

QZONE102

Instruction Manual



QZONE102 Instruction Manual

Version 1.0



CAUTION - ATTENTION - VORSICHT

RISK OF ELECTRIC SHOCK- DO NOT OPEN RISQUE D'ELECTROCUTION- NE PAS OUVRIR STROMSCHLAGGEFAHR- NICHT OFFNEN





In Compliance with the following directives: RoHS Directive (2002/95/EU) and WEEE Directive (2002/96/EU)

If this product is no longer functional or reaches the end of its usable life, please take it to an approved recycling plant.

Introduction:

Dear Customer,

Thank you for purchasing the QZONE102 2 Zone Installation Mixer. For your safety and to ensure you make full use of the product's features, please make sure you read this manual in full.

Safety Advice:

- Read this manual in full before operating this product.
- Keep this manual in a safe place for future reference.
- Heed all warnings and instructions, both in this manual and on the product.
- In the event of serious operating problems, stop using the appliance and contact your dealer immediately.
- It is prohibited to make unauthorized modifications to this unit.
- Carry and transport this product with care. Dropping this product may result in serious mechanical failure.
- Keep the unit away from children.
- Inexperienced persons should not operate this device.
- The manufacturer accepts no responsibility for injury or damage caused as a result of not following the manual provided.
- This unit is for indoor use only.

Protection from Electric Shock:

- Only connect this unit to a mains socket with suitable breaker and RCD protection.
- To disconnect from the mains socket, always remove by the mains plug. Do not attempt to remove by pulling the mains cable.
- Disconnect the unit from the mains supply before cleaning. Cleaning should be carried out with a soft, dry cloth.
- Do not expose the interior of this unit to any liquids or metal objects. If a foreign object enters the unit, immediately disconnect the mains power.
- Do not operate near exposed water or in high humidity. Allow unit to adapt to surrounding temperatures before switching on, when bringing into a warm room after transport. Condensation inside the unit, may lower the product's performance and/ or cause damages.
- Choose a suitable route for all cables, ensuring trip hazards are avoided and the cables are not at risk of being crushed.
- Do not open this unit to service. There are no user serviceable parts inside. Any servicing or repairs should be carried out by a qualified engineer only. Any attempt to service or adapt this unit will leave your warranty void and could result in serious malfunction or injury.
- Should you need to replace the power fuse, do so with identical size and rating.

Protection from Fire:

- · Keep unit away from naked flame sources, such as candles.
- Do not cover or block any ventilation holes (>5cm away from nearest object).
- Prevent use in dusty environments and clean the unit regularly.
- Check your AC wall socket will take the power you are applying to avoid overloading the mains supply.
- Maximum safe ambient temperature is 40°C. Don't use this unit at higher ambient temperatures.
- Unplug the unit before servicing and when it is not in use.
- The power cord should always be in perfect condition. If the cord is squashed or damaged, switch the unit off immediately and contact the manufacturer for a replacement cord.
- The socket inlet must remain operable for disconnection from the mains.
- Never let the power cord come into contact with other cables.
- When the Power Switch is in the OFF position, the unit is not completely disconnected from the mains.

Introduction:

Contents & Unpacking:

Before beginning your initial setup, check the unit has not been damaged in transit and all parts below are supplied. In the event there is damage to the housing, cable or internal components, contact your dealer immediately.

Included in the Box:	Amount
QZONE102 Main Unit	1 piece
Mains Cable	1 piece

Introduction:

The Q Audio QZONE102 is a purpose-built mixer, ideal for small installations in venues such as bars, restaurants, and gyms. It is especially effective in setups where two zones require either distinct music sources or the same audio at different volume levels.

This mixer offers four main input channels, compatible with both line and phono sources. Channel 1 includes a front-panel 3.5mm auxiliary jack for convenient connection to devices like iPods or smartphones. Channel 4 features a Front-of-House (FOH) input, allowing external sound sources, such as a DJ or band, to connect via balanced stereo jacks—an invaluable option for integrating live performances with background music.

The front panel also provides two microphone inputs, with the choice of XLR or jack connectors, paralleled by two additional mic inputs on the rear. Each mic input includes bass, mid, and treble controls and can be activated or muted as needed. An automatic talk-over function reduces music volume when microphone input is detected.

Rear-panel connections enable balanced and unbalanced output to amplifiers via XLR or RCA. Zone outputs can be configured as mono or stereo, balanced or unbalanced, and include a 100Hz cut to reduce bass frequencies—an ideal feature for background music played through smaller speakers. A two-way tone control and volume adjustment on the rear panel allow precise setup prior to installation. The main output also supports balanced or unbalanced output and has its own rear-panel volume control.

For emergency requirements, the mixer includes a rear-panel emergency input that mutes all music to prioritise an emergency message. An output mute function is also available for integration with fire alarm systems, automatically silencing the music when the alarm is triggered.

Features:

- 2 Zone Installation Mixer
- 4 Line Inputs RCA and 2 Mic Inputs
- 2U 19" Rack Mountable
- Tone Controls
- Emergency Input & Output Mute
- Adjustable Auto Talk-Over for Automatic Music Level Reduction
- Front Panel 3.5mm Stereo Jack Input
- Balanced XLR and Phoenix Output Connectors
- 100Hz High Pass Filter for Background Speakers
- · Phantom Power

Technical Specifications:

Product	QZONE102
Signal/ Noise	> 82dB (Line)
Crosstalk Damping	> 65dB (Line)
THD	< 0.05% (Line)
Frequency Response (LoZ w/o HPF)	20Hz - 20kHz
AC IN	115V/ 230 ~ 50/ 60Hz
Power Consumption	max. 20W
Dimensions	483mm x 88mm x 162mm (H x W x D)
Weight	3.1kg

Product Configuration Setup:

Installation Guidelines:

- Install the unit in a well-ventilated location, where it will not be exposed to high temperatures or humidity.
- Placing and using this unit near heat-generating sources will affect its performance and may even damage the unit.
- The unit can be mounted in 19-inch racks. Attach the unit using the 4 screw holes on the front panel. Be sure to use screws of the appropriate size (screws not provided).
- Take care to minimize shocks and vibrations during transport.
- When the mixer is installed in a rack, make sure the rack is well ventilated, to keep the unit as cool as possible.



Warning: Before plugging the AC Cord in the wall outlet, check whether the AC mains voltage and frequency is compatible with this product. If the specified voltage or AC plug do not match local conditions, do NOT plug the AC cord into the wall outlet and contact your dealer.

Cleaning and Maintenance:

Clean by wiping with a damp cloth. Avoid getting water inside the unit. Do not use volatile liquids, such as benzene or thinner, which will damage the unit.

Internal Settings:

IMPORTANT NOTICE:

THE FOLLOWING CHAPTER CONTAINS WORK ON AN OPEN UNIT- WITH CONTACTS,
WIRES AND PARTS CARRYING LIVE VOLTAGE EXPOSED.
ALL WORK BELOW SHOULD BE CARRIED OUT BY A QUALIFIED TECHNICIAN.
IF YOU DO NOT HAVE THE REQUIRED QUALIFICATION,
CONTACT YOUR DEALER TO MAKE THESE SETTINGS FOR YOU.

UNIT MUST BE DISCONNECTED FROM THE AC POWER SUPPLY.

THE MANUFACTURER TAKES NO LIABILITY

FOR DAMAGE TO HEALTH OR GOODS

FROM FAILURE TO FOLLOW THE MANUAL'S INSTRUCTIONS.

Internal Settings:

To change the internal settings, the unit will need to be opened. All work must be carried out by a qualified technician. The unit must be unplugged from the AC mains before work is carried out. Remove the top cover to gain access to the internal PCBs, then set the switches and jumpers and arrange connections as shown.

Microphone Phantom Power Setting for MIC1 and MIC2:

If using condenser microphones, phantom power is required to the microphone inputs. In order to set up the phantom power, use the jumpers shown below on the rear PCB. The mixer is supplied with the Phatom Power set to the Off position.



When connecting this unit to AC mains, please note:

- Check whether the AC mains voltage and frequency matches the product's specification (rear panel). If the specified voltage does not match your AC plug, do NOT plug it in and contact your dealer immediately.
- · Do not operate the unit without the earth ground cord connected.

To ensure good audio signal connections, always use good cables. Poorly soldered cables may result in loss of sound quality or intermittent audio signals.

Powering Up:

To protect your equipment, it is important you follow the proper power-up sequence. Follow the procedure below:

- Turn down all output volume controls of any equipment in your audio system.
- Switch on your audio sources first (Tuners, CD Players, PC's etc.)
- Switch on this unit and set it to the desired audio source.
- Turn up the audio level on your sources if such controls are provided.
- Set the MAIN and ZONE volume controls of this unit to a low level.
- Make adjustments to all volume settings as needed.

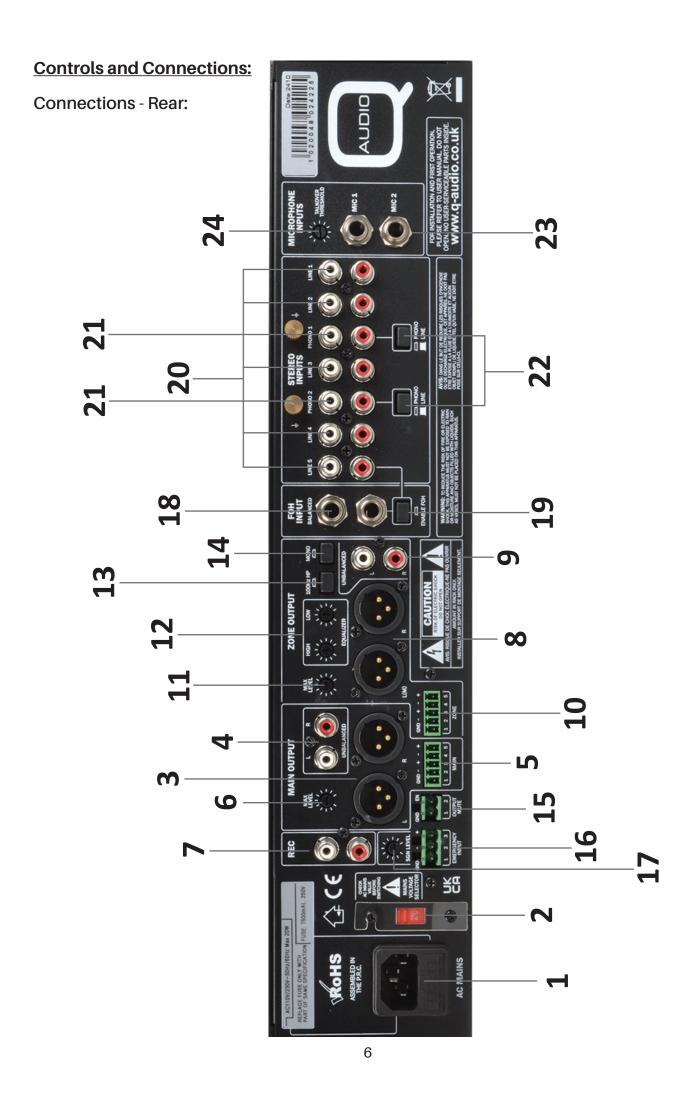
For switching off, complete the sequence in reverse, always switch this unit off before the connected audio sources.

Use:

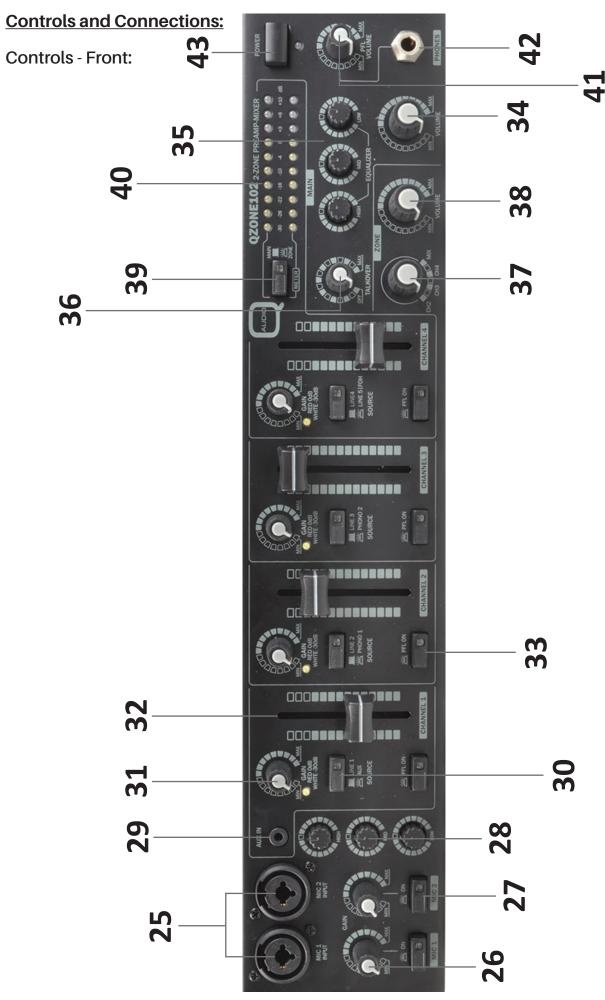
Level setting mistakes are one of the most common reasons why equipment is not performing as desired. For setting levels, please follow these two guidelines:

- Avoid distortion by leaving some headroom. Ensure audio inputs are never overrun. This can be monitored by looking at the level meters and displays.
- Use as little attenuation as possible to avoid unnecessary amplification.

By following these steps, you are marking a levelling window that the operator must match to achieve a good sound with as little distortion and noise as possible.



No.	Function
_	AC Inlet and Fuse Holder- Use AC Cord to connect the unit to the mains.
2	AC Voltage Selector Switch- Switches the voltage between 110/115v and 220/230V AC.
က	Stereo Main Output- Balanced stereo XLR output carrying the main output signal controlled by (34).
4	Stereo Main Output- Unbalanced RCA output carrying the same signal as output (3).
2	Stereo Main Output- Balanced terminal block output carrying the same signal as output (3).
9	Maximum Level Setting for Stereo Main Output- Limit maximum level at outputs 3-5 to match the connected sound system. These adjustments will not be displayed by the output level meter (40) and can be made with a small screwdriver at a maximum angle of 300 degrees.
7	Record Output- Unbalanced stereo output carrying the same signal as the main outputs 3-5, but is not influenced by the main volume control (34). This is normally used to record the output to an external source.
8	Stereo Zone Ouptut- Balanced stereo XLR output carrying the main output signal controlled by (38).
6	Stereo Zone Output- Unbalanced RCA output carrying the same signal as output (8).
10	Stereo Zone Output- Balanced terminal block output carrying the same signal as output (8).
11	Maximum Level Setting for Stereo Zone Output- Limit maximum level at outputs 8-10 to match the connected sound system. These adjustments will not be displayed by the output level meter (40) and can be made with a small screwdriver at a maximum angle of 300 degrees.
7	Equalizer for Zone Output- 2-band stereo equalizer that adjusts the frequency response of the output. Adjustments can be made with a small screwdriver at a total angle of 300 degrees.
13	100Hz (HP) HighPass Filter for Zone Output-When pressed, frequencies below 100Hz are removed. Suitable for speaker systems with limited low-frequency response, such as ceiling speakers.
14	Mono Switch for Zone Output- Pressed position: Converts the stereo signal to a mono signal.
15	Music Mute Input- Terminal block input that allows you to remotely mute all output signals.
16	Emergency Input- Auto-sensing, balanced terminal block input which allows connection to an emergency evacuation system. Once a signal is present, all other outputs (including microphones 23 and 25) will mute and an emergency message will play.
17	Emergency Volume Control- Sets the level of the emergency signal output through outputs 3-5 and 9-10.
18	FOH Input- 1/4" TRS balanced stereo input specifically designed for a stage mixer output. Useful for stereo source replay and live music being played from the same system. Can be routed to input channel 4 instead of the Line5 signal by pressing the FOH Enable Switch (19).
19	FOH Enable Switch- In pressed position, this switch routes the FOH signal (18) to Channel 4 instead of the Line5 RCA input.
20	Line Inputs- RCA Connectors that provide line-level signals to the assigned channels.
21	Phono Inputs- RCA Connectors that provide inputs for phono-level signals with RIAA equalization to the assigned channels. (22) can change sensitivity.
22	Sensitivity Switch for Phono Inputs- Sets the sensitivity of the Phono Inputs (21) to Phono with RIAA equalization (pressed) or Line Level (released).
23	Mic Input for MIC 1 and MIC 2- Balanced 1/4" TRS connectors which can be internally set to carry phantom power. The input signal is connected in parallel to the fron-panel inputs (25).
24	Talkover Threshold Control- Sets the level of the microphone signal at which the music signal is attentuated. The depth to which the music is reduced is set by (36).



No.	Function
25	Mic Input for MIC1 and MIC2- Balanced Combo XLR + 1/4" TRS Connectors, which can be internally set to carry phantom power.
26	Level Control for Mic Inputs- Allows you to individually adjust the levels of MIC1 and MIC2.
27	On/ Off Switches for MIC1 and MIC2.
28	Microphone Equalizer- Adjust the tonal balance of both mics, in three voice-specific frequency bands with an adjustment range of +/-12dB.
29	AUX Input for Channel 1-3.5mm Mini TRS Stereo Socket which allows the connection of external media sources. Once inserted, the rear panel inputs for Channel 1 are disabled and the connected source is active.
30	Input Selector Switch- Selects one of the rear-panel sources to be used with the respective input channel.
31	Input Gain Control with Level LED for Input Channels- Helps to compenate for different source levels. White LED indicates a signal present Red Peak I ED helps to adjust the sources to the same level whilst keeping the required headroom. The Red Peak I ED
	should only be occasionally lift.
32	Level Control of Input Channels- Allows adjustment of the respective channel level.
33	PFL Switch for Input Channels- Assigns the channel to the headphone bus for pre-fader listening (PFL) via the headphone output (42). LED indicates the pressed position.
34	Main (Stereo) Output Level Control- Determines the main output level present at outputs 3-5.
35	Equalizer for Main (Stereo) Output- 3-Band Stereo equalizer to adjust the frequency response of the output.
36	TALKOVER Damping Control- Controls the amount of damping applied when TALKOVER mode is in use. Clockwise turn for more attentuation.
37	Zone Source Selection Switch- This rotary switch allows you to use the master mix bus (same signal as carried by the stereo master outputs 3-5) or any of the assigned source signals to the inputs 2-4, to be used as the source for the Zone Output.
38	Zone Output Level Control- Determines the output present at 8, 9 and 10.
39	Level Meter Source Switch- Switches the meter (40) between the Main and the Zone signal.
40	Main (Stereo) Output Level Meter- Displays the output level of the stereo main output or the zone output. This is adjusted using setting switch (39).
41	PFL Level- Determines the signal volume at the headphone output (42).
42	Headphone Output- a 1/4" TRS Connector to connect headphones.
43	Power Switch- Switches the unit on and off.

Connections:

This unit uses the connector types shown in the table below. To ensure proper operation, make sure to use good connectors and cables. Balanced operations are preferable over unbalanced connections, where applicable. If unbalanced connections are used, avoid exceeding 2m of cable length for this connection.

	Structure	Balanced Connection	Unbalanced Connection
XLR MALE	Inner Conductor - Inner Conductor + Outer Screen GNID	RED= 2 BLACK= 3 SHIELD= 1	RED= 2 SHIELD= 1+3
XLR FEMALE	Inner Conductor -	RED= 2 BLACK= 3 SHIELD= 1	RED= 2 SHIELD= 1+3
6.35MM TRS - STEREO	Inner Conductor - Inner Conductor + Outer Screen GND	RED= TIP BLACK= RING SHIELD= SLEEVE	RED= TIP SHIELD= SLEEVE+RING
6.35MM TRS - MONO	Signal + Signal - Sig	N/A	RED= TIP SHIELD= SLEEVE
3.5MM TRS - STEREO	Left Channel Right Channel GND	RED= TIP BLACK= RING SHIELD= SLEEVE	N/A
RCA	Signal	N/A	RED= TIP SHIELD= SLEEVE





Disposal of the Unit:

Environmental Advice (Disposal of Unit):

This unit is built to conform to the ROHS Standards and the WEEE Directive 2011/65/EU of the European Parliament and of the Council of the European Union. Under these regulations, the product shall not be discarded into regular garbage at the end of its life, but shall be returned to authorized recycling stations.

Correct Disposal of this Product:

Waste Electrical and Electronic Equipment

Applicable in the European Union and other European Countries with separate collection systems.



This marking shown on the product or its literature, indicates it should not be disposed with other household waste at the end of its working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of waste and recycle it responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased the product, or their local government office, for details of where and how they can take this item for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial wastes for disposal.

Thank you for taking the time to read this manual.

For further enquiries, please contact us at:
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