

LIMITED WARRANTY POLICY

Warranty in the United States and Canada

Mirage warrants this product to the retail purchaser against any failure resulting from original manufacturing defects in workmanship or materials. The warranty is in effect for a period of one (1) year from the date of purchase from an authorized Mirage dealer and is valid only if the original bill of sale is presented when service is required.

The warranty does not cover damage caused during shipment, by accident, misuse, abuse, neglect, unauthorized product modification, failure to follow the instructions outlined in the owner's manual, failure to perform routine maintenance, damage resulting from unauthorized repairs or claims based upon misrepresentations of the warranty by the seller. If you require service for your Mirage crossover at any time during the one (1) year warranty period, please contact: 1) the dealer from whom you purchased the product, 2) Mirage National Service, 203 Eggert Road, Buffalo, N.Y. 14215, Tel: 716-896-9801 or 3) Mirage Loudspeakers, a division of Audio Products International Corp., 3641 McNicoll Avenue, Scarborough, Ontario Canada, M1X 1G5, Tel: 416-321-1800. You will be responsible for transporting the crossover in adequate packaging to protect it from damage in transit and for the shipping costs to an authorized Mirage service center or to Mirage Loudspeakers. If the product is returned for repair to Mirage in Scarborough or Buffalo the cost of the return shipment to you will be paid by Mirage, provided the repairs concerned fall within the Limited Warranty. Mirage Warranty is limited to repair or replacement of Mirage products. It does not cover any incidental or consequential damage of any kind. If the provisions in any advertisement, packing cartons or literature differ from those specified in this warranty, the terms of the Limited Warranty prevail.

WARRANTY OUTSIDE OF THE UNITED STATES AND CANADA

Product warranties may be legislated differently from one country to another. Ask your local dealer for details of the LIMITED WARRANTY in your country.

Important: Please retain the carton and packing material for this Mirage product to protect it in the event it ever has to be shipped to a service center for repair. Product received damaged by a service center that has been shipped by the end user in other than the original packaging, will be repaired, refurbished and properly packaged for return shipment at the end user's expense.



LFX-1

ACTIVE CROSSOVER NETWORK

OWNER'S MANUAL

INTRODUCTION

We are proud to welcome you as a new owner of Mirage LFX -Series active crossover. The LFX-series of active crossovers are the result of extensive research into the interaction of subwoofers with a wide variety of main loudspeaker types. They represent the leading edge in active crossover design and performance.

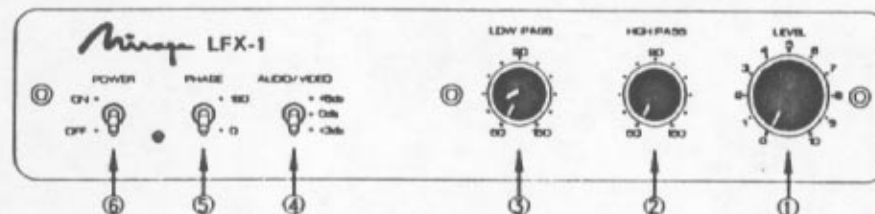
The finest components and materials combined with sophisticated manufacturing and quality control procedures ensure many years of performance and listening pleasure.

Please take time to read all of the instructions contained in this manual to make certain your system is properly connected and functioning correctly.

TABLE OF CONTENTS

1. Introduction	Page 1
2. Table of contents	Page 1
3. Front panel control layout and description	Page 2
4. Low level (RCA interconnect) connection diagrams	Page 3
5. High level (speaker wire) connection diagrams	Page 4
6. Crossover setup and adjustments	Page 5
7. Specifications	Page 6
8. Limited warranty information	Page 7

FRONT PANEL CONTROLS



1. **Level control:** Adjusts the loudness of the subwoofer(s).
2. **High Pass control:** Adjusts the low frequency limit of the main speakers.

NOTE: Only active when the LFX-1 is connected to preamp outputs and main amp. inputs of receiver, A/V processor, or amp/preamp (Page 3, Fig. 2). Range 50-150Hz.

Low Pass control: Adjusts the high frequency limit of the subwoofer. Range 50-150Hz.

4. **Audio/Video switch:** A three position switch to adjust the subwoofer low frequency equalization.

0db flat to 25Hz.
+3db slight video equalization of +3db @ 45Hz.
+6db moderate video equalization of +6db @ 45Hz.

5. **Phase Switch:** A two position switch 0 or 180 degrees.
6. **Power Switch:** Turns indicator LED on or off

LOW LEVEL
(RCA Interconnect)

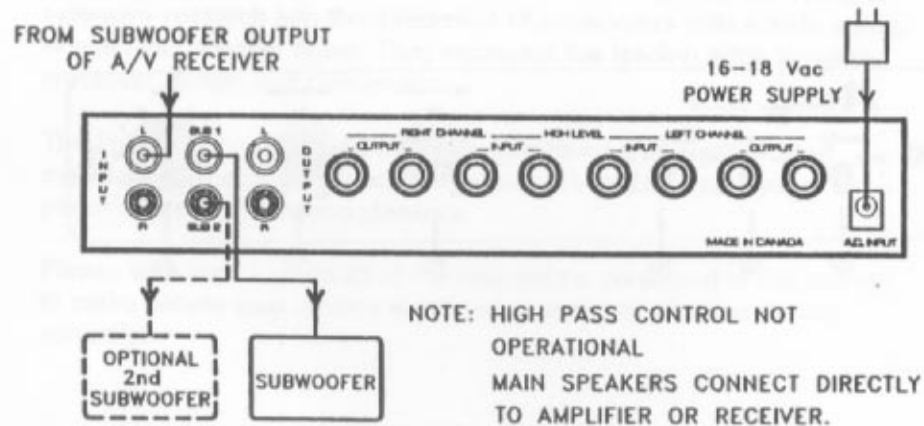


Fig.1

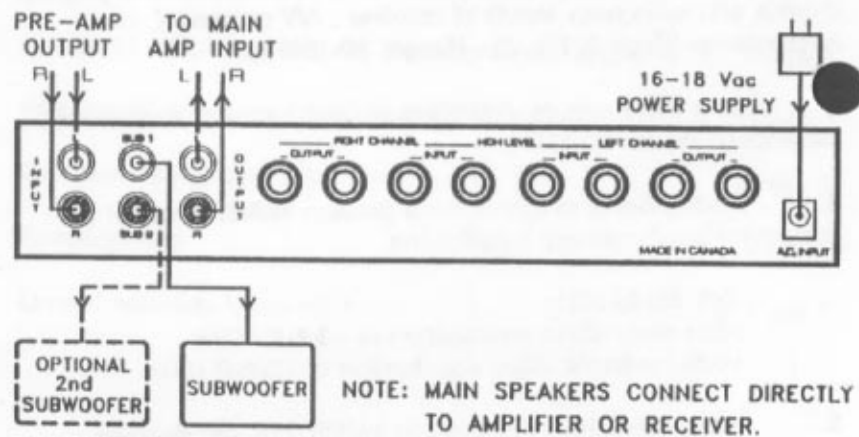


Fig.2

3.

HIGH LEVEL
(Speaker wire)

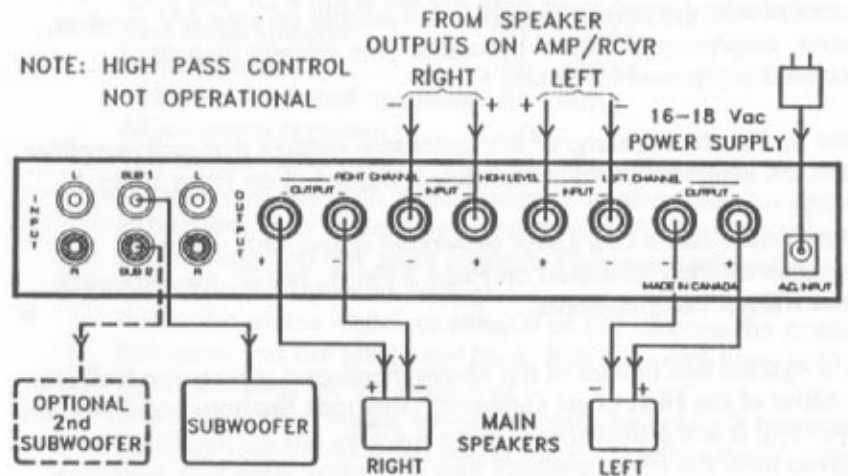


Fig.3

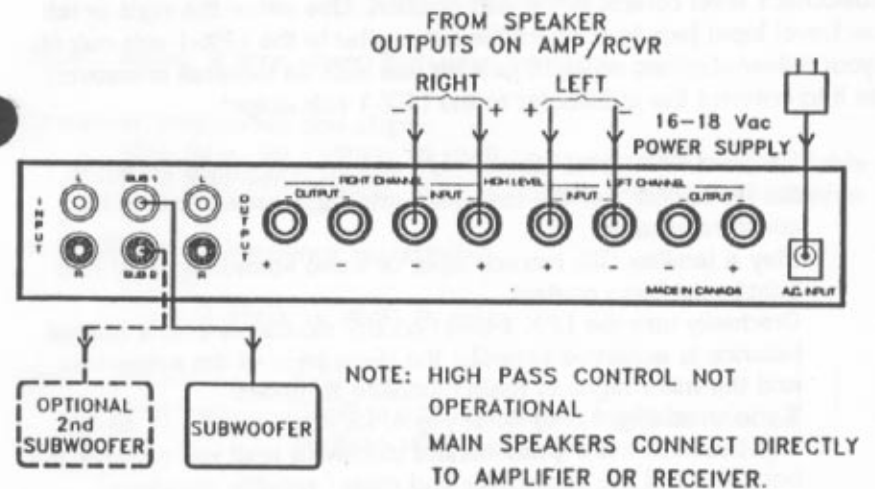


Fig.4

4.

CROSSOVER SETUP AND ADJUSTMENT

CONNECTION OPTIONS:

Before connecting the LFX-1 crossover to your system; you must first be familiar with the connection options available on your A/V receiver, receiver, amp/preamp, or A/V processor (see owners manual of associated equipment for details).

If your system has preamp or A/V processor outputs and main amplifier inputs, the best method of connection is illustrated on Page 3 Fig. 2.

If your system has a Low Level subwoofer output only use the connection method illustrated on Page 3 Fig. 1. NOTE: the high pass control will not be operational.

If your system has neither of the above mentioned connection facilities use either of the High Level connection methods illustrated on Page 4. NOTE: Fig. 3 is the best choice since the very low frequencies are removed from the main speakers thus protecting them from excessive cone excursion.

ADJUSTMENT:

If the your subwoofer has a built in Low Pass control make sure that it is set to the highest frequency possible (usually full clockwise). Set the subwoofer's level control to the mid position. Use either the right or left Low Level input jack to connect the subwoofer to the LFX-1 sub output. If your subwoofer has an input jack for use with an external crossover; use it to connect the subwoofer to the LFX-1 sub output.

1. Set the LFX-1 **level** control, **A/V** switch, and **phase** switch to the 0 position. Set the **low pass** and **high pass** controls fully counterclockwise.
2. Play a familiar CD, record, tape, or video soundtrack that has substantial bass content.
3. Gradually turn the LFX-1 **level** control clockwise until a neutral balance is achieved between the deep bass of the subwoofer and the mid / highs of main / satellite speakers.
4. If you used Fig. 1, Fig. 3, or Fig 4, for connection Slowly turn the LFX-1 **low pass** control clockwise until you achieve the best blend of the subwoofer and main / satellite speakers.

5.

5. If you used Fig. 2 for connection adjust the **high pass** control to achieve the desired low frequency cutoff of the main/satellite speakers. As a guide set the **high pass** control as follows:.....
Very small speakers 100 - 150Hz.
Small speakers 80 - 100Hz.
Mid sized bookshelf speakers ..60 - 80Hz.
All full range speakers 50Hz
The **low pass** control should be set at approximately the same frequency as the **high pass** control. You also have the option to fine tune your system by trying different frequency settings for the **high** and **low pass** controls. Please experiment to determine the optimum settings.
6. Adjust the **phase** switch to either 0 or 180; choose the position that gives you the fullest mid bass. If at this point there is too much mid bass repeat steps 4 or 5.
7. The **audio/video** switch should normally be set to 0; however, for added impact on video sound tracks try either the +3 or +6 switch positions.

SPECIFICATIONS

Type Active 2 way; stereo high pass mono low pass

Crossover frequencies and slopes:

High Pass 50 - 150Hz. @12dB / octave continuously variable
Low Pass 50 - 150Hz. @24dB / octave continuously variable

Audio/Video low frequency equalization

0 flat
+3dB @ 45Hz. or +6dB @ 45Hz.

Gain High Pass 0dB

Low Pass-90dB to +12dB with two inputs connected
-90dB to +6dB with one input connected

Power supply 16-18 Vac 200ma.

6.