CL-4 Tool

USER MANUAL

Version 1.4

20250918

Contents

1. General information

CL-4 Tool Windows PC graphics control tool is specified tool for CL-4 power amplifier. The connection between them through Type C cable. Its main functions are as follows:

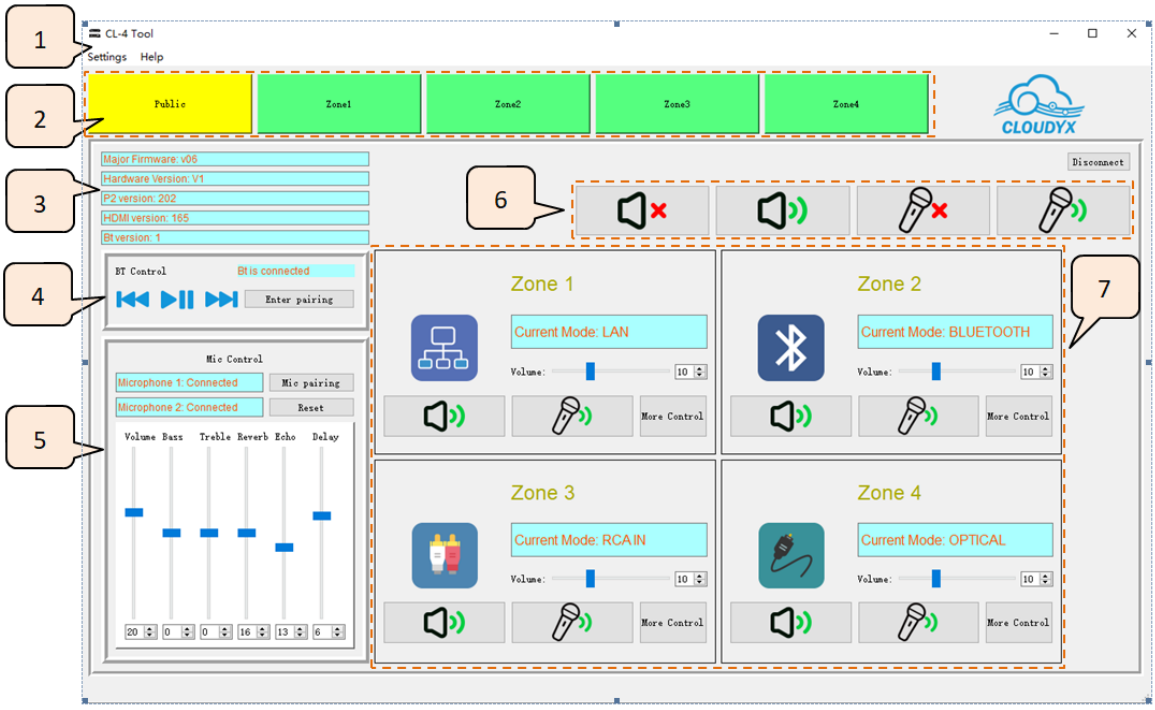
1. Observe CL-4 equipment information and working status
2. Switch the audio source of each zone of CL-4
3. Adjust the output audio volume of CL-4, BASS, TREBLE, etc.
4. Control CL-4 to mute/unmute, control microphone audio to mute/unmute
5. Adjust the microphone volume, reverb, delay, ECHO, BASS, TREBLE, etc.
6. Visual filter design tool for parametric EQ
7. Preset EQ adjustment

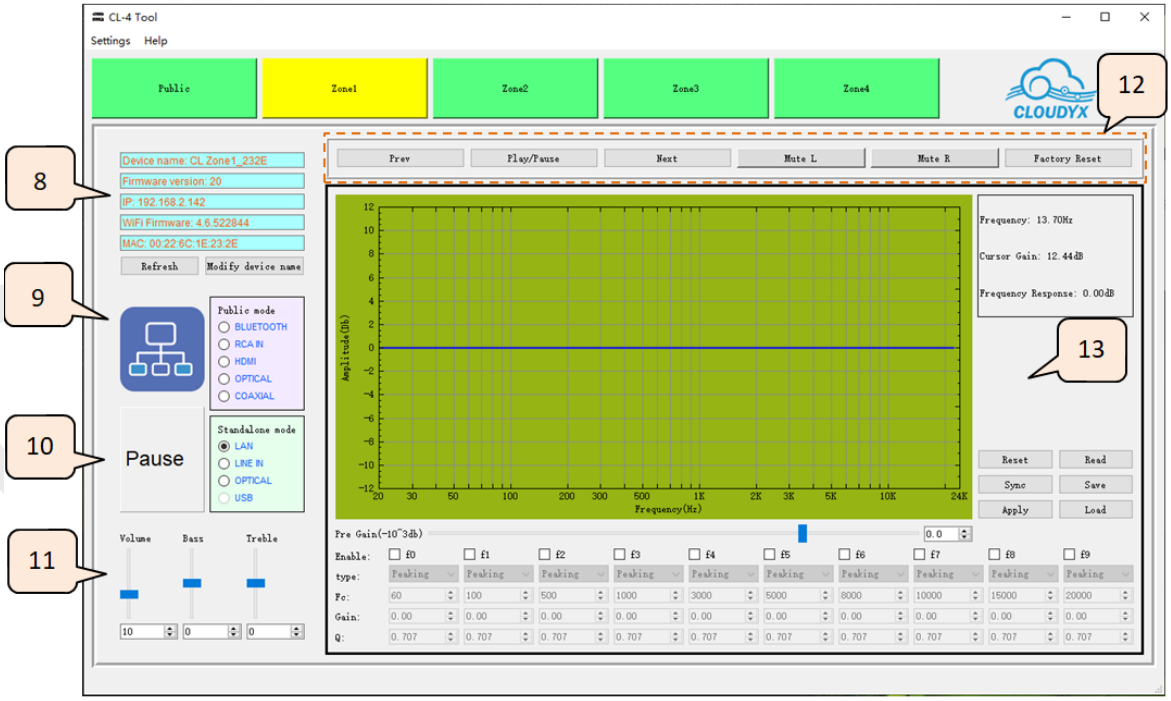
2. Gettingstarted

The CL-4 PC Tool must be connected with the CL-4 power amplifier through a Type C data cable. After connected, click "Connect Device" to enter the main interface. If you cannot connect to the device, please check whether the device is turned on Or whether the Type C line supports data transmission.

3. Interface description

CL-4 Tool have 5 function pages: public area and 4 zones function interfaces. The views are as follows:





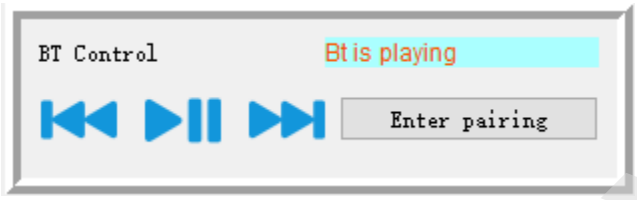
1. Tools menu: contains debug mode options and tool version related information.
2. Switch and display of public area interface and partition interface.
3. CL-4 firmware version information area: contains hardware version information, and the firmware version number of each module.
4. Bluetooth audio control: including Bluetooth audio: previous song, play/pause, next song, re-pairing and Bluetooth working status.
5. Microphone audio control: including microphone connection status, microphone volume adjustment, BASS adjustment, TREBLE adjustment, Reverb adjustment, ECHO adjustment, DELAY adjustment.
6. Mute control for all zones: including audio output mute control, microphone audio mute control
7. Zone working status and basic operation: including audio Source of each zones, volume level and adjustment, zone audio mute status and control, zone microphone mute status and control.
8. Zone information display area: including Zone name, firmware version number, LAN IP address, network module firmware version number, network module MAC address

9. Zone audio source display and switching: including current audio source display, public area and zone audio source options
10. Zone audio output display area: display "playing" or "pause"
11. Zone audio adjustment area: including audio output volume adjustment, BASS adjustment, TREBLE adjustment
12. Zone audio operation area: including zone audio previous song, play/pause, next song, left channel output mute control, right channel output mute control, restore factory settings
13. Zone EQ modulation area: including Pre Gain adjustment, EQ point switch, EQ point modulation, and the application and storage of EQ parameters, and etc.
14. Partition EQ preset area: includes preset EQ option selection, EQ parameter application, and reading

4. Control and Interface Description

4.1 Bluetooth Audio control

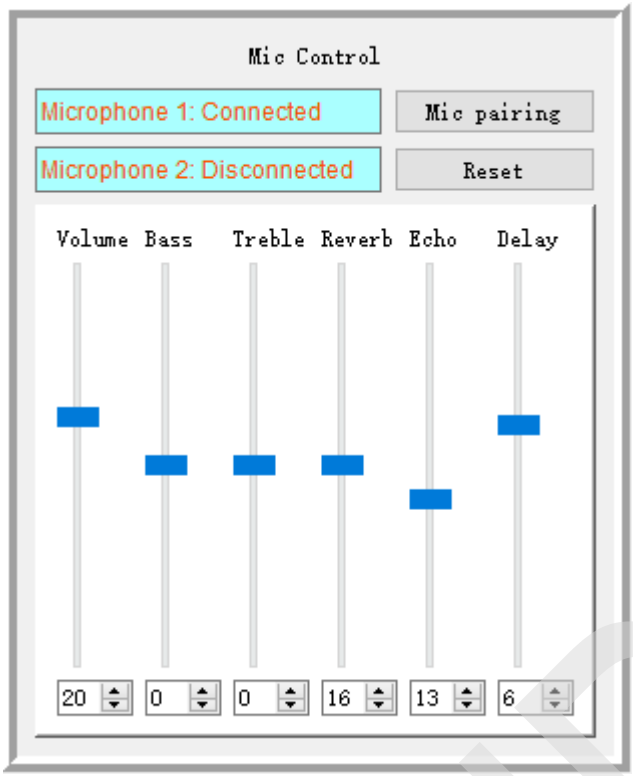
The 4 zones of CL-4 share one same Bluetooth audio input, and the controls related to Bluetooth audio are displayed on the CL-4 Tool public area interface. As shown below：



The display status area shows the Bluetooth working status: "pairing", "connected" and "playing". During the Bluetooth working, can control and click the previous song, play pause, and next song. “Enter pairing” button can be disconnect the current Bluetooth connection and re-pair Bluetooth.

4.2 Microphone Audio Control

The 4 partitions share the microphone audio input, and the microphone-related parameter settings are displayed on the CL-4 Tool common area interface. As shown below:



Microphone 1/ Microphone 2: Shows the microphone connection status.

Mic pairing: Control the microphone receiving module to enter pairing state

Reset button: will reset the microphone configuration parameters to the factory default state

Volume:Microphone input volume level, range 0~32

Bass: Microphone audio Bass level, range -5~5

Treble: Microphone audio Treble level, range -5~5

Reverb: Microphone audio percentage of reverberation output、Damping、density of reverb tail、decay of reverb tail、the ratio of wet (reverberated) signal to the mixed outputand other parameters to adjust, the level range is 0~32

Echo:Adjust the attenuation value of the microphone audio echo, the level range is 0~32, the lower the level, the greater the attenuation value until there is no echo

Delay:Adjust the interval between microphone echoes. It is valid when ECHO is turned on. The level ranges from 0 to 10. The higher the level, the longer

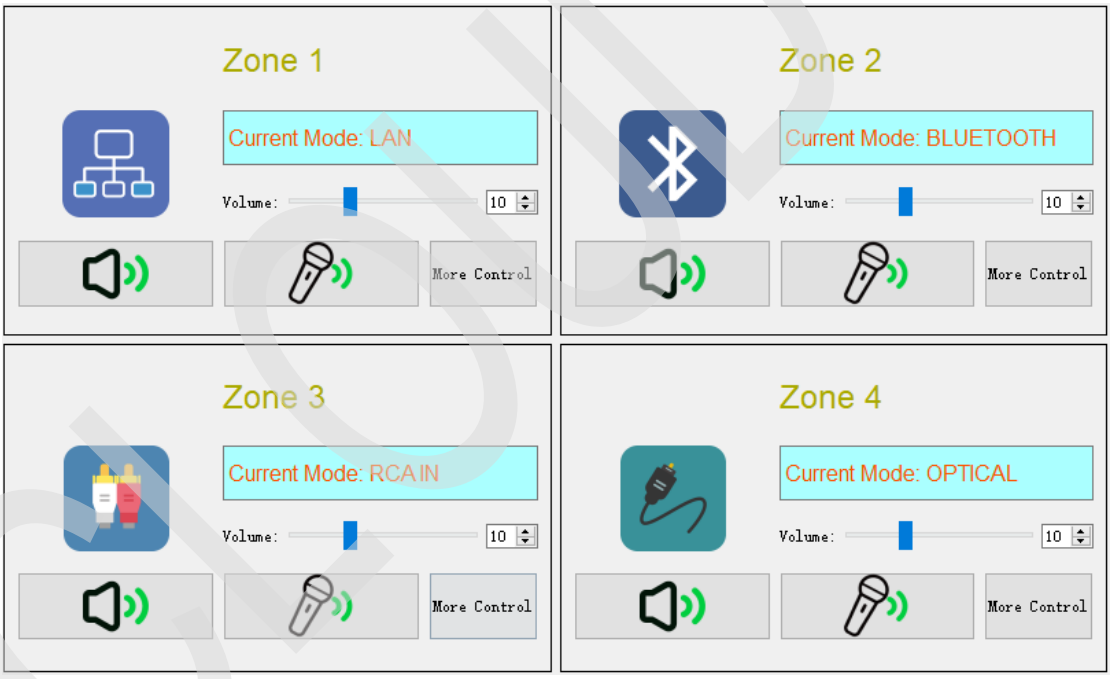
the echo delay time

4.3 Pubilc Mute Control

In the public display interfacearea, the audio output of all zones can be muted, and the microphone audio can be muted.

4.4 Zones overview and basic control

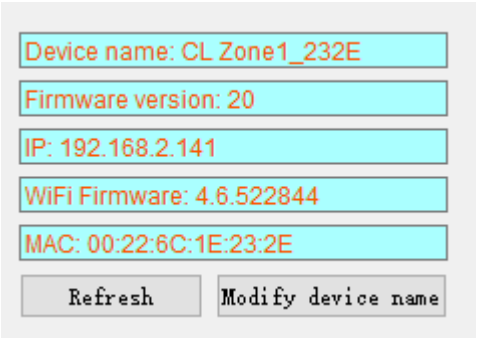
In the display interface of the public area, you can see the audio source, volume level, and mute status of each zone. Also can click the corresponding button to adjust the volume, mute the audio or mute the microphoneof the certain zones alone, the mute status will be stay on the interface. Details as shown below：



4.5 Zones' information display and modification

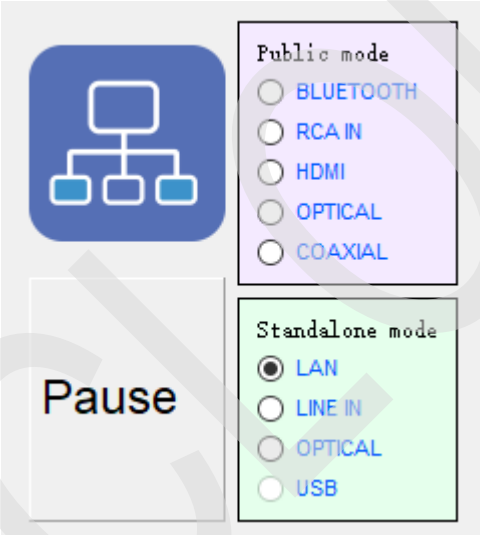
In the zone's display interface, it's name, firmware version number, LAN IP address, network module firmware version number, and network module MAC address are shown; The "Refresh" button can refresh the displayed content, and the "Modify device name" can modify the zone's name , after

modification, the network module will automatically restart to take it works.



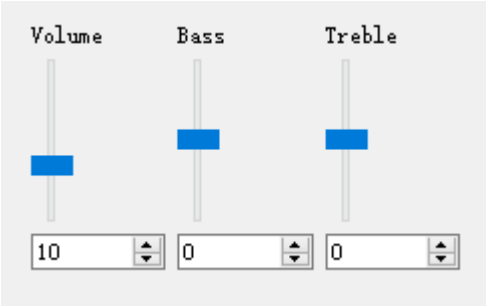
4.6 Zone audio Source display and switching

The audio source of each zone includes BLUETOOTH, RCA IN, HDMI, OPTICAL, COAXIAL as the public functions, and the independent of each zone: LAN, LINE IN, OPTICAL, USB. You can click to select the audio source of this area, and the audio source icon will be shown on it. When the audio source is playing, the audio output area shown "Playing", but when there is no audio signal playing, the audio output area shown "Pause".



4.7 Zone audio output adjustment

In the audio adjustment area of each zone, you can adjust it's: audio output volume, BASS level and TREBLE level. Which is shown as below:



Volume: Source audio output volume level, range 0~32

Bass: Source audio output Bass level, range -5~5

Treble: Source audio output Treble level, range -5~5

4.8 Zone Audio Operations

When each zone in LAN mode or USB mode, can click the operation button on the interface to control previous song, play/pause, and next song. When clicked "Mute L" or "Mute R" buttons, it'spower output of left Channel or right Channel can be muted respectively, andthe button will turn red to indicate it, which as below shown:

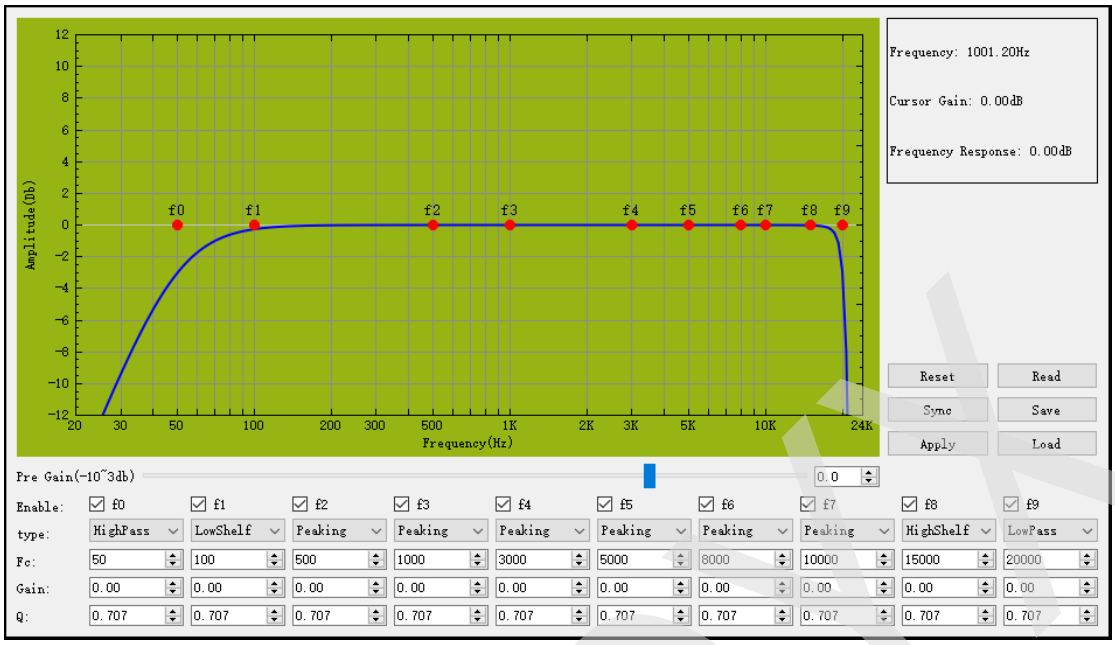
4.9 Zone restore factory settings operation

Click the "Factory Reset" button of the zone to restore the factory settings of its following parameters：

1. Reset the output audio volume level to 10/32
2. Reset output audio BASS and TREBLE level to 0
3. Reset custom SSID
4. Reset EQ to Flat

4.10 EQModulation interface operation

Each zone's interface supports the EQ of the modulated audio output, but only supports up to 10 EQ filters. The modulated EQ curve is displayed on the graphical interface in real time. And it's EQ graphical interface is shown below：



EQThe parameter editor has the following features：

1. Support mouse drag and wheel to set filter parameters
2. Support direct input of filter parameters
3. Support EQ parameter configuration export save and import application
4. Support the operation of synchronizing the EQ parameters of this zone to other zones

When designing EQ, you can add or delete filters by clicking the f0~f9 option boxes. The filter type is selected through the drop-down box. Filter parameters (center frequency f0, gain, Q) can be edited directly or by dragging the mouse or scroll wheel. The editable range of f0 is 20Hz~24KHz, and the editable range of gain is -12dB~+12dB. Note that the value of f0 cannot be set too small, otherwise the IIR filter is prone to distortion, and the gain cannot be set too large, which will easily cause data saturation.

EQIn the parameter editor interface, Pre Gain adjustment is supportedranging from -10db to +3db.

In the EQ parameter editor interface, the functions of each button are described as follows：

Reset：Reset the EQ curve to Flat

Read：Read the EQ in the real-time application of the device

Sync：Synchronize the EQ parameters of the current zone to other zones and apply

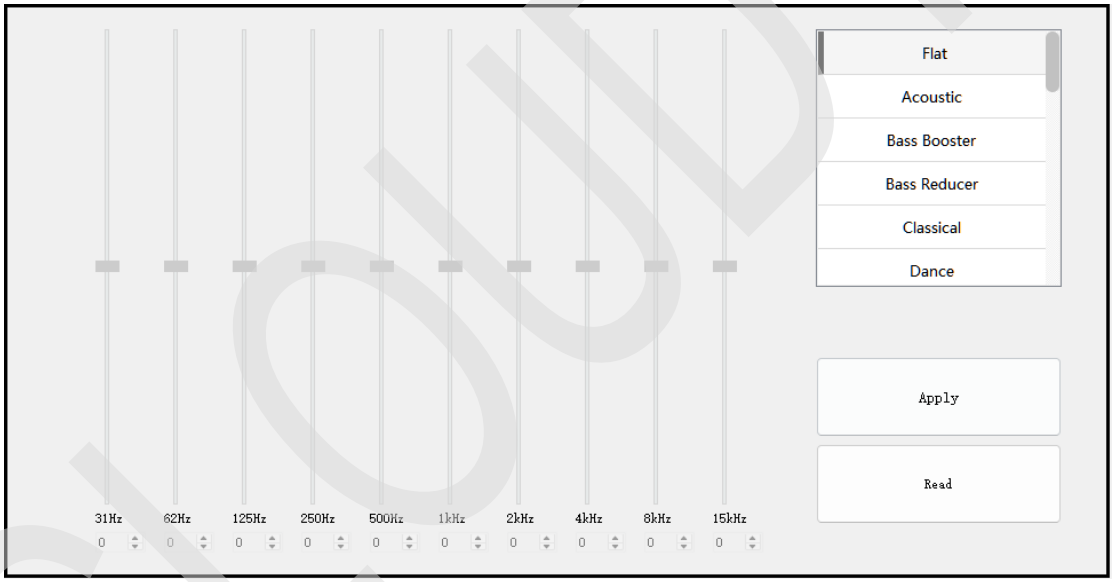
Save：Save EQ parameters to a local folder

Apply：Apply EQ parameters to devices

Load：Load the locally saved EQ parameters, click Apply after loading to take it effect

4.11 EQ preset interface operation

Each partition page supports the selection of preset EQ, and the preset EQ interface has multiple preset options. The preset EQ graphical interface is shown in the following figure:



In the EQ parameter editor interface, the function descriptions of each button are as follows:

Apply: Apply EQ parameters to the device

Read: Read EQ in real-time applications of the device