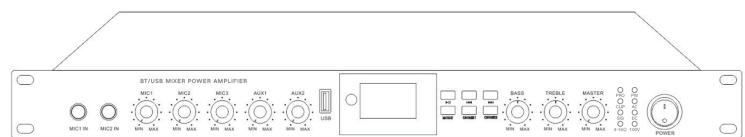


# User Manual



BT/USB/FM/ALARM MIXER AMPLIFIER

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Thank you for purchasing this series full-featured amplifier.

Please follow the instructions in this manual carefully to ensure long and trouble-free use of the unit.

## Package content

Name	Quantities
Amplifier	1
Power cable	1
Antenna Connector	1
Alarm Trigger Connector	1
Speaker Connector	1
Remote control	1



### Note

#### When installing equipment

- Do not plug or unplug the power plug with wet hands as this may result in electric shock.
- When unplugging the power cord, be sure to grasp the power plug and do not pull on the power cord itself; operating the unit with a damaged power cord may cause fire or electric shock.
- Be sure to unplug the power cord from the wall outlet when moving the unit. Moving the unit with the power cord connected to the outlet may damage the power cord, which could result in fire or electric shock. When unplugging the power cord, be sure to hold it by the plug to pull it out.
- Do not block the ventilation slots in the housing of the unit as this may cause heat to build up inside the unit and cause a fire.
- Avoid installing the unit in damp or dusty places, indirect sunlight, near heaters, or in places where fumes or vapors are generated, as this may cause fire or electric shock.

#### Equipment in use

- Do not place heavy objects on the unit as this may cause the unit to fall or break, which could result in personal injury or property damage, in addition, the objects themselves may fall and cause injury or damage.
- Before turning on the power, make sure the volume control is set to the minimum position; when the power is turned on, high volume produces loud noise that can damage your hearing.
- Do not operate the unit for an extended period of time with the sound distorted, which indicates a malfunction of the main unit, which in turn may cause heat generation and fire.
- Please contact your dealer regarding cleaning, if dust accumulates in the unit over a long period of time, it may cause a fire or damage the unit.
- If dust accumulates on the power plug or on the wall AC outlet, it may cause a fire, so clean it regularly. Also, insert the plug firmly into the wall outlet.
- For safety reasons, when cleaning or leaving the unit unused for more than 10 days, turn off the power and unplug it from the outlet, otherwise it may cause a fire or electric shock.

## Safety Notes

- ※ Be sure to read the contents of this manual carefully before use.
- ※ It is important to follow the instructions in this manual as it contains important safety symbols, messages and precautions.
- ※ We also recommend that you carry this instruction manual with you for future reference.

### Warnings



This symbol is intended to alert the user to the important operating and maintenance (servicing) instructions in the literature accompanying the equipment.



This marking is intended to alert the user to the presence of uninsulated "hazardous voltage" within the product's enclosure, which may be sufficient to pose a risk of electric shock to a person.

## Equipment Installation

- ※ Do not expose the unit to rain or environments where it may be splashed with water or other liquids, as this may cause fire or electric shock.
- ※ Use the equipment only at the voltage specified on the equipment; using a higher voltage than specified may result in fire or electric shock.
- ※ Do not cut, kink or damage the power cord. In addition, avoid using the power cord in the vicinity of the heater, and never place heavy objects (including the unit itself) on the power cord, as this may cause a fire or electric shock.
- ※ Be sure to replace the terminal cover of the unit when the connection is complete, and do not touch the speaker terminals because of the high voltage applied to them to avoid electric shock.
- ※ Be sure to ground to a safe grounding terminal to avoid electric shock, and never ground the air hose, as this could result in a catastrophic disaster.
- ※ Avoid installing the unit in an unstable location, such as on a rickety table or inclined surface, as this may cause the unit to fall, resulting in personal injury or property damage.

## Utilization equipment

- ※ If any of the following abnormalities are found during use, immediately turn off the power, unplug the power plug from the AC outlet, and contact your nearest dealer, and do not attempt to operate the unit under such conditions, as this may cause fire or electric shock.
- ※ If you notice that the unit is smoking or emitting an odor.
- ※ If water or any metal object enters the unit.
- ※ If the unit is dropped or the unit housing is cracked.
- ※ If the power cord is damaged (core exposed, disconnected, etc.).
- ※ If a malfunction occurs (no sound).
- ※ To prevent fire or electric shock, never open or remove the unit's case, as there are high-voltage components inside the unit, and refer all service to your nearest dealer.
- ※ Do not place cups, bowls, or other containers holding liquids or metal objects on top of the unit; if they are inadvertently spilled into the unit, they could cause a fire or electric shock.
- ※ Do not insert or drop metal objects or flammable items into the gout slots in the cover of the unit as this may cause fire or electric shock.

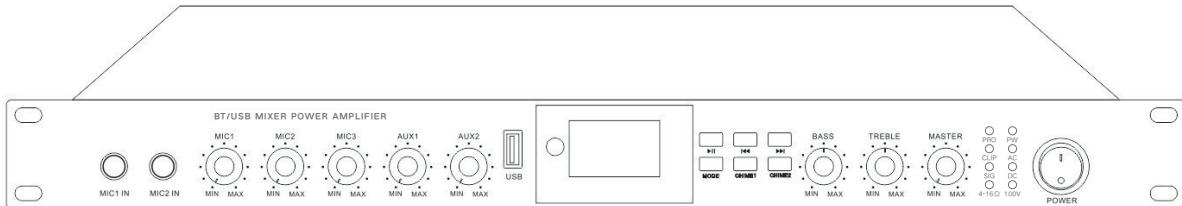
## **Warranty**

- We warranty the products it manufactures to be free from defects in material and workmanship for a period of 3 years for parts replacement , two years for parts repairs , and six months for accessories from the date of invoice . This warranty does not cover damage or malfunctions due to alteration , misuse , abuse , misapplication , negligence , accidents , or any cause other than defects in the product .
- We will replace or repair products covered by this limited warranty that are returned to our facility if they are defective in material and workmanship under normal use and conditions .
- To request warranty service , you must contact our sales team within the warranty period to send the product back to us in its original or equivalent packaging (freight prepaid) , and the warranty period will not be extended if we repair or replace the product .

## **Disclaimers**

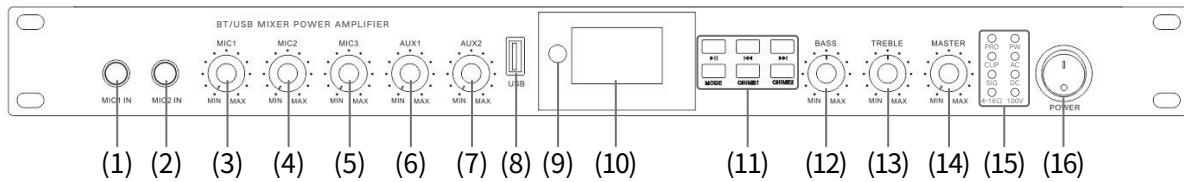
- The information contained in this manual is subject to change without notice and does not represent a commitment on the part of the seller , and we shall not be liable for any loss or damage arising from the use of the information or any errors contained in this manual.
- It is recommended that all servicing and repairs of this product be carried out by us or an authorized dealer , this product should only be used for the purpose specified by the manufacturer and in conjunction with this operating manual , and we shall not be liable for any loss or damage arising out of the servicing , maintenance or repair .

## Appearance Description



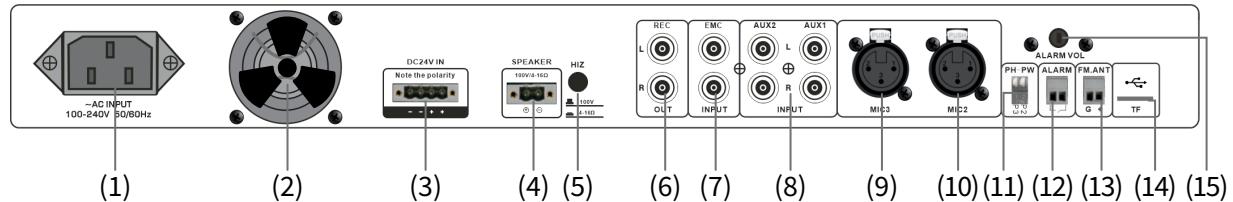
1. The product features a black brushed aluminum panel with a luxurious texture.
2. The internal circuit adopts STM surface-mount technology, providing stable performance and neat wiring.
3. It uses Class D amplifier circuitry with low heat dissipation and strong power output.
4. The power supply employs a high-performance switching circuit with high efficiency and low heat generation.
5. It supports 6 input channels (3 microphone inputs, 2 line inputs and 1 EMC input) and comes with built-in Bluetooth, FM, USB, TF card, and automatic playback features.
6. It has a 1.69-inch LCD dot-matrix display with touch-sensitive controls.
7. The product offers master volume control, independent volume adjustment for each channel, and independent high and low tone adjustments.
8. Comprehensive protection features include output short-circuit protection, DC protection, and high-temperature protection. It also supports 100V fixed voltage output and 4~16Ω fixed impedance output.
9. Ideal for small to medium-sized public address and broadcasting systems.

## Front Panel



- (1) MIC1 IN: 6.35mm microphone input port 1.
- (2) MIC2 IN: 6.35mm microphone input port 2.
- (3) MIC1 Volume Control Knob: Adjusts MIC1 input volume.
- (4) MIC2 Volume Control Knob: Adjusts MIC2 input volume.
- (5) MIC3 Volume Control Knob: Adjusts MIC3 input volume.
- (6) AUX1 Volume Control Knob: Adjusts AUX1 input volume.
- (7) AUX2 Volume Control Knob: Adjusts AUX2 input volume.
- (8) USB Port: Supports playback of audio files from USB storage devices.
- (9) IR Remote Window: Receives signals from the remote control for convenient operation.
- (10) LCD Display Screen: Displays all operational information and settings.
- (11) Control Buttons: Includes mode selection (MODE), play/pause, previous track, next track, and chime controls (CHIME1 and CHIME2).
- (12) BASS Control Knob: Adjusts bass effect.
- (13) TREBLE Control Knob: Adjusts treble effect.
- (14) MASTER Volume Control Knob: Controls the master volume.
- (15) Indicator Panel: Status indicators:
  - 15.1 PRO: Protection mode indicator.
  - 15.2 PW: Power status indicator.
  - 15.3 CLIP: Signal clipping indicator.
  - 15.4 AC: AC Power mode indicator.
  - 15.5 SIG: Signal input indicator.
  - 15.6 DC: DC Power mode indicator.
  - 15.7 4-16Ω: Impedance speaker indicator
  - 15.8 100V: 100V speaker indicator.
- (16) Power Switch: Turns the device on/off.

## Rear Panel



- (1) AC Power Input: Supports AC 100-240V, 50/60Hz power input.
- (2) Fan
- (3) DC24V power input
- (4) Speaker Output Terminal: Provides 100V, COM, and 4-16Ω outputs for various speaker configurations.
- (5) 4-16Ω or 100V speaker switch
- (6) REC Output: RCA output for recording devices.
- (7) EMC Input: RCA input for emergency broadcast signals.
- (8) AUX1, AUX2 Input: RCA input for auxiliary audio source AUX, AUX2
- (9) MIC3 Input: XLR input for microphone 3.
- (10) MIC2 Input: XLR input for microphone 2.
- (11) PH Switch: Phantom power switch for MIC2 and MIC3.
- (12) Alarm Port (ALARM): Connects to an external alarm signal.
- (13) FM Antenna Port (FM ANT): Connects to an FM antenna for improved reception.
- (14) TF Card Slot: Supports playback of audio files from TF cards, it's to restore the music files and alarm files.
- (15) Alarm volume adjustment

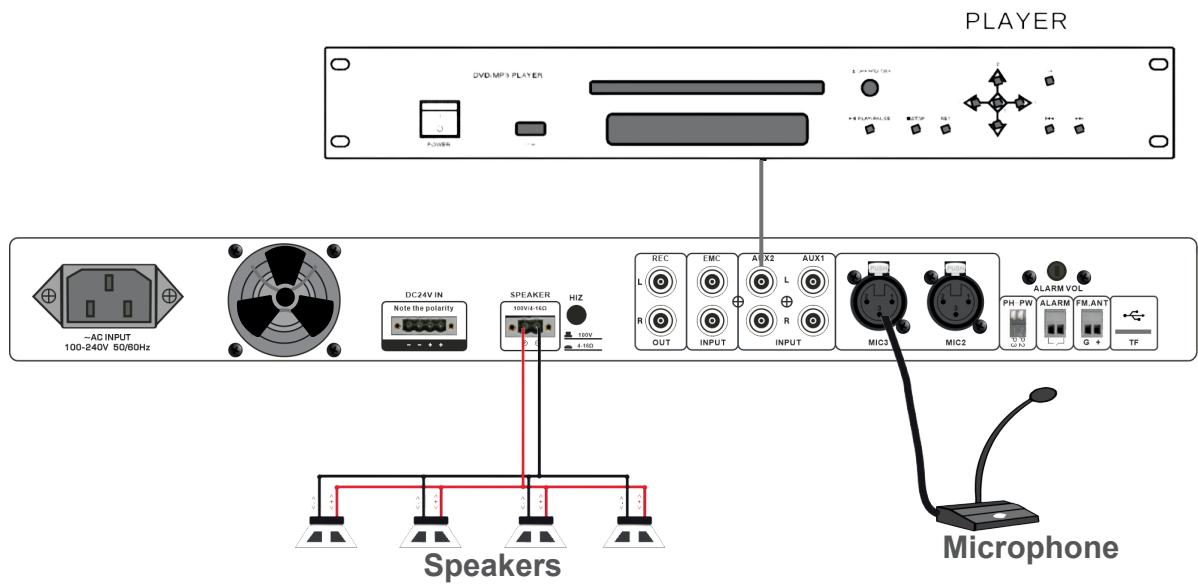
## Specification

Model number	TCI-120DMV	TCI-240DMV	TCI-360DMV	TCI-500DMV	TCI-660DMV
Rated Output Power	120W	240W	360W	500W	660W
Fixed Resistance Output	8-16ohms(Ω)				
Constant Voltage Output	100V(83Ω)	100V(42Ω)	100V(28Ω)	100V(21Ω)	100V(15Ω)
Microphone Input	MIC1 / MIC2: 600 ohms(Ω)10mV,unbalanced				
	MIC3: 600 ohms(Ω)10mV,balanced				
Line Input	AUX1 / AUX2:LINE:10K ohms(Ω)300mV,unbalanced				
Auxiliary Output	0.775V (0dB)				
Frequency Response	60Hz—20KHz (±3dB)				
Nonlinear Distortion	<0.5%at 1KHz,1/3 of rated output power				
S/N	Line: >80dB,MIC: >65dB				
Output Adjustment Rate	<3dB,from static to full load working state				
Tone Adjustment Range	BASS: 100Hz(±10dB),TREBLE: 10KHz(±10dB)				
Indicator Light	Power supply: PW, level indication: -20, -10, -3, CLIP				
Power Supply	AC100V~AC240V 50~60Hz & DC24V				
Power Cord	(3×0.5mm <sup>2</sup> )×1.5M (standard)	(3×0.75mm <sup>2</sup> )×1.5M (standard)			
Power Consumption	180W	360W	480W	750W	990W
Product Size	480*200*45mm	480*280*45mm			
Package Size	522*28*72mm	515*380*100mm			
Net Weight	3.5KG	3.6KG	3.7KG	3.9KG	4.3KG
Gross Weight	4.5KG	4.6KG	4.7KG	4.9KG	5.3KG

※ The above specifications are standard.

※ Specifications are subject to change or improvement without prior notice.

## Device Connection Diagram



## Speaker Wiring and Setup

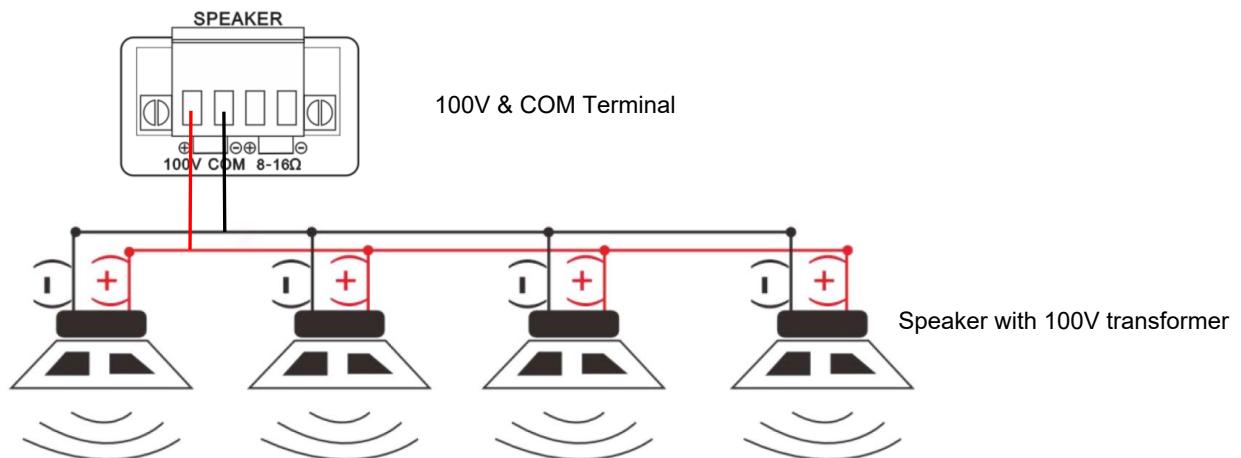
### Caveats:

- The amplifier has different speaker sound outputs of 100V and low impedance 4-16Ω.
- **Only one output can be used at the same time, the amplifier may damage internal parts if more than one output is connected.**

### 100V Output

This system is most commonly used in PA systems and only 100V line speaker cabinets with transformers may be used. All speaker cabinets are connected in parallel and the sum of their power must not exceed the rated output power of the amplifier.

**When playing music, it is recommended not to load the amplifier beyond 70% of its rated output power.**

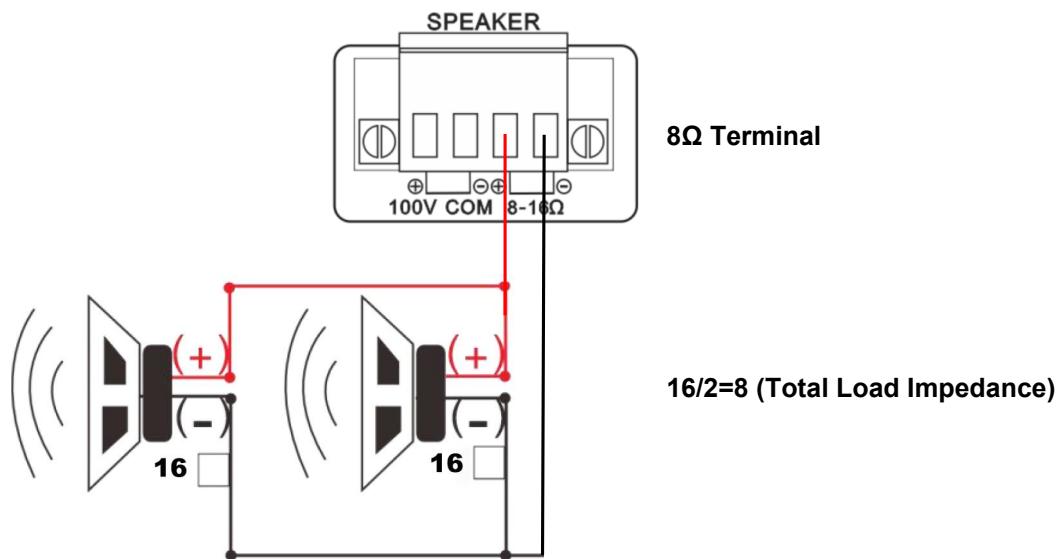


## 4-16Ω Low Impedance Outputs

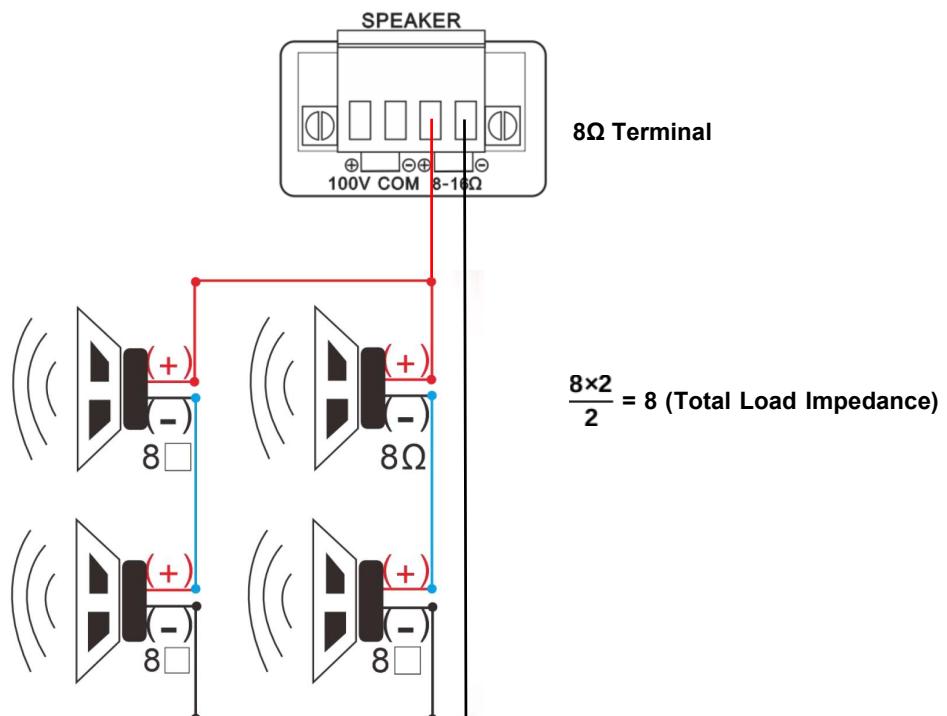
This output allows the connection of low impedance speaker cabinets without transformers when using two or more speaker cabinets.

Be sure to connect in **series**, **parallel**, or a **mixture of series and parallel**, keeping the total load impedance at 8Ω or 16Ω.

### A. Parallel



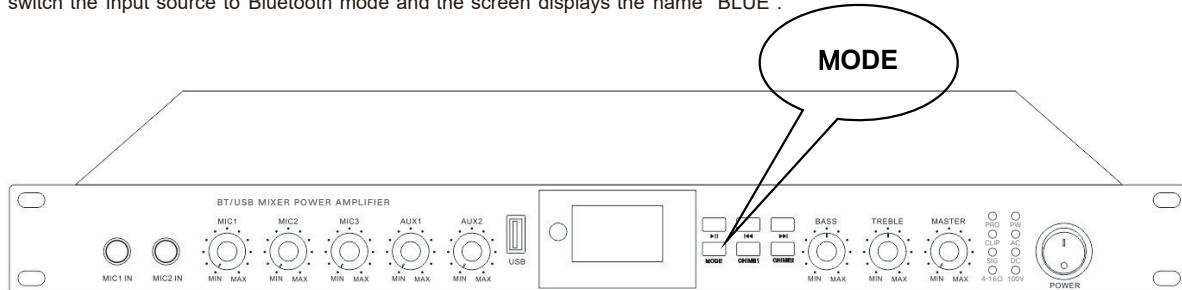
### B. Mixed series and parallel connection



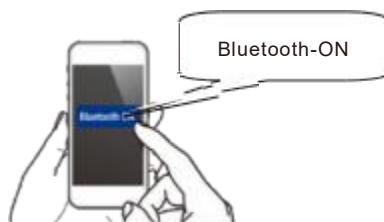
## Bluetooth Device Connection

**\*Note: The name of the Bluetooth device searched by the cell phone or tablet is the product model name "TCI-120DMV or TCI-240DMV or TCI-360DMV or TCI-500DMV or TCI-660DMV".**

In order to enjoy music from a Bluetooth device, the Bluetooth device must first be paired with this amplifier; after the Bluetooth device is paired, there is no need to pair it again. Press the MODE button on the front panel of the amplifier to switch the input source to Bluetooth mode and the screen displays the name "BLUE".



1. Activate the Bluetooth function of the phone/tablet.



Select "TCI-XXXDMV" from the list of devices displayed on the phone/tablet screen.

At this time, the cellphone/tablet can be connected about 1M close to the unit, and "TCI-XXXDMV" will appear on the cell phone's/tablet's pairing list when the pairing is finished.

**\*Note: Please enter "6666" when your cell phone/tablet requires a password when trying to connect to the expander.**



Play music from your phone/tablet.

**\*Note: The next time you switch the input source to Bluetooth, this amplifier will automatically connect to the last Bluetooth device connected.**



## Function button explanation

- ▶⏸ Play/Pause button: In USB and Bluetooth mode, it is used to control the playback and pause of the track.
- ◀▶ Previous song button: In USB and Bluetooth mode, press this button to play the previous track, long press to decrease the volume.
- ▶▶ Next song button: In USB and Bluetooth mode, press this button to play the next track, long press to increase the volume.

**MODE**: Mode switch button: Switch between USB and Bluetooth modes. The system defaults to Bluetooth mode when no USB drive is inserted, and this button is invalid.

**CHIME1**: This button is used to activate the emergency alarm

**CHIME2**: This button is used to activate the chime sound.

## Remote control function introduction (optional )

**POWER** button: Turn on/off the power of the decoding board.

**MODE** button: Mode switching button, the same as the panel function.

Number keys: Can directly select the corresponding digital track.

**MUTE** button: Mute button, press once to mute, press again to restore output.

**EQ** button: Equalization sound effect button, there are 6 sound effects to choose from in USB and Bluetooth mode.

**REP** button: Loop button, 4 loop modes: R for random playback, A for all loop, 1 for single loop, F for sequential playback.

**STOP** button: Stop button, in USB and Bluetooth mode, it can stop the track being played.

◀▶ :In USB and Bluetooth mode, press this button to play the previous track.

▶▶ :In USB and Bluetooth mode, press this button to play the next track.

▶⏸ :In USB and Bluetooth mode, it is used to control the playback and pause of the track.

**VOL-** button: Volume decrease button.

**VOL+** button: Volume increase button.





## Warning



To avoid electric shock, do not open the case cover by yourself. In the event of a malfunction, have the equipment repaired by your dealer or the manufacturer, or by a qualified professional whose specialization is based on a certificate. Non-professionals should not dismantle the unit, as this may cause electric shock and jeopardize the safety of the operator.