SETTING UP THE ESS amt I tower

You now have one of the world's most advanced loudspeakers, the ESS amt I tower. Because it utilizes the revolutionary Heil air-motion transformer, there are some steps to be taken in its installation and operation which are unlike speakers with which you may be familiar. Please read these instructions before proceeding to set up the ESS amt I tower.

The ESS amt I tower utilizes the same driver elements as contained in the ESS amt I, the speaker system which introduced the unprecedented Heil air-motion transformer to the sound world and was immediately recognized as a major advance in loudspeaker design. The amt I tower, however, is capable of an extended low frequency response and provides a substantially increased range where its higher cost and greater size are not disqualifying considerations. The low frequency system of the ESS amt I tower is a complex, newly designed, full length transmission line labyrinth developed to exactly match the requirements of the woofer. The woofer is that of the ESS amt I whose sound character was painstakingly developed to provide a "seamless" crossover into the sound clarity of the Heil air-motion transformer. The transformer, as it is in the amt I, is allowed to radiate a full 360 degrees to retain its outstanding depth and accuracy of imaging. The result is an extremely wide range system whose capability extends from the deepest organ pedal to the shining ring of the triangle.

INSTALLATION

Carefully remove the amt I tower from its packaging and set it in the desired room location. All terminal connections and fuse locations are accessable from the rear of the unit.

Connect the RED input terminal post of the amt I tower to the "+" or red terminal of the associated amplifier or receiver. Connect the BLACK terminal post of the amt I tower to the "-" or black terminal of the amplifier or receiver. If you are setting up a stereo system, connect the amt I on your left as you face the loudspeakers from your listening area to the LEFT channel output of the amplifier or receiver, and the amt I on your right to the RIGHT channel output.

By unscrewing the large plastic portion of the terminal post on the amt I tower, plain wire may be secured without the use of attachment hardware. The use of dual banana plugs which are designed expressly for this type of connector is, however, strongly recommended. If you are not using connecting hardware be certain that no wire strand or end touches the adjacent terminal of the amt I tower for it will short the amplifier's output and activate its protective circuitry.

If you are setting up a quadriphonic installation, follow the connection instructions supplied with the associated electronics.

Number 16 gauge wire is recommended for most installations. Use a smaller wire (larger gauge numbers, such as 18 or 20) only for connecting amt I

towers 12 feet or less from the associated electronics.

ADJUSTMENTS

The brightness control allows three positions of high frequency response to match room acoustics. The NORMAL position gives a truly flat response and is suited for average furnished and draped rooms. The BRIGHT position increases the response of the Heil air-motion transformer by approximately 3 db and is suited for heavily draped and carpeted rooms. The SOFT position decreases the response of the Heil air-motion transformer by approximately 2 db and is suited for rooms having a minimum of draping and hard, sound reflecting surfaces. These recommendations are only general guides and final adjustments will have to be made on a basis of personal preference.

WARRANTY

The Heil air-motion transformer unit is fabricated in its entirety by ESS and is warranted to be completely free from defects in material and workmanship. Should such a defect occur while the amt unit is in the possession of the original owner, it will be repaired or replaced without charge for material or labor. Unauthorized removal of the diaphragm from the Heil air-motion transformer will void the warranty for the unit. The remainder of the Amt I tower system is warranted to be free from defects in material and workmanship for a period of five years. In this period such a defect will be rectified without charge for material or labor. These warranties do not cover accidental or intentional abuse or damage resulting from the failure or misuse of

associated equipment. The warranties must be registered by the return of the enclosed warranty card within 10 days of purchase.

CARE

The ESS amt I tower needs no more care than that normally given a piece of fine furniture. The grill may be vacuumed gently or brushed to remove dust and debris, while the wood surfaces may be cleaned with any commercial polish or dusting spray. Do not allow the spray to be directed toward the drivers beneath the grill. Do not use abrasive compounds or strong solvent cleaners on any portion.

The ESS amt I tower is made up of rugged, reliable, and adequately protected components. Used properly, it is practically ageless and will provide outstanding listening pleasure for a lifetime. We are certain that the ESS amt I tower will surpass your most demanding expectations and provide an exciting new revelation in sound as clear as light.

IMPORTANT

Amplifiers capable of 300 watts or more RMS power per channel have the capacity for destroying <u>any</u> loudspeaker system. When driven to excessive levels with these amplifiers, most loudspeakers will give sonic indication of approaching a danger level by an onset of distortion particularly noticeable as a "hardening" in the upper frequencies. Because of its unique and specific design for maximum dynamic (instantaneous) response, the ESS

amt I tower will not give this warning.

Therefore, amplifiers capable of 300 or more watts RMS power per channel (including the ESS 500 which is conservatively rated) should not be consistently operated at or near clipping levels into the ESS amt I tower even though the speaker gives no audible signs of distress. Because of the energy distribution in musical material, and the fact that when operated into a 4 ohm system such as the ESS amt I tower, an amplifier is capable of delivering far more than its 8 ohm rated power: 300 watts available at 8 ohms is equivalent roughly to 500 watts at 4 ohms. Meter operation on the amplifier can serve only as a guide as to actual energy delivered. As a rule of thumb: do not advance volume to the point at which instantaneous peaks reach 0 VU on the amplifier's meters.

Do not under any circumstances drive the system with sine wave signals.

The driver elements of the amt I tower are protected by two seperate fuses. The overall system fuse is located in the fuse holder mounted on the input terminal plate recessed in the back panel of the system. It is a 2 amp 3 ag fast blow fuse. If it should blow the entire system will fall silent. The Heil air-motion transformer is additionally protected by a lamp 3 ag fast blow fuse. This fuse is located in a "snap in" holder located directly to the rear of the Heil transformer. It is removed by reaching into the opening at the top of the back panel and snapping upward out of its holder.

If this fuse should blow the upper frequencies will be gone from the reproduced sound. DO NOT INTERCHANGE THESE FUSES OR REPLACE THEM WITH FUSES OF A HIGHER VALUE.

Failure to observe these precautions will be considered unreasonable abuse and will not be covered by the warranty.