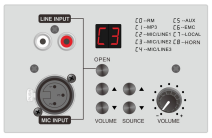
adertech

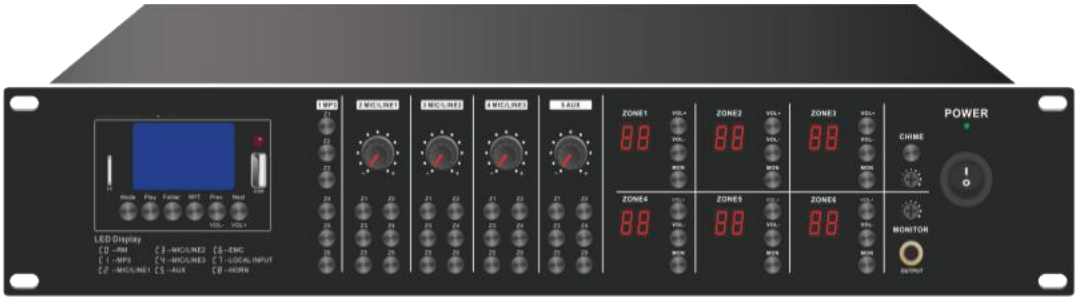
MPAMP-6030X
MPAMP-6060X
MPAMP-6120X

6 Zone Matrix Amplifiers with MP3/FM/BT









USER MANUAL

SAFTY WARNINGS!

1. Read and keep these instructions.
2. Heed all warnings and follow all instructions.
3. Do not use this apparatus near water.
4. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
5. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus that produce heat.
6. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong is provided fo r your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
7. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
8. Only use attachments/accessories specified by the manufacturer.
9. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
10. Unplug this apparatus during lightning storms or when unused for long periods of time.
11. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
12. This appliance shall not be exposed to dripping or splashing water and that no object filled with liquid such as vases shall be placed on the apparatus.
13. Plug this apparatus to the proper wall outlet and make the plug to be disconnected readily operable.
14. Main plug is used as disconnected device and it should remain readily operable during intended use. In order to disconnect the apparatus from the mains completely, the mains plug should be disconnected from the mains socket outlet completely.
15. WARNING: To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.
16. An appliance with a protective earth terminal should be connected to a mains outlet with a protective earth connection.

WARNING!

TO PREVENT FIRE OR SHOCK HAZARD, DO NOT USE THE PLUG WITH
AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES
CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.
TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE
THIS APPLIANCE TO RAIN OR MOISTURE.
TO PREVENT ELECTRICAL SHOC
K, MATCH WIDE BLADE PLUG TO WIDE SLOT, FULLY INSERT.

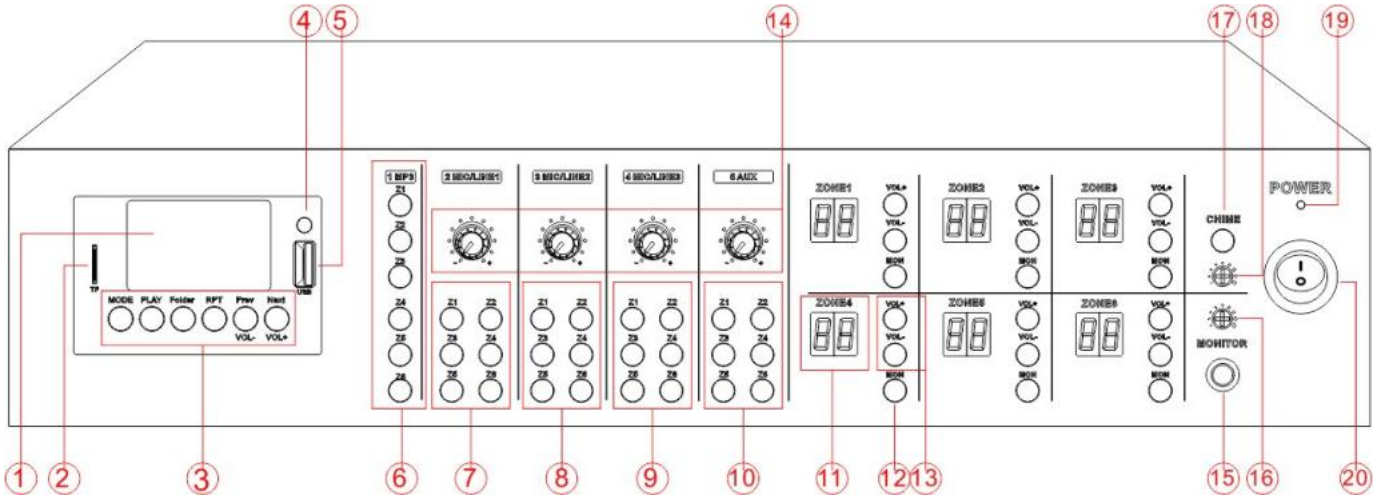


INTRODUCTIONS

Features:

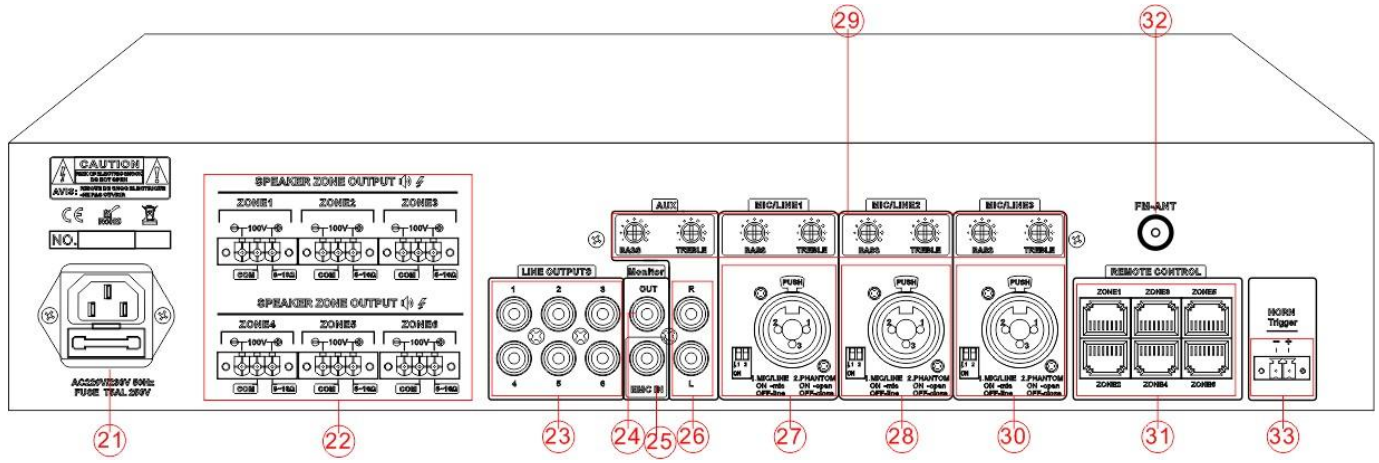
- 6×6 Matrix matrix amplifier with 6 x 30W, 6 x 60W, 6 x 120W outputs.
- 5 sources and EMC input matrix distributed to 6 speaker zones.
- MP3/FM/Bluetooth, 3 mic/line, aux input & EMC mute input.
- 6 channel matrix amplifier controller with audio sources, zone volume control .
- Matrix amplifier with remote control panel and remote paging microphone.
- 6 remote control by CAT5 cable up to 999 meters to select program and control volume.
- 6 remote paging microphone by CAT5 cable up to 200 meters communication.
- Different 6 zone of different music program and different volume output.
- 6 Zone speaker outputs of 100V or 8-16 Ohms speakers.
- 3 mic/line switchable inputs of balanced XLR with 48V phantom power.Mic1/Mic2/Mic3 have chime functions.
- 1 aux input and an integral USB/SD/FM player and Bluetooth can be matrix switched to any of the 6 zones independently.
- Each microphone input has switchable phantom power.
- Priority:Trigger>EMC>Remote Paging Mic>BT of Remote control panel>Mic1/Mic2/Mic3
- 6 zone remote paging microphone for paging & announcement system.
- Designed for multi-room systems requiring different audio sources.
- Integral USB/SD/FM audio player and remote control.
- Internal Bluetooth receiver with mobile use.
- 100V or 8-16 Ohms operation for PA system and hi-fi both sound system.
- 6 independent output zones for multiple room sound system.
- 24V mute contacts to integrate with fire alarm system.
- AC230V and 24V DC both operation system.

FRONT PANEL



1. Mp3/FM/Blue tooth media player module.
2. SD card slot.
3. Function button.
4. IR receiver
5. MP3 slot.
6. Zone selector for MP3:
   You can choose MP3 play to any of zone
7. Zone selector for Mic1/Line1:
   You can choose MIC1/Line2 play to any of zone
8. Zone selector for Mic2/Line2:
   You can choose MIC1/Line2 play to any of zone
9. Zone selector for Mic3/Line3:
   You can choose Mi3/Line3 play to any of zone
10. AUX output to any zone.
11. Display of zone:
    This will show which audio source is playing on currentzone.
12. MON: Monitor Open or Close
13. Zone Volume control.
14. Volume control for audio input
15. 6.3mm phone jack Monitor output
16. Volume control for Monitor
17. Chime
18. Volume control for Chime
19. Power indicate
20. Power Switch

REAR PANEL



21. AC Power Socket.
22. Zone output-100V&8ohms
23. 6ch Signal output
24. Monitor RCA output

25. EMC input
26. AUX input.
27. Mic 1/Line 1 Input.
28. Mic 2/Line 2 Input.
29. Bass & Treble volume control
30. Mic 3/Line 3 Input.
31. Remote Microphone & Remote volume control interface.
32. FM antenna.
33. Horn output (24V signal to trigger play the EVAC message build in).

AMPLIFIER OPERATION GUIDANCE

Connection and setup

With the amplifier power switched off (20), connect the rear IEC inlet (21) to the mains using the supplied mains lead (or anequivalent approved type). Ensure that the voltage is correct and the speaker connect is correct then power on

The amplifier has 5 input channels and an integral multi-source audio player.
Microphone input 1, 2 and 3 are designed for either microphones or line level sources (such as a CD/mp3 player or output from a matrix) via combo connectors on the rear panel, it is switch able by DIP switch.
These can accept either XLR or 6.3mm plugs for balanced or unbalanced signals.

DIP switches

Mic/Line inputs 1, 2 and 3 each have 2 DIP switches on the rear panel to set the input level and/or activate +20V phantom power for use with condenser microphones.

Set the level correctly for the type of input source connected (Mic or Line)
If the source connected is a condenser microphone which requires phantom power, make sure that the phantom is switched on for that channel.

Be sure to make these DIP switch settings when the amplifier is switched off. Making any changes when the amplifier is powered up may cause loud bangs through the system which can damage the speakers.

Priority and Emergency Activation

1. Horn output- with a 24V trigger voltage will active the message build in
2. EMC input- this one is EMC audio input
3. Remote microphone
4. Other Local input

Signal Inputs and Outputs

Connect microphones or line signals to Mic/Line 1, 2 and 3 inputs (27,28,30) using good quality signal leads. A stereo or mono line level source can be connected to the Auxiliary channel 4 input on 2 RCA connectors (26)

For checking the output of any zone, an assignable Monitor output can be connected to headphones from the front panel 6.3mm jack (15) or as a line output (e.g. to active speakers) from RCA connectors at the rear (24)

Each zone output has a dedicated RCA signal output on the rear panel (23), which can be connected to the line inputs of active speakers or amplifiers. These are in addition to the speaker outputs detailed below.

An antenna input (32) is provided on the rear panel for connection to an external aerial for FM tuning
There are Bass and Treble volume control on rear panel to adjust the sound of MIC and Line input signal

Speaker outputs

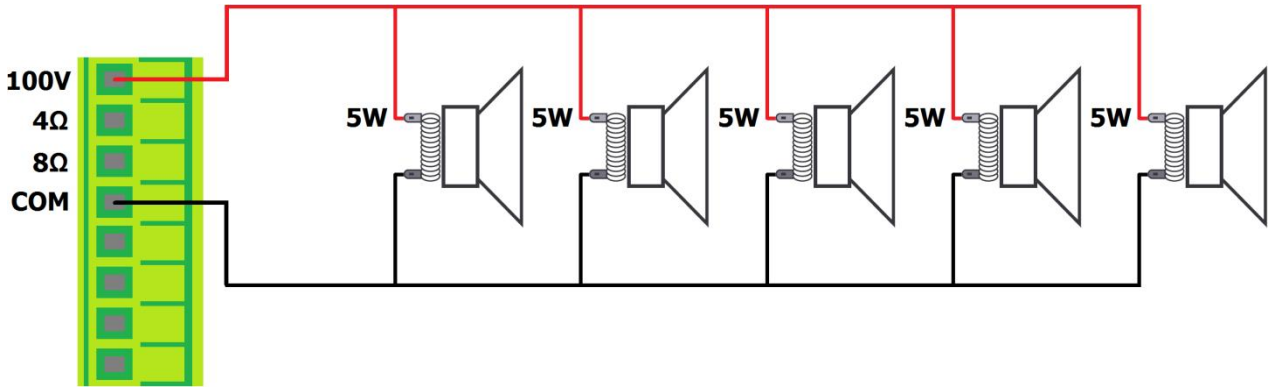
The amplifier has a separate speaker output for each zone, connected via 3 large modular terminal plugs. Each plug can be removed from the rear panel for convenient connection of speaker outputs to 2 zones.

Each zone output can be used to power either 100V line speakers or standard low impedance speakers. These 2 configurations cannot be used together, so it is important to decide which will be used at the start.

100V line systems

For 100V speakers, connect the selected zone output to the first speaker in the zone using double-insulated speaker wire which has adequate current rating to handle the total output of the amplifier.

Connect the “100V” output terminal for the selected zone to the positive (+) connection of the speaker and “COM” output to the negative (-) connection of the speaker. Connect further speakers in parallel to the first speaker with all positive terminals and connected together and all negative terminals connected together as shown below.



A 100V line speaker system can comprise of many speakers connected together. The determining factor for how many speakers can be used on a single amplifier is the power rating. For most purposes, it is advised to connect as many speakers as needed with a combined wattage of no more than 80% of the amplifier’s output power rating (in the case of the amplifier, this is 30W per zone output)

The terminals of a 100V speaker are connected via a transformer and if necessary, this transformer may be “tapped” for different power ratings. These tappings can be used to adjust the wattage (and output volume) of each speaker in a zone to help achieve the ideal total power of the system for the relevant zone output.

Low impedance systems

Alternatively, each zone output of the amplifier is capable of powering one or more low impedance speakers. There is an option on each zone for either a 8-16Ω speaker output to determine the minimum impedance. It is essential to select the correct output terminal when opting for low impedance speakers.

For a single 8Ω speaker, connect the positive (“+” 8-16Ω) wire to the (+) of speaker terminal and the speaker negative (-) wire to “COM” of the amplifier terminals.

In either case, the connected load should have a combined impedance no lower than stated on the terminal. Lower impedance may cause irreparable damage to the amplifier.
The connected speaker(s) must also have a power handling to accept up to RMS loading from the zone output. Lower power handling may risk damage to the speakers.

LED Display meaning:

- C0-Remote Paging Mic
- C1-MP3 Module
- C2-MIC1/Line1
- C3-MIC2/Line2
- C4-MIC3/Line3
- C5-AUX
- C6-EMC
- C7-Local input
- C8-HORN 24V signal

Operation

When all connections to the amplifier are made, turn all rotary controls down and switch on the power
and the power LED will illuminate.

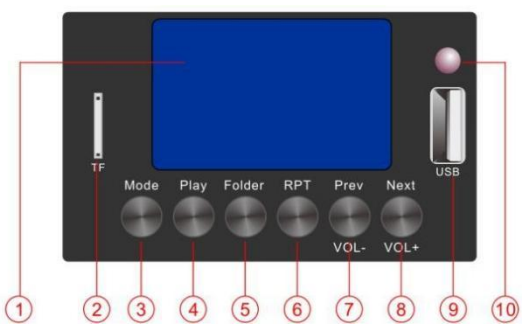
To check for correct operation of the system, select an input source and output zone for testing. In the following example, Mic/Line 1 input and Zone 1 output have been selected.

Press Z1 button on the line of MIC/Line1, if zone1 display C2, that means MIC/Line1 output to zone 1
If you playing MP3, press zone1 on the line of MP3, then zone 1 will have MP3 music and display on Zone1 will show C1

If Zone 1 cannot be heard from the location of the amplifier, use the monitoring feature as follows Press the button of Monitor (12) and connect headphones to the Monitor output (15)
Make sure that the Monitor button for Mic/Line 1 is pressed in and listen through the headphones Gradually turn up the Monitor level control and check for the output to Zone 1

Onboard Multi-Source Audio Player

The amplifier is fitted with a built-in audio player, operated via a backlit LCD display and transport buttons. This section provides access to a Bluetooth™ receiver, FM radio tuner and USB/SD audio player
In order to play audio to one of the zones, it is necessary to press in one of the “Play” buttons (4).



Mode: Select between Bluetooth, FM tuning, USB or SD playback
Play: play music
Folder: hold on the music **RPT:** repeat the music
Prev: Back to last music **Next:** go to next Music
Vol+: Increase volume **Vol-**: Reduce Volume

Short press: Prev& Next **Long Press**: Vol+&Vol-

Bluetooth Operation

In order to play back audio from a smartphone, tablet or other Bluetooth device, the built-in Bluetooth receiver will need to be paired with a device which is within range."

To pair a device with the amplifier Bluetooth receiver, it is necessary to scan for devices in the Bluetooth menu of the sending device and select to pair with "**BT66078**",password:**1234**. Once paired, the display will show it is connect



Select to connect as an audio device and play audio tracks on the smartphone or tablet (or other) and the audio should be heard on the selected zone.

The buttons labelled "Prev" and "Next" can adjust the audio player output volume.
Press and hold "Prev" to increase volume or press and hold "Next" to decrease volume.

If the sending device goes out of range or the Mode of the audio player is changed, the connection will stop. Returning to within range or to Bluetooth mode will restore the pairing.
It may be necessary to re-select connection as an audio device on the sending device.

FM Tuner

Press the Mode button to switch to the FM tuner function. For good FM reception, it will be necessary to connect an external aerial to the Antenna connector on the rear panel using good quality coaxial RF cable terminated .

If no channels are tuned in, press the Play button to begin auto tuning, which scans available stations and stores them as channels within the FM tuner. To step through pre-set stations, press the Previous or Next buttons.

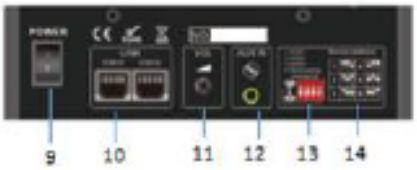
USB/SD Player

The amplifier audio player has inputs for a USB pen drive or SD card with standard compressed digital audio files on them. Inserting either or both of these will switch the player to read from these sources and the display will show "MP3 Mode".

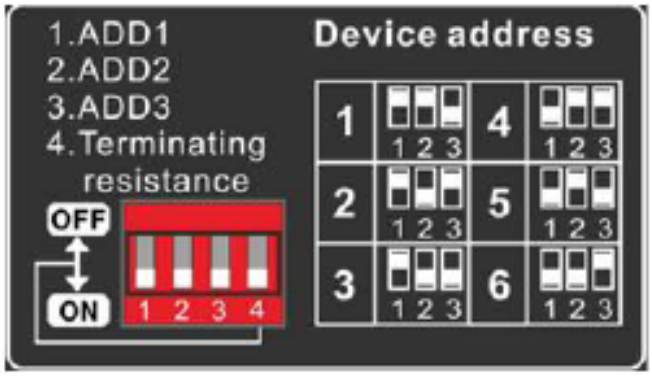
After you Insert the USB it will play automatically, you can use "Prev" or "NEXT" to choose last or next song, "REPT" is for one song or all song repeat.

Remote Paging Microphone and Remote Control Panel





1. Capacitive straw interface
2. Power light
3. Sending light
4. Busy indicator
5. Partition indicator
6. Partition button
7. Partition selection
8. Paging
9. Power switch
10. The network port is connected to the host (through cable, regardless of input and output)
11. Volume adjustment
12. AUX signal input
13. DIP switch
14. Microphone1---6 address setting diagram



MCH-MX6

6 ZONE REMOTE PAGING MICOPHONE

- Communication through CAT6 cable up to 200 m
- Direct power supply from matrix controller
- 6 speaker zone individual, group or all zone paging
- Up to 6 Mics working simultaneously loop connection



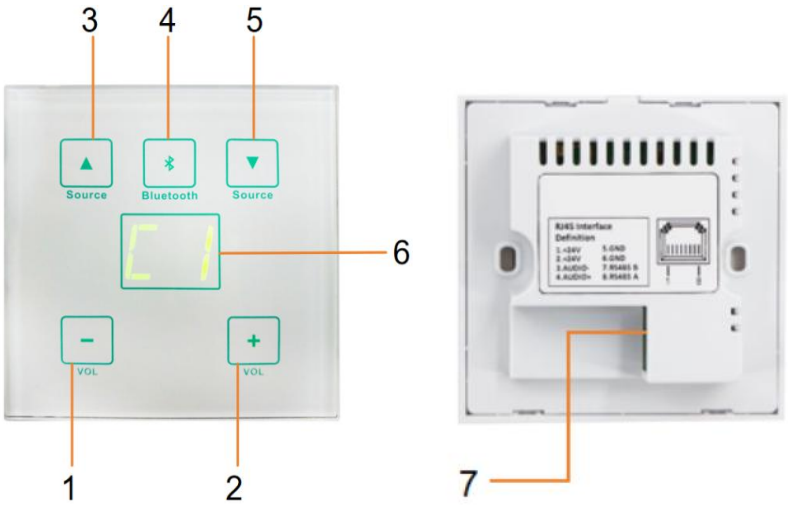
MCH-MX6

CTRL-WP1MX6
CTRL-WP2MX6

REMOTE CONTROL PANEL

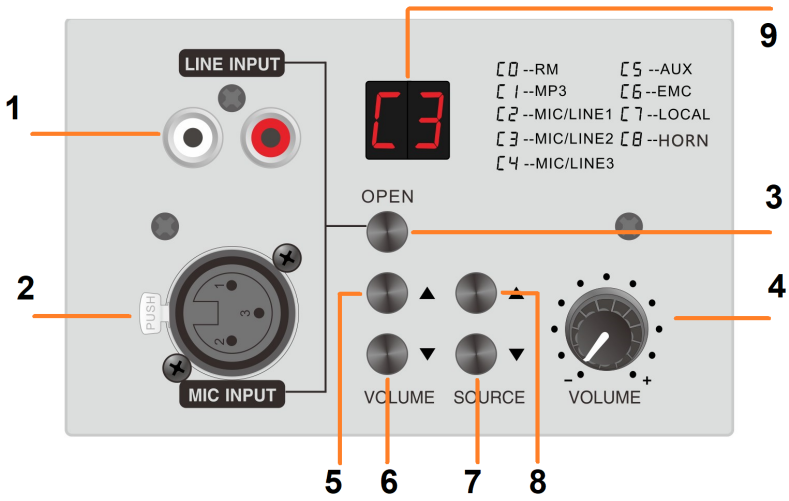
- Communication through CAT6 cable up to 999 m
- Direct power supply from matrix controller
- Audio sources selection and volume control
- 6 units capacity for each matrix controller
- **CTRL-WP1MX6 BluetoothName:BK3254, Password:nopassword**

1. Volume -
2. Volume +
3. Output source Prev
4. Bluetooth switch
5. Output source Next
6. Display window
7. RJ45 port



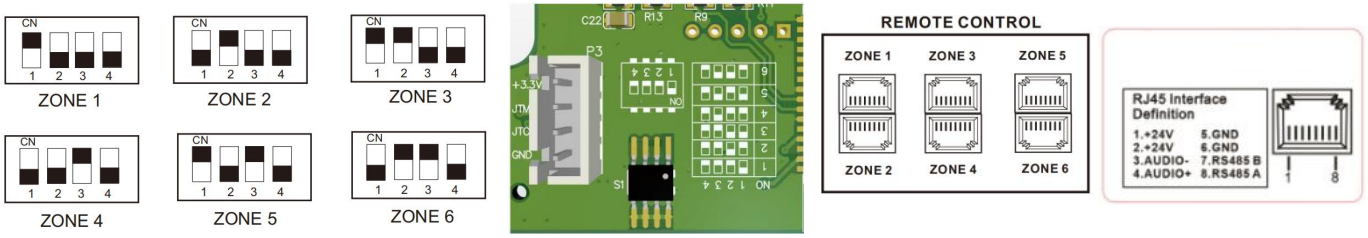
CTRL-WP1MX6

1. Line input
2. Mic input
3. Local panel switch/Bluetooth switch
4. Local panel/Bluetooth volume selection knob
5. Volume +
6. Volume -
7. Output source Next
8. Output source Prev
9. Display for audio source selection



CTRL-WP2MX6

CTRL-WP1MX6 DIP switch guide



Connection and setup

1. The matrix amplifier has 5 input channels and a complete multi-source audio player.
2. Microphone inputs 1, 2 and 3 are designed for microphone or line-level sources such as CD or MP3 players or matrix outputs. through the combo connector on the rear panel they can be switched via DIP switches
3. Can accept XLR plug or 6.3mm balanced or unbalanced signal.
4. Support up to 6 paging microphones or up to 6 wall control panels or no more than 6 microphone + panels.
5. The connection setting needs address matching. Please refer to the rear panel or bottom box of the device for adjustment by DIP switch. Switch the sound source through the front panel button adjustment of the main unit or the touch panel button of the wall control panel.

DIP switch

1. Mic /Line Input 1, 2 and 3 each has 2 DIP switches Set in the rear panel and activate the +48V phantom power condenser microphone.
2. Set the correct level for the connected input source (MIC or row).
3. If the connected source is a condenser microphone that requires phantom power, please make sure the channel of phantom is on.
4. Make sure to turn off these DIP switches when setting up the amplifier. Any changes on the amplifier's power supply can cause a loud noise through the system, which can damage the speaker.
5. The paging microphone and wall control panel DIP switches are used to configure the address to prevent conflicts.
6. The paging microphone speaks to the first partition.

6.1. Press Z1 of the paging microphone, the paging indicator will light up, and the digital display of the host will display C0; press the green CALL button to start talking.

6.2. If you need to speak in the whole area, you can press the ALL button to quickly select, then press the CALL button to start speaking. The main panel LEDs all display C0.

6.3. If the paging microphone control is invalid, please check whether the DIP address switch dial code on the rear panel is correct, whether it matches, and whether there is a conflict.

7. The control panel using configuration.

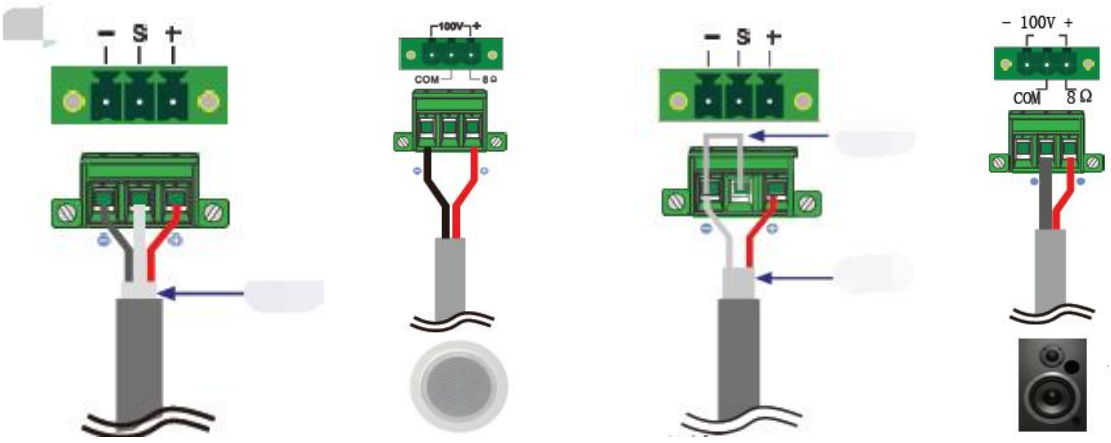
7.1. If you need to use the control panel to select the source, use the control panel channel plus or minus keys to adjust the desired source.

7.2. If you need to play Bluetooth separately, press the Bluetooth switch button, the panel displays C7, and the Bluetooth device can play Bluetooth audio. The volume up and down buttons adjust the volume.

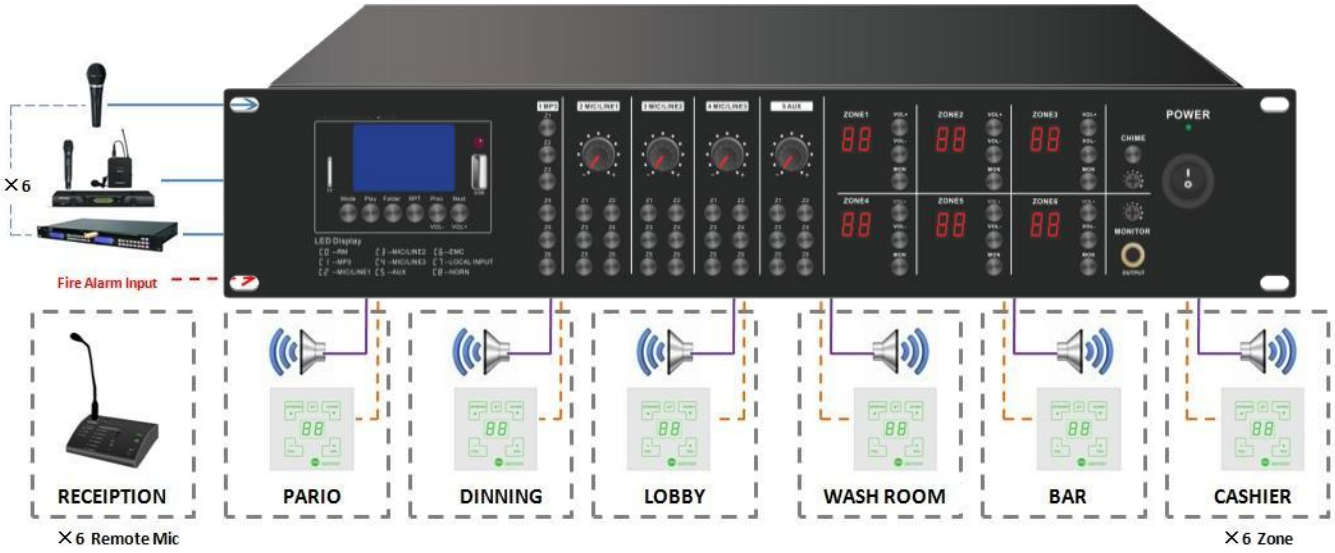
7.3. If the control panel is not displayed, check if the cable is connected correctly. For the corresponding connection method, please refer to the description of the upper right corner of the rear panel network port and the control panel bottom box.

7.4. If the control panel control is invalid, please check whether the DIP address switch dialing of the rear control panel is correct, whether it matches, and whether there is a conflict.

Balanced audio input 100V/70V speaker unbalanced audio input 8 Ohms



CONNECTION DIAGRAMS



SPECIFICATION SHEET

Description	MPAMP-6030X	MPAMP-6060X	MPAMP-6120X
Rated Power Output	6×30W	6×60W	6×120W
Speaker Output	100V and 8-16 Ohms		
Input	Mic/line1-3: 2.5mV, balanced XLR input with 48V phantom power, Line1-2: 250mV; RCA type		
	Mute: 250mV, phoenix connector		
Remote Mic	6 units by CAT5 cable up to 200 meters, direct powered by amplifier		
Remote Panel	6 units by CAT5 cable up to 999 meters, direct powered by amplifier		
Frequency Response	80-16KHz		
THD	<0.1%		
S/N Ratio	>70dB		
Protection	High temp, short circuit, clip & overload protection		
Power Supply	AC230V or AC110V, 50-60Hz		
Power Consumption	200W	400W	900W
Dimension	484(W)×405(D)×88(H)mm		
Weight	6.5kg	6.7kg	6.9kg

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