

THE

Skylark



3-WAY

HIGH-FIDELITY

LOUDSPEAKER SYSTEM



authentic contemporary styling
frequency response—70 to 15,000 cps
size—14 in. high, 33 in. wide, 10 $\frac{3}{4}$ in. deep
price—mahogany, audiophile net \$89.70
blonde, audiophile net \$92.70

Electro-Voice

ELECTRO-VOICE, INC. • BUCHANAN, MICHIGAN

THE Skylark

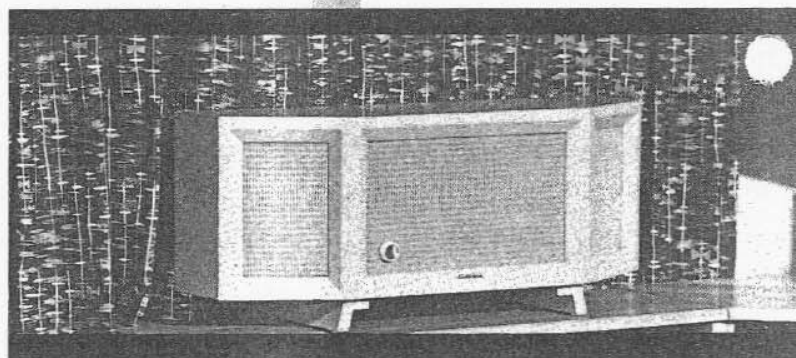


figure 1

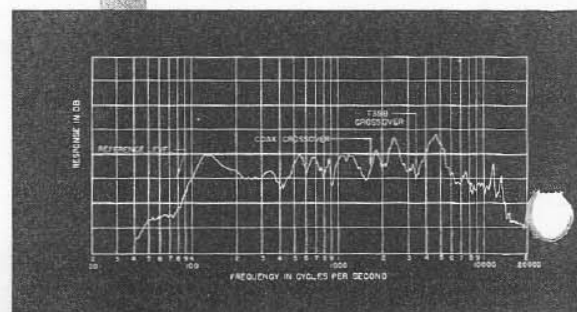
The Electro-Voice Skylark is a true high-fidelity reproducer designed to economize on space and the budget. For top fidelity, a 3-way reproducing system is used in the attractive functional housing. The design is based on the precepts of modern decor in tune with contemporary living. The Skylark may be used either as a table-top unit, or for unobtrusive placement on a bookshelf. The Skylark also may be used as a beautiful furniture piece with floor legs. By means of screw eyes it may be hung on the wall, centrally, or inconspicuously near the ceiling.

HOW THE SKYLARK FUNCTIONS TO BRING THE BEAUTY OF VIBRANT SOUND TO YOUR LIVING ROOM

The use of a 3-way reproducing system in the Skylark lowers distortion products and enhances listening pleasure. It separates the sound spectrum into three parts, each section then being reproduced by a specialized driver component. Division of the audio spectrum into three parts allows each reproducing component to function in an optimum manner, reproducing the original performance in all its sparkling clarity and richness. This follows exactly the design pattern of the larger, more expensive Electro-Voice reproducers.

The Skylark incorporates two tapered ports which function to load properly the low-frequency driver in the bass region. The frequency reproduction is, therefore, enhanced and the ultimate result of this system represents an advance in the acoustic art for small enclosures. The Skylark reproduces a complete frequency range from approximately 70 cycles to 15,000 cycles with only small variations; this is 8 octaves out of the possible ten which the human ear can hear!

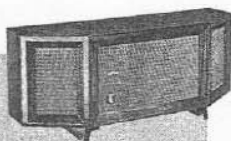
figure 2



THE COMPONENTS OF THE SKYLARK

The Skylark is a complete system and is comprised of a specialized Electro-Voice Model SP8C coaxial driver for bass and mid-range reproduction designed expressly for this reproducer. An Electro-Voice Model T35B Super-Sonax very-high-frequency driver for frequencies above 3500 cycles is used just as in the more elaborate speaker systems.

The SP8C is a reproducer employing the exclusive Electro-Voice Radax principle whereby the large cone reproduces the lower frequencies; mechanical crossover is made to a smaller treble cone operating from approximately 2000 cycles upwards. This coaxial principle is phenomenal in that it delivers the lowest distortion product in the art—well below the perception threshold of the human ear. This virtually distortionless reproduction of the very important mid-frequencies lends greatly to the realism effect achieved by the Skylark in the vital "presence" range. An electrical crossover is included to divide the spectrum between the SP8C midrange section and the T35B VHF driver.



Power handling capacity, 20 watts program. Impedance, 16 ohms nominal. RETMA Sensitivity rating, 42 db. Mechanical crossover, 2000 cps. Electrical crossover, 3500 cps. Baffle, 2 tapered low-frequency ports; direct mid-range and high-frequency radiation. Cabinet finish, Tropical Mahogany or Blonde Korina. Dimensions, 14 in. h, 33 in. w, 10 3/4 in. d; 11 3/4 in. high with feet removed. Net weight, 25 1/2 lb. Shipping weight, 30 lb.



Impedance, nominal, 16 ohms. Voice coil diameter, 2 in. RETMA sensitivity rating, 42 db. Power handling capacity, 20 watts program maximum. Mounting, 4 3/16 in. diameter holes on a 7 1/2 in. bolt circle. Flux density, 7000 gauss. Force factor, 61×10^{-5} maxwells/cm. Cone resonance, 60 cps. Magnet weight, 6.8 oz. Net weight, 2 lb. 15 oz.



Impedance, nominal, 16 ohms. Voice coil diameter, 1 in. RETMA sensitivity rating, 53 db. Power handling capacity, 25 watts program maximum. Mounting, vertical on 4 1/2 in. centers. Flux density, 9000 gauss. Force factor, 2.20×10^{-6} maxwells/cm. Magnet weight, 4 oz. Net weight, 1 lb. 12 oz.

Electrical Crossover — Crossover frequency, 3500 cps. Impedance, 16 ohms. Insertion loss: Hi pass, .75 db; low pass, 0 db. High section, 1/4.

THE ENCLOSURE

The tapered ports increase the efficiency at frequencies below approximately 100 cycles, and this bass augmentation is one of the reasons for the superior performance of the Skylark. The 3-way system includes the E-V SP8C 8-inch Radax-type coaxial bass and mid-range driver, T35B very-high-frequency driver, electrical crossover, and brilliance control.

THE MODEL SP8C BASS AND MID-RANGE COAXIAL DRIVER

The Electro-Voice SP8C Radax loudspeaker is a coaxial reproducer designed especially for the Skylark. It has a very low free-space resonance of 60 cycles and is rated for 15 to 20 watts of program material. The low-frequency resonance of the loudspeaker determines the point at which response begins to fall off and, of course, the lower the resonance of the loudspeaker, the better will be the bass reproduction. Usual resonances for 8-inch loudspeakers are around 120 cycles, and thus the superiority of the SP8C is obvious. Response of the SP8C in the Skylark is 70 to 3500 cycles. The Radax principle employed provides a super-efficient method of utilizing two disparate, coaxially mounted cones to divide the audio spectrum while operating from a single voice coil. The built-in mechanical crossover from the low-frequency cone to the mid-frequency propagator permits the design of each cone for optimum response. This crossover takes place at approximately 2000 cycles. The Radax propagator used in the Skylark to reproduce the range from 2000 to 4000 cycles has unusually low distortion. In addition, the Radax cone disperses its energy in a broad pattern, in contrast to ordinary reproducers which "beam" the high-frequency tones.

THE MODEL T35B VHF DRIVER

The T35B Super-Sonax VHF driver used in the Skylark has a uniform response from 3500 cycles to beyond the audible range. A wide dispersion angle of 180° is provided by the integral Hoodwin diffraction slit-type horn, thus covering the entire listening area. This diffraction horn operates on an acoustical principle derived from the field of optics, whereby a sound wave passing down a properly designed tube is diffracted, just as a light beam passing past a sharp point is spread. This diffraction efficiently distributes sound over a wider area, as contrasted to the pinpointing effect of multi-cellular horns or conventional cone-type "tweeters". The horn has a cutoff frequency of 1500 cycles and thus the crossover frequency, placed at 3500 cycles, is removed far enough from the horn cutoff to insure complete freedom from undesirable disturbances associated with operation near the cutoff frequency.

THE BRILLIANCE CONTROL

This control matches the Skylark to different room acoustics. It controls the amount of acoustical energy radiated by the T35B Super-Sonax VHF driver.

figure 3

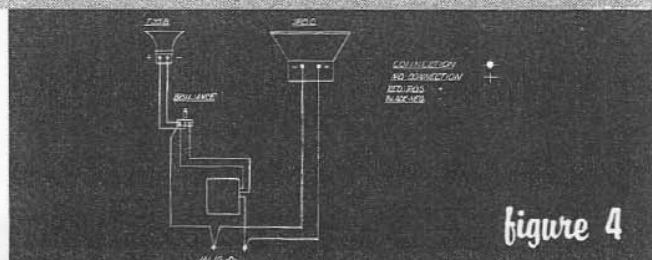
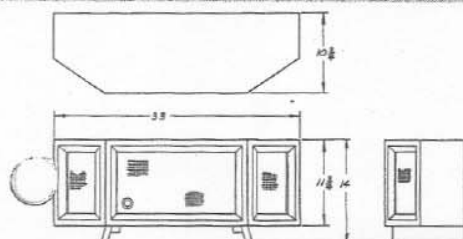


figure 4

HOW THE SKYLARK MAY BE EMPLOYED IN YOUR LIVING ROOM

PLACEMENT

The Skylark may be used on a table-top or in a bookcase, on the floor against the wall, or as an end table with the application of accessory legs. For bookcase use, the two feet beneath the Skylark may be removed by unscrewing the three screws which attach them to the bottom. There are five felt glides on the bottom of the enclosure which provide protection for furniture finishes when the Skylark is used without feet in position.

The Skylark may be used in a hanging position by inserting screw eyes in the bottom of the cabinet and mounting the unit upside down against the wall.

CONNECTIONS

Use No. 18 fixture wire or larger to connect the 2 terminals on the rear of the Skylark to the amplifier, or to the radio, radio-phonograph or TV set output. The 16-ohm impedance in the Skylark is a standard RETMA rating. A mismatch by $\pm 40\%$ may be made without affecting the reproduction or efficiency of the unit. If only an 8-ohm tap is available on the amplifier, a loss of efficiency will be just noticeable. Connected to a 4-ohm terminal, a loss of overall efficiency will be observed. Under these conditions, however, the Skylark will be still more efficient in level than conventional units.

THE BRILLIANCE CONTROL

Perfect adjustment to match the acoustic conditions in any room may be made by proper setting of the brilliance control. Rooms having large amounts of overstuffed furniture or thick rugs, will require an advanced setting of the brilliance control of about $\frac{3}{4}$ clockwise rotation. Rooms with little padded material or of small size will allow best musical balance when the control is set at about $\frac{1}{2}$ rotation. The correct position of the control for any environment will be immediately apparent, bringing the highs and lows into balance and making the sound come into "focus".

AMPLIFIER DAMPING CONTROL SETTING

If your amplifier has a variable damping control, as do the E-V Models A20C and A30, set this control at 5.0.

OTHER EQUIPMENT CONTROLS

Turn up the level or volume control of the source equipment feeding the Skylark. Listen carefully to a good vinylite LP Record with orchestral and vocal selections. Make certain that the brilliance control on the Skylark is set about half-open. With the treble adjustment on the amplifier in the flat position, a reasonable musical balance should be obtained.

Now advance the bass control slightly for richness in the lower octaves. Despite the small size of the Skylark enclosure, the low cone resonance of the bass-driver and the special tapered ports in the cabinet will enable the amplifier power to result in clean fundamental low tones. Now readjust slightly the brilliance control on the front grill of the Skylark on several different types of music for maximum clarity and tonal balance. The setting for this brilliance control may be left permanently, and minor variations in source material compensated for with the amplifier treble control.

PRICE

Skylark, complete, mahogany: Audiophile Net \$89.70

Skylark, complete, blonde Korina: Audiophile Net \$92.70

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