ADCOM®

details you can hear

GFS-4

Audiophile-Grade Speaker Selector

OWNER'S MANUAL

GFS-4 SPEAKER SELECTOR
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Welcome

Please read these instructions carefully before connecting this device to your system. If connections are made incorrectly you may short circuit and damage your amplifier.

The GFS-4 is an audiophile-grade, loudspeaker switching system. During its design and construction, particular attention was paid to the critical switching points and connectors to ensure that no degradation of sound quality would occur during its use. Some of the outstanding features and attributes of the GFS-4 are:

-Extremely low internal resistance.

-The highest grade of solid brass, 5-way, gold-plated binding posts generally used in the most expensive instrumentation.

-Glass-fiber epoxy printed circuit board.

-Extra wide PC Board traces for minimum signal loss.

-Wide contact speaker selector switches capable of handling the full music output of high-power amplifiers with music peaks of up to 1000 watts.

-Oxygen Free Copper internal jumpers made with #12 AWG stranded cable.

SECTION 1

INITIAL HOOK UP

IMPORTANT NOTE: THE HOOK UP PROCEDURE SHOULD ONLY BE MADE WITH THE AMPLIFIER POWER OFF. PLEASE WAIT FOR AT LEAST TWO MINUTES AFTER TURNING YOUR AMPLIFIER OFF BEFORE PROCEEDING.

The GFS-4 Speaker Selector is designed to be wired between your amplifier or receiver and your speakers. The first connection to be made is from the Speaker Output Terminals of your amplifier to the 5-way binding posts on the GFS-4 marked INPUT FROM AMPLIFIER. Use only new wire (old wire may be oxidized causing unsatisfactory results), with as low an AWG (gauge) number as possible. The lower the AWG number, the thicker the wire. Speaker wires will have some means of identifying polarity: one side of the insulation will be marked with a line or ridge, or the wire will be of two different colors. in general, heavier wire will give better results, especially for high power systems and when long wiring distances are required. Do not use less than 18 gauge wire (the 20 and 22 gauge wire widely sold on spools as "Speaker Wire" is not adequate). Even heavier wire (16, 14, & 12 gauge) is recommended when feasible and well worth the slight additional cost. You may also wish to use one the several excellent brands of specialty speaker wires. Talk to your high-end audio dealer about wires that are comparable with your audio system.

As a rule, "+" goes to Red terminals and "-" to Black terminals. Left channel is Ch. A and Right channel is Ch. B when such indications are used.

Next hook up each speaker pair to the pairs of terminals marked OUTPUTS TO SPEAKERS 1 THROUGH 4, as appropriate, making sure to observe correct polarity and channel indications. The 5-way binding posts can be used with either double or single "Banana Plugs", stripped and tinned (or bare) wire, spade connectors, or pins such as those fitted to Monster Cable and others.

SECTION 2

HOW TO USE THE GFS-4

The GFS-4 has been designed to switch among four independent speaker systems. Each system or pair may be rated (typically) at either 4- or 8-ohms impedance and each channel may be driven at any reasonable power level up to its rated power handling limit. Keep in mind that few home speakers systems have sufficient power handling capacity to accept the full output of today's most powerful amplifiers.

To select a speaker system, simply press the button on the front panel corresponding to the appropriate pair of speakers. You may select more than one speaker system at a time by pressing additional buttons on the front panel. Please note, however, that not all amplifiers will be able to drive multiple speaker pairs. If you intend to operate more than two speaker systems at the same time, compute the load impedance using the formula below and make sure that your amplifier can handle such loads by checking the owners manual or with the manufacturer. The formula is used to compute the impedance (in ohms) of one channel only.

Formula:

$$\frac{1}{R_1}+\frac{1}{R_2}+\frac{1}{R_3}+\frac{1}{R_4}=\frac{1}{R_T}$$

Where: R_1 = Impedance (Ohms) of speaker #1
Where: R_2 = Impedance (Ohms) of speaker #2
Where: R_3 = Impedance (Ohms) of speaker #3
Where: R_4 = Impedance (Ohms) of speaker #4
Where: R_T = Total Impedance (Ohms) of system

Example: For 4 pairs of 8 ohm speakers the formula for each channel would be:

$$\frac{1}{8}+\frac{1}{8}+\frac{1}{8}+\frac{1}{8}=\frac{1}{R_T}$$

which reduces to:

$$\frac{4}{8}=\frac{1}{R_T}$$

take the reciprocal:

$$\frac{8}{4}=\frac{R_T}{1}$$

solve the equation:

$$2 = R_T$$

Total system impedance is 2 ohms:

If you own an amplifier that is stable to as low as 2 ohms (such as the ADCOM amplifiers) , you may safely operate 4 pairs of 8-ohm speakers or up to 3 pairs of 4-ohm speakers, at moderate levels, simultaneously. If you have a mix of 4- and 8- ohm pairs, generally it will be possible to operate any 3 pairs, at moderate levels, simultaneously. If extremely high volume listening levels are required, we recommend using only 1 or 2 pairs of speakers at a time.

SECTION 3

THE CARE AND FEEDING OF YOUR GFS-4

Great care has been taken by ADCOM to assure that your GFS-4 is as flawless in appearance as it is in its operation. The front panel is heavy gauge, high-grade anodized aluminum, bead-blasted for durability and beauty. If the front panel should become fingerprinted or smeared, it can be cleaned with a soft cloth dampened with a mild solution of detergent and water.

UNDER NO CIRCUMSTANCES SHOULD A STRONG OR ABRASIVE CLEANER SUCH AS SCOURING POWDER OR OVEN CLEANER BE USED ON ANY PART OF THE GFS-4.

SECTION 4

IF YOU HAVE A PROBLEM OR QUESTION

ADCOM has a Technical Service Department to answer all questions pertinent to the installation and operation of your unit. Please feel free to write or call us in the event of difficulty, and we shall endeavor to offer prompt advice. If your problem can not be resolved through our combined efforts, we may wish to refer you to an authorized repair agency, or we may prefer to authorize return of the unit to the factory. To aid us in directing you to a convenient Service Station, it would be helpful if you indicate which major city is accessible to your home. Please address inquiries to:

ADCOM TECHNICAL SERVICE DEPT.
11 ELKINS ROAD
EAST BRUNSWICK, NJ 08816
Phone: (908) 390-1130
Fax: (908) 390-9152

When calling or writing about your GFS-4, be sure to include the model number of your unit, as well as the date of purchase and the dealer from whom the unit was purchased. In the event that the unit must be returned to us for service, you will be instructed as to the proper procedure when you call or write for return authorization.

UNDER NO CIRCUMSTANCES SHOULD YOUR UNIT BE SHIPPED TO THE FACTORY WITHOUT PRIOR AUTHORIZATION, OR WITHOUT THE ORIGINAL CARTON AND FILLERS.

If the original shipping carton has been lost or discarded, or if the carton is not in good condition, a duplicate carton may be obtained from our parts department for a nominal charge.

Always ship PREPAID via UPS or other recognized surface carrier. DO NOT SHIP VIA PARCEL POST, since the packing may not withstand rough mail handling. We are forced to refuse many Parcel Post shipments since they arrive in such poor condition. FREIGHT COLLECT SHIPMENTS CANNOT BE ACCEPTED.

SECTION 4

ADCOM PROTECTION PLAN (U.S.A. ONLY)

ADCOM offers the enclosed LIMITED WARRANTY. Please read the details on the Warranty Card carefully to fully understand the extent of the protection offered by the Warranty, its limits, and what responsibilities are required of you in order to obtain its benefits.

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