



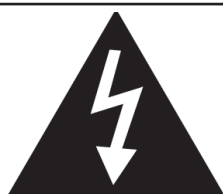
# QMIX121

Instruction Manual



## QMIX121 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 QMIX121 (1U) 7 Channel Mic/ Line 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
QMIX121 Main Unit	1 piece
Mains Cable	1 piece

The Q Audio QMIX121 is a highly adaptable mixer offering five stereo inputs, each easily switchable between balanced microphone and unbalanced line input levels via a rear-panel switch. It also includes a dedicated input for front-of-house systems, such as bands or DJs, accessible through balanced stereo jacks or a front-panel 3.5mm jack for quick connection to phones and tablets.

An additional rear input accommodates a secondary microphone with front and rear gain controls and an adjustable auto talk-over function that automatically reduces music levels when the microphone is in use. The unit supports 12V phantom power for condenser microphones, activated by an internal jumper.

For output, the mixer provides a stereo master channel with a precise 10-LED level meter, rear-panel maximum output control, and a mono switch for added flexibility. Balanced TRS and Phoenix connectors ensure reliable connectivity.

In emergencies, an override input allows critical signals to bypass the main output, while an output mute contact enables external muting. All components are securely housed in a 1U 19" metal case with detachable rack ears for versatile installation.

Enhance your audio setup with a mixer that combines sophisticated features, intuitive controls, and dependable performance.

### **Features:**

- 5 Switchable Stereo Inputs
- Balanced Microphone Inputs
- Headphone Output
- 12V Phantom Power for Microphones
- Adjustable Auto Talk-Over Output Mute Function
- 1U Rack Mountable
- Front 3.5mm Jack Input for convenient device connection
- Dedicated microphone input with talk-over functionality
- Rear-panel gain control adjustment
- Front-panel 2-band EQ for inputs 1-5
- Mono Switch for the master output

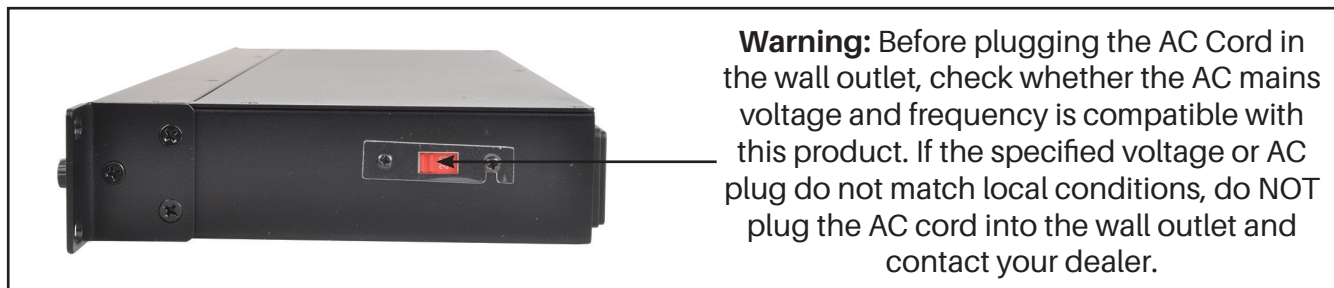
### **Technical Specifications:**

Product	QMIX121
Signal/ Noise	> 82dBu (unwgt'd 22Hz-22kHz)
Crosstalk Damping	> 65dB (Line)
THD	< 0.03% (Line)
Frequency Response	20Hz - 20kHz
AC IN	115/230V ~ 50/60Hz
Power Consumption	max. 20W
Dimensions	483mm x 44.5mm x 152mm (H x W x D)
Weight	2.3kg

## **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.



### **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 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 overdriven. 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.

### 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.

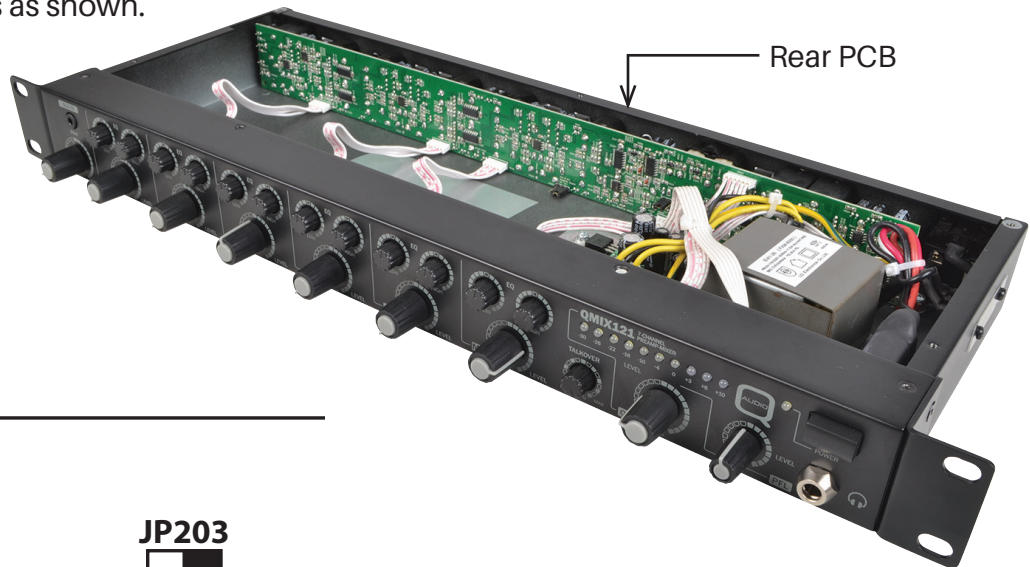
### Internal Settings:

#### **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.**

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.



Rear PCB

	<b>JP203</b> 		
<b>JP602</b> 	<b>JP603</b> 		
			<b>ON setting:</b>

Key

JP602= CH1-5 Mic Phantom Power

JP603= Mic "M" Phantom Power

JP203= Emergency Mic Priority

### 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 above on the rear PCB.

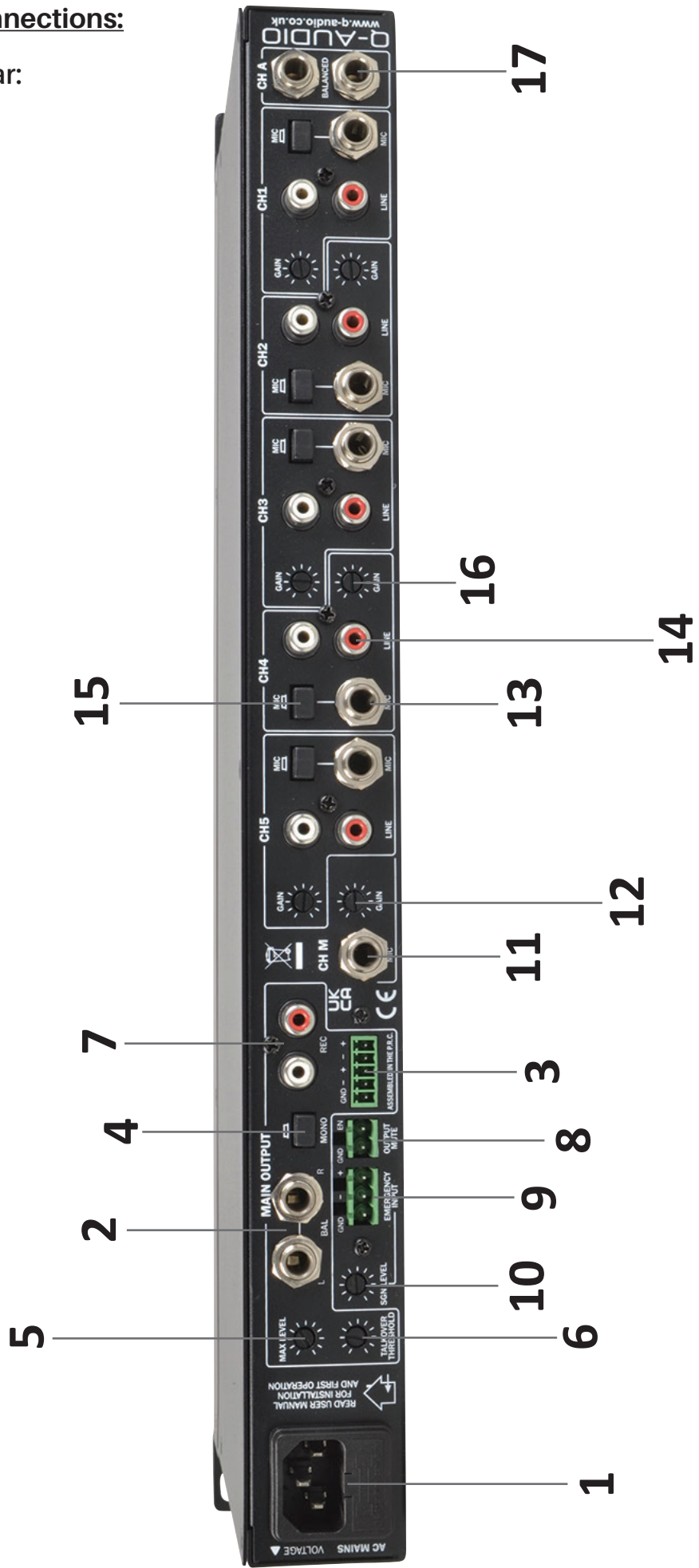
### Microphone Emergency Setting:

In case of an external emergency signal muting the unit's outputs, an internal jumper can be set to mute the connected microphones. To mute the microphones, set the correct jumper on the front PCB to the 'off' position. To allow the microphones to be used for announcements over the emergency signal, switch the jumper 'on.'



# Controls and Connections:

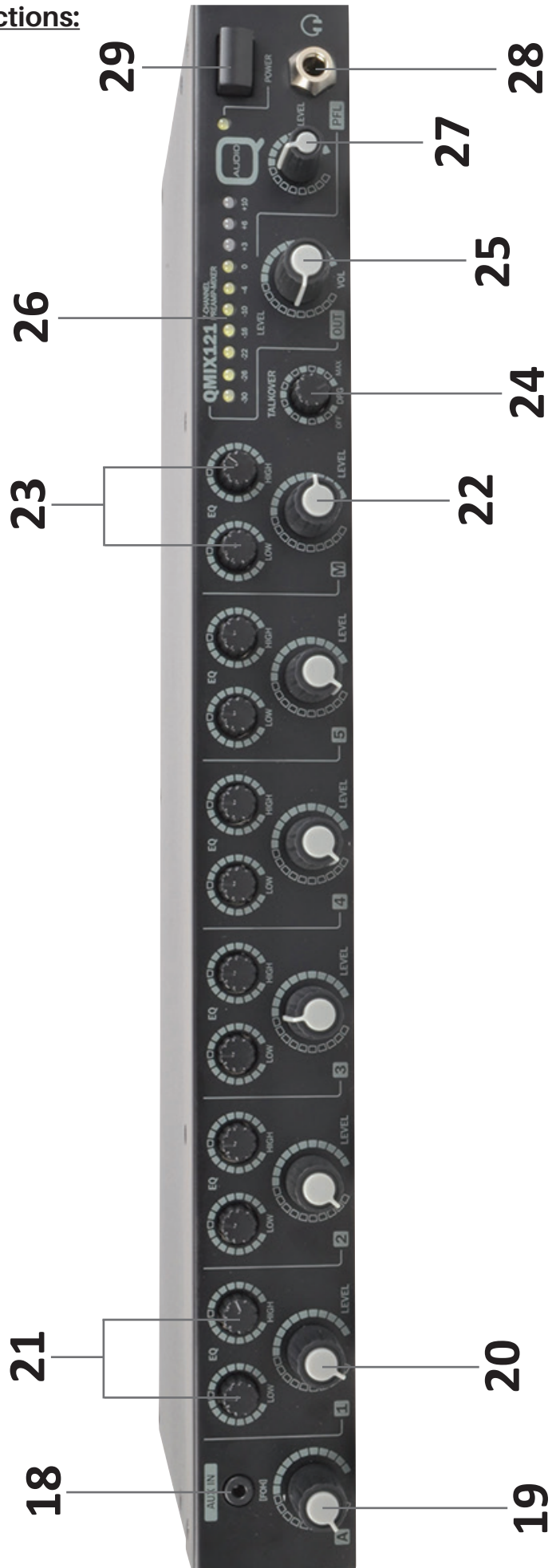
## Connections - Rear:



No.	Function
1	AC Inlet and Fuse Holder- Use AC Cord to connect the unit to the mains.
2	Stereo Main Output- Balanced Stereo 1/4" TRS output carrying the main signal controlled by (25).
3	Stereo Main Output- Balanced terminal block output carrying the same signal as output (2).
4	Mono Switch for Main Output-Converts the stereo signal to a mono signal when pressed. The signal is then available on both the L and R outputs (2 and 3).
5	Maximum Level Setting for Stereo Main Output- Limit the maximum level at the outputs (2 and 3) in order to match the connected sound system. Total angle is 300 degrees and adjustments can be made with a screwdriver. This will not be displayed by the output level meter (26).
6	Talkover Adjustment (Stereo Main Output)- Sets the level that talkover is enabled. The amount of sound reduction is set by a front panel control (24).
7	Record Output- Unbalanced stereo output carrying the same signal as the main output, but not influenced by the main volume controls. Used for recording to an external source.
8	Music Mute Input- Terminal block input which allows you to remotely mute all 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, see 'Microphone Emergency Settings.' (Page 5).
10	Emergency Volume Control- Allows you to set the level the signal fed into the emergency input (9) will be replayed at the two master outputs (2-3).
11	Priority Microphone Input "M"- Balanced 1/4" TRS input with adjustable priority over other signals by means of the talkover controls (6 and 24). Phantom power can be enabled or disabled (Page 5).
12	Gain Control for Priority Microphone Input- Allows the sensitivity for input (11) to be adjusted to match the different output levels.
13	Microphone Input for Channels 1-5- Balanced 1/4" TRS Connectors with optional phantom power (see Page 5). Controlled by front panel controls (20 and 21).
14	Line Input for Channels 1-5- RCA Connectors that provide inputs for line level signals to the assigned channels.
15	Source Selector Switch for Channels 1-5- Switches the input source between the connected Line signal (14) or microphone signal (13).
16	Gain Control for Input Channels 1-5- Allows sensitivity for every line input to be adjusted, allowing outputs to be mixed at balanced levels.
17	Line Input for Channel A (FOH)- 1/4" TRS Balanced Stereo Input designed to allow the connection of a stage mixer output or other balanced audio source at a larger distance. Useful in applications where live music is performed over the same sound system, or where a source/ signal from a different room/ area needs to be replayed. The volume is controlled by (19). This input is disabled when front-panel AUX jack (18) has a connector inserted.

**Controls and Connections:**

Controls - Front:


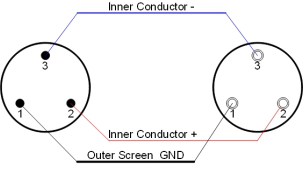

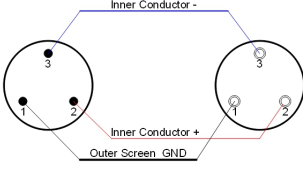

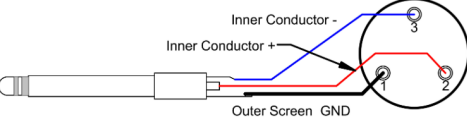

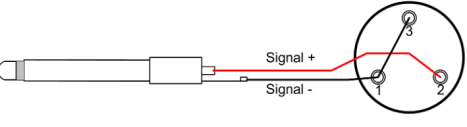

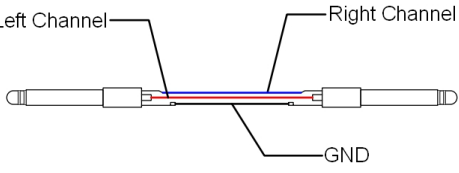



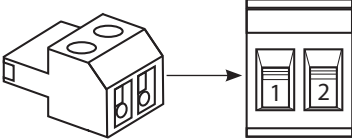


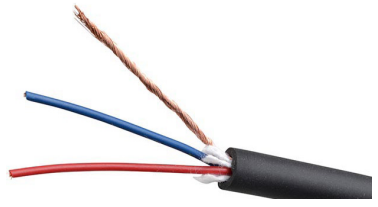


No.	Function
18	AUX Input for Channel A- 3.5mm mini TRS stereo socket to connect sources such as MP3 players, without removing this unit from its mount. When a plug is inserted, rear inputs for music Channel A (17) are disabled.
19	Volume Control for Channel A- Controls the volume of the signal inserted in the balanced rear-panel input (17) or the front-panel TRS input (18).
20	Volume Controls for Channels 1-5- Controls the volume of the signal inserted in the rear-panel microphone inputs (13) or line inputs (14) depending on the setting of the source selector switch (15). The maximum volume is adjusted by the rear-panel gain control (16).
21	Equalizer for Channels 1-5- Adjust tonal balance of the input in two frequency bands. Adjustment range of +/- 12dB.
22	Volume Control for Priority Mic Channel- Controls the volume of the microphone inserted in input (11). The maximum volume is adjusted by the rear-panel gain control (12).
23	Equalizer for Priority Mic Channel- Adjusts the tonal balance for the priority microphone in two frequency bands. Adjustment range of +/- 12dB.
24	Talkover Control- Controls the amount of sound reduction applied when the priority microphone is in use. Turn fully clockwise to suppress the signal and turn full counter-clockwise to turn the talkover damping function off.
25	Main (Stereo) Output Level Control- Determines the output level of outputs 2 and 3.
26	Main (Stereo) Output Level Meter- Displays the output level of (2 and 3). The level limitation controlled by (5) is not displayed.
27	PFL Level- Determines the volume at the headphone output (28). Always set this control to a minimum before putting on headphones to avoid damage to your ears.
28	Headphone Output- 1/4" TRS Connector to connect headphones.
29	Power Switch- Switches the unit on and off.

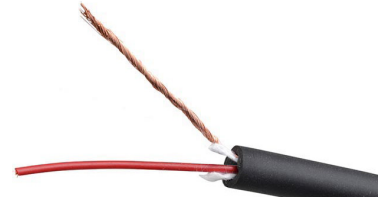
## Connections:

This unit uses some 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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