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**The Martin Experience**

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**Martin Audio – CMX2A Cinema Controller**



This equipment conforms to the requirements of the EMC Directive 89/336/EEC, amended by 92/31/EEC and 93/68/EEC and the requirements of the Low Voltage Directive 73/23/EEC, amended by 93/68/EEC.

Standards Applied

EMC Emission	EN55103-1:1996
Immunity	EN55103-2:1996
Electrical Safety	EN60065:1998

## 1 INTRODUCTION

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Thank you for purchasing a Martin Audio CMX2A cinema controller. The CMX2A is used to optimise the performance of the Martin Audio Active Screen 5 loudspeaker system and provides the necessary crossover, delay and screen equalisation functions for bi-amp operation.

## 2 UNPACKING

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Each Martin CMX controller is built to the highest standard and thoroughly inspected before it leaves the factory. After unpacking the unit, examine it carefully for any signs of transit damage and inform your dealer if any such damage is found. It is suggested that you retain the original packaging so that the unit can be repacked at a future date if necessary.

Please note that Martin Audio and its distributors cannot accept responsibility for damage to any returned product through the use of non-approved packaging.

### 3 MAINS CONNECTION

The CMX2A is provided with a captive mains cable which is fitted with a schuko style 2 pin plug. The plug has double earth contacts and female (euro style) combined earth.

**Should the moulded plug be removed and another plug substituted the cable must be wired as below:**

GREEN/YELLOW - EARTH • BROWN - LIVE • BLUE - NEUTRAL

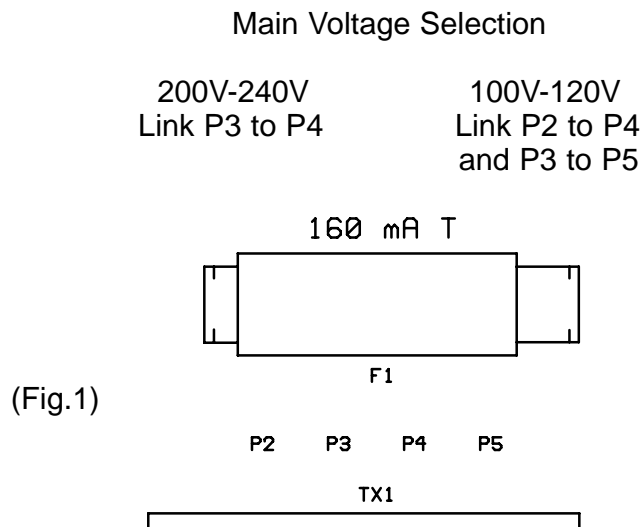
**WARNING: The CMX2A Controller must always be operated with the mains safety earth connected.**

The CMX2A is supplied from the factory in either 100-120V or 200-240V versions. Mains voltage tolerance  $\pm 10\%$  on each setting.

Fuse: - type 'T' semi-delay 160mA (L) 100-120V

Fuse: - type 'T' semi-delay 160mA (L) 220-240V

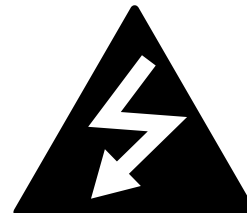
**NO ATTEMPT SHOULD BE MADE BY THE USER TO CHANGE THE MAINS OPERATING VOLTAGE FROM THAT SUPPLIED, REFER TO QUALIFIED PERSONNEL ONLY.**



This equipment must be earthed.



**CAUTION**  
**RISK OF ELECTRIC SHOCK**  
**DO NOT OPEN**  
**DO NOT EXPOSE TO RAIN**  
**OR MOISTURE**



It should not be necessary to remove any protective earth or signal cable shield connections.

## 4 INPUT CONNECTIONS

(See Fig. 2)

The CMX2A should be connected immediately preceding the power amplifiers and after any pre-amps or processing.

The 3 input channels are all (differential) electronically balanced on M4 screw terminals.

Always use 2 core and screen balanced type signal leads even for unbalanced circuits. The screen should be regarded as separate from the signal return even if they are connected together at one end of the line.

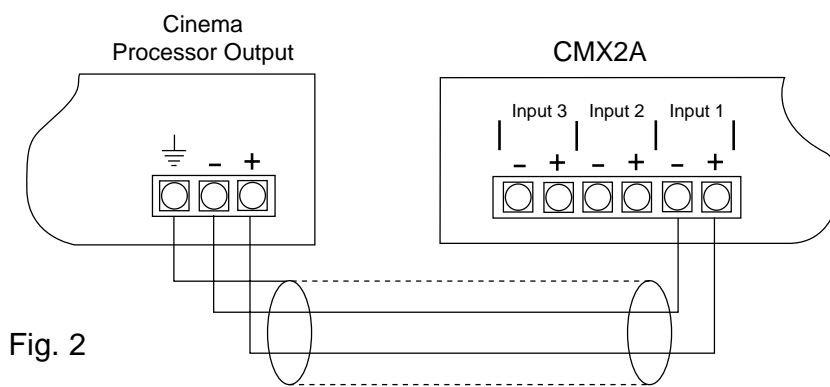


Fig. 2

## 5 OUTPUT CONNECTIONS

(See Fig. 3)

All six outputs of the CMX2A are (single ended) unbalanced on M4 screw terminals.

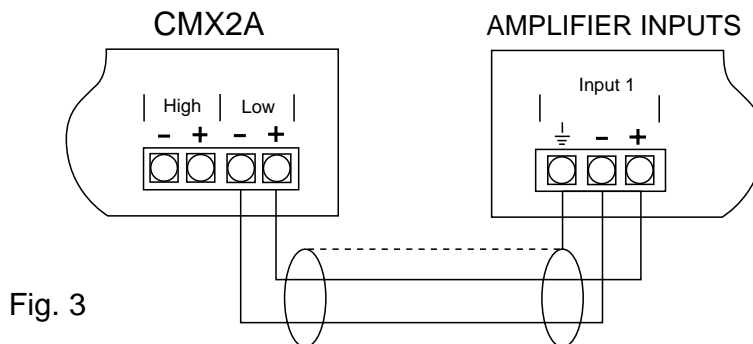


Fig. 3

## 6 CMX2A OPERATION

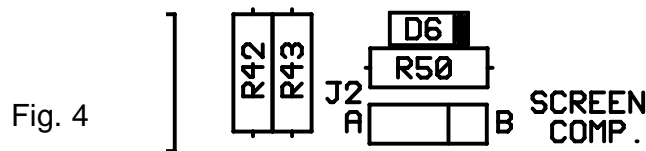
The CMX2A cinema controller is a 3 input/6 output controller used to optimise the performance of the Martin Audio Screen 5 bi-amp Loudspeaker System.

The controller provides the correct crossover, delay and screen compensation equalisation. The nominal through gain of the controller is 0dB at the centre position of the trimpot, plus and minus 6dB of gain variation is available to optimise the relative levels of the bass and mid high outputs per channel. All six trimpots are accessible through the front panel.

## 7 SCREEN COMPENSATION EQ

(See Fig. 4)

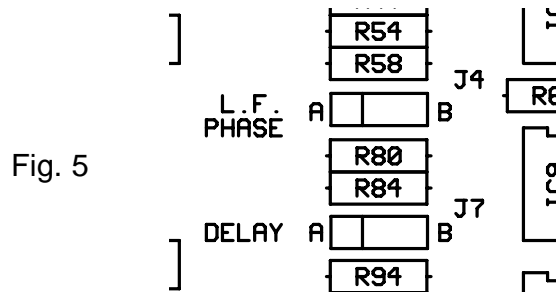
To avoid high frequency energy losses due to screen absorption, the CMX2A is fitted with a compensating filter. When required Jumpers J1, J2 and J3 should be placed in the right hand position B (screen comp in). Should the Screen 5 loudspeaker system be used where there is no high frequency masking or for demonstration purposes J1, J2 and J3 would be placed in the left hand position A (screen comp out). Due to the extra gain in the HF channel introduced by the compensation filter, an LED is fitted to indicate High Frequency overload.



## 8 DRIVER OFFSET COMPENSATION

(See Fig 5)

The CMX2A provides offset compensation to acoustically align the output from the Screen 5 Mid horn and the Screen 5 Bass cabinet. This is factory set to position (A) on jumpers J7, J8 and J9 and position (B) on the LF phase jumpers J4, J5 and J6.



## 9 WARRANTY

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Martin Audio CMX2A Cinema Controllers are warranted against manufacturing defects in materials or craftsmanship over a period of 1 year from the date of original purchase. During the warranty period Martin Audio will, at its discretion, either repair or replace products which prove to be defective provided that the product is returned in its original packaging, shipping prepaid, to an authorised Martin Audio service agent or distributor.

Martin Audio Ltd. cannot be held responsible for defects caused by unauthorised modifications, improper use, negligence, exposure to inclement weather conditions, act of God or accident, or any use of this product that is not in accordance with the instructions provided by Martin Audio.

Martin Audio is not liable for consequential damages.

This warranty is exclusive and no other warranty is expressed or implied.

This warranty does not affect your statutory rights.

## 10 TECHNICAL SPECIFICATION

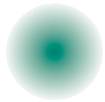
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### **CMX2A**

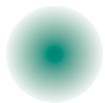
MAINS SUPPLY	Captive 2m 3 core cable with moulded Schuko 2-pin plug
MAINS VOLTAGE	Internally selectable by hard wire link 100-120/220-240V AC, 50/60Hz. Mains voltage tolerance $\pm 10\%$ on each setting
MAINS FUSE	100-120V AC Fit 160mA Type T(L) 220-240V AC Fit 160mA Type T(L)
POWER CONSUMPTION	5 V.A.
INPUTS	20K ohms electronically balanced on M4 barrier strip
OUTPUTS	100 ohms output impedance unbalanced on M4 barrier strip. Maximum output level before clip 8 V (minimum load impedance 4Kohms)
SIGNAL+NOISE/ NOISE RATIO	>102dB @ 2V output
DISTORTION	1kHz 2V output 0.007% 1K ohm load 100Hz 2V output 0.003% 1K ohm load
DIMENSIONS	(W) 482mm x (H) 44mm x (D) 153mm (W) 19ins x (H) 1.75ins x (D) 6ins
WEIGHT	1.85kg (4lbs)
SHIPPING DIMENSIONS	(W) 545mm x (H) 120mm x (D) 235mm (W) 21.5ins x (H) 4.7ins x (D) 9.3ins
SHIPPING WEIGHT	2.45kg (5.4lbs)

Due to our policy of continuous improvement all specifications are subject to change without notice.

# CMX2A Cinema Controller



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# **CMX2A** Cinema Controller

## User's Guide



**ENGLISH**



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