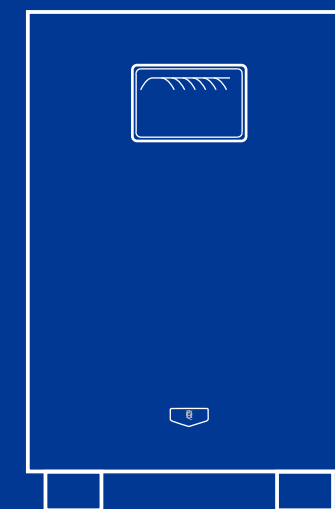


QUAD

L-ite

Powered Subwoofer



Owner's Manual

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QUAD

QUAD L-ite
Subwoofer

USER GUIDE

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settings. The goal is to ensure the subwoofer blends seamlessly into the sound stage. Setting the subwoofer to Standby should reduce the bass extension, not change the bass level - as always personal taste plays an important part.

Setting levels: Once the loudspeaker settings have been finalised, put the AV amplifier into its “Test” mode (see instructions supplied with your processor.) Adjust the levels until all channels are reproduced at equal loudness.

When adjusting the subwoofer output level avoid setting too high a level or you will swamp the sound with bass which be tiring to listen to and may limit the subwoofer’s ability to respond to large bass transients. Set a sensible level going *into* the subwoofer from the processor. The volume display should be around 50 at normal listening levels.

LFE: This channel was originally an additional bass channel with its own dedicated subwoofer. In practice however, if any speakers are set to ‘Small’, the LFE channel is combined with the bass from those channels and fed into the subwoofer. When you set the LFE level from your AV processor, use care as the LFE channel contains powerful low frequencies which, although normal in a cinema, may overload a domestic subwoofer. If, during a programme, you hear popping or thumping noises from the subwoofer, turn the AV Processor volume level down and back off the LFE level. If this does not cure the problem, lower the subwoofer volume level.

Note: If any channels are set to ‘Small’ the subwoofer **must** be on when the system is playing otherwise there will be reduced bass , as well as no LFE.

Stereo reproduction

Low Pass Filter: The low pass filter should be set having regard to the size and low frequency extension of the main speakers. The role of the subwoofer is to *extend* the bass response of the system *not* to increase the overall bass level. If the loudspeakers are large the LPF should be set low, a value around 45-55 Hz is a good place to start. With smaller speakers this can be increased, up to 85Hz for very small bookshelf units. As always the final value is determined by listening.

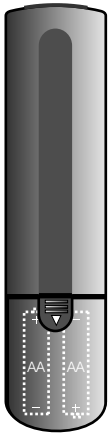
Low-level listening: Our ears are far more sensitive to midrange frequencies (2-5 kHz) than bass frequencies. Very low bass and especially percussive bass is ‘felt’ rather than heard. At low sound levels bass frequencies appear to attenuate faster than midrange and treble. As the level increases this bass roll-off decreases and at loud volumes is negligible. The pioneering work was done in the 1930’s by Fletcher and Munson who produced a series of ‘Equal Loudness Contours’. Occasionally we may wish to listen to a normally loud piece of music at a low level but with retention of the bass information. The slope control on Quad pre-amplifiers compensates to some extent but there may be a case for assigning a preset for low level listening where the subwoofer volume is set somewhat higher and the LPF is set somewhat lower - as always this is for individual judgement.

Testing the system

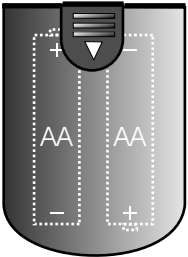
By Ear: The simplest way to test the system is to play, at a moderate level, music with deep consistent bass. Switching the subwoofer in and out of Standby should cause change of the depth of bass, and the ambience will also alter. If there is a significant change in bass volume, or a noticeable step in the bass response, or an increase in coloration when the subwoofer is playing, the setup needs to be refined further. By entering different settings in different presets, you will be able readily to identify the most favourable combination.

Using an SPL Meter: This is done with a test disc or signal generator and is beyond the scope of this handbook except to observe that SPL meter settings are weighted ‘A’, ‘B’ and ‘C’ - these correspond to the inverse of the Fletcher-Munson Equal Loudness Contours at 40, 70 and 100dB. For normal listening levels the SPL meter is usually set to ‘C’ and the response set to *slow*. If you wish to use this setup method you should definitely seek your dealer’s advice beforehand.

Installing batteries in the remote handset



The handset operates on two LR6 (AA) batteries which are supplied. The battery compartment is located at the rear of the handset. Unwrap the batteries and slide the cover off the handset. Place the batteries in the handset observing the polarity. The correct orientation is shown on the diagram. When the batteries are installed, replace the cover.



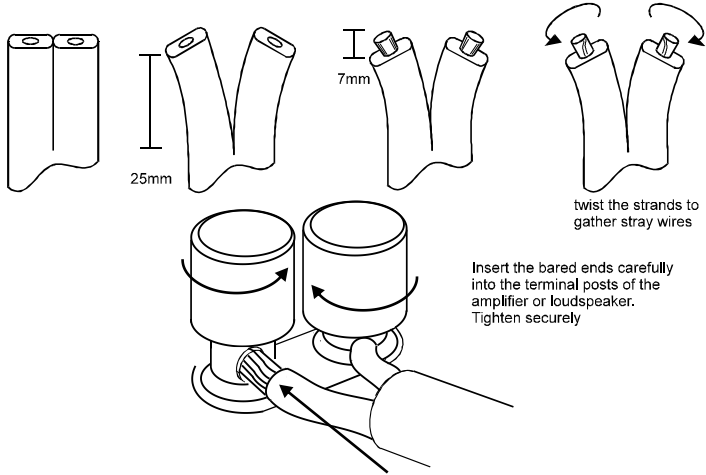
Use of correct connectors and cables

You should ensure that cables which are used with Quad equipment are properly terminated and appropriate to the task. This is particularly important with loudspeaker cables and connections. If you are in any doubt consult your dealer.

When routing any cables to loudspeakers do not run them across open floor spaces where they may cause danger to people and pets. Route them safely, around room boundaries if necessary.

Loudspeaker cables

Loudspeaker cables should be carefully prepared. The following sketches show the preparation of a speaker cable for use with Quad power amplifiers and loudspeakers. When stripping the insulation, be careful not to cut into the wire. Make sure that you collect together all the strands of wire as stray wires may cause shorting which could result in damage or cause a fire.



When estimating the length of loudspeaker cable, provide sufficient to enable access and tidy securing. Some cables are quite heavy and should be placed so that they do not cause undue strain on the binding posts of the subwoofer.

Signal cables

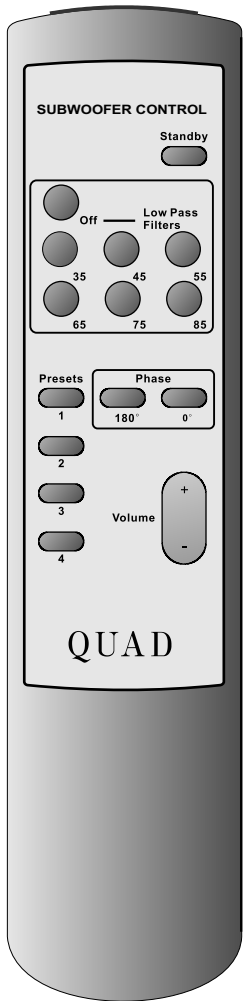
Signal cables should be properly terminated and fully screened to minimise hum. If you connect your subwoofer via the low level signal inputs, the cable between your control unit or processor and the subwoofer could be quite long so screening is particularly important. Consult your dealer if in doubt.

OPERATING YOUR EQUIPMENT

Switching On

Check that all the connections to the subwoofer have been properly made and that the system volume control is at minimum. Plug the supplied power cord into the mains socket on the rear panel. Plug the mains plug into the wall socket and switch the power on. Now switch the subwoofer on with the rest of your system. The subwoofer on/off switch has a rocker action; press the upper part to switch the equipment on and the lower part to switch it off. When switched on the light above the power switch will glow and the subwoofer will be operational.

Operation - Controls and Functions.



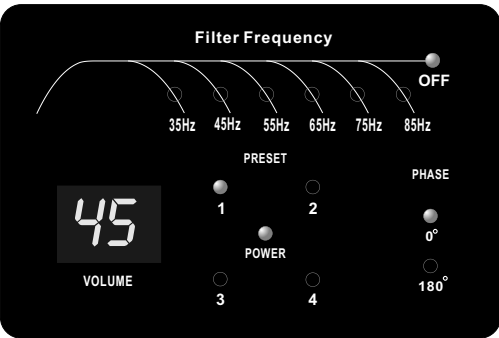
All control functions are carried out using the remote handset. The handset must be pointed at the subwoofer and be in line of sight for it to operate.

Standby: Operating the Standby key brings the subwoofer in and out of Standby.

The drawing on the right shows a typical front panel display during operation.

The preset light will not light if no preset has been set up or if a preset has been over-ridden.

In Standby, the Volume, Filter, Preset and Phase indicators are extinguished. The POWER and the rear panel lights remain on to show the unit is powered.



Volume: Press the Volume + key to increase the volume level. Press the Volume - key to decrease the volume level of the subwoofer. The volume range on the front panel display varies from 00 (minimum) to 99 (maximum).

Low Pass Filters: Pressing the appropriate filter key will select the frequency at which the subwoofer rolls off. The filter has steps at Off and 35Hz-85Hz in 10 Hz increments. When 'OFF' is selected the subwoofer operates over its full designed range. Pressing other keys lowers the maximum operating frequency. The Low Pass Filter value should be chosen having regard to the nature of the Front speakers and programme material. Follow the Setup Notes on Page 11 and the instruction manual of your AV processor (if used) for more guidance.

Phase: This key toggles the subwoofer between 0° and 180° phase shift.

Presets: Four different settings of level, frequency and phase can be stored. Pressing and holding any of the preset keys on the remote for 3 seconds will cause the current settings to be stored in that preset. The display will show the preset number then flash the preset number once to show it has stored the preset.

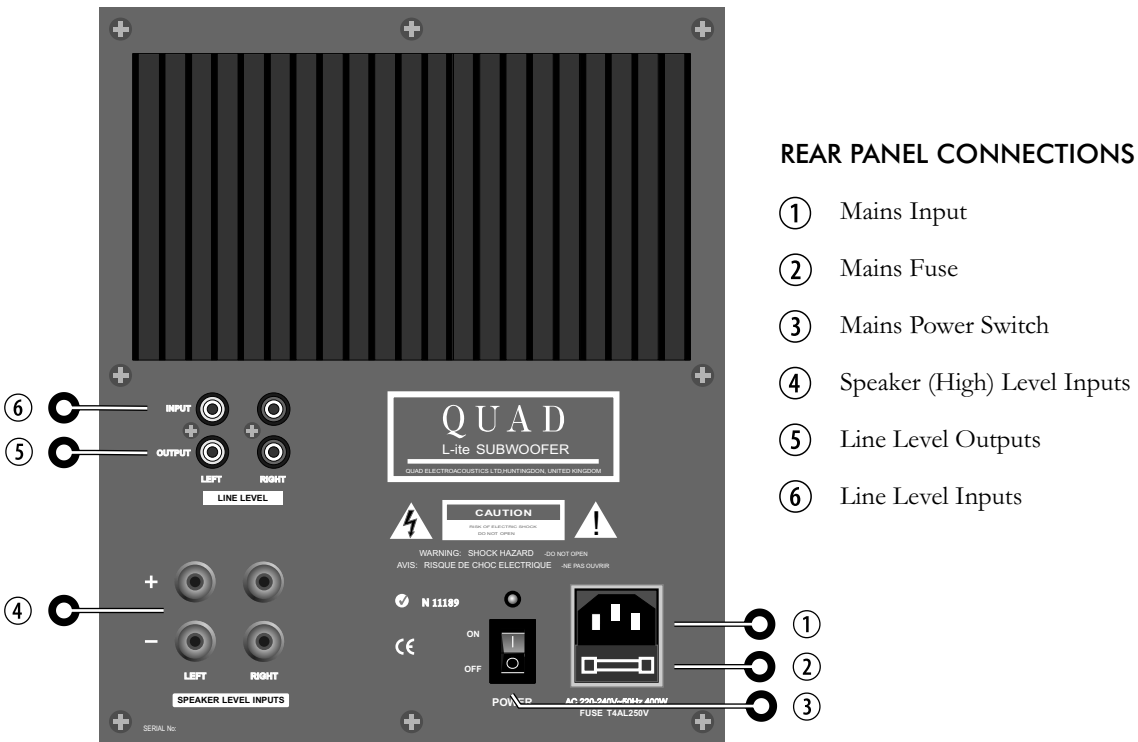
To change from one preset to another, press a preset key on the remote for less than 3 seconds to recall the settings of that preset. The display will show the preset number:

If you select a preset and then alter any aspect of the setup, the preset light will extinguish (as the setup no longer matches the preset).

Note: When brought out of standby for the first time, the unit will display the factory presets. Thereafter, bringing the unit out of standby will revert it to the operational state last used. If you switch the power on and off at the rear panel while the unit is in standby, the unit will power up to a normal operating state (i.e. not in standby). To enter standby, again press the Standby key.

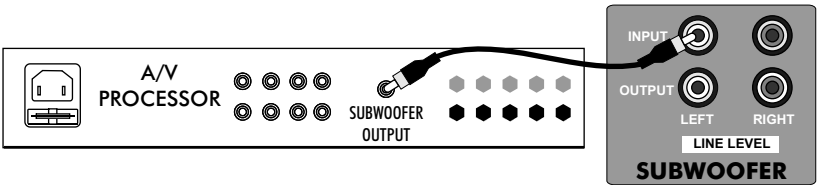
Connecting the subwoofer

Switch all active system components off before connecting the subwoofer



Connecting to a Digital AV processor

If your AV processor has a line level or LFE subwoofer output you should use this connection. You will need to purchase a single screened RCA phono lead from your dealer. Connect this lead to the Left line input of the Subwoofer as shown below.



Stereo Line Level Connections

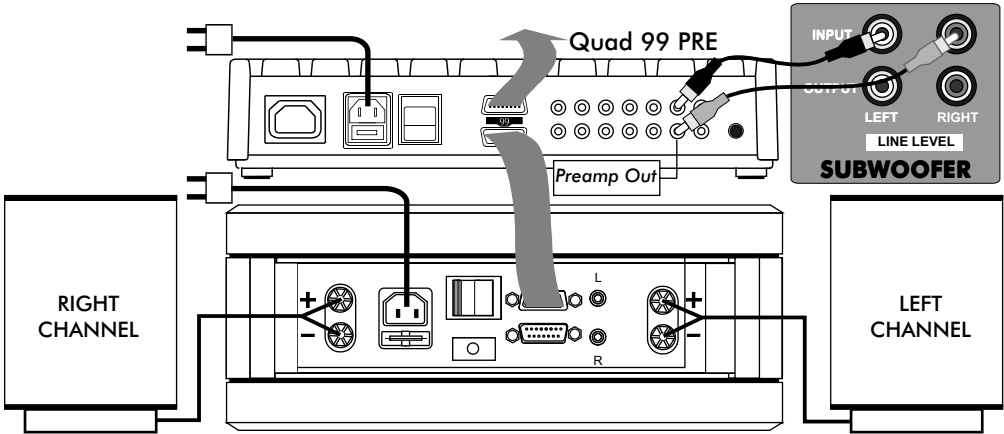
Stereo line level connections will be necessary

- Where there is no dedicated single subwoofer output
- With legacy AV systems where there is a stereo subwoofer line output
- In regular stereo systems where there is a suitable preamplifier line output, or in the case of an integrated amplifier, a pre/main link that can be separated. The output must be controlled by the main system volume control - a tape output is *not* suitable. If you are in any doubt, consult your dealer.

METHOD A: Use this method

- Where a Quad control unit is connected to the power amplifier using the QUADLINK system - this will be found on 77 and 99 series systems only.
- If you have a Quad 77 integrated amplifier (whether you use QUADLINK or not) or a preamplifier or integrated amplifier with a spare (unused) preamplifier output.

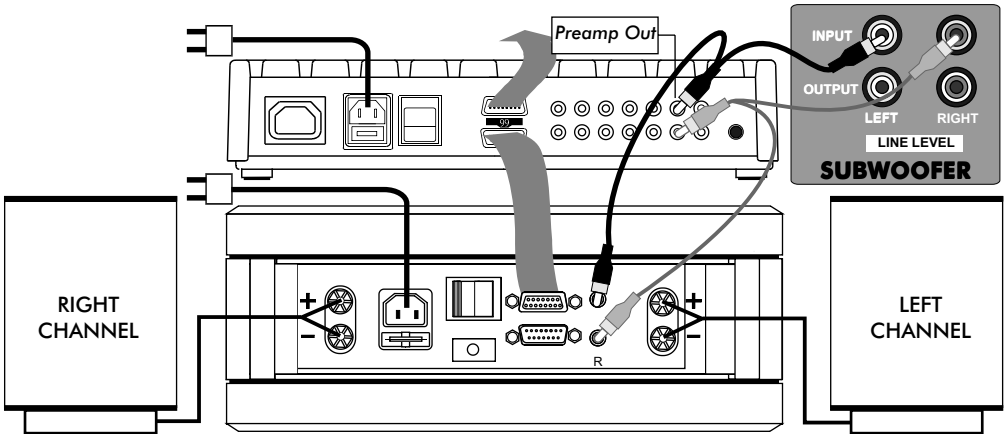
Connect the control unit to the subwoofer using a good quality RCA screened stereo cable as shown in the diagram below.



METHOD B: Use this method

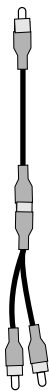
- Where a Quad control unit is connected to the power amplifier via RCA phono connectors.
- Where a regular preamplifier/amplifier combination is in use.

You will need two 'split mono' leads - a single phono plug connected to two phono plugs. Connect the leads as shown in the diagram below taking care not to mix up the channels.



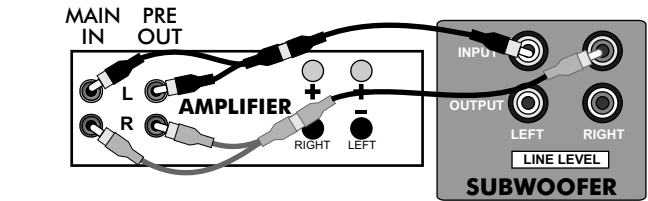
Pre Out - Main In connections

(x2)



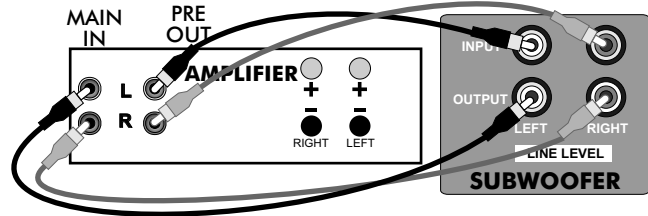
Method A: You will need two screened RCA 'Y' adaptors and two single RCA phono cables.

Remove the Pre-Main links on your amplifier. Connect the socket (common) of an RCA 'Y' adaptor to one of the mono cables. Connect one leg of the 'Y' adaptor to the Left Channel Pre Out socket on the amplifier and the other leg to the Left Channel Main In socket. Connect the remaining plug on this combination to the Left Channel Line Level Input on the sub-woofer. Repeat this for the Right Channel.



Method B: You will need two stereo (or four single) screened RCA cables.

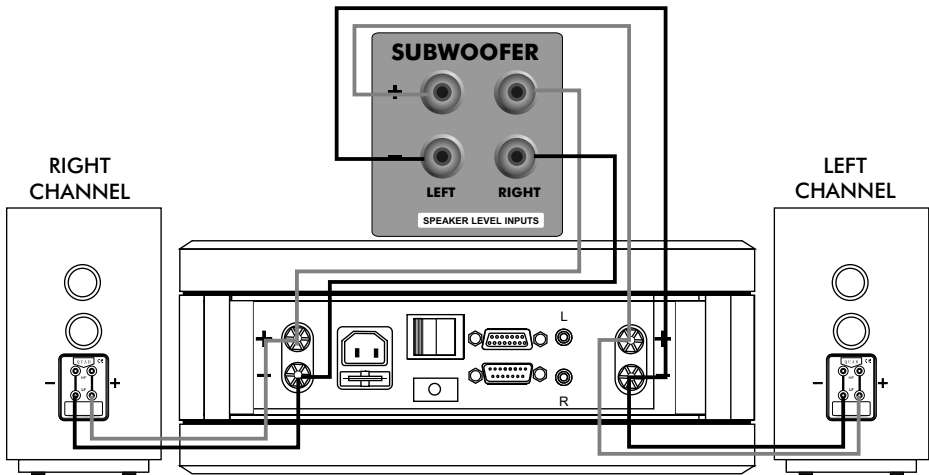
Connect a Stereo cable from the Line Level Inputs of the subwoofer to the Pre Out sockets of the amplifier. Connect a second Stereo cable from the Line Level Outputs of the subwoofer to the Main In sockets of the amplifier..



Speaker level connections

The high level Speaker connections should be used only if your amplifier does not have a line level subwoofer or preamp output. You will need two extra twin core cables.

Using one of the additional twin core cables, connect the Left Speaker Terminals on the subwoofer to the Left speaker terminals of the amplifier. Connect the Red (+) speaker terminal on the amplifier to the Red (+) terminal on the subwoofer. Connect the Black (-) speaker terminal on the amplifier to the Black (-) terminal on the subwoofer. Now connect the Right Speaker terminals on the subwoofer to the Right speaker terminals of the amplifier.



INSTALLATION

Positioning the subwoofer

Although the unit may be placed almost anywhere in the room, we recommend that it be placed in front of the listener and as central to the listening position as possible. As the subwoofer is a powered unit there should be a mains outlet within easy reach. The subwoofer should not be operated within 450mm of a television set as the drive unit magnet may distort the picture. Remember that there should be a line of sight between the listening position and the front of the subwoofer otherwise the remote functions will not be operable.

We suggest you initially position the subwoofer about 20cm (8 inches) from the wall. Placing the unit close to the wall will enhance the bass; placing it across the corner of the room will increase the bass further, possibly at the expense of clarity. Do not place the subwoofer close to surfaces or objects that may rattle. The floor under the subwoofer should be sound with no loose floorboards, etc.

You should expect to experiment with a variety of locations and sources before making a final decision. The notes on Page 11 and 12 will help you.

Checking the AC power supply

The Quad L-ite subwoofer is supplied in versions suitable for connection to 230V, 220V, 115V or 100V AC power supplies. Before connecting the subwoofer check that you have the correct version - if the subwoofer is connected to a lower voltage than marked, the maximum output power will be lower than specified.

Before connecting to the AC power supply, check that the voltage range marked on the back corresponds with that of the supply. Please check with the dealer if you have any doubt as to the voltage in your area or intend to use the equipment in regions which use other mains voltages.

If you are in any doubt of the correct operational voltage, ask a qualified electrician before applying power to the equipment. The subwoofer will work correctly within standard tolerances of this voltage.

Fuses

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

220 - 240V (UK, Korea, etc.) T 4 AL 20mm Slow Blow
100- 120V (USA, Japan, etc.) T 8 AL 20mm Slow Blow

You should switch off the equipment and remove the connection to the mains power outlet before changing the fuse.

Connecting to the AC power supply

Quad equipment supplied is provided with a mains cable fitted with an appropriate mains plug. This plug should not be cut from the cable. If, for any reason, the plug is removed, it must be safely disposed of. It must never be plugged into a mains outlet.

Any replacement plug should be wired to the supplied mains cable as follows:

the BROWN wire must be taken to the LIVE terminal

the BLUE wire must be taken to the NEUTRAL terminal

In the UK a fused 13 Amp mains plug should be fitted with a fuse link rated to 13 Amp which conforms to BS1362. In other countries a value between 10 Amps and 15 Amps should be used at either the wall socket or at the mains distribution board. If you are in any doubt you should consult a qualified electrical engineer.

SETTING UP YOUR SUBWOOFER

General Notes

Your subwoofer is most likely to be used with two typical programme sources, music and movies. The setup for these two very different sources may be different if best results are to be achieved. Please read these setup notes in conjunction with your processor and speaker manuals.

All setting up of the subwoofer should be performed with tone controls and filters set 'flat'.

Listening Rooms and Subwoofer Positioning: Listening rooms are not ideal. Most rooms are reverberant with some parallel walls. Because of room geometry and construction there will be areas with severe peaks at some frequencies and severe troughs at others. These peaks and troughs are called 'standing waves' and if you site loudspeakers in such areas the response will be highly non-linear. With subwoofers this situation is exacerbated by the fact that it is easier to treat high frequency irregularities by the use of drapes, soft furnishings etc., but very hard to do the same at bass frequencies due to the very long wavelengths - at 40 Hz the wavelength is almost 9 metres.

To help locate standing waves in your listening room, one idea is to sit in the listening seat and recruit a friend with a deep voice to speak as he moves around the area where you propose to site your subwoofer - you will soon find out where *not* to site it! Where the voice sounds most natural is a good place to start.

The low frequency response of the subwoofer and its blend with the main loudspeakers is thus profoundly affected by positioning. Although bass is enhanced by walls or corners, so often is coloration. As the drive unit faces downward, the floor will influence the sound. The surface under the subwoofer should be stable and unobstructed. If the carpet is very thick, consider placing the subwoofer on a solid surface such as a marble slab.

The subwoofer has to blend with the main speakers: if you place the subwoofer where it amplifies the irregularities of the room or the main speakers the result will be bloated, coloured bass. If acoustic guitar and male voice sounds coloured when the subwoofer is operating and less coloured when in standby, you need to address the positioning first before adjusting any controls

Loudspeaker Phasing: Make sure that all loudspeaker channels are connected in phase. Nothing is more certain to defeat a Home Cinema or Stereo setup involving a subwoofer than one(or more) channels being out of phase. In Stereo, if there is a doubt about the way the loudspeakers are connected, check their phasing by playing a mono source - the sound should appear from a point midway between the two loudspeakers. If this position is indefinite, reverse the connections to one of the loudspeakers. Correctly connected loudspeakers give a definite centre sound source with fuller bodied tenor and bass registers.

Setting the Phase of the Subwoofer: Phase at very low frequencies is not straightforward to detect. Initially we suggest you temporarily set the low pass filter to 'off' and the phase to 0° and play some bass heavy music in Stereo through the main speakers and the subwoofer. From the listening position, switch the phase between 0° and 180°. The setting which appears to give the greater bass output is correct. Now follow the instructions below for setting the low pass filter.

Home Cinema Systems

Low Pass Filter: If you are using a digital AV processor the initial setting should be 'OFF' as the processor will have its own bass management system.

Most digital AV Processors ask you to specify the size of speakers in the various channels. These are usually 'Large' or 'Small'. This sets the bass management for the system. Unless your loudspeakers are large floor standing units, you should choose 'Small' for the Front channels, as the subwoofer is going to be better at providing clean, deep bass. Choose 'Small' for the surround channels and also for the Centre channel, so that any bass from these channels will be directed to the subwoofer. Set the 'Subwoofer' option on the processor to 'On' or 'Yes'.

After experimenting with various sources you may need to adjust the LPF

PRELIMINARIES

The packaging contains the following items:

- One Quad L-ite Powered Subwoofer
- One IEC mains lead fitted with an appropriate mains connector;
- for UK this is QUKES2B
- for Europe this is QE2P2S2
- for USA, Canada, Japan and Korea this is QU3ES2C
- for other territories an appropriate cable will be supplied.
- Instruction Manual
- Warranty Registration Form
- Remote Control Handset plus two LR6/AA batteries
- 4 adjustable standard feet
- 4 adjustable spiked feet
- One cardboard carton and packing materials

Consult the dealer from whom you purchased the equipment if any of these items are not present.

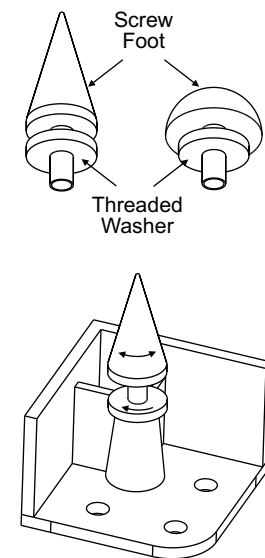
Unpacking the subwoofer

Open the carton and remove all the top packing pieces. Lift the subwoofer out taking care not to damage the cabinet. When lifting the unit from the carton support it from the bottom. DO NOT attempt to lift the subwoofer out of the carton using the polythene bag. The unit is heavy; if you cannot manage it easily, get someone to assist you.

Retain the packing materials for future use or return them to your dealer. If you decide not to keep the packing, please dispose of it sensibly. The paper and plastics are recoverable and may be taken to an appropriate recovery service.

Please retain the user manual and the information concerning the date and place of purchase of this equipment for future reference. If you transfer this equipment to a third party, please ensure all the instructions are passed on with the product.

Fitting the feet and levelling the subwoofer.



Carefully invert the subwoofer. Protect the top by placing it on a soft surface such as a towel. Open the polythene bag and slide it part-way down the cabinet.

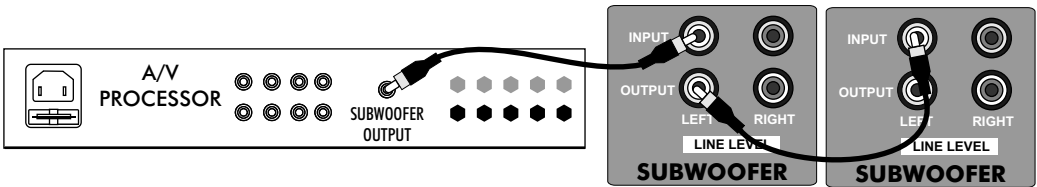
Two sets of adjustable screw feet are provided - regular and spiked. Choose one set only - do not use a mixture of spiked and regular feet.

Screw the threaded washer over each foot as shown. Screw a foot part-way into the threaded hole at the bottom of each leg of the subwoofer and hand-tighten the washer. When all four screw feet have been fitted, stand the subwoofer upright and remove the bag.

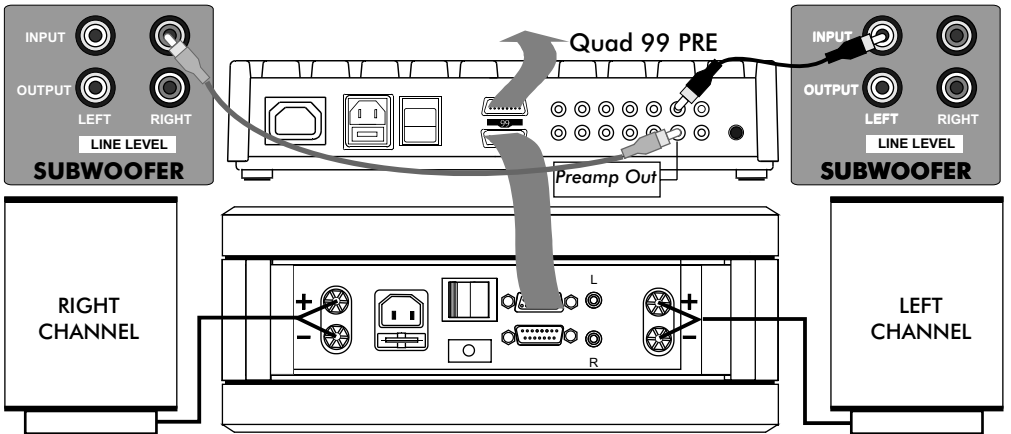
With the aid of a spirit level, screw each foot in and out until the subwoofer is level (side to side and front to back) and firmly supported on all four feet. Tighten the washer with a suitable wrench to lock the assembly in position.

Note: When using spiked feet take care not to drag the subwoofer and be careful not to pierce objects or cables which may be hidden under carpets, etc. Spikes are not suitable for use with stone floors and can cause damage to wood floors, so consider carefully before deciding which feet to use.

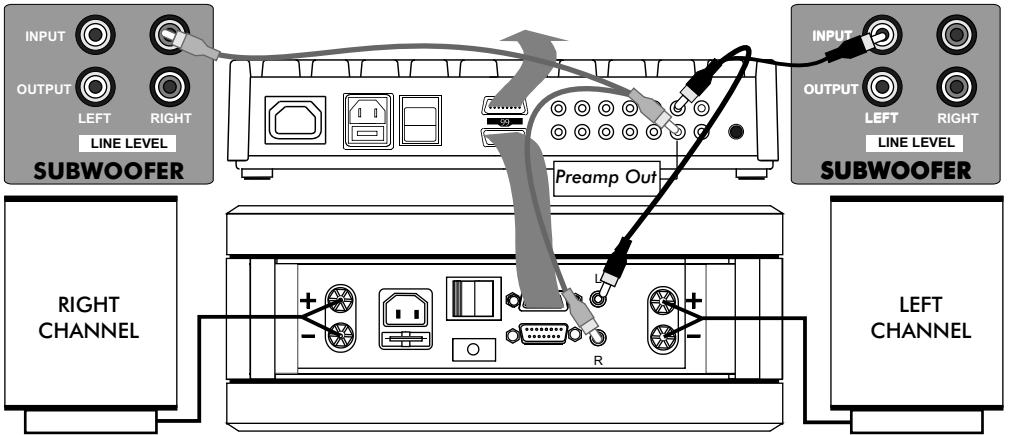
CONNECTING TWO SUBWOOFERS



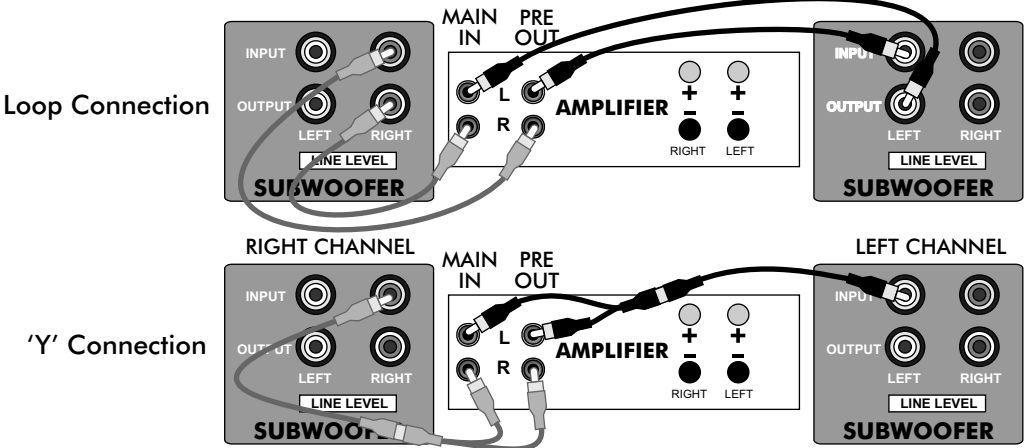
Connection to Quadlink Bus Systems



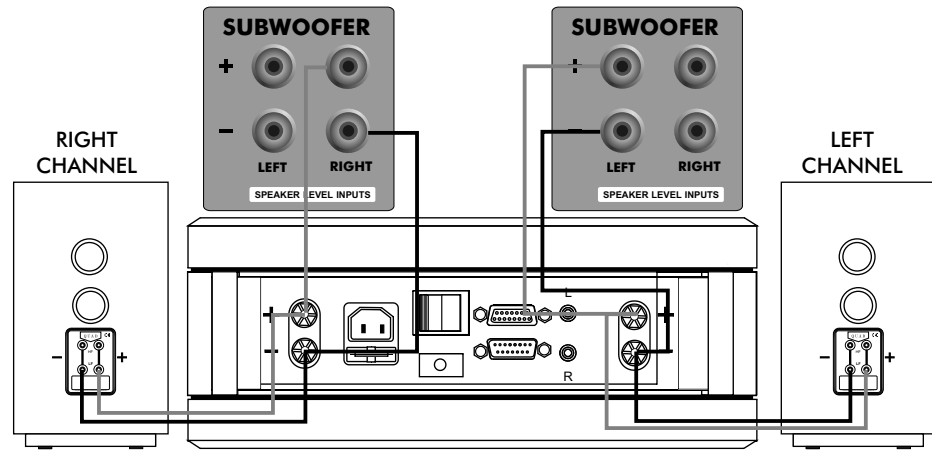
Normal Stereo Connection



Pre Out/Main In Connection



Speaker Level Connection



SETTING UP TWO SUBWOOFERS

General notes

These notes should be read in conjunction with the notes on Pages 11 and 12.

- Subwoofers should be sited so that they enhance the system bass response but do not cancel each other out.
- A well-sited pair of subwoofers for stereo applications will be adequately sited for Home Cinema applications.
- A well-sited subwoofer pair raises the bass output level 6dB when operating in mono (Home Cinema) but not in Stereo.
- Both subwoofers should be in line of sight to the listening seat as both will answer to one remote handset.
- When operating two subwoofers do all setups and operations on one handset
- When allocating presets make sure that the same preset is allocated to each subwoofer, e.g. Home Cinema on preset 1 on both subs, etc.

Home Cinema:

- As AV Processors produce a common subwoofer channel considerations of Left and Right do not apply, but with spaced subwoofers each helps to fill in the troughs caused by in-room standing waves, smoothing the bass and giving the sound greater intensity, 'air' and depth.
- Set up the position of each subwoofer separately with the other one switched off. After you have set both subwoofers up, reduce the front panel volume level of each subwoofer by 3 points.
- Complete the final adjustment with both subwoofers switched on. You may need to make some small adjustments to the position of each sub for best results. We suggest you enter this final setting as a Home Cinema preset.

Stereo:

- Each subwoofer should be located as near as possible to its partnering loudspeaker having regard to placement constraints.
- The smaller the main speakers, the more necessary this becomes.
- It is easier to set up each subwoofer with a mono source playing through one channel with the other channel turned off.
- Complete the adjustment by ear using a mono source with both channels and subwoofers operational. We suggest you enter this setting as a Stereo preset.

INTRODUCTION

The Quad L-ite subwoofer is primarily intended for use with very high quality sound reproducing systems in the home and we hope that they will give you much pleasure. The subwoofer will very probably be used in conjunction with Quad amplification though any quality electronics or home cinema equipment can be used.

You should read the following useful notes before you begin to install and use the equipment. The notes are directed towards responsible adults who can ensure safe installation of the equipment. Minors should not attempt electrical installation or carry out changes.

Quad subwoofers are very heavy and robust. Remember to check that any surface on which you place it is stable and able to support this weight.

There are no user adjustable parts inside the equipment. You should refer any servicing to a qualified engineer or return the equipment to either the dealer or the Quad distributor.

INFORMATION TO THE USER

Good Practice

It is always good practice to switch off all equipment in the system before connecting or disconnecting signal leads. This will prevent unpleasant and loud noises coming from the loudspeakers and avoid the risk of damage to equipment.

Please be aware that very high sound pressure levels can cause permanent damage to your hearing and also severe annoyance to neighbours.

Guarantee and Product Registration

Your Quad equipment is guaranteed against any defect in material and workmanship for one year from the date of purchase (proof of purchase is required). We ask that you complete and return the enclosed Warranty Registration Form. Within the guarantee 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 guarantee.

Quad carries out a regular review of its products and reserves the right to adjust the specifications and performance from time to time.

There are no user replaceable or serviceable parts inside this unit. Unauthorised attempts to service or modify this product will invalidate the warranty.

Service Arrangements

Equipment for servicing should be returned to the supplying dealer, or to the appointed service agents for your area. The addresses of Service Agents for the UK, USA and Canada are listed at the rear of this manual. If you are abroad and there is no suitable dealer in your area, please contact the distributor for the country in which it was purchased or Quad Electroacoustics Ltd.

Equipment returned for service should use the original packing. Please enclose a brief note with your name and address and the reason for returning the unit.

Care and Cleaning

The cabinet and non-electrical parts of the equipment may be cleaned with a barely damp cloth provided the power has been switched off or unplugged at the mains. Solvent based cleaners should not be used.



IMPORTANT SAFETY INFORMATION

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 are 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 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.

Warning: The mains power switch for this appliance is located on the rear panel. To permit free access to this switch, the apparatus must be located in an open area without any obstructions.
NOTE: 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 communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

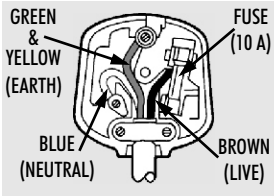
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

IMPORTANT NOTICE TO UK USERS

The appliance cord is terminated with a UK approved mains plug fitted with a 10A fuse. If the fuse needs to be replaced, an ASTA or BSI approved BS1362 fuse rated at 10A 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. The GREEN & YELLOW wire must be connected to the terminal marked with the letter E or coloured GREEN or GREEN & YELLOW or marked with the Earth Symbol ⊕



SPECIFICATIONS

Quad L-ite Subwoofer

(Measurements made with 230V supply)

Bass Drive Unit	250 mm (10”) Tri-lam
Amplifier Power Output	300 W RMS
Line Input Sensitivity	250mV for 100W
Frequency Range (Boundary Position)	25 Hz - 95 Hz
Max Power Output (SPL at 1 Metre)	108dB
Low Pass Filter Range	35 Hz - 85 Hz (plus bypass) (in 10 Hz increments)
Input Impedance (Line input)	10 kΩ
Phase Adjustment	0° - 180° switchable
Dimensions (H x W x D mm)	485 x 288 x 435 (plus connectors)
Weight	
Gross	28.5 Kg
Net	26 Kg

The right is reserved to alter all performance and specifications as required

COMPLIANCE

This Quad product complies with the relevant clauses enshrined in the following standards and directives in force at the time of the introduction of the product.
EU
Directives: 89/336/EC, 72/23/EEC
Safety: EN60065 (CB Scheme)
Emissions: EN55013, EN61000
Immunity: EN55020:2002.



USA: UL 6500:2002.
Approved under the verification provision of FCC Part 15 as a Class B Digital Device.

CANADA: CAN/CSA-E60065-00