

High Fidelity, Commercial-Industrial Loudspeakers, Systems and Accessories

PRODUCT UNIVERSITY CATALOG



The world's largest, most complete line of loudspeakers and speaker components . . . **for every application** . . . industrial, military, commercial, marine, theatre, institutional. University offers not one or two models, but a truly comprehensive choice in each speaker equipment category . . . thus insuring a proper solution for every acoustic and budget requirement. University **quality** is a byword in the sound equipment field . . . a heritage of engineering advances in loudspeaker design, supported by modern, efficient production facilities that deliver "**better products at lowest cost.**" You are invited to consult with our Technical Service Department on any sound installation problem.

University LOUDSPEAKERS, INC., 80 SO. KENSICO AVE., WHITE PLAINS, N. Y., White Plains 6-7700

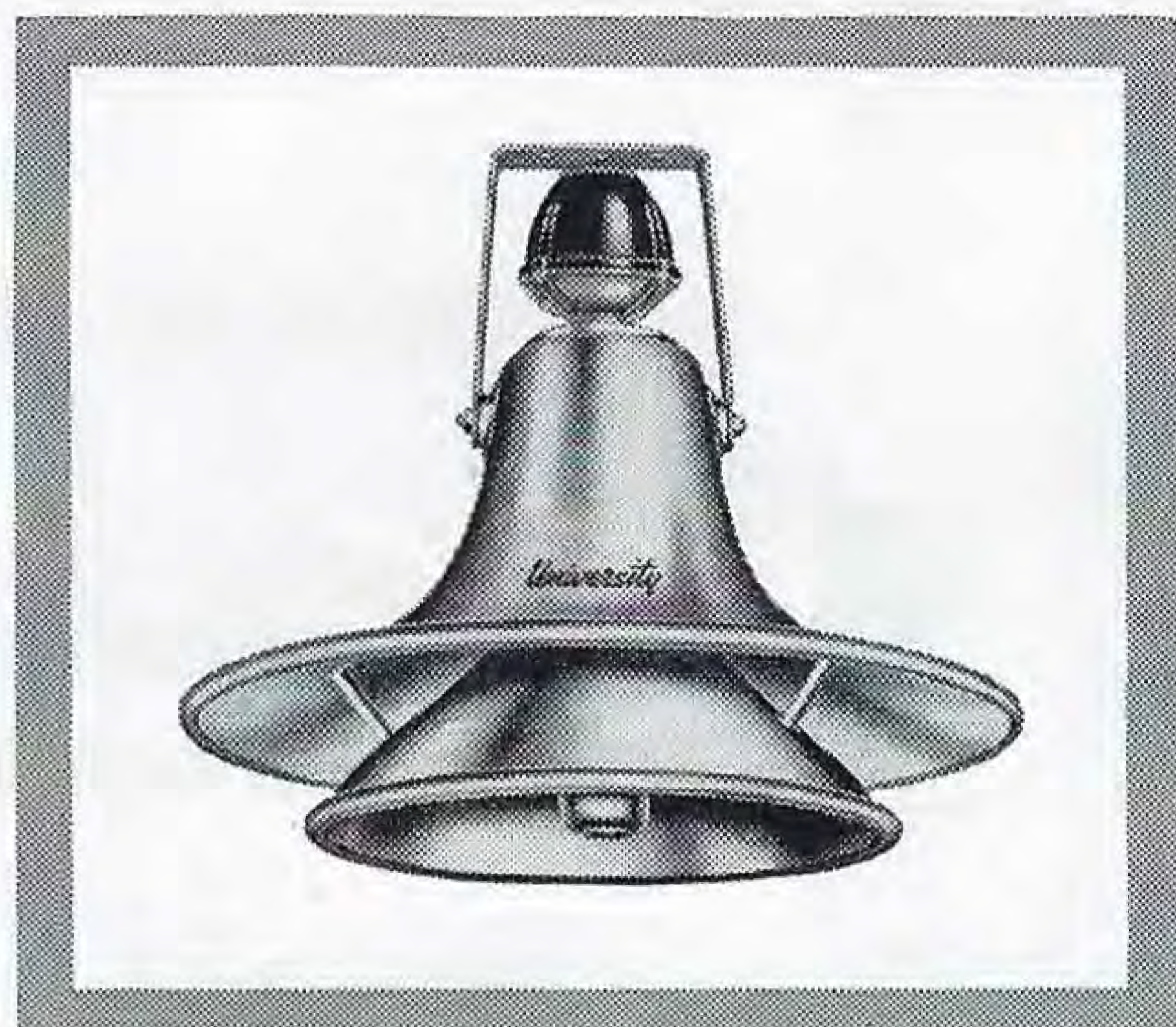
TRUMPETS University pioneered the reflex trumpet, now the industry standard where maximum conversion efficiency, intelligibility and distance or noise penetration are essential. Careful, scientific design and meticulous attention to mechanical detail are virtues that are more than skin deep with these University products. Any similarity between these trumpets and other brands is largely in their appearance. For uncompromising performance, University presents a wide and varied selection of directional, wide-angle and radial models to satisfy the most demanding specifications.



DIRECTIONAL

These models, designed to concentrate acoustic energy in a relatively narrow angle of sound dispersion, are incomparable for applications requiring maximum penetration of distance and noise. Rigid adherence to time-proven design formula achieves peak attainable conversion efficiency, resulting in higher sound pressure output and greater utilization of amplifier power. Four trumpet sizes satisfy every need. The GH has very low cut-off for finest reproduction of music. LH is excellent for general use where music quality, voice intelligibility and penetration are important considerations. The PH has wider dispersion and may be used for both music and voice where cost is a factor. The SMH is ideal for speech and for covering wider areas with good penetrative qualities. All models take any University driver unit; have positive-lock, serrated swivel "U" mtg. bracket.

MODEL	GH	LH	PH	SMH
LOW FREQUENCY CUT-OFF	85 cps	120 cps	150 cps	200 cps
SOUND DISTRIBUTION	65°	75°	85°	95°
AIR COLUMN LENGTH	6½ ft.	4½ ft.	3½ ft.	2½ ft.
*SERIES CAPACITOR FOR HORN CUT-OFF	120 mfd.	85 mfd.	65 mfd.	50 mfd.
HORN LENGTH	28"	19"	15¾"	12"
BELL DIAMETER	31"	25¾"	20¾"	16¼"
SHIPPING WEIGHT	22 lbs.	16½ lbs.	11¾ lbs.	8 lbs.
LIST PRICE	\$65.00	\$44.50	\$31.00	\$26.00

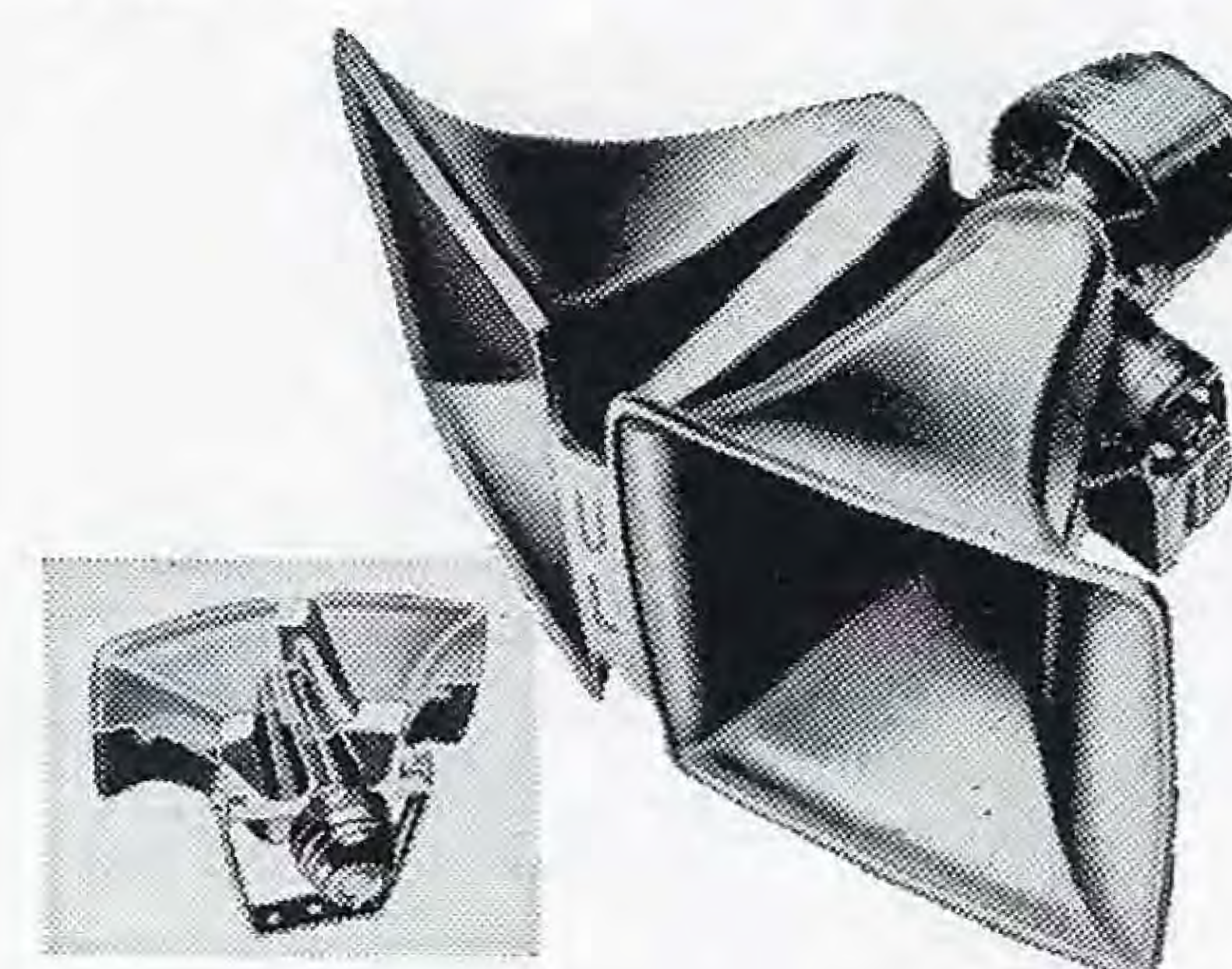


RADIAL

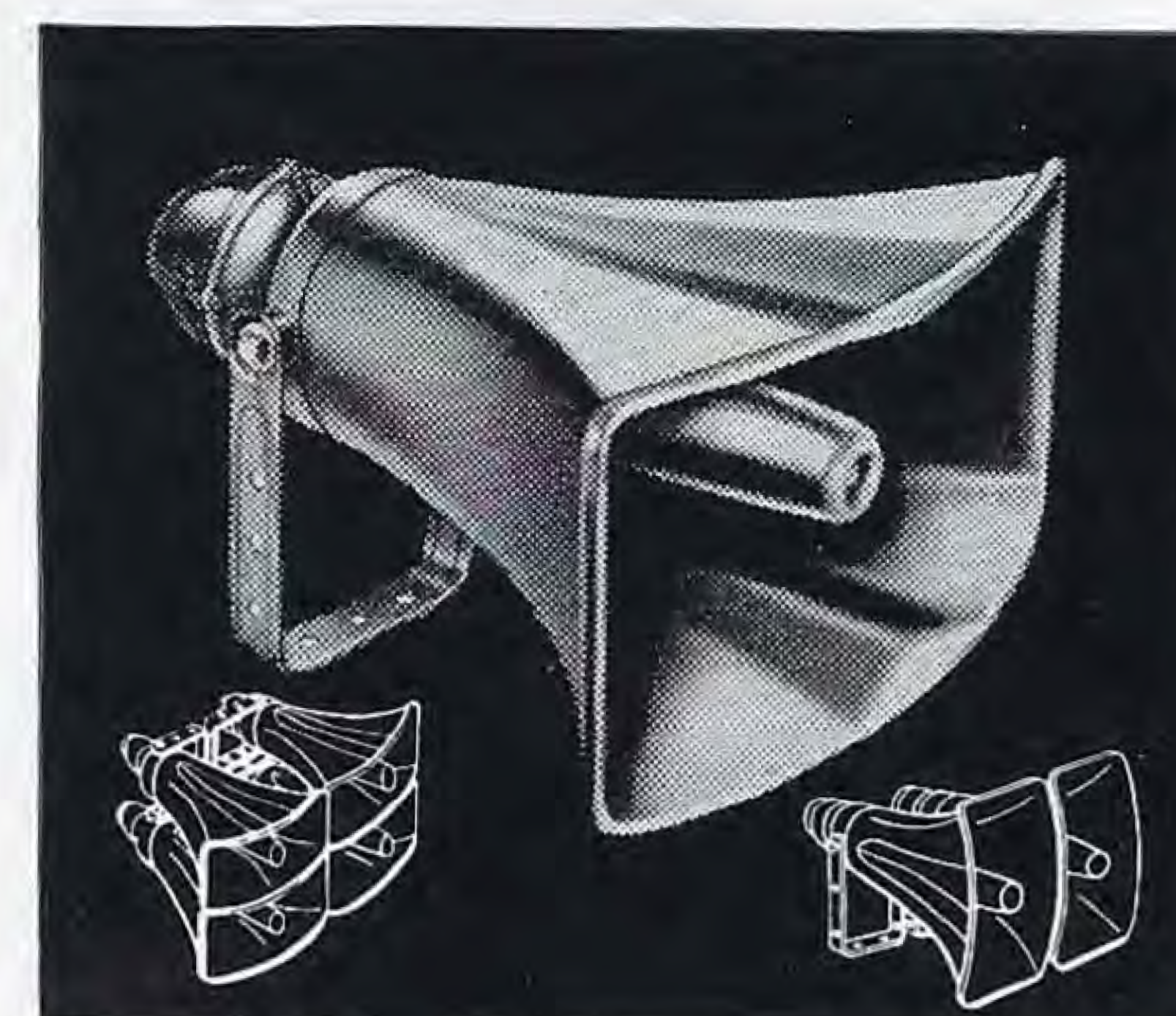
Economical and efficient, these models provide uniform horizontal dispersion in all directions from a single projector. Fewer loudspeakers needed to cover an area. Using University drivers, they give as much as 500% more output than radials using cone speakers. Especially popular for high-ceilinged factories, hangars, church interiors and towers, warehouses, etc. Rugged, weather-resistant; ideal as well in installations subject to high humidity and dust-laden atmosphere. Model RLH has longest air column for maximum low frequency response. RPH has higher cut-off; is suitable for both music and speech in general purpose applications. RSH is good for speech and further cost reduction.

MODEL	RLH	RPH	RSH
LOW FREQUENCY CUT-OFF	120 cps	140 cps	180 cps
SOUND DISTRIBUTION	360°	360°	360°
AIR COLUMN LENGTH	5 ft.	4 ft.	3 ft.
*SERIES CAPACITOR FOR HORN CUT-OFF	55 mfd.	70 mfd.	85 mfd.
OVERALL HEIGHT (Horn Only)	18½"	13¾"	11"
BELL DIAMETER	28½"	25½"	19"
SHIPPING WEIGHT	25 lbs.	19 lbs.	13 lbs.
LIST PRICE	\$59.00	\$47.00	\$41.00

WIDE-ANGLE



Cobreflex Unmatched for ruggedness and exceptionally high speech articulation in fixed or mobile applications requiring coverage of areas having greater width than depth. "Dual Exponential Flare" design . . . two identical *one-piece* all die-cast aluminum combination air column/bell castings form a completely integrated, virtually indestructible and scientifically perfect twin wide-angle reflex trumpet. Nothing else like it! Takes any University driver unit; use singly or in clusters. Adjustable, positive-lock "U" mtg. bracket.



Model CLH Newest addition to University's expanding line of wide-angle trumpets and paging speakers. The CLH combines longest air column length and new wide-angle bell designed for maximum low frequency response and compact, low silhouette dimensions. New *omni-swivel*, positive-lock mtg. bracket permits speaker to be placed where most convenient and rotated horizontally and vertically for optimum projection. Dispersion can be literally *tuned* to avoid echo and reverberation, or used to specifically include elusive "dead spots." CLH is perfect too for multi-speaker cluster arrays; can be "stacked" in any configuration, for any sound distribution pattern. Uses any University driver.

MODEL	COBREFLEX	CLH
LOW FREQ. CUT-OFF	200 cps	120 cps
SOUND DISTRIBUTION	120° x 60°	120° x 60°
AIR COLUMN LENGTH	2½ ft.	4½ ft.
*SERIES CAPACITOR FOR HORN CUT-OFF	50 mfd.	85 mfd.
BELL MOUTH SIZE	18½" x 9¼"	21½" x 11½"
DEPTH (Less driver)	10¼"	20"
SHIPPING WEIGHT	10¼ lbs.	15 lbs.
LIST PRICE	\$38.33	\$44.50

*For doubling "Full Range" driver power capacity. Assumes 16 ohm driver. If two drivers with 2YC used, halve capacitor value if drivers wired in series; double if wired in parallel.

DRIVERS

University has a long history of great "firsts" in driver units; among them are wide-range response, breakdown-proof mechanisms, super-efficient "W" magnets, built-in matching transformers, etc. The new line presented below is the largest and most complete selection on the market today, meeting every soundcasting requirement with the highest quality standards. Only the prices are compromised.

University



Model MA-25

Use this rugged, weather-proof driver unit where response to 6500 cycles is adequate, or to preserve "balance" when used with high cut-off frequency trumpets. Low in cost, high in quality, featuring high efficiency magnet, tropicalized 2" voice coil, rim-centered breakdown-proof diaphragm.

Model SA-HF

Often called "the workhorse of the sound industry." Meets most p.a. and industrial requirements. Response to 10,000 cycles and more efficient than the Model MA-25. This unit will deliver that extra punch needed to cut through heavy noise. Use for speech or high quality music. Tropicalized and hermetically sealed for continuous top flight performance even under adverse weather conditions.

Model SA-30

High efficiency and response of Model SA-HF, plus "battleship" construction for maximum durability against abuse or in hazardous environments. Completely die-cast aluminum housing and built-in matching transformer for connection to high impedance lines or "constant voltage" systems. Exclusive water-tight dural gland nut cable entrance. Shockproof bi-sectional speaker construction.

Model PA-HF

Without question the finest driver unit ever offered. For applications requiring the greatest power handling capacity, maximum sensitivity, widest range frequency response, plus rugged lifetime construction. Features bi-sectional construction, super-efficient Alnico 5 W magnet, completely die-cast aluminum housing. Water-tight voice coil terminals conveniently located at base of housing. Increased sound output cuts amplifier requirements in half!

Model PA-50

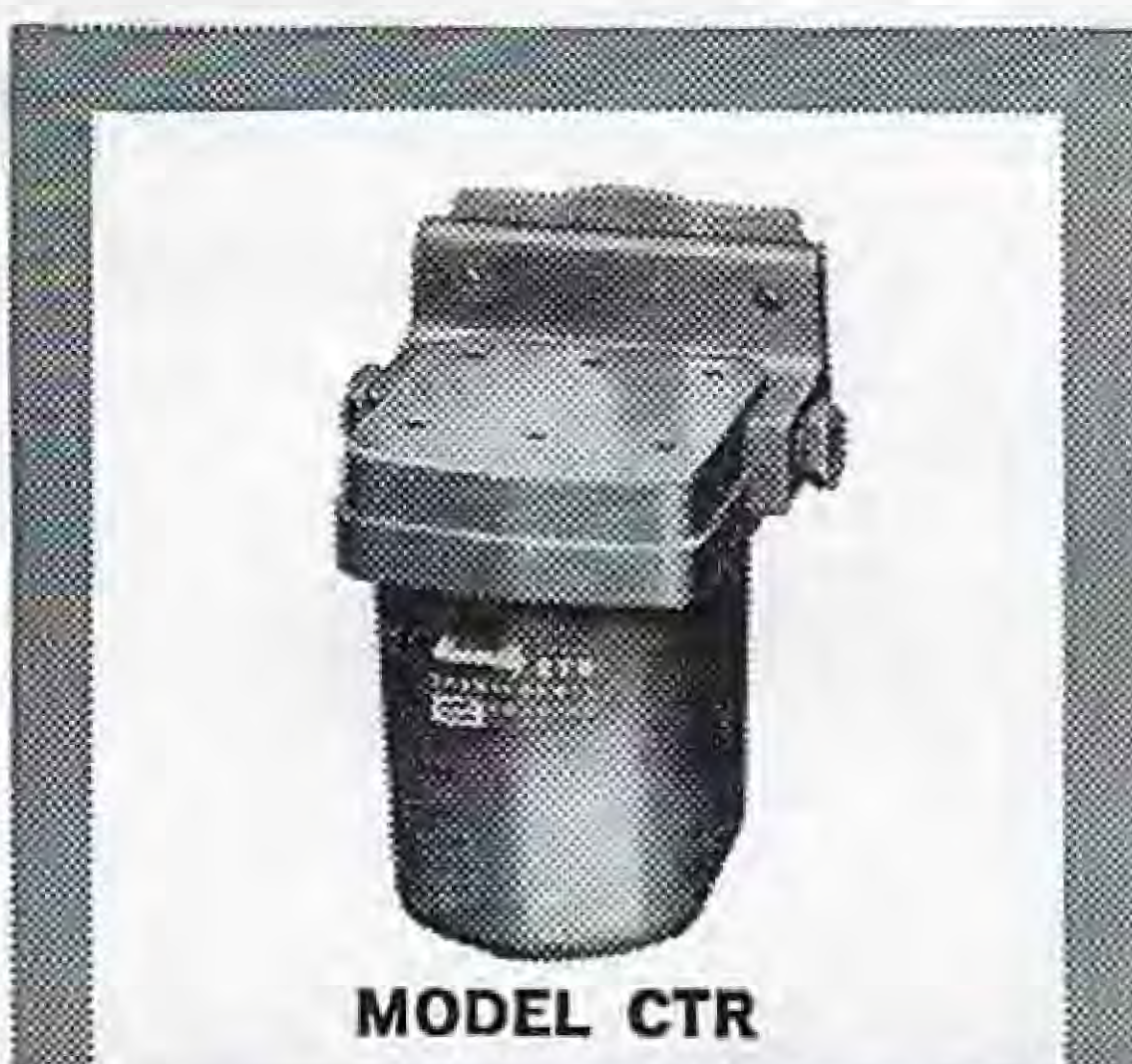
The ultimate in deluxe, advance-design. Features extended high and low frequency range, highest continuous duty power capacity, Super W magnet, bi-sectional construction, greatest conversion efficiency, husky built-in multi-match transformer with terminals conveniently located at base of unit. Recommended for church chimes, carillons, etc.; fast set-up time ideal for rental or semi-permanent systems. Answer to toughest sound problems. Nothing finer!

MODEL	MA-25	SA-HF	SA-30	PA-HF	PA-50
FREQUENCY RESPONSE	85 to 6500 cps	80 to 10,000 cps	80 to 10,000 cps	70 to 10,000 cps	70 to 10,000 cps
POWER CAPACITY (Cont. Duty)					
FULL RANGE	25 watts	30 watts	30 watts	50 watts	50 watts
*ADJUSTED RANGE	50 watts	60 watts	60 watts	100 watts	100 watts
VOICE COIL IMPEDANCE	16 ohms	16 ohms	16 ohms	16 ohms	16 ohms
TRANSFORMER IMPEDANCES	-----	-----	45/165/250/500/ 1000/2000 ohms	-----	16/100/165/250/500/ 1000/2000 ohms
70 V. LINE POWER TAPS	-----	-----	30/20/10/5/2.5 watts	-----	50/30/20/10/5/2.5 watts
‡SOUND PRESSURE LEVEL	127 db	130 db	130 db	134 db	134 db
DIMENSIONS (OVERALL)	4 1/8" dia. 3 3/4" deep	4 1/2" dia. 4 7/8" deep	5" dia. 6 1/4" deep	4 11/16" dia. 5" deep	6 3/4" dia. 6 3/4" deep
SHIPPING WEIGHT	3 3/4 lbs.	4 1/2 lbs.	5 1/4 lbs.	5 3/4 lbs.	6 1/4 lbs.
LIST PRICE	\$27.50	\$36.00	\$47.50	\$47.50	\$57.50

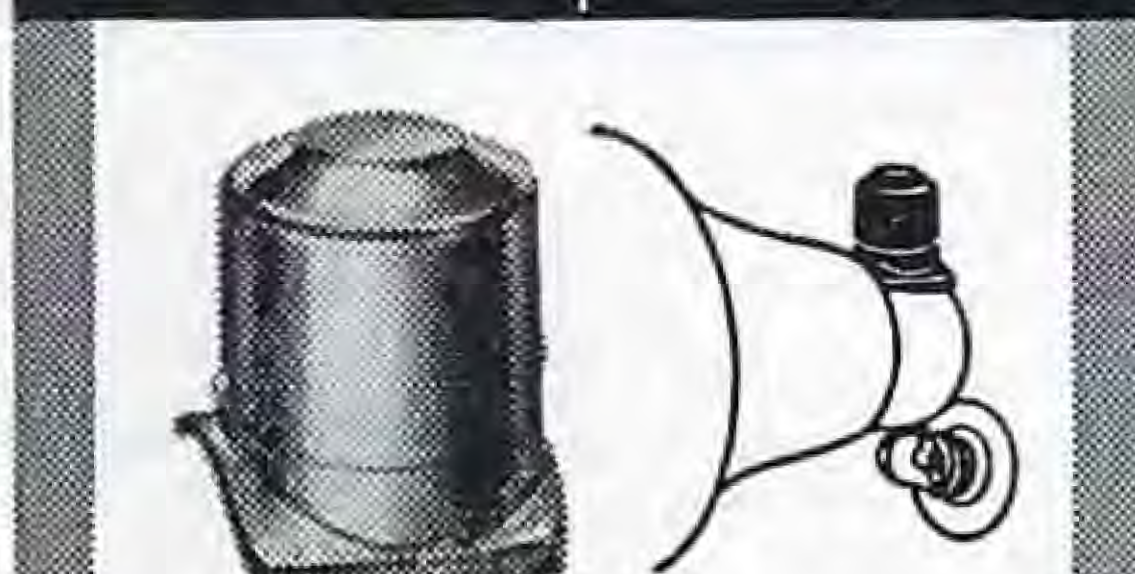
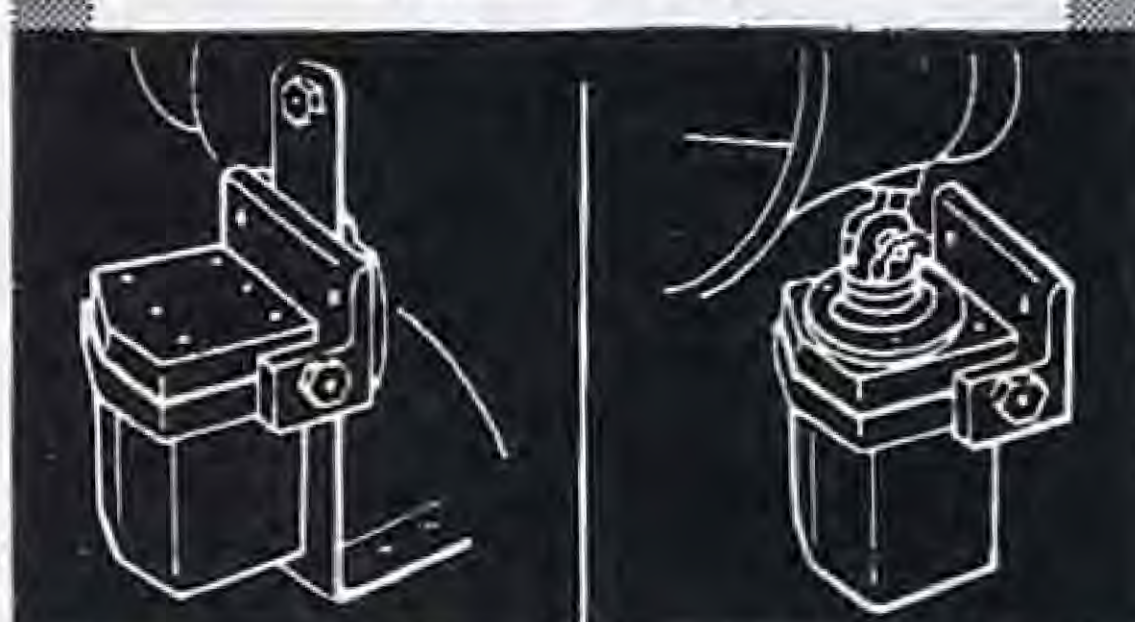
*When input program response limited to above low frequency cut-off of trumpet used.

‡Sound Pressure readings taken at 4 ft. on 6 1/2' horn, with rated Full Range power input. Reduce by 6 db each time distance is doubled. Reduce by 3 db each time power input is halved, add 3 db if power is doubled.

ACCESSORIES



MODEL CTR



Model PB-1 Transformer Housing

New, water-shedding and splashproof transformer housing for MIL, CMIL, IB and CIB paging speakers. Use Model 5434 or any suitable transformer with 2" mtg. center. Shpg. wt., 1 lb. \$3.75 List.

Model CTR Transformer Junction Housing

New all die cast aluminum construction. Complete weather protection with exclusive University gland nut cable entrance and exit. For housing Models 5433, 5434 or other transformers with 4" x 4-15/16" x 3 3/4" max. dimen. Adjustable slotted adapter mounts transformers with centers 1 1/2" to 2 3/4". Also makes a wonderful junction box for terminating and tying speaker transmission lines. Includes bar strap for mounting to trumpet "U" bracket; and can be screwed directly to wall or super structure; will also hold University Paging speakers. Shpg. wt., 2 lbs. \$8.00 List.

LINE MATCHING TRANSFORMERS & WEATHERPROOF HOUSINGS



MODEL 5433

MODEL 5434

Model 5433 Transformer has a 30 watt capacity and may be used with the MA-25 and SA-HF driver units, or can be used in a speaker transmission line feeding a number of smaller paging speakers like the IB, MIL or CR, etc. The universal secondary impedance permits matching to any series, parallel or series/parallel combination, as well as obtaining unlisted impedance ratios. Pri. Imp.: 45/165/200/250/500/1000/2000 ohms, Sec. Imp.: 4/8/16 ohms, 70 v. Line Pwr. Taps: 30/25/20/10/5/2.5 watts. Overall dimensions: 1-15/16" x 2-5/16" x 1 3/4". Mounting hole centers: 2 3/4". The 5433 will fit the CTR Weatherproof Housing. Shpg. wt., 1 lb. \$7.00 List.

Model 5434 Transformer has a 15 watt power capacity suiting it to paging speakers or lines carrying a number of the smaller types. Primary impedance ratios have been selected to provide the most practical range; while the multi-tap secondary permits obtaining other unlisted impedances that may be desired. Pri. Imp.: 45/325/500/1000/2000/4000/8000 ohms, Sec. Imp.: 4/8/16 ohms, 70 v. Line Pwr. Taps: 15/10/5/2.5/1.25/.65 watts. Overall dimensions: 1 5/8" x 1-15/16" x 1 5/8". Mounting hole centers: 2". The 5434 will fit the CTR and PB-1 Weatherproof Housings. Shpg. wt., 3/4 lb. \$6.00 List.

HORN AND DRIVER ADAPTERS



2YC



PMA



RTA



WEA



SPA

2YC Connector — Enables two driver units to be used on any single radial, directional or wide-angle trumpet. Use when unusually high input power is required in speech applications. Shpg. wt., 1 lb. \$12.00 List.

PMA Adapter — Fits standard 1/2" I.P.S. threaded pipe to any University "U" mounting bracket. Use in special appli-

cations requiring pipe mounting from ceiling, stands, etc. Shpg. wt., 3/4 lb. \$2.00 List.

RTA Adapter — Fits University trumpets to Western Electric and RCA drivers having 1-7/16-16 threads, thus obtaining advantage of University projector performance. Shpg. wt., 1/2 lb. \$3.00 List.

WEA Adapter — Fits University driv-

ers to Western Electric and RCA trumpets having 1-7/16-16 threads, thus obtaining advantage of University driver unit performance. Shpg. wt., 1/2 lb. \$2.50 List.

SPA Adapter — Replaces standard triangular base used on all University CR and MM-2 series paging speakers in order to mount to 1/2" threaded I.P.S. pipe. Shpg. wt., 1/2 lb. \$1.75 List.

PAGING AND TALK-BACK

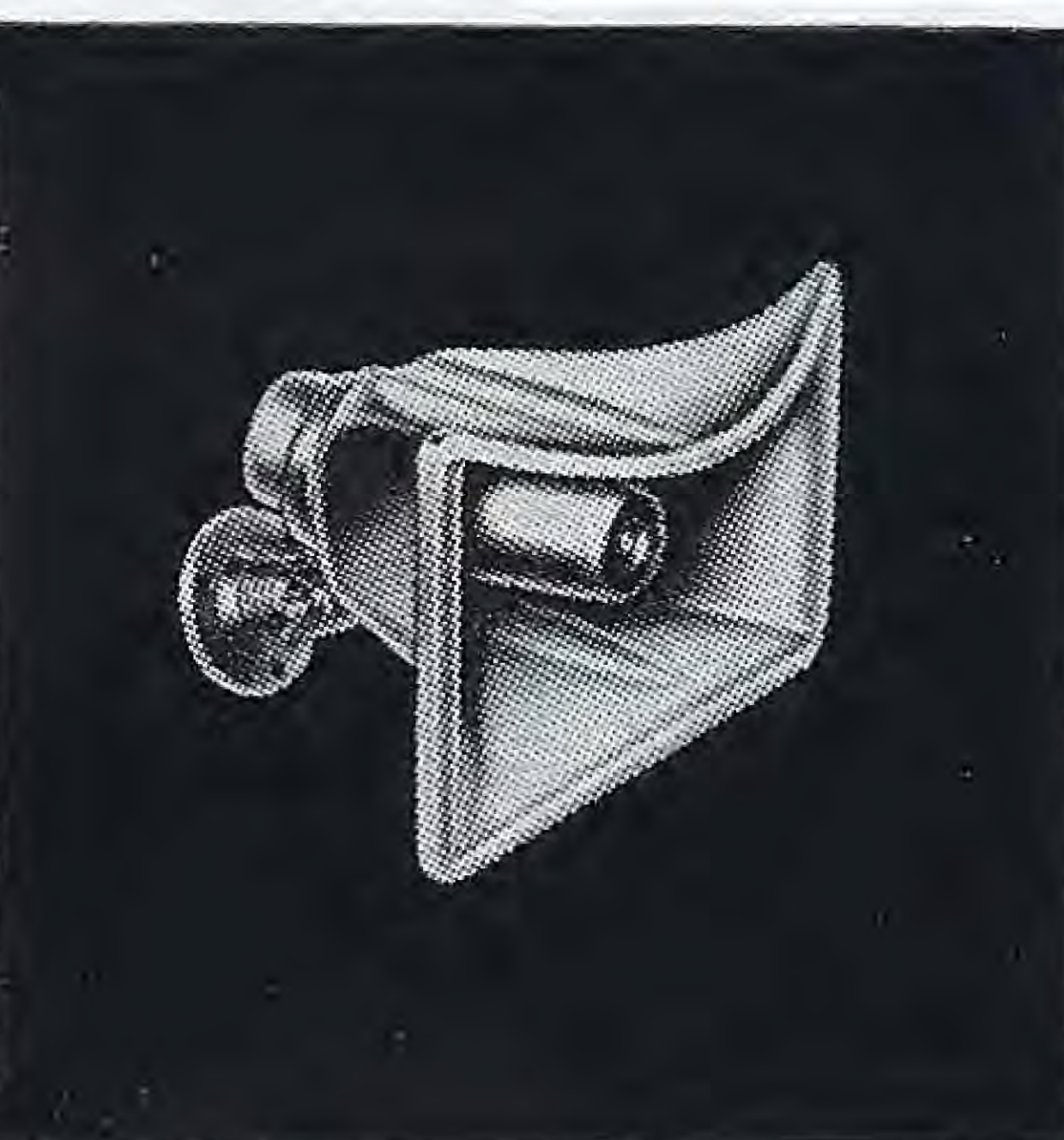
University progress and ever increasing standards of achievement have yielded an exceptionally large series of compact, moderate-power speakers capable of literally incredible performance for their size. The unusual variety of types available for paging and "talk-back" applications is certain to more than satisfy every conceivable technical and installation requirement.

University

COMMERCIAL-INDUSTRIAL



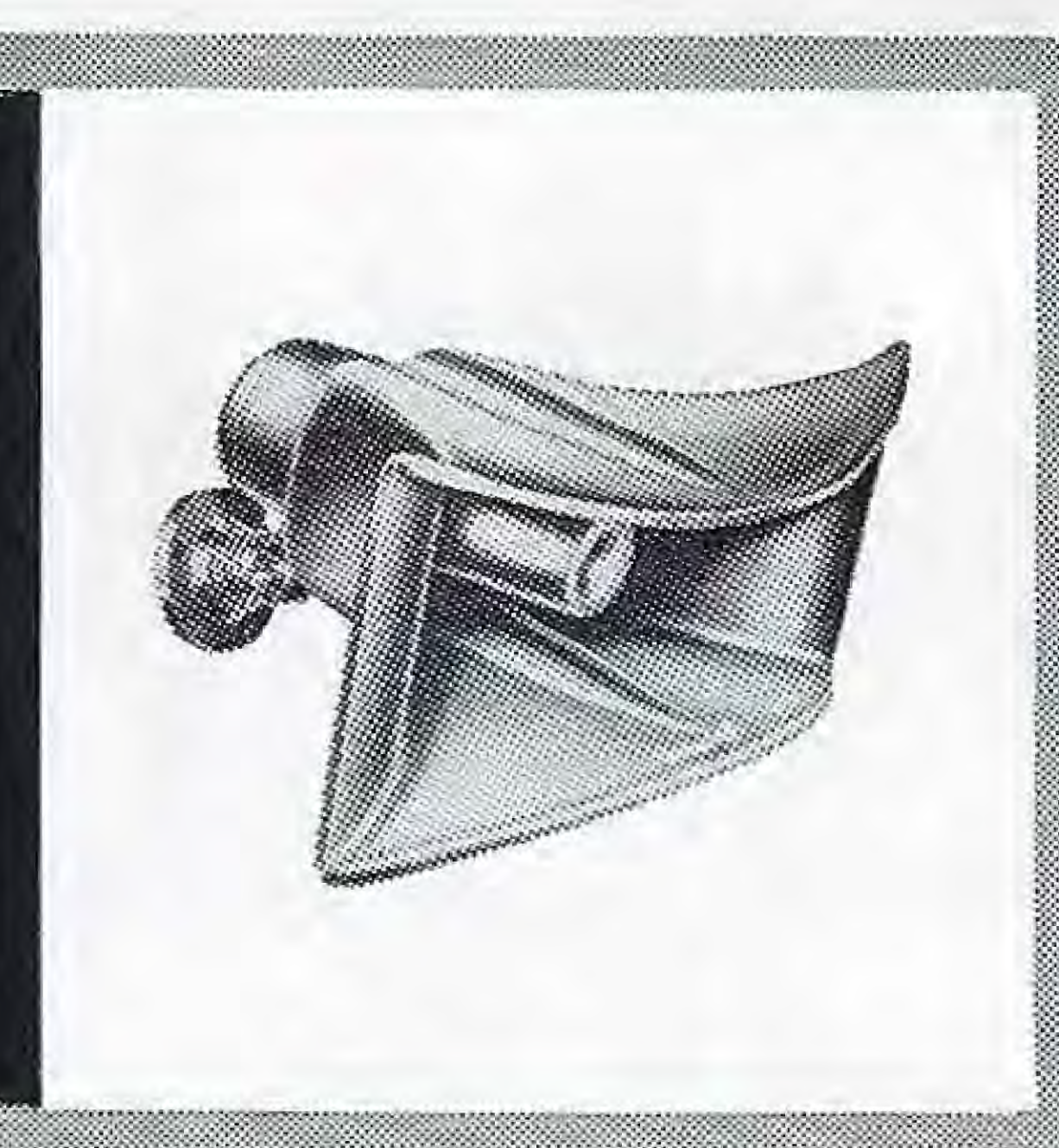
Model MIL — Small, compact reflex; excellent for limited areas and filling in "dead" spots. High conversion efficiency triples effectiveness of low power paging and intercom systems normally using cone speakers. Tropicalized, hermetically sealed. Exclusive OMNI-LOK swivel mounting bracket; also fastens to 1/2" pipe without additional fixture.



Model CMIL — High efficiency paging and talk-back speaker with University "cobra" horn for effective coverage of wide areas. Eliminates waste of sound where not needed. Tropicalized Hermetically sealed. Geared omni-swivel mounting bracket with 2-plane positive-lock; also fastens to 1/2" pipe without additional fixture.



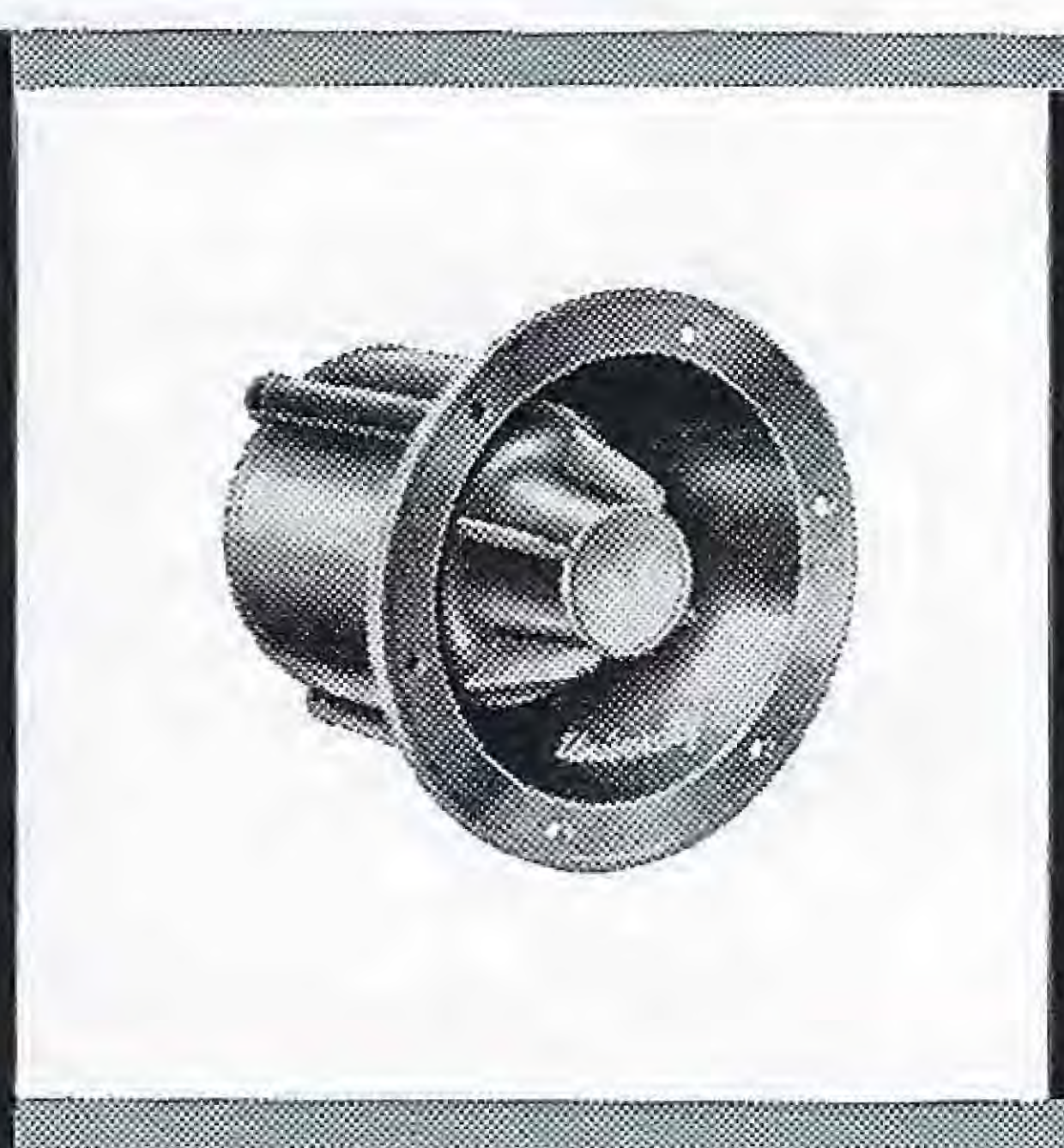
Model IB — World's most widely used medium power speaker. For paging/talk-back. Tropicalized, weatherproof, for trouble-free lifetime operation. High efficiency, special rising frequency characteristic, wide range response and 90° projection assure maximum penetration and intelligibility in noisy areas. Geared 2-plane omni-swivel positive-lock mtg. bracket; also fits 1/2" pipe.



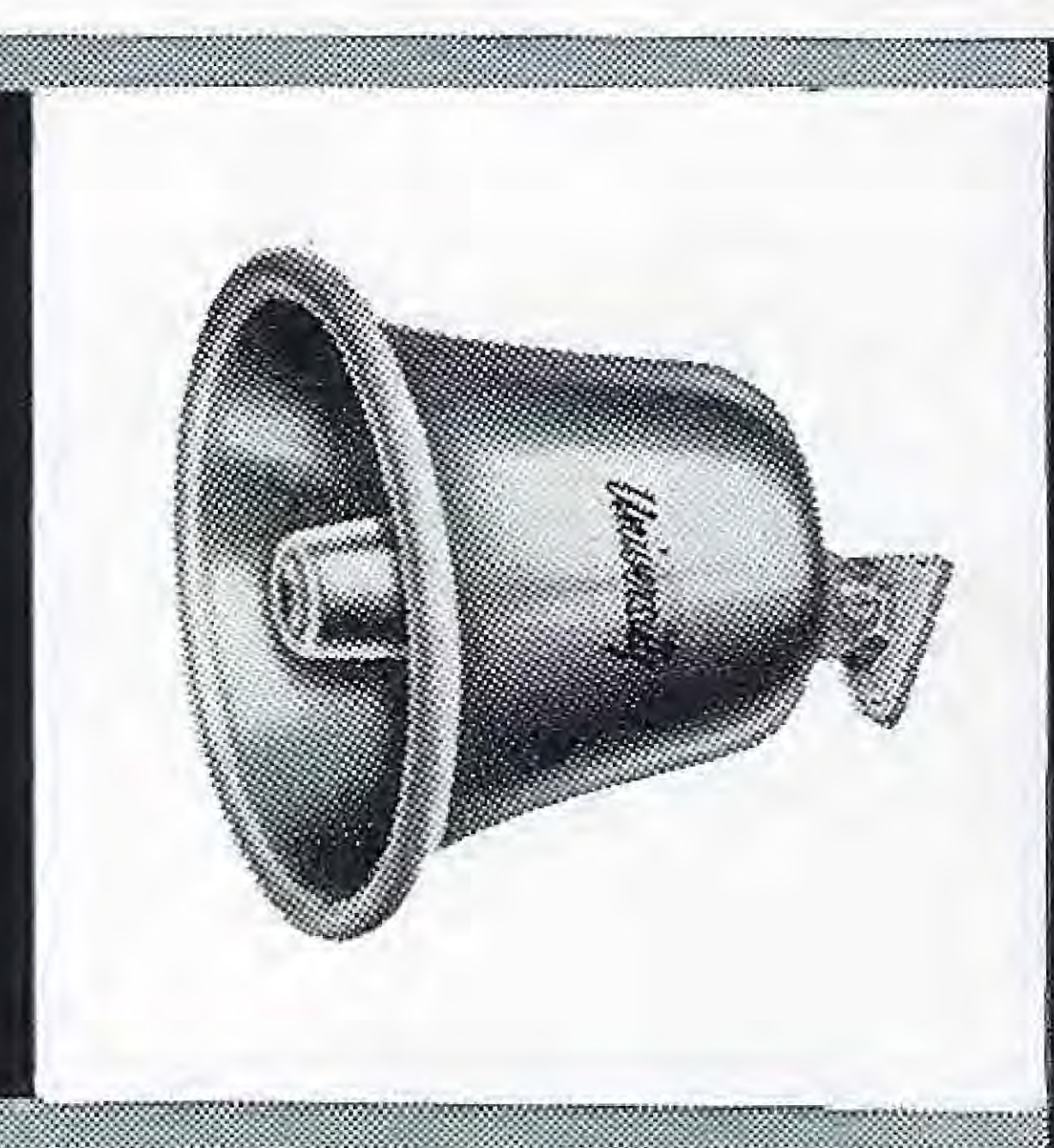
Model CIB — Exclusive University "cobra" horn for uniform wide-angle sound pattern with optimum vertical dispersion. OMNI-LOK swivel mtg. bracket directs sound where desired. Ideal for coverage of wide area where ambient noise level is not excessive. Design minimizes feed-back problems. Highly efficient. Bi-sectional driver mechanism is tropicalized, hermetically sealed for continuously dependable performance.



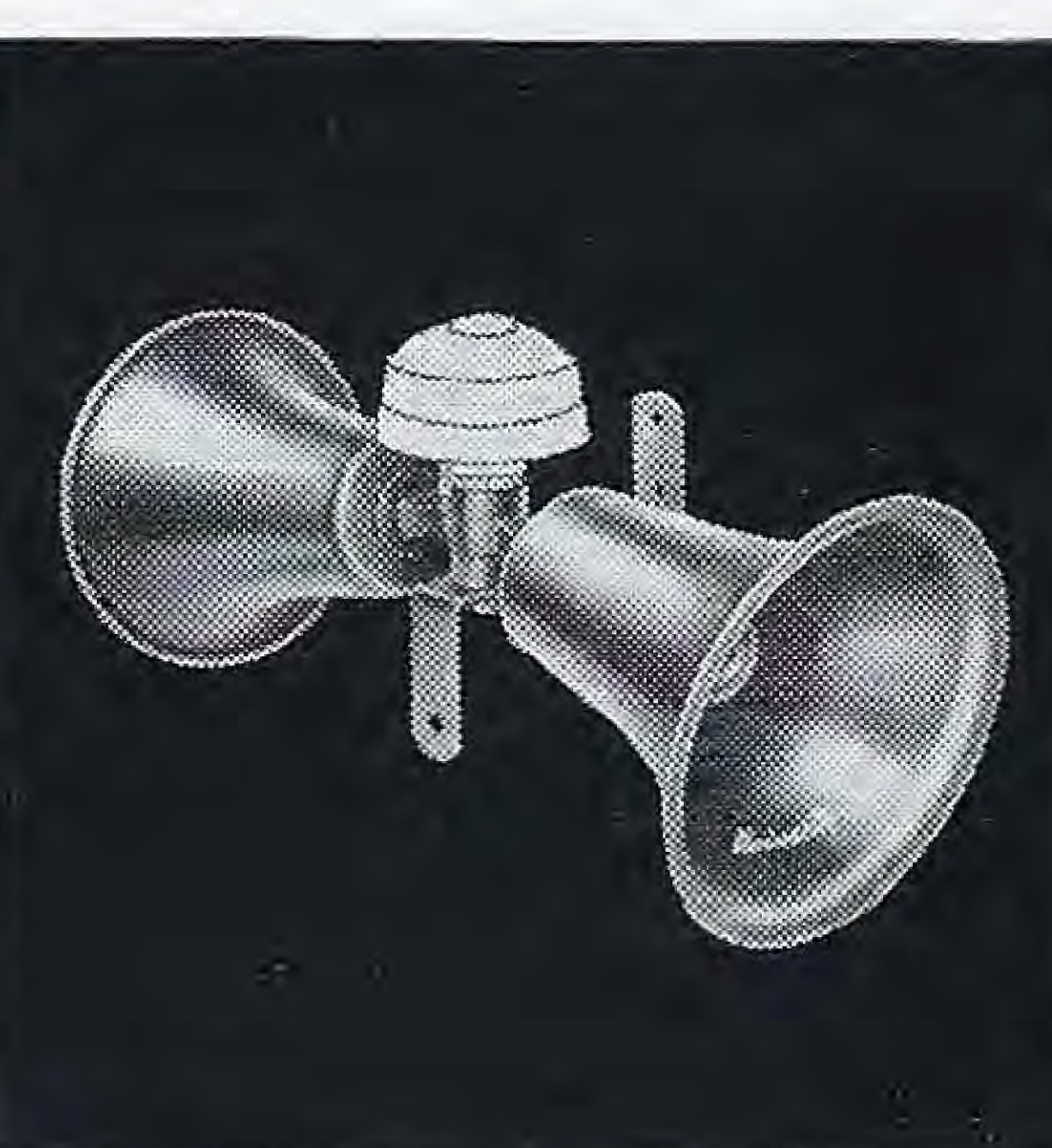
Model IBR — Exceptionally compact, complete with built-in driver. Uniform 360° sound dispersion offers an economical solution to installations where omni-directional coverage is required but the total number of speakers must be kept to a minimum. For cube-like areas where speakers can be suspended from the ceiling. Tropicalized, hermetically sealed; ideal for both commercial and industrial applications.



Model MIS — Compact reflex speaker similar to Model MIL, but designed for flange or flush mounting in cabinets, walls, ceilings, bulkheads, dashboards, etc. Tropicalized, hermetically sealed for total weatherproofing. Ideal replacement for less efficient cone speakers, provides more output gain and greater reliability. Cork-neoprene flange gasket included.



Model CR — Big power in a small package. 90° dispersion, built-in driver with heavy-duty 2" voice coil—for the punch and penetration that assures high intelligibility in noisy areas. Its frequency response makes Model CR ideal for paging/talk-back systems that must also reproduce music. Tropicalized, hermetically sealed; serrated swivel bracket.



Model 2WP — Bi-directional paging projector enables economical coverage of two oppositely located areas with a single driver unit. Use with MA-25, SA-HF, SA-30 or PA-HF driver. Adjustable mtg. bracket permits output from the two horns to be directed 10° downward or outward for best sound distribution. Mounts on any surface, pipe or superstructure.

MODEL	IB	CIB	MIL	CMIL	MIS	CR	IBR	2WP
FREQUENCY RESPONSE	300-13,000 cps	300-13,000 cps	400-13,000 cps	400-13,000 cps	500-13,000 cps	250-8000 cps	300-10,000 cps	350 cps horn cut-off
POWER CAPACITY (Cont. Duty)								
FULL RANGE	15 watts	15 watts	5 watts	5 watts	5 watts	20 watts	15 watts	Depends upon driver used
*ADJUSTED RANGE	30 watts	30 watts	10 watts	10 watts	10 watts	40 watts	30 watts	
IMPEDANCE	4,845 ohms	4,845 ohms	4,845 ohms	4,845 ohms	4,845 ohms	16 ohms	4,845 ohms	Depends upon driver used
DISPERSION	90°	120° x 60°	120°	120° x 60°	150°	90°	360°	120° each horn
**SOUND PRESSURE LEVEL	120 db	118 db	113 db	113 db	111 db	119 db	106 db	Depends upon driver used
‡SENSITIVITY AS MICROPHONE	-26 DBM	-22 DBM	-23 DBM	-20 DBM	-22 DBM	-22 DBM	-32 DBM	Depends upon driver used
DIMENSIONS	8 1/2" dia. 9" deep	7 3/8" hi. 14" wide 12" deep	6 3/8" dia. 7" deep	6 1/4" hi. 9 1/2" wide 8 1/2" deep	5 1/2" o.d. 4 7/16" deep 6 holes on 4 7/8" mtg. dia.	11 1/2" dia. 11 1/2" deep	13" dia. 10 1/4" high	8 1/2" dia. each bell 20 1/2" long
SHIPPING WEIGHT	4 lbs.	5 1/2 lbs.	3 1/4 lbs	4 lbs.	3 1/2 lbs.	8 3/4 lbs.	5 1/4 lbs.	4 lbs.
LIST PRICE	8Ω—\$34.50 4,45Ω—\$36.00	8Ω—\$42.00 4,45Ω—\$43.50	8Ω—\$26.00 4,45Ω—\$27.25	8Ω—\$29.75 4,45Ω—\$31.00	8Ω—\$24.00 4,45Ω—\$25.25	\$45.00	8Ω—\$45.00 4,45Ω—\$46.50	\$28.00

*Input program response above speaker low frequency cut-off.

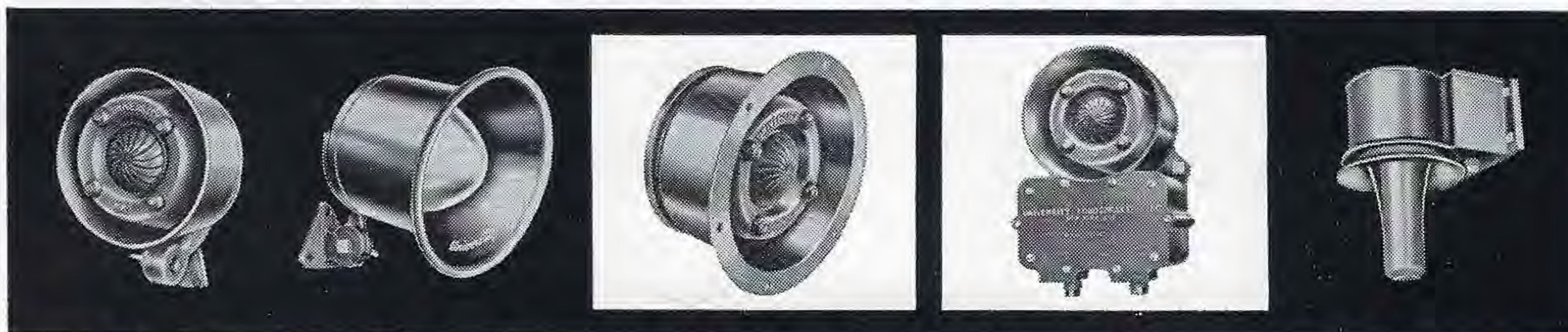
**Sound pressure readings taken at 4 ft. with "Full Range" power input. Reduce by 6 db each time distance is doubled. Reduce by 3 db each time power input is halved. Increase by 3 db when power input is doubled.

‡DBM re 10 dynes/cm²

SUBMERGENCE-PROOF

University's perception of the many conditions encountered in meeting the more stringent requirements of marine and heavy-industry applications has resulted in this exclusive and unequalled series of submergence-proof speakers that are impervious to dust and dirt, fumes, and salt water spray. They can be relied upon unequivocally to do the job . . . and keep on doing it.

University



Model MM-2—Rugged, compact . . . power capacity and frequency response ideal for clear, noise-cutting reception. Four screws of reflector permit removal from front to expose diaphragm for cleaning. Serrated die-cast swivel mtg. bracket for fast, reliable adjustment.

Model MM-2L—Similar to the MM-2, but has higher power capacity and extended low frequency response. Used where both music and speech, or high power capacity are needed. Swivel mounting bracket can mount directly on CTR watertight transformer housing.

Model MM-2F—Similar to the MM-2, but for flush mounting in walls, ceilings, bulkheads, dashboards; or where looks or mechanical protection are important. Drains automatically. Cork-neoprene weatherproofing gasket. Six mounting holes on a 6 5/8" circle dia.

Model MM-2TC—Complete speaker, using cast aluminum combination bell and weatherproof housing with space for a line matching transformer and/or volume control. Control can be mounted right into position provided. For bulkhead, wall or ceiling mounting. MM-2TC T . . . comes wired with multi-impedance transformer and pad attenuator.

Model MSR—All die-cast reflexed air column speaker with radial deflector for 360° horiz. dispersion. Hermetically sealed driver easily removed. Provisions for line matching transformer and volume control. Wall/ceiling bulkhead mtg. MSR-T comes wired with multi-impedance transformer and pad.



MODEL ST MODEL SB

Model ST . . . Transformer Junction Box Adapter

Fits MM-2, MM-2L. Weather-proofed. For bulkhead, wall, ceiling mounting. Houses transformers up to 2 1/4" x 2 1/4" x 2 3/4" with 2" and 2 3/8" mtg. centers. Used as terminal or junction box. \$12.50 List.

Model SB . . .

Bulkhead Mtg. Adapter

Fits MM-2, MM-2L, MM-2F. 3 mounting holes 120° apart on 5-13/16" mounting circle dia. For flush-fit mounting onto bulkhead, wall, ceiling. \$3.00 List.

MODEL	MM-2	MM-2L	MM-2F	MM-2TC	MSR
FREQUENCY RESPONSE	350-10,000 cps	250-10,000 cps	350-10,000 cps	350-10,000 cps	250-10,000 cps
POWER CAPACITY (Cont. Duty)	15 watts	25 watts	15 watts	15 watts	15 watts
FULL RANGE	30 watts	50 watts	30 watts	30 watts	30 watts
*ADJUSTED RANGE					
DISPERSION	150°	120°	150°	120°	360°
**SOUND PRESSURE LEVEL	117 db	120 db	117 db	117 db	114 db
IMPEDANCE	16 ohms	16 ohms	16 ohms	16 ohm	16 ohms
‡SERIES CAPACITOR FOR ADJUSTED RANGE	33 mfd	40 mfd	33 mfd	33 mfd	40 mfd
DIMENSIONS (overall)	6" O.D. 5" deep	7 1/4" O.D. 5" deep	7 1/4" O.D. 3 3/4" deep	10" high 6 1/8" W. 4 1/8" deep	10 3/4" high 7 3/4" W. 8 1/4" deep
SHIPPING WEIGHT	5 1/4 lbs.	6 3/4 lbs.	5 1/4 lbs.	MM-2TC—8 1/2 lbs. MM-2TC-T—10 1/4 lbs.	MSR—10 lbs. MSR-T—10 1/2 lbs.
LIST PRICE	\$46.00	\$52.00	\$46.00	MM-2TC—\$70.00 MM-2TC-T—\$83.50	MSR—\$70.00 MSR-T—\$83.50

*Input program response above low frequency cut-off.

‡Assumes use of 16 ohm input.

**Sound Pressure readings taken at 4 ft. with "Full Range" power input. Reduce by 6 db each time distance is doubled; reduce by 3 db each time power input is halved; increase by 3 db when power input is doubled.

HIGH FIDELITY WEATHERPROOF DUAL-RANGE SYSTEMS

LC speakers are complete systems . . . designed to simplify indoor and outdoor high fidelity sound installations. Include: tropicalized, heavy-duty low frequency driver, separate compression high frequency reproducer coaxially assembled, electrical frequency divider . . . all wired and housed in compact dual horn projector. Baffled chamber and front folded horn provide optimum loading, assure clean bass. Exceptional uniformity of frequency response and sound distribution helps eliminate reverberation problems. Dependable performers for fixed or mobile applications, indoors or out. Weatherproof, all metal construction. Sturdy "U" mounting bracket for ease of installation and adjustment.



MODEL	MLC	BLC	WLC
POWER CAPACITY (Cont. Duty)	15 watts	25 watts	30 watts
FREQUENCY RESPONSE	150-15,000 cps	70-15,000 cps	50-15,000 cps
IMPEDANCE	8 ohms	8 ohms	8 ohms
DISPERSION	120°	120°	90°
*SOUND PRESSURE LEVEL	117 db	119 db	120 db
DIMENSIONS			
DIAMETER (overall)	12 3/4" W x 9 1/8" H	22 3/4"	33 1/2"
DEPTH (overall)	10 5/8"	9 1/4"	20"
SHIPPING WEIGHT	10 lbs.	21 lbs.	72 lbs.
LIST PRICE	\$54.50	\$86.00	\$250.00

*Sound Pressure taken at 4 ft., 750-1250 cps with 1 cps sweep. Reduce by 6 db each time distance is doubled; reduce by 3 db each time power input is halved.

Model MLC . . . Mighty Midget for Music/Voice

All new, small sized version of time-tested LC design is for low level speaker distribution, or to cover medium size areas. Incorporates design changes that make it suitable for paging applications. Articulation is exceptional, and musical balance is well preserved. MLC is the ideal speaker for sound reinforcement systems. It carries sound to points that can't be reached unaided, yet retains *naturalness*. Very efficient; easily installed.

Model BLC . . . For General Applications

A sensation when introduced, the BLC has set new standards for high fidelity sound in p.a. for voice and music reproduction . . . indoors and out. Lightweight and easy-to-carry. Shallow depth solves problems where emphasis is on decor or physical limitations. As a complete system, the price is in line with fine trumpet/driver combinations, and can be used in their place except under exceptionally noisy conditions.

MODEL WLC . . . Heavy Duty System

The largest of the series, the WLC has a decade of successful performance in concert halls, rinks, auditoriums, stadiums and outdoor theatres throughout the world. Though rated only a few more watts power capacity than the BLC, the WLC with heavy duty, super-efficient components gives greater low frequency response, and higher overall output equal to double the power on a relative basis. Finest full-range response. Simple installation. Completely ignores the weather.

SUPER-POWER PROJECTORS

University leadership and experience in military requirements has produced highly refined designs for the reproduction and projection of high power sound with no compromise in efficiency, intelligibility and reliability. With the expanding use of soundcasting in civil, commercial, and industrial applications, these highly versatile University speakers are worthy of serious consideration.

University



Model 4A4—Exceptionally versatile, powerful and compact, the 4A4 can be used with Models MA-25, SA-HF, SA-30, or PA-HF drivers . . . depending upon the power capacity, response, efficiency and impedance needed. Four individually reflexed center assemblies united in acoustically correct mixing chamber. Combined output concentrated by a single bell assures maximum penetration of distance and ample reserve power where uninterrupted service is essential. Adjustable 'U' bracket for complete mounting flexibility. Dispersion 80°; bell dia. 30 3/4"; Length overall 28 7/8"; Shpg. wt., (less driver) 49 lbs. \$125.00 List.

B-12P — Accommodates *twelve* University drivers of the MA-25, SA-HF, SA-30, or PA-HF types. Achieves fantastic power range . . . reserve power to meet *any* challenge. Drivers screw into patented mixing chamber of heavy cast aluminum construction. Bell is separate assembly . . . easily attaches to mixing chamber. Large spun aluminum coverall protects the drivers and interconnections. Adjustable 'U' mounting bracket. Many applications: military, civil defense, church towers, large stadiums, etc. Dispersion 80°; Bell dia. 31 1/2"; Length overall 47"; Shpg. wt., (less drivers) 60 lbs. \$395.00 List.

SPECIFICATIONS—4A4 WHEN USED WITH FOLLOWING DRIVERS

MODEL	MA-25	SA-HF	SA-30	PA-HF
FREQUENCY RESPONSE	120-6500 cps	120-10,000 cps	120-10,000 cps	120-10,000 cps
POWER CAPACITY (Cont. Duty)				
FULL RANGE	100 watts	120 watts	120 watts	200 watts
*ADJUSTED RANGE	200 watts	240 watts	240 watts	400 watts
‡SOUND PRESSURE LEVEL	128 db	131 db	131 db	135 db

*Input program response limited to above 120 cps.

‡Sound Pressure reading taken at 4 ft. with "Full Range" power input. Reduce by 6 db each time distance is doubled; reduce by 3 db each time power input is halved; increase by 3 db when power input is doubled.

SPECIFICATIONS—B-12P WHEN USED WITH 12 DRIVERS OF FOLLOWING TYPES

MODEL	MA-25	SA-HF	SA-30	PA-HF
FREQUENCY RESPONSE	100-6500 cps	100-10,000 cps	100-10,000 cps	100-10,000 cps
POWER CAPACITY (Cont. Duty)				
FULL RANGE	300 watts	360 watts	360 watts	600 watts
*ADJUSTED RANGE	600 watts	720 watts	720 watts	1200 watts
‡SOUND PRESSURE LEVEL	136 db	139 db	139 db	143 db

*Input program response limited to above 100 cps.

‡Sound Pressure readings taken at 4 ft. with "Full Range" power input. Reduce by 6 db each time distance is doubled; reduce by 3 db each time power input is halved; increase by 3 db when power input is doubled.

EXPLOSION-PROOF SPEAKERS ...FOR HAZARDOUS DUTY



Models 7101, 7102 are Underwriters' Labs. approved for use where flammable liquids, gases, dust and other combustibles are present. They enable industries previously denied sound, paging and intercom to install 100% safe systems. Shipped fully assembled, complete with built-in line matching transformer to comply with Government Safety regulations and installation approval. Required conduit entrance is provided as part of the driver housing casting. Model 7101 for Class I, Groups C and D; Model 7102 for same *plus* Class II, Groups E, F, G.

SPECIFICATIONS—7101 AND 7102

FREQUENCY RESPONSE	200-10,000 cps
POWER CAPACITY (Cont. Duty)	
FULL RANGE	25 watts
*ADJUSTED RANGE	50 watts
DISPERSION	95°
**SOUND PRESSURE LEVEL	7101 122 db 7102 110 db
‡SENSITIVITY AS MICROPHONE	7101 -23 DBM 7102 -32 DBM
VOICE COIL IMPEDANCE	16 ohms
TRANSFORMER IMPEDANCES	45/500/1000/ 1500/2000 ohms
DIMENSIONS	
BELL DIAMETER	15 3/4"
LENGTH OVERALL	19"
SHIPPING WEIGHT	23 3/4 lbs.
LIST PRICE	7101 \$125.00 7102 150.00

*Input program response limited to above 200 cps.

**Sound Pressure readings taken at 4 ft. with "Full Range" power input. Reduce by 6 db each time distance is doubled; reduce by 3 db each time power input is halved; increase by 3 db when power input is doubled.

‡DBM re 10 dynes/cm²

POWRPAGE—NEW ULTRA-LIGHT PORTABLE SOUNDCASTING SYSTEMS—EXCLUSIVE FEATURES & 1001 APPLICATIONS

Model PP-1 . . . Portable Powrpage

The most compact, efficient portable system ever devised. Ideal for police, fire, civil defense, railroads, sporting events, etc. High output, weatherproof reflex speaker projects sound in any desired direction. Hand microphone with 11 ft. cable gives full freedom of movement. *Powrsaver* press-to-talk switch controls entire system, gives instantaneous operation without warm-up or power waste. Uses 6 volt standard lantern batteries (Burgess type S-4H or equivalent). Equipped with comfortable carrying handle and convenient microphone clip. Battery housing serves as base stand for entire assembly. Lightweight, easily handled. Shpg. wt., 11 1/2 lbs. \$116.25 List. (Less batteries).

Model PP-2 . . . Pistolgrip Powrpage

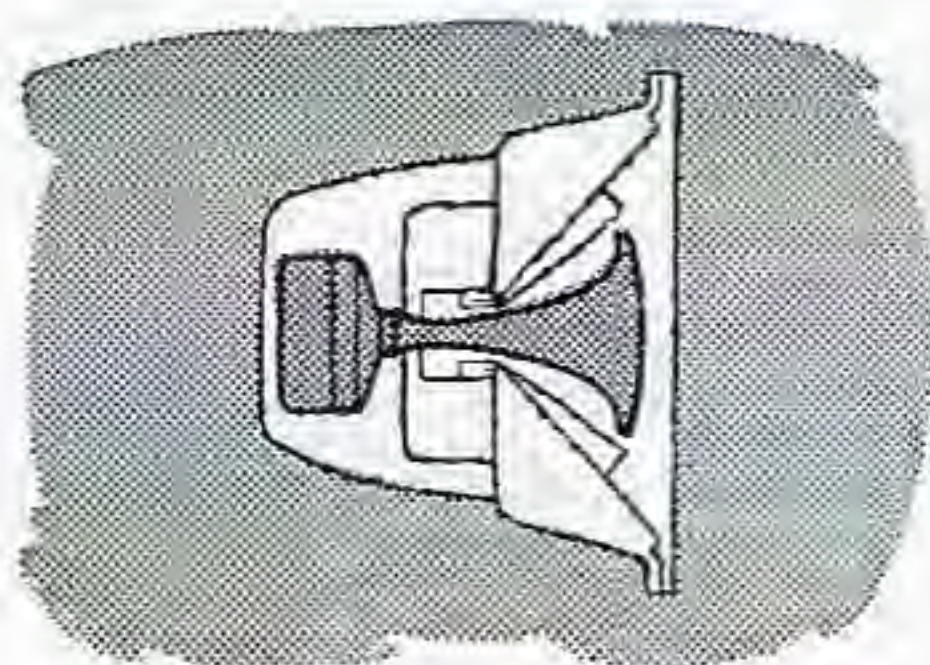
Aim, press, talk . . . projects crystal clear, powerful sound in any direction . . . as you move. Streamlined, only 3 1/2 lbs. including batteries. Can be taken anywhere; easy, one-hand use. Ideal for marine, construction, auctions, carnivals, etc. *Slim* handle holds pencil batteries and *Powrsaver* press-to-talk switch. Weatherproof, high-output speaker. Instantaneous operation without warm-up or power waste. Built-in jack can draw 6 to 12 volts from boat or auto ignition system. Shpg. wt., 4 lbs. \$108.35 List. (Less batteries).



MODEL PP-1



MODEL PP-2



DIFFAXIALS

University has ingeniously combined the most advanced principles of audio and acoustic engineering to produce a speaker that is different . . . the Diffaxial . . . an exceptionally high quality extended range speaker, capable of the most magnificent, natural, wide-range reproduction of sound.

University



MODEL 315-C

MODEL 6303

MODEL 312

MODEL UXC-123

MODEL 308

Model 315-C Super 15" 3-way Diffaxial Speaker

The new, improved 315-C embodies all latest and *exclusive* developments. Big theatre woofer with high excursion, dual spider piston and special anti-breakup low resonance diaphragm achieve clean, rich bass reproduction never before attained. *Patented* multi-element Diffusicone mid-range section crosses over at 1000 cps. Treble range now covered by new heavy duty T-50 Hypersonic driver and new true-axially mounted wide-angle horn. Re-designed crossover network includes *exclusive* "emotional" balance adjustment which alters the overall tonal personality of the speaker to best match room acoustics, baffle contribution, associated electronic equipment characteristics and personal tastes or hearing acuity. Adjustment of tweeter output also provided. Contains 6½ lbs. all-Alnico 5 Gold Dot magnet (including tweeter). Response: 25 cps. to inaudibility; 50 watts* power capacity; 8-16 ohms. 12" deep; Shpg. wt., 34½ lbs. **\$260.00 List.**

Model 6303 15" 3-way Diffaxial Speaker

A tremendous value, with performance capabilities second only to the 315-C. Super-efficient woofer, deluxe multi-element Diffusicone for mid-range with crossover at 1000 cps., famous and newly improved HF-206 Hypersonic tweeter *true-axially* mounted, for sweet, clear treble, crossing over at 5000 cps. and going out to inaudibility. Built-in frequency dividing network includes "Brilliance" balance control. Handles 30 watts* of power; 8-16 ohms impedance; 10" deep; Shpg. wt., 12 lbs. **\$138.33 List.**

Model 312 Super 12" 3-way Diffaxial Speaker

A completely engineered package . . . University's new Hypersonic HF-206 super-tweeter is *true-axially* projected through the center of the 12" woofer. Full-bodied mid-range reproduction is handled by *patented* deluxe multi-element Diffusicone section. Built-in L/C network and variable "Brilliance" control. Crossover is mechanical at 1000 cps. and electrical at 5000 cps. Contains extra heavy 2 lbs. of all-Alnico 5 Gold Dot magnet. Frequency response to inaudibility; 25 watts* power handling capacity; 8-16 ohms; 8" deep; Shpg. wt., 11 lbs. **\$116.67 List.**

Model UXC-123 12" 3-way Diffaxial Speaker

An integrated 3-way speaker assembly completely wired with built-in L/C network and "Brilliance" control. Employs *exclusive* standard uni-sectional diffusicone element. UXT-5 Super Tweeter with "reciprocating flare" horn mounted *through* the center axis of woofer assembly. Highest efficiency, lowest distortion, and true uniform wide-angle dispersion. Super-sensitive all-Alnico 5 magnet. Crossover mechanically at 1000 cps., electrically at 5000 cps. Response from 45 to 17,500 cps.; 25 watts*; 8-16 ohms; 8¼" deep; Shpg. wt., 9 lbs. **\$106.67 List.**

Model 308 8" 3-way Diffaxial Speaker

Features University's *exclusive true-axial* construction with compression tweeter projected *through* center of woofer. Tweeter employs University's "reciprocating flare" principle crossing over electrically at 5000 cps. . . mid-range is reproduced from *patented* deluxe multi-element Diffusicone section with 1000 cycle crossover. Woofer has extra large voice coil for enhanced bass. Heavy 1¼ lbs. all-Alnico 5 Gold Dot magnet. Response to 15,000 cps. Handles 25 watts*; 8-16 ohms; 6¼" deep; Shpg. wt., 5 lbs. **\$66.25 List.**



DIFFUSICONE-15

DIFFUSICONE-12

DIFFUSICONE-8

MODEL UXC-122

EXCLUSIVE UNIVERSITY 2-WAY DIFFAXIALS

University's 2-way diffaxials employ the *patented* deluxe multi-sectional diffusicone design with 1000 cps. mechanical crossover in 8", 12" and 15" size speakers. Coaxial dual horn loading at apex of cone extends mid and high frequency response. Uniform wide-angle dispersion of highs achieved by means of radial projector with aperture diffraction. Full fidelity at *all* listening points off speaker axis. All models contain heavy super-sensitive all-Alnico 5 Gold Dot magnets for high efficiency.

DIFFUSICONE-15 — Response from 30 to 14,000 cps.; 30 watts*; 1½ lbs. of all-Alnico 5 magnet; 8-16 ohms; 7½" deep; Shpg. wt., 8¼ lbs. **\$75.00 List.**

DIFFUSICONE-12 — Response from 40 to 14,000 cps.; 30 watts*; 1½ lbs. of all-Alnico 5 magnet; 8-16 ohms; 4½" deep; Shpg. wt., 6 lbs. **\$61.67 List.**

DIFFUSICONE-8 — Response from 70 to 13,000 cps.; 25 watts*; a full pound of all-Alnico 5 magnet; 8-16 ohms; 3¾" deep; Shpg. wt., 3¼ lbs. **\$43.33 List.**

Model UXC-122

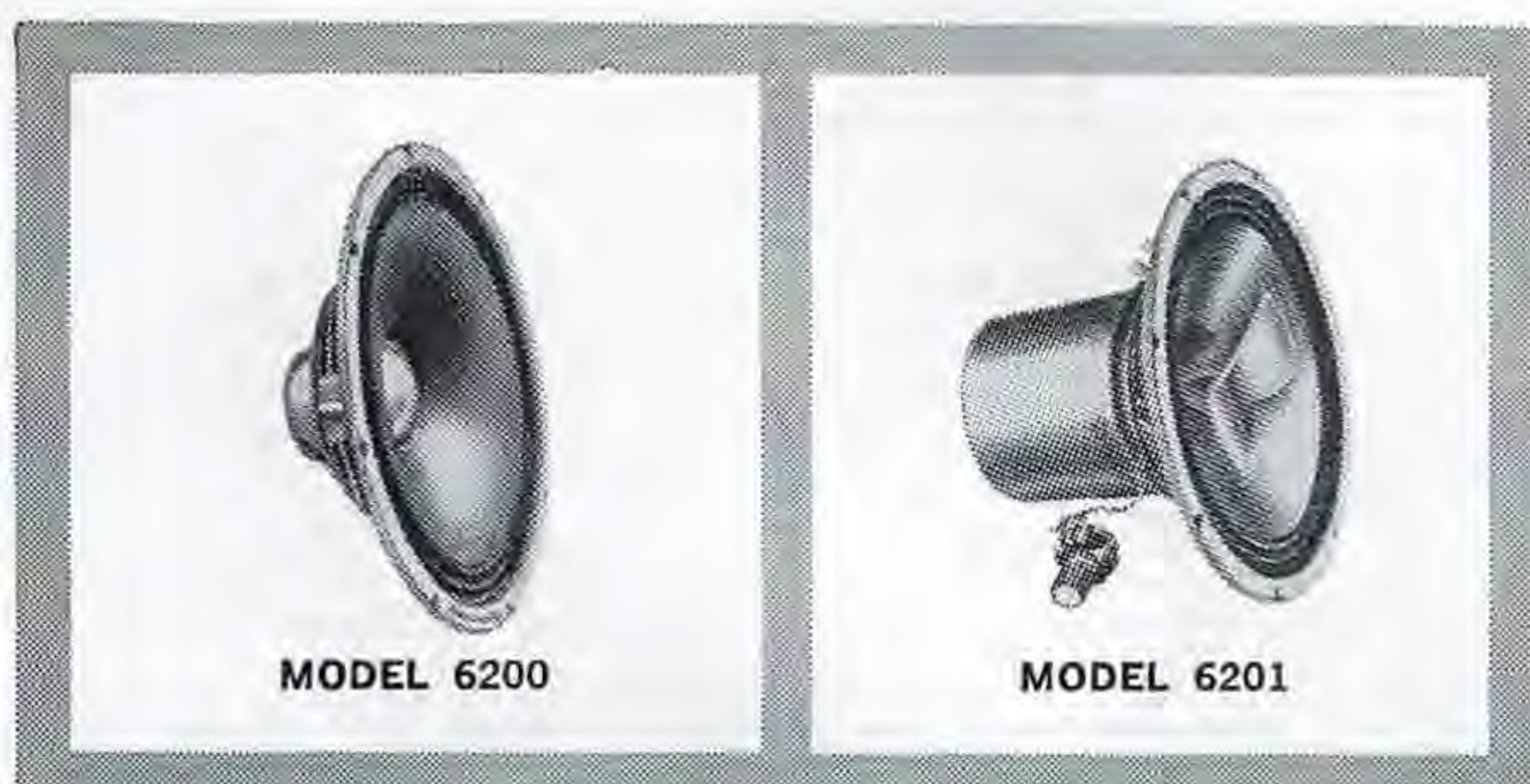
12" Diffaxial speaker employing *exclusive* standard uni-sectional diffusicone element with 1000 cps. mechanical crossover. Coaxial horn loading at the apex of the cone extends mid and high frequency response. Uniform wide-angle dispersion by means of radial projector plus aperture diffraction for full fidelity at all listening points off speaker axis. Extra-large voice coil and one-piece molded woofer cone of special pulp content provide long, trouble-free life and high-power capacity. Contains super-sensitive all-Alnico 5 magnet. Response from 45 to 13,000 cps.; 25 watts*; 8-16 ohms; 4¾" deep; Shpg. wt., 5¼ lbs. **\$55.00 List.**

Model 6200 12" Extended Range Speaker

Shallow design perfect for wall, flush ceiling, and limited space installations. Contains a full pound of super-sensitive all-Alnico 5 magnet. One-piece molded cone of special pulp content for long, trouble-free life. High efficiency, requires a fraction of the power needed for ordinary 12" speakers. Response from 45 to 10,000 cps.; 30 watts*; 8-16 ohms; 4" deep; Shpg. wt., 5¼ lbs. **\$43.33 List.**

Model 6201 12" Dual Range Coaxial Speaker

A *true* dual range coaxial system. The tweeter, with compression driver and "reciprocating flare" horn is mounted *through* the center axis of the cone. High efficiency, wide-angle, uniform treble reproduction. Contains heavy super-sensitive all-Alnico 5 Gold Dot Magnet. Built-in L/C network with "Brilliance" control. Response from 45 to 15,000 cps.; 25 watts*; 8-16 ohms; 8¾" deep; Shpg. wt., 10¼ lbs. **\$86.67 List.**



MODEL 6200

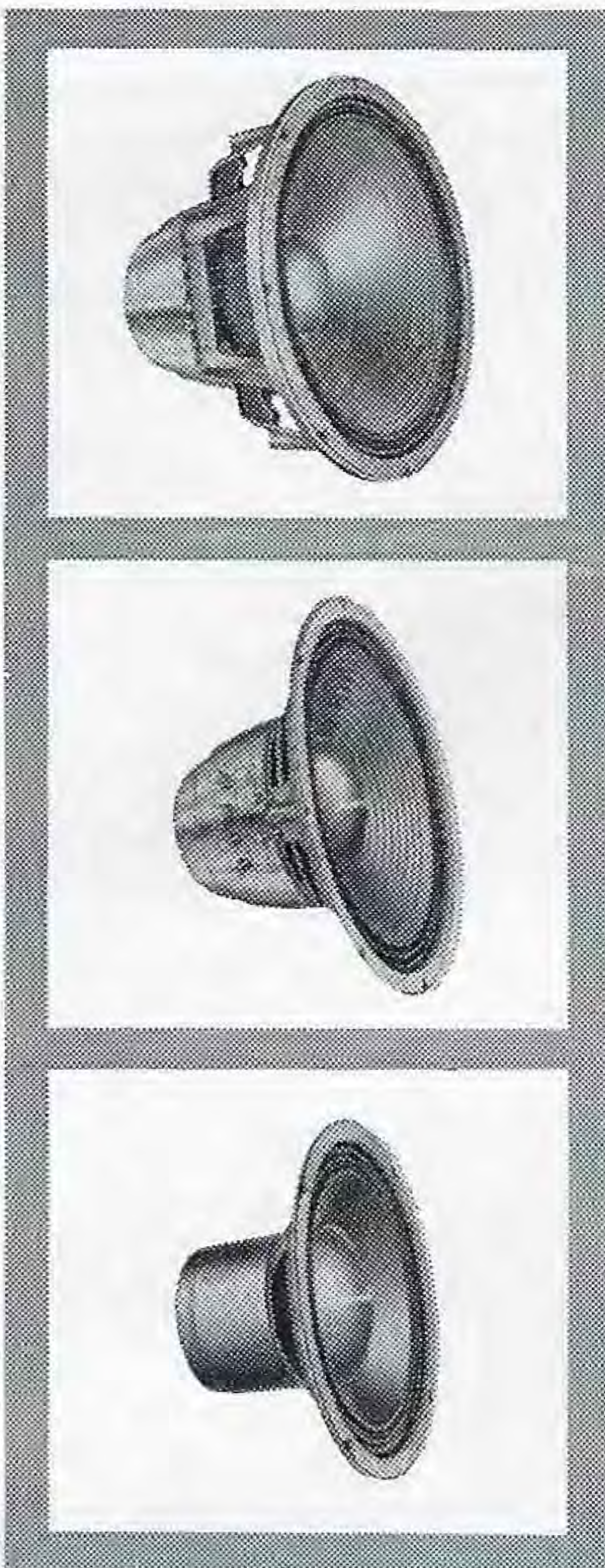
MODEL 6201

*Integrated Program

WOOFERS

University recognition of all the obscure as well as the more apparent engineering concepts involved in multi-speaker and stereophonic systems has resulted in the widest assortment of specialized low frequency reproducers, to suit specific application, technical and budget requirements.

University



Model C-15W

15" Dual Impedance Woofer

Maximum conversion is maintained by a new type voice coil with greatest axial depth and excursion ever attained. Exclusive *twin spider* arrangement and 6 lb. all-Alnico 5 Gold Dot magnet reduces distortion to virtually broadcast level. Response from below 25 to 1500 cps. Up to 50 watts*. Exclusive dual impedance voice coil assembly enables use in any system of 4 to 20 ohms... facilitating alteration and expansion of systems, and balancing to associated components of varied efficiency. 10 1/2" deep; Shpg. wt. 26 3/4 lbs.

\$141.67 List.

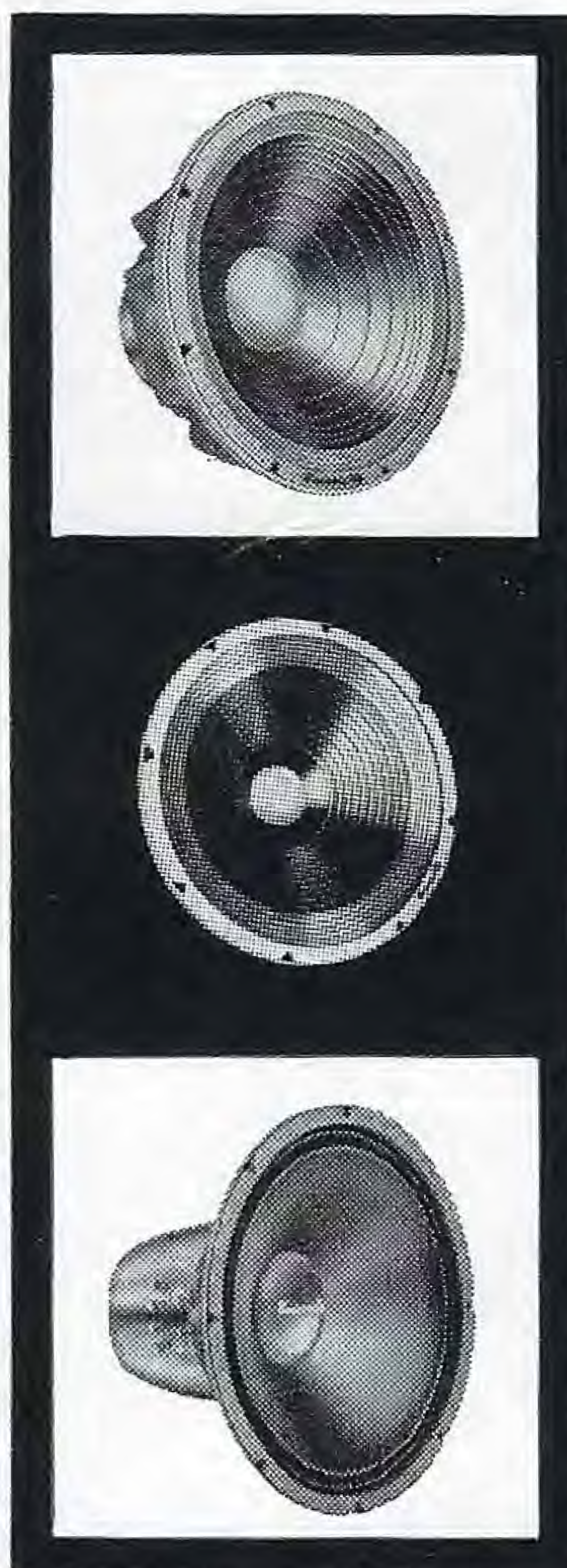
Model C-12W

12" Adjustable Response Woofer

Built-in facilities enable high-end adjustment of response to 700, 2500 or 5000 cps. suiting requirements of most tweeters. Crossover points can be changed to achieve best tonal balance. When used with N-1 adjustable high-pass filter in a 2-way system combination forms a complete L/C network. 1 1/2 lbs. super-sensitive all-Alnico 5 Gold Dot magnet. Response 40 to 6000 cps. (overall); 8 ohms. Up to 30 watts*; 6 1/4" deep. Shpg. wt. 7 1/4 lbs. \$60.00 List.

Model C-8W 8" Woofer

Ideal for assembling a compact, high quality speaker system. Perfect also for mid-range in low cost 3-way systems. Suitable for crossover up to 5000 cps. Super-sensitive all-Alnico 5 Gold Dot magnet. Response to 50 cps. is achieved when properly baffled. Up to 25 watts*; 8 ohms; 4 1/4" deep. Shpg. wt. 3 lbs. \$22.50 List.



Model C-15HC

15" High Compliance Woofer

Now, for the first time, a *high compliance*, low resonance 15" woofer which yields astounding bass depth without compromising power handling ability and clean output. Specifically designed for ultra-linear response *throughout* the complete low frequency range. Magnetic assembly employs the NEW Hiflux UNIFERROX-7 magnet material in specially designed suspension assembly insuring positive transient control during maximum excursions. Recommend installation in a baffle volume or enclosure of approximately 3.4 cu. ft. with a duct 4" in length, and 3" in dia. at rear of enclosure. Overall response to 800 cycles. Resonance 15 cps. Dual impedance voice coil. 4-8 and 10-20 ohms. Operating input power to complete speaker system 20 to 70 watts. 9 1/2" deep; Shpg. wt. 24 3/4 lbs. \$149.17 List.

Model C-12HC

12" High Compliance Woofer

A new high compliance, ultra-linear 12" woofer capable of outstanding performance in matched level systems utilizing operating input power of 25 to 60 watts. Recommend installation in a baffle volume or enclosure of approximately 1.8 cu. ft. with a duct 10" in length, and 3" in dia. at rear of enclosure. Response to 2500 cycles permits use in speaker system with addition of only a tweeter. Magnetic assembly employs the NEW Hiflux UNIFERROX-7 magnet material. Cone resonance 18 cps. Dual impedance voice coil. 4-8 and 10-20 ohms. 6 1/2" deep; Shpg. wt. 8 1/2 lbs. \$82.50 List.

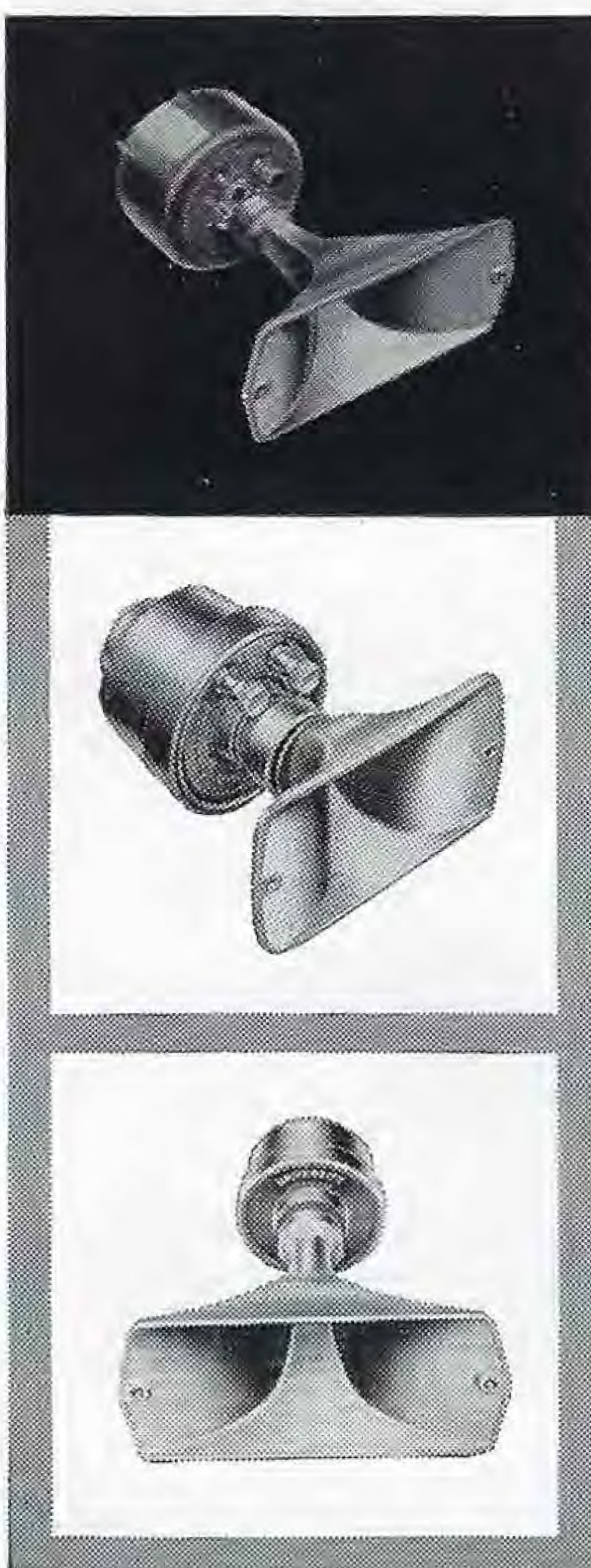
Model C-63W

15" Adjustable Response Woofer

Highly versatile low frequency speaker with *exclusive* built-in features. Adjustable response limiter sets response to 700, 2500 and 5000 cps. to suit crossover requirements of most tweeters. Combination with N-1 Adjustable High Pass Filter forms a 2-way L/C network with "Brilliance" control. Bass response is smooth to better than 30 cps. with lowest distortion. One-piece molded cone of special pulp content for increased stability. 1 1/2 lbs. of super-sensitive all-Alnico 5 Gold Dot magnet. Response from 30 to 6000 cps. (overall). 30 watts*; 8 ohms; 10" deep; Shpg. wt. 10 lbs. \$81.67 List.

TWEETERS

University research and engineering have achieved new horizons which are leading the art of tweeter design away from the shortcomings of staid, antiquated designs of the past. Here is a wide selection of the very finest, most advanced examples of the art, embodying important patented features which make them outstanding values.



NEW HF-206 Hypersonic Tweeter

High frequency far beyond audibility. Employs improved die-cast aluminum wide-angle horn based on "reciprocating-flare" principle providing uniform 120° horizontal and 50° vertical dispersion. New super-efficient driver mechanism also housed in die-cast aluminum casting. Low end cut-off 3500 cps. Power capacity; 25-50 watts*, depending on crossover frequency used and speaker system set-up. 8 ohms. N-1 or N-2B network for 5000 cps. crossover recommended. 6" x 3-5/16" x 6-9/16". Shpg. wt. 3 1/2 lbs. \$55.00 List.

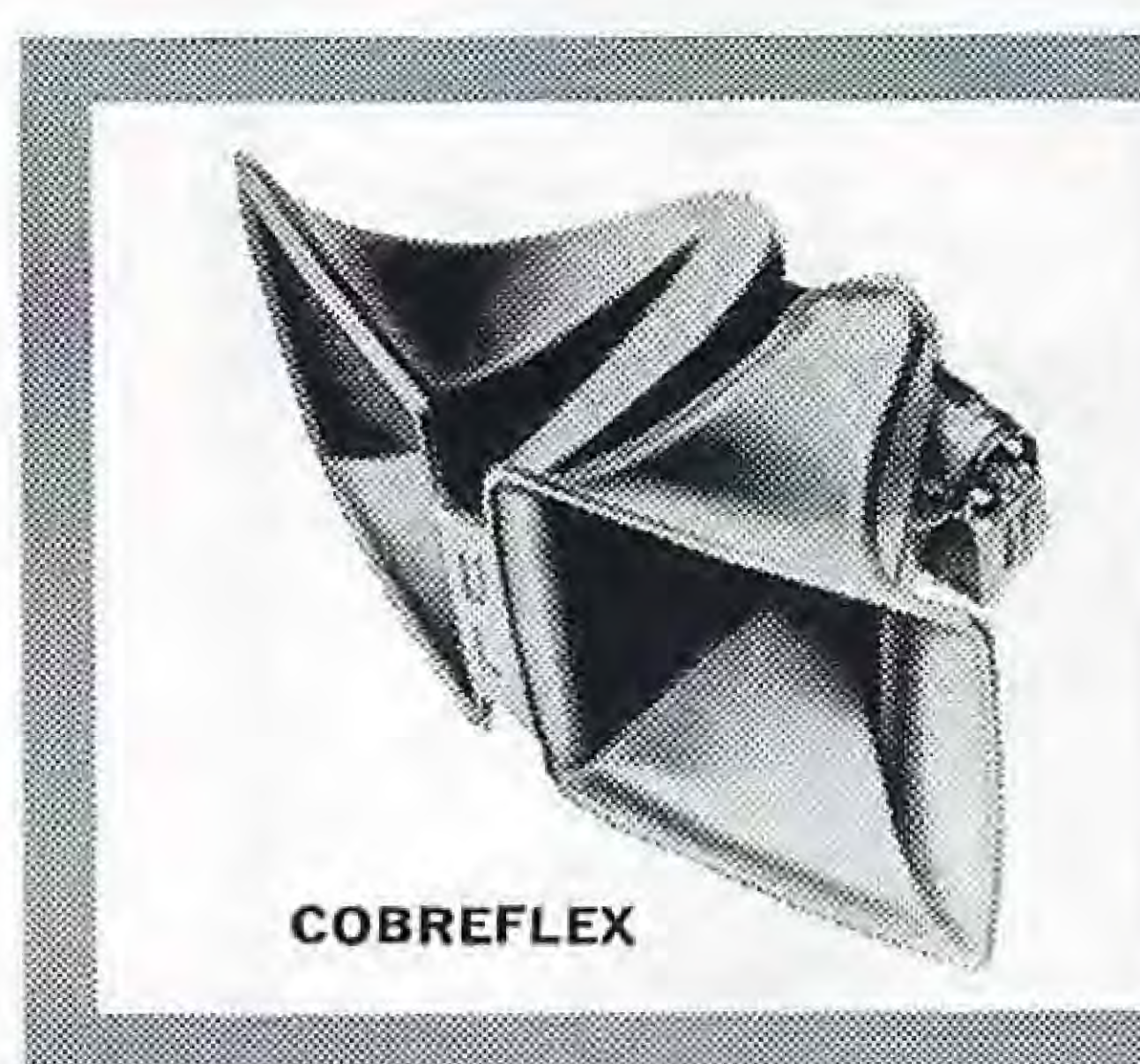
Model UXT-5 Super Tweeter

A compact super tweeter assembly for crossover at 5000 cps. or above. Employs a genuine compression driver with super-sensitive Alnico 5 magnet, coupled to University's *exclusive* and *patented* "reciprocating flare" horn. Uniform wide-angle response, high conversion efficiency. N-1 or N-2B L/C network recommended. Response from 4500 to 17,500 cps.; 120° horizontal and 50° vertical dispersion 25-50 watts*. 8 ohms; 4 1/4" x 2 1/2" x 4"; Shpg. wt. 1 3/4 lbs. \$35.00 List.

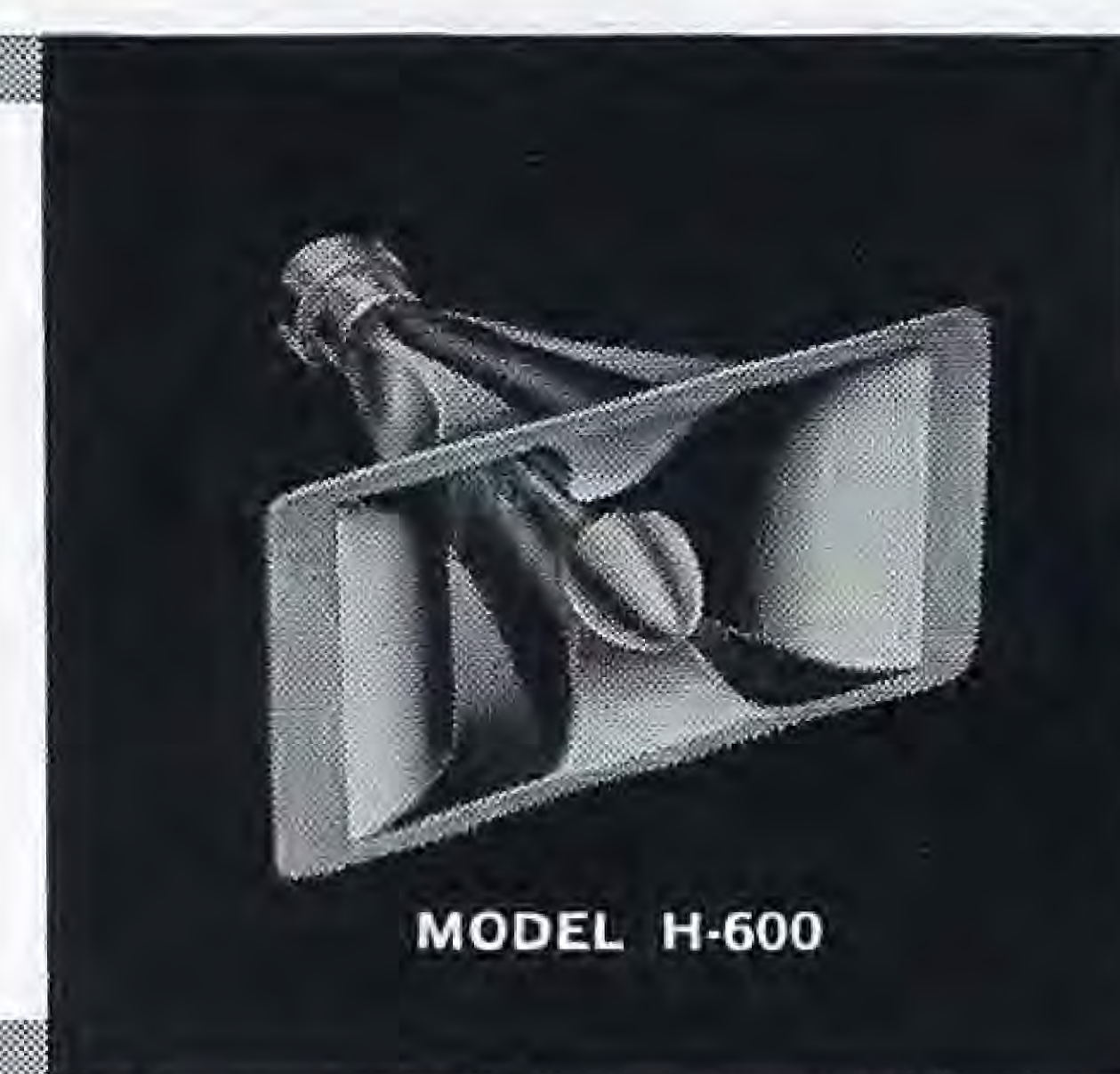
Model 4401 Tweeter

Sturdy one-piece die-cast horn using "reciprocating-flare" principle results in 120° horizontal high frequency dispersion and 50° vertical. High conversion efficiency due to use of genuine "driver" mechanism with light weight duralumin voice coil suspension. Hermetically sealed construction. Response from 2000-15,000 cps., 8 ohms. Handles up to 25 watts*. N-1 or N-2B dividing network recommended. 6" x 2 3/4" x 6-5/16". Shpg. wt. 2 lbs. \$30.00 List.

*Integrated Program



COBREFLEX



MODEL H-600

Model Cobreflex Horn

Unsurpassed as a mid-range horn in 3-way systems when used with T-30 compression driver unit... 27" exponentially-flared air column permits crossover as low as 350 cps. *Exclusive* twin-flare design for uniform wide-angle dispersion, 120° horizontal and 60° vertical. Two identical one-piece die-castings of extra heavy aluminum. 1 3/8"-18 throat; 10 1/4" x 18 1/2" x 9 1/4". Shpg. wt. 10 1/4 lbs. \$38.33 List.

Model H-600 Mid-Range and High Frequency Horn

New and improved, the H-600 is the finest in 600 cycle cut-off wide-angle horns for professional and home hi-fi applications. All-new die-cast design combines famous patented "reciprocating-flare" principle with hemispherical deflection for exceptionally uniform sound distribution patterns throughout the *full* response range. Use with T-30 or T-50 drivers and N-2A network. Will take any driver with standard 1 3/8"-18 throat. 7 3/4" x 8 3/4" x 4 3/4". Shpg. wt., 2 1/2 lbs. \$30.00 List.



NEW T-30 Mid-Range and High Frequency Driver

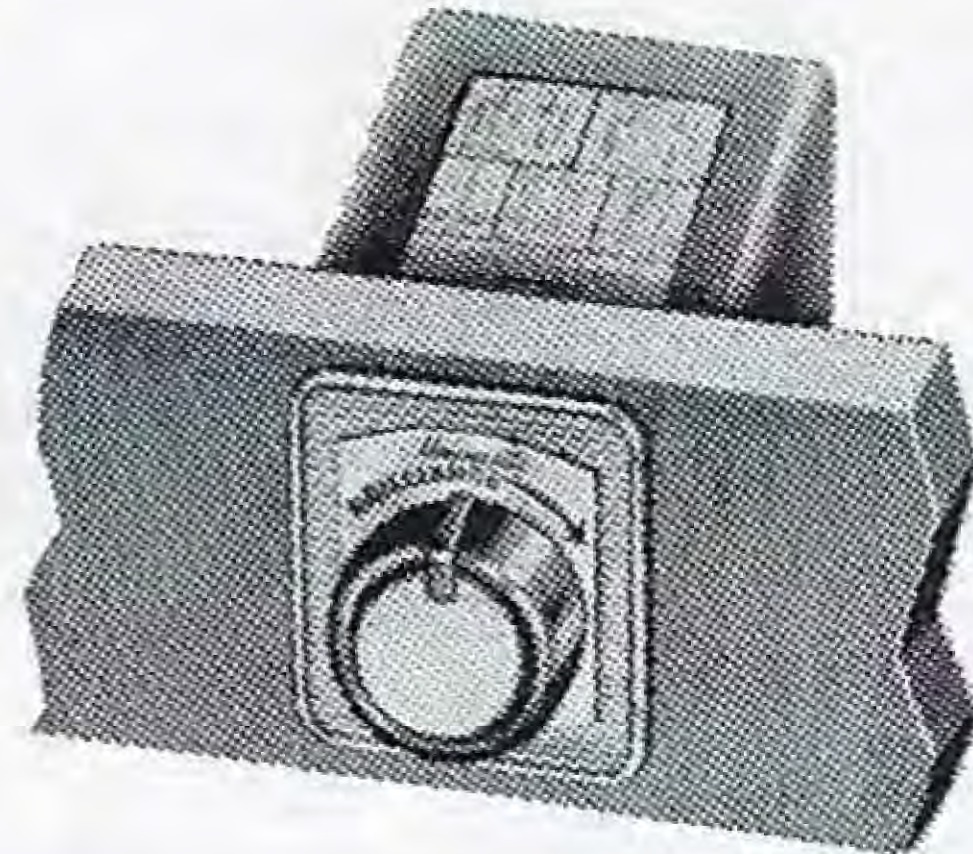
Redesigned throughout; new mechanism and housing. For mid-range in 3 and 4-way systems, or as tweeter in 2-way system. Use with H-600 or Cobreflex horns. N-2A network recommended. Response 200 to 15,000 cps.; 8 ohms; 1 3/8"-18 throat; 3 1/2" dia., 3 3/4" deep; Shpg. wt. 2 3/4 lbs. \$50.00 List.

NEW T-50 Hypersonic High Frequency Driver

Heavy duty super-efficient driver for use with the H-600 horn. Response covers from 600 cps. to inaudibility and is recommended for large theater and auditorium systems, and deluxe home hi-fi where the ultimate in performance is desired. Use with N-2A network. 8 ohms; 1 3/8"-18 throat; 4 1/4" dia.; 4 1/8" deep; Shpg. wt. 5 lbs. \$82.50 List.

ADJUSTABLE CROSSOVER NETWORKS

University offers the most complete line of frequency dividing filters and crossover networks to satisfy all popular requirements. Because of their exclusive features, as well as "adjustable" design that eliminates obsolescence and makes technical exploration possible—these units are a truly worthwhile investment.



Model N-1 Adjustable Filter

Adjustable high pass filter with built-in "Brilliance" Control; for dividing program between woofer and tweeter in 2-way systems. Crossover and impedance combinations: 2500, 5000, 10,000 cps. at 8 ohms; 1250, 2500, 5000, 10,000 cps. at 16 ohms; 5000, 10,000 cps. at 4 ohms. Can be used with N-2A L/C network in 3-way system. Fits panels up to 1" thick. 3 5/8" x 3 1/4" x 3" Shpg. wt., 1 3/4 lbs. **\$17.50 List**



Model N-3 Acoustic Baton Network

An adjustable L/C network for 3-way systems. Connections for either 350 or 700 cps. crossover between mid-range and woofer. Tweeter crossover is 5000 cps. Built-in "Presence" and "Brilliance" controls. Adjustable for vertical or horizontal mounting. Fits panels up to 1" thick. 8 ohms; 7" x 5" x 3". Shpg. wt., 5 1/2 lbs. **\$46.67 List.**



MODEL N-2B



MODEL N-2A

Models N-2A and N-2B Adjustable L/C Dividing Networks

With either or both these units, any combinations of speakers can be used in a great variety of voice coil impedances and popular crossover points. N-2A and N-2B can be used in combination for 3-way speaker systems. 3 5/8" x 3 1/4" x 3". Shpg. wt., each 2 1/4 lbs.

N-2A ADJUSTABLE CROSSOVER

6 db/oct. 2-way L/C network. May be used in pairs as 12 db/oct. network or singly as 12 db/oct. low or high-pass filter. Crossover—350 or 700 cps. at either 8 or 16 ohms; 700 cps. at 4 ohms. **\$30.00 List.**

N-2B ADJUSTABLE CROSSOVER

6 db/oct. 2-way L/C network. May be used in pairs as 12 db/oct. network, or singly as 12 db/oct. low or high-pass filter. Crossover—1250, 2500 or 5000 cps. at 8 ohms; 2500 or 5000 cps. at 16 ohms; 2500 at 4 ohms. **\$23.33 List**



Model AP-8 "Balance" Control

Effective and efficient attenuator pad for balancing sound according to room acoustics and personal taste. Ideal for use with N-2A and N-2B networks. Complete with attractive escutcheon and knob, marked two sides; "Presence" for use in mid-range circuits and "Brilliance" for use with tweeters. Suits 8-16 ohms systems. Fits panels up to 1" thick. Shpg. wt., 7 oz. **\$6.58 List.**

University



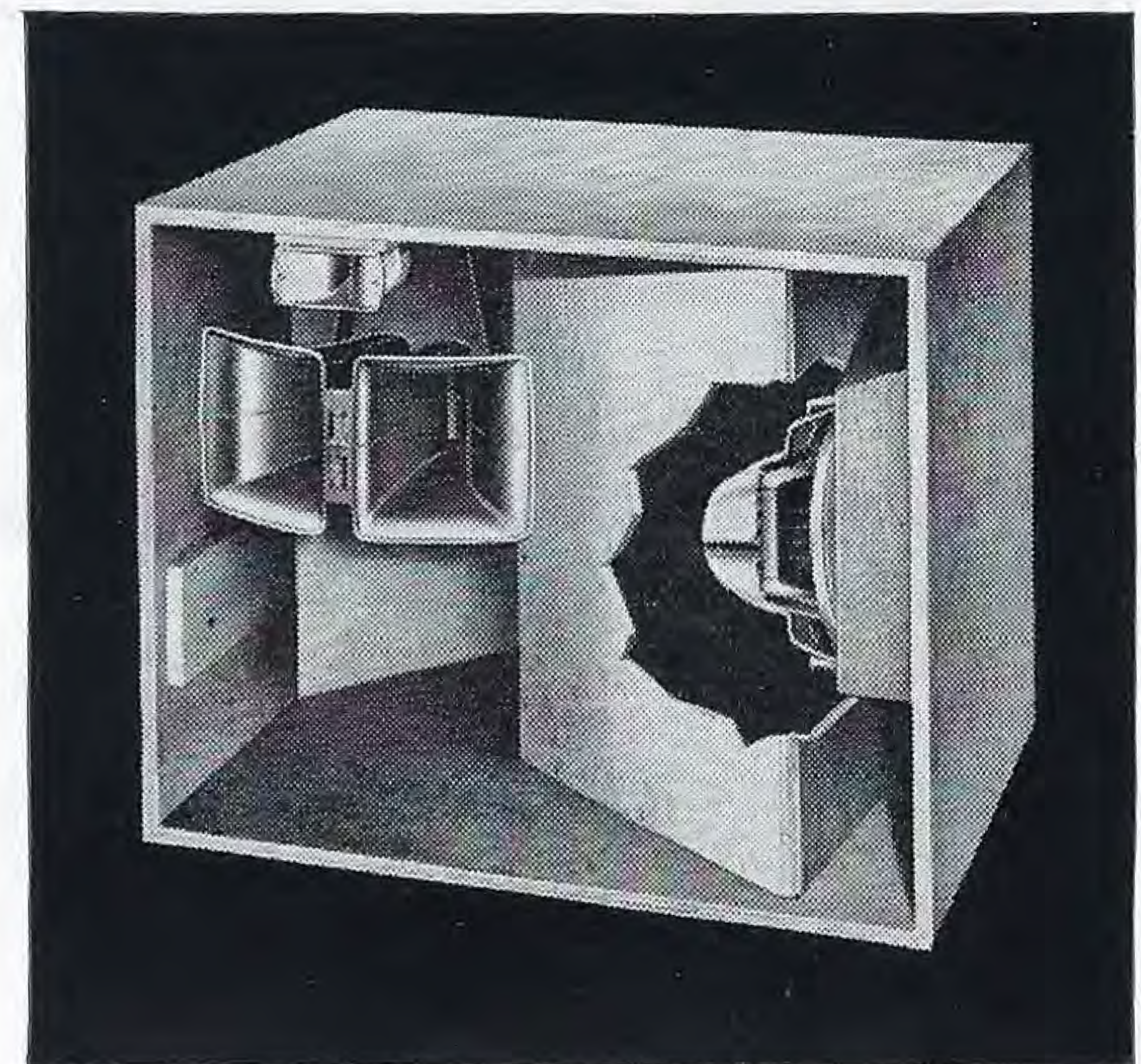
UNFINISHED UTILITY "CLASSIC" ENCLOSURE AND SYSTEM

Model EN-CB Unfinished "CLASSIC" ENCLOSURE

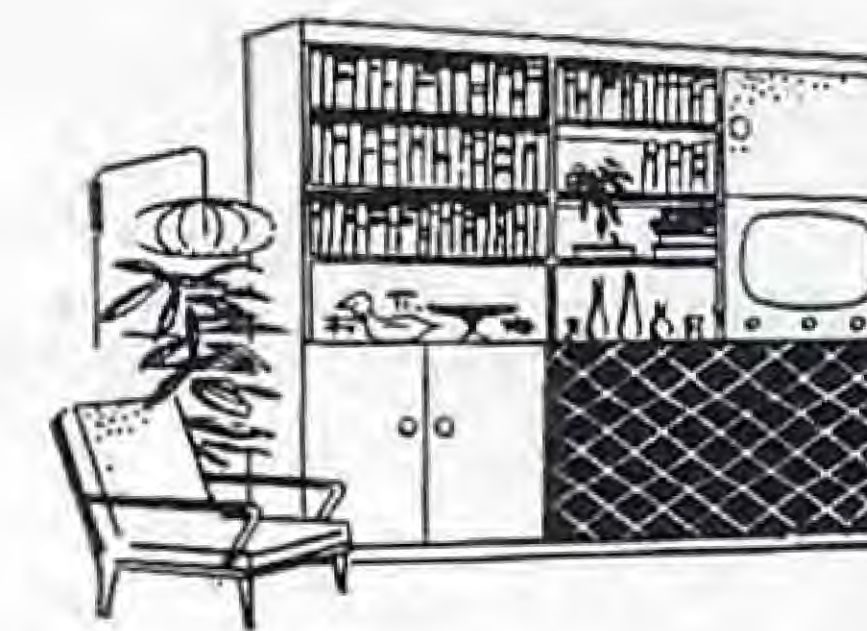
A true, self-contained front-loaded folded horn, operating with highest quality wherever placed, independently of walls or floors. Complete in itself with all acoustically correct elements always in place, EN-CB is identical in design to the enclosure used in the famous "Classic" system. Ideal for the do-it-yourself home decorator . . . the many ways to finish the EN-CB is limited only by the imagination. Can be used horizontally or vertically. *Fully assembled*, constructed of select 3/4" white birch veneer plywood with lock and mitre joints and braced with heavy glue blocks. Supplied unfinished, less base and frame, but with necessary hardware for mounting speakers. Recommended components are Model C-15W Woofer, Model HF-206 Hyper-sonic Tweeter, Cobreflex Mid-range Horn with T-30 Driver, Model N-3 Crossover Network. 40 1/2" x 31 1/2" x 23 3/4" Wt., 142 lbs. **\$200.00 List.**

Model S-9 Unfinished UTILITY "CLASSIC" SYSTEM

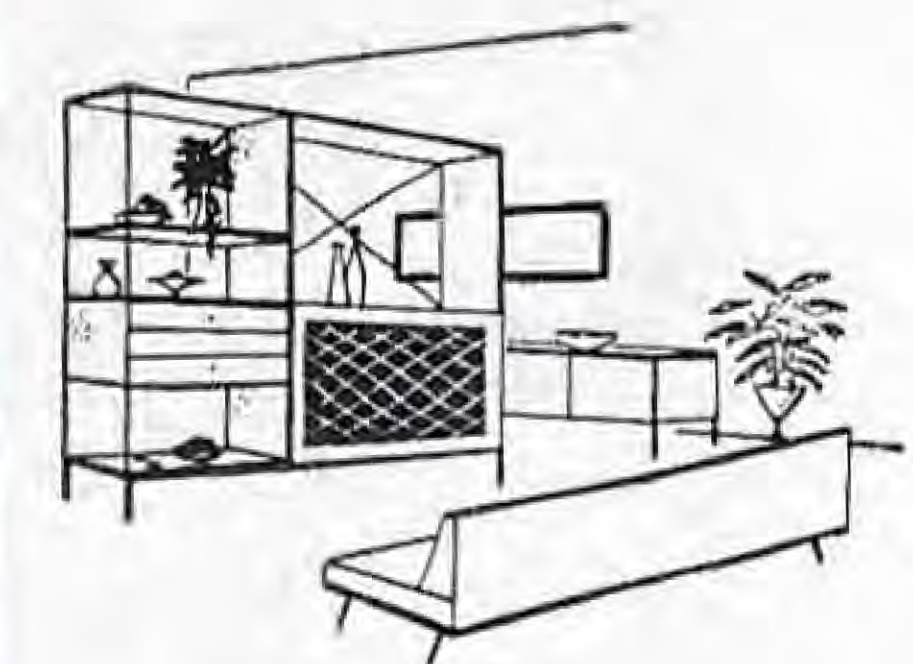
Model S-9 is the EN-CB with the recommended CLASSIC speakers and network completely installed and wired. A real convenience for those who wish to buy the whole system—ready to use or finish. No charge for installation and wiring. Shpg. wt., 185 lbs. **\$533.33 List.**



EN-CB illustrated with components installed



BUILT-INS



ROOM DIVIDERS



PICK A PERIOD



CUSTOM FINISHING

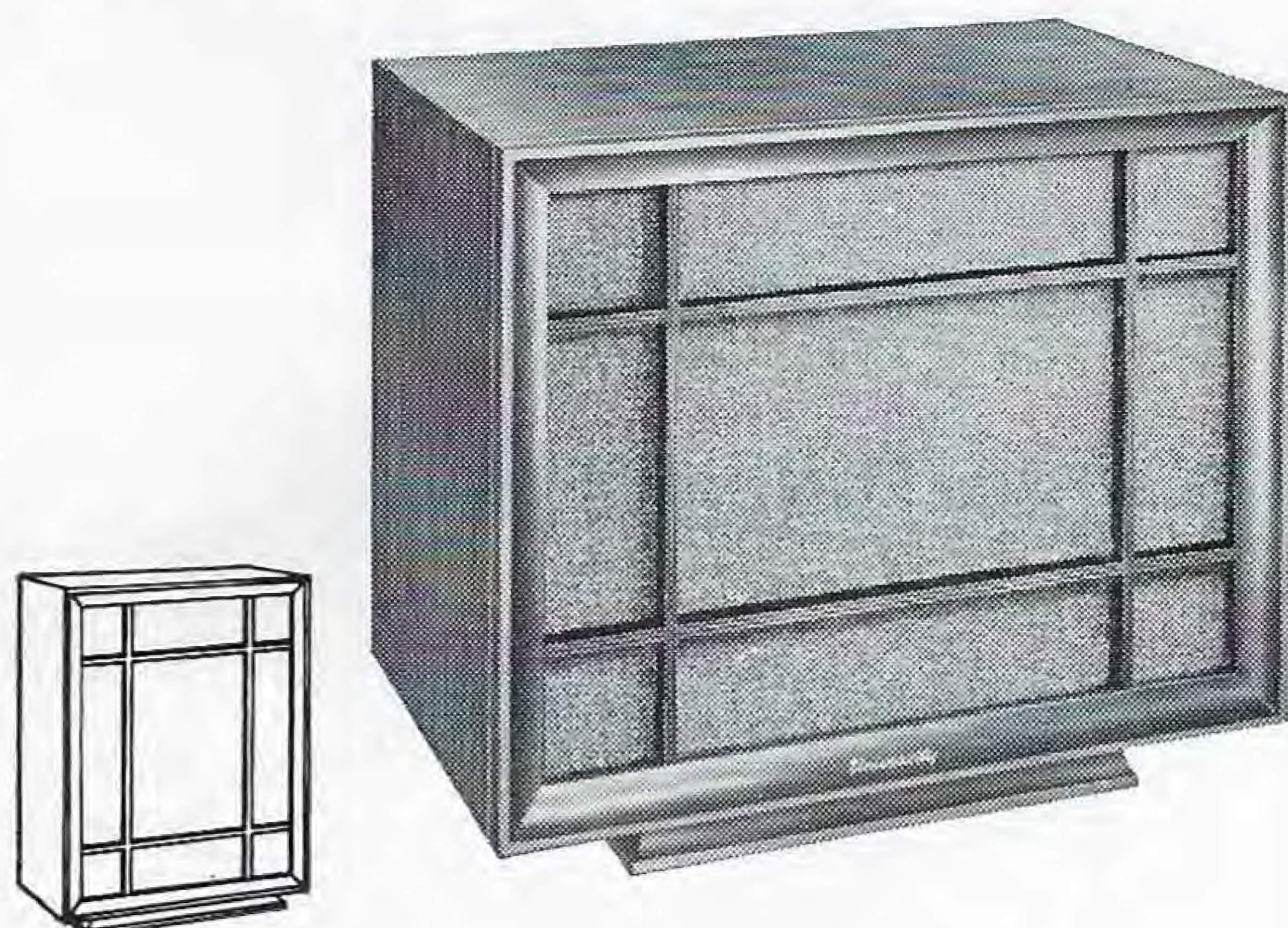
SPEAKER SYSTEMS AND ENCLOSURES

University enclosures are as important to the realization of fine reproduction as a loudspeaker. They enjoy the full benefit of University's extensive engineering experience and manufacturing know-how. When used together, University speakers and speaker enclosures attain system quality in the highest tradition of audio and acoustic design.

University



HIGH EFFICIENCY SPEAKER SYSTEMS



Model S-8 "Classic" Deluxe Console Speaker System

The CLASSIC embodies University's many engineering advances. Components comprise the incomparable C-15W 15" woofer, Cobreflex wide-angle dual exponential horn with T-30 driver for rich, full-bodied middles; the new HF-206 Hypersonic Tweeter and N-3 Acoustic Baton network with "Brilliance" and "Presence" controls. The enclosure is a versatile front-loaded, folded horn operating the woofer as a compression driver for maximum efficiency. Thus, the CLASSIC functions independently of walls and floor. May be used as "lowboy" or "highboy" console. Response: 20 cps. to inaudibility. 50 watt* power handling capacity; 8 ohms. Available in mahogany, walnut and blonde. Size: 34½" x 40½" x 25½". Shpg. wt., 225 lbs. List Price: Mahogany—\$791.67, Walnut—\$866.67, Blond—\$825.00.



Model S-7 "Dean" Deluxe Corner Speaker System

Employs the same high quality components and exclusive advance design as the "Classic." The DEAN is truly a "cornerless-corner" system. This enclosure is a full compression, front-loaded, folded horn that functions completely independent of room configuration and acoustics. Just listen to the results of the C-15W 15" woofer, Cobreflex with T-30 driver for the mid-range, and the HF-206 for highs. The N-3 Acoustic Baton network crosses over at 350 and 5000 cycles. It will be difficult for your ears to believe that such magnificent sound can be produced by a speaker. Response: 20 cycles to inaudibility; Handles 50 watts*; 8 ohms. Available in mahogany, walnut or blond. Size: 36½" H. x 37½" W. x 26¾" D. Shpg. wt., 208 lbs.; List Price: Mahogany—\$791.67, Walnut—\$866.67, Blond—\$825.00.

Model S-6 "The Master" —Multi-Speaker System

Provides the full response and dynamic range of music... at an attractive price for such quality. Integrates the C-15W 15" woofer, the H-600 horn with T-30 driver for mid-range, with the HF-206 Hypersonic Tweeter for natural highs. The N-3 Acoustic Baton completes this quality team of components. Includes "Presence" and "Brilliance" controls. Performance competes with speaker systems considerably larger in size and higher in cost. Handles up to 50 watts*. All are installed in a new folded horn "cornerless-corner" enclosure which permits use either in a corner or flat against wall. Size: 37" H. x 29" W. x 20" D. Available in mahogany, walnut and blond. Shpg. wt., 130 lbs. List Price: Mahogany—\$516.67, Walnut—\$541.67, Blond—\$533.33.

Enclosure only—Model EN-15

For use with any University 12" or 15" extended range speaker or multiple speaker combination using 12" or 15" woofer; 8" speaker or H-600/T-30 for mid-range; 4401, UXT-5, HF-206 or H-600/T-50 as tweeter. Available in mahogany, walnut, blond and unfinished. Shpg. wt., 96 lbs. List Price: Mahogany—\$208.33, Walnut—\$232.50, Blond—\$225.00, Unfinished—\$170.00.

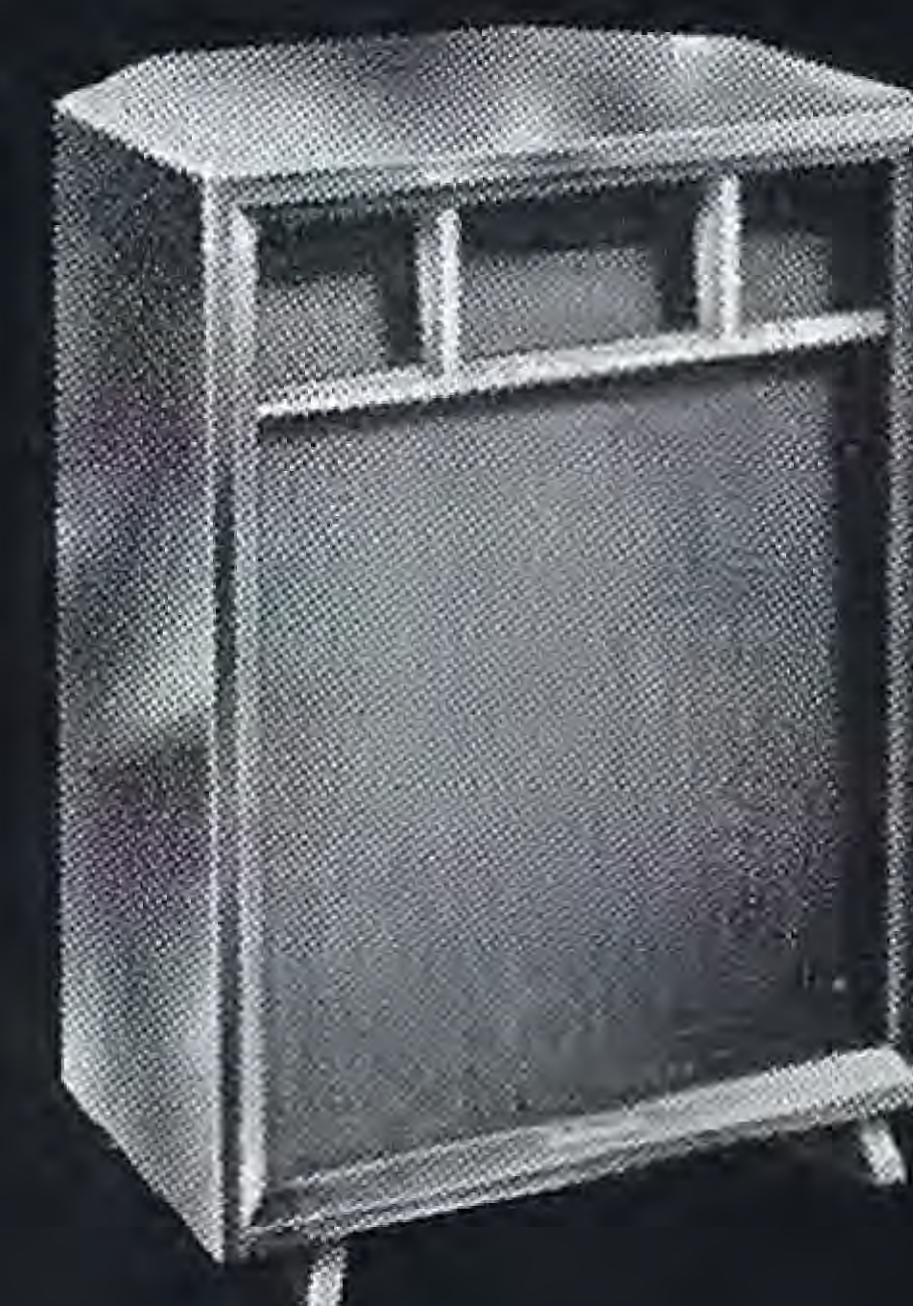


Model S-5 "The Senior" —Multi-Speaker System

Fulfills the need for a top quality performer whenever space and budget are limited. Using the basic C-12W woofer (minus response limiter), H-600/T-30 mid-range combination; the UXT-5 "reciprocating-flare" wide-angle Super Tweeter and Acoustic Baton network... this outstanding team of components performs with excellent efficiency to beyond audibility, handling up to 30 watts*. Installed into University's NEWEST folded horn enclosure... the result is smooth, natural reproduction of music and speech. Made by master craftsmen with same quality of material, workmanship and finish as the finest furniture. Available in mahogany, walnut and blond. Size: 30" H. x 21½" W. x 15¾" D. Shpg. wt., 85 lbs. List Price: Mahogany—\$333.33, Walnut—\$348.33, Blond—\$341.67.

Enclosure only—Model EN-12

For use with any University 12" extended range speaker or multiple speaker system with 12" woofer, H-600 with T-30 driver for mid-range or with T-50 for full range; 4401, UXT-5 or HF-206 as tweeter. Available in mahogany, walnut, blond and unfinished. Shpg. wt., 60 lbs. List Price: Mahogany—\$126.67, Walnut—\$139.17, Blond—\$132.50, Unfinished—\$109.17.



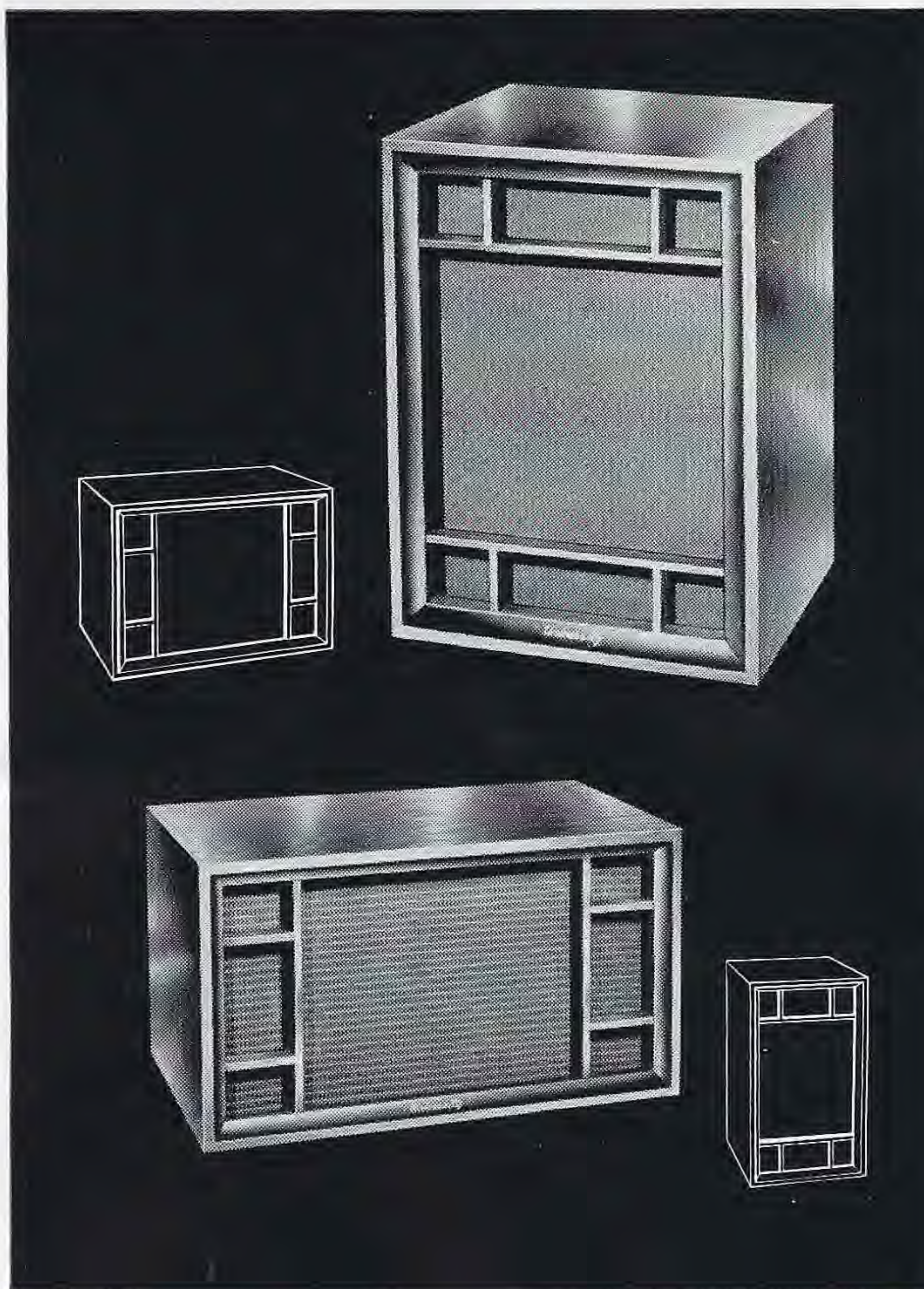
*Integrated Program

UNIVERSITY successfully meets the challenge of achieving high fidelity performance . . . almost the equal of considerably larger systems . . . with small ensembles. Necessitating a completely new electrical and acoustical design concept, the resulting exciting component and enclosure designs are setting new industry standards.

University



ULTRA-LINEAR SPEAKER SYSTEMS



Ultra-Linear 15, Models S-11H and S-11L

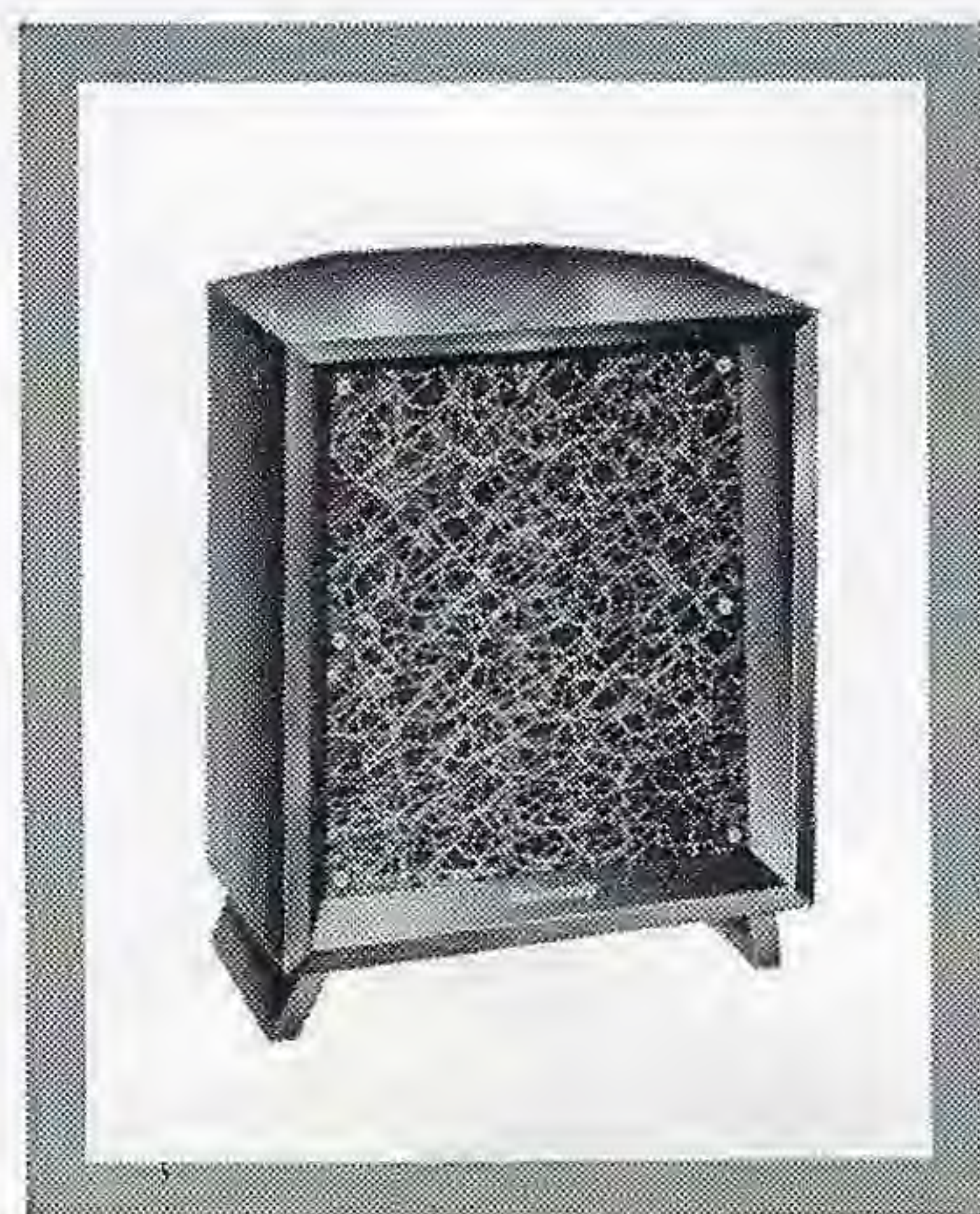
"Incredible . . . outstanding" — these are the words you'll use to describe the *magnificent* performance of the Ultra-Linear 15.

Small overall size is achieved by coupling the new University infinite loading/annular relief enclosure design to the new, heavy duty high compliance C-15HC woofer. A specially designed matched-level network integrates the Diffusicone-8 with its own compression chamber for mid-range and the new HF-206 Hyper-sonic Tweeter for response to beyond audibility. The S-11 will outperform most other systems *regardless* of type, size and cost! Extra heavy construction; beautiful, fine furniture finishes, styled in good taste to complement every decor. Operates with power input of 20 to 60 clean watts. S-11H is upright model, S-11L for lowboy use. 8 ohms impedance. Cabinet base removable. Available in mahogany, walnut and blond. 26 $\frac{7}{8}$ " x 19 $\frac{1}{2}$ " x 17 $\frac{1}{2}$ ". **List Price: Mahogany—\$408.33, Walnut—\$421.67, Blond—\$415.00.**

Ultra-Linear 12, Models S-10H and S-10L

These systems are intended for use where available space is most restricted, yet *highest quality reproduction is essential*. Model S-10H is for use where minimum width must be considered; S-10L where height must be conserved. Either model can be used without its base, for shelf, bookcase or "built-in" applications. Only 25" x 14" x 14 $\frac{1}{2}$ "; base adds 1 $\frac{1}{2}$ ". The new C-12HC 12" high compliance, low resonance woofer is employed with the 2500 cps. wide-angle tweeter and a specially matched-level crossover network. Includes high frequency adjustment for matching room attenuation characteristics. Operates with power input of 25 to 60 clean watts. 8 ohms impedance. Enclosure is a new infinite-loaded design with annular compression relief. *Heavy* 1 $\frac{1}{8}$ " thick double braced construction; beautiful natural grain, hand-rubbed finish. Cabinet base removable. Available in mahogany, walnut and blond. **List Price: Mahogany — \$231.67, Walnut — \$245.00, Blond — \$238.33.**

"BEST BUYS" IN SMALL SYSTEMS AND ENCLOSURES



Tiny Mite Enclosure, Model TM-812 Speaker System, Model S-3TM

Where the cost of the enclosure, loudspeaker and amplifier must be kept to a minimum but *not* at the expense of achieving high fidelity reproduction, the TM-812 TINY-MITE enclosure operating with one of the University high efficiency 8" or 12" extended range speakers is the solution. Sturdy $\frac{3}{4}$ " wood is used throughout. Versatile enclosure is supplied with baffle board cut out for 12" speakers; adapter available for 8" speaker with ample space for tweeter. Baffle board removable from front for easy installation. Beautifully finished, including rear of cabinet. True "cornerless-corner" design permits use in corner, against wall or upside down! TM-812 is available in mahogany, walnut, blond and unfinished. 21 $\frac{1}{4}$ " H. x 15 $\frac{1}{2}$ " W. x 12 $\frac{1}{2}$ " D. Shpg. wt., 25 lbs. **List Price: Mahogany—\$72.50, Walnut—\$80.83, Blond—\$77.50, Unfinished—\$62.92.**

Model S-3TM — Incorporates Model 308 3-way 8" Diffaxial Speaker, wired and ready to use. A modestly priced combination of exceptional performance. Shpg. wt., 30 lbs. **List Price: Mahogany — \$141.67, Walnut — \$149.17, Blond — \$146.67.**



Model S-1 "Companionette" 2-Way Speaker System

Decorative and smartly styled, ideal speaker system for limited space application or as extension speaker to an existing high fidelity installation. Makes every room a music room with this true 2-way speaker system using the Model 4401 wide-angle Tweeter and Model C-8W Woofer. The enclosure employs the "distributed port" phase inversion principle for deep, rich bass reproduction. The cabinet is skillfully constructed of the finest and fully cured woods. Ideal for bookcase installations. Wrought iron legs may be purchased from furniture or department store to convert system for floor use. Response to 15,000 cps.; Handles 25 watts*; 8 ohms impedance. Available in mahogany, walnut and blond. Size: 10" H. x 24" W. x 10" D. Shpg. wt., 21 lbs. **List Price: Mahogany—\$103.33, Walnut—\$109.58, Blond—\$106.67.**

*Integrated Program

Why you need every feature of these

NEW UNIVERSITY FOLDED-HORN ENCLOSURE KwiKits

Because... in performance, mechanical design, construction and ease of assembly, these new KwiKits are unquestionably the *very finest* enclosure kits—at any price!

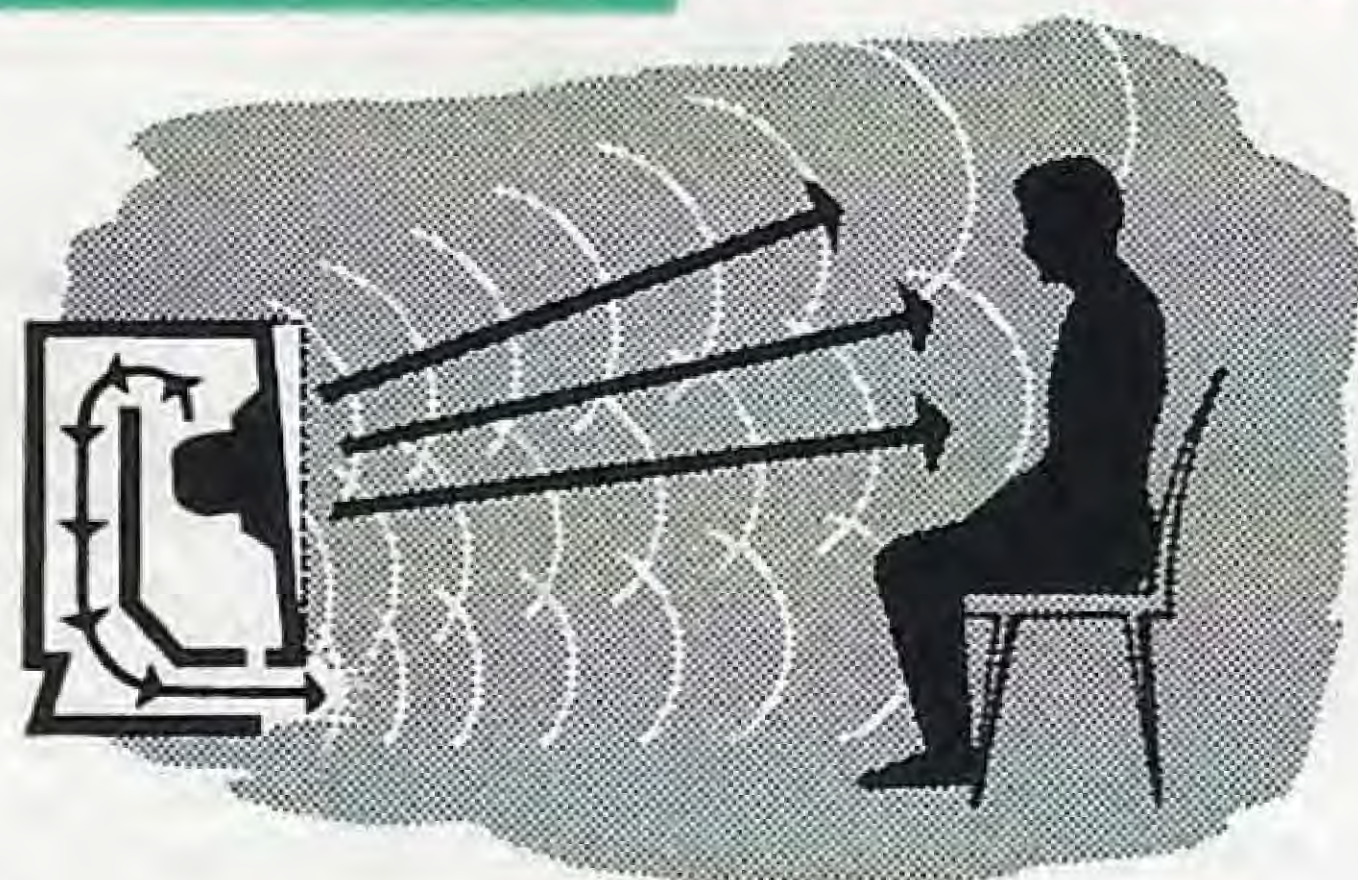
KEN-12... for 12" speakers and systems

KEN-15... for 12" or 15" speakers and systems



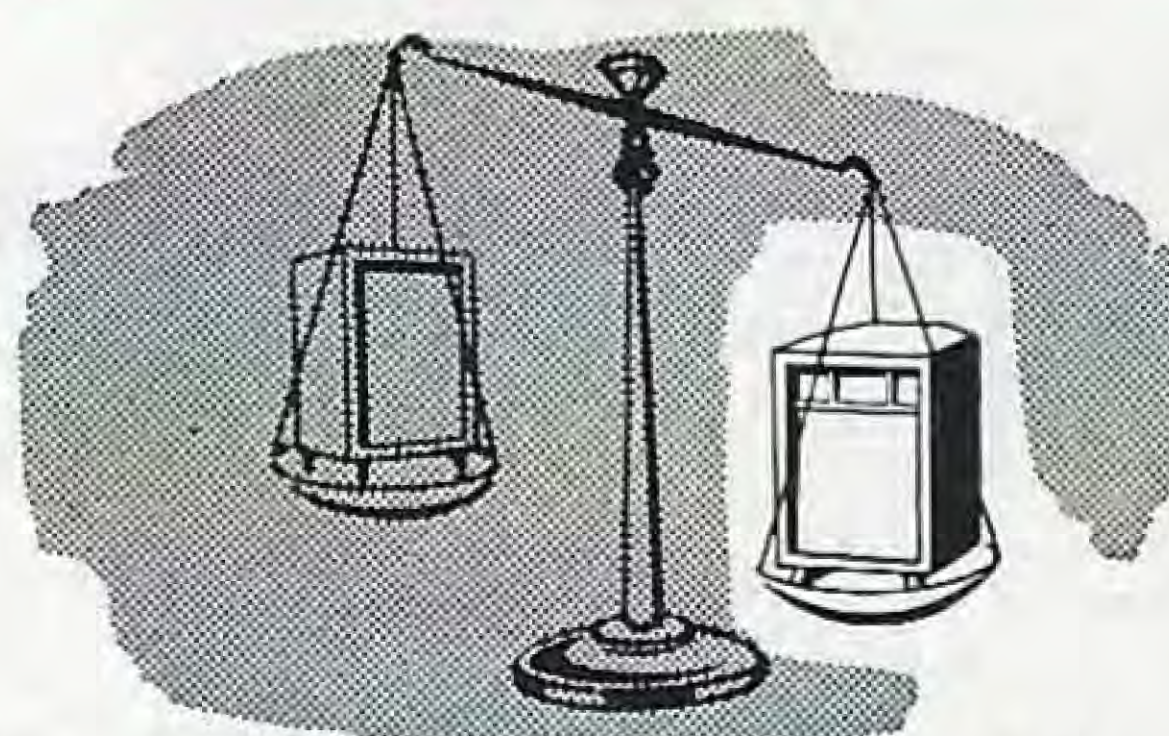
MODEL KEN-12

ROOM-BALANCED PERFORMANCE



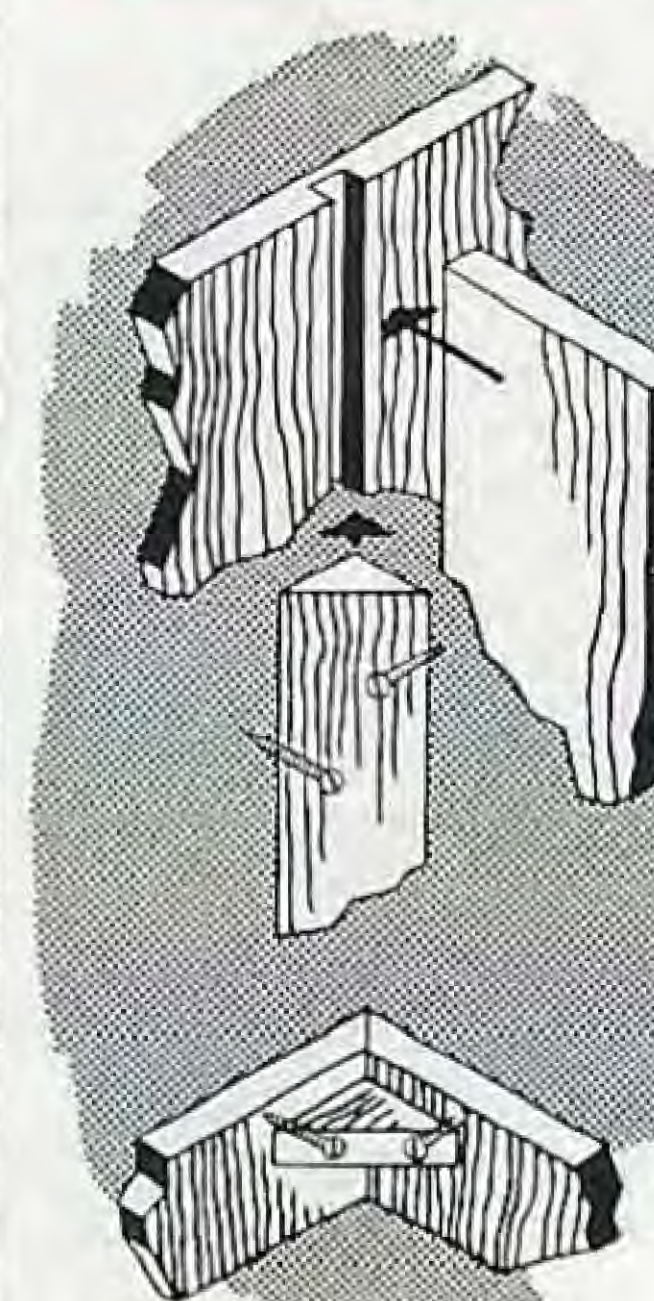
KwiKit acoustic design and tilted baffle combine direct speaker radiation and compensated rear horn loading in a way that blends bass, middle and treble ranges perfectly... for *uniform* response throughout the listening areas of a room.

HEAVIER CONSTRUCTION



Heavy $\frac{3}{4}$ " first grade, fully cured lumber for top, bottom, sides and back... *not* flimsy $\frac{1}{2}$ " wood commonly used in "kits." Bigger, sturdier—as much as 30% heavier than others in the same price class. Eliminates spurious resonances so detrimental to achieving richer, cleaner bass reproduction.

PRECISION MECHANICAL DESIGN



Exterior and interior elements, even the cleats, fit snugly within close tolerance "rabbeted" grooves. Gluing and screwing of each piece results in reliably air-tight, permanent joints. No nails used. No pencil markings necessary. Mitering and plenty of glue blocks and bracing for truly rigid construction.

PLACE ANYWHERE IN ROOM



Underside view shows how advanced design, self-contained folded horn extends to the *front* of the cabinet, projecting low frequencies out into the room... not back into a corner, splashed against the walls. Small slot in base is resistively controlled vent which equalizes woofer diaphragm excursions in compression chamber. KwiKits are therefore independent of room furnishings, shape or placement and can be used against a flat wall, in a corner... even up in the air!

FOOLPROOF ASSEMBLY



All pieces are pre-cut and pre-drilled... *engineered* to go together quickly. All you need is a screwdriver! Baffle board is pre-cut... blank plugs and adapters supplied for easy installation of additional components as your system expands. Your KwiKit includes all required hardware, plastic wood, glue, sandpaper, Tufflex insulation, easy-to-follow instructions and... special attention is given to packaging of KwiKits to insure safe, intact delivery to your door.

PROFESSIONAL RESULTS

GENUINE KORINA VENEER

... for a luxurious finish in *any* desired color.

DECORATIVE FRONT MOLDINGS

... designed to complement and enhance any decor.

TEXTURED GRILLE FABRIC

... exquisite, and acoustically correct to prevent high frequency attenuation.

For any wide-range, coaxial, diffaxial or multi-speaker system... *if it's a kit that you want, it's KwiKit you need!*

KEN-12-15 1/2" D x 21 1/2" W x 29 1/2" H Shpg. Wt. 50 lbs. \$74.50 List
KEN-15-18 1/2" D x 29" W x 35 1/4" H Shpg. Wt. 73 lbs. \$99.17 List
Adapter for mounting 12" speakers in KEN-15 \$2.50 List

LISTEN

University sounds better

