ADERTECH

PAMP-41TD
PAMP-42TD
PAMP-43TD

Multi-functional Network DSP Digital Power Amplifier



User Manual

DSP Features & Software

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Chapter 1 Brief Introduction

This device is a multifunctional network DSP digital amplifier that enables real-time remote monitoring of amplifier status and allows instant configuration of various DSP functions such as compressors, limiters, noise gates, parametric equalizers, matrix routing, cross-over and delay units. Its user-friendly software interface provides customers with a simple setup and operation experience, while multiple connectivity options ensure excellent configurability and scalability, making it suitable for diverse application environments.

Application

●Performance Center ●Theater ●Gym ●Hotel ●Conference Center ●Shopping Center
●Retail Shop ●Dinning Hall ●Bar ●Any Other Indoor/Outdoor Suitable Space

Amplifier Main Features

◆ Analog/DANTE/AES67 network audio is optional,
◆ Network TCP/IP control, capable of managing multiple devices
◆ Remote power on/off
◆ Adopting a 2.0-inch colorful screen
◆ Built in high-precision DSP digital processor with a sampling rate of 96KHz.
◆ Supports multiple online modes: USB, TCP/IP
◆ Real time remote monitoring of power amplifier working status
◆ The power amplifier can be identified through software on site
◆ Supports free switching between bridge, matrix, mono, and stereo modes
◆ The overall gain of the machine is adjustable from 26 to 44dB, which can be set through software or color LCD display screen
◆ Standard Fir function, input supports 4 * 1024 Taps, output supports 4 * 512 Taps
◆ Constant voltage and resistance support: 100V, 70V, 8 ohms, 4 ohms
◆ Software control can simultaneously control media matrix and professional processor
◆ Wide voltage operation 90-260VAC

Chapter 2 Technique Specifications

2.1 Gain For The Whole Amplifier Unit

(depending on diverse models, some gain options are not open)

Gain（dB）	Sensitivity
26	17dBu/5.49V
27	16dBu/4.89V
28	15dBu/4.36V
29	14dBu/3.88V
30	13dBu/3.46V
31	12dBu/3.09V
32	11dBu/2.75V
33	10dBu/2.45V
34	9dBu/2.18V
35	8dBu/1.95V
36	7dBu/1.74V
37	6dBu/1.55V
38	5dBu/1.38V
39	4dBu/1.23V
40	3dBu/1.09V
41	2dBu/0.98V
42	1dBu/0.87V
43	0dBu/0.78V
44	-1dBu/0.69V

2.2 DSP Features

High-performance 4-in-4-out DSP processor board, integrating DSP digital signal processing technology and network communication technology. Primarily used for constructing the pre-amplifier section of power amplifiers. The G4PSE provides gain for different amplifier solutions. Matching function, providing amplifier temperature, voltage, current, and load detection interfaces. Equipped with precise compressors, limiters, noise gates, parametric equalizers (PEQ), dynamic equalizers (DEQ), and device presets equipment lock, amplifier gain matching function. The Windows operating software provides an intuitive user interface that is capable of quickly adapting to operations.

Supports multiple connection methods: USB, TCP/IP, COM.

Supports 48K FIR filters. Through the FIR Designer function window of Mconsole, users can easily export/input the speaker data measured by Smaart /REW/re Phase, and utilize functions such as automatic amplitude and automatic phase. Flexible compensation of amplitude and phase curves for speakers.

2.3 DSP Main Functions

(Refer to the following Chart)

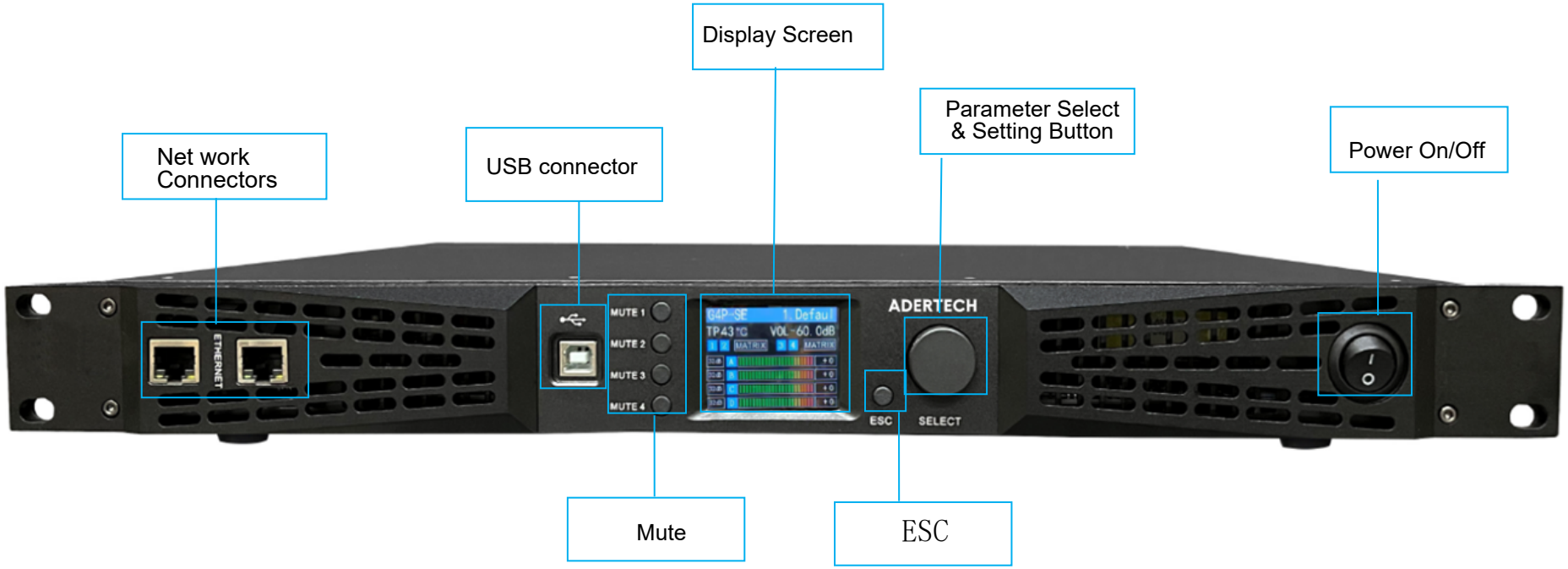
High-performance DSP with 450MHz processing	Parameter Equilibrium PEQ
Sampling rate: 96kHz, 24-bit, professional-grade	Maximum 48dB/Oct High and Low Pass Filter
Balanced analog signal pin interface	48K FIR filter and automatic phase correction function
AES/EBU Digital Input Interface	FIR input 1024 taps/output 512 taps
Optional Dante network audio module	Can import speaker measurement parameters such as Smaart/Auto FIR
Amplifier gain matching	Temperature, voltage, current, load monitoring pin interface
DSP 4x4 Matrix Processing Architecture	USB, TCP/IP, COM control pin interface
96K IIR up to 14 filter types	Optional 2-inch IPS color screen
Dynamic Equilibrium (DEQ)	Constant voltage and resistance supported: 70V-100V, 8 ohms, 4 ohms (for some models)

2.4 DSP Parameters

Input audio source	: analog DANTE,AES67, Test signals: pink noise, white noise, sine wave
Sampling rate	: 96KHz
Frequency division	: Butterworth, Bessel, Linkwitz slope 6-24
DSP preset	: 80 preset positions
Output limiter	: Start control level -90dBu~24dBu, release time 1~2895ms
Output compressor	: soft inflection point, control level, control time, compression ratio, release time
Fir function	： input supports 4x1024 Taps, output supports 4x512 Taps
DSP matrix	： 4x4 matrix
Input noise gate	: start time 1-2895ms, release time 1-2895ms, start level -120dBu~0dBu
Input/output EQ	: I nput EQ 15 parameter equalities, output EQ 10 parameter equalities, with dynamic
EQ adjustment Delay	: Input Delay: 2000ms Output Delay: 2000ms
Output compressor	: soft inflection point, control level, control time, compression ratio, release time
Network specifications	: TCP/IP, 1000base-T/100base-TX, RJ45X2

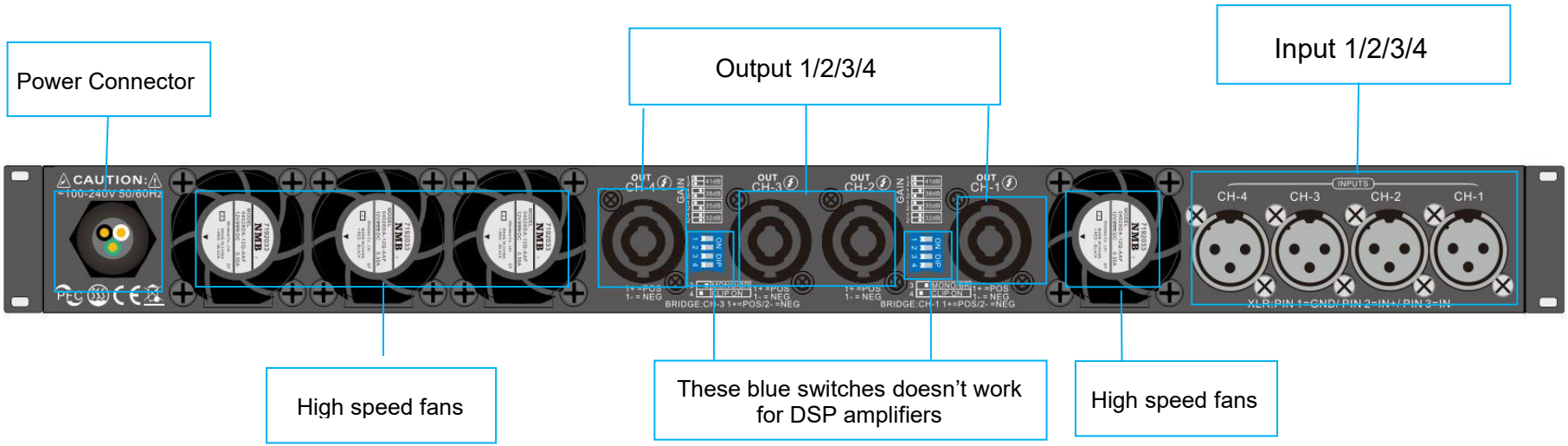
Chapter 3 Functional Structure

Amplifier Front Panel Layout



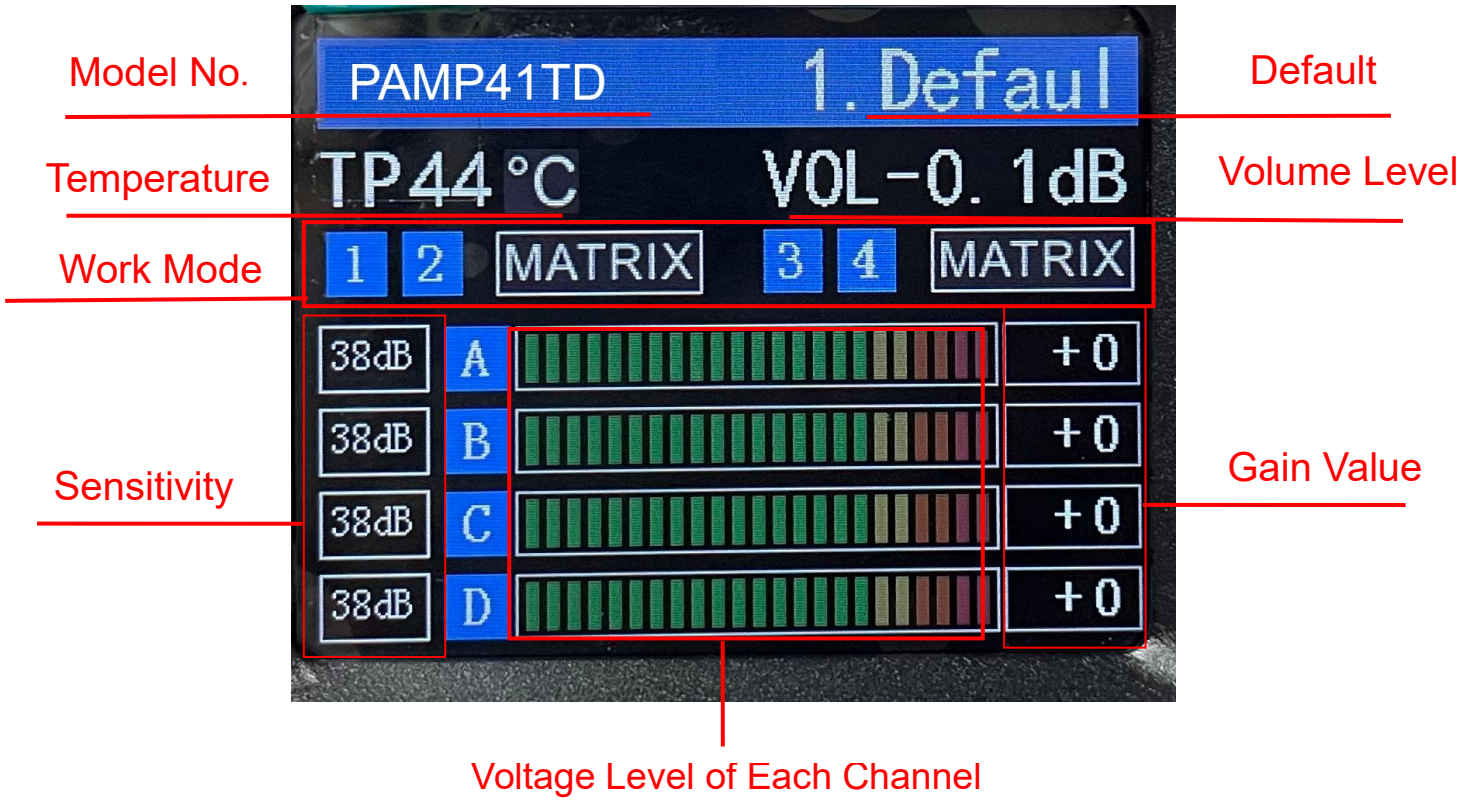
Rear Panel Introduction

(The layout may be various for different models)

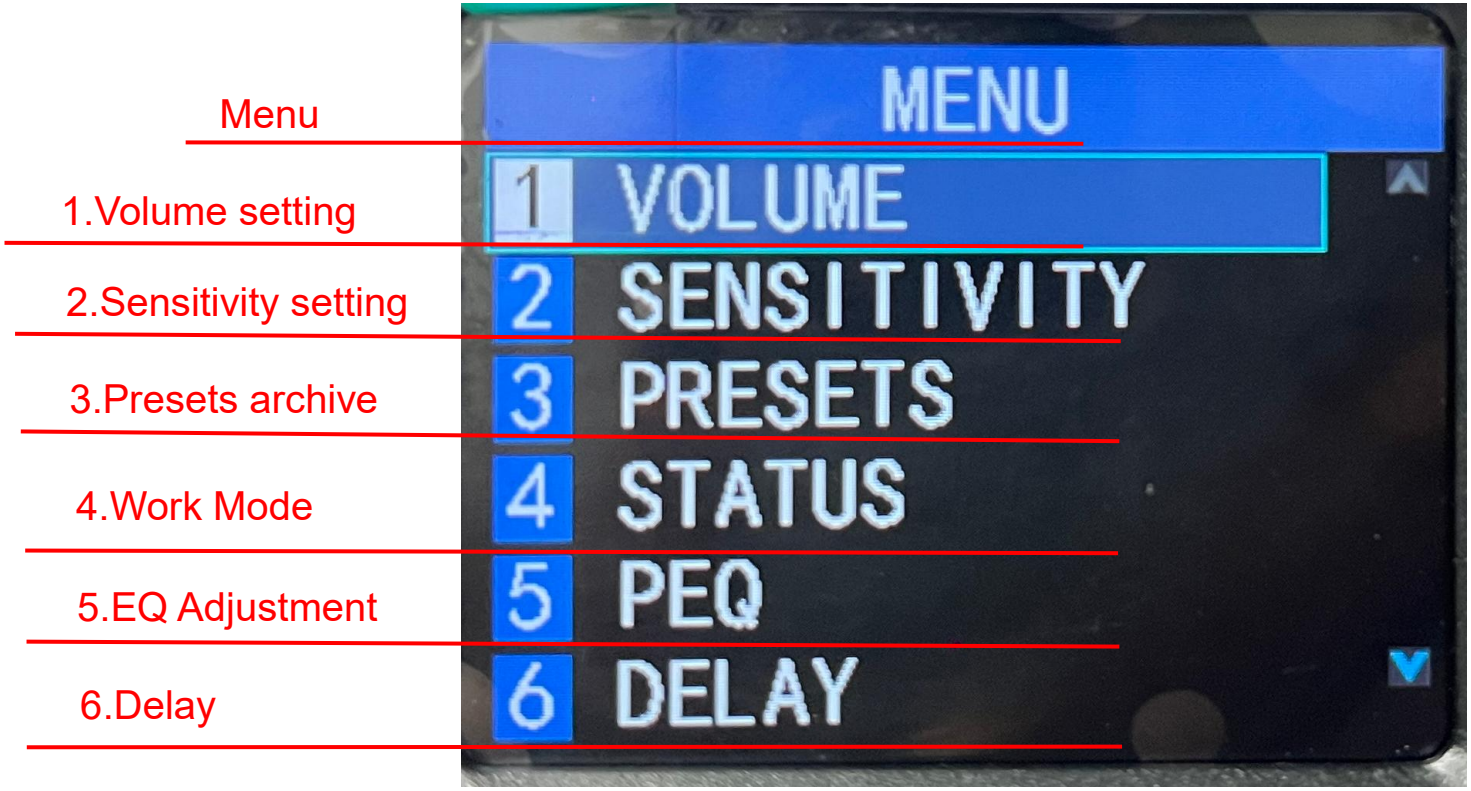


3.1 Display Screen Introduction

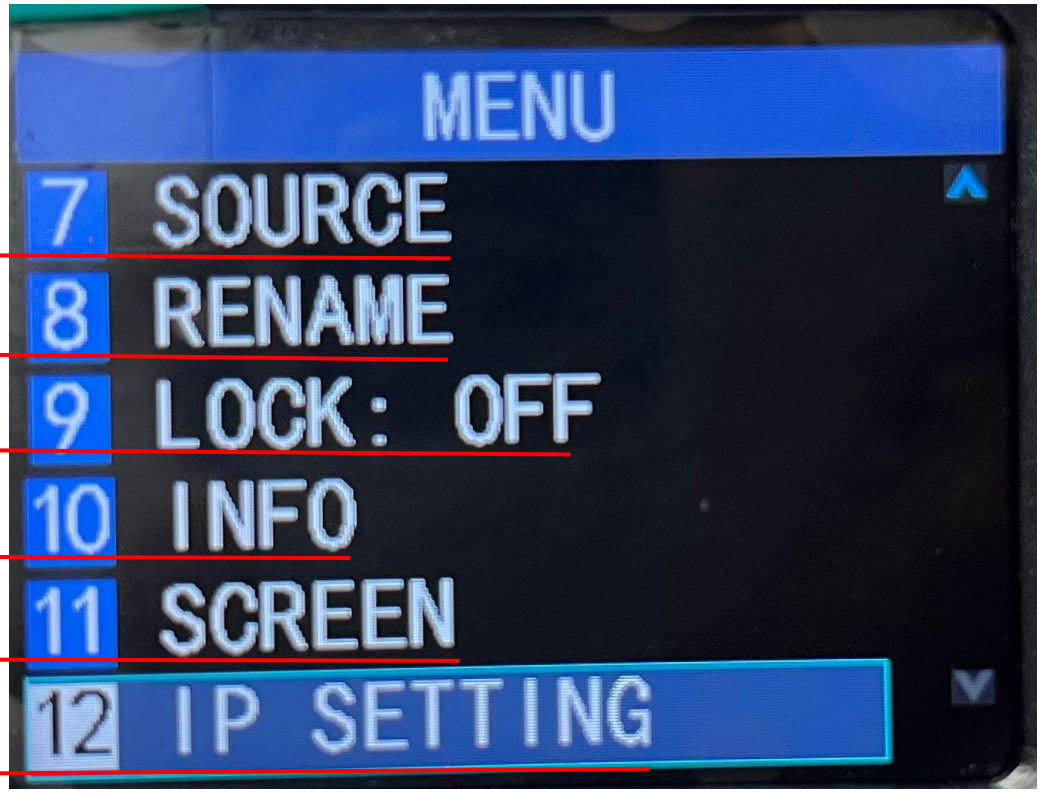
Main Interface of Screen



Index Interface



Index Interface



7.Input source

8.Device rename

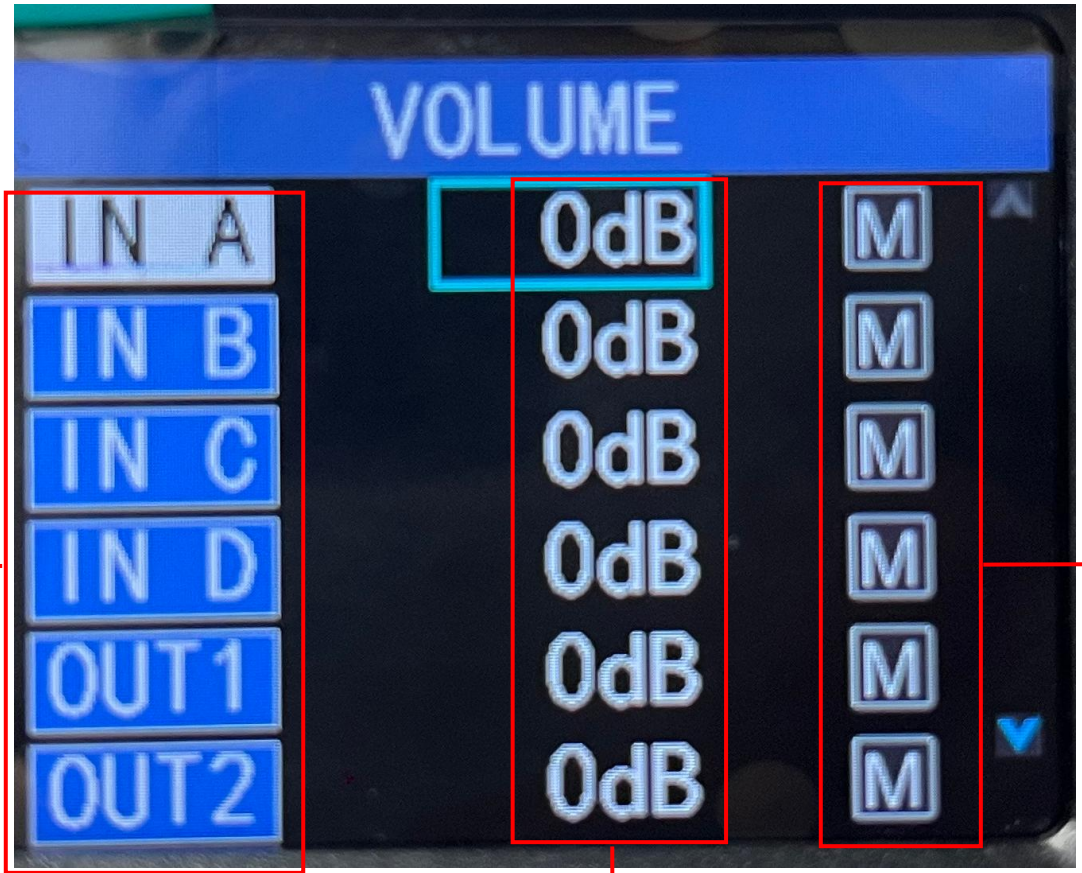
9. Lock status

10.Device information

11. Other setting

12.IP setting

Channel Settings

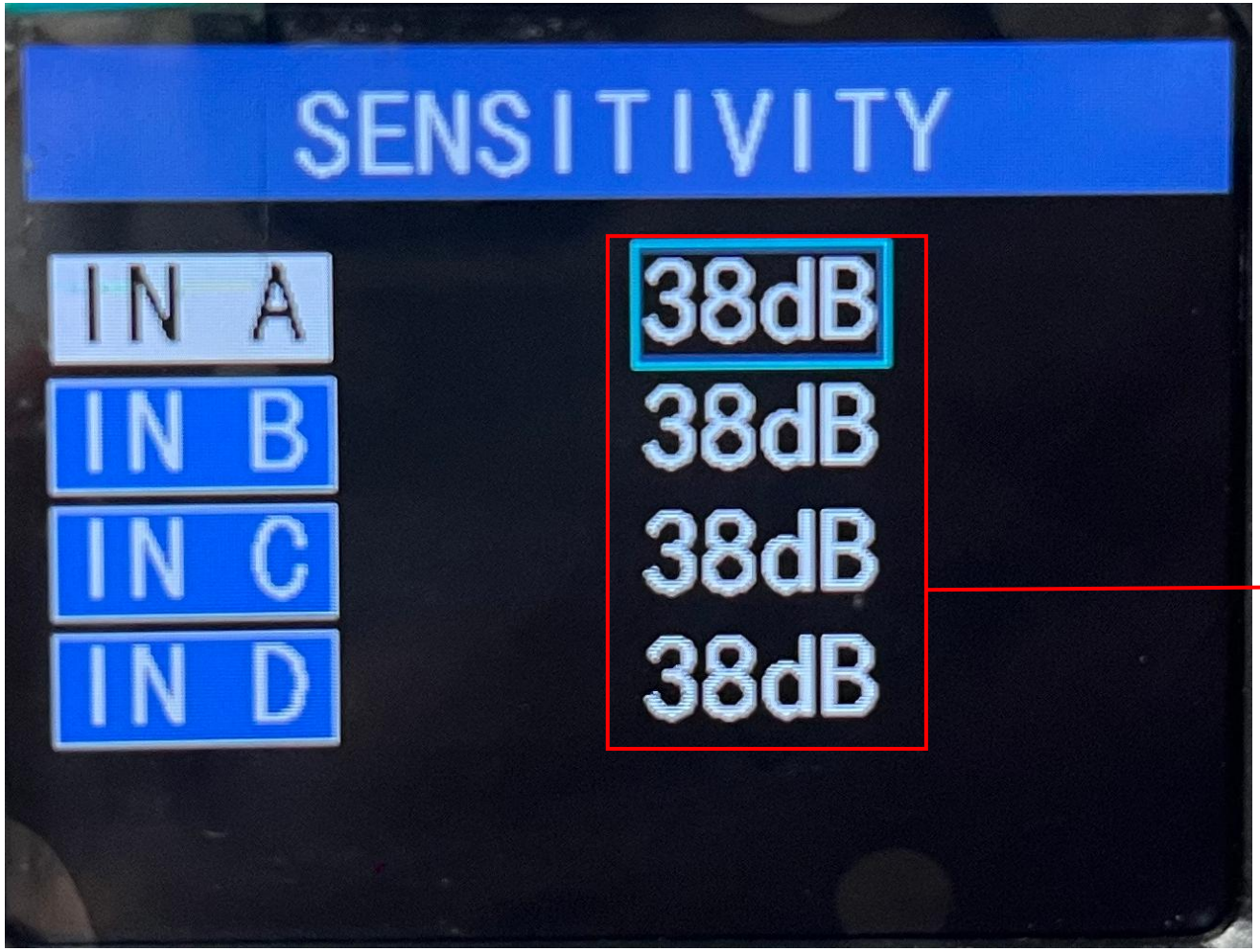


Input/Output Channels

Mute status

Gain value for channels

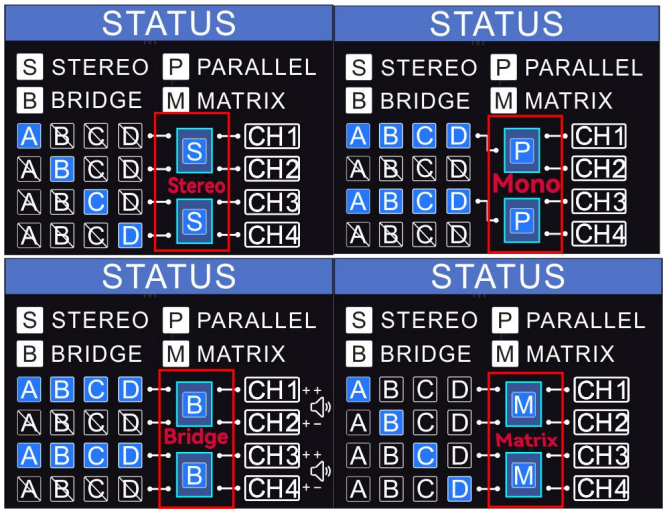
Sensitivity Setting



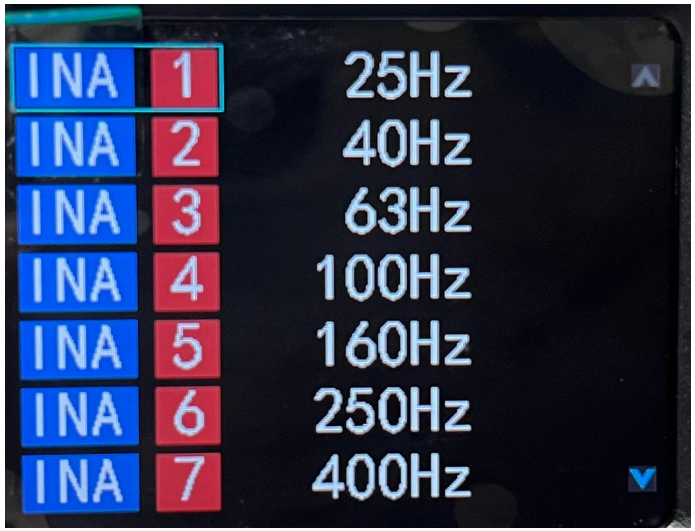
Archive setting



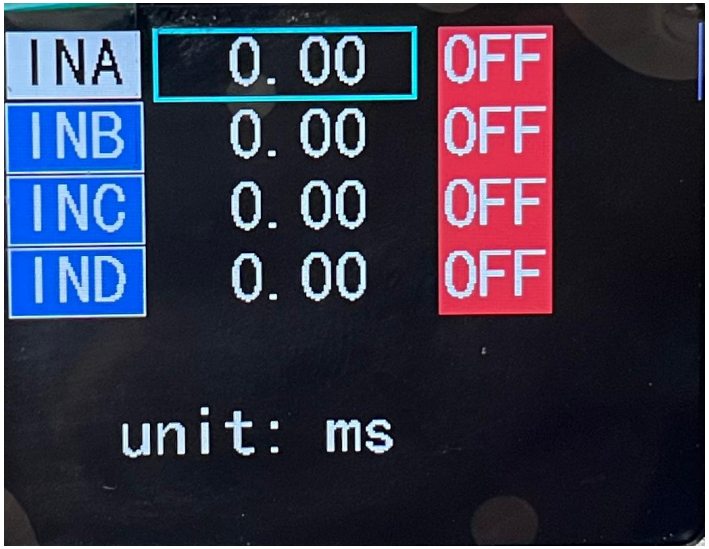
Working Mode setting



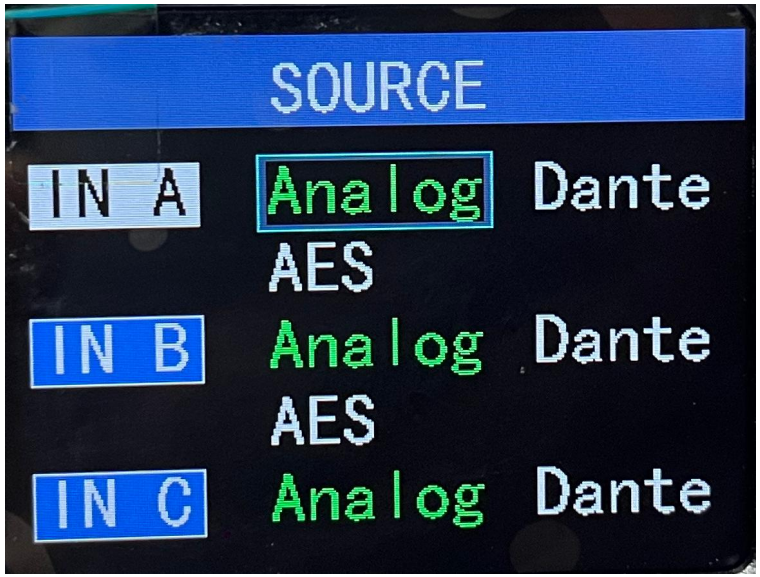
EQ setting



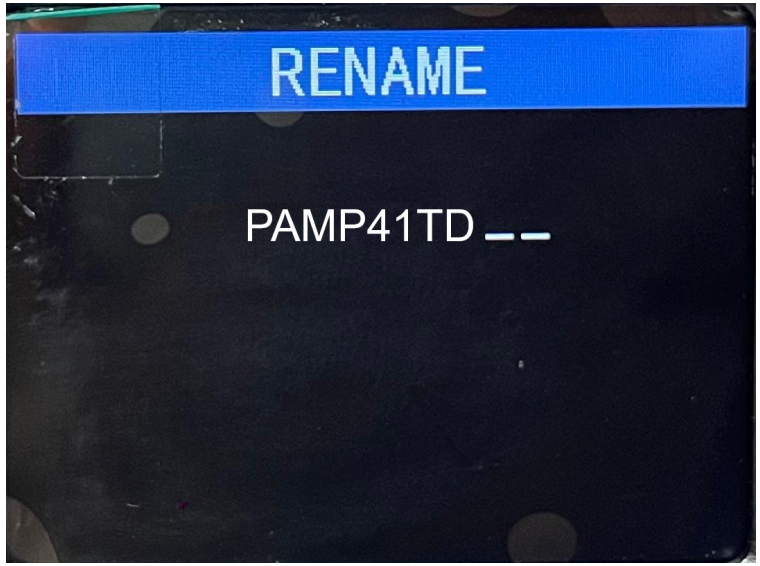
Delay setting



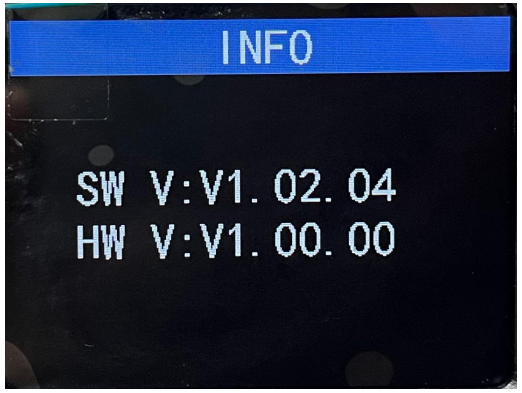
Input setting



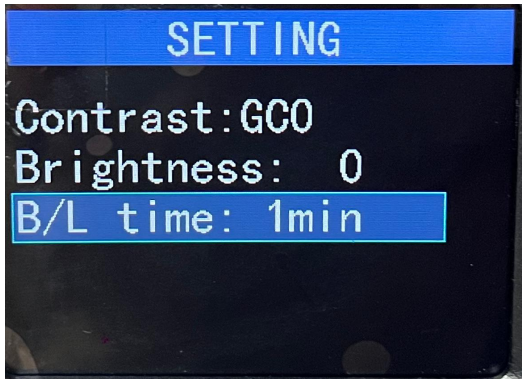
Device rename



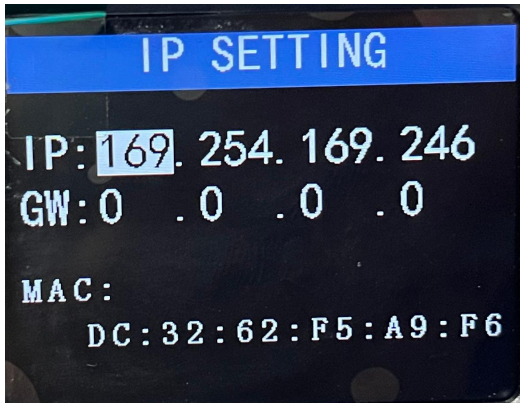
Device information



Display setting



IP setting



Chapter 4 Introduction to Upper level Software

Device management software is a software designed for users to quickly interact with various parameters of one or more machines. It can store the configuration parameters of the machines in disk files, providing a very convenient means for configuring preset scenarios and switching and restoring parameters for multiple machines or different usage locations. This product has high execution efficiency and clear interface structure. The UI of this product adopts a self-developed control library and can be customized and modified according to customer needs, enhancing the user experience.

Chapter 5 Software Installation

5.1 Running Environment

The software is suitable for any Windows x86/x64 with WIN7/WIN8/WIN10/WIN11 and comes with the Microsoft, or NET Framework 4.0 runtime library.

5.2 Software Installation

This software is a green version, and the green version does not require the installation of the main program. The folder contains the following files or folders, which are indispensable. The green version of the software does not include the Microsoft, NET Framework 4.0 runtime library. If needed, please download and install it from the official Microsoft website.

5.3 Software Running

Just Double click the executable file 

on the folder to enter the software theme interface as shown in Figure 1.1 below.

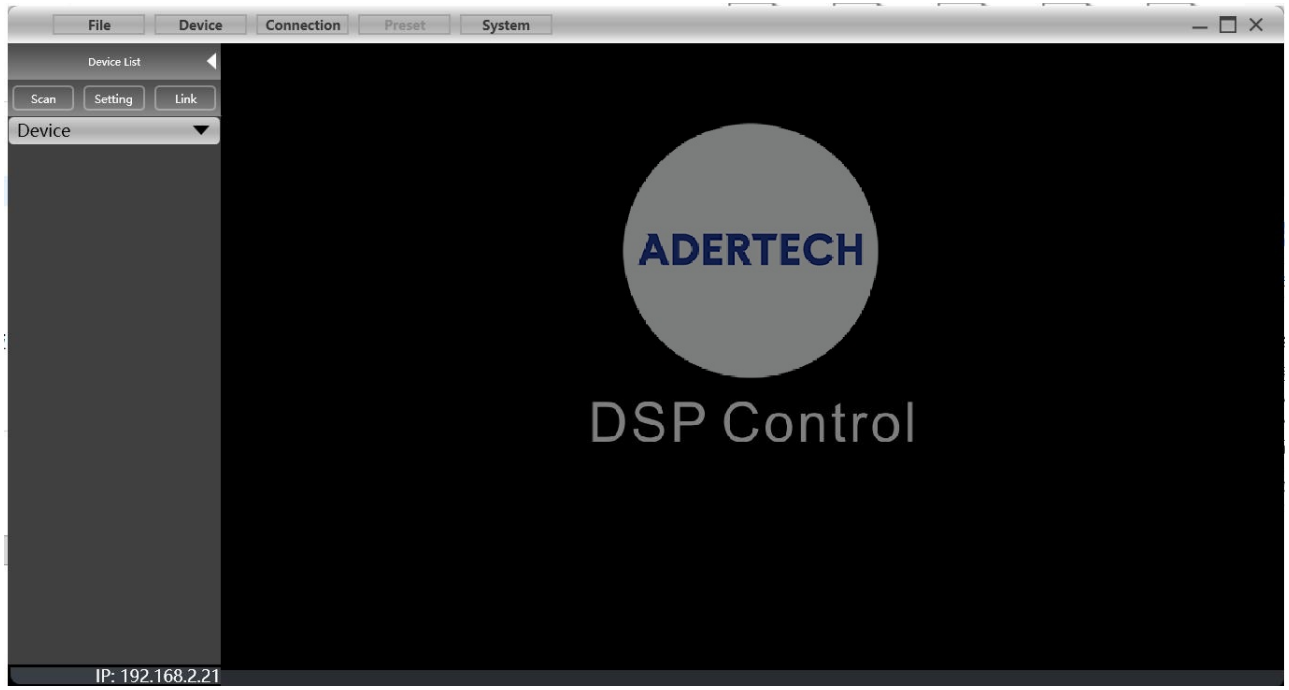
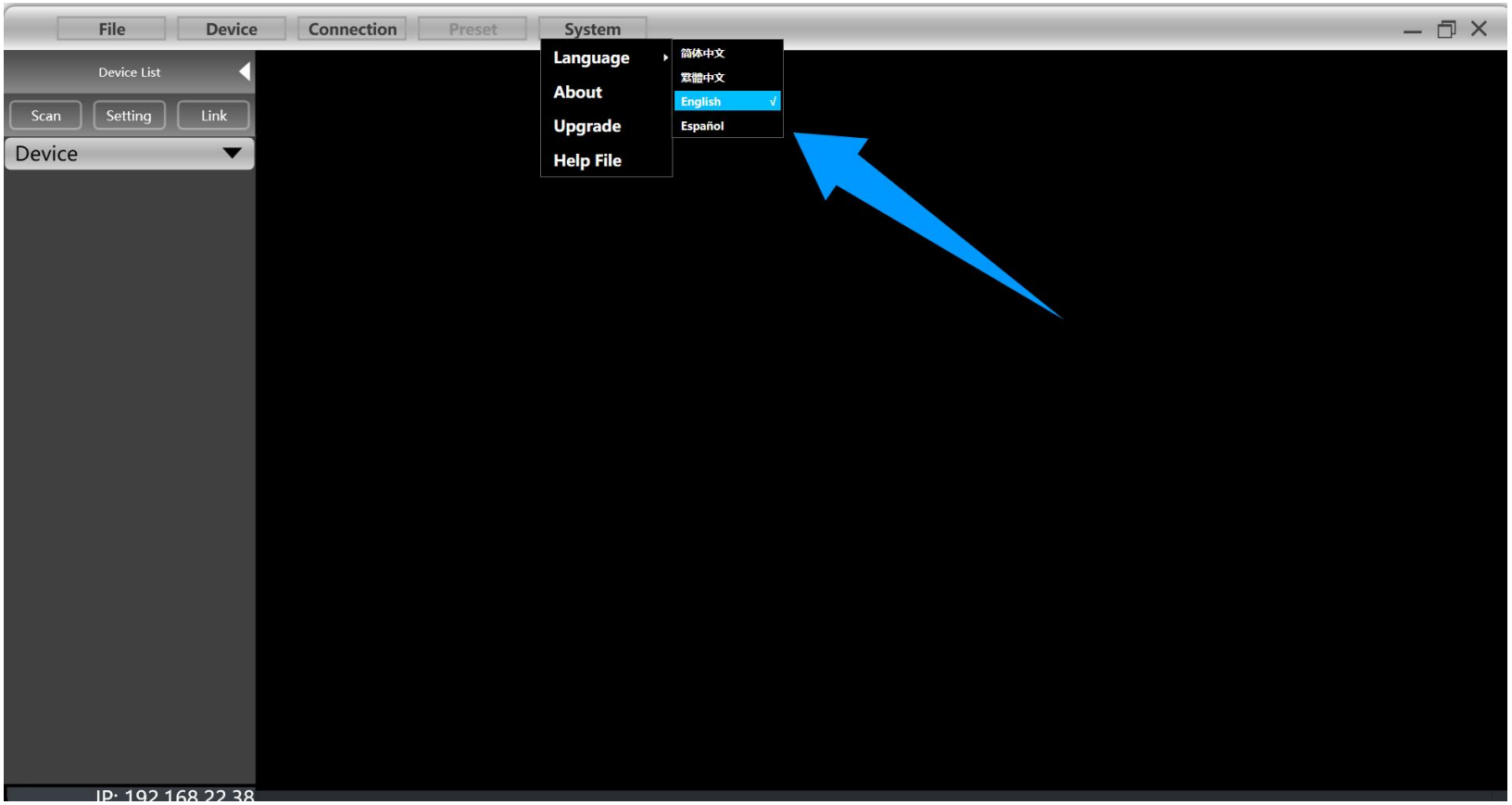


Figure 1.1

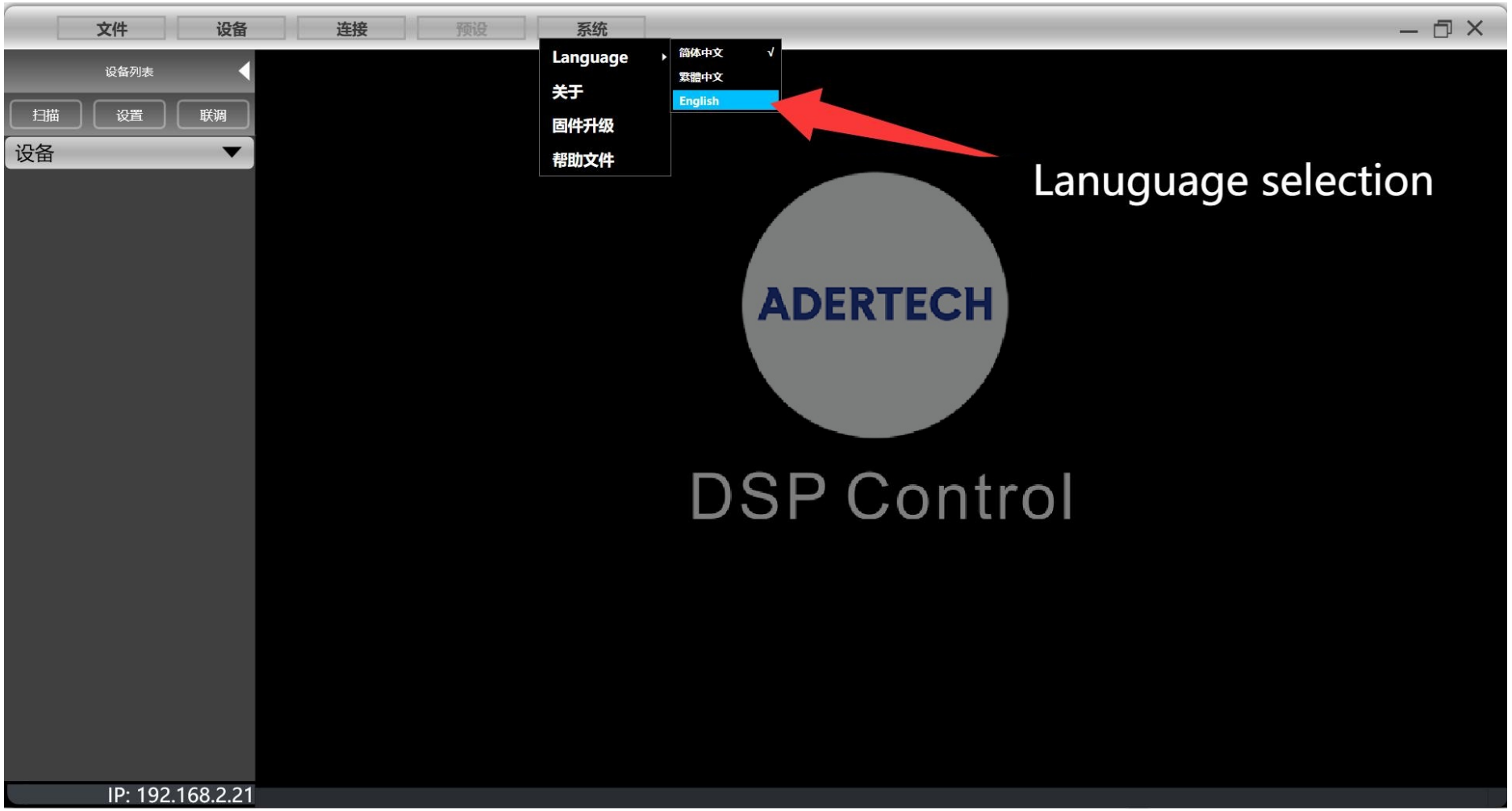
5.4 Language selection

There are 3 languages , including Chinese, English and Spanish, to select. Click “System” on the top line of the interface,and move the cursor over “Language” to select the operating language you prefer.

(1) The initial Interface in English



(2) The initial Interface in Chinese

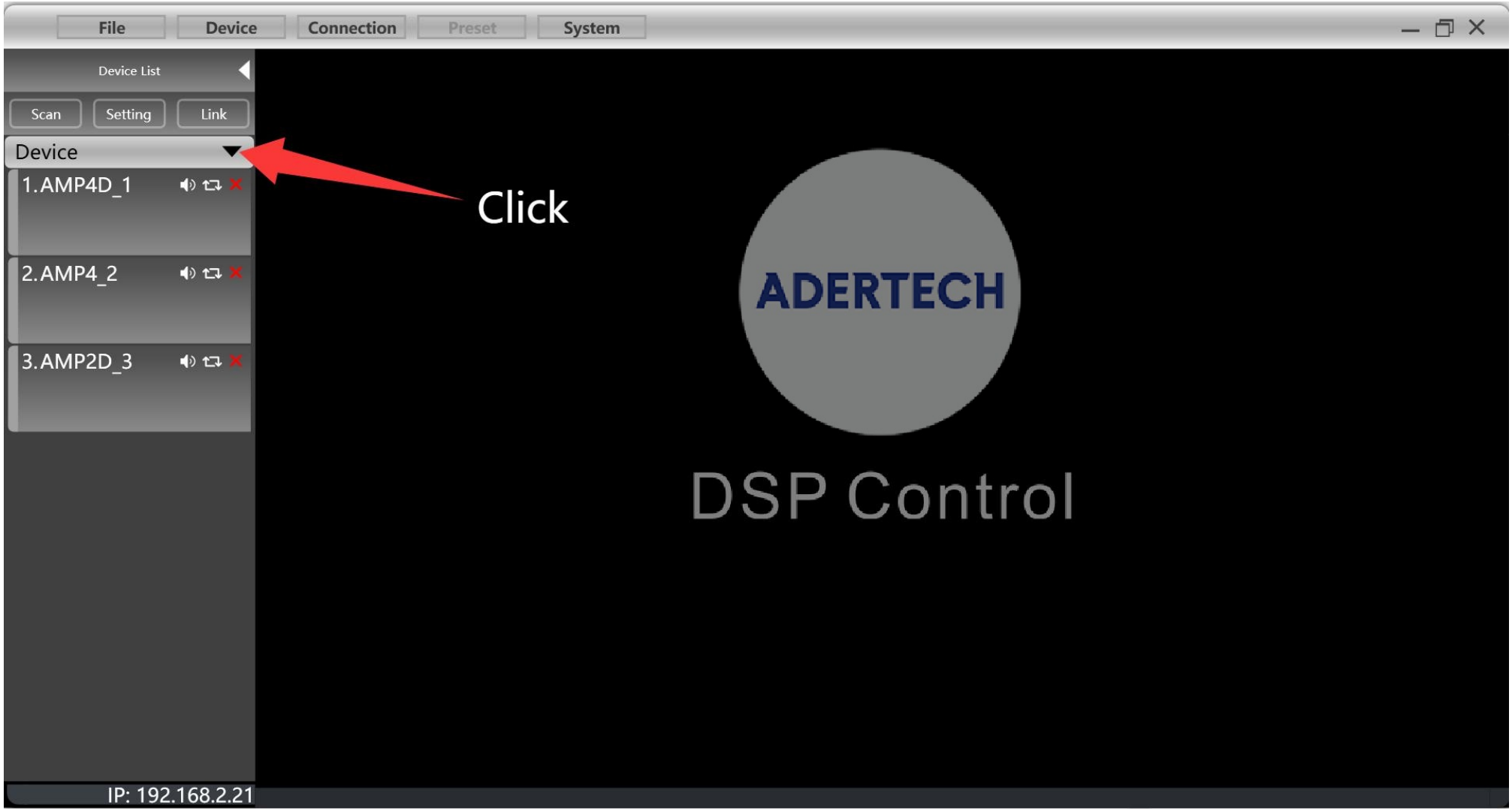


5.5 How 3 steps to find and run interface with virtual devices in demo version of DSP Software

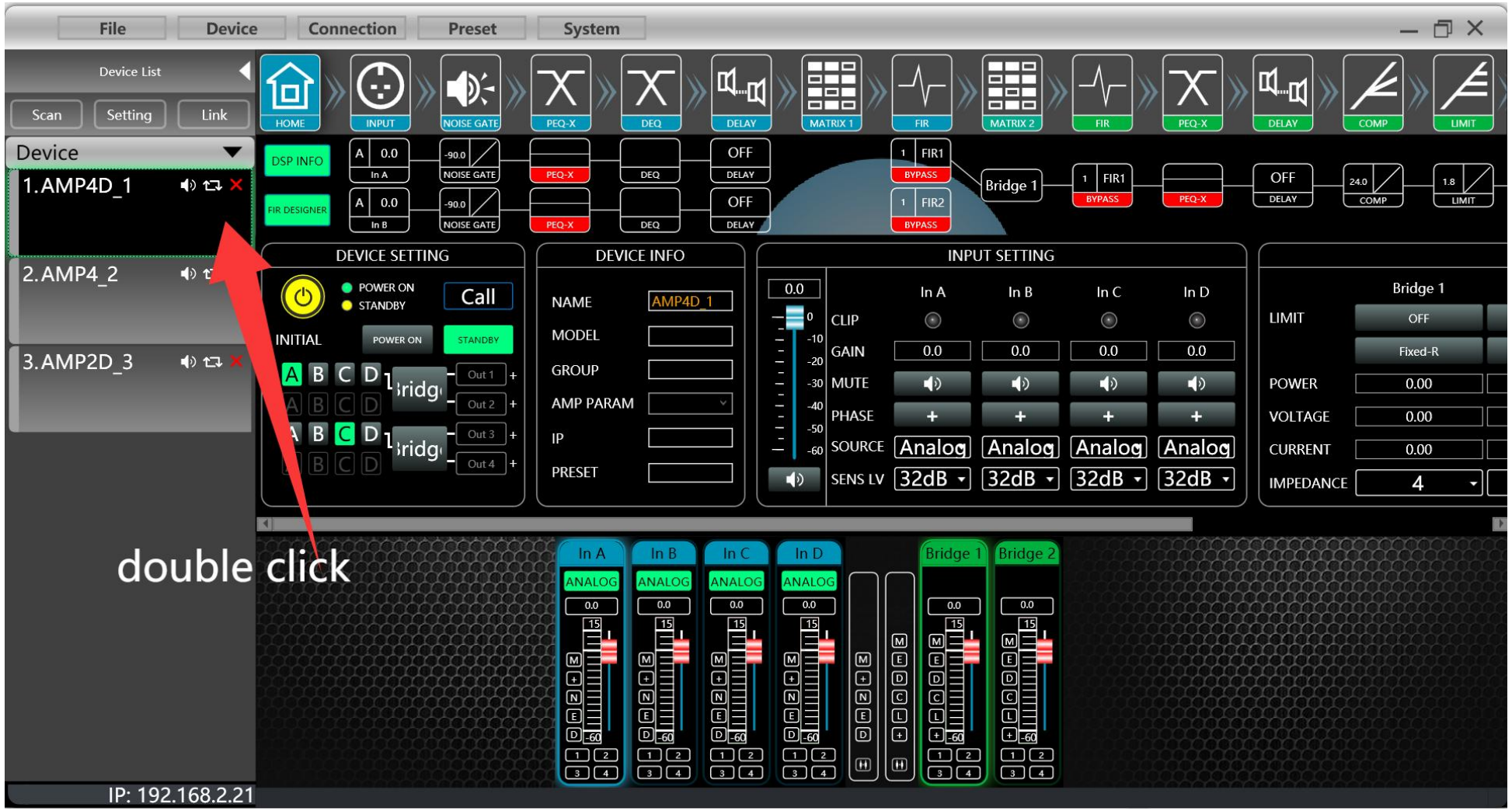
(1) Just click “File” and move the cursor over “Demo Device” to select the virtual devices you would like to check. At least 1 virtual device can be selected:



(2) Click the small triangle shape next to “Device”, you will find the virtual devices selected as below for example: .



(3) Double click any virtual device to show up the functional operating interface as below for example:



Chapter 6 Software Interface Introduction

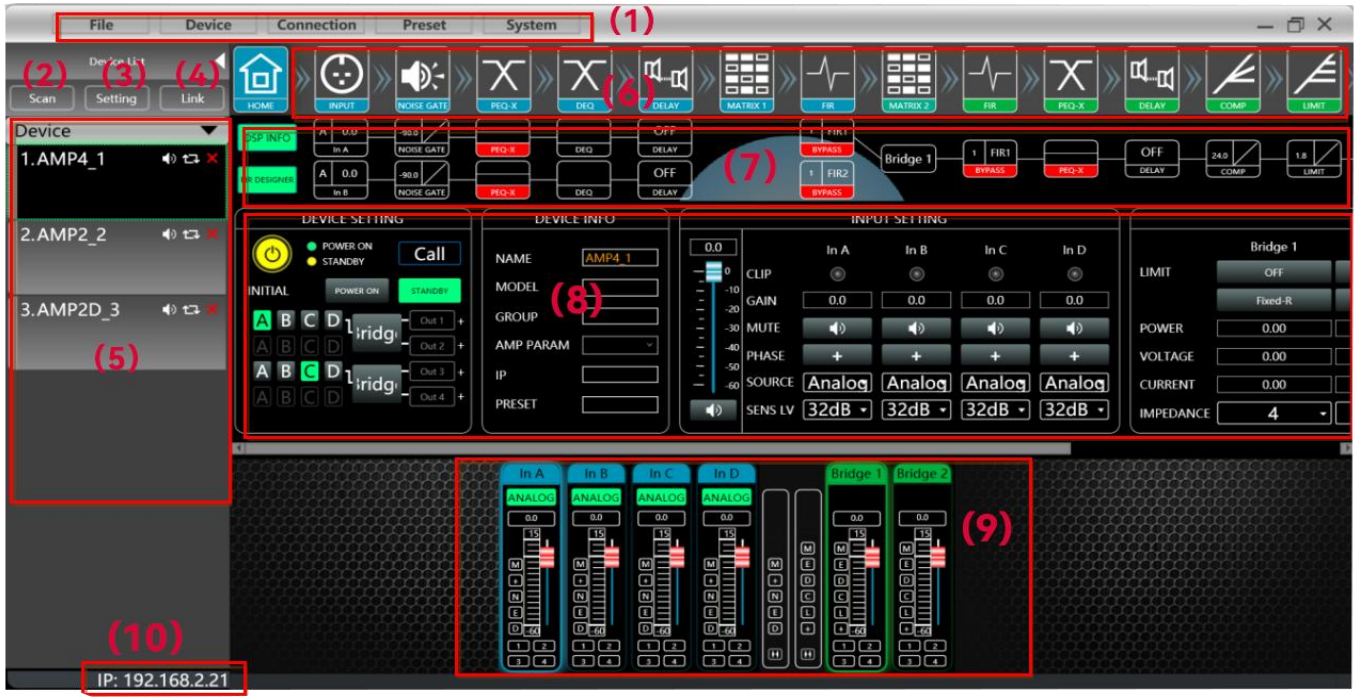


Figure 1.2

The explanation refer to the Figure 1.2

（1） Menu bar
（2） Scan button
（3） Setting bar
（4） Link bar
（5） Devices list
（6） **Functional modules**
（7） Homepage Monitoring Area
（8） Home page function interface
（9） Input/output channel list
（10） Local IP address

6.1 Initial Interface Introduction referring to the above (8) in Figure 1.2

Device setting

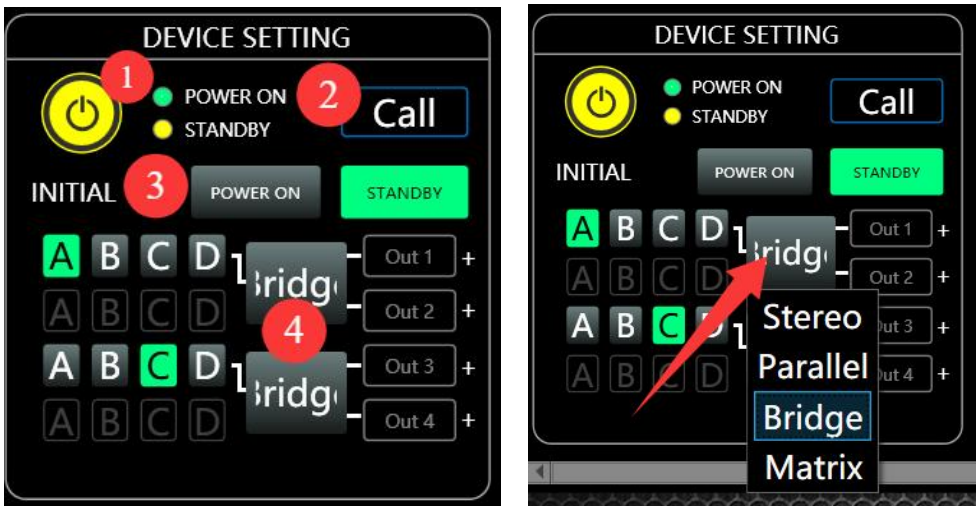


Figure 1.3

①  As shown in Figure 1.3, clicking this yellow button can switch the device between POWER ON and STANDBY, with green indicating POWER ON and yellow indicating STANDBY .

②  Clicking this Call button, can make the display screen and status light of the connected device flash, and quickly find the connected device from the "amplifier device stack".

③  You can choose the power on state, and after selecting it, the hard switch will directly switch to the selected state when turned on.

④ Click the button inside the box to quickly switch the routing status. There are four options available, namely: stereo, mono, bridge, and matrix.

Device Information

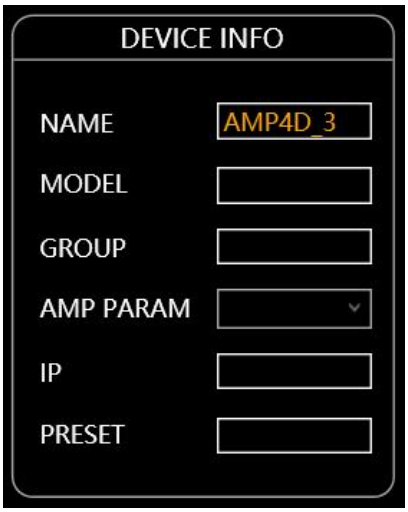
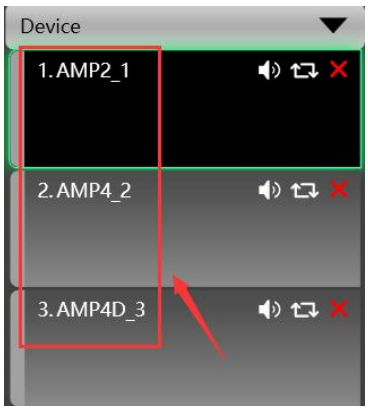


Figure 1.4

1. As shown in Figure 1.4, the device name, group, and IP can be modified. The modification method involves navigating to the "Device - Device Management" section in the upper left corner of the initial interface and making changes based on actual requirements.

2. The equipment model and LINK ID cannot be modified. The LINK ID corresponds to the ID when the host computer connects to multiple devices.



3. The archive name is the name of the currently used archive.

Input Setting

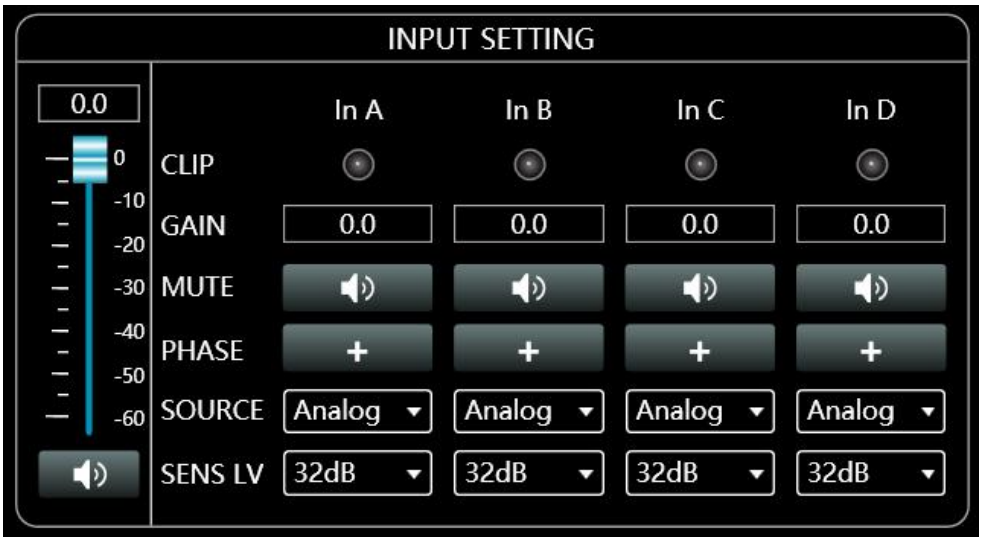


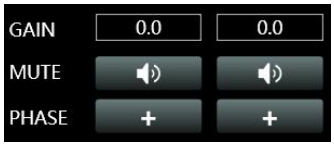
Figure 1.5

① Just as shown in above Figure 1.5，the bar  is for the master volume，you can drag with the mouse，You can also input accurate numerical values directly into the input box.



It is button for MUTE.

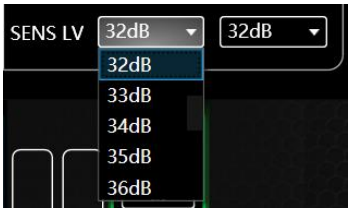
②When the input is overloaded, the indicator light will turn on like it is : 

③You can quickly set gain, mute, and phase here 

.

④Multiple input sources are available for selection here 

.

⑤Supports optional sensitivity switching between 26~44dB 

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Amplifier Status

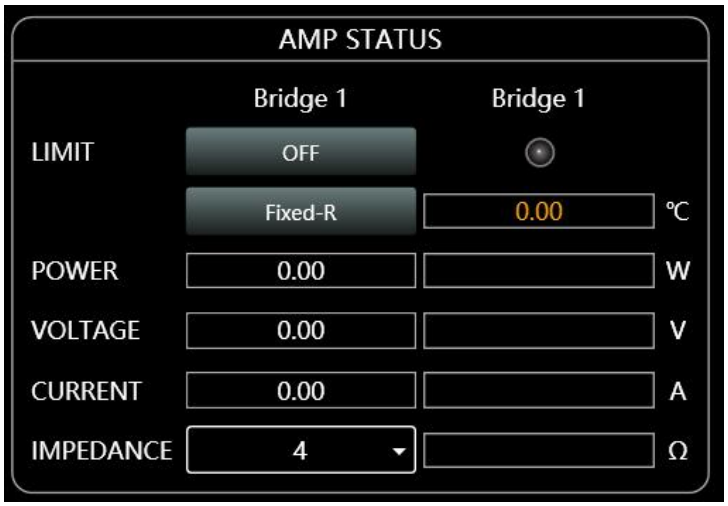


Figure 1.6

As the above Figure 1.6， the impedance and limiter can be selected according to actual need. When the limiter is in the on control state, the overload light on amplifier will turn on as the following:



6.2 Menu Bar Introduction referring to the above (1) in Figure 1.2



6.2.1 File

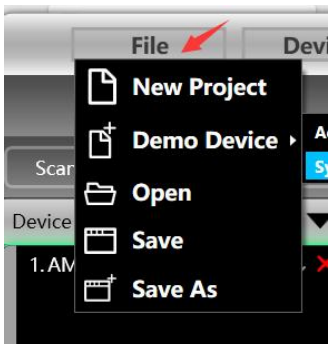


Figure 2.1

As shown in above Figure 2.1 "File" menu:

1. 1. New, the software can create a model for each device in this menu when the device is not

connected.

2. 2. Add new devices and simulation devices, which will not affect existing devices.
3. 3. Open an existing device management project from the computer disk.
4. 4. Save, save the current device management project to the computer disk.
5. Save as, save the current device management project as a file.

6.2.2 Device

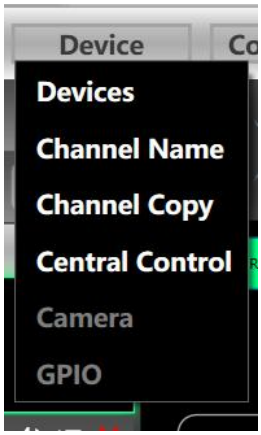


Figure 2.2 Device Menu

As shown in Figure 2.2 "Device" menu:

1. Device management, viewing or modifying software information, device names, and device IP addresses of the upper and lower devices of the device.

2. Channel management, set the name of each input/output channel.

3. Channel copying, copying parameters of the same type of channel.

6.2.3 Connection



Figure 2.3 “Connection” menu

As shown in Figure 2.3 "Connection" menu:

1. Connect the port, set the connection method, port number, and baud rate.

2. Connect the device, connect and download device parameters.

3. Disconnect the device, disconnect the connected devices.

4. Connect all devices and download the device parameters of all devices in the device list.

5. Disconnect all devices and all connected devices in the device list.

6.2.4 Archive



Device archiving operation

1. Save, select the saved file, and save all current parameters of the machine to the machine archive
2. Call, call the existing archives in the machine archive
3. Delete, delete existing archives, default files cannot be deleted or overwritten
4. Clear and delete all archives in the machine
5. Set as startup mode, select a certain archive, set as startup mode, and automatically call the archive parameter every time the machine is powered on
6. Import archive, import individual archive files from the computer
7. Export archive, export all parameters of the current state to the computer, and generate a single archive file
8. Import archive packages, import multiple archive package files from the computer
9. Export archive package, package multiple archives in the machine archive into one archive package and export it to the computer to generate archive package files

6.2.5 System



Figure 2.4

As shown in Figure 2.4"System" menu:

1.Language， Multi language switching.

Regarding the current version information of the upper computer and equipment.

3. Firmware upgrade, upgrading the firmware of the device.

6.3 Scan Button

As shown in Figure 2.5 below, clicking the "Scan" button will immediately scan all devices under the currently set connection mode and display the scanning progress.

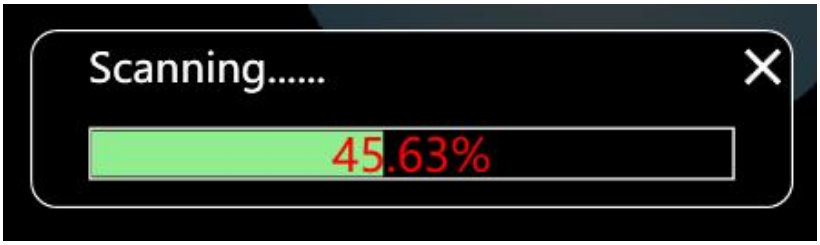


Figure 2.5 Scanning

6.4 Setting Button

Set the connection mode of the scanning device by clicking the "Setting" button, which will open the port connection interface as shown in Figure 2.6. Select the corresponding mode, configure the relevant parameters, and confirm. If there are changes to the device ports, click the "Refresh" button in the lower left corner to update the port list instantly.

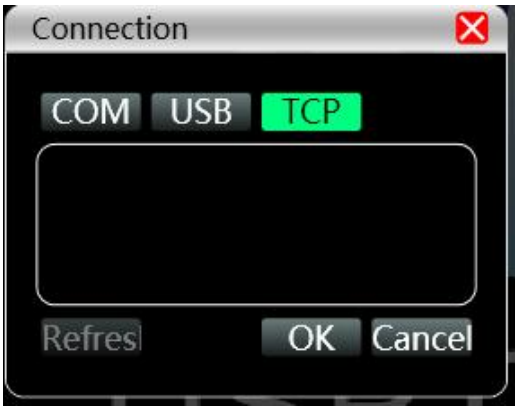


Figure 2.6

6.5 Link Button

The function for simultaneously setting parameters of multiple devices is activated by clicking the "Link" button, which will then display the network joint debugging interface as shown in Figure 2.7. Select the devices requiring simultaneous configuration from the left box and move them to the combined grouping in the middle box. Next, choose the grouping parameter settings from the far-right box. Finally, press the "Confirm" button to apply the grouping function. The same procedure can also be used to modify the network grouping settings.

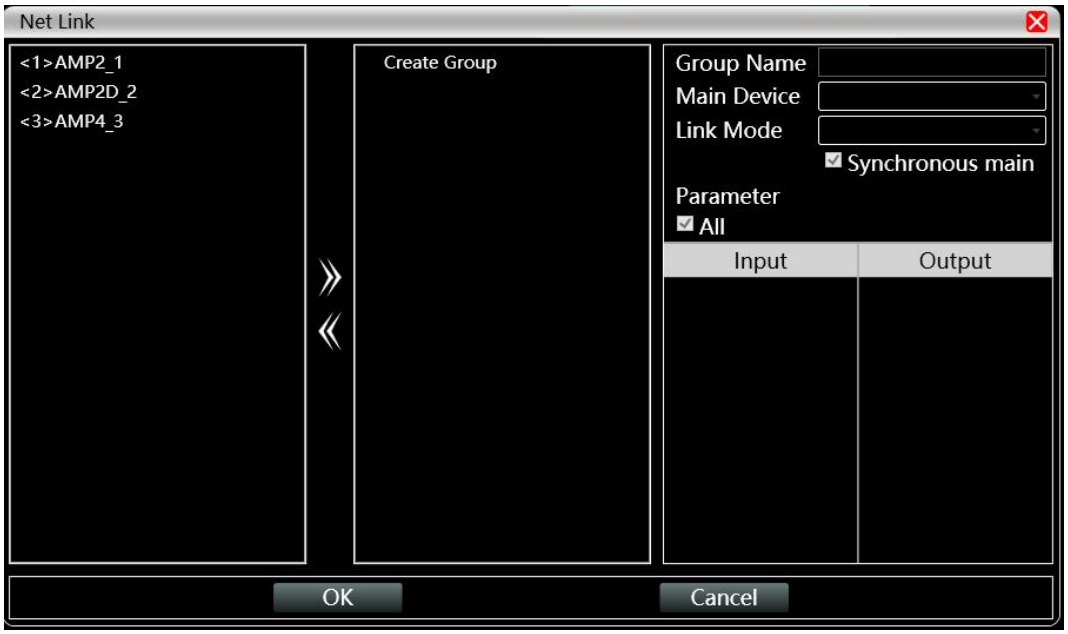


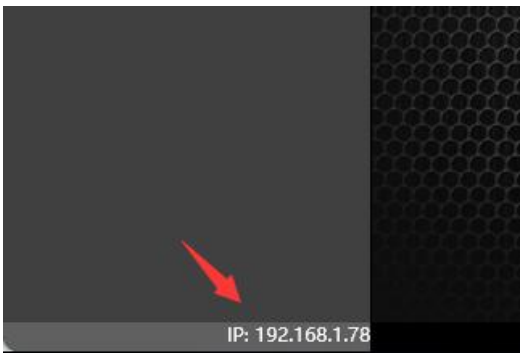
Figure 2.7

6.6 Device List



When the software scans or manually adds virtual/simulated devices, the corresponding devices will be automatically added to the device list, making it convenient for users to interact with the required devices and operate multiple devices simultaneously.

6.7 Local IP Address



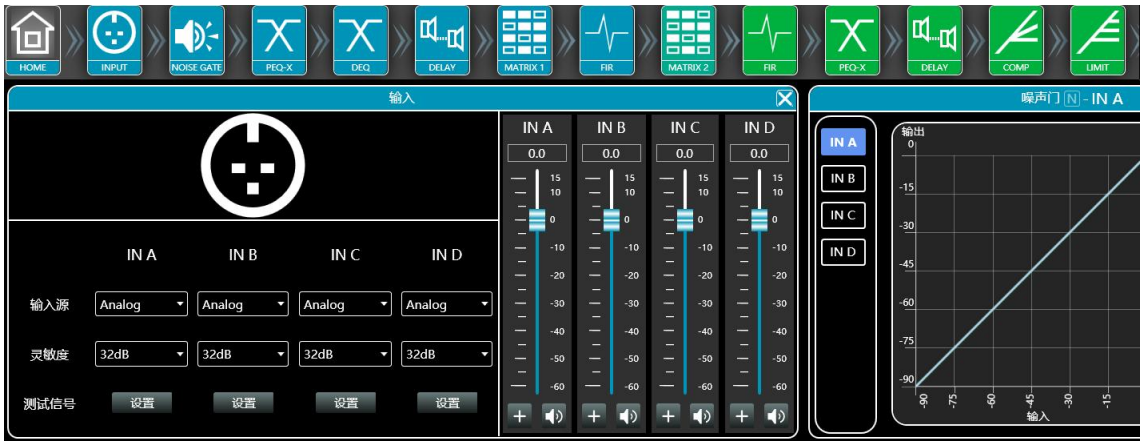
When the software is opened, it will automatically obtain the IP address of the network connection corresponding to the effective network adapter of the current computer system, which is displayed in the lower left corner of the software for easy management of device IP addresses.

6.8 Functional Module Control Key For Device



For the convenience of interacting with different parameters of the device, the software is divided into multiple modules in functional order. If users want to operate the corresponding modules, they can use this module control key to open, close, and locate the module interface. Double click to open/close, and click to locate.

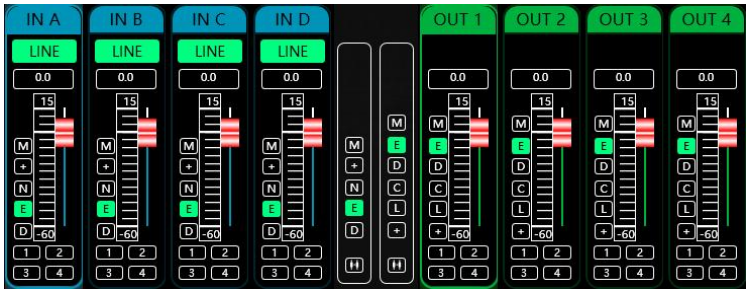
6.9 Function Module Interface For Device



Each functional module can be opened and closed through control keys, displaying function pages and detailed parameters, allowing for detailed settings and free operation of individual or multiple functions. You can drag left and right to switch between different functional pages.

6.10 Input/output Channel List

It can display information such as channel level, gain, input mode, channel name, etc., control the corresponding channel gain and DSP function master switch, and enable the input and output channel grouping and joint debugging function to achieve stronger operational convenience.



Chapter 7 Introduction to Function Interface

7.1 Input Module Main Interface



Double click on this INPUT button to pop up the channel input module shown in Figure 3.1 below. Operations can be performed on the polarity, mute, and input source sensitivity of the corresponding input channel. In the sensitivity setting, the range of 26-44dB can be selected.

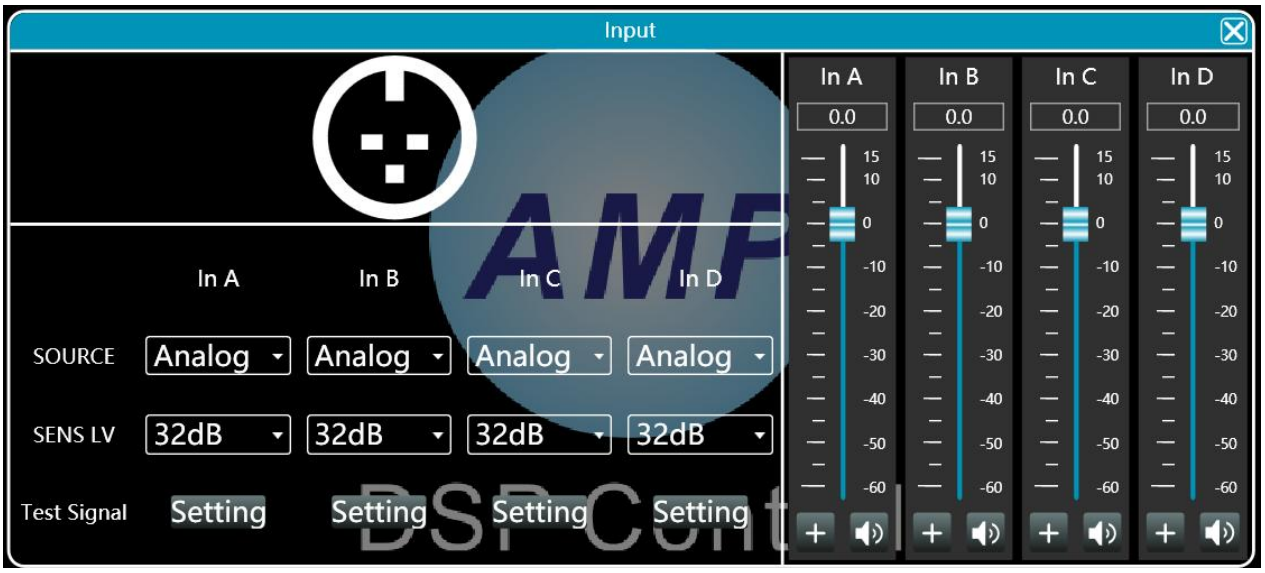
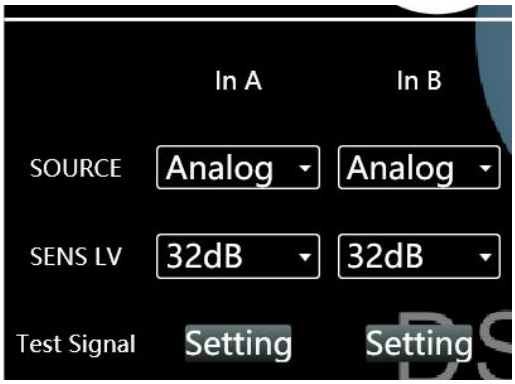


Figure 3.1 Input Module Interface

7.2 Test signal function



Select sine wave, pink noise, and white noise from the input source, and then set the corresponding parameters according to your requirements in the test signal settings to perform channel testing. In the test signal generation settings, all three types of test signals can be set to generate corresponding gain values for the test signals. The switch button on the right side of each test signal can control whether the test signal is effective, with green indicating on and red indicating off.

In addition, the frequency of the sine wave can be set.

7.3 Input Noise Gate



Double click this NOISE GATE button to pop up the input noise gate setting module in Figure 3.2 below.Click on the noise gate switch in the upper right corner to turn on or off the noise gate function of the channel input signal.

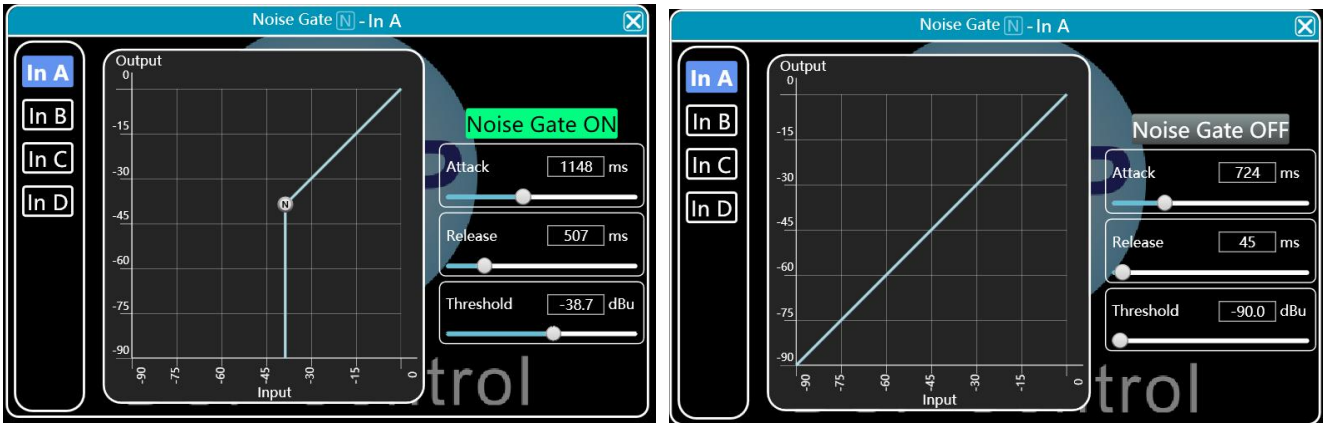
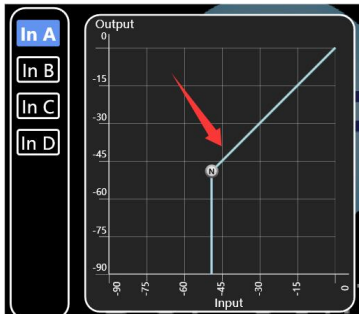


Figure 3.2



The start control time, release time, and start control level are parameters corresponding to the noise gate function, which can be adjusted by dragging the slider or entering the corresponding values in the value box.



When the noise gate function is turned on, the points in the above chart can be adjusted by dragging diagonally.

7.4 Input Equalizer (PEQ)



Double click the PEQ-X button to pop up the input equalizer setting module as Figure3.3 below. Clcik the button in the upper right corner of the module can enlarge or restore the interface of this module, and the interface display will be clearer after enlargement.

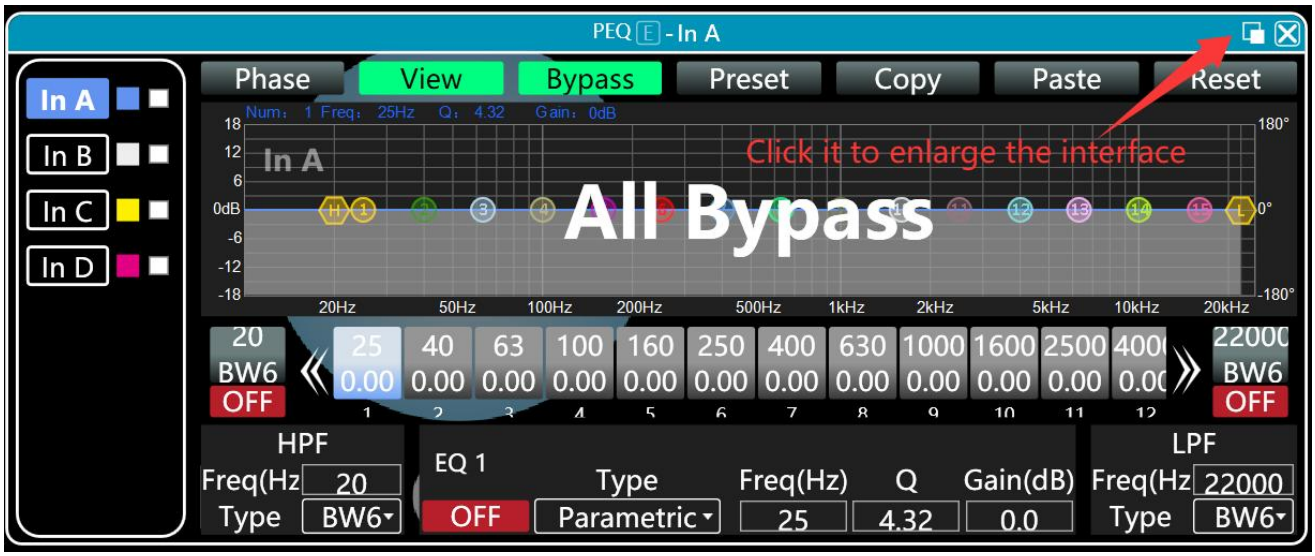


Figure 3.3

7.4.1 Function Buttons Of Input Equalizer

As shown in Figure 3.3 above, the top buttons have the following functions:
Phase Curve : Display the phase curve of the current channel.
Display Control Points : Show or hide all balanced control points.
Full bypass : Simultaneously open or close all EQ equalizers of the current channel
EQ Archive : Save the current equalizer settings parameters to the computer and retrieve them to overwrite the existing equalizer parameters.
Copy : Copy the current equalizer parameter values and paste them into other input channels.
Paste : Used in combination with the copy button, the equalizer parameter values copied by the copy function can be pasted into the current channel.
Reset : Reset the equalizer parameters to their default values.

7.4.2 Multi channel EQ curve display

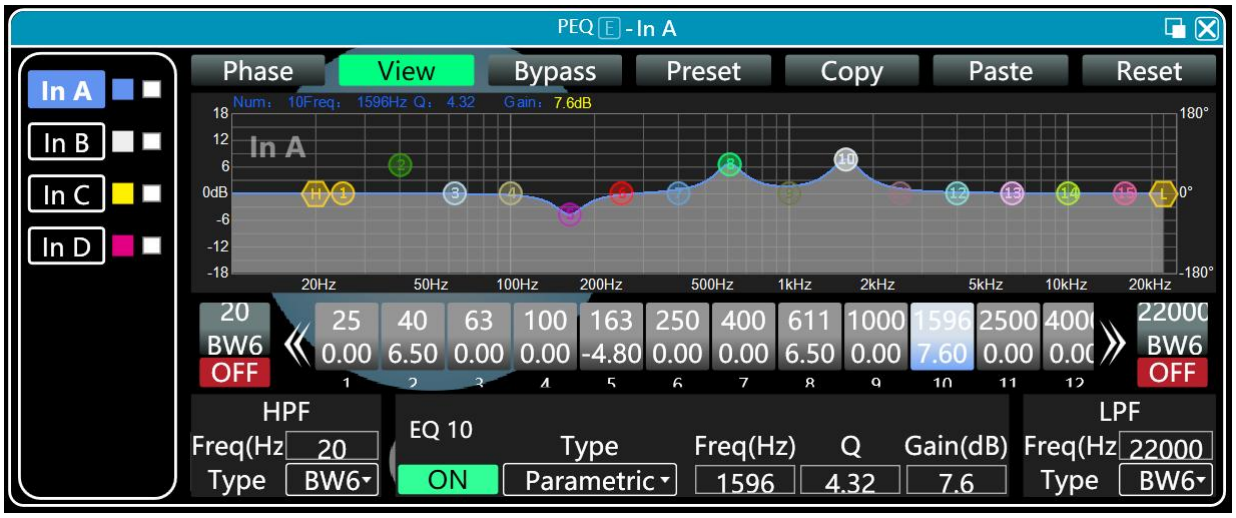
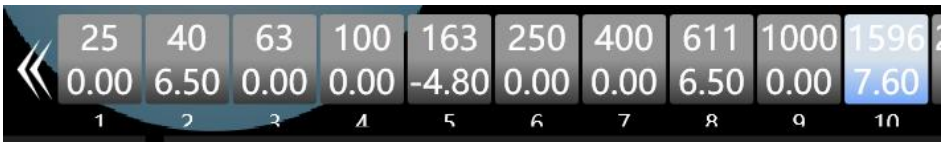


Figure 3.4

As shown in Figure 3.4, on the left is the EQ curve display switch for each channel. When turned on, the corresponding channel's curve will be drawn in the EQ curve chart.

7.4.3 EQ Control



As shown in Figure 3.4 above，below the curve chart, all EQ controls and their detailed values are displayed, which can be used to locate the position of the controls. Combined with the EQ parameter adjustment items below, the parameter values of each EQ can be accurately adjusted.

7.4.4 EQ Parameter Adjustment Items



As shown in Figure 3.4 above，below the EQ control is the EQ parameter adjustment item, which can accurately control EQ parameters such as switch, type, frequency, Q value, gain, etc.

7.4.5 EQ Preset/Archive Button

As shown in Figure 3.4 above , clicking the EQ Preset button will pop up below Figure 3.5 EQ Save . Select the item corresponding to the gear list on the left, and then click the function button on the right to save, recall, delete, and rename the equalizer setting parameters.

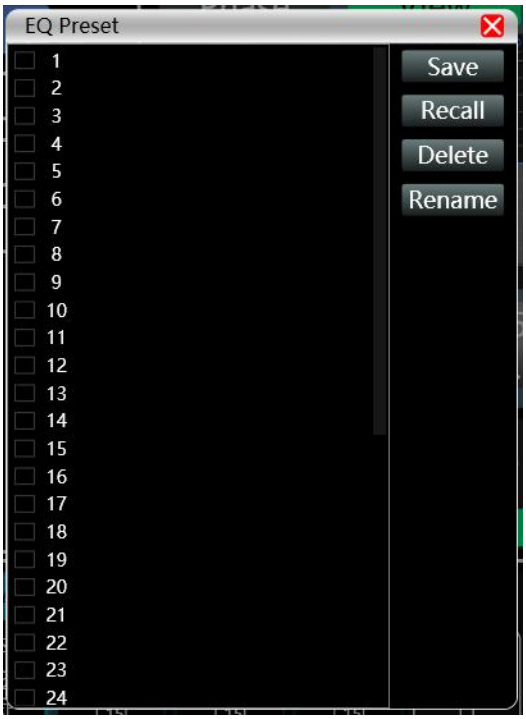


Figure 3.5

7.5 Dynamic EQ



Double click the DEQ button to pop up the input equalizer setting module as Figure 3.6 below. Clcik the button in the upper right corner of the module can enlarge or restore the interface of this module, and the interface display will be clearer after enlargement.

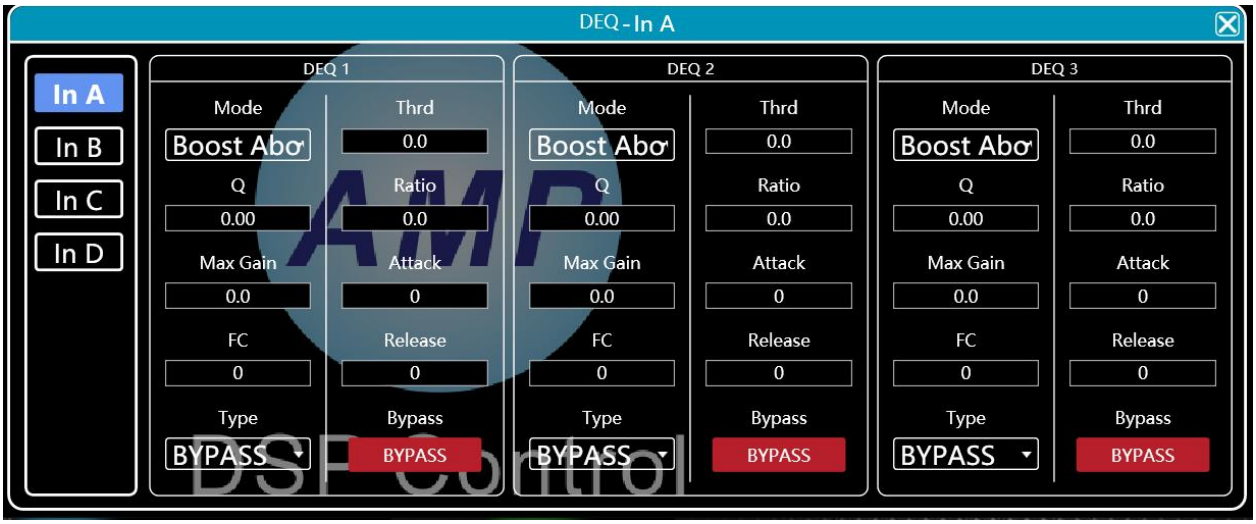
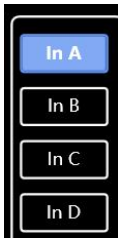


Figure 3.6

1. 

Click the input button to switch input channels.

2. Modes supported : as shown in Figure below, it can support four modes: Boost Above is to increase above threshold, Boost Below is to increase below threshold, Cut Above is to decrease above threshold, and Cut Below is to decrease below threshold.



Modes Supported

3. 

Click BBYPASS to disable the DEQ function, cancel the bypass, and enable the DEQ function.

4. Control level (threshold): -90~24dbu. When the frequency signal reaches the control level value, this function takes effect;

Q value: 0.27-15, range of Q values for frequency points of variation;

Ratio: 1~100, control the adjustment ratio of dynamic changes, the larger the adjustment, the more obvious the adjustment

Maximum effect: 0-12, the limit value for increasing or decreasing according to the selected mode;

Start control time: 1-2895, with a delay before the effect of enhancement or attenuation

The above are all parameters of DEQ, which can be set by modifying the numerical values in the number box.

7.6 Input Delay



Double click this button, the input delay function interface in Figure 3.6 pops up.

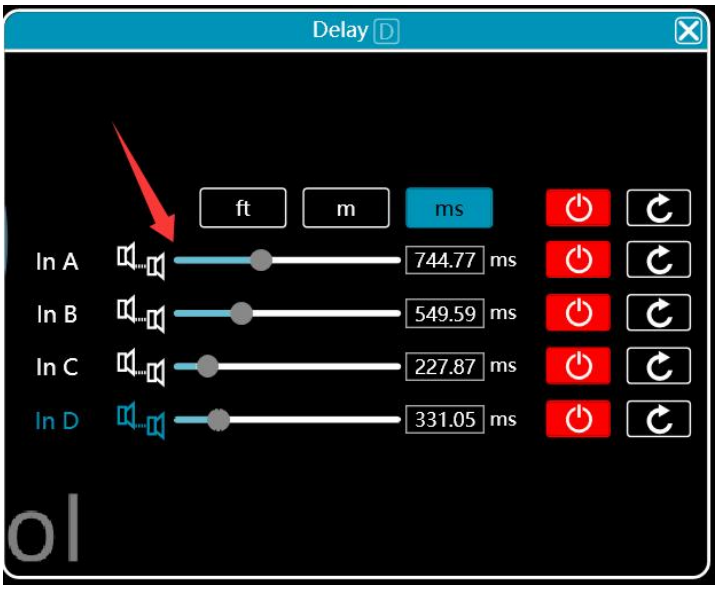


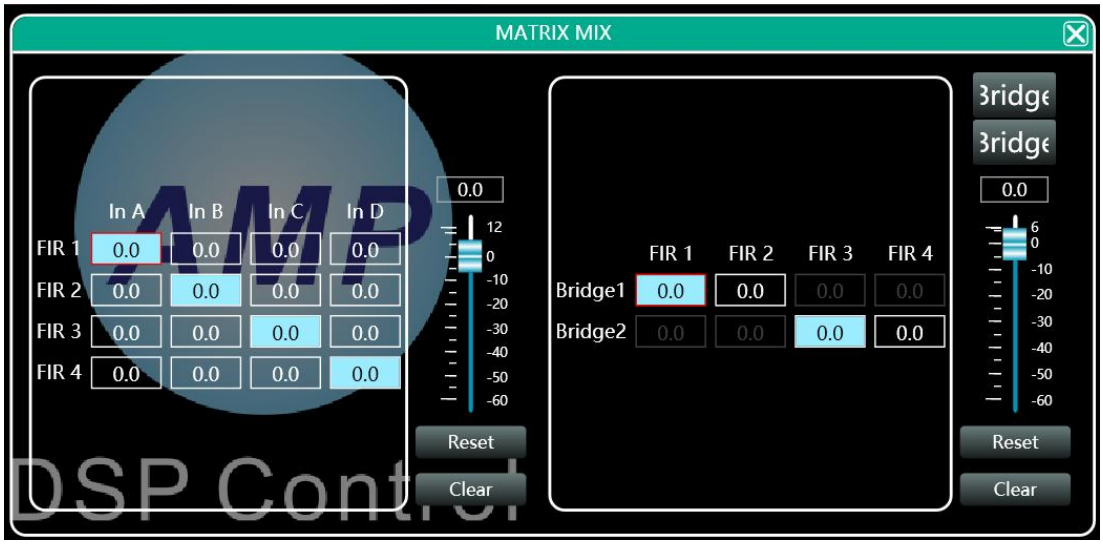
Figure 3.6

As shown in the above figure, the delay control content of all input channels is listed. Dragging the left slider can intuitively adjust the delay value of the corresponding channel, or entering the corresponding value in the value box. The switch for the delay function is on the right, with red indicating off and green indicating on. The reset button on the far right can directly reset the default delay value of the channel.

7.7 Matrix Mixing



Double click this button to pop up Matrix mixing setting module:



In the above figure, there are output channels corresponding to the left side and input channels corresponding to the upper side. The numerical box with values is the mixing key for the input and output channels. When the mixing key is on (double-click the numerical box to switch states), the signals of this input channel and output channel achieve mixing function.

The right part of the above figure contains the gain, reset button, and clear button for matrix mixing. Click on the value box on the left, then drag the sliding block for matrix mixing gain or enter a value in the value box to adjust the gain value in this matrix block; Clicking the reset button will reset the matrix mixing function to its initial one-to-one state; Clicking the clear button will clear all matrix mixing functions, and there will be no corresponding relationship between the input and output of the device.

7.8 INPUT/OUTPUT FIR



Double click this button to pop up the FIR function page shown below, and the button in the upper right corner of the module can enlarge this interface for easier debugging.



Figure 3.7

Introduction to Corresponding Functions In Marked Areas ①②③③⑤ Of Above Figure 3.7

① Setting Area	IMPORT	Import FIR preset document to the current channel
	EXPORT	Export the current channel FIR document
	BYPASS	Full bypass function, when turned on, the EQ of the channel is a straight line, and the default red state is turned on. When using FIR, it needs to be manually turned off
	STORE	Store FIR parameters in the device
	Taps	The current number of Taps in the channel
	Ms	The delay of the current channel
	Name	Current channel FIR preset document name
② Channel Area	1,2,3,4	After clicking, the corresponding channel's FIR curve will be displayed. Multiple curves can be displayed simultaneously
③ Interface Area	Design	FIR Designer
	Filter	Design interface switch button
	Magnitude	Display amplitude curve on the interface
	Phase	Interface displays phase curve
	72dB	Display content with amplitude accuracy within 72dB
	144dB	Display content with amplitude accuracy within 144dB
④ Display Area	-108~+36	Amplitude accuracy, the numerical value used as a reference when currently displayed as an amplitude curve
	-180°~+180°	Phase accuracy, the numerical value used as a reference when currently displayed as a phase curve
	20Hz~20KHz	frequency band

⑤ Design Area		Qualcomm
		frequency band
		low-pass
		straight and flat
	Freq (Hz)	Starting frequency setting, high pass on the left and low-pass on the right
	Num. Taps	Taps number, 2 orders in total. Optional 256-512
	ALT. (dB)	Depth, window type selection is only available when using Kaiser windows
	Windows Type	window type
	STORE	Save, set parameters and click to save to device channel

7.9 Designer Function Introduction

1. Designer Interface



Click FIR in function bar or Designer on main interface to pop up the Designer interface as below Figure 3.8.

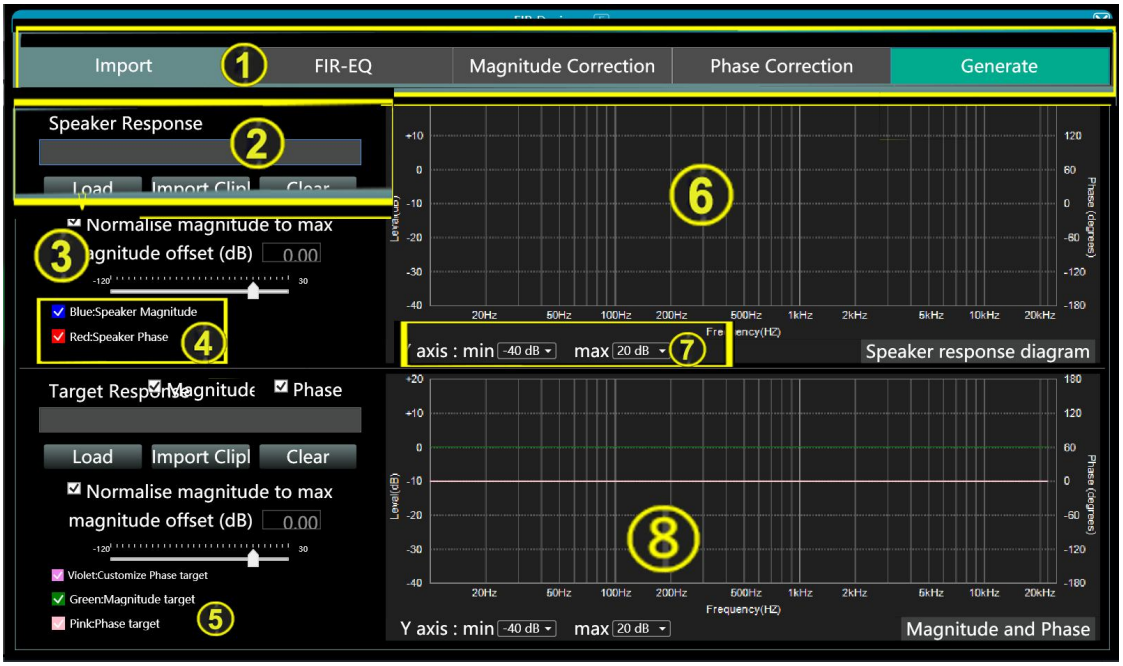


Figure 3.8

The following is an introduction of Designer Interface by ①②③③⑤⑥⑦⑧ based above Figure 3.8:

① Designer Function Bar

② You can load the curve file of the speaker, or cut and import the curve from the measurement software. Clearing refers to clearing the current interface and the loaded FIR curve.

③ Uncheck the average amplitude value to adjust the gain average of the FIR curve to 0dB or other amplitudes.

④ Blue indicates the amplitude of the speaker, and red indicates the phase curve of the speaker.

⑤ Green indicates amplitude adjustment amplitude, and pink indicates phase adjustment amplitude.

⑥ Display area for amplitude and phase lines of the speaker after loading or cutting.

⑦: 

Y-axis depth minimum display -80dB. 

The highest display is 40dB.

The following Figure3.9 is for an example:

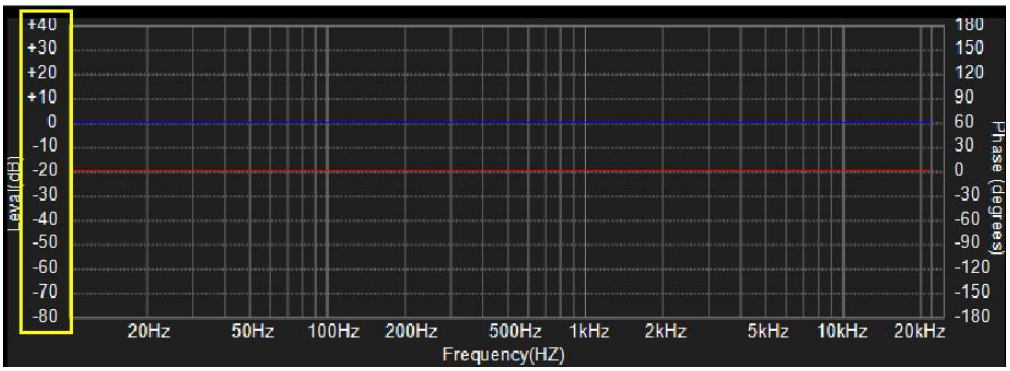


Figure 3.9

⑧: Modify the display area of the FIR target curve here.

2. FIR design interface: click on FIR-EQ to switch to it (as shown in Figure 4.0 below)

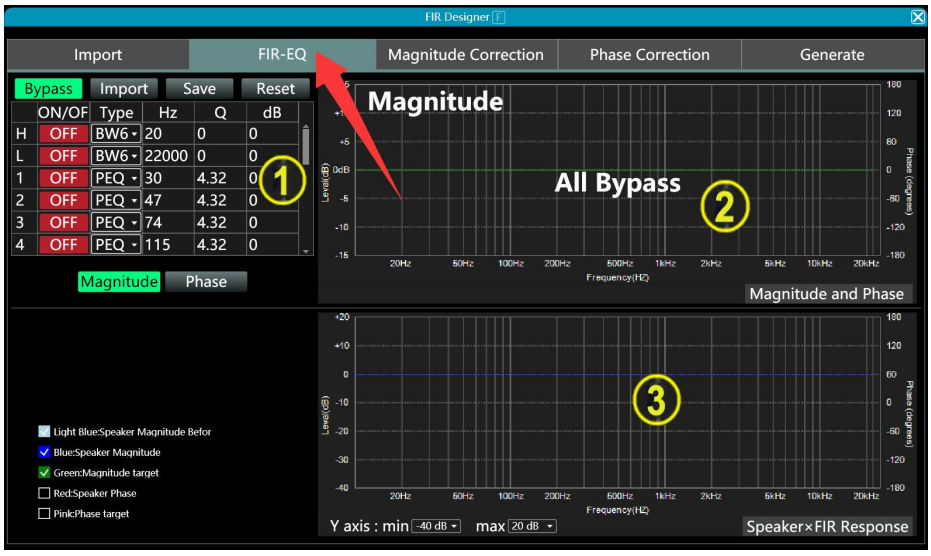


Figure 4.0

① You can add high-low pass, EQ type, Q value, and gain. Full bypass refers to disabling all EQ values. Import imports the saved EQ values into the current FIR curve. Save saves the current EQ values to the computer. Reset restores all EQ values to their default values.
② The EQ value for debugging in the display area will be displayed on the current FIR.
③ FIR amplitude display area.

3. Magnitude Correction

Please click Magnitude Correction to pop up the interface as following Figure 4.1

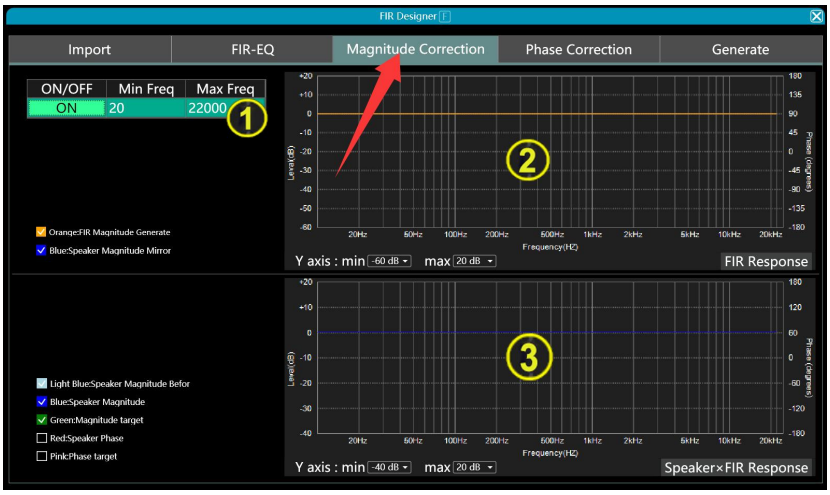
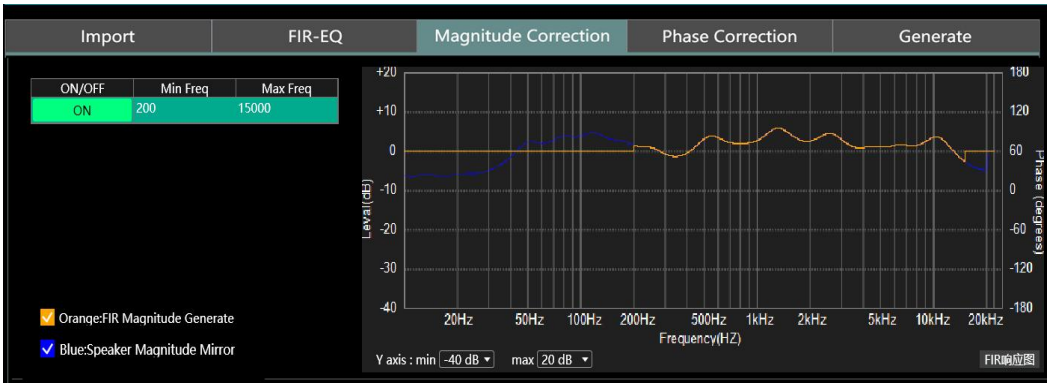


Figure 4.1

① Adjust the frequency of amplitude
② The amplitude display area after adjusting the frequency is shown in Figure shown below:



③: Speaker amplitude display area

4. Phase Correction Diagram (Figure 4.2)

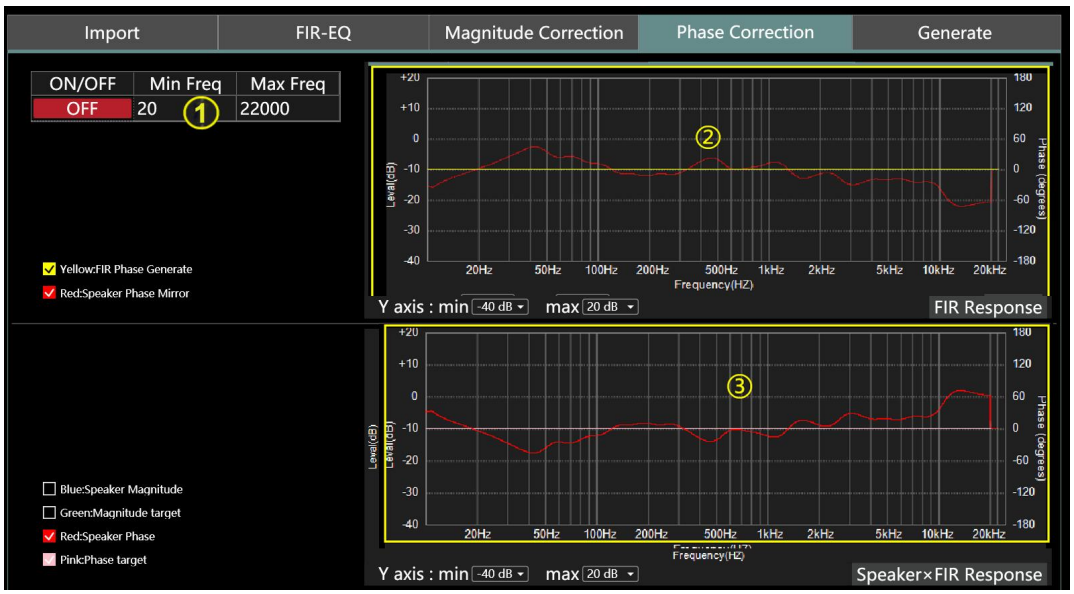
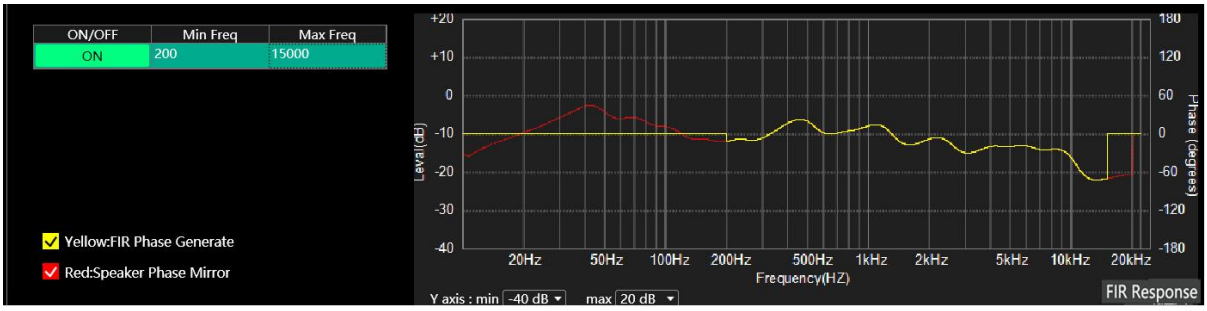


Figure 4.2

① Adjust the frequency of amplitude

② The amplitude display area after adjusting the frequency is shown in Figure shown below:



Phase effect display after frequency adjustment

③: Speaker phase display area

5. Generate Interface : click on Generate bar to pop up it as figure 4.3 shown below

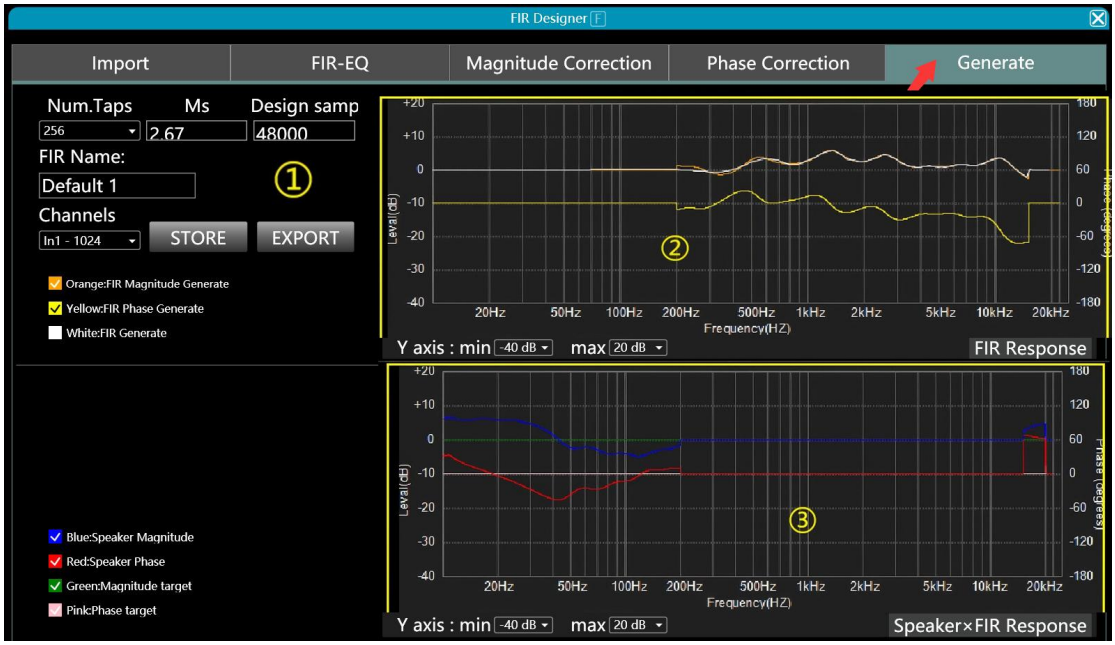


Figure 4.3

① Setting and selection of FIR data: Num. Taps: Selection of Taps numbers 256 and 512. MS Delay: Different Taps selected for delay will automatically generate corresponding delay times. Sampling rate: The generated sampling rate is only 48K. FIR name: can be modified according to your own needs. Channel: You can choose an input channel or an output channel. Generate: Generate to the selected channel. Export: Export and save the current FIR to the computer.

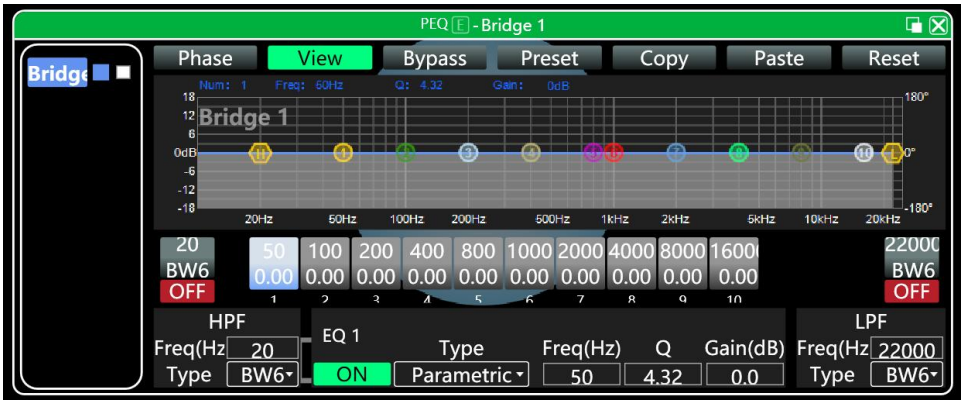
② Final FIR curve amplitude and phase display area

③ Final FIR curve amplitude and phase display area

7.10 Output EQ (PEQ)



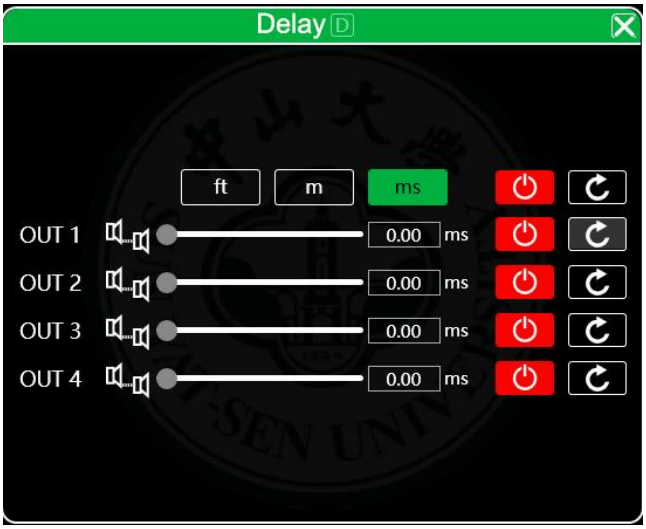
Double click this button to pop up the module interface of the output equalizer setting module in Figure as below, with the same functions and operation methods as the input equalizer in 7.4 above.



7.11 Output Delay



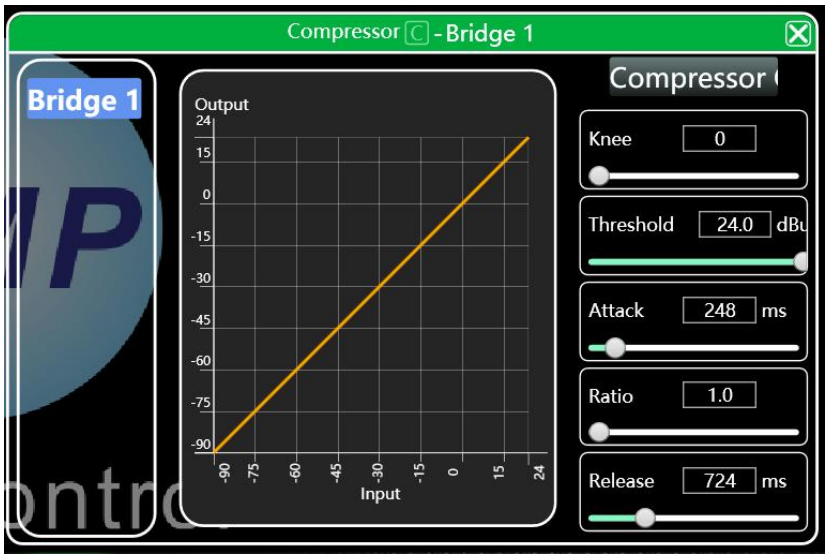
Double click this button to pop up the interface of output delay setting as figure shown below. The function and operation mode are the same as 6.5 input delay.



7.12 Output Compressor



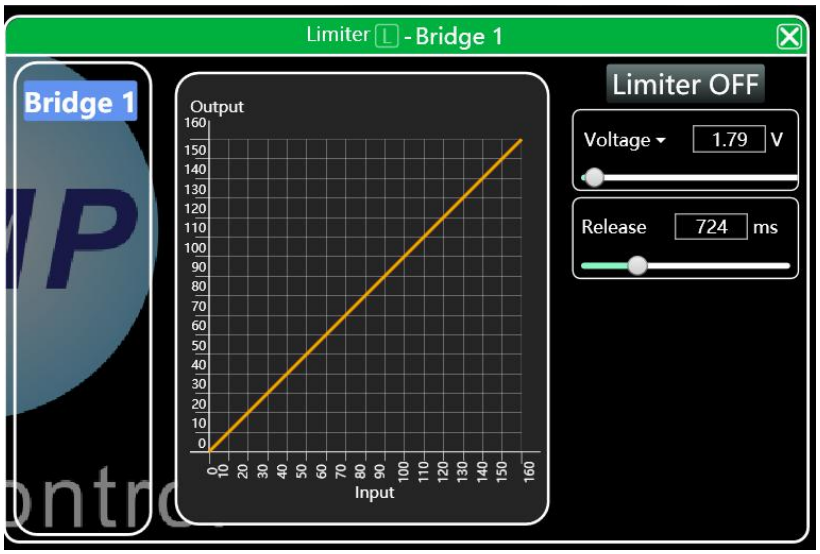
Double click on this button to pop up the output compressor setting module shown in Figure below:



7.13 Output Limit



Double click this button to pop up the output LIMIT interface as figure below:



7.14 Output Interface Module



Double click this button to pop up the output setting module as figure below. Can control the polarity and mute settings of the corresponding output channel.

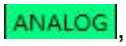


7.15 Input Channel

As shown in the input/output channel list on the software homepage, the left part is the input channel as shown in the following figure.



① The content from top to bottom in the input channel interface includes: channel name 

、Input mode 

,channel gain,function button 

, Channel grouping and joint debugging situation 

.

② The channel name, input mode, and channel grouping can only be viewed without editing function.



③ In the channel gain function, the level status of the input channel signal can be seen.

④ In the function buttons, the buttons from top to bottom are: mute

,polarity

,noise gate

,EQ BY PASS

， If the mute button is red, it is in a mute state. If other buttons are green, they are in an active state

⑤ The channel grouping and joint debugging situation displays the default 4 channel joint debugging groups. When the corresponding number box background color changes to yellow

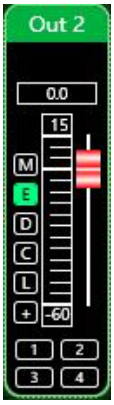
， this indicates that this channel has been added to the second group for joint debugging.

⑥ Button bar between input and output channels 

, 

, The main switch of this function button corresponding to all input and output channels will directly operate all input channels simultaneously.

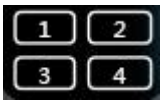
7.16 Output Channel



As shown in the input and output channel list on the software homepage , the right part is the output channel as shown in Figure this figure.

① The content from top to bottom in the output channel interface includes: channel name 

,channel gain,function button 

, Channel grouping and joint debugging situation 

.

② The channel name, digital output status, and channel grouping can only be viewed without editing function; In the channel gain function, the level status of the output channel signal

can be seen 

. The other two parts (gain value box and gain slider) are used to adjust the gain value of this channel.

③ In the function buttons, the buttons from top to bottom are:mute M ,EQ By Pass E、Delay D、Compressor C、LIMIT L、Polarity +, If the mute button is red, it is in a mute state. If other buttons are green, they are in an active state.

④ The channel grouping and joint debugging situation displays the default 4 channel joint debugging groups. When the corresponding number box background color changes to yellow 2, This indicates that this channel has been added to the second group for joint debugging.

7.17 Channel Joint Debugging LINK

Click on the joint debugging button between the input and output channels on the software homepage , Pop up the channel joint debugging interface as shown in the following figure

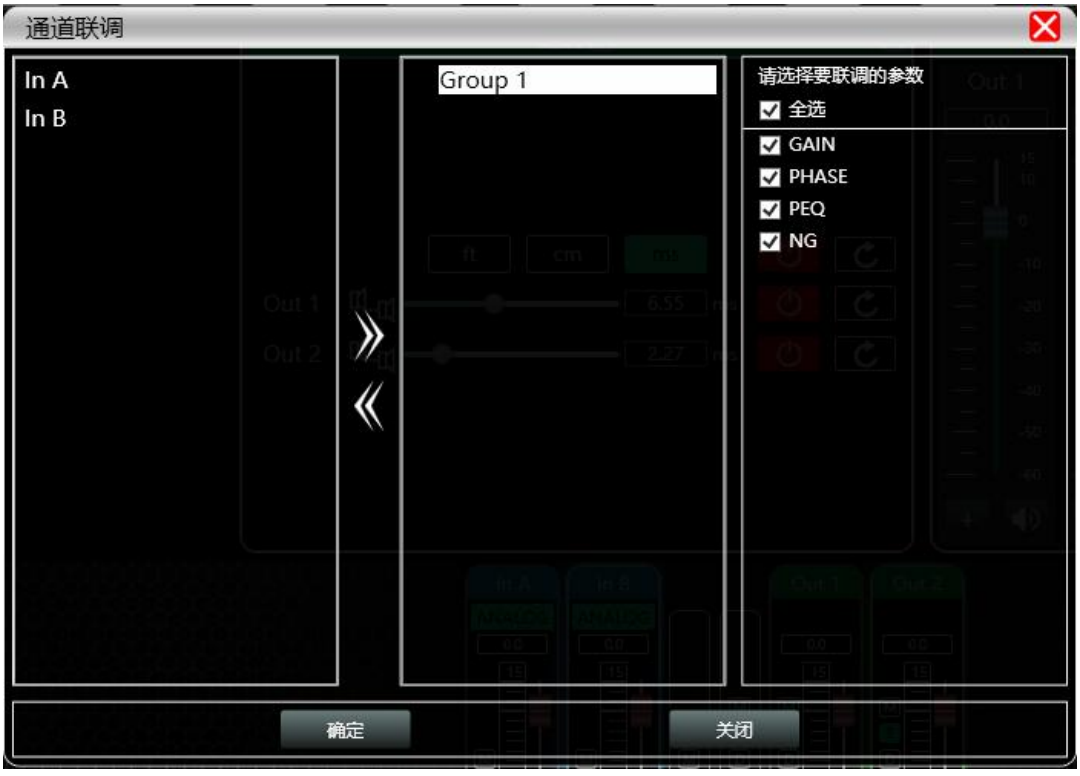


图 8.3 通道联调界面

As shown in the above figure, the three lists from left to right are divided into channel list, group list, and parameter list:

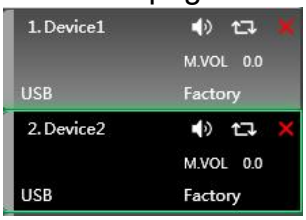
The channel list has listed all the adjustable channels. You can select the corresponding channel and click the add button  Move to the group list.

There are already 2 groups in the group list. Select the corresponding group directly. If you add a channel to the channel list, it will be directly assigned to the selected group. To remove it, select the channel you want to remove and click the remove button below the add button  It can be removed from the channel list.

The parameter list refers to the parameters that can be jointly adjusted when grouping in the group list. Checking the box indicates that when several channels in the same group adjust parameters, other channels will make the same adjustments simultaneously.

7.18 Device List

The device list on the software homepage is shown in the following figure.



 Number the connected devices； is name of the device； is factory name that can not be amended by user；If the connection method is TCP, and there is an empty space on the left side of the factory name after connection, the network IP address of this device will be displayed; If in USB mode, display USB; If connected via serial port, the specific COM port used will be displayed；

From left to right, it is divided into a mute button, a status refresh button, and a remove device button. The mute button can directly control the mute of all input and output channels of the entire device, and the status button can instantly refresh the device's status. If the device is online, the leftmost button  The position will turn green， The remove button can directly remove this device from the software.

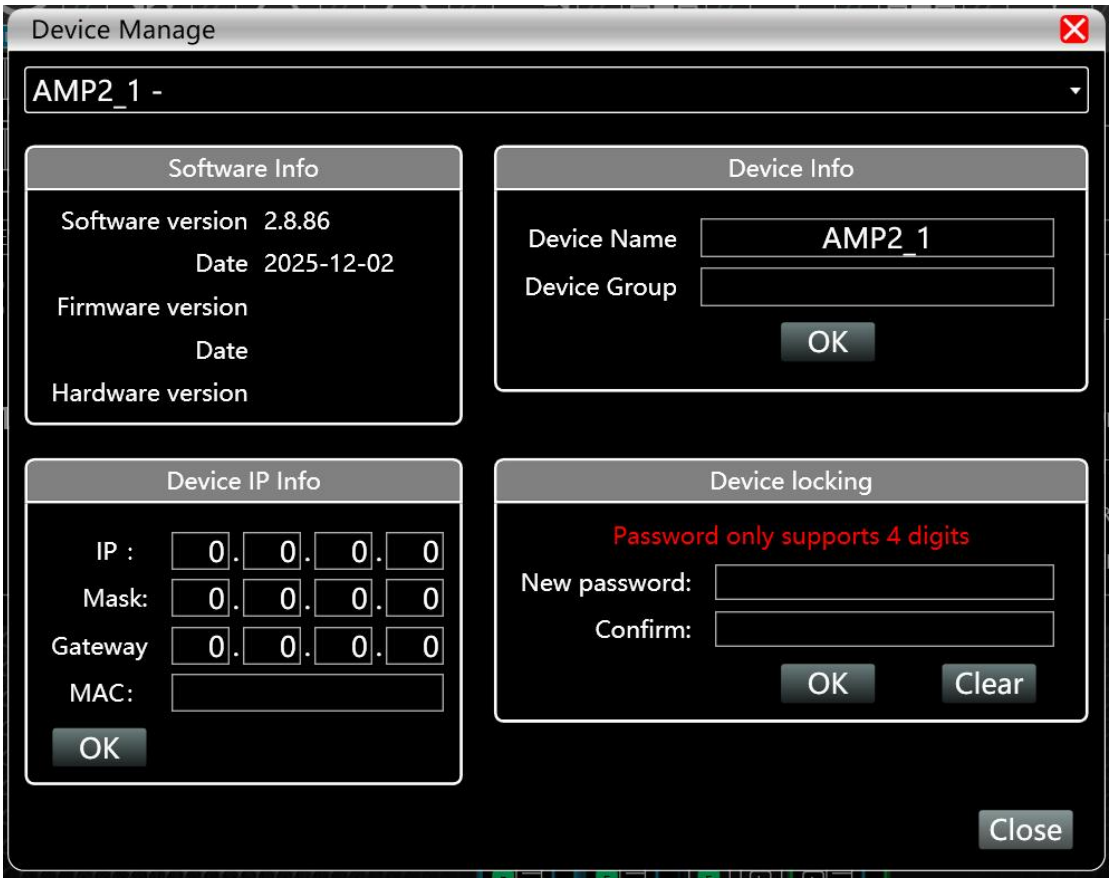
If debugging is required for different devices, you can click to select the target device, and the function interface will be updated to the device function page.

7.19 To add devices

Click on the menu bar "File" - "Add Device" in the software main interface , and the "Add Device" interface will pop up. Select the virtual device model that needs to be added to the device list.
Note: Virtual devices will not connect to real devices.

7.20 Device Manage

Click on the menu bar "Device" - "Device Management" in the main interface of the software , and the device management interface will pop up.



As shown in the figure above, the device information displayed on the target device management interface can be selected from the top device list

Device Information: Display the current device name and device group, where "Device Name" can be entered with a new name and saved by clicking the button.

Device IP information: If the current device is connected through network information, the device's IP address, gateway, and MAC address will be displayed here. The IP and gateway can be modified and saved by clicking the OK button to restart the device's network module. The newly entered network information will take effect immediately.

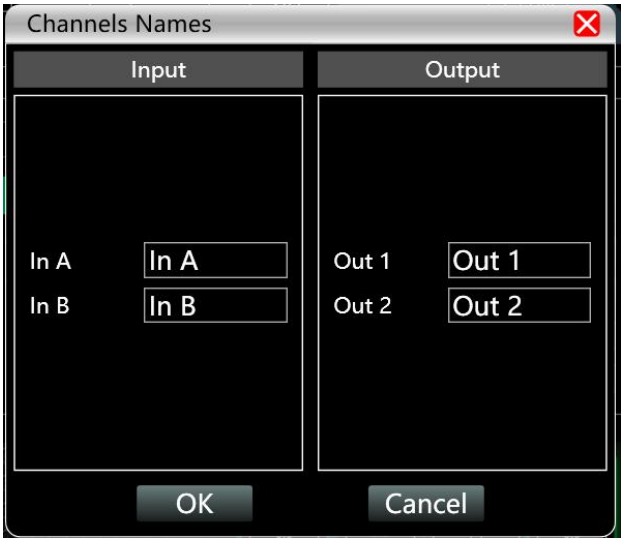
Device lock setting: ① Lock: Enter the four digit number and click confirm to complete the lock. Note: Only numbers can be entered, other non numeric characters are invalid.

② Unlock: Click "Unlock" to unlock.

③ Panel unlocking: Click on the lock icon, enter the password, and click OK. Note: After entering the password incorrectly 6 times, you need to contact the manufacturer for handling.

7.21 Channels Names Manage

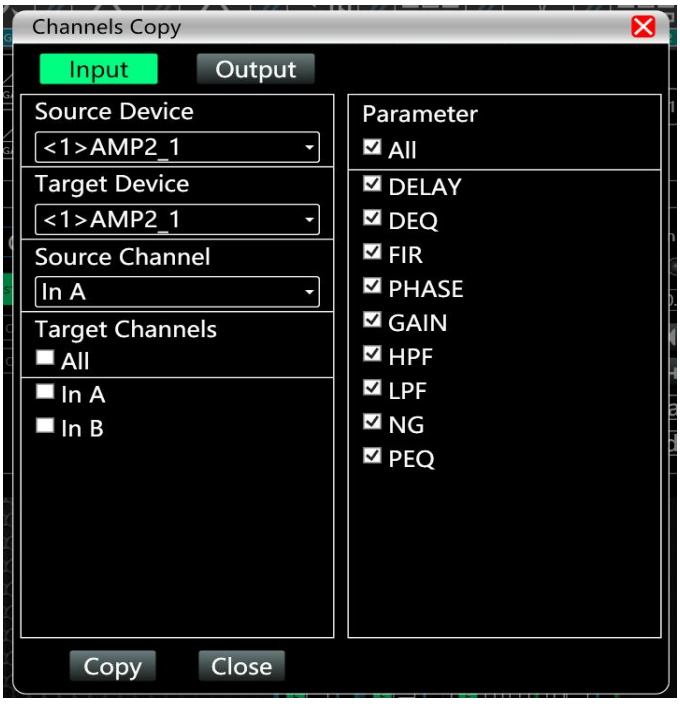
Click on the menu bar "Device" - "Channel Management" in the software main interface , and the channel name management interface as shown will pop up.



As shown in the figure above, after entering the new name of the channel in the corresponding channel, click the OK button to instantly save and update the name of the channel. Please note that the length limit for channel names is 5 English letters and numbers.

7.22 Channel Copy

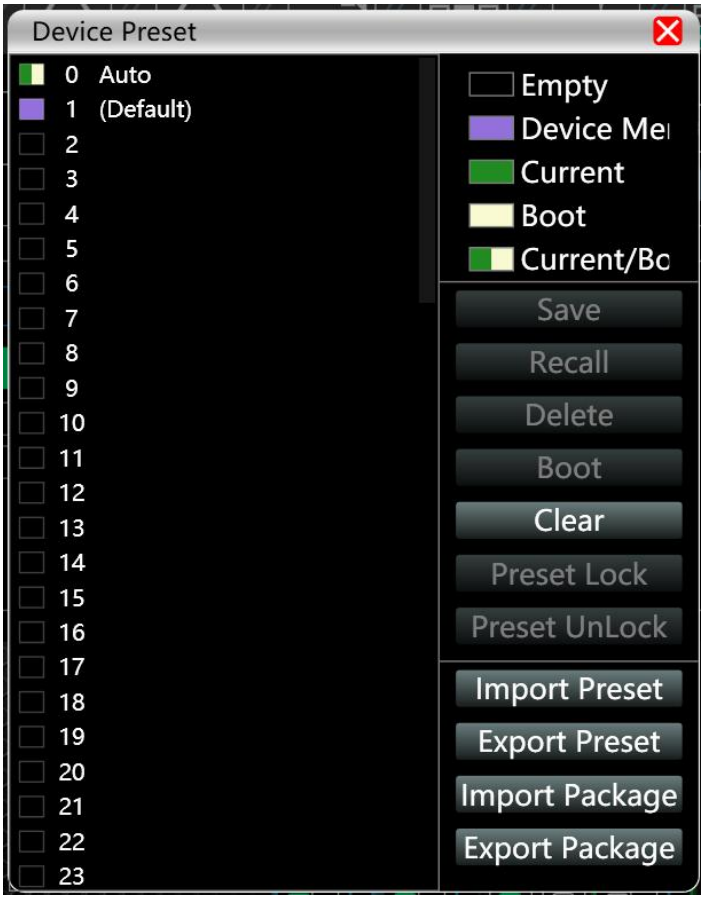
Click on the menu bar "Device" - "Channel Copy" in the software main interface , and the channel copy interface will pop up



As shown in the above figure, channel copying is to first select the channel parameters of a source device and copy them to the target channels of other target devices. The input channel and output channel cannot be copied to each other. On the left is the corresponding channel, and on the right is the copied parameter. The "Input" and "Output" buttons at the top of the interface can switch the channel type to be copied.

7.23 Archive/Preset

Click on the menu bar "Preset" on the main interface of the software, and the save interface will pop up.



① As shown in the above figure, the left side of the archive interface is the gear position, where "0 automatic gear" is the system gear position and cannot be used directly; 1 (default) "is the default file of the device, which can only be called and cannot be deleted or overwritten. After calling, all device parameters will be restored to factory default parameters; Other gears can be freely saved, called, deleted, and other operations.

② The function buttons on the right side of the archive interface are as follows:

③ ① Save: Save the existing device parameters to the corresponding selected archive.

④ ② Call: Retrieve the selected archive into the parameters of the current device.

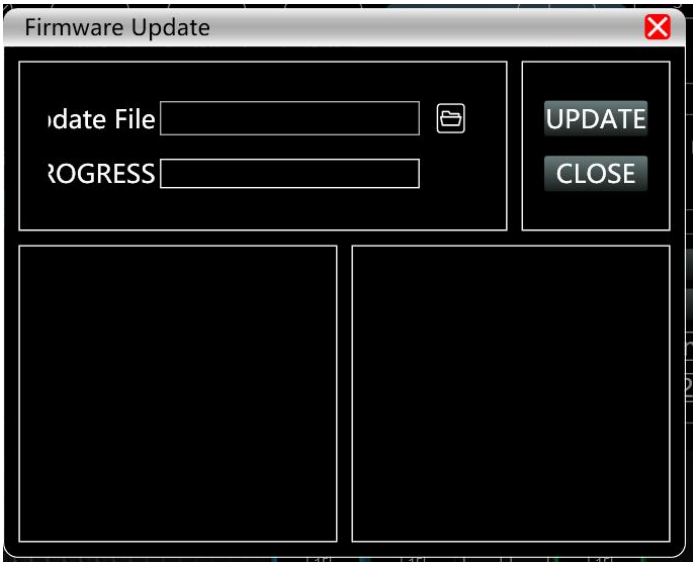
⑤ ③ Delete: Delete the selected archive parameter.

⑥ ④ Clear: Clear all archive parameter records that are not system archives.

⑦ ⑤ Set as boot mode: Set the selected mode as the archive that will be automatically called for work the next time the device is powered on.
⑧ ⑥ Preset lock: Lock the saved preset and set a password.
⑨ ⑦ Preset unlock: Enter the set password to unlock the saved preset.
⑩ ⑧ Import Archive: Import a single device parameter file from the computer system, directly overwriting existing parameter data.
⑪ ⑨ Export archive: Save the parameters of the current device to the computer system and produce a single device parameter archive file
⑫ ⑩ Import archive package: Import parameter packages for multiple archives in the computer system
⑬ Export archive package: Export the parameters of all files in the device archive to the computer system, and produce multiple archive parameter package files.

7.24 Firmware Upgrade

Click on the menu bar "System" - "Firmware Upgrade" in the software main interface and the firmware upgrade interface will pop up.



When there is an update in the lower computer system of the device, after obtaining the upgrade file, you can open the firmware upgrade interface as shown in the figure above. Select the corresponding upgrade file in the "Upgrade File" column, click "Start Upgrade" in the upper right corner, and the system will automatically transfer the upgrade file to the lower computer for upgrade operation, and display the operation log in the progress box below. After the upgrade is completed, the machine will automatically restart or manually restart the machine to complete the upgrade.

7.25 Dante Usage Instruction

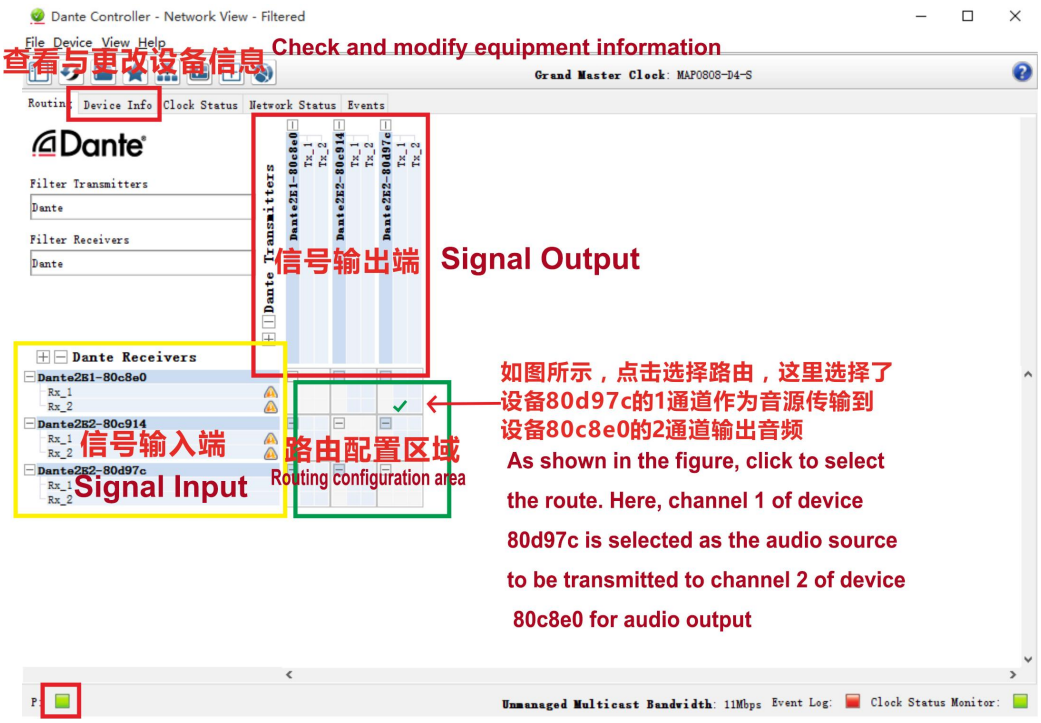


Enter settings on the main interface, or in the INPUT function area, set the channel input source to Dante mode





① There are two ways to connect Dante. The first is to connect to a local area network with other Dante devices, and the second is to connect through a Dante Virtual Soundcard (DVS). Both connection methods require wired connection through a switch or router.
② Regardless of the connection method used, routing configuration must be done through the official Dante Controller computer software provided. Dante Controller software can be downloaded for free from the official website www.audite.com.
③ Dante defaults to automatic IP acquisition, with an IP address of 169.254.XXX.XXX.



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