

Crimson

INSTRUCTION MANUAL ***CS620C***

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Congratulations on the purchase of your Crimson CS620C stereo power amplifier.

This unit has been hand built for your enjoyment and is 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 Crimson.

CONTENTS

Precautions	2
Installation	4
Connections	8
Operation.....	11
Performance tips	13
Troubleshooting	14
Specifications.....	16

PRECAUTIONS

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

Before proceeding with installation of the CS620C, ensure that the following items are included in the accessory boxes:

- Instruction manual.
- DNM reson power cable.*
- 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 CS620C is 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 CS620C in a well ventilated location. Avoid positioning the CS620C near hot appliances or radiators. Placing the CS620C on heat generating sources will severely affect the amplifier's 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 CS620C 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 CS620C to the correct voltage for your area.

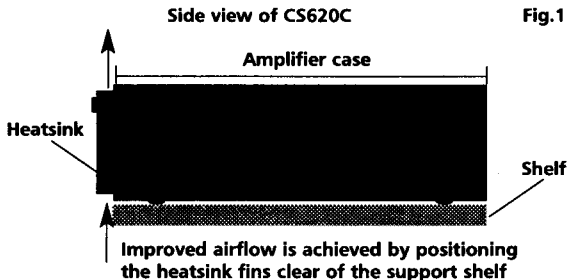
INSTALLATION PRECAUTIONS

Care should be taken with the routing 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 CS620C.

UNIT POSITION

The Crimson CS620C may be positioned as a free standing unit or alongside a partnering Crimson pre or power amplifier. Never stand the unit directly on top of a power amplifier, as this will cause overheating. You should also take care to ensure that the heatsink fins on

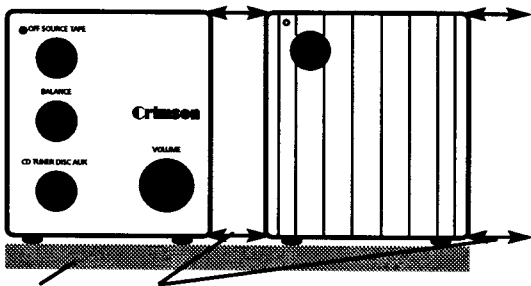
the front of the amplifier have adequate air-flow over them. This is achieved by the positioning of the amplifier so that the fins are in free air (see fig.1).



When used with a Crimson CS610C Pre-Amplifier, the CS620C should be positioned to the right hand side. Ensure that there is a gap of 1cm on either side of the CS620C. This will increase airflow over the case, which acts as an additional heatsink at high power levels (see fig.2).

Front view of CS610C and CS620C

Fig.2



Shelf A gap of 1cm is recommended between the CS620C and partnering equipment for improved ventilation at high volume levels.

The CS620C 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

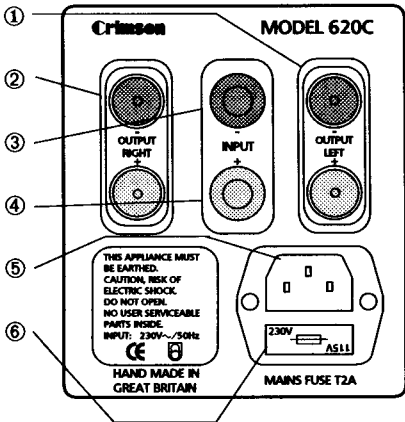
The IEC connector of the supplied mains lead should be plugged into the power inlet on the rear of the unit ⑤. **Please note that the CS620C must be earthed.** The mains fuse is an integral part of the IEC socket ⑥. The fuse drawer contains a spare mains fuse. When replacing the fuse drawer ensure that 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 CS620C 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 620C was purchased with a Crimson 610C pre-amplifier, a DNM reson RCA audio interconnect will have been supplied. Connect

Back view of CS620C

Fig.3

Speaker
OUTPUT LEFTSpeaker
OUTPUT RIGHTRCA INPUT
leftRCA INPUT
rightPower inlet
IEC plug must be
earthed.MAINS FUSE
(includes spare T2A
fuse in drawer)

the interconnect to the input sockets ③ and ④. Ensure that left channel marked (-) and right channel marked (+) correspond to the black (-) and red (+) coloured caps on the inter-connect cables (see fig.3).

CONNECTING THE LOUDSPEAKERS

The CS620C is fitted with 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 CS620C. Connect the left channel speaker cable to ① marked OUTPUT LEFT and the right channel cable to ② marked OUTPUT RIGHT (see fig.3). Connect the speaker cables to the loudspeakers. **The CS620C should not be switched on until all cable connections have been made.**

Speaker cable bi-wiring can be achieved using the 2-4mm adaptors.* With the adaptors in place the CS620C has 4mm outputs. Crimson recommends using the DNM reson 4mm plugs which allow two runs of speaker cable to be terminated into one set of 4mm plugs.

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

The CS620C is now ready for use.

To switch the unit on, turn the knob on the front of the amplifier clockwise until you feel a small click. The ON/OFF LED 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 CS620C requires 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 CS620C 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 heatsink will become hot and the sleeve may become warm to touch. This condition is quite normal at high listening levels and should not cause concern. In the event that the CS620C is

overdriven, a thermal sensor on the heatsink 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 CS620C. Once the temperature 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 CS620C 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 CS620C 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 CS620C is fitted with single wire 2mm safety sockets. For single wiring use DNM reson 2mm plugs - part code (LSS2).**
- **For bi-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 CS620C is not operating to specification, please read through this section before returning it to your dealer.

Always switch off all system components before changing any connections.

No sound from either speaker

- Check CS620C is on. The green power indicator LED 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 CS620C.**
- **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 CS620C. 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	2x50W into 8Ω – 2x75W 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	>15V/μs
Signal to noise ratio	Better than 100dB
Crosstalk	>65dB
Voltage	230V
Power consumption (No signal)	10W
Power consumption (2 x 50W/Ch)	200W
Dimensions (W x H x D)	95mm x 116mm x 364mm
Weight	3.97kg

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

