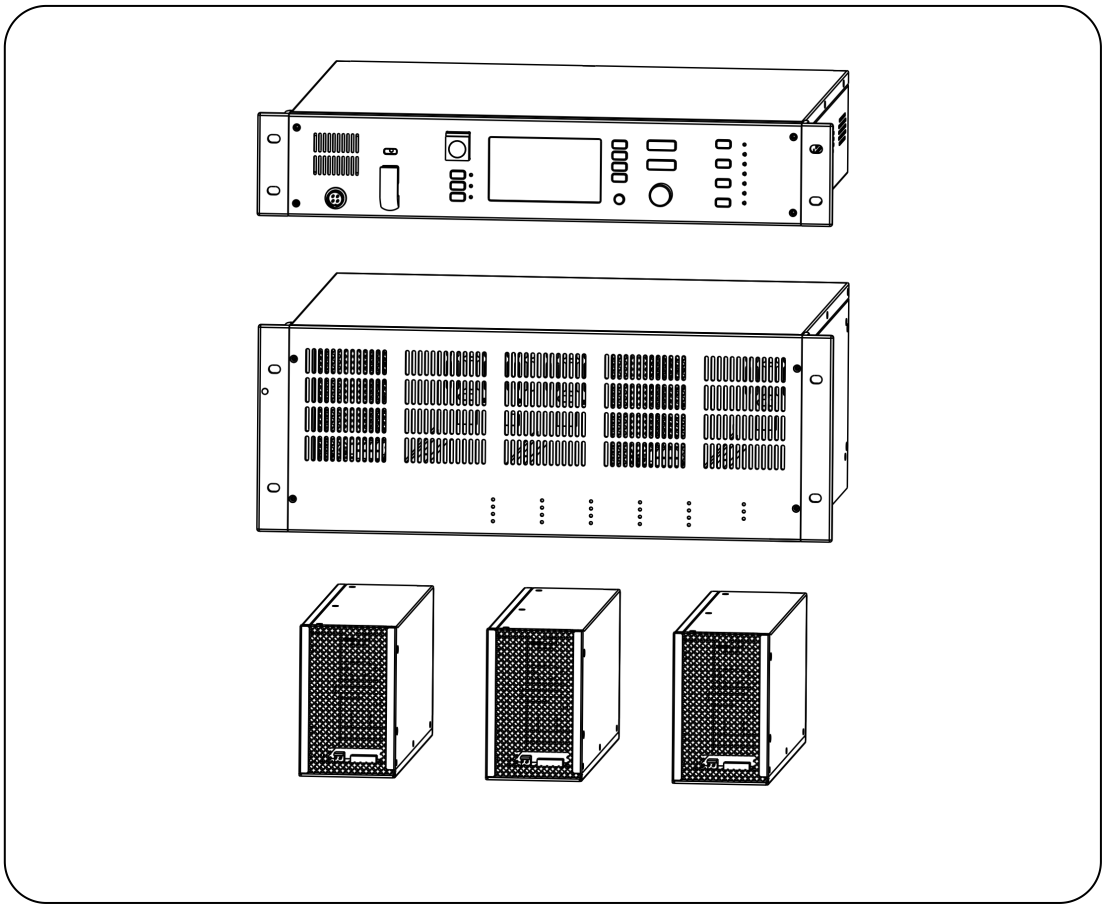
TOA

User's Manual

Matrix Controller	VX-1000MC-W
Peering Frame	VX-1000PF-W
Digital Amplifier Module 125W	VX-1125DA-W
250W	VX-1250DA-W
500W	VX-1500DA-W



Thank you very much for purchasing TOA VX-1000 series product.
Please read the instructions in this manual carefully, to ensure long-term, trouble-free operation of the system.

TOA Corporation

1. SAFETY PRECAUTIONS

Please abide by the warning and the relevant safety tips.
Please take this manual in convenient place after you reading the guide for future reference.

Warning

**The sign means there is potential safety hazard, when operate wrong may result in death or serious injury.**

**The sign is used to remind user of this equipment is attached the important data of operation and maintenance.**

Setting and Installation

（1）Avoid being wet with the water.

Don ' t make the product or exposed to rain water or other liquid contamination of the environment, or lead to fire or get an electric shock.

（2）Don't use voltage outside of the designation

Using the marked voltage on the product.

Using more than the logo of voltage could lead to fire or shock.

（3）Don't scratch the power cord.

Don't scratch the power cord or cut it.

Simultaneously, keep the power line far way from heated objects, put heavy things on it will lead to fires or electric shock.

Using Product

（1）Once the anomalies

In use, immediately cut off power supply when finding the abnormal phenomena, please connect with the agency. if you continue to use, it will likely fires or shock.

· The smoke or odor of the product.
· The inside of the product is flooded by water or foreign bodies intrusion.
· Product falling or product shell damage.
· The power cord damage(wire core is exposed of broken, etc.)
· Fault (e.g. it can't network, no sound etc.)

（2）Do not let foreign matters invade the products internal.

Don ' t let the metal items or inflammable objects inserting product such as foreign inserting products or throw into the vents products internal, otherwise will likely cause fires or electric shock.

（3）Please do not touch it when thunder

To avoid electric shock, please do not touch the product and the plug when lightning, etc.

（4）Please do not place containers with liquid or small metal objects on product above.

If gets upset containers, and let the fluid inflow to the product that will likely fires or cause shock.

（5）Do not open the product internal or modification of the product.

The product internal contains high voltage parts, once the open cover, or modification of the product, it will likely fires or cause shock. All about maintenance and other such matters within the product to transform should be operated by professional personnel.

（6）Maintenance or the precautions when not in use for long time.

When Maintenance, if the product not in use in 10 days or more than 10 days, in order to ensure

the safe, please shut off power supply switch, and will power plug. If failure to comply with this provision, it will likely cause electric shock or fires.

2. PRODUCT INTRODUCTION

2.1 Overview

Matrix controller can realize business broadcasting and fire alarm linkage emergency broadcasting by supporting Peering Frame and fire alarm. It is a Public Address system and fire protection linkage alarm system suitable for large public places such as railways, business offices, factories, schools, hospitals, shopping malls, entertainment places, etc.

Matrix Controller:

(1) Standard 2U rack-mounted design, 4.3-inch true color LCD screen, which can display information such as working status and equipment parameters.
(2) Support emergency broadcast function, can receive fire alarm linkage alarm signal from fire alarm controller for emergency broadcast.
(3) Support local broadcast, network broadcast, schedule broadcast, etc.; can realize multi-receiver and multi-source broadcast, schedule broadcast, control input trigger source broadcast and other functions.
(4) Support zone control, you can manually select the audio source and zones, support the control of local audio input playback to any audio output, and can play any audio source in any zones.
(5) Optional hand-held microphone can be used for general manual broadcasting and fire emergency broadcasting.
(6) Built-in monitor speakers, which can monitor the audio source and zone's audio.
(7) With automatic noise control function, it can monitor the external environmental noise of each output channel in real time, automatically adjust the output sound pressure level, and improve the clarity of the sound.
(8) With self-check function, the self-check is realized through the "self-check" button on the panel. During the self-check process, all the indicators on the front panel are always on (multi-color indicators alternately display different colors), and the fault indication buzzer sounds continuously. During the self-check process, all devices directly connected to the matrix controller execute the self-check function.
(9) With fault detection function, it can detect the open circuit, short circuit, ground fault, power amplifier fault and power supply fault of the horn circuit.
(10) It has the function of power amplifier reverse backup. When a power amplifier failure is detected, it can automatically switch to the backup power amplifier to ensure that the broadcast is not interrupted.
(11) Equipped with dual network ports, supporting network redundancy backup, one network interruption, can automatically switch to another network.
(12) With CPU OFF function, when the device crashes or the network is paralyzed, the CPU OFF function can be turned on to realize the whole area broadcasting.
(13) Support redundancy for power supply, usually from power supply A, when the power supply A fails, it can automatically switch to the power supply B; when the power supply A returns to normal, it will automatically return to the power supply A.

Peering Frame:

(1) The standard 4U rack design is used to supply power to the digital power amplifier module installed in the chassis.
(2) Provide 4 channels digital power amplifier module slot + 1 channel standby digital power amplifier module slot.
(3) The operation and fault status of the digital power amplifier module can be displayed.
(4) It can show whether the standby power amplifier is in working state or not.
Support redundancy for power supply, usually from the power supply A, when the power supply A fails, it can automatically switch to the power supply B; when the power supply A returns to normal, it will automatically return to the power supply A.

Digital Power Amplifier Module:

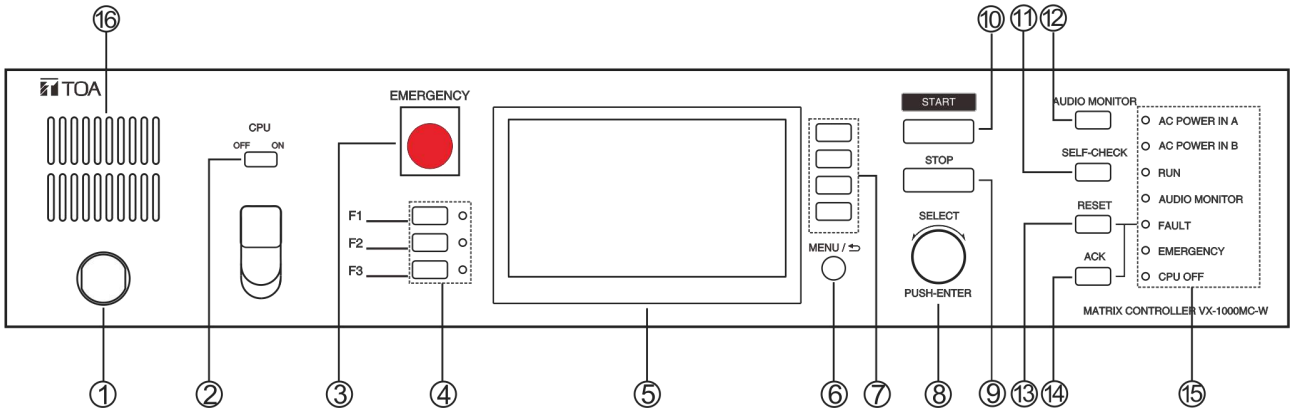
(1) Class D digital power amplifier, high efficiency and energy saving.
(2) There are three power levels of 125W / 250W / 500W to choose from.

(3) Modular design, small and light appearance.
(4) It has a fault detection function, which can detect faults such as overcurrent, overheat, and fan abnormality, and displays them on the indicator light of the power supply chassis.

2.2 Interface Description

2.2.1 Matrix Controller

Front Panel



① Handheld Microphone Interface: connect the handheld microphone (PM-100VX-EA) to this interface, used for general manual broadcasting and fire emergency broadcasting.
② CPU OFF Button: Switch to the OFF position means that the handheld microphone channel is open; switch to the ON position means that the handheld microphone channel is closed (Note: when the CPU is down, please manually switch to OFF to enable).
③ Emergency Broadcast Button: press this button to manually initiate emergency broadcast. The button has a protective cover to prevent misuse. When you need to switch to manual emergency mode, first lift the protective cover, then press the button, the button indicator lights red.
④ Preset Button and status indicator: Press the preset 1-preset 3 button, the preset broadcast task will be executed. (Note: The preset broadcast needs to be configured in the "VX-1000 Setting Software" in advance.)
Preset 1/2/3 status lights: press the preset button, the corresponding indicator lights green; when the preset task ends, the light goes out.
⑤ 4.3-inch LCD screen: display device parameters, working status, etc.
⑥ Menu / Back Button
⑦ Zone Selection Button: press to select the corresponding zone (multiple selection is supported), press again to cancel the selection.
⑧ Operate Button: Rotate the Operate Button to select the menu, and press the Operate Button to confirm the selection.
⑨ STOP Button: Press this button to stop broadcasting / monitoring.
⑩ START Button: Press this button to start broadcasting / monitoring.
⑪ SELF-CHECK Button: Press this button to perform self-check, and press the self-check button again to end the self-check. During the self-check, all the indicators on the front panel are always on (multi-color indicators alternately display different colors), and the fault indication buzzer continues to sound.
⑫ AUDIO MONITOR Button: Press this button to monitor the audio source and zone audio.
⑬ RESET Button: When the system has a fault, press the "Reset" key to reset the fault state, the fault indicator returns to the normal state, and then re-detect the system fault.

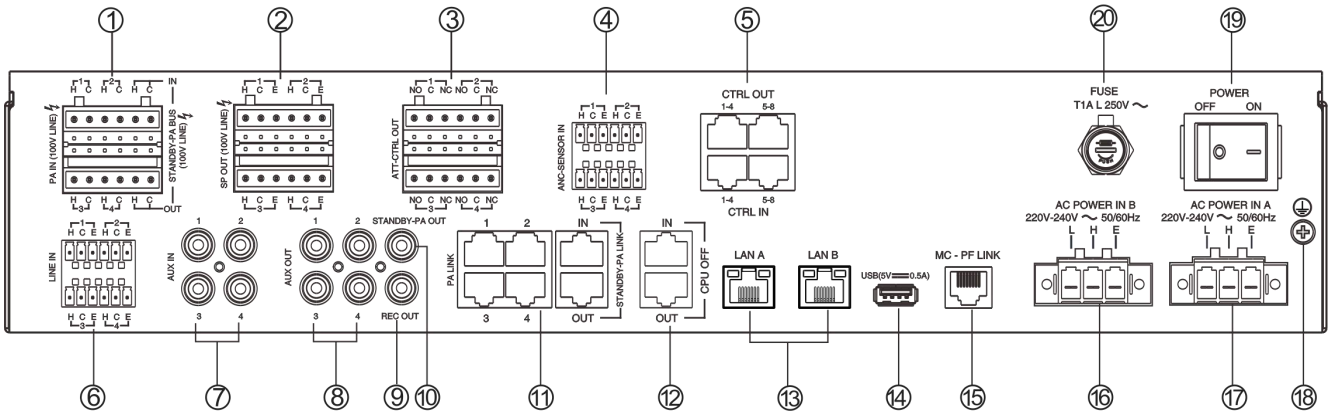
⑭ ACK Button: When the system detects a fault, press the "ACK" button to confirm the fault, the fault indicator orange light is always on, and the LCD screen displays specific fault information.

⑮ Equipment status indicator, the relevant instructions are as follows:

Status Indicator LED	Introduction
AC POWER IN A	Two-color lights, orange light without power input, green light with power input.
AC POWER IN B	Two-color lights, In case surveillance function is enable: if there is no power input, lights orange, if there is power input, lights green; In case surveillance function is disable: if there is no power input, no lights, if there is power input, lights green.
RUN	The device is steady green after the device is started and can work normally.
AUDIO MONITOR	Press the AUDIO MONITOR Button to enter the monitor state, the monitor status light is always green; Press the monitor button again to exit the monitor state and the monitor status light goes out.
FAULT	The orange light flashes when the device is faulty; after pressing the confirm key, the orange light is always on. After all the faults are eliminated or the reset key is pressed, the orange light goes out.
EMERGENCY	When the emergency broadcast occurs, the indicator lights red; After the emergency broadcast stops, the indicator goes off.
CPU OFF	When the "CPU" switch is pulled to the "OFF" state, the CPU OFF indicator lights red; When the "CPU" switch is pulled to the "ON" state, the CPU OFF indicator goes out.

⑯ Speaker

Rear Panel



① PA IN: 4 power amplifier inputs + 1 backup power amplifier input, used to connect the 100V amplifier output port of any amplifiers. 1 cascade power amplifier input (used when two matrix controllers are cascaded), used to connect the cascade power amplifier input of another matrix controller (VX-1000MC). (H: hot end, C: cold end).

② SP OUT: 4 channels of power amplifier signal output, used to connect the speaker line. (H: hot terminal, C: cold terminal, E: ground terminal)

③ ATT-CTR OUT: 4 channels attenuator control output. (NO: normally open, C: public, NC: normally closed)

④ ANC-SENSOR IN: 4 microphone (as an ambient detection sensor) inputs, which can be connected to an ambient noise detector to automatically adjust the broadcast sound output level according to environmental noise level. (H: hot terminal, C: cold terminal, E: ground terminal)

⑤ CTRL IN/ CTRL OUT: 8 control inputs, 8 control outputs. See the next page for the wire sequence and definition of the interface.

⑥ LINE IN: 4 channels balanced line signal input, used to connect external audio source equipment. (H: hot terminal, C: cold terminal, E: ground terminal)

⑦ AUX IN: 4 channels unbalanced line inputs, used to connect external audio source equipment, such as CD / DVD player, tuner, etc.

⑧ AUX OUT: 4 channels unbalanced line outputs, can be connected to active speakers or power amplifier equipment.

⑨ REC OUT: 1 channel recording output, used to connect external recording equipment.

⑩ STANDBY-PA OUT: 1 channel stand-by audio output interface, can output the audio signal of the stand-by power amplifier channel.

⑪ PA LINK: 4 channels power amplifier interface + 1 channel standby power amplifier interface, used to connect the Digital Power Amplifier Module built-in Peering Frame (VX-1000PF), to interface 1-4, and standby. 1 channel cascaded power amplifier interface (used when two matrix controllers are cascaded), used to connect the cascaded power amplifier interface of another matrix controller (VX-1000MC). Two matrix controllers cascaded will share a stand-by power amplifier.

⑫ CPU OFF: cascade with another matrix controller's CPU OFF interface. (Note: If two devices are cascaded, you must ensure that the CPU OFF cascade interface, cascade power amplifier by PA LINK, and cascade power amplifier interface of the two devices are all connected)

⑬ LAN A/ LAN B: dual network ports. When the network cable is not connected, the network interface light is off; after connecting the network cable, the orange light flashes slowly, and the orange light flashes quickly when there is data.

⑭ USB: Not used.

⑮ MC-PF LINK: Connected to the MC-PF LINK interface of the Peering Frame (VX-1000PF), which can detect the power failure of the Peering Frame.

⑯ AC POWER IN B: connect to AC220V-240V standby power supply.

⑰ AC POWER IN A: connect to AC220V-240V main power supply.

⑱ Ground terminal: connect the ground wire.

⑲ POWER Switch: control the power on and off.

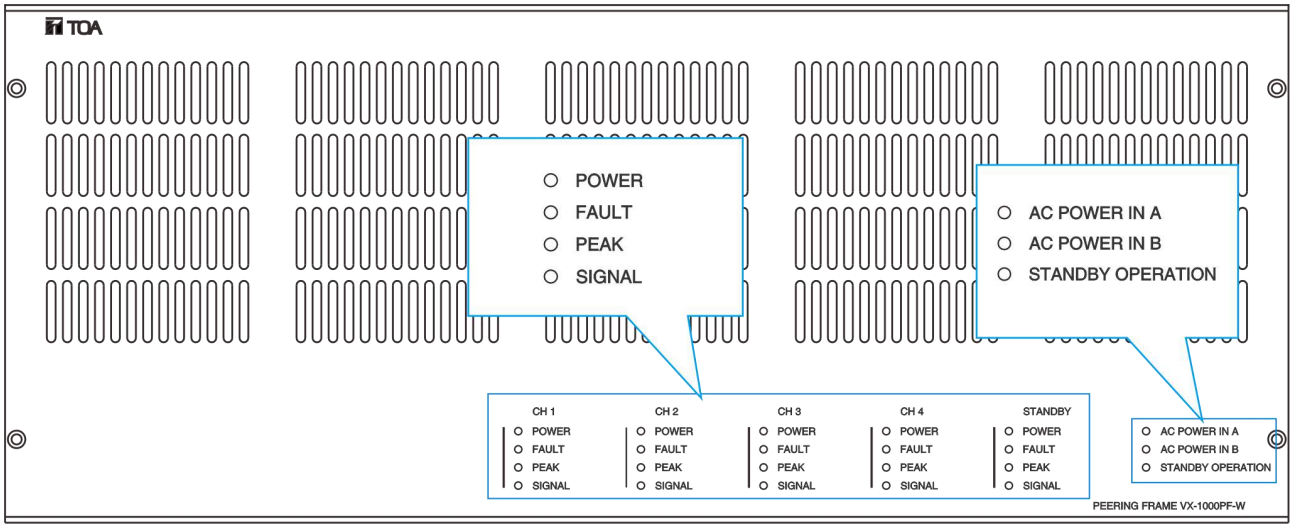
⑳ FUSE: T1AL / 250V, providing power supply overcurrent protection.

Line sequence and definition of control input / control output interface:

Name	No.	Color	Pair	Pin Assignment	Description
CTRL_OUT 1-4	①	Orange/White		COM 1	Common 1
	②	Orange		NO 1	Normally Open 1
	③	Green/White		COM 2	Common 2
	④	Blue		COM 3	Common 3
	⑤	Blue/White		NO 3	Normally Open 3
	⑥	Green		NO 2	Normally Open 2
	⑦	Brown/White		COM 4	Common 4
	⑧	Brown		NO 4	Normally Open 4
CTRL_OUT 5-8	①	Orange/White		COM 5	Common 5
	②	Orange		NO 5	Normally Open 5
	③	Green/White		COM 6	Common 6
	④	Blue		COM 7	Common 7
	⑤	Blue/White		NO 7	Normally Open 7
	⑥	Green		NO 6	Normally Open 6
	⑦	Brown/White		COM 8	Common 8
	⑧	Brown		NO 8	Normally Open 8
CTRL_IN 1-4	①	Orange/White		CTRL IN 1	Control Input 1
	②	Orange		GND	Ground
	③	Green/White		CTRL IN 2	Control Input 2
	④	Blue		GND	Ground
	⑤	Blue/White		CTRL IN 3	Control Input 3
	⑥	Green		GND	Ground
	⑦	Brown/White		CTRL IN 4	Control Input 4
	⑧	Brown		GND	Ground
CTRL_IN 5-8	①	Orange/White		CTRL IN 5	Control Input 5
	②	Orange		GND	Ground
	③	Green/White		CTRL IN 6	Control Input 6
	④	Blue		GND	Ground
	⑤	Blue/White		CTRL IN 7	Control Input 7
	⑥	Green		GND	Ground
	⑦	Brown/White		CTRL IN 8	Control Input 8
	⑧	Brown		GND	Ground

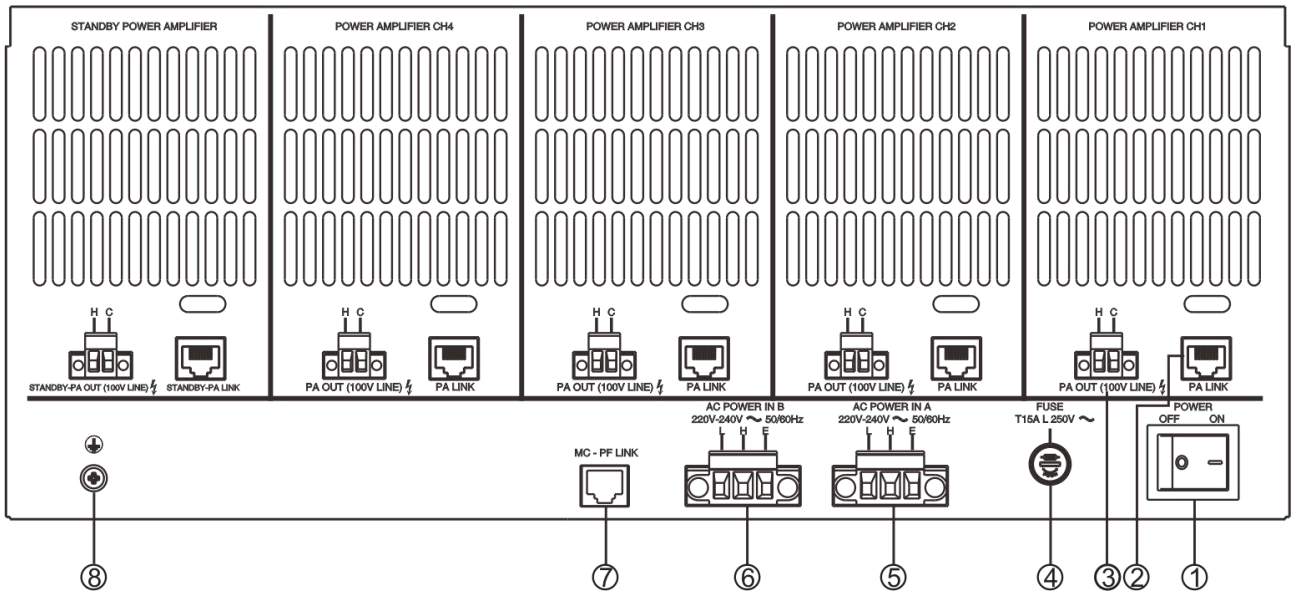
2.2.2 Peering Frame

Front Panel



Name	Indicator light status
AC POWER IN A	Green light when there is power input, and does not light up when there is no power input.
AC POWER IN B	Green light when there is power input, and does not light up when there is no power input.
STANDBY OPERATION	Green light when switching to the standby power amplifier, and the light is off when not switching.
POWER	Green light when the power amplifier channel has power input; without power input, it does not light.
FAULT	If the power amplifier is faulty, it will light orange; if there is no fault, it will not light.
PEAK	When the input signal of the power amplifier reaches the peak value, it lights up in red; if it does not reach, it does not light up.
SIGNAL	The amplifier has an input signal and lights green; no signal, it does not light.

Rear Panel



① POWER Switch: control the power on and off.

② PA LINK: power amplifier interfaces (amplifier channels 1-4), respectively connected to the matrix controller's power amplifier interface 1-4; 1 channel for standby power amplifier interface, connected to the matrix controller's standby power amplifier STANDBY-PA LINK interface.

③ PA OUT: power amplifier output (power amplifier channels 1-4), respectively connected to the matrix controller PA IN interface 1-4; 1 channel for standby power amplifier interface, connected to the matrix controller standby power amplifier PA IN interface.

④ FUSE: T15AL / 250V, providing power overcurrent protection.

⑤ AC POWER IN A: connect to AC220V – 240V power supply.

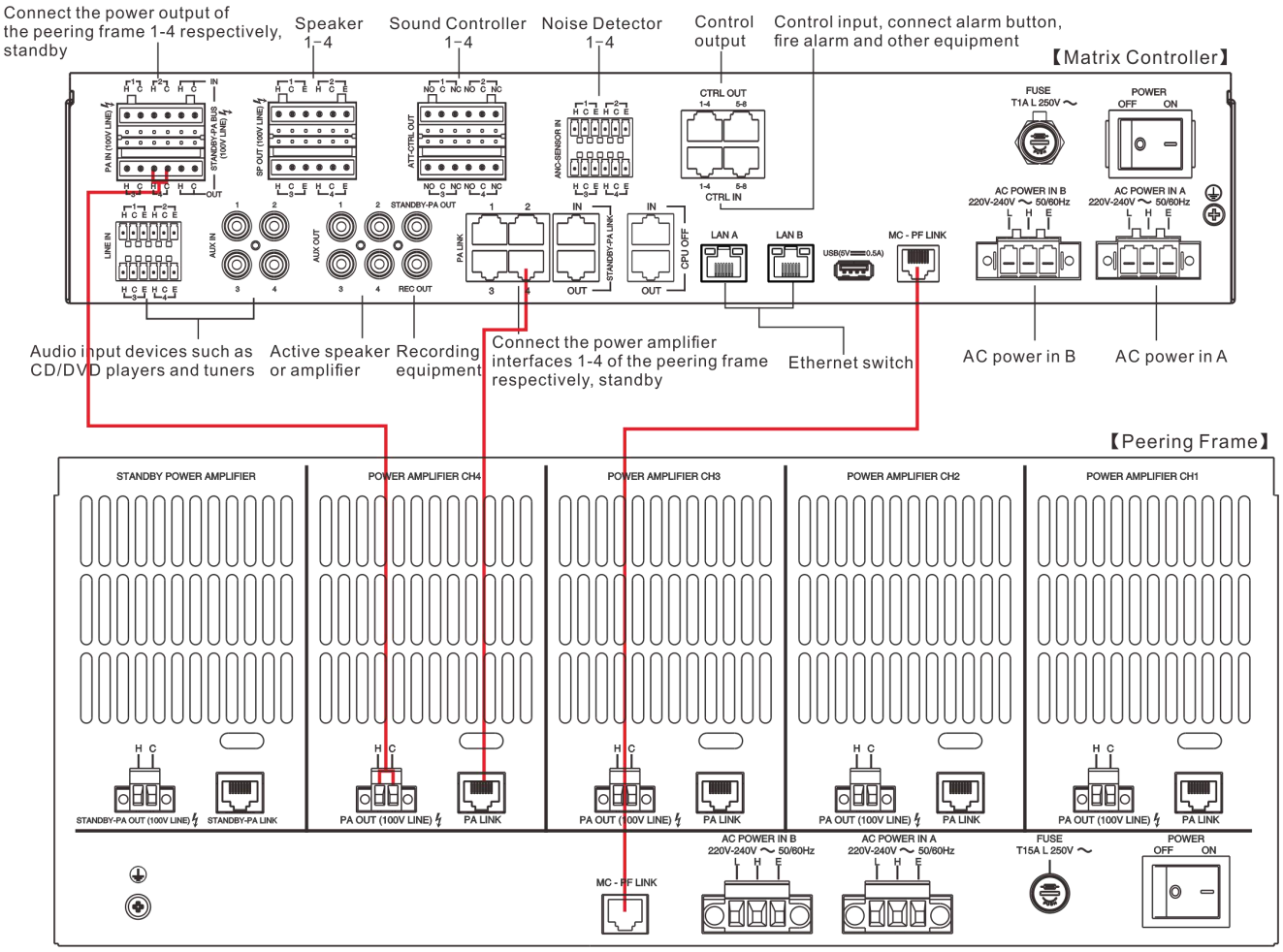
⑥ AC POWER IN B: connect to AC220V – 240V power supply.

⑦ MC-PF LINK: Connected to the MC-PF LINK interface of the matrix controller (VX-1000MC), it can detect the power failure of the Peering Frame (VX-1000PF).

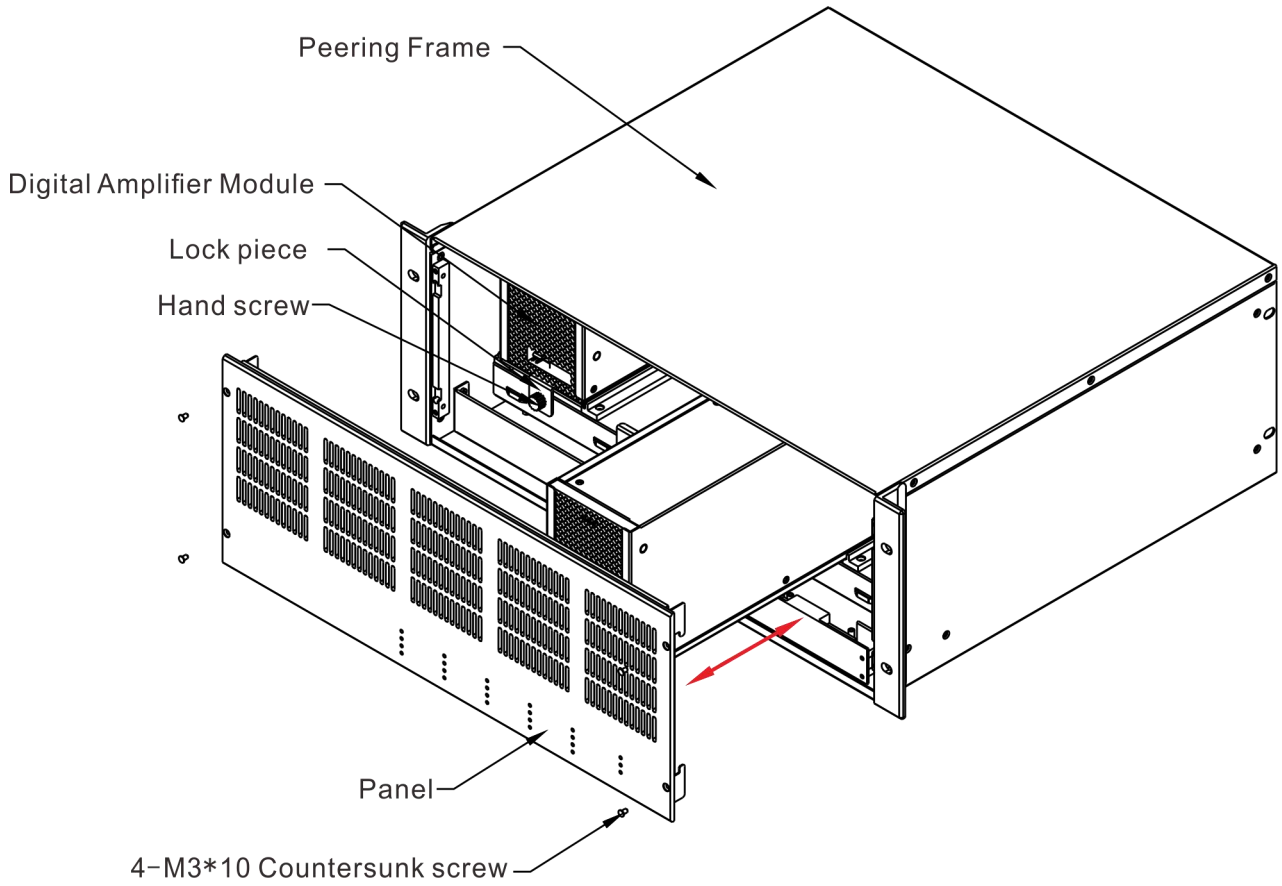
⑧ Ground: connect the ground wire.

3. Wiring

3.1 Matrix Controller Wiring Diagram



3.2 Digital Power Amplifier Module Installation Diagram



Installation steps

Step 1：Remove the four M3 * 10 countersunk screws on the panel of the Peering Frame, and then remove the panel.

Step 2：Loosen the thumb screw (no need to completely unscrew it, the lock piece can be dropped to the lower right), and turn the lock piece to the lower right (hook down).

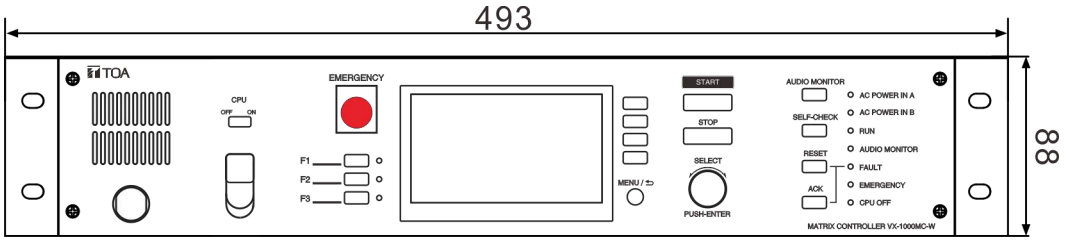
Step 3：Push the digital power amplifier module into the corresponding position.

Step 4：Turn the locking plate to the upper left, with the hook position facing up, hook the hook position on the bottom of the digital power amplifier module, and then tighten the hand screw.

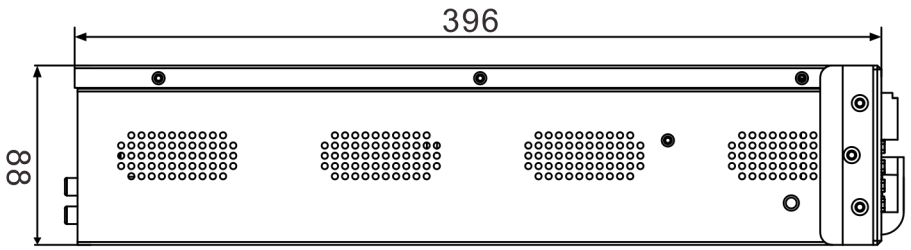
Step 5：Connect the cable and use 4 M3 * 10 countersunk screws to assemble the panel.

3.3 Reference Size（unit：mm）

3.3.1 Matrix Controller

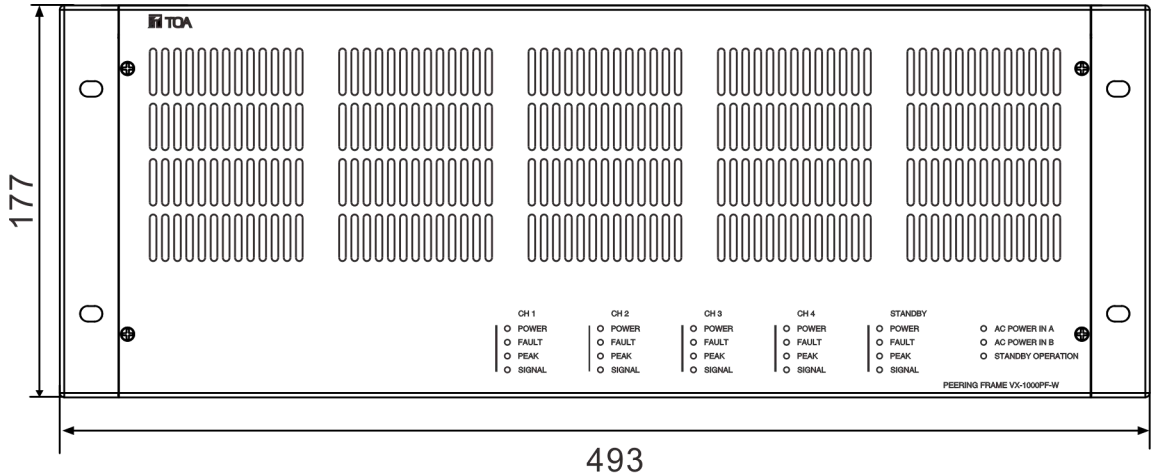


Front view

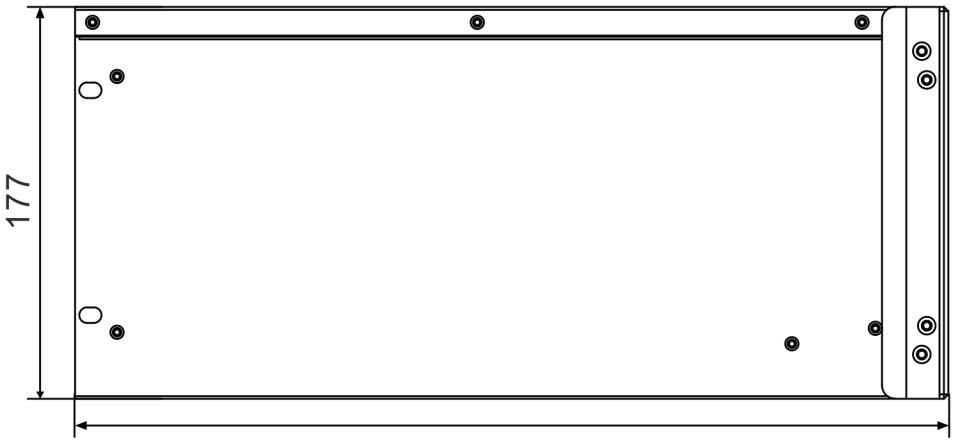


Side view

3.3.2 Peering Frame



Front view



Side view

4. Instructions

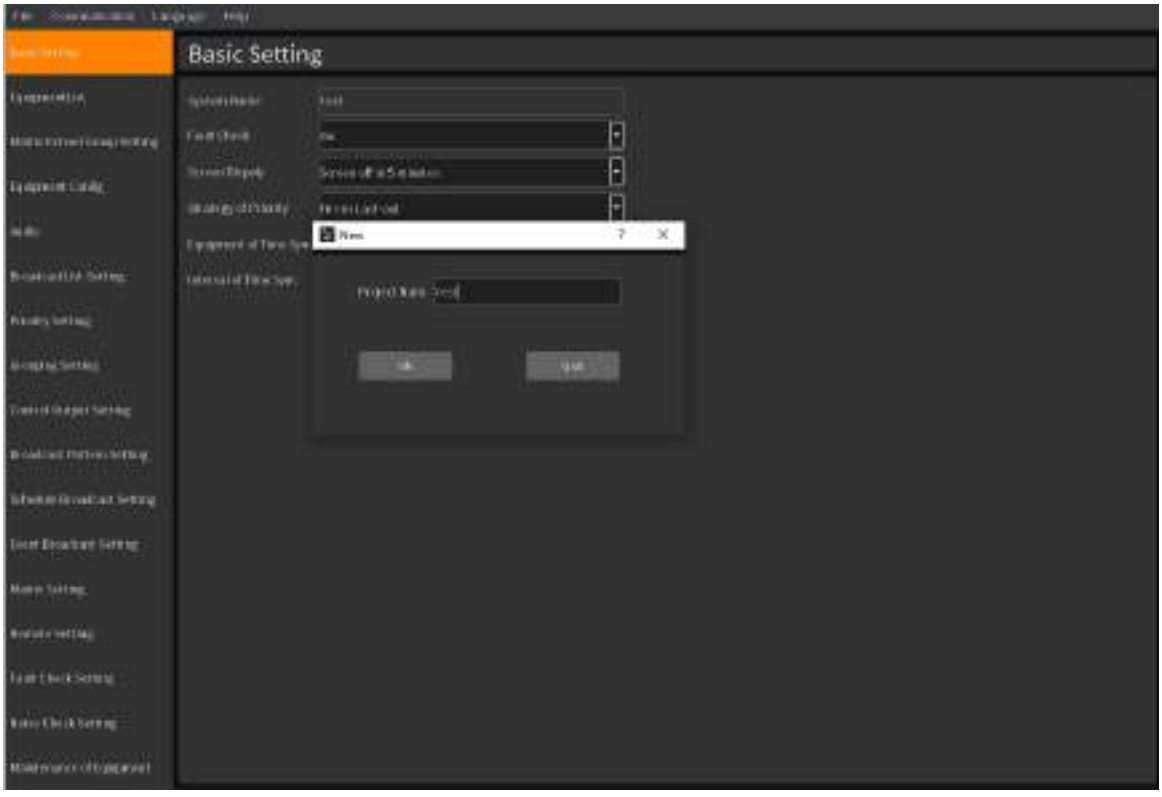
4.1 VX-1000 Configuration tool operating instructions

4.1.1 Software Installation

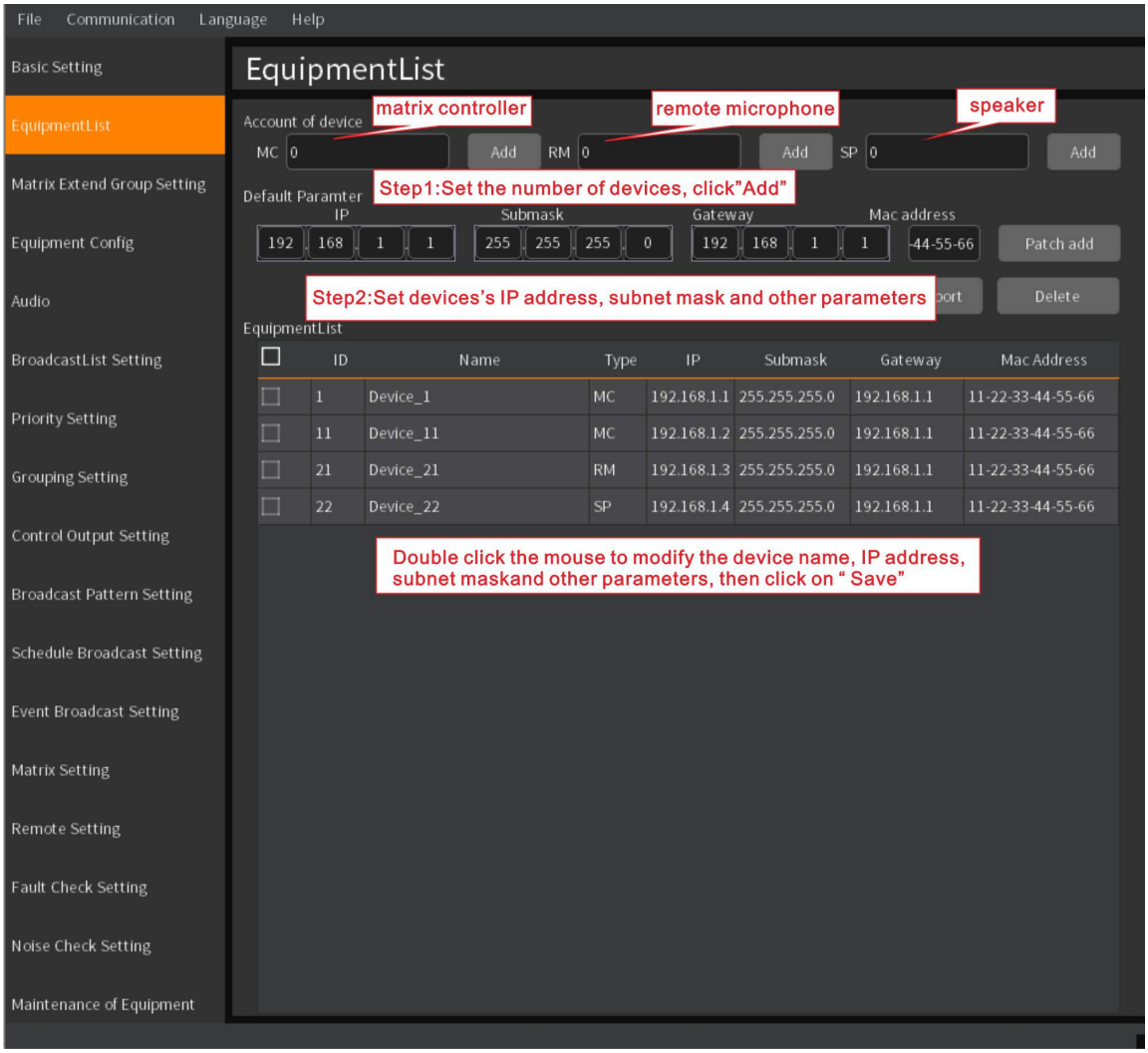
Double-click the VX-1000 installer and press "Next" to install. After the installation is complete, select "Run as administrator" software.

4.1.2 Basic parameter settings

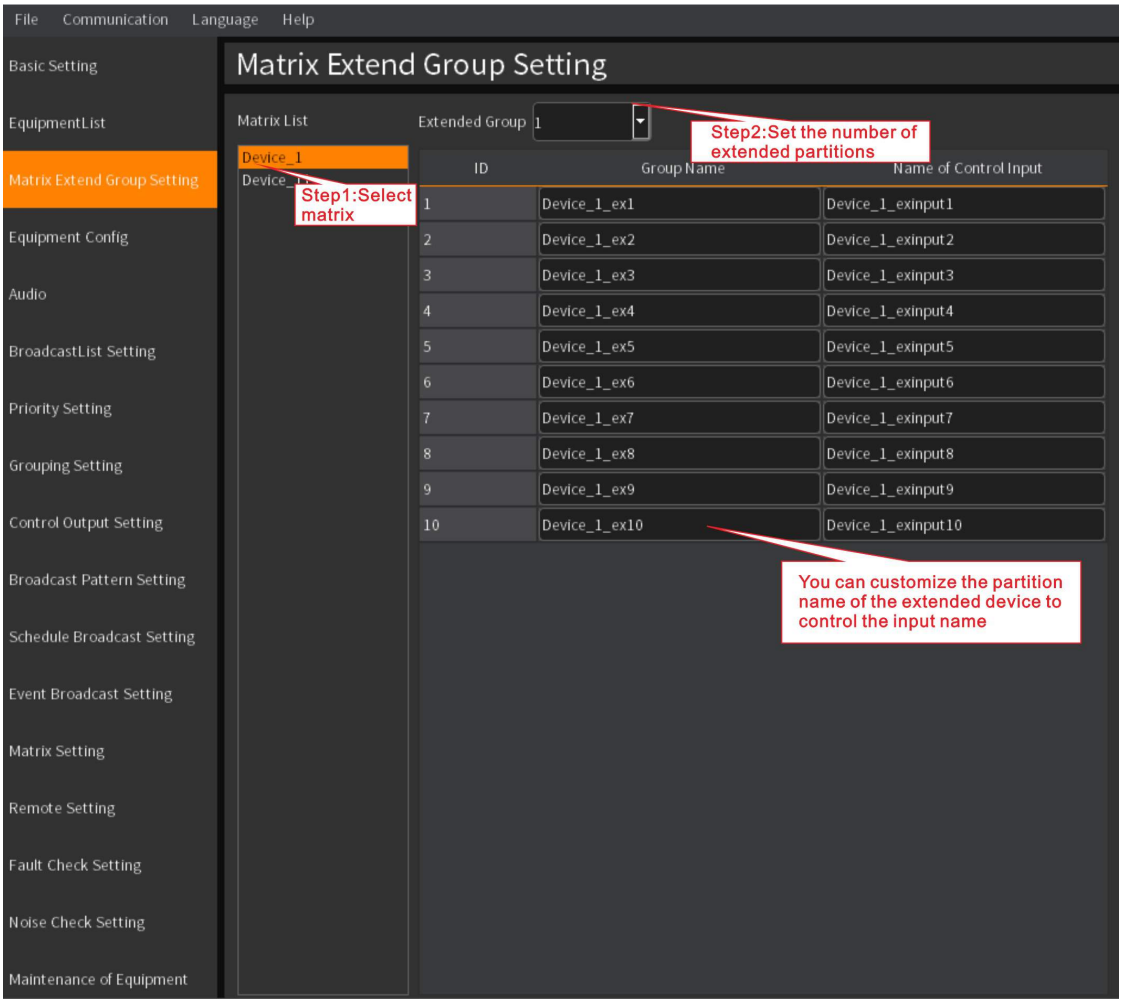
(1) **New project file**：Click "File"-"New" in the main interface of the software, enter the project name in the pop-up dialog box, and create a new project file. After the new creation is complete, related settings such as system name and screen display can be made on the "Basic Settings" interface.



(2) **Add device**：In the "Device List" interface, add devices, set device IP and other operations. After the configurations are completed, the system will save configurations automatically.



(3) **Matrix extended partition configuration:** Set the number of matrix extended partition extenders vX-1010ZE-EA. If the vX-1010ZE-EA is not connected, then you do not need to set this parameter. A maximum of 16 partition extenders can be added.After the configurations are completed, the system will save configurations automatically.



(4) **Device Configuration**：After the device is added, the names of the input and output channels and control input and output channels of each matrix controller can be customized in the device configuration interface. After the configurations are completed, the system will save configurations automatically.

The configuration of the matrix controller is described as follows:

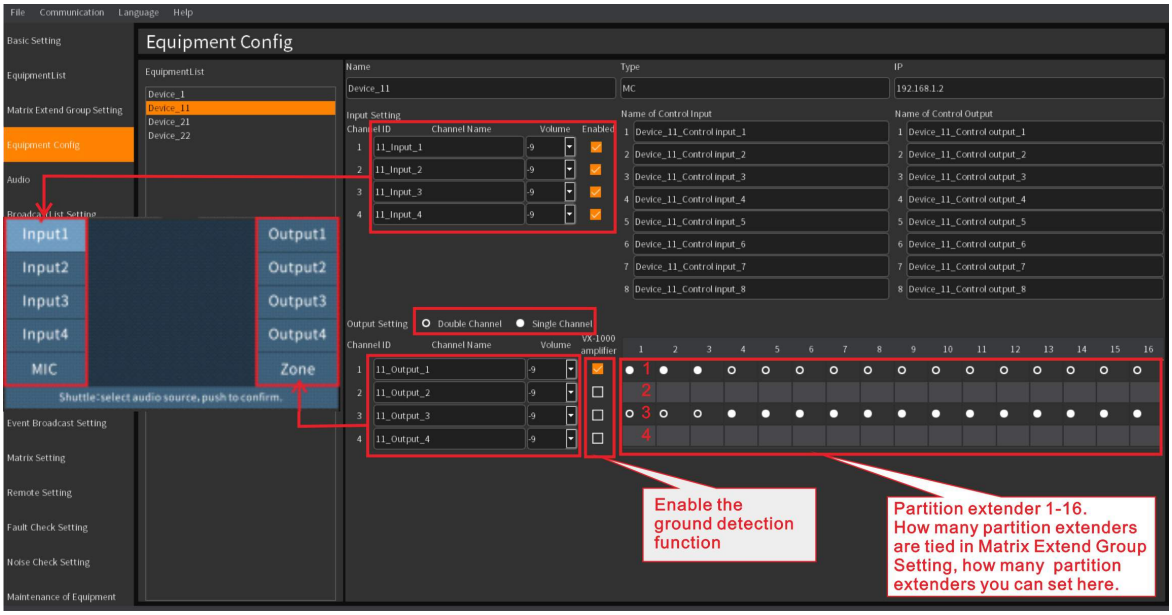
(1) Select the corresponding matrix controller in EquipmentList. You can customize the input/output channel name, volume, whether to enable the ground detection function, and the name of the control input/output channel for each matrix controller.(**Note: Input channels 1-4 respectively correspond to the 4-channel audio source input of the matrix controller, and output channels 1-4 respectively correspond to the 4-channel line output of the matrix controller. Grounding detection is not enabled when using da-X power amplifier**.)

(2) If partition controller extenders VX-1010ZE-EA are connected, set the channel type in

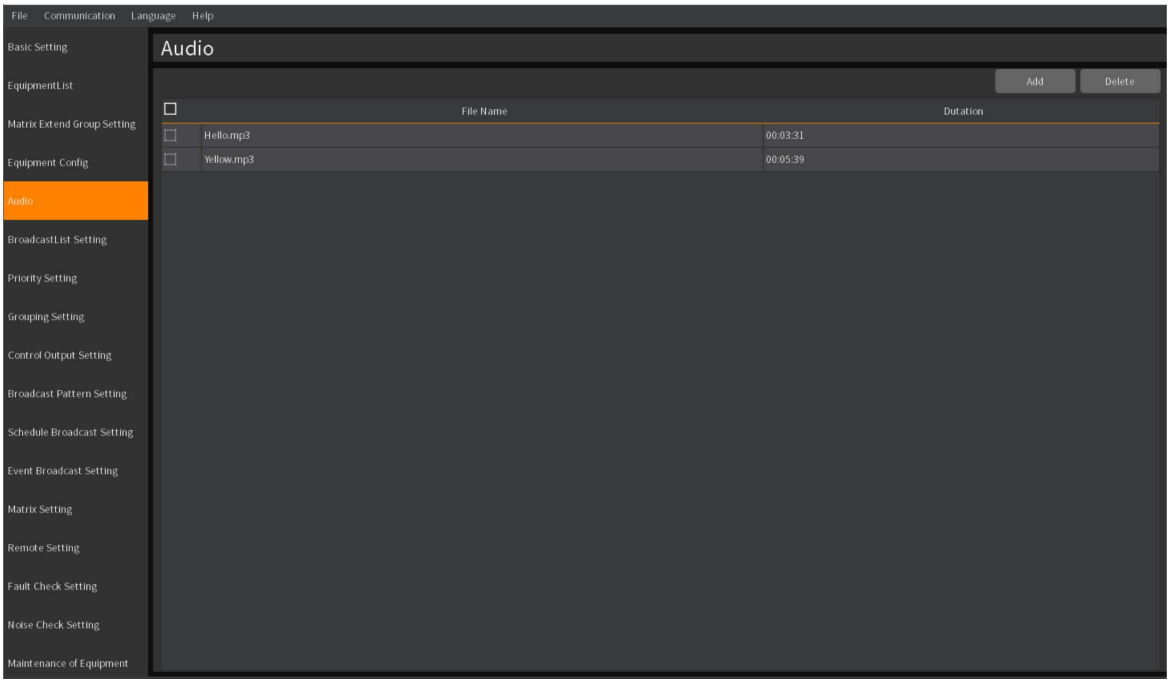
Output Settings. To connect one power amplifier to the partition extender, select single channel; to connect two power amplifiers to the partition extender, select double channel.

A single channel supports only one broadcast output. You can select any channel 1, 2, 3, or 4 as the output channel.

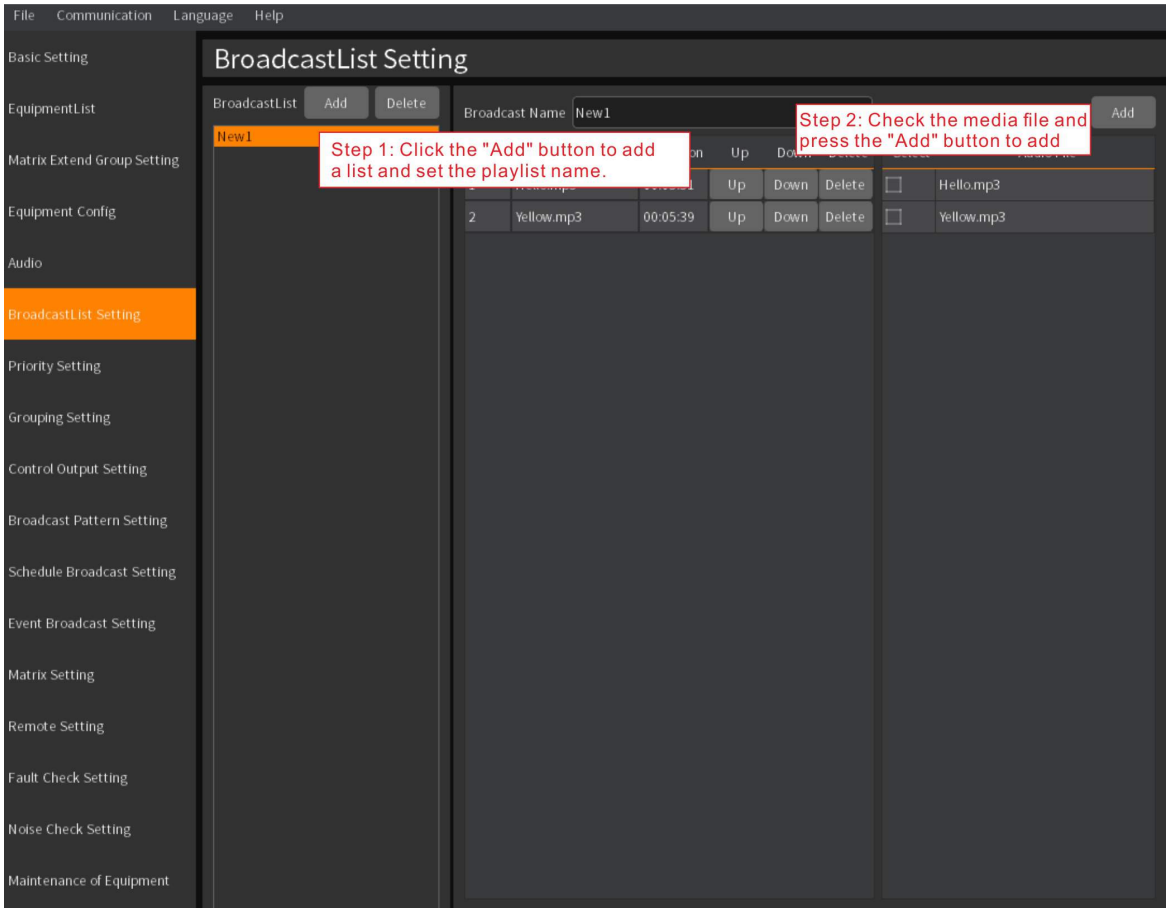
Dual channel Supports BGM and two priority broadcasts. You can select 1, 2, or 3, or 4 output channels (1 indicates channels 1 and 2, and 3 indicates channels 3 and 4). BGM broadcasts output from 2 and 4, and priority broadcasts output from 1 and 3.



(5) **Create a media library**：Click the "Add" button in the "Media Library" to add audio files (used as a broadcast source). After the configurations are completed, the system will save configurations automatically.

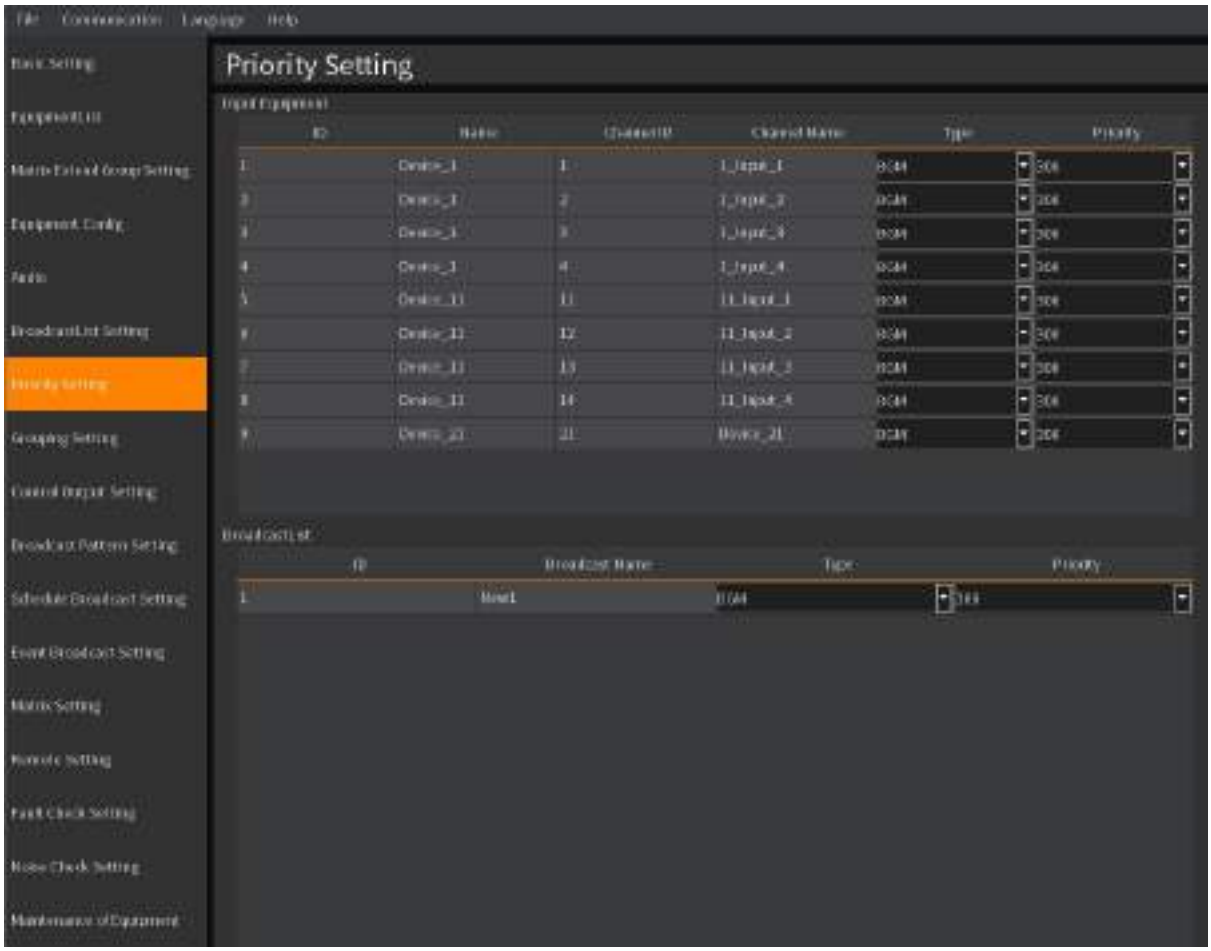


(6) **Broadcast List Setting**：Set the broadcast audio file playlist (need to add audio files in the "Media Library" in advance). After the configurations are completed, the system will save configurations automatically.

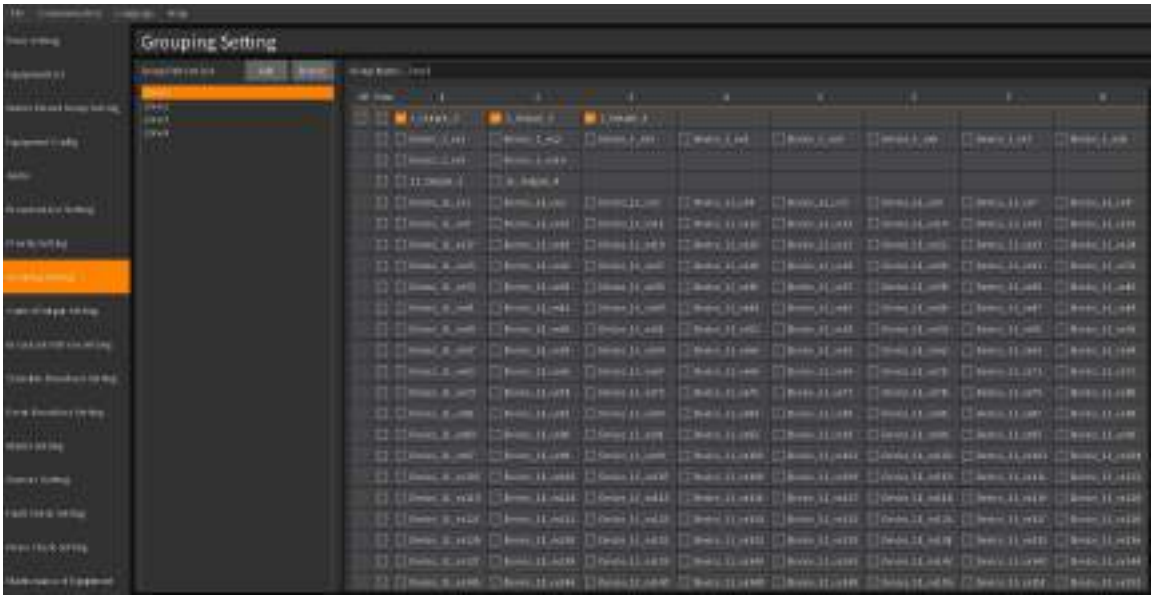


(7) **Set audio source priority**：Set the audio source type (BGM/Business/Emergency) and priority of

the device input channel and playlist. After the configurations are completed, the system will save configurations automatically.

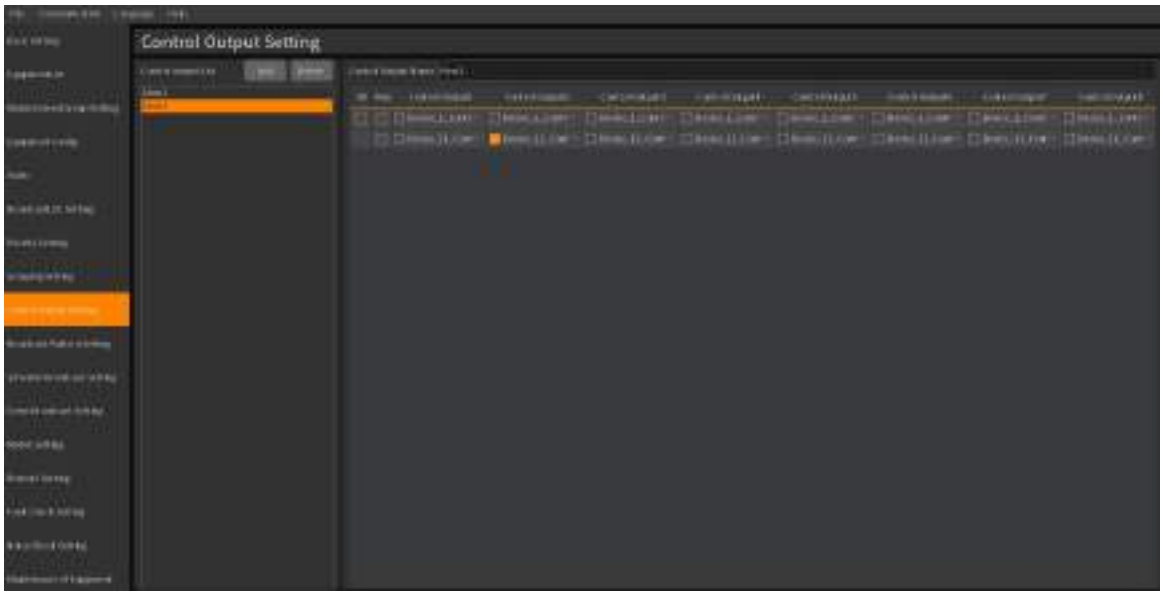


(8) **Set Group:** On Grouping Setting, multi-zone can be conbined to one group.

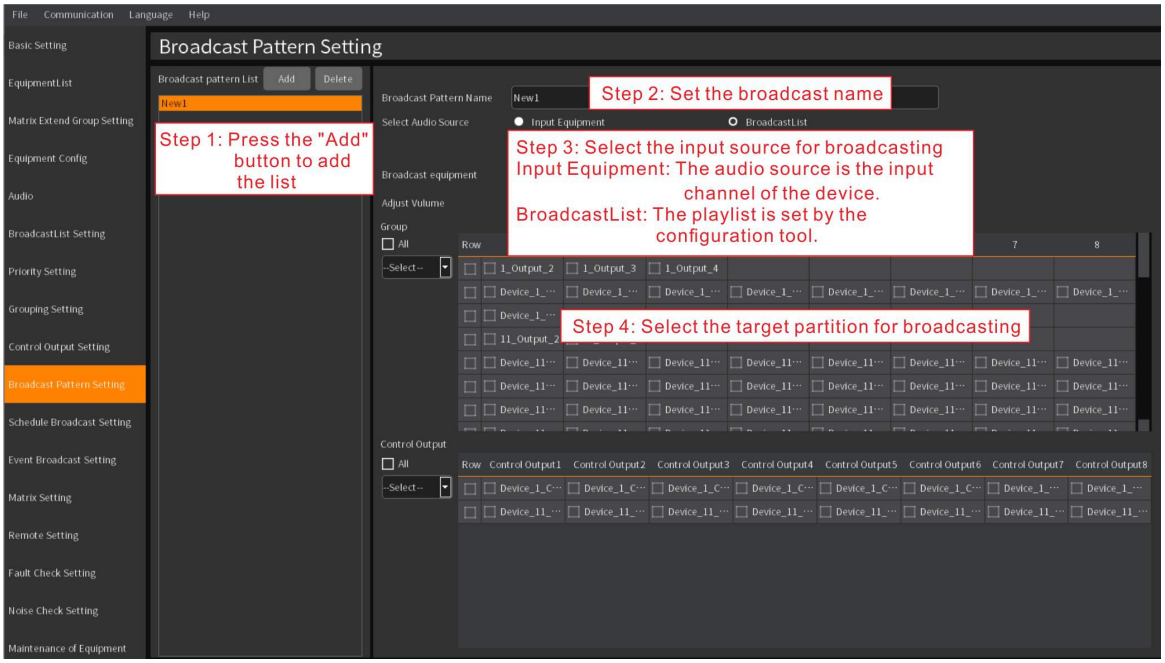


(9) **Control output：** Enter the name of the Control output, check the control output to be

added.After the configurations are completed, the system will save configurations automatically.

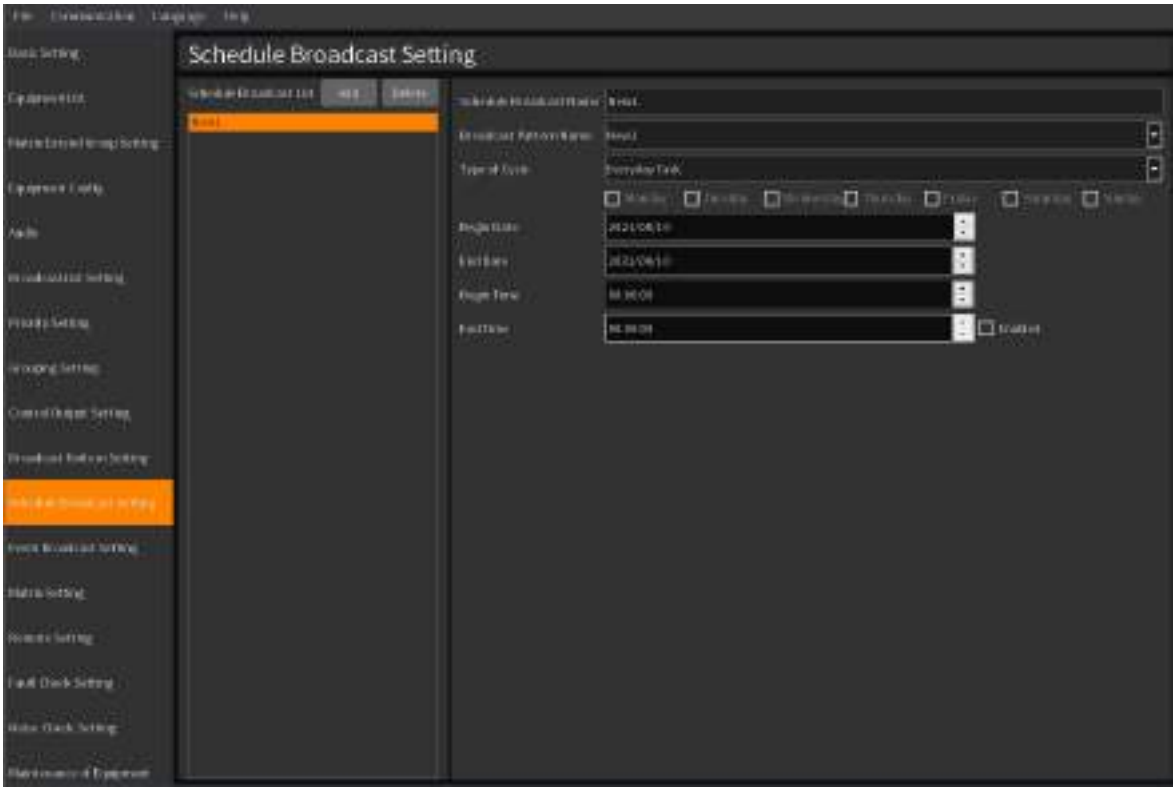


(10) Set the broadcast pattern：Set the broadcast pattern, which is used to set the mode selection when schedule broadcast and control broadcast.After the configurations are completed, the system will save configurations automatically.



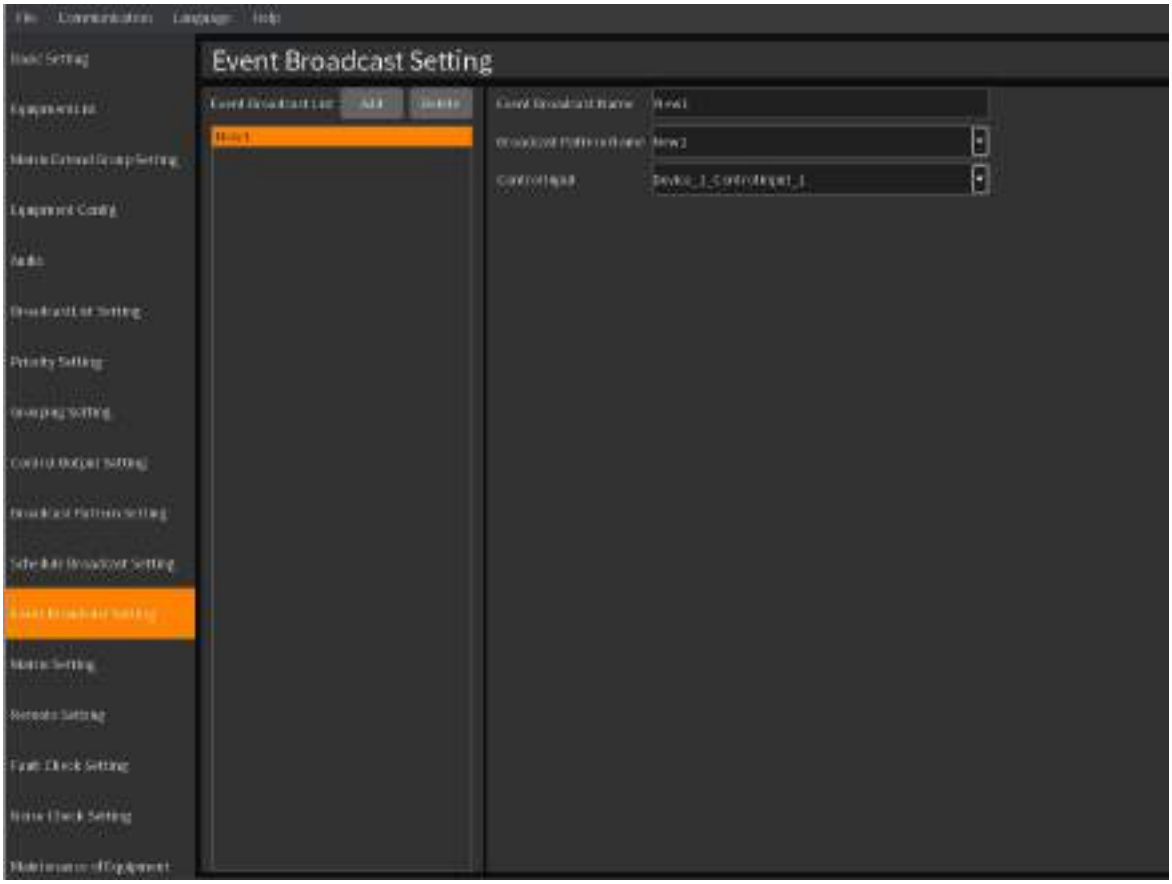
4.1.3 Set the timer to start broadcasting

On the "Schedule Broadcast Settings" interface, set the task name, broadcast pattern, cycle type, start time, etc. When the device reaches the specified time, it will start the specified broadcast pattern.



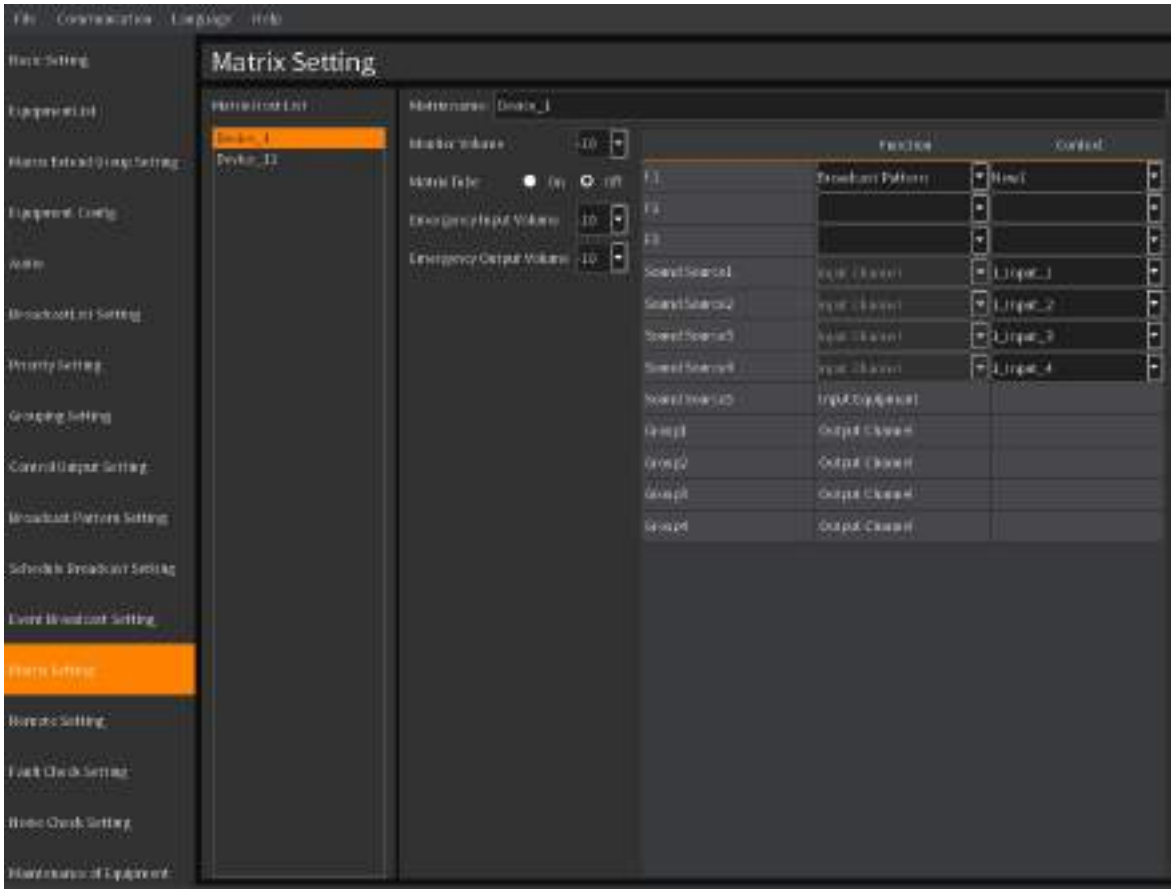
4.1.4 Set control to start broadcasting

On the "Event Broadcast Settings" interface, set the task name, broadcast pattern, and control input. When the control input of the device is triggered, the specified broadcast mode will be activated.



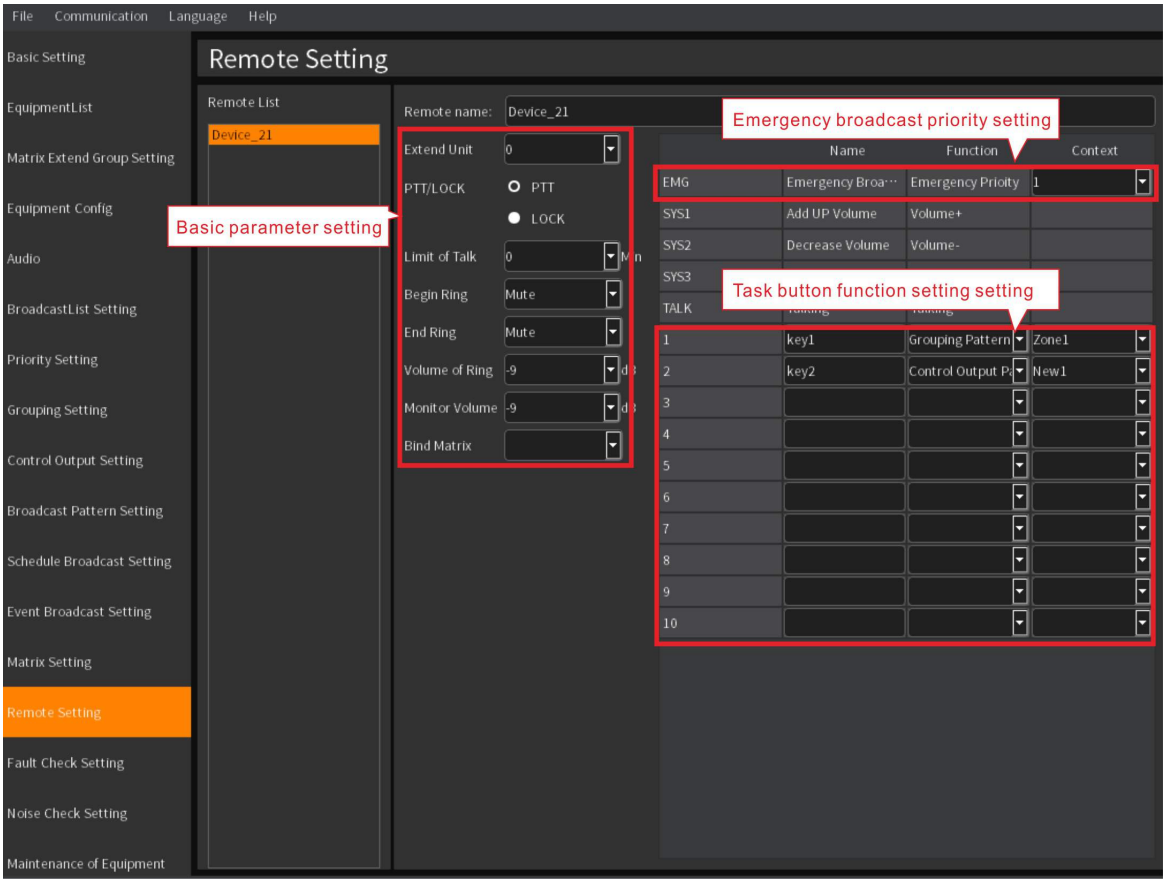
4.1.5 Set button to start broadcast

On the "Matrix Settings" interface, you can set the broadcast pattern corresponding to the [Preset 1]-[Preset 3] keys of the matrix controller. Press the device's [Preset 1]-[Preset 3] key to start the specified broadcast pattern.



4.1.6 Set remote microphone function

On the "Remote Settings" interface, you can configure the remote microphone.

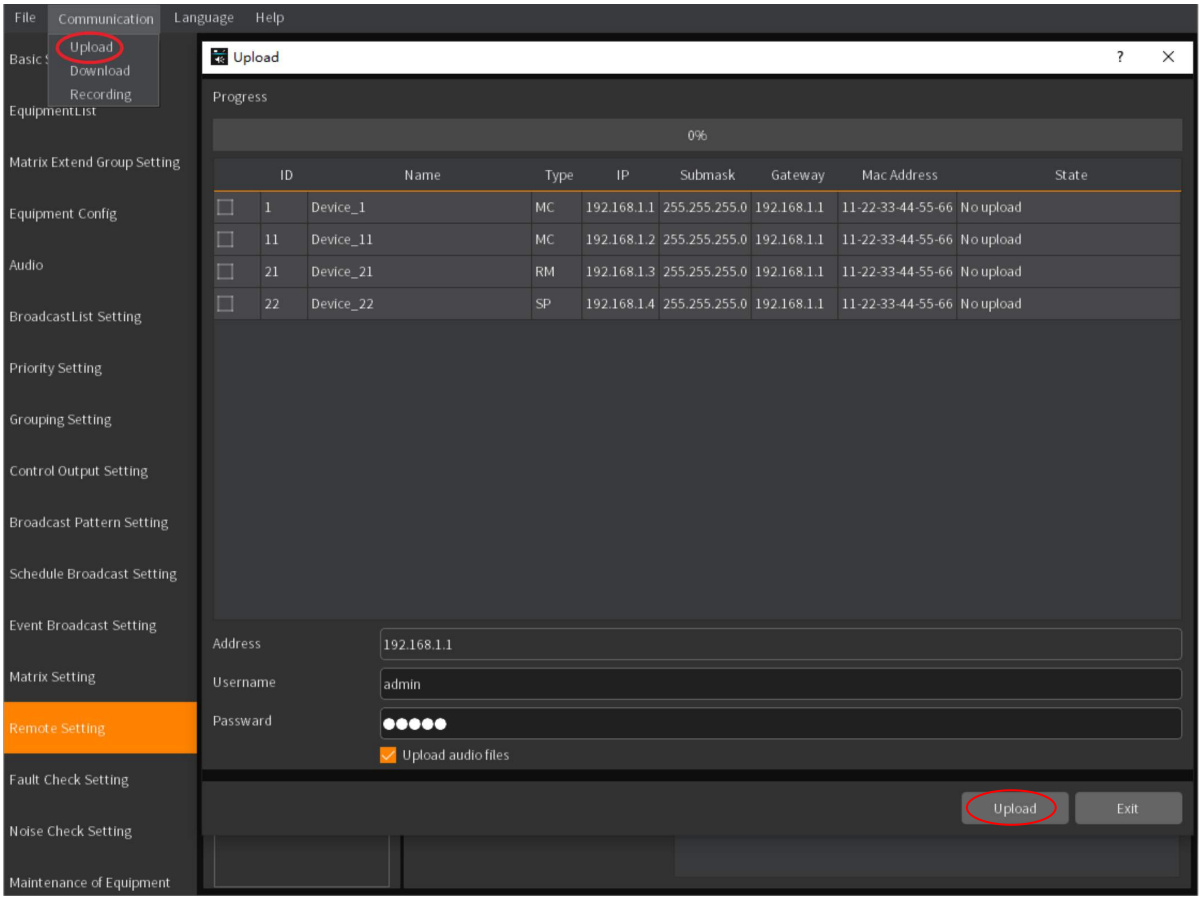


Basic parameter setting	Extention unit setting	Set the number of extention units connected to the remote microphone, and support up to 9 extention units.
	PTT/LOCK	**PTT mode:** When broadcasting, press the selection key first, and then continue to hold the broadcast speech key, then you can initiate a call. Release the talk button to end the broadcast. **LOCK mode:** When broadcasting, press the selection key first, then press the broadcast speech key to initiate a call. Press the talk button again to end the broadcast.
	Limit of Talk	Set the duration of the broadcast call, after the time, the device will automatically end the broadcast. When the time limit is set to 0, the speaking time is not limited, and the broadcast ends manually.
	Pre-announcement tone settings (Begin Ring/ End Ring)	Set the device to start broadcasting and end broadcast pre-announcement tone, when set to mute, there is no pre-announcement tone；
	Pre-announcement tone volume	The volume configuration of the start and end pre-announcement tone.
	Monitor volume	The output volume configuration of the microphone monitor speaker.
EMERGENCY Button priority setting	EMERGENCY Button priority setting	Set the priority of the EMERGENCY Button of the remote microphone, the priority range is 1 ~ 128;
Task button function setting	Broadcast pattern	Select the broadcast mode, the corresponding list shows the preset mode set on the VX-1000 broadcast mode interface. After selecting the corresponding broadcast mode, press the corresponding button to execute the broadcast mode; press the button again to end the broadcast mode.
	Grouping pattern	Select the zone. The corresponding list shows the zone list set on the VX-1000 partition mode interface. After setting the partition mode, press the corresponding button and then press the broadcast talk button to initiate a microphone broadcast.

	Control output pattern	Select the control output mode. The corresponding list shows the control output list set on the VX-1000 control output mode interface. After setting the control output mode, press the corresponding button, the corresponding control output is closed, and press the button again, the corresponding control output is disconnected.
	Monitor pattern	Select the monitor mode, corresponding to the matrix output list displayed in the list. After configuring the monitoring object, press the corresponding button, the microphone monitor speaker plays the audio of the corresponding partition, and press the button again to end the monitoring output.
	Failure Check	Select Fault Detection and the Remote Microphone [Fault Information] screen will display a list of amplifiers configured with the VX-1000. When the microphone detects an amplifier fault, it will indicate accordingly.
	触发模式	Select the trigger mode, the function of the corresponding key for the remote microphone is the corresponding matrix device selected in the VX-1000 settings (the key trigger task needs to be configured on the SIP server). Pressing the corresponding key will trigger the microphone to initiate a broadcast.

4.1.7 Upload configuration

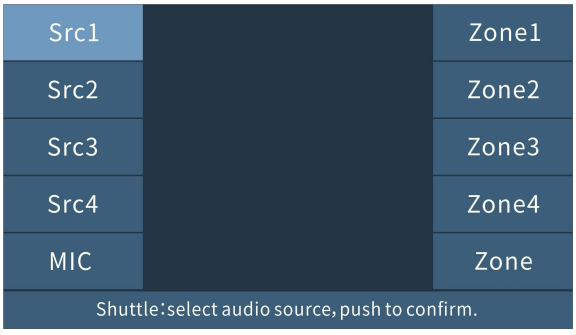
After the parameters are modified and saved, you must click [Communication]-[Upload], check the relevant device in the pop-up dialog box, and then click the "Upload" button to upload the configured data file to the specified device to take effect.



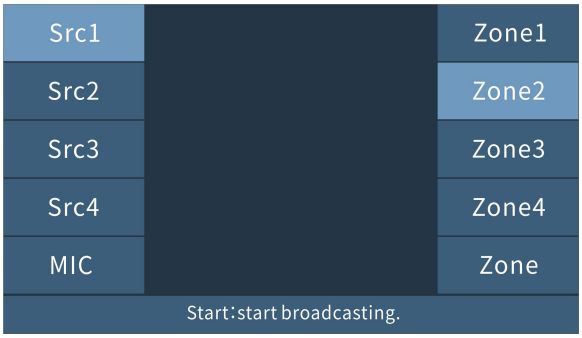
4.2 Initiate broadcast

4.2.1 Audio broadcasting

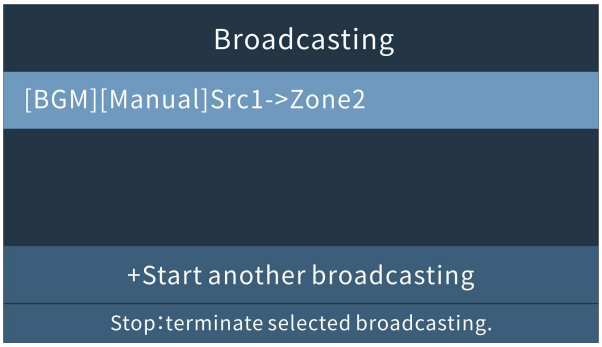
(1) Rotate the [OPERATE Button] to select the target input (4 audio inputs, only single selection), press the [OPERATE Button] to confirm the selection；



(2) Rotate the [OPERATE Button] or press the corresponding partition key to select the target output (support multiple selection), press the [OPERATE Button] to confirm the selection；



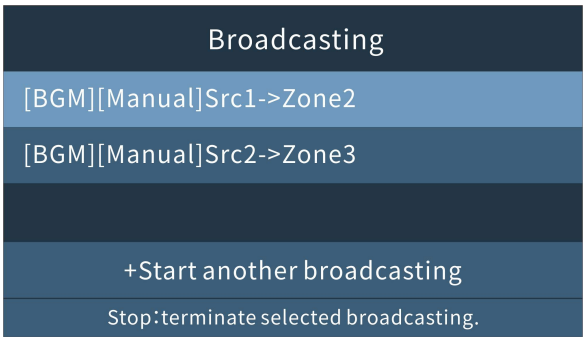
(3) Press the [START Button] to start broadcasting.



(4) Additional broadcasting (maximum support for simultaneous 4-channel broadcasting)：

a) Rotate the [OPERATE Button] on the interface during the broadcast, select "Add broadcast", and press the [OPERATE Button] to confirm the selection.

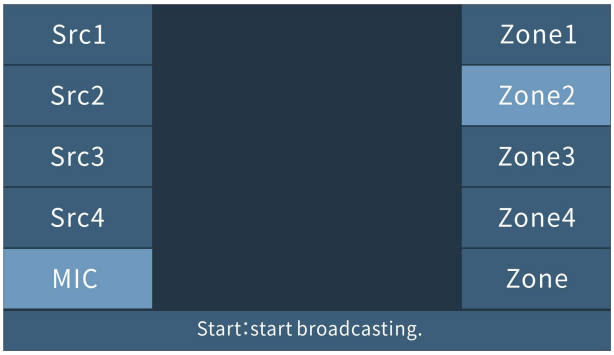
b) Select the target input and output (the operation method is the same as above), press [START Button] to initiate the second broadcast.



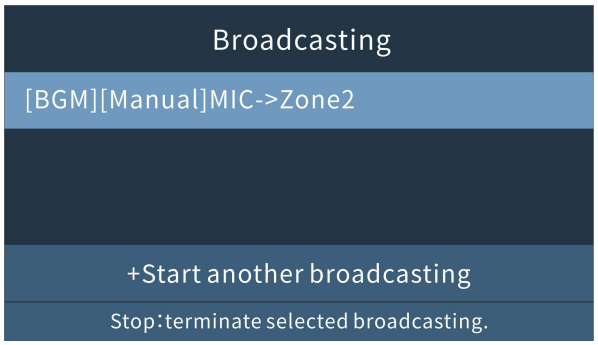
(5) Stop broadcasting: Rotate the [OPERATE Button] to select the corresponding broadcast task, and press the [STOP Button] to end the corresponding broadcast.

4.2.2 Handheld microphone broadcasting

(1) Take off the handheld microphone, and then rotate the [OPERATE Button] or press the corresponding partition key to select the target output (multiple selection is supported), press the [OPERATE Button] to confirm the selection.



(2) Press the [START Button] to start broadcasting. At this time, press the button on the left side of the microphone to start voice shouting.



(3) Release the button on the left side of the handheld microphone, and the broadcast sound output stops.

(4) Press the [STOP Button] to stop broadcasting.

【Note: Please select "Yes" handheld microphone in "Matrix Device Setting" of VX-1000 configuration tool in advance】

4.2.3 Preset broadcasting

(1) Press the device [preset 1/2/3 key], the corresponding preset status light is green, and the preset broadcast set by the VX-1000 configuration tool is played；

(2) Press the corresponding [preset 1/2/3 key] again to end the preset broadcast, the corresponding preset status light is off.

4.2.4 Emergency broadcasting

External fire alarm broadcasting：

(1) Press [EMERGENCY Button], the button light is steady red, and enter the emergency broadcast

state.

(2) Rotate the [OPERATE Button] to select the target input (4 audio inputs, only single selection), press the [OPERATE Button] to confirm the selection.

(3) Rotate the [OPERATE Button] or press the corresponding partition key to select the target output (support multiple selection), press the [OPERATE Button] to confirm the selection.

(4) Press【START Button】to start emergency broadcasting.

(5) Press【STOP Button】to stop broadcasting.

Handheld microphone emergency broadcasting：

(1) Press the 【EMERGENCY Button】, the button light is steady red, and the emergency broadcast state is entered.

(2) Take off the handheld microphone, and then rotate the [Job key] or press the corresponding partition key to select the target output (multiple selection is supported), and press the [OPERATE Button] to confirm the selection.

(3) Press [START Button] to start broadcasting.

(4) Press the button on the left side of the microphone to start voice shouting; release the button on the left side of the handheld microphone, the output of the broadcast sound stops.

(5) Press【STOP Button】to stop broadcasting.

4.2.5 CPU OFF Analog line broadcasting

(1) Remove the handheld microphone and pull the "CPU" switch to the "OFF" state. The CPU OFF status light is steady red, and emergency broadcast begins.

(2) Press the button on the left side of the handheld microphone to start the broadcast, the microphone broadcast will be played in all zones.

(3) Release the left button of the handheld microphone, the broadcast sound output stops.

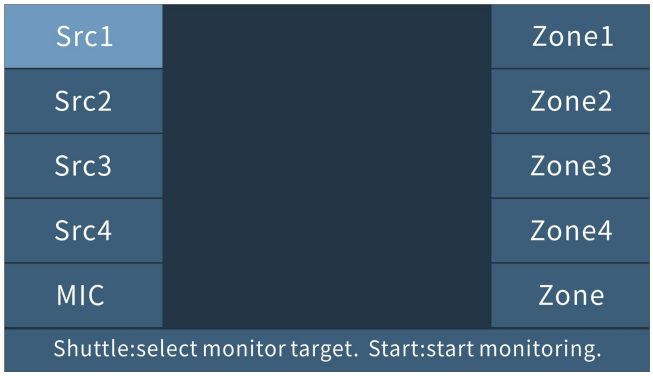
Pull the "CPU" switch back to the "ON" state, the CPU OFF status light goes out, and the analog line

broadcast is stopped.

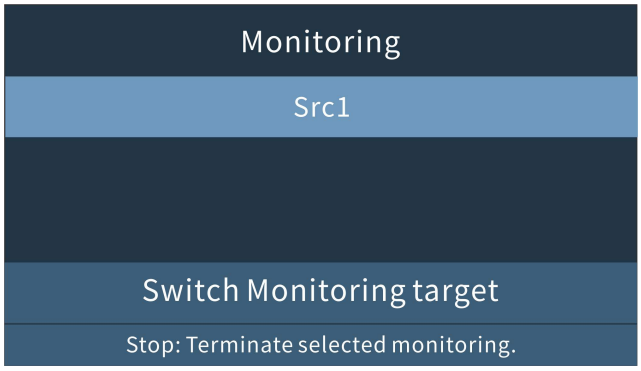
4.3 Monitoring

(1) Press the [AUDIO MONITOR Button], the monitor status light is steady green, and the device enters the monitor state.

(2) Rotate the [OPERATE Button] to select the monitor input audio source or zone output audio (Note: only one target can be monitored at the same time).



(3) Press the [START Button] to start monitoring, the built-in monitoring speaker plays the target audio for monitoring.



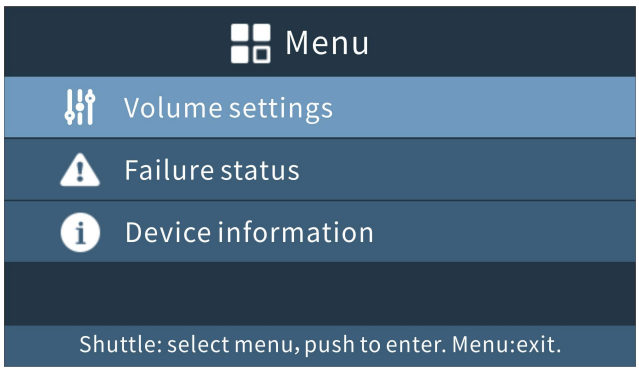
(4) Switching the monitoring object: In the "Monitoring" interface, rotate the [OPERATE Button] to select "Switching the monitoring object" and press the [OPERATE Button] to confirm the selection. Rotate the [OPERATE Button] again to select the monitoring target, press the [START Button] to start monitoring.

End monitoring: Press [STOP Button] to end monitoring the target, and the device is still in monitoring state. Press [AUDIO MONITOR Button] again, the status light of the AUDIO MONITOR Button goes out, and the monitor state is exited

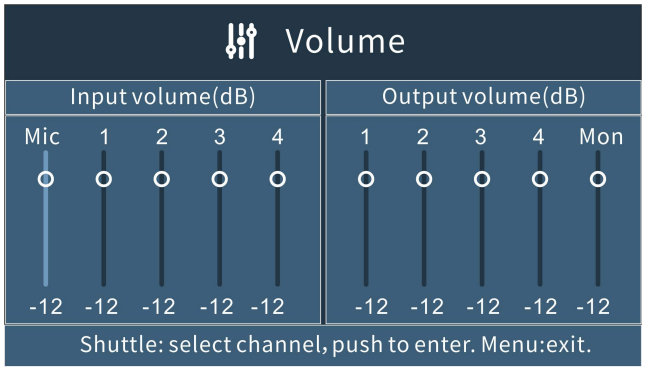
4.4 System menu

4.4.1 Volume Adjustment

(1) Press the [MENU Button] to enter the system menu interface, rotate the [OPERATE Button], select the "Volume adjustment" module, press the [OPERATE Button] to confirm the selection.



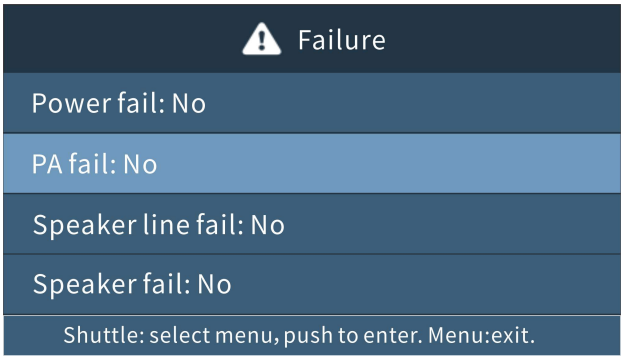
Rotate the [OPERATE Button] to select the volume of the target area, and press the [OPERATE Button] to confirm the selection. Continue to rotate the [OPERATE Button] to adjust the target volume.



(2) Press【MENU Button】to save the current volume.

4.4.2 Fault state

Press the [MENU Button] to enter the system menu interface, rotate the [OPERATE Button], select the "Fault status" module, and press the [OPERATE Button] to confirm the selection. View equipment failure status.



4.4.3 Device Information

Press the [MENU Button] to enter the system menu interface, rotate the [OPERATE Button], select the "Device Information" module, and press the [OPERATE Button] to confirm the selection. View device IP address, firmware version, MAC address and other information.

5. TROUBLESHOOTING

5.1 Troubleshooting

5.1.1 Manually initiate a sound source broadcast without sound?

1）Check whether the device audio source input interface or auxiliary audio source input interface has audio input. Press the monitor button to monitor the audio source input channel, whether there is sound output from the left speaker on the front panel;

2）Check whether the output interface of the device group is properly connected. Press the monitor button to monitor the target partition channel, whether there is sound output from the speaker on the left side of the front panel; if there is sound, check whether the signal light of the channel of the power amplifier module corresponding to the Peering Frame is always on; check the power input and output interface and power amplifier interface of the matrix and Peering Frame Whether the connection cable is connected normally; whether the output wiring of the matrix speaker circuit is normal;

5.1.2 Press the self-check button, the indicator light on the panel of the Peering Frame does not respond?

Check the matrix controller and the Peering Frame to check whether the interface is well connected with the network cable;

5.1.3 In the main interface of the matrix controller UI, the displayed channel name does not match the configured name?

Check whether the device has uploaded the parameters configured in the matrix configuration tool;

5.1.4 Press the manual button to initiate the broadcast, and there is no response when pressing the shuttle button?

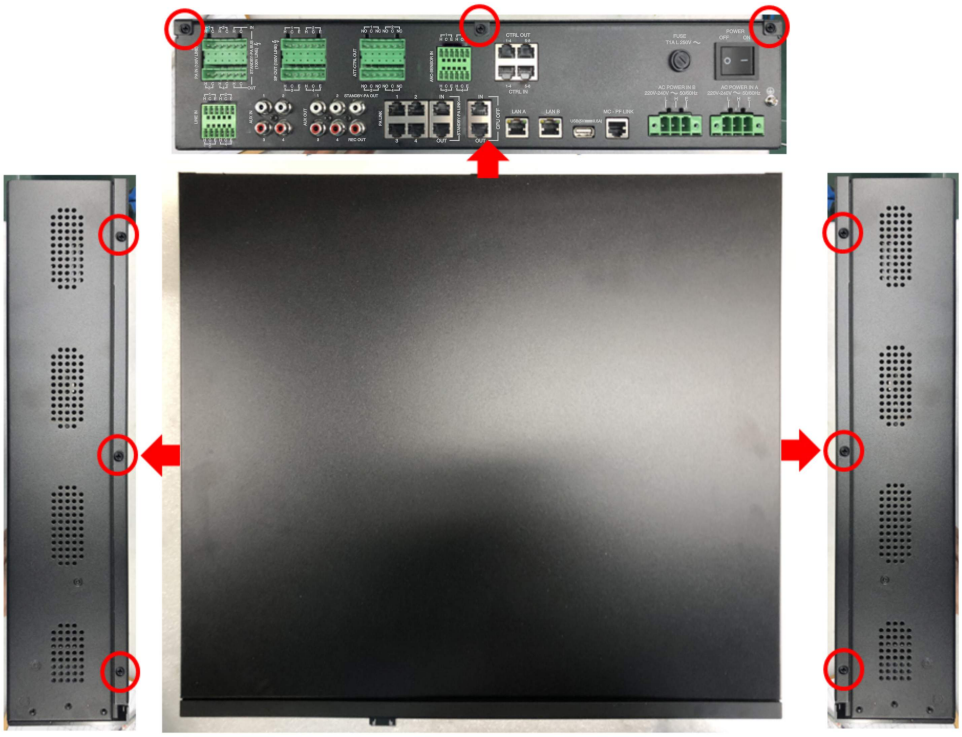
Check whether the monitor status light of the device is green, if it is green, the device enters the monitor state, and the broadcast cannot be initiated at this time; press the monitor button to exit the monitor state and initiate the broadcast again;

5.1.5 When the server is offline, the time display is abnormal?

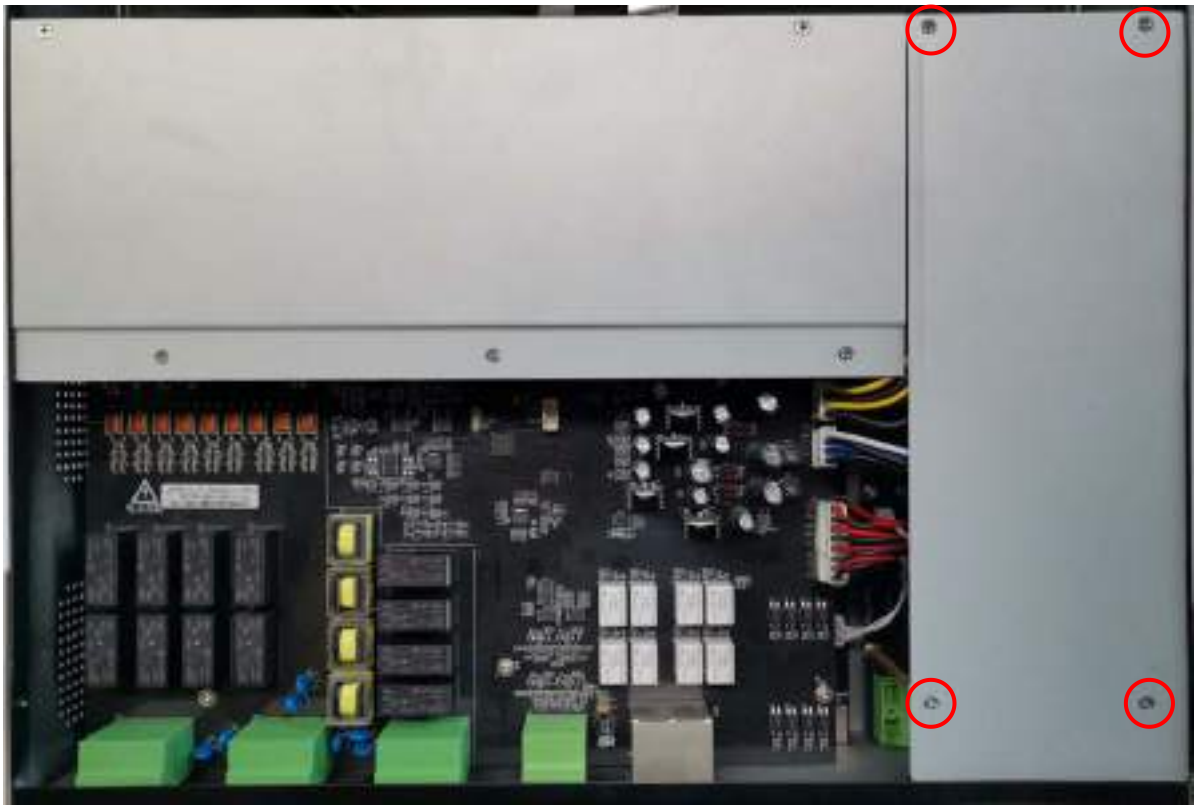
This situation may be caused by the exhaustion of the battery of the device. Please replace the battery at the J8 position in the product (Note: This operation must be performed by a professional). The specific steps are as follows:

Required tools: Phillips screwdriver (or electric screwdriver), tweezers.

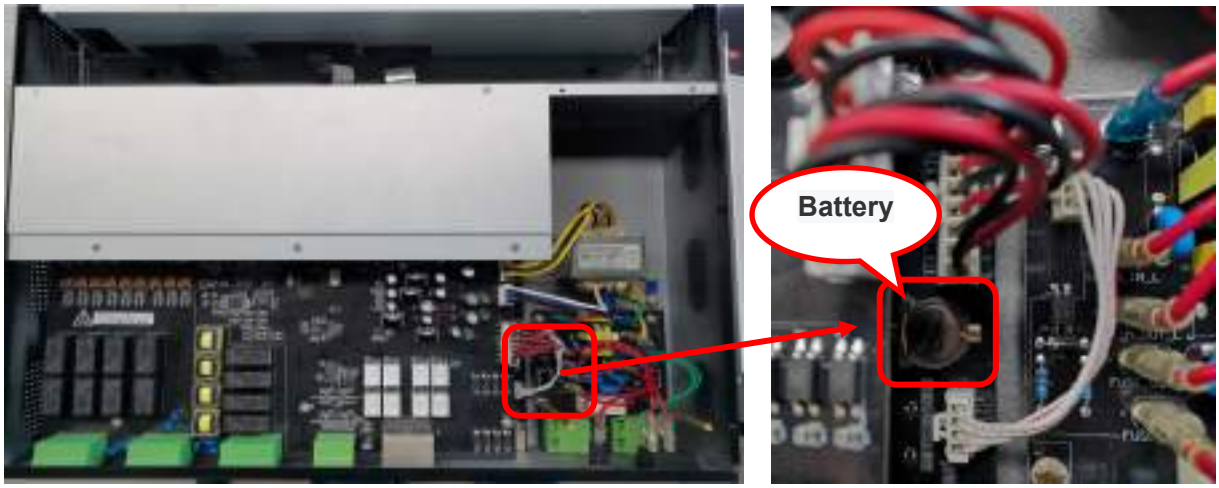
Step one：Using a Phillips screwdriver (or electric screwdriver), remove all 9pcs of M3*5 countersunk countersunk screws on the side and back of the device and remove the upper cover.



Step two：Use a Phillips screwdriver (or electric screwdriver) to remove the four M3*4 countersunk cross screws on the right side bracket of the device and remove the right side bracket.



Step three：Locate the button battery at the J8 position on the lower motherboard, and use tweezers to remove the battery and replace it.



Step four：Reinstall the removed bracket and cover.

6. APPENDIX

6.1 Specification

6.1.1 VX-1000MC-W Matrix Controller

Model		VX-1000MC-W
Power Supply		AC POWER IN A/B：AC220-240V，50Hz/60Hz，European standard terminal
Power Consumption		16.65W
Audio Input		4 Channels，European standard terminal，Balanced，Input impedance 10KΩ，Rated input 0dB
Auxiliary audio input		4 Channels，RCA Terminal，Unbalanced，Input impedance 10KΩ，Rated input 0dB；Mixing with audio input interface
Amplifier Interface		4 Channels，RJ45 Interface
Auxiliary audio output		4 Channels，RCA Terminal，Unbalanced，maximum 0dB
Recording output		1 Channels，RCA Terminal，Unbalanced，maximum 0dB
Noise detection Microphone input		4 Channels，European standard terminal，Balanced，Rated input 0dB
Control input		8 Channels，RJ45 Interface
Control output		8 Channels，RJ45 Interface
Attenuator control output		4 Channels，European standard terminal
Speaker line output		4 Channels，European standard terminal
Internal storage capacity		1GB
Network	Interface	RJ45 Interface，10BASE-T/100BASE-TX
	Protocol	SIP、NTP、HTTP、RTP、FTP
Audio features	Frequency response	Analog audio：20～20,000Hz ±3dB Network audio：40～18,000Hz ±3dB Built-in files：40～18,000Hz ±3dB
	Distortion	≤1%
	S/N	＞70dB
Functions	Loop detection	Open circuit, short circuit, ground
	Fault detection	Main power failure, backup power supply failure, power amplifier failure, Peering Frame failure
Working temperature		-10°C~+55°C
Working humidity		≤90%，not condensing
material		Panel: Aluminum profile surface oxidation treatment, black
size		493(width)×88(height)×396(depth)mm
Weight		6.96kg
accessories		Terminals（hole）（2EDGK-5.08-06P）6pcs Terminals（hole）（15EDGK-3.81-06P）4pcs Foot pad（FF-7）4pcs power cable 2pcs（Only when a single device is shipped） Button Battery（CR1220 3V）1pcs

6.1.2 VX-1000PF-W Peering Frame

Model	VX-1000PF-W
Power Supply	AC POWER IN A/ B：AC220V-240V，50Hz/60Hz，European standard terminal
Power Consumption	3.5W（When the main power port & power amplifier unit is not inserted）
Power Amplifier Module slot	4 channels
Stand-by Amplifier Module slot	1 channels
Operation temperature	-10℃~+55℃
Operation humidity	≤90%，not condensing
material	panel：Aluminum profile surface oxidation treatment, black
size	493(width)×177(height)×395(depth)mm
weight	8.77kg
accessories	Foot pad（FF-7）4pcs power cable 2pcs（Only when a single device is shipped）

6.1.3 VX-1000DA-W Digital Amplifier Module

Model	VX-1125DA-W	VX-1250DA-W	VX-1500DA-W
Power Supply	AC220V-240V，50Hz/60Hz		
Amplifier	Class D digital amplifier		
Power consumption	30.3W（standby mode） 130W（Rated output status）	27.7W（standby mode） 255W（Rated output status）	28.2W（standby mode） 505W（Rated output status）
Rated output	125W	250W	500W
Frequency response	20～20,000Hz ±3dB		
Distortion	＜1%		
S/N	＞90dB		
cooling method	Forced air cooling		
Working temperature	-10℃~+55℃		
Working humidity	≤90%，not condensing		
material	SECC		
size	82.5(width)×128.7(height)×316(depth)mm		
weight	2.030kg	2.035kg	2.085kg
accessories	Terminals（hole）（2EDGKM-5.08-2P）1pcs		