



QXOVER23

Instruction Manual



QXOVER23 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 QXOVER23 Electronic Crossover. 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
QXOVER23 Main Unit	1 piece
Mains Cable	1 piece

Using an active crossover in a sound system delivers superior audio quality compared to passive alternatives, as it separates bass from high frequencies, significantly enhancing overall system performance.

The Q Audio QXOVER23 is a versatile stereo 2-way or mono 3-way active crossover, positioned between the mixer and amplifier, typically connected by balanced line-level cables. Incoming signals are divided into precise frequency bands using Linkwitz-Riley filters, offering excellent speaker driver protection with their steep 24dB/octave slope. Additional protection is provided by 25Hz low-cut filters, which remove inaudible, high-energy bass content.

This unit also features an independently adjustable subwoofer output, allowing control over an additional low-frequency band within a range of 10-235Hz, effectively making it a 3-way stereo or 4-way mono crossover. Mute and phase-invert switches on all outputs simplify troubleshooting.

Features:

- Stereo 2 Way/Mono 3 Way Active Crossover
- Crossover Frequencies Adjustable in Two Switchable Ranges: 44 to 930Hz & 440Hz to 9.3kHz
- Mono Subwoofer Output with Independent Crossover Frequency Control
- Individual Output Level Controls for all Bands
- Individual Output Mute Switches for all Bands
- Individual Phase Reverse Switches for all Bands
- Switchable 25Hz Low Cut Filter in each Input
- Balanced XLR Connectors for all Inputs & Outputs
- All Switches with LED Status Indicator
- 1U 19" Rack Mountable Active Crossover

Technical Specifications:

Product	QXOVER23
Signal/ Noise	> 91dB (unwgted 22Hz - 22kHz)
Crosstalk Damping	> 92dB
THD	<0.01% (Line)
Frequency Response	20Hz - 20kHz
AC IN	AC115V/ 230V ~ 50/ 60Hz
Power Consumption	max. 20W
Dimensions	483 x 44.5 x 162mm
Weight	2.3kg

Product Configuration Setup:

Installation Guidelines:


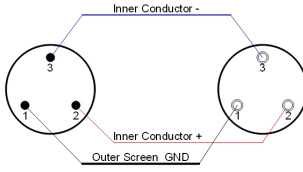

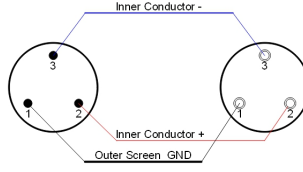
- Install the unit in a well-ventilated location, where it will not be exposed to high temperatures or humidity.
- Placing and using this unit near heat-generating sources will affect its performance and may even damage the unit.
- The unit can be mounted in 19-inch racks. Attach the unit using the 2 mounting panels that attach to the front of the unit. 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.

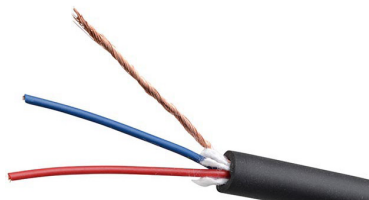


Warning: Before plugging the AC Cord in the wall outlet, check whether the AC mains voltage and frequency is compatible with this product. If the specified voltage or AC plug do not match local conditions, do NOT plug the AC cord into the wall outlet and contact your dealer.

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
		RED= 2 BLACK= 3 SHIELD= 1	RED= 2 SHIELD= 1+3
		RED= 2 BLACK= 3 SHIELD= 1	RED= 2 SHIELD= 1+3



2- CONDUCTOR SHIELDED CABLE
(BALANCED CONNECTIONS)



1- CONDUCTOR SHIELDED CABLE
(UNBALANCED CONNECTIONS)

Using your Product- The Basics:

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 audio mixer.
- If applicable, switch on any audio processor between the mixer and amplifier(s).
- Turn up the audio level on your sources if such controls are provided.
- Set the mixer's audio output to a low level. Any audio processor's between the mixer and amplifier(s) should be set to a medium level.
- Turn up the volume slowly and 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.

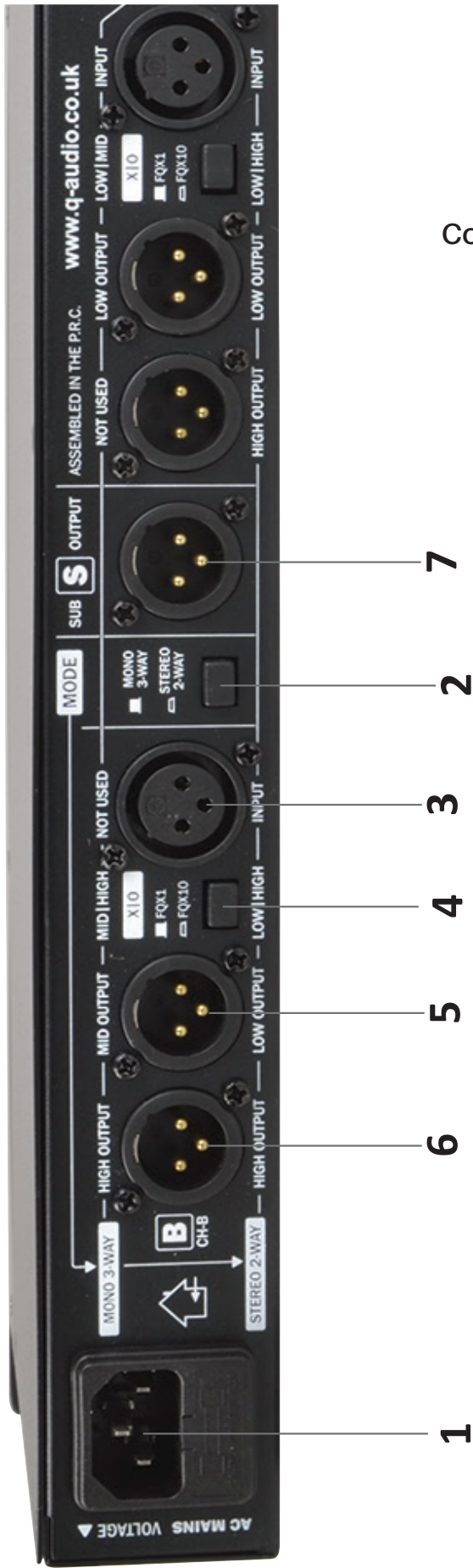
By following these steps, you are marking a levelling window that the operator must match to achieve a good sound with as little distortion and noise as possible.

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.

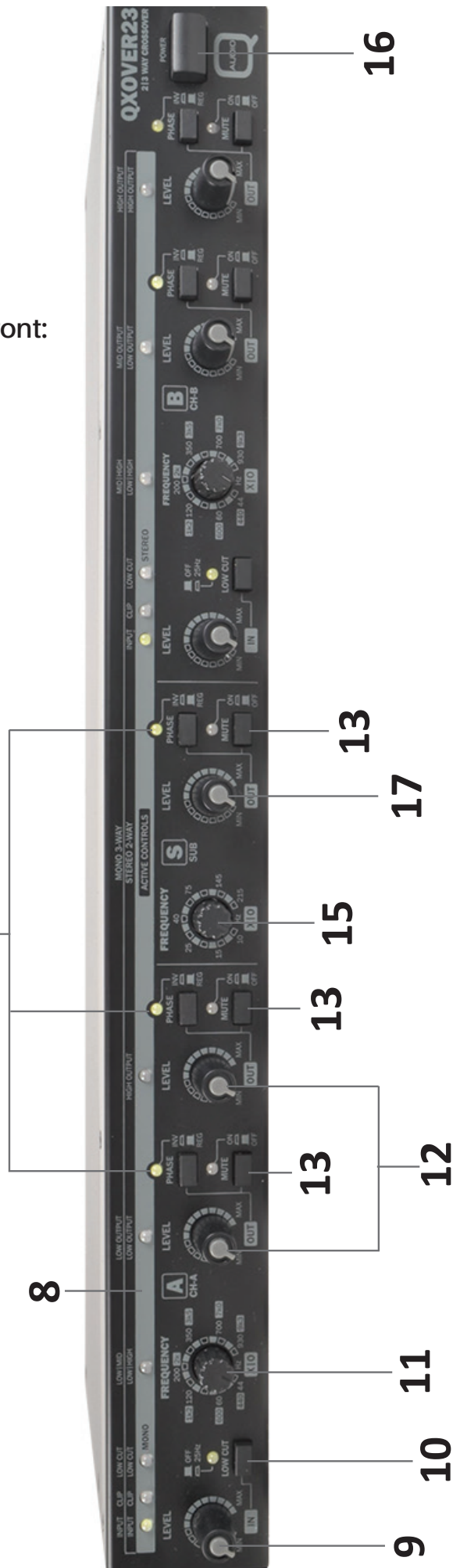
Controls and Connections:

Connections - Rear:



Controls - Front:

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Connections - Rear:

No.	Function
1	AC inlet and Fuse Holder- Use the supplied AC cord to connect the unit to the AC mains. Check voltage and frequency stated and set on the unit comply with your local AC main supply. Replacement of the internal AC mains fuse requires you to hand over the unit to qualified personnel.
2	Mode Switch- DO NOT change the switch setting when the sound system is switched on. Determines whether the unit works in 2-way stereo mode or in 3-way mono mode. Depending on the position of the switch, the functional assignment of some controls and connections may change. Front Panel control function assignment: ACTIVE CONTROL LEDS (8) indicate current settings. Rear Panel: Functional indication is printed on the panel.
3	Input Connector- Mono Inputs via balanced XLR Jacks.
4	Frequency Range Switch- Determines the front-panel rotary frequency control (11). 44 to 930Hz or 440Hz to 9.3kHz.
5	Low Output Connector- Balanced XLR connectors for the low frequency band output signal.
6	High Output Connector- Balanced XLR connectors for the high frequency band output signal in stereo 2-way mode. The assignment changes depending on the Mode switch (2).
7	Subwoofer Output Connector- Balanced XLR output for the mono sub-woofer signal. The front panel frequency control determines the cut-off frequency and the level is set using control (17).

Controls - Front:

No.	Function
8	Active Controls Indicator- LED row to illustrate the functional assignment of the front panel elements depending on Mode switch.
9	Input Gain Control- Sets the main input gain with a +/- 12dB range. Signal presence and a possible clipping of the input are indicated by the LEDs on the top of the control. Clip LED only lights up at signal peaks.
10	Low Cut Switch- Activates the 25Hz high-pass filter with a 12dB/ Octave slope for protection against infrasonic signals.
11	Low/ High Xover Frequency- This control sets the crossover frequency between low and high frequency bands. In 3-way Mono mode, Channel A becomes the Low/Mid and the control in Channel B serves as the Mid/High crossover.
12	Output Level Control- Adjust the output level for the high/ low frequency band. In 3-way mono mode with Channel A's High level control disabled: Channel B becomes Mid and High Level control.
13	Phase Switch- Turn 180 degrees to invert the relative output.
14	Mute Switch- Mute every output individually.
15	Subwoofer Xover Frequency- This control sets the crossover frequency between the subwoofer and low frequency bands from 10Hz to 215Hz.
16	Power Switch- Turns the unit on and off.
17	Subwoofer Level Control- Adjust output level of the subwoofer.

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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