

SHURE MICROPHONES

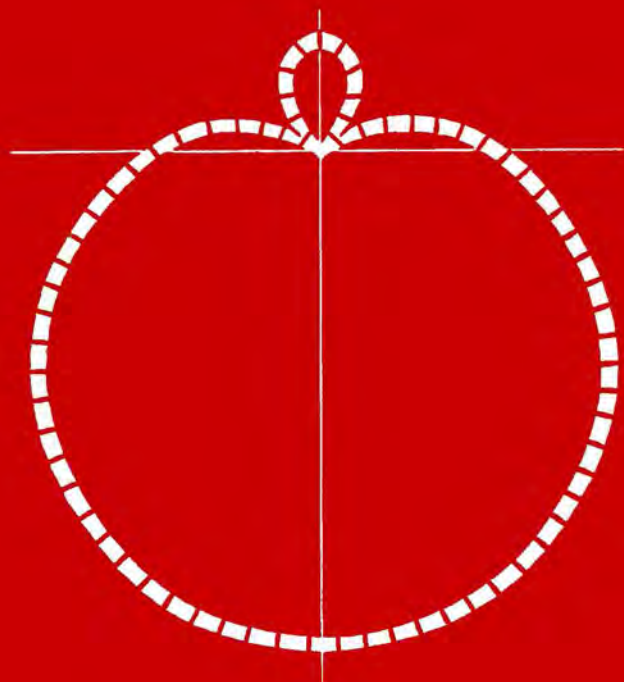
AND ACOUSTIC DEVICES



For the Ear of America

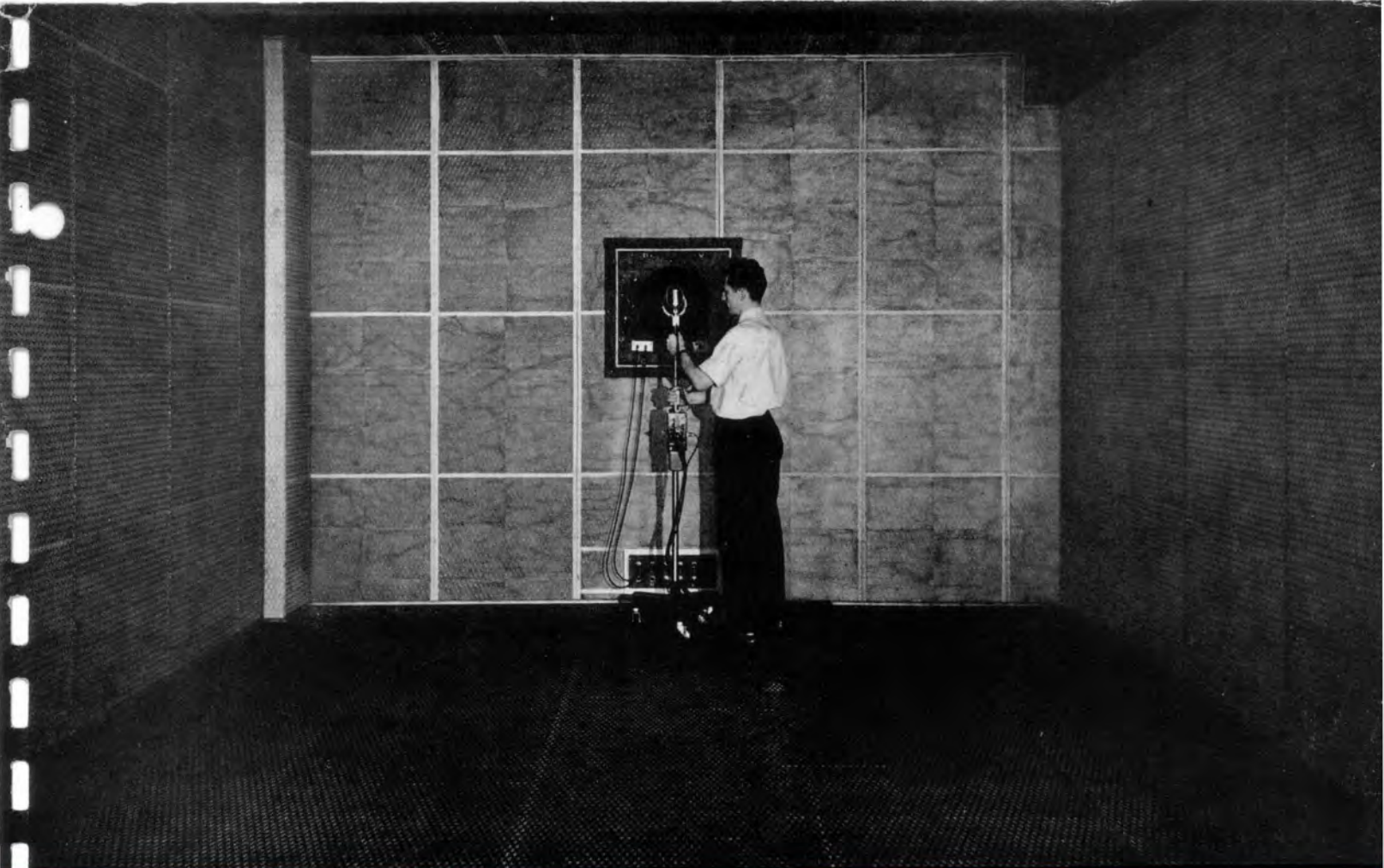


CATALOG 154



SHURE

Designers and Manufacturers of Microphones and Acoustic Devices



THE QUIETEST FIELD OF ACTION



In Total War, Microphones are weapons—for planes, tanks, and ships. These weapons are being built to new and higher standards.

Very important in the development of Microphones, is the accurate measurement of output level and frequency response. In measuring Microphones, the ideal medium is a free field without interference from atmospheric elements, outside noises, or reflections from nearby objects.

To achieve this goal, a special new room has been designed at Shure Brothers with a large area of sound absorbing surfaces. All four walls, floor and ceiling are covered with thick layers of sound insulation and sound absorption materials. The floor is provided with an open grill to offer good support without affecting the sound absorption prop-

erties. The room is completely shielded to avoid electrical disturbances. The high fidelity sound field is measured by means of standard Microphones calibrated at the U.S. Bureau of Standards. Electrical equipment for measurement purposes is located outside the room. In this room, the response of Microphones is measured with extreme accuracy.

In addition to close tolerances in output and response, Shure Microphones must survive electrical and mechanical tests which are far more destructive than any conditions they meet in actual service.

Shure Engineers know that Microphones must operate under extraordinary conditions whether used by the Armed Forces or civilian population. They recognize that even the quiet of a sound room is a battle front against the forces of Darkness.

SHURE

SHURE

Cardioid Microphones



"556" SUPER-CARDIOID BROADCAST DYNAMIC

Solves Difficult Problems in Broadcasting and Recording for Studio or "Remote"

Reduces reflections and reverberation effects — decreases random noise pickup by 73%. Smooth response from 40 to 10,000 cycles over wide angle at front — dead at rear (down 12 to 15 db). Super-Cardioid pattern — more unidirectional than the Cardioid. Single unit construction simplifies production; offers advantages of ruggedness and economy. Accomplished through Shure "Uniphase" principle (Patented). Floating moving coil system; double wind screened. Built-in isolation unit. Swivel head. Standard $\frac{5}{8}$ " — 27 thread; adapters to R.C.A. or W.E. thread furnished with microphone upon request at no charge. Equipped with 18" rubber covered two-conductor shielded cable. Convenient terminal connections for attaching of longer length cables. Case dimensions: $4\frac{1}{4}$ " high, $3\frac{1}{4}$ " wide, $3\frac{1}{2}$ " deep. Shipping weight $4\frac{1}{2}$ lbs.

Write for Bulletin No. 172 for additional information.

MODEL	IMPEDANCE	OUTPUT LEVEL	INCLUDES INTERNAL TRANSFORMER	CODE	LIST PRICE
556A	35-50 ohms	Into 50 ohms: 62.8db below 6 Milliwatts for 10 bar signal	No	RUDOM	\$75.00
556B	200-250 ohms	Into 250 ohms: 63.8db below 6 Milliwatts for 10 bar signal	Yes	RUDOP	\$75.00
556C	35,000 ohms For High Impedance Input	55db below 1 volt per bar	Yes	RUDOR	\$75.00



"UNIDYNE" CARDIOID DYNAMIC

Solves Feedback—Permits Higher Volume

Allows closer placement of microphone and loudspeakers. Makes it easier to set up your sound system in any location. Picks up sound from greater distance in front — gives freedom to performers. Eliminates reproduction of background noise and reflected sounds at rear.

Faithful reproduction from 40 to 10,000 cycles. Rugged construction. Practically unaffected by atmospheric conditions. Has technical advantages of exclusive Shure "Uniphase" principle. (Patented) Swivel head. Built-in cable connector. Low impedance model permits use of any length cable required. $\frac{5}{8}$ " — 27" thread. Case same size as "556" series. Shipping weight $4\frac{1}{2}$ lbs.

MODEL	IMPEDANCE	OUTPUT LEVEL	CABLE	INCLUDES INTERNAL TRANSFORMER	CODE	LIST PRICE
55A	35-50 OHMS	Into 50 ohms: 62.8db below 6 Milliwatts per 10 bar signal	25 ft.	No	RUDAR	\$47.00
55B	200-250 OHMS	Into 250 ohms: 63.8db below 6 Milliwatts for 10 bar signal	25 ft.	Yes	RUDAT	\$49.50
55C	35,000 OHMS for high Impedance Input	55db below 1 volt per bar	25 ft.	Yes	RUDAS	\$49.50

"UNIPLEX" CARDIOID CRYSTAL

The Only True Cardioid Crystal Microphone

The Shure "Uniplex" is the most economical means of obtaining the advantages of true cardioid performance. High quality reproduction from 30 to 10,000 cycles over a wide angle at the front, yet practically unaffected by sound approaching from the rear. (Rear response down approximately 15 db.) Permits more volume without feedback — simplifies microphone and speaker placement — greatly improves systems using ordinary microphones. Uses exclusive Shure "Uniphase" principle. (Patented) Output level 63 db below 1 volt per bar. Specially moisture-proofed Grafoil Bimorph Crystal. Swivel head. Built-in cable connector. Standard $\frac{5}{8}$ " — 27 thread. Dia. $3\frac{1}{8}$ ", depth $3\frac{3}{8}$ ". Shipping weight $1\frac{1}{2}$ lbs.

Model 730A. "UNIPLEX" Cardioid Crystal Microphone. Complete with 25 ft. super-shielded cable. Code: **RUPEL**. List price — **\$35.50**



SHURE

Communications Microphones

Cardioid Communication Microphones offer two definite advantages:

1. Special speech response for greater intelligibility.
2. Uni-directional pickup for elimination of background noise and other acoustic interference.

Special voice response reduces the reproduction of frequencies outside the voice range. Gives voice knife-like sharpness — commands attention. Cardioid pickup pattern

gives wide angle coverage at front, yet is dead at the rear. (down 12 to 15db) Permits you to place microphone close to wall, window, or control panel without interference from reflected sounds heard in ordinary microphones. Reduces pickup of random sound energy 66%.

This combination of both speech response and cardioid performance improves the reproduction of voice in Airports, Police Broadcasts, Defense Control Centers, Railway Depots — wherever background noise is present.



"VOICE" UNIDYNE DYNAMIC

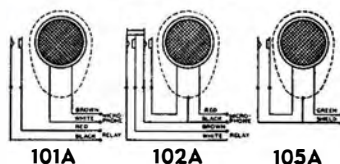
The only dynamic microphone that combines the Cardioid pickup pattern with special voice response. Designed to withstand more than ordinary abuse. Can be used indoors or outdoors. Practically unaffected by weather conditions. Specially suspended moving coil system. Double wind-screened. Case dimensions: 4¼" high, 3¼" wide, 3½" deep. Built-in cable connector. Swivel head. Shipping weight 4½ lbs. (Illustrated with S36A desk stand).

MODEL	IMPEDANCE	OUTPUT LEVEL	CABLE	INCLUDES INTERNAL TRANSFORMER	CODE	LIST PRICE
55AV	35-50 ohms	Into 50 ohms 62.8db below 6 Milliamps for 10 bar signal	12 ft.	No	RUVAK	\$45.70 Less stand
55BV	200-250 ohms	Into 250 ohms 63.8db below 6 Milliamps for 10 bar signal	12 ft.	Yes	RUVD	\$48.20 Less stand
55CV	35,000 ohms for High Impedance Input	55db below 1 volt per bar	12 ft.	Yes	RUVC	\$48.20 Less stand

"SPEECH" UNIPLEX CARDIOID CRYSTAL

The only Cardioid crystal microphone with specially engineered speech response. Has very high output level at speech frequencies. 33db below 1 volt for 10 bar speech signal. Built-in R. F. filter protects against burn-outs. Specially moisture-proofed Grafoil Bimorph crystal. Built-in cable connector. Complete with 7 foot shielded cable. Case dimensions: Diam. 3½", depth 3¾". Shipping weight 1½ lbs. Illustrated with S36A Stand.

Model 730SH. Code: RUPOD. List Price less desk stand **\$35.50**



"100 SERIES" MILITARY CARBON MICROPHONES

High-quality, carbon microphones specially designed for police equipment and other uses where ruggedness and dependability are vital factors. Clear, crisp voice response. High output. Easy to use, fits snugly into palm of hand. Heavy duty switch for push-to-talk performance. Furnished with hook for suspension and bracket for wall mounting. Adopted as standard microphone by leading manufacturers of police transmitters. Output level: 32db below 1 volt for 10 bar speech signal. Net weight 14 ozs. Shipping weight 1 lb. Case Dimensions: 3¾" high, 1¾" deep, 2¾" wide.

MODEL	SWITCH ARRANGEMENT	CABLE	CODE	LIST PRICE
101A	Two Wire Relay Switch normally open (No microphone switch)	4 ft. 4 Conductor Unshielded	RUCEG	\$25.00
102A	Relay normally open. Microphone switch normally open.	4 ft. 4 Conductor Unshielded	RUCEM	\$25.00
105A	Microphone switch normally open. (No relay switch)	7 ft. Single Conductor Shielded	RUCEF	\$25.00

SHURE

Dynamic and Crystal Microphones for General Use

The appearance of your microphone is important. It is always in the spotlight. A beautiful microphone tells your customers that you are using good equipment. Make the right impression. The Shure Stratoliner's projectile form—its rich, bright metallic and gray effect makes an impression on the public that you are using more expensive equipment. But beauty is not the only feature of this microphone. Careful engineering has given it response characteristics for high quality reproduction. Its ear impression matches its eye impression. The Stratoliner looks expensive and sounds expensive.

"STRATOLINER" DYNAMIC

A rugged microphone with unusually smooth response. Its faithful reproduction makes it ideal for music as well as voice. Its ruggedness qualifies it for heavy duty work on Police transmitters, at Airports, in War Production Plants on paging and outdoor systems. Practically unaffected by heat or humidity. Moving conductor system. Die cast case, swivel head, built-in cable connector. Diam. 2½", length 4-7/16", Shipping weight 2¾ lbs. Stand Thread ⅝" — 27.

MODEL	IMPEDANCE	OUTPUT LEVEL	CABLE	CODE	LIST PRICE
508A	35-50 ohms	68db below 6 milliwatts for 10 bar signal	18 ft. 2 conductor shielded	RUVAM	\$28.80
508B	200-250 ohms			RUVAP	\$28.80
508C	High Impedance	60db below 1 volt per bar	18 ft. single conductor shielded	RUVAS	\$28.80

"STRATOLINER" CRYSTAL

An expensive looking microphone at low cost. High output level with good response. Designed for Home Recording, Public Address, Paging Systems, Transmitters and other general purpose use. Has all the features of an expensive microphone such as swivel head, built-in cable connector and sparkling appearance. Genuine Bimorph Crystal. Case dimensions and specifications same as "508" series above. Shipping weight 2½ lbs.

MODEL	CABLE	OUTPUT LEVEL	IMPEDANCE	CODE	LIST PRICE
708A	7 ft.	49.7db below one volt per bar	High Impedance	RUDUM	\$19.50
708A—18 ft.	18 ft.			RUVAT	\$20.30



702L LABORATORY NON-DIRECTIONAL MICROPHONE

Shure Non-Directional Crystal Microphone designed for scientific and industrial sound measurement work — and for high quality sound reproduction in broadcasting, professional recording and other applications. High fidelity flat response from 30 to 10,000 cycles in the horizontal plane. Output level: 58.3 db below 1 volt per bar open circuit (61.5 db below 1 volt per bar at end of 25 ft. cable). Diam. 2¼". Built-in cable connector. Satin Chrome finish. 25 ft. shielded single-conductor cable. Shipping weight 2 lbs. **Model 702L.Code: RUPAY. List Price\$47.50.**

Individual Frequency Response Curve measured in our laboratories, furnished for \$10 net.



NEW 707A CRYSTAL

A good sturdy microphone at low cost. Attractive modern die cast case in Iridescent Gray finish with highly polished plating on front grille. Natural life-like reproduction. Output level 49.7 db below one volt per bar at end of 7 ft. cable. Bimorph Crystal, mechanically isolated. 7 ft. single-conductor shielded cable, with spring protector. Standard ⅝" — 27 thread. Diam. 2¾". Shipping weight 1¼ lbs.

Model 707A. Crystal Microphone. Code: RUDOF. List Price \$12.50.



SHURE 706B LAPEL MICROPHONE

Gives freedom to lecturers. Small, light, crystal microphone with high output level. High quality reproduction of speaker's voice. Inconspicuous. Only 1⅞" diameter; weight only 1½ oz. Gray finish. Handy lapel clip. 25 ft. shielded single-conductor cable. Shipping weight 1 lb.

Model 706B.Lapel Microphone. Code: RULOP. List Price\$25.00.



NEW HAND MICROPHONE

Lowest cost crystal microphone. Tenite plastic case and handle. Output level . . . 49.7 db below one volt per bar. Genuine Bimorph Crystal. Smooth response. 7 ft. single-conductor, shielded cable. Diam. 2½", height overall 6", depth 1½". Shipping weight ¾ lb.

Model 717A. Crystal Hand Microphone. Code: RUDUK. List Price \$9.95.



"ULTRA" 700D CRYSTAL

Highest Quality Performance

Outstanding feature is dependable performance. Shure "Ultra" wide-range response from 30 to 10,000 cycles. Output level: 58db below 1 volt per bar. Triple-moisture-sealed Grafoil Bimorph Crystal. Barometric compensation. Internal screen-protected cartridge. Small, compact swivel head—easily aimed at source of sound for best response. Built-in cable connector. Standard ⅝" — 27 thread. Diameter 2¾". Shipping weight 2¼ lbs.

Model 700D. "Ultra" Crystal Microphone. Complete with 18 ft. single-conductor shielded cable. Code: RUVEB. List Price\$26.80.

SHURE

Dynamic and Crystal Microphones for General Use

The microphone stand is the only part of a sound system operated by the performer. Don't annoy the performer and the audience with a cheaply constructed stand. Shure stands have been scientifically designed by microphone engineers. They work smoothly and quietly to give you the best performance from your microphone. Stabilized base cushioning gives 10 to 18 db reduction of noise pickup from floor.

MODEL	BASE STYLE	WEIGHT OF BASE	BASE DIAM.	HEIGHT ADJUSTMENT	SHPG. WT.	CODE	LIST PRICE
S50A	Round	8 lbs.	9½"	44" to 71"	11½ lbs.	RUSAG	\$11.00
S54C	Round	8 lbs.	9½"	3 sections 30" to 64"	11½ lbs.	RUSAP	\$11.00
S55A	3 Leg	10¼ lbs.	Leg spread 15½"	48" to 70"	14 lbs.	RUSAT	\$17.50



MODERN DESK STANDS

Model S36A. Beautiful, streamlined Desk Mount with stable support at correct height. Fits Shure connector-type microphones, concealing plug in base. Adapter plate and tubing provided for other type microphones. Removable button at front for installation of ⅜" standard bushing switch or volume control. Iridescent Gray finish. Base: 2½" high, 5" wide, 7" long. Shpg. wt. 1½ lbs.

Code: **RUSEF.** List Price **\$4.00.**

Model S32D. Adjustable modern Desk Stand in rich gray chrome-finish. Height adjustment from 7" to 11". ⅝"—27" thread. Base diameter 6". Shpg. wt. 3½ lbs.

Code: **RUSED.** List Price **\$7.50.**



A83A



A84A



A80B

MICROPHONE "ON-OFF" SWITCHES

Many microphone applications do not require switches at the microphone. Therefore switches are not built into Shure Microphones. But, whenever a switch is needed these "On-Off" switches plug into the microphone quickly and conveniently. You can depend on them.

Model A83A. Quickly attached to any cable-connector type Shure microphone. No wiring; internal plug establishes connections. Bakelite arrow knob.

Code: **RUNIM.** List Price **\$4.00.**

Model A84A. Momentary "On-Off" Switch. Press-to-talk Bakelite disc.

Code: **RUNID.** List Price **\$4.50.**

Model A80B. Threaded ⅝"—27 to fit non-connector type microphones Bakelite arrow knob.

Code: **RUNIB.** List Price **\$2.50.**

TAKE-APART STAND

Model S34A. Handy low-cost stand for desk or hand use. One twist of handle locks it securely in base for use as a table stand, or releases handle for use in hand. Metal base, wood handle. Metal top threaded ⅝"—27. Height over all 6-11/16". Base diam. 4½". Length of handle 5⅞". Shpg. wt. 1 lb.

Code: **RUKAB.** List Price **\$2.00.**

Model A41A. Microphone Handle. Threaded ⅝"—27.

Code: **RUJAD.** List Price **\$0.75.**



CABLE-TYPE TRANSFORMER

Model A86A. High quality Cable-Type Transformer. Matches 35 to 50 and 200 to 250 ohm microphones to high impedance amplifier input. Compact, sturdy. Case Diam. 1⅞", length 2⅞", 7 ft. cable. Shpg. wt. 1½ lbs.

Code: **RUDEB.** List Price **\$12.00.**



SHURE

Crystal Pickups ★ Magnetic Recording Heads



Save Records with the new Hi-Lo 1-Ounce Crystal Pickup

1 Ounce needle pressure practically eliminates record wear. 1.4 volts output at 1,000 cps. (Audio Tone Record) makes possible easy replacement of heavier pickups. Permanent sapphire point eliminates bother of changing needles. Low price makes it possible to modernize a record player with a lightweight pickup at a trifle more than the cost of replacing the cartridge. Plays 10" and 12" records. Streamlined plastic arm in mahogany finish blends harmoniously with modern cabinets. Offset head. Set screw permits changing of needle without replacing entire cartridge. Genuine Bimorph Crystal. Playing radius $7\frac{1}{2}$ ". Overall length $8\frac{5}{8}$ ". Can be mounted in $\frac{1}{4}$ " or $\frac{1}{2}$ " holes. Furnished with 14" leads and arm rest. Shpg. wt. 9 ozs.

MODEL	PRES-SURE	OUTPUT AT 1000 cps	WITH SAPPHIRE NEEDLE?	RESPONSE	NEEDLE SCREW	CODE	LIST PRICE
97AN	1 oz.	1.4 V	Yes	60-6000 cps	Set	RUZER	\$6.50
97A			No		Set and thumb screw	RUZEP	\$5.50
95A	2 oz.	3.0 V	No	60-5500 cps		RUZES	\$5.50

Here's How to Give Your Customers Better Service on Crystal Cartridge Replacements

The two most important factors in replacing a cartridge (in addition to response and correct dimensions) are needle pressure and output voltage. When you replace a cartridge in a conventional arm, you give your customer better service, if you give him a new cartridge designed for a lightweight pickup. Of course, it is necessary that you give him the same or greater output voltage. If you can do this, he will have a new cartridge with lower needle point stiffness. That means less record wear and reduced surface noise. This is possible only when you use Shure Hi-Lo pickup cartridges as standard for replacement. A new development gives these cartridges the highest output with the lowest needle pressure. You also give your customer improved response—the best reproduction of his records.

Shure Hi-Lo pickup cartridges will directly replace all other standard flat type cartridges. Use the following table as a handy guide:

MODEL	REPLACES SHURE	REPLACES OTHER STANDARD FLAT TYPE CARTRIDGES WITH	CODE	LIST PRICE
W40A	99-180	Pressure of 2 oz. or more output of 3 volts or less	RUZOP	\$4.00
W41A	99-181	Pressure of $1\frac{1}{2}$ oz. or more output of 2 volts or less	RUZOK	\$4.00
W42A	99-182	Pressure of 1 oz. or more output of 1.4 volts or less	RUZOG	\$4.00



Handy Reference Table for Shure Magnetic Cutter Replacements



Many tens of thousands of Shure Magnetic Cutters are in use throughout the world in Home Recording Sets. These cutters operate directly from the voice coil winding of the output transformer. A stiff moving element permits recording on practically all recording materials. Furnished with 36" flexible lead. Overall length $3\frac{3}{8}$ ". Shpg. wt. 8 oz.

MODEL	REPLACES	D.C. RESIST	400 CYCLE IMPEDANCE	POWER INPUT	CODE	LIST PRICE
401B-3	96-01B3	3 ohms	7.5 ohms	.4 VA	RUWOB	\$11.50
401B-4	96-01B4	4 ohms	10 ohms	.4 VA	RUWOC	\$11.50
401B-8	96-01B8	8 ohms	20 ohms	.4 VA	RUWOD	\$11.50
401B-12	96-01B12	12 ohms	30 ohms	.4 VA	RUWOF	\$11.50
411B-3	96-11B3	3 ohms	7.5 ohms	.4 VA	RUWOG	\$11.50
411B-4	96-11B4	4 ohms	10 ohms	.4 VA	RUWOK	\$11.50
411D-1.7	96-11D1.7	1.7 ohms	4.2 ohms	.25 VA	RUWOL	\$11.50
416B-2	96-16B2	2 ohms	5 ohms	.4 VA	RUWOM	\$11.50
422D-1.7	96-22D1.7	1.7 ohms	4.2 ohms	.25 VA	RUWOP	\$11.50
422D-3.2	96-22D3.2	3.2 ohms	8 ohms	.25 VA	RUWOR	\$11.50
431A-1.7	96-31A1.7	1.7 ohms	4.2 ohms	.10 to .15 VA	RUWOS	\$11.50
432A-1.7	96-32A1.7	1.7 ohms	4.2 ohms	.10 to .15 VA	RUWOT	\$11.50
436A-3	96-36A3	3 ohms	7.5 ohms	.10 to .15 VA	RUWOX	\$11.50

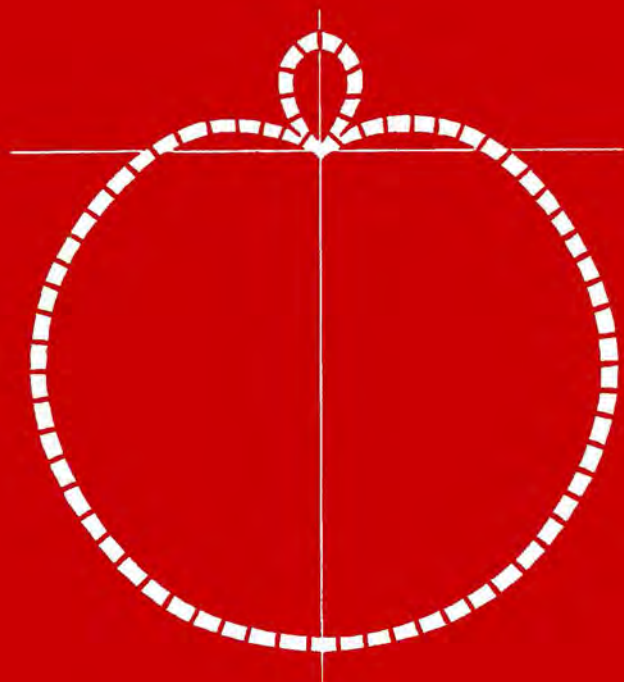


OTHER CRYSTAL PICKUP CARTRIDGES

Model W20C. Metal type cartridge that fits Shure 99, 94 and 910 pickups. Has built-in "Needle-Tilt" Balanced Tracking.

Code: **RUZIM.** List Price\$4.00.

Model W27C. Bakelite type cartridge for universal replacement. Three-in-one all purpose unit. Has lug terminals, but is also supplied with screws and pins for quick, easy conversion to screw, or "plug-in" pin type as used in many record players and "coin machines". Straight needle tracking. Code: **RUZOR.** List Price\$5.00.



SHURE

Designers and Manufacturers of Microphones and Acoustic Devices





MICROPHONES IN ACTION

Out of the dark gray sky ahead, the commander of flight D suddenly spies a formation of enemy planes. In a flash he picks up his Microphone, "Enemy bombers dead ahead. Give 'em the works Boys!" . . .



Without warning the torpedo strikes. The ship settles fast, A courageous radio operator stays at his Microphone pleading for aid. "Torpedoed! All hands on deck! Prepare to abandon ship! Position . . ."



The steady note of the all-clear signal sounds. Industrial plants come to life immediately. Foremen grab Microphones: "All workers return to your posts! Resume full production! Enemy planes beaten off . . ."



In the OCD control centers the blue light flashes. Men take their posts at Microphones to put entire city on the alert . . . "All police, All fire stations. All hospitals — ON ALERT! Unidentified planes 15 minutes from city!"



Millions of lives depend on a microphone — it must work. Shure Brothers is supplying microphones for all these vital posts. These microphones will work because they have survived tests in engineering, development and production which are more destructive than any conditions they will meet in service. There is no time for doubt in an emergency. Shure Microphones are made to do their part.

SHURE

SHURE BROTHERS, 225 West Huron Street,

DESIGNERS AND MANUFACTURERS OF MICROPHONES AND ACOUSTIC DEVICES

Chicago, Illinois, U.S.A.

All prices subject to change without notice. Complete technical data available on all Microphones. Shure Brothers reserve the right to make any changes necessary in microphones because of the War Emergency provided these changes do not affect the performance of the Microphone.

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