

**N.B.** The A52 is designed to work properly in normal domestic operating conditions. However, the amplifier's performance may be seriously affected if sited near to, or in the room with, a radio transmitter such as a mobile phone or CB radio rig, etc. Re-siting the A52, or the radio, will normalise the situation.

## CREEK A52 & A52SE SPECIFICATION

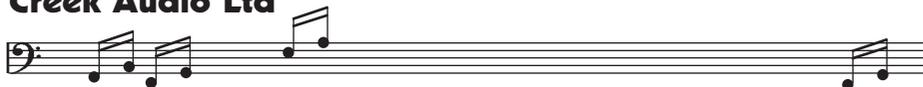
	STANDARD	SE
POWER OUTPUT (both channels)	70 Watts into 8 $\Omega$	80 Watts
POWER OUTPUT (one channel)	75 Watts into 8 $\Omega$	80 Watts
POWER OUTPUT (one channel)	120 Watts into 4 $\Omega$	120 Watts
<i>Not recommended for use into more than two pairs of 8 <math>\Omega</math> loudspeakers.</i>		
POWER OUTPUT (bridged mono)	240 Watts into 8 $\Omega$	240 Watts
<i>Not suitable for use into less than 8 <math>\Omega</math>.</i>		
<i>Bridged operation can only be enabled by connecting the input sockets according to the diagram.</i>		
OUTPUT CURRENT (auto current limited)	> 25 Amps RMS	> 30 Amps
TOTAL HARMONIC DISTORTION	< 0.05% 20 Hz to 20 kHz	
FREQUENCY RESPONSE	3 Hz to 25 kHz - 1 dB	
SLEW RATE	> 50V per $\mu$ S	> 50V per $\mu$ S
SENSITIVITY	720 mV / 70W	770 mV / 80W
INPUT IMPEDANCE - BALANCED	20 K	20 K
INPUT IMPEDANCE - UNBALANCED	10 K	10 K
CMRR FOR BALANCED INPUT	> 40 dB	> 40 dB
SIGNAL TO NOISE RATIO	> 105 dB	> 105 dB
SEPARATION	> 80 dB at 1 kHz	> 80 dB
POWER CONSUMPTION at idle	< 70 W	< 70 W
POWER CONSUMPTION (full power 10% THD)	320 W	340 W
WEIGHT	8 Kg, 17.5 lbs	11 Kg, 22 lbs
SIZE	420 x 60 x 280 mm	
MAINS VOLTAGE	@ 60Hz	100V Japan, 115V North America
	@ 50Hz	230/240V Europe, Asia and UK

MAINS VOLTAGE AND FREQUENCY IS INTERNALLY SET FOR THE COUNTRY OF USE

*Creek Audio Ltd reserve the right to change or modify the specification of its products without prior warning.*

*Designed and made in the UK.*

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# Creek A52 & A52SE

## Operating Instructions



Thank you for purchasing the A52 Power amplifier. You are now in possession of a State of the Art Power Amplifier. The functions and operation of the A52 are extremely simple. However, the following notes are provided to explain all aspects of its design and use.

### MAINS CONNECTION

When unpacking the amplifier please keep the packing material in a safe place for possible future use. In the pack there is a separate mains cable suitable for connecting to the mains supply in the country of use. The IEC socket end of the cable should be firmly inserted into the connector on the rear panel marked "Mains Input".

Remember, do not overload the mains wall socket with too many plugs or adaptors. The high quality performance of the amplifier will be impaired if the electrical supply to it is in poor condition. If in doubt, consult a qualified electrician or your dealer. The "Mains Input" connection is also fitted with a fuse, specifically suited to the supply voltage of the country of use. The correct value is clearly marked on the rear panel next to the Mains Input.

Should it be necessary to replace the fuse, ensure that you use the same type as specified on the rear panel. i.e.

**5 x 20mm cartridge type T4 Amp surge resisting for 220-240V 50Hz AC, T8 Amp surge resisting for 110-120V 60Hz AC, T10 Amp surge resisting for 100V 60Hz.**

### STANDARD CONNECTION CONNECTING THE LOUDSPEAKERS

The loudspeakers should be connected using suitable cables designed specifically for audio use. These should be terminated with dedicated spade lugs. Alternatively, twisted bare wire, prefer-



ably soldered, can be inserted into the hole in the terminal post and the plastic cap should be screwed down tightly onto the cable or lug. Please consult your dealer if you are unsure.

**It is very important** to connect the loudspeakers to the loudspeaker sockets in the correct phase, or polarity. The positive and negative sides of the cable should be connected to the loudspeaker in the same way for each channel. If it is connected out of phase, or the polarity is changed, a severe loss of bass performance and a spreading of the stereo image will result.

It is not recommended to use loudspeakers of less than  $4\Omega$  resistance or more than two pairs of  $8\Omega$  speakers running from the amplifier at one time. However, bi-wiring of one pair of speakers, using the four terminal posts, can improve the sound of your system (consult your dealer for more details). Terminals A and B are both connected to the output of the amplifier, via high current switching relays selected from the front panel switch.

**N.B. It is VERY IMPORTANT not to short the loudspeaker cables together when the other ends are still connected to the working amplifier as permanent damage may result. If it is necessary to move or change the location of your loudspeakers, make sure that you SWITCH OFF the amplifier from the mains first.**

## STANDARD INPUT CONNECTION

There are 8 shielded RCA type jack sockets on the rear panel. This is, needless to say, more than the normal quantity found on a regular stereo amplifier. The A52 is, however, more than a regular power amplifier as, whilst it provides inputs for LEFT and RIGHT channels, it also provides inputs for both Positive and Negative Phases, and two input-output sockets for each phase and channel. The reason is to increase its flexibility. The coupled input-output sockets allow for the input signal from the pre-amp to be patched to another A52 power amplifier for bi-amped systems and for forming a link from one channel to the other in mono configuration. Positive and Negative inputs allow for balanced input operation in stereo and the possibility to bridge the A52 into mono mode. The A52 will, of course, operate as a simple stereo amp.

## INPUT CONNECTION FOR NORMAL STEREO OPERATION

Where a single A52 is used to drive a single pair or bi-wired pair of loudspeakers in stereo, it is necessary to input a signal from the source, in the normal way, via a pre-amp or control unit, to either the left or right positive phase inputs, marked + 1 RIGHT INPUT and +1 LEFT INPUT.

## PARALLEL INPUT-OUTPUT CONNECTION

Paralleled in-out sockets make it easy to connect two or more A52's together in a chain for dedicated multi-amp systems or for high-end AV systems. See *wiring diagram for multiple connection*.

## BRIDGED DUAL MONO CONNECTION CONNECTING THE LOUDSPEAKERS

A further A52 amplifier will be required for stereo operation. Each A52 amplifier should be wired to drive a single channel only, either left or right. Each loudspeaker should be wired between the left live (RED) and right live (RED) output terminals on the rear of each amplifier. Phasing of the leads is still important and, therefore, if the positive (ribbed) wire is connected to the right connector on one channel (Right) it should be wired to the same connector on the other channel.

Bi-wiring is still possible, by using A and B terminals, but it is not advisable to connect more than one  $8\Omega$  speaker to a Bridged A52 at a time, as the amplifier will try to increase its power output to a level that could overheat and possibly damage it. Do not connect either loudspeaker wires to any ground terminals (BLACK) or the bridging mode will be defeated. When wiring the A52 in Mono mode is necessary to configure the input in a special way also. See *wiring diagram for bridged mono mode*.

**N.B. It is VERY IMPORTANT not to short the loudspeaker cables together when the other ends are still connected to the working amplifier as permanent damage may result. If it is necessary to move or change the location of your loudspeakers, make sure that you SWITCH OFF the amplifier from the mains first.**

## INPUT CONNECTION FOR BRIDGED MONO OPERATION

If the A52 is required to run in Bridged Mono mode, it is necessary to input a signal from the source, in the normal way, via a pre-amp or control unit to both of the A52's amplifiers which are joined in a bridge. Input the source signal to + RIGHT input 1 (the 1st right channel positive input). This connects the signal to one half of the bridge. Then use a very short interconnect (10 - 20 cm) cable between + RIGHT input 2 (in parallel with the input 1) and - LEFT input 1 (the 1st left channel negative input) to link the input signal to the other half of the bridge.

Both of the A52's amplifiers now share the input signal, each capable of amplifying half of the signal. However, to properly balance the signal and gain maximum efficiency (symmetry) and sound quality, it is necessary to short the unused positive and negative inputs with a special terminating stub or shorting RCA jack plug. **Creek part # RCA-STUB**. Using 2 x RCA-STUB's, plug the first into + LEFT input 2 and the second Stub into - RIGHT input 1. For further information, see *wiring diagram for Bridged Mono Operation*.

## STEREO BALANCED MODE INPUT CONNECTION

It is possible to input the A52 with a fully balanced signal from a Pre-amp with balanced output capability.

## OPERATING THE A52

Make sure that the unit is on a suitable table or Hi-Fi equipment cabinet. It is important to allow adequate ventilation to the heatsink in the centre of the unit. Avoid obstruction of the ventilation slots on the top cover. It may be necessary to place the amplifier on the top of other equipment to allow for this.

To switch on the A52 press the switch, marked POWER, on the right hand side of the front panel. The rotary switch on the left hand side of the front can select speaker outputs A, B or A+B, or off.

The rotary control next to the speaker switch, marked TUNING, allows the user to adjust the point at which the low frequency response of the A52 rolls off. The TUNING point should be adjusted up or down to provide more or less extreme bass and also to affect the space and depth of the stereo image. TUNING will not produce a dramatic effect, as it only alters sub-sonic frequencies.

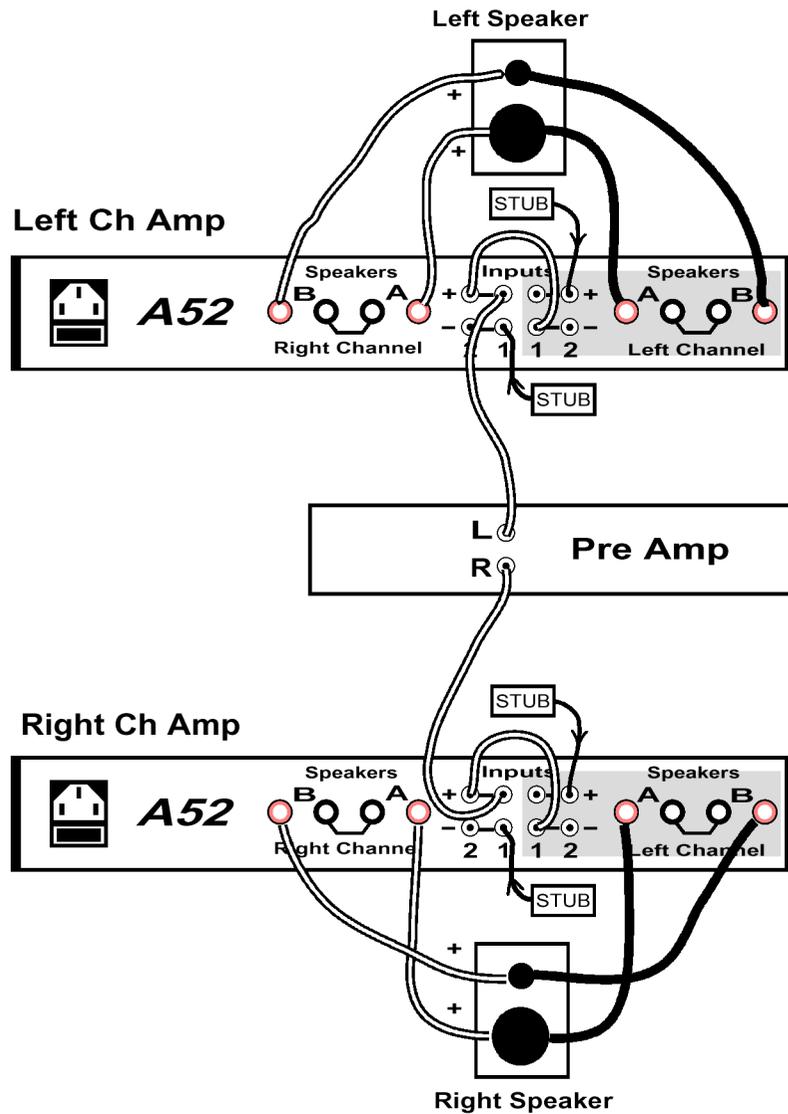
To indicate the status of the amplifier, when the amplifier is first switched on, the POWER LED indicator should glow orange. When the amplifier reaches operating condition, the Power LED will switch to green. However, if a fault condition is detected the relay will switch speaker outputs off and the POWER indicator will glow red.

To protect the loudspeakers connected to the amplifier from dangerous DC voltages, there is an internal 10 Amp relay for each output A and B. They operate after a short delay at switch-on but are instantaneous at switch off, to avoid unpleasant noises. Short circuiting the output should be avoided at all costs. However, over-current and short circuit protection in the A52 will monitor the condition and disengage the output relays, should it be necessary.

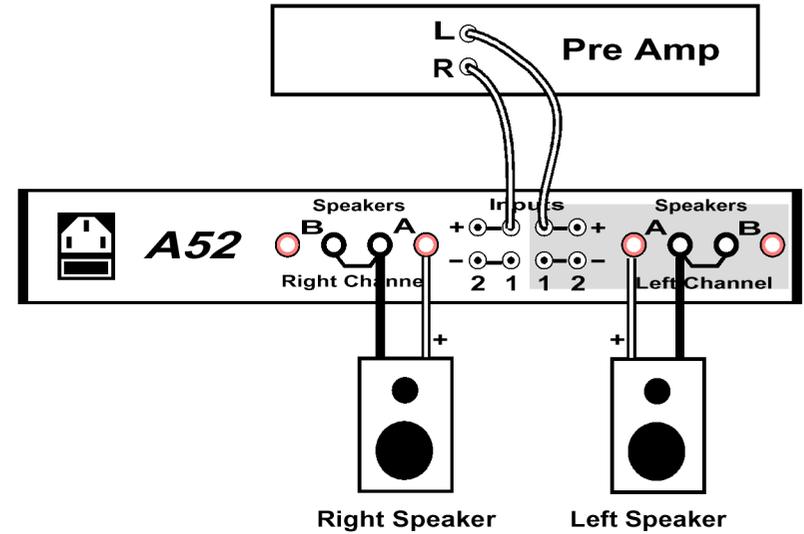
Your A52 amplifier is designed to give you years of reliable use. However, it is necessary to take care of your possession, so never overheat it or short out the speaker connections. If an adjustment is needed, it is always advisable to return it to the supplying dealer for his expert help. If you are unfortunate enough to need service work to be carried out on your amplifier, it should be returned to your dealer or the manufacturer in the original packing material if possible.

# A52 Wiring Diagrams

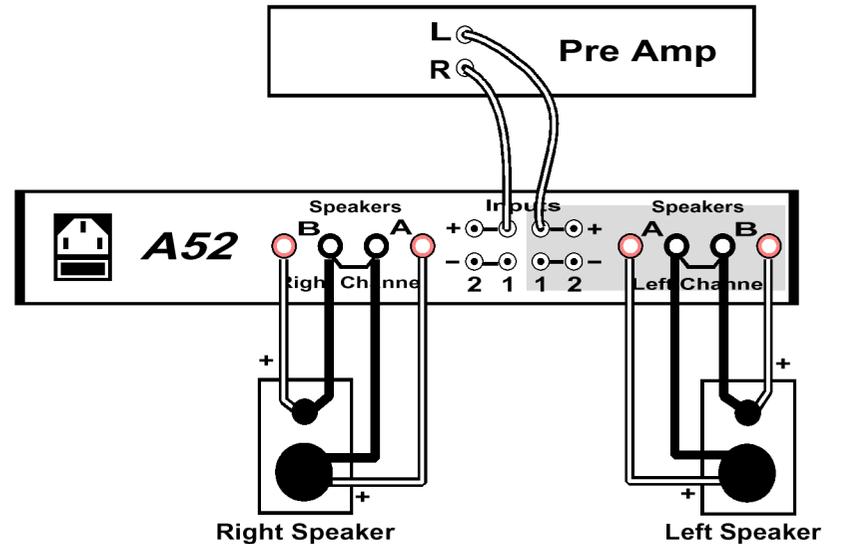
## 6. Bridged dual-mono connection (Bi-wired)



## 1. Standard connection (Stereo)

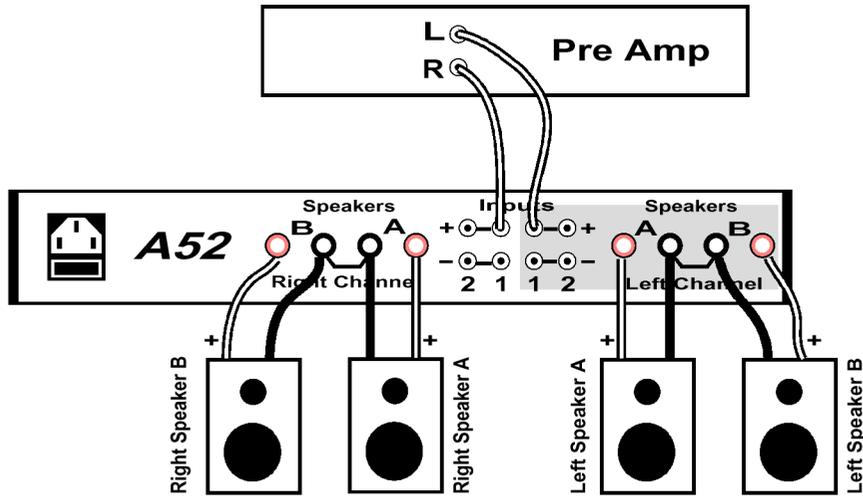


## 2. Bi-wired connection (Stereo)

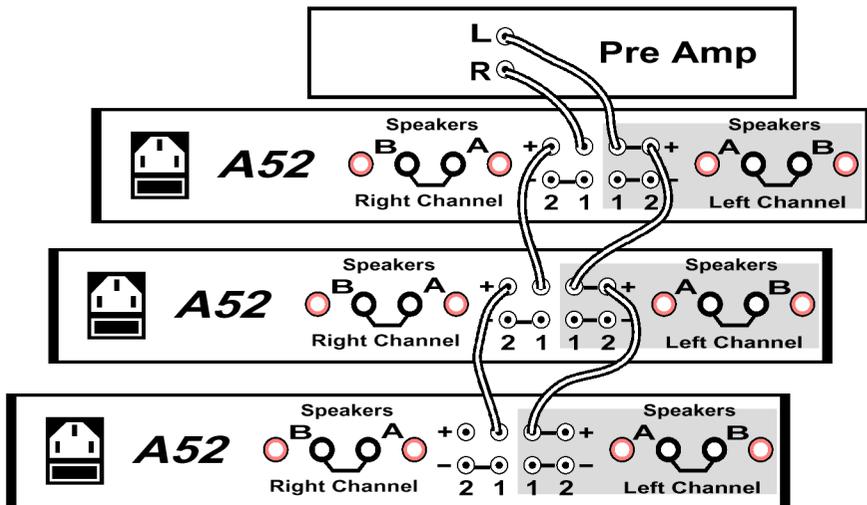


# A52 Wiring Diagrams

## 3. Connection for two pairs of speakers (Stereo)



## 4. Chain-linked connection of several A52 amplifiers



(Only input configuration is shown)

## 5. Bridged dual-mono connection

