

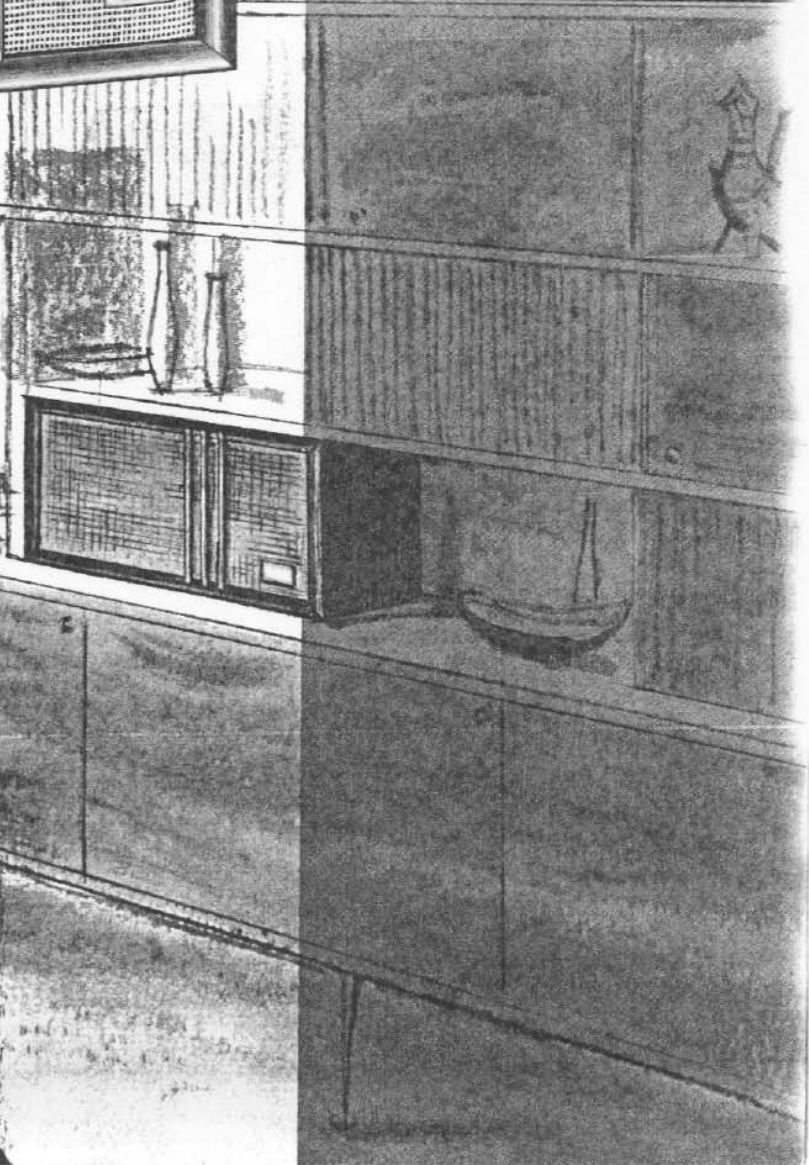
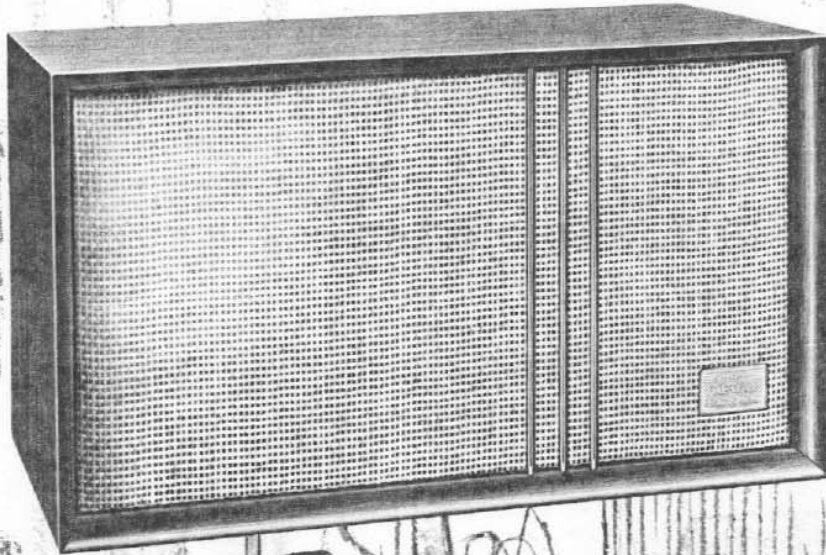


REGAL

LOW RESONANCE ULTRA-COMPACT LOUDSPEAKER SYSTEM

Electro-Voice
300

- SPECIFICATIONS
- INSTRUCTIONS
- APPLICATIONS



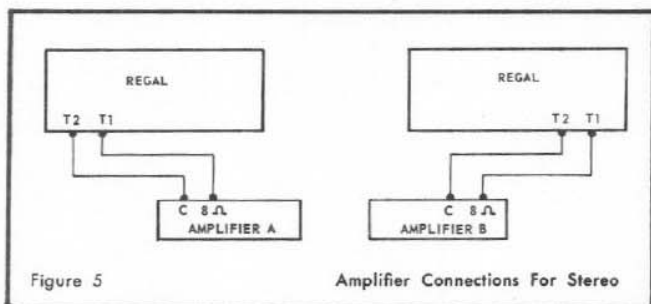
"t" sounds, at a volume level equal to that of your own speaking voice. Adjust the control until the "s" and "t" sounds are no more prominent in the announcer's speech than they are in yours; such an adjustment will generally be quite satisfactory. Too high a setting of the high-frequency control will be audible as a piercing, "metallic" sound.

The best guide, of course, to proper setting of the control on the speaker system, is a familiarity with the sound of live music. Most listeners will find it easy to balance the sound to conform to their personal tastes.

Stereo Operation

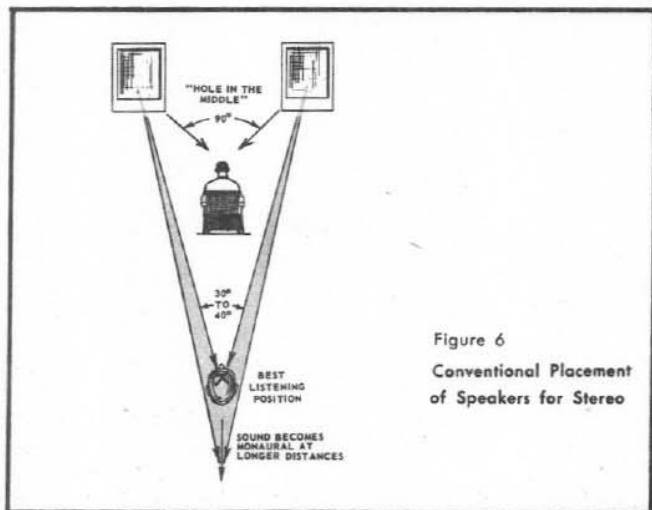
Your Regal 300 is designed for professional quality sound reproduction. The same performance features which make this unit outstanding for monaural reproduction will also give superb performance in stereophonic array.

The wiring connections for a pair of Regals in stereo are shown in Fig. 5. When connecting be sure to run the lead from T1 on the Regal to the 8-ohm terminal on the amplifier and from T2 to the COMMON terminal. With this connection both units will then be phased correctly.



Placement For Stereo

When arranging a pair of Regal 300's in stereo array, the units should be placed at positions which allow the listener to sit at the apex of a 30° to 40° angle, as shown in Fig. 6. This will provide the best stereophonic effect. If this placement is not possible, you may, by experiment, use room reverberations to advantage in finding other desirable positions.



Widening The Stereo Area — 3-Channel Listening

The natural extension of 2-channel stereo reproduction is to recreate completely the original performance suitably tailored to suit the individual taste and listening area. In stereo recording great pains are taken to capture every

realism of the music and to insure that nothing of the life and reality of the original performance is lost.

In modern stereo recording 3 microphones are normally employed to insure complete coverage of the sound stage. The sound from the microphone in the center is then apportioned to both left and right channels of recorded sound. From this master recording emerges the commercially available 2-Channel stereo tape or disc.

In these "two track" stereo tapes and discs the element of this third channel remains and can be reformed by means of the Electro-Voice XT-1 Stereo Mixer Transformer. XT-1 recovers the center sound from the left and right channels, adds them together in the correct proportions, and passes them to the central speaker. (Technically, the third channel signal consists of A plus B sum tones.)

Thus a still broader curtain of sound is created, giving good stereo over a larger area, even in listening positions quite close to the loudspeakers themselves. A second advantage lies in the virtually perfect re-creation of the original positions of the instruments.

Stereons

For those who have space or budget limitations, a Stereon 300 can be used with the Regal 300 for either two or three channel stereo. The Stereon 300, which matches the middle and upper ranges of the Regal 300, can be used with it by taking advantage of a natural phenomenon:

Since no directional effect exists in sounds below 300 cps, only one speaker system need be used for bass reproduction, if the bass signal from both channels is fed to it correctly. This was proved in 1934 by an acoustic engineer, Harvey Fletcher, who determined that sounds from about 300 cps down with a wave length of 3-2/3 ft. or more are not intercepted to any detectable degree by the head. The STEREOONS make use of this principle, when used with a full-range speaker which reproduces all the bass from both channels, while sounds above 200 cycles per second are fed through both channels in the normal stereophonic manner. The STEREOONS, then, permit easy and economical expansion to the stereo system.

The best approach to 3-channel stereo sound is obtained by using two Regal 300's with one Stereon 300. This arrangement permits the use of two full-range units, to achieve the fullest bass response. Good performance can also be achieved by using two Stereon 300's with one Regal 300.

Complete wiring diagrams for connecting the Regal 300 with Stereons and XT1 will be found in the instruction sheets accompanying the Stereon.

Speaker Repairs

Your Regal 300 system is guaranteed indefinitely against defects in workmanship and materials. Should Regal 300 become damaged or develop faulty operation from unusual conditions of employment, Electro-Voice maintains a complete service department to put equipment in factory-new condition. If it becomes necessary to return the equipment for repair, please write for authorization and shipping instructions.

Technical Service

The distributor from whom you purchased your equipment knows thoroughly the application of Electro-Voice products and high-fidelity techniques. His advice on the installation of Electro-Voice components and on the selection of associated high-fidelity equipment will be invaluable. Technical problems which cannot be answered locally may be referred to:

MANAGER, CONSUMER PRODUCTS DIVISION
Electro-Voice, Inc.
Buchanan, Michigan

When writing, please list the manufacturer and model number of all components used in your high-fidelity system.

Electro-Voice®

REGAL 300

INTRODUCTION

The new Electro-Voice Regal 300 is a 3-way low-resonance system which, despite its ultra-compact design, provides exceptionally wide-range response. It contains a special 12" woofer, the Electro-Voice 12WS, utilizing a five pound ceramic magnet; an 8" mid-range cone-type speaker, with a 1 lb. 6 oz. ceramic magnet; and a compression-type VHF driver. These features make it an excellent choice for either monaural or stereo reproduction.

Constructed of fine hardwood veneers, the Regal 300 is finished on four sides to allow use in either vertical or horizontal position. The nameplate may be rotated for vertical placement. The use of heavy, vibration-free $\frac{3}{4}$ " panels gives the Regal 300 unusual rigidity.

SPECIFICATIONS

Nominal Impedance: 8 ohms

Power Handling Capacity:

Sine Wave: 32-2500 cps., 30W., Max.; 2500-20,000 cps., 5W., max.

Program: Maximum undistorted output of 70 W. amplifier on complex program signal.

Frequency Response Range:

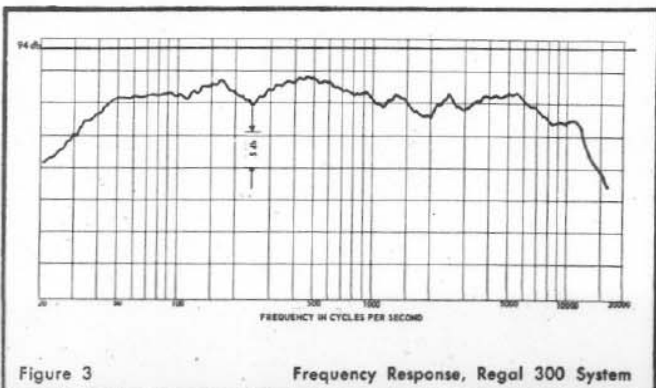
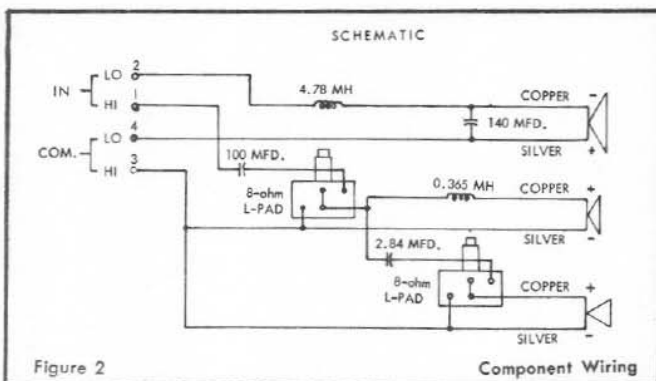
32-19,000 cps., \pm 5db.

Components:

12WS woofer, 8" extended range speaker, compression high-frequency driver, crossover network, and two level controls.

Size:

13" D., 14" H., 25" W.



Setting Up For Operation

Shipping Damage: Your Regal 300 is packed in accordance with all shipping requirements of the Interstate Commerce Commission plus extra protection. If shipping damage occurs, contact the carrier directly, requesting inspection and instructions. Use the date code of the speaker in your correspondence.

Date Code Number: The date code is noted on your warranty registration card. The number indicates type, style and date of manufacture of the unit. Always use this number in your correspondence.

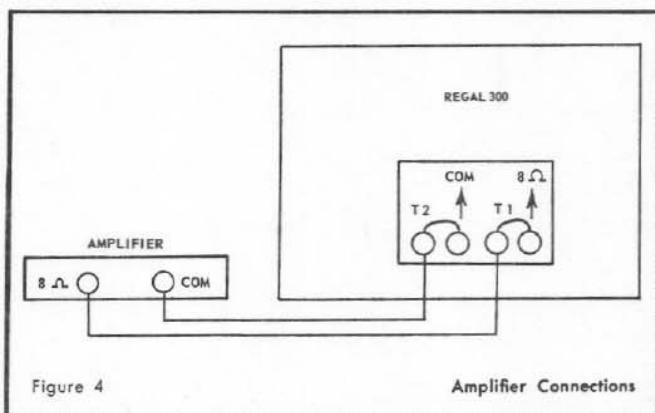
Warranty Card: To register your Regal 300, fill out the Warranty Registration Card and send it to the factory within ten days after your purchase. The Warranty Card will also put you on the Electro-Voice mailing list for future technical publications.

Placement

Nearly any speaker system will sound best if it is placed in or near the corner of the room in which it is to be used. This positioning provides the best coupling between the speakers and the air in the room, the corners and walls acting as a large "horn" for the sound. The small size of the Regal 300 also makes it ideal for bookshelf placement. Best height is at the listeners ear level.

Connections

Connection of your Regal 300 to the amplifier should be made with No. 18 or larger wire (Common lamp cord is good). If you wish to run the lead behind a moulding strip or under a carpet, use 300-ohm TV twin lead. Connect to the 8-ohm and common taps on the back of the amplifier. Be certain that these connections are secure. Jumpers should be left in place unless unit is used for stereo reproduction with E-V STEREO 300 "add-on" unit. Specific instructions will be found with the STEREO 300.

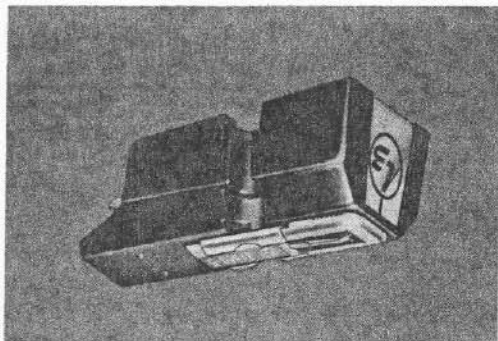


Level Controls

Your Regal 300 is equipped with two controls, a treble array adjustment and a brilliance control, both of which are on the rear panel. Set treble array fully clockwise unless the unit is to be matched in a stereo arrangement with a speaker of differing efficiency. (If used with Stereon 300's in 3-channel stereo, full instructions for setting will be found on the Stereon 300 instruction sheet).

Brilliance control setting should usually be at "normal," but this may be adjusted to suit the acoustics of the room in which it is used. A simple, convenient way to adjust the high-frequency level control is to tune in a live FM broadcast and listen closely to the announcer's voice, particularly the "s" and

HIGH FIDELITY ACCESSORIES SUGGESTED FOR USE WITH THE REGAL 300



For more than 35 years, Electro-Voice has been a leader in the development and manufacture of dynamic microphones and loudspeakers. Why then, with this extensive experience in designing and producing electromagnetic devices, is Electro-Voice introducing the new Magneramic 31 Series stereo cartridge using ceramic elements?

The reason is that Electro-Voice is genuinely convinced that a precision ceramic cartridge is the finest type that can be made today . . . definitely superior to the magnetic type. The superiority of the Magneramic 31 is demonstrated in these three areas:

(1) *Greater Flexibility* — The 31 Series cartridge will operate perfectly at any stylus pressure from 2 to 20 grams. The same stylus assembly can be used for operation of both turntable and record changers; performance need not be compromised by using a special, stiff stylus assembly for record changers. Record wear is the only criterion in setting stylus pressure — cartridge operation is not affected. Thus, when converting from a changer to a turntable, or vice versa, replacement of the stylus assembly is not necessary when using the Magneramic 31.

(2) *Higher Output* — Along with the trend toward less efficient speaker systems, more amplifier power has become a necessity. While most stereo amplifiers are now designed with input sensitivities to match the typical 5 millivolt output of magnetic stereo cartridges, nearly all monaural amplifiers were designed for a least 10 millivolt input. These cannot be driven to full output with a magnetic stereo cartridge.

The Magneramic 31 develops a full 10 millivolt output and couples directly into any magnetic preamp unit. This higher output should be given special consideration by those planning to convert to stereo with existent monaural amplifiers.

(3) *Freedom from Hum.* — The increased amplifier gain required to drive low efficiency speakers coupled with decreased cartridge output has significantly increased system hum problems. Also, conventional methods of hum elimination used in monaural magnetic cartridges become difficult or impossible to apply to stereo magnetics. The Magneramic 31 completely eliminates these problems. It is non-inductive and has adequate output.

The Electro-Voice Magneramic 31MD7 cartridge directly replaces any monophonic or stereophonic magnetic cartridge now on the market. It feeds into the preamp input jack specified for magnetic cartridges and does not require adapter or circuit modifications.

SPECIFICATIONS — MAGNERAMIC 31MD7

<i>Response Range:</i>	20 to 15000 cps. + 2 db (Westrex 1A)	<i>Output:</i>	8 millivolts
<i>Compliance, Vertical:</i>	3.5 x 10 ⁶ cm/dyne	<i>Recommended Load:</i>	22,000 to 47,000 ohms (Magnetic phono inputs)
<i>Compliance, Lateral:</i>	3.5 x 10 ⁶ cm/dyne	<i>Elements:</i>	2, lead Zirconium Titanate (Ceramic)
<i>Isolation:</i>	28 db @ 1000 cycles	<i>Weight:</i>	8 grams
<i>Tracking Force:</i>	2 to 4 grams in transcription arms 4 to 6 grams in changer arms	<i>Terminals:</i>	4, standard .050" connectors
<i>Styli:</i>	.7 mil diamond	<i>Mounting Centers:</i>	Fits both 1/2" and 7/16"

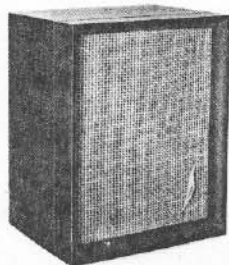
Audiophile Net \$24.00

Model XT-1 Stereo Mixer Transformer



For use with the Stereon 300 and Regal 300. Only one required for two- or three-channel stereo system.

Audiophile Net \$13.50



Stereon 300

A two-way system consisting of a RADAX extended-range speaker, together with a diffraction horn very high frequency driver. Operates with the Regal 300 in two- or three-channel stereophonic systems.

Audiophile Net \$69.50

(Prices above are subject to change without notice.)

Electro-Voice®

ELECTRO-VOICE, INC. / BUCHANAN, MICHIGAN