



INSTRUCTIONS FOR THE OPERATION OF THE SERVO-STATIK I

With your purchase of the Servo-Statik I, you now possess the most advanced and sophisticated music reproduction system the world has ever known. This system offers features which indeed obsolete every existing speaker system and will do so for many years to come.

Design features in the Servo-Statik I system which contribute to its outstanding performance include feedback bass, all operational amplifier electronic crossover with separate level controls and electrostatic panels of new design used in a frequency range where they are best suited.

AMPLIFIER SELECTION:

In selecting amplifiers for the Servo-Statik I system, your dealer can give you excellent recommendations, however, a few cardinal points should be considered:

- a) Do not skimp on amplification; since this system demands the finest.
- b) At least 60 watts RMS should be used for the midrange sections. Amplifiers such as the Crown DC 300 (in the hysteresis mode), the SAE Mark III, the Marantz 16B, or any of the powerful tube amps will work admirably.
- c) The tweeter amplifier should be more modest in power output (20 to 40 watts per channel).
- d) Both midrange and tweeter amplifiers should have excellent stability characteristics and low distortion, especially into capacitive loads.

INSTALLATION OF THE SYSTEM:

- a) The switch on the rear of the bass amplifier/electronic crossover should be set on the "3 way" position. If there is no switch the unit will have already been set in the "3 way" mode. Use the separate midrange and tweeter outputs on the control unit.
- b) On the rear of the electrostatic screens,
 - 1) Connect the tweeter amp to terminals C and D (D being amplifier ground).
 - 2) Connect the midrange amp to terminals A and B (B being amplifier ground).
 - 3) This procedure insures proper phasing with the servo woofer. Do not worry about ground loops as terminals B and D are not tied together.

SYSTEM OPERATION:

The system can now be activated and, since the midrange level is pre-set, the bass control and tweeter level control on the front panel can be adjusted for best response in your room. The actual settings of the bass and treble controls are dependent upon the particular amplifiers selected for the midrange and tweeters. Setting ranges are 4-6 for the bass setting and 5-7 for the tweeters. If settings do not fall in these ranges, something in the system is non-operational. Check to see if both electrostatic screens are plugged into 110 volt outlets and are indeed receiving power. The screens may be left permanently connected to the AC (they draw only a small amount of current), however, some people will prefer to use a switched AC outlet or unplug the units when the speakers will not be used for extended periods of time.

The Servo Bass system can be placed almost anywhere in the room due to its non-directional character, however, most enthusiasts prefer the unit somewhere near the screens. Furthermore, avid organ music enthusiasts may prefer the Servo Bass system near a corner opposing the listening area in order to better couple the extreme low frequencies into the room.

The screens can be floor standing and may even be placed very close to the wall. The most preferable position, however, is to have the screens about one to two feet off the floor and about two feet from the wall.

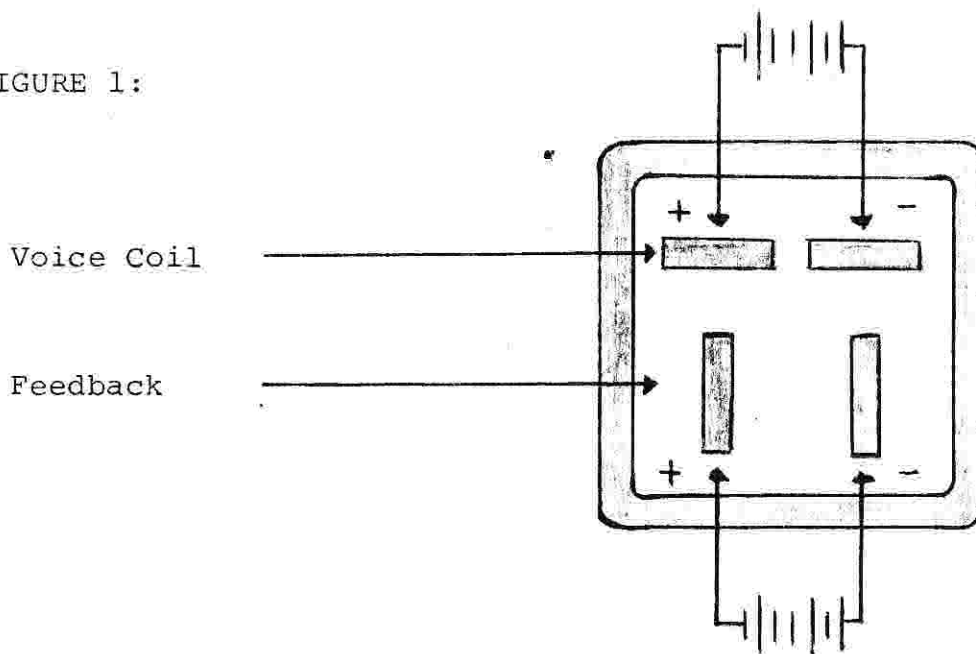
The Servo-Statik I is built for ruggedness and extreme reliability since all aerospace materials and circuitry are utilized throughout to give you trouble free enjoyment of the world's finest music reproduction system.



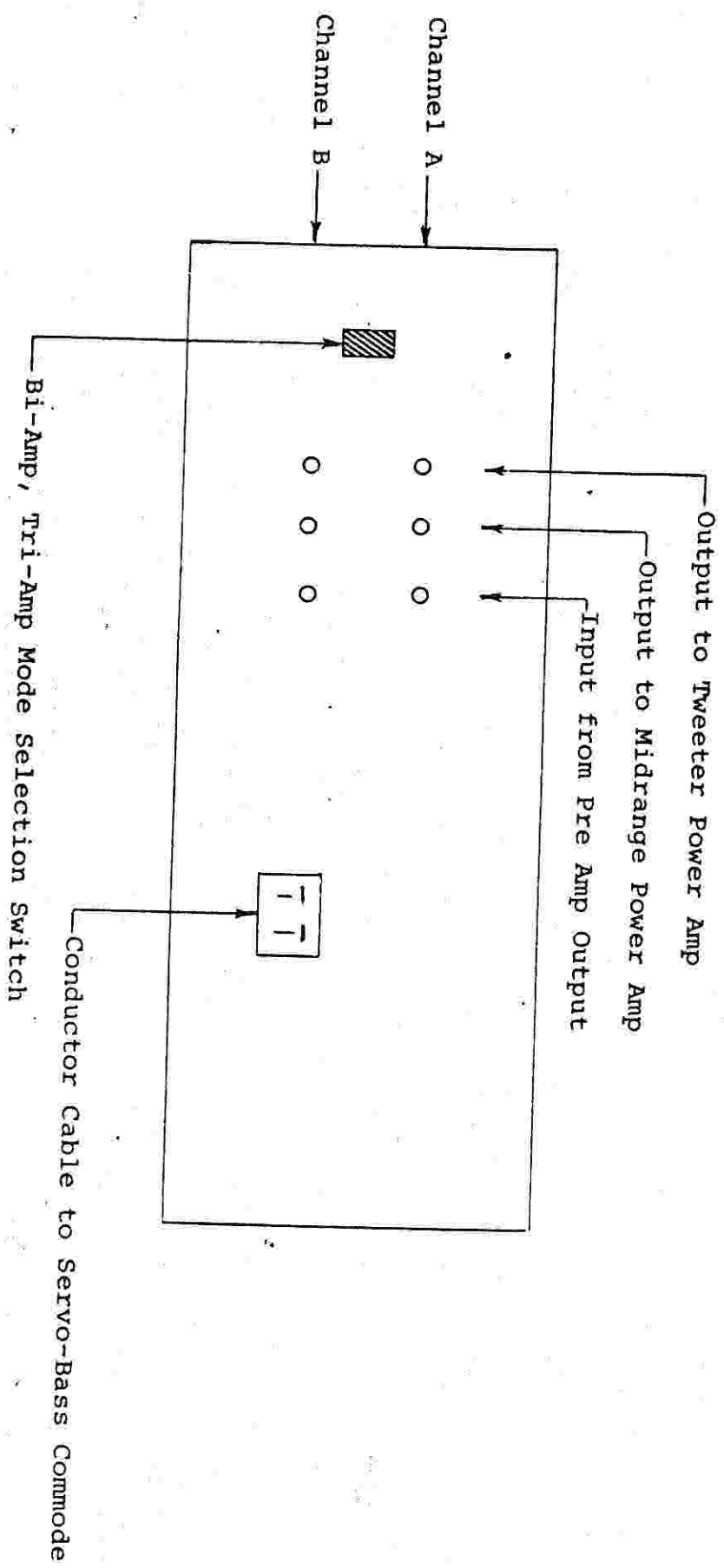
SERVO-STATIK I WOOFER PHASING

- STEP 1. Momentarily connect 1.5v flash light battery across voice coil as shown in figure 1, hooking positive side of battery to the indicated plus side. Cone should move out. (If it moves in, reverse voice coil wires on woofer.)
- STEP 2. Momentarily connect battery to feedback winding as shown in figure 1, hooking positive side of battery to the indicated plus side. Cone should move in. (If it moves out, reverse feedback wires on woofer.) Movement will be very small on feedback winding.

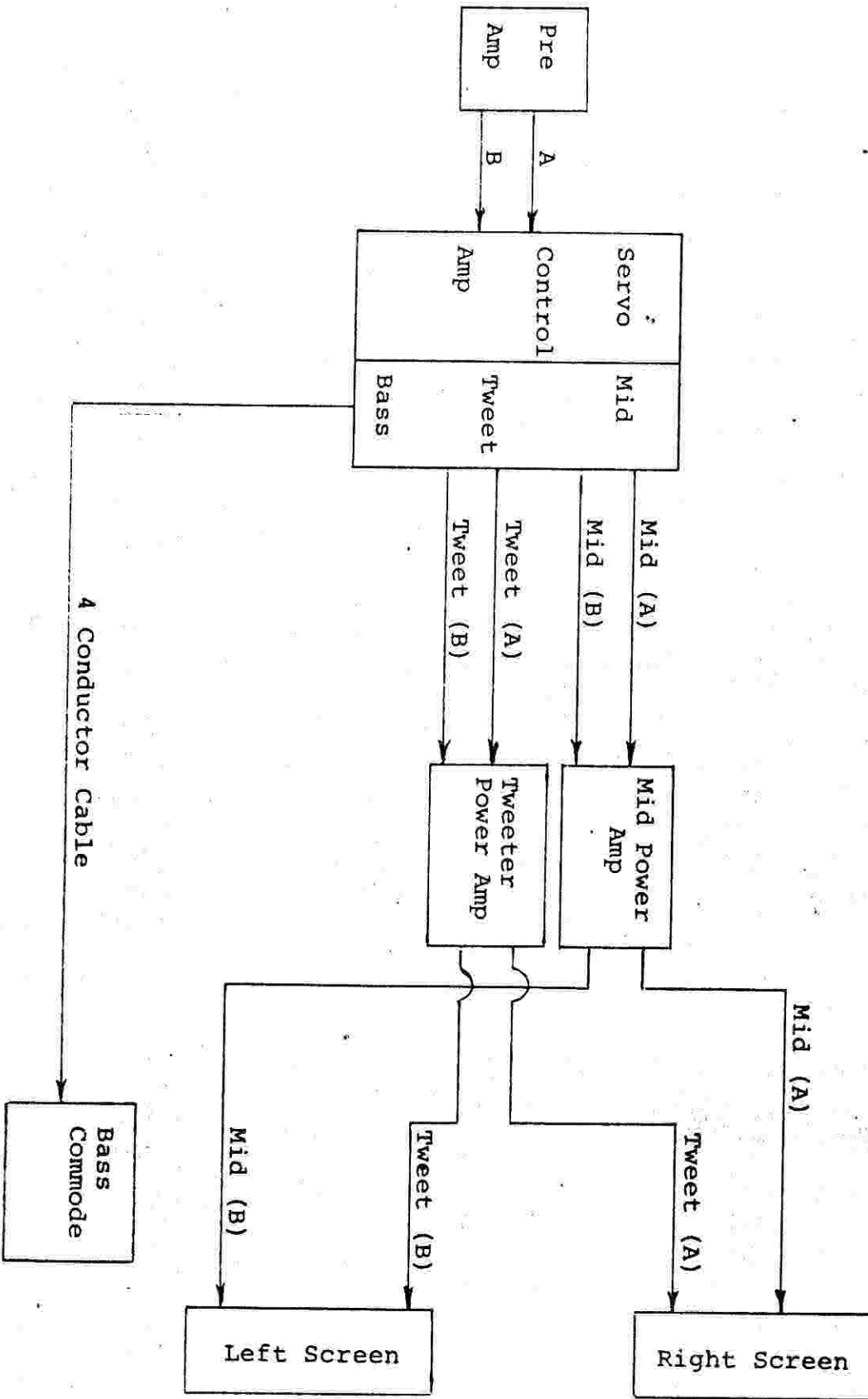
FIGURE 1:



REAR VIEW OF SERVO-CONTROL AMP



BLOCK DIAGRAM FOR TRI-AMPLIFIED SERVO-STATIK I SYSTEM



TECHNICAL SPECIFICATIONS

THE SERVO-STATIK I

SERVO AMPLIFIER:

110 watts RMS DC, all silicon transistors and integrated circuit operational amplifiers.

BASS SPEAKER:

18" reproducer with built-in feedback sensor utilizing a 26 pound magnet structure.

MINIMUM AMP POWER:

Midrange: 60 watts RMS/
channel

MAXIMUM AMP POWER:

Tweeters: 40 watts RMS/
channel

SYSTEM'S FREQUENCY RESPONSE:

10 Hz to 30 KHz \pm 2 db.

DISTORTION:

Less than 0.5% at any frequency between 20 Hz and 20 KHz at normal listening levels.

DISPERSION:

280° horizontal at 10 KHz;
75° vertical at 10 KHz.

ELECTRONIC CROSSOVER OUTPUT:

7 volts RMS on all three channels.

CROSSOVER FREQUENCIES:

120 Hz and 2.2 KHz.

CROSSOVER RATE:

12 db / octave.

CROSSOVER DISTORTION:

Less than .01% at 6 volts RMS.

INPUT IMPEDANCE:

40 K Ohm

OUTPUT IMPEDANCE:

Less than 1 Ohm.

ROOM PLACEMENT:

Not critical. (The electrostatic screens can be placed very close to the wall.)

Available in Contemporary Styling. Walnut or Brazilian Rosewood