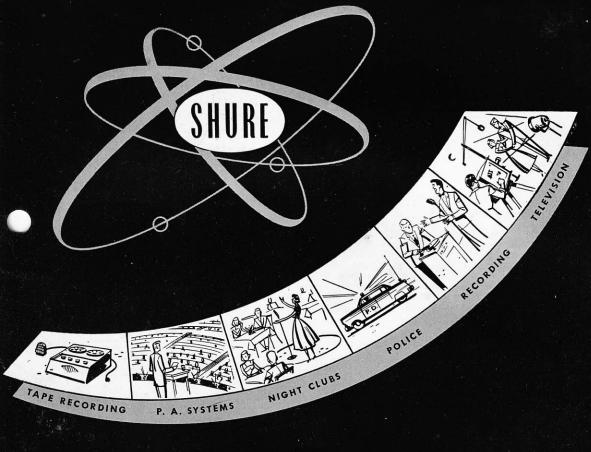
SHURE CONDENSED CATALOG NO. 58C

Microphones ~ Electronic Components

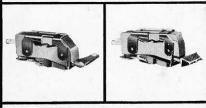
The Nucleus of Superb Voice and Music Reproduction







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SHURE

STUDIO MICROPHONES



Model "333" Studio Uni-Ron

UNI-DIRECTIONAL RIBBON MICROPHONE

Here is the dependable "333," a truly fine and rugged microphone created for discriminating users with the most exacting professional requirements. Here, indeed, is a major advance in microphone development and design! This small, ultra-cardioid "333" is highly recommended for motion-picture studios, TV studios, radio stations, professional recording, and all other uses where quality requirements are of the highest. Here is performance never before achieved in such a small and slender microphone! Here is ruggedness and reliability! Here is matchless beauty and striking design to appeal to users who demand the finest! The "333" is ultra-cardioid, uni-directional—reduces the pickup of random noise energy by 73%——prevents the pickup of moving props, scuffling feet and moving "dollies," so common when conventional broadcast microphones are used. Following are the features that make the "333" Studio so outstanding in performance, so dependable in operation: (1) patented, world-famous "Uniphase" system; (2) a true ultra-cardioid pickup pattern; (3) horn-loaded ribbon transducer provides extended smooth response, production uniformity guaranteed to plus er minus 2½ db, 30-15,000 c.p.s.; (4) multi-impedance switch; (5) voice-music switch; (6) anti-"Pfff" filter screen; (7) Shure self-adjusting "lifetime" swivel; (8) high output; (9) sturdy, one-piece metal case; (10) vibration-isolation unit mounted in live rubber; (11) Cannon XL connector. All these important features, plus the striking design of the Studio "333," make it ideal for critical studio applications that call for the highest possible broadcast quality, small size and matchless beauty——plus the ability to withstand the rough work-a-day handling by the sound crew. The "333" has two-tone "Baked Bronze" non-reflecting finish. Head dimensions: Width, 1 1/8"; height, 3 9/16"; depth, 1 3/4".

IMPEDANCE TABLE	OUTPUT LEVEL
Low-50 ohms	60 db below 1 Milliwat per 10 microbar signal
Medium-150 ohms	59 db below 1 Milliwat
High-Medium-250 ohms	per 10 microbar signal



Model \$33 Broadcast Desk Stand For use with Models 300, 330, 333, 525,

00, 330, 333, 525, 535 and 556S "333"

MODEL	LIST PRICE
"333"	\$250.00



Model "525" Studio Slendyne

OMNI-DIRECTIONAL DYNAMIC MICROPHONE

The new Studio "525" is an exceptionally fine probe microphone of broadcast quality. It features: (1) frequency response 40-15,000 c.p.s., production uniformity guaranteed to plus or minus 2½ db; (2) a moving-coil mounted in a highly efficient magnetic structure; "Alnico V" magnet; (3) multi-impedance switch; (4) high output; (5) long life "Duracoustic" diaphragm—specially designed to withstand moisture, heat, cold and physical shock. The "525" is furnished with a 20 ft., two-conductor, rubber-covered, shielded cable with Cannon XL-3-11 connector attached; swivel adapter; adjustable lavalier assembly (cord and clip), and a belt clip assembly. The "525" Studio has a non-reflecting "Baked Bronze" finish—which makes it blend into the background, giving the spotlight to the performer. Body diameter, 1"; length, 8 17/32".

IMPEDANCE TABLE	OUTPUT LEVEL
50 ohms	61 db below 1 Milliwatt
1.00 1	per 10 microbar signal
250 ohms	per re inicional signal

Model \$33 Broadcast Desk Stand List Price: \$15.00

MODEL	LIST PRICE
"525"	\$200.00

BI-DIRECTIONAL GRADIENT' MICROPHONE

This rugged, high fidelity, multi-impedance microphone is widely used for television, radio broadcasting, professional recording and high-fidelity uses. The "300" reduces reverberation and the pickup of random noise by 66%. The "300" combines the best features of conventional velocity microphones with advanced acoustic design—including an anti-"PFF" filter screen. Its bi-directional polar pattern is effective over a broad frequency range. It provides sound pickup at the front and rear of the microphone, but greatly reduces pickup at the sides. One of the outstanding features of the "300" is the fact that the microphone can be placed at a 73% greater distance from the performer than is possible with omnidirectional microphones! The "300" has a non-reflecting "Baked Bronze" finish, so it blends into the background, gives the spotlight to the performer. The "300" has a readily accessible Voice-Music switch, vibration-isolation unit mounted in live rubber, and a multi-impedance switch, providing low medium and high impedance. Extended response, production uniformity guaranteed to plus or minus 2½ db, 40-15,000 c.p.s. Furnished with a 20-foot two-conductor, rubber-covered, shielded cable with Cannon XL-3-11 connector attached.



Model "300" Studio Gradient¹

IMPEDANCE TABLE	OUTPUT LEVEL
L-35-50 ohms	59 db below 1 Milliwatt per 10 microbar signal
M-150-250 ohms	60 db below 1 Milliwatt per 10 microbar signal
H-High	57 db below 1 volt per microbar

Model S33 Broadcast Desk Stand List Price: \$15.00

MODEL	LIST PRICE
"300"	\$150.00

GENERAL PURPOSE MICROPHONES





Model "330" "Professional Uni-Ron"

UNI-DIRECTIONAL RIBBON MICROPHONE

The striking-looking new 330 "UNI-RON" Microphone has been designed to meet the exacting requirements of professional tape recording and highest quality indoor public-address systems. The "UNI-RON" is basically a member of the Shure Studio Microphone family, similar in appearance and performance to the Model "333". The "UNI-RON" has a super-cardioid pickup pattern — reduces the pickup of undesired random noise energy by 73%.

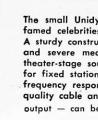
It has a smooth, peak-free response from 30 to 15,000 cps. The Professional Uni-Ron is equipped with multi-impedance (50, 150 and 250 ohms) switch, life-time swivel, and special vibration-isolation shock mount, as well as Cannon XL-3-11 cable connector and 20 ft. 2-conductor shielded broadcast-type cable. The microphone is finished in beautiful satin-chrome with natural anodized aluminum grill.

IMPEDANCE TABLE	OUTPUT LEVEL
L-50 ohms	59 db below 1 milliwatt per 10 microbars
M-150 ohms	57 db below 1 milliwatt per 10 microbars
H-250 ohms	58 db below 1 milliwatt per 10 microbars

This rugged performer has been developed to achieve optimum operating performance — for those aplications where highest quality is essential, yet cost is a factor. Model "330"

List Price \$120.00

UNI-DIRECTIONAL DYNAMIC MICROPHONES



Model "555" "Small Unidyne"

The small Unidynes are the largest selling microphones throughout the world—used consistently by famed celebrities for those important events where the faithfulness of sound reproduction is critical. A sturdy construction provides immunity of the moving-coil system to abnormal atmospheric conditions and severe mechanical shock. Model 55S is highly recommended for fine quality public address, theater-stage sound systems, recording and remote broadcasting. It is also the field-proved standard for fixed station use in the police, fire, transportation, forestry and commercial services. The smooth frequency response of the 55S ranges from 50 to 15,000 c.p.s. It is furnished with an 18-foot, high quality cable and plug assembly. Special Note: Both of the famed Unidynes are now 41% higher in output - can be used with low gain tape recorders and P.A. systems.

Model 556S is specially constructed and tested to meet the requirements of the broadcast and television studio, and is held within close tolerances in frequency response and directivity. It is a moving-coil type microphone with a frequency range of 40 to 15,000 c.p.s., production uniformity guaranteed to plus or minus 21/2 db. The Broadcast Unidyne is ideal for high quality station and remote broadcasting, public address, theater-stage sound systems and recording applications. As a further precaution against mechanical vibration pickup, the 556S is provided with an additional isolation unit. This isolation unit is of live rubber construction in combination with the stand connector and a built-in high quality cable connector. The microphone is furnished with a 20-foot, high quality, shielded, 2-conductor cable with a Cannon microphone plug attached. Both the 55S and the 556S feature the world-renowned patented "Uniphase" network system.



"Small Broadcast"

IMPEDANCE TABLE	OUTPUT LEVEL
L-35-50 ohms	54 db below 1 Milliwatt per 10 microbar signal
M-150-250 ohms	55 db below 1 Milliwatt per 10 microbar signal
H-High	57 db below 1 volt per microbar

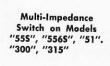
MODEL	LIST PRICE
556S	\$135.00
55\$	\$ 83.00

MULTI-IMPEDANCE HIGH OUTPUT DYNAMIC

The "Sonodyne" is ideal for all general purposes, including public address, wire and tape recording, and similar applications. It is widely used by bands, instrumentalists and professional recording artists because of its outstanding reproduction of both voice and music. Widespread usage by home users of tape recorders indicates that the Sonodyne is the ideal high-quality, moderately-priced replacement for the conventional microphone supplied with tape recorders. The wide range frequency response is 60 to 10,000 c.p.s. This rugged microphone is of the pressure type, with conventional semidirectional characteristics, and it may be used for close-talking without undue low frequency emphasis. The Sonodyne is a multi-impedance microphone, providing the versatility of three microphones in one —for low, medium and high impedance. Has built-in receptacle and a 15-foot, two-conductor shielded cable with microphone plug attached. Satin chrome finish. Model "51"

List Price \$49.50







IMPEDANCE TABLE	OUTPUT LEVEL
L-35-50 ohms	53.0 db below 1 Milliwatt for 10 microbar signal
M-150-250 ohms	52.5 db below 1 Milliwatt for 10 microbar signal
H—High	52.0 db below 1 volt per microb

GENERAL PURPOSE MICROPHONES

OMNI-DIRECTIONAL DYNAMIC MICROPHONES

The new Slendyne 535 is the most versatile fine quality probe microphone ever developed — actually five microphones in one because of its practical design and useful accessories! The "535" is a movingcoil dynamic microphone built to provide wide range reproduction of music and voice. It can be used for indoor or outdoor applications in the following manner: (1) in the hand, (2) on a floor stand, (3) on a desk stand, (4) hung around the neck on a lavalier cord. Add to these factors an on-off switch adapter and a dual-impedance switch and you have the most completely versatile fine quality probe ever developed. Frequency response is 60 to 13,500 c.p.s..

The Slendyne 535 is ideal for high quality public address, theater-stage sound systems, and all recording applications where an omni-directional microphone is desired. The microphone is ruggedly built to withstand hard usage, and is unaffected by temperature and humidity variations. The 18-foot, high quality, shielded, two-conductor cable is supplied with a microphone plug equivalent to the Amphenol 91-MC3M plug. The "535" meets the requirements for maximum quality and minimum size. It is finished in rich satin chrome. A self-adjusting swivel adapter is supplied with the microphone, and permits it to be tilted from 90° from vertical to horizontal, making it possible to tilt the microphone at the source of sound. Furnished accessories are the A25 Swivel Adaptor, On-Off Switch Adaptor, and Dual-Impedance Switch.

The "535" is specially recommended for "interview-type" use where the "hand-a-bility" is important. Of special interest to P.A. technicians and recording enthusiasts is the quick-disengaging feature that permits the microphone to be instantaneously removed from the stand swivel adapter, for use as a hand microphone during audience participation shows, interviews, and for home recording sessions. The Made! 530 Slendyne is the deluxe broadcast Slendyne, finished in an attractive black and gold anodized finish. It has a frequency range of 50 to 15,000 c.p.s., and is furnished with a 20-foot, high quality, two-conductor shielded cable with a Cannon XL-3-11 cable connector. Furnished with swivel adaptor, deluxe lavalier cord and belt clip, on-off switch adaptor.

OUTPUT LEVEL	MODEL	LIST PRICE
61 db below 1 Milliwatt per 10 microbar signal	"535"	\$72.50
61 db below 1 volt per microbar		
61 db below 1 Milliwatt per 10 microbar signal	"530"	\$110.00
61 db below 1 volt per microbar		



Model "535" Stendyne



Model "530" Broadcast Slendyne

BI-DIRECTIONAL GRADIENT MICROPHONE

This rugged high fidelity multi-impedance microphone is recommended for fine quality general purpose uses. It features a frequency response of 50 to 12,000 cps—will reproduce voice and music in a clear, natural tonal quality, which makes it ideal for use in auditoriums, night clubs, schools and churches. The "315" is similar in features and design to the Studio Model 300. It is ideal for those numerous public address applications where its streamlined design and striking beauty lend dignity and prestige to any setting in which it is used. This gradient microphone is a favorite of professional performers and educators because it provides unusual freedom of motion on the platform — making it possible for the user to stand at a 73% greater distance from the microphone than is possible with omni-directional microphones. Its bi-directional "Fig. 8" pickup pattern extends over a broad frequency range and it permits the sound system to be operated at a level almost 6 db higher than is possible with non-directional (omni-directional) microphones! The "315" picks up voices and music from front to back — is "dead" at the sides, reduces reverberation and the pickup of random noises by 66%. This feature means the "315" can be used in those critical installations where feedback makes it impossible or impracticable to use conventional microphones. It is "PFF"-proof — filters out the "PFF"type noises often heard over conventional microphones. Here again is another fine quality Shure microphone made under scientific control conditions, which are your guarantee that it can be used month after month without deviation from its original standards. Dimensions: height 6"; width 1 7/16"; depth 1 3/32". The "315" is furnished with an 18-foot, high quality, two conductor, shielded cable, supplied with the equivalent of the Amphenol 91-MC3M plug.

IMPEDANCE TABLE	OUTPUT LEVEL
L-35-50 ohms	59 db below 1 Milliwatt per 10 microbar signal
M-150-250 ohms	60 db below 1 Milliwatt per 10 microbar signal
H-High	57 db below 1 volt per microba

MODEL	LIST PRICE
"315"	\$89.50



Model "315" Gradient

MODEL

"535"

"530"

IMPEDANCE TABLE

L-50-250 ohms

H-High

L-50-250 ohms

H-High



GENERAL PURPOSE MICROPHONES

"COMMANDO" ALL-PURPOSE MICROPHONES

The new Commando series represents a significant achievement in providing quality performance at nominal cost. These dramatic looking, rugged microphones can be used indoors or outdoors. Models 415 and 430 provide practical versatility of operation. They can be held in the hand, set on a floor stand or on a desk stand — can be inserted or withdrawn from the stand in a second, without the use of any tools. Model 420 is of more compact design and is intended primarily for use as a lavalier microphone. It is readily detachable from its lavalier clip for use as a hand held unit. Coupled with this versatility of usage, the Commandos are ideal for general-purpose applications where both voice and music reproduction are of critical importance. Commandos can be used for tape recording in the home; theater-restaurant public address systems; lecturing; paging and dispatching systems; interview-type shows; outdoor public address systems for carnivals, picnic and special events.

All three units are ruggedly constructed of attractive, non-reflecting gray, impact resistant polystyrene. The lower part of Models 415 and 430 are of die cast zinc with a satin chrome finish.

The Commandos are omni-directional units with a frequency response of 60-10,000 cps. They are controlled magnetic units and are unaffected by extremes of temperature and humidity. Models 420 and 430 are equipped with readily changeable pin jacks for a choice of two impedances (L - 150 to 250 ohms and H — High), without soldering.

Model 430 includes on-off switch, dual-impedance feature and Amphenol MC2M cable conductor. Furnished with 15 Ft. of 2-conductor shielded cable, black Model A25-type swivel adapter and switch locking plate for keeping switch in "on" position. List Price:

Model 420 includes dual impedance feature and lavalier cord and clip assembly. Furnished with 20 ft. of non-detachable 2-conductor shielded cable. List Price: \$30.00

Model 415 includes black Model A25-type swivel adapter and 7 ft. of non-detachable single-conductor shielded cable. High impedance only. List Price: \$27.50

538B Desk Stand for use with Models 415 and 430.

OUTPUT LEVEL

-52 db below 1 volt

—52 db below 1 milli-watt per 10 microbars

per microbar







List Price:



Model 430 in the Hand

in the

Model 430 on Floor Stand

"STARLITE" MICROPHONES



IMPEDANCE

150-250

HIGH

Model 215 and 715

These beautifully designed microphones are excellent for voice and music reproduction. Their extremely low price and good quality make them a "natural" for home recording, intercom systems and inexpensive public address systems. The "Starlite" microphones can be held in the hand. or used on a desk by simply releasing a built-in retractable stand which

is an integral part of the back of the microphone case. They are semi-directional, high impedance units, in impact resistant poly-

Model 215, a ceramic unit, has a response from 50-8000 cps; Model 715, a crystal unit has a response range from 50-10,000 cps. Both microphones are supplied with 5 ft. fabric covered single conductor shielded cable.

MODEL	OUTPUT	LIST PRICE
215 Ceramic	56.5 db below 1 volt per microbar	\$8.00
715 Crystal	50 db below 1 volt	\$8.00

CABLE TYPE TRANSFORMER

\$4.50



Model A86A

Model A86A is a high-quality, cabletype transformer which makes it convenient to run a long microphone line from a low impedance microphone to a high impedance amplifier. It is housed in a compact, sturdy and magnetically-shielded case. Connection terminals are easily accessible. and compression fittings crimp the microphone and amplifier inputs. The

A86A matches 35-50 ohm and 150-250 ohm microphones to high impedance amplifier inputs. This type of system usually solves the problem of excessive high frequency loss and objectionable hum pickup when long lengths of microphone cable are necessary. The A86A offers additional versatility when used in conjunction with Shure Models 51, 55S, 556S, 300, 315, 330, 333, 525, 530 and 535 Dynamic and Ribbon Microphones. And in addition to these the Model A86A may be used in specialized applications which require high impedance to low impedance circuit connections. The transformer is finished in an attractive two-tone gray and is furnished with a 2-foot cable. Frequency response: 20 to 20,000 c.p.c., plus or minus 1 db.

Model -A86A

List Price: \$17.50

SHURE

CRYSTAL MICROPHONES

THE VERSATILE "SLIM-X" ALL-PURPOSE MICROPHONE

FOR:

- Low Cost P. A. Systems
- Home Recording
- Hams
- **General Purpose**







On Floor Stand

The "777" Slim-X Microphones are rugged little microphones weighing only 6 ounces! They are designed for good-quality voice and music reproduction. Their versatility and "hand-ability" make them ideal for use by lecturers, announcers, instructors, and Hams; for audience participation shows; carnivals; panel and quiz shows; and use with home-recorders. When mounted on either cradle or swivel, the "777" can be removed in

a flash (no tools necessary)—simply by lifting it

out of the holder. This makes it an ideal "walkaround" hand-held microphone.

TECHNICAL INFORMATION: Smooth frequency response-60 to 10,000 c.p.s.; Moisture-proof "Metal Seal" crystal for long operating life; high impedance; 7 ft. single-conductor cable, disconnect type. Dimensions: (Microphone only) Length, 41/2"; Diameter, 1". Finish: Rich satin chrome overall.



In the Hand

Note: All Models are furnished with Lavalier Cord, for suspension of microphone around neck.

"SLIM-X" ASSEMBLIES

MODEL 777A includes 777 Microphone; A-25 Swivel Adaptor; S-38 Desk Stand; Lavalier Cord. Model: 777A

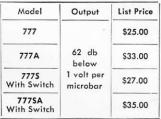
MODEL 777SA includes 777S Microphone; A-25 Swivel Adaptor; S-38 Desk Stand; Lavalier Cord. Model: 777SA List Price: \$35.00

ACCESSORIES FOR "777"

MODEL S-38 STAND is a heavy die-cast base. Includes metal screw machine stud for connecting microphone adaptor to stand base.

List Price: \$4.50

MODEL A-25 SWIVEL ADAPTOR features a long-life, high-quality swivel connector. Is lined with a long-life nylon sleeve—for noise-free and scratch-free insertion and removal of microphone. List Price: \$5.50



*(Price includes cradle for mounting on stand.)





"MONOPLEX"

(Fig. A)

The only Super-Cardioid Crystal Microphone made—far superior to conventional Crystal Microphones! Excellent for high-quality public address, communications, recording, and similar applications. The 737A operates under adverse conditions of background noise and reverberation—where a conventional microphone would be practically useless! Reduces pickup of random sound by 73%! Moisture-proof "Metal Seal" crystal for long operating life. Case pivots at rear, can be pointed toward desired sound or upwards for horizontal plane pickup. Has 15 ft. shielded cable. Rich satin chrome finish. High impedance.

MODEL	OUTPUT	LIST PRICE	
737A	55.0 db below 1 volt per microbar	\$46.00	

THE "REX" (Fig. B)

Its low price makes this hand-held microphone a natural for "Hams" and low-cost public address system. A rugged unit designed for high speech intelligibility. Saves extra costs, as it needs no desk stand! Has a broad base, complete with stand adapter for mount-



Fig. C ing on floor stand. Sits firmly on a table top without tipping over. Die cast case. Frequency response 60 to 9,000 c.p.s. 5 ft. shielded cable. Beautiful Bergundy-red metallic finish. Only 23/3" wide, 31/4" high, 11/8" thick. High impedance.

MODEL	OUTPUT	LIST PRICE
710A	50 db below 1 volt per microbar	\$12.00
7105 (with switch)	50 db below 1 volt per microbar	\$14.00

MODEL 707A (Fig. C)

Ideal for low-cost P.A. systems, amateur phone transmitters and similar applications. Good-quality performance at low cost. Has typical semi-directional pickup. Has 7 ft. shielded cable. High impedance. Pearl Gray case with rich satin chrome finish on front grille. Diameter 23/8"

Model 707A designed to be used with Shure Model S34B or S36A Desk Stands (see page D-179).

MODEL	ОИТРИТ	LIST PRICE	
707A	51.0 db below 1 volt per microbar	\$19.50	



Fig. E

LAPEL MICROPHONE (Fig. D) Specially designed unit widely used by lecturers, instructors, speakers, etc. High speech intelligibility. Response from 40 to 6,000 c.p.s. 178" diameter. Has lapel clip. 20-foot shielded single-conductor cable. High impedance.

MODEL	OUTPUT	LIST PRICE
76B	57 db below 1 volt per microbar	\$29.00

STRATOLINER (Fig. E.)

An expensive-looking crystal microphone at moderate cost. Wide-range response for good reproduction of either voice or music. Placed horizontally, the 708A is semi-directional; used vertically it becomes non-directional. Swivel permits 90° tilting of microphone. 7 ft. shielded cable and plug assembly. High impedance. Pearl Gray finish.

MODEL	OUTPUT	LIST PRICE	
708A	51.0 db below 1 volt per microbar	\$31.00	

CONTROLLED MAGNETIC MICROPHONES



THE "HERCULES"



The "Hercules" is a hand-held unit, ideal for general purpose use in tropical countries and in all coastal areas where heat and humidity are a problem. The "510" provides the ruggedness, clear reproduction and high output for public address, communications and recording where high speech intelligibility is vital. It is recommended for Announcing; Mobile Public Ad-

dress Systems; Communications; Home Recording, and High Quality Intercommunication. The Hercules can be used either Indoors or Outdoors, fits snugly in the hand, sits firmly on a desk. High impedance. Frequency response 100 to 7000 c.p.s. Furnished with 7 ft. shielded cable. Green metallic finish. Diecast case. Furnished with stand adapter. Dimensions: 2 2/3" wide, 3 1/4" high, 1 1/2" thick. Model 510 Series designed to be used with S34B or S36A Desk Stands. (See page D-7)

MODEL	OUTPUT LEVEL	IMPEDANCE	LIST PRICE
510C	52.5 db below 1 volt per microbar	нісн	\$17.00
5105 (with switch)	52.5 db below 1 volt per microbar	HIGH	\$19.00

MINIATURE MICROPHONES



Model MC11 (Circular) Impedance: 1,000 ohms Frequency Response: 400 to 3,000 cps Output Level: -75 db (0 db 1 volt per microbar) Dimensions: Dia: 1 1/64", thickness 25/64"

List Price: \$12.50

Small microphones specially designed for use in vacuum-tube devices such as small, compact amplifiers, transmitters, dictating equipment—wherever size and weight are important factors. They also are highly recommended for use in small transistor-type devices. They are immune to varying conditions of heat and humidity.

Model MC20
(Rectanglar)
Impedance: 1,100 ohms
Frequency Response:
400 to 4,500 cps
Output Level:
-75 db (0 db 1 volt per microbar)
Dimensions:
width 10/16",
thickness 5/16",
length 15/16"
List Price: \$14.00

Model MC30 (Rectangular)
Impedance: 1,850 ohms
Frequency Response:
400 to 3,500 cps
Output Level:
-76 db (0 db 1 volt per microbar)
Dimensions:
width .5",
length .5",
thickness .265"
List Price: \$20.00

THE "GREEN BULLET"



The "Green Bullet" is deigned to provide quality music and speech reproduction at moderate cost. It is practically immune to the effects of high temperatures and humidity. It features: high output, good response, high impedance without the need of a transformer. The "Green Bullet" has a beautiful modern metallic green finish with a plated grille. Frequency response is 100 to 7000 c.p.s. Furnished with 7 ft. single-conductor shielded cable. High Impedance. The "Green

Bullet" is highly recommended for those public address systems where low cost is a must, good reproduction is essential and ruggedness is a necessity. Model 520 series designed to be used with Shure Model S34B or S36A Desk Stands. (See page D-7)

MODEL	OUTPUT LEVEL	IMPEDANCE	LIST PRICE
520	52.5 db below 1 volt per microbar	нібн	\$22.50
520B	51 db below 1 milli- watt per 10 microbars	150-250 ohms	\$22.50

THE "DISPATCHER"



MODEL 520SL

This new Controlled Magnetic unit is designed to handle the most severe field requirements of paging and dispatching systems. The unit is supplied with 7 feet of 2-conductor shielded cable, and is wired to operate both microphone and relay circuits. The "Dispatcher" is ideal for police, taxi-cab, railroad, airport, bus, truck, and all emergency communications work where dependability is vital. Large grip-bar assures positive contact.

(NOTE: Complete assembly furnished as illustrated.)

MODEL	OUTPUT LEVEL	IMPEDANCE	LIST PRICE
520SL	52.5 db below 1 volt per microbar	High	\$45.00

THE "RANGER"

The new Shure "Ranger" is a new development of a similar magnetic unit originally housed in microphones used by the Armed Forces. The "Ranger" is especially recommended for those applications where long lines are used, and a rugged hand-held microphone is needed. It is ideal for outdoor public address (sports arenas, athletic fields), mobile communications, ham, audience participation shows, etc. The "Ranger" is designed for high speech intelligibility. Easy to use, fits snugly in the palm of the hand. Has heavy-duty double-pole, single-throw, leaf-type switch for pu-sh-to-talk operation. Phosphor-bronze blades and silver contacts for maximum operating life. Model 505B is furnished with 5 ft. four-conductor shielded cable. Model 505C is furnished with 5 ft. three-conductor shielded cable. Model 505K is the replacement for General Electric Model EMIOA and is furnished with Amphenol MC4M connector and 5½ ft. coiled 3-conductor (1-conductor shielded) cable. Frequency response is 200 to 8,000 cps.

MODEL	OUTPUT LEVEL	IMPEDANCE	SHPG. WT.	LIST PRICE
505B	50.0 db below 1 milliwatt per 10 microbar signal	150-250 ohms	1 5/8 lbs.	\$32.00
505C	50.5 db below 1 volt per microbar	High	1 5/8 lbs.	\$32.00
505K*	50.5 db below 1 volt per microbar	High	1 5/8 lbs.	\$37.50

* Replacement for General Electric EMIOA





COMMUNICATIONS MICROPHONES

MODEL "100" SERIES CARBON MICROPHONES

Used around the world for police, taxi, bus, truck, and commercial applications — more than all other makes combined! Rugged unit with clear, crisp voice response and high output. Heavy duty switch for push-totalk performance. Furnished with bracket for wall mounting, plus coiled-cord cable. Adopted as standard microphone by G.E., Link, Motorola, R.C.A. and others for 2-way radio communications equipment. Output level: 5db below 1 volt for 100 microbar speech signal.



REPLACEMENT CHART

MANUFACTURERS MODELS	REPLACEMENT
CB10, CB10B, CB10C, CB10D, CB15, CB15D,	101C
CBIOE	101E
CB12, CB12A, CB12C, CB12D	102C
CB12E	102E
CB15F	103

Model	Cable	Switch Arrangement	List Price
101C	Standard Coiled Cord 11" retracted; 5' extended	Two Wire Relay	\$30.00
101E	Tinsel Coiled Cord 11" re- tracted; 5' extended with Amphenol MC4M Connector	Switch normally open. (No microphone switch)	\$33.00
102C	Standard Coiled Cord 11* retracted; 5' extended	Relay normally open.	\$30.00
102E	Tinsel Coiled Cord 11" re- tracted; 5' extended with spade lugs	Microphone switch normally open.	\$33.00
103	Standard Coiled Cord 11" retracted; 5' extended with Amphenol MC4M Connector	Two Wire Relay Switch normally open. (No microphone switch)	\$31.00

CARBON MICROPHONE CARTRIDGE



Model R10 and Model 99A149

Rugged microphone cartridge replacement for "CB", "100", and "120" Series Carbon Microphones. Furnished with necessary mounting hardware and complete installation instructions. Direct replacement for the cartridge used in the Models 101A, 101B, 101C, 102A, 102B, 102C, 120, CB10, CB10B, CB10C, SB10E, CB11, CB11B, CB12, CB12A, CB12B, CB12C, CB12D, CB12E, CB14A, CB15A, CB15B, CB15C, CB15D, CB15F, CB20, CB162, 91A27 carbon microphones.

Models R10

List Price \$8.50

Model 99A149 is the replacement for cartridges used in microphone models: CB20, CB21, CB50 and 115. models: CB20, Model 99A149

List Price \$8.50

"RANGER" TRANSISTOR-AMPLIFIER FOR CARBON MICROPHONE REPLACEMENT

Model 505T is the perfect improvement-replacement for carbon microphones. A self-contained transistor amplifier, powered by the carbon microphone circuit, does not require an additional power source. Provides unusual speech clarity and freedom from ageing under severe vibration conditions. Same size and appearance as "100" series microphones. Output level 1 db below 1 millivolt per

List Price \$48.50



MODEL R5T

Model R5T is a conversion kit containing a controlled magnetic cartridge and transistor amplifier. It is designed to convert carbon microphones into improved controlled magnetic transistorized microphones. Conversion takes only a matter of minutes—and all that is necessary is a screwdriver, a long-nose plier and a soldering iron.

SPECIFICATIONS FOR MODEL R5T

List Price: \$25.00

Type: Controlled magnetic with transistor amplifier.

Frequency Response: 200 to 4,000 cps Output Level: -1 db loaded with 500 ohms

(0 db == 1 milliwatt per 100 microbars) Polar Pattern: Semi-directional

COILED CORD SETS

Tinsel Coiled Cord with trimmed and tinned leads and Amphenol MC4M connector attached (3 conductor shielded) for use with General Electric EM10A and 505K microphones. Model: C10C List Price \$12.00

Standard Copper Coiled Cord with trimmed and tinned leads.
Used in "CB" and "100" Series Microphones.
Model: C15C List Price: \$6.25

Tinsel Coiled Cord with Amphenol MC4M Connector for use with General Electric equipment.

Model: C16C List Price: \$9.50

Tinsel Coiled Cord with spade lugs for use in Motorola equip-

Model: C17C List Price: \$7.75 Standard Coiled Cord with Amphenol MC4M Connector for use

with Motorola equipment.

Model: C18C List Price: \$9.50 Tinsel Coiled Cord with Amphenol MC4M Connector for use with

Motorola equipment. Model: C19C List Price: \$9.50

SWITCHES AND ACCESSORIES

MICROPHONE REPLACEMENT CARTRIDGES



CONTROLLED MAGNETIC

Model R5 & Model R5B

Direct replacement for cartridges used in the following Shure microphone models: 510C, 510MD, microphone models: 510C, 510MD, 510S, 520, 520SL and 505C. Also ideal for replacement of crystal cartridges in Shure cases of the Model 707A and 708A Series, where heat and humidity are a problem. Supplied with rubber mounting ring.

Model: R5 List Price: \$11.00

Model 99C86 is used in models 505B and 520B. Is physically identical to Model R5; but low impedance (150 to 250 ohms). Model: R5B List Price: \$11.00



CRYSTAL

Model R7

Model R7 Crystal Microphone. Available for service installation Available for service installation as a replacement for the cartridges in the Shure Crystal Microphones of the 707A and 708A Series, and other microphones of similar design. High output—48 db below 1 volt per microbar. Cartridge supplied with rubber mounting rings and installation instructions. instructions. Model: R7 List Price: \$8.25

SLIM-X CARTRIDGE Model 99A186 for the 777 Series Slim-X Microphones. Crystal ele-ment metal-sealed for long life. Requires only one solder connec-

Model: 99A186 List Price: \$10.00

"GRIP-TO-TALK SLIDE-TO-LOCK" SWITCH

Heavy-Duty Switch withstands the most severe field neary-Duty Switch withstands the most severe field requirements of paging and dispatching systems. Ideal for Police, Taxi-Cab, Railroad, Airport, Bus, Truck, and all emergency communications work. Can be used with Shure connector-type crystal, dynamic and carbon microphones of any impedance. Fits handily on Shure S36A Desk Stand. Rich satin chrome finish.

Model: A88A

List Price: \$12.50



List Price: \$12.50

ON-OFF PRESS-TO-TALK SWITCHES







Model A83B. Rotary-type "On-Off" switch. Quickly attached to any cable-

connector type Shure microphone.

Model: A83B List Price: \$11.00 Model A84B. Momentary Press-to-Talk "On-Off"
Model: A84B f" switch. List Price: \$11.00 Model A85C. Momentary Press-to-Talk Relay-Type Switch.

Model: A85C List Price:

TAKE-APART STAND



Model S34B. Handy low-cost stand for desk or Model: S34B. Handy low-cess states for deash 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. Model: S34B List Price: \$4.50

MODERN DESK STAND



Model S36A. Streamlined Desk Mount fits all Shure connector-type microphones. Adapter provided for mounting other type microphones. Ideal for use with A88A switch. List Price: \$6.50 Model: 536A

Model S36A

MAGNETIC TAPE and WIRE RECORDING HEADS

















Fig. A Record-Playback-Erase

Fig. B Record-Playback

Fig. C Record-Playback Also Erase

Fig. D Record-Playback-Erase

Fig. E Record-Playback Also Erase

Fig. F Record-Playback Also Erase

Fig. G Record-Playback-Erase

TECHNICAL DATA-MAGNETIC TAPE AND WIRE RECORDING HEADS

Model	Recording Speed	Bias & Erase Frequency	Std* Recording Level	Operating Bias Current	Erase** Current	Impedance Erase Coil	Impedance Recording Coil
815 (Fig. A)	3.75" per sec 7.5" per sec 3.75" per sec	25KC 50KC DC	.05 ma .05 ma .095 ma	1.25 ma 1.5 ma .35 ma	27 ma 30 ma 25 ma	750 ohm at 25KC 1300 ohm at 50KC 12 ohm	1450 ohm at 1000 cps 1450 ohm at 1000 cps 180 ohm
815H (Fig. A)	3.75" per sec 3.75" per sec	25KC DC	.03 ma .056 ma	.72 ma .24 ma	27 ma 25 ma	750 ohm at 25KC 12 ohm	5800 ohm at 1000 cps 556 ohm
816 (Fig. B)	3.75" per sec 3.75" per sec	25KC DC	.03 ma .07 ma	.80 ma .26 ma			5500 ohm at 1000 cps 556 ohm
817 (Fig. C)	3.75" per sec 3.75" per sec	25KC DC	.06 ma .175 ma	3.6 ma .42 ma			1860 ohm at 1000 cps 180 ohm
TR30 & TR35 (Fig. E & Fig. F)	1.875" per sec 3.75" per sec 7.5" per sec	25KC 50KC 50KC	.054 ma .056 ma .057 ma	.50 ma .57 ma .62 ma			3000 ohm at 1000 cps 3000 ohm at 1000 cps 3000 ohm at 1000 cps
TE2 (Fig. C) Without case	3.75" per sec 3.75" per sec 3.75" per sec	25KC 50KC DC			30 ma 35 ma 25 ma	750 ohm at 25KC 1300 ohm at 50KC 12 ohm	
TE30 & TE35 (Fig. E & Fig. F)	3.75" per sec	25KC 50KC 75KC			12 ma 12.5 ma 12 ma	8000 ohm 14,000 ohm 21,000 ohm	,
TR21C (Fig. G)	7.5" per sec	75 KC	.040 ma	1.0 ma	3		4000 ohm at 1000 cps

^{*}Determined in accordance with RTMA Standard REC.-134 August 1949.
**Erase current chosen for 50 db Erasure of Saturated 400 C.P.S. Recording.

Recording Medium—Minnesota Mining & Mfg. Co., Tape No. 111 5RBA1. Pressure Pad Force (Area—.025 sq. in.) Two Ounces.

RECORDING HEAD DIMENSIONS

Models 815, 815H (Fig. Width 1.240" Depth 1.03		Models TE2 (Fig. C) Width .516" Depth .830" Height .715"
Model 817 (F Width .552" Depth .830	0 /	Models TR30 & TE30 (Fig. E) & Models TR35 & TE35 (Fig. F) Width .635" Depth 1.13" Height .460"

Model TR21C (Fig. G) Width .600" Depth .821" Height .775"

NUMERICAL LIST OF SHURE TAPE HEADS USED IN ORIGINAL EQUIPMENT

MODEL			DESCRIPTION	OPERATING DATA
812	Fig. D	\$ 20.00	Wire Recording Head.	Not Shown
815	Fig. A	15.00	Upper track recording. Low impedance record-playback coil.	See 815
815 H	Fig. A	15.00	Upper track recording. High impedance record-playback coil.	See 815H
816	Fig. B	12.00	Upper track recording. High impedance record-playback coil.	See 816
817	Fig. C	9.00	.093" record track width. Low impedance record-playback coil.	See 817
TR5B	Fig. A	17.00	Upper track recording with 14-inch completely insulated leads. Cinch Plug attached.	See 815*
TR5N	Fig. A	16.00	Special Shield. Special Leads. Special Plug.	See 815*
TR5Z-2	Fig. A	18.50	Upper track recording. High impedance record-playback coil.	See 815H
TR6	Fig. B	12.00	Lower track recording. Low impedance record-playback coil.	Not Shown
TR6G	Fig. B	12.00	Lower track recording. High impedance record-playback coil.	See 816**
TR6H	Fig. B	12.00	Upper track recording. Low impedance record-playback coil.	Not Shown
TR16	Fig. C	9.00	.093" record track width. High impedance record-playback coil.	Not Shown
T R 26	Fig. C	11.00	.093" record track with (¼ mil gap). High impedance record-playback coil.	Not Shown
TR30	Fig. E	20.00	Microgap .093" record track width (¼ mil gap). 500 mh inductance.	See TR30
T R 35	Fig. E	20.00	Microgap .093" record track width (¼ mil gap). 500 mh inductance.	See TR35
TE2	Fig. C	7.00	Erase head116" erase track width.	See TE2
TE30	Fig. F	20.00	Microgap .110" erase track width.	See TE30
TE35	Fig. F	20.00	Microgap .110" erase track width.	See TE35
TR21C	Fig. G	14.00	.093" Record Track Width. Record-Playback Coil.	See TR21C

Note: For replacement information, write for free Replacement Manual No. RM-58

^{*}Operating data only. 815 does not replace.
**Operating data only. 816 does not replace.



CRYSTAL and CERAMIC PICKUP CARTRIDGES

Fine Groove Cartridges For 331/3, 45 RPM Records

MODEL NO.	ILLUS- TRATION	TYPE	LIST PRICE	OUTPUT LEVEL	MIN. NEEDLE FORCE	RESPONSE TO	NET WEIGHT	SHURE NEEDLE NO.
W C 20 #	Fig. C	Ceramic	\$ 9.50	.58V	21/2 - 3 grams	12,000 cps	21/4 grams	A20S
W21F*	Fig. B	Crystal	8.90	1.5V	6 grams	10,000 cps	4½ grams	A63MG
W31AR	Fig. A	Crystal	7.50	2.1V	7 grams	7,500 cps	5½ grams	A53MG





"Twin-Lever" Cartridges For 331/3, 45 And 78 RPM Records

MODEL NO.	ILLUS- TRATION	TYPE	LIST PRICE	OUT		MIN. NEEDLE FORCE	RESPONSE TO	NET WEIGHT	SHURE NEEDLE NO.
				MG.	STD.				
WC6 §	Fig. H	Ceramic	\$14.50	.5V	.7٧	4-6 grams	15,000 cps	7 grams	A6S
WC6TM A Top Mount	Fig. R	Ceramic	\$14.50	.5٧	.7٧	4-6 grams	15,000 cps	7 grams	A6S
₩9 Þ	Fig. J	Crystal	9.50	3.5V	5.0٧	11 grams	10,000 cps	7 grams	A9
W C 10 §	Fig. H	Ceramic	9.50	.78V	1.0V	7 grams	12,000 cps	7 grams	A10S
WC10D§	Fig. H	Ceramic	34.00	.78V	1.0V	7 grams	12,000 cps	7 grams	A10DS







Turnover Cartridges For 331/3, 45, And 78 RPM Records

MODEL NO.	ILLUS- TRATION	TYPE	LIST PRICE	OUTPUT LEVEL						MIN. NEEDLE FORCE	RESPONSE TO	NET WEIGHT	SHI NEE N	DLE
				MG.	STD.				MG.	STD.				
W22	Fig. D	Crystal	\$ 9.50	1.2V	1.4V	8 grams	10,000 cps	4½ grams	A65MG	A61A				
W22-T	Fig. E	Crystal	10.00	1.2V	1.4V	8 grams	10,000 cps	12½ grams	A65MG	A61A				
W C 24	Fig. F	Ceramic	8.75	0.6V	0.6V	* 8 grams	7,000 cps	4½ grams	A53MG	A52A				
W C24-T	Fig. G	Ceramic	9.25	0.6V	0.6V	8 grams	7,000 cps	12½ grams	A53MG	A52A				
W C 25	Fig. K	Ceramic	9.50	.65V	.7٧	8 grams	7,000 cps	6 grams	A65MG	A61A				
W72 † §	Fig. L	Crystal	8.50	3V	4V	10-15 grams	5,000 cps	7 grams	A69A	A70A				



















































MODEL NO.	ILLUS- TRATION	TYPE	LIST PRICE	OUT		MIN. NEEDLE FORCE	RESPONSE TO	NET WEIGHT	SHURE NEEDLE NO.
				MG.	STD.				
W26	Fig. B	Crystal	\$ 6.50	.87V	1.0V	8 grams	8,000 cps	4½ grams	A67U
W C38	Fig. A	Ceramic	7.50	.9٧	.92V	9 grams	10,000 cps	5½ grams	A58U
W66B	Fig. 0	Crystal	7.00	2.0V	2.3V	8 grams	4,500 cps	12 grams	A66U
W70	Fig. P	Crystal	4.95	3.0V	3.8V	10-15 grams	5,000 cps	16 grams	A77U

All Purpose Single Needle Cartridges For 331/3, 45, 78 RPM Records

MODEL NO.	ILLUS- TRATION	TYPE	LIST PRICE	OUTPUT LEVEL	MIN. NEEDLE FORCE	RESPONSE TO	NET WEIGHT	SHURE NEEDLE NO.
W56N **	Fig. N	Crystal	\$10.00	4.3V	1 oz.	10,000 cps	12 grams	A68D
W 68 †	Fig. 0	Crystal	7.50	1.6V	1 oz.	4,500 cps	Dual Wt. 25 grams or 12 grams	A62A
W78 ‡	Fig. M	Crystal	5.55	4.0V or 2.0V	1 oz.	6,000 cps	Dual Wt. 25 grams or 12 grams	None

Note: For replacement information, write for free Replacement Manual No. RM-58

^{*}With .453 Mount for Oak Changer.

**Cutter-Cartridge for Wilcox-Gay "Recordette." Equipped with bifurcated needle.

†Dual-Weight Cartridge. With weight-slug, net weight 25 grams. Without weight-slug, net weight 12 grams.

‡Dual-Weight Cartridge. Has same weight-slug as Model W68, with same net weight differential. In addition, Model W78 has capacitor, furnished as accessory. Without capacitor, output is 4.0 volts. With capacitor, output is 2.0 volts.

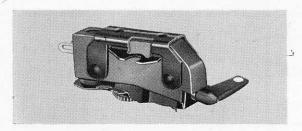
§Not a turnover type. Needles are set into tracking position by ingenious "Twin Lever" needle shift system.

‡For Columbia 16 2/3 Highway Hi-Fi Records.

bModel W9 has Capacitor furnished as accessory. Without Capacitor output is as shown above. With Capacitor output it 1.7 volts for 33 1/3, 45 RPM; 2.5 volts for 78 RPM.

\$Model W72 has a silip-on Capacitor furnished as an accessory. With the Capacitor, output is 2 volts for 78 RPM, 1.5 volts for 33 1/3 45 RPM. Without the Capacitor, output is 4 volts for 78 RPM, 3 volts for 33 1/3, 45 RPM.

UNIN LOUPT," CARTRIDGES . NEEDLES . REPLACEMENT KITS



IMPROVE THE QUALITY OF ALL CONVENTIONAL HOME PHONOGRAPHS!

We make these strong claims; the "Twin-Lever" Series of Improvement Cartridges are the finest replacement cartridges ever developed. They set a new high, leaving all other replacement cartridges far behind their level of tone superiority . . . individual needle compliance for superior standard and fine-groove response . . . unique needle shift design. Needle replacement is fast and easy. No tools are needed. Cartridges do not have to be removed from tone arms.

MODEL WC10:-

This 3-speed dual-needle cartridge replaces and out-performs 157 3-speed, plastic cased, ceramic and crystal, turnover and single needle cartridges!

List Price \$9.50

MODEL W9:-

For the first time . . . a five-volt phono cartridge with response to 10,000 cps. for improvement-replacement applications! This 3speed, dual-needle, dual-voltage, crystal cartridge replaces and out-performs 69 high output cartridges. Dramatically improves the sound of low cost, low-gain phonographs.

List Price \$9.50

MODEL WC6:-

This 3-speed, dual-needle ceramic cartridge is recommended as the finest quality replacement-improvement for all other ceramic cartridges with plastic cases. With the WC6 you can actually improve the reproduction of even the fine quality ceramic cartridges which are currently used for high fidelity applications!

List Price \$14.50



The "MUSIC LOVERS CARTRIDGE" for High Fidelity Systems

The "Music Lovers" Cartridge is a three-speed ceramic cartridge that reproduces all records sharply and clearly.

It is equipped for mechanical interchangeability with magnetic pickups, and for direct connection to magnetic inputs of amplifiers, thus allowing the full advantages of compensation circuits.

Model ML44 (SS) List Price \$13.95 List Price \$38.95 Model ML44 (DS) Model ML44 (DD) List Price \$57.90

REPLACEMENT KITS



RK-58 REPLACEMENT KIT 3 CARTRIDGES REPLACE 92!

The RK-58 contains the models WC6, WC6TM and W9-all "Twin-Lever" cartridges-plus a FREE A6S needle assembly which will replace the existing needles in the model WC6 or model WC6TM.

List Price \$38.50

RK-56 REPLACEMENT KIT 3 CARTRIDGES REPLACE 217!

The RK-56 contains the models WC10, W70 and W72.

List Price \$22.95

RK-54 REPLACEMENT KIT 3 CARTRIDGES REPLACE 192!

The RK-54 contains the models W22, W26 and W78.

List Price \$21.55

PHONOGRAPH PICKUP NEEDLES

MODEL	ILLUSTRA- TION	DESCRIPTION	LIST PRICE	
A6S	Fig. B	Std. and MG Sapphiret	\$ 5.95	Fig. A
A9††	Fig. B	Std. and MG Sapphire†	3.50	"MUTED STYLUS"
A10S	Fig. B	Std. and MG Sapphiret	3.50	.0
Alods	Fig. B	MG Diamond, Std. Sapphire†	28.00	300
A20S	Fig. E	.0003 (3/10 mil) Sapphire†	3.50	Fig. B
A52A	Fig. C	Std. Osmium	1.50	"TWIN-LEVER"
A53MG	Fig. C	MG Osmium	1.50	
A56U**	Fig. C	All Purpose Osmium Unipoint	1.50	Fig. C.
A58U***	Fig. C	All Purpose Osmium Unipoint	1.50	"DIRECT DRIVE"
A61 A	Fig. A	Std. Sapphiret	2.50	n
A62A	Fig. A	Std. Osmium	1.50	
A63MG	Fig. A	MG Osmium	1.50	Fig. D
A64 MG*		MG Osmium	2.00	"CUTTER PLAYBACK"
A65MG	Fig. A	MG Sapphire†	2.50	**
A66U	Fig. A	All Purpose Osmium Unipoint	1.50	Fig. E
A67U	Fig. A	All Purpose Sapphire Unipoint†	2.50	"HIGHWAY HI-FI"
A68D	Fig. D	Osm. Playback Needle—Stelite Cutting Stylus	3.50	
A69A	Fig. F	MG Sapphire†	2.50	
A70A	Fig. F	Std. Sapphiret	2.50	Fig. F
A77U		All Purpose Osmium Unipoint	1.50	"PUSH-IN TYPE"

Standard Bent Shaft Needle Not Illustrated. *Used in Cartridge Models PC10 and WC36B.

***Used in Models PC12 and WC38.

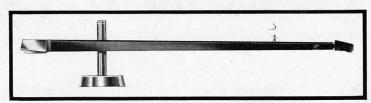
*Standard Straight Shaft Needle Not Illustrated.

†High-quality commercial-type synthesized sapphire specially designed for long operating life.

†Cannot be replaced by A10S or N3 series needles.

Crystal and Ceramic Cartridges manufactured under Shure Patents and Patents Pending.

For selective high fidelity enthusiasts...for the most critical high fidelity applications in broadcast and recording studios.



For the first time—reliable, consistent, 1-gram tracking force...with the Shure Studio Dynetic Phono Reproducer that makes it impossible to scratch records!

Featuring—the gram of prevention—never again need you worry about scratching your records with the Studio Dynetic.

It has long been recognized that elimination of record and stylus wear requires that tracking force be reduced below the level of 2 grams. However, attempts to utilize conventional cartridges and arms with these extremely light forces were uniformly unsatisfactory, providing for a completely new basic-research approach to a practical, integrated arm and cartridge—developed specifically for use at a tracking force of 1 gram. As a result of such a research program, carried out in the Shure Acoustical Development Laboratories, the Studio Dynetic Phono Reproducer came into being.

The Studio Dynetic will track at 1 gram, without any sacrifice of those other features so necessary for truly highest quality reproduction of the sound from your phonograph records—not just on the first few playings, but on the one hundredth or one thousandth playing. This means, that you will not only get the finest reproduction but never under any circumstances scratch your records. Even delicate "lacquer masters" can be played with complete safety, eliminating the need for "deepfreezing" to achieve record hardening.

SPECIFICATIONS:

Tracking Force: 1 gram
Frequency Response: 20 to 20,000 cps
plus or minus 2 db

Sensitivity: Output at 1000 cycles—14 millivolts for 10 cms/sec

DC Resistance: 180 ohms

Recommended Input Impedance: 10,000 ohms

Inductance: 130 millihenrys

Stylus: .0007" Diamond

Needle Compliance: 7 x 10-6 cm/dyne

Needle Tip Mass: 1.25 milligrams

...For high fidelity

any other separate cartridge...

enthusiasts who want

performance that surpasses

SPECIAL FEATURES

- Dynetic Principle—a moving magnet within a stationary coil. Prevents the pickup of hum.
- Friction Free Suspension—jewel bearings throughout. This means complete friction-free operation.
- Safety Control—provides for remote retraction of the cartridge and stylus without danger of damage to record and stylus from careless handling.
- Dynamic Damping—arm counterbalance floats on a dampened suspension bar.
- Geometric Configuration—arm is reinforced, tapered channel of durable aluminum. The proper tracking angle—avoiding the complications of curved tone arms or offset cartridges.
- Ease of Installation—The Studio Dynetic can be used with any high quality transcription type turntable.
- Laboratory Production—Each Studio Dynetic Phono Reproducer is custom-produced in a special Shure engineering laboratory. It is individually tested electrically, acoustically and mechanically.

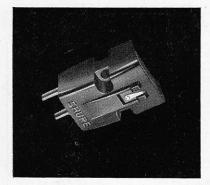
Model M16—Studio Dynetic Phono Reproducer including M1 cartridge with .0007" diamond stylus (for playing records up to 16") Net Price \$79.50 Model M12—Studio Dynetic Phono Reproducer including M1 cartridge with .0007" diamond stylus (for playing records up to 12") Net Price \$79.50 M1—Studio Dynetic Cartridge for LP records with .0007" diamond stylus Net Price \$42.00 M2—Studio Dynetic Cartridge for 78 rpm records with .0027" diamond stylus Net Price \$42.00 Net Price \$42.00

N1—Studio Dynetic Stylus with .0007" diamond tip Net Price \$21.00

N2—Studio Dynetic Stylus with .0027" diamond tip Net Price \$21.00

Model A29R—Adapter Plate for use with Model M12 for mounting with the Rek-O-Kut turntable

Net Price \$2.40



PROFESSIONAL DYNETIC PHONO CARTRIDGE

SPECIAL FEATURES

- The heralded dynetic principle of movingmagnetic reproduction.
- High compliance and low effective needle mass provide excellent tracking with minimum record wear and minimum distortion.
- Completely eliminates magnetic attraction to steel (changer) turntables.
- Suppresses magnetic hum induced from external hum fields.
- Needle replacement is exceptionally simple and fast. No tools are required—and you can replace the needle right in your home, without even removing the cartridge from the tone arm.
- Reproduces everything on the record—clearly and with superlative definition—far superior to conventional magnetic high fidelity cartridges.
- High degree of both vertical and lateral compliance, making it possible for you to play stereo records monaurally, without ever damaging either the record or the cartridge.

Model M5D—Professional Dynetic Phono Cartridge for LP records including N5D .001" diamond stylus. Net Price \$27.50

Model M6S—Professional Dynetic Phono Cartridge for 78 rpm records including N6S .003" sapphire stylus. Net Price \$15.00 Model N5D—Professional Dynetic Stylus with .001" diamond tip. Net Price \$16.50

Model N6S—Professional Dynetic Stylus with .003" sapphire tip. Net Price \$5.00

SHURE BROTHERS, INC.

222 Hartrey Ave. • Evanston, III.

The new Shure Professional Dynetic Phono Cartridge is for use in record-changers and transcription-type arms—in installations where premium quality is paramount. It is rapidly becoming known among critical music lovers as the pre-eminent high fidelity monaural phono cartridge.

SPECIFICATIONS:

Frequency Response: 20 to 20,000 cps Sensitivity: Output at 1,000 cycles—21 millivolts for 10 cms/sec Recommended Load Impedance:

27,000 ohms or more Compliance: 3 x 10-6 cm/dyne Tracking Force: 3 to 6 grams Inductance: 350 millihenrys DC Resistance: 440 ohms Weight: .44 ounces Model M5D—for use with microgroove records, 33½—45 rpm Model M6S—for use with standard records, 78 rpm

SHURE

MICROPHONES AND ELECTRONIC COMPONENTS