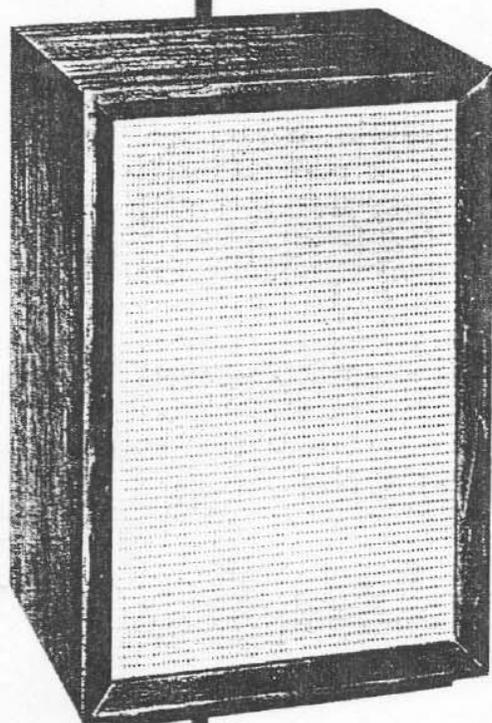


*Keep*

**Electro-Voice®**

**MODEL KD9 MARQUIS  
ENCLOSURE KIT**

**DO-IT-YOURSELF INSTRUCTION BOOKLET**



Horn loaded along-the-wall enclosure perfectly complements the famous Aristocrat

Designed for 12-inch or 15-inch coaxial speakers, or separate 2-way and 3-way systems . . . without need for modification

One full octave of added bass guaranteed over any commercially available bass reflex enclosure

Lowest price of any manufactured three-way system enclosure

Principle of Operation — Recognizing that the quality of a music reproducing system is proportionate to its size, Electro-Voice engineers have, through unique design, hidden the bulk of the acoustic system. The very walls of the room have been employed as an extension of this compact and beautiful enclosure. The result is a performance so striking that the first note heralds a vibrant new experience.

Correct propagation of the first three octaves, or those frequencies included between 16 and 128 cycles per second, requires that the cone of the low-frequency driver be loaded with an air column of great dimensions. For instance, the smooth reproduction of a 50-cycle tone requires that the cross-sectional area at the mouth of this column be a quarter of its wave length or 28 square feet. At 30 cycles this dimension is 78 square feet. It is quite apparent that a horn this size would never fit in a living room.

Electro-Voice's folded horn principle is our engineers' answer to the problem. It employs the walls of the room as an extension of the horn throat, and effectively extends the bass range by concealing an exponential horn in a cabinet of reasonable dimensions. The size of the horn, and therefore the lower limit of the reproductive range, is as great as the size of the room.

Through these means the MARQUIS delivers program material of remarkably wide range, virtually peak-free and fully powered. The MARQUIS generates treble and bass tones at full efficiency with purity never attained before in the living room.

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## SHIPPING DAMAGE

Your kit is packaged in accordance with all shipping requirements plus a long margin of extra protection. When shipping damage occurs, contact the shipper directly, noting the extent of and description of the damage. Always use the serial number of the kit in your correspondence.

## REPLACEMENT PARTS

Where the need exists for replacement of defective or missing parts, contact your Electro-Voice distributor. He requires only your record of purchase and the serial number of your KD kit. With these, prompt replacement can be effected.

## SERIAL NUMBER

The serial number is noted on the yellow tag in your kit. The serial number indicates type, style, date of manufacture and numerical sequence of the enclosure. Staple the yellow tag to the back of the assembled enclosure for permanent record.

## WARPED WOOD

is no cause for great alarm. A warped piece of wood is easily aligned. Warpage that takes the shape of a gentle curve is corrected easily in the assembly. Work from one end to another when joining slightly-warped pieces.

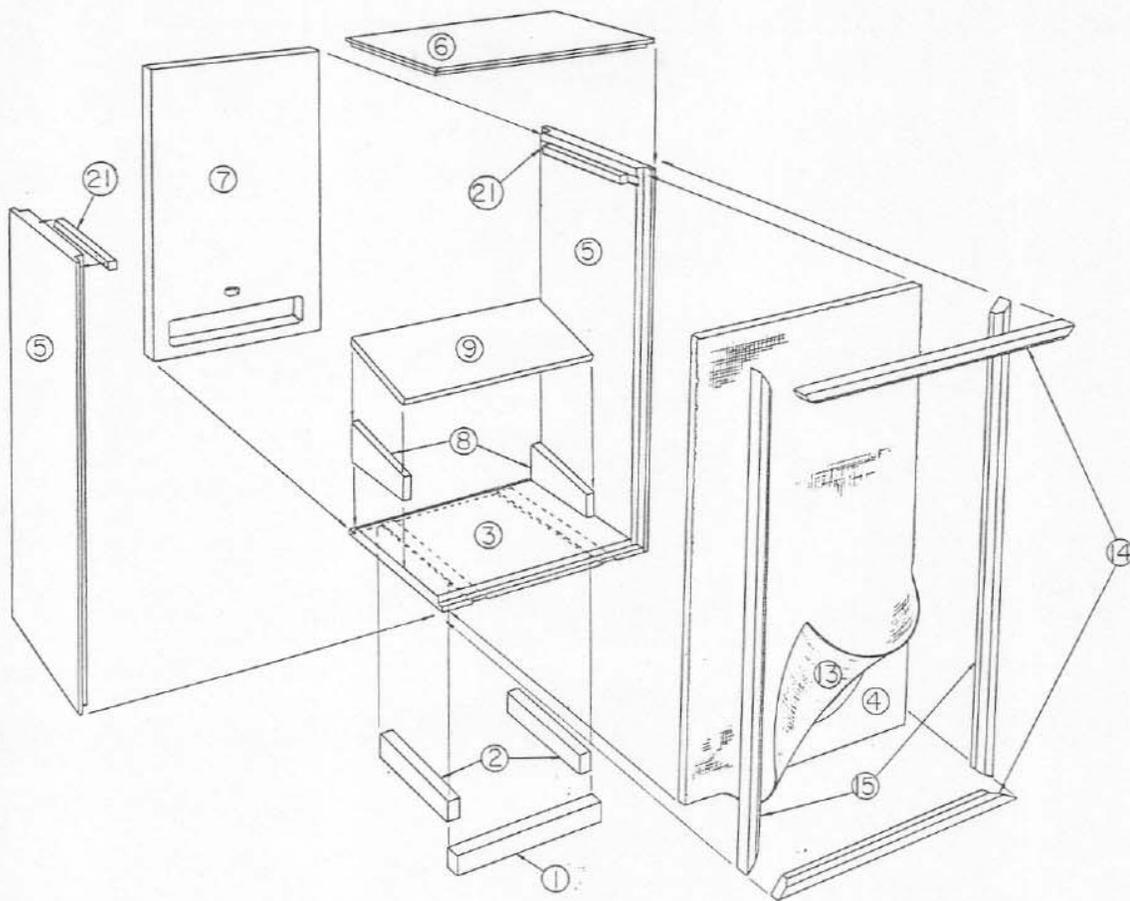
## CABINET WOOD VENEERS

are easily dented or nicked. A marred surface is painfully obvious after the cabinet is finished. Work with fine veneers as carefully as with glass. When dents or marks appear, dampen slightly the dented area and allow to dry. As the wood swells and dries, your dent will disappear.

## BEFORE BEGINNING ASSEMBLY

- 1 — First check off the contents of your kit against the Packing List. All major parts are stamped with number and description. Compare the major parts with the exploded perspective on the next page, to become familiar with their relative positions in the assembly.
- 2 — You will need a phillips-head screw-driver, or an automatic ("Yankee") screw-driver if you want to save time and labor. You'll also want some beeswax or soap for lubricating the screws; this makes assembly much easier and at the same time tighter. A tack-hammer or a stapler is needed for mounting the Grille Cloths. While some other tools may be needed for mounting the speaker system components, these should prove adequate for assembling the cabinet.

- 3 — You should have more than enough glue. In most cases a bead-line on both joining surfaces will be plenty. If you pull joints tight enough to force glue out the seams, be sure to wipe it off the exterior of the cabinet immediately. (If it dries there, the wood will not take stain in that spot). The setting time is twenty to thirty minutes, and screws should be pulled tight immediately after the glue is applied. Joints should not be moved, hammered on, or otherwise disturbed while glue is setting.
- 4 — Your Marquis kit has been sub-assembled by glueing and nailing the cleats into position. This will assure a tight fit and a sound cabinet; your greatest concern should be pulling the joints tight enough to prevent air leaks. The parts in your kit are identical with those used in finished production models; on the care with which you assemble and finish them will depend the degree to which your Marquis will match up to the factory model.
- 5 — If you plan to install the AK6 brass grille kit over the grille cloth, wait until after the finish coats are dry on the cabinet. Then remove the molding, tack the grille in place on the Front Baffle, and carefully replace the molding.



MODEL KD9  
EXPLODED VIEW

PACKING LIST

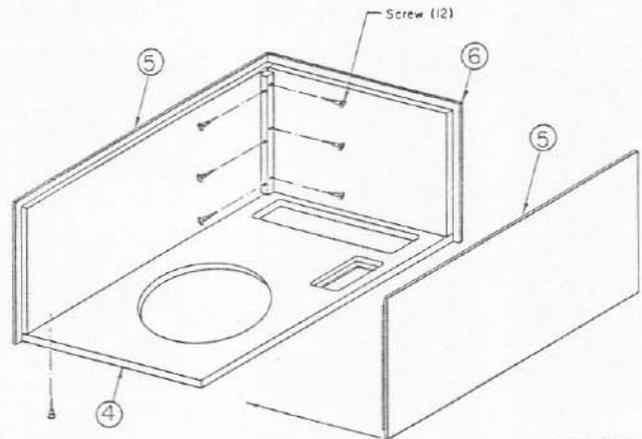
Part Number	Description	Quantity Supplied	Item	Quantity Supplied
1	Front Leg	1	Furniture Glides	4
2	Side Leg	2	Screws: #7, 1 1/4" flathead phillips, wood	73
3	Cabinet Bottom	1	Threaded Shank Speaker Screws:	
4	Speaker Mounting Board	1	8-32 x 1 1/4"	4
5	Side Panel	2	10-32 x 1"	4
6	Cabinet Top	1	10-32 x 1 1/2"	4
7	Back Panel	1	10-32 x 2"	12
8	Horn Baffle Block	2	Washers: #10 flat steel	12
9	Horn Baffle	1	#8 flat steel	4
10	Tufflex Insulation, 11" x 21"	2	Nuts: 10-32 hex	20
11	Tufflex Insulation, 11" x 16"	1	8-32 hex	4
12	Rubber Stripping, 125"	1	Plug Buttons: #6 Brass Cup	2
13	Grille Cloth	1	Tacks: #3, Carpet	60
14	Top and Bottom Molding	2		
15	Side Molding	2	Additional:	
16	MF Port Reducer	1	Glue, polyvinyl resin emulsion, "Elmer's"	
17	MF Port Cover	1	Serial Number Card	
18	MF Horn Clamp	2	Guarantee Card	
19	HF Port Cover	1	Decal	
20	12" Speaker Adapter Ring	1		
21	Cleat	2		

## ASSEMBLY

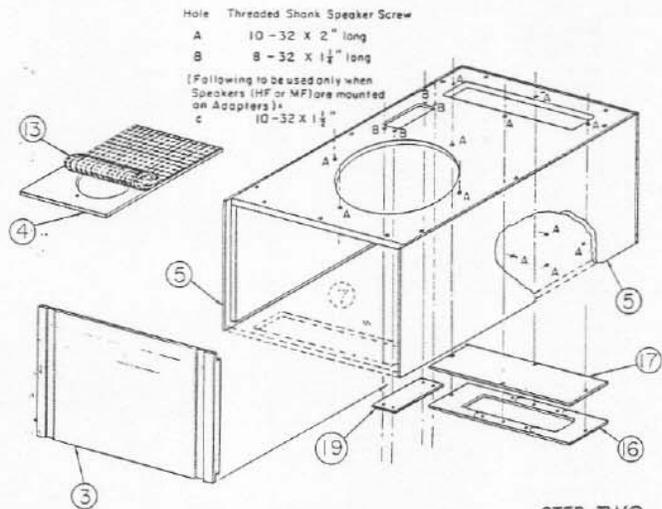
It's suggested that you "dry fit" the kit (assemble without glue or screws) before final assembly to familiarize yourself with the construction procedure.

### STEP ONE

Apply glue to the recess on the inside face (not to the recess on the edge) of a *Side Panel* (part 5) and install a *Cleat* in the center of the recess as shown. In a similar fashion install a *Cleat* on the other *Side Panel*. Screw tight. Lay the *Speaker Mounting Board* (part 4) face down as shown; this is to be used as a square in forming the cabinet. During all gluing operations, be careful that no glue gets on surfaces to be finished. Any accidental glue reaching these surfaces should be removed immediately with a damp cloth. Hold the *Cabinet Top* (part 6) on its long side and fit one *Side Panel* (part 5) against it as shown. Apply glue to the joining edges, and drive the screw about halfway into part 6 through the cleat on part 5. Carefully invert the assembly of parts 5 and 6 and put the *Speaker Mounting Board* in place, making sure that no glue touches it. The larger of the two rectangular openings in the *Speaker Mounting Board* should be toward the top of the cabinet. While seeing that the inner surface of the recess on part 6 butts against the inside face of the *Side Panel* and that the front edges of parts 5 and 6 line up evenly at the corner, drive the screws through the *Speaker Mounting Board* and into parts 5 and 6, starting with the screws near the corner, squaring the assembly of 5 and 6 with the *Speaker Mounting Board*, and driving the screws halfway. Now invert the assembly and drive the screws through the cleat all the way into part 6. Stand the assembly so that the outer surface of the *Cabinet Top* rests flat on the work surface. Apply glue to the joining edges of the *Cabinet Top* and the other *Side Panel* (part 5), and fit the side panel into place. Remove, and check to see that excess glue is not reaching the *Speaker Mounting Board*. Refit the *Side Panel* and drive screws all the way into the *Cabinet Top* through the cleat on part 5.



STEP ONE

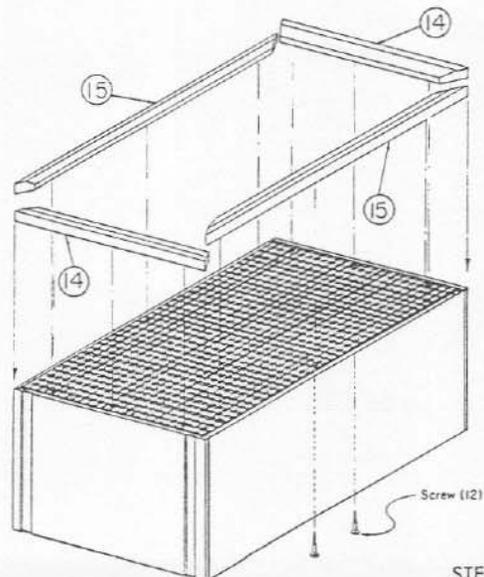


STEP TWO

### STEP TWO

Fit the long edge of the *Cabinet Bottom* (part 3) between the two *Side Panels* and against the *Speaker Mounting Board*. Make sure all parts fit tight and leave no gaps. Glue the joining surfaces of parts 3 and 5 (do not glue the *Speaker Mounting Board*) and drive screws into the bottom edges of the *Side Panels* through the holes provided in the *Cabinet Bottom*. Screw *Back Panel* (part 7) into place (rectangular opening in part 7 toward the bottom of the assembly) temporarily (do not glue) to keep assembly square while *Speaker Mounting Board* is being glued permanently in place. Remove *Speaker Mounting Board*, apply glue, replace, and screw tightly into position. Drive *Threaded Shank Speaker Screws* firmly into appropriate holes in counter clockwise direction in *Speaker Mounting Board* as shown.

Fit the *Grille Cloth* onto the *Speaker Mounting Board* so that the pattern is squared and even; tack down along one edge with #3 tacks, every two to four inches. Stretch tight from this edge and tack down all around.



STEP THREE

### STEP THREE

Remove back panel. It is suggested that newspaper be mounted between the moldings and the *Grille Cloth*, to protect the *Grille Cloth* during finishing operations. Fit *Top Molding* in place with its thick edge flush with the outside surface of the cabinet top, and screw into position, driving screws from the inside of the cabinet, through the holes provided in the *Speaker Mounting Board*, and into the *Top Molding* (do not glue), checking continually as the screws are being driven to be sure of a neat fit. This is one of the most difficult steps in the assembly, and close attention should be paid to lining up these molding parts so that there will not be gaps at the corners. In a similar fashion, apply the two side moldings, and last of all, the bottom molding. In the event you do not have a satisfactory alignment of the molding frame with the cabinet, alignment can be corrected by removing the four pieces of molding and enlarging the diameter of the screw holes in the *Speaker Mounting Board* slightly. If the holes have to be made larger than the screw head, then round head wood screws  $1\frac{1}{4}$ " long backed up with #10 flat steel washers will cover the enlarged hole. Replace molding and adjust for best fit. If it is necessary to perform this operation be certain to mark the moldings in order that they will be returned to their original place.

### STEP FOUR

Position a *Horn Baffle Block* (part 8) with its rectangular corners downward and its shortest end toward the front of the enclosure, and its surface against the *Side Panel* (part 5). Butt its lower edge to the inside face of the *Cabinet Bottom* and bring its rear edge (having the two closest screw holes) flush with the inside back edge of the *Side Panel*. Apply glue and screw in place. In a similar fashion, install the other *Horn Baffle Block*.

Apply glue to the upper sloping edges of the *Horn Baffle Blocks*. Place the *Horn Baffle* (part 9) on the edges of the *Horn Baffle Blocks*, with its sharp angled edge facing upward and flush with the rear edges of the side panels. Secure with screws.

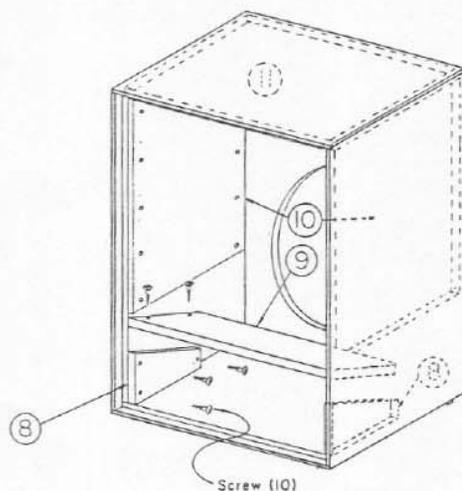
Using #3 Carpet Tacks attach *Insulation Pads* (parts 10 and 11), gauzed side against the panel, to the inside of the *Side Panels* and *Cabinet Top*.

### STEP FIVE

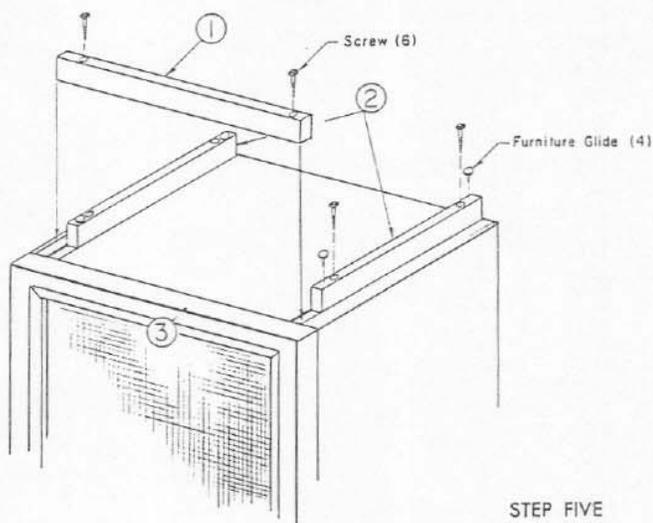
Identify the bottom of the three *Legs* (parts 1 and 2) by the countersunk holes. Apply glue to the top edge of the *Front Leg* (part 1) and screw in place flush with the edge of part 3, and with its ends flush with the outside edges of the recesses provided for the two *Side Legs*. Apply glue to the top edges of the *Side Legs*, fit into the recesses provided with one end butted against the inside surface of the *Front Leg*, and screw securely.

### STEP SIX

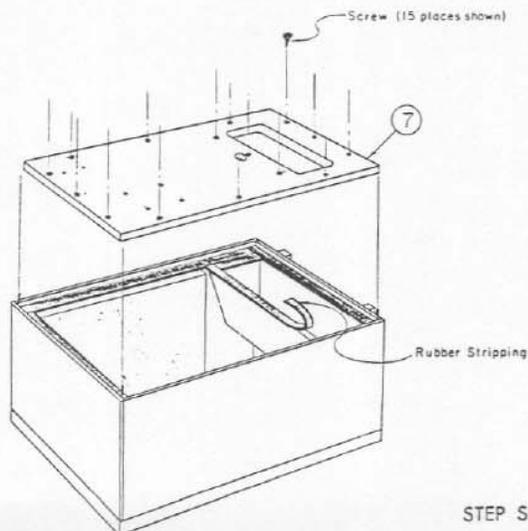
Install Speaker Components according to the instructions following. Lay cabinet face down, and apply rubber stripping to the rear edge of the *Horn Baffle* and to the inner face of the recess around the rear edges of the cabinet, so that when the back panel is screwed into position it will be drawn tightly against the rubber. Position the *Back Panel* on the rubber stripping, and screw tightly.



STEP FOUR



STEP FIVE



STEP SIX

## FINISHING

An Electro-Voice Finishing Kit offers you the direct route to skillful finishing. It contains all the finishes plus brushes and sandpaper and a set of instructions designed specifically for the job. There are a variety of finishes available; select yours at your Electro-Voice dealer.

It's usually advisable to spread a layer of newspapers or a drop cloth on the floor of your working area. Remove the grille cloths from the side ports if they've been mounted and check the paper cover on the front grille cloth for holes.

If you want to choose materials from your local paint store, follow these steps:

- 1 — Make yourself a sanding block by tearing a piece of sandpaper into quarters and stapling or tacking it around a small block of wood about the size of the Tweeter Port Cover. This will help you to avoid sanding too deeply on the edges, which is a major hazard in finishing work.

Work always with the grain. While sanding the cabinet down, pay close attention to marks and stains left over from the assembly process. Most will sand out rather easily, but if you have dried glue on the outside of your cabinet you will probably have to do some touch-up work after staining. Sand these spots vigorously.

Check closely for open seams, also, and fill them with a brand of plastic wood that will take a stain. (Boyle and Midway Plastic Wood is one of these.) The excess can be sanded off a few minutes after application.

- 2 — If you've decided on a natural finish, you can go right on to the finishing coats at this point. (See step 4.) Otherwise, thin the wood filler to the consistency of heavy cream and brush it over a small area at a time. After about 15 minutes, when it begins to look dull, rub cross-grain with a rag to pack the filler into the wood and wipe off any excess. If let go too long, it will be difficult to rub out. Allow to dry overnight.

Find a clean lintless rag and rub your stain in cross-grain. Apply evenly and wipe off excess. In the EV Finishing Kit, the stain is in the wood filler.

Now, after the filler and stain are dry and imperfections are easy to pick out, you should do whatever touching-up is necessary. Use a tube of colored lacquer, a shellac stick, or whatever else your local paint dealer might recommend. Remember that dark spots will be much less apparent than light spots.

- 3 — The wood should then be sealed with shellac, about a 2-lb. cut, and allowed to dry for an hour or two. Then make a sanding pad with felt or hard rubber

wrapped in 7/0 sandpaper, or use a pad of #0000 steel wool, and rub the cabinet to an even texture. (The brush used for shellac should not be used again unless it is thoroughly cleaned; shellac will not mix with other finishes.)

- 4 — If you're not using a Finishing Kit, you should consult a paint store on selection of a varnish or lacquer for the finish coats, and follow directions on the can. Use a very fine (#000000) steel wool to rub out blemishes between coats. Pebbles and waves in the finish coats will now become particularly apparent; the trick is to rub these out without cutting through the finish coats. Varnish requires about 12 hours to dry between coats, and 48 hours for the final coat.

After finishing, the appearance of the cabinet can be improved by rubbing it down with fine pumice stone mixed with paraffin oil, or with 7/0 steel wool gauze. Rub gently and uniformly with the grain, and take special care with the edges of the cabinet to avoid cutting the finish. Clean with a soft rag and polish with an auto paste wax.

## FINISHING KITS



Electro-Voice finishing kits make it easy for you to obtain professional-like furniture finishes. These kits, prepared especially for the home finisher, are complete with stain filler, sealer, shellac, high gloss and satin varnishes, finishing paper, brushes and simple, easy-to-follow instructions. Available in the following finishes:

Model FK10—Walnut.

Model FK20—Cordovan Mahogany.

Model FK30—Fruitwood.

Model FK40—Cherry.

Model FK50—Golden Oak.

Model FK60—Ebony.

Net Each.....\$5.00

## DECORATIVE TRIM KIT

The addition of this custom grille will provide, for your enclosure, a smart, finished appearance to compliment any interior decor. Lacquered, antique brushed brass crossbar grille cut for sight-size.

Model AK6 Trim Kit. Net Each.....\$4.80

## LOUDSPEAKER INSTALLATION

Carefully lay the cabinet on its front and remove the *Back Panel* if already assembled. Remove the nuts and washers where you plan to mount components. In addition to the philips-head screwdriver, you may need a conventional screwdriver, a small crescent wrench, and longnose pliers.

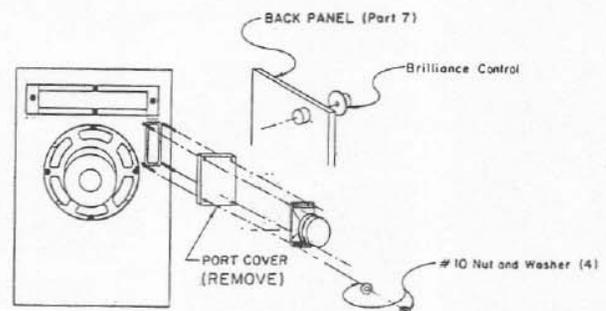
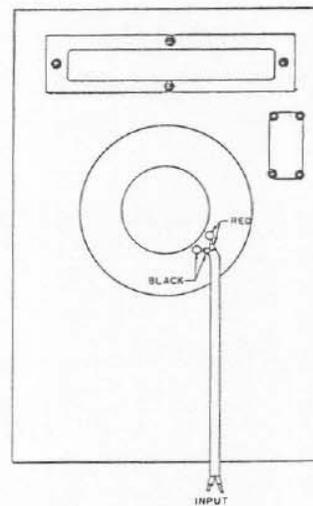
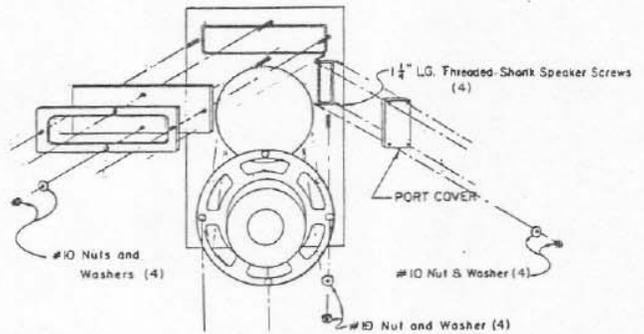
After the speaker or speakers are mounted, wire according to the diagram given. Remember that Red and Yellow indicate *Positive*, and Black and Green indicate *Common Return*. Follow the diagram and color code to avoid confusion.

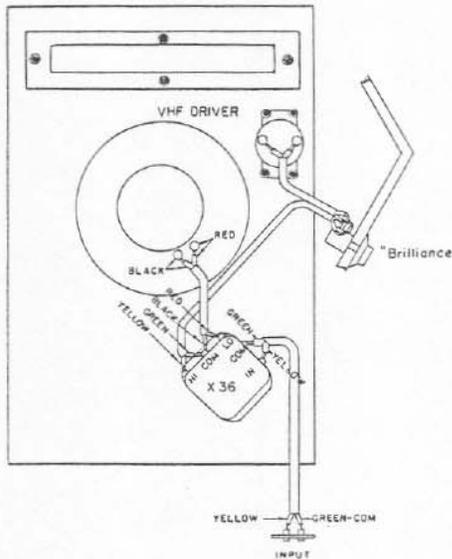
*The 15-inch Speaker* — Line up the mounting holes in the speaker rim over the bolts in the Speaker Mounting Board and very carefully lower it into place. Replace the washers and nuts and tighten firmly enough to prevent rattle but not so much as to bend the speaker frame. Before wiring, run the input lead to the speakers through the cutout in the Back Panel and tie a large knot just inside the cabinet to protect the speaker from tension on the wire.

If the smaller speaker ports are not to be used at this time, they should be masked over with the Port Covers as shown. The bolts used will serve to mount components added to the system later on.

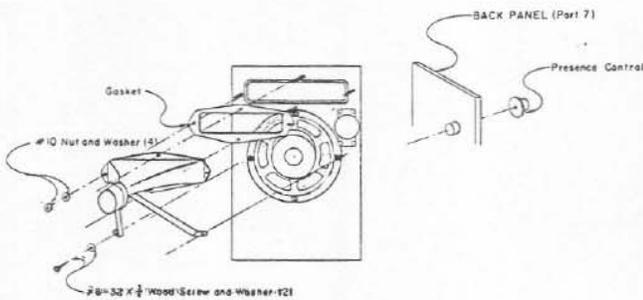
*The 12-inch Speaker* — Bolt the 12-inch speaker adapter ring (part 20) to the 12-inch speaker. Line up the mounting holes in the adapter ring over the bolts in the Speaker Mounting Board and very carefully lower it into place. Apply washers and nuts and tighten firmly.

*The High-Frequency Driver* — To mount the T35, discard the port cover. Set the tweeter down on the four bolts and replace the washers and nuts. Tighten to a firm fit.



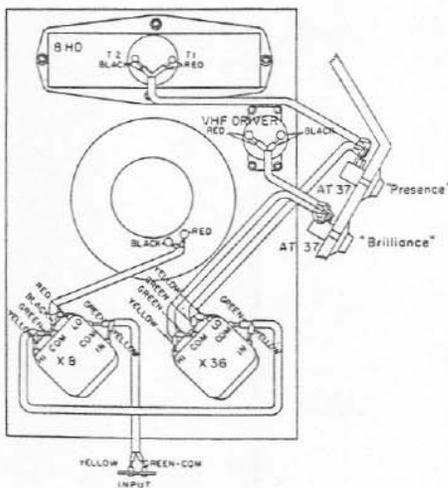


Mount the crossover over one of the pairs of holes provided on the *Back Panel*. The "Brilliance" level control is mounted in one of the pair of larger holes in the Back Panel, follow the instructions which accompany it. Plug Buttons will cap unused holes.



*The Treble Driver*—Assemble the driver and horn according to the instructions accompanying them. Bolt the two steel mounting straps to the base of the horn as instructed. Slip the 8HD mouth gasket and the 8HD horn onto the Threaded Shank Speaker Screws around the treble port, apply nuts, and tighten only partially. Attach ends of steel mounting straps to panel with wood screws supplied with 8HD mounting hardware. Tighten all around to a firm fit.

Mount the crossover on the other pair of bolts on the *Back Panel*. The "Presence" level control is mounted on the Back Panel next to the "Brilliance" control and in the same manner. Wire as shown in the diagram.



*The MR10* — Screw the MR10 to the MF Port Reducer (part 16). Bolt the Adapter Plate to the Speaker Mounting Board by means of the Shakeproof Screws which have been installed.

With the components mounted and wired, and the Front Baffle and Molding back in place, position the Marquis about three inches from the wall. Now, you can pause a moment to consider the product of your labor. You are listening to a loudspeaker system whose quality of reproduction comes straight from the Electro-Voice laboratory and factory, but for whose singular beauty you alone are responsible.

## SPEAKER SYSTEM EXPANSION . . . THE BUILDING BLOCK PLAN

The Electro-Voice Building Block Plan provides a step-by-step method for building from a single loudspeaker to a full three-way system. (The Building Block Kits come complete with driver, crossover, controls, wiring harness and instructions.) In this way, the development of your system is kept in stride with your budget, while assuring you properly matched components. And what's more important, you protect your first investment by building on it; any 12 or 15-inch Radax loudspeaker will become the woofer in the fully developed system. No matter how simply you begin, you build directly toward perfection . . . and without obsoleting existing components!

Electro-Voice manufactures a deluxe and an economy loudspeaker for every application. The deluxe loudspeakers for use in the Marquis are the 12TRX, 15TRX, SP12, SP15, BB2, and BB4; 12TRXB, 15 TRXB, the SP12B, SP15B the BB1 and the BB3 are the economy models. The primary difference between the two types is the magnet weight; the deluxe series offers highest efficiency, best damping and lowest distortion. The economy units offer comparable performance at lower cost. If you choose a deluxe speaker to start, then add deluxe Building Blocks; if you choose the economy loudspeaker the additional Building Blocks should be of similar quality. For example, with the economy SP12B, use the BB1 and BB3 for your additions to the system.

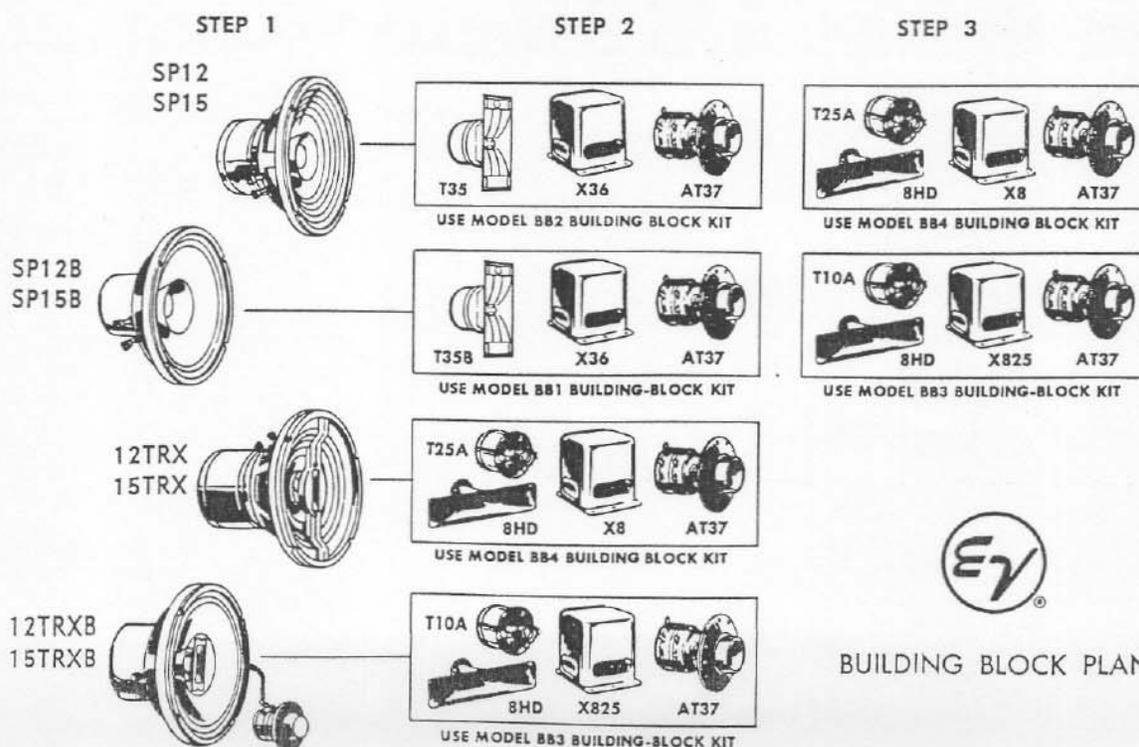
As a general principle, it is recommended that you start with the best full-range speaker you can afford, so that you can look forward to the best possible system. For a comparison, the SP12 and 12TRXB loudspeakers sell for approximately the same price. The 12TRXB, an

integral three-way speaker, will give better high-frequency performance initially. But the later addition of Building Block Kits to the SP12 will produce the ultimate performance possible from the Aristocrat enclosure.

The decision between coaxial and TRX 3-way speakers is simple. The performance of the 12TRX speaker, for example, is exactly the same as that of the SP12 and the BB1. The TRX speaker, which contains the VHF driver mounted on the same frame, is somewhat easier to mount but slightly more expensive than the combination of coaxial speaker and Building Block Kit. If you're starting your system from scratch, the coaxial speaker plus its companion BB Kit would be the wise choice.

In all instances the Building Block Kit containing the VHF driver should be the first addition to a coaxial speaker. This addition will result in greater efficiency from 3500 cps to beyond the limits of audibility, plus greater dispersion of the higher frequencies in the listening area. Reproduction in the upper octaves becomes silky smooth, free from distortion.

The final addition should be the treble driver Building Block Kit. This allows the Radax speaker to operate solely as a woofer, restricting its response to frequencies below 800 cps. The mid-range horn utilizes the diffraction principle of high-frequency sound dispersion through a solid 120° angle; molded of fiberglass, the horn is completely free of resonance. The audio range is thus divided for more efficient reproduction of each frequency section by more specialized components and both harmonic and intermodulation distortion are noticeably lowered.



BUILDING BLOCK PLAN

## FULL - RANGE LOUDSPEAKERS

### RADAX COAXIAL SPEAKERS

You step into a new world of listening pleasure, when you start with an E-V Radax coaxial loudspeaker. This economical way, you enjoy true high-fidelity reproduction of music . . . the full, deep, sonorous bass . . . the sparkling treble . . . the range and realism of the original performance.

The Radax extends both bass response and high-frequency reproduction in pleasing musical balance—insures improved coverage of the entire listening area—minimizes distortion.

This exclusive E-V development achieves highest efficiency with economy. Two separate coaxially-mounted cones, operating from a single voice coil, divide the audible spectrum. Each is specifically designed to reproduce its portion of the audible range. The large cone "woofer" provides maximum bass reproduction; the small cone gives effective high-frequency propagation. True mechanical crossover permits smooth transition and reproduction of lows and highs in proper phase and balance, without phasing dips at the crossover frequency. With the Radax, you have a coaxial two-way system that assures clean, sparkling, wide-range reproduction.

Electro-Voice 15-inch Radax Speakers are designed for use in the E-V Regency and other folded-horn enclosures. For the music lover who wishes to expand his system gradually by the "Building Block" method, these speakers adapt themselves perfectly as bass drivers to progression into superior E-V separate 2- and 3-way systems.

**Model SP15 Radax Super-Fifteen 15-inch Coaxial Speaker.** Response 30-13,000 cps. RETMA Sensitivity Rating 50 db. Resonance 35-45 cps. Program material capacity 30 watts, peak 60 watts. Damping factor in Regency: 1.0. Impedance 16 ohms. Mechanical crossover 3000 cps. 4¼-lb. magnet. Size: 15½" diam. x 9" overall depth. Baffle opening 13½". Shpg. Wt. 38 lbs. Net Each.....\$89.00

**Model SP15B Radax Fifteen 15-inch Coaxial Speaker.** Response 30-13,000 cps. RETMA Sensitivity Rating 47 db. Resonance 38-48 cps. Program material capacity 30 watts, peak 40 watts. Damping factor in Regency: 2.0. Impedance 16 ohms. Mechanical crossover 3500 cps. 1½-lb magnet. Size: 15½" diam. x 7½" overall depth. Baffle opening 13½". Shpg. Wt. 15 lbs. Net Each.....\$43.00

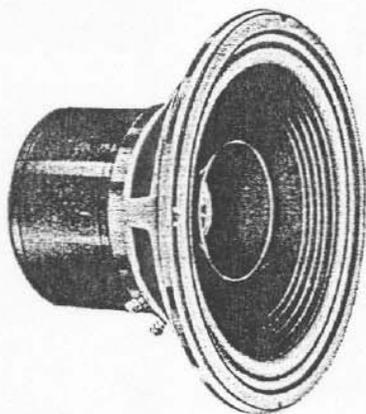
### TRX INTEGRAL 3-WAY SPEAKERS

Three-in-one concentric design combines the advantages of Super-Sonax VHF reproduction, Radax propagator, and large bass cone with heavy magnet in one compact, low-priced assembly.

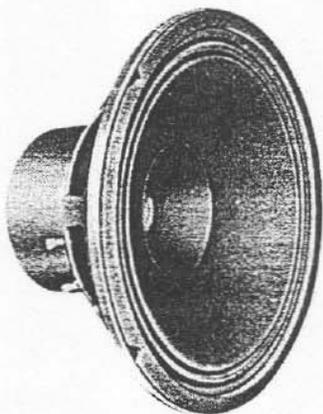
**Model 15TRX 15-inch TRX 3-Way Speaker** complete with X36 and HF control. Response 30-19,000 cps. RETMA sensitivity rating 51 db. Resonance 35-45 cps. Program material capacity 30 watts, peak 60 watts. Impedance 16 ohms. Mechanical crossover 2000 cps. Electrical Crossover 3500 cps. 5-lb. magnet. Size: 15½" diam. x 9½" overall depth. Shpg. Wt. 43 lbs. Net Each.....\$149.00

**Model 15TRXB 15-inch TRX 3-Way Speaker** completely wired with HF control. Response 30-18,000 cps. RETMA sensitivity rating 47 db. Resonance 38-48 cps. Program material capacity 30 watts, peak 40 watts. Impedance 16 ohms. Mechanical crossover 2000 cps. Electrical crossover 3500 cps. 1¼-lb. magnet. Size: 15½" diam. x 7½" overall depth. Shpg. Wt. 17 lbs. Net Each.....\$79.00

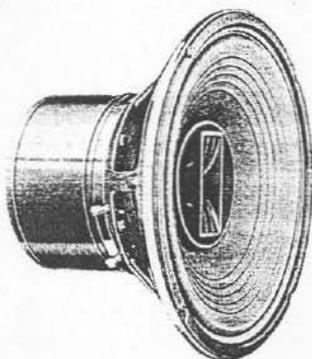
SP15



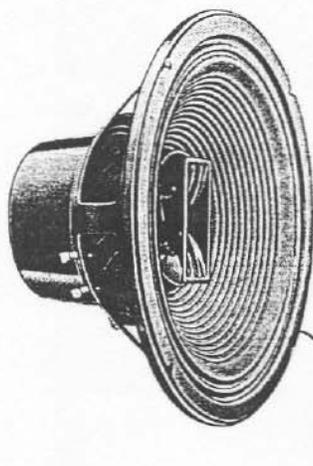
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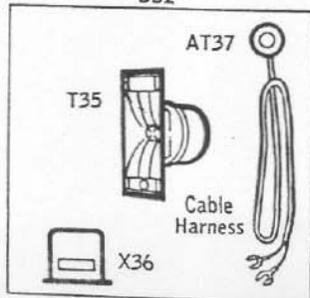
15TRX



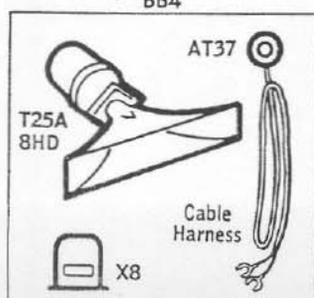
15TRXB



BB2



BB4



## FULL-RANGE LOUDSPEAKERS

### RADAX COAXIAL SPEAKERS

You step into a new world of listening pleasure, when you start with an E-V Radax coaxial loudspeaker. This economical way, you enjoy true high-fidelity reproduction of music . . . the full, deep, sonorous bass . . . the sparkling treble . . . the range and realism of the original performance.

The Radax extends both bass response and high-frequency reproduction in pleasing musical balance — insures improved coverage of the entire listening area — minimizes distortion.

This exclusive E-V development achieves highest efficiency with economy. Two separate coaxially-mounted cones, operating from a single voice coil, divide the audible spectrum. Each is specifically designed to reproduce its portion of the audible range. The large cone "woofer" provides maximum bass reproduction; the small cone gives effective high-frequency propagation. True mechanical crossover permits smooth transition and reproduction of lows and highs in proper phase and balance, without phasing dips at the crossover frequency. With the Radax, you have a coaxial two-way system that assures clean, sparkling, wide-range reproduction.

Electro-Voice 12-inch Radax Speakers are designed for use in the E-V Aristocrat and other folded-horn enclosures. For the music lover who wishes to expand his system gradually by the "Building Block" method, these speakers adapt themselves perfectly as bass drivers to progression into superior E-V separate 2- and 3-way systems.

**Model SP12 Radax Super-Twelve 12-inch Coaxial Speaker.** Response 30-13,000 cps. RETMA Sensitivity Rating 48 db. Resonance 35-45 cps. Program material capacity 25 watts, peak 50 watts. Damping factor in Aristocrat: 2.0. Impedance 16 ohms. Mechanical crossover 3000 cps. 3-lb. magnet. Size: 12¼" diam. x 7½" overall depth. Baffle opening 11". Shpg. Wt. 25 lbs. Net Each.....\$66.00

**Model SP12B Radax Twelve 12-inch Coaxial Speaker.** Response 30-13,000 cps. RETMA Sensitivity Rating 46 db. Resonance 40-50 cps. Program material capacity 20 watts, peak 40 watts. Damping factor in Aristocrat: 4.0. Impedance 16 ohms. Mechanical crossover 3500 cps. 1-lb. magnet. Size: 12¼" diam. x 6" overall depth. Baffle opening, 11". Shpg. Wt. 12 lbs. Net Each .....\$35.00

### TRX INTEGRAL 3-WAY SPEAKERS

Three-in-one concentric design combines the advantages of Super-Sonax VHF reproduction, Radax propagator, and large bass cone with heavy magnet in one compact, low-priced assembly.

**Model 12TRX 12-inch TRX 3-Way Speaker** complete with X36 and HF control. Response 30-19,000 cps. RETMA sensitivity rating 49 db. Resonance 35-45 cps. Program material capacity 25 watts, peak 50 watts. Impedance 16 ohms. Mechanical crossover 2500 cps. Electrical crossover 3500 cps. 3½-lb. magnet. Size: 12¼" diam. x 8" overall depth. Shpg. Wt. 32 lbs. Net Each.....\$125.00

**Model 12TRXB 12-inch TRX-3-Way Speaker** completely wired with HF control. Response 30-18,000 cps. RETMA sensitivity rating 46 db. Resonance 40-50 cps. Program material capacity 20 watts, peak 40 watts. Impedance 16 ohms. Mechanical crossover 2000 cps. Electrical crossover 3500 cps. 1-lb. 2 oz. magnet. Size: 12¼" diam. x 6-½" overall depth. Shpg. Wt. 14 lbs. Net Each.....\$66.00

### BUILDING BLOCK KITS

Designed to provide convenient package additions to any full-range speaker or separate two-way system, E-V Building Block Kits contain matched sets of components complete with wiring harness and individual instruction sheets for each unit.

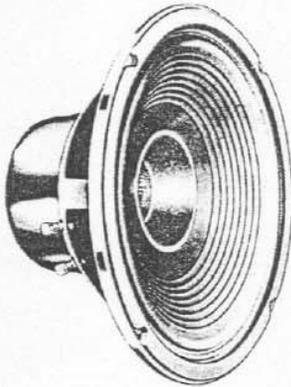
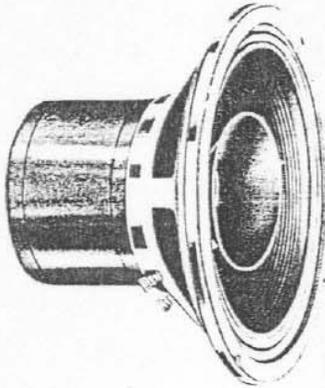
**Model BB1.** For use with existing 2-way systems (LF driver with treble driver) and coaxial speakers having 1-lb. magnets. Includes T35B Super-Sonax VHF driver, X36 crossover, AT37 level control, wiring harness. Shpg. Wt. 5 lbs. Net Each.....\$37.00

**Model BB2.** For use with existing 2-way systems (LF driver with treble driver) and coaxial speakers having 3-lb. magnets or greater. Includes T35 Super-Sonax VHF driver, X36 crossover, AT37 level control, wiring harness. Shpg. Wt. 5 lbs. Net Each.....\$50.00

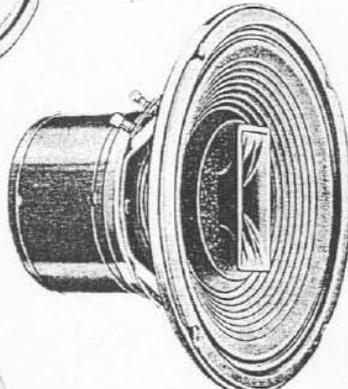
**Model BB3.** For use with existing LF drivers and coaxial speakers having 1-lb. magnets. Includes T10A driver, 8HD horn, X825 crossover, AT37 level control, wiring harness. Shpg. Wt. 10 lbs. Net Each.....\$86.00

**Model BB4.** For use with existing LF drivers and coaxial speakers having 3-lb. magnets or greater. Includes T25A driver, 8HD horn, X8 crossover, and AT37 level control, wiring harness. Shpg. Wt. 13 lbs. Net Each.....\$114.00

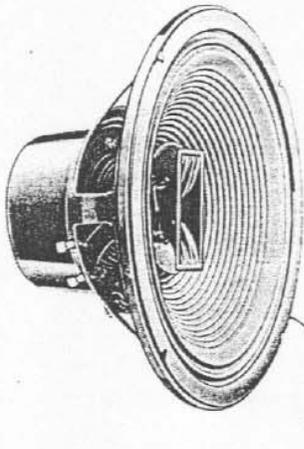
SP12



SP12B

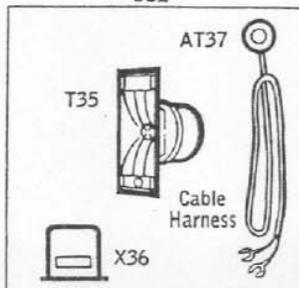


12TRX

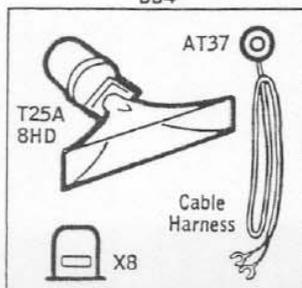


12TRXB

BB2



BB4

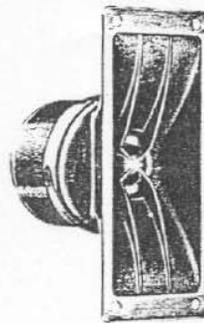


## VERY-HIGH-FREQUENCY DRIVERS

These new very-high-frequency drivers, employing the E-V diffraction horn principle and the Avedon Sonophase throat design, overcome range and sensitivity limitations, function without distortion at the highest ranges, avoid listener fatigue. All have 180° dispersion patterns, program capacities of 50 watts, peak 100 watts, voice coils one inch in diameter and 16 ohms impedance.

**Model T35 VHF Driver.** Frequency response  $\pm 2$  db 2 kc to 19 kc. RETMA sensitivity rating 57 db. Magnet weight 8 oz. Size: 2" wide x 5¼" long and 3¼" deep overall. Net Each.....\$35.00

**Model T35B VHF Driver.** Frequency response  $\pm 2$  db 2 kc to 18 kc. RETMA sensitivity rating 54 db. Magnet weight 4 oz. Dimensions same as Model T35 except 3" deep overall. Net Each.....\$22.00



T35

## TREBLE DRIVERS AND HORNS

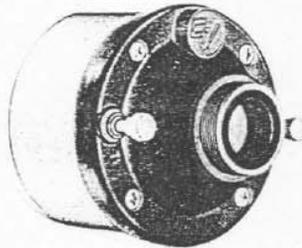
Exceptional operating efficiency is assured by these permanent magnet dynamic type driver units, designed for use as mid-range and high-frequency reproducers in conjunction with suitable horns, such as the E-V 8HD. Each driver provides response to 13,000 cps.

Utilizing the diffraction principle, the E-V Hoodwin horn design provides perfect high-frequency sound dispersion through a solid 120° angle — and does it with more efficiency. Correct exponential flare properly loads the driver diaphragm. The horn has a wide margin of safety near the crossover frequency point, which eliminates cutoff disturbances. A most important feature is the increased efficiency of 3 db at higher frequencies, or double that of conventional cellular horns.

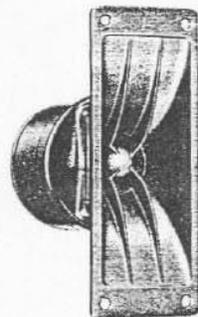
**Model T25A High-Frequency Driver.** RETMA sensitivity rating 53 db. Free space resonance 700 cps. Power rating 30 watts. Impedance 16 ohms. 1-lb magnet. Size 4½-inch deep x 3¾-inch diameter. Throat diameter 7/8-inch. Net Each.....\$58.00

**Model T10A High-Frequency Driver.** RETMA sensitivity rating 51 db. Free space resonance 700 cps. Power rating 25 watts. Impedance 16 ohms. 12-oz. magnet. Size: 3¼-inch deep x 3¾-inch diameter. Throat diameter 7/8-inch. Net Each.....\$42.50

**Model 8HD Diffraction Horn.** Crossover frequency 800 cycles. Cutoff frequency 600 cps. Size: 14½-inch high x 3¾-inch wide x 7½-inch deep. Net Each.....\$18.00



T25A



T35B

## CROSSOVER NETWORKS, LEVEL CONTROLS

Crossover networks are essential in multi-way speaker systems to divide the audio spectrum into the 2, 3 or 4 sections of frequencies required by the individual drivers. The crossover routes the various frequencies, from the amplifier, to their respective drivers — feeds the lows to the woofer, the highs to the respective treble and VHF drivers and so on. Smooth, clean transition from one range of frequencies to another is provided at the proper point for ultimate performance.

All E-V crossovers use high-Q air core coils and paper condensers. Insertion loss is low. Attenuation: 12 db per octave in ½ section, 6 db per octave in ¼ section crossovers.

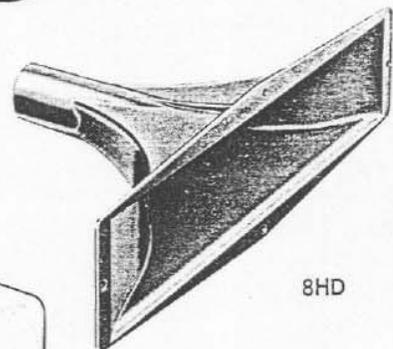
**Model X36 Crossover** — Recommended for use with VHF drivers. ½ section. Crossover point, 3500 cps. Impedances 16 ohms in and out. Size 3⅞" high, 4⅞" wide, 3⅞" deep. Shpg. Wt., 2 lbs. Net Each.....\$9.50

**Model X8 Crossover** — ½ section. Crossover point, 800 cps. Impedances 16 ohms in and out. Size 4½" high, 4⅞" wide, 3⅞" deep. Shpg. Wt., 4 lbs. Net Each.....\$32.00

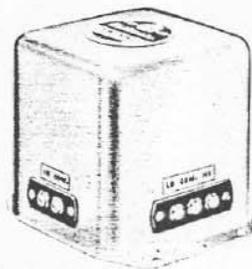
**Model X825 Crossover** — ¼ section. Crossover point, 800 cps. Impedances 16 ohms in and out. Size 3⅞" high, 4⅞" wide, 3⅞" deep. Shpg. Wt., 3 lbs. Net Each.....\$19.00

**Model AT37 Level Control.** An "L" pad attenuator for use in loudspeaker systems with a characteristic impedance of 16 ohms. Adjusts output level on treble and VHF drivers to individual taste. Program material capacity 40 watts, 5 watts steady tone sine wave. Size: 1⅞-inch diameter x 2⅞-inch long. Shaft size: ⅞-inch diameter x 1¼-inch long. May be mounted in panels up to ¾-inch thick. Mahogany dial and knob. Net Each.....\$3.90

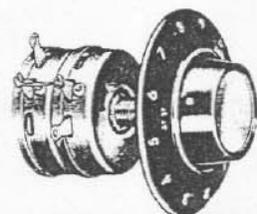
**Model AT37B** — Similar to above but blonde. Net Each.....\$3.90



8HD



X36



AT37



**ELECTRO-VOICE, INC. / BUCHANAN, MICHIGAN**