Evolution AiO 100" Interactive Whiteboard

——User Manual——

Content

Chapter One - Product Model and Standard Configuration

IQAio Interactive whiteboard all-in-one(Here in after referred to IQAio), Highly integrated infrared interactive whiteboard, OPS computer, central control, power amplifier, speaker, wireless microphone etc. as one. There is no need to consider about the complex wiring between equipment, and installation is very easy.With aluminum alloy ultra-narrow frame, the overall appearance is simple, and rich in technology. It adopts 15 shortcut keys with three sections on both sides, which conforms to the ergonomic design and is designed according to the user's usage frequency and habit, so it is convenient and efficient to use.The user's panel adopts capacitor luminescence buttons, which is intuitive and sensitive to operate, combined with the RFID card to power on/off and identification function, making the management and use of IQAio more convenient and flexible.

Model and Configuration

1）Product Model: GR519

2）Product Configuration: (See packing list for details.)

Product Configuration	Configuration Status
OPS Host Computer	Optional
Intelligent Central Control	Standard
Power Amplifier	Standard
Built-in Speaker	Standard
Infrared Whiteboard	Standard
Wireless Keyboard and Mouse	Optional
External Wall-mounted USB Document Camera	Optional
Wireless Microphone (with laser pointer and page turning function)	Optional

*Product model or configuration are subject to change without prior notice.

Chapter Two - Product Structure and Installation Method

1. Appearance
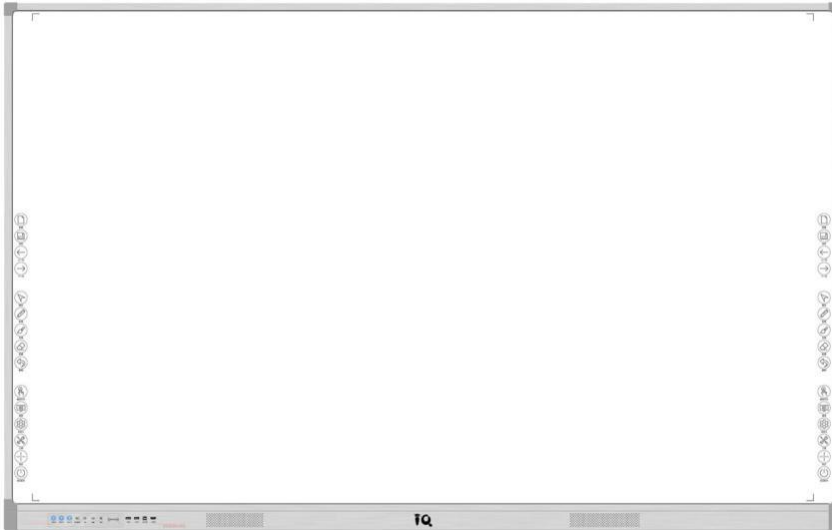
2. Dimensions

| Model	Overall Dimension（inch）	Projected Dimension（inch）	Projection Ratio	Overall Dimension (mm)	Maximum Thickness（mm）
GR519-100W	107.7	100	16:10	2319*1460	85
GR519-100H	107.7	100	16:9	2373*1370	85
GR519-92W	96	92	16:10	2093*1246	85
GR519-92H	96	92	16:9	2373*1370	85
GR519-80X	87.5	80	4：3	1779*1343	85

（Product overall dimension tolerance is ±5mm）

3. Installation

1). Determine the fixed position and fixed height of the IQAio according to the customer's actual

using situation; Install 2 fixed bracket B to the wall according to the distance of the wall hanging

parts on the back of the IQAio, and ensure that the 2 fixed bracket B are at the same level, (it is

suggested that the distance from the bottom of Aio to the ground is 800mm);

2). After confirming the position, use an 8mm electric drill to drill four fixed holes deeper than

70mm on the installation wall;

3). Insert the expansion rubber plug into the hole that has been punched, and then fix the fixed bracket

B to the wall with the self-tapping screws in the accessory box;
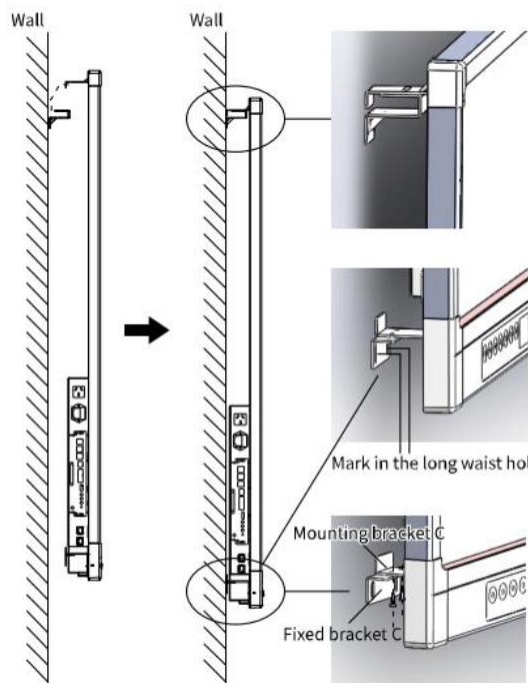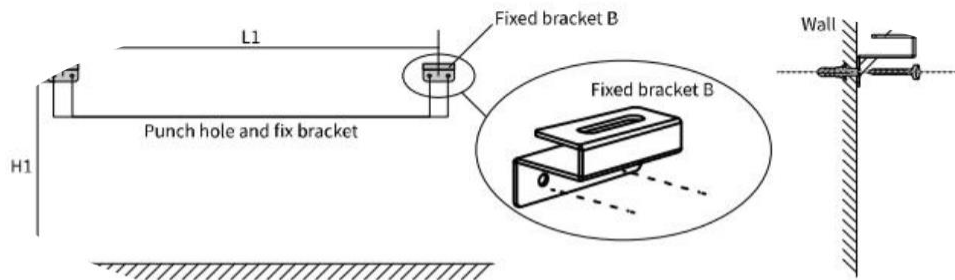
4). Hang IQAio directly on fixed bracket B and then adjust projection position;

5). After confirming the projection position, according to position of the bottom mounting bracket C to mark in the long waist hole of fixed bracket C on the wall;

6). Remove IQAio and unscrew the screws of fixed bracket C. Take off the fixed bracket C and save the removed four pieces M4 * 12 round head screws with gasket.

7). After confirming the position of the fixed bracket C, use an 8mm electric drill to drill 4 fixed

holes deeper than 70mm on the installation wall;

8). Insert the expansion rubber plug into the hole that has been punched, and then fix the fixed bracket

C on the wall with the self-tapping screws in the accessory box;

9). Hang IQAio on the fixed bracket that have been installed, and then fix the upper and lower four mounting brackets with eight M4*12 round head screws with gasket. And the installation is complete.
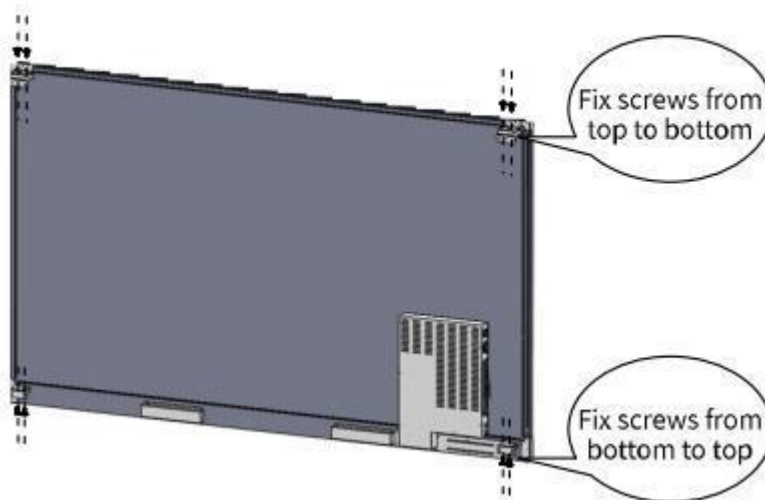
Chapter Three - Function Introduction of the Equipment

1. Introduction of central control buttons and ports function
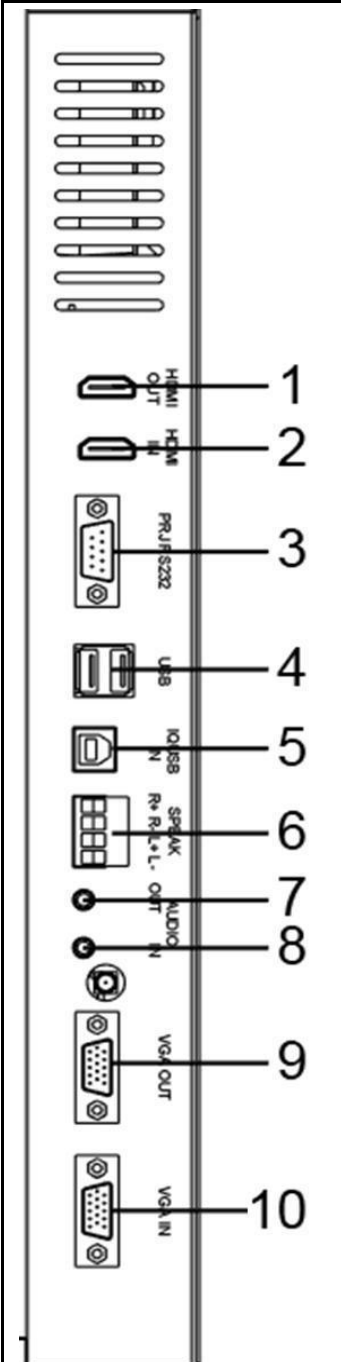

Power	Button	**Long press it for 3 seconds,** trigger the main switch of IQAio, which can be used for power on/off for built-in OPS computer, projector, built-in power amplifier, and built-in whiteboard etc.
	Indicator light	Off: all-in one whole machine power off
		On: IQAio has built-in power indicator light of central control and power

		amplifier.When under power-off status, with one key, the built-in central control, power amplifier, built-in OPS computer, projector, and built-in whiteboard will be opened. It will light up after complete.
PC	Button	**Long press it for 3 seconds,** it can independently control the switch of the built-in OPS computer
	Indicator light	Off: built-in OPS computer is under power-off status.
		On: built-in OPS computer is under power-on status.
Projector	Button	**Long press it for 3 seconds,** it can independently control the switch of projector.
	Indicator light	Off: Projector power off (the control code of the control unit should be properly configured and the control wire of projector should be connected ready)
		On: Projector power on (the control code of the control unit should be properly configured and the control wire of projector should be connected ready)
Source	Button	Short press the button can trigger the source change button, the sequence is the machine, front HDMI, rear HDMI, status indicator light with LED
	Indicator light	Off: built-in OPS computer (effective when the built-in computer switch indicator is on)
		On: front HDMI input (effective when the front HDMI is connected correctly and work properly)
		On, Off, On: rear HDMI input (effective when HDMI of the external computer connect and work properly)
Vol+	Button	Short press the button can increase the volume of the built-in power amplifier, long press it can increase volume continuously to maximum stop
	Indicator light	Off: the built-in power amplifier is not at full volume
		On: the built-in power amplifier is at full volume
Vol-	Button	Short press the button can reduce the volume of built-in power amplifier, long press the button can reduce the volume continuously to minimum stop
	Indicator light	Off: the volume of the built-in amplifier is not at its minimum
		On: the volume of built-in power amplifier is at its minimum
Mute	Button	Short press the button to switch between play and mute of the power amplifier sound. When the IQAio is off, long press the button for 3 seconds to separately open the built-in power amplifier of the IQAio, and the indicator light on the power button under this state is on.To turn off the amplifier, please press "power" button for 3 seconds.
	Indicator light	Off: built-in power amplifier works normally
		On: built-in power amplifier is under mute status
IQUSB Port	Port	it's the intelligent IQUSB input port of the IQAio. After connected with the external laptop, the touch function of the built-in whiteboard, the audio and power amplifier

|		function,and the handheld microphone page turning function all can work.
USB Port	Port	USB expansion port
HDMI Port	Port	Front HDMI video signal input port
VGA Port	Port	Front VGA video signal input port (optional)

2. Central control and power port:

1) **Back center control port (the port is at the lower left of the backboard of the whiteboard, facing the inside of the backboard)**

Serial Number	Port	Wiring instruction
1	HDMI out	Connect to HDMI in port of projector
2	HDMI in	connect to the HDMI out port on the motherboard or external computer
3	Projector RS232	Connect to RS232 control port of projector to control the power on/off of projector
4	USB port	Connect the USB document camera, whiteboard, and USB flash disk etc.
5	IQ USB	Connect to the USB port of external computer. After connected, the touch function of the built-in whiteboard, the audio and power amplifier function,and the handheld microphone page turning function all can work.
6	Stereo power amplifier out	connect double sound channel passive speaker (Single channel maximum 25W 4 Ω /8 Ω impedance speaker)
7	Audio in	Connect to the green audio out port of external computer
8	AUX audio out	AUX mixed audio put, connect external active speaker, and recording and broadcasting host
9	VGA out	Connect to VGA in port of projector

	10	VGA in	Connect to the VGA out port on motherboard or GPU of external computer

2）**Back port (the port is at the lower left of the backboard of whiteboard, facing the outside of the backboard)**
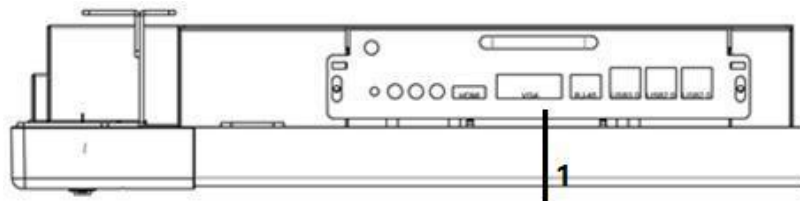
1	OPS slot	Compatible size, 19.5±0.5mm long, 18.1±0.5mm wide , 30±0.5mm thick or 42±0.5mm thick OPS computer

3）**Back port (above the backboard central control port)**

1	DC power input	IQAio power supply input port, DC 19V

Chapter Four - Main Technical Parameter

Working power: DC19V ≥4.72A （≥90W）

Maximum power: 90W

Wireless microphone range: ≥15m (open environment)

Power amplifier and speaker power: amplifier power: 2∗25W, speaker power: 2∗15W
Intelligent central control audio in channel: 3 channels, including front and rear USB audio, and rear 3.5mm audio in

Intelligent central control audio out channel: 2 channels, including rear 3.5mm AUX mixed audio and power amplifier audio out

Intelligent central control video in channel: 3 channels, including front HDMI in, rear HDMI in, rear VGA in

Intelligent central control video out channel: 2 channels, including rear HDMI out, rear VGA out
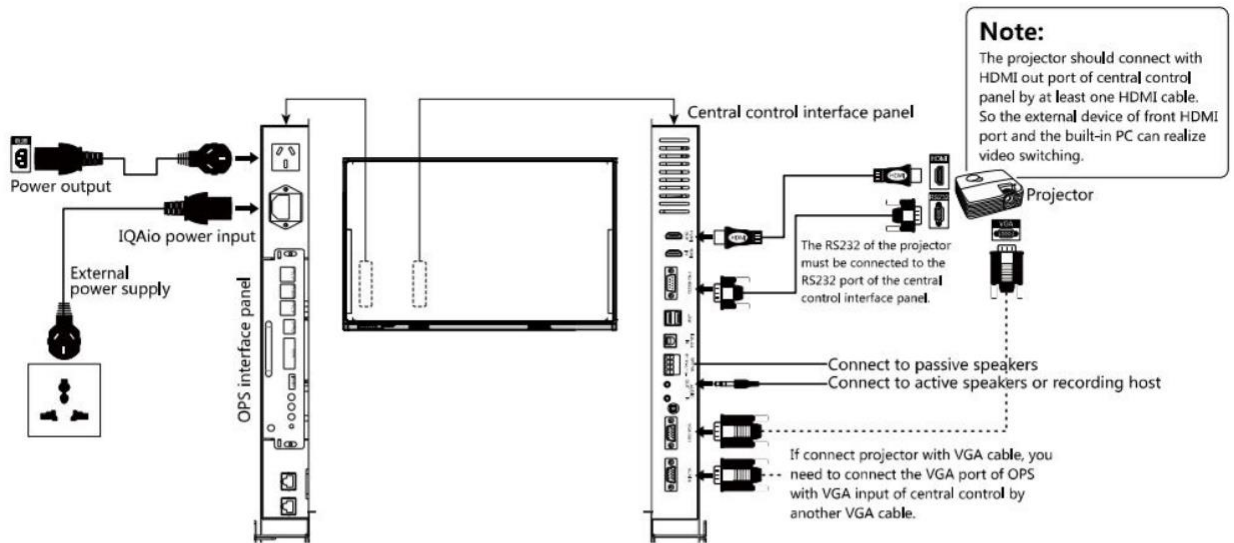
Projector control port: RS232 1 channel

Intelligent central control USB port: rear 3 channels, front 3 channels

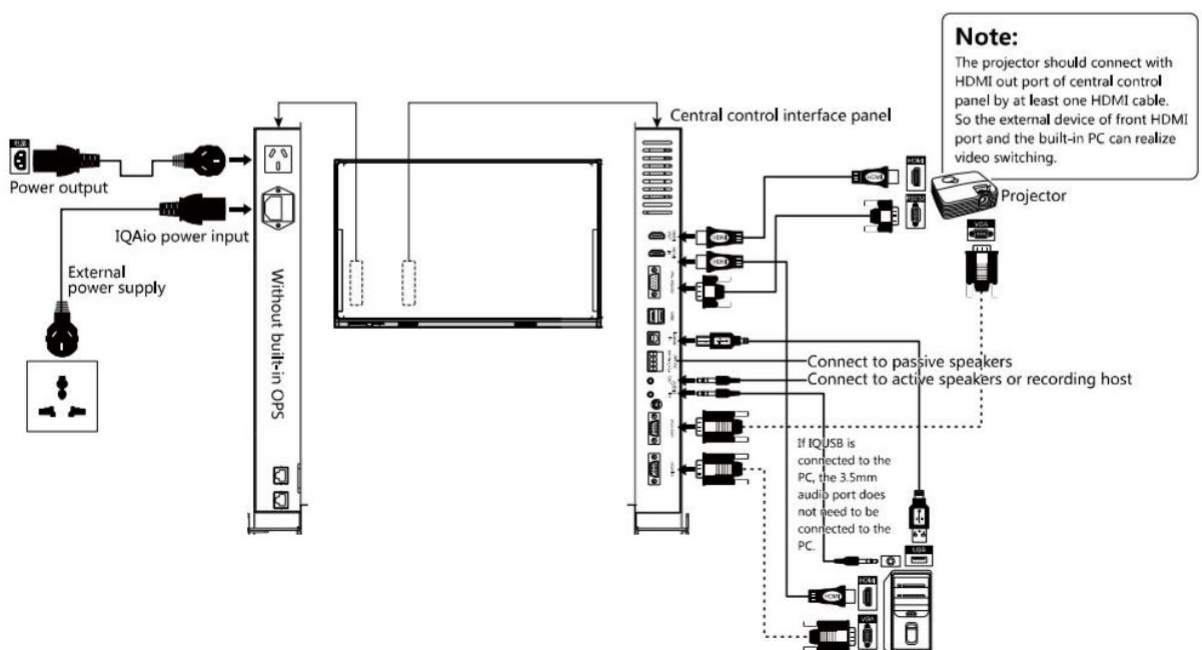Working temperature: 0℃～+40℃

Working humidity: 20%～80%

Chapter Five - Introduction of Equipment Use

1. **Schematic diagram of equipment connection**

(Pic. 1)

(Pic. 2)

*Note: As shown in Pic.1 and Pic.2 above, the connection between the device and projector can be

HDMI or VGA. For example, when using the HDMI cable, you do not need to connect the VGA cable.

2. Introduction of equipment use

1) First, complete the connection of wires required by the equipment (such as the schematic diagram of equipment connection).

2) Power on method ①, power on by swiping the key ring: use the key ring configured by the product, Hearing the sound of "di" means the equipment including the computer and the projector (the equipment must correctly write the power-on control code) have been powered on synchronously, at the same time, the central control, power amplifier, wireless microphone (receiving end) and other equipment has been connected to the power supply.

3) Power on method②，One key power on: long press "power on/off" button for 3 seconds to power on the device. The power-on function of "power on/off" button can be turned off by the intelligent central control tool of the computer. After turning off, the device can only be powered on by swiping the card, while the device can be powered off by long press the "power on/off" button.

4) Users can also independently perform "power on/off", "computer", "projection", "signal source", "volume +/-", "mute" and other operations;

Chapter Six - Instructions for RFID Card

1) RFID Card to power on, the premise is that the machine has been equipped with card password, and the factory standard card has been configured with a password;

2) Stick the matched card in the center of the "card" area, and remove the card after hearing the sound of "di", and the Aio machine will be powered on;
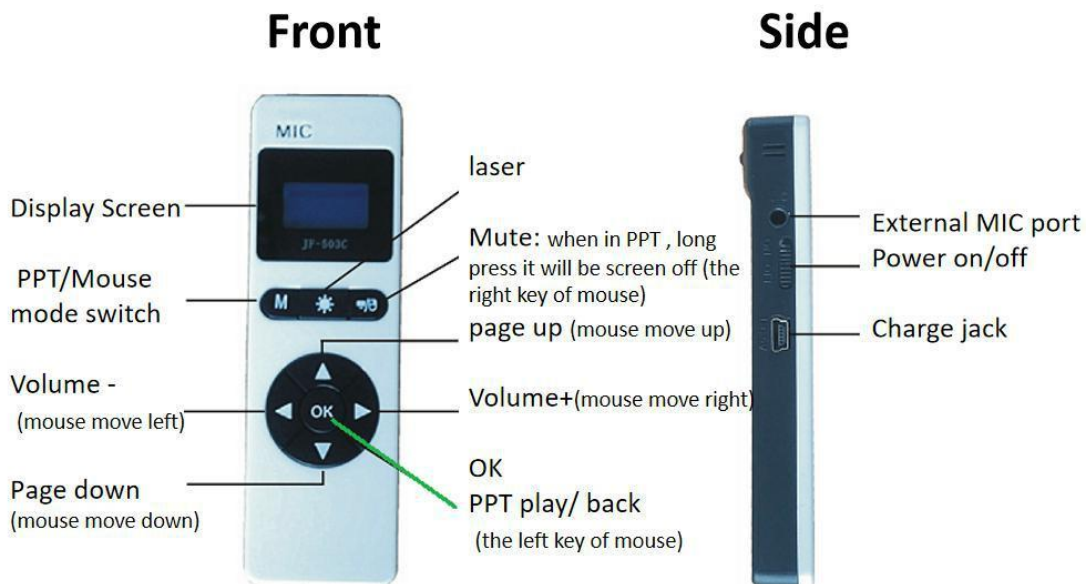
3) If the card is wrong, the buzzer will continuously alarm;

4) when power off the machine, stick the matched card in the center of the "card" area, and remove the card after hearing three "di" sounds. The IQAio will be powered off.

Chapter Seven - Instruction for Wireless Microphone (optional)

1. Instruction for use

1) When the IQAio equipped with wireless mic receiver is turned on and the handheld wireless mic is turned off, the handheld wireless mic is turned on within 30cm of the card swiping area. The handheld wireless mic and the all-in-one receiver will be automatically connected to each other.

2) Short press the button to mute the wireless microphone. short press "←" and "→" to increase or decrease the volume of the wireless microphone alone.

3) Open PPT and play it in slide mode, short press "∧" "∨" can "page up" and "page down" separately;

4) The key with "sun" logo is laser pointer;

5) The icon of electric quantity indicates the current electric quantity. When the icon is empty, it is the lowest electric quantity.Please connect the USB power cord to charge, the battery icon will flash;

6) The headset mic can be accessed through the side 3.5mm audio port. It is recommended to use the headset mic.

Front

Display Screen

PPT/Mouse mode switch

Volume -
(mouse move left)

Page down
(mouse move down)

laser

Mute: when in PPT , long press it will be screen off (the right key of mouse)

page up (mouse move up)

Volume+(mouse move right)

OK
PPT play/ back
(the left key of mouse)

Side

External MIC port
Power on/off

Charge jack

2. Precautions for use:

1)Keep a certain space and distance between the metal and area near the wireless microphone antenna on the back board of the white board to prevent the wireless signal from being blocked;

2)Never allow any liquid substances to contact with the wireless microphone. This module should be used in a dry and cool environment.

3)Please avoid product shock or fall from a height to avoid malfunction.

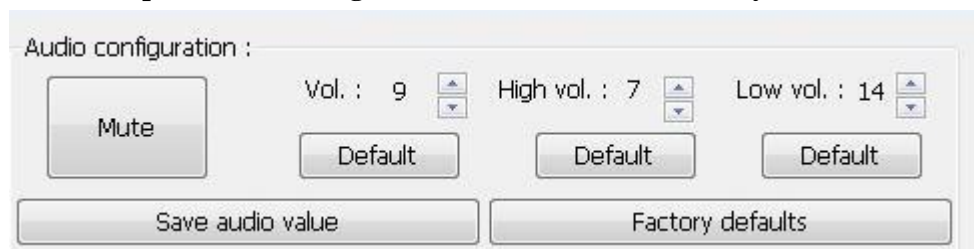4)To prevent rapid aging of the power supply, the battery should be charged at least once within three months.

Chapter Eight - Easy Operation of Intelligent Central Control Management Platform

1. Introduction of Central Control Platform Interface
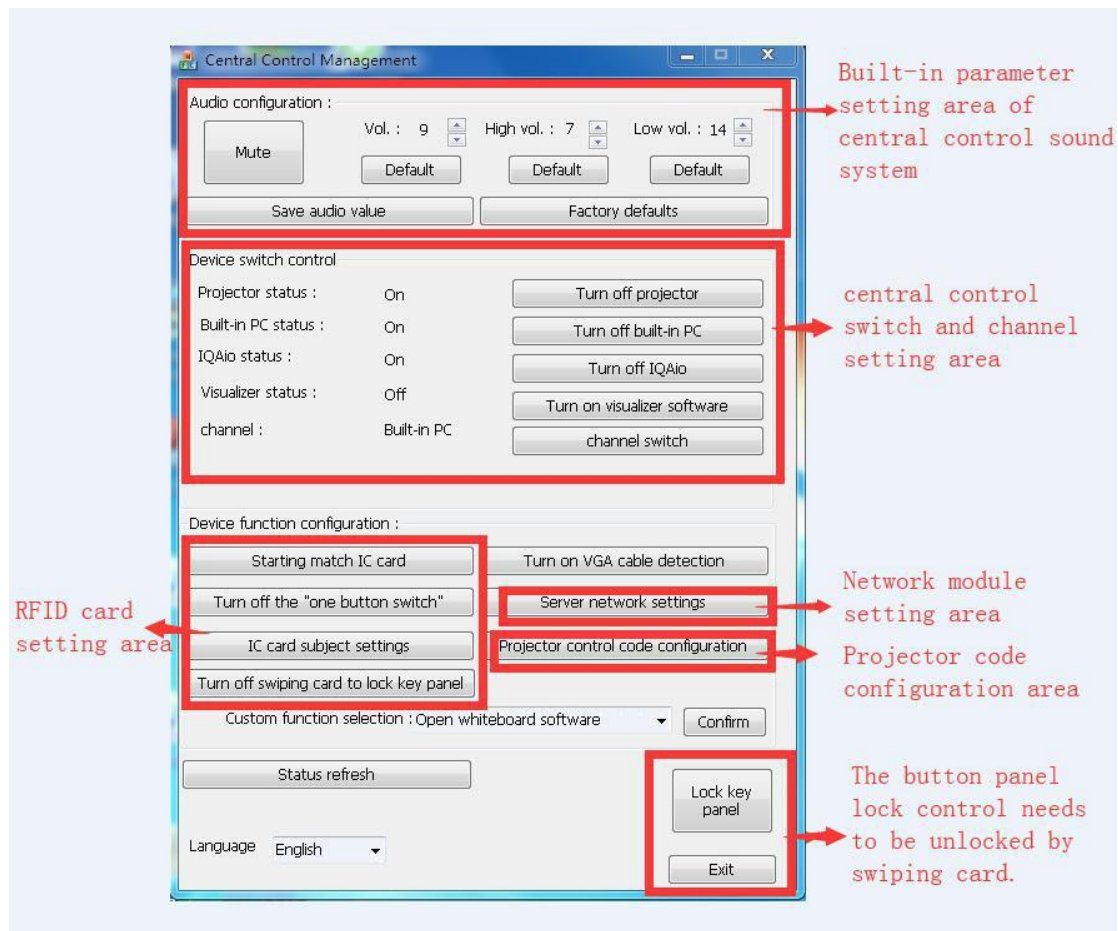
2. Built-in parameter setting area of central control sound system
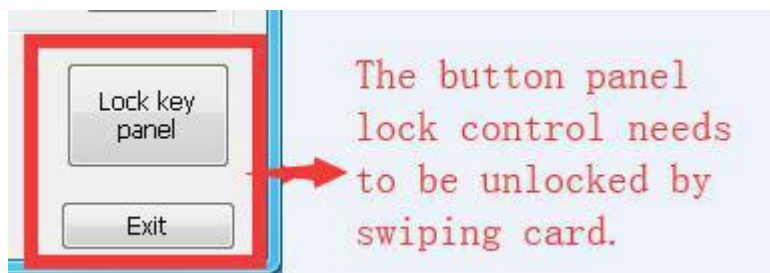
3. Central control switch and channel setting area

4. Function configuration area

5. Button panel lock function

After the front button panel is locked, it can be unlocked by intelligent central control management software or by swiping a card in the front area.

# Chapter Nine - Operation Introduction of Central Control

Write Code

The built-in central control code configured multiple projectors, It can choose the projector control code through AIO central control software on the computer, it can also manually enter the projector "boot", "shutdown" and "RGB INPUT1", "HDMI" control code to write into memory storage of central control memory chip, and control the projector power on/off directly with central control panel button.

1. Connection between the central control and the projector

1) There is an RS232 projector control line when delivery, which is used to connect the all-in-one machine with the projector. If the serial port model of the projector is different, the adapter shall be added;

2) The "5" pin of the central control is ground, and the "3" pin is signal output pin;

3) There are two kinds of receiving pins in serial port code of projectors of different models in various factories, namely direct connection and crossover. However, the built-in central control has the function of pin intelligent identification, which eliminates the need for direct connection and crossover operation on line.

2. Software coding operation

1) After entering the computer system, open the intelligent central control management tool.
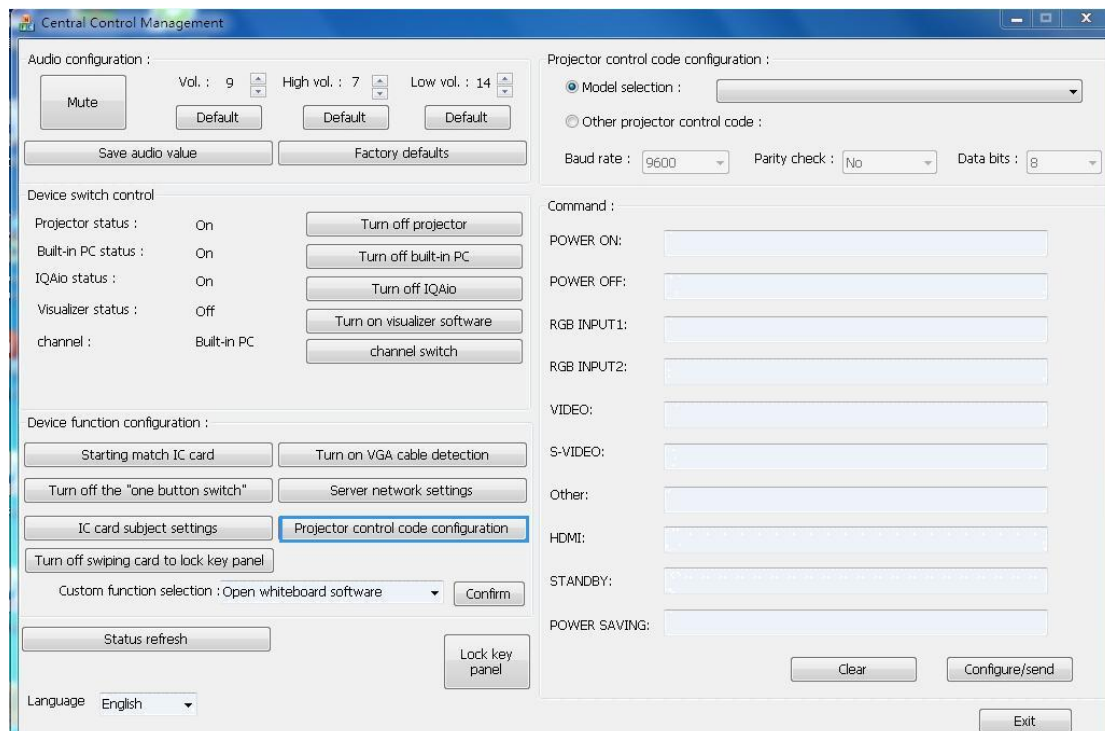
2) You can select the corresponding projector model from the existing model to see whether it is in the list, or directly check whether the baud rate and parity check code, command code and other contents are consistent with the control code of the projector, if consistent, you can directly select and configure

the control code.If your projector cannot be found in the list model, please set the baud rate, parity check code, command code and other contents of the current serial port according to the technical parameter requirements of the projector manual, and select and input in the command box.

3）After setting the control code, click the send button, after long pressing the buzzer of the IQAio, the control code of the projector has been written into the memory chip of the central control, and then the switching function of the projector can be realized.

Chapter Ten - Whiteboard Software

	Technical Principal	Infrared technology
	Touch point	Support 10-point touch control and synchronous writing, no need for special pen, use finger or other non-transparent materials to operate directly on the whiteboard, to avoid later use loss;
	Response rate	8m/s
	Position accuracy	0.05mm
Whiteboard Software	port	USB2.0 and above
	Shortcut key	15 silk-print shortcut keys on the left and right side
	Material	Anti-glare, no light spot, high contrast, good color reduction, low reflection, strong and wear-resistant, anti-scratch, dustproof, smooth writing and support pen writing;The normal use of the board will not be affected even if the board is damaged, perforated or dented due to accidents.It uses double-sided metal plate material to shield other signal interference more better.

Chapter Eleven - Attention

1. Do not clean the whiteboard with wet cloth to prevent water from entering into the touch module and causing product malfunction;

2. Do not dismantle the machine by yourself;

3. Please stay away from heat sources, water sources and corrosive substances;

4. During routine maintenance of the whiteboard, please power off the equipment and use dry towels to clean the black plastic sheet on the lower frame;

5. The normal range of working temperature: 0℃～+40℃;

6. When not in use for a long time, the device should be closed and unplugged.

Chapter Twelve - Common Malfunction and Solutions

1. The power is on, the power indicator is not on.

Please check whether the live wire and null line of the socket is connected or not, If the power supply is normal, please check the power indicator of the power adapter behind the whiteboard. If the light is not on, please contact the after-sales service to replace the power adapter.

2. The image of the projector is inverted.

Since the projector used in the classroom is usually in a hoisting mode, the image revealed by the projector will be reversed under normal circumstances after installation. At this time, the inverted projection mode can be set in the projector setting menu, and the image cast is the normal image.

3. No output of computer image

Please check the "signal source" indicator light on the panel, and confirm whether the signal source is selected incorrectly according to the status of the signal indicator light.

4. The projector cannot be started

1）Whether there is a connection between the "RS232" control port of the IQAio and the RS232 interface of the projector, and whether the projector control code is set correctly;

2）Please check whether the signal feet at both ends of the wire are broken.

5. There is no sound of wireless microphone

1）Check whether the battery level of the handheld wireless microphone is too low. The battery level on the handheld wireless microphone LCD screen indicates that the battery level is empty. Please charge it in time;

2）When the handheld wireless mic is turned off, turn on the handheld wireless mic close to the card swiping area for frequency matching;

3）Check whether the mute compound key on the handheld wireless microphone is pressed, short press to exit mute.Then test whether the volume mute indicator on the front button panel is on. If the light is on, short press the "mute" button, and the indicator will go off to exit the mute state.

6. The IQAio is not powered up, and the power indicator in the card swiping area is off.

1）Check whether the power socket is in good contact;

2）Check whether the power on/off button on the central control panel is on.

7. Display image but no volume output.

1）Check whether the center control panel displays mute.If the mute indicator is on, short press the mute button to exit the mute state.

2）Check that the volume of the computer system is minimal or mute.

8. No touch in whiteboard software

1) First, check whether the whiteboard driver is installed successfully. After the installation fails, open

the teaching platform software on the computer and it will prompt you to register. At this time, exit the safety software (such as 360 security guard or computer butler, etc.), reinstall the correct whiteboard driver, and restart the computer and confirm the touch again.

9. Touch point or cursor of the whiteboard is offset.

1) Please open the whiteboard positioning in the drive, or operate the "positioning" shortcut keys on the left and right sides of the white board to conduct the positioning operation.

If problem is not solved, please call our technical support.