

SHURE MICROPHONES
HIGH FIDELITY TONE-ARMS and CARTRIDGES
REPLACEMENT PHONO CARTRIDGES
and MAGNETIC RECORDING HEADS

SHURE
GENERAL
CATALOG
No. **58**

SHURE

MICROPHONES AND ELECTRONIC COMPONENTS

Shure—the Standard of Quality...“In Electronics Since 1925”

Shure Brothers, Inc. is providing for today's critical requirements and will meet the exacting demands of the future. The world of electronics is at the threshold of a new era, and Shure planning envisions dramatic new products and revolutionary applications which will meet the challenge and fulfill the promise of tomorrow.

Since 1925 Shure Brothers, Inc., has made numerous significant contributions to the development of original acoustical-electronic products. In the future, as in the past, you can look to Shure for continued leadership in:

Fine Studio and Public Address Microphones

Precision Magnetic Recording Heads

High Fidelity Phonograph Cartridges and Arms

Original Equipment and Replacement Phonograph Cartridges

“Industry-Standard” Communications Microphones

Handsets and Special-Purpose Microphones



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Shure Brothers, Inc., is able to give you quality products because we continually strive to raise already critical standards to precision levels previously considered unattainable.

Some of the more important factors governing Shure quality are:

***RESEARCH AND DEVELOPMENT**—A continuing research program is devoted to the objective of developing new products with performance and design standards of a high order.

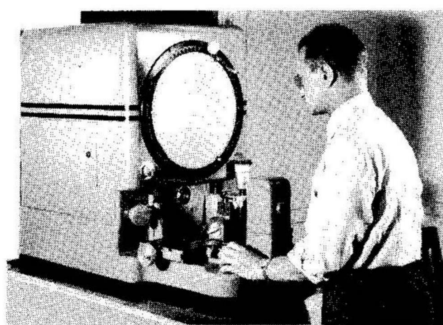
***ENGINEERING FACILITIES**—The most modern anechoic chambers and laboratory equipment, much of it unavailable commercially, have been designed and built by our own engineering laboratory staff.

***ADVANCED METHODS AND STANDARDS**—Special control techniques and devices enable us to improve the precision quality of customized assembly-line production.

***SCIENTIFIC PRODUCTION TECHNIQUES**—Special production facilities guarantee desired delivery of mass-produced components for original equipment.

***QUALITY CONTROL**—The continuous use of daily quality control techniques for incoming materials and for all phases of production results in uniform, high quality products.

Add up all of these factors and you have a time-proved formula for the quality performance and long-life operation of Shure products.



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STUDIO MICROPHONES

Model "333" STUDIO UNITRON UNI-DIRECTIONAL RIBBON MICROPHONE

This quality microphone is designed for discriminating users with the most exacting professional requirements. The rugged "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. The "333" is super-cardioid, uni-directional—reduces the pickup of random noise energy by 73%—prevents the pickup of moving props and scuffling feet. The "333" Studio features the patented, world-famous Shure "Uniphase" acoustical network system—a field-proved standard of quality.



Model "525" STUDIO SLENDYNE OMNI-DIRECTIONAL DYNAMIC MICROPHONE

The Studio "525" is an exceptionally fine, slender microphone of broadcast quality. It is custom-built to provide high fidelity reproduction of voice and music. The microphone has complete versatility and reliability for indoor and outdoor use and may be used: (1) on a conventional floor or desk stand, (2) in the hand, and (3) with the lavalier cord and belt clip assembly. The use of high efficiency magnetic materials and specially designed magnetic circuits has made it possible to develop this small microphone and still achieve maximum operating efficiency. The microphone is ruggedly built to withstand hard usage and is unaffected by temperature and humidity variations.



Model "300" STUDIO GRADIENT¹ BI-DIRECTIONAL RIBBON MICROPHONE

This professional quality multi-impedance microphone is widely used for tape recording, broadcast and highest quality Public Address use. The "300" has a specially designed anti-"PFF" filter screen—which eliminates pickup of distracting breath noises. 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 omni-directional microphones. It is ideal for highest-quality reproduction, especially wherever multi-person pickup is desired, yet background noise must be reduced.



"333" UNI-DIRECTIONAL RIBBON MICROPHONE

LIST PRICE: \$250.00

TYPE: Ribbon

FREQUENCY RESPONSE: 30 to 15,000 cps production
uniformity guaranteed to plus or minus $2\frac{1}{2}$ db.

OUTPUT LEVEL: 50 ohm impedance: -60 db
150 ohm impedance: -59 db
250 ohm impedance: -59 db
(0 db = 1 milliwatt per 10 microbars)

IMPEDANCE: Equipped with a multi-impedance switch,
furnishing a choice of 3 impedances—L-50 ohms,
M-150 ohms, H-250 ohms.

POLAR PATTERN: Super-Cardioid (Uni-directional)
Response at rear down 12 to 20 db from front.

MAGNETIC CIRCUIT: Uses Alnico V magnet

CASE: Die cast zinc

FINISH: Combination non-reflecting "Bronze-Tone"
enamel case with beige aluminum grille.

SWIVEL: New, improved, self-adjusting "positive action"

lifetime swivel. Permits tilting the head 45° forward
and 70° backward, making it simple to aim the micro-
phone at the source of sound.

SHOCK MOUNT: Special vibration-isolation unit of
live rubber construction.

CABLE CONNECTOR: Cannon XL-3-11

CABLE: 20 ft., 2-conductor shielded broadcast type

STAND THREAD: Standard $\frac{5}{8}$ "—27 thread

STAND COUPLERS: Adapter for $\frac{1}{2}$ " pipe thread or
 $\frac{5}{8}$ "—24 thread available upon request at no extra
charge.

SWITCH: Voice-Music Switch to adjust frequency char-
acteristic for optimum performance.

DIMENSIONS: $7\frac{3}{32}$ " high; $1\frac{1}{32}$ " wide; $1\frac{7}{8}$ " deep

NET WEIGHT: $1\frac{1}{2}$ lb.; shipping weight 4 lbs.

OPTIONAL ACCESSORIES: Model S33 Desk Stand,
A26C Extension Cable, Model A86A Cable-Type
Transformer.

"525" OMNI-DIRECTIONAL DYNAMIC MICROPHONE

LIST PRICE: \$200.00

TYPE: Dynamic

FREQUENCY RESPONSE: 40 to 15,000 cps, produc-
tion uniformity guaranteed to plus or minus $2\frac{1}{2}$ db.

IMPEDANCE: Equipped with a multi-impedance switch,
furnishing a choice of three impedances—L-30-50
ohms, M-150 ohms, H-250 ohms.

OUTPUT LEVEL: At 50, 150, 250 ohms: -61 db
(0 db = 1 milliwatt per 10 microbars)

POLAR PATTERN: Omni-directional

MAGNETIC CIRCUIT: Uses Alnico V magnet

CASE: Aluminum

FINISH: Non-reflecting "Bronze Tone" enamel with
beige grille.

SWIVEL ADAPTER: Furnished with A25 type swivel

adapter. It is a self-adjusting "positive action" life-
time swivel which permits the microphone to be
tilted 90° from vertical to horizontal, making it simple
to aim the microphone at the source of sound.

CABLE CONNECTOR: Cannon XL-3-11

CABLE: 20 ft., 2-conductor shielded broadcast type

STAND THREAD: The Model A25 swivel adapter has
a $\frac{5}{8}$ "—27 thread

STAND COUPLERS: Adapter for $\frac{1}{2}$ " pipe thread or
 $\frac{5}{8}$ "—24 thread are available upon request at no extra
charge.

DIMENSIONS: $8\frac{17}{32}$ " high, 1" diameter

NET WEIGHT: $\frac{1}{2}$ lb., shipping weight $3\frac{1}{4}$ lbs.

OPTIONAL ACCESSORIES: Model S33 Desk Stand,
A26C Extension Cable, Model A86A Cable-Type
Transformer.

"300" BI-DIRECTIONAL GRADIENT¹ MICROPHONE

LIST PRICE: \$150.00

TYPE: Ribbon

FREQUENCY RESPONSE: 40 to 15,000 cps production
uniformity guaranteed to plus or minus $2\frac{1}{2}$ db.

OUTPUT LEVEL: 30-50 ohms -59 db*
150-250 ohms -60 db*
High -57 db**

* (0 db = 1 milliwatt per 10 microbars)

** (0 db = 1 volt per microbar)

IMPEDANCE: Equipped with a multi-impedance switch,
furnishing a choice of three impedances—L-30-50
ohms, M-150-250 ohms, H-35,000 ohms.

POLAR PATTERN: Bi-directional. Equally sensitive
at front and rear. Response at sides down 15 to 20 db
from front and rear responses.

MAGNETIC CIRCUIT: Uses Alnico V magnet

CASE: Die cast zinc

FINISH: Non-reflecting "Bronze-Tone" enamel

SWIVEL: New improved self-adjusting "positive action"

lifetime swivel permits tilting the head 45° forward
and 90° backward so that the microphone can be
aimed at the source of sound.

SHOCK MOUNT: Special vibration-isolation unit of
live rubber construction.

CABLE CONNECTOR: Equipped with Cannon XL-3-11
connector.

CABLE: 20 ft., 2-conductor shielded broadcast type

STAND THREAD: $\frac{5}{8}$ "—27 thread

STAND COUPLERS: Adapter for $\frac{1}{2}$ " pipe thread or
 $\frac{5}{8}$ "—24 thread available upon request at no extra
charge.

SWITCH: Equipped with Voice-Music Switch to adjust
frequency characteristic for optimum performance.

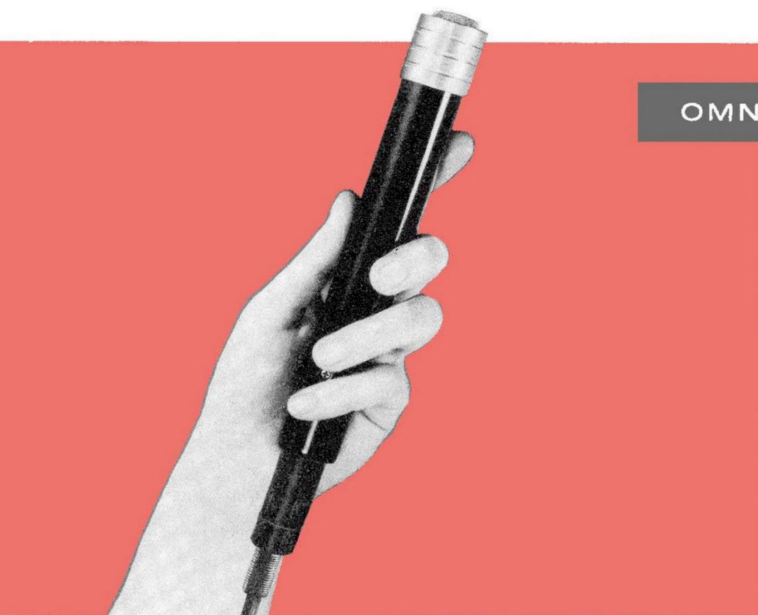
DIMENSIONS: 6" high; $1\frac{1}{16}$ " wide, $2\frac{1}{16}$ " deep

NET WEIGHT: $1\frac{1}{4}$ lb.; shipping weight $3\frac{3}{4}$ lbs.

OPTIONAL ACCESSORIES: Model S33 Desk Stand,
A26C Extension Cable, Model A86A Cable-Type
Transformer.

GENERAL PURPOSE MICROPHONES

OMNI-DIRECTIONAL DYNAMIC MICROPHONES



Model "530" BROADCAST SLENDYNE

The Slendynes are the most versatile fine quality probe microphones ever developed—*actually five microphones in one* because of their practical design and useful accessories. They can be used for indoor or outdoor applications in the following manner: (1) in the hand; (2) on a floor or desk stand; (3) hung around the neck on a lavalier cord and clip assembly; (4) "on-off" switch adapter; (5) "high and low" dual-impedance switch. The Slendynes are ideal for high quality public address, theater-stage sound systems and all recording applications where an omni-directional microphone is desirable. These microphones are ruggedly built to withstand hard usage, and are unaffected by temperature and humidity variations.



Model "535" SLENDYNE

SPECIFICATIONS FOR MODEL 530

LIST PRICE: \$110.00
TYPE: Dynamic
FREQUENCY RESPONSE: 50 to 15,000 cps
OUTPUT LEVEL: L—50-250 ohm impedance —61 db (0 db = 1 milliwatt per 10 microbars)
H—High impedance —61 db (0 db = 1 volt per microbar)
IMPEDANCE: Equipped with a dual-impedance switch, furnishing a choice of 2 impedances—L-50-250, H-high.
POLAR PATTERN: Omni-directional
MAGNETIC CIRCUIT: Uses Alnico V magnet
CASE: Aluminum
FINISH: Black and gold anodized
SWIVEL ADAPTER: Furnished with A25 type swivel adapter. It is a self-adjusting "Positive Action" lifetime swivel which permits the microphone to be tilted through 90° from vertical to horizontal, making it simple to aim the microphone at the source of sound.
CABLE CONNECTOR: Cannon XL-3-11
CABLE: 20 ft. high quality, 2-conductor shielded broadcast type
STAND THREAD: With swivel adapter, standard $\frac{5}{8}$ "—27 thread and may be mounted on any conventional desk, banquet or floor stand.
SWITCH: On-Off (normally closed)
DIMENSIONS: $7\frac{11}{32}$ " high, 1" diameter
NET WEIGHT: $\frac{1}{2}$ lb., shipping weight $2\frac{7}{8}$ lbs.
FURNISHED ACCESSORIES: On-Off Switch, with Adapter Plate, A25 type Swivel Adapter, and Lavalier Assembly.
OPTIONAL ACCESSORIES: Model S33B Desk Stand, Model A86A Cable Type Transformer, A26C Extension Cable.

SPECIFICATIONS FOR MODEL 535

LIST PRICE: \$72.50
TYPE: Dynamic
FREQUENCY RESPONSE: 60 to 13,500 cps
OUTPUT LEVEL: L—50-250 ohms impedance —61 db (0 db = 1 milliwatt per 10 microbars)
H—High impedance —61 db (0 db = 1 volt per microbar)
IMPEDANCE: Equipped with a dual-impedance switch, furnishing a choice of 2 impedances—L-50-250 ohms, H-high.
POLAR PATTERN: Omni-Directional
MAGNETIC CIRCUIT: Uses Alnico V magnet
CASE: Brass
FINISH: Satin chrome
SWIVEL ADAPTER: Furnished with Model A25 type Swivel Adapter. It is self-adjusting and permits the microphone to be tilted through 90° from vertical to horizontal, making it simple to aim the microphone at the source of sound.
CABLE CONNECTOR: Equivalent to Amphenol MC3M plug.
CABLE: 18 ft. 2-conductor shielded broadcast type
STAND THREAD: With swivel adapter, standard $\frac{5}{8}$ "—27 thread, and may be mounted on any conventional desk, banquet or floor stand.
SWITCH: On-Off (normally closed)
DIMENSIONS: $7\frac{9}{32}$ " high, 1" diameter
NET WEIGHT: $\frac{7}{8}$ lb., shipping weight $2\frac{7}{8}$ lbs.
FURNISHED ACCESSORIES: On-Off Switch Adapter plate, A25 type Swivel Adapter.
OPTIONAL ACCESSORIES: Model S33B Desk Stand, A27A Extension Cable, Model A86A Cable Type Transformer and A28L Lavalier Assembly.

GENERAL PURPOSE MICROPHONES

WORLD FAMOUS "UNIDYNE" MICROPHONES

SPECIFICATIONS FOR MODEL 55S

LIST PRICE: \$83.00

TYPE: Dynamic

FREQUENCY RESPONSE: 50 to 15,000 cps

OUTPUT LEVEL: L—35-50 ohms —54 db

(0 db=1 milliwatt per 10 microbars)

M—150-250 ohms —55 db

(0 db=1 milliwatt per 10 microbars)

H—High —57 db (0 db=1 volt per microbar)

IMPEDANCE: Equipped with a Multi-Impedance switch, furnishing a choice of 3 impedances—L-35-50 ohms, M-150-250 ohms, H-35,000 ohms.

POLAR PATTERN: Ultra-Cardioid (uni-directional)
Response at rear down 15 db from front.

MAGNETIC CIRCUIT: Uses Alnico V Magnet

CASE: Die cast zinc

FINISH: Satin chrome

SWIVEL: New improved self-adjusting "positive action" lifetime swivel permits tilting of the head through 80° so that the microphone can be aimed at the source of sound.

CABLE CONNECTOR: Equivalent to Amphenol MC3M

CABLE: 18 ft., 2-conductor, shielded broadcast type

STAND THREAD: Standard $\frac{5}{8}$ "—27 thread

DIMENSIONS: $7\frac{3}{8}$ " high, $2\frac{3}{16}$ " wide, $3\frac{1}{16}$ " deep

NET WEIGHT: $3\frac{1}{8}$ lbs., shipping weight $4\frac{1}{4}$ lbs.

OPTIONAL ACCESSORIES: Model S36A Desk Stand, Model A86A Cable Type Transformer, A27A Extension Cable, Models A83B, A84B, A85C, A88A On-Off Switches.

SPECIFICATIONS FOR MODEL 556S

LIST PRICE: \$135.00

TYPE: Dynamic

FREQUENCY RESPONSE: 40 to 15,000 cps guaranteed to plus or minus $2\frac{1}{2}$ db.

OUTPUT LEVEL: L—30-50 ohm impedance —54 db

(0 db=1 milliwatt per 10 microbars)

M—150-250 ohm impedance —55 db

(0 db=1 milliwatt per 10 microbars)

H—High —57 db (0 db=1 volt per microbar)

IMPEDANCE: Equipped with a Multi-Impedance switch, furnishing a choice of 3 impedances—L-30-50 ohms, M-150-250 ohms, H-High.

POLAR PATTERN: Ultra-Cardioid (Uni-directional)
Response at rear down 15 db from front.

MAGNETIC CIRCUIT: Uses Alnico V Magnet

CASE: Die cast zinc

FINISH: Satin chrome

SWIVEL: New improved self-adjusting "positive action" lifetime swivel permits tilting of the head through 45° forward and 90° backward so that the microphone can be aimed at the source of sound.

SHOCK MOUNT: Special vibration-isolation unit of live rubber construction.

CABLE CONNECTOR: Equipped with Cannon XL-3-11 connector.

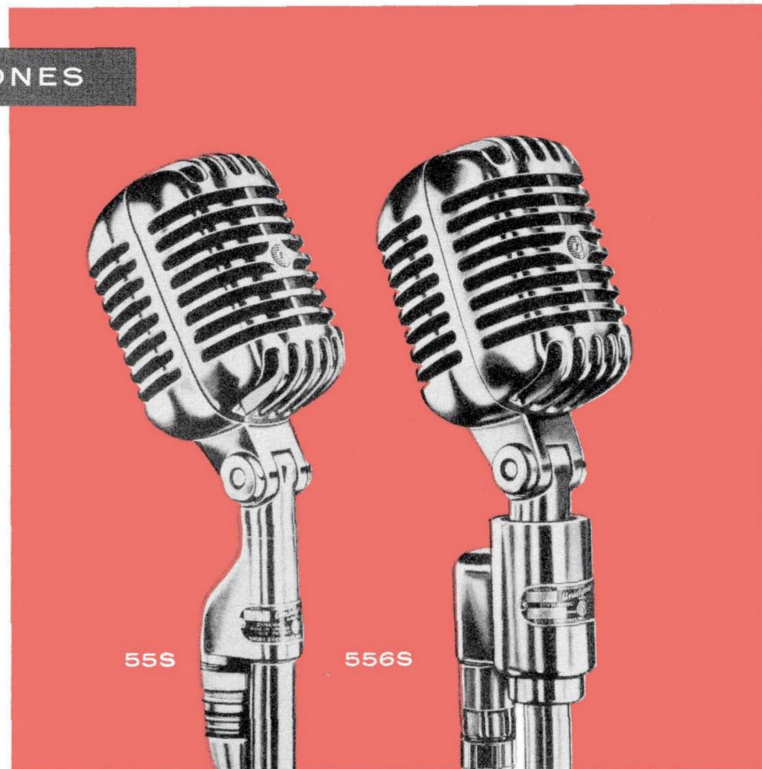
CABLE: 20 ft., 2-conductor shielded broadcast type.

STAND THREAD: Standard $\frac{5}{8}$ "—27 thread

DIMENSIONS: $7\frac{3}{4}$ " high, $2\frac{3}{16}$ " wide, $3\frac{1}{16}$ " deep

NET WEIGHT: $3\frac{3}{8}$ lbs., shipping weight $4\frac{1}{2}$ lbs.

OPTIONAL ACCESSORIES: Model S33 Desk Stand, Model A86A Cable Type Transformer, A26C Extension Cable.



Model "55S" AND "556S"

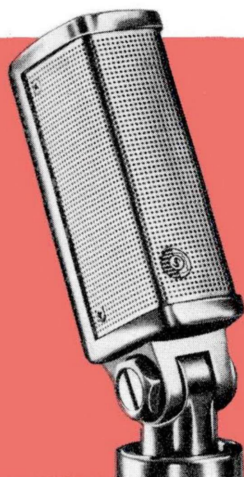
UNI-DIRECTIONAL DYNAMIC MICROPHONES

For many years the Unidynes have been the most widely used microphones throughout the world. They are specified by leading sound engineers and requested by famed celebrities—for those important events where the faithfulness of sound reproduction is most critical. And now, "The Best is Even Better"—for the famed Unidynes are now 41% higher in output level! This means that the Unidynes are ideal for use with low-gain tape recorders and low-gain P. A. systems—in addition to their famed use with highest quality sound systems.

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.

Model 556S is specially designed to meet the high technical requirements of broadcast and television studios. It will endure the heavy punishment of daily use and abuse—will operate at optimum efficiency while conventional microphones are "out of service," due to their frequent need for maintenance and repair. It is held within close tolerances in frequency response and directivity. The Broadcast Unidyne is ideal for high quality station and remote broadcasting, public-address, theater-stage sound systems and recording applications. The 556S is provided with a vibration-isolation unit of live rubber construction. This specially designed shock-mount completely eliminates metal-to-metal contact between microphone and stand.

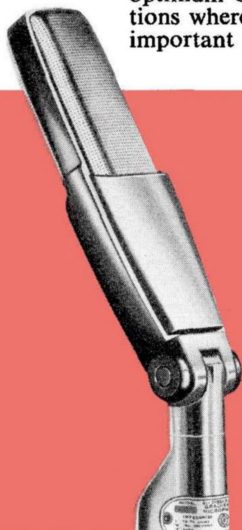
GENERAL PURPOSE MICROPHONES



Model "330" PROFESSIONAL UNITRON

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

This rugged performer has been developed to achieve optimum operating performance—for those applications where highest quality is essential, yet cost is an important factor.



Model "315" GRADIENT¹

This rugged high fidelity multi-impedance microphone is recommended for fine quality, general-purpose uses. The 315 will reproduce voice and music in a clear, natural-tone quality, which makes it ideal for use in auditoriums, night clubs, schools and churches. It is similar in features and design to the Studio Model 300. The 315 is used 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.

Deluxe Recording and Public-Address Microphones

SPECIFICATIONS FOR MODEL 330

LIST PRICE: \$120.00

TYPE: Ribbon

FREQUENCY RESPONSE: 30 to 15,000 cps. Guaranteed to plus or minus 2½ db.

OUTPUT LEVEL: 50 ohm impedance —59 db*
150 ohm impedance —57 db*
250 ohm impedance —58 db*

*(0 db=1 milliwatt per 10 microbars)

IMPEDANCE: Equipped with a Multi-Impedance Switch, furnishing a choice of 3 impedances—50 ohms, 150 ohms, 250 ohms

POLAR PATTERN: Super Cardioid (Uni-directional). Response at rear down 15 db from front.

MAGNETIC CIRCUIT: Ribbon Element—Alnico V magnet

CASE: Die cast zinc.

FINISH: Satin chrome plate with natural anodized aluminum grille

SWIVEL: Self-adjusting "positive action" lifetime swivel. Permits tilting the head 45° forward and 70° backward, making it simple to aim the microphone at the source of the sound.

SHOCK MOUNT: Special vibration-isolation unit of live rubber construction.

CABLE CONNECTOR: Equipped with Cannon XL-3-11 Connector

CABLE: 20-ft., 2-conductor shielded broadcast type

STAND THREAD: Standard ⅝"—27 thread

DIMENSIONS: 3½" high, 1⅞" wide, 1⅞" deep

NET WEIGHT: 1½ lb., shipping weight 4 lbs.

OPTIONAL ACCESSORIES: Model S33B Desk Stand A26C Extension Cable, Model A86A Cable-Type Transformer.

SPECIFICATIONS FOR MODEL 315

LIST PRICE: \$89.50

TYPE: Ribbon

FREQUENCY RESPONSE: 50 to 12,000 cps

OUTPUT LEVEL: L —30-50 ohm impedance —59.5 db*
M —150-250 ohm impedance —60 db*
H —High —57 db**

*(0 db=1 milliwatt per 10 microbars)

** (0 db=1 volt per microbar)

IMPEDANCE: Equipped with a multi-impedance switch, furnishing a choice of 3 impedances: L-30-50 ohms, M-150-250 ohms, H-High.

POLAR PATTERN: Bi-directional. 66% reduction of pick-up of undesired sound. Equally sensitive at front and back. Response at sides down 15 to 20 db from front and rear responses.

MAGNETIC CIRCUIT: Uses Alnico V magnet

CASE: Die cast zinc

FINISH: Satin chrome

SWIVEL: New self-adjusting swivel permits tilting the head through 90° so that the microphone can be aimed at the source of sound.

CABLE CONNECTOR: Equivalent to the Amphenol MC3M plug

CABLE: 18 ft., two conductor, shielded broadcast type

STAND THREAD: Standard ⅝"—27 thread

DIMENSIONS: 6" high, 1⅞" wide, 1⅞" deep

NET WEIGHT: 1 lb., shipping weight 3¼ lbs.

OPTIONAL ACCESSORIES: Model S36A Desk Stand, Model A86A Cable Type Transformer, A27A Extension Cable, and A83B, A84B, A85C, A88A On-Off Switches.

GENERAL PURPOSE MICROPHONES

Moderate Cost Public-Address and Recording Microphones

SPECIFICATIONS FOR MODEL 51

LIST PRICE: \$49.50

TYPE: Dynamic

FREQUENCY RESPONSE: 60 to 10,000 cps

OUTPUT LEVEL: L —35-50 ohm impedance —53 db*
M—150-250 ohm impedance —52.5 db*
H —High —52 db**

*0 db=1 milliwatt per 10 microbars

**0 db=1 volt per microbar

IMPEDANCE: Equipped with a multi-impedance switch, furnishing a choice of 3 impedances—L-35-50 ohms, M-150-250 ohms, H-High

POLAR PATTERN: Semi-directional

MAGNETIC CIRCUIT: Uses Alnico V magnet

CASE: Die cast zinc

FINISH: Satin chrome

SWIVEL: Lifetime swivel permits tilting the head 90° backward to horizontal position for omni-directional pickup.

CABLE CONNECTOR: Equivalent to Amphenol MC3M.

CABLE: 15 ft., 2-conductor shielded

STAND THREAD: Standard $\frac{3}{8}$ "—27 thread

DIMENSIONS: $5\frac{3}{16}$ " high, $3\frac{1}{8}$ " wide, $2\frac{1}{8}$ " deep

NET WEIGHT: $1\frac{3}{8}$ lbs., shipping weight $3\frac{1}{2}$ lbs.

OPTIONAL EQUIPMENT: Model S36A Desk Stand, Model A86A Cable Type Transformer, A27A Extension Cable, Models A83B, A84B, A85C, A88A On-Off Switches.



Model 51 "SONODYNE"

The "Sonodyne" is recommended for all general purposes, including public address, wire and tape recording, and similar applications. It is used by bands, instrumentalists and recording artists because of its excellent reproduction of both voice and music. Because of its high output and multi-impedance features, tape recording enthusiasts have used the Sonodyne as an ideal good-quality, moderately-priced replacement for the conventional microphone supplied with tape recorders.



Model 737A "MONOPLEX"

The "Monoplex" is the only Super-Cardioid Crystal Microphone made—far superior to any other crystal microphone. It is 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 inadequate. Eliminates feedback problems and reduces pickup of random sound by 73%! Has moisture-proof "Metal Seal" crystal for long operating life.

SPECIFICATIONS FOR MODEL 737A

LIST PRICE: \$46.00

TYPE: Crystal—Moisture-proof "Metal Seal" crystal for long operating life.

FREQUENCY RESPONSE: 60 to 10,000 cps

OUTPUT LEVEL: —53 db* (0 db=1 volt per microbar)

IMPEDANCE: High. Recommended load: 1 to 5 megohms

POLAR PATTERN: Super Cardioid, for 73% reduction of pickup of random noise energy.

CASE: Die cast zinc

FINISH: Satin chrome

SWIVEL: Lifetime swivel permits tilting the head 90° backward to horizontal position for omni-directional pickup.

CABLE CONNECTOR: Equivalent to Amphenol MC3M

CABLE: 15 ft., single conductor, shielded

STAND THREAD: Standard $\frac{3}{8}$ "—27 thread

DIMENSIONS: 4" high, $6\frac{3}{32}$ " high with connector, $3\frac{3}{32}$ " wide, $1\frac{7}{8}$ " deep.

NET WEIGHT: $1\frac{1}{8}$ lb., shipping weight $2\frac{1}{4}$ lbs.

OPTIONAL ACCESSORIES: Model S36A Desk Stands, A27A Extension Cable, Models A83B, A84B, A85C, A88A On-Off Switches

VERSATILE CRYSTAL MICROPHONES



MODEL 777 "SLIM-X" MICROPHONE

SPECIFICATIONS FOR MODEL 777

LIST PRICE: Model 777—\$25.00 Includes lavalier cord and molded stand adapter.

Model 777S—\$27.00 Includes lavalier cord, "On-Off" switch and molded stand adapter.

Model 777A—\$33.00 Includes lavalier cord, A25 Swivel stand adapter, S38 Desk Stand.

Model 777SA—\$35.00 Includes lavalier cord, A25 swivel stand adapter, S38 Desk Stand and "On-Off" switch.

TYPE: Crystal—moisture-proof "Metal Seal" crystal for long operating life.

FREQUENCY RESPONSE: Smooth, peak free from 60 to 10,000 cps.

OUTPUT LEVEL: -62 db (0 db=1 volt per microbar)

POLAR PATTERN: Omni-directional

CASE: Die cast zinc

FINISH: Satin chrome

SWIVEL: Models 777A and 777SA are equipped with Model A25 swivel stand adapter. It has a self-adjusting "positive action" lifetime swivel which permits the microphone to be tilted 90° from vertical to horizontal.

CABLE CONNECTOR: Equipped with Amphenol MC1F plug for attaching cable to microphone.

CABLE: Detachable 7 ft., rubber-covered, single conductor shielded.

STAND THREAD: Standard 5/8"—27 thread

SWITCHES: Models 777S and 777SA have a built-in switch to control the microphone circuit. The switch is of the press-to-talk locking or non-locking type.

DIMENSIONS: (Microphone only) 4 1/2" high, 1" diameter.

NET WEIGHT: (Microphone only) 6 oz., shipping weight 1 lb.

OPTIONAL ACCESSORIES: Model S38 Desk Stand, A25 type Swivel Adapter.

Model 777 "SLIM-X"

The "777" Slim-X Microphones are rugged little microphones weighing only 6 ounces. They use a "Metal Seal" crystal for long operating life under adverse conditions of heat and humidity. 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 "walk-around" hand-held microphone. All models are furnished with a lavalier cord, for suspension of microphone around the neck.



Model 708A "STRATOLINER"

An expensive-looking crystal microphone at moderate cost. Provides wide-range response for good reproduction of either voice or music. It is designed for public address, home recording and all general purpose use. A special advantage to this microphone is the fact that it can be tilted vertically for omnidirectional pickup for group recording.

SPECIFICATIONS FOR MODEL 708A

LIST PRICE: \$31.00

TYPE: Crystal

FREQUENCY RESPONSE: 60 to 10,000 cps

OUTPUT LEVEL: -51 db (0 db=1 volt per microbar)

IMPEDANCE: High. Recommended Load impedance: 1 to 5 megohms.

POLAR PATTERN: Essentially non-directional.

CASE: Die cast zinc

FINISH: Iridescent gray

SWIVEL: Self-adjusting swivel permits tilting of microphone through an angle of 90°.

CABLE CONNECTOR: Equivalent to Amphenol MC3M plug.

CABLE: 7 ft., single conductor shielded.

STAND THREAD: Standard 5/8"—27 thread

DIMENSIONS: 4" high, 2 1/2" wide, 4 7/8" deep

NET WEIGHT: With cable; 1 lb. 4 oz., shipping weight with cable 1 lb. 14 oz.

OPTIONAL ACCESSORIES: Model S36A Desk Stand, Models A83B, A84B, A85C, A88A Switches, A27A Extension Cable.

THE NEW "Commando" SERIES

"CONTROLLED MAGNETIC" GENERAL PURPOSE MICROPHONES

Model 430

"COMMANDO" MICROPHONE

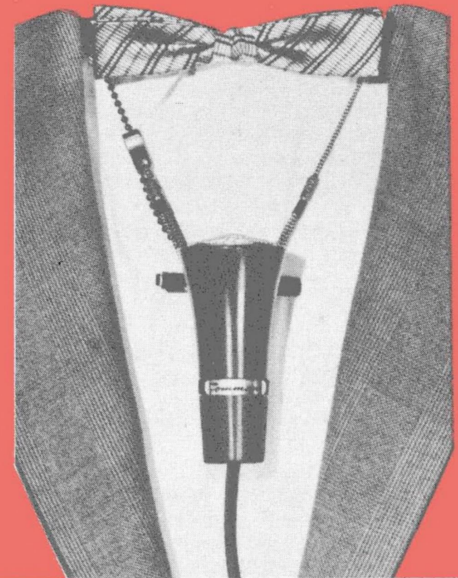
The new Commando series represents a significant achievement in providing quality performance at nominal cost. These dramatic looking, rugged microphones can be used indoors or outdoors. Models 415 and 430 provide practical versatility of operation. They can be held in the hand, set on a floor stand or on a desk stand—can be inserted or withdrawn from the stand in a second, without the use of any tools! Coupled with this versatility of usage, the Commandos provide excellent voice and music reproduction, making them 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, picnics and special events.

Model 420

"COMMANDO" MICROPHONE

Model 415

"COMMANDO" MICROPHONE



MODEL 430 OMNI-DIRECTIONAL "CONTROLLED MAGNETIC" MICROPHONE

SPECIFICATIONS FOR COMMANDO MICROPHONE MODEL 430

LIST PRICE: \$38.50

TYPE: Controlled Magnetic

FREQUENCY RESPONSE: 60 to 10,000 cps

OUTPUT LEVEL: High —55 db (0 db = 1 volt per microbar), Low —54 db (0 db = 1 milliwatt per 10 microbars).

IMPEDANCE: Equipped with readily changeable pin jacks (no soldering required). Furnishing a choice of two impedances, L—150 to 250 and H—High.

POLAR PATTERN: Omni-Directional

CASE: Impact-resistant polystyrene and die cast zinc.

FINISH: Satin chrome and non-reflecting gray.

SWIVEL ADAPTER: A Model A25 type swivel adapter is furnished with the microphone. It is self-adjusting and permits the microphone to be tilted through 90° arc from vertical to horizontal, making it simple to aim the microphone at the source of sound.

STAND THREAD: $\frac{5}{8}$ "—27 thread.

CABLE: 15 ft., 2-conductor shielded.

CABLE CONNECTOR: Amphenol MC2M

SWITCH: Press-to-talk switch—normally closed

DIMENSIONS: Length $6\frac{37}{64}$ ", diameter of top portion $1\frac{3}{4}$ ", diameter of handle $1\frac{3}{16}$ ".

FURNISHED ACCESSORIES: Switch locking plate for keeping switch in "on" position, Model A25 type Swivel Adapter.

OPTIONAL ACCESSORIES: Model A86A Cable Type Transformer and Model S38B Desk Stand.

MODEL 420 OMNI-DIRECTIONAL "CONTROLLED MAGNETIC" MICROPHONE

SPECIFICATIONS FOR COMMANDO MICROPHONE MODEL 420

LIST PRICE: \$30.00

TYPE: Controlled Magnetic

FREQUENCY RESPONSE: 60 to 10,000 cps

OUTPUT LEVEL: High —55 db (0 db = 1 volt per microbar), Low —54 db (0 db = 1 milliwatt per 10 microbars).

IMPEDANCE: Equipped with readily changeable pin jacks (no soldering required). Furnishing a choice of two impedances L—150 to 250 and H—High.

POLAR PATTERN: Omni-Directional.

CASE: Impact-resistant polystyrene.

FINISH: Non-reflecting gray.

CABLE: 20 ft., 2-conductor, non-detachable, shielded.

DIMENSIONS: Length $3\frac{11}{16}$ ", diameter $1\frac{3}{4}$ ".

FURNISHED ACCESSORIES: Lavalier cord and clip assembly. Readily detachable for use of microphone as a hand-held type.

OPTIONAL ACCESSORIES: Model A86A Cable Type Transformer.

MODEL 415 OMNI-DIRECTIONAL "CONTROLLED MAGNETIC" MICROPHONE

SPECIFICATIONS FOR COMMANDO MICROPHONE MODEL 415

LIST PRICE: \$27.50

TYPE: Controlled Magnetic

FREQUENCY RESPONSE: 60 to 10,000 cps

OUTPUT LEVEL: —55 db (0 db = 1 volt per microbar)

IMPEDANCE: High

POLAR PATTERN: Omni-Directional

CASE: Impact-resistant polystyrene—die cast zinc

FINISH: Non-reflecting gray and satin chrome.

SWIVEL ADAPTER: Furnished with Model A25 type swivel Adapter. It is self-adjusting and permits the microphone to be tilted through 90° arc from vertical to horizontal, making it simple to aim the microphone at the source of sound.

CABLE: 7 ft. non-detachable single conductor shielded.

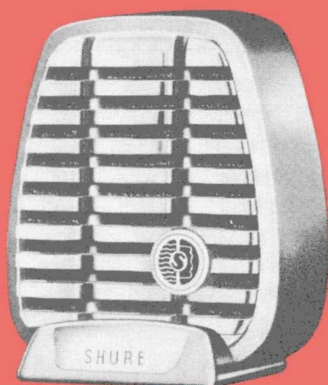
STAND. THREAD: With swivel adapter, standard $\frac{5}{8}$ "—27 thread, and may be mounted on any conventional desk, banquet or floor stand.

DIMENSIONS: Length $6\frac{13}{16}$ ", diameter of head $1\frac{3}{4}$ ", diameter of handle $1\frac{3}{16}$ ".

ACCESSORIES FURNISHED: Model A25 type Swivel Adapter.

OPTIONAL ACCESSORIES: Model S38B Desk Stand.

CONTROLLED MAGNETIC MICROPHONES



Model 510
"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 ruggedness, clear reproduction and high output for public address, communications and recording, wherever high speech intelligibility is vital. It is recommended for Announcing; Mobile Public Address Systems; Communications; Home Recording; and Intercom Systems. The Hercules can be used either indoors or outdoors, fits snugly in the hand, or sits firmly on a desk. Furnished with stand adapter.

SPECIFICATIONS: Model 510
LIST PRICE: Model 510C \$17.00, Model 510S (with switch) \$19.00
TYPE: Controlled Magnetic
FREQUENCY RESPONSE: 100 to 7,000 cps
OUTPUT LEVEL: -52.5 db (0 db = 1 volt per microbar)
IMPEDANCE: High. Recommended load 100,000 ohms or more
POLAR PATTERN: Semi-directional
CASE: Die cast zinc
FINISH: Metallic green
CABLE: 7 ft. fabric-covered, single conductor, shielded
STAND THREAD: Microphone provided with a stand adapter having a $\frac{5}{8}$ "-27 thread which fits the conventional floor stand
SWITCH: Model 510S has a built-in switch to control the microphone circuit. The switch is of the press-to-talk locking or non-locking type
DIMENSIONS: $3\frac{7}{32}$ " high, $2\frac{1}{16}$ " wide, $1\frac{1}{16}$ " deep
NET WEIGHT WITH CABLE: $\frac{7}{8}$ lb., shipping weight $1\frac{1}{2}$ lb.
OPTIONAL ACCESSORIES: Models S34B or S36A Desk Stand



Model 520SL
"DISPATCHER"

This Controlled Magnetic unit is designed to handle the most severe field requirements of paging and dispatching systems. It is wired to operate both microphone and relay circuits. The "Dispatcher" is ideal for police, taxicab, railroad, airport, bus, truck, and all emergency communications work where dependability is vital. Large grip-bar assures positive contact. Complete assembly furnished as illustrated.

SPECIFICATIONS: Model 520SL
LIST PRICE: \$42.50
TYPE: Controlled Magnetic
FREQUENCY RESPONSE: 100 to 9,000 cps
OUTPUT LEVEL: -52.5 db (0 db = 1 volt per microbar)
IMPEDANCE: High. Recommended load 100,000 ohms or more
POLAR PATTERN: Semi-directional
CASE: Die cast zinc
FINISH: Metallic green with satin chrome handle and grille
CABLE CONNECTOR: Equivalent to Amphenol MC3M plug
CABLE: 7 ft. high-quality 2 conductor shielded
SWITCH: Equipped with grip-to-talk switch, similar to Shure A88A.
DIMENSIONS: With stand $9\frac{3}{8}$ " high, 5" wide, 7" deep
NET WEIGHT WITH CABLE: $2\frac{1}{2}$ lbs., shipping weight 5 lbs.

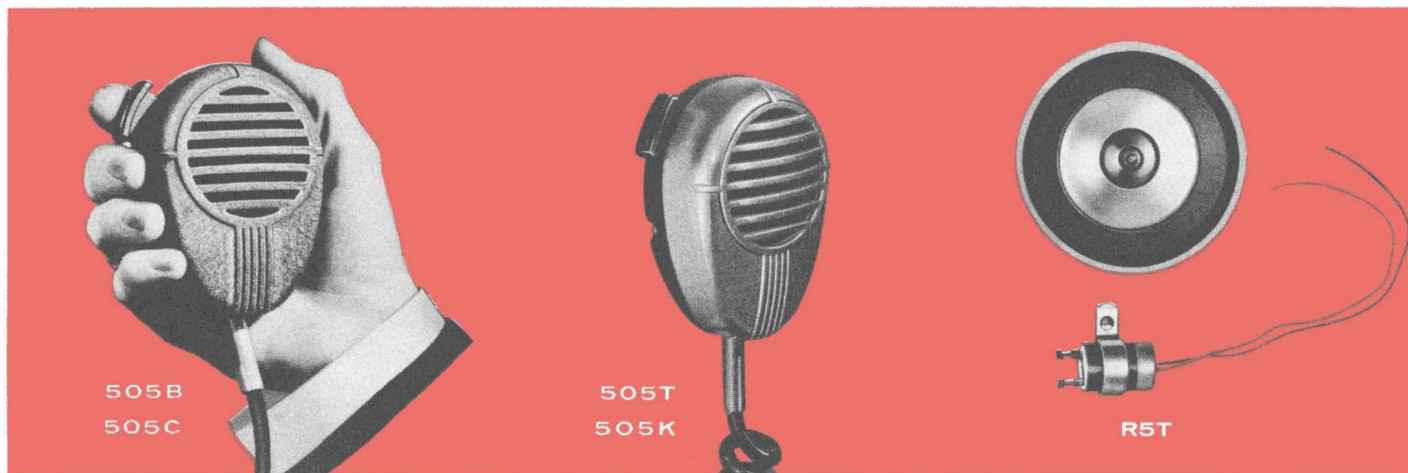


Model 520
"GREEN BULLET"

The "Green Bullet" is designed to provide quality music and speech reproduction at moderate cost. It is practically immune to the effects of high temperature and humidity. 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.

SPECIFICATIONS: Models 520-520B
LIST PRICE: Model 520 \$22.50, Model 520B \$22.50
TYPE: Controlled Magnetic
FREQUENCY RESPONSE: 100 to 9,000 cps
OUTPUT LEVEL: Model 520: -52.5 db (0 db = 1 volt per microbar), Model 520B: -51 db (0 db = 1 milliwatt per 10 microbars)
IMPEDANCE: Model 520—High. Recommended load 100,000 ohms or more. Model 520B—Recommended load 150-250 ohms
POLAR PATTERN: Semi-directional
CASE: Die cast zinc
FINISH: Metallic green with satin chrome grille
CABLE: Model 520—7 ft., single conductor shielded. Model 520B—7 ft., two conductor shielded
STAND THREAD: Standard $\frac{5}{8}$ "-27 thread
DIMENSIONS: Diameter $2\frac{13}{32}$ ", overall length $3\frac{1}{4}$ "
NET WEIGHT: $1\frac{1}{8}$ lb. (with 7 ft. cable), shipping weight $1\frac{1}{2}$ lb.
OPTIONAL ACCESSORIES: Models S34B or S36A Desk Stands. Model A86A cable type transformer (for use with Model 520B)

CONTROLLED MAGNETIC MICROPHONES



Model 505B

505C, 505K "RANGER"

The Shure "Ranger" is 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, carnivals, etc.). The "Ranger" is designed for high speech intelligibility. Easy to use, fits snugly in the palm of the hand. (Note: In addition to being a direct replacement for the General Electric EM10A, the Model 505K is also ideally suited for those applications requiring a unit with a coiled cord.)

SPECIFICATIONS

FOR MODELS 505B, 505C

LIST PRICE: \$32.00

TYPE: Controlled Magnetic

FREQUENCY RESPONSE: 200 to 8,000 cps

OUTPUT LEVEL: Model 505B -50 db (0 db = 1 milliwatt per 10 microbars)
Model 505C -50.5 db (0 db = 1 volt per microbar)

IMPEDANCE: Model 505B, 150-250 ohms
Model 505C, High, Recommended load 100,000 ohms or more

POLAR PATTERN: Semi-Directional

CASE: Die cast zinc

FINISH: Blue gray-Wrinkle Enamel

CABLE: Model 505B 5 ft., 4-conductor (2 conductor shielded)
Model 505C 5 ft., 3-conductor, (1-conductor shielded)

SWITCH: A double-pole, single-throw, leaf-type switch to control the microphone circuit and to control an external relay or switching circuit.

DIMENSIONS: $3\frac{1}{16}$ " high, $2\frac{3}{4}$ " wide, $1\frac{7}{8}$ " deep, $2\frac{1}{32}$ " deep with mounting button

NET WEIGHT: $1\frac{1}{8}$ lb., shipping weight $1\frac{3}{8}$ lb.

OPTIONAL ACCESSORIES: Model A86A cable type transformer (for use only with Model 505B)

ACCESSORIES FURNISHED: Mounting bracket for permanent placement with the associated equipment.

SPECIFICATIONS FOR MODEL 505K

LIST PRICE: \$37.50

TYPE: Controlled Magnetic

FREQUENCY RESPONSE: 200 to 8,000 cps

OUTPUT LEVEL: -50.5 db (0 db = 1 volt per microbar)

IMPEDANCE: High

POLAR PATTERN: Semi-Directional

CASE: Die cast zinc

FINISH: Two-tone light gray front and black "Baked Enamel" back

CABLE CONNECTOR: Equipped with Amphenol MC4M

CABLE: Tinsel $5\frac{1}{2}$ ft. extended, 3 conductor (1-conductor shielded) coiled cord

SWITCH: A double-pole, single-throw, leaf-type switch to control the microphone circuit and to control an external relay or switching circuit.

DIMENSIONS: $3\frac{1}{16}$ " high, $2\frac{3}{4}$ " wide, $2\frac{1}{32}$ " deep

NET WEIGHT: $1\frac{1}{8}$ lb., shipping weight $1\frac{3}{8}$ lb.

Model 505T

"RANGER"

The Model 505T "Ranger" is the perfect improvement-replacement for carbon microphones now used in mobile communications equipment. An outstanding feature incorporated in this unit is a TRANSISTOR AMPLIFIER, housed within the case. It is powered by the current available from the carbon microphone circuit. The 505T does not require batteries or extra power-supplies. The 505T provides remarkable speech clarity and it is free from the ageing common to carbon microphones used under conditions of vibration. Model 505T is recommended for mobile communications where carbon microphones have been in use: police, bus, trucking, taxicab, etc., where high speech intelligibility and long operating life are essential.

SPECIFICATIONS FOR MODEL 505T

LIST PRICE: \$48.50

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

CASE: Die cast zinc

FINISH: Two-tone light gray and black "Baked Enamel"

CABLE: 5 ft. extended, 4-conductor stranded coiled cord, Model C15C.

SWITCH: Equipped with heavy-duty, push-to-talk switch. Controls external relay.

DIMENSIONS: $3\frac{1}{16}$ " high, $2\frac{3}{4}$ " wide, $2\frac{1}{32}$ " deep

NET WEIGHT: $1\frac{1}{8}$ lb., shipping weight $1\frac{3}{8}$ lb.

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

CARBON COMMUNICATIONS MICROPHONES



MODEL 100 SERIES MICROPHONES

SPECIFICATIONS FOR MODEL 100 SERIES

LIST PRICE: Model 101C; \$30.00 and 102C; \$30.00
Model 101E; \$33.00 and 102E; \$33.00
Model 103; \$31.00

TYPE: Carbon

FREQUENCY RESPONSE: 300 to 4,000 cps

OUTPUT LEVEL: 5 db below 1 volt for 100 microbar speech signal

IMPEDANCE: Recommended load: 50 to 100 ohms

POLAR PATTERN: Semi-directional

CASE: Die cast zinc

FINISH: Blue gray—Wrinkle Finish

CABLE: 11" retracted and 5' extended cable
Model 101C and 102C—Standard Coiled Cord
Model 101E—Tinsel Coiled Cord with Amphenol MC4M Connector
Model 102E—Tinsel Coiled Cord with spade lugs
Model 103—Standard Coiled Cord with Amphenol MC4M Connector

SWITCH: All models equipped with heavy-duty, push-to-talk switch

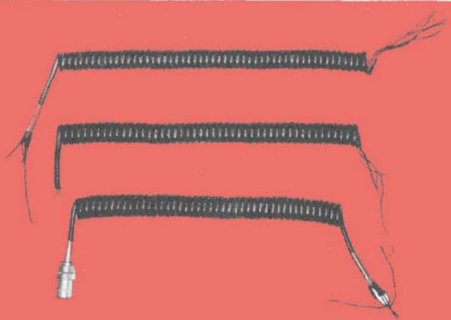
SWITCH ARRANGEMENT: Models 101C and 101E—2-wire Relay Switch normally open (no microphone switch)
Models 102C and 102E—Relay normally open. Microphone switch normally open
Model 103—2-wire Relay Switch normally open (no microphone switch)

DIMENSIONS: 3- $\frac{1}{16}$ " high, 2 $\frac{3}{4}$ " wide, 2 $\frac{1}{2}$ " deep

NET WEIGHT: 1 lb., shipping weight 1 lb., 6 oz.

Model 100 SERIES

Used around the world for police, taxi, bus, truck and commercial applications—*more than all other makes combined!* Adopted as standard microphone for G.E., Motorola, R.C.A. and others for 2-way radio communications equipment. The "100 Series" Microphones are provided with a bracket for permanent placement in portable or mobile equipment. They fit naturally and comfortably in the palm of the hand. They are light, compact and rugged units—with a reputation for long-life performance under "rough and tumble" operating conditions.



Coiled Cord Sets

Coiled Cord replacement for Shure "100" and "CB" Series Microphones vary from model to model. For specific models see listing below.

MODEL	CABLE	MODEL	CABLE	MODEL	CABLE
CB10	C15C	CB12E	C17C	101B	C15C
CB10B	C15C	CB12F	C19C	101C	C15C
CB10D	C15C	CB15	C15C	101E	C16C
CB10E	C16C	CB15B	C15C	102A	C15C
CB10F	C15C	CB15C	C15C	102B	C15C
CB12	C15C	CB15D	C15C	102C	C15C
CB12A	C15C	CB15F	C18C	102E	C17C
CB12C	C15C	101A	C15C	103	C18C
CB12D	C18C				

REPLACEMENT CHART

Manufacturers Models	Replacement Model	Manufacturers Models	Replacement Model
CB10, CB10B, CB10C, CB10D, CB15, CB15D,	101C	CB12, CB12A, CB12C, CB12D	102C
		CB12E	102E
CB10E	101E	CB15F	103

COILED CORD SETS

Tinsel coiled cord with trimmed and tinned leads and Amphenol MC4M Connector attached 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 with 505T, "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 equipment.

MODEL: C17C List Price: \$7.75

STANDARD COILED CORD with Amphenol MC4M Connector for use with Motorola equipment.

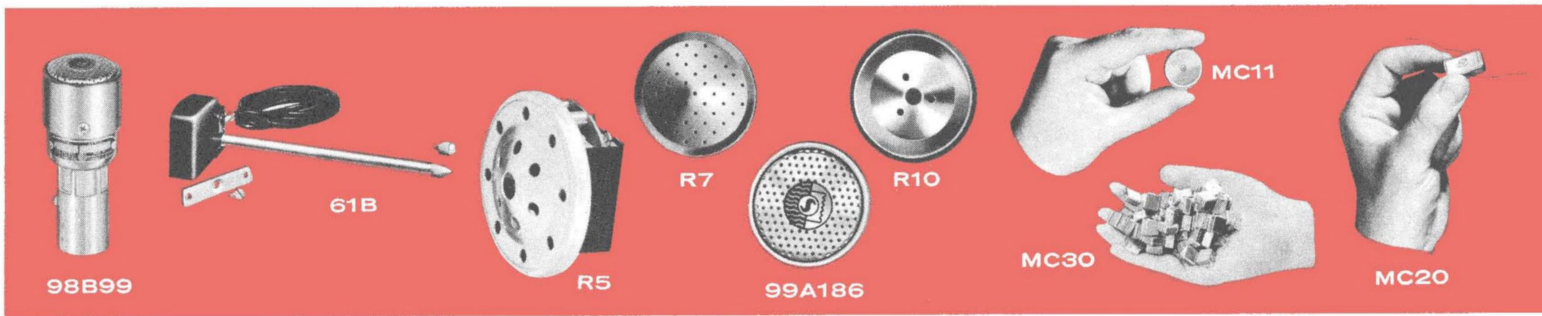
MODEL: C18C List Price: \$9.50

TINSEL COILED CORD with Amphenol MC4M Connector for use with Motorola equipment.

MODEL: C19C List Price: \$9.50

SPECIAL PURPOSE MICROPHONES

MICROPHONE REPLACEMENT CARTRIDGES



SOUND LEVEL MICROPHONE MODEL 98B99

Custom-made non-directional crystal microphone designed for scientific and industrial sound measurement work—and for those special applications that involve frequency response determinations, production testing, ambient noise levels, reverberation measurements, etc. Protected from humidity by "Humi-Seal" foil wrap. Features uniform frequency response; high sensitivity; high acoustical impedance; freedom from electrostatic and electromagnetic induction.

Model 98B99 List Price \$110.00

SPECIFICATIONS FOR MODEL 98B99
LIST PRICE: \$110.00

TYPE: Crystal

FREQUENCY RESPONSE: 30-15,000 cps

OUTPUT LEVEL: -58 db (0 db=1 volt per microbar)

POLAR PATTERN: Omni-directional

CASE: Die cast zinc

FINISH: Satin chrome

CABLE CONNECTOR: Cannon XL-3-11

DIMENSIONS: 1 1/8" diameter, 2 3/4" long

NET WEIGHT: 3.8 oz.

VIBRATION PICKUP MODEL 61B

Used for locating and measuring vibration; checking surface smoothness and for the solution of a wide variety of scientific and industrial problems. No external moving parts. Triple moisture-sealed Grafoil Bimorph Crystal element. The Model 61B may be fastened to an object or used with the furnished extension rod for point-to-point tests.

Model 61B List Price \$97.50

SPECIFICATIONS FOR MODEL 61B
LIST PRICE: \$97.50

TYPE: Crystal

FREQUENCY RESPONSE: Low frequency response dependent on the terminal resistance employed.

INTERNAL IMPEDANCE: Equivalent to .005 microfarad capacitor. Recommended Load: 1/2 to 5 megohms

CASE: Die cast aluminum

FINISH: Baked black enamel

CABLE: Equipped with 7 ft. single conductor rubber-jacketed shielded cable.

ACCESSORIES FURNISHED: Complete set of adapters including 8" extension rod, ball-tip, point-tip and mounting bracket.

MICROPHONE REPLACEMENT 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, 101E, 102A, 102B, 102C, 102E, 103, 120, CB10, CB10B, CB10C, CB10E, CB11, CB11B, CB12, CB12A, CB12B, CB12C, CB12D, CB12E, CB13A, CB14, CB15, CB15B, CB15C, CB15D, CB15F, CB162, 91A27 carbon microphones.

Model R10 List Price \$8.50

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

Model 99A149 List Price \$8.50

CRYSTAL MICROPHONE MODEL R7

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—48 db below 1 volt per microbar. Supplied with rubber mounting rings and installation instructions.

Model R7 List Price \$8.25

SLIM-X MICROPHONE CARTRIDGE

The Model 99A186 replacement cartridge assembly for the 777 Series Slim-X Microphones. Crystal element metal-sealed for long life under adverse conditions of heat and humidity.

Requires only one solder connection.

Model 99A186 List Price \$10.00

CONTROLLED MAGNETIC MICROPHONE MODEL R5

Direct replacement for cartridges used in the following Shure 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

LOW IMPEDANCE MICROPHONE CARTRIDGE MODEL R5B

Model R5B is the replacement cartridge for cartridges used in microphone models 505B and 520B. Model R5B is physically identical to Model R5; but low impedance (150 to 250 ohms). Can be used in any R5 applications which require a low impedance cartridge.

Model R5B List Price \$11.00

SMALL CONTROLLED MAGNETIC MICROPHONES

The MC Series of small microphones are specially designed for use in vacuum-tube devices, such as small, compact hearing-aids, amplifiers, transmitters, dictating equipment—wherever size and weight are important factors. They also are highly recommended for use in small transistor-type devices. The MC series are metal cased for hum protection. They are rugged units, immune to mechanical shock, and to varying conditions of heat and humidity.

MC11 (Circular) List Price: \$12.50
MC20 (Rectangular) List Price: \$14.00
MC30 (Rectangular) List Price: \$20.00

SPECIFICATIONS FOR MODELS MC11, MC20 and MC30

LIST PRICE: MC11—\$12.50
MC20— 14.00
MC30— 20.00

TYPE: Controlled Magnetic

FREQUENCY RESPONSE: MC11—400 to 3,000 cps, MC20—400 to 4,500 cps, MC30—400 to 3,500 cps

OUTPUT LEVEL: MC11 —71 db (0 db =1 volt per microbar), MC20 —75 db (0 db=1 volt per microbar), MC30 —76 db (0 db=1 volt per microbar)

IMPEDANCE: MC11—1,000 ohms, MC20—1,100 ohms, MC30—1,850 ohms

CASE: Brass

FINISH: Cadmium plated

TERMINALS: MC11—Eyelet Solder Type, MC20—1 1/2" flexible lead type, MC30—Eyelet solder terminals

DIMENSIONS: MC11 (circular) 1 1/4" diameter, 3/16" thick, MC20 (rectangular) 1 9/16" wide, 1 1/8" long, 3/16" thick, MC30 (rectangular) .5" wide, .5" long, .265" thick

NET WEIGHT: MC11—12 1/2 grams, MC20—9.6 grams, MC30—3.7 grams

MICROPHONE ACCESSORIES



MICROPHONE SWITCHES

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

Heavy-Duty Switch withstands the most severe field requirements of paging and dispatching systems. Ideal for Police, Taxicab, 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

ON-OFF PRESS-TO-TALK SWITCHES

Quickly attached to any cable-connector type Shure microphone. These are plug-in units which require only a screwdriver to install. Suitable for use with the following Shure microphones: Models 55, 55A, 55B, 55C, 55S, 51, 315, 737A and 708A.

Model A83B. Rotary-type "On-Off" switch. When "turned on," it stays on until turned off.

MODEL A83B

LIST PRICE \$11.00

Model A84B. Momentary Press-to-Talk "On-Off" switch. Press—it's on, release—it's off.

MODEL A84B

LIST PRICE \$11.00

Model A85C. Momentary Press-to-Talk Relay-Type switch same as above, but has extra contacts to provide for relay operation.

MODEL A85C

LIST PRICE \$11.50

CABLE-TYPE TRANSFORMER

Model A86A is a high-quality, cable-type transformer which makes it convenient to run a long microphone line from a low impedance microphone to a high impedance amplifier. 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. Solves the problem of excessive high frequency loss and objectionable hum pickup when long lengths of microphone cable are necessary.

SPECIFICATIONS FOR MODEL A86A

LIST PRICE: \$17.50

FREQUENCY RESPONSE: 20 to 20,000 cps plus or minus 1 db

IMPEDANCE: Matches 35-50 ohm and 150-250 ohm microphones to high impedance amplifier input

CASE: Compact, sturdy and magnetically shielded steel

FINISH: Two-tone gray

CABLE: 2 ft.

DIMENSIONS: 7/8" long, 1 5/8" diameter

NET WEIGHT: 1 1/4 lbs., shipping weight 1 7/8 lbs.

MICROPHONE EXTENSION CABLES

Here, for the first time, is an easy, convenient way to add extra lengths of cable. These 25-foot extension cables can be attached to existing cables without the use of tools—wiring—or soldering.

The A26C, 25 feet long, is a two-conductor, shielded cable with Cannon XL-3-11 and XL-3-12 plugs. It will fit the following Shure microphones and their respective cables: 556S, 525, 530, 300, 330 and 333. LIST PRICE \$15.00

The A27A, 25 feet long, is a two-conductor, shielded cable with Amphenol MC3M and MC3F plugs. It will fit Shure microphone models: 55S, 535, 315, 737A, 708A, 51, 520SL and their respective cables. LIST PRICE \$11.00

DESK STANDS

TAKE-APART STAND

Model S34B. Handy low-cost stand for desk or hand use. One twist of wood handle locks it securely in base for use as a table stand, or releases handle for use in hand. Metal base.

MODEL S34B

LIST PRICE \$4.50

BROADCAST DESK STAND

Model S33. Baked Bronze Finish. For use with Models 300, 333, 525. LIST PRICE \$15.00

MODEL S33B—Same as S33—in black finish. For use with Models 330, 530, 535, 556S, 415 and 430. LIST PRICE \$15.00

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. The S36A is designed for use with all Shure microphones except the 505 Series, 100 Series, 76B and 420 Microphones. Ideal for use with the Shure switches listed on this page.

MODEL S36A

LIST PRICE \$6.50

SPECIAL STAND

This stand is a heavy die-cast base. Metal screw machine stud connects microphone adaptor to stand base.

Model S38 for use with 777 Series microphones.

Model S38B for use with "Commando" microphone Models 415 and 430.

MODELS S38 AND S38B

LIST PRICE \$4.50

SWIVEL ADAPTER

Model A25. To be used with Slendyne Models 525, 530 and 535, 777 Series and Commando Models 415 and 430—For use with standard desk or floor stand.

MODEL A25

LIST PRICE \$5.50

LAVALIER ASSEMBLY

Model A28L. For use with Slendyne Model 535.

MODEL A28L

LIST PRICE \$4.50

MAGNETIC RECORDING HEADS

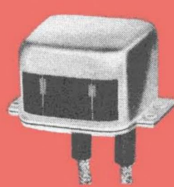


Fig. A
Record-
Playback-
Erase

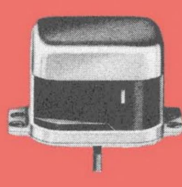


Fig. B
Record-
Playback

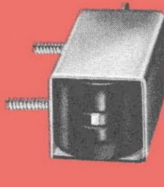


Fig. C
Record-
Playback
Also Erase

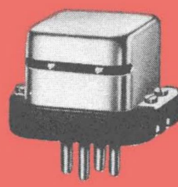


Fig. D
Record-
Playback-
Erase

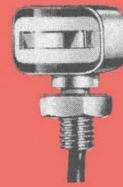


Fig. E
Record-
Playback
Also Erase

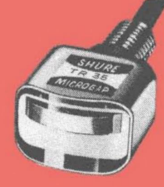


Fig. F
Record-
Playback
Also Erase



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	75KC	.040 ma	1.0 ma			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. A) & 816 (Fig. B) Width 1.240" Depth 1.031" Height .695"	Models TE2 (Fig. C) Width .516" Depth .830" Height .715"
Model 817 (Fig. C) Width .552" Depth .830" Height .765"	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

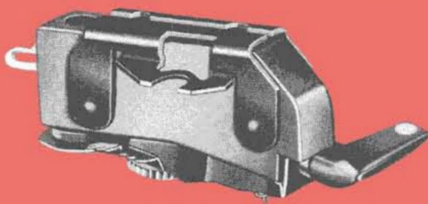
MODEL	ILLUSTR.	LIST PR.	DESCRIPTION	OPERATING DATA
812	Fig. D	\$120.00	Wire Recording Head.	Not Shown
815	Fig. A	15.00	Upper track recording. Low impedance record-playback coil.	See 815
815H	Fig. A	15.00	Upper track recording. High impedance record-playback coil.	See 815H
816	Fig. B	12.00	Upper track 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	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
TR26	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
TR35	Fig. E	20.00	Microgap .093" record track width (¼ mil gap). 500 mh inductance.	See TR35
TE2	Fig. C	7.00	Erase head. .116" 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

*Operating data only. 815 does not replace.

**Operating data only. 816 does not replace.

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

"Twin Lever" 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! See page 21 for technical information.

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 3-speed, dual-needle, dual-voltage, crystal cartridge replaces and out-performs 69 high output cartridges. Dramatically improves the sound of low cost, low-gain phonographs. See page 21 for technical information.

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! See page 21 for technical information.

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

Model ML44 (DS)

List Price \$38.95

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. (For complete technical features see page 21.)

List Price \$38.50

RK-56 REPLACEMENT KIT 3 CARTRIDGES REPLACE 217!

The RK-56 contains the models WC10, W70 and W72. (For complete technical features see page 21.)

List Price \$22.95

RK-54 REPLACEMENT KIT 3 CARTRIDGES REPLACE 192!

The RK-54 contains the models W22, W26 and W78. (For complete technical features see page 21.)

List Price \$21.55

PHONOGRAPH PICKUP NEEDLES

MODEL	ILLUSTRATION	DESCRIPTION	LIST PRICE	
A6S	Fig. B	Std. and MG Sapphire†	\$ 5.95	Fig. A
A9††	Fig. B	Std. and MG Sapphire†	3.50	"MUTED STYLUS"
A10S	Fig. B	Std. and MG Sapphire†	3.50	
A10DS	Fig. B	MG Diamond, Std. Sapphire†	28.00	Fig. B
A20S	Fig. E	.0003 (3/10 mil) Sapphire†	3.50	"TWIN-LEVER"
A52A	Fig. C	Std. Osmium	1.50	
A53MG	Fig. C	MG Osmium	1.50	Fig. C
A56U**	Fig. C	All Purpose Osmium Unipoint	1.50	"DIRECT DRIVE"
A58U***	Fig. C	All Purpose Osmium Unipoint	1.50	
A61A	Fig. A	Std. Sapphire†	2.50	
A62A	Fig. A	Std. Osmium	1.50	Fig. D
A63MG	Fig. A	MG Osmium	1.50	"CUTTER PLAYBACK"
A64MG*		MG Osmium	2.00	
A65MG	Fig. A	MG Sapphire†	2.50	Fig. E
A66U	Fig. A	All Purpose Osmium Unipoint	1.50	"HIGHWAY HI-FI"
A67U	Fig. A	All Purpose Sapphire Unipoint†	2.50	
A68D	Fig. D	Osm. Playback Needle—Stellite Cutting Stylus	3.50	
A69A	Fig. F	MG Sapphire†	2.50	Fig. F
A70A	Fig. F	Std. Sapphire†	2.50	"PUSH-IN TYPE"
A77U #		All Purpose Osmium Unipoint	1.50	

*Standard Bent Shaft Needle Not Illustrated.

***Used in Models PC12 and WC38.

**Used in Cartridge Models PC10 and WC368.

-Standard Straight Shaft Needle Not Illustrated.

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

††Cannot be replaced by A10S or N4 series needles.

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

CRYSTAL and CERAMIC PICKUP CARTRIDGES

Fine Groove Cartridges For 33 1/3, 45 RPM Records

MODEL NO.	ILLUS-TRATION	TYPE	LIST PRICE	OUTPUT LEVEL	MIN. NEEDLE FORCE	RESPONSE TO	NET WEIGHT	SHURE NEEDLE NO.
WC20 #	Fig. C	Ceramic	\$ 9.50	.58V	2 1/2-3 grams	12,000 cps	2 1/4 grams	A20S
W21F*	Fig. B	Crystal	7.75	1.5V	6 grams	10,000 cps	4 1/2 grams	A63MG
W31AR	Fig. A	Crystal	6.50	2.1V	7 grams	7,500 cps	5 1/2 grams	A53MG

"Twin-Lever" Cartridges For 33 1/3, 45 And 78 RPM Records

MODEL NO.	ILLUS-TRATION	TYPE	LIST PRICE	OUTPUT LEVEL		MIN. NEEDLE FORCE	RESPONSE TO	NET WEIGHT	SHURE NEEDLE NO.
				MG.	STD.				
WC6 \$	Fig. H	Ceramic	\$14.50	.5V	.7V	4-6 grams	15,000 cps	7 grams	A6S
WC6TM* Top Mount	Fig. R	Ceramic	\$14.50	.5V	.7V	4-6 grams	15,000 cps	7 grams	A6S
W9 †	Fig. J	Crystal	9.50	3.5V	5.0V	11 grams	10,000 cps	7 grams	A9
WC10 \$	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 33 1/3, 45, And 78 RPM Records

MODEL NO.	ILLUS-TRATION	TYPE	LIST PRICE	OUTPUT LEVEL		MIN. NEEDLE FORCE	RESPONSE TO	NET WEIGHT	SHURE NEEDLE NO.	
				MG.	STD.				MG.	STD.
W22	Fig. D	Crystal	\$ 9.50	1.2V	1.4V	8 grams	10,000 cps	4 1/2 grams	A65MG	A61A
W22-T	Fig. E	Crystal	10.00	1.2V	1.4V	8 grams	10,000 cps	12 1/2 grams	A65MG	A61A
WC24	Fig. F	Ceramic	8.75	0.6V	0.6V	8 grams	7,000 cps	4 1/2 grams	A53MG	A52A
WC24-T	Fig. G	Ceramic	9.25	0.6V	0.6V	8 grams	7,000 cps	12 1/2 grams	A53MG	A52A
WC25	Fig. K	Ceramic	9.50	.65V	.7V	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

All Purpose Single Needle Cartridges For 33 1/3, 45, 78 RPM Records

MODEL NO.	ILLUS-TRATION	TYPE	LIST PRICE	OUTPUT LEVEL		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	4 1/2 grams	A67U
WC38	Fig. A	Ceramic	6.50	.9V	.92V	9 grams	10,000 cps	5 1/2 grams	A58U
W66B	Fig. O	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

Standard Cartridges For 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	\$ 8.50	4.3V	1 oz.	10,000 cps	12 grams	A68D
W68 †	Fig. O	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

*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.

Model 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 slip-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.

▲ Top mounting for Magnavox cartridge replacement

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



Fig. A



Fig. B



Fig. C



Fig. D



Fig. E



Fig. F



Fig. G

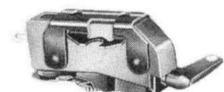


Fig. H

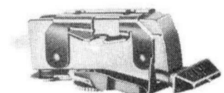


Fig. J



Fig. K



Fig. L



Fig. M



Fig. N



Fig. O

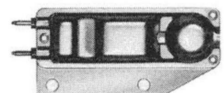


Fig. P

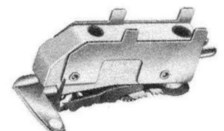
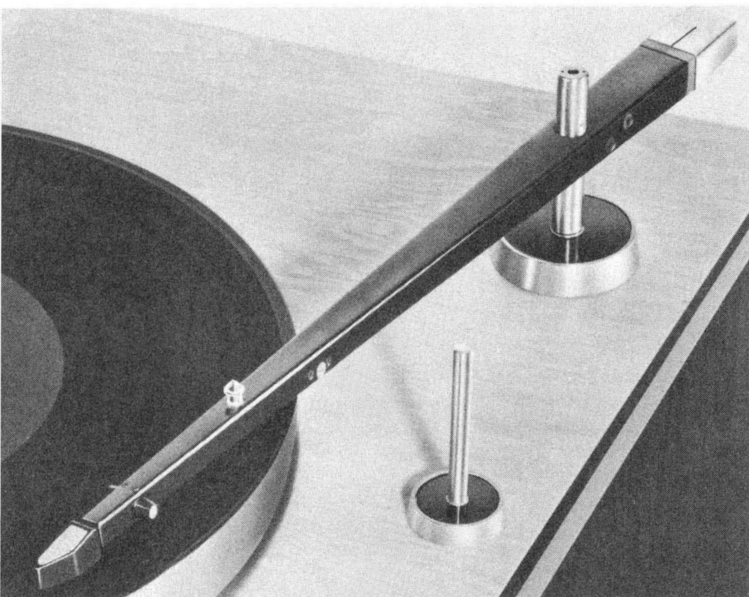


Fig. R

MONAURAL STUDIO DYNETIC PHONO REPRODUCER

... FOR SELECTIVE HIGH FIDELITY ENTHUSIASTS ... FOR THE MOST CRITICAL
HIGH FIDELITY APPLICATIONS IN BROADCAST AND RECORDING STUDIOS



**... This is the remarkable
Phono Reproducer that
tracks at 1 GRAM -- actually
makes it impossible
to scratch records!**

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 the need 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. Even delicate “Lacquer Masters” can be played with complete safety, eliminating the need for “deep-freezing” to achieve record hardening.

- 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
- Model M1** —Studio Dynetic Cartridge for LP records with .0007" Diamond Stylus. Net Price: \$42.00
- Model M2** —Studio Dynetic Cartridge for 78 rpm records with .0027" Diamond Stylus. Net Price: \$42.00
- Model N1** —Studio Dynetic Stylus with .0007" Diamond tip. Net Price: \$21.00
- Model N2** —Studio Dynetic Stylus with .0027" Diamond tip. Net Price: \$21.00
- Model A29R** —Adapter Plate for use with Model M12 for mounting purposes with the Rek-O-Kut turntable. Net Price: \$2.40

SPECIAL FEATURES

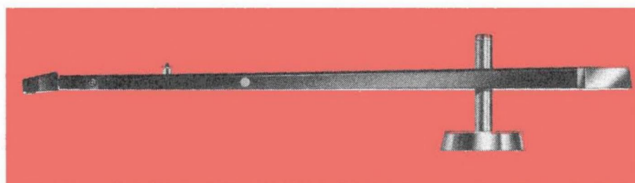
- 1. Dynetic Principle:—**
A moving magnet within a stationary coil. High permeability shield and hum-bucking arrangement of coil prevents pick up of hum.
- 2. Friction Free Suspension:—**
Jewel bearings throughout. Cartridge is pivoted on sleeve and cap jeweled bearings. Arm pivot is a ruby thrust bearing.
- 3. Safety Control:—**
Provides for remote retraction of the cartridge and stylus without danger of damage to record and stylus from careless handling.
- 4. Dynamic Damping:—**
Arm counterbalance floats on a damped suspension bar. This system provides critical damping (even in the sub-sonic range) without impeding normal motions of the arm.
- 5. Geometric Configuration:—**
Arm is reinforced, tapered channel of durable aluminum. Dynetic principle permits off-setting the stylus to provide proper tracking angle—avoiding the complications of curved tone arms or offset cartridges.
- 6. Ease of Installation:—**
The Studio Dynetic can be used with any high quality transcription type turntable. Only one hole must be drilled to install the arm on conventional mounting boards. Exceptional ease of height adjustment.
- 7. Laboratory Production:—**
Each Studio Dynetic Phono Reproducer is custom-produced in a special Shure engineering laboratory—and is individually tested electrically, acoustically and mechanically. Each unit must meet all specifications and standards before it is approved for packaging and shipment.

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
Recommended Input Impedance: 10,000 ohms
Inductance: 130 millihenrys
DC Resistance: 180 ohms
Stylus: .0007" Diamond
Needle Compliance: 7×10^{-6}
Needle Tip Mass: 1.25 milligrams

DIMENSIONS:

	Model M16	Model M12
Over-all length:	14 $\frac{3}{4}$ "	11 $\frac{5}{16}$ "
Stylus tip to center of arm base:	11"	8 $\frac{1}{2}$ "
Arm base diameter:	2"	2"
Range of height adjustment:	1 $\frac{5}{8}$ "	1 $\frac{5}{8}$ "
Arm pivot to turntable center:	10 $\frac{19}{32}$ "	8 $\frac{1}{4}$ "
Net weight (arm and cartridge):	11.1 oz.	10.6 oz.



MONAURAL PROFESSIONAL DYNETIC PHONO CARTRIDGE

...FOR HIGH FIDELITY ENTHUSIASTS WHO WANT PERFORMANCE THAT SURPASSES ANY OTHER SEPARATE CARTRIDGE

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

SPECIAL FEATURES

1. The heralded dynetic principle of moving-magnet reproduction.
2. High compliance and low effective needle mass provide excellent tracking with minimum record wear and minimum distortion.
3. Completely eliminates magnetic attraction to steel (changer) turntables.
4. Suppresses magnetic hum induced from external hum fields.
5. 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.
6. Reproduces everything on the record—clearly and with superlative definition—far superior to conventional magnetic high fidelity cartridges.
7. High degree of both vertical and lateral compliance making it possible for you to play your records with an absolute minimum of needle talk and wear.

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.

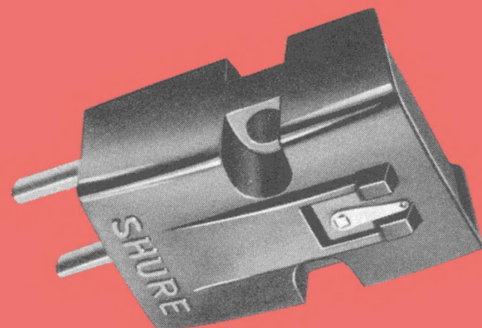
Net Price: \$15.00

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



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

COMPLIANCE: 3×10^{-6} centimeters per dyne

TRACKING FORCE: 2 to 6 grams

INDUCTANCE: 350 millihenries

DC RESISTANCE: 440 ohms

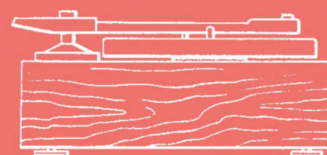
WEIGHT: 12.4 grams

Model M5D—for use with micro-groove records, 33 $\frac{1}{3}$ -45 r.p.m.

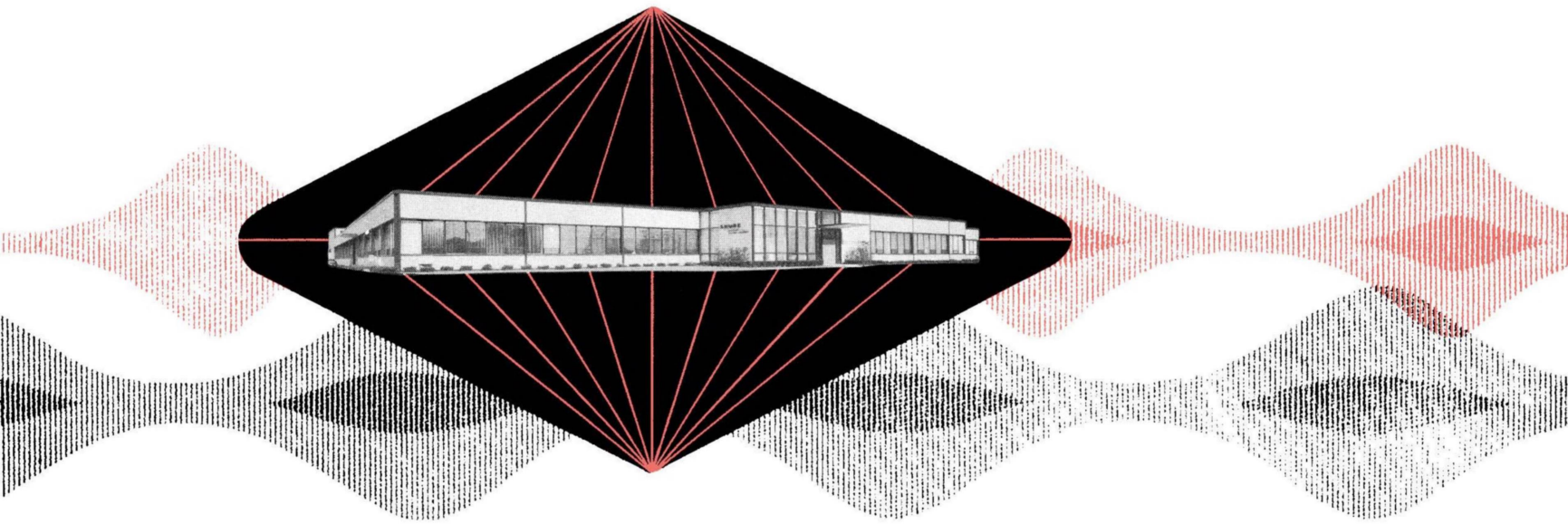
Model M6S—for use with standard records, 78 r.p.m.



FOR USE IN RECORD CHANGERS
OR IN TRANSCRIPTION TONE ARMS



The quality products in the Shure line of microphones...high fidelity reproducers...replacement phono cartridges . . . magnetic recording heads . . . and electronic components are available at the authorized Shure Distributor indicated below.



SHURE BROTHERS, INC., 222 HARTREY AVENUE, EVANSTON, ILLINOIS

Scans:

<https://archive.org/>