Crimson

INSTRUCTION MANUAL

CS630C

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Congratulations on the purchase of your Crimson CS630C mono power amplifiers.
These units have been hand built for your enjoyment and are constructed to the highest standards and specifications. This manual contains installation and operating instructions to enable you, the user, to obtain the best possible performance from your Crimsons.

CONTENTS

PRECAUTIONS

Always follow the instruction handbook and retain it in a safe place for future reference.

Before proceeding with installation of the CS630C's, ensure that the following items are included in the accessory boxes:

- Instruction manual.
- DNM reson power cables.*
- DNM reson interconnect cable.*
- Guarantee card.

After removing these items please retain the packaging for future use.

*Included when purchasing a Crimson Pre and Power amplifier combination.

SUPPLY VOLTAGE

The Crimson CS630C's are factory set to operate from a fixed mains supply voltage of 230V. Before connection check that this voltage is the same as your mains supply.

230V Products	Range 220V-240V
115V Products	Range 110V-120V

LOCATION

You should install your CS630C's in a well ventilated location. Avoid positioning the CS630C's near hot appliances or radiators. Placing the CS630C's on heat generating sources will severely affect the amplifiers' ability to dissipate heat. This will result in reduced performance and possible damage.

Installation in damp or humid environments may result in malfunction or damage. Should the unit become immersed in liquid, **do not reconnect to the mains supply.**

Under these circumstances the unit should be returned immediately to your nearest Crimson dealer for inspection.

RELOCATION

The Crimson CS630C's is supplied preset to run on 230V mains. Should you relocate to an environment where mains supply voltage is

different, consult your Crimson distributor to arrange for conversion of the CS630C's to the correct voltage for your area.

INSTALLATION PRECAUTIONS

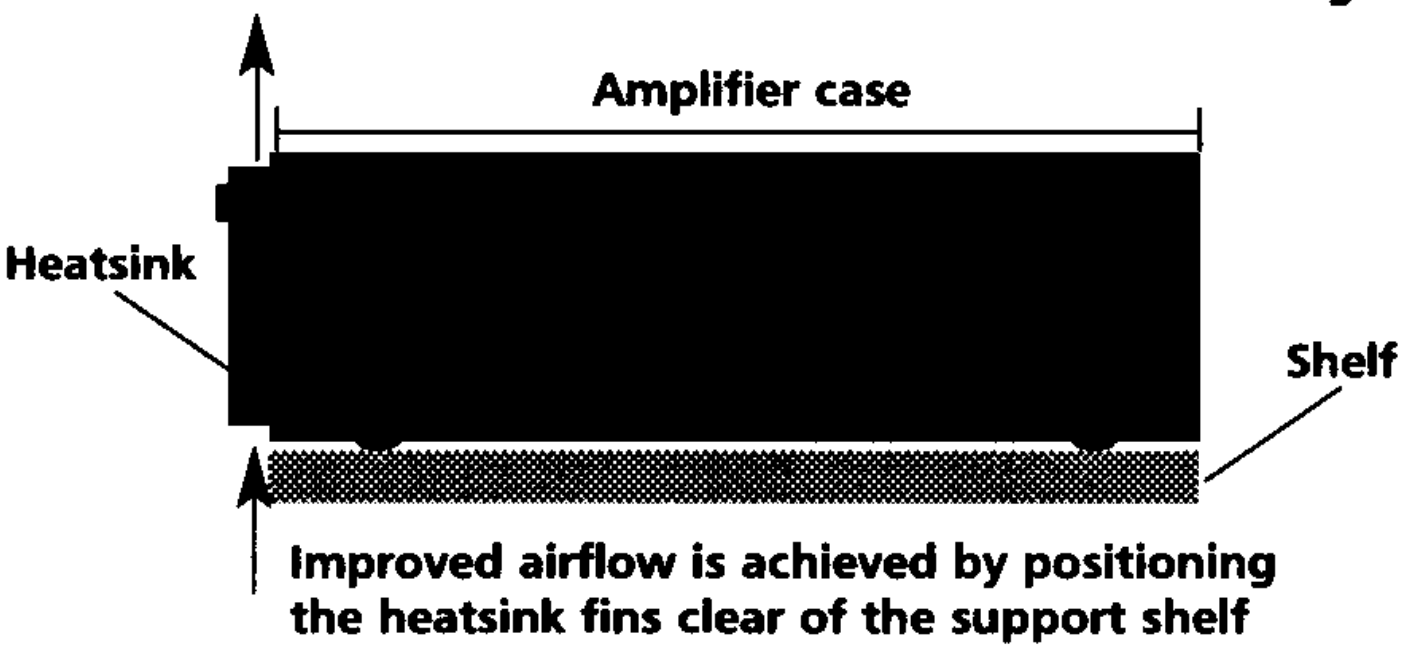
Care should be taken with the routeing of the mains power cord. Avoid running it over or near sharp objects. It is also advisable to route the power cord away from any interconnect and speaker cables. This will ensure you achieve the maximum performance from your Crimson CS630C's.

UNIT POSITION

The Crimson CS630C's may be positioned as free standing units or alongside partnering Crimson pre or power amplifiers. Never stand the units directly on top of a power amplifier, as this will cause overheating. You should also take care to ensure that the heatsink fins on

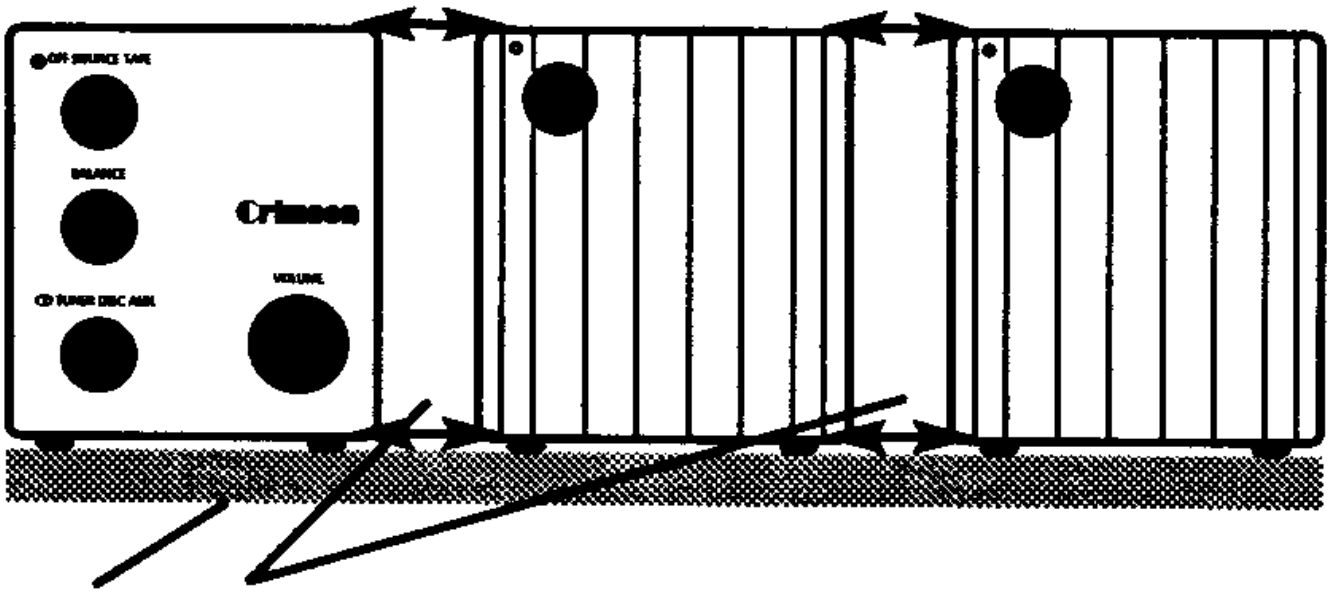
the front of the amplifiers have adequate airflow over them. This is achieved by the positioning of the amplifiers so that the fins are in free air (see fig.1).

Side view of CS630C Fig.1



When used with a Crimson CS610C Pre-Amplifier, the CS630C's should be positioned to the right hand side. Ensure that there is a gap of 1cm on either side of the CS630C's. This will increase airflow over the cases, which act as additional heatsinks at high power levels (see fig.2).

Front view of CS610C and CS630C's **Fig.2**



A gap of 1cm is recommended between the CS630C's and partnering equipment for improved ventilation at high volume levels.

The CS630C contains no user serviceable parts. **Never** remove the case or rear panel. In the unlikely event of failure, contact your Crimson dealer. A basic troubleshooting guide is provided on pages 14 and 15. Please refer to this section prior to contacting your Crimson dealer.

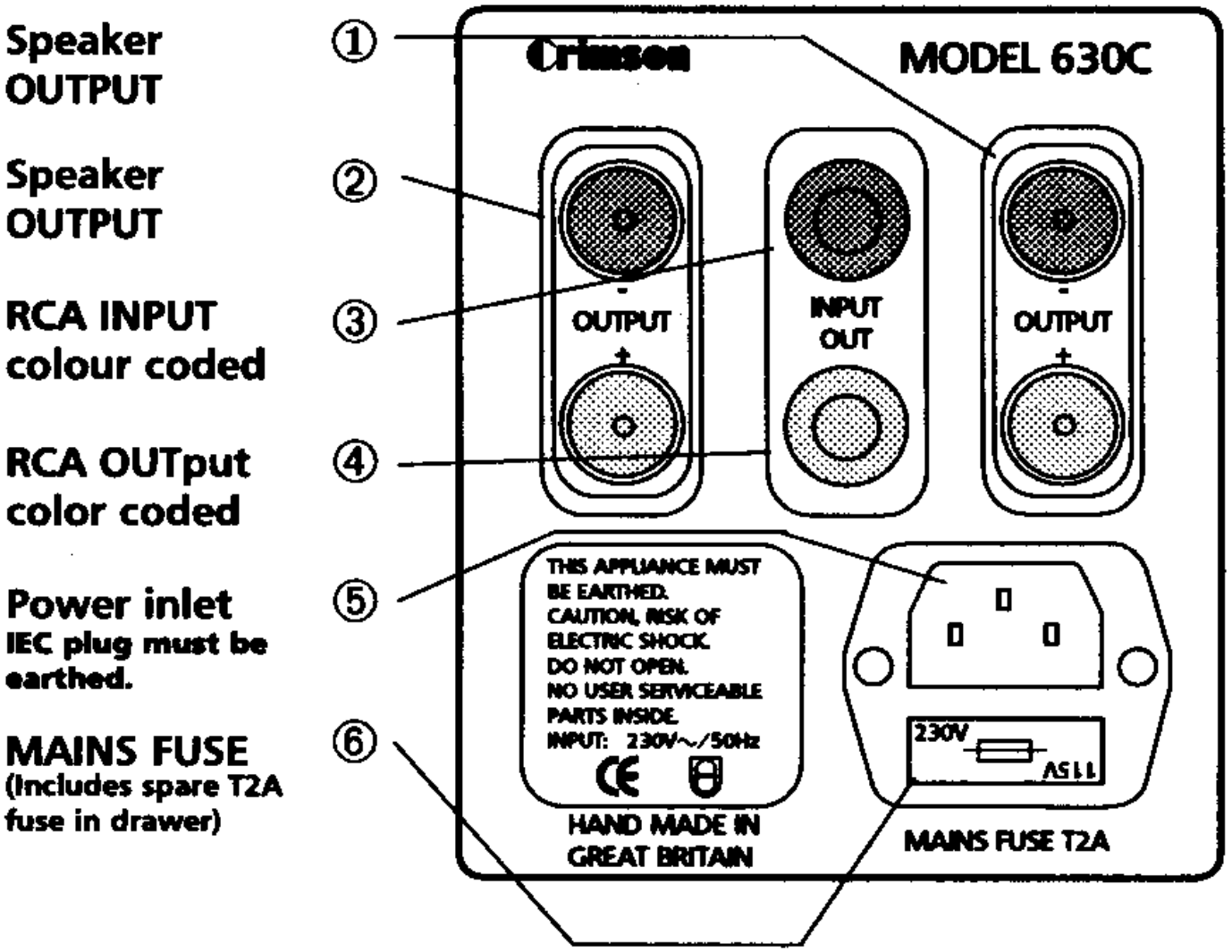
CONNECTING POWER TO THE UNIT

The IEC connector of the supplied mains leads should be plugged into the power inlet on the rear of each unit ⑤. **Please note that the CS630C's must be earthed.** The mains fuse is an integral part of the IEC socket ⑥. The fuse drawer contains a spare mains fuse. When replacing the fuse drawer ensure that it is re-inserted the correct way up (the 230V legend should be at the top left corner). Failure to do this will mean that the CS630C's will have no live mains feed and will not function. Replacement fuses are rated at 230V T2A/20mm (see fig.3).

CONNECTING THE PRE-AMPLIFIER

If the 630C's were purchased with a Crimson 610C pre-amplifier, a DNM reson RCA audio interconnect will have been supplied. Connect

Back view of CS630C Fig.3



the interconnects to the input sockets ③ on both CS630C's. The red RCA input identifies the right channel amplifier and the white RCA input identifies the left channel. The RCA output ④ allows 'daisy-chaining' of CS630C's for home cinema or high power applications.

CONNECTING THE LOUDSPEAKERS

The CS630C's are fitted with dual 2mm safety loudspeaker connections. These connections require DNM reson 2mm plugs.* Crimson recommends the use of DNM reson speaker cable* for the optimum performance of the CS630C's. To identify which CS630C is right channel and which is left, refer to the colour of the RCA inputs ③ and ④ (see fig.3). The right channel amplifier has a red coded input RCA socket and the right channel speaker cable should be connected to position ① or to ① **and** ② for dedicated bi-wiring. The left channel amplifier has a white coded input. Follow the same connection routine described for the right channel. Now connect the speaker cables. **The CS630C's should only be switched on when all cable connections have been made.**

***(Refer to page 13 for more information.)**

The CS630C's are now ready for use.
To switch the units on, turn the knob on the front of each amplifier clockwise until you feel a small click. The ON/OFF LED's will illuminate and a low level bump should be heard at the loudspeakers. You should now switch on the pre-amplifier and the required source equipment. Like any new product, your CS630C's require a 'running in' period. Allow at least 36 hours playing time for the components to bed in and achieve their optimum performance.
When operating the CS630C's from cold, you should allow at least 30 minutes for the amplifier to reach normal operating temperature.
It should be noted that at full power the heatsinks will become hot and the sleeves may become warm to touch. This condition is quite normal at high listening levels and should not cause concern. In the event that the CS630C's

are overdriven a thermal sensor on the heatsinks will cut the mains power. This safety feature is activated when heatsink temperature rises above 70°C and is designed to prevent damage to the CS630C's. Once the temp-erature has dropped below 40°C normal operation will resume. Cooling may take up to 15 minutes.

Should a short circuit occur at the speaker terminals the CS630C will shut off. The power indicator LED, however, will remain on. To reset the amplifier, remove the short circuit and disconnect the unit from the mains. Leave for 5 minutes and then reconnect to the mains. The short circuit protection will have reset and the amplifier will continue to operate normally.

NB - If it is necessary to disconnect the RCA leads from the CS630C's input, the amplifier should be powered down. This will avoid unwanted 'open input' noise being reproduced by the loudspeaker.

- Crimson recommends the use of both DNM reson speaker and interconnect cables.

- The CS630C's are fitted with bi-wire 2mm saftey sockets. For single or bi-wiring use DNM reson 2mm plugs - part code (LSS2).

- For tri-wiring use adaptors - part code (A2/4) and terminate the speaker cable with DNM reson 4mm plugs - part code (LSS).

- For optimum performance Crimson recommends using a reson domo furniture equipment support. Ask your Crimson dealer for more information.

- Use reson licon contact enhancer to treat all the connections in your system. This amazing liquid will extract more detail and information than you could ever imagine!

If you think your CS630C's are not operating to specification please read through this section before returning them to your dealer.
Always switch off all system components before changing any connections.

No sound from either speaker

- Check CS630C's are on. The green power indicator LED's will illuminate.

- Check loudspeakers are connected.

- Check that signal input is connected.

- If the mains fuse has been changed recently,
  check it has been inserted the correct way up. Refer to (fig.3) on page 9 and the section headed 'connecting power to the unit.'

No sound from one speaker

- Some loudspeakers have protection fuses. Check the fuses are intact and cable connection integrity on the missing channel.

- Check the interconnect cable between signal source and pre-amplifier. Also check the interconnect between pre-amplifier and the CS630C's.

- Try another signal source. If the fault is removed, the original signal source is at fault.

- Swap left and right channels at the back of the CS630C's. If the fault remains then the speaker cable or loudspeaker is faulty. Now switch the cable at the loudspeaker end. If the fault changes channel then the loudspeaker could be damaged.

AUDIO PERFORMANCE

Power output	2x100W into 8Ω – 2x175W into 4Ω
Peak output current	17A/Channel
Input sensitivity	775mV
Distortion	Typically 0.01%
Frequency response	10Hz to 40kHz @ -1dB
Output resistance	Inductor + wiring @0.1R
Slew rate	>20V/µs
Signal to noise ratio	Better than 100dB
Crosstalk	>65dB
Voltage	230V
Power consumption (No signal)	10W
Power consumption (2 x 100W/Ch)	300W
Dimensions (W x H x D)	95mm x 116mm x 364mm
Weight	3.95kg

Crimson Products Ltd. reserves the right to change specifications without prior notice. E&OE.
All Crimson Products are CE compliant.

CE