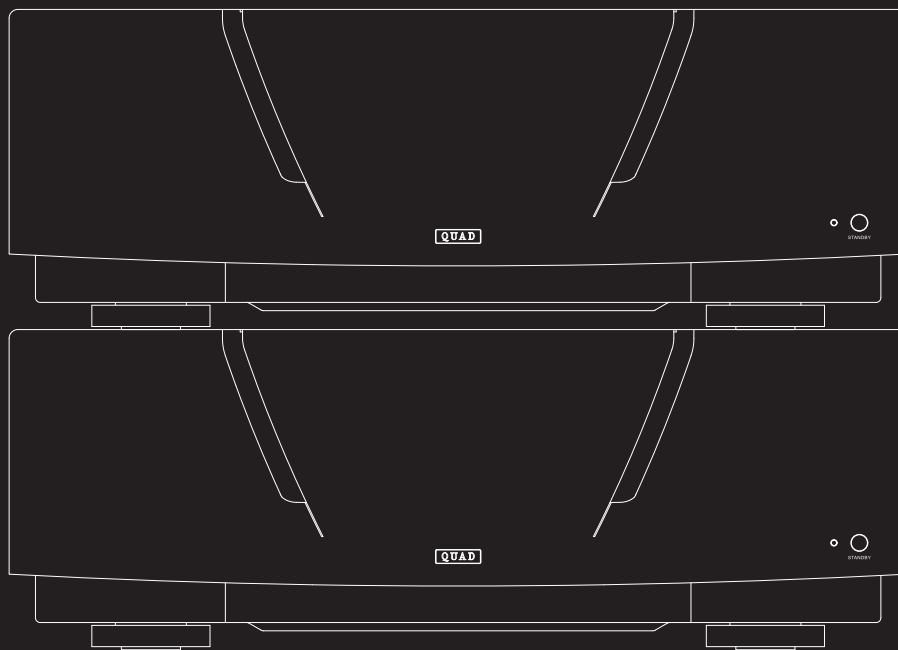


Platinum Series

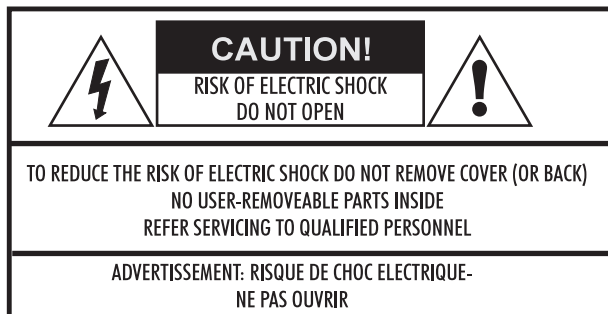


Mono Power Amplifier
Stereo Power Amplifier

Owner's Manual

QUAD *the closest approach to the original sound*

IMPORTANT SAFETY INFORMATION



This symbol indicates that there are important operating and maintenance instructions in the literature accompanying this unit.



This symbol indicates that dangerous voltage constituting a risk of electric shock is present within this unit.

Read these instructions.

Keep these instructions.

Heed all warnings.

Follow all instructions.

Do not use this apparatus near water.

Clean only with dry cloth.

Do not block any ventilation openings.

Install in accordance with the manufacturer's instructions.

Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

Do not defeat the safety purpose of the polarized or grounding type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wider blade or the third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an

electrician for replacement of the obsolete outlet.

Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.



Use only attachments/accessories specified by the manufacturer.

Use only with a cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

Unplug this apparatus during lightning storms or when unused for long periods of time.

Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

Warning: To reduce the risk of fire or electrical shock, do not expose this product to rain or moisture. The product must not be exposed to dripping and splashing and no object filled with liquids such as a vase of flowers should be placed on the product.

No naked flame sources such as candles should be placed on the product.

Caution: Changes or modifications not expressly approved by the manufacturer could void the user's authority to operate this device.

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 or television reception, which can be determined by tuning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Re-orientate or re-locate the receiving antenna. Increase the separation between the equipment and the 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.

ELECTRICAL INFORMATION

MAINS SUPPLY AND SAFETY

Mains Supply: The mains operating voltage of all QUAD Platinum series units is shown on the rear panel. If this voltage does not match the mains voltage in your area, consult your QUAD dealer about converting the unit.

The mains supply fuse on the rear panel is accessible when the IEC mains plug has been removed. In the rare event that it has broken, check for any obvious cause before replacing the fuse with one of the correct rating and type. The fuse values are:

QUAD Platinum Stereo Amplifier

220 - 240V (UK, China, etc.) T4AL 20mm Slow Blow

100 - 120V (USA, Japan, etc) T6.3AL 20mm Slow Blow

QUAD Platinum Mono Amplifier

220 - 240V (UK, China, etc.) T4AL 20mm Slow Blow

100 - 120V (USA, Japan, etc) T6.3AL 20mm Slow Blow

Note: The means of disconnecting this equipment from the mains supply is the ON/OFF switch on the rear panel. This should be freely accessible and operable at all times.



This equipment is a Class II or double insulated electrical appliance. It has been designed in such a way that it does not require a safety connection to electrical earth.

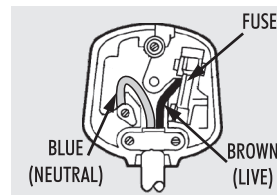
IMPORTANT NOTICE TO UK USERS

The appliance cord is terminated with a UK approved mains plug fitted with a 5A fuse. If the fuse needs to be replaced, an ASTA or BSI approved BS1362 fuse rated at 5A must be used. If you need to change the mains plug, remove the fuse and dispose of this plug safely immediately after cutting it from the cord.

Connecting a Mains Plug

The wires in the mains lead are coloured in accordance with the code: Blue: NEUTRAL Brown: LIVE: Green and Yellow: Earth. As these colours may not correspond to the coloured markings identifying the terminals in your plug, proceed as follows:

The BLUE wire must be connected to the terminal marked with the letter N or coloured BLUE or BLACK. The BROWN wire must be connected to the terminal marked with the letter L or coloured BROWN or RED.



QUAD

PLATINUM

USER GUIDE

Platinum Mono Power Amplifier

Platinum Stereo Power Amplifier

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INTRODUCTION

The Quad Platinum power amplifiers offer class-leading accuracy combined with high power delivery. The amplifiers can be used stand-alone or partnered with other components of the Platinum series.

Balanced and Unbalanced inputs are provided offering the user complete compatibility with other units in the Platinum series and ensuring compatibility with the widest possible range of high fidelity and Studio equipment.

Please read this manual carefully before you begin to install and use the equipment.

Product Registration and Warranty

QUAD equipment is guaranteed against any defect in material and workmanship for a period of one year from the date of purchase. Proof of purchase is required for Warranty claims.

Please complete and return the enclosed Warranty Registration form. Within the warranty period QUAD will undertake replacement of defective parts free of charge provided that the failure was not caused by misuse, accident or negligence. Your statutory rights within the territory in which you purchased the equipment are not affected by this warranty.

QUAD carries out regular reviews and reserves the right to adjust the specifications and performance from time to time.

UNPACKING THE EQUIPMENT

The Platinum Mono Amplifier carton contains:

- The Platinum Mono Power-Amplifier
- One IEC mains cable with a plug suitable for your area
- Platinum Amplifier Instruction Manual
- Warranty Registration Form
- One Trigger Line

The Platinum Stereo Amplifier carton contains:

- The Platinum Stereo Power-Amplifier
- One IEC mains cable with a plug suitable for your area
- Platinum Amplifier Instruction Manual
- Warranty Registration Form
- One Trigger Line

Consult the dealer from whom you purchased the equipment if any item is not present.

Carefully unpack all the units and accessories. Take care not to damage the surface finish when undoing the protective polythene sleeve. Retain the packing materials for future use.

Retain the user manual and information concerning the date and place of purchase of your equipment for future reference.

If you transfer any unit to a third party please pass on this instruction manual along with the equipment.

PLACEMENT

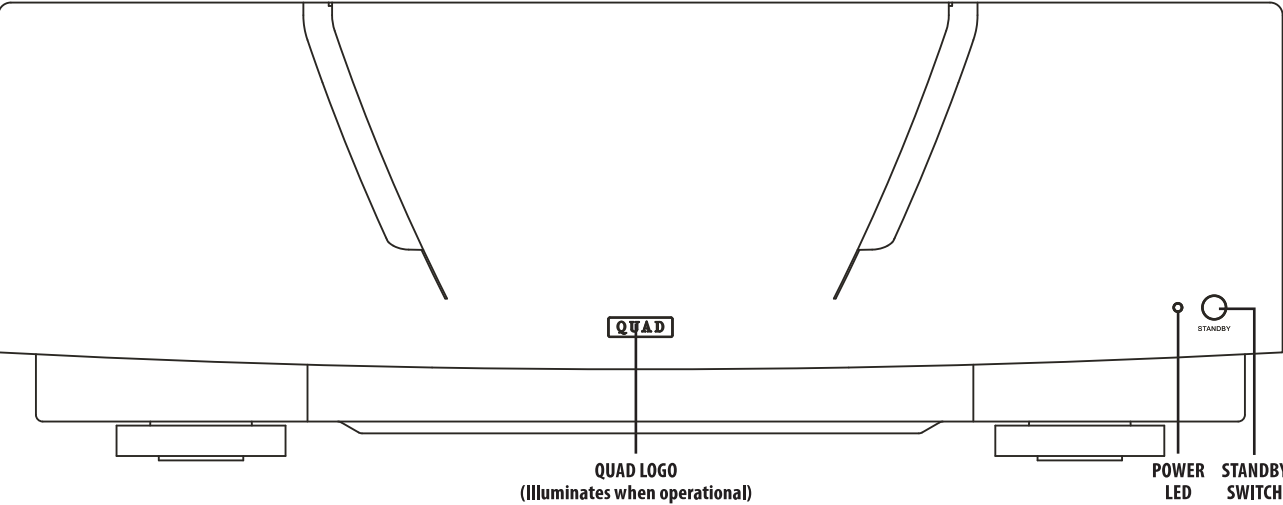
When installed in a domestic system at the base of a Platinum Series vertical equipment stack the Platinum Stereo or even a pair of Platinum Mono amplifiers will operate perfectly satisfactorily provided there is sufficient ventilation.

If you are likely to use the amplifier/s for extended periods at extremely high volume levels, it may be advisable to install the units side by side in free air.

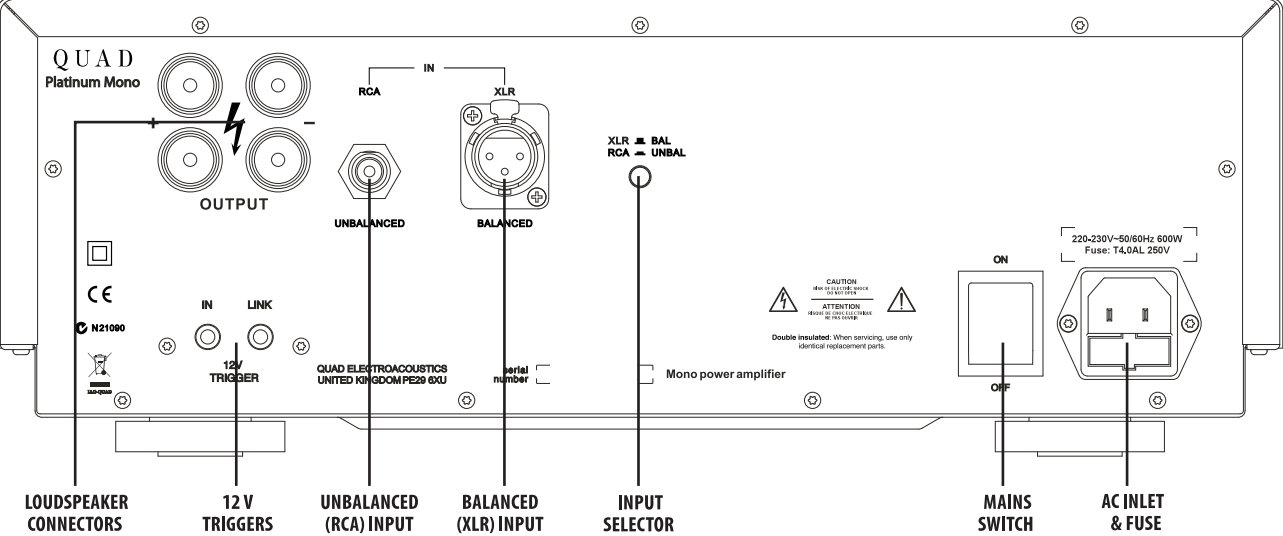
The drawings in this manual show Platinum mono amplifiers stacked vertically. *Never use more than two Platinum amplifiers in a vertical stack.* If you are using four mono amplifiers for bi-amplification they should be in a two pairs beside the other source units.

CONTROLS AND CONNECTIONS

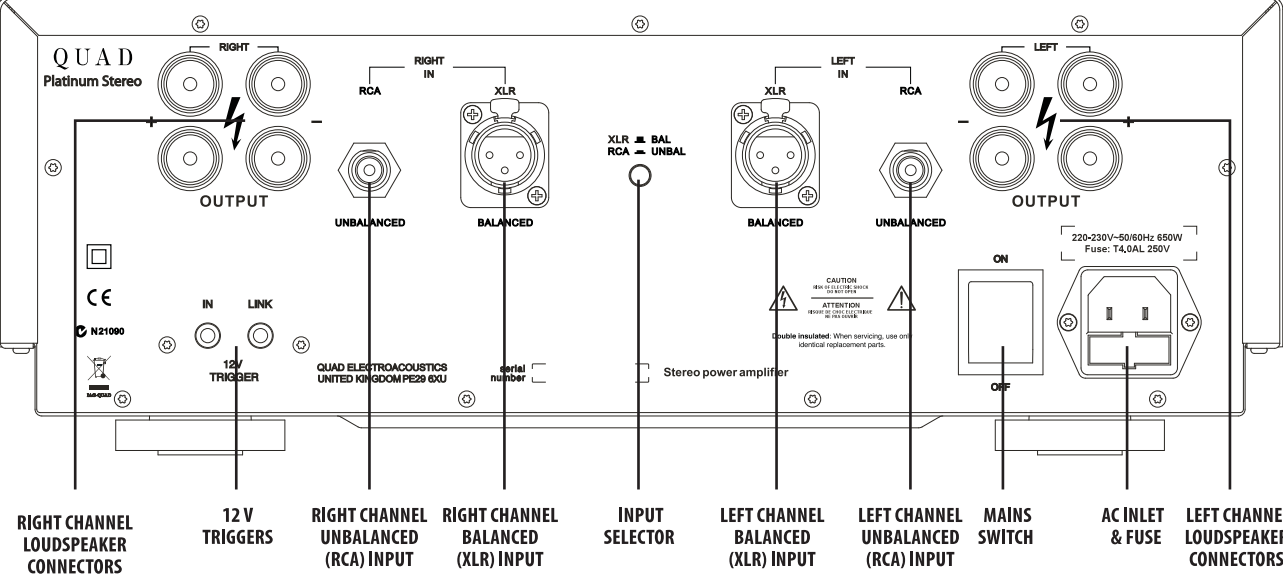
FRONT PANEL PLATINUM MONO AND STEREO AMPLIFIERS



REAR PANEL PLATINUM MONO AMPLIFIER



REAR PANEL PLATINUM STEREO AMPLIFIER



INSTALLATION

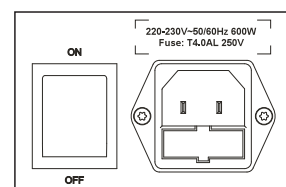
Before making any connections to your high fidelity equipment make sure that all units in the system are switched off and unplugged at the mains.

Mains Connections

Before connecting your QUAD equipment to the AC mains supply check that the voltage marked on the back matches the voltage of your supply.

Mains On/Off Switch

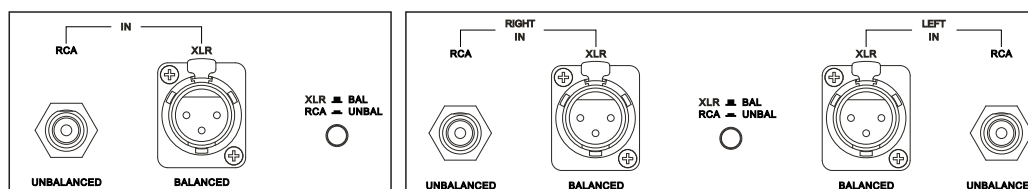
The Mains On/Off switch is on the rear panel. When the amplifier is connected to a source unit (e.g. Quad Platinum preamplifier or DMP Player) using the 12V triggers this switch should be left switched on as the amplifier will be remotely switched by other source units. Where the amplifier/s are not part of a trigger enabled system the Mains On/Off switch should be switched off when the amplifier is not in use.



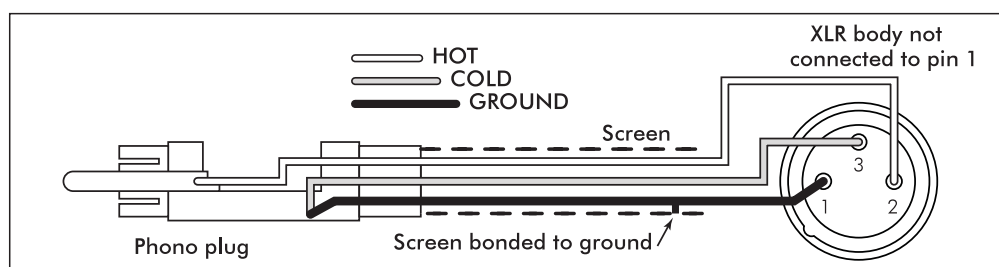
Signal Input Connections

Balanced Connections: If you are connecting a Quad Platinum amplifier to the Quad Platinum preamplifier or DMP player we strongly advocate the use of balanced XLR connections. A major advantage of balanced interconnects is the suppression of ground-loop problems. Balanced line inputs use 3 conductors, one for the ground and two for the voltage difference between the signal and the ground at the preamplifier. As a result the input at the amplifier does not respond to the voltage between input and ground, but to the difference between the two signal conductors. The signal is thus 'cleaner' and free from earth-induced currents and other LF artefacts.

XLR interconnects should be of screened, twisted pair construction. Refer to your dealer if in doubt.



If you are connecting to equipment with single ended RCA phono outputs and you wish to use the balanced XLR input: use a manufactured RCA/XLR adaptor cable. If you cannot obtain such a cable, consult your dealer or have one professionally made up. Wiring details of this cable are below.



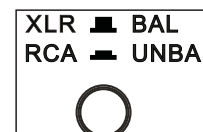
The important point is that the 'cold' line is connected to ground at the remote (phono) end, and not at the XLR. Thus the balanced inputs at Pins 2 and 3 see only the voltage at the phono plug itself, and any spurious voltages that may exist on the ground line are ignored.

The XLR body, if metal, will have a separate solder tag. Do not join this to ground or Cold as this creates a connection between audio ground and chassis ground, which may affect system performance.

Unbalanced Connections: Connect an RCA phono interconnect between the unbalanced input on the Platinum amplifier with the matching output on the preamplifier.

Input Selector: When connecting the signal input ensure the Input Selector is switched to the appropriate input.

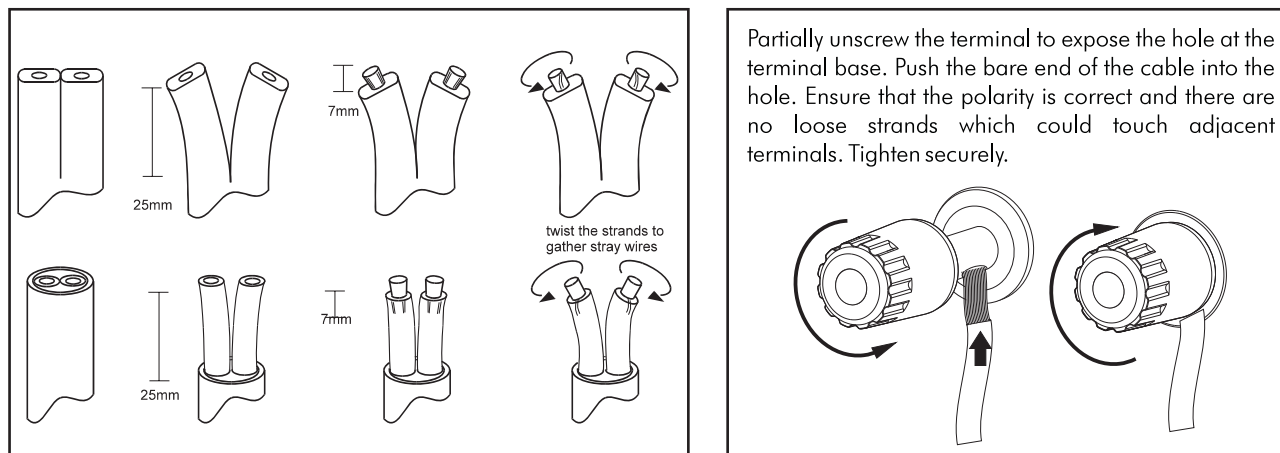
- In the normal (extended) position the balanced XLR input is selected.
- Press the selector in for single ended RCA phono input.



Loudspeaker Connections

Loudspeaker cables should be carefully prepared. The illustrations shown use round and flat speaker cable. When stripping the insulation, be careful not to cut into the wire. Collect together all the strands of wire as stray wires may cause shorting which could result in damage or cause a fire.

Make sure that all channels are connected in phase. The positive (red) output terminal of each channel should be connected to the positive (red) terminal of the speaker. Special care should be taken when bi-wiring as phase becomes critical.



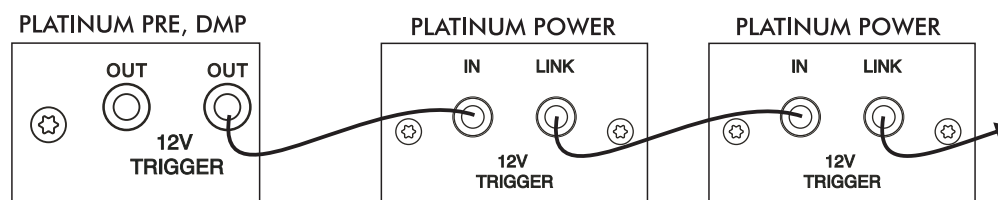
Quad Platinum power amplifiers use two sets of loudspeaker connectors per channel. The positive and negative terminals of each channel are internally connected. If you are single wiring your loudspeakers (for example to a pair of Quad Electrostatics) you may use either pair. If you are bi-wiring your loudspeakers with two sets of cables, you may find it more convenient to use both sets of terminals. The wiring diagrams on the next pages will help you.

Triggerr Connections

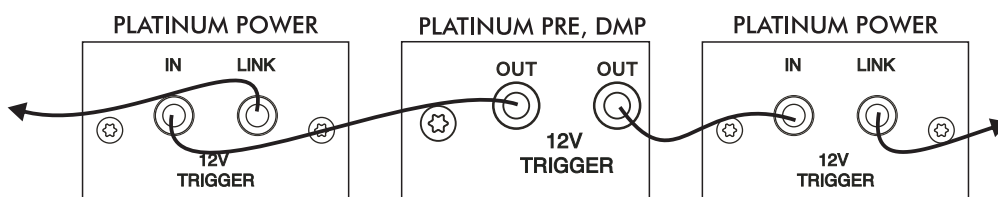
If you have a Quad Platinum system we advise connecting the triggers. This will enable all Platinum units to be brought in and out of standby along with the control unit.

To connect to your Control Unit you will need a cable with one end to match the trigger output of the control unit and the other terminating in a 3.5mm jack plug. For Quad Platinum units this will be a 3.5mm-3.5mm interconnect.

Connect the **12V Trigger Input** of one Quad platinum amplifier to the trigger output of your Platinum preamplifier, the Platinum DMP, or any other control unit having a **12V master trigger output**. Connect the **Link** socket to the **12V Trigger Input** of the next Quad platinum amplifier in the system (if there is one). Proceed in this way until all amplifiers are connected.



If you have a Platinum system with one mono power amplifier placed behind each loudspeaker, you can take advantage of the twin triggers on Platinum control units by using the configuration shown below.



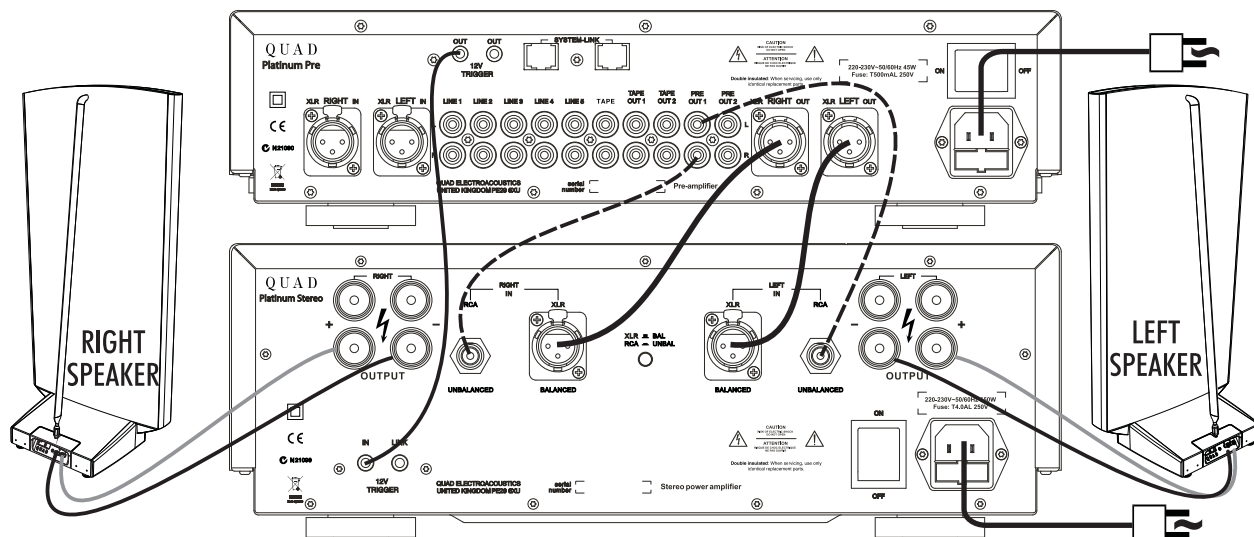
System Connections - Platinum Stereo

Input Connections: Connect the Left and Right XLR balanced outputs of the Quad Pre or DMP into the corresponding input sockets of the Platinum Stereo. Alternatively you may use the unbalanced connections (dashed line).

Trigger Connections (optional): Connect a 3.5mm cable from the trigger out socket of the Quad Pre or DMP into the trigger input of the Platinum Stereo.

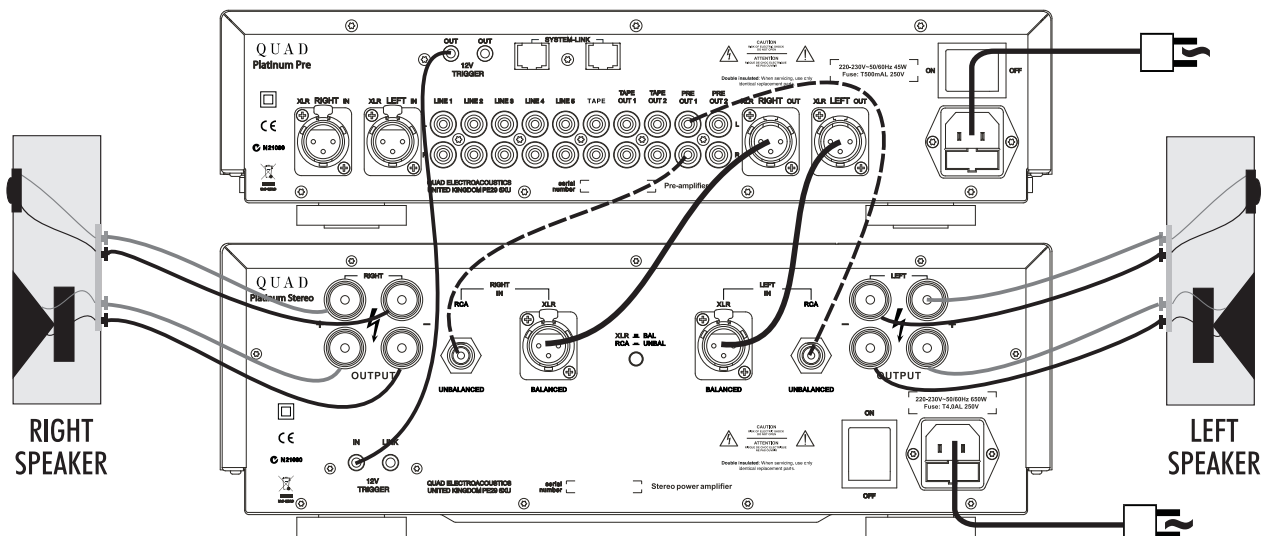
Standard Loudspeaker Wiring: Connect the Left speaker to the Left output of the amplifier. Ensure that the Red (+) terminal of the amplifier connects to the Red (+) terminal of the speaker and that the Black(-) terminal of the amplifier connects to the Black (-) terminal of the speaker. Connect the Right channel similarly.

Platinum Stereo Amplifier with Standard Loudspeaker Wiring



Bi-Wiring: If your loudspeakers have a bi-wiring capability you should certainly bi-wire them. Please refer to the Loudspeaker user manual for the relevant information and advice.

Platinum Stereo Amplifier with Loudspeaker Bi-Wiring



System Connections - Platinum Mono

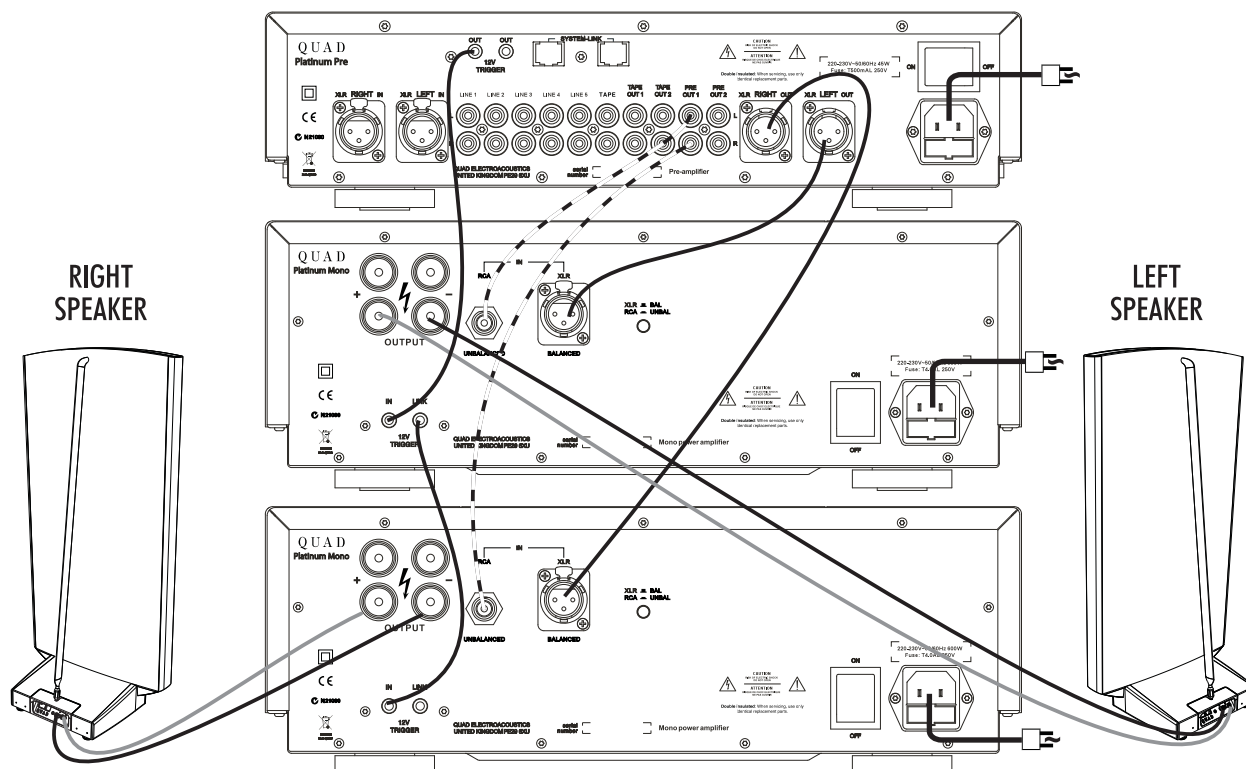
Designate the Left and Right amplifiers. By convention the Left amplifier is on top, the Right is below.

Input Connections: Connect the Left and Right XLR balanced outputs of the Quad Pre or DMP into the corresponding input sockets. Alternatively you may use the unbalanced connections (dashed line).

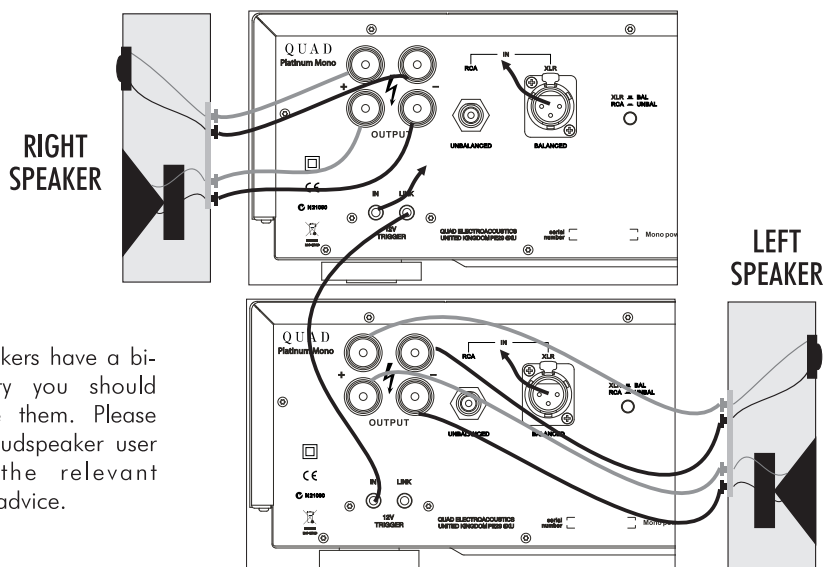
Trigger Connections (optional): Connect a 3.5mm cable from the trigger out socket of the Quad Pre or DMP into the trigger input of one Platinum Mono. Connect a second 3.5mm cable from the Link Socket of this amplifier into the Trigger in socket of the next Platinum Mono so you have a daisy chain.

Standard Loudspeaker Wiring: Connect the Left speaker to the Left output of the amplifier. Ensure that the Red (+) terminal of the amplifier connects to the Red (+) terminal of the speaker and that the Black(-) terminal of the amplifier connects to the Black (-) terminal of the speaker. Connect the Right channel similarly.

Platinum Mono Amplifiers with Standard Loudspeaker Wiring



Platinum Mono Amplifiers with Loudspeaker Bi-Wiring



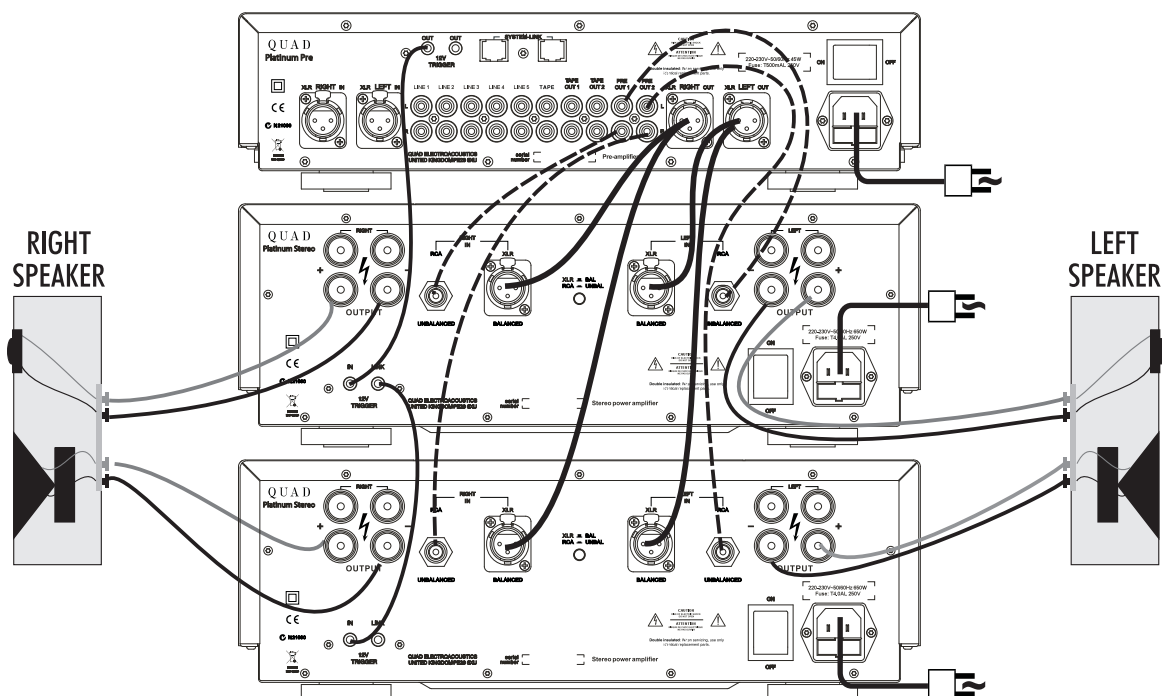
If your loudspeakers have a bi-wiring capability you should certainly bi-wire them. Please refer to your Loudspeaker user manual for the relevant information and advice.

Bi-Amplification

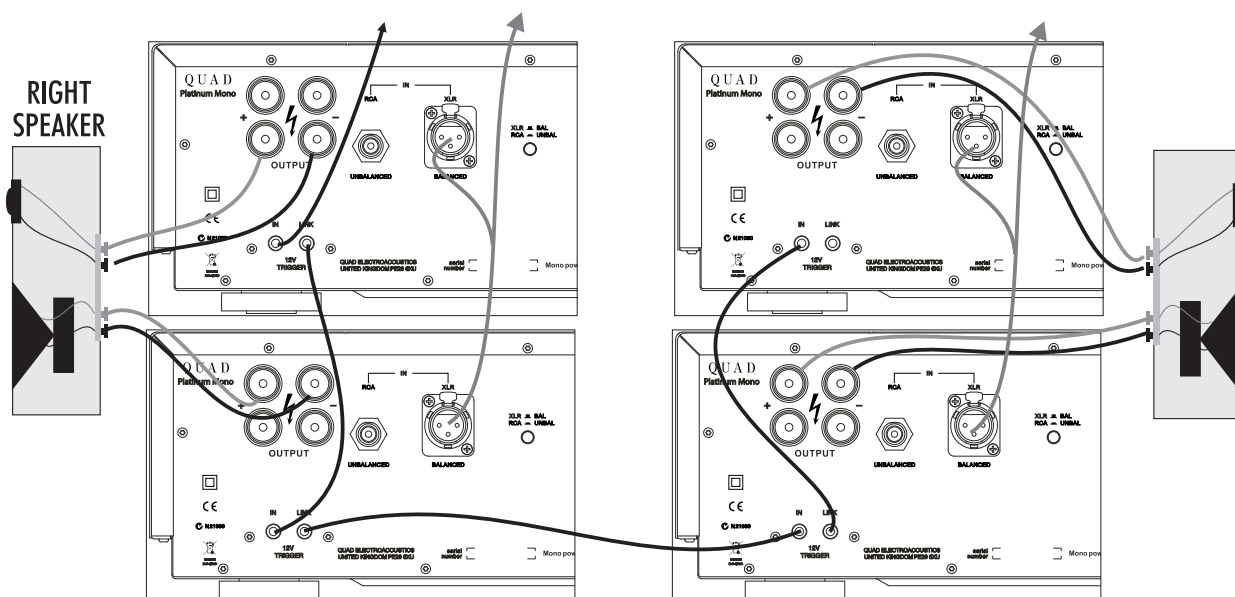
Bi-amplification is a process whereby the bass and treble units of a loudspeaker are separately amplified. If your loudspeaker is capable of bi-wiring it can also be bi-amplified. Please refer to your Loudspeaker user manual for the relevant information and advice.

Note: Bi-amplifying requires the inputs of the power amplifier to be coupled together. If you are using XLR balanced connections you will need two special interconnects. These have one XLR socket connected to two XLR plugs and are available from professional audio/studio suppliers. The Platinum Pre and DMP have two sets of unbalanced RCA outputs to facilitate bi-amping and these connections are shown in the top drawing as dashed lines.

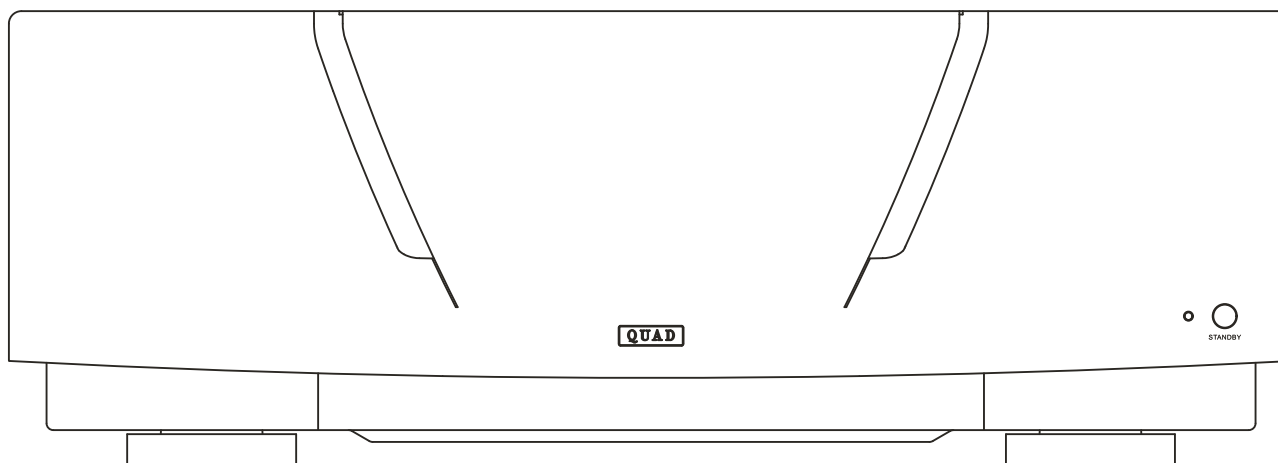
Platinum Stereo Amplifiers



Platinum Mono Amplifiers



OPERATION



Switching on

The power supply input is via an IEC mains connector and an appropriate mains lead is supplied. Connect the mains lead/s to the amplifier/s and then to the wall socket ensuring that the mains switch on all amplifiers and wall sockets are switched off.

Check that all leads are correctly installed and the input selector switch is correctly set on each amplifier. Switch on the mains supply to the preamplifier and then to the power amplifier/s. All connected unit/s will go to Standby and the power led/s on the front panel/s will indicate Red.

If the trigger system is connected: Press the Standby button on the control unit (Quad Pre or DMP). All connected units will go from Standby to "Active". The Power LED and Quad Logo light up white.

If the trigger system is not connected: Press the Standby button/s on the control unit and all the amplifier/s. The units will go from Standby to "Active". The Power LED and Quad Logo light up white.

Protection Systems on Platinum power amplifiers

DC Offsets: A DC offset of 10mV on any input will mute the amplifier. DC offsets are caused by poorly designed source components and should not occur in quality audio systems. Once the DC offset is removed (by unplugging the input or switching off the source component) the output/s will un-mute.

The DC offset circuit will also trigger in the event of asymmetric clipping of the output waveform. An internal fault or uncorrected signal that results in DC in excess of 10mV being present on the amplifier output/s will cause the unit to mute.

Overheating: The amplifier heatsink/s are monitored for excessive temperature. Above 110° amplifier will disconnect the loudspeaker circuits. Once the heatsink is within normal working temperatures (this can take as long as 30 minutes depending on ambient temperatures), the speakers will be reconnected.

Short Circuit and excessively low output impedance: The amplifier is monitored for over current caused by either a shorted output or too small a load impedance. If a short circuit or excessive current demand is detected the output relay/s will operate and disconnect the loudspeakers. After a few seconds the amplifier "try again". If the short is still present the loudspeakers will again be disconnected.

If after a prolonged period of time the amplifier still fails to operate: Return the unit to your Quad dealer for attention.

Running- In

The performance of power amplifiers tends to improve after a period of use and then stabilise. We recommend that the system be run with a music signal for several hours when first installed. Although the changes can be subtle we find that after a few days the sound quality becomes smoother and more natural.

After Use



Platinum System (trigger connected): Put the system into standby with the control unit Standby switch or system handset. This will send all connected amplifiers into standby.

Non-Platinum System: Set the volume control on the preamplifier to minimum. Switch the power amplifiers into Standby BEFORE you switch the preamplifier off. In a non-Platinum system the power amplifier should always be the last unit in the chain to be switched on and the first to be switched off.

TROUBLESHOOTING

If you suspect that your power amplifier is not operating properly, here are a few simple checks you should carry out before returning the unit to your dealer.

Before making any checks on system wiring, please ensure all units are switched off and the system volume control is set at minimum. If you are in any doubt as to the satisfactory operation of your Quad Platinum Series hi-fi equipment, please consult your appointed QUAD dealer

SYMPTOM	POSSIBLE CAUSE
No front panel indication when the amplifier is brought out of standby.	Mains outlet faulty or not switched on Mains plug fuse or mains cable faulty The IEC plug has not been pushed in firmly enough The rear panel fuse has blown
The front panel indicator glows but there is no sound from either speaker	The input selector on the amplifier is set to the wrong input type. Loudspeaker/ loudspeaker cables misconnected or faulty No source connected to your preamplifier or the source has finished playing. The cable between the amplifier input and the preamplifier is faulty.
The channels are reversed	Loudspeaker cables are misconnected. Signal input cables misconnected
There is a large hum or unpleasant noise from the loudspeakers	Signal cable to amplifier faulty Faulty source equipment
After playing for a while, the amplifier switches off	Faulty loudspeakers or loudspeaker cable Loudspeaker impedance too low and/or Amplifier playing too loudly and overheating

FURTHER INFORMATION

12V Trigger Operation

The unit is equipped with a 12V trigger system. When the unit sees 12V on the trigger input it will come out of standby. The front panel led will change from Red to White and the unit will go through its normal timed start up. If the unit is already fully on this 12V input will be ignored. The unit will go back into standby when the 12V supply is removed. The 12V trigger can be over-ridden at any time by pressing the front panel switch.

Quad Electrostatic loudspeakers

Platinum power amplifiers are fully compatible with the all models from the Quad ESL-63 onwards. They should not be used with the original model (ESL 57) which could be damaged by signal peaks unless a protection circuit is fitted inside each loudspeaker – please contact Quad Electroacoustics for details.

Checking the phase of your loudspeakers

If there is any doubt about the way the loudspeakers are connected, their phasing can easily be checked by playing a mono source, when the sound should appear to emanate from a point midway between the two loudspeakers. If this is indefinite, then the connections to one of the loudspeakers should be reversed. When correctly connected, the loudspeakers will give a definite centre sound source with more full bodied tenor and bass registers.

Headphone Listening

Where headphones are used, these will normally be used instead of loudspeakers and there are a number of suitable switch units available designed to enable the loudspeakers to be switched off when the headphones are plugged in. Most of these incorporate a simple attenuator circuit to permit operation at normal settings of the preamplifier volume control. Electrostatic headphones requiring a high level input should be operated in accordance with the manufacturer's instructions. The Platinum preamplifier features headphone connections.

CARE AND CLEANING

The surface of the equipment may be cleaned with a damp cloth provided that the power has been switched off first. Solvent based cleaning materials should not be used as they may damage the finish.

SERVICE INFORMATION

Product service enquiries should, in the first instance, be referred to the supplying dealer. If you need to return your equipment for servicing we recommend that it is shipped in its original packing.

In cases of difficulty or for other product enquiries please contact the appointed QUAD distributor for your country. Principal Service Centre addresses and contact numbers can be found below.

For information on authorised service centres worldwide contact QUAD Electroacoustics Ltd. A worldwide distributor list is available on the QUAD website: www.quad-hifi.co.uk

International Service Centre

UK: International Audio Group Service Centre, Unit 4, St Margaret's Way, Stukeley Meadows Industrial Estate Huntingdon, Cambs, PE29 6EB'

Tel: +44 (0)1480 452561 Fax: +44 (0)1480 413403

SPECIFICATIONS - PLATINUM MONO POWER AMPLIFIER

Power Output	170W into 8Ω (<0.1% THD at 1kHz)
Total Harmonic Distortion (THD)	0.006% (120W at 1kHz) <0.1% (100W at 20Hz - 20kHz)
Frequency Response	-0.3dB at 5Hz and 20kHz, ref 1kHz -1dB at 5Hz and 50kHz, ref 1kHz
Gain	29.5dB
Signal-to-Noise Ratio (S/N)	95dB (1W @ 1kHz 'A' weighted) 117dB (170W @ 1kHz 'A' weighted)
Input Impedance	20kΩ (balance) 20kΩ (unbalance)
Dimension (W x H x D)	380 x 135 x 410 (mm)
Net Weight	13kg

SPECIFICATIONS - PLATINUM STEREO POWER AMPLIFIER

Power Output	140W into 8Ω (<0.1% THD at 1kHz)
Total Harmonic Distortion (THD)	0.009% (100W at 1kHz) <0.1% (100W at 20Hz - 20kHz)
Frequency Response	-0.3dB at 5Hz and 20kHz, ref 1kHz -1dB at 5Hz and 50kHz, ref 1kHz
Gain	29.5dB
Signal-to-Noise Ratio (S/N)	94dB (1W @ 1kHz 'A' weighted) 114dB (160W @ 1kHz 'A' weighted)
Input Impedance	20kΩ (balance) 20kΩ (unbalance)
Dimension (W x H x D)	380 x 135 x 410 (mm)
Net Weight	14.5kg



Correct Disposal of this product. This marking indicates that this product should not be disposed of with other household wastes throughout the EU. Please recycle where facilities exist. Check with your Local Authority or retailer for recycling advice.



QUAD

IAG House, Sovereign Court, Ermine Business Park, Huntingdon, Cambs, PE29 6XU, UK
Tel: +44(0)1480 447700 Fax: +44(0)1480 431767 <http://www.quad-hifi.co.uk>
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Quad is a member of the International Audio Group. CODE: QH11-MNL009b