



TENDZONE
DIGITAL AUDIO PROCESSOR

Preface

Thank you for purchasing our product. Please read this manual to be familiar with the product.

Note: this manual provides relevant information for all models of the same series. Different models have different configurations, so the actual configuration of the product your purchase may be not the same with the instructions in the manual. If there is any discrepancy, the product you actually purchase shall prevail.

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I 、 Equipment architecture

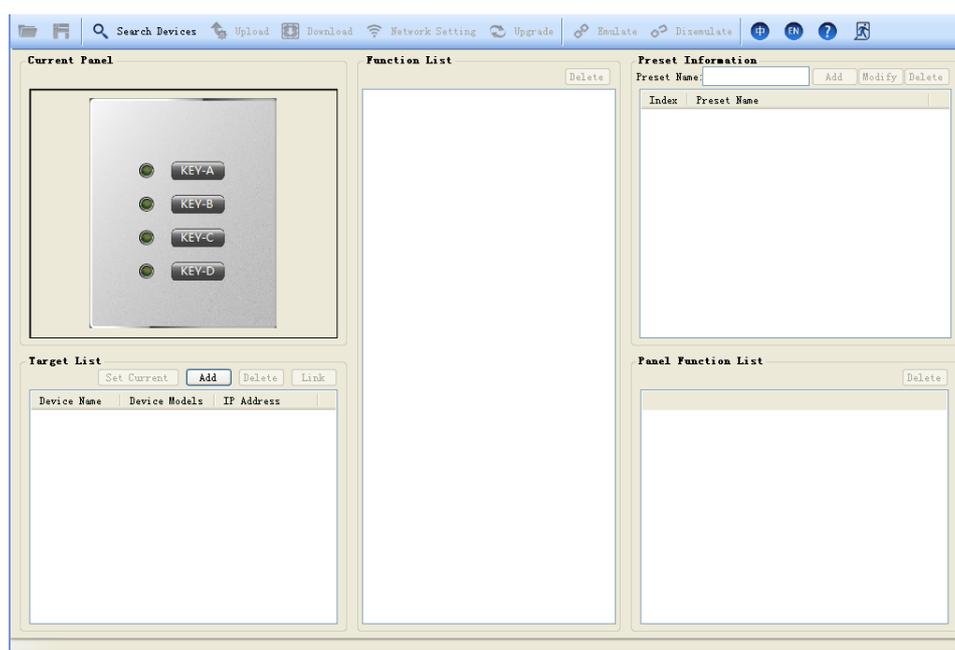
1.1 Brief introduction of equipment

	TP4	VOL	PS	MIX	MEX
Control protocol	Standard TCP/IP				
PoE network power supply equipment	Supporting 13W switch				
Failure tip	When the equipment under control is in the off-line state, all lamps flash.				
PoE power supply	√	√	√	√	√
DC9V power supply				√	√

II、 software operation

Software installation: the software supports and operating systems of XP, win7 and vista. Before software installation, please make sure the computer has been installed with Net Framework 3.5. Secondly, at least one of IP addresses of PC shall be in the same network segment with the IP address of the equipment (the factory default IP address of the equipment is "192.168.10.10"). Otherwise, the equipment can only be inquired, but cannot be properly connected; if the IP addresses of PC is not in the same network segment with the IP address of the equipment, please refer to the precautions for using the device for the first time in the frequently asked questions below for proper setting.

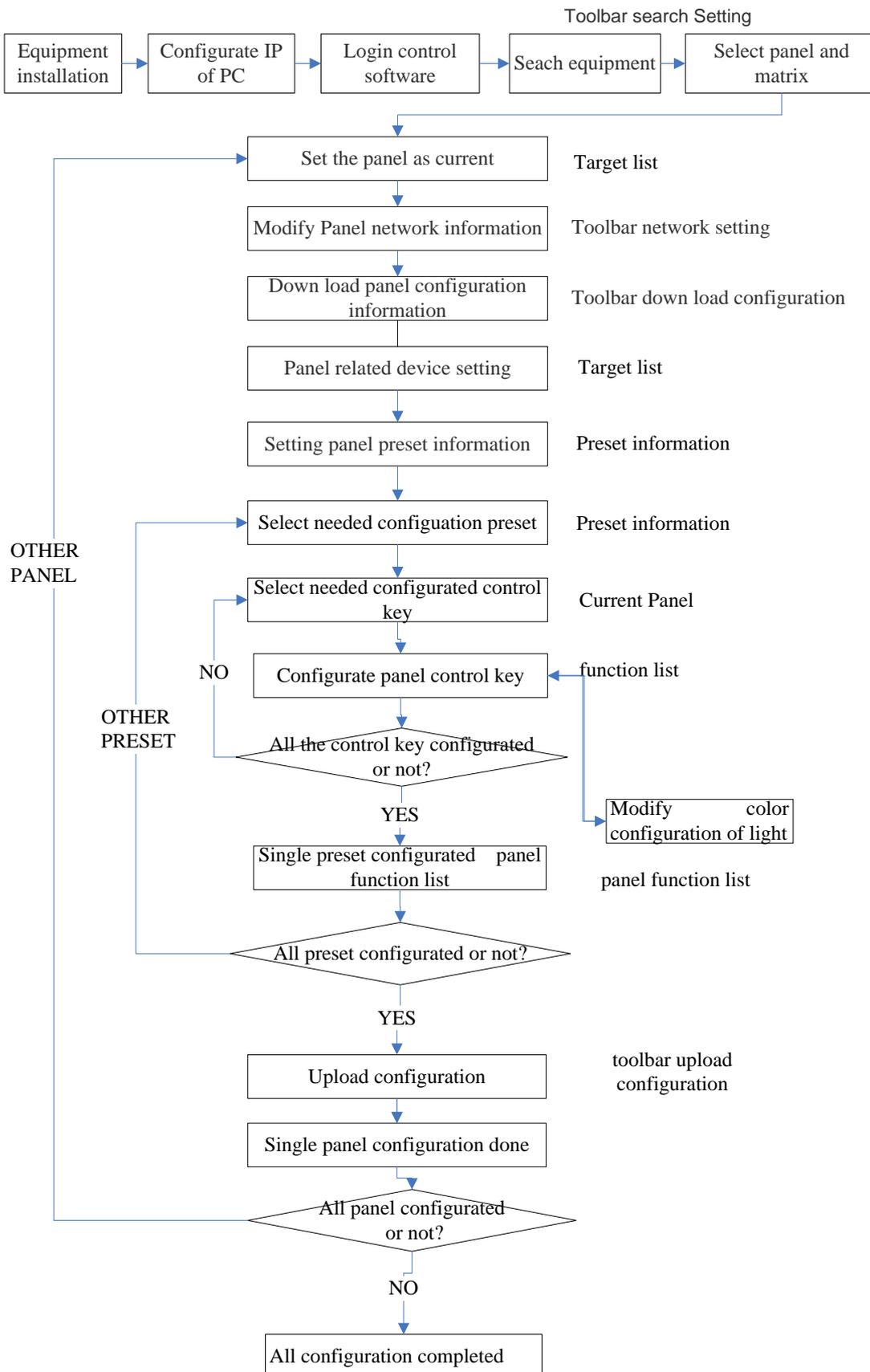
Install the PC software, and select the corresponding software. The start interface is shown in the following picture:



- (1) Menu bar and tool bar: the menu bar contains various function menus of the software, and the tool bar displays function menus in common use.
- (2) Current configuration panel: it displays the currently selected panel or the panel being configured;
- (3) List of controlled equipment: it displays the information of current panel and the controlled equipment;
- (4) Function list: it displays the controllable information of the current panel
- (5) Preset information: it displays all preset information of the current panel;
- (6) List of panel functions: it displays the selected preset sub-information of the current panel.



Panel Configuration Process

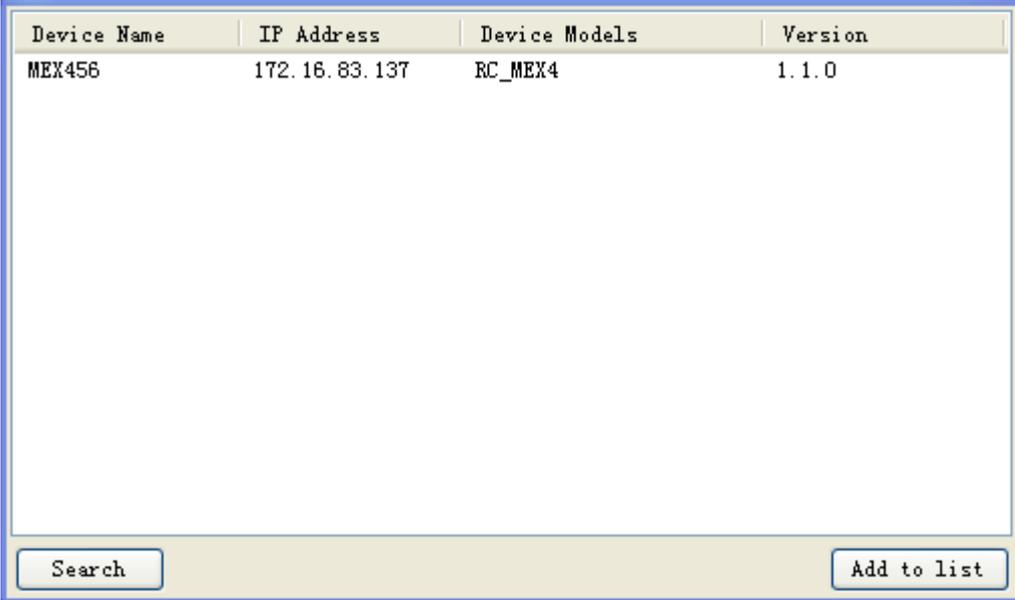


2.1 Menu bar and tool bar

- (1) Open: To load the equipment configuration saved locally on the currently selected panel. The panel model must be identical to the saved. Otherwise, it cannot be loaded.
- (2) Save: To save the configuration information of the currently selected panel to the local, and then repeated call with channel opening mode.
- (3) Search equipment: To search the panel in the current local area network and the equipment under the control of the panel, select the equipment to be configured (multiple choices), click "OK", and the information of selected equipment can be displayed in the controlled list.
- (4) Upload configuration: To upload the local configuration information to the panel.
- (5) Download configuration: To display the panel configuration on the equipment.
- (6) Network settings: To modify the panel's IP and network failure tips.
- (7) Panel upgrade: To upgrade the panel.
- (8) Run / stop: Conduct simulation debugging on the currently selected panel.

2.2 Target List

Click the "Search Devices" on the tool bar:



Device Name	IP Address	Device Models	Version
MEX456	172.16.83.137	RC_MEX4	1.1.0

Search Add to list

Click the "Search", to find the current on-line panels and the audio matrix with configurable panel. Select the panel and audio matrix to be configured, click "Add To List", and the controlled list can display the selected equipment.



Device Name	Device Models	IP Address
MEX456	RC_MEX4	172.16.83.137
2365423	SMART S1616/C	172.16.83.186
Smart 12x12	SMART S1212/TC	172.16.83.165
1616S	SMART S1616/S	172.16.83.108
Tel 8x8	SMART M880/EX	172.16.83.164
Smart 8x8	SMART M880/EX	172.16.83.198
Smart 8x8	SMART S880/TC	172.16.83.214
Smart 8x8	SMART M880/EX	172.16.83.199

Selected the panel to be configured in the "Target list", click the "Set Current", and the "Current" will appear at the end of the corresponding equipment name; meanwhile, the "Current Panel" will display the style of the current panel, and any of the rest interface operations is related with the "current Panel".

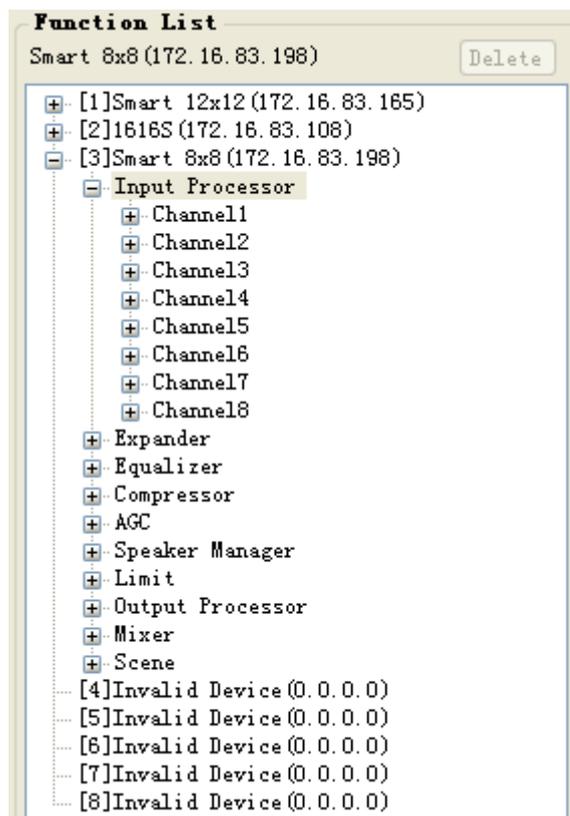
Set Current: To set the selected panel as the current. The upload and download configuration can be conducted, and the network information and configuration can be modified after the panel is set as the "current".

Add: To be used for off-line configuration. The user can choose the type of the off-line equipment, as save it to the local after configuration, which can be opened directly when required.

Delete: to delete the equipment from the current controlled list.

Link: To specify the equipment as the equipment under control of the current panel, and the equipment will appear in the "function list" automatically after being associated.

2.3 Function list



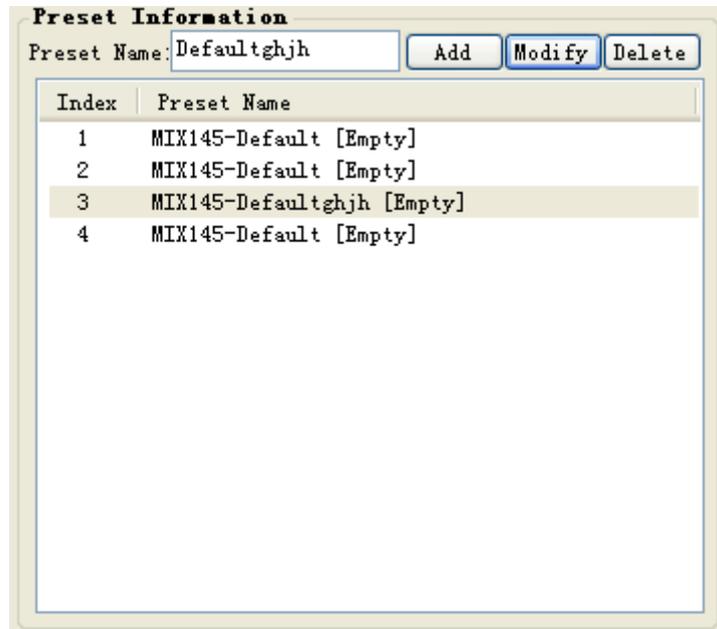
Select the panel in the "Target List" and "Set Current", and then select the equipment under control. Click the "Link", and the information of the associated equipment will be automatically displayed in the function list; in case of wrong choice, to select the root directory of corresponding equipment, and click the "Delete" button.

To expand the structure of the function list, select the minimum level panel node, and double click. The corresponding function will automatically appear in the "Panel Function List";

If other defaults are required, select other defaults in the "Preset Information", and then configure the corresponding function in the "Function List".



2.4 Preset Information



Each panel can be set to "add" multiple defaults;

To select the default, modify the default name in the edit box, and click "Modify", to save the modified default name;

After configuring multiple defaults, the redundant defaults can be deleted; the system will perform the emptying operation for the middle defaults; and the system will perform the deleting operation for the last default.

After the panel default is set, the control operating configuration can be conducted to each default of the panel respectively.

2.5 Current configuration panel and the panel function list

After the associated equipment and default information is set, the panel controls can be configured.



Select the key or lamp on the panel, and the information of the equipment under control in the function list will be filtered in accordance with the control type. The filter type shall be as follows:

	Knob and strip LED lamp	Key LED lamp	Key	MIC key
Controllable equipment	Audio matrix	Audio matrix	Audio matrix, RC panel	Audio matrix, RC panel
Controllable range	Gain and other numerical range types	Straight, mute and other switch types	Straight, mute, panel default and other switch types	Function of the ordinary programmable keys + MIC control

Wherein, the key, LED and others are required to be set separately;

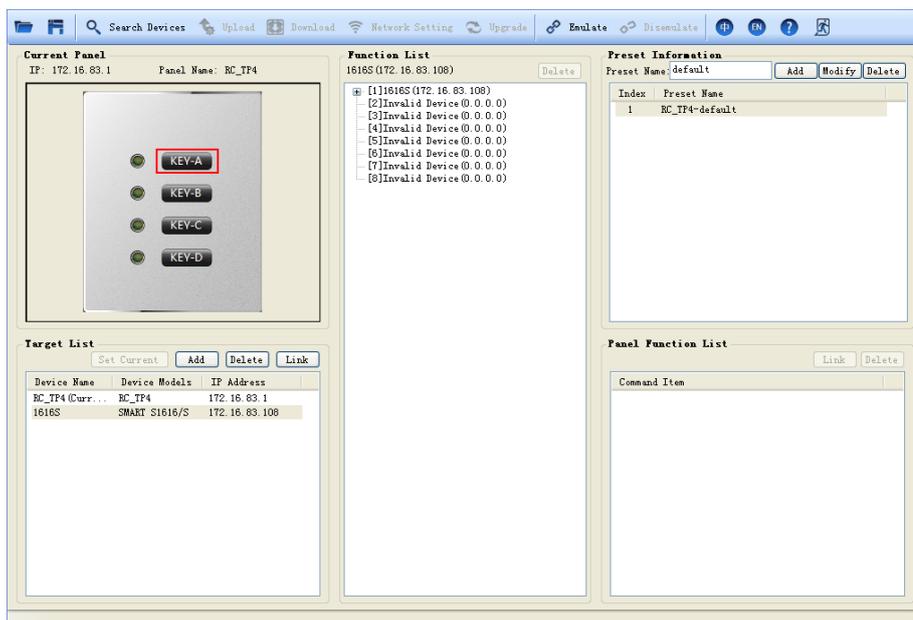
If the key controls the default of other panels, there are 2 modes. One is additional, and the other is .

Additional default: to overlay the control functions in the new default, and the previous function shall be maintained for control not set.

Overlaid default, to empty the panel settings, and then load the new default. The control not set in the new default shall maintain the ex-factory state.

2.5.1 Key configuration

The following figure is the configuration function after key filtering:





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After the key function is configured, click the "Link" in the "Panel Function List", and the corresponding indicator lamp of the key can configure the related color instructions.



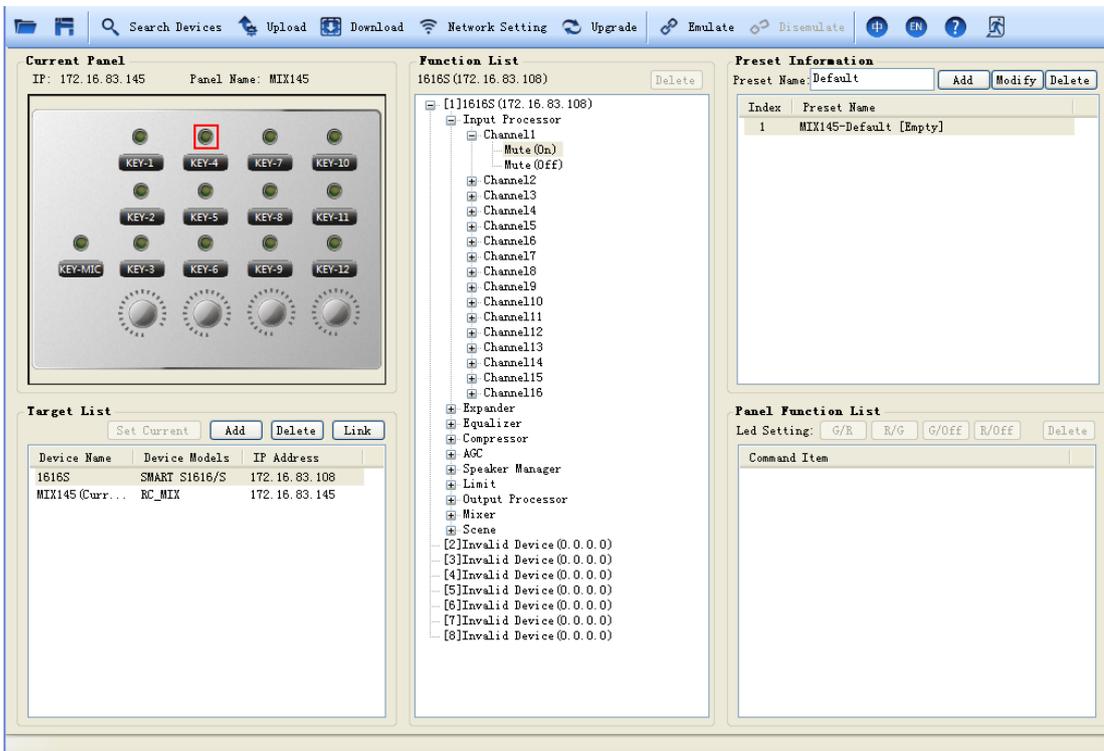
If the configuration of the indicator lamp is to be modified, the corresponding LED shall be selected in the current configuration panel, to reconfigure the related functions, or just change the color.

2.5.2 Key LED configuration

The default setting of the corresponding indicator lamp of the key can be completed by clicking "Link" in the "Panel Function List".

If the configuration of the indicator lamp is to be modified, the corresponding LED shall be selected in the current configuration panel, to reconfigure the related functions, or just change the color.

The following figure is the function after LED filtering:

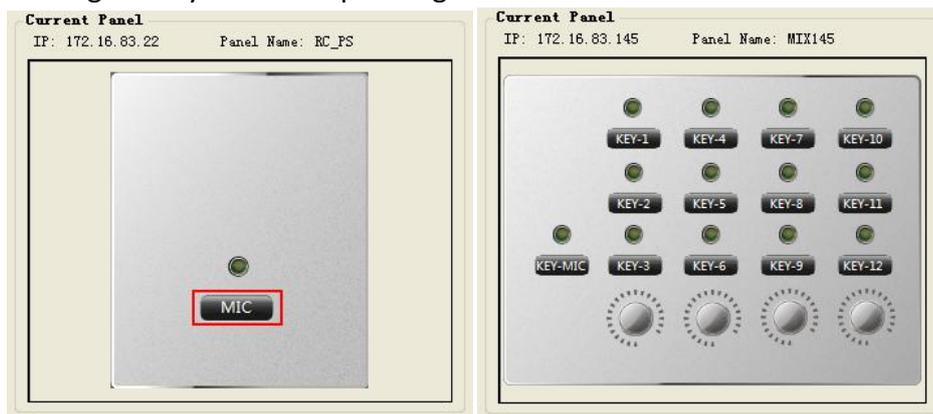


After the LED configuration is completed, as shown in the following figure, the indicator lamp shows green when the input channel 1 is in the mute state, and shows red when in the non-mute state.

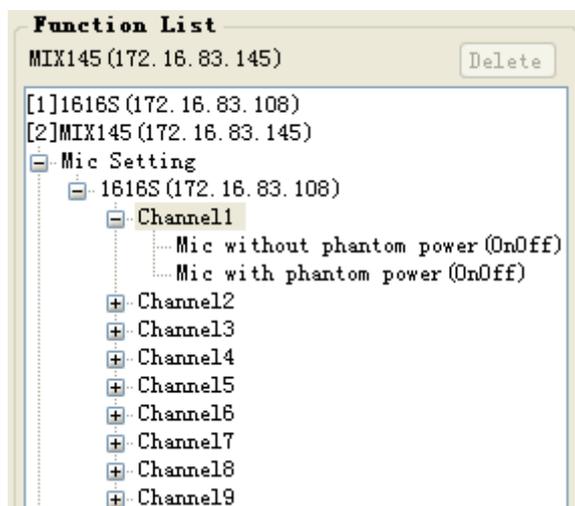


2.5.3 MIC configuration

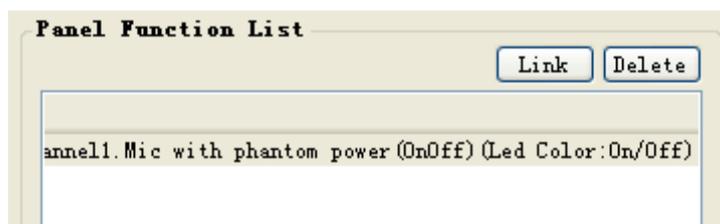
MIC can only be configured by the corresponding MIC switch:



After associating itself with the corresponding audio matrix by selecting the MIC switch, the function list is as follows:



To select the microphone setting to choose the corresponding matrix channel, double click the bottom node, and click the "Link";



Once configured, the sound of the microphone will be input to the first channel of 172.16.83.108. The green lamp is on when the phantom power is on, and the red lamp is on when the phantom power is off.



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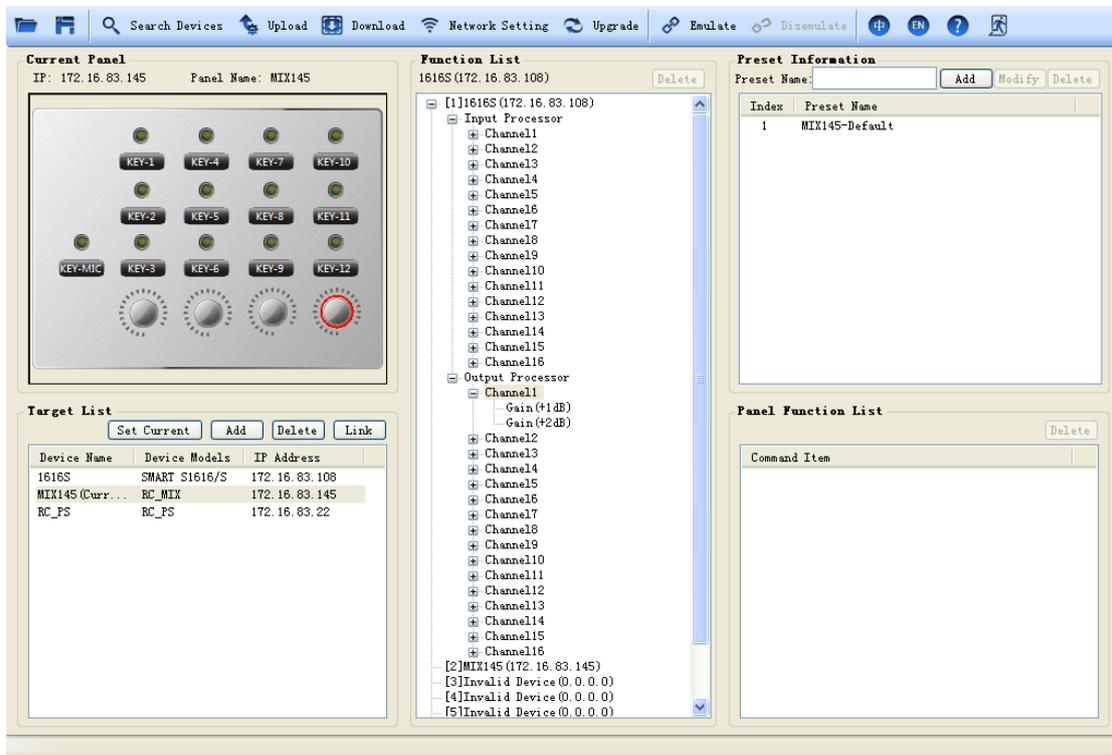
Note: for PS type panel or MIX type panel, first of all, associate the panel itself and the matrix, select the key, select the microphone setting in the panel configuration options in the function list, and then select the corresponding input channel, i.e., input to the matrix channel through the panel.

There are two options for the channel input mode, with phantom power and without phantom power. With phantom power: open the microphone switch while provide the phantom power.

2.5.4 Knob configuration



Select the knob as shown in the figure. The knob can only control the parameters of gain and continuous changing numerical range type, and the parameters configured are displayed in the panel function list.



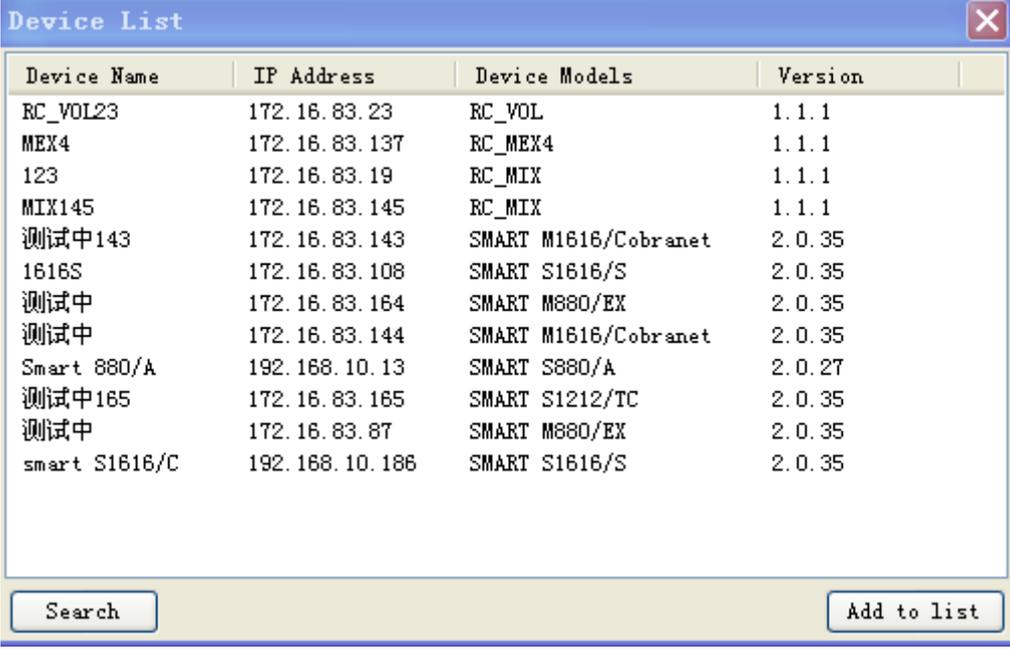
2.5.5 LED strip lamp



There are two types of strip lamps, one is arc-shaped , and the other is , which can only display the parameters of gain and continuous changing numerical range type.

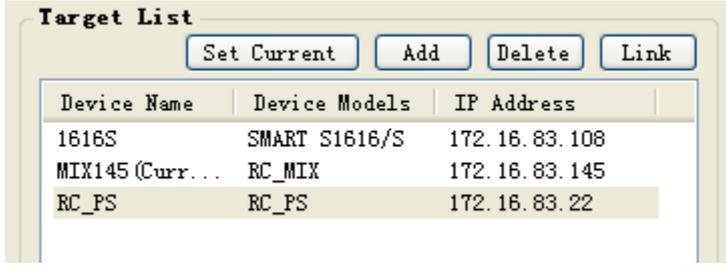
III、MIX configuration examples

Open the panel PC software, and click the "Search Devices", to search the equipment currently on-line:



Device Name	IP Address	Device Models	Version
RC_VOL23	172.16.83.23	RC_VOL	1.1.1
MEX4	172.16.83.137	RC_MEX4	1.1.1
123	172.16.83.19	RC_MIX	1.1.1
MIX145	172.16.83.145	RC_MIX	1.1.1
测试中143	172.16.83.143	SMART M1616/Cobranet	2.0.35
1616S	172.16.83.108	SMART S1616/S	2.0.35
测试中	172.16.83.164	SMART M880/EX	2.0.35
测试中	172.16.83.144	SMART M1616/Cobranet	2.0.35
Smart 880/A	192.168.10.13	SMART S880/A	2.0.27
测试中165	172.16.83.165	SMART S1212/TC	2.0.35
测试中	172.16.83.87	SMART M880/EX	2.0.35
smart S1616/C	192.168.10.186	SMART S1616/S	2.0.35

Select the panel and audio matrix to be configured, click "Add to list", and the selected equipment is displayed in the "Target List";



Device Name	Device Models	IP Address
1616S	SMART S1616/S	172.16.83.108
MIX145 (Curr...)	RC_MIX	172.16.83.145
RC_PS	RC_PS	172.16.83.22

Select the panel to be configured, click the "Set Current", and there will appear "Current" at the end of the equipment name on the panel, indicating the equipment being configured. Meanwhile, click the "download" in the tool bar, to download the panel configuration to the local.

Then select two equipment in the controlled list, click the "Link", and the corresponding equipment name and IP address will appear on the function list.

Select the panel key "KEY1", and expand the function list as follows:



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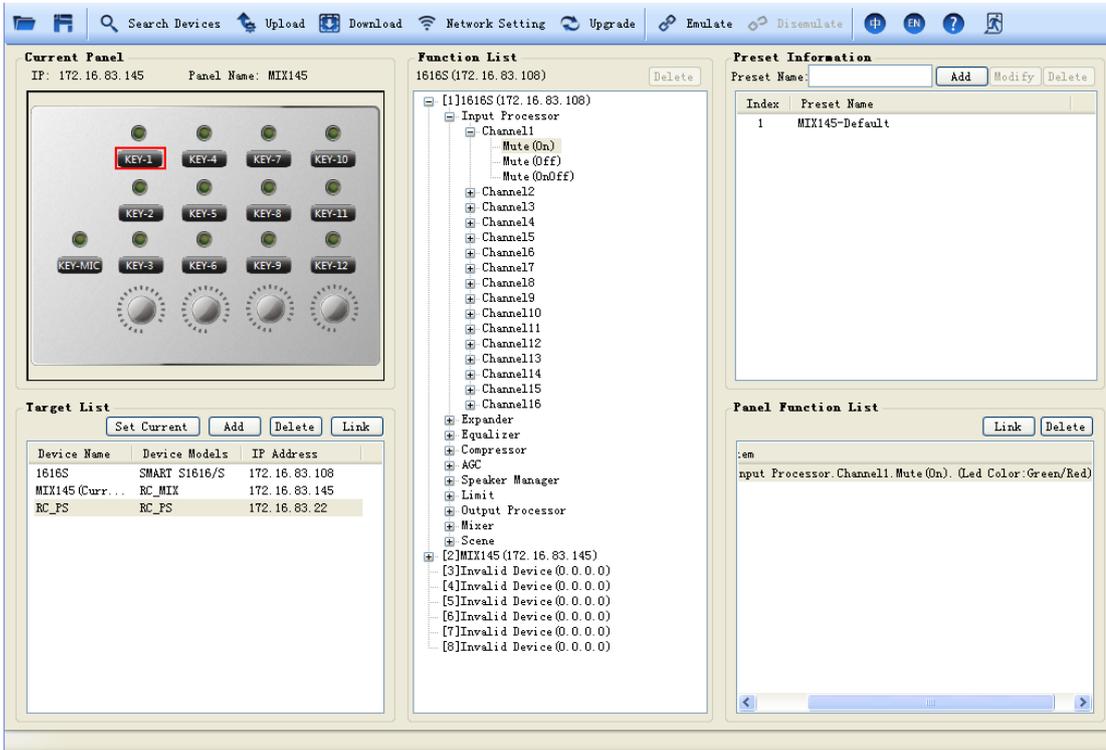
The screenshot shows the TENDZONE software interface with the following sections:

- Current Panel:** IP: 172.16.83.145, Panel Name: MIX145. It features a control panel with 12 keys (KEY-1 to KEY-12) and four rotary knobs. KEY-1 is highlighted with a red box.
- Function List:** A tree view showing the hierarchy of functions. The expanded view for 1616S (172.16.83.108) includes: Input Processor, Channel1 (with sub-options: Mute (On), Mute (Off), Mute (OnOff)), Channel2 through Channel16, Expander, Equalizer, Compressor, AGC, Speaker Manager, Limit, Output Processor, Mixer, and Scene. Below this, a list of devices is shown, including MIX145 (172.16.83.145) and several 'Invalid Device' entries.
- Preset Information:** Preset Name: MIX145-Default. A table with columns 'Index' and 'Preset Name' shows one entry: Index 1, Preset Name MIX145-Default.
- Target List:** A table with columns 'Device Name', 'Device Models', and 'IP Address'. It lists: 1616S (SMART S1616/S, 172.16.83.108), MIX145 (Curr... RC_MIX, 172.16.83.145), and RC_PS (RC_PS, 172.16.83.22).
- Panel Function List:** A section with a 'Link' button and a 'Delete' button, currently empty.

Panel Function List [Delete]

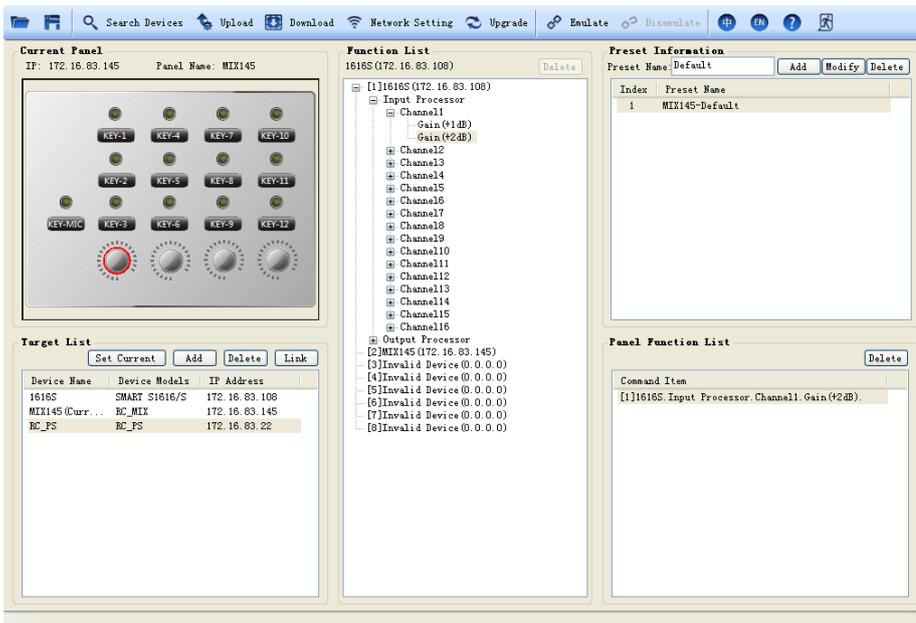
```
Processor.Channel3.Mute(On).(Led Color:Green/Red)
Processor.Channel1.Mute(Off).(Led Color:Green/Red)
Processor.Channel1.Mute(Off).(Led Color:Green/Red)
Processor.Channel3.Mute(On).(Led Color:Green/Red)
Processor.Channel1.Mute(Off).(Led Color:Green/Red)
Processor.Channel1.Mute(Off).(Led Color:Green/Red)
```

Expand the sub-options of the matrix in the function list, i.e. function options of the key control. Double click the sub-option, and the function displays in the "panel function list". Click the "LINK", and arrange the default lamp colors as follows:

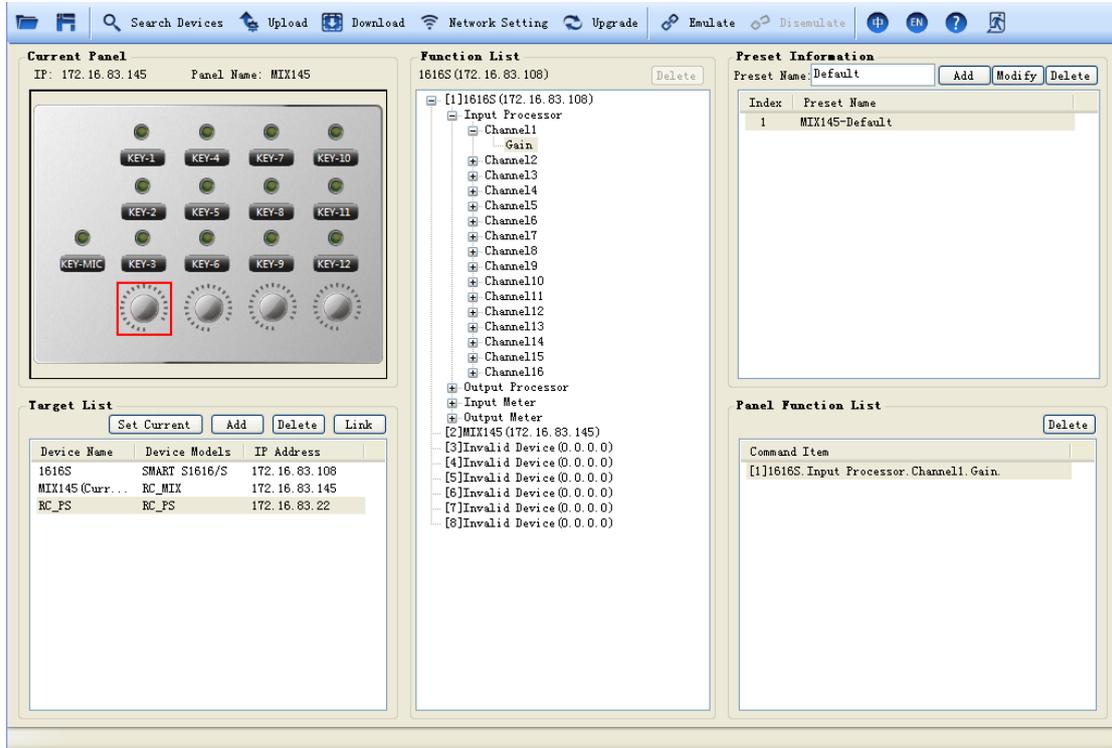


Set the completion key and LED, and the functions in default 1 are as follows:

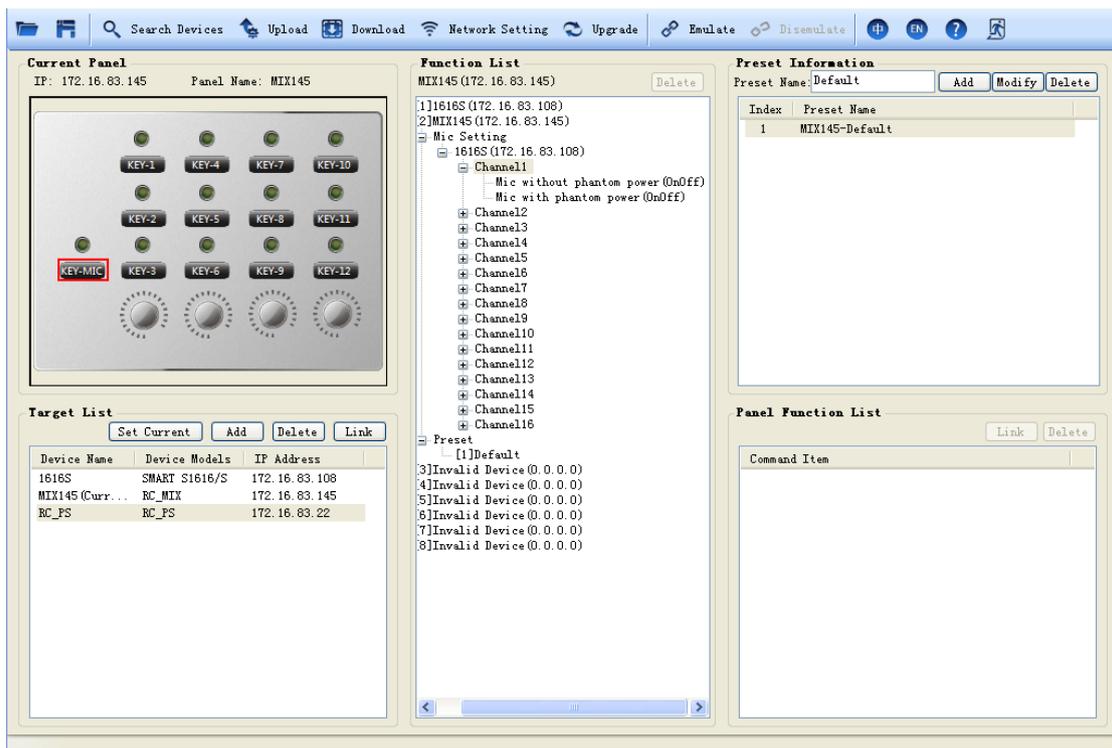
Then configure the knob, and select the corresponding knob, to configure knob to control the gain of input channel 1;



Then configure the corresponding indicator lamp of the knob, select the corresponding indicator lamp, and configure the electrical level of output channel 1



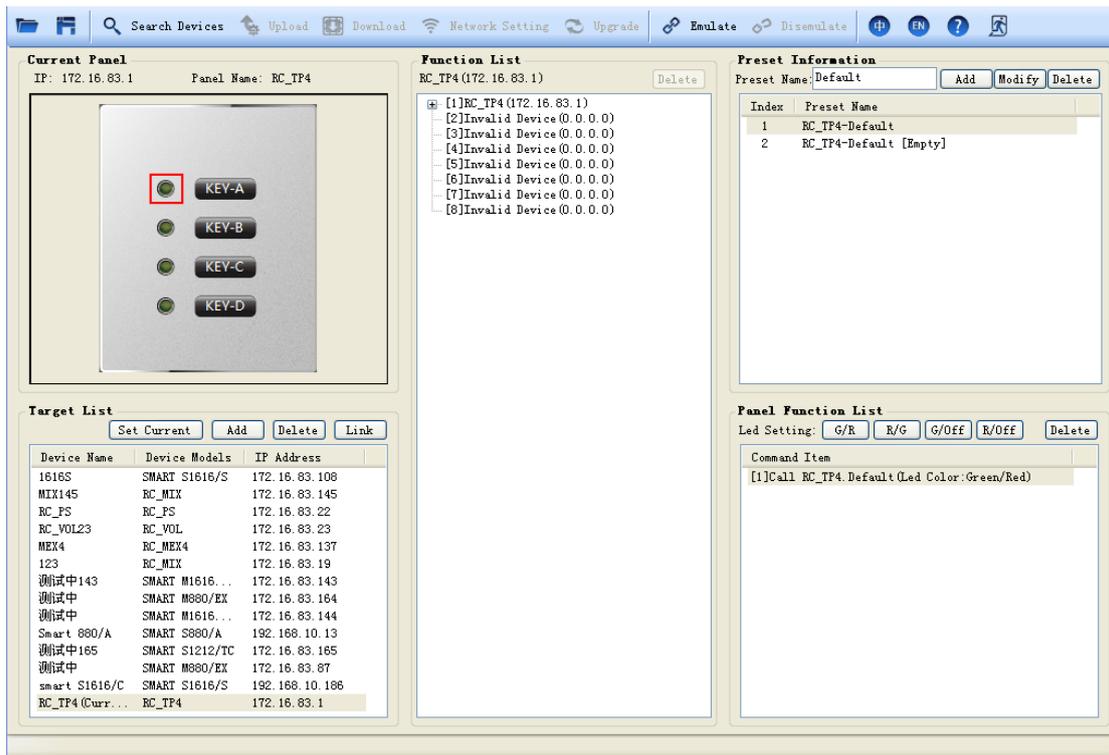
Then configure the MIC. First of all, associate the current panel and the matrix, select the key, expand the sub-option of the panel, select the matrix, and specify the input channel. There are two MIC access modes: with phantom power and without phantom power:



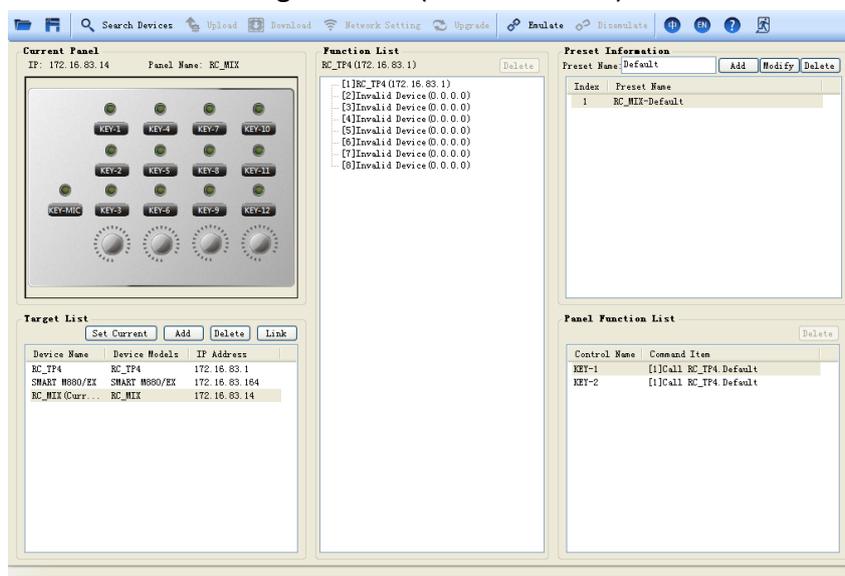
Double click the sub-option to be configured, to complete the configuration. Then click the "upload

configuration" in the tool bar, to upload the equipment configuration. The configuration uploaded is "default 1". If it requires switching to other defaults, the key of this panel or other panels shall be used to call the default.

Call default: configure two defaults for Panel 1 (172.16.83.1), and upload the configuration.



Then call the default of Panel 1 through Panel 2 (172.16.83.164):





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Set Panel 2 (172.16.83.164) as the current configuration panel, and associate Panel 1. Call default 1 through KEY-1 and Call default 2 through KEY-2. In case of additional mode, when the default 2 is called, the functions of both KEY-1 and KEY-2 are effective in any default.

In case of overwrite model, only KEY-1 function is effective in default 1 and only KEY-2 function is effective in default 2.

The indicator lamp can only display the current default, and cannot display whether the default model is additional or overwrite.

After the configuration is completed, click the "upload configuration" in the menu bar options, to complete the configuration of Panel 2; press KEY1 of Panel 2 to switch Panel 1 to default 1; press KEY2 of Panel 2 to switch Panel 1 to default 2.

IV、 Frequently Asked Questions

* What configurations shall be made when the system is used for the first time?

Answer: When this system is used for the first time, the following steps shall be followed:

(1) Read the instructions carefully, especially the safety precautions.

(2) The defaulted IP address in the factory is "192.168.10.10". If there is no address of "192.168.10.10" network segment in the PC, please add at least one address of this network segment in the PC so that the device can be normally connected. The adding process is as follows (the following shows the process adding IP in XP system):

Right click network computer ->Attribute->Local Connection-> Attribute ->Select Internet protocol (TCP/IP) in "Series of item used of this connection", click attribute ->advanced->Click "Add" in the IP column->Input IP address such as "192.168.10.101", sub-network mask "255.255.255.0"->Add->OK->OK;

(3) Plug in the POE network cable, for equipment testing: select the "search equipment" in the system menu, and click the "search" button, to find out whether the equipment can be searched. If the equipment cannot be searched, please contact us!

* There is no voice from MIC output?

Answer: (1) Check whether the MIC phantom power is correct or not.

(2) Check whether the input configuration of the panel MIC is correct or not.

(3) Check whether the "allow call" in the input source of the audio matrix is turned on or not.

(4) If the above is check without fault, please contact us!

In short, any fault can be report to us in the way of "Help -> Contact Us", to facilitate comprehensive analysis and facilitate improvements in the future versions