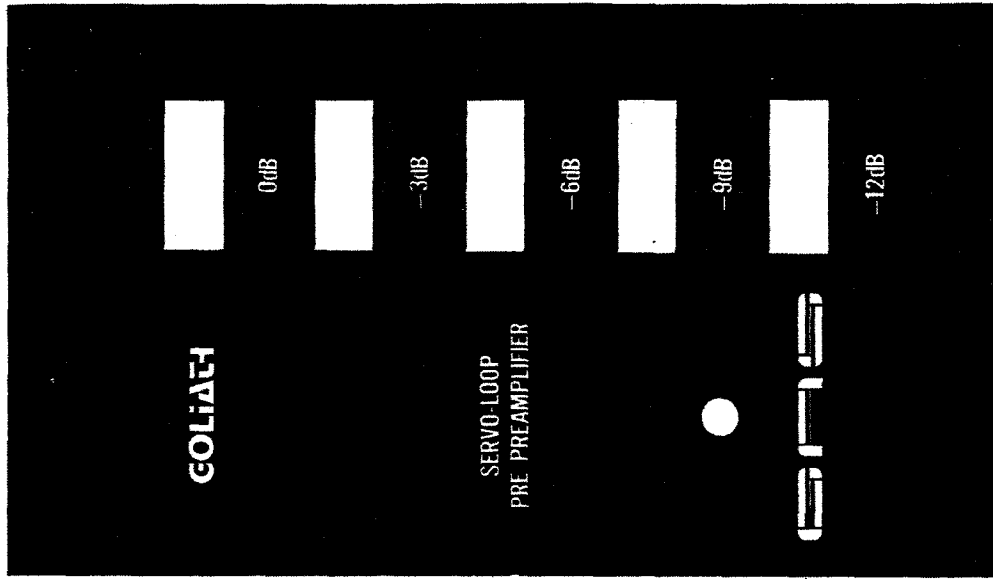


# GOLIATH



# OWNER'S MANUAL

# SPECIFICATIONS

Gain	29 dB (also selectable 26, 23, 20, 17 dB).
Noise	75 Nanovolts — 20 Hz to 20 KHz (referred to input.) 32 Nanovolts — 400 Hz to 20 KHz (referred to input.)
Distortion	Less than .01% (T.H.D.& IM) 20 Hz to 20 KHz (reference to 2 V RMS at THOEBE Tape outputs).
Max. input capability	200mV (at max gain).
Freq. response	20 Hz — 20 KHz + 0.1 dB.
Size	5-1/4" (133mm) H. x 2-1/4" (57mm) W. x 8" (203mm) D.
Shipping weight	5 lbs. (2.3Kg.)

**GOLIATH**

# INTRODUCTION

"Moving-coil" cartridges represent outstanding advances in the field of phono transducers. They do, however, have special amplification and load requirements which can only be met by transformers (which have many limitations) or by sophisticated electronics.

GOLIATH is the complementary electronic device developed by Great American Sound Co. which will realize the full potential of all moving-coil cartridges.

# UNPACKING

Before attempting to operate GOLIATH, please take a moment to inspect the unit carefully for any signs of shipping damage. Any such damage must be reported to your dealer immediately.

The packing material was carefully designed to protect GOLIATH during shipment and should be saved for future use. Any units returned to the factory for any reason must be in the original packing. If materials are lost or unusable, contact G.A.S. Co. for replacement before shipment.

# INSTALLATION

GOLIATH can be mounted in any position and placed where necessary within reach of the 5-foot power-supply cord. GOLIATH's front-panel dimensions and styling are designed to fit neatly on a shelf beside THOEBE. Before making a permanent installation, it is advisable that you read the special notes on 'Hum Reduction' in this manual.

## PRECAUTIONS:

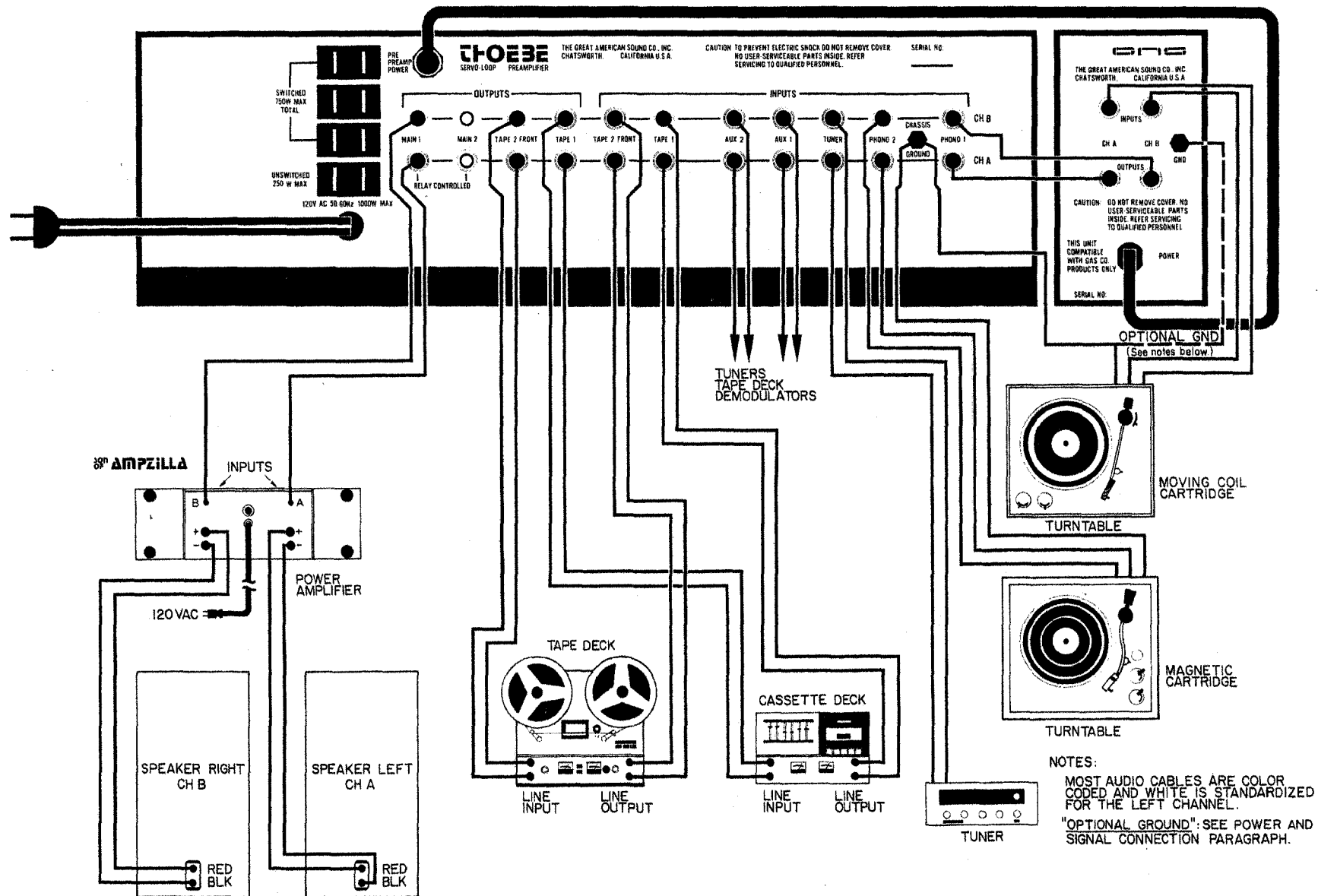
1. Never attempt to remove or install the power supply jack while THOEBE is on.
2. Do not change the gain of GOLIATH (pushbuttons) while THOEBE volume control is above zero.
3. Never connect the power-supply cable to any other power source. Evidence of such misuse will void the warranty.
4. To prevent possible shock hazard, do not change the power-cord plug to any other type of plug.

## POWER AND SIGNAL CONNECTION:

Refer to pictorial A

A power-supply jack for use with GOLIATH is located on the back panel of THOEBE. Plug in the power cable located on the rear of GOLIATH into this jack. This is the only jack which will properly accommodate GOLIATH's power-supply cable. Do not attempt to use the headphone or tape jacks found on the front panel of THOEBE or damage may result!

Four RCA jacks are located on the back panel of GOLIATH for necessary input and output signal connections. Connect the turntable outputs to the two jacks marked INPUT CH. A and CH. B. Connect the ground lead from the turntable chassis to the ground post on THOEBE. NOTE: Best hum reduction may be achieved with the turntable ground lead connected directly to GOLIATH's ground post. Use the two audio cables (furnished) to interconnect the two jacks on GOLIATH marked OUTPUT CH. A and CH. B to THOEBE phono 1 (or phono 2) CH. A and CH. B (See pictorial A). GOLIATH is now ready for use.



Refer to pictorial B

Operation of GOLIATH is automatic and requires no adjustment after initial gain setting.

#### **GAIN SELECT:**

There are five pushbuttons which control the gain of GOLIATH to match it to a wide variety of cartridge output levels. To select the correct gain setting for your cartridge, begin with the -12 dB select button depressed. Advance the THOEBE volume control until an average listening level is obtained. The indicator on the volume control should ideally be positioned at approximately one o'clock. If it is found to be positioned beyond one o'clock, lower the volume to minimum and depress the -9 dB select button. Repeat the above procedure in 3 db steps until the desired volume range is achieved. You need not worry about overloading the GOLIATH inputs since overload occurs at 200 millivolts. This level is beyond the reach of the highest-output magnetic cartridges.

#### **HUM REDUCTION:**

Probably the most frustrating problem with low-output moving-coil cartridges is hum. In most cases, it is the result of the relative position of the audio components. Some components are more prone to hum than others; furthermore, no cable made is entirely immune to radiated magnetic flux (hum). It follows then that all cables in the system must be oriented for the lowest level of hum.

The connecting cables from the turntable generally pick up far more hum than any other source. Therefore, these cables should be oriented for maximum hum cancellation. All wires carrying AC power should be located as far away from the turntable, preamp, and GOLIATH input as is physically possible. It sometimes is also helpful to twist the AC power cords to cancel out their flux fields. Under no circumstances should you connect the turntable ground wire or grounding post to a water pipe or similar ground. Your system may be grounded to earth, but only

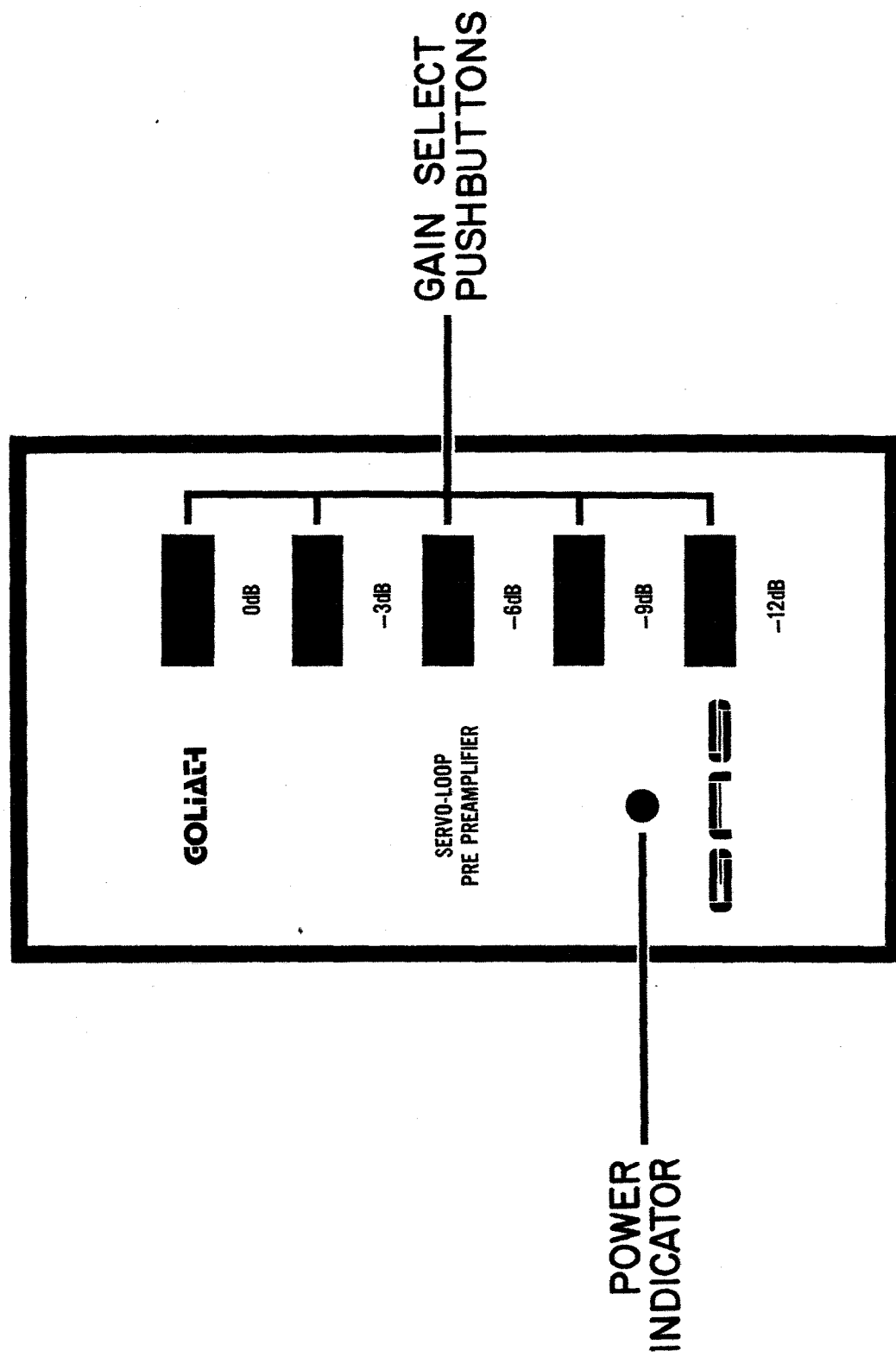
# OPERATION

through the power amplifier.

Although, it may provide an awkward installation, rotating the power amplifier at right angles to the preamplifier will alter the radiation field from its power transformer, which may be beneficial. Placing metal sheets between units will generally not aid in the reduction of hum because the magnetic flux field usually extends around the shield.

Hum can also be introduced by a poor cable-connector contact at the outer grounding fingers of its plug. Make sure that the outer fingers on the RCA phono plugs are squeezed together tightly enough to provide a positive ground connection. Try rotating the plugs to obtain the best possible ground.

In short, if hum is still encountered, further experimentation with audio cables, AC power cords, and the relative position of electrical equipment is the order of the day.



# FIVE-YEAR WARRANTY

THIS PRODUCT IS WARRANTED UNDER THE FOLLOWING CONDITIONS:

1. PRODUCT IS PURCHASED THROUGH AN AUTHORIZED G.A.S. CO., INC. DEALER.
2. WARRANTY COVERS NORMAL OPERATING CONDITIONS OF HOME USE.
3. WARRANTY PERIOD BEGINS AS OF DATE OF SALE PROVIDED THIS CARD IS FILLED OUT AND REGISTERED BY THE AUTHORIZED G.A.S. DEALER WHERE THE PRODUCT WAS PURCHASED. REGISTRY PERIOD IS 20 DAYS.
4. DELIBERATE MISUSE, MISHANDLING, FAILURE TO REPORT RECEIVING DAMAGED MERCHANDISE, OR UNAUTHORIZED TAMPERING OR MODIFYING TO THIS MERCHANDISE AUTOMATICALLY VOIDS ALL WARRANTIES.
5. WARRANTY PERIOD FOR ALL G.A.S. CO., INC. FACTORY WIRED PRODUCTS IS 5 YEARS COVERING BOTH PARTS AND LABOR. TRANSPORTATION CHARGES TO AND FROM THE DEALER OR FACTORY ARE EXCLUDED.
6. WARRANTY ON ALL G.A.S. CO., INC. PRODUCTS USED IN ANY OTHER FASHION OTHER THAN STATED ABOVE SHALL REDUCE THE WARRANTY TIME PERIOD AND OTHER CONDITIONS TO NEGOTIATIONS BETWEEN G.A.S. CO., INC. AND PROSPECTIVE USER.
7. THIS WARRANTY SHALL EXTEND TO EACH SUCCESSIVE OWNER PROVIDED G.A.S. CO., INC. IS NOTIFIED BY REGISTERED MAIL WITHIN 20 DAYS OF RESALE BY INITIAL OR PRESENT OWNER. THIS NOTIFICATION SHALL CONSIST OF DATE OF SALE, AMOUNT, NAME AND ADDRESS OF NEW OWNER.
8. G.A.S. CO., INC. GUARANTEES THAT ALL G.A.S. CO., INC. PRODUCTS ARE FREE FROM DEFECTS IN MATERIALS AND/OR WORKMANSHIP FOR THE REQUIRED WARRANTY PERIOD. OWNERS OF G.A.S. CO., INC. PRODUCTS ARE ENTITLED TO FREE PERIODIC CHECKS, AT EITHER DEALER OR FACTORY LOCATIONS, TO INSURE PRODUCT PERFORMANCE TO ORIGINAL SPECIFICATIONS.  
  
G.A.S. CO., INC. WILL REPAIR OR REPLACE ANY AND ALL DEFECTIVE PARTS AT NO CHARGE, PROVIDED ALL OTHER CONDITIONS OF THE WARRANTY ARE IN ORDER. THIS FREE CHECKOUT SERVICE IS LIMITED TO A MAXIMUM OF ONCE A YEAR, PER UNIT, PER CUSTOMER.
9. THIS WARRANTY IS NOT VALID UNLESS ACCOMPANIED BY SALES SLIP VALIDATION OR PROPERLY STATED INVOICE (COPY).



THE GREAT AMERICAN SOUND CO., INC.

80006-876  
ted in U.S.A.

20940 LASSEN STREET CHATSWORTH, CALIFORNIA 91311 (213) 998-8100



## GOLIATH

### Self-Power, RIAA-Equalized Moving-Coil Phono PreAmplifier

The attached owners manual for Goliath is applicable to self-powered Goliath II with the following exceptions:

1. (Pages 3 & 4) The outputs on Goliath II should be interconnected with audio cables to the AUX 1 inputs on Thoebe or AUX inputs on Thalia (not to the phono inputs as shown).
2. (Pages 3 & 4) The power supply cord on the Goliath II power supply module should be plugged into a switched 120V power outlet on the rear of the preamplifier (such as Thalia) so that it will be energized when the preamplifier power switch is turned on.
3. (Page 1) Additions to specifications:

Gain: 72dB

#### Power

Requirements: 120V 50-60Hz at 0.5 Amp

Size: 19 In. (47 cm.) W  
3.5 In. (9.3 cm.) H  
12 In. (30.1 cm.) D

#### Shipping

Weight: 12 lbs. (26.4 Kg.)