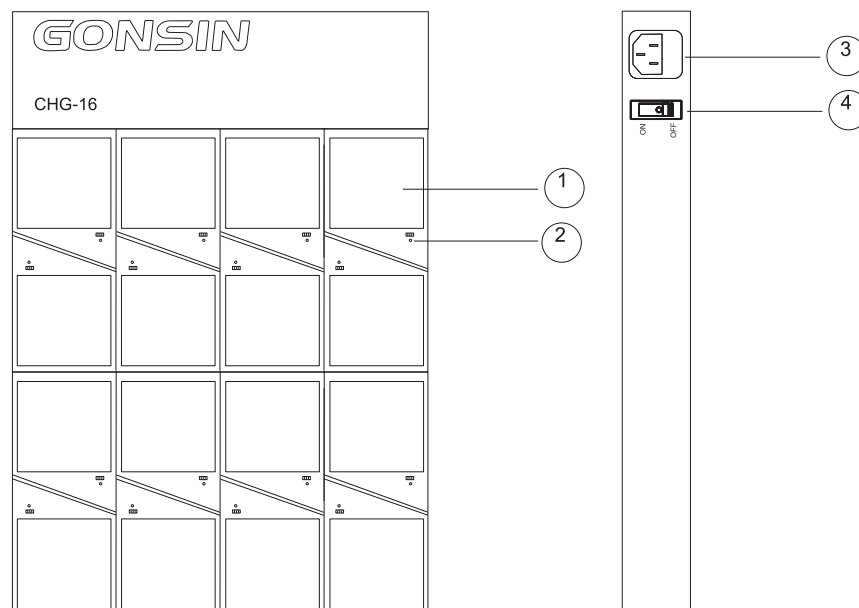
Notice: CHG-16 charging case can charge the DSC-3021 conference terminal. Don't use it to charge other types of conference terminals.

Product model: CHG-16

3.3.1 Basic Functions

1. Smart management of batteries: ensure security and reliability of charging process, manage battery capacity and charging current, extend service life
2. Red/green LED indicator to indicate charging different states
3. Charging is implemented by an independent module with battery capacity detection function. When no battery is inserted, the charging module does not work.
4. Up to 16 batteries can be charged at the same time; charging duration: 5h

3.3.2 Indicators

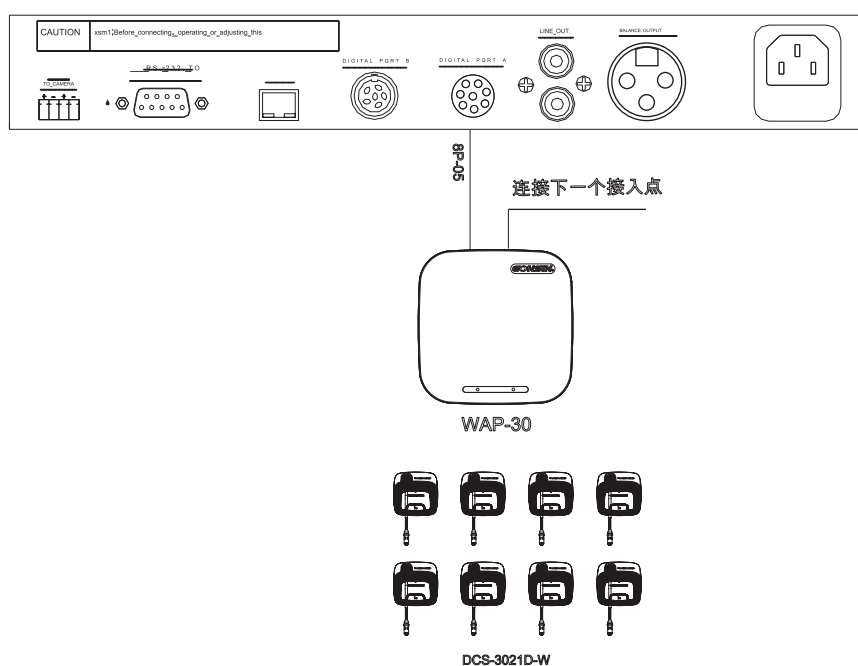


- 1、 Battery grid
- 2、 LED indicator (red indicates "being charging"; green indicates "charging completed")
- 3、 Power interface(AC 110-220v 50Hz)
- 4、 Power switch(power)

3.4 Connection of Congress Terminal

To connect the congress server with wireless terminals, use an 8PS-03/05/10/20/40 extension cable to connect the 8P interface (female connector) of the server to a WAP-30 AP, with one male connector of the cable connected to the congress server and the other male connector to the AP. Theoretically, the maximum distance between the AP and a congress terminal is 30m.

Refer to the following figure:



Chapter 4 Wireless Network Design

4.1 Introduction

GONSIN30000 system is composed of three parts: GONSIN30000 server, WAP-30 wireless AP, and DCS-3021 congress terminal.

This chapter describes how to design a wireless network.

4.2 Control Rules

Control rule 1: control capability

GONSIN30000 server can control up to 500 devices within a wireless network.

Control rule 2: coverage range

In order for the wireless parts to operate better, all wireless congress terminals must be within the coverage range of the wireless AP. Theoretically, the maximum coverage range for the AP is 30m×30m. During use, determine the actual coverage range of the AP.

Control rule 3: frequency

This wireless network must work within a frequency band that is different from the working frequency of adjacent PC network. Refer to Section 1.3.

4.3 Frequency Band

4.3.1 Specifications

This wireless network is based on 2.4GHz wireless communication technology, so all devices work within the frequency band 2.4000~2.4835 GHz.

4.3.2 Wireless PC Network

The wireless PC network is based on 2.4GHz wireless communication technology as well and there are 13 channels available on the PC network. Refer to Figure 1.2.

4.3.3 Carrier

In GONSIN30000 system, the frequency band 2.4GHz is divided into 85 channels; where, channel (0) and channels 80~84 are reserved for communication of fixed purpose. Channels 1~79 are switchable. Refer to Figure 1.3.

4.3.4 Interference

DCS3021 system will cause interference to the wireless network of PC. Make sure the wireless carrier of the DCS3021 system does not overlap with the WLAN channel.

4.3.5 Example

Refer to Figure 1.4. In this example, the WLAN works on channel 3 which overlaps with the wireless carriers 10~35 of GONSIN30000. Therefore, it is advisable to use frequency other than carriers 10~35 in order to ensure communications effect.

Use special measuring instruments to measure the actual wireless environment or use third-party measuring APP for evaluation.

Notes:

Though this system can work at any frequency, make sure to abide by specific frequency control rules of the country you locate.

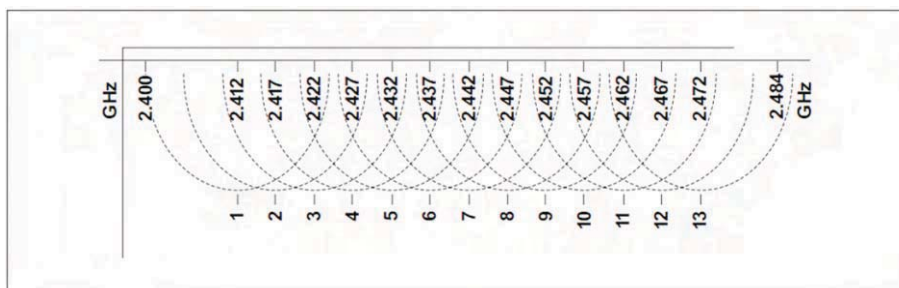


Figure 1.2 WLAN channel

4.3 Function and Indication of Wireless Conference Terminal and Wireless Converter

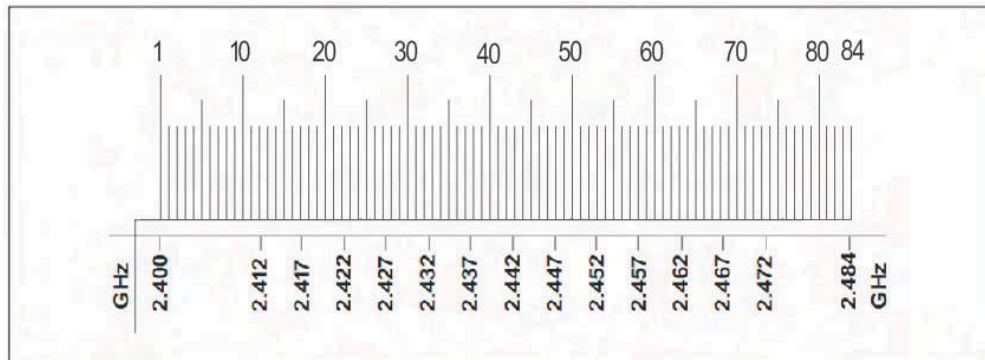


Figure 1.3 Wireless channel of the GONSIN30000 system

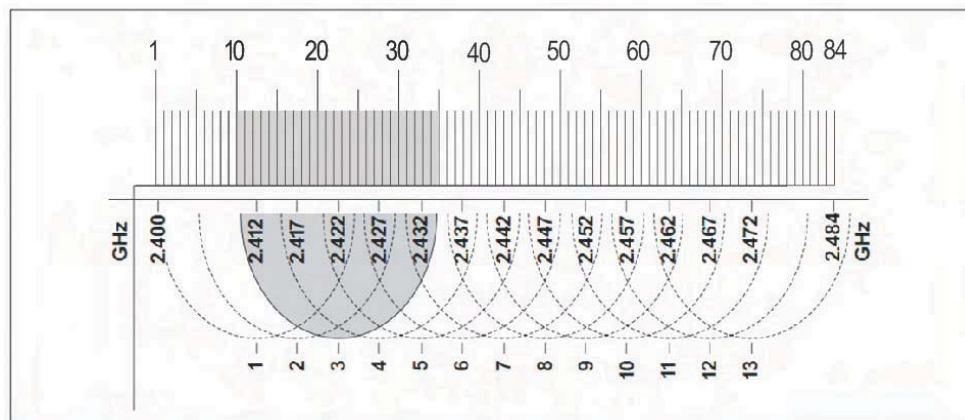


Figure 1.4 Signal interference example

4.4 Installation Rules

As a wireless communication device, the DCS3021 should be installed in accordance with requirements of wireless communication products. Remove any obstacle set between the wireless communication devices (communication range will be narrowed by obstacles) and remove any metal around (wireless signal is easily interfered by metals, especially aluminum). The wireless devices shall be kept as least 1~2m away from electronic products (electronic products such as starter, air conditioner, microwave stove, and TV set will emit radio wave which will interfere with wireless signal).

The degree of impact on radio signals varies with the different kinds of materials:

- Minor impact – glass, wood, gypsum, asbesto
- Major impact – water, brick, stone
- Completely block – marble, cement, concrete, metal

The following instructions should be followed when you are installing the wireless AP WAP-30.

4.4.1 Installation Height

WAP-30 must be installed at 2.5m height at least to avoid human body from blocking communication between the WAP-30 and DCS-3021.

4.4.2 Installation Distance

The communication distance between WAP-30 and DCS-3021 should be as close as possible and within 30m.

4.4.3 Installation Environment

Do not set any metal or electronic product that will produce radio wave within 2m range of the WAP-30.

Chapter 5 Accessories

5.1.1 Wireless AP Cable 8P2-1.5



Item	Description
Color	Black
Type	8P2
Connector	Male connector x 2
Length	1.5m

5.1.2 Extension Cable 8PS-03\05\10\15\20\40



Item	Description
Color	Black
Type	8PS
Connector	Male connector x 1, female connector x 1
Length	5 types, namely 3m, 5m, 10m, 15m, 20m

5.1.3 UTP-Five Category Cable (optional)



Item	Description
Length	> 3m
Network Cable	UTP
Conductor	26AWG Copper-clad aluminum conductor
Connector Type	Rj45

Chapter 6 Technical Indicators

6.1 Congress Server GONSIN30000

Item	Product Name	GONSIN30000 System Server
	Parameter	
Maximum processing capacity		500 (sets)
Communication distance		30m
Audio frequency response		30Hz-20KHz
Power consumption		72W
Harmonic distortion		(THD) < 0.05% (total harmonic distortion 50Hz~8KHz)
Signal to noise ratio		≥75 dB (signal to noise ratio based on A weight)
Maximum audio output		LINE OUT:+20dBu;
Power consumption		AV110/220V±10% 50~60Hz
Installation		19inch standard rack
Dimensions (L × W × H)		1U rack (340mm×420mm×45mm)
Weight		4KG
Operating temperature		0~45°C
Storage temperature		-20~50°C
Interface for video tracking		RS-485
Speaking mode		AUTO, FIFO
Qty. of active microphones		1/2/3+1
Protocol for camera control		PELCO-P 9600/VISCA
Interfaces		1. RS-232 × 1 (connected to a camera for video tracking);
		2. RJ-45 (connected to a PC);
		3. RS-485 bus (for camera control);
		4. 8P socket (connected to a wireless AP);
		5. One-channel balanced audio output (XLR connector);
		6. Two-channel non-balanced audio output (RCA connector);

6.2 Congress Terminal 3021

Item	Product Name	DCS-3021C-W wireless chairman terminal with basic discussion DCS-3021D-W wireless delegate terminal with basic discussion
	Parameter	
COM mode		2.4GHz frequency hopping
Audio frequency response		30Hz-20KHz
Signal to noise ratio		≥60dB
Sensitivity		-46dB±1dB
Operating voltage		3.7V
Battery capacity		2600mAH lithium-ion battery
Battery lasting time		≥20h (speaking state)
Dimensions (L × W × H)		141mm×161mm×53mm
Gooseneck length		310mm
Weight		0.5 kg
Headphone jack		3.5MMjack stereo
Speaking mode		AUTO, FIFO
Qty. of active microphones		1/2/3+1
Attendance registration		Button pressing
Operating temperature		0~45°C
Storage temperature		-20~50°C
Sound pickup distance		10~40cm
Built-in loudspeaker		4Ω3W

6.3 Charging Case CHG-16

Item	Product Name	Charging case
		Parameter
Power source		AC100~240V, 50~60Hz
Highest charging voltage		4.2V
Power consumption		106W
Charging duration		5h
Weight		6.7 kg (net weight) / 7.4 kg (fully loaded)
Dimensions		490mm×320mm×67.5mm
Operating temperature		0~45°C
Storage temperature		-20~50°C

Chapter 7 Environment and Maintenance

7.1 System Requirements

A proper working environment and proper maintenance method can help extend service life of the devices. Before operation or maintenance, please read this chapter carefully.

7.2 Public Environment Requirements

Wires must be installed in invisible places and device surface must be kept clean. When speaking into a microphone, keep a distance. The microphones are highly directional, so point them to a specified direction when speaking into them. Do not use alcohol or ammonia to clean devices. Use soft cloth and cleaning agent (e.g. Pledge cleanser) to clean the devices.

7.2.1 Technical Requirements on Public Environment

1. Keep indoor environment hygienic.
2. Keep indoor environment airy.
3. Keep proper light and ensure system operation is not affected by light.
4. Do not place irrelevant articles on devices to avoid blocking ventilation or heat dissipation; otherwise, the product poses a risk of fire or electric shock.
5. Do not set the devices to moist place or expose them to rain; otherwise, the product poses a risk of fire or other damage.
6. Do not dismantle the housing of the congress terminals; otherwise, the product poses a risk of electric shock. To maintain the devices, contact GONSIN after-sales service center.
7. This product is applicable to indoor use only; make sure not to expose it to direct sunlight. If cable coating is damaged, the product poses a risk of electric shock or fire.

7.2.2 System Operation Requirements

GONSIN conference management software must be supported by a PC in order to run. Generally, the system operator is located in an independent room which should reach the standards of an interpreter booth. The room should be configured with simultaneous interpretation devices (microphones) to connect to a PA system so that the operator can remind participants of related operation, for example, voting starts or registration starts. An audio device should be installed in the room as well to allow the operator to clearly hear the site and understand site situation.

Notes:

1. Keep good ventilation conditions. Reserve holes on the upper part of the devices and place the devices on a flat and stable floor.
2. If the operation room will be left unused for a long period of time, shut down the power supply or remove and store the devices in an airy dry place.

Chapter 8 FAQs

1. The congress server does not respond after it is started up and corresponding indicator is on.

A: The server is a PC and it should perform a self-check before activating the entire system. The server takes more than 1 minute to start up.

2. The congress terminal cannot be started up or an error occurs during startup.

A: The server does not detect the congress terminal.

- ① Start the server. Make sure the server has been completely started up before switching on the congress terminal.
- ② Check whether the terminal has been started up.
- ③ Check whether the wireless AP is properly connected to the server.
- ④ If the problem persists, contact technicians.

3. The dome camera cannot be controlled.

A:

- ① Check whether the "+" and "-" of the RS-485 cable is reversely connected and whether the copper core of the binding post is inserted into the RS-484 interface of the central control unit and locked.
- ② Check the ID and protocol settings of the dome camera. The central control unit supports PELCO-P9600 camera.

4. The power button of the microphone keeps blinking?

With the same ID server, ① when server sweeps frequency and finished, the light of power button of the microphone would keep blinking and indicating the current congress terminal is matching with the server. As the match is finished, the light stop blinking, the congress terminal would operate normally; ② when the server is writing number of congress terminals. The light of power button of the microphone would keep blinking. Press the microphone power button, the light stops blinking, all congress terminals would finished the number writing.

Appendix:

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This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.