

Operation Instructions

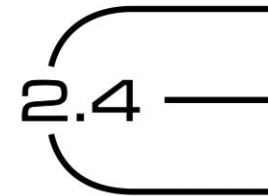
DIGITAL
MULTIFUNCTIONAL
VIDEO TRACKING
WIRELESS CONFERENCE SYSTEM

CONTROLLER MANUAL

This operation manual would be revised at any time without prior notice.

This manual contains needed information as much as possible. If there is anything unclear, wrong or omitted, please don't hesitate to contact us for confirmation. The company is free from all the damage and loss caused by no confirmation.

For testing and maintenance, please contact us or our authorized distributors through the dealer from whom you purchased this product. The company assumes no responsibility for any loss or damage resulting from testing and maintaining this unit by unqualified personnel.



Thank you very much for choosing our company's professional 2.4G video-tracking wireless conference control system. In order to make full use of the product, we highly suggest you read the instruction manual before usage.

This series of professional 2.4G video-tracking wireless conference system adopt digital audio signal processing and control signal. No intricate connection, scientific ID code design. Open the power supply can be used, makes the installation , operating more humanized. The system have several speech modes, carrying video-tracking function, new technology for this system. 2.4G conference product is an important part in conference system industry.



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1.Feature

- 1.The product sound transmission and control signals adopt 2.4GHz universal frequency processing, can support 255 units to use per one host controller.
- 2.This product has automatic interference detection function. When an interference signal is found, it can allocate another frequency to avoid interference signal.
- 3.Used mature 2.4GHz ADFHSS technology to increase the security.
- 4.Four conference mode :first-in first-out (FIFO),limitation of speaking, chairman only, time-limited speak mode. Speaking people allow 4 people at most. Chairman unit 1-4 people, delegate unit 1-4 people).
- 5.Have function of video-tracking when connect with camera, there are 4 ways video signal input and 2 ways video signal output.
- 6.Large LCD 240*128 dot matrix screen show working status.
- 7.There are three audio output terms. XLR , RCA and 6.3 plug.
- 8.This product uses the intelligent power management system, the main power supply off, the unit will automatically shut down, reduce battery consumption.
9. The product unit has the frequency automatic tracking, without the need on frequency operation.

2.Safety instructions

- Read this instruction manual.
- Keep this instruction manual for future reference.
- Follow all instructions in this instruction manual.
- Do not place the product near any heat sources such as radiators, stoves, or other devices that product heat. If you are not going to use the product for a long time, pull out the battery. Do not throw or drop the product in case it causes severe damages.
- Be aware of the supply voltage. Only the supply voltage listed on the instruction manual fits the product.
- Only use accessories specified by our company.
- Never take apart the device. If devices are took apart by customers in breach of this instruction, the warranty becomes null and void. Turn to the professional mechanic or local dealer for help if there is something wrong with the product.
- If components are needed to replaced, replace them with original components produced by our company.
- Leave the devices the minimum space of 30 mm for proper ventilation.Do not cover the vent with newspapers, cloths, curtains, etc.
Do not place the devices near fire or water.
Only professional mechanic can assemble the devices if it is labeled with hazard warning sign “ ⚡ ” .
Recycle the replaced battery.
The devices can be used in tropical or temperate regions.
Only for safe use in the area with an altitude of below 2,000 meters.



3. Working environment requirement & Operating procedure

3.1 Working environment requirement

- Connect the receiver with antenna and adjust the antenna to vertical. Note that mental, wall, ceiling, human body will weaken the emitter's signal. For best effect, please follow the rules. The emitter should be placed as near the spot as possible. Keep the minimum distant of 1.5m with metal, wall, scaffold, ceiling, etc. Make sure the emitter and receiver are accessible straight forward.

3.2 Operating procedure

- Installation of antenna, connect the power supply, the host get in the energized state.
- After turning on the host, the LCD screen will show the working parameters. LCD screen display speech model, speech number, channel, unit ID code, battery
- Connect the host's MTX OUT and MIC with audio connecting line. Adjust to reasonable volume.

3.3 System's parameters

Power supply : DC12-17V
 Sensitivity : -105dBm
 S/N Ratio : >90dB
 T.H.D : <0.05%dB
 Max. deviation range : ±45 KHz
 Normal distance : ≥30 meter (only connect with normal antenna)
 Working distance : ≥60 meter (connect with antenna amplifier)
 Channel : 4
 Power : 6.5W

EIA label box, suitable for desktop or rack mount

Meeting Mode: first-in first-out (FIFO), limitation of speaking, chairman only, time-limited speak mode

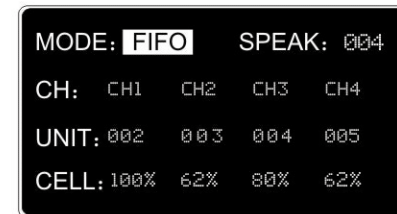
The three audio output terminals, can be connected with a recording or reproducing apparatus.

240*64 dot matrix LCD screen displays working state. There are 6 function keys for system setting and adjusting.

4. System function and diagrams

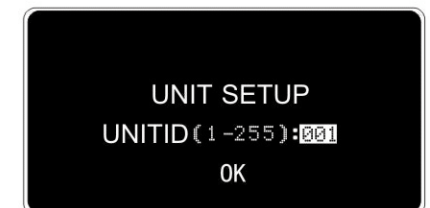
4.1 Working state setting and diagram

- Press "ENTER" into the setting state, press left key "◀" or right key "▶" move to "mode" or "speak number" for option, then press up key "▲" or down key "▼" to adjust the suitable value.
- 1. Conference mode: first-in first-out (FIFO), limitation of speaking, chairman only, time-limited speak mode four speaking mode.
 - ① First-in first-out (FIFO): when up to the limited number, the last in unit will steal the first on delegate unit. No limit for Chairman unit. (For example: number setting is three, A,B,C delegate unit is on, when D unit on , A must out automatically.)
 - ② Limitation of speaking: it means restrict speaking number from 001-004
 - ③ Chairman only : only the allow the chairman unit to speak, delegate unit can not open in this mode.
 - ④ Time-limited speak: restrict the speaking time for each unit. (Setting the time on speaking-time menu)
- 2. Speaking number for choose :001-004 (means totally mostly 4 units)



4.2 Unit setting and diagram

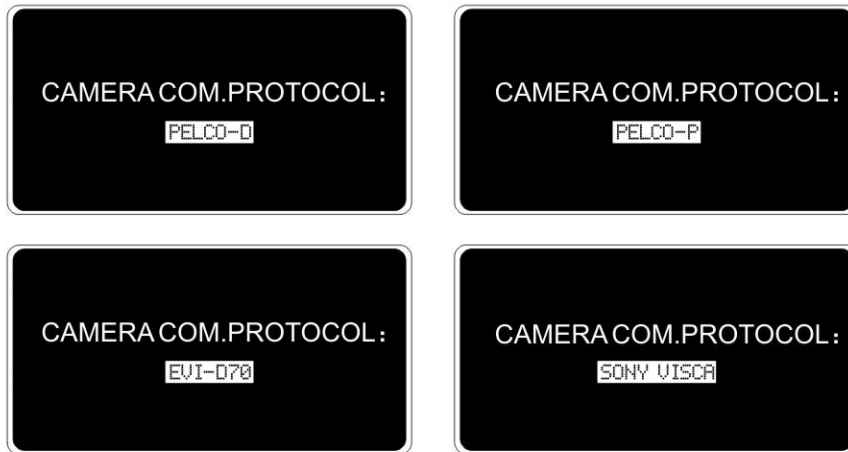
- Press three times "ENTER" key into the unit setting interface, press up key "▲" or down key "▼" to choose the unit ID code (from 1-255)
- How to setting the ID code for each unit. Put on the setting unit, press speech button, when finish the communicate between the host and unit, the host will display "OK", it means setting complicated. The setting time please control in 15 seconds.
 - ※ Notice: every unit can not have the same ID code.



4. System function and diagrams

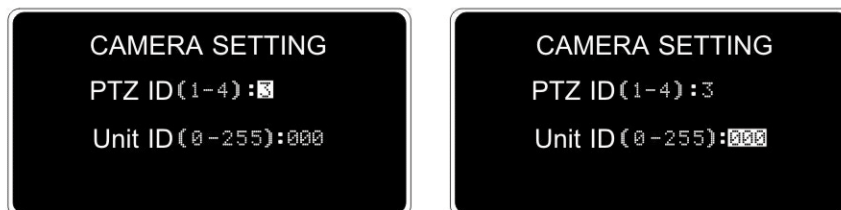
4.3 Video communication protocol and diagram

- Press four times “ENTER” key into the video communicate protocol interface. Press up key “▲” or down key “▼” to choose protocol of PELCO-D, PELCO-P, EVI-D70, or SONY VISCA.



4.4 Video setting and diagram

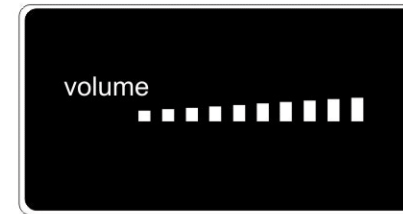
- Press five times “Enter”key into “Camera setting”,press left key “◀” or right key“▶” can move to “camera code(001-004)”, “unit code(0-255)”options,press up key “▲” or down key“▼”to choose the necessary value.
 - 1. Camera number (1-4) : each host can support 4 cameras, choose the right camera number according to the input port.
 - 2. Unit number (0-255): each host can support 255 units to use, according to the unit ID to set the corresponding preset points, 000 is the scene preset point.
 - 3. Adjust the camera preset points, used remote control device to assist. It must be save according to he corresponding ID code to set and save. (After adjust by camera preset points save it before press the ID code in remote control device.)
- ※ Notice : press “ESC” to exit after finished every setting.



4. System function and diagrams

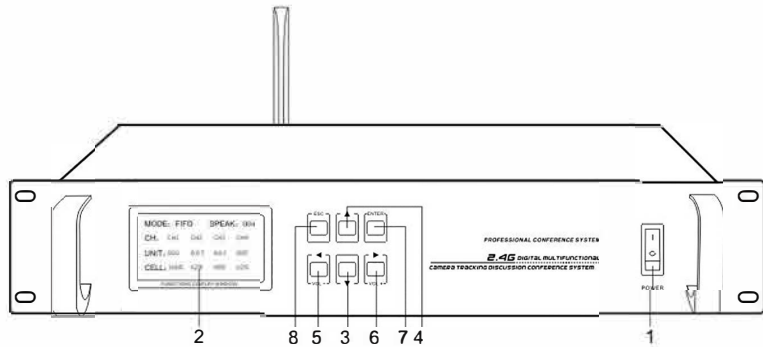
4.5 Main volume setting and diagrams

- At any case can adjust the host output volume, press left key “◀” or right key “▶” can completed directly. No need to press “ENTER” key to save.



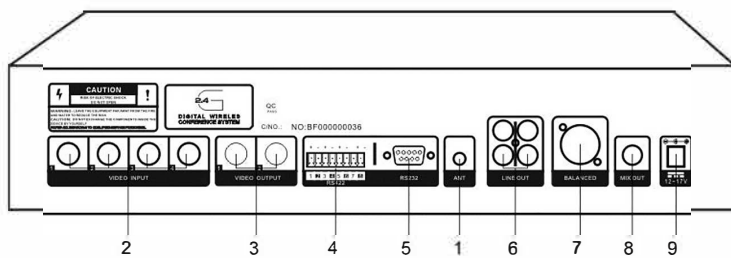
5. System operating instructions

5.1 Front panel of digital wireless conference system



- 1.Power switch
- 2.LCD Screen
- 3.Up key
- 4.Down key
- 5.Left key/ reduce volume
- 6.Right key/ increase volume
- 7.Enter/Into menu / turn page
- 8.Exit

5.2 Back panel of digital wireless conference system



- 1.Communicate antenna
- 2.video input
- 3.video output
- 4.RS-422
- 5.PC 232 port
- 6.Cable signal output
- 7.balanced output
- 8.Unbalanced output
- 9.DC socket

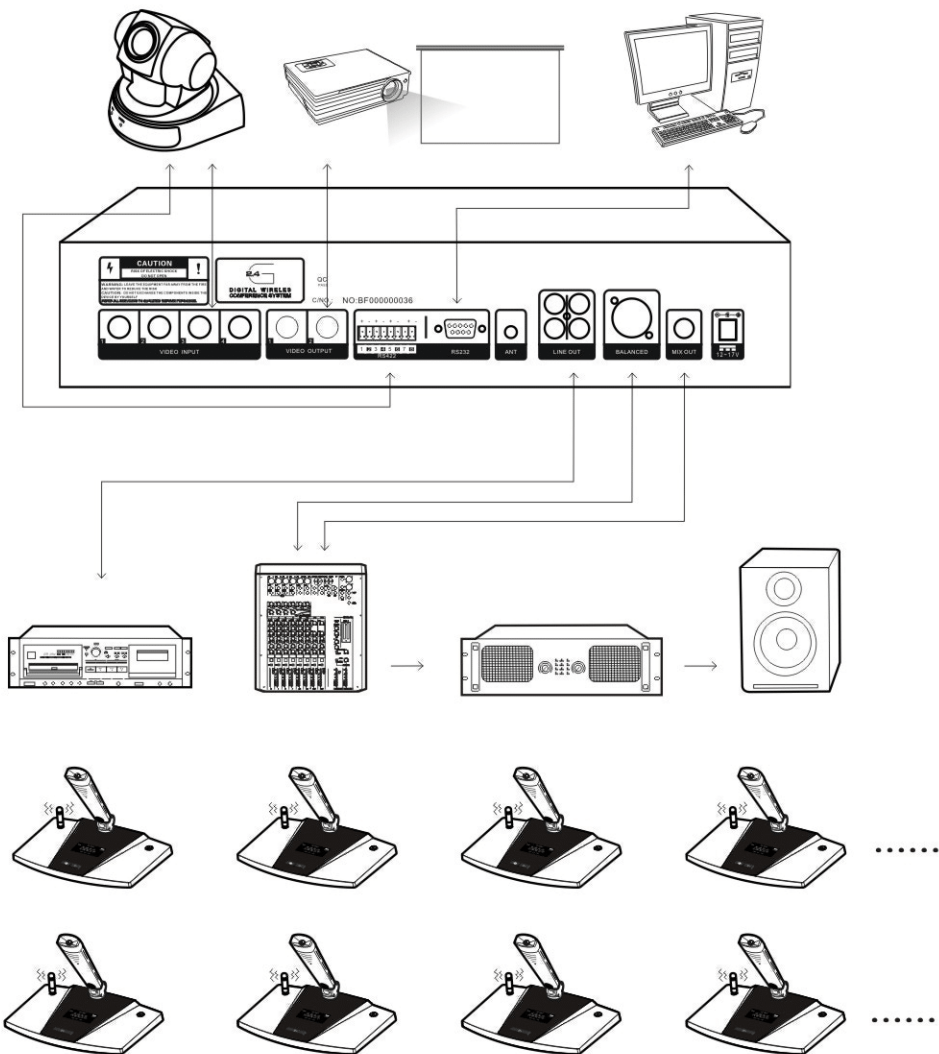
6.Solutions to breakdowns

Breakdowns	Causes	Solutions
The host is not energized	The utility is not energized	Check the utility
	External power supply fault	Check and change the external power supply
The host cannot receive signal	The unit haven't on	Turn on the unit
	Haven't set the unit code	Look the manual operation to set the unit code
	The unit is too far away	Keep the unit in the valid range
The host can receive signal but without sound	The volume is at the minimum	Adjust the volume
	Bad connection of audio	Reconnect the audio connection
On and off sound	Too far away	Keep it near
Can not set option	Set option not confirmed	Press "enter" after set option
The unit can not working	In the setup state	Exit setup and return to main menu
Effective operating distance is short	Complicated environment	Avoid metal, wall, crowds, etc as they will weaken the signal
	The receiving antenna is not installed	Install the receiving antenna
Camera can not use	Power haven't turn on	Turn on the power
	Haven't save the preset point	Adjust and save the preset point

Care and maintenance

Before fixing or cleaning the device, cut off the electricity supply. Clean it with soft cloth. For spots, clean it with cloth that has neutral cleaning solvent and dry it with another cloth. Do not use gasoline, diluents or any other chemical product, or else the surface will be damaged.

7. Connection instruction



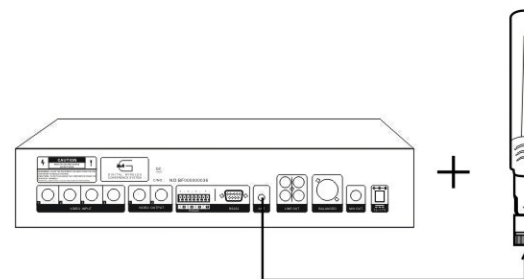
Attention:

1 meter above floor At least 1 metre to wall Antenna vertical to the receiver

8. Host and antenna connecting term

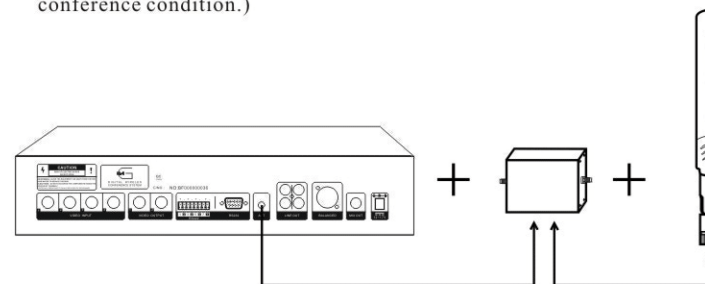
A. 2.4host + Omni-direction antenna

In the open air, connect the host with the Omni-direction antenna, straight distance is about 30 meters.



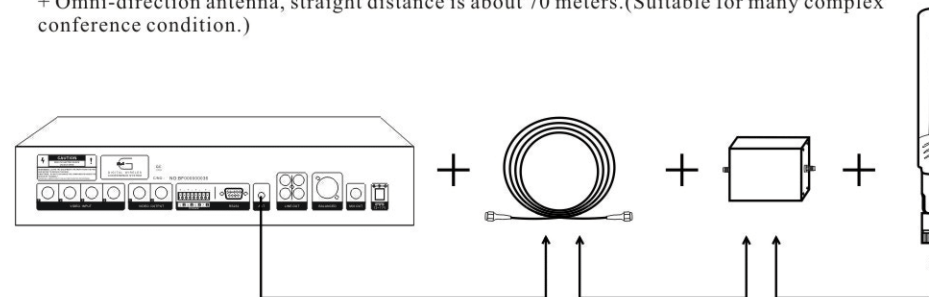
B. 2.4host + antenna amplifier + Omni-direction antenna

In the open air, connect the host with the antenna amplifier, antenna amplifier connect with the Omni-direction antenna, straight distance is about 60 meters. (Suitable for a little complex conference condition.)



C. 2.4host + 10 meter antenna extend cable + antenna amplifier + Omni-direction antenna

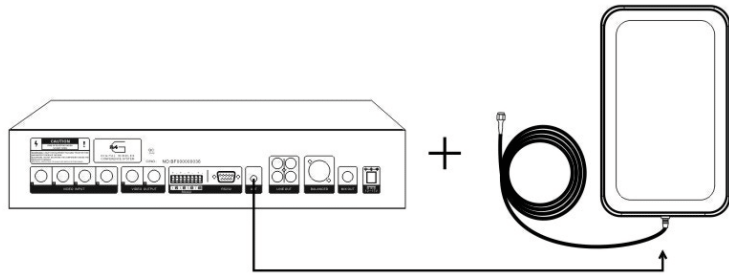
In the open air, connect the host with 10 meter antenna extend cable + antenna amplifier + Omni-direction antenna, straight distance is about 70 meters. (Suitable for many complex conference condition.)



8. Host and antenna connecting term

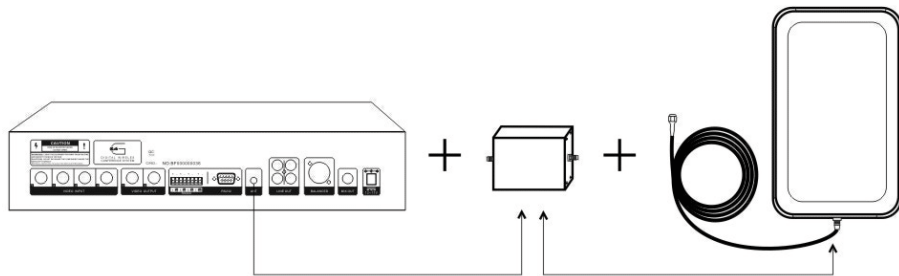
D. 2.4G host + directive antenna

In the open air, host connect with directive antenna, directly distance is 40 meters.



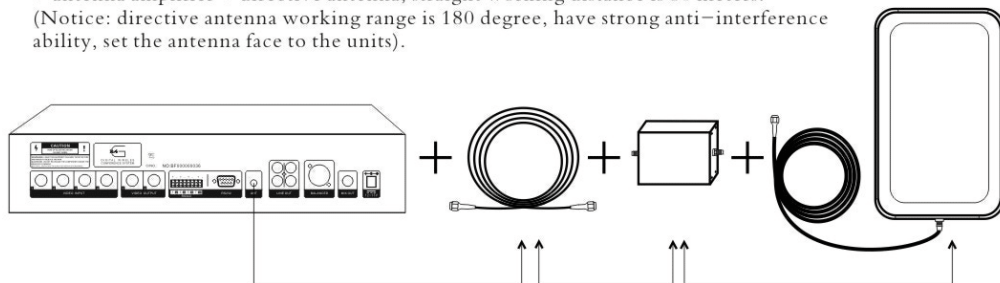
E. 2.4host + antenna amplifier + directive antenna

If the conference situation is complex, let the 2.4G host connect with antenna amplifier + directive antenna, straight working distance is 70 meters. (Notice: directive antenna working range is 180 degree, have strong anti-interference ability, set the antenna face to the units).



F. 2.4host + 10 meter antenna extend cable + antenna amplifier + directive antenna

If the conference situation is complex, let the 2.4G host connect with 10 meter antenna + antenna amplifier + directive antenna, straight working distance is 80 meters. (Notice: directive antenna working range is 180 degree, have strong anti-interference ability, set the antenna face to the units).



9. Directive antenna installation diagram

Please use the screw to fix.

