



DMF-iAMP series

Digital Multi Function Integrated Matrix Amplifier

User Manual



Contents

Welcome	01
Warning.....	01
Installation environment	02
Important safety instructions	02
1.0 Introduction	03
1.1 Features	03
1.2 Front panel	04
1.3 Rear panel	05
1.4 LCD display screen	06
2.0 Installation and wiring	07
2.1 Open-box	07
2.2 Installation	07
2.3 Cooling and ventilation	08
2.4 AC power cord connection	08
2.5 Audio input connection	08
2.6 Audio output and speaker connection	09
3.0 Operation	10
3.1 Audio input routing to Zone A&B	10
3.2 Siren button operation	10
3.3 Chime button operation	11
3.4 Multimedia player	11
3.4.1 BT connection.....	11
3.4.2 USB player.....	12
3.4.3 REC function.....	12
3.4.4 External USB disk emergency message	12
3.4.5 Supplementary instruction	13
3.5 Mic1&2 override control knob	13
3.6 Phantom power switch for Mic	13
3.7 Output Mono or stereo mode switch	13
3.8 Amplifier output mode selector 100V/70V/4Ω/8Ω	14
3.9 Emergency message mode switch	14
3.10 Emergency message contact in port	14
3.11 24VDC paging output port	14
3.12 Update firmware	15
4.0 Optional Wifi or Dante extended input	16
4.1 WiFi audio version	16
4.2 Dante audio version	20
5.0 Common Problems and Solutions	21
6.0 Specifications	22

Welcome

Thanks you for choosing our products, we will always provide innovative, advanced, reliable products like before.

We are sincerely trust these products will provide years of satisfactory service, but if anything is not to your complete satisfaction, we will endeavor to make things right.

Welcome to us again, and thank you for becoming part of our worldwide extended family!

Warning



CAUTION
RISK OF ELECTRIC
SHOCK DON'T OPEN



CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



This symbol 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 persons.



This symbol is intended to alert the user to the presence of important operation and maintenance (servicing) instructions in the literature accompanying the appliance.

Caution: To prevent electric shock do not use this (polarized) plug with an extension cord, receptacle or other outlet unless the blades can be fully inserted to prevent blade exposure.

WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.

Attentions: Pour prévenir les chocs électriques ne pas utiliser cette fiche polarisée avec un prolongateur, une prise de courant ou une autre sortie de courant, sauf si les lames peuvent être insérées à fond sans en laisser aucune partie à découvert.

* Do not install this equipment in a confined space such as a book case or similar unit.
* The apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the apparatus.
* Worded: "WARNING FOR YOUR PROTECTION PLEASE READ THE FOLLOWING-WATER AND MOISTURE: Unit should not be used near water(e.g. near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, etc). Care should be taken so than objects do not fall and liquids are not spilled into the enclosure through openings."

Service Instructions
* Worded: "Caution: These servicing instructions are for use by qualified service personnel only. To reduce the risk of electric shock, do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so."
* Location: Instruction Manual.

NOTE : This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Installation Environment

Installation this system is not difficult and complex. But you still need to spend some time to read this manual and ensure the connection and installation is exact.

Never place this product in an environment which could alter its performance or reduce its service life.

Such environments usually include high levels of heat, dust, moisture, and vibration.

Important Safety Instructions



1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus that produce heat.
9. Pay attention to the grounding condition and positive and negative polarity of the power supply.
10. Keep the power outlet in good contact, do not loose or poor contact.
11. Use only accessories and tools supplied or approved by the manufacturer.
12. Follow the installation instructions when moving or relocating the equipment.
13. Unplug the unit from the electrical outlet before lightning, thunderstorms or storms, or when the unit is not in use for an extended period of time.
14. If repairs are required, they must be performed by qualified personnel certified by the manufacturer. In the event that the equipment is damaged in any way or anomalies are discovered, it must be taken out of service and serviced by factory-certified service personnel, such as damaged power cords or plugs, liquid or other objects falling into the equipment, water or moisture in the equipment, or dropped.

- Avoid excessive heat, humidity, dust and vibration

Keep the unit away from locations where it is likely to be exposed to high temperatures or humidity—such as near radiators, stoves, etc. Also avoid locations which are subject to excessive dust accumulation, or to vibration that could cause mechanical damage.

- Avoid physical shocks

Strong physical shocks to the unit may cause damage. Handle the unit with care.

- Do not open the case or attempt repairs or modifications yourself

This product contains no user-serviceable parts. Refer all maintenance to qualified our service personnel. Opening the case and/or tampering with internal circuitry voids the warranty.

- Always power off before making connections

Always turn the AC mains OFF before connecting or disconnecting cables. This is important to prevent damage to the unit itself as well as other connected equipment.

- Handle cables carefully

Always plug and unplug cables (including the AC mains power cord) by gripping the connector, not the cord.

- Clear with a soft dry cloth

Never use solvents such as benzene or paint thinner to clean the unit. Wipe clean with a soft, dry cloth.

1.0 Introduction

This series of amplifiers are specially designed for commercial audio applications with high quality sound reinforcement and optimized design, featuring high quality sound, high stability, large dynamics, low noise and high energy efficiency.

The whole series features fanless and silent design without any mechanical noise, which is suitable for all kinds of application requiring low noise.

With the newly developed DSP audio signal processing system, it can ensure providing high quality sound at any volume.

The amplifier's EQ is optimized for use with the FIT Series of high-quality commercial loudspeakers. Using them together will improve the audio experience.

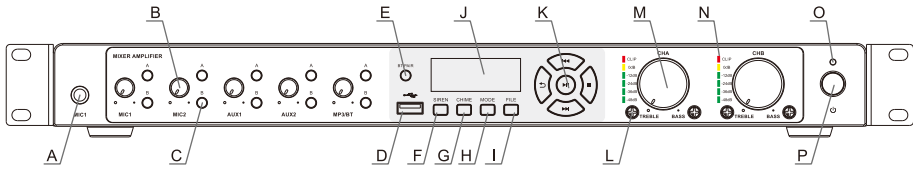
Amplifier output can be selected to support stereo or mono mode, support for low impedance (4Ω , 8Ω) and high impedance ($100V$, $70V$) output, flexible matching a variety of types of high-quality commercial speakers.

The advantages of this amplifier allow it to be widely used in various types of stores, restaurants, bars, conference centers, schools, supermarkets, showrooms, shopping malls, hotels and other occasions where excellent sound quality is required.

1.1 Features

- Full range of fanless silent design, no mechanical noise;
- Optional WiFi audio module or Dante audio module version;
- 2 channels Mic input, microphone input with priority;
- 2 channels Aux input, supports stereo or mono audio input;
- 1 channel built-in media player input, support for BT or USB playback, support for REC recording;
- 1 channel Aux output, support stereo or mono mode;
- 2 channels power amplifier output, each output with independent volume, treble and bass control;
- Built-in CHIME, SIREN (support for external U disk customized emergency sound source);
- Each input with independent volume control, free to choose Zone A&B output;
- 192x64 LCD screen can clearly display detailed playback information;
- Audio input signal indicator, output audio level and clipping indicator, power indicator;
- Selectable stereo or mono amplifier output mode;
- Power amplifier output support for low impedance (4Ω , 8Ω) and high impedance ($100V$, $70V$) output, can be connected to any type of speaker;
- High-efficiency Class D power amplifier, the entire output with perfect overheating, overvoltage, overcurrent, short protection;
- 1 channel dry contact emergency control input and 1 channel 24VDC/2A control output;
- 1 RJ45 expansion port;
- Firmware update function;

1.2 Front Panel



- A. Mic1 Input Port** - 1/4" TRS connector, supports balanced or unbalanced inputs
- B. Input Volume Control Knob** - Provides -100dB to 0dB gain adjustment, built-in input signal indicator on the knob, green means input signal is present, orange means input signal clipping
 WiFi version (figure 1.2-1): USB, BT, WiFi volume control knob
 Dante version (figure 1.2-2): USB, BT, WiFi volume control knob
- C. Audio Input Signal Routing Button (A&B)** - Assigns input signals to Zone A or B
- D. USB disk Port** - Inserting a USB disk to play audio files
- E. BT Pair Button** - Long press to turn pairing on or off
 (for detailed section 3.4.1, page 11)
- F. SIREN Button** - Long press for three seconds to activate the built-in siren or external USB emergency message (for detailed section 3.2, page 11); If all output need be muted (for detailed section 3.9, page 14)
- G. CHIME Button** - Press to activate built-in chime (for detailed section 3.3, page 11)
- H. Media Player Mode Switch Button** - Press to select BT, USB or Recording mode, select and press ►|| button to save.
- I. FILE Button** - Press to enter or exit USB disk file browsing
- J. LCD screen** - Displays device name, mode, temperature, media playback, etc.
- K. Multimedia Playback Buttons** - Includes Previous, Next, Back, Play/Pause, and Stop controls
- L. Output EQ Control Knobs** - TREBLE, BASS adjustable knobs from -15dB to +15dB
- M. Output Volume Control Knob** - Range from -100dB to 0dB
- N. Output Signal Indicator** - Displays output level signal and clipping
- O. Device Status LED** - Blue color means the device is functioning normally, no light or red light or flashing red light is a malfunction, see section "common problems and solutions" (section 5.0, page 21) for solution.
- P. Power Switch** - Turns the mixer amplifier on and off

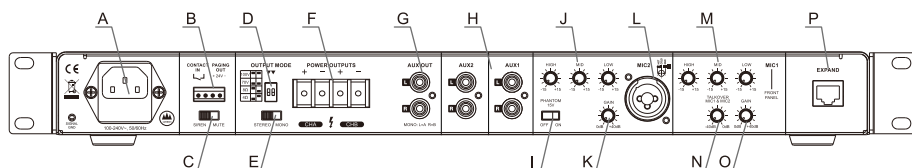


1.2-1



1.2-2

1.3 Rear Panel



- A. AC Power Connector** - Supports a wide range of voltages from 100-240V, 50/60Hz worldwide, with fuses to match specifications
- B. Euro-block Connector** - one dry contact emergency trigger input (left) to activate the emergency message or mute all outputs, and one 24VDC/2A power output (right) will be activated at the same time (for detailed section 3.10, and 3.11, page 10)
- C. Emergency Message Mode Selector** - see Figure1.3.1 Emergency Message Activation Flow. When the switch is set to MUTE, all outputs of the amplifier will be muted when the left dry contact is activated. When the switch is set to SIREN, the built-in siren or external USB emergency message will be activated (for detailed section3.2, page11 and section3.4.4, page12)
- D. Amplifier output mode selector** - Switch to different output modes (100V, 70V 8Ω, 4Ω) for connecting different kinds of speaker
- E. Audio Output Mode Selector** - Switch to select stereo or mono output mode, both Aux out and Power Output
- F. Amplifier Output Connector** - for speaker connection
- G. Aux Output** - RCA connector, Line output, supports stereo or mono mode
- H. Line1/2 Input** - RCA connector, Line input, supports stereo or mono inputs
- I. Phantom Power Switch** - provides +15V phantom power to Mic2 when turned on
- J. Mic2 EQ Control Knob** - Treble (HIGH), Midrange (MID), Bass (LOW), adjustable range from -15dB to +15dB
- K. Mic2 Gain Control Knob** - Adjustable range from 0dB to + 40dB
- L. Mic2 Input Port** - Combo connector, supports 1/4"TRS or XLR inputs, balanced or unbalanced inputs
- M. Mic1 EQ Control Knob** - Treble(HIGH), Midrange(MID), Bass(LOW), adjustable range from -15dB to +15dB
- N. Mic Priority Control Knob** - Adjusts this knob will attenuates other input sources range from 0dB to -40dB when the microphone is talking
- O. Mic1 Gain Control Knob** - Adjusts from 0dB to + 40dB
- P. Extended Audio Input Connector** - RJ45 connector, compatible with WiFi audio or Dante audio inputs

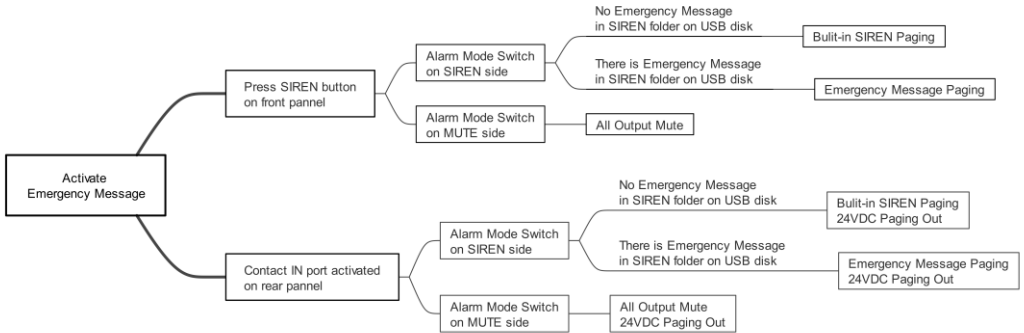
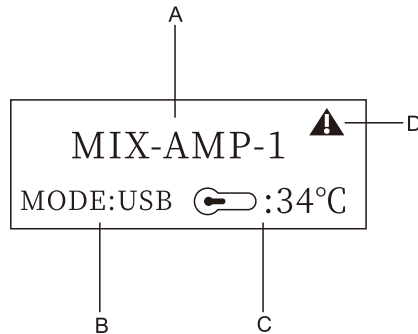


Figure1.3.1 Emergency Message Activation Flow

1.4 LCD screen



- A. Amplifier name + ID number (ID: 1-99)
- B. Display the current multimedia playback mode, USB, BT or REC mode
- C. Real-time detection and display of internal PCB board temperature (displayable temperature range: 0-99°C)
- D. If the rear panel dry contact signal is activated, the upper right corner of the display will show "▲" icon

Note: The screen back-light will go out without any operation in 5 minutes, you can press any key to wake up the screen.

2.0 Installation and Wiring

2.1 Open Box

After receiving the equipment, please open the box in time to check whether there is damage caused by transportation. If you find that the equipment is damaged due to improper transportation, please contact the carrier immediately (equipment packaging materials are recommended to be properly stored for future use when transporting the equipment); after confirming that there is no problem, please unpack the box and check whether all the accessories are complete:

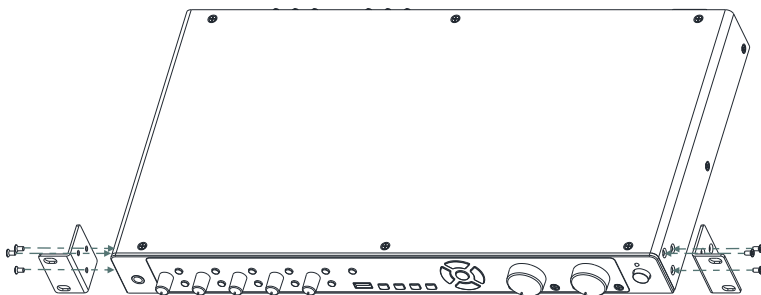
- Mixer amplifier * 1
- AC power cord * 1
- Cabinet mounting bracket * 2
- Rubber feet (already mounted on amplifier) * 4
- 4-pin Euroblock terminal block * 1
- User's manual * 1

Note: Before installing the equipment, please read the "Important Safety Instructions" section of this manual carefully and strictly follow the requirements in that section to install and use the equipment.

2.2 Installation

The unit can be installed in the following two ways:

- Desktop mounting: Place the device directly on the countertop (e.g., table or shelf), which can be combined with the use of rubber feet (factory default mounting method).
- Cabinet mounting: Cabinet mounting brackets are required for installation. See Figure 2.2.1



2.2.1 Mounting bracket for cabinet installation

Note: Before installation, please disconnect the power supply of the amplifier and make sure that the volume knobs have been adjusted to the minimum position.

2.3 Heat Dissipation and Ventilation

When installing on the desktop, do not place any objects on the top of the amplifier, keep ventilation around the amplifier for heat dissipation, and prohibit blocking the heat dissipation port at the bottom. When installing in the cabinet, at least 5cm of space should be left on the top and bottom of the amplifier for ventilation and heat dissipation, and the cabinet cooling fan must be turned on or the cabinet door should be kept open as much as possible.

2.4 AC Power Cord Connection

Use the matching AC power cord to connect to the power input connector of the amplifier. The amplifier operates at AC100-240V, 50/60Hz, please make sure that the local AC power supply meets this voltage and frequency.

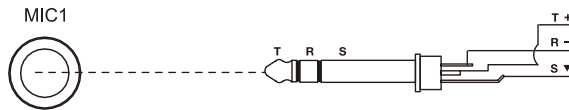
Note: In order to protect the safety of the equipment and the operator, please make sure the socket is grounded according to the specifications.

2.5 Audio Input Connection

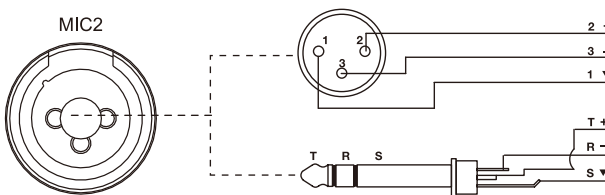
For connecting microphone, 1/4" TRS or XLR connector can be used, and it is recommended to use balanced cable for connection.

To connect CD, MP3, Cell-phone, Pad, MP3 player, etc., use RCA connector for connection.

1/4"TRS connector



1/4"TRS + XLR combo connector



RCA connector



2.6 Audio Output And Speaker Connection

If you want to connect a recording device, an expansion amplifier, or active speakers, use the “Aux Out” connector.

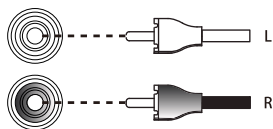
When connecting passive speakers, use the “Power Outputs” connector on the rear panel.

When connecting passive speakers, it is recommended to use high-quality audio twisted-pair cable. In order to prevent short-circuiting between the cable and the amplifier, the cable's connector (stripped length) shall not be more than 8mm, after the wiring is completed, in order to protect the personal safety, be sure to cover the amplifier outputs come with a transparent protective cover.

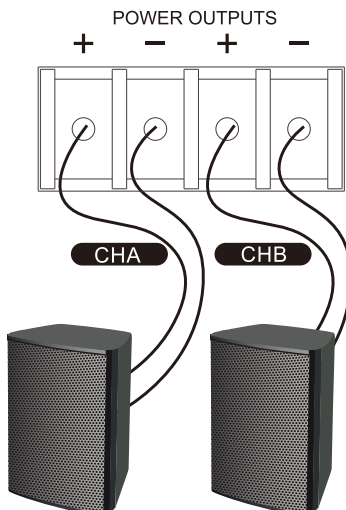
Note: Ensure that the speaker impedance and amplifier output mode match (100V, 70V, 8Ω, 4Ω), for detailed of amplifier mode settings(section 3.8, page 14).

RCA connector

AUX OUT



Screw Terminal



3.0 Operation

When using this mixer amplifier for the first time, please follow the steps below to ensure that the amplifier will work properly:

1. Make sure the output volume is off and the EQ knobs of all input and output channels are in the midpoint position (factory default) before powering up (for detailed section 2.6, page 9);
2. Make sure that the speakers are connected to the two amplifier outputs on the rear panel;
3. Turn on the power switch, the power light will light up blue when startup is complete;
4. Playing an external audio source such as BT, USB, or Line input;
5. Press the Zone A&B assignment button next to the volume knob of each input channel, the button will light orange and the corresponding channel will play to Output Zone A&B (for detailed section 3.1, page 10) ;
6. Slowly increase the volume of the input channels and the volume of the total output channels clockwise until the desired level is reached;

3.1 Audio Input Routing to Zone A&B

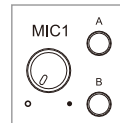
Input signal routing assignment button, you can select whether the corresponding input source is mixed to the output channel, the button is selected after the indicator lights orange.

Note: This amplifier has a memory save function after the power off.

Mono Mode:

Press button 'A', the audio source will be mixed to output Zone A.

Press button 'B', the audio source will be mixed to output Zone B.



Stereo mode:

Press either button 'A' or 'B', the source will be mixed to output Zone A&B at the same time.

Note: output mono or stereo mode switch (for detailed section 3.7, page 13).

3.2 SIREN Button Operation

Long press the SIREN button for 3 seconds to trigger the built-in siren output to all outputs of this amplifier (i.e. Zone A&B and Aux Out), and mute any audio source except the MIC inputs, and adjust the SIREN volume by controlling the Total Output Volume knob;

Pressing again stops the SIREN output;

When SIREN is activated, the indicator of this button lights up red;

If you want to mute all output when activated, see "Emergency Message Mode Switch" (for detailed section 3.9, page 14);

Note: default is the built-in siren output, if you want to play the customized Emergency Message from the external USB disk when activated, see "Emergency Message Mode Switch" (for detailed section 3.4.4, page 12)

3.3 CHIME Button Operation

Press the Chime button to play the attention-getting chime that precedes the speech; when activated this button lights up red and is only active when the Mic1/2 routing button is pressed;

If Mic1 or Mic2 routing button 'A' is pressed, the chime will be mixed to Zone A;

If Mic1 or Mic2 routing button 'B' is pressed, the chime will be mixed to Zone B;

Note: Chime cannot be activated if neither Mic1/2 routing buttons 'A' nor 'B' are pressed;

3.4 Multimedia Player

3.4.1 BT connection

Please follow the steps below to turn on and use the BT connection function:

1. Long press the BT PAIR button until the BT indicator starts blinking;
2. Open the BT function of the audio device, search for "MIX-AMP-XX" and establish a BT connection;

Note: 'XX' represents the ID of the amplifier, when multiple amplifiers are used together, please set a different ID for each amplifier for identifying the connection.

3. When the BT connection is successful, BT indicator changes from blinking to always on;

4. Use ◀▶ button to switch to the previous or next BT song;

5. Use ▶|| to pause or continue playing BT song;

6. Use ■ to stop playing BT song;

7. To turn off the amplifier's BT, press and hold the BT pairing button again until the BT indicator goes out, or cancel the BT connection from the audio playback device;



3.4.2 USB Player

1. Insert the USB disk into the device, the amplifier will enter the USB playback screen and automatically play the audio files in the USB disk (autoplay function);
2. Use **◀◀ ▶▶ ▶▶▶** button to play the previous song, next song, pause or continue playing;
3. Use **"FILE"** button to enter or exit the USB flash drive file browsing screen;
4. Use **◀◀ ▶▶ ▶▶▶** button to select or play a audio file;
5. Use **■** button to stop playing audio files;
6. At the USB playback screen, press the MODE button to enter the playback settings, which allows you to set the playback mode and EQ mode:.

Built-in 7 playback modes:

-  Repeat All
-  Repeat Folder
-  Repeat One
-  All Random
-  Folder Random
-  All Order
-  Folder Order

Built-in 6 EQ modes:

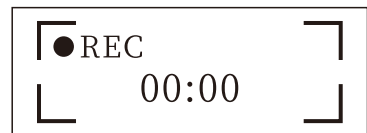
- Normal
- Rock
- Pop
- Classic
- Jazz
- Country

Note: Playback settings are saved at power-down.

3.4.3 REC Function

Please follow the steps below to enable the recording function:

1. Make sure the USB disk is inserted into the device;
2. Go back to the main screen and press the MODE button and select REC mode, then press the **▶▶▶** button to enter the recording operation screen;
3. Use **▶▶▶** button to start recording or pause recording;
4. Use **■** button to save recording files;
5. The recording files will be saved to "REC" folder in USB disk (If there is no REC folder, it will be created automatically);
6. After saving successfully, you can choose to play the recording file again or delete the file;



REC screen

Note: Audio from the built-in multimedia player will not be recorded.

3.4.4 External USB Disk Emergency Message

You can create a "SIREN" folder in the root directory of the external USB drive and put in a pre-recorded Emergency Message file, which can be used to replace the built-in siren output when the SIREN button is pressed on the front panel or when CONTACT IN is activated on the rear panel.

3.4.5 Supplementary Instruction

1. The factory default volume of the built-in media player is 25.

Note: You can reset the volume of the multimedia player by long press **⏮** or **⏭** button in the main screen or USB flash disk playback screen, range:0-30, the setting would be saved at power-down.

2. The USB capacity supports up to 32G and the file format is FAT32.
3. USB support MP3, WAV, APE, FLAC format audio file playback, support for sampling rate: 8-48KHz, 16bit.
4. BT and USB audio can not be recorded in recording mode.
5. In the main LCD screen, long press **▶||** button to enter the system settings screen, select "Device ID Settings", you can assign a unique ID for this amplifier.

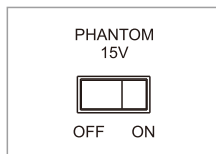
3.5 Mic1&2 Override Control Knob (TALKOVER)

The amplifier has MIC input priority function, which can be activated by the potentiometer (TALKOVER) on the rear panel;

Adjusts this knob will attenuates other input sources from 0dB to -40dB when the microphone is talking.

3.6 Phantom Power Switch For Mic

If the phantom power switch is set to the "ON" position, it will provide +15V phantom power to the MIC2 microphone.



3.7 Output Mono Or Stereo Mode Switch

When the switch is in the STEREO position, both of amplifier's Power Outputs and Aux Out will output stereo audio (usually connected to 4~8Ω low impedance speakers);

When the switch is in MONO position, both Power Outputs and Aux Out of the amplifier will output mono audio (usually connected to 100V & 70V high impedance speakers);

Stereo mode: CHA = L CHB = R

Mono mode: CHA = L+R CHB = L+R

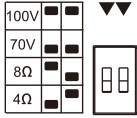


Note: Mic input is a mono signal, only music has stereo mode.

3.8 Amplifier Output Mode Selector 100V/70V/4Ω/8Ω

Set the amplifier output mode via DIP switches for connecting different high impedance speakers or low impedance speakers;

OUTPUT MODE



High Impedance



Low Impedance



DIP switches setting

3.9 Emergency Message Mode Switch

When the SIREN button is pressed on the front panel or when CONTACT IN is activated on the rear panel:

MUTE mode: All outputs will be fully muted

SIREN mode: Built-in siren or emergency message (in SIREN folder on external USB) will be paged to all outputs.



3.10 Emergency Message Contact In Port

This port is used for triggering automatic emergency alarms, when the dry contact is activated, the built-in SIREN is played.

If a voice file exists in the SIREN folder of the external USB flash drive, the pre-existing voice will be played (for detailed section 3.4.4, page12).

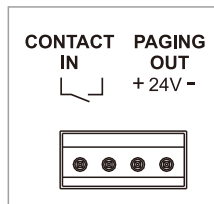
When triggered, the amplifier can be set to mute all outputs (for detailed section 3.9, page14).

WARNING: This port only allows dry contact signal inputs and must not be connected to any energized wet contact signal.

3.11 24VDC Paging Output Port

When CONTACT IN port is activated on the rear panel:

This port will output 24VDC/2A and is typically used to turn on a 4-wire volume attenuator or to drive a flashing alarm light or for third party system integration.



3.12 Firmware Update

3.12.1 BT Firmware Update

1. Put the “**update.bfu**” firmware into the root directory of the USB disk (FAT32, max. 32G);
2. Insert the USB disk into the USB port of the amplifier;
3. The screen show “Equipment Updating”, indicating that the device is being updated;
4. Wait until the screen shows “Update Success!” which indicates that the device has been updated successfully;
5. After the upgrade is completed, please unplug the USB and delete the upgrade file inside, otherwise the firmware will be upgraded repeatedly after plugging it in again.

Warning: Do not unplug the USB disk during the upgrade process, otherwise the BT module will not work.

3.12.2 Master Chip Firmware Update

1. Put the “**MIX-AMP.bin**” firmware into the root directory of the USB disk (FAT32, max. 32G);
2. Insert the USB disk into the USB port of the amplifier;
3. The screen show “Equipment Updating”, indicating that the device is being updated;
4. Wait until the screen shows “Update Success!” which indicates that the device has been updated successfully; and then the amplifier will restart.
5. After the upgrade is completed, please unplug the USB and delete the upgrade file inside, otherwise the firmware will be upgraded repeatedly after plugging it in again.

4.0 Optional Wifi or Dante extended input

4.1 WiFi Audio Version

4.1.1 Introduction

WiFi Audio Push function belongs to a kind of intelligent wireless audio streaming technology, which can push audio from cell phone, pad, PC and other devices to speakers, amplifiers or other audio devices wirelessly via WiFi network to realize high-quality music playback. It supports multi-room synchronized/independent playback, compatibility with most operating systems, remote control and other functions, and is suitable for home, office, commercial and other applications.

4.1.2 Features

- Transmits audio via WiFi network, no wiring required, wider coverage area
- Supports lossless audio formats such as FLAC, WAV, APE, etc., up to 24bit/192kHz music files.
- Support DLNA, AirPlay, Spotify Connect, QPlay and other protocols, compatible with iOS, Android, Windows system.
- Support multi-room synchronization/independent playback, can connect multiple audio devices at the same time to achieve whole-house music synchronization or group playback
- Remote playback through APP or third-party music software such as Spotify, Deezer, Tidal, Qobuz, etc.

4.1.3 Steps

1. Download And Install The Player:

- Android user: Search and download "MUZO PLAYER" APP in App Store or Browser.

Note: Before installing, please make sure that you have turned on the cell phone location service, and then ignore the installation risk tips, allow reading and writing memory, and allow cell phone location.

- iOS user: Search and install "Audio System" APP in the App Store.

2. Network Setting:

When you use it for the first time, you need to connect the amplifier to the local area network, wired or wireless are supported, you can choose the most suitable networking method flexibly according to the on-site environment.

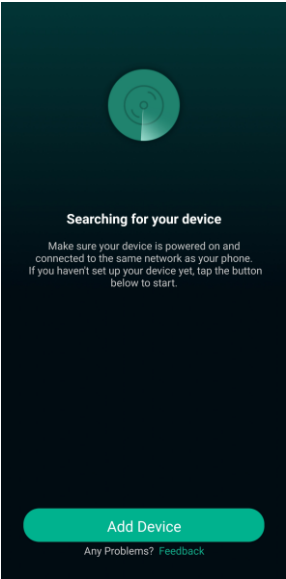
Wired Network:

- a: Use one end of the cable to connect to the switch/router, and the other end to connect to the RJ45 network port of the device, the device supports DHCP function by default, and it will get the IP address automatically after accessing it, make sure that the switch/router has turned on the DHCP service (default on).
- b: Make sure the cellular WiFi and the device are connected to the same network (the same 2.4GHz band), and then open the APP, take the Android system "MUZO Player" APP as an example, version 3.2.0, as shown in Figure 4.1.3-1 on page 17, which indicates that searching for the device network is being configured. Wait for the configuration to complete.
- c: After the network configuration is completed, the APP screen will go to Figure 4.1.3-2 on page 17.

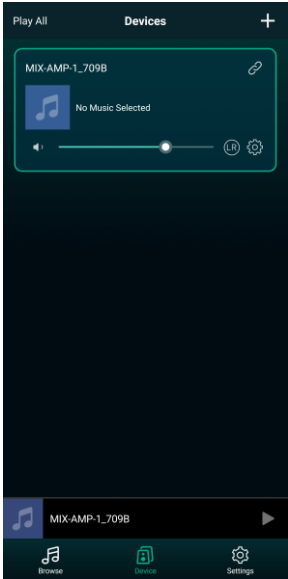
Wireless Network

Configuration is based on Android as an example, iOS is similar:

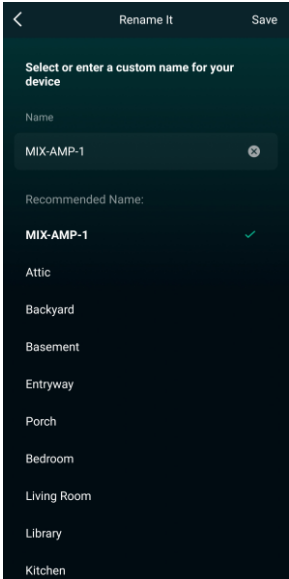
- a: Open the WiFi search list of your Android phone, find the "MIX-AMP-1" device and connect it, and turn on the positioning;
- b: Open APP, take "MUZO Player", version 3.2.0 as an example, after opening it, as shown in Figure. 4.1.3-2, click the "+" icon in the upper right corner to enter the wireless network connection;
- c: Select the network to be connected, enter the password, showing that the device is being connected;
- d: At this time, if Phone is not automatically connected to the same WiFi, please follow the prompts to connect again until Phone and device are in the same WiFi;
- e: Click "Next" to enter the device naming screen after successful connection, as shown in Figure 4.1.3-3, the default name of the device is "MIX-AMP-1", click the ">" icon in the upper right corner to exit.



4. 1. 3-1



4. 1. 3-2



4. 1. 3-3

Wired vs. Wireless Network:

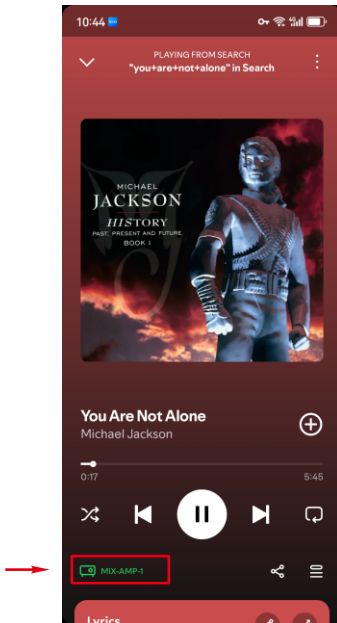
Network	Advantages	Disadvantages	Application
Wired	High stability, low delay	Cabling required	Fixed Installation and High Sound Quality Requirements
Wireless	Flexibility without wiring	Unstable network may cause playback delay	Portable applications or home multi-room playback

Note: Network connection can be selected according to the on-site environment, wired network is recommended.

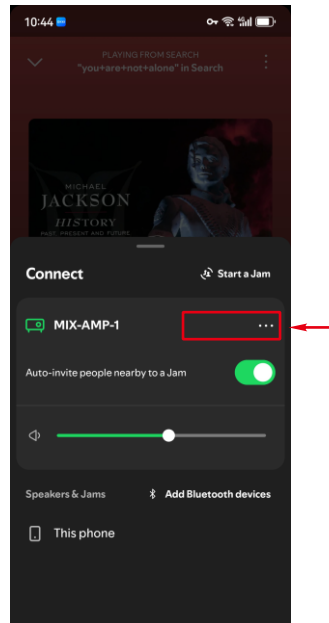
3. Music Push Function (Take Android music app as an example, iOS users please use AirPlay streaming technology directly).

Open any music APP that supports "Audio Pushing" function, here take "Spotify" APP as an example:

- When the software fee is paid, the software will show the devices "MIX-AMP-1" available for pushing as shown in Figure 4.1.3-4
- Click "..." button to select playing different device as shown in Figure 4.1.3-5.
- Press the "A&B" button to routing Spotify audio to Zone A&B and adjust the WiFi volume knobs to a reasonable position.



4.1.3-4



4.1.3-5

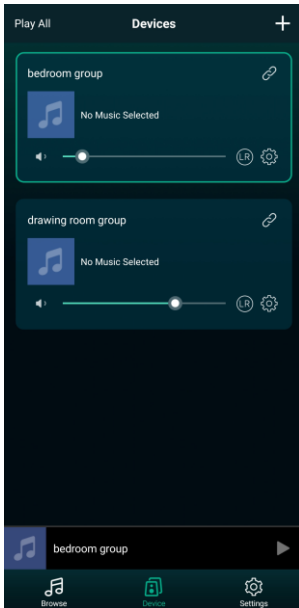
Note: Make sure Cell Phone and amplifier are connected to the same WiFi (2.4GHz band) before operation.

4. Multi-Room Synchronized Playback Setting (Take Android system as an example, iOS system is similar).

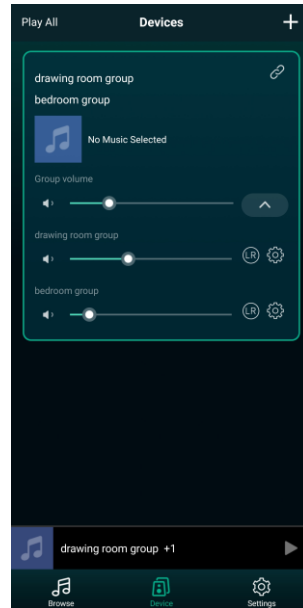
When multiple WiFi streaming devices are located in different rooms, set up through MUZO APP to realize multiple devices play the same music at the same time, note that all devices need to be connected to the same LAN.

Setup Steps:

- As shown in Figure 4.1.4-1, there are two devices in this LAN placed in the living room and bedroom respectively (name the devices as living room group and bedroom group);
- Click the link button  in the upper right corner of the living room group to add the bedroom group to the living room group, click Finish, then the bedroom group can synchronize to play the music of the living room group, as shown in Figure 4.1.4-2.



4. 1. 4-1



4. 1. 4-2

4.1.5 Restoring to WiFi Factory Settings

Restoring to factory settings is often a necessary step in resolving a device malfunction or the need to reconfigure the network.

Method 1: When the device is normally connected to the "MUZO" APP and is online, open the APP, click on the bottom menu "Device", select the device that needs to be restored to factory settings, click on the Settings icon  at the bottom right corner, enter the APP and click "Device Information", slide to the end and click on "Restore Factory Settings".

Method 2: Long press  the button on amplifier main screen to enter the system settings interface, select "WiFi Factory Reset", click to enter and select "YES", wait for a few seconds to complete the restoration of factory settings.

Note: After restoring the factory settings, the network needs to be reconfigured (for detailed section 4.1.3, page 12)

4.2 Dante Audio Version

4.2.1 Introduction

Dante is a professional digital audio transmission protocol based on IP network, which transmits multi-channel, low-latency, high-quality audio signals in real time over standard Ethernet (Gigabit/Hundred Gigabit), and is widely used in applications such as performances, broadcasting, and conference systems.

4.2.2 Setup Steps

- Connect one end of the cable to the switch/router and the other end to the RJ45 network port of the device.
Install the “Dante Controller” software.
- Open the “Dante Controller” software, it will automatically scan for Dante devices on the LAN.
- In the “Dante Controller” software, select the channel routing for the Dante Input on this device. Please refer to the “Dante Controller” software user’s manual for more details.
- Press the “A” & “B” output routing buttons next to the “MP3/BT/DANTE” knob on the front panel of the amplifier and adjust the volume knob to a reasonable position.

Note: The DANTE module only supports 1 input or 1 output (can only be set to one of the inputs or outputs).

5.0 Common Problems And Solutions

Problems	Possible causes	Solutions
The power indicator shows abnormality: Not lit, red light, blinking red light.	1. Not lit: the fuse has blown.	Open the fuse holder and replace it with the same specification fuse.
	2. Red light: The device is in an overcurrent or overheated state.	Reduce the output volume and ensure the speaker and amplifier output modes are matched.
	3. Blinking red light: The device is overheated, and the temperature has exceeded the threshold, causing the amplifier to lock.	Wait for the amplifier to cool down to normal temperature and then restart, please do not put it in an overheated environment.
No output volume or low output volume.	1. No output volume or low output volume.	Turn on the audio source and adjust the input volume to the desired level.
	2. Input signal routing switch is not pressed.	For detailed section 3.1, page10. Audio input routing to Zone A&B.
	3. Volume control knob in minimum position.	Adjust the input or output volume knob to the desired level.
	4. Mismatch between amplifier output and speaker impedance.	Ensure that the amplifier's output mode setting (100V/70V/4Ω/8Ω) matches the speakers. For detailed section 3.8, page 14.
	5. Damaged speakers or total power exceeds amplifier power.	Disconnect the power to check the speaker wiring, replace the damaged speakers and make sure that the total power of the speakers is less than amplifier's power.
Audio signal distortion	1. Input audio level too high.	Reduced input audio level.
	2. Damaged speaker or faulty wiring.	Disconnect the power to check the speaker wiring, replace the damaged speakers.
Other faults	Please contact your local authorized after-sales service	

6.0 Specifications

Model No.	DMF-iAMP2150		DMF-iAMP2300	
Rated Power	150Wx2@100V/70V/8Ω/4Ω		300Wx2@100V/70V/8Ω/4Ω	
Mic Input	MIC1: Gain (0dB - 40dB), Balanced or Unbalanced, 1/4" TRS connector MIC2: Gain (0dB - 40dB), Balanced or Unbalanced, with +15V phantom power, Combo connector supporting XLR or 1/4" TRS input			
Aux Input	Two Aux input, Unbalanced, RCA connector, optional Mono or Stereo output mode			
Multimedia Player	Supporting USB or BT audio sources and REC recording function			
Extended Audio Input	Optional Wifi or Dante extended input			
Aux Output	0dB, 560Ω, Unbalanced, Stereo RCA connector			
Minimum Operating Impedance	4Ω output: 4Ω 70V output: 32Ω	8Ω output: 8Ω 100V output: 66Ω	4Ω output: 4Ω 70V output: 16Ω	8Ω output: 8Ω 100V output: 32Ω
Protection Circuits	AC fuse and overheat, overvoltage, overcurrent, short circuit, DC protection			
EQ of Master Output	Treble: +/-15dB@5KHz-20KHz Bass: +/-15dB@20Hz-500Hz			
Input Sensitivity	Mic input: 10mVrms Line input: 0.316Vrms			
Frequency Response	70V/100V output: 70Hz-17KHz, +/-3dB 4Ω/8Ω output: 20Hz-20KHz, +/-2dB			
Signal-to-noise Ratio (A-weighted)	90dB(BT)			
T. H. D	100V/70V output: <1% 4Ω/8Ω output: <0.5%			
Phantom Power	+15VDC			
Control Input/Output	One dry contact trigger input, one 24VDC/2A controlled output			
Power Source	100~240VAC, 50/60Hz			
Power Consumption	360W@Rated Power		660W@Rated Power	
Operating Temperature/Humidity	-20°C~+50°C, <95%			
Dimensions & Weight				
Net weight	3.83kG			
Dimensions	482(W)×50(H)×254(D)mm (with rack mounting brackets and Rubber feet)			
Shipping Dimensions	600(W)×115(H)×335(D)mm			

