



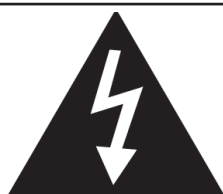
# QZONE83

Instruction Manual



## QZONE83 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 QZONE83 3 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
QZONE83 Main Unit	1 piece
Mains Cable	1 piece

### **Introduction:**

The Q Audio QZONE83 is a highly versatile 3-zone mixer, designed for installations in bars, restaurants, gyms, schools, and similar environments. This compact 1U, 19" rack-mountable mixer provides a robust solution for professional audio setups, ensuring seamless integration and high-quality sound.

The QZONE83 offers five stereo inputs; four of these have rear-panel gain controls and can be routed to output zones A, B, or C. The fifth input is dedicated to Zone C, delivering a focused audio output. Additionally, the mixer includes a balanced rear-panel stereo FOH input and a convenient front 3.5mm stereo jack input, which can replace inputs 1 and 4, and be routed to any zone.

The unit features two microphone inputs with rear 1/4" TRS connectors and gain controls, and includes phantom power for condenser microphones (activated via an internal jumper). A voice-optimised 2-band EQ and "on-air" switches provide customisation for microphone inputs. The automatic talk-over function reduces music levels during microphone use, with adjustable damping levels per zone.

The QZONE83 supports two stereo output zones and one mono output zone, each monitored by a 5-LED level meter. Each zone includes an adjustable 2-band EQ on the rear panel for precise audio adjustment. Volume control can be managed via the front-panel knobs or an optional remote control potentiometer, such as the QWALL V1 control panel (sold separately). Balanced TRS and Phoenix output connectors ensure reliable connections across zones. For emergency situations, the mixer features an emergency input that overrides the master output to broadcast an emergency signal. An output mute contact also allows for external muting, providing complete control over the audio environment.

### **Features:**

- 3 Zone Outputs
- 5 Line Inputs
- 2 Microphone Inputs
- Zone Routable Inputs
- 19" 1U Rack Mountable
- 12V Phantom Power Available via Internal Jumper for Condenser Microphones
- Front 3.5mm Stereo Jack Route-able to Zones
- Rear-Panel Balanced Stereo Input (FOH input) Routable to Zones
- Two Stereo Output Zones and One Mono Output Zone
- Rear Adjustable EQ for each Zone Output
- Level Control for each Zone Switchable Between Front-Panel & Optional Remote Control
- Balanced TRS and Phoenix Output Connectors for each Zone

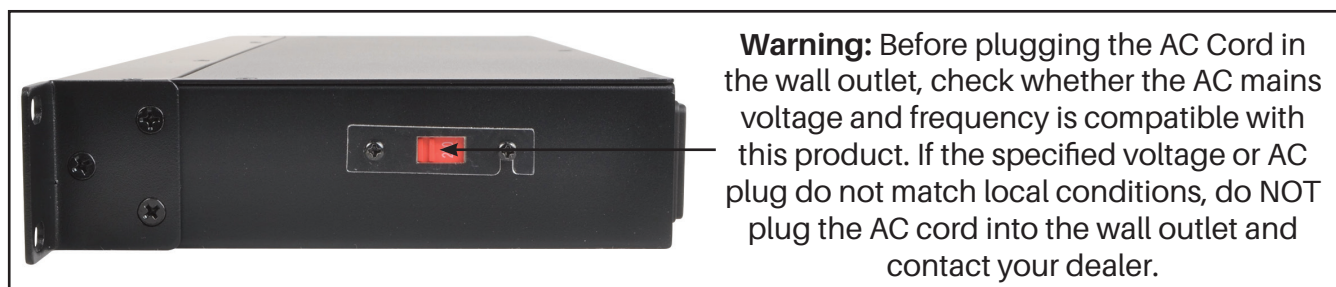
## Technical Specifications:

Product	QZONE83
Signal/ Noise	> 82dB (Line)
Crosstalk Damping	> 65dB (Line)
THD	< 0.05% (Line)
Frequency Response (LoZ w/o HPF)	20Hz - 20kHz
AC IN (EU Version)	AC220 - 250V ~ 50Hz
Power Consumption	max. 18W
Dimensions	483mm x 44.5mm x 183.5mm (H x W x D)
Weight	2.2kg

## 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.



### 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.

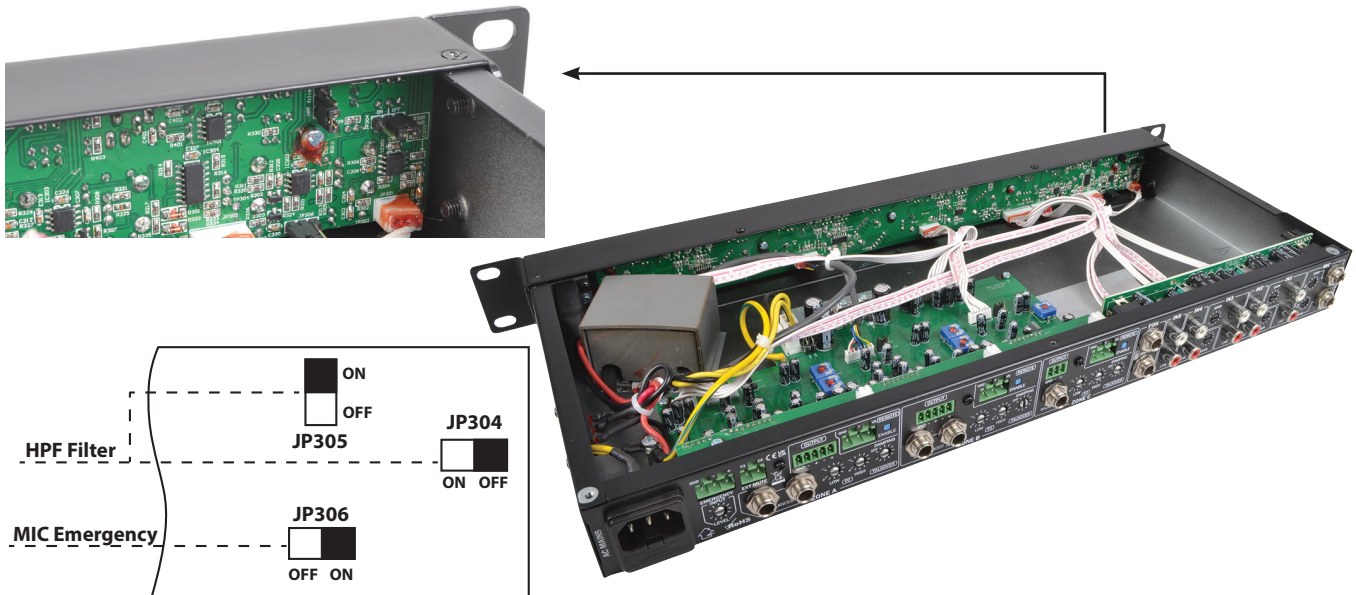


**Internal Settings:**

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. The mixer is supplied with filters and Phantom Power set to the Off position.

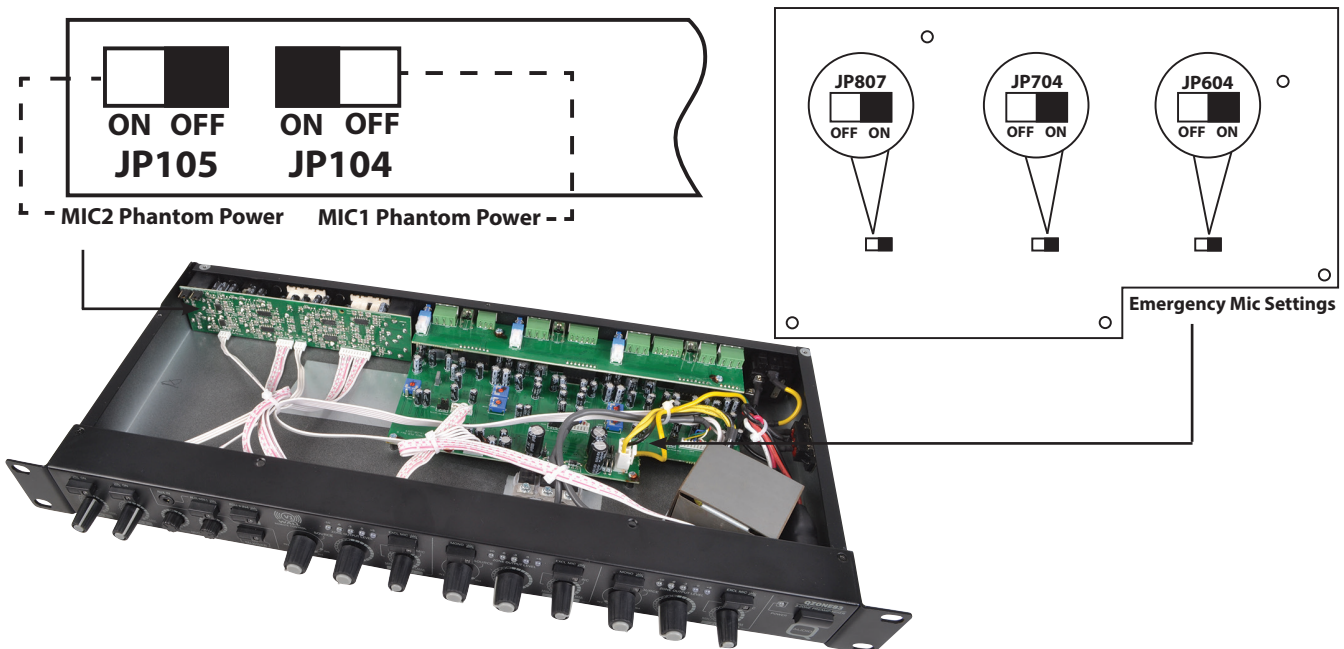
**Microphone High Pass Filters and Emergency Setting:**

For each of the two microphone inputs, there is an optional 100Hz high pass filter. In addition, an internal jumper can be set to mute the microphones when an external emergency signal is sent to the mixer. Alternatively, the jumper can be set to leave the microphones on during emergency signals so additional instructions can be relayed. These jumpers can be found on the front PCB and can be set as shown below:



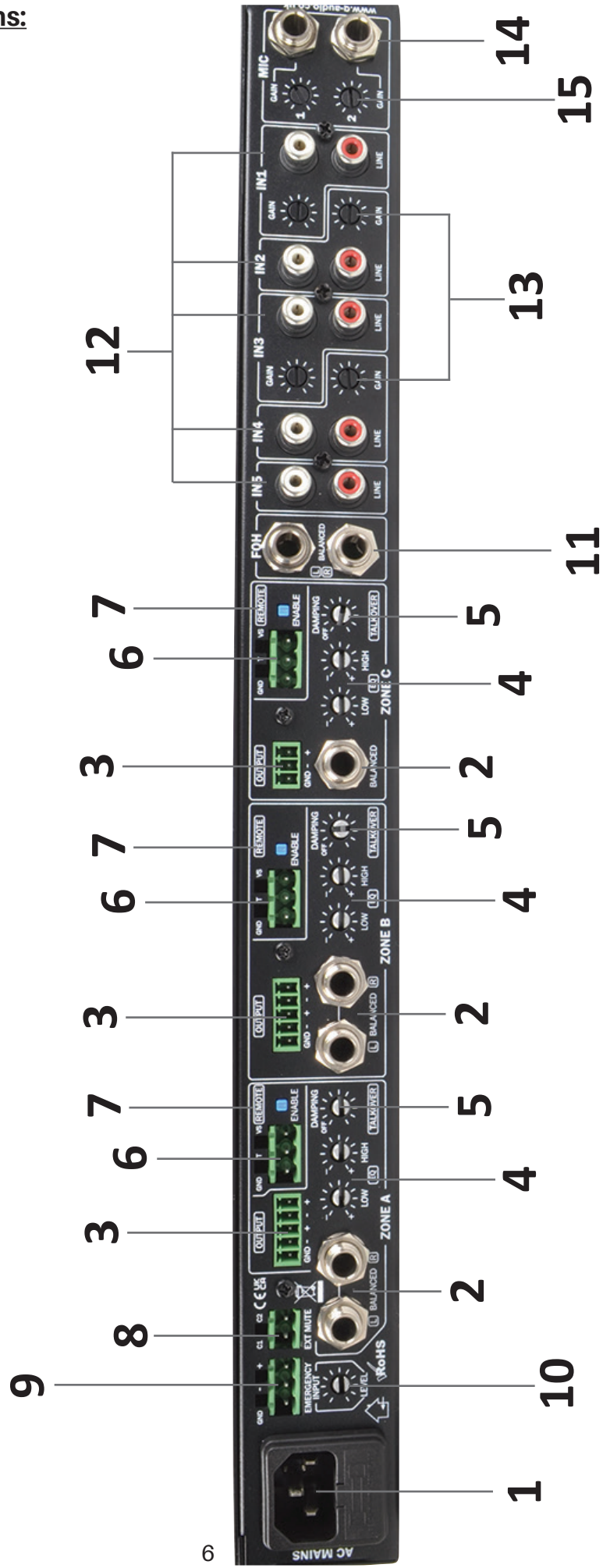
**Microphone Phantom Power Setting:**

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. Jumpers in the unit labelled "emergency mic setting" should remain at the factory default position "off".



**Controls and Connections:**

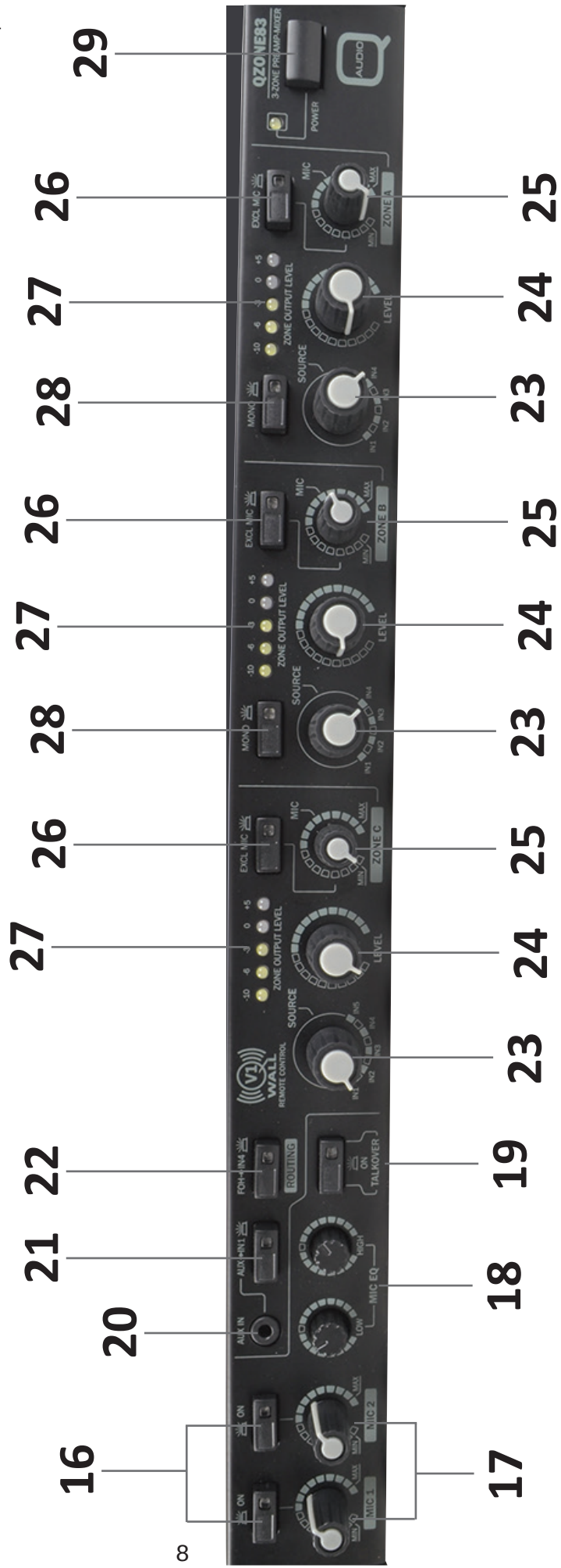
**Connections - Rear:**



No.	Function
1	AC Inlet and Fuse Holder- Use AC Cord to connect the unit to the mains.
2	Zone Outputs- Balanced stereo 1/4" TRS Outputs. Zones A and B are stereo and Zone C is mono. Carries the zone output signal.
3	Zone Outputs- Balanced Phoenix terminal block outputs carrying the zone output signal. Zones A and B are stereo and Zone C is mono.
4	Equalizer for Zone Outputs-2-band stereo equalizer to adjust the frequency response of the output. Adjustments can be made with a small screwdriver to a total angle of 300 degrees.
5	Talkover Adjustment for Zone Outputs- Sets the amount of reduction applied to the music signal when the microphone is in use. Full clockwise turn will suppress the music when the microphone is in use. Fully turned counter-clockwise turns the talkover function off and the music will not respond to microphone input. This can be changed with a small screwdriver (maximum turn is 300 degrees).
6	Volume Remote Control Inputs- Only enabled when the remote-enable switch is pressed. 5mm Phoenix terminal block inputs for connecting to the QWALLV1.
7	Remote Enable Switches- Press the switch to enable remote volume controls.
8	Music Mute Input- Terminal block input that can remotely mute all the the output signals.
9	Emergency Input- Auto-sensing, balanced terminal block input which connects to an emergency evacuation system. Unit can be set to include or exclude microphone signals from this muting process.
10	Emergency Volume Control- Allows you to set the level of the signal fed in the emergency input (9).
11	FOH Input- 1/4" TRS Balanced stereo input, designed to connect to a stage mixer output. Useful for playing stereo source reply and live music over the same sound system. Routed to input channel 6.
12	Line Inputs- These RCA Connectors provide inputs for line-level signals to assigned channels.
13	Gain Control for Input Channels- Allows sensitivity for every line input to be adjusted, allowing outputs to be mixed at balanced levels.
14	Microphone Inputs- Balanced 1/4" TRS Connectors, which optional internal setting to carry phantom power (see 'Microphone Phantom Power Setting'). The signal is controlled by the front panel inputs: 16-19.
15	Gain Control for Mic Inputs- Allows sensitivity for every microphone to be adjusted. Microphones of different output levels can be used.

Controls and Connections:

Controls - Front:





No.	Function
16	Microphone On/ Off Switches- Switches MIC1 and MIC2 on and off.
17	Level Control for Microphone Inputs- Allows individual adjustments of MIC1 and MIC2.
18	Microphone Equalizer- Adjust tonal balance of the microphone inputs in two voice specific frequency bands. Affects both mics.
19	Talkover On/ Off Switch- Enables/ disables the automatic microphone priority. The amount of damping is controlled by control (5). However, if the rear-side control is set fully counter-clockwise whilst this switch is 'on', no microphone priority will be applied to the zone.
20	AUX Input for Input1- 3.5mm mini TRS stereo socket which allows you to connect sources like MP3 Players without removing the unit from its mounting position. For this function to work, the routing switch (21) must be pressed and set to INPUT1.
21	Routing Switch for AUX Input- Determines which of the following is INPUT1: Released position: the rear-side RCA Socket (12) or pressed position: the front-side TRS socket (20).
22	Routing Switch for FOH Input- Determines which of the following is INPUT4: Released position: the rear-side RCA socket (12) or pressed position: the rear-side TRS sockets (11).
23	Zone Source Selection Switch- This rotary switch allows you to use any of the inputs 1-5 to be used as the source signal for the relative zone output.
24	Zone Music Level Control- Determines the total volume of a relative zone's output program, including the music program and microphone signal. The microphone's share can be set independently using control (25).
25	Zone Microphone Level Control- The amount of microphone signal added to the music is set using this control. If the microphone exclusion switch (26) is on, the microphone will not be audible. Please also ensure controls 16 and 17 are set for the microphones.
26	Microphone Exclusion Switch- Pressing this switch will exclude the microphone signals. This will disable the microphone volume control (25). The respective damping on the rear-side panel should also be set to 'off' (fully counterclockwise).
27	Zone Output Level Meter- Displays the output level (signal levels that are sent from the mixer to speakers or other devices).
28	Zone Mono Switch (only for Zones A and B)- Switches the stereo output to mono. Only available in Zones A and B, as Zone C is already mono.
29	Power Switch- Switches the unit on and off.

## Operation Basics:

### Connections:

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:

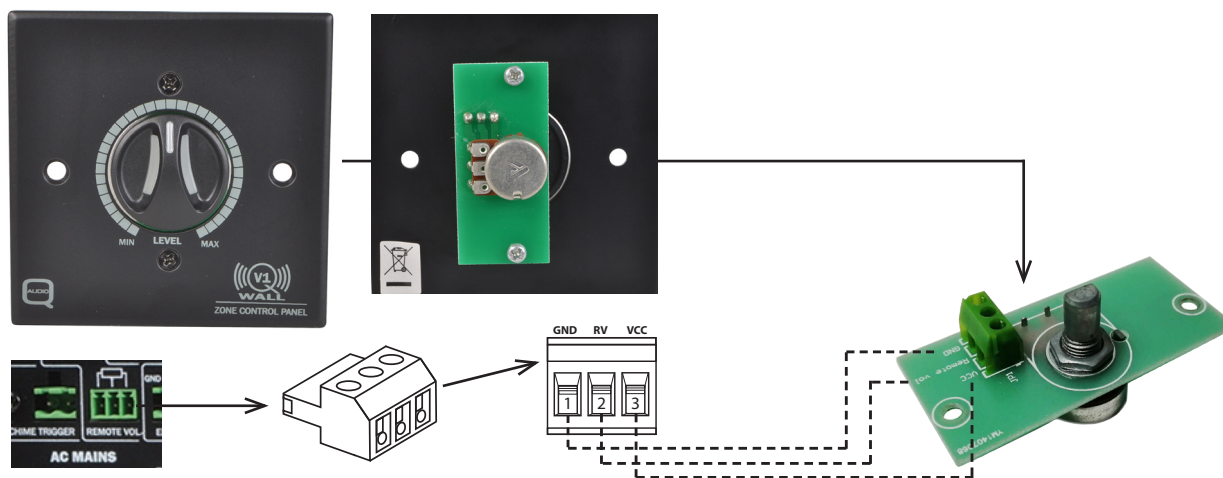
Level setting mistakes are one of the most common reasons why equipment is not performing as desired. For setting levels, please follow these two guidelines:

- 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.


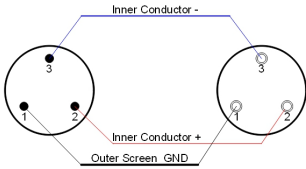

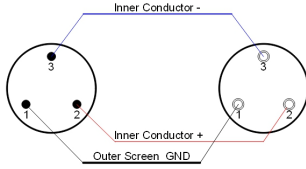

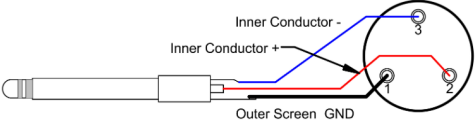

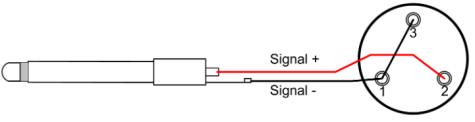

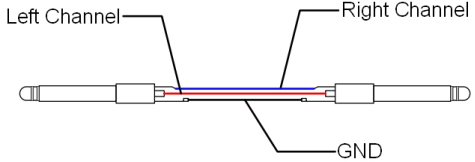



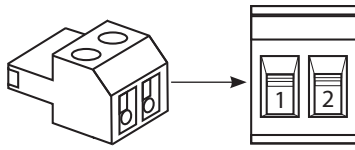
### Remote Volume Control:

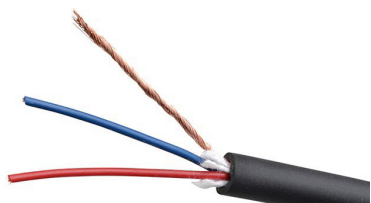
The QZONE83 can also be used with the QWALLV1 Wall Panel. This allows for remote volume control. Using a 2 core shielded audio cable, wire the cable end into the 3 Pin green connector and other into the 3 Pin connector on the volume control PCB, using the correct wiring. Plug the 3 Pin connector into the socket labelled 'Remote VOL' (8) on the rear of the unit. Pressing the remote volume switch (7) will allow the remote volume control (7) will allow the remote control to be used instead of the master volume control.



## Connections:

This unit uses some of 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
		RED= 2 BLACK= 3 SHIELD= 1	RED= 2 SHIELD= 1+3
		RED= 2 BLACK= 3 SHIELD= 1	RED= 2 SHIELD= 1+3
		RED= TIP BLACK= RING SHIELD= SLEEVE	RED= TIP SHIELD= SLEEVE+RING
		N/A	RED= TIP SHIELD= SLEEVE
		RED= TIP BLACK= RING SHIELD= SLEEVE	N/A
		N/A	RED= TIP SHIELD= SLEEVE
		N/A	RED= 1 BLACK= 2



2- CONDUCTOR SHIELDED CABLE  
(BALANCED CONNECTIONS)



1- CONDUCTOR SHIELDED CABLE  
(UNBALANCED CONNECTIONS)

## **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.

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Thank you for taking the time to read this manual.

**For further enquiries, please contact us at:**

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