

### Clever Features, Contractor Friendly

# AMIS23X

Stereo 2-way/Mono 3-way crossover

## Installation And Operation Manual

### Introduction

The Australian Monitor Installation Series AMIS23X is a one rack unit, fourth order Linkwitz-Riley electronic crossover. The AMIS23X can be configured as either a stereo two way or a mono three way crossover. Featuring clip LED indication per band per channel, frequency range selector switch, CD horn boost switch & polarity reverse switching, the AMIS23X is an extremely well featured crossover at a contractor friendly price.



NO USER-SERVICEABLE PARTS INSIDE.

REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

#### WARNING !

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK. DO NOT EXPOSE THIS EQUIPMENT TO RAIN OR MOISTURE.



This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



This symbol is intended to alert the user to the presence of important operation and maintenance (servicing) instructions in the literature accompanying the appliance.

Caution: To prevent electric shock do not use this (polarized) plug with an extension cord, receptacle or other outlet unless the blades can be fully inserted to prevent blade exposure.

To prevent electric shock, match wide blade of plug to wide slot, fully insert.



### Front Panel



#### 1. Power Switch

This switches the mains power "on" to the unit.

#### 2. Channel 1 Crossover Section

This section refers to the controls for channel one. This section is duplicated for channel 2.



#### 3. Clip LED's

These LED's indicate that the high range or low range signals are clipping & entering distortion. Occasional flickering of these LED's is acceptable but if the LED remains on continuously, the level should be turned down to avoid distortion.

#### 4. Input Level.

This controls the input level of signal being fed to each channel.

#### 5. Low Mute.

This switch will mute the low frequency band signal output for each channel.

#### 6. Low (lo) Level.

This controls the level of the low frequency band output of each channel.

#### 7. Range Selection Switch

This switches the frequency value of the frequency control (8) from the frequency shown on the front panel when the switch is the "off" position to 10 x the frequency shown when in the "on" position.

#### 8. Mid (lo/Mid) Frequency.

This will determine the crossover frequency between Low frequencies & High frequencies for each channel when used in 2 way stereo mode. In 3 way mono mode this control will determine the (Lo/Mid) crossover point & the corresponding Channel 2 control will determine the (Mid/Hi) crossover point.

#### 9. Hi Mute

This switch will mute the Hi frequency band signal output for each channel.

#### 10. High Level.

This controls the level of the high frequency band output of each channel.



### Back Panel



#### 1. Channel 2 High output XLR

Channel 2 XLR high frequency output/ Mono 3 way high frequency output.

#### 2. Channel 2 High output Jack

Channel 2 Jack high frequency output/ Mono 3 way high frequency output.

#### 3. Hi Phase.

This switch reverses the polarity of the high frequency output.

#### 4. Channel 2 Low output XLR

Channel 2 XLR low frequency output/ Mono 3 way mid frequency output.

#### 5. Channel 2 Low output Jack

Channel 2 Jack low frequency output/ Mono 3 way mid frequency output.

#### 6. CD Boost Switch.

This switches in a constant directivity horn equalization circuit. This is used with horns that require a high frequency boost. This boost is +3 dB @ 3.5kHz rising 6dB per octave to 22.5kHz. If constant directivity horn equalization is required engage this switch. Consult your horn manufacturer to determine if this equalization is required.

#### 7. Mode Mono/stereo.

This switch will determine if the AMIS34X will operate in 2 way stereo or 3 way mono configuration. The switch "in" is 3 way mono mode & switch "out" is 2 way stereo mode.



#### 8. Channel 2 Input XLR

This input accepts a balanced line level signal in 2 way stereo mode. This input is not used in 3 way mono mode.

#### 9. Channel 2 Input Jack

This input accepts a balanced line level signal in 2 way stereo mode. This input is not used in 3 way mono mode.

#### 10. Channel 1 High output XLR

Channel 1 XLR high frequency output. This is not used in Mono 3 way mode.

#### 11. Channel 1 High output Jack

Channel 1 Jack high frequency output. This is not used in Mono 3 way mode.

#### 12. Hi Phase.

This switch reverses the polarity of the high frequency output.

#### 13. Channel 1 Low output XLR

Channel 1 XLR low frequency output/ Mono 3 way Lo frequency output.

#### 14. Channel 1 Low output Jack

Channel 1 Jack low frequency output/ Mono 3 way Lo frequency output.

#### 15. CD Boost Switch.

This switches in a constant directivity horn equalization circuit. This is used with horns that require a high frequency boost. This boost is +3 dB @ 3.5kHz rising 6dB per octave to 22.5kHz. If constant directivity horn equalization is required engage this switch. Consult your horn manufacturer to determine if this equalization is required.

#### 16. Channel 1 Input XLR

This input accepts a balanced line level signal in 1 way stereo mode. This input is the input used in 3 way mono mode.

#### 17. Channel 1 Input Jack

This input accepts a balanced line level signal in 2 way stereo mode. This input is the input used in 3 way mono mode.

#### 18. Voltage Selector Switch

This switches the correct voltage for your part of the world.



#### 19. Fuse Holder.

The AMIS23X has a 500mA mains voltage fuse.

### Modes of Operation

#### 2 Way Stereo

When using the AMIS23X in 2 way stereo mode, firstly ensure the Stereo/Mono Mode switch (7) is set to the correct position (switch "out"), then simply patch the left line level output signal into input 1 (16 or 17) & the right line level output signal into input 2 (8 or 9). Connect low output 1 (13 or 14) & low output 2 (4 or 5) to your low frequency amplifiers. Connect the Channel 1 high output (10 or 11) & the channel 2 high output (1 or 2) to your high frequency amplifiers.

#### 3 Way Mono

When using the AMIS23X in 3 way mono mode, firstly ensure the Stereo/Mono Mode switch (7) is set to the correct position (switch "in"), then simply patch the line level output signal into input 1 (16 or 17). Connect low output 1 (13 or 14) to your Low frequency amplifiers, connect low output 2 (4 or 5) to your mid frequency amplifiers & connect high output 2 to your high frequency amplifiers. In this mode ensure Channel 1 Range Selection Switch (7) is set to X1 & Channel 2 Range Selection Switch (7) is set to X10,& that both Channel 2 High Level (10) & Channel 2 Input Level (4) are set to '0'.

### AMIS23X Specifications

1. Frequency Range;	x1: 80Hz – 920 Hz x10: 800Hz – 9.2 kHz
2. Frequency Response;	20 Hz – 20 kHz
3. S/N Ratio;	Low Frequency Output @ 0dB <-106dBu High Frequency Output @ 0dB <-97dBu



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