

MX-1800

8x8 Digital matrix with DSP



12x8 DSP matrix, with 7" touch screen and remote control via PC and APP for mobile devices.

Each zone supports one MX-1888 or MX-1880 remote control panel, with UTP cable link.

The matrix can also be connected to up to 4 8-zone message desks, linked by UTP cable.

Each input and output has a 7-band graphic equalizer and independent volume.

The MX-1800 matrix has the following audio inputs:

- 8 balanced Line level inputs.
- 2 microphone inputs with phantom power +48V and independent volume control. One of them can be programmed as an emergency microphone for general announcements.
- 1 MP3 input with independent volume control. It has an internal storage of 4Gb, optionally expandable to 32Gb, and through a device with external USB connection.
- 1 internal FM tuner input.
- 1 analogue telephone input. The system allows to manage the priority between the telephone and the announcements.

The matrix has 8 balanced Line level outputs.

In addition, the MX-1800 matrix incorporates other functionalities:

- Weekly event scheduler. Allows programming of background music broadcasting schedules, or message broadcasting.
- Output monitor with built-in internal loudspeaker and volume adjustment.
- Configuration of network parameters.
- MP3 file manager.
- Password manager.
- Pre-warning chime volume adjustment.
- MP3 file source selector (internal or external USB).
- Ethernet network connection for remote control via PC or APP for mobile devices (requires WiFi connection).
- 8 emergency input contacts, as well as 1 general emergency contact and audio input for external emergency messages.

The MX-1800 has 230Vac/110Vac 50Hz power supply and 24Vdc emergency power supply.



EQUIPOS Y SISTEMAS MEGAFONÍA/INTERCOM • PUBLIC ADDRESS SYSTEMS

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Technical characteristics

Model	MX-1800
Power supply	~230V/50Hz
Emergency Power supply	24v DC
Sensitivity Input MIC1 & MIC2	10mV
Sensitivity output lines 1-8	250mV
Voltage output lines 1-8	1V
Input sensitivity EMC	250mV
Frequency response MIC (± 3db)	80Hz~10kHz (± 3 dB)
Frequency response LINE (± 3db)	20Hz~20kHz (± 3 dB)
Radio Frequency Band	86-108 MHz
Max Output noise	<3mV
Output Distortion (@1kHz)	<1% 1KHz
Dimensions	484mm×375mm×132mm
Weight	10Kg



Safety warnings



TO REDUCE DE RISK OF ELECTRIC SHOCK, DO NOT OPEN THE COVER (OR BACK PART). INTERNAL COMPONENTS CANNOT BE REPLACED OR REPAIRED BY THE USER. CONSULT AUTHORIZED SERVICE PERSONNEL ONLY



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to users.



The exclamation point within an equilateral triangle is intended to alert the user to important operating and maintenance instructions in the literature accompanying the equipment.

CAUTION

Ignoring the caution message may result in minor injury or damage of the product.

Do not expose the equipment to dripping or splashing water, do not place objects filled with liquids or naked flame sources, such as candles, on the appliance.

The working environment must be dry and completely free of dust.

To clean the equipment, use only a dry cloth. For persistent stains, disconnect the equipment from the power supply, use a cloth slightly dampened with a neutral soap solution. Dry the equipment thoroughly before reconnecting it to the power supply. Do not use the equipment if liquid has penetrated inside, wait for it to dry first.

Do not cover or block ventilation openings.

Install in accordance with the UDE's instructions.

Do not install the product near heat sources such as radiators, central heating grills, cookers or other heat-emitting appliances.

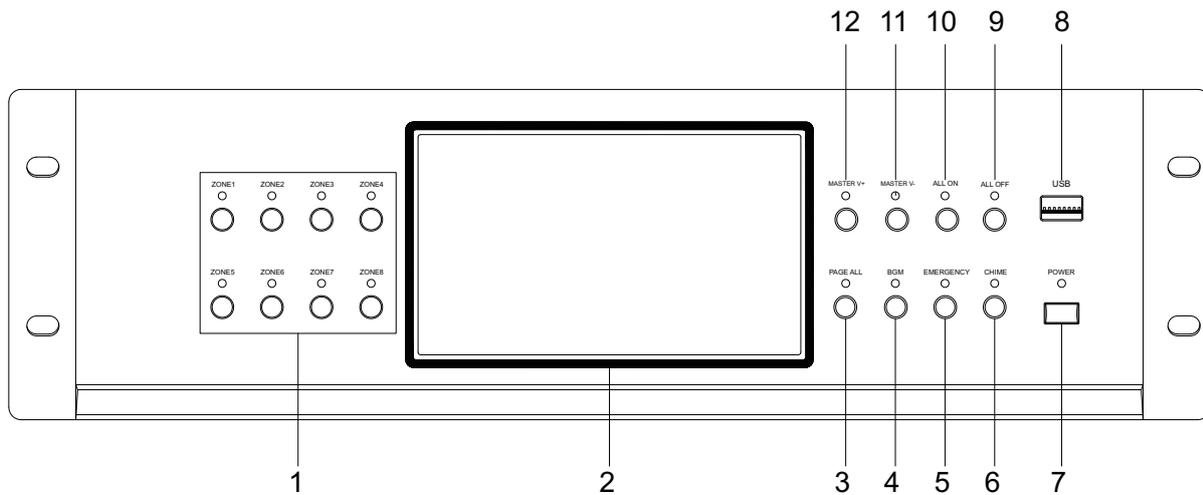
Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades and a third grounding prong.

The wide blade or the grounding prong provides added protection for the user.

Should any intervention or access to the interior be required to make any configuration, the device must be disconnected from the power supply beforehand, taking into account that if it has a mixed power supply (AC/DC), it must be disconnected from both sources.

If the protection fuse blows, disconnect the equipment from the power supply and replace it with a fuse of the same value. Never replace the fuse with a fuse of a higher value than the rated value.

Front panel



1. 1-8 zones button and indicator

2. Display/Touch Screen

The display shows dynamically all information of the system and it is also the touch screen for operation.

3. Page all button and led indicator

4. Background music source button and led indicator

5. Emergency button and led indicator

It can send the warning signals to all zones simultaneously by pressing the full-warning button of the system, and meanwhile, the indicator light is ON.

6. Chime and indicator

7. Power

8. USB

Use to connect the U disk with MPS programs, mobile hard disk and other memory devices. It can directly play the songs of the U disk and copy the programs for built-in MP3 player.

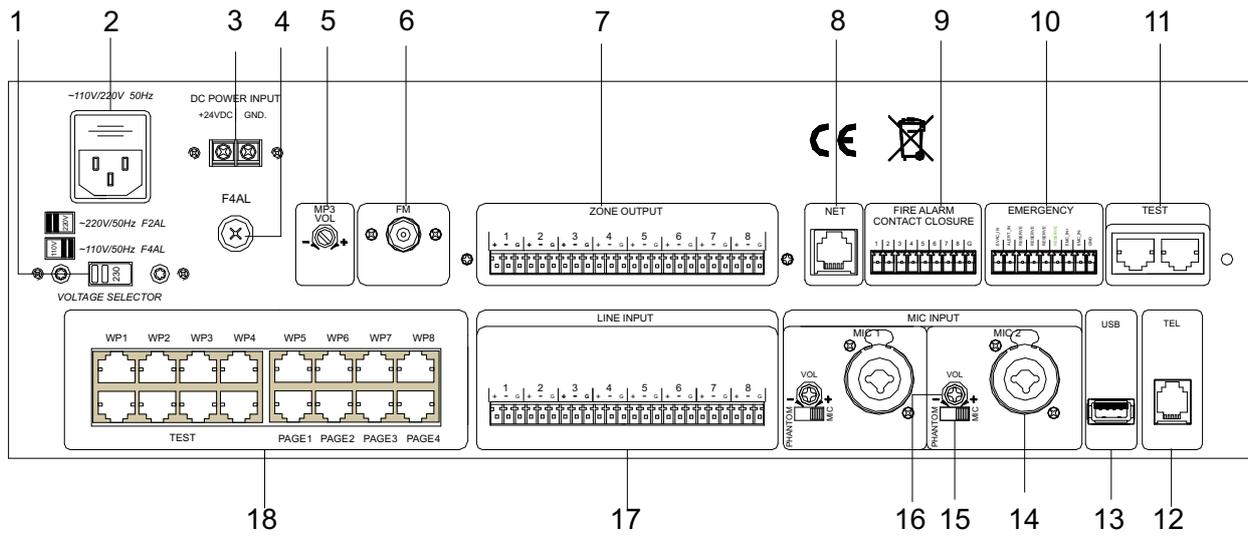
9. All-page close and indicator

10. All-page open and indicator

11. Volume control -

12. Volume control +

Rear panel



1 AC 110V/220V Selector Switch

2 AC Power Input Socket

3 DC 24V connection terminal
Externally connect with DC 24V power supply.

4 DC 24V Fuse
Use for the fixed DC power supply. If it is fused, please replace it with the fuse of the same specification. A continuous fusing indicates that there are some faults.

5 MP3 volume control knob

6 FM Antenna Interface

7 Zones Output
Connect with the power amplifier.

8 Network Interface
It is used to connect the LAN, through which the remote control of the system is performed.

9 General Purpose Inputs
GPI Remote controls for zone alarm activation.

10 EMG Signal Input
Remote controls for activation of alarm or evacuation messages pre-recorded in the device or from an external source to all zones.

11 Testing Interface
It is used for testing.

12 Telephone Interface
It is used to connect the telecom signals to the device.

13 USB
It is used to update the applications.

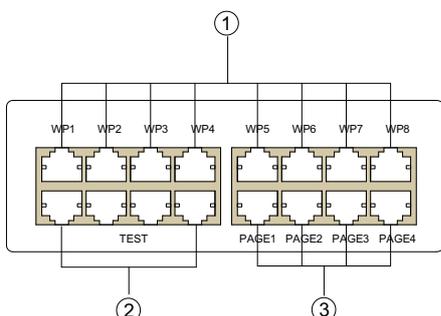
14 MIC2 Input Interface

15 +48V Phantom Power Control Switch (MIC1-MIC2)
MIC1 and MIC2 are individually controlled. Turn left the switch to open this power source when the +48V phantom power supply microphone is used.

16 MIC Volume Control Knob

17 Line Input Interface

18 Control Panel Interface



1 Control panel interface
Connect 8 sets MX-1880 / MX-1888 control panels.

2 Extension interface

3 Connect 4 MX-1801 paging microphones

Operating instructions

After turning on the power switch, the MX-1800 starts with the following main interface.



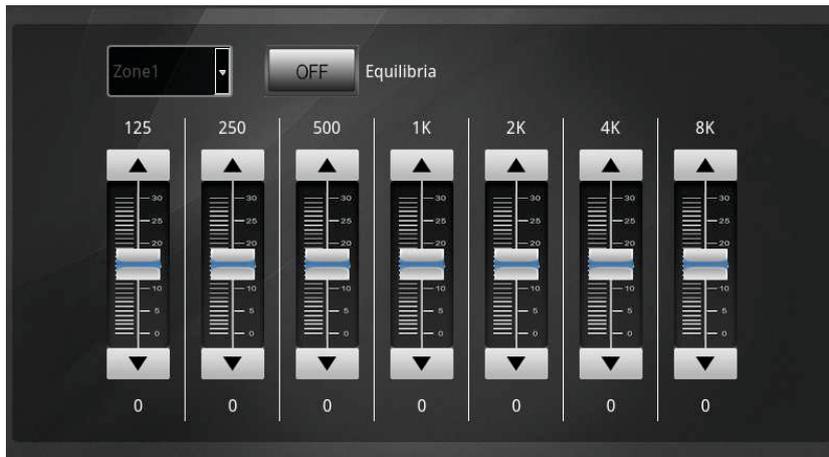
PLAY

In the following interface, the list box on the left is the directory list of built-in player and the list of songs under this directory. Through the operating buttons of MP3, the operations of Play, Stop, Previous Song, Next Song and Playback modes can be available. On the right of the interface, it is the audio interface. It can achieve the multi-channel operations of automatically searching FM frequency, playing the desired FM frequency, playing the previous channel/next channel, playing the specified channel, collecting the channels, etc.



ZONE SETTINGS

As shown below, each zone can be equalized. During the operation, it is necessary to turn OFF the equilibrium button



INPUT SETTINGS

As shown below, each sound source can be equalized and the volume can be set. During the operation, it is necessary to turn OFF the equilibrium button



MONITOR

Only one zone can be monitored each time. When the background color of zone button becomes blue, it indicates this zone is monitored. When this zone will not be monitored, it can be canceled by clicking the key "Cancel" on the right of this interface. The volume can also be controlled.



SETTINGS

You can set up all information of the entire system in this interface. You can set up all items in this interface before you perform the operations like Play in the main interface, and various items of the system can then be accurately executed and operated.



Network settings. Click the button “Network Setting” to enter the IP address setting interface. As shown below, there are ID address setting and the current IP address information of this machine in this interface. After the IP address is set up, click the button OK. The newly configured IP address cannot be effective unless the device is re-started.



Date and time settings. Please align the current clock when setting the system time, which relates to the implementation punctuality of timing point. The timing point can be accurate to seconds. So, when re-setting the system time, please pay attention to the setting of seconds.



File management. In this setting, you can copy the sound source of this machine to U disk or copy it from U disk to this machine. During the operation, you shall select the sound source and direction to be copied, and then click the button "Copy".



Timer Settings. Create the timing point: select the button “Create” to set up the Start Time and Stop Time, select the Day of Week, Zone and Sound Source, and then click the button “Save” to add the timing point.



Password Settings. The password setting is mainly for the phone calls. When there is a phone call access, it can be answered only by entering the password. The password can only be set up to four numbers.



Others Settings. As shown below, you can set up two setting items, namely, input for BGM (background music) and input for PAGE ALL.



Controller. In this interface, you can view the ID number, IP address and controlled zones and other information of the control terminal in the system.



ID	Priority	Device Info	Control Zones
03000041	3.0	192.168.0.147:4000/0000	1, 16

PC software for system management

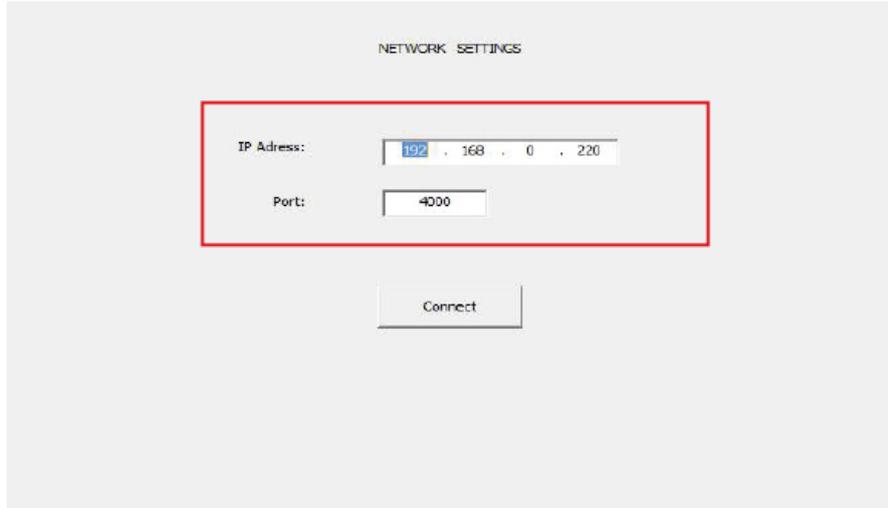
The MX-1800 controller includes a system management software for PC use.

Connect the MX-1800 Matrix to the computer via LAN connection.

Set the IP address of the PC and MX-1800 to the same network segment (for example, the IP address of the host device is 192.168.0.220, the IP address of the computer should be 192.168.0.10)

Click on the program icon. It will start automatically without prior installation.

Enter the software connection interface and input the host's IP address and port number. As shown below:



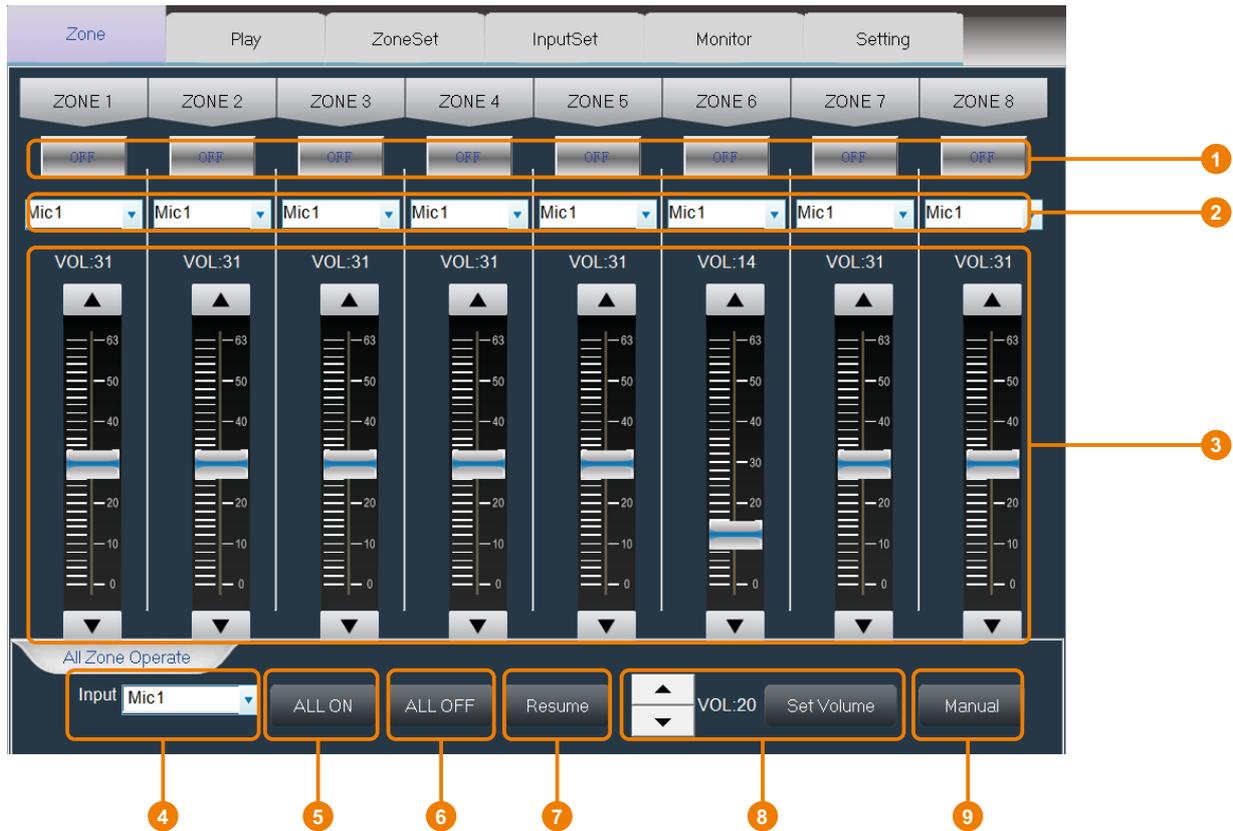
NETWORK SETTINGS

IP Address:

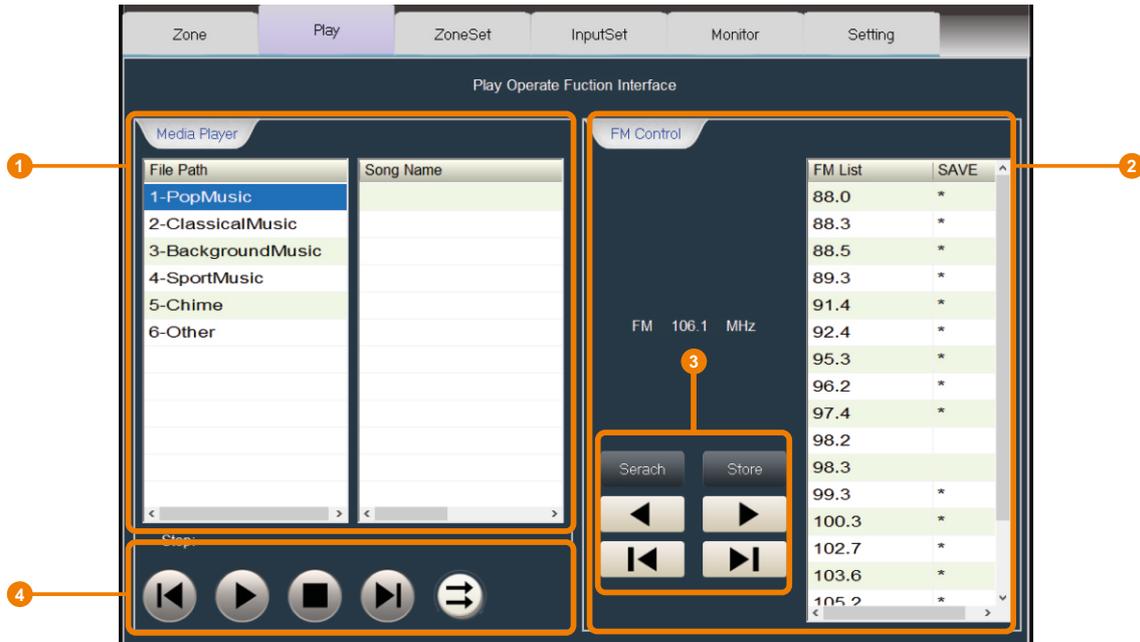
Port:

The PC software has the same graphical interface as the MX-1800 on its front screen.

Main Screen (ZONE)



- 1 **Paging button.** Allows you to activate or deactivate the zones for the broadcasting of warnings or music.
- 2 **Zone sound settings.** Allows the selection of the emission source for each zone.
- 3 **Zone volume control.** Allows volume adjustment for each zone
- 4 **“All zones” source settings.** Select “all zones” audio source.
- 5 **All ON.** Select all zones.
- 6 **All OFF.** Deselect all zones.
- 7 **Resume.** Restore the previous operation state.
- 8 **Volume adjustment.** Allows you to activate or deactivate the zones for the broadcasting of messages or music.
- 9 **Timer.** Enable o disable timing reminded

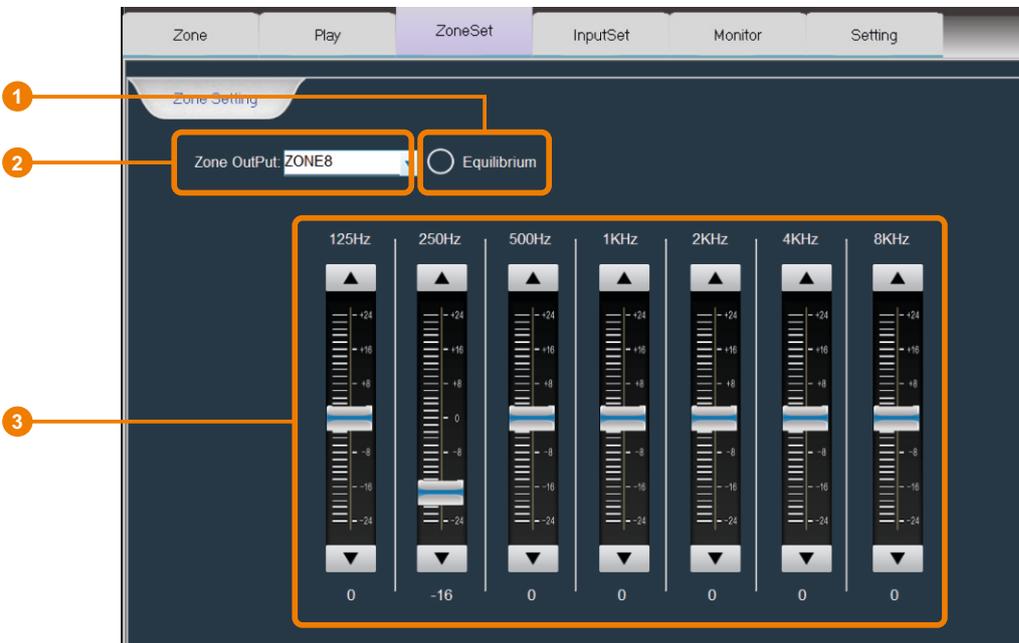


1 Media Player. Select the folder and tracks you want to broadcast.

3 FM Radio Stations. Auto-search / Store / Previous FM / Next FM

2 FM Radio Stations. Allows the selection of available FM frequencies.

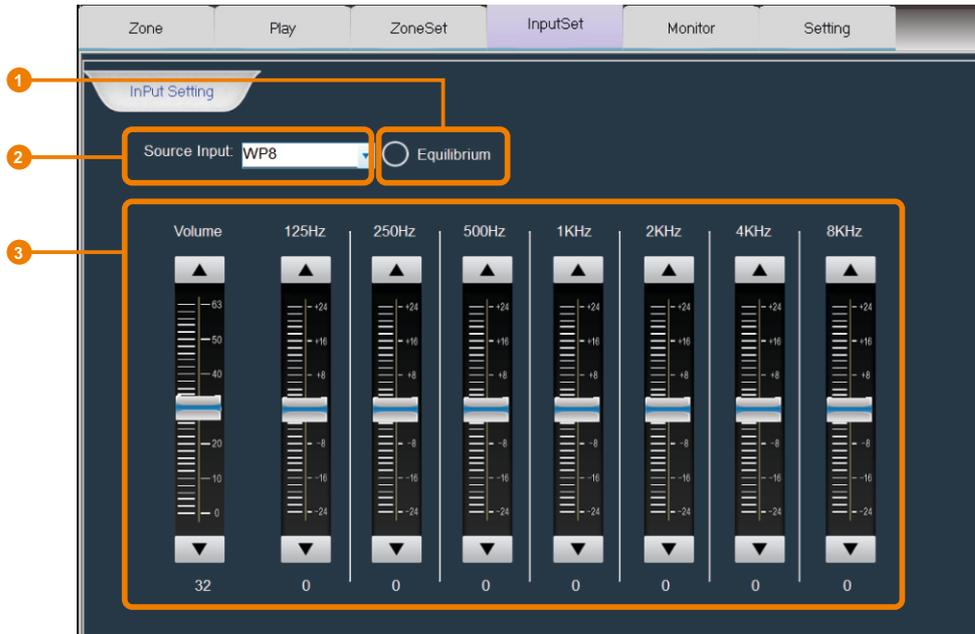
4 Playback modes. Sequence / Loop / Shuffle / Single Loop



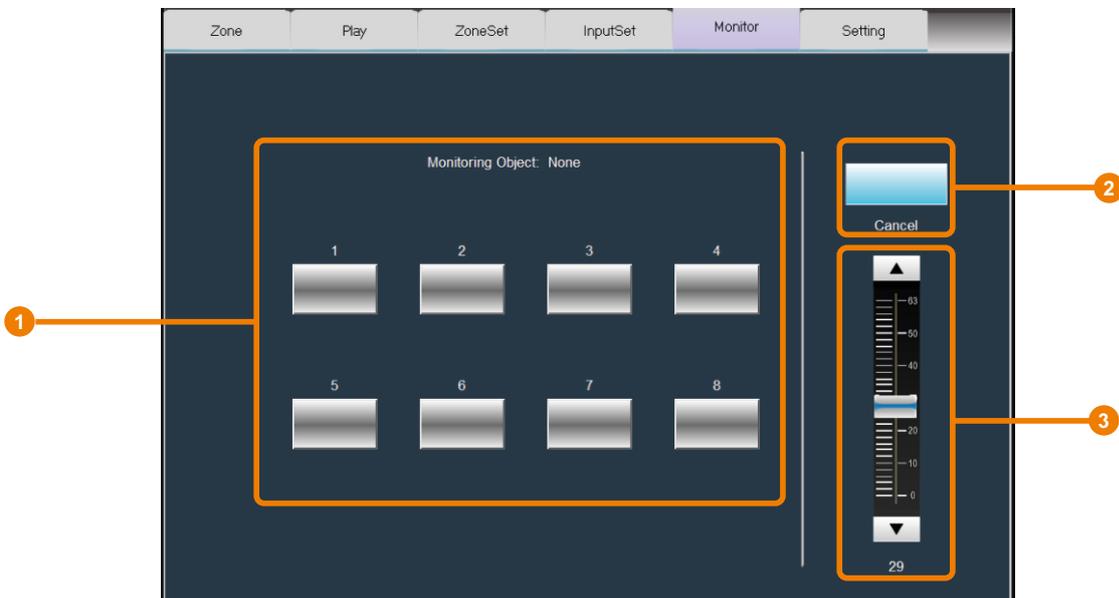
1 Equilibrium. Reset equalizer.

3 Band Equalizer. 7-band equalizer adjustment.

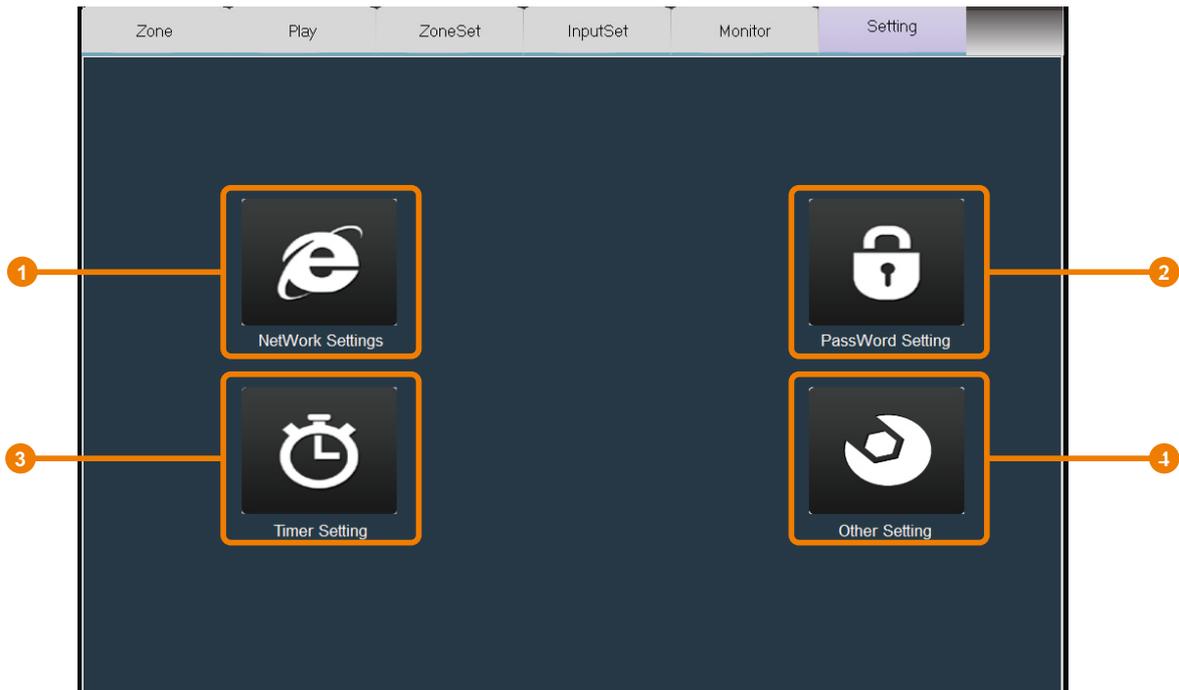
2 Zone Output. Select the zone you want to equalize.



- 1 **Equilibrium.** Reset equalizer.
- 2 **Source input.** Select the audio source you want to equalize
- 3 **Band Equalizer.** Volume and 7-band equalizer adjustment



- 1 **Monitoring zone selection.** Select the desired zone to be monitored. Selected will turn blue.
- 2 **Cancel.** Zone monitoring cancellation
- 3 **Monitor volume adjustment.** Select the desired zone to be monitored. Selected will turn blue.



1 Network settings. Allows to configure your IP's settings

3 Timer Settings. Create, remove or edit timing points for message broadcasting

2 Password Settings. Allows you to receive phone calls by entering the password before. The password must be 4 digits.

4 Other Settings.