Crimson

INSTRUCTION MANUAL
CS710

Crimson Products Ltd.
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Great Britain

INTRODUCTION CS710

Congratulations on the purchase of your Crimson CS710 pre-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

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

PRECAUTIONS   CS710

Before proceeding with installation of the CS710, ensure that the following items are included in the accessory boxes:

● Instruction manual.
● Crimson power supply (PS 710).
● Power supply to pre-amplifier cable
● IEC power cable.
● Remote control handset.
● Guarantee card.

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

SUPPLY VOLTAGE

The Crimson CS710 is factory set to operate from a fixed mains supply voltage of 115V. 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 CS710 in a well ventilated location. Avoid positioning the CS710 or its external power supply near hot appliances or radiators. Placing the CS710 on heat generating sources will affect the pre-amplifier's performance, and could also cause damage to the casework. Installation in a damp or humid environment may result in malfunction or damage. Should the unit or its external power supply become immersed in liquid, do not reconnect to the mains supply. Under these circumstances the items should be returned immediately to your nearest Crimson dealer for inspection.

RELOCATION

The Crimson CS710 is supplied preset to run on 230V mains. Should you relocate to an environment where mains voltage is different, then

INSTALLATION   CS710

please consult your Crimson distributor to arrange to have your power supply unit converted to the correct input voltage rating for your new location.

INSTALLATION PRECAUTIONS

The CS710 is supplied with an external AC power supply unit. The connecting cable is 1m long and is terminated with a 5 pin LEMO plug at each end. The power supply cable should be carefully routed to avoid running over or near sharp objects and should not be grouped together with interconnect or speaker cables.

UNIT POSITION

The Crimson CS710 may be positioned as a free standing unit or alongside a partnering Crimson power amplifier. Never stand the unit directly on top of a power amplifier, which may generate heat, as performance and long term reliability could be compromised.
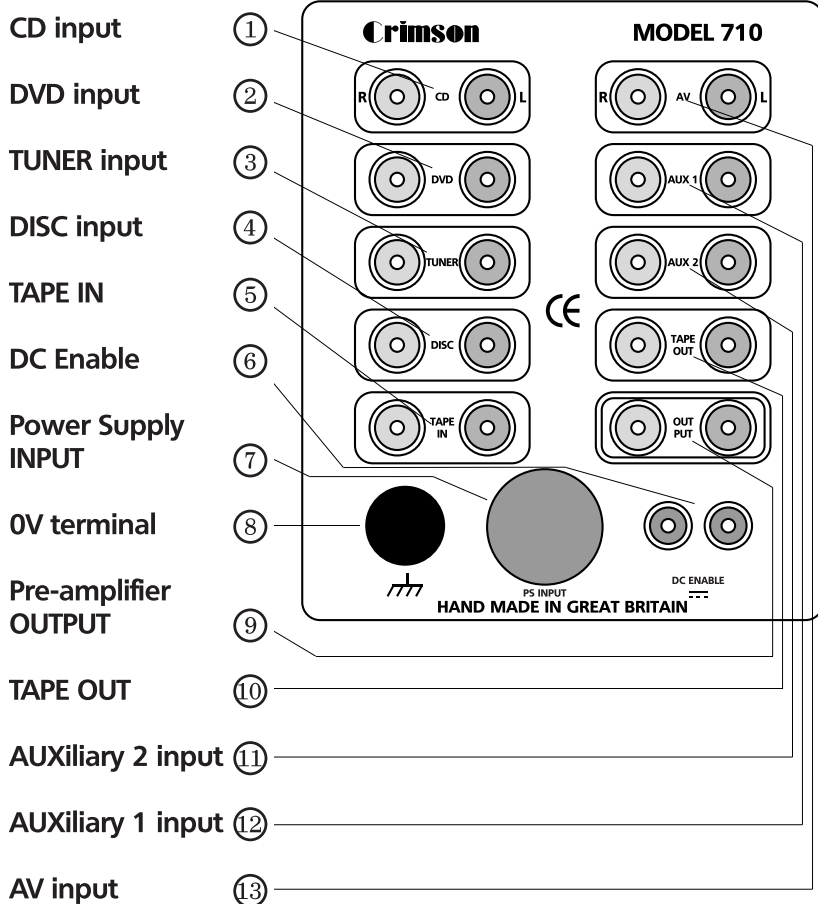
CONNECTING POWER TO THE UNIT

The 5 pin connector of the external power sup-
ply unit should be plugged into the power inlet
on the rear of the unit ⑦ (see fig.1). The PS710
is a sealed unit which contains no user service-
able parts. In the event of suspected power
failure, both CS710 and PS710 should be
returned to your dealer.

CONNECTING SIGNAL SOURCES

Connecting a Turntable

Prior to connecting your turntable, you should
determine whether you have an MC or MM
cartridge. The CS710 comes factory set for MC
operation. If your cartridge is an MM type, you
will need to reset the internal dip switches on
the main circuit board. Take the CS710, turn it
upside down and place on a soft cloth to avoid
damaging the casework. Undo both 2.5mm

CONNECTIONS *CS710*

Back view of CS710 Fig.1

CD input ①

DVD input ②

TUNER input ③

DISC input ④

TAPE IN ⑤

DC Enable ⑥

Power Supply INPUT ⑦

0V terminal ⑧

Pre-amplifier OUTPUT ⑨

TAPE OUT ⑩

AUXiliary 2 input ⑪

AUXiliary 1 input ⑫

AV input ⑬

Crimson **MODEL 710**

R CD L   R AV L

DVD   AUX 1

TUNER   AUX 2

DISC   TAPE OUT

TAPE IN   OUT PUT

PS INPUT   DC ENABLE
HAND MADE IN GREAT BRITAIN
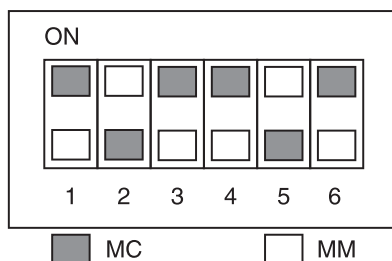
allen fixing screws. Now slide the sleeve off the CS710 chassis going from front to back. Note the pre-amplifier serial number sticker is on the underside of the sleeve at the rear of the unit. This will help identify the correct direction when refitting the sleeve. Now turn the pre-amplifier the correct way up. The main circuit board runs lengthways along the unit. On the top edge of the board just to the right of the 40 way ribbon cable connector you will see a bank of 6 dip switches (see fig.2). You will require a small screwdriver to make the necess-

MC/MM settings for CS710   Fig.2

ary adjustments in accordance with the diagram below. Reassemble the CS710 and prepare to connect your signal sources.

You are now ready to connect your turntable to the DISC input ④ RCA sockets. If the turntable has a separate ground wire fitted, connect this to the 0V terminal ⑧ on the rear panel of the CS710 (see fig.1).

Connecting line sources

To use your CD player, connect a phono cable interconnect from the CD outputs to the RCA inputs of the CS710 ① (see fig.1). Ensure you observe the correct colour coding for left and right channel. Additional system components should be connected in the same way, again taking care to note the correct channel colour coding. The CS710 allows connection of the following line sources, a DVD player ②, TUNER ③, TAPE deck ⑤, and has an AV input ⑬

for a VCR or AV processor, and two auxiliary inputs, AUX 1 and AUX 2 ⑫ and ⑪ , for any other line sources you may have such as an additional VCR, AV processor, CD or DVD player (see fig.1). Tape recordings from disc and other line sources can be made to tape by connecting an RCA phono cable from the TAPE OUT ⑩ of the CS710 to the input or record sockets of your tape deck.

Finally, you should make the connection to the power amplifier. Connect a phono interconnect from the pre-amp OUTPUT sockets ⑨ to the signal input sockets of your power amplifier. Be sure to follow the colour coding of the plugs. Your CS710 is now ready for use.

OPERATION - Manual

The presence of power is indicated by the STANDBY LED ② glowing red. To switch the CS710 on, press the ON/STANDBY switch ① until you feel a small click. The DISPLAY ③, input SOURCE LED ⑧ and record SOURCE LED
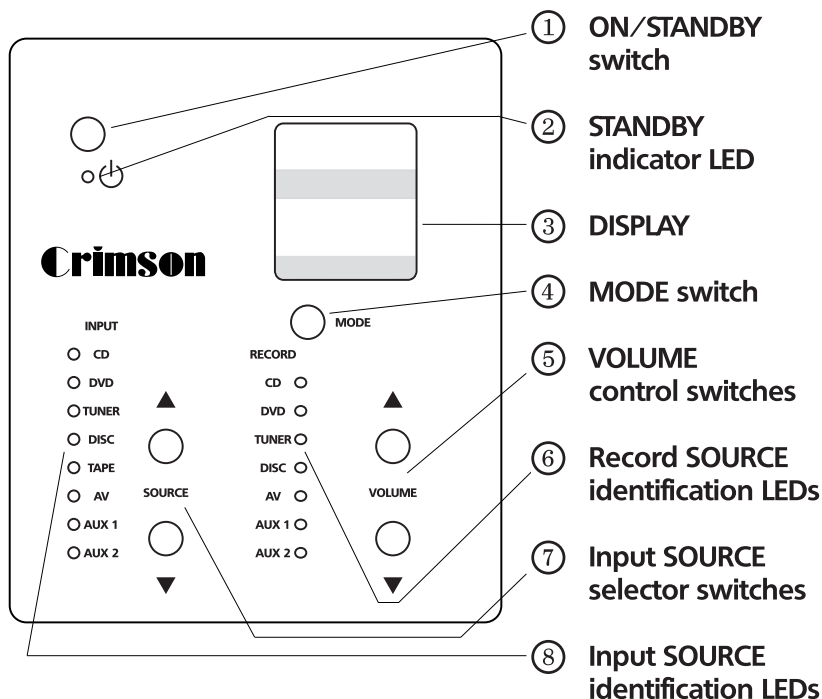
⑥ will illuminate indicating the last selected source (the factory default setting is CD). The unit is now powered up. You will note that the CS710 has a silent power up. The CS710 is muted at switch on and gently fades up to normal level in 5 seconds. At power down the

Front view of CS710   Fig.3

Crimson

INPUT
○ CD
○ DVD
○ TUNER
○ DISC
○ TAPE
○ AV   SOURCE
○ AUX 1
○ AUX 2

MODE

RECORD
CD ○
DVD ○
TUNER ○
DISC ○
AV   ○
AUX 1 ○
AUX 2 ○

VOLUME

① **ON/STANDBY switch**

② **STANDBY indicator LED**

③ **DISPLAY**

④ **MODE switch**

⑤ **VOLUME control switches**

⑥ **Record SOURCE identification LEDs**

⑦ **Input SOURCE selector switches**

⑧ **Input SOURCE identification LEDs**

mute circuit immediately engages. This fea-ture prevents unnecessary clicks or thumps coming through to the loudspeakers.

Like any new product, the CS710 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 CS710 from cold, you should allow at least 30 minutes for the pre-amplifier to reach normal operating temperature.

Selecting an input for listening

With the unit switched on you can switch between any of the eight available inputs by pressing one of the input SOURCE selector switches ⑦.

Tape recording and playback

If the tape recorder connections are made according to the previous instructions in this manual, then you should be able to listen to a recording by selecting TAPE with the input SOURCE selector switches ⑦.

OPERATION *CS710*

Should your tape deck have a three-head facility, then you can use the tape position on switch ② to monitor the recording quality directly from the third head, whilst recording. To record from a source you need to select the relevant input. To do this, first press the MODE switch ④ once and then press one of the input SOURCE selector switches ⑦ until the desired source is indicated by the record SOURCE LED ⑥ and the DISPLAY ③. N.B. The DISPLAY ③ will revert to indicating the current input SOURCE after a few seconds. You should now follow the recording instructions in your tape deck manual.

Volume control

The VOLUME control switches ⑤ define the output level of the CS710. The level increases in a linear fashion from minimum gain (0) to maximum gain (255). The current gain level is indicated by pressing one of the VOLUME control switches ⑤. N.B. The DISPLAY ③ will revert to indicating the current input SOURCE after a few seconds.

Caution - Ensure the volume level is set to a reasonable level prior to source activation.

Balance control

To adjust the balance first press the MODE switch ④ once and then press one of the VOLUME control switches ⑤, up for left and down for right. N.B. The DISPLAY ③ will revert to indicating the current input SOURCE after a few seconds.

Display Off and Brightness Adjustment

The DISPLAY ③ may be adjusted for brightness or turned off. To select one of the seven available levels, first press the MODE switch ④ three times and then press one of the input SOURCE selector switches ⑦ until the desired brightness is achieved. N.B. The DISPLAY ③ will revert to indicating the current input SOURCE after a few seconds. The DISPLAY ③ may be turned off by going one step beyond the dimmest setting. N.B. The DISPLAY ③ will now illuminate only to show the function of any switch pressed on the 710 or the remote control and will extinguish after a few seconds.

OPERATION *CS710*
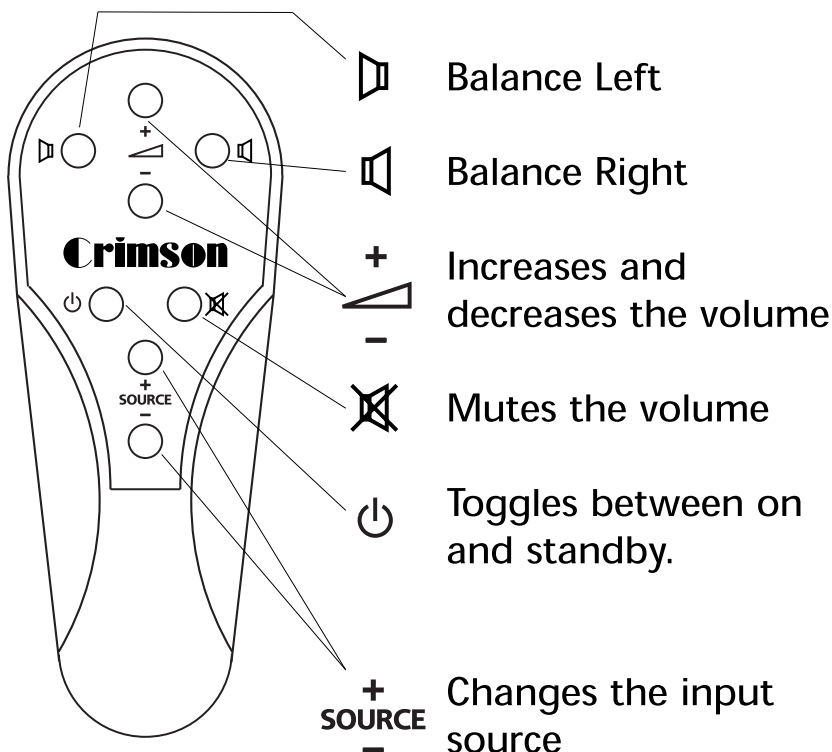
DEFAULT RESET AND DC ENABLE

For your convenience, the CS710 includes a factory default reset routine. To access this routine, first ensure that the CS710 is in STANDBY mode which is indicated by the STANDBY LED ② glowing red. Press the MODE switch ④ and, whilst keeping this depressed, press the ON/STANDBY switch ①. The DISPLAY ③ will indicate "Rst?" asking if you wish to return all settings to the factory default position. If the answer to this question is yes, then press the MODE switch ④ once more and the DISPLAY ③ will indicate "EEPROM Reset" and then return to STANDBY mode. If the answer is no and you wish to retain your current settings, simply press the ON/STANDBY switch ① once and the CS710 will return to STANDBY mode leaving your settings unaltered.

To use the DC Enable outputs ⑥ to control other amplifiers such as the Crimson 600 "E" series, please consult your dealer.

REMOTE CONTROL OPERATION

Remote Control Handset   Fig.4

Balance Left

Balance Right

Increases and decreases the volume

Mutes the volume

Toggles between on and standby.

Changes the input source

N.B. The balance control may be reset to the central position by simultaneously depressing both balance switches on the remote control handset.

TROUBLESHOOTING

No sound from either speaker

● Check that pre-amp is turned on. Red LED STANDBY indicator ② will be off whilst the DISPLAY ③, input SOURCE LED ⑧ and record SOURCE LED ⑥ will be illuminated indicating the last selected source (the factory default setting is CD).

● Check power amplifier is switched on.

● Check appropriate programme source is selected and working e.g. the CD player is playing.

● Check the VOLUME control is not set to absolute zero.

● Check installation is correct according to the installation guide in this booklet.

● Check the continuity of both input and

speaker connections to the power amplifier and the connections to the loudspeakers.

No sound from one speaker

- If your loudspeakers are fitted with protection fuses, check that the fuse is intact.

- Check the interconnect cable integrity on the rear panel of the CS710 and at the source. Try another interconnect.

- Check the interconnect cable integrity between the CS710 and the power amplifier.

- Check the speaker cable connection integrity of the missing channel at the power amplifier and loudspeaker.

- Change the programme source using the suspected interconnect cable and check whether the problem still exists. If the fault is removed by doing this, then the original

source is at fault.

● Interchange the left and right connection of the interconnect cable at source. If the missing channel switches over then there is a problem in one channel of the source or in the interconnect cable.

Phono input - troubleshooting

● Low volume level on both channels when using phono input. This could be caused by connecting a MC cartridge into the CS710 when set for MM. Configure to MC (Page 9).
● Excessive volume/poor sound quality for both channels using phono input. This could be caused by connecting a MM cartridge into the CS710 when set for MC. Configure to MM (Page 9).

● Background hum or buzz when using phono input. Check phono ground wire is attached to 0V terminal ⑧ at rear panel (see fig.1).

SPECIFICATIONS   CS710

PERFORMANCE & DIMENSIONS

Nominal output level..775mV
Tape out level MM disc selected....................300mV (5mV input)
Tape out level line........Equal to selected line input (unity gain)
Input resistance line inputs...10kΩ
Output resistance 600Ω
Maximum line input levels before overload....................5V r.m.s
Maximum output level...>6V r.m.s
Gain (all line inputs)............-111.5dB to +15.5dB (0 to times 5)
Signal to noise ratio line inputs...................................... >100dB
Frequency response (line inputs)..............DC to 100kHz @ -1dB
Distortion line inputs ....typically 0.001%
Sensitivity (MM).....................................5mV @ 1kHz into 50kΩ
Sensitivity (MC).....................................0.5mV @ 1kHz into 330R
RIAA.. 20Hz to 20kHz @ 1dB
Slew rate .... >10V/µs
Signal to noise ratio .... MM 70dB MC 65dB
Distortion disc input .... <0.01%
DC Enable outputs .... 12V @ 1kΩ, load to > 10k
Power supply (digital).....................0-5VDC regulated @ 500mA
Power supply (analogue).............................+/-23VDC @ 100mA
Power consumption 6W
Dimensions (W x H x D) ....95mm x 116mm x 370mm
Weight 2.2kg
P/S dimensions (W x H x D).................85mm x 55mm x 166mm
P/S weight 0.58kg

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specifications without prior notice. E&OE.
All Crimson Products are CE compliant.

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