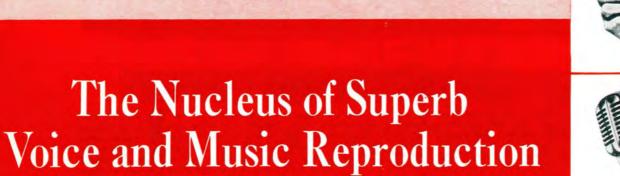
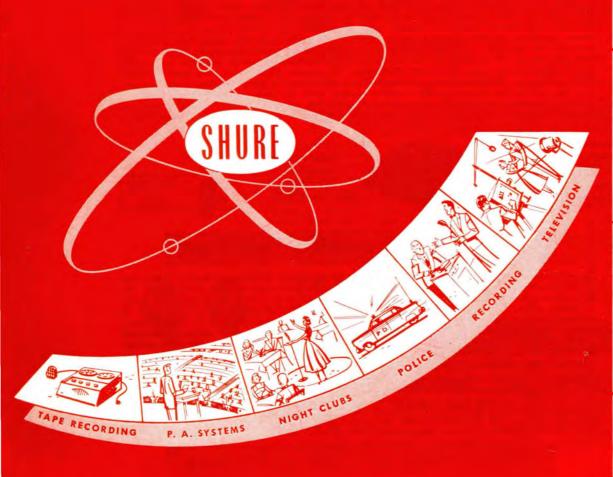
SHURE GENERAL CATALOG No. 55B

MICROPHONES · PHONO PRODUCTS · TAPE RECORDING HEADS









































() Concert Line

STUDIO MICROPHONES



Model "333" Concert-Line

High-Medium-250 ohms

UNI-DIRECTIONAL RIBBON MICROPHONE

Here is the Concert-Line "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" Concert-Line 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 or minus 21/2 db, 30-15,000 c.p.s.; (4) multi-impedance switch; (5) voice-music switch; (6) anti-"Pff" 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 Concert-Line "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 Milliwatt per 10 microbar signal
Medium—150 ohms	59 db below 1 Milliwatt per 10 microbar signal



Model S33 Broadcast Desk Stand List Price: \$15.00

MODEL	LIST PRICE
"333"	\$250.00

OMNI-DIRECTIONAL DYNAMIC MICROPHONE



Model "525" Concert-Line

The new Concert-Line "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" Concert-Line 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	
	per 10 microbar signal	
250 ohms	per to interessar signar	

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

MODEL	LIST PRICE
"525"	\$200.00

BI-DIRECTIONAL GRADIENT MICROPHONE



Model "300" Concert-Line

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. Dims.: Ht., 6"; Wth., 1 7/16"; Depth, 1 3/32".

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

MODEL	LIST PRICE
"300"	\$150.00



GRADIENT' AND DYNAMIC MICROPHONES



Model "530' Slendyne



Model "315" Gradient



Model 55S
"Small Unidyne"

"Small Broadcast" Model 556S

OMNI-DIRECTIONAL DYNAMIC MICROPHONE

The Slendyne "530" is the most versatile of all public-address probe microphones because it can be held in the hand; used on a desk stand; placed on a floor stand; or hung around the neck to provide complete freedom of the performer's hands. The Slendyne features: (1) frequency response 60-15,000 c.p.s. (2) a moving coil mounted in a highly efficient magnetic structure, with "Alnico-V" magnet (3) dual-impedance switch for high or low impedance (4) high output (5) "Duracoustic" diaphragm—specially-designed to withstand moisture, heat, cold and physical shock. The "530" is furnished with an on-off switch plate assembly which requires no wiring; swivel adapter; lavalier and belt clip assembly, and a 20', 2-conductor, rubber-covered shielded cable with Cannon XL-3-11 connector attached. The Slendyne is a striking-looking microphone with a beautiful black and gold finish. It imparts glamour to any sound system with which it is used. Dimensions: body diameter, 1"; length, 7 11/32".

IMPEDANCE TABLE	OUTPUT LEVEL
	59 db below 1 Milliwatt per 10 microbar signal
H-High	58 db below 1 volt per microbar

		(Black)
	Slendy	
	esk Si	
List	Price:	\$15.00

MODEL	LIST PRICE
"530"	\$110.00

BI-DIRECTIONAL GRADIENT MICROPHONES

This rugged, high-fidelity, multi-impedance microphone is recommended for highest-quality general purpose uses! The Gradient provides a bi-directional pickup pattern—permitting greater performer freedom (performers can stand at a 73% greater distance from the microphone!) The "315" picks up voice and music from front and back—is "dead" at the sides. Reduces reverberation and the pickup of distracting random noises by 66%! Has a Multi-Impedance switch. Response is 50 to 12,000 c.p.s. Permits the sound system to operate at a level almost 6db higher than is possible with omni-directional microphones! Finished in rich, soft chrome. The "315" is "PFF"-proof—can be used in outdoor drafts and moderate breezes! Dims: Ht., 6"; Wth., 1 7/16"; Dpth., 1 3/32".

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	LIST PRICE
"315"	\$85.00

UNIDIRECTIONAL DYNAMIC MICROPHONES

The "Small Unidynes" are the largest selling microphones throughout the world. 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. Is widely used for fixed station use in the police, fire, and transportation services. Model "556S" is recommended for studio broadcasting, television use, and professional recording. Has Cannon XL connector and vibration-isolation unit. Both models reduce the pickup of random noise by 67%; have smooth response from 40 to 15,000 c.p.s.; are supplied with a 20-ft., high quality cable and plug assembly. Both models have the world-famous, patented "Uniphase" system.

IMPEDANCE TABLE	OUTPUT LEVEL
L-35-50 ohms	59.4 db below Milliwatt per 10 microbar signal
M-150-250 ohms	60.1 db below I Milliwatt per 10 microbar signal
H-High	60.5 db below 1 volt per microba



Multi-Impedance Switch on Models "555", "5565", "51", "300", "315"

MODEL	LIST PRICE	
\$56S	\$120.00	
555	\$ 79.50	



Model "51" Sonodyne

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. Has built-in receptacle and a 15-ft., 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 microbar

CRYSTAL MICROPHONES



THE NEW "SLIM-X" ALL-PURPOSE MICROPHONE

FOR:

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



The new "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 homerecorders. 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 "walk-around" 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' 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

List Price: \$31.00

MODEL 7775A includes 777S Microphone; A-25 Swivel Adaptor; S-38 Desk Stand; Lavalier Cord.

Model: 7775A

List Price: \$33.00

ACCESSORIES FOR "777"

MODEL S38 STAND is a heavy die-cast base. Includes metal screw machine stud for connecting microphone adaptor to stand base.

Model: \$38

List Price: \$3.50

MODEL A25 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.

Model: A25

List Price: \$5.50

Model	Output	List Price
777		23.00*
777A	62db below	31.00
777\$ With Switch	1 volt per microbar	25.00*
7775A With Switch		33.00

*(Price includes cradle for mounting on stand.)









Fig. F

"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-proofed "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	54.0 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 systems. A rugged unit de signed for high speech intelligibility. Saves extra costs. as it needs no desk stand! Has a broad base, complete with stand adapter for mounting 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' shielded cable. Beautiful Bergundy-red metallic finish. Only 2¹/₈" wide, 3¹/₄" high, 1¹/₈" thick. High impedance.

MODEL	OUTPUT LEVEL	LIST PRICE	
710A	50 db below 1 volt per microbar \$12		
710S (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%".

Model 707A designed to be used with Shure Model S34B or S36A Desk Stands (see page 6).

MODEL I	OUTPUT	LIST PRICE
707A	51.0 db below 1 volt per microbar	\$18.00

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. 1%" diameter. Has lapel clip. 20-foot shielded single-conductor cable. High impedance.

MODEL	OUTPUT LEVEL	LIST PRICE	
76B	57db 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 ussembly. High impedance. Pearl Gray finish.

MODEL	OUTPUT LEVEL	LIST PRICE
708A 1 volt per microbar		\$31.00

NOTE: Models 737A, 710 Series 707A, 708A are designed ta be used with Model S34B or S36A Desk Stands. (See page 6.)

CONTROLLED RELUCTANCE 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 responce 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 6.)

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

"1-INCH" MICROPHONES





The MC Series of small microphones are specially designed for use in vacuumtube 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 transistortype devices. The MC Series Microphones are furnished with an impedance of 1000 ohms. They are rugged units immune to mechanical shock and to varying con-

ditions of heat and humidity. Both the 1" circular unit, Model MC11, and the rectangular unit, Model MC20, are metal-cased for hum protection. They are highly recommended to engineers, technicians and "build-it-yourself" enthusiasts, because their small size and shape make them ideal for various types of custom-made devices. Model MC11 (Circular) Dimensions: diameter 1 1/64", thickness 25/64". List Price \$12.50. Model MC20 (Rectangular) Dimensions: width 10/16", thickness 5/16", length 15/16". List Price \$12.50.

THE "GREEN BULLET"



The "Green Bullet" is designed 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.

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 6.)

MODEL	OUTPUT LEVEL	IMPEDANCE	LIST PRICE
520	52.5 db below 1 volt per microbar	HIGH	\$21.00
520B	51 db below 1 milli- wat per 10 microbars	150-250 ohms	\$21.00

THE "DISPATCHER"



MODEL 520SL

This new Controlled Reluctance 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	IMPEDANCE	LIST PRICE
520SL	52.5 db below 1 volt per microbar	High	\$42.50

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 single-throw, double-pole leaf-type switch for push-to-talk operation. Phosphor-bronze blades and silver contacts for maximum operating life. Model 505B is furnished with 5' four-conductor shielded cable. Model 505C is furnished with 5' three-conductor shielded cable. Frequency response is 100 to 9,000 c.p.s.

MODEL	OUTPUT LEVEL	IMPEDANCE	SHPG. WT.	CODE	LIST PRICE
505B	47.0 db below 1 milliwatt per 10 microbar signal	150-250 ohms	1 5/8 lbs.	RUDAY	\$32.00
505C	50.5 db below 1 volt per microbar	High	1 5/8 lbs.	RUDAX	\$32.00



COMMUNICATIONS MICROPHONES AND ACCESSORIES



COILED CORD SETS

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

Tinsel Coiled Cord with Amphenol MC4M Connector for use with General Electric equipment. Model: C16C Code: RUCAG List Price: \$9.50

Tinsel Coiled Cord with spade tugs for use in Motorola equipment.

Code: RUCAJ List Price: \$7.75

Standard Coiled Cord with Amphenot MC4M Connector for use with Motorola equipment.

Tinsel Coiled Cord with Amphenol MC4M Connector for use with Motorola equipment.

Model: C19C List Price: \$9.50

CARBON MICROPHONE CARTRIDGE



Model R10

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, 107C. 120, CB10, CB10B, CB10C, SB10E, CB1, CB1B, List Price: \$8.50 Model: R10

MICROPHONE ASSEMBLY

A Controlled Reluctance Microphone and Desk Stand Assembly—ideal for fixed-station used in all types of communications work. Has a built-in switch for controlling both the microphone circuit and an external relay or control circuit. Replacement for Mfrs. Model No. CR84.

Model 510MD

List Price: \$42.50



Model 510MD

MODEL "100" SERIES CARBON MICROPHONES

Used around the world for police, taxi, bus, truck, and commercial applications - more than all other makes combinedl 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

	44111111
MANUFACTURERS MODELS	REPLACE MENT MODEL
CB10, CB10B, CB10C, CB10D, CB15, CB15D,	101C
CB10E	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 "PACK" MICROPHONE

Designed for use with small portable and mobile transmitters. Only 2" in diameter and 11/2" thick, Has 3-conductor coiled cord, metal-spring strain relief, and Push-to-Talk switch. Has same operating characteristics "10G Series" Carbon Microphones. Replacement for Mfrs. Model Nos. CB20, CB21.

List Price: \$31.00



SWITCHES AND **ACCESSORIES**

MICROPHONE REPLACEMENT CARTRIDGES



CONTROLLED RELUCTANCE

Model R5

Controlled Reluctance. Ideal for Controlled Reluctance. Ideal for the replacement of Crystal Cart-ridges 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

NOTE: Replacement for 505B and 520 is 99C86. List Price: \$11.00



CRYSTAL

Model R7

Model R7 Crystal Microphone. Avail-Model R7 Crystal Microphone. 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—484b below 1 volt per microbar. Cartridge supplied with rubber mounting rings and installation instructions.

Model: R7 List Price: \$8.25

Heavy-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 Model A88A

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







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

Model A83B. Rotary-type On-On-Connector type Shure microphone.

Model: A83B List Price: \$9.00

Model A84B. Momentary Press-to-Talk "On-Off" switch.
List Price: \$9.00

Model A85C. Momentary Press-to-Talk Relay-Type Switch.
List Price: \$11.50

CABLE-TYPE TRANSFORMER



Model A86A is a high quality, cable-type transformer, ideal for matching low-impedance mi former, ideal for matching low-impedance mi-crophone lines to high-impedance amplifier inputs (matches 35-50 and 150-250 ohm microphones of high impedance), 2-foot cable.

Model: A86A List Price: \$17.50

TAKE-APART STAND



Model \$34B. 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. Model: \$34B List Price: \$3.50

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. Model: \$36A List Price: \$6.50

Model S36A

SHURE MAGNETIC TAPE AND WIRE RECORDING HEADS



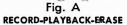




Fig. B RECORD-PLAYBACK



Fig. C RECORD-PLAYBACK



Fig. D ERASE



RECORD-PLAYBACK-ERASE

MAGNETIC TAPE RECORDING HEADS

TYPICAL OPERATING DATA

MODEL	81	5 (FI	G. A)	815H	(FIG. A)	816	(FIG. B)	817	(FIG. C)	T	E2 (FG.	D)
Recording Speed	3.75" p	er sec.	7.5"	3.75"	per sec.	3.75"	per sec.	3.75"	per sec.	3	.75" per se	c.
Bias & Erase Freq.	25KC	DC	50KC	25KC	DC	25KC	DC	25KC	DC	25KC	50KC	DC
Std.* Recording Level	.05 ma	.095 ma	.05 ma	.03 ma	.056 ma	.03 ma	.07 ma	.06 ma	.175 ma	_		_
Operating Bias Current	1.25 ma	.35 ma	1.5 ma	.72 ma	.24 ma	.80 ma	.26 ma	3.6 ma	.42 ma	_	-	
Erase** Current	45 ma	35 ma	55 ma	45 ma	35 ma	_	_		_	45 ma	55 ma	35 ma
Impedance Erase Coil	750 ohm at 25KC	12 ohm	1300 ohm at 50 KC	750 ohm at 25KC	12 ohm	_				80 ohm at 25KC	1250 ohm at 50KC	12 ohm
Impedance Recording Coil	1450 ohm at 1000 cps	180 ohm	1450 ohm at 1000 cps	5800 ohm at 1000 cps	556 ohm	5500 ohm at 1000 cps	556 ohm	1860 ohm at 1000 cps	180 ohm			_

^{*}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. A) Width 1.240" Depth 1.031" Height .695"	Model 816 (Fig. B) Width 1.240" Depth 1.031" Height .695"							
Model 817 (Fig. C) Width .552" Depth .830" Height .765"	Model TE2 (Fig. D) Width .516" Depth .830" Height .715"							

NUMERICAL LISTING OF SHURE TAPE HEADS USED IN ORIGINAL EQUIPMENT

MODEL	ILLUSTR.	LIST PR.	DESCRIPTION	OPERATING DATA
812	Fig. E	17.00	Wire Recording Head.	Not shown
815	Fig. A	15.00	Upper track recording. Low impedance record-playback coil.	See 815
815H	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	Not Illustr.	16.00	Special Shield. Special Leads. Special Plug.	See 815*
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.	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
TR14	Not Illustr.	9.00	Narrow track (.014"). Low impedance record-playback coil.	Not shown
TR26	Fig. C	11.00	.093" record track width (1/4 mil gap). High impedance record-playback coil.	Not shown
TE2	Fig. D	7.00	Erase head.	See TE2
TE10	Not Illustr.	7.00	Erase head.	Not show

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

MAGNETIC RECORDING HEAD REPLACEMENT CHART

(INCLUDING MFRS. EQUIPMENT BY DESCRIPTION AND MODEL NO. AND THE SHURE REPLACEMENT MODEL NO.)

(INCLUDING MFRS. EQUIPMEN	NT BY DESCRIPTION AND MODE	L NO. AND THE SHURE	REPLACEMENT M	ODEL NO.)
MANUFACTURER	TRADE OR BRAND NAME	MFRS. EQUIPMENT MODEL NO.	SHURE HEAD USED	REPLACE WITH
AMPLIFIER CORP. OF AMERICA	MAGNEMITE	6108	TR6	TR6
AMPLIFIER CORP. OF AMERICA	MAGNEMITE	610C	TR6	TR6
AMPLIFIER CORP. OF AMERICA	MAGNEMITE	610TD	TR6	TR6
AMPLIFIER CORP. OF AMERICA	ELECTRO-MAGNEMITE		TR5	815
AMPLIFIER CORP. OF AMERICA	MAGNEMASTER	815	TR5	815
AMPRO	İ	730	TR16	TR16
AMPRO		731	TR16	TR16
AMPRO		731B	TR16	TR16
AMPRO CORPORATION	AMPRO	730	TR6C	816
AMPRO CORPORATION	AMPRO	731	TR6C	816
BELL SOUND SYSTEMS, INC.	RE-CORD-O-FONE	RT-658	TR5	815
CRESCENT IND.		903	TR5N	
	1			TR5N
CRESCENT IND.		907	TR5N	TR5N
CRESCENT IND.		9037	TR5N	TR5N
CRESCENT IND.	1	2900	TR5N	TR5N
FEDERAL MFG. & ENG.	FME	378	TR5C	815H
THE GENERAL INDUSTRIES CO.		250	TR6	TR6
MARK SIMPSON MFG CO., INC.	MASCO	R-3		**816
MARK SIMPSON MFG CO., INC.	MASCO	M-60 (Mechanism)		**816
MARK SIMPSON MFG CO., INC.	*MASCO	375		**816
MITCHELL MFG. CO.	MAGCO	1290	TR5N	TR5N
	TAPESONIC			**
PREMIER ELECTRONIC LABS.		70-B	TR16 and TR16A	TR16 and 817
R. C. A.	THE EXECUTIVE	SRT-403	TR16A	817
R. C. A.	THE SENIOR	SRT-402	TR16A	817
R. C. A.	THE DELUXE	SRT1401	TR16A	817
REVERE CAMERA CO.		T-1100	TR5B	TR5B
REVERE CAMERA CO.	REVERE	T-700 (T-70163)	TR5B	TR5B
REVERE CAMERA CO.	REVERE	T-10 (T-70167)	TR5B	TR5B
REVERE CAMERA CO.	REVERE	TR-800 (T-77163)	TR5B	TR5B
REVERE CAMERA CO.	REVERE	TR-20 (T-77167)	TR5B	TR5B
REVERE CAMERA CO.	REVERE	T-100	TR5D	815
REVERE CAMERA CO.	REVERE	TR-200	TR5D	815
REVERE CAMERA CO.	REVERE	T-500	TR5K	815H
REVERE CAMERA CO.	REVERE	TR-600	TR5K	815H
TAPEMASTER INCORPORATED	TAPEMASTER	TH-21 (Mechanism)	TR5L	815H
TAPEMASTER INCORPORATED	TAPEMASTER	PT-121	TR5L	815H
TAPEMASTER INCORPORATED	TAPEMASTER	TH-25 (Mechanism) "B-Wind"	TR5L	TR5L
TAPEMASTER INCORPORATED	TAPEMASTER	PT-125 (TH-25 Mech.) "B-Wind"	TR5L	815H
TELECTRO INDUSTRIES INC.	TELECTRO	TR-48	TR16	TR16
SONOGRAPH LTD.	SONOGRAPH	C-1	TR5	815
SONOGRAPH LTD.	SONOGRAPH	C-2	TR5	815
SONOGRAPH LTD.	SONOGRAPH	C-3	TR5	815
SONOGRAPH LTD.	SONOGRAPH	C-3A	TR5	815
SONOGRAPH LTD.	SONOGRAPH	C-4	TR5	815
U. S. TIME CORP.	TIMEX		TR14	TR14
V-M CORP.	TAPE-O-MATIC	700	TR26	TR26
WILCOX-GAY CORPORATION	RECORDIO	2A108		
			TR16	TR16
WILCOX-GAY CORPORATION	RECORDIO	3A10	TR16	TR16
WILCOX-GAY CORPORATION	RECORDIO	3A11	TR16A	817
		1/210	TD4	TR6
WILCOX-GAY CORPORATION	RECORDIO	1C10	TR6	
WILCOX-GAY CORPORATION WILCOX-GAY CORPORATION WILCOX-GAY CORPORATION	RECORDIO RECORDIO RECORDIO	3C10 9C10	TR6	TR6

^{**}Contact MARK SIMPSON Mfg. Co. for Required Circuit Information and Special Mtg. Plate.

CARTRIDGE REPLACEMENT CHART

SHURE MODEL NO.	SHURE REPLACEMENT	SHURE MODEL NO.	SHURE REPLACEMENT	ASTATIC MODEL NO.	SHURE REPLACEMENT	WEBSTER MODEL NO.	SHURE REPLACEMENT
P30 P30B	W68 W68	PN30 PN30S	WC33B WC33B	L-76A L-76AS	W78 W78	N7P N7P-1	W78 W78
P30C P30D	W68 W68	PN31S PN88	WC33B W58HS	L-76S L-82	W78 W78	N7P-2 N7P-3	W78 W78
P30E	W60HS	PN88S PN89	W58HS W58HS	L-82A L-92A	W78 W78	N8 N8-1	W78 W78
P30G P30HS	W68 W60HS	PN89D	W58HS	L-92-33	W53MG	N8-2	W78 W78
P30S P30W	W68 W68	PN89E PN89S	W58HS W58HS	LP-6 LP-21	W68 W68	N8P N9	W78
P35 P35S	W68 W78 W78	PS20 W21A	W36B W31AR	LP-23 LT1-M	W68 W68	N10 N10-1	W78 W78
P37	W66B	W21AR W21E	W31AR W21F	I TI MAA	W68 W68	N10-2 N10-3	W78 W78
P37 A P37C	W66B W66B	W22A	W22AB	LT1-MA LT2-MA LT2-MA LT3-M LT3-MA LT4-AG	W68 W68	N10-4	W78
P37CA P70	W66B W23B	W23A W26A W40A	W23B W26B	LT3-M LT3-MA	W68	N10-5 N10-6	W78 W78
P70A P71	W23B W26B	W40A W42A	W78 W78	LT4-AG LT5-AG	W66B W66B	N10-7 N10P	W78 W78
P71A	W26A	W42B W42BH	W78 W78	MLP-1 MLP-1J	WC33B WC33B	N10P-1 N10P-2	W78 W78
P71B P71C	W26B W26B	W42H	W78	MLP-2	W68	N10P-3	W78
P71CA P72	W26A W22AB	W56A W56PN W56R	W78 W58HS	MLP-3 Nylon 1-J-PN	WC33B WC33B	N10P-4 N10P-5	W78 W78
P72A	W22AB	W56R W57A	W56N W78	Nylon 1-M-PI PT	WC33B W68	N10P-6 N10P-7	W78 W78
P72AF P72AFT	W22AB W22AB-T	W57AN	W68	OC-1	WC33B	N-11	W78
P72AFV P72T	W22AB W22AB-T	W58A W59A	W78 W78	QT-J-PN	WC33B WC33B	N11P Q1 Q2	W78 W68
P72V P73	W22AB W31AR	W60A W60B	W68 W68	QT-M QT2-M-PN	WC33B WC33B	Q2 WS	W68 W78
P73A	W31AR W31AR	W60PN	WC33B	QT3-J	WC33B WC33B WC33B WC33B WC33B	X-82	W78
P73AR P73 R	WAIND	W61B W65B	W68 W78	QT3-JA QT3-M	WC33B	X-82CH-1 Y-82	W78 W78
P75 P75A	W21F W21F W22AB	W65R W66A	W56N W66B	QT3-MA QT3-J-PN	WC33B WC33B	YN2 YN2-1	W58HS W58HS
P76	W22AB	WC22AB	WC24	QT3-M-PN	WC338 W68		
P7 6A P76 A -T	W22A W22AB-T W22AB	WC22AB-T WC36B WC60B	WC24-T WC38	L-J L-M	W68	ELECTRO-VOIC MODEL NO.	CE SHURE REPLACEMENT
P76 AF P76 A F-T	W <u>2</u> 2AB W22AB-T	WC60B 99-180	WC33B W78	WEBSTER	SHURE	10	W68
P76AFV P76AV	W22AB	99-181 99-182	W78 W78	MODEL NO.	REPLACEMENT	14 32	W31AR W23B
P76-T	W22A W22AB-T			A1 A1M	W22AB W22AB	33 33-2	W26B W26B
P76V P77	W22AB W22AB	ASTATIC MODEL NO.	SHURE REPLACEMENT	A1M-2	W22AB	33-3	W26B W26B
P77A P77A-T	W22A W27AB-T		WC10	A7-8 A-7M1	W22AB-T W22AB-T	33-4 34S	W31AR
P77AV	W22AB	55TJ 57-TJ AC-78-J	WC10 W23B	A-7M5 C2	W22AB-T W70	43 50	WC38 W78
P77-T P77∨	W22AB-T W22AB	AC-C-J	WC31AR	C2 C2-1	W70 W70 W70 W70	50 60	W78 W22AB
P79 P79-T	₩22AB W22AB-T	AC-C-AG-J AC-C-78-J	WC38 WC33B	C3 C4 C7 C7-1	W70	96 96 -0	W22AB
P80	W21F	AC-J	W31AR	C7-1	W70 W70	H12 H12-S	W78 W78
P80RA P81 P81A	W31AR W26B W26A	AC-AG-J AC-AG-M	W26B W26 8	C7-2 C7-3	W70 W70	L12 L12-S	W68 W68
P81A P81AD	W26A W26B	ACD-C-M ACD-1M	WC24 W22AB-T	C8 C8-1	W70	M12	W68
P81ADH P81C	WC36B	ACD-J	W22A	C8-2	W70 W70	M12-S	W68
P81CA	₩26B ₩26A	ACO-J ACD-2J ACD-CJ	W22AB W22AB-T	C8-5 C9	W70 W70	AMERICAN MODEL NO.	SHURE REPLACEMENT
P81D P81E	W26A W26B	ACD-CJ CAC-78-J	WC24 W23B	C9-1 C9-3	W70 W70	CR1	W78
P81R P81RA	W31AR W31AR	CAC-AG-J CAC-D-J	WC10 WC10	C9-4	W70	CRIA	W78
P85 P86R	W23B W56N	CAC-J	W31AR	C9-X C10	W70 W70	CR2 CR2A	W78 W78
P87	W78	CQ-AG-M CQ-J	W26B W31AR	C10-8 CX	W70 W70	CR3 CR3A	W68 W68
P87B P87S	W78 W78	GČ-78-J GC-AG-J GC-AG-M	WC33 8 WC38	E4 E4-1	W78 W78	CR4	W78 W78
P88 P88S	W78 W78	GC-AG-M GC-J	WC38 WC31AR	E9	W78	CR4A CR5	W31AR
P89	W78	GCD-J	WC10	F-1 F-2 F1P	W78 W7 8	CR7 PNM	W36B W58H\$
P89G P89L	W78 W56N	L12 L12U	W78 W78	FIP FIP-I	W78 W78	PNMA S1	W58H\$ W68
P89R P89RE	W56N W56N	I -22A	W78 W78	F1P-2	W78	SIA	W68
P89S	W78 W78	L-24A L-25A L-26A	W78 W78	F1P-3 F1P-4	W78 W78	S2 S2A	W68 W68
P908 P90C P90D P90HS	W78 W78 W58HS	L-27A L-29	W78 W66B W78	F2P F2P-1 F2P-3	W78 W78 W78	ADMIRAL MODEL NO.	SHURE REPLACEMENT
P90S	W78 W78	L-32A L-36A	W78	F3P F4P	W78 W78	409B17	WC38
P92B P93	W78	L-40A L-41A	W78 W78	F5P F6P	W78 W78	409A13	W26B
P93B P93C	W78 W78	L-46 A L-50A	W78 W78	F7P	W68 W68		
P93D P93E	W78 W58HS	L-70 L-70A	W78 W78	F7P-2 F10P1	W68	R. C. A. MODEL NO.	SHURE REPLACEMENT
P93MG P93S	W53MG W78	L-70AS L-70S	W78 W78	F12 F13M	W53MG W53MG	74067	W31AR
P94 P94B	W78 W78	L-71	W78	F17-P GX	W78 WC31AR	74625 75476	W31AR W31AR
P94E	W58HS	L-71A L-71AS	W78 W78	GX GX-82 N-1	W78 W78	75575	W31AR
PC2SNA PC4SNA	WC10 WC10	L-71S L-72	W78 W78	N1-N N2	W78 W78	A-988370-1	W21F
PC4SNE PC9 PC10	WC10D WC33B WC38	L-72A L-72AS L-72S	W78 W78 W78	N3 N4	W78 W78	SONOTONE MODEL NO.	SHURE REPLACEMENT
PC11 PC12	WC31AR WC38	L-73	W58HS W58HS	N5 N6	W68 W78	9980-S 9980-SD	WC10 WC10D
PC13	WC31AR	L-73A L-73AS	W58HS	N6-1 N6P	W78 W78	W-7500	WC33B WC31AR
PC13A PC14	WC38 WC33B	L-73S L-74	W5BHS W58HS	N6P-2	W78	W-7530 W-7540	WC33B
PC25NE PC30	WC10D WC338	L-74A L-74AS	W58HS W58HS	N6P-3 N6P-4	W78 W78	W-7590-1 W-7590-2	WC31AR WC38
PC40 PC40C-T	WC24 WC24-T	L-74S L-75	W58HS W78	N6P-5 N6P-6	W78 W78	W-7590-3	WC33B
PC40-T PC41	WC24-T WC24	L-75A L-75AS	W78 W78	N7 N7-1 N7-2	W78 W78	TURNER MODEL NO.	SHURE REPLACEMENT
PC41-T PC72V	WC24-T WC24	L-75S L-76	W78 W78	N7-3	W78 W78	A AU	W78 W78
				N7-4	W78		***************************************

CRYSTAL AND CERAMIC PICKUP CARTRIDGES SHURE





"Direct Drive"



Fig. B "Vertical Drive"



Fig. C "Vertical Drive"



Fig. D "Twin-Lever"



Fig. E "Vertical Drive" With Turnover Mechanism



Fig. F "Lever Type"



Fig. G "Cutter Cartridge"



Fig. H "Muted Stylus"



Fig. J All-Purpose **High Output**

FINE GROOVE CARTRIDGES FOR 331/3, 45 RPM RECORDS

MODEL NO.	ILLUSTRA- TION	TYPE	LIST PRICE	OUTPUT LEVEL	MIN. NEEDLE FORCE	RESPONSE TO	NET WT.	SHURE NEEDLE NO.
W21F*	Fig. 8	Crystal	\$7.75	1.5 V	6 grams	10,000 c.p.s.	41/2 grams	A63MG
W31AR	Fig. A	Crystal	6.50	2.1V	7 grams	7,500 c.p.s.	51/2 grams	A53MG
WC31AR	Fig. A	Ceramic	6.50	.87V	7 grams	7,500 c.p.s.	51/2 grams	A53MG
W53MG	Fig. F	Crystal	8.50	1.3V	6 grams	8,500 c.p.s.	12 grams	A64MG

TURNOVER CARTRIDGES FOR 331/3, 45, AND 78 RPM RECORDS

MODEL NO.	ILLUSTRA- TION	TYPE	LIST PRICE	OUT		MIN. NEEDLE FORCE	RESPONSE TO	NET WT.	SHU NEEL NC	DLE
				MG	STD				MG	STD
WC10§	Fig. D	Ceramic	\$9.50	.78V	1.0V	7 grams	12,000 c.p.s.	7 grams	A10	S
WC10D§	Fig. D	Ceramic	34.00	.78V	1.0V	7 grams	12,000 c.p.s.	7 grams	A10	DS
W22A	Fig. C	Crystal	\$10.50	1.2V	1.4V	8 grams	10,000 c.p.s.	41/2 grams	A65MG	A61A
W22AB	Fig. C	Crystal	9.50	1.2V	1.4V	8 grams	10,000 c.p.s.	41/2 grams	A65MG	A62
W22AB-T	Fig. E	Crystal	10.00	1.2V	1.4V	8 grams	10,000 c.p.s.	121/2 grams	A65MG	A62A
WC24	Fig. C	Ceramic	8.75	0.6V	0.6V	8 grams	7,000 c.p.s.	41/2 grams	A53MG	A52A
WC24-T	Fig. E	Ceramic	9.25	0.6V	0.6٧	8 grams	7,000 c.p.s.	121/ ₂ grams	A53MG	A52A

ALL PURPOSE SINGLE NEEDLE CARTRIDGES FOR 331/3, 45, 78 RPM RECORDS

ILLUSTRA- TION	TYPE	LIST PRICE	OUT		MIN. NEEDLE	RESPONSE	NET	SHURE
					FORCE	TO	WT.	NO.
			MG	STD.				
Fig. B	Crystal	\$8.50	.87 V	1.0V	8 grams	8,000 c.p.s.	4½ grams	A67U
Fig. B	Crystal	7.50	.87 V	1.0V	8 grams	8,000 c.p.s.	4½ grams	A66U
Fig. A	Crystal	6.50	2.3V	2.5V	9 grams	7,000 c.p.s.	5½ grams	A56U
Fig. A	Ceramic	6.50	.9V	.92V	9 grams	10,000 c.p.s.	51∕2 grams	A58U
Fig. H	Crystal	7.00	2.0V	2.3V	8 grams	4,500 c.p.s.	12 grams	A66U
Fig. J	Crystal	4.95	3.OV	3.8V	10-15 grams	5,000 c.p.s.	16 grams	None
	Fig. B Fig. A Fig. A Fig. H	Fig. B Crystal Fig. A Crystal Fig. A Ceramic Fig. H Crystal	Fig. B Crystal 7.50 Fig. A Crystal 6.50 Fig. A Ceramic 6.50 Fig. H Crystal 7.00	Fig. B Crystal 7.50 .87V Fig. A Crystal 6.50 2.3V Fig. A Ceramic 6.50 .9V Fig. H Crystal 7.00 2.0V	Fig. B Crystal 7.50 .87V 1.0V Fig. A Crystal 6.50 2.3V 2.5V Fig. A Ceramic 6.50 .9V .92V Fig. H Crystal 7.00 2.0V 2.3V	Fig. B Crystal 7.50 .87V 1.0V 8 grams Fig. A Crystal 6.50 2.3V 2.5V 9 grams Fig. A Ceramic 6.50 .9V .92V 9 grams Fig. H Crystal 7.00 2.0V 2.3V 8 grams	Fig. B Crystal 7.50 .87V 1.0V 8 grams 8,000 c.p.s. Fig. A Crystal 6.50 2.3V 2.5V 9 grams 7,000 c.p.s. Fig. A Ceramic 6.50 .9V .92V 9 grams 10,000 c.p.s. Fig. H Crystal 7.00 2.0V 2.3V 8 grams 4,500 c.p.s.	Fig. B Crystal 7.50 .87V 1.0V 8 grams 8,000 c.p.s. 4½ grams Fig. A Crystal 6.50 2.3V 2.5V 9 grams 7,000 c.p.s. 5½ grams Fig. A Ceramic 6.50 .9V .92V 9 grams 10,000 c.p.s. 5½ grams Fig. H Crystal 7.00 2.0V 2.3V 8 grams 4,500 c.p.s. 12 grams

STANDARD CARTRIDGES FOR 78 RPM RECORDS

MODEL NO.	ILLUSTRA- TION	TYPE	LIST PRICE	OUTPUT LEVEL	MIN. NEEDLE FORCE	RESPONSE TO	NET WT.	SHURE NEEDLE NO.
W23B	Fig. B	Crystal	\$7.75	1.1V	6 grams	8,000 c.p.s.	41/2 grams	A62A
WC33B	Fig. A	Ceramic	6.50	.92V	9 grams	7,000 c.p.s.	5½ grams	A52A
w68†	Fig. H	Crystal	7.50	1.6V	1 oz.	4,500 c.p.s.	Dual Weight 25 grams or 12 grams	A62A
W78‡	Fig. F	Crystal	5.55	4.0V or 2.0V	1 oz.	6,000 c.p.s.	Dual Weight 25 grams or 12 grams	None
W56N**	Fig. G	Crystal	8.50	4.3V	1 oz.	10,000 c.p.s.	12 grams	A68D
W58HS***	Fig F	Humi-Seal Crystal	6.55	1.6V	1 oz.	6,000 c.p.s.	25 grams	None
W60HS***	Fig. H	Humi-Seal Crystal	8.50	1.BV	1 oz.	4,500 c.p.s.	25 grams	A62A



PHONO PICKUPS . NEEDLES . REPLACEMENT KIT

PHONOGRAPH PICKUPS

STANDARD FOR 78 RPM RECORDS







MODEL	ILLUSTRA- TION	LIST PRICE	OUTPUT LEVEL	NEEDLE FORCE	RESPONSE TO	SHURE CARTRIDGE USED	SHURE NEEDLE NUMBER
92H	Fig. B	\$5.50	3.5V	1 oz.	5000 c.p.s.	W42H	None
99DV	Fig. A	8.50	4.0V or 2.0V**	1 1/8 oz.	6000 c.p.s.	W78†	None

TURNOVER FOR 331/3, 45, 78 RPM RECORDS

MODEL	ILLUSTRA- TION	LIST PRICE	OUTPUT LEVEL	NEEDLE FORCE	RESPONSE TO	SHURE CARTRIDGE USED	SHURE NEEDLE NUMBER	
			MG STD.				MG STD.	
901D	Fig. A	\$16.25	1.2V 1.4V	7 grams	10,000 c.p.s.	W22AB-T	A65MG A62	

SINGLE-NEEDLE ALL-PURPOSE FOR 331/3, 45, 78 RPM RECORDS

MODEL	ILLUSTRA- TION	LIST PRICE	OUTPUT LEVEL	NEEDLE FORCE	RESPONSE TO	SHURE CARTRIDGE USED	SHURE NEEDLE NUMBER
			MG STD.				
92U	Fig. B	\$9.75	2.0V 2.3V	8 grams	4500 c.p.s.	W66B	A66U

SHURE PICKUP FOR "WEBSTER-CHICAGO" THREE SPEED CHANGERS

MODEL	ILLUSTRA. TION	LIST PRICE	OUTPUT LEVEL	NEEDLE FORCE	RESPONSE TO	SHURE CARTRIDGE USED	SHURE NEEDLE NUMBER	
			MG STD			- 1	MG	STD.
920W	Fig. C	\$13.00	1 2V 1 4V	6 grams	10,000 c.p.s.	W22AB-T	A65MG	A62A

^{**}Dual Voltage Cartridge 4 0V without condenser 2 0V with condenser

MODEL ILLUSTRA- DESCRIPTION

LIST

PHONOGRAPH PICKUP NEEDLES

MODEL	ILLUSTRA- TION	DESCRIPTION	LIST PRICE	
A10S	Fig. B	Std. and MG Sapphire	\$3.50	
A10DS	Fig. B	MG Diamond Std. Sapphire	28.00	
A52A	Fig. C	Std. Osmium	1.50	
A53MG	Fig. C	MG Osmium	1.50	
A56U**	Fig. C	All Purpose Osmium Unipoint	1.50	
A58U***	Fig. C	All Purpose Osmium Unipoint	1.50	
A61A	Fig. A	Std. Sapphire†	2.50	

MODEL	TION	DESCRIPTION	PRICE
A62A	Fig. A	Std. Osmium	\$1.50
A63MG	Fig. A	MG Osmium	1.50
A64MG*		MG Osmium	2.00
A65MG	Fig. A	MG Sapphire†	2.50
A66U	Fig. A	All Purpose Osmium Unipoint	1.50
A67U	Fig. A	Alí Purpose Sapphire Unipoint†	2.50
A68D	Fig. D	Osm. Playback Needle —Stelite Cutting Stylus	2.50

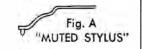
MODEL

NO.

W22AB

W26B

W78*







OUTPUT

LEVEL

1.2V

.87V

Crystal 4.0V or 2.0V

STD.

1.4V

STD.

1.0V



NET

41/2

arams

41/2

grams

Dual-

Weight

Technical Data for Models W22AB, W26B, W78

RESPONSE

10,000

c.p.s.

8,000

c.p.s.

6,000

c.p.s.

MIN

NEEDLE

FORCE

8

grams

grams

THE RK-54 REPLACEMENT KIT PUTS PROFITS IN YOUR TILL!

TYPE

Crystal

Crystal

The RK-54 is beyond all doubt the most popular replacement kit on the market. Proof? Simply this-Servicemen, Service Dealers and Distributors alike broke all previous cartridge kit sales records during the past year with

the RK-54. Thinkofit—3 cartridges (Models W22AB, W26B, W78) replace 192. This

Model RK-54 Replacement Kit, List Price \$22.55

is "broadest coverage for lowest investment".

*Dual-Weight, Dual-Volt Cartridge. With weight-slug, net weight is 25 grams. Without weight-slug, net weight is 12 grams. In addition Model W78 has capacitor, furnished as accessory. Without capacitor, output is 4.0 volts. With capacitor, output is 2.0 volts.

SHURE

NEEDLE

NO.

STD. A65MG A62A

MG

A66U

^{*}Standard Bent Shaft Needle Not Illustrated.

^{**}Used in Cartridge Models PC10 and WC36B

^{***}Used in Models PC12 and WC38

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

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



for High Fidelity Systems



... A New Experience in Listening Pleasure!

Here is an important development in the history of high fidelity reproduction—a three-speed ceramic cartridge which is specially designed to enhance the quality of all the popular high fidelity equipment in use today. It brings a new dimension to tone quality ... reproduces all instruments sharply and clearly ... yet there is a subtle softness that records the original voice and music with a naturalness that will surprise and delight the most critical listeners. The "Music Lovers" Cartridge provides freedom from the induced hum and the magnetic "drag" prevalent with conventional high fidelity cartridges.

The "Music Lovers" Cartridge is equipped for mechanical interchangeability with magnetic pickups, and for direct connection to magnetic inputs of amplifiers not yet provided with constant displacement inputs, thus allowing the full advantages of compensation circuits.

A special feature of the "Music Lovers" Cartridge is the "twin-lever" needle shift transport—a unique device that provides lower mass and individual needle compliance for superior response—eliminates needle interaction.

The "Music Lovers" needle can be replaced quickly without tools in a matter of seconds—while it is in the tone arm—even blindfolded—with no danger of transposing the 3-mil and 1-mil tips.

Investigate the "Music Lovers" Cartridge, for here is a high-fidelity cartridge which is in a class by itself. Being free of cartridge induced hum and magnetic "drag" it provides a pureness of tone that gives you concert hall realism in the home!

Technical Data and General Information about the "Music Lovers" Cartridge

Response Frequency Characteristics:

A smooth response from 30 to 15,000 c.p.s. with a gradual "roll off" between 10,000 and 15,000 c.p.s. designed to ideally meet the exacting requirements of typical high fidelity reproduction. Equipped with network for connection to magnetic amplifier inputs.

Output Voltage:

Without network—0.4 volts at 1000 c.p.s. With network—25 millivolts at 1000 c.p.s.

Recommended Load Impedance:

Input network (supplied with cartridge) is designed work into all magnetic preamplifiers with input impedance of 22,000 ohms to 1.0 megohm.

Compliance:

A high lateral compliance of $1.5 \times 10^{-6} \rm cm/dyne$ helps reduce record wear and allows the pickup to track and reproduce the full low frequency range at oll speeds.

Tracking Force:

5 to 8 grams for all types of records.

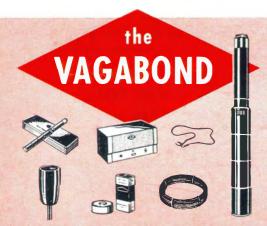
Cartridge Capacitance:

525 mmfd.

Cartridge Weight:

Approximately 14 grams—with network—which is equivalent to the most popular magnetic cartridges.

MUSIC LOVERS CARTRIDG	ES	MUSIC LOVERS NEEDLES		
Model ML44 (SS) (with ,001 and .003 Sapphire needles)	List Price \$13.95	N4 (SS) (with .001 and .003 Sapphire tips)	List Price \$5.95	
Model ML44 (DS) (with .001 Diamond and .003 Sapphire needles)	List Price \$38.95	N4 (DS) (with .001 Diamond and .003 Sapphire tips)	List Price \$31.00	
Model ML44 (DD) (with .001 and .003 Diamond needles)	List Price \$57.90	N4 (DD) (with .001 and .003 Diamond tips)	List Price \$49.95	



The Vagabond System consists of: Microphone Transmitter FM Receiver; Stand Adapter; Batteries; Lavalier; Antenna; 20' Shielded Cable.

Wireless Microphone System

The Vagabond "88" is the first practical wireless microphone system ever developed — no cables! . . no body wiring! . . . no station license needed! The "88" is a complete wireless microphone system that can be used with the existing public-address equipment of any night club, auditorium, church, theater, athletic stadium, etc. The Vagabond "88" is recommended for clergymen, businessmen, entertainers, educators and sports announcers, who need freedom of movement within an operating area of 500 to 1000 square feet.

NOTE: The "88" will operate at maximum efficiency in an area free of electrical disturbances. In areas having higher electrical noise-levels, the operating area will be significantly reduced.

Model "88" System

Net Price \$700.00



SHURE BROTHERS, INC.

225 West Huron Street Chicago 10, Illinois Cable Address: SHUREMICRO