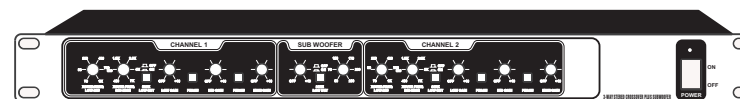


ACTIVE CROSSOVERS  
INSTRUCTION MANUAL

*3-way stereo plus subwoofer*



English

## SAFETY INSTRUCTIONS



**CAUTION:** To reduce the risk of electrical shock, do not remove the cover ( or back ) .No user serviceable parts inside; refer servicing to qualified personnel.

**WARNING:** To reduce the risk of fire or electrical shock, do not expose this appliance to rain or moisture.



This symbol, wherever it appears, alerts you to the presence of uninsulated dangerous voltage inside the enclosure - voltage that may be sufficient to constitute a risk of shock.



This symbol, wherever it appears, alerts you to important operating and maintenance instructions in the accompanying literature. Read the manual.

### DETAILED SAFETY INSTRUCTIONS:

All the safety and operation instructions should be read before the appliance is operated.

#### **Retain Instructions:**

The safety and operating instructions should be retained for future reference.

#### **Heed Warnings:**

All warnings on the appliance and in the operating instructions should be adhered to.

#### **Follow instructions:**

All operation and user instructions should be followed.

#### **Water and Moisture:**

The appliance should not be used near water ( e.g. near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool etc. )

#### **Ventilation:**

The appliance should be situated so that its location or position does not interfere with its proper ventilation. For example, the appliance should not be situated on a bed, sofa, rug, or similar surface that may block the ventilation openings; or placed in a built-in installation, such as a bookcase or cabinet that may impede the flow of air through the ventilation openings.

#### **Heat:**

The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances ( including amplifiers ) that produce heat.

#### **Power source:**

The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.

#### **Grounding or Polarization:**

Precautions should be taken so that the grounding or polarization means of an appliance is not defeated.

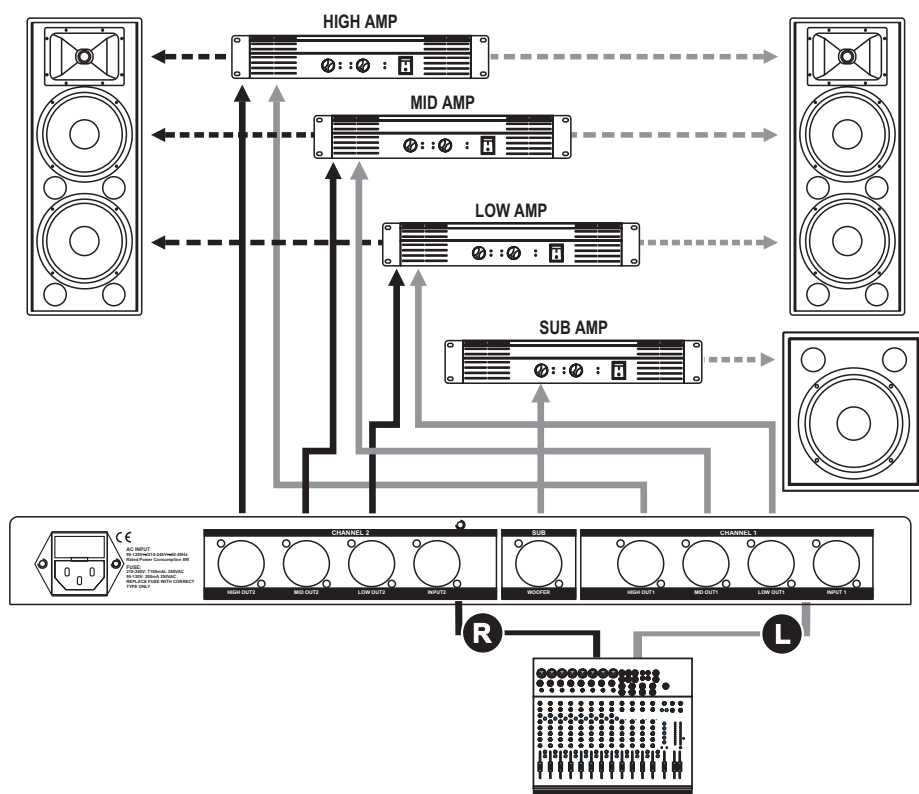
#### **Power-Cord Protection:**

Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords and plugs, convenience receptacles and the point where they exit from the appliance.

#### **Cleaning:**

The appliance should be cleaned only as recommended by the manufacturer.

## TYPICAL SET-UP



### Non-use Periods:

The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.

### Object and Liquid Entry:

Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.

### Damage Requiring Service:

The appliance should be serviced by qualified service personnel when:

- The power supply cord or the plug has been damaged; or
- Objects have fallen, or liquid has been spilled into the appliance; or
- The appliance has been exposed to rain; or
- The appliance does not appear to operate normally or exhibits a marked change in performance; or
- The appliance has been dropped, or the enclosure damaged.

### Servicing:

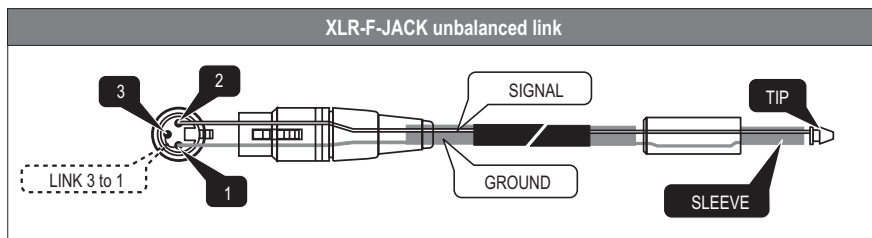
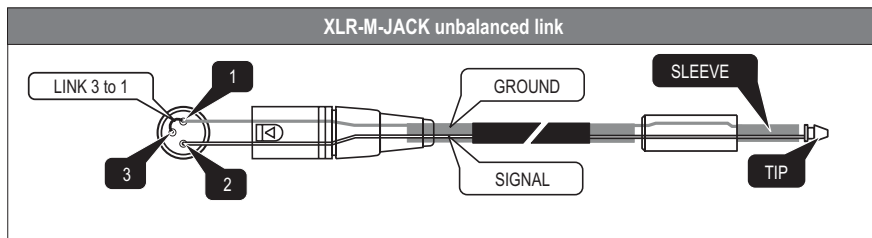
The user should not attempt to service the appliance beyond that is described in the Operating Instructions. All other servicing should be referred to qualified service personnel.

## SPECIFICATIONS

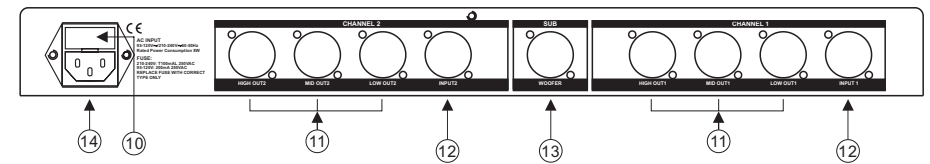
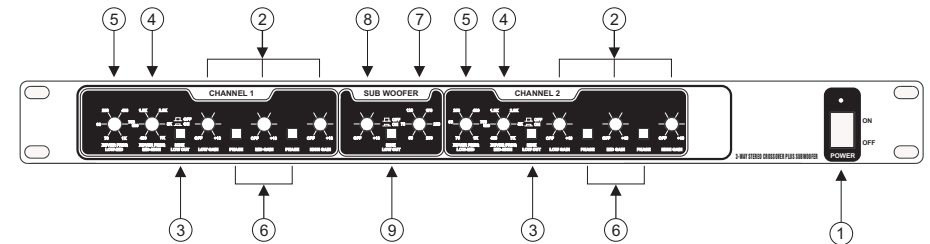
### CONTENTS

CONTROLS AND CONNECTIONS .....	1
CONNECTION CABLES .....	3
SPECIFICATIONS .....	5
TYPICAL SET-UP .....	6

Crossover Type	Stereo 3 ways + Subwoofer
Crossover Frequencies	Subwoofer: 50 - 250Hz
	LM : 70-1000Hz
	MH : 480-7000Hz
Filter Type (Slope)	2nd order, 12dB/Octave
Inputs	
Type	Balanced XLR
Impedance	100 Kohms
Outputs	
Type	Balanced XLR"
Impedance	220 Ohms
Low Cut Filters	30Hz/ – 3dB, 12dB/Octave
Frequency Response	25Hz - 25KHz +/- 1dB
Total Harmonic Distortion (THD) + Noise	< 0.05 %
S/N Ratio	> 80 dB
Fuse	95-120 V AC: 200mA 250VAC (slow-blow)
	210-240 V AC: T100mAL 250VAC (slow-blow)
Dimensions	483×194.5×44mm/19"(W)×7.7"(D)×1.7"(H)
Weight	2.6 Kg (5.73 lb)



## CONTROLS AND CONNECTIONS



### 1 ON/OFF SWITCH:

Caution: Always turn the Crossover ON before the amplifier, and turn it OFF after the amplifier or transients harmful to the speakers may result.

### 2 L/M/H OUTPUT LEVEL CONTROLS:

These are used to adjust the output level of each way : LOW, MID and HIGH.

### 3 LOW CUT SWITCHES FOR LOW WAY:

These insert low cut filters in the LOW way of each stereo channel with a 12dB/Octave, 30 Hz HPF to minimize problems from subsonic frequencies in the signal, to suppress hum, and to prevent low frequency speaker resonance.

### 4 MH CROSSOVER FREQUENCY CONTROLS:

These select the crossover frequencies of the MID and HIGH ways. They re a low cut for the HIGH and a high cut for the MID. You can select the frequencies between 480 Hz to 7 kHz.

### 5 LM CROSSOVER FREQUENCY CONTROLS:

These select the crossover frequencies of the LOW and MID ways. They are a low cut for the MID and a high cut for the LOW. You can select the frequency between 70 Hz to 1 kHz.

### 6 PHASE SWITCHES:

These allow switching the polarity to invert the signal phase on the MID and HIGH ways. This is done after the output levels are set to correct audible phase problems. Caution: Before pressing the PHASE switches, always lower the outputs of your power amplifiers to avoid possible speaker damage.

### 7 SUB CROSSOVER FREQUENCY CONTROL:

This selects the crossover frequency of the SUB WOOFER way. You can select the frequency between 50 Hz to 250Hz.

### 8 SUBWOOFER OUTPUT LEVEL CONTROL:

This is used to adjust the SUB WOOFER output level.

### 9 SUBWOOFER LOW CUT SWITCH:

This inserts a low cut filter in the SUBWOOFER way with a 12dB/Octave, 30 Hz HPF to minimize problems from subsonic frequencies in the signal, to suppress hum, and to prevent low frequency subwoofer speaker resonance.

### 10 FUSE HOLDER / VOLTAGE SELECTOR

Your unit may have the AC Voltage Selector (~115V/60Hz or ~230V/50Hz) built into the Fuse Holder. With a small screw driver pull/pop out the Fuse Holder and rotate it so that the arrow showing the proper voltage in your area points toward the other arrow in the upper left corner of plug assembly, and re-insert.

### 11 L/M/H OUTPUT CONNECTORS:

Connect to your amplifiers via these balanced XLR output jacks.

### 12 STEREO INPUT CONNECTORS:

Connect your L/R stereo input signal to these balanced XLR input jacks.

### 13 SUBWOOFER OUTPUT CONNECTOR:

Connect to your subwoofer amplifier via this balanced XLR output jack.

14 Use the enclosed power cord to connect the unit to the mains.

## CONNECTION CABLES

In this chapter you'll find the wiring diagrams for the connectors to be used with your crossover. Take care of the connector cables, always holding them by the connectors and avoiding knots and twists when coiling them: this gives the advantage of increasing their life and reliability, which is always to your advantage.

Periodically check that your cables are in good condition, that they are correctly wired and that all their contacts are perfectly efficient: a great number of problems (faulty contacts, ground hum, Discharges, etc.) are caused entirely by using unsuitable or faulty cables.

