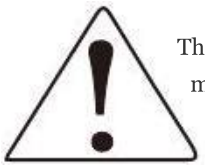
Multifunctional Commercial Digital Power Amplifier
Standard Version

Thank you for choosing DEKEN (Deqin) products, which fully demonstrate your professionalism and discerning taste. All DEKEN staff sincerely appreciate your support and will continue to provide innovative, advanced, and reliable products.

We believe this product will provide you with years of satisfactory service, but if there are any issues that leave you less than completely satisfied, please let us know how we can improve, and we will do better.

Welcome again to join our DEKEN family and become one of us.

This symbol is used to warn users of the presence of uninsulated "dangerous voltage" inside the product enclosure, which is sufficient to cause electric shock.



This symbol is used to remind users that the accompanying materials of this device contain important operating and maintenance (repair) instructions.

Note: To prevent electric shock, do not use this (polarized) plug with extension cords, sockets, or other power outlets unless the pins can be fully inserted without being exposed.

To prevent fire or electric shock, Do not allow this device to come into contact with rain or moisture.

* Do not install this device in confined spaces such as bookshelves, wooden tables, or similar items.
* This device cannot be used in rainy or humid environments. Otherwise, it will damage the device.

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

To prevent electric shock, do not use this polarized plug with an extension cord, outlet, or other power source unless the blades can be fully inserted without leaving any part exposed.

＊For the terminals marked with symbol of " $\widehat{\Delta}$ " may be of sufficient magnitude to constitute a risk of electric shock. The external wiring connected to the terminals requires installation by an instructed person or the used of ready—made leads or cords.

*For the terminals marked with the symbol " $\widehat{\Delta}$ ", the voltage may be of sufficient magnitude to constitute a risk of electric shock. The external wiring connected to these terminals requires installation by a qualified person or the use of ready-made leads or cords.

＊The apparatus shall not be exposed to dripping or splashing and that objects filled with liquids，such as vases，shall not be placed on apparatus.

*The apparatus shall not be exposed to dripping or splashing, and objects filled with liquids, such as vases, shall not be placed on the apparatus

＊The appliance coupler is used as disconnect device，the disconnect device shall remain readily operable.

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＊Protective earthing terminal. The apparatus should be connected to a mains socket outlet with a protective earthing connection.

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＊Increase the minimum distance of the prototype to the surrounding environment.

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＊no naked flame sources，such as lighted candles，should be placed on the apparatus;

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＊The use of apparatus in tropical climates.

＊The use of apparatus in tropical climates.

＊The use of apparatus in moderate climates.

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＊Do not install this equipment in a confined space such as a book case or similar unit.

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＊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).

*Worded: "WARNING FOR YOUR PROTECTION PLEASE READ THE FOLLOWING - WATER AND MOISTURE: The 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． "

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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． "

*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."

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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．

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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．

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Installation Environment

This product is not complicated to install and is easy to operate, but you still need to spend some time reading this manual to ensure correct installation, become familiar with the various features of the device, and use it properly.

Try not to discard the carton and other materials, as they may be needed again when moving or repairing the equipment.

To protect the device and ensure many years of high-quality use, please do not place the device in environments with high temperature, dust, humidity, or strong radiation.

Important Safety Instructions

. Read these instructions.

2. Keep these instructions.

3. Pay attention to all warnings.

4. Follow all instructions.

5. Do not use this device in wet environments.

6. Clean only with a dry cloth.

7. Keep air circulation and heat dissipation. Install according to the manufacturer's instructions.

8. Do not install near heat sources, such as radiators, electric heaters, radiators, or other devices that generate a large amount of heat (including amplifiers).

9. Pay attention to the grounding condition of the power supply and the polarity of positive and negative.

10. Keep the power socket in good contact; do not let it be loose or have poor contact.

11. Only use accessories and tools provided or approved by the manufacturer.

12. Follow the installation instructions when moving or relocating the equipment.

13. Unplug the power socket before thunderstorms, lightning, or storms, or when the equipment will not be used for a long time.

14. If repairs are needed, they must be carried out by manufacturer-certified personnel qualified for maintenance. Stop using the equipment and request inspection and repair by certified personnel if the equipment is damaged in any way or abnormal conditions are found, such as damaged power cords or plugs, liquid or other objects entering the equipment, water ingress or excessive moisture, or if the equipment has been dropped.

- Avoid excessive heat, moisture, dust, and vibration.

Keep the device away from high temperature or humid environments, such as radiators, stoves, etc. Also avoid placing the device in dusty or vibration-prone environments to prevent mechanical damage.

- Avoid physical impact

Strong physical impact can cause device damage. Please handle with care!

- Do not open the chassis to repair or modify the device by yourself

This device does not contain any personal consumable parts. Any maintenance or repair must be performed by certified after-sales service personnel.

Any opening of the chassis or modification of internal circuits will void the warranty.

Always turn off the power before making any wiring connections.

The device's AC power must be turned off before connecting or disconnecting any wiring. This is very important to protect the device from damage and also to protect other connected equipment.

Be careful when plugging and unplugging cables

When plugging or unplugging cables (including power cords), always hold the socket and do not just pull the cable forcefully. This helps protect the integrity of all sockets.

Use a soft and dry cloth to clean the device

Do not use solvents or corrosive substances to clean the device. Be sure to use a dry, soft cloth to clean the device.

Introduction

The DTA series is a newly developed power amplifier by DEKEN specifically for commercial background music applications. It is optimized for commercial use, featuring a full range of fanless, silent, high-efficiency digital power amplifiers with no mechanical noise, suitable for various environments with noise requirements. Equipped with a newly developed DSP processing system, it ensures complete and balanced music performance at any volume. Additionally, this series of power amplifiers is equalized and optimized for the DEKEN FIT series commercial speakers, enhancing the audio experience when used together. It offers selectable low impedance (constant impedance: $4\Omega, 8\Omega$) and high impedance (constant voltage: $100\ V, 70\ V$) outputs, with a portable and flexible design suitable for various types of retail stores, restaurants, bars, conference centers, schools, supermarkets, exhibition halls, shopping malls, hotels, and other venues with high audio quality demands.

1.1 Features

Entire series features fanless silent design with no mechanical noise

Compatible with one Dante stereo audio input (optional)

2 MIC microphone inputs, compatible with LINE and MIC signal levels, microphone input has priority

2 AUX line inputs, supporting stereo or mono audio source input

1 local audio source input, supporting USB or Bluetooth audio playback, and equipped with recording and capturing functions

1 AUX auxiliary output channel, supporting stereo or mono audio source output

2 power amplifier output channels, each with independent volume, bass, and treble control

Built-in prompt chime and alarm trigger output; supports external custom alarm sound output

Each input channel has independent volume control and customizable output routing

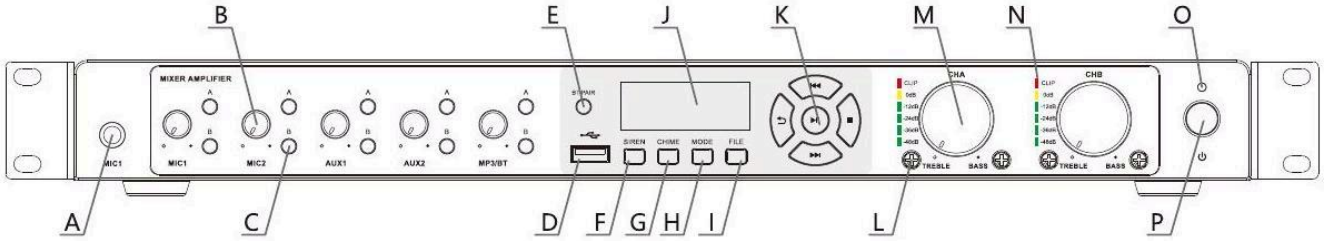
Amplifier constant voltage and constant impedance mode switching function, used to drive $100\ V/70\ V$、$8\Omega/4\Omega$ speaker systems

High-efficiency Class D power amplifier, the whole unit output is equipped with comprehensive protection against overheating, overvoltage, overcurrent, and short circuit

One short-circuit dry contact input trigger function and one set of 24 V auxiliary DC power output

RJ45 function expansion interface

1.2 Front panel controls and interfaces



A. MIC1 audio input interface - uses a 1/4 " TRS large three-core interface, supporting balanced or unbalanced line-level input

B. 5-channel input volume control knobs - provide gain adjustment from -100 dB to 0 dB for inputs, with signal level indication function; green indicates signal input, orange indicates signal clipping, among which:

Dante version (as shown in Figure 1.2-2):

USB drive, Bluetooth, and Dante share one tone knob; adjusting this knob can simultaneously control the Dante volume.

C. Signal routing switch (A & B) - used to set the signal path from input to output.

D. USB audio input - can connect a USB drive to play audio files.

1. 2—2 1.2-2

E. Bluetooth Pairing Button - Long press to turn Bluetooth pairing on or off

F. Siren (SIREN) button - Long press to activate siren output

G. Chime (CHIME) button - Press to activate chime sound output

H. Media mode (MODE) toggle button - Press to select Bluetooth, USB, or recording mode, then press the **II** button after selection

I. File Browse (FILE) Button - Press to enter or exit USB drive file browsing

J. LCD Display Screen - Displays device name, mode, temperature, media playback, and other information

K. Multimedia Playback Auxiliary Buttons - Includes Previous Track, Next Track, Return, Play/Pause, and Stop controls

L. Output Tone Control Knob - Output treble (TREBLE) and bass (BASS) adjustment knobs, providing gain adjustment in the range of -15dB to +15dB

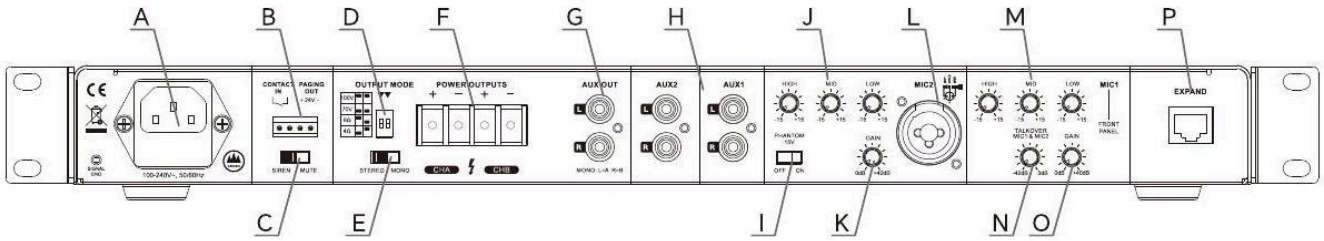
M. Output volume control knob - provides gain adjustment in the range of -100 dB to 0 dB for the output

N. Output level indicator light - can display multi-segment output level signal indicators

O. Device status LED indicator - shows blue to indicate the device is operating normally

P. Power switch - turns the mixer amplifier on or off

1.3 Rear Panel Controls and Interfaces



A. AC Power Interface - Supports wide voltage $100-240\ \mathrm{V}, 50/60\ \mathrm{Hz}$ input and is equipped with a $250\ \mathrm{V}/8\ \mathrm{A}$ glass fuse

B. Euro-block Interface - Features one dry contact trigger input (left) and one set of $24\ \mathrm{V}/2\ \mathrm{A}$ auxiliary power outputs (right)

C. Alarm Mute Switch - When the switch is set to MUTE, it silences the alarm output

D. Amplifier mode selection switch - used to switch the amplifier output between constant voltage $(100\ \mathrm{V}、70\ \mathrm{V})$ or constant impedance $(8\Omega、4\Omega)$

E. Channel mode selection switch - allows selection between stereo or mono output modes

F. Amplifier output interface - balanced amplifier line output, used to connect speakers

G. RCA auxiliary output - LINE level line output, supports stereo or mono audio source output

H. RCA Line Input $1/2$ - LINE level line input, supports stereo or mono audio source input

I. Phantom Power Switch - When turned on, provides a +15 V phantom power supply for MIC2

J. MIC2 Tone Control Knob - Controls the high (HIGH), mid (MID), and low (LOW) tones of MIC2 input, offering gain adjustment from -15 dB to +15 dB

K. MIC2 Gain Control Knob - Allows adjustment of MIC2 input gain in the range of 0 dB to +40 dB

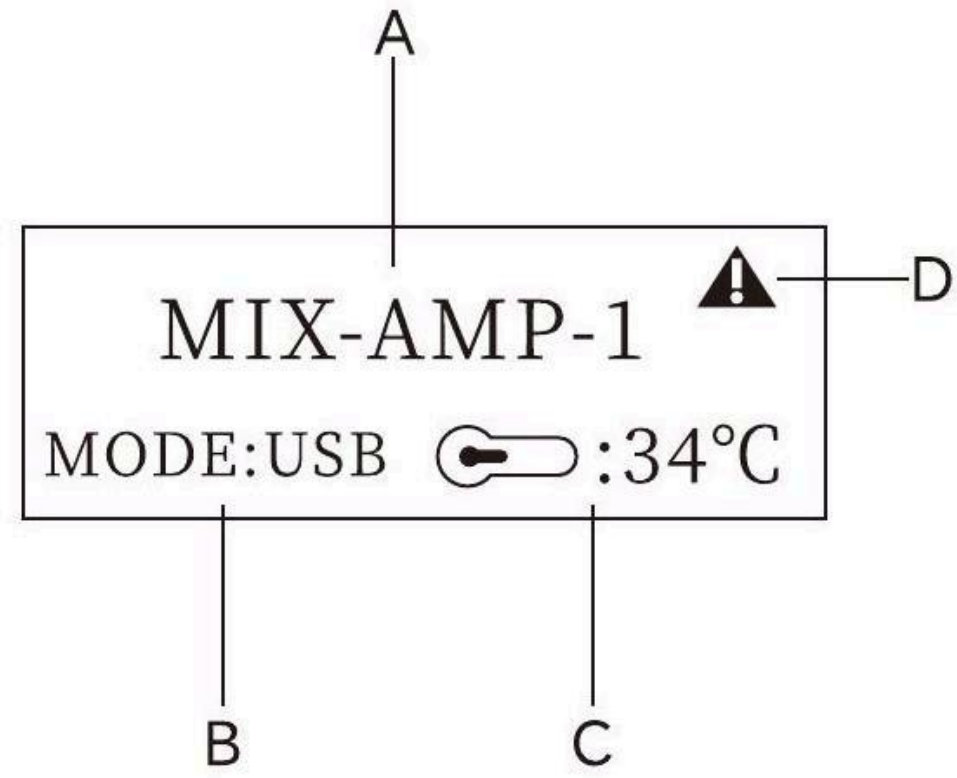
L. MIC2 Audio Input Interface - Uses a $1/4$ " TRS+ combo XLR interface, supporting balanced or unbalanced line-level input

M. MIC1 Tone Control Knob - Adjusts the high (HIGH), mid (MID), and low (LOW) tones of the MIC1 input, providing a gain adjustment range from -15dB to +15dB

N. MIC Priority Function Control Knob - When the microphone is in use, it forces attenuation of the background music in the range of 0dB to -40dB

O. MIC1 Gain Control Knob - Allows adjustment of the MIC1 input gain within the range of 0 dB to +40 dB

1.4 LCD Display Screen Interface



A. Displays the name of this mixer amplifier + ID number (ID: 1-99)

B. Displays the current multimedia playback mode, USB (flash drive) mode, or BT (Bluetooth), REC (recording) mode

C. Real-time detection and display of the internal temperature of the chassis (temperature display range: $0-99^{\circ}C$)

D. If the rear panel dry contact signal is triggered, the upper right corner of the display will show the " **A** " icon

Note: The display will turn off after 5 minutes of no operation and can be awakened by pressing any key

2.0 Installation and Wiring

2.1 Unboxing

After receiving the device, please unbox and inspect it promptly to check for any damage caused during transportation. If any damage due to improper transportation is found, please contact the carrier immediately (it is recommended to keep the packaging materials properly for future transportation of the device); after confirming there are no issues, please unpack and check whether the device accessories are complete:

Integrated amplifier main unit * 1, AC power cord * 1

Ear hooks * 2, rubber feet pads (already locked on the main unit) * 4

1 4pin-Euroblock European style terminal block * 1
Manual * 1, certificate of conformity * 1, warranty card * 1

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

2.2 Installation

This device can be installed in the following two ways:

Desktop installation: Place the device directly on a desktop (such as a table or shelf), and rubber feet can be used (default factory installation method).

Rack installation: Requires the use of mounting ears for installation. See Figure 2.2.1

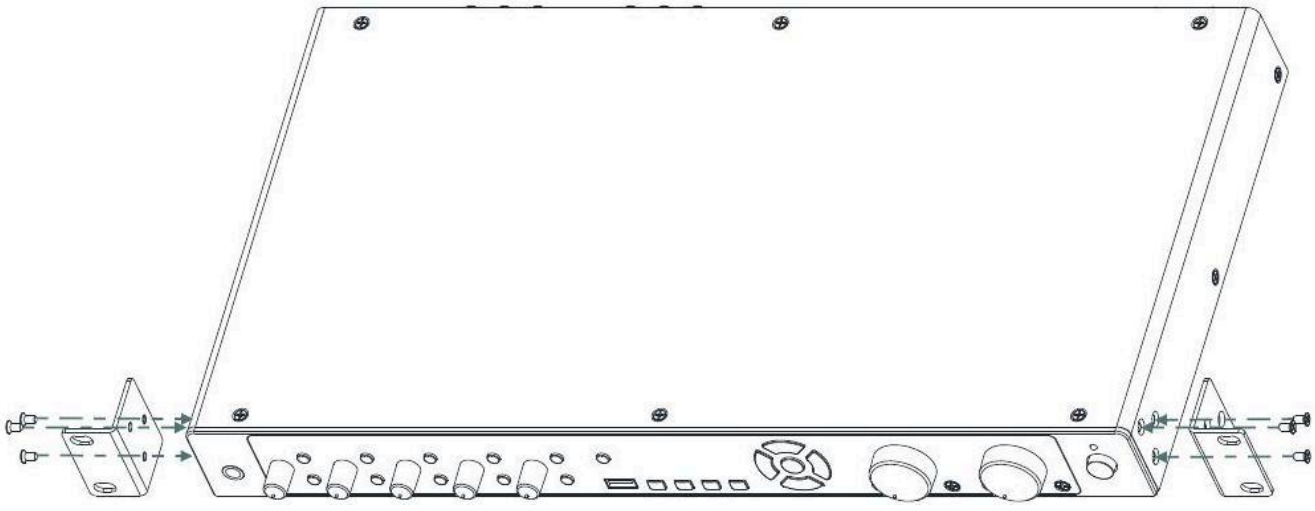


Figure 2.2.1 Rack installation

Note: Please disconnect the device power before installation and ensure all audio control knobs are turned to the minimum.

2.3 Heat Dissipation and Ventilation

When installed on a flat surface, do not place any objects on top of the amplifier. Keep the surrounding area ventilated for amplifier heat dissipation, and do not block the bottom cooling vents.

When installing in a cabinet, leave at least 5 cm of space above and below the amplifier for ventilation and heat dissipation, and try to keep the front and rear of the cabinet open.

2.4 AC Power Cord Connection

Use the AC power cord supplied with the device to connect to the device's AC power input interface. The operating voltage of the device is $100\ \mathrm{V}-240\ \mathrm{V}\sim, 50/60\ \mathrm{Hz}$. Please ensure that the local AC power output meets this voltage and frequency requirement.

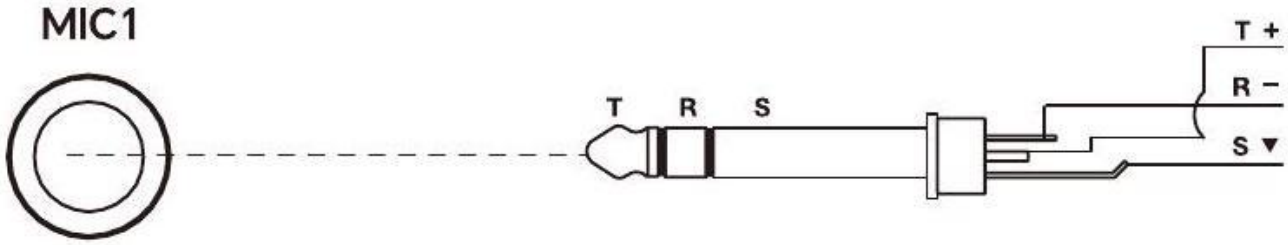
Note: To protect the device and personal safety, please be sure to connect the socket to the protective ground as required.

2.5 Audio Input Connection

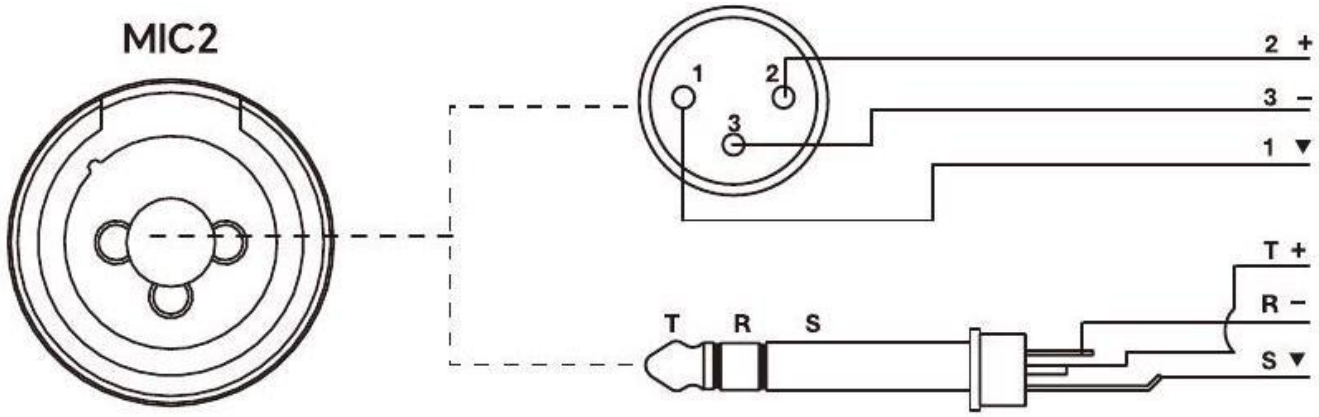
When connecting a microphone, you can choose a $1/4$ " TRS (large three-core) or XLR input interface. It is recommended to use balanced cables for the connection.

When connecting CD/DVD, mobile phones, MP3 players, etc., you can choose to connect using the RCA input interface.

1/4" TRS connector

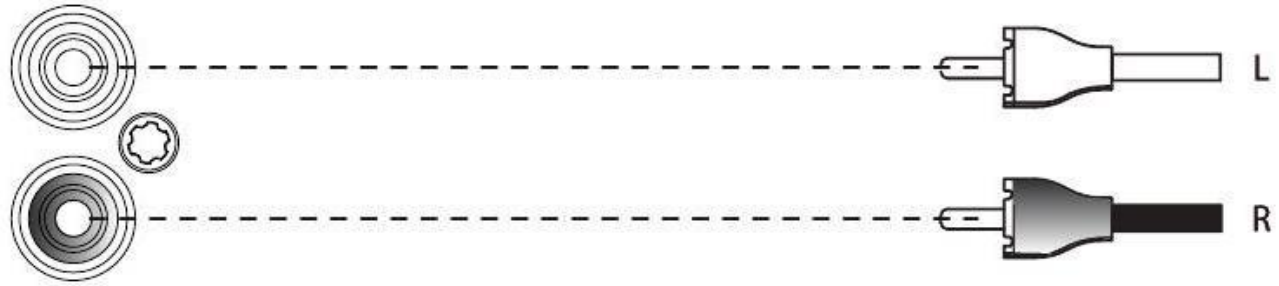


1/4" TRS + XLR Cannon connector



RCA connector

AUX1／2 AUX1/2



2.6 Audio Output and Amplifier Output Connection

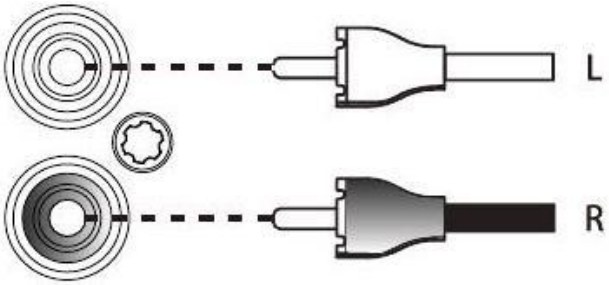
When the output needs to be connected to a pure power amplifier or an active speaker system, use the RCA auxiliary output interface on the rear panel for connection.

When connecting the output to speakers, use the barrier terminal on the rear panel.

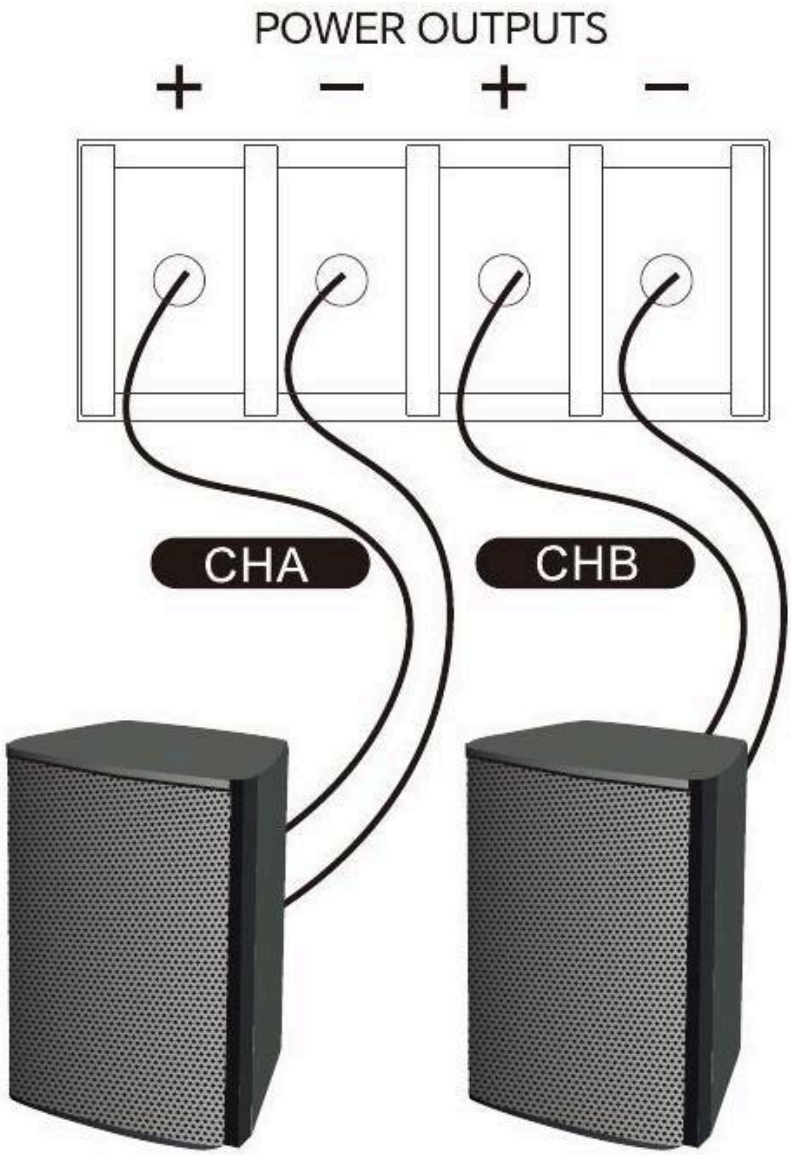
When connecting the output to speakers, it is recommended to use high-quality audio-specific twisted pair cables. To prevent short circuits between wires and the chassis during wiring, the exposed length of the cable end (stripped length) between the cable and the amplifier output terminal must not exceed 8 mm. Also, to ensure personal safety, be sure to cover the transparent protective cover that comes with the amplifier output terminal after wiring is completed.

Note: Ensure that the impedance of the connected speaker matches the current amplifier output mode. For amplifier mode settings, see section 3.8 "Output Mode Switch"

RCA辅助输出接口 RCA Auxiliary Output Interface
AUX OUT



Barrier-type terminal block



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

(1) Ensure that all volume control knobs are set to the lowest position and all tone control knobs are set to the midpoint (factory default settings) before powering on;

(2) Ensure that both amplifier output interfaces on the rear panel are connected to speakers, see section 2.6 "Audio Output and Amplifier Output Connection" for details;

(3) Connect to AC power and turn on the power switch. After startup is complete, the device status indicator light will turn blue;

(4) Connect external audio sources, such as Bluetooth, USB, or local audio line input;

(5). On the front panel, press the routing selection switches ' A ' and ' B ' corresponding to the input source selected in step '4'. When selected, the button indicator lights up orange. For details, see section 3.1 "Signal Routing Selection";

(6). Slowly turn the volume control knob corresponding to the input source selected in step '4' and the master output volume control knob clockwise until the output volume reaches the desired level;

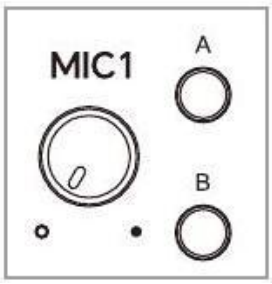
3.1 Signal Routing Selection (A & B)

By controlling the signal routing selection button, you can choose whether the corresponding input source is mixed to the output channel (Note: the selected state is saved after power off). In mono mode:

When the MIC1 routing selection button 'A' is pressed, the MIC1 source will be mixed to output channel A;

When the MIC1 routing selection button 'B' is pressed, the MIC1 audio source will be mixed to output channel B;

In stereo mode:



When either the 'A' or 'B' routing selection button of MIC1 is pressed, the MIC1 audio source will be mixed to both output channel A and output channel B. After the channel is selected, the corresponding button indicator light will turn orange;

For mode switching settings, see section 3.7 "Stereo/Mono Mode Switch"

3.2 Siren Switch (SIREN)

Press and hold the siren button for 3 seconds to trigger the siren output. The siren sound will be mixed into output channel A and output channel B,

Mutes all sound sources except MIC input, and adjusts the siren volume by controlling the master output volume knob;

Press again to turn off the siren output;

When the siren is triggered, the corresponding button indicator light will turn red;

To output mute when the alarm sound is triggered, see section 3.9 "Alarm Sound Mute Toggle Switch"

Note: The default is built-in alarm sound output. For external (custom) output, see section 3.4.4 "External Alarm Sound Output"

3.3 Chime Switch (CHIME)

Press the prompt tone button to add a prompt tone to the audio broadcast, and adjust the volume of the prompt tone by controlling the master output volume knob;

At the same time: if MIC1 or MIC2 routing switch to 'A' is selected, the chime will be mixed into output channel A;

If the MIC1 or MIC2 routing switch is set to 'B', the prompt tone will be mixed to output channel B;

After the prompt tone is triggered, the corresponding button indicator light will turn red;

3.4 Multimedia Player

3.4.1 Bluetooth Connection

Please follow the steps below to enable and use the Bluetooth connection function:

(1) Press and hold the Bluetooth pairing button (BT PAIR) until the Bluetooth indicator starts flashing.

(2) Turn on the Bluetooth function of the audio source device, search for "MIX-AMP-XX", and establish a Bluetooth connection.

(Note: "XX" represents the ID number of the mixer amplifier. Setting different IDs for each mixer amplifier makes it easier for users to distinguish and manage them.)

(3) After the Bluetooth connection is successful, the Bluetooth indicator changes from flashing to steady on.

(4). Use the 144 button to switch to the previous or next Bluetooth song.

(5). Use the II button to pause or resume playing Bluetooth songs.

(6). Use the button to stop playing Bluetooth songs.

(7). To turn off Bluetooth, long press the Bluetooth pairing button until the Bluetooth indicator light goes off, or disconnect Bluetooth from the source device.

3.4.2 USB Playback

1. Insert the USB drive into the device's USB audio input interface to enter the USB song playback interface (play automatically upon insertion).

2. Use buttons 11 and 1l to play the previous track, next track, or pause playback on the USB song playback interface.

3. Use the "FILE" button to enter or exit the USB file browsing interface.

4. Use buttons 14 and 11 to select or play files in the file browsing interface.

5. Use the button to stop playing the song.

6. In the USB playback interface, press the MODE button to enter the music settings interface, where you can set the USB playback mode and EQ mode, including:

Built-in 7 playback modes:

	Repeat All	USB drive loop playback
		Folder loop playback
		gle track loop playback
	All Random	Random playback within USB drive
	Folder Random	Random playback within folder
	All Order	Play once in order on the USB drive
	Folder Order	Play once in folder order

Built-in 6 EQ modes:

Normal	Standard Sound Effect
Rock	Rock Sound Effect
Pop	Pop Sound Effect
Classic	Classic Sound Effect
Jazz	Jazz Sound Effect
Country	Country Sound Effect

Note: The music mode setting is saved after power off

3.4.3 REC Recording Function

Please follow the steps below to enable the device's recording function:

1. Ensure the USB drive is inserted into the device's USB audio input port.

2. Return to the main interface, press the MODE button and select REC mode, then press the **II** Play/Pause button to enter the recording interface.

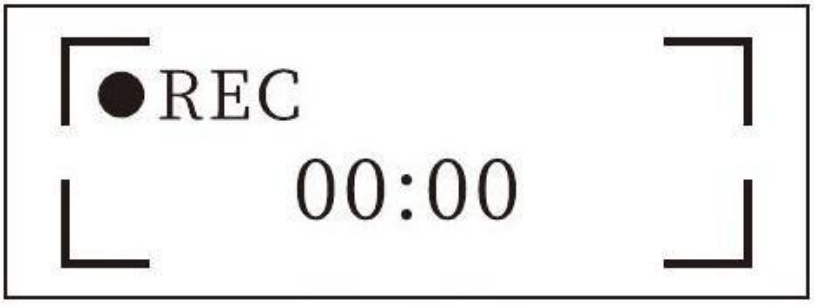
3. Use the II play/pause button to start or pause recording.

4. Use the stop button to save the recording.

5. The recording file will be saved to the "REC" folder (automatically created).

6. After successful saving, you can choose to play the recorded file or delete it.

Note: Media player signals are not recorded.



REC recording interface

3.4.4 External alarm sound output

You can create a "SIREN" folder in the root directory of the USB drive and pre-store audio files, which will be used to replace the built-in alarm sound output when the alarm is triggered.

3.4.5 Supplementary Statement

1. The default volume of the media player is 25.

(Press and hold the 14 or 1 button on the main interface or USB playback interface to reset the media volume, range: 0 - 30, parameters are saved after power off)

2. USB reading supports a maximum of 32G, with the system format being FAT32 for the USB drive.

3. USB supports playback of audio files in MP3, WAV, APE, and FLAC formats, supporting a sampling rate of $8-48\mathrm{KHz}$ and a bit depth of 16bit.

4. Bluetooth and USB signals cannot be recorded.

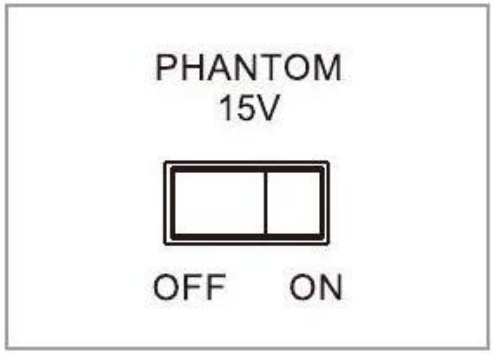
5. Long press the II button on the main interface to enter the system settings interface, select "Device Id Settings" to assign a unique ID to the device.

3.5 MIC priority function control knob (TALKOVER)

The mixer amplifier has a MIC priority function, which can be activated by the potentiometer (TALKOVER) on the rear panel of the device; turning the potentiometer counterclockwise will reduce the input audio signal level when this function is activated; turning it fully clockwise will turn off this function.

3.6 Phantom Power Switch (PHANTOM)

If the phantom power switch is set to "ON," it provides a +15 V phantom power supply to the MIC2 microphone input channel.



3.7 Stereo/Mono Mode Switch

Select whether the output is stereo or mono audio source;

When the switch is set to Stereo (STEREO), stereo signals are output;

When the switch is set to Mono (MONO), mono signals are output;

$\mathrm{CHA}=\mathrm{L},\mathrm{CHB}=\mathrm{R}$ Stereo: $\mathrm{CHA}=\mathrm{L},\mathrm{CHB}=\mathrm{R}$
$\mathrm{CHA}=\mathrm{L}+\mathrm{R},\mathrm{CHB}=\mathrm{L}+\mathrm{R}$ Mono: $\mathrm{CHA}=\mathrm{L}+\mathrm{R},\mathrm{CHB}=\mathrm{L}+\mathrm{R}$

Note: When only the MIC input is used, there is no stereo output effect

3.8 Output Mode Switch (OUTPUT MODE)

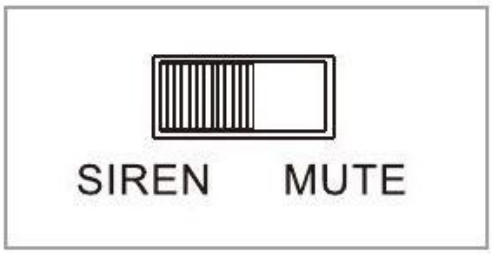
The amplifier output mode can be set via the two DIP switches on the rear panel, used to drive different speaker systems of 100 V/70 V、8Ω/4Ω;

DIP Switch Settings

3.9 Alarm Sound Mute Toggle Switch

If the alarm sound mute toggle switch is set to "MUTE," it will mute the output when the alarm sound is triggered;

If the alarm sound mute toggle switch is set to "SIREN," the alarm sound will output normally;



（CONTACT IN）

3.10 Short Circuit Trigger Input Interface (CONTACT IN)

The mixer amplifier is equipped with a dry contact trigger input function. When the contact is short-circuited, the device's PAGING OUT port will output a 24V DC power supply and trigger an alarm sound source, which can be linked with the fire alarm signal; as shown in Figure 3.11.1 (left contact).

Warning: This interface only allows dry contacts as input. It is forbidden to connect any live contacts (wet contacts).

3.11 24V DC output interface (PAGING OUT)

Provides a set of $24\ V/2\ A$ DC power that can only be output when the CONTACT IN contact is short-circuited, and can be linked with the fire alarm signal; as shown in Figure 3.11.1 (right contact)

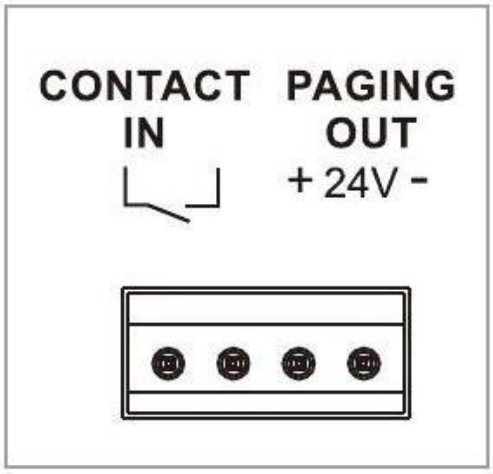


Figure 3.11.1

3.12 Firmware Update

3.12.1 Bluetooth Firmware Update

1. Save the "updata.bfu" upgrade firmware to the root directory of the USB drive (the drive format should be FAT32, maximum 32GB)

2. Insert the USB drive into the device's USB port

3. The display screen shows "Equipment Updating," indicating that the device is being updated.

4. Wait until the display screen shows "Update Success!!," indicating that the device has been successfully updated.

5. After the upgrade is complete, you can remove the USB drive and delete the upgrade files inside, otherwise the upgrade will repeat.

Note: Do not unplug the USB drive during the upgrade process, otherwise the Bluetooth module will be completely bricked and can only be repaired by returning to the factory

3.12.2 Main Control Chip Firmware Update

1. Save the "MIX-AMP.bin" upgrade firmware to the root directory of the USB drive (the drive format should be FAT32, maximum 32GB)

2. Insert the USB drive into the device's USB port

3. The display will show "Equipment Updating," indicating the device is updating

4 . Wait until the upgrade is complete and the device restarts automatically

5. Remove the USB drive and delete the upgrade files inside, otherwise the upgrade will be repeated.

Common Problems and Solutions

故障现象 Fault Phenomenon	可能原因 Possible Causes	解决方法 Solutions
设备状态LED指示灯显示异常（不亮、显示红灯、红灯闪烁） Device status LED indicator abnormal (not lit, red light on, red light flashing)	1．无显示（不亮）：保险丝烧毁 1. No display (not lit): fuse blown	打开保险丝座，用相同规格的保险丝更换 Open the fuse holder and replace it with a fuse of the same specification
	2．显示红灯：过流保护 2. Red light on: Overcurrent protection	断电后检查后级扬声器线路是否短路或故障，并确保扬声器和功放输出模式匹配 After power off, check whether the speaker wiring is short-circuited or faulty, and ensure the speaker and amplifier output mode match
	3．红灯闪烁：过热保护 3. Red light flashing: Overheat protection	待设备冷却恢复至常温后重启恢复，同时请勿将功放置于过热的环境下工作 Restart after the device has cooled down to normal temperature, and please do not operate the amplifier in an overheated environment.
无输出或输出音量过低 No output or output volume is too low.	1．无输入信号或信号水平过低 1. No input signal or signal level is too low.	开启音源并调整输入信号至理想水平 Turn on the audio source and adjust the input signal to the ideal level
	2．未正确选择信号路由开关 2. Signal routing switch not correctly selected	详见 3.1 章节 " 信号路由选择（A\＆B） " 设置正确的输出通道 See section 3.1 "Signal Routing Selection (A & B)" for setting the correct output channel
	3．音控旋钮被调至最低 3. Volume control knob turned to the lowest	合理调整输入或输出音控旋钮至理想水平 Adjust the input or output volume control knob to an appropriate level
	4．功放输出模式与负载不匹配 4. Amplifier output mode does not match the load	参考 3.8 章节 " 输出模式切换开关 " 配置正确的输出模式 Refer to section 3.8 "Output Mode Switch" to configure the correct output mode
	5．喇叭损坏或总功率不匹配 5. Speaker damage or total power mismatch	断电检查喇叭线路或更换喇叭确保喇叭总功率不能超过功放的额定功率 Power off to check speaker wiring or replace the speaker, ensuring the total speaker power does not exceed the rated power of the amplifier
音频失真 Audio distortion	1．输入信号水平过高 1. Input signal level is too high	降低输入源音量 Reduce the volume of the input source
	2．喇叭线路故障 2. Speaker circuit fault	断电检查喇叭线路或更换喇叭 Check the speaker wiring or replace the speaker after power failure
其它故障 Other faults	请联系相应购买渠道的售后服务机构 Please contact the after-sales service agency of the corresponding purchase channel	

6.0 性能参数 6.0 Performance Parameters

话筒输入 Microphone Input	MIC1：增益可调（0 dB－40 dB），平衡或非平衡， 6.3 mm 直插 MIC2：增益可调（0 dB－40 dB），平衡或非平衡，带 +15 V 幻像电，卡侬或 6.3 mm 直插 MIC1: Adjustable gain (0 dB－40 dB), balanced or unbalanced, 6.3 mm plug; MIC2: Adjustable gain (0 dB－40 dB), balanced or unbalanced, with +15 V phantom power, XLR or 6.3 mm plug	
AUX辅助输入 AUX Auxiliary Input	两路非平衡，立体声莲花接口（可选立体声输入或者单声道输入） Two unbalanced channels, stereo RCA interface (can be stereo input or mono input)	
本地音源 Local audio source	支持USB或蓝牙音乐播放、并具备录音采集功能 Supports USB or Bluetooth music playback and has recording and collection functions	
扩展音频输入 Extended audio input		
AUX辅助输出 AUX auxiliary output	0 dB, 560Ω，非平衡，立体声莲花接口 0 dB, 560Ω, unbalanced, stereo RCA connector	
最低运行阻抗 Minimum operating impedance	4Ω 输出： 4Ω 8Ω 输出： 8Ω 70 V 输出： 32Ω 100 V 输出： 66Ω 4Ω output: 4Ω 8Ω output: 8Ω 70 V output: 32Ω 100 V output: 66Ω	4Ω 输出： 4Ω 8Ω 输出： 8Ω 70 V 输出： 16Ω 100 V 输出： 32Ω 4Ω Output: 4Ω 8Ω Output: 8Ω 70 V Output: 16Ω 100 V Output: 32Ω
保护电路 Protection Circuit	交流保险丝，整机具备过热，过压，过流，短路，DC直流保护 AC fuse, the whole unit is equipped with overheat, overvoltage, overcurrent, short circuit, and DC protection	
总输出均衡控制 Total Output Balance Control	高音＋／－15dB@ 5KHz－20KHz低音＋／－15dB@20Hz－500Hz Treble +/–15dB @ 5KHz－20KHz Bass +/–15dB @ 20Hz–500Hz	
输入灵敏度 Input Sensitivity	话筒输入： 10 mVrms线路输入：0．316Vrms Microphone Input: 10 mVrms Line Input: 0.316 Vrms	
频率响应@ 300W Frequency Response @ 300W	70 V/100 V 输出： 70 Hz－17KHz, +/－3 dB 4/8Ω 输出： 20 Hz－20KHz, +/－2 dB 70 V/100 V Output: 70 Hz－17KHz, +/－3 dB 4/8Ω Output: 20 Hz－20KHz, +/－2 dB	
信噪比（A计权） Signal-to-noise ratio (A-weighted)	95 dB(A)	
总谐波失真（THD） Total harmonic distortion (THD)	100V／70V输出：＜1\% 4／8 Ω 输出：＜0．5\% 100V/70V Output: <1% 4/8 Ω Output: <0.5%	
幻像电源 Phantom Power	＋15VDC +15VDC	
控制输入输出 Control Input and Output	短路干接点触发输入，+24 V/2 A 直流电源触发输出 Short-circuit dry contact trigger input, +24 V/2 A DC power trigger output	
工作电源 Operating Power Supply	100 ～ 240VAC, 50/60 Hz	
功耗（额定输出时） Power Consumption (at Rated Output)	360 W	660 W
运行温度／湿度 Operating Temperature / Humidity	–20°C ～ +50°C, 495%	
尺寸，重量 Dimensions, Weight		
净重 Net Weight	3.83 kG	
尺寸 Dimensions	482(W) × 50(H) × 254(D)mm（配上机柜挂耳 + 脚垫） 482(W) × 50(H) × 254(D)mm (with rack ears + foot pads)	

包装尺寸 Packaging dimensions	600(W) × 115(H) × 335(D)mm

DEKEN

注意： Note:

DEKEN (Deqin) will make every effort to ensure that the information in this user manual is accurate and consistent with the actual product.

However, due to technological updates, the text, graphics, and other information in this manual may contain technical errors, typographical errors, or errors caused by other reasons. DEKEN reserves the right to modify or remove information without any prior notice.

CAUTION: Changes or Modifications not expressly approved by the party responsible could void the user's authority to operate this device.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
—Reorient or relocate the receiving antenna.
—Increase the separation between the equipment and receiver.
—Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
—Consult the dealer or an experienced radio/TV technician for help.

This equipment complies with FCC radlation exposure lmits set forth
for an uncontrolled environment.
It should be installed and operated with minimum distance 20cm between the radiator & your body.