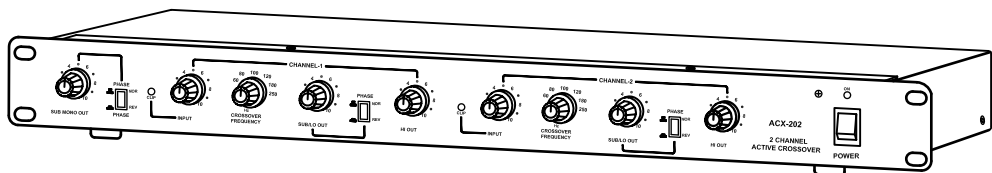


# ACTIVE CROSSOVER

## ACX-202



- ◆ Thank you for purchasing the 2 Channel Active Crossover.
- ◆ Please read this manual thoroughly before making connections and turning on the power. Following the instructions in this manual will enable you to obtain optimum performance from your new 2 Channel Active Crossover.
- ◆ Please retain this manual for future reference.

## • Safety Instructions

**Read the Instructions:** Please read all the instructions in this section carefully before installation or use of the product. All the safety instructions must be followed.

**Retain the Instructions:** Please retain this Instruction Manual for future reference.



This symbol, wherever it appears, alerts you to the presence of uninsulated hazardous voltage that may be sufficient to constitute a risk of electric shock. External wiring to any terminal marked with this symbol must be done by a trained and instructed person only.



This symbol, wherever it appears adjacent to a component, alerts you that the concerned component can only be replaced by another of the exact same specifications.

### WARNING

- To reduce the risk of electric shock, do not remove the top cover. No user serviceable parts inside. Refer all servicing to qualified personnel only.
- Before replacing any fuse, make sure the set is switched off and disconnected from the AC mains or any other power source. Replace a fuse only with another of exactly same specification.

### CAUTIONS

**Water & Moisture:** To reduce the risk of fire or electrical shock, do not expose this set to rain or moisture. Do not use this set near water or in a wet location. Do not keep any object filled with liquid, such as a vase, on top of this set. Do not insert or remove the AC mains plug with wet hands.

**Power Source:** The voltage & frequency of the AC mains supply, and the voltage of the external battery, (if applicable) to which this set can be connected, is marked on the rear panel of the set. Do not connect this set to any power source other than those specified on the rear panel.

**Power Cord Protection:** Do not cut, kink, damage or modify the AC power cord supplied with this set. Keep the AC power cord away from heaters and harmful chemicals. Do not keep any heavy object on the power cord.

**Operation on Generator:** When operating this set on a generator, make sure the set is switched off till the generator voltage has stabilized.

**Stability:** This set must be kept in a stable and flat horizontal position, and never in a tilted position. Do not place this set on an unstable stand, tripod, bracket or mount. Do not use attachments which are not supplied or explicitly recommended by the manufacturer.

**Earthing:** This set must be earthed properly before use. A wire from the Earth terminal on the rear panel must be connected to electrical earth.

**Cleaning:** Disconnect this equipment from the AC mains and external battery before cleaning. Clean with a damp cloth, but do not allow any liquid to enter the set. Do not clean with liquids or aerosols.

## • Table of Contents

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## • Features / General Description of Product

### **INPUT**

- Individual controls for Input to each channel.
- Balanced XLR and 1/4" TRS input sockets.
- Individual clip LED indication for input signals.

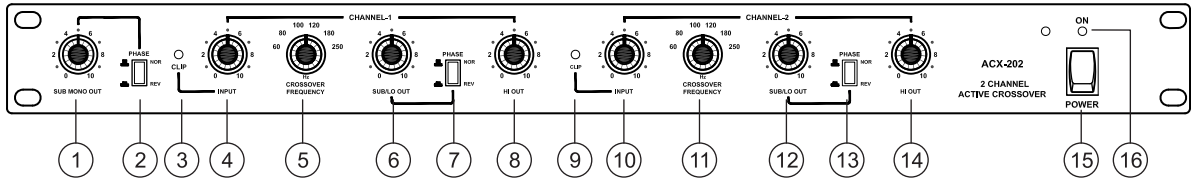
### **OUTPUT (FULL STEREO MODE)**

- Dual HI & LO outputs.
- 6 Variable Crossover Frequencies 60Hz, 80Hz, 100Hz, 120Hz, 180Hz and 250Hz selectable for each channel.
- Individual rotary switch for selection of crossover frequency in each channel.
- Phase reversal switch for each channel.
- 24dB/octave filter slope.

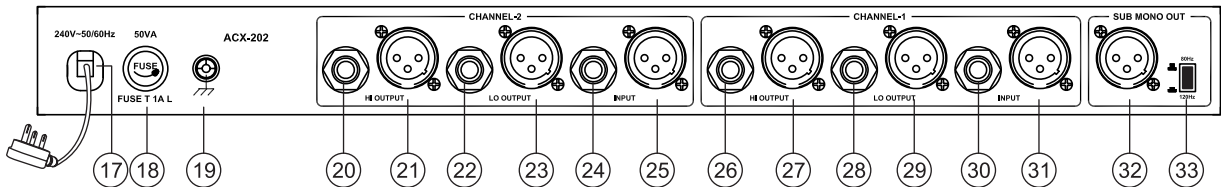
### **OUTPUT FOR MONO SUBWOOFER**

- Separate output for connecting mono subwoofer, with its own separate level control and frequency selection.
- Two variable crossover frequencies 80Hz, 120Hz.
- Phase reversal switch.
- 24dB/octave filter slope.

## • Front & Rear Panel Controls & Features



1. **SUB MONO OUT:** To control the MONO subwoofer output.
2. **PHASE:** If button is pressed, then SUB MONO OUT signal is reversed in phase (shifted by 180 degrees). When phase button is not pressed, no phase reversal takes place.
3. **CLIP LED:** Clip LED indication for high input. If this LED glows continuously, it means that the input signal level is too high. Reduce the setting of the input level controls.
4. **INPUT Control :** To control the input level.
5. **Rotary Switch:** To select the required crossover frequency.
6. **SUB/LO OUT:** To control the Low Band Output.
7. **Phase:** If button is pressed, then SUB/LO OUT signal is reversed in phase (shifted by 180 degrees). When phase button is not pressed, no phase reversal takes place.
8. **HI OUT:** To control the High Band Output.
9. **CLIP LED:** Clip LED indication for high input. If this LED glows continuously, it means that the input signal level is too high. Reduce the setting of the input level controls.
10. **INPUT:** To control the input level.
11. **Rotary Switch:** To select the required crossover frequency.
12. **SUB/LO OUT:** To control the Low Band output.
13. **Phase:** If button is pressed, then SUB/LO OUT signal is reversed in phase (shifted by 180 degrees). When phase button is not pressed, no phase reversal takes place.
14. **HI OUT:** To control the High Band output.
15. **Power ON/OFF Switch:** Press the top part of the switch to switch the power ON. Press the bottom part of the switch to switch the power OFF.
16. **Power ON:** LED glows to indicate that the power is ON.



17. **AC main Cord:** Connect to 240VAC mains.
  18. **AC Mains Fuse:** (Rating T 1A L Amp 250V).
  19. **Earth Terminal:** For earthing the chassis to building EARTH.
  20. **1/4" TRS Connector:** For High Band Output.
  21. **Balanced XLR Connector:** For High Band Output.
  22. **1/4" TRS Connector:** For Low Band output
  23. **Balanced XLR Connector:** For Low Band output.
  24. **1/4" TRS Connector:** For Input
  25. **Balanced XLR Connector:** For Input.
  26. **1/4" TRS Connector:** For High Band Output.
  27. **Balanced XLR Connector:** For High Band output.
  28. **1/4" TRS Connector:** For Low Band output.
  29. **Balanced XLR Connector:** For Low Band output.
  30. **1/4" TRS Connector:** For Input.
  31. **Balanced XLR Connector:** For Input.
  32. **XLR Connector:** For SUB MONO Output.
  33. **Frequency Selector Switch:** Frequency selection for SUB MONO OUT.
- Note:** TRS connectors can be used either with a stereo phone plug (for balanced line connections) or with a mono phone plug (for unbalanced line connections).

## • Precautions

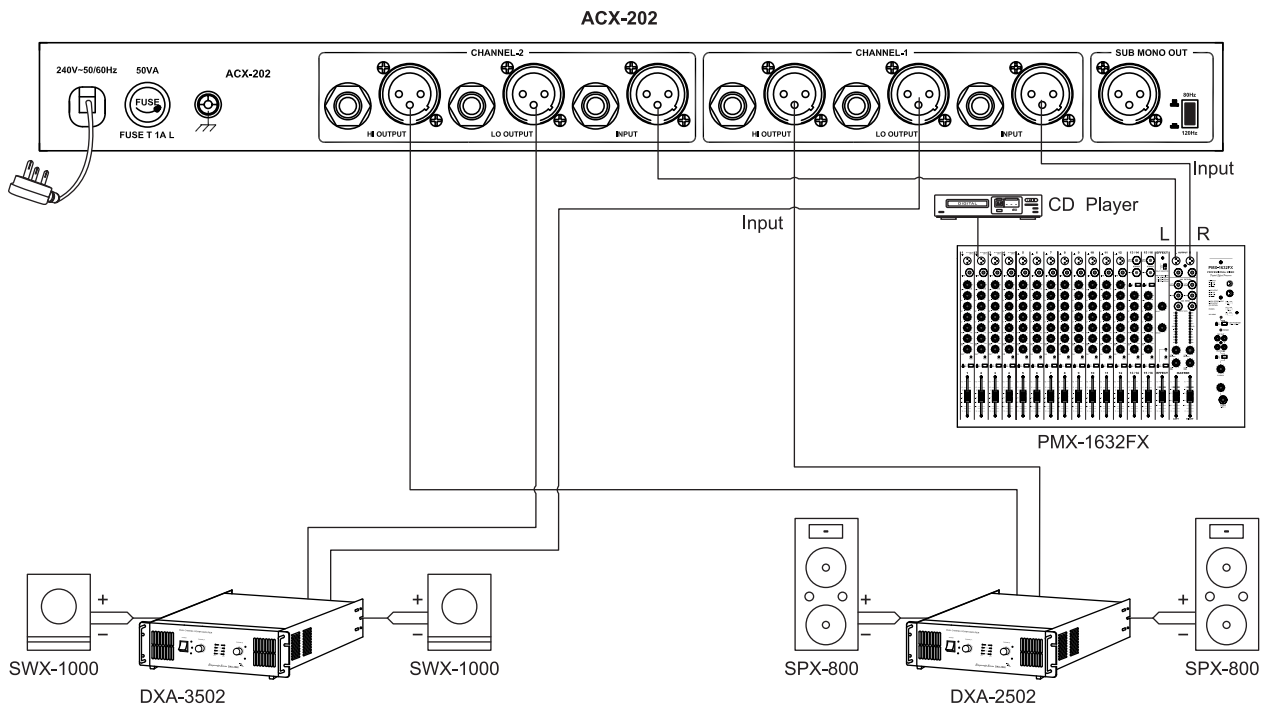
- All connections must only be carried out or changed with the power switch in OFF position and the AC mains cord disconnected from the Mains..
- To avoid loud switching noise from the speakers, always switch ON the power amplifier after all other units of the audio system (like active crossover) have been switched ON. After operation, switch the power amplifier OFF first and then the other units.

## • Adjustment of Crossover Network

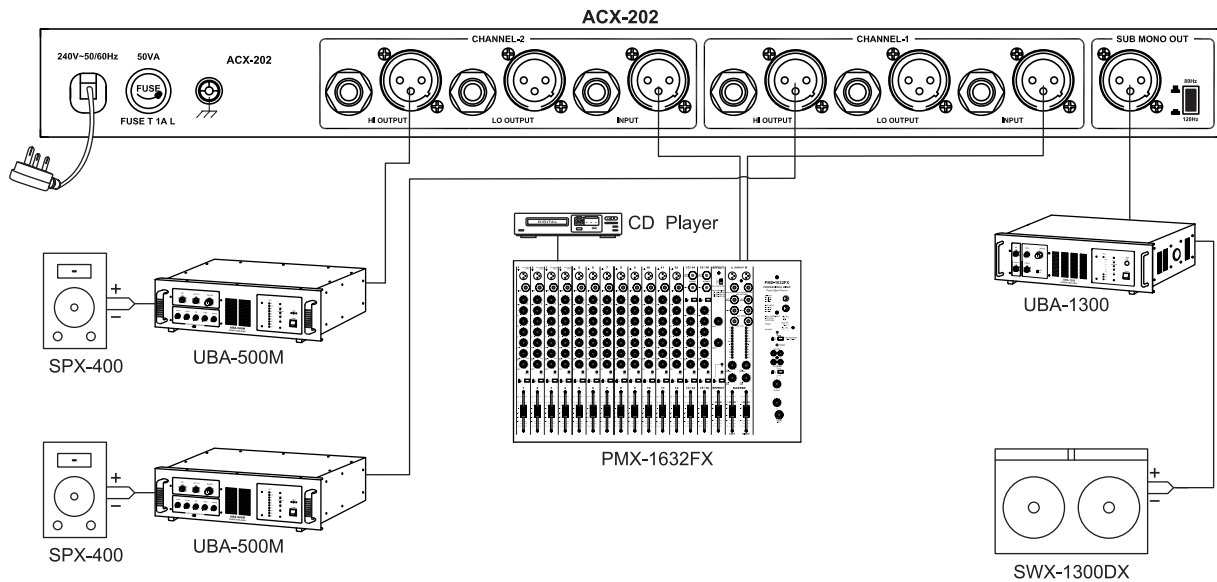
- Connect the Active Crossover to an amplifier.
- Set all rotary level controls to 0 position.
- Phase switch must not be depressed.
- Switch ON the active crossover and then the power amplifier.
- Select the required crossover frequency from the appropriate switch.
- Adjust input level control, making sure the CLIP LED does not glow continuously.
- Adjust output level controls to get the required output level.
- Press & un-press the PHASE switch and check by listening which position gives better bass. The optimum position will depend on many factors, including placement of the speakers.

# • Typical Applications....

## Connecting ACX-202 in full stereo mode.



## Connecting ACX-202 with MONO Subwoofer.



## • Specifications

<b>MODEL</b>	<b>ACX-202</b>
<b>Input Sensitivity</b>	1V/20K $\Omega$
<b>Low, High Out (L, R) Filter Slope</b>	24dB/Oct
<b>THD</b>	<0.01%
<b>Crossover Frequencies</b>	For full Stereo Mode: 60Hz, 80Hz, 100Hz, 120Hz, 180Hz, 250Hz For Sub MONO Mode: 80Hz, 120Hz
<b>Frequency Range</b>	20Hz to 20kHz
<b>Signal to Noise Ratio</b>	85dB
<b>Indications</b>	Power ON LED, Clip LED for each channel
<b>Power Supply</b>	AC: 240V 50Hz
<b>Protection</b>	AC: Fuse 1Amp. (T 1AL)
<b>Dimensions</b>	W483 × H52 × D231 mm
<b>Weight</b>	2.85kg approx.