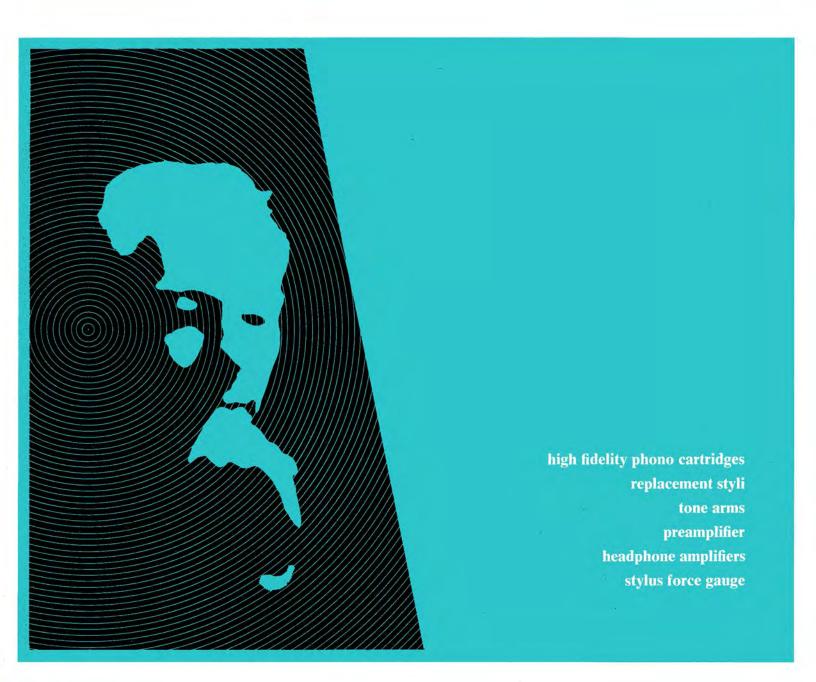
### THE PREMIER FAMILY OF STEREO SOUND REPRODUCERS



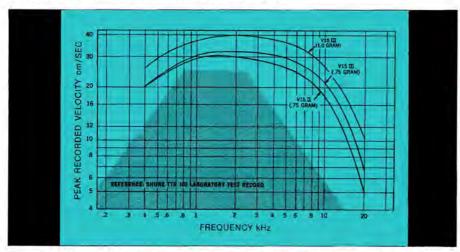


### THE ALL-IMPORTANT SOURCE OF SOUND

True high fidelity sound recreation begins at the source of sound. Since the stylus is the only point of contact between the record and phonograph system, the sound can be no better than the cartridge. This breathtakingly precise mini-aturized electric generator (that's really what it is) must carry the full burden of translating the miles-long stereo record groove into usable electrical impulses . . and should do this without adding or subtracting from what is on the recording. Knowing this, Shure quality standards are rigidly maintained at the highest levels.

### ABOUT TRACKABILITY

Trackability is the measure of a cartridge's total performance. The "secret" of High Trackability is to enable the stylus tip to follow the hyper-complex record groove not only up to but beyond the theoretical cutting limits of today's modern recordings—not only at a select and discrete frequency, but across the entire audible spectrum—at light tracking forces that are below both the threshold of audible record wear and excessive stylus tip wear.

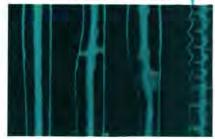


The trackability curve above dramatizes the differences in trackability between the V-15 Type II Improved (shown at ¾ gram) and the extraordinary Shure V-15 Type III (shown at ¾ and 1 gram). The shaded area represents the recommended theoretical limits for cutting recorded velocities. Peak recorded velocities are shown up the left edge, frequency range is registered across the bottom. The smoother the curve of the cartridge being tested and the greater its distance above the shaded area, the greater its trackability.

Any good cartridge will truck these grooves.



but only a high trackability vartridge can cope with this grouve!



The photomicrograph above left portrays an errant, hard-to-track castanet sound in an otherwise conservatively modulated recording. The somewhat more heavily modulated grooves shown above right are an exhilarating combination of flutes and maracas with a low frequency rhythm complement from a recording cut at sufficiently high velocity to deliver precise and definitive intonation, full dynamic range, and optimum signal-to-noise ratio. Neither situation is a rarity, far from it. They are the very essence of today's highest fidelity recordings. But when played with an ordinary "good" quality cartridge, the stylus invariably loses contact with these demanding grooves—the castanets sound raspy, while the flute and maracas sound fuzzy, leaden, and "torn apart." One of the most common, most universally audible examples of mistracking occurs on vocal recordings when a cartridge attempts to track sibilant "sss" and "th" sounds. Mistracking here produces clearly audible, intrusive "sibilant distortion." Increasing tracking weight to force the stylus to stay in the groove will literally shave off the groove walls. Only High Trackability cartridges will consistently and effectively track all the grooves in today's recordings at light, record-saving pressures . . . even with cymbals, orchestral bells, and other difficult-to-track instruments. They will preserve the fidelity and reduce distortion from all your records, old and new.



### Shure cartridges and the

In addition to their many other individual features. the Shure cartridges shown in this catalog offer the audiophile a uniformity of manufacture and performance that is unique in high fidelity componentry.

We call it the "U" factor , . . U for uniformity. It assures you that not only does the Shure cartridge you have conform precisely to its published specifications, but so does every other Shure cartridge bearing the same model number!

Uniformity doesn't come easily. It takes infinite care in production, and one of the most uncompromising, most comprehensive quality control programs in the high fidelity industry. The simple fact is that every cartridge or stylus with the Shure name on it either meets all of its specifications or is rejected.

Thus, a Shure V-15 Type III cartridge will provide superlative performance no matter where it is purchased—from Portland, Oregon to Portland, Maine; from London to Rome; and from Tokyo to Paris to Johannesburg.

And the original sound of any Shure cartridge can be recreated exactly—no matter where the genuine Shure replacement stylus is purchased.

The U factor . . . a part of every Shure cartridge and replacement stylus.

SPECIAL NOTE: The Dynetic® stylus assembly used in Shure cartridges is the most critical component. To maintain the original performance standards of your cartridge, be certain that any replacement stylus you buy bears the following certification on the package:
"This Stereo Dynetic® stylus is precision manufactured by

Shure Brothers Inc."

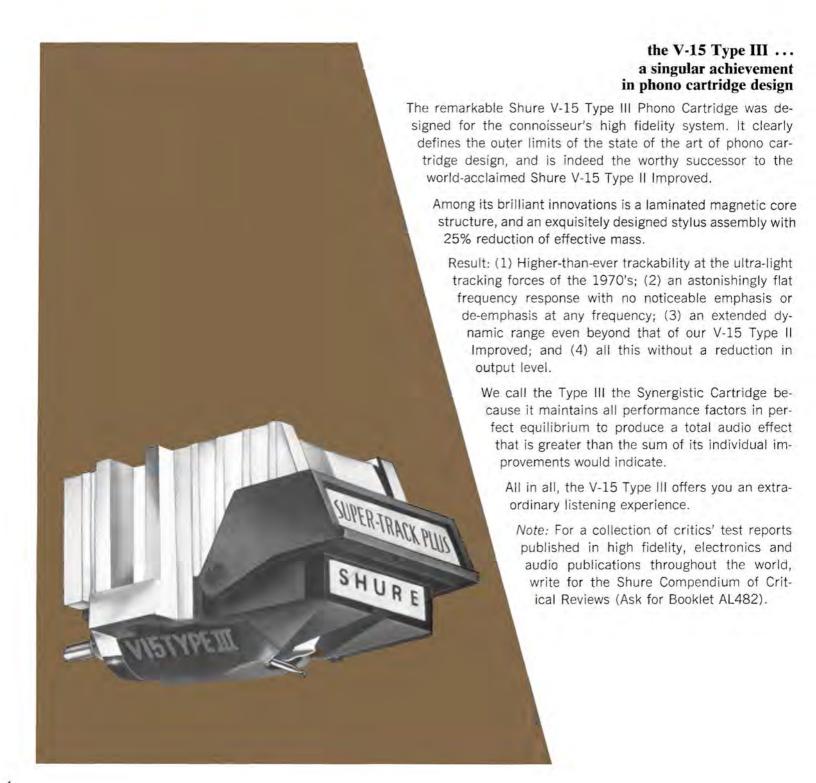
AVOID INFERIOR IMITATIONS, THEY WILL SERIOUSLY DE-GRADE THE PERFORMANCE OF YOUR CARTRIDGE. ALL GENUINE "DYNETIC®" STYLI ARE MANUFACTURED BY SHURE BROTHERS INC. LOOK FOR THE NAME SHURE ON THE STYLUS GRIP.

PATENT NOTICE, ALL SHURE DYNETIC® CARTRIDGES, STYLI AND PROFESSIONAL TONE ARMS ARE MANUFACTURED UNDER ONE OR MORE OF THE FOLLOWING U.S. PATENTS: 2,983,516; 3,055,988; 3,077,521; 3,077,522; 3,463,889; D183,366; D185,168; D187,229; D187,229; D187,230 D189,144; D193,006; D193,007; D193,854; D193,934; D201,802; D201,803; D230,995; D235,070; D235,211; D235,351; D235,352; D235,661; AND D235,658. OTHER PATENTS PENDING PENDING

Peak Recorded Velocity) Trackability Tracking 400 Model Page 1000 5000 0,000 Measured Force Stylus Net No. No. Hz Hz Hz at (Grams) Configuration Type Range Price SUPER-5 microns x 18 microns (.0002" x .0007") Biradial Elliptical Standard Mount TRACK 3/4 to 11/4 4.5 26 38 35 26 1 Gram \$85.00 V-15 Type III with Snap-Down (PLUS) V-15 Stylus Guard TYPE III Standard Mount 15 microns (.0006") Spherical with Snap-Down \$80.00 4.5 38 35 1 Gram SERIES V-15 III-G 26 26 3/4 to 11/4 Stylus Guard Standard Mount 5 microns x 18 microns (.0002" x .0007") Biradial Elliptical 7 \$64.95 M95ED 24 33 28 19 1 Gram 3/4 to 11/2 with Snap-Down Stylus Guard 5 microns x 18 microns (.0002" x .0007") Biradial Elliptical DELUXE M91ED 8 22 33 28 19 1 Gram 3/4 to 11/2 Standard Mount \$59.95 HIGH TRACK-ABILITY 15 microns (.0006") M91GD 8 22 33 28 19 Standard Mount 1 Gram 3/4 to 11/2 SERIES \$49.95 Spherical 5 microns x 18 microns (.0002" x .0007") Biradial Elliptical Standard Mount 8 22 33 28 19 M75ED Type 2 1 Gram 3/4 to 11/2 with Snap-Down \$59.95 Stylus Guard 10 microns x 18 microns (.0004" x .0007") Biradial Elliptical Standard Mount 7 28 30 20 M95EJ 35 2 Grams 11/2 to 3 with Snap Down \$49.95 Stylus Guard 5 microns x 18 microns (.0002" x .0007") Biradial Elliptical Snap-In M91E 9 20 28 25 18 1 Gram 34 to 11/2 Easy-Mount \$54 95 CUSTOM Standard Mount 5 microns (.0006") HIGH 9 20 28 25 18 M75G Type 2 1 Gram 34 to 11/2 with Snap-Down Spherical \$43.45 TRACK-Stylus Guard ABILITY SERIES Standard Mount 10 microns x 18 microns (.0004" x .0007") Biradial Elliptical M75EJ Type 2 9 28 35 30 20 2 Grams 11/2 to 3 with Snap-Down \$49.95 Stylus Guard M75B Type 2 Standard Mount \$38.45 15 microns (.0006") Spherical 9 28 35 30 20 2 Grams 11/2 to 3 with Snap Down (Formerly Stylus Guard M75-6 Type 2) 10 microns x 18 microns (.0004" x .0007") Biradial Elliptical Snap-In \$44.95 18 14 10 25 24 M93E 2 Grams 11/2 to 3 Easy-Mount 10 microns x 18 microns (.0004" x .0007") Biradial Elliptical M70EJ 19 Standard Mount \$39.50 10 26 23 13 2 Grams 11/2 to 3 15 microns (.0006") EXTRA DURABILITY HIGH-M70B 10 19 26 23 13 2 Grams 11/2 to 3 Standard Mount \$32.50 Spherical \$32.50 TRACK Snap-In 15 microns (.0006") Spherical M75-6S 10 18 25 24 14 2 Grams 1½ to 3 SERIES Easy-Mount 10 microns x 18 microns (.0004" x .0007") Biradial Elliptical Snap-In 26 21 \$34.95 M75ECS 10 37 12 3 Grams 2 to 4 Easy-Mount Snap-In 15 microns (.0006") Spherical M75CS 25 10 39 25 15 4 Grams 3 to 5 Easy-Mount \$24.50 STEREO + QUADRI-PHONIC Standard Mount (MATRIX **M24H** 9 20 28 47 50 11/4 Grams 1 to 11/2 "Long-Contact Hyperbolic" with Snap-Down \$74.95 AND Stylus Guard DISCRETE) CARTRIDGE THE SHURE CARTRIDGES LISTED ABOVE ARE COMPATIBLE WITH ALL FOUR-CHANNEL MATRIX SYSTEMS 5 microns x 18 microns These cartridges were de-Standard Mount \$34.95 M55E 11 (.0002" x .0007") Biradial Elliptical 34 to 2 signed prior to the de-10 microns x 18 microns (.0004" x .0007") Biradial Elliptical velopment of trackability \$29.95 M44E 11 Standard Mount 134 to 4 measurement techniques. STANDARD STEREO DYNETIC They are intended for econ-\$24.95 11 3/4 to 11/2 Standard Mount M44G 15 microns (.0006") omy systems; however, the SERIES trackability of these car-18 microns (.0007") Spherical \$24.95 11 M44-7 Standard Mount 11/2 to 3 tridges is good, and will generally exceed the track-11 \$22.95 M44C 3 to 5 18 microns (.0007") Standard Mount ability potential of the associated equipment with \$17.95 11 which they are used. 18 microns (.0007") Spherical M<sub>3</sub>D Standard Mount 3 to 6

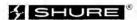
Trackability (CM/SEC

## ANYTHING II COULD DO III CAN DO BETTER!





For 3/4 to 11/4 Grams Tracking



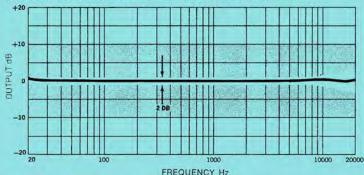
### V-15 TYPE III SUPER-TRACK "PLUS" PHONO CARTRIDGE

### THE SOUND OF THE V-15 TYPE III

The sound of the V-15 Type III, paradoxically, is due in no small part to an absence of a sound of its own. In no way does it interpose itself upon the music. Thus, the resultant sound of the Type III is not "sweet," "mellow," or "brilliant"... it is the sound of the recording itself! Its truly flat, unaccented frequency response and extended dynamic range mean a hearable difference in all your recordings, old and new

In extended listening, the uncolored neutral timbre and tonality of the Type III results in a remarkable listening experience in which complex melodic lines from every conceivable kind of music — from baroque to rock — utilizing a wide variety of recording techniques and playback equipment, are delineated with startling and hitherto unheard clarity.

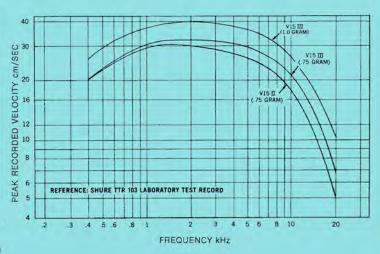
### ABSOLUTE UNIFORMITY OF PERFORMANCE



Shown above is a graphic representation of the audible spectrum, which Illustrates the uniformly flat response you will achieve with your V-15 Type III cartridge. Under the Shure Quality Control Program, every Type III cartridge, whether it is purchased now or next year, in Chicago, London, Hong Kong, or Sydney, must produce a flat response curve that fits within the extraordinarily narrow limits of the Type III response "output envelope" (the unshaded area above) before shipment. The curve shown was made by a typical Type III, mounted in an SME tone arm, and tracking the STR100 test record, response corrected for 6 dB/octave below 500 Hz

### EXTRAORDINARY TRACKABILITY

Its exceptional trackability enables you to use ultra-light tracking forces that will significantly increase the life of recordings and stylus tip. Further, it enables you to use the most advanced light-tracking tone arms and precision turntables available, and to use the newer, even more sophisticated turntables and arms now under development.



The trackability chart above shows the unmistakable superiority of the V-15 Type III in the single most important measure of overall cartridge performance: trackability. These curves were produced by Shure V-15 cartridges tracking in a Shure SME tone arm. The Type III effortlessly tracks the highest velocity levels of modern recordings.

### V-15 TYPE III and V-15 III-G SPECIFICATIONS

Typical Trackability (at 1 gram in Shure-SME Tone Arm). Reference: Shure TTR 103 Laboratory Test Record.

400 Hz — 26 CM/SEC\* 1000 Hz — 38 CM/SEC\* 5000 Hz — 35 CM/SEC\* 10,000 Hz — 26 CM/SEC\*

\*Peak recorded velocity

Frequency Response (using Optimum Load): 10 to 25,000 Hz Output Voltage: 3.5 mV per channel at 1000 Hz, 5 CM/SEC peak recorded velocity. Output from each channel within 2 dB.

Channel Separation: Minimum 25 dB at 1000 Hz Minimum 15 dB at 10,000 Hz

Tracking Force Range: ¾ to 1¼ grams.

Optimum Load: 47,000 ohms resistance in parallel with 400 to 500 pico-farads total capacitance per channel. Load resistance can be up to 70,000 ohms with almost no audible change in frequency response. Total capacitance includes both the tone arm wiring and amplifier input circuit. (Most amplifiers and tone arms meet this requirement.)

Inductance: 500 millihenries nominal D.C. Resistance: 1350 ohms nominal

Output Terminals: 4 terminals

V-15 Type III Styli Available: VN35E Biradial Elliptical Stylus (as supplied in V-15 Type III Cartridge) Diamond Tip

18 microns (.0007 inch) frontal radius
5 microns (.0002 inch) side contact radii
25 microns (.0010 inch) between record contact points
VN3-G Spherical Stylus, (as supplied in V-15 III-G Cartridge) Diamond
Tip [15 microns (.0006 inch) radius]

VN78E Biradial Elliptical Stylus, Diamond Tip for monophonic 78 rpm records

Tracking Force Range: 11/2 to 3 grams 63 microns (.0025 inch) frontal radius 13 microns (.0005 inch) side contact radii

89 microns (.0035 inch) between record contact points.

NOTE: A small .8 gram weight on the molded grip of the VN78E Stylus Assembly allows it to be substituted for a VN35E or VN3-G. This .8 gram weight achieves the proper tracking force for 78 rpm records automatically and normally requires no manual adjustment of the tone arm's tracking force setting.

Mounting: Standard 12.7 mm (1/2 inch) mounting centers. Weight: Net Weight-6.3 grams MODEL V-15 Type III Super-Track cartridge ..... \$85.00

MODEL V-15 III-G Super-Track cartridge with .0006" Spherical ....\$80.00 stylus MODEL V-15 III-DL Super-Track cartridge premounted for DUAL "1200 Series" automatic turntables tracking from 3/4 to 11/4 grams (Biradial Elliptical Stylus).

MODEL V-15 III-GZ Super-Track cartridge pre-mounted for GARRARD Zero automatic turntables tracking from 34 to 114 grams (Biradial Elliptical Stylus) .... \$86.00

MODEL VN35E Biradial Elliptical stylus fits V-15 Type III and V-15 III-G cartridges . .....\$31.00 MODEL VN3-G, 15 microns (.0006 inch) Spherical stylus fits

V-15 Type III and V-15 III-G cartridges . . . . \$29.00 MODEL VN78E Biradial Elliptical stylus designed for monophonic 78 rpm recordings. Fits V-15 Type III and V-15 III-G cartridges. . \$30.00

5



For 1 to 11/2 Grams Tracking



# UNCOMPROMISED STEREO & 4-CHANNEL the new way to add up total high fidelity

### SHURE

M24H Cartridge: discrete quadriphonic records/ matrix quadriphonic records/ stereo records/mono LP records

The new Shure M24H Wide-Range Dynetic® Cartridge offers audiophiles the best of both worlds: It is the only cartridge on the market that does not compromise stereo reproduction to add quadriphonic capability.

Best of all, this remarkable upgrading of stereo/quadriphonic performance is achieved at a relatively low increase in tracking force.

The stunning quadriphonic sound recreation capabilities of the M24H can be traced directly to Shure's unquestioned preeminence in stereo, where even in discrete quadriphonic records approximately 60% to 90% of all quadriphonic signals originate. Most of what is audible in the entire four-channel sound field originates in the fundamental signals found in the stereo "base" band; the FM carrier channels are supplementary.

The wide-range performance of the M24H means that it is the *first* cartridge which will play all your records (mono, stereo, SQ, QS, CD-4) with traditional Shure fidelity.

The M24H cartridge is a combination of innovations and a distillation of proven Shure design—just what you expect from the world's leading cartridge maker. The result is the first totally optimized cartridge for both stereo and quadriphonic (discrete and matrix) records.

- Lowest effective stylus mass available in quadriphony
- · A new hyperbolic stylus tip for improved carrier signal retrieval
- New "Dynetic® X" exotic high energy magnet assembly
- · Low-loss laminated electromagnetic structure
- · Low impedance design
- Uncompromised stereo trackability at 1 to 1½ grams
- Strong carrier signal output to assure optimum demodulator performance

For the audiophile in transition from stereo to quadriphony—or for the audiophile who wants to hear the best of both—the Shure M24H Cartridge is unsurpassed.

### **M24H SPECIFICATIONS**

Frequency Response: 20 to 50,000 Hz

Output Voltage: 3.0 mV per channel (at 1,000 Hz, 5 CM/SEC peak recorded velocity)

Channel Balance: Within 2 dB

Channel Separation (Minimum): 22 dB at 1 kHz

Inductance: 160 millihenries DC Resistance: 510 ohms

Optimum Load: Discrete Four-Channel: 100 kilohms resistance in parallel with 100 picofarads total capacitance per channel.

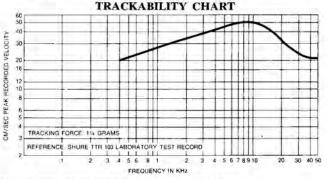
Stereo and Four-Channel Matrix: 20,000 to 100,000 ohms resistance in parallel with 100 to 250 picofarads total capacitance per channel. Total capacitance includes the capacitances of the tone arm wiring, phono cables, and the amplifier input circuit.

Tracking Force Range: Minimum: 1 gram Optimum: 1¼ grams Maximum: 1½ grams

(Tracking forces greater than maximum indicated should not be used.)

Trackability: Trackability indicates how well a stylus can follow or track the recorded signals in a record groove without losing contact. To provide an uninterrupted flow of information from the record, the phonograph stylus must be able to track the grooves. Mistracking causes the most objectionable form of distortion. Signals recorded at high levels (peak recorded velocity, measured in CM/SEC) are more difficult to track. The Model M24H provides high trackability to meet the stereo requirements as well as the high-frequency carrier requirements imposed by discrete four-channel playback. At a 1¼ gram stylus force the trackability values are (see Figure):

400 Hz20 C	M/SEC*
1,000 Hz	M/SEC*
5,000 Hz	M/SEC*
10,000 Hz	M/SEC*
30,000 Hz	M/SEC*



(Measurements made using a Shure/SME Tone Arm.)

Weight: 5.8 grams

Replacement Stylus: Model N24H, Hyperbolic nude diamond tip.

Stylus Grip Color: Gold.

Mounting: Standard 12.7mm (1/2 inch) Mounting Centers.

Model M24H cartridge ......\$74.95 Model N24H replacement stylus ......\$31.00

\*Peak recorded velocity

**FRACKABILITY** CARTRIDGES

For 3/4 to 11/2 Grams Tracking

### ∮ SHURE ®

M95ED Deluxe high trackability cartridge with built-in snap-down stylus guard and biradial elliptical stylus



Second only to one! The Shure M95ED combines several of the highperformance design features of the Shure V-15 Type III with a radically new internal electromagnetic structure to deliver exceptional trackability and total performance surpassed only by the Type III.

The M95ED incorporates a new, thinner, uninterrupted pole piece developed by Shure design engineers to optimize electromagnetic characteristics—especially at higher frequencies. As a result, magnetic losses have been minimized, and frequency response remains essentially flat across the entire frequency range. Dynamic range is significantly extended.

With its nude-mounted, biradial elliptical stylus tip, the M95ED has very low effective stylus tip mass. This provides higher trackability to maintain perfect groove contact through the "hottest," most heavily modulated passages encountered on modern recordings—all at extremely light tracking forces that cut record wear and increase stylus tip life. Its exceptional trackability makes the M95ED an outstanding choice for use in four-channel encoded (matrix) systems.

### **M95ED SPECIFICATIONS**

Trackability at 1 gram tracking force (in CM/SEC peak recorded velocity) using a Shure/SME Arm:

24 CM/SEC at 400 Hz

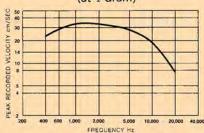
33 CM/SEC at 1,000 Hz

19 CM/SEC at 10,000 Hz

Tracking Force: ¾ to 1½ grams Frequency Response: 20 to 20,000 Hz

Optimum Load: 47,000 ohms resistance in parallel with 400 to 500 pico-farads total capacitance per channel. Load resistance can be as high as 100,000 ohms and total capacitance can be as low as 100 picofarads with

### TRACKABILITY CHART (at 1 Gram)



only minor audible change. Total capacitance includes the capacitances of the tone arm wiring, phono cables, and the amplifier input circuit. (Most amplifiers and tone arms meet this requirement.)

Output Voltage: 4.7 mV per channel at 1,000 Hz at 5 CM/SEC peak recorded velocity

Channel Separation: Minimum 25 dB at 1,000 Hz Channel Balance: Output from each channel within 2 dB

Stylus: N95ED Biradial elliptical nude diamond tip 17.8 microns (.0007 inch) frontal radius 5 microns (.0002 inch) side contact radii

25 microns (.0010 inch) wide between record contact points

Stylus: N95-3 Spherical for monophonic 78 rpm recordings-

63 microns (.0025 inch) stylus tip radius

Inductance: 650 millihenries D. C. Resistance: 1550 ohms

Weight: 6.3 grams

Mounting: Standard 12.7mm (1/2 inch) mounting centers

MODEL M95ED Deluxe Hi-Track Cartridge with Biradial Elliptical stylus .....\$64.95

MODEL N95ED Biradial Elliptical replacement stylus......\$28.10

MODEL N95-3 Spherical stylus designed for monophonic 78 rpm

recordings .....\$11.45

### SHURE "

M95EJ Custom high trackability cartridge with built-in-snap-down stylus guard and biradial elliptical stylus



Designed specifically for owners of heavier tracking (11/2 to 3 grams) turntables and tone arms who want optimum cartridge performance. The M95EJ uses the same newly developed pole piece of the M95ED (above) and delivers a frequency response virtually identical in its flatnessbut at slightly greater tracking forces.

The M95EJ uses a biradial elliptical stylus tip, and delivers excellent trackability. It is the ideal cartridge choice for audiophiles who want to upgrade their record playback systems at moderate cost.

### **M95EJ SPECIFICATIONS**

Trackability at 2 grams tracking force (in CM/SEC peak recorded velocity)

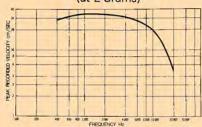
using a Shure/SME Arm:
28 CM/SEC at 400 Hz
35 SM/SEC at 1,000 Hz
Tracking Force: 1½ to 3 grams 30 CM/SEC at 5,000 Hz 20 CM/SEC at 10,000 Hz

Frequency Response: 20 to 20,000 Hz

Optimum Load: 47,000 ohms resistance in parallel with 400 to 500 pico-farads total capacitance per channel. Load resistance can be up to 100,000 ohms and total capacitance can be as low as 100 picofarads with only minor audible change. Total capacitance includes the capacitances of the tone arm wiring, phono cables, and the amplifier input circuit. (Most amplifiers and tone arms meet this requirement.)

### TRACKABILITY CHART

(at 2 Grams)



Output Voltage: 4.7 mV per channel at 1,000 Hz at 5 CM/SEC peak recorded velocity

Channel Separation: Minimum 20 dB at 1,000 Hz Channel Balance: Output from each channel within 2 dB Stylus: N95EJ Biradial elliptical diamond tip

17.8 microns (.0007 inch) frontal radius

10 microns (.0004 inch) side contact radii 25 microns (.0010 inch) wide between record contact points

Stylus: N95-3 Spherical for monophonic 78 rpm recordings—63 microns (.0025 inch) stylus tip radius

Inductance: 650 millihenries D. C. Resistance: 1550 ohms

Weight: 6.3 grams

Mounting: Standard 12.7mm (1/2 inch) mounting centers

MODEL M95EJ Custom Hi-Track Cartridge with Biradial Elliptical stylus .....\$49.95

MODEL N95EJ Biradial Elliptical replacement stylus ......\$23.40 MODEL N95-3 Spherical stylus designed for monophonic 78 rpm

recordings ......\$11.45

DELUXE SERIES OF HIGH TRACKABILITY CARTRIDGES

For 3/4 to 11/2 Grams Tracking

### SHURE

**M91ED Biradial Elliptical Stylus** M91GD Spherical Stylus Deluxe high trackability cartridges



Optimized design parameters in the stylus assembly give these Deluxe Series cartridges superb high frequency trackability, and overall performance previously unavailable at this price level. The ultra-light diamond stylus tip on these cartridges is nude-mounted directly on the stylus bar, reducing effective stylus tip mass and heightening its excellent tracking characteristics. The very high trackability levels reached by these cartridges makes them suitable choices for use in four-channel encoded (matrix) playback systems.

The M91ED, M91GD and M75ED Type 2 have identical performance characteristics. The M75ED Type 2 is offered for those who prefer a builtin snap-down stylus guard. The M91GD is offered for those who prefer a spherical stylus.

### M91ED, M91GD and M75ED Type 2 SPECIFICATIONS

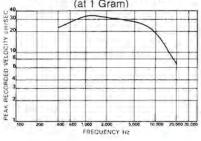
Trackability at 1 gram tracking force (in CM/SEC peak recorded velocity) using a Shure/SME Arm:

22 CM/SEC at 400 Hz 33 CM/SEC at 1,000 Hz 28 CM/SEC at 5,000 Hz 19 CM/SEC at 10,000 Hz

Tracking Force: 34 to 11/2 grams

Frequency Response: From 20 to 20,000 Hz

### TRACKABILITY CHART (at 1 Gram)





### SHURE

M75ED Type 2 Biradial Elliptical Stylus with Built-in Snap-down Stylus Guard

Optimum Load: 47,000 ohms resistance in parallel with 400 to 500 picofarads total capacitance per channel. Load resistance can be up to 70,000 ohms with almost no audible change in frequency response. Total capacitance includes both the tone arm wiring and amplifier input circuit. (Most amplifiers and tone arms meet this requirement.)

Output Voltage: 5.0 mv per channel at 1,000 Hz at 5 CM/SEC Peak re-corded velocity

Output Voltage: 5.0 mv per channel at 1,000 Hz at 5 CM/SEC peak velocity Channel Separation: Minimum 25 dB at 1,000 Hz

Channel Balance: Output from each channel within 2 dB

Stylus: N91ED and N75ED Type 2 Biradial Elliptical with nude diamond tip

17.8 microns (.0007 inch) frontal radius

5 microns (.0002 inch) side contact radii

25 microns (.0010 inch) wide between record contact points

Stylus: N91GD Spherical-15 microns (.0006 inch) radius with nude diamond tip

Inductance: 720 millihenries

D.C. Resistance: 630 ohms

Weight: M91ED, M91GD 5.8 grams; M75ED-2, M75ED Type 2, 6.2 grams

Mounting: Standard 12.7 mm ( 1/2 inch ) mounting centers

MODEL M91ED Deluxe Hi-Track Cartridge with Biradial Elliptical

stylus ......\$59.95 MODEL N91ED Biradial Elliptical replacement stylus......\$27.05

NOTE: Owners of M91E or M92E cartridges may upgrade their present systems by using an N91ED stylus.

MODEL M91GD Deluxe Hi-Track Cartridge with Spherical stylus ... \$49.95 MODEL N91GD Spherical replacement stylus..... \$22.40

MODEL M75ED Type 2 Deluxe Hi-Track Cartridge with Biradial

MODEL N75ED Type 2 Biradial Elliptical replacement stylus..... \$27.05

NOTE: To play 78 rpm records with the M91ED or M91GD cartridges, use a Model N91-3 63 microns (.0025 inch) spherical stylus. To play 78 rpm records with an M75ED Type 2 cartridge, use a Model N75-3 63 microns (.0025 inch) spherical challenges.

inch) spherical stylus,

### SHURE "

### M81CS and M81ECS Cartridges

### REDUCE HUM PICKUP IN TWO-POLE RECORD CHANGERS!

The Shure M81 Series cartridges are direct replacements for the original cartridges used in two-pole turntables. They compare in trackability and frequency response performance to the popular Shure M75 Series cartridges. In addition, the M81CS (with spherical stylus tip) and the M81ECS (with biradial elliptical stylus tip) feature extremely high reduction of hum pickup. M81CS has a tracking force of 3 to 5 grams; the M81ECS has a 2 to 4 gram tracking force.

MODEL M81CS with Spherical stylus .. \$28.00 MODEL N75C Spherical replacement

\$10.00 stylus ... MODEL M81ECS with Biradial Elliptical

. . \$37.95

MODEL N75EC Biradial Elliptical replacement stylus .......\$14.95

### PREMOUNTED DELUXE M91ED HIGH TRACKABILITY CARTRIDGES



For Garrard Zero 100 Turntables Model M91ED-GZ Pre-mounted M91ED cartridge fits Garrard Zero 100 turntables

. . . . . . . . . . \$61.25

For Dual Turntables Model M91ED-DL Fits all Dual "1200" Series automatic turntables tracking from ¾ to 1½ grams ..........\$61.25

### PREMOUNTED CARTRIDGE REPLACEMENT STYLI

MODEL N91ED Biradial Elliptical replacement stylus.

Fits all M91ED premounted cartridges.....\$27.05

CUSTOM SERIES **OF HIGH** TRACKABILITY CARTRIDGES

For 3/4 to 11/2 Grams Tracking

### SHURE

M91E **Biradial Elliptical Stylus Easy-Mount Design** 



About the Custom Hi-Track Series

critical Shure quality control program.

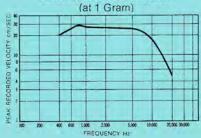
### SHURE

M75G Type 2 Spherical Stylus with Built-in Snap-down Stylus Guard



Excellent trackability in the ¾ to 1½ gram range. Designed for use in high quality manual and automatic turntables. The M91E is available in standard cartridge configuration, or pre-mounted in tone arm head for instant installation in Garrard, Miracord or Dual turntables. The M91E and M75G Type 2 have identical trackability characteristics. The M75G Type 2 is offered for those who prefer a spherical stylus.

### TRACKABILITY CHART



### M91E and M75G Type 2 SPECIFICATIONS

The trackability charts for the cartridges on this page tell you that these cartridges deliver

high trackability at whisper-weight tracking forces—yet they are relatively modest in cost.

Each also features a retractile stylus to prevent record damage, and are available in both

Biradial Elliptical and Spherical stylus configurations. Manufactured and tested under the

Trackability at 1 gram tracking force (in CM/SEC peak recorded velocity)

using a Shure/SME Arm: 20 CM/SEC at 400 Hz 28 CM/SEC at 1,000 Hz

25 CM/SEC at 5,000 Hz 18 CM/SEC at 10,000 Hz

Tracking Force: ¾ to 1½ grams

Frequency Response: From 20 to 20,000 Hz

Optimum Load: 47,000 ohms resistance in parallel with 400 to 500 picofarads total capacitance per channel. Load resistance can be up to 70,000 ohms with almost no audible change in frequency response. Total capacitance includes both the tone arm wiring and amplifier input circuit. (Most amplifiers and tone arms meet this requirement.)

Output Voltage: 5.0 mV per channel at 1,000 Hz at 5 CM/SEC peak recorded velocity

Channel Separation: Minimum 25 dB at 1,000 Hz Channel Balance: Output from each channel with 2 dB

Stylus: N91E Biradial elliptical diamond tip
17.8 microns (.0007 inch) frontal radius
5 microns (.0002 inch) side contact radii
25 microns (.0010 inch) wide between record contact points

Stylus: N75G Type 2 Spherical, 15 microns (.0006 inch) radius diamond tip Inductance: 720 millihenries

D.C. Resistance: 630 ohms

Weight: M91E, 5.6 grams; M75G Type 2, 6.2 grams Mounting: Standard 12.7 mm (1/2 inch) mounting centers

NOTE: To play 78 rpm records with any M91 Series cartridge use an N91-3 microns (.0025 inch) spherical stylus. To play 78 rpm records with any M75 Series cartridge use an N75-3, 63 microns (.0025 inch) spherical stylus.

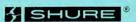
MODEL M91E Custom Hi-Track Cartridge with Biradial Elliptical MODEL N91E Biradial Elliptical replacement stylus ...... \$25.50 MODEL N91G Spherical replacement stylus ......\$15.10 MODEL M75G Type 2 Custom Hi-Track Cartridge with Spherical MODEL N75G Type 2 Spherical replacement stylus . . . . . . . . . . . \$20.05

### PRE-MOUNTED CARTRIDGES

MODEL M91E-GSL Pre-mounted M91E Cartridge fits Garrard SL95B and SL72B automatic turntables ..... 

MODEL M91E-D12 Pre-mounted M91E Cartridge fits all Dual "1200" Series automatic turntables tracking from ¾ to 1½ grams .....

For 11/2 to 3 Grams Tracking



M75B Type 2 Spherical Stylus with **Built-in Snap-down Stylus** Guard

SHURE

M75EJ Type 2 Biradial Elliptical Stylus with **Built-in Snap-down Stylus** Guard



The Shure M75EJ Type 2 and M75B Type 2 cartridges deliver excellent trackability at moderate tracking forces between 1½ and 3 grams, making them ideal choices for moderately priced systems and for upgrading older systems. Trackability measurements (see chart) show that these cartridges track even heavily modulated recordings at velocities that are well above theoretical cutting limits of modern recordings. Choice of Biradial Elliptical or Spherical styli. Both cartridges feature a built-in snap-down stylus guard. The M75EJ Type 2 and M75B Type 2 have identical trackability characteristics. The M75B Type 2 is offered for those who prefer a spherical stylus.

### TRACKABILITY CHART (at 2 Grams)

### M75EJ Type 2 and M75B Type 2 SPECIFICATIONS

Trackability at 2 grams tracking force (in CM/SEC peak recorded velocity) using a Shure/SME Arm:
28 CM/SEC at 400 Hz
35 CM/SEC at 1,000 Hz
20 CM/SEC at 10,000 Hz

Tracking Force: 11/2 to 3 grams

Frequency Response: From 20 to 20,000 Hz

Optimum Load: 47,000 ohms resistance in parallel with 400 to 500 picofarads total capacitance per channel. Load resistance can be up to 70,000 ohms with almost no audible change in frequency response. Total capacitance includes both the tone arm wiring and amplifier input circuit. (Most amplifiers and tone arms meet this requirement.)

Output Voltage: 5.0 mV per channel at 1,000 Hz at 5 CM/SEC peak recorded velocity

Channel Separation: Minimum 20 dB at 1,000 Hz

Channel Balance: Output from each channel within 2 dB

Channel Balance: Output from each channel within 2 dB
Stylus: N75EJ Type 2 Biradial Elliptical diamond tip
17.8 microns (.0007 inch) frontal radius
10 microns (.0004 inch) side contact radii
25 microns (.0010 inch) wide between record
contact points
Stylus: N75B Type 2 Spherical 15 microns (.0006 inch)
radius diamond tip

Inductance: 720 millihenries

D.C. Resistance: 630 ohms

Weight: 6.2 grams Mounting: Standard 12.7 mm (1/2 inch) mounting centers 

MODEL N75EJ Type 2 Biradial Elliptical replacement stylus \$23.40 stylus \$23.40

MODEL M75B Type 2 Custom Hi-Track Cartridge with
Spherical stylus \$38.45

MODEL N75B Type 2 Spherical replacement stylus \$17.45

NOTE: To play 78 rpm records with the M75G Type 2, M75EJ Type 2 or M75B Type 2, use an N75-3 63 microns (.0025 inch) spherical stylus.

EXTRA DURABILITY TRACKABILITY CARTRIDGES

For 11/2 to 5 Grams Tracking

### SHURE

M93E Biradial Elliptical Stylus Hi-Track Cartridge





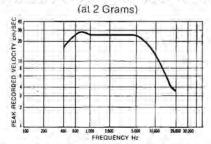
M75-6S, M75ECS and M75CS Hi-Track Cartridges



This high performance series of cartridges was designed to give heavy-duty performance at moderate prices in all modern turn-tables and tone arms. Four High Trackability Cartridges in a choice of tracking force ranges from 1½ to 5 grams—and all feature "snap-in" design for fast, effortless installation.

CARTRIDGE MODEL	STYLUS CONFIGURATION	TRACKING FORCE	REPLACEMEN
M93E	10 microns x 18 microns (.0004" x .0007") Biradial Elliptical	1½-3	N93E
M75-6S	15 microns (.0006") Spherical	11/2-3	N75-6
M75ECS	10 microns x 18 microns (.0004" x .0007") Biradial Elliptical	2-4	N75EC
M75CS	15 microns (.0006") Spherical	3-5	N75C

### TRACKABILITY CHART for M93E and M75-6S



Trackability (in CM/SEC peak recorded velocity) using a Shure/

-M93E and M75-6S at 2 grams tracking force: 18 CM/SEC at 400 Hz 24 CM/SEC at 5,000 Hz 25 CM/SEC at 1,000 Hz 14 CM/SEC at 10,000 Hz 14 CM/SEC at 10,000 Hz -M75CS at 4 grams tracking force: 25 CM/SEC at 400 Hz 39 CM/SEC at 1,000 Hz 25 CM/SEC at 5,000 Hz 15 CM/SEC at 10,000 Hz

M75ECS at 3 grams tracking force: 26 CM/SEC at 400 Hz 37 CM/SEC at 1,000 Hz 21 CM/SEC at 5,000 Hz

12 CM/SEC at 10,000 Hz Frequency Response: From 20 to 20,000 Hz

Output Voltage: M93E and M75-6S, 6.2 mV per channel at 1,000 Hz at 5 CM/SEC peak recorded velocity; M75CS and M75ECS, 9.3 mV per channel at 1,000 Hz at 5 CM/SEC peak recorded

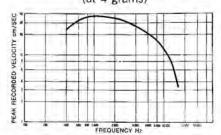
Channel Separation: Minimum 20 dB at 1,000 Hz

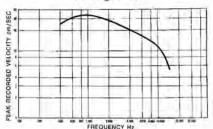
Economy priced, but fine performance when used in moderately priced record changers. Extra durable stylus assemblies for heavy use by the whole family. These cartridges are well suited for institutional (school) and broadcast applications where durability is a performance consideration.

### Easy-Mount Design

Clip-on easy-mount design cuts cartridge mounting time in half. First mount the specially designed retaining clip in the tone arm head-there's plenty of room for your fingers and a screwdriver. Then connect the leads and simply snap the cartridge into the retaining clip. Alignment is precise and positive. Stylus replacement is greatly simplified, too.

### TRACKABILITY CHART for M75CS TRACKABILITY CHART for M75ECS (at 4 grams) (at 3 grams)





Channel Balance: Output from both channels within 2 dB.

Stylus: N93E Biradial Elliptical with diamond tip, 11/2 to 3 grams tracking force

18 microns (.0007 inch) frontal radius 10 microns (.0004 inch) side contact radii 25 microns (.0010 inch) wide between record contact points

N75EC Biradial Elliptical with diamond tip, 2 to 4 grams tracking force

18 microns (.0007 inch) frontal radius 10 microns (.0004 inch) side contact radii 25 microns (.0010 inch) wide between record contact points

N75-6 Spherical 15 microns (.0006 inch) radius with diamond tip, 11/2 to 3

grams tracking force N75C Spherical 15 microns (.0006 inch) radius with diamond tip, 3 to 5 grams tracking force

Optimum Load: 47,000 ohms resistance in parallel with 400 to 500 picofarads total capacitance per channel. Load resistance can be up to 70,000 ohms with almost no audible change in frequency response. Total capacitance includes both the tone arm wiring and amplifier input circuit. (Most amplifiers and tone arms meet this requirement.)

Inductance: 720 millihenries

D C Resistance: 630 ohms

Weight: M93E, 5.7 grams; M75-6S, M75ECS, M75CS, 5.6 grams

Mounting: Snap-in type; standard 12.7 mm (1/2 inch) mounting centers on retaining clip MODEL M93E Hi-Track Cartridge with Biradial Elliptical stylus ..............\$44.95 MODEL N93E Biradial Elliptical replacement stylus ......\$20.30 MODEL M75-6S Hi-Track Cartridge with Spherical stylus ......\$32.50 MODEL N75EC Biradial Elliptical replacement stylus . . . . . . . . . . . . . . . . . \$14.95 MODEL N75C Spherical replacement stylus ......\$10.00

NOTE: To play 78 rpm records with the M93E, use an N91-3, 63 microns (.0025 inch) spherical stylus. Use an N75-3, 63 microns (.0025 inch) spherical stylus to play 78 rpm records with the M75-6S, M75ECS or M75CS.



NEW! M70EJ and M70B Cartridges. the BETTER bargain!



Dollar for dollar, the Shure M70 cartridges are the easiest way to upgrade your hi-fi stereo system without breaking your budget. The M70EJ (with the biradial elliptical stylus tip) and the M70B (with the spherical stylus tip) deliver a basically flat 20 to 20,000 Hz frequency response that's comparable to other brands of cartridges costing twice the price! The 1½ to 3 gram tracking force range means the M70 cartridge series is suitable for the vast majority of stereo systems made today. Channel separation: Minimum 20dB at 1,000 Hz.

Trackability (in CM/SEC peak recorded velocity) at 2 grams:
19 CM/SEC at 400 Hz
11 CM/SEC at 10,000 Hz
26 CM/SEC at 1,000 Hz

MODEL M70EJ Cartridge with Biradial Elliptical stylus	.\$39,50
MODEL N70EJ Biradial Elliptical replacement stylus	.\$15.25
MODEL M70B Cartridge with Spherical stylus	.\$32.50
MODEL N70B Spherical replacement stylus	.\$11.80

NDARD

### SHURE

For 3/4 to 2 Grams Tracking



A popular cartridge that gives professional performance within a moderate budget. Incorporates Biradial elliptical stylus. Note the wide variety of features and impressive specifications:

### **SPECIFICATIONS**

Tracking Force: 34 to 2 grams

Frequency Response: From 20 to 20,000 Hz

Output Voltage: 6.2 millivolts per channel at 1,000 Hz at 5 CM/SEC peak recorded velocity

Channel Separation: Minimum 22 dB at 1,000 Hz

Channel Balance: Output from each channel within 2 dB

Trackability at 1 gram Tracking Force: 12 CM/SEC at 400 Hz

Effective Stylus Tip Mass: 1.2 milligrams

Stylus N55E: Biradial elliptical diamond tip

18 microns (.0007 inch) frontal radius

5 microns (.0002 inch) side contact radii

25 microns (.0010 inch) wide between record contact points

Optimum Load: 47,000 ohms resistance in parallel with 400 to 500 picofarads total capacitance per channel. Load resistance can be up to 70,000 ohms with almost no audible change in frequency response. Total capacitance includes both the tone arm wiring and amplifier input circuit.

Inductance: 720 millihenries

D.C. Resistance: 630 ohms

Weight: 6 grams

Mounting: Standard 12.7 mm ( 1/2") mounting centers

SHURE "

For Heavier Tracking Forces 13/4 to 4 Grams

All the advantages of a Biradial elliptical stylus for older turntables that track at heavier forces. Good performance at a moderate cost.

### SPECIFICATIONS

Tracking Force: 134 to 4 grams

Frequency Response: From 20 to 20,000 Hz

Output Voltage: 9.5 millivolts per channel at 1,000 Hz at 5 CM/SEC peak recorded velocity

Channel Separation: Minimum 20 dB at 1,000 Hz

Trackability at 1% gram Tracking Force: 15 CM/SEC at 400 Hz

Effective Stylus Tip Mass: 1.2 milligrams Stylus N44E: Biradial elliptical diamond tip

18 microns (.0007 inch) frontal radius

10 microns (.0004 inch) side contact radii

25 microns (.0010 inch) wide between record contact points

Optimum Load: 47,000 ohms resistance in parallel with 400 to 500 picofarads total capacitance per channel. Load resistance can be up to 70,000 ohms with almost no audible change in frequency response. Total capacitance includes both the tone arm wiring and amplifier input circuit. (Most amplifiers and tone arms meet this requirement.)

Inductance: 720 millihenries D.C. Resistance: 630 ohms

Weight: 6.5 grams

Mounting: Standard 12.7 mm (1/2") mounting centers

MODEL N44E Stylus ......\$13.00

NOTE: To play 78 RPM records with any of the M44 Series or M55E cartridges, use Model N44-3, 63 microns (.0025 inch) radius, spherical tip stylus.

### SPHERICAL STYLUS CARTRIDGES

### SHURE "

**M44 Series** 

**Combines Quality and Economy** 



Three cartridges in the \$23.00 to \$25.00 price range to fill the needs of the hi-fi hobbyist who wants the most for his money in this price range. All have received ample critical acclaim as the best in their price class. Note: All M44 series styli are interchangeable.

### **SPECIFICATIONS**

Frequency Response: From 20 to 20,000 Hz

Output Voltage: At 1,000 Hz at 5 CM/SEC peak

recorded velocity

Model M44G, 6.2 millivolts per channel

Model M44-7, 9.5 millivolts per channel

Model M44C, 9.5 millivolts per channel

Channel Separation:

M44G: Minimum 25 dB at 1,000 Hz

M44G, M44-7 and M44C: Minimum 20 dB at 1,000 Hz

Optimum Load: 47,000 ohms resistance in parallel with 400 to 500 picofarads total capacitance per channel. Load resistance can be up to 70,000 ohms with almost no audible change in frequency response. Total capacitance includes both the tone arm wiring and amplifier input circuit. (Most amplifiers and tone arms meet this requirement.)

Inductance: 720 millihenries D.C. Resistance: 630 ohms

Weight: 6.5 grams

Mounting: Standard 12.7 mm ( 1/2") mounting centers

For Light Tracking 3/4 to 11/2 Grams

MODEL M44G Cartridge. With 15 microns (.0006 inch) radius spherical diamond stylus MODEL N44G Stylus. 15 microns (.0006 inch) radius spherical diamond tip .......\$10.15

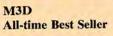
For Heavier Tracking 11/2 to 3 Grams

MODEL M44-7 Cartridge. With 18 microns (.0007 inch) radius spherical diamond stylus ..... MODEL N44-7 Stylus. 18 microns (.0007 inch) radius spherical diamond tip ......\$10.15

For Heaviest Tracking 3 to 5 Grams

MODEL M44C Cartridge. With 18 microns (.0007 inch) radius \$22.95 MODEL N44C Stylus. 18 microns (.0007 inch) radius spherical







Where cost is the dominant factor, the M3D provides extremely musical and transparent sound at a rock-bottom price. The original famous Shure Stereo Dynetic Cartridge . . . with almost universal application. Tracks at forces from 3 to 6 grams. For any changer.

MODEL M3D Cartridge .....\$17.95 





### **分SHURE**

### SME Series II Improved "the best pickup arm in the world"

The ultimate in independent tone arms - now redesigned for significantly superior performance. The Shure-SME Series II Improved combines the flawless craftsmanship and unmatched precision of its predecessor (the SME Series II) with design improvements that reduce tone arm/cartridge system mass and friction to significantly

Ultra-low friction pivot points, with high-precision, protected ball and knife-edge bearings; arm deflects either vertically or horizontally with less than .020 gram force applied at stylus tip. Very low overall mass, with heavier elements positioned near the arm fulcrum. Low distortion geometry.

Precisely accurate adjustments for every factor related to perfect tracking, including height, overhang, length, tracking force and bias (anti-skating). Accepts cartridges weighing four to nine grams, and allows positive tracking force adjustment in 14-gram increments from 0 to 1½ grams. Deluxe hydraulic cuing control.

Recommended for use with all Shure high trackability cartridges tracking at up to 1½ grams and when teamed with the super-trackability Shure V-15 Type III, the result is a tone arm/cartridge system that is, quite simply, unsurpassed for precision record play-back. Highly recommended for connoisseurs' component systems in which quality requirements are uncompromisingly high.

MODEL 3009 Series II Improved (non-removable shell) \$162.00	
MODEL 3009/S2 (removable shell)	
MODEL S2 Extra shell for 3009/S2	
MODEL LCL-4 Low-Capacitance Cable (for four-channel cartridges such as the M24H)	

Note: SME tone arms are distributed by Shure only in the U.S. and Canada.



### **Professional Tone Arm**

A quality arm at an unexpectedly low price. Full range of adjustments for static and dynamic balance, cartridge overhang, arm height, etc. Exceptionally easy to install from the top of the motorboard. Recommended for use with cartridges tracking at 11/2 grams or more.

MODEL M232 for 12" recordings	\$42.50
MODEL M236 for 16" recordings	
MODEL A23H extra plug in head	



### SHURE

M64 and M64-2E Universal Stereo Preamplifier

### For Phonographs, Tape Decks, Microphones

Converts phonos to accept magnetic cartridges

Equalizes and amplifies tape decks Boosts microphone output

Ideal as a broadcast phono preamplifier

The Model M64 is a low-cost, versatile, compact, low noise and low distortion stereo preamplifier that provides gain, equalization, and choice of impedances and levels to solve an unusually broad variety of preamplification and equalization problems. Silicon transistor circuitry, easy permanent-mount installation.

### SPECIFICATIONS

Frequency Response:

Flat — ± 2 db from 20 Hz to 20 KHz Phono — ± 2 db from 40 Hz to 15 KHz (Standard RIAA Curve) Tape — ± 2 db from 50 Hz to 15 KHz (7½ IPS NAB Curve)

Distortion: Under 1% total harmonic distortion for an output of 2

volts at 1 KHz in phono, flat and tape positions Channel Separation: Minimum 50 dB at 1 KHz

Channel Balance: Channels matched to within 2 dB at 1 KHz

Dimensions: 59 mm ( $2^2\%4''$ ) High x 142 mm ( $5^1\%z''$ ) wide x 114 mm ( $4\frac{1}{2}''$ ) Deep Weight: 794 grams (1% lb.)

MODEL M64 Preamplifier—For 120 V.A.C. 50/60 Hz. . . . . . \$57.50 MODEL M64-2E Preamplifier-For 240 V.A.C. 50 / 60 Hz. . . . . \$64.50

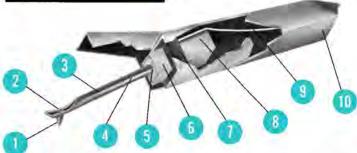


SFG-2 Height: 13 mm (½") Width: 138 mm (5¾6") Depth: 25 mm (1") Stylus Force Weight: 20 grams (0.7 oz.) Gauge

Low-cost, precision stylus force gauge is a must for the serious audiophile. Detects excessive or insufficient tracking force; allows precise resetting of stylus force to maintain optimum trackability and sharply reduce wear on records and stylus tip. Especially valuable when cartridges are switched. Accuracy to within 1/10th of a able when carringes are switched. Accuracy to within 1/10th of a gram in ½ to 1½ gram primary operating range; extended range to 3 grams. The SFG-2 uses friction-free, stainless steel pivot points and easy-to-read reference bars in a permanently accurate "balance" system—no springs to weaken or wear out. Special title-amirror reflects reference bar positions for effortless, accurate reading. Greater accuracy in measurement is obtained because the SFG-2 is used with the tone arm in actual playing position.

MODEL SFG-2 Stylus Force Gauge ......\$5.75





The Shure Stereo Dynetic® Stylus Assembly is a micro-engineering masterpiece that tells your entire stereo system what's happening in the record grooves. It's no simple "needle," but rather a complex miniature assembly made up of seven distinct, interacting subcomponents\* with an aggregate weight of .01 gram (1/2800 of an ounce), and with an effective mass as low as .33 milligrams (referred to the groove contacting stylus tip). Its manufacturing processes look and sound like science fiction, with electro-discharge machining, annealing, shadowgraph positioning and so on.

\* Not counting the stylus grip, guard, or positioning carrier.

### THIS...PROTECTS YOUR MOST EXPENSIVE HI-FI INVESTMENT



Look for the name SHURE on the stylus grip and the words "This Stereo Dynetic® stylus is precision manufactured by Shure Brothers Inc." on the box.

### FREE STYLUS BOOKLET

For more information about Shure styli, send for the authoritative booklet "Small World of the Stylus." Ask for booklet AL402E.

When you buy a replacement stylus, don't be surprised when you find that the cost translates to something like \$20,000 a pound. It's worth it, because all the parts you can't see with a naked eye (shown at left) make up what is—pound for pound— the most complex component in your stereo system!

- 1. Full diamond stone (nude in the Super-Track "Plus" and Deluxe Series)—Equal in quality to the finest quality gem stones. It is precisely shaped and polished, then assembled into an accurately machined mounting—not merely a small chip cemented to the end of the mounting-producing flawless Biradial (elliptical), spherical or hyper-
- Doubly secure mounting The diamond is first press-fitted, then high-temperature epoxy-cemented to insure permanent axial orientation. No short-cuts are ever used.
- 3. Ultra-thin-wall tubular stylus bar Special heat-treated aluminum alloy gives necessary rigidity, with relatively small contribution to mass.
- Dynamic control lever (hidden) Optimizes stylus bar compliance. (V-15 Type III, M24H, M95, M91 and M75 Type 2 series only).
- Center-mounted stylus bar Precisely fitted into electro discharge-machined magnet aperture. (V-15 Type III Series, M24H, M95 Series and M91 Series and M75 Type 2 Series only).
- Pivot control Assures correct positioning and functioning of bearing and support wire.
- 7. Viscoelastic suspension block The "heart" of the bearing. Cyclic temperature variations ranging from —51°C. to 74°C. (—60°F. to 165°F.) will not deteriorate cartridge performance in normal playback environment - nor will humidity adversely affect the performance.
- 8. High energy Alnico magnet Super-strong magnetic field allows for smallest size --contributes less than 20% to effective mass of the assembly.
- Tuned, resonance-free support wire Does not affect performance within the cartridge's operating range.
- 10. Stylus assembly carrier Holds the stylus assembly in precisely the correct position relative to pick-up coils.

NOTE: For information about the uniformity of Shure cartridges and styli, see the "U Factor" explanation on Page 2 of this catalog.

### GENUINE SHURE REPLACEMENT STYLI

### CHECK YOUR SHURE STYLUS PERIODICALLY

True, it's unfortunate . . . and unfortunately, it's true: the diamond tip of ANY high fidelity stylus eventually wears out. Some sooner, some later. The new ultra-lightweight tracking force cartridges (% to 1½ grams) extend diamond tip life many times. But even they need periodic inspection. Depending upon the degree of wear, a worn stylus will (at the very least) appreciably accelerate record wear—or it can actually damage a record beyond redemption, in a single playing! a single playing!

### SHURE PERFORMANCE DEPENDS ON A GENUINE SHURE STYLUS

The superior performance of all Shure cartridges depends upon the Shure Stereo Dynetic\* Stylus Assembly. An inferior stylus replacement will audibly detract from and significantly reduce the cartridge's performance and increase record wear, Obviously, if an imi-tation Shure Stereo Dynetic® Stylus is used, we cannot guarantee that the cartridge will perform to published specifications. Accept no substitute. Look for this wording:

"This Stereo Dynetic® Stylus is precision manufactured by Shure Brothers Inc."

### HOW TO UPGRADE OLDER SHURE CARTRIDGES WITH A NEW STYLUS

It is possible to actually upgrade your cartridge by using a higher compliance stylus assembly which tracks at lighter force, or by using an elliptical stylus in place of a spherical stylus for reduction of IM, harmonic and tracing distortion. Here are some examples of improvements:

M3D or M7D . . Substitute N21D stylus for greater compliance, lighter tracking (2½ grams maximum).

Any M44 Cartridge . . . Substitute N55E stylus for greater compliance and lighter tracking (at % to 2 grams). For tracking at 1% to 4 grams, use the N44E stylus.

Any M71, M73 or M75 Cartridge . . . Substitute N75 Type 2 stylus for higher trackability.

Any M91, M92 or M93 Cartridge . . . Substitute N91ED stylus for lower stylus tip mass and higher trackability at  $\frac{3}{2}$  to  $\frac{1}{2}$  grams.

### REPLACEMENT DIAMOND STYLI FOR OLDER SHURE CARTRIDGES

MODEL N21D Stylus. 18 microns (.0007") spherical tip radius. Direct replacement for M7/N21D and M3/N21D cartridges..\$11.45 MODEL N22D Stylus, 13 microns. (.0005") spherical tip radius. Fits M22, M7/N21D, M3/N21D, M3D and M7D cartridges...\$25.75 MODEL N44-1 Stylus, 25 microns (.0010") soherical tip radius. For mono L.P.'s. Fits M44 series, M55E and V-15 Type I MODEL N77 Stylus. 18 microns (.0007") spherical tip radius. Fits M77 cartridge ..... MODEL VN2E Stylus. Biradial elliptical tip. Fits V-15 Type I. . . . \$27.00 MODEL VN7 Stylus. Spherical tip radius. Fits V-15 Type II-7....\$26.00. MODEL VN15E Stylus. Biradial elliptical tip. Fits V-15 Type II... \$29.00 STYLI FOR 78 RPM RECORDS

If you have a large collection of 78 rpm records, you can equip the M31E, M32E, any M44 series cartridge, M55E, M70, M71, M73, M75, M75 Type 2 series, M81, M91, M92, M93 series, M95, V-15 Type 1, II, or III cartridges with a special stylus for 78 rpm records.

MODEL N32-3 Stylus.63 microns (.0025") spherical tip radius. 

MODEL N70-3 Stylus. 63 microns (.0025") spherical tip radius.

Fits M70 series cartridges. \$10.40

MODEL N75-3 Stylus. 63 microns (.0025") spherical tip radius.
Fits the M71, M73, M75, M75 Type 2 series, M81 and V-15
Type II cartridges \$10.40

MODEL N91-3 Stylus. 63 microns (.0025") spherical tip radius. Fits the M91, M92, M93, M91GD and M91ED series cartridges

MODEL N95-3 Stylus. 63 microns (.0025") spherical tip radius. Fits M95ED and M95EJ cartridges..... ..\$11.45

MODEL VN78E Stylus. 63 microns x 18 microns (.0025" x .0007"). Biradial Elliptical tip radii. Fits V-15 Type III cartridge \$30.00 All styli designed for use with 78 rpm recordings track between 1½ grams and 3 grams, except the N32-3 which tracks at 2½ to 5 grams.

### STYLUS GROUP

### REPLACEMENT STYLUS CHART

(All styli are diamond)







Cartridge Model Replacement Stylus Model		Stylus Group	Stylus Radius	Stylus Color Code	Tracking Force (grams)
DM101MG	N91GD*	н	15 microns (.0006")	Red	3/4 - 11/2
DM103ME	N91ED*	10	† 5 microns x 18 microns (.0002" x .0007")	Yellow	34 - 11/2
DU10-M75E Type 2	N75ED Type 2*	E	† 5 microns x 18 microns (.0002" x .0007")	Black	3/4 - 11/2
M3D	N3D	В	18 microns (.0007")	(A)	3-6
M3/N21D	N21D	ь	18 microns (.0007")	(B)	11/2 - 21/2
M7D	N3D*		18 microns (.0007")	(A)	3-6
M7DMF	N3D*		18 microns (.0007")	(A)	3-6
M7/N21D	N21D	В	18 microns (.0007")	(B)	11/2 - 21/
M8D	N3D*	9	18 microns (.0007")	(A)	3-6
M21	N21D		18 microns (.0007")	(B)	11/2 - 21/
M22 (Stereo only)	N22D		15 microns (.0006")	©	3/4 - 11/
M24H	N24H	L	Hyperbolic	Gold	1 - 11/
M31E	N31E		† 5 microns x 18 microns (.0002" x .0007")	Yellow	1-2
M32E	N32E	G	†10 microns x 18 microns (.0004" x .0007")	Brown	21/2-5
M32-3	N32-3		63 microns (.0025")	Dark Green	21/2 - 5
M33-5	N99*	D	18 microns (.0007")	Gray	11/2 - 3
M44C	N44C		18 microns (.0007")	Light Blue	3 - 5
M44E	N44E		+10 microns x 18 microns (.0004" x .0007")	Brown	13/4 - 4
M44EM	N44E*		†10 microns x 18 microns (.0004" x .0007")	Brown	13/4 - 4
M44-G	N44G*		15 microns (.0006")	Gray	3/4 - 11/
M44MA	N44-7*		18 microns (.0007")	White	11/2 - 3
M44MB	N44-7*	0	18 microns (.0007")	White	11/2 - 3
M44MC	N44C*	Α	18 microns (.0007")	Light Blue	3-5
M44MF	N44G*		15 microns (.0006")	Gray	34 - 11
M44MG	N44G*		15 microns (.0006")	Gray	34 - 11/
M44-5	N44G*		15 microns (.0006")	Gray	3/4 - 11/
M44-7	N44-7		18 microns (.0007")	White	11/2 - 3
M55E	N55E		† 5 microns x 18 microns (.0002" x .0007")	Yellow	3/4 - 2
M55EM	N55E*		† 5 microns x 18 microns (.0002" x .0007")	Yellow	3/4 - 2
M70EJ	N70EJ	C	†10 microns x 18 microns (.0004" x .0007")	Light Green	11/2 - 3
M70B	N70B		15 microns (.0006")	Beige	1½-3
M71C	N75C*		15 microns (.0006")	Light Blue	3-5
M71EB	N75EJ Type 2*		†10 microns x 18 microns (.0004" x .0007")	Light Green	11/2 - 3
M71EMB	N75EJ Type 2*		†10 microns x 18 microns (.0004" x .0007")	Light Green	11/2-3
M71MB	N75-6*		15 microns (.0006")	Beige	1½-3
M71MC	N75C*		15 microns (.0006")	Light Blue	3-5
M71-6	N75-6*		15 microns (.0006")	Beige	11/2-3
M73G	N75G Type 2*		15 microns (.0006")	Dark Gray	34 - 11/
M73MG	N75G Type 2*	] ]	15 microns (.0006")	Dark Gray	3/4 - 11/
M75BM	N75-6		15 microns (.0006")	Beige	11/2 - 3
M75CS	N75C		15 microns (.0006")	Light Blue	3-5
M75E	N75ED Type 2*		† 5 microns x 18 microns (.0002" x .0007")	Black	3/4 - 11/
M75ECS	N75EC		†10 microns x 18 microns (.0004" x .0007")	Brown	2-4
M75E Type 2	N75ED Type 2*		† 5 microns x 18 microns (.0002" x .0007")	Black	3/4 - 11/
M75ED Type 2	N75ED Type 2	, 1	† 5 microns x 18 microns (.0002" x .0007")	Black	3/4 - 11/
M75EJ Type 2	N75EJ Type 2	E	†10 microns x 18 microns (.0004" x .0007")	Light Green	1½-3
M75E-D19	N75ED Type 2*	1	† 5 microns x 18 microns (.0002" x .0007")	Black	3/4 - 11/
M75E-D19 Type 2	N75ED Type 2*		† 5 microns x 18 microns (.0002" x .0007")	Black	3/4 - 11/
M75EM	N75ED Type 2*		† 5 microns x 18 microns (.0002" x .0007")	Black	3/4 - 11/
M75EM Type 2	N75ED Type 2*		† 5 microns x 18 microns (.0002" x .0007")	Black	3/4 - 11/
M75E-P20 Type 2	N75ED Type 2*		† 5 microns x 18 microns (.0002" x .0007")	Black	3/4 - 11/
M75E-95G	N75ED Type 2*		† 5 microns x 18 microns (.0002" x .0007")	Black	3/4 - 11/
M75E-95G Type 2	N75ED Type 2*		† 5 microns x 18 microns (.0002" x .0007")	Black	3/4 - 11/
M75G	N75G Type 2*		15 microns (.0006")	Dark Gray	3/4 - 11/
M75G Type 2	N75G Type 2		15 microns (.0006")	Dark Gray	3/4 - 11/
M75MB	N75B Type 2*		15 microns (.0006")	Beige	11/2 - 3
M75MB Type 2	N75B Type 2		15 microns (.0006")	Beige	1½-3
M75MG	N75G Type 2*		15 microns (.0006")	Dark Gray	3/4 - 11/3
M75MG Type 2	N75G Type 2*		15 microns (.0006")	Dark Gray	3/4 - 11/
M75MG-D	N75G Type 2*		15 microns (.0006")	Dark Gray	3/4 - 11/
M75 Type D	N75-6		15 microns (.0006")	Beige	11/2 - 3
M75-6	N75-6		15 microns (.0006")	Beige	11/2-3
M75B Type 2	N75B Type 2		15 microns (.0006")	Beige	11/2 - 3
M75-6 Type 2	N75-6 Type 2		15 microns (.0006")	Beige	11/2 - 3

















Cartridge Model Replacement Stylus Model		Stylus Group	Stylus Radius	Stylus Color Code	Tracking Force (grams)	
M75-6S	N75-6	E	15 microns (.0006")	Beige	1½-3	
M77	N77		18 microns (.0007")	Black	3-6	
M77D	N77*	D	18 microns (.0007")	Black	3-6	
M77MD	N77*		18 microns (.0007")	Black	3-6	
M80E	N55E		† 5 microns x 18 microns (.0002" x .0007")	Yellow	3/4 - 2	
M80E-D	N55E	A	† 5 microns x 18 microns (.0002" x .0007")	Yellow	3/4 - 2	
M80E-D19	N55E		† 5 microns x 18 microns (.0002" x .0007")	Yellow	3/4 - 2	
M81MC	N75C*		15 microns (.0006")	Light Blue	3-5	
M81CS	N75C	E	15 microns (.0006")	Light Blue	3-5	
M81ECS	N75EC		†10 microns x 18 microns (.0004" x .0007")	Brown	2-4	
M91E	N91E		† 5 microns x 18 microns (.0002" x .0007")	Black	3/4 - 11/2	
M91ED**	N91ED		† 5 microns x 18 microns (.0002" x .0007")	Yellow	3/4 - 11/2	
M91GD**	N91GD		15 microns (.0006")	Red	3/4 - 11/2	
M91G	N91G		15 microns (.0006")	Gray	3/4 - 11/2	
M91MGD	N91GD*	- H	15 microns (.0006")	Red	3/4 - 11/2	
M92E	N91E*		† 5 microns x 18 microns (.0002" x .0007")	Black	3/4 - 11/2	
M92G	N91GD*		15 microns (.0006")	Red	3/4 - 11/2	
M93E	N93E		†10 microns x 18 microns (.0004" x .0007")	Light Green	11/2 - 3	
M95ED	N95ED		† 5 microns x 18 microns (.0002" x .0007")	Yellow	3/4 - 11/2	
M95EJ	N95EJ	K	†10 microns x 18 microns (.0004" x .0007")	Light Green	11/2 - 3	
M95G	N95G	,,	15 microns (.0004")	Gray	3/4 - 11/2	
M98/A	N44-7	A	18 microns (.0007")	White	11/2 - 3	
M99/A	N99		18 microns (.0007")	Gray	11/2 - 3	
M99/AT6	N99	D	18 microns (.0007")	Gray	1½-3	
M99/M10	N99	1	18 microns (.0007")	Gray	1½-3	
R7C	N75C*		15 microns (.0007")	Light Blue	3-5	
R27E	N75ED Type 2*	1	† 5 microns x 18 microns (.0002" x .0007")	Black	34 - 11/2	
R47EB	N75EJ Type 2*	E	†10 microns x 18 microns (.0002 x .0007)	Light Green	11/2 - 3	
R700E	N75ED Type 2*		† 5 microns x 18 microns (.0002" x .0007")	Black	34 - 11/2	
RM900E	N91E*	Н	† 5 microns x 18 microns (.0002" x .0007")	Black	3/4 - 11/2	
RM910E	N75EJ Type 2*	п	†10 microns x 18 microns (.0002 x .0007)	Light Green	1½ - 3	
RM930C	N75C*		15 microns (.0004 × .0007 )	Light Blue	3-5	
	N3D*	-	18 microns (.0008 )	(A)	3-6	
RS100		В				
RS120E	N32E*	G	†10 microns x 18 microns (.0004" x .0007")	Brown	2½ - 5 1 - 2	
RS220E	N31E*		† 5 microns x 18 microns (.0002" x .0007")	Yellow		
SL95-M75E Type 2	N75ED Type 2*	E	† 5 microns x 18 microns (.0002" x .0007")	Black	3/4 - 11/2 3/4 - 11/2	
V-15	VN2E	Α	† 5 microns x 18 microns (.0002" x .0007")	Black		
V-15 Type II***	VN15E	F	† 5 microns x 18 microns (.0002" x .0007")	Black	3/4 - 11/2	
V-15 II-7	VN7		18 microns (.0007")	Gray	3/4 - 11/2	
V-15 Type III	VN35E	J	† 5 microns x 18 microns (.0002" x .0007")	Black	3/4 - 11/4	
V-15 III-G	VN3-G		15 microns (.0006")	Gray	3/4 - 11/4	
24-0003	N3D*	В	18 microns (.0007")	(A)	3-6	
24-0044	N44E	A	†10 microns x 18 microns (.0004" x .0007")	Brown	13/4 - 4	

† Elliptical.

\*Styli marked with (\*) provide equal or better performance than original styli.

\*\*The M91GD and M91ED are identical in performance to the Dual DM101MG and DM103ME.

\*\*\*Includes both V15 Type II and V15 Type II (improved) Models.

(a) Gold Spade—Large Silver Shank (b) Gold Spade—Small Silver Shank (c) Silver Spade—Silver Shank

NOTE: For units not listed, write to Shure.

### PRE-MOUNTED CARTRIDGES:

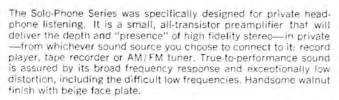
Pre-mounted cartridges feature the V-15 Type III, M91E, M91ED as indicated, already mounted in the tone arm head, ready for instant installation without further assembly.

Turntable Manufacturer	Model	Cartridge	Stylus Model	Tracking Force (grams)	Stylus Radius	Stylus Grip Color Code	Stylus Function
Elac	770H, 50H 750, 660H, 660, 630, 625, 620	M91E-50H	N91E	34 - 11/2	5 microns x 18 microns (.0002" x .0007")	Black	Stereo-Mono LP
Dual	1229, 1219, 1218, 1215S, 1215, 1209	V-15 III-DL M91E-D12 M91ED-DL	VN35E N91E N91ED	3/4 - 11/4 3/4 - 11/2 3/4 - 11/2	5 microns x 18 microns (.0002" x .0007")	Black Black Yellow	Stereo-Mono LP Stereo-Mono LP Stereo-Mono LP
Garrard	SL95B, SL75B, SL72B	M91E-GSL	N91E	34 - 11/2	5 microns x 18 microns (.0002" x .0007")	Black	Stereo-Mono LP
Garrard	Zero-100	V-15 III-GZ M91ED-GZ	VN35E N91ED	3/4 - 11/4 3/4 - 11/2	5 microns x 18 microns (.0002" x .0007")	Black Yellow	Stereo-Mono LP Stereo-Mono LP



### **∮** SHURE

Model SA-1, SA-2 For Use With The Sound Source of Your Choice



### VERSATILE ...

Tape, record changer or tuner . . . you can easily vary the sound source. You also can use the Solo-Phone amplifier with one or two sets of headphones, or even with high efficiency speakers, for low-volume background music. Each stereo channel can be adjusted separately to achieve proper balance. U.L. listed. Weighs just 910 g (2 lbs.)



MODEL SA-1 SOLO-PHONE AMPLIFIER: 108-132 V., AC., 260 mm x 89 mm x 76 mm (10¼" x 3½" x 3"). Less Headphones
MODEL SA-2E
Same as SA-1 except for 120 V. or 240 V., AC, 50-60 Hz. No plug.
MODEL SA-IF SOLO-PHONE FOR PANEL MOUNTING.* 108-132 V., AC., 302 mm x 124 mm x 79 mm
(11%" x 55%" x 34%") Less Headphones \$63.50
MODEL SA-2FE Same as SA-1F except for 120 V. or 240 V., AC, 50-60 Hz. No plug.
\$66.00

\*The SA-1F is listed by Canadian Standards Association as certified.

### CARTRIDGE SELECTION GUIDE

Just as a chain is no stronger than its weakest link, and a camera only as good as its lens, the quality of your stereo system can be no better than your weakest component.

Case in point: A superb light tracking cartridge operating in a tone arm designed to be used at heavier tracking forces will yield far poorer results than a cartridge designed to track in the correct range of that tone arm.

Conversely, it is a waste to utilize a heavier tracking cartridge (with the resultant increase in stylus and record wear) where a very light tracking cartridge can be used.

It is with this in mind that the following recommendations are made.

CARTRIDGE RECOMMENDATIONS	FOR THESE OPERATING PARAMETERS		
V-15 Type III	For ultimate performance in precision quality manual tone arms and automatic turn tables capable of tracking at 1¼ grams or less.		
M24H	For uncompromised performance in BOTH stereo and quadriphonic (matrix and discrete) systems capable of tracking at $1\text{-}1\frac{1}{2}$ grams.		
M95ED	Second only to V-15 Type III. Use in same general applications when cost is a factor.		
M91ED M75ED Type 2	For deluxe performance in high quality manual tone arms and automatic turntables capable of tracking at $1\frac{1}{2}$ grams or less.		
M95EJ M75EJ Type 2	For custom performance in standard manual tone arms and automatic turntables that operate in the $1\frac{1}{2}$ -3 gram tracking force range.		
M75ECS	For extra-durable high-track performance in older manual tone arms and record changers requiring 2-4 gram tracking for optimum operation.		
M75CS	For upgrading older, heavier tracking cartridges or for maximum economy in virtuall any tone arm or record changer tracking from 3-5 grams.		
M70EJ M70B	For maximum economy in upgrading hi-fi systems capable of tracking forces of $1\frac{1}{2}$ -3 grams,		
	NOTE: Other Shure cartridges, in the appropriate tracking force range, may be used if preferred.		

THE SHURE CARTRIDGES LISTED ABOVE ARE COMPATIBLE WITH ALL FOUR-CHANNEL MATRIX SYSTEMS

