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 miniaturized 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 3/4 gram) and the extraordinary Shure V-15 Type III (shown at 3/4 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 track these grooves...

but only a high trackability cartridge can cope with this groove!

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 "ss" 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.
### Trackability (CM/SEC) Peak Recorded Velocity

Trackability Tracking

Model 10,000 Measured Force Stylus Net

<table>
<thead>
<tr>
<th>Model No.</th>
<th>Page No.</th>
<th>400 Hz</th>
<th>1000 Hz</th>
<th>5000 Hz</th>
<th>10,000 Hz</th>
<th>Trackability Measured (Grams)</th>
<th>Tracking Force Range</th>
<th>Stylus Configuration</th>
<th>Type</th>
<th>Net Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>V-15 Type III</td>
<td>4 5</td>
<td>26</td>
<td>38</td>
<td>35</td>
<td>26</td>
<td>1 Gram</td>
<td>¼ to 1½</td>
<td>5 microns x 18 microns (0.0002” x 0.0007”)</td>
<td>Standard Mount with Snap-Down Stylus Guard</td>
<td>$85.00</td>
</tr>
<tr>
<td>V-15 III-G</td>
<td>4 5</td>
<td>26</td>
<td>35</td>
<td>35</td>
<td>26</td>
<td>1 Gram</td>
<td>¼ to 1½</td>
<td>15 microns (0.0006”)</td>
<td>Standard Mount with Snap-Down Stylus Guard</td>
<td>$80.00</td>
</tr>
<tr>
<td>M95ED</td>
<td>7 24</td>
<td>33</td>
<td>28</td>
<td>19</td>
<td>1 Gram</td>
<td>¼ to 1½</td>
<td>5 microns x 18 microns (0.0002” x 0.0007”)</td>
<td>Standard Mount with Snap-Down Stylus Guard</td>
<td>$64.95</td>
<td></td>
</tr>
<tr>
<td>M91ED</td>
<td>8 22</td>
<td>33</td>
<td>28</td>
<td>19</td>
<td>1 Gram</td>
<td>¼ to 1½</td>
<td>5 microns x 18 microns (0.0002” x 0.0007”)</td>
<td>Standard Mount with Snap-Down Stylus Guard</td>
<td>$59.95</td>
<td></td>
</tr>
<tr>
<td>M91GD</td>
<td>8 22</td>
<td>33</td>
<td>28</td>
<td>19</td>
<td>1 Gram</td>
<td>¼ to 1½</td>
<td>5 microns x 18 microns (0.0002” x 0.0007”)</td>
<td>Standard Mount with Snap-Down Stylus Guard</td>
<td>$59.95</td>
<td></td>
</tr>
<tr>
<td>M75ED Type 2</td>
<td>8 22</td>
<td>33</td>
<td>28</td>
<td>19</td>
<td>1 Gram</td>
<td>¼ to 1½</td>
<td>5 microns x 18 microns (0.0002” x 0.0007”)</td>
<td>Standard Mount with Snap-Down Stylus Guard</td>
<td>$59.95</td>
<td></td>
</tr>
<tr>
<td>M95EJ</td>
<td>7 28</td>
<td>35</td>
<td>30</td>
<td>20</td>
<td>2 Grams</td>
<td>½ to 3</td>
<td>10 microns x 18 microns (0.0004” x 0.0007”)</td>
<td>Standard Mount with Snap-Down Stylus Guard</td>
<td>$49.95</td>
<td></td>
</tr>
<tr>
<td>M91E</td>
<td>9 20</td>
<td>25</td>
<td>25</td>
<td>18</td>
<td>1 Gram</td>
<td>¼ to 1½</td>
<td>5 microns x 18 microns (0.0002” x 0.0007”)</td>
<td>Snap-In Easy-Mount</td>
<td>$59.95</td>
<td></td>
</tr>
<tr>
<td>M75G Type 2</td>
<td>9 20</td>
<td>28</td>
<td>25</td>
<td>18</td>
<td>1 Gram</td>
<td>¼ to 1½</td>
<td>15 microns (0.0006”)</td>
<td>Standard Mount with Snap-Down Stylus Guard</td>
<td>$43.45</td>
<td></td>
</tr>
<tr>
<td>M75EJ Type 2</td>
<td>9 28</td>
<td>35</td>
<td>32</td>
<td>20</td>
<td>2 Grams</td>
<td>½ to 3</td>
<td>10 microns x 18 microns (0.0004” x 0.0007”)</td>
<td>Standard Mount with Snap-Down Stylus Guard</td>
<td>$49.95</td>
<td></td>
</tr>
<tr>
<td>M75B Type 2 (Formerly M75-6 Type 2)</td>
<td>9 28</td>
<td>35</td>
<td>32</td>
<td>20</td>
<td>2 Grams</td>
<td>½ to 3</td>
<td>15 microns (0.0006”)</td>
<td>Standard Mount with Snap-Down Stylus Guard</td>
<td>$38.45</td>
<td></td>
</tr>
<tr>
<td>M93E</td>
<td>10 18</td>
<td>25</td>
<td>24</td>
<td>14</td>
<td>2 Grams</td>
<td>½ to 3</td>
<td>10 microns x 18 microns (0.0004” x 0.0007”)</td>
<td>Snap-In Easy-Mount</td>
<td>$44.95</td>
<td></td>
</tr>
<tr>
<td>M70EJ</td>
<td>10 19</td>
<td>26</td>
<td>23</td>
<td>13</td>
<td>2 Grams</td>
<td>½ to 3</td>
<td>10 microns (0.0004”)</td>
<td>Standard Mount</td>
<td>$39.50</td>
<td></td>
</tr>
<tr>
<td>M70B</td>
<td>10 19</td>
<td>26</td>
<td>23</td>
<td>13</td>
<td>2 Grams</td>
<td>½ to 3</td>
<td>15 microns (0.0006”)</td>
<td>Standard Mount</td>
<td>$32.50</td>
<td></td>
</tr>
<tr>
<td>M75-6S</td>
<td>10 18</td>
<td>25</td>
<td>24</td>
<td>14</td>
<td>2 Grams</td>
<td>½ to 3</td>
<td>15 microns (0.0006”)</td>
<td>Snap-In Easy-Mount</td>
<td>$32.50</td>
<td></td>
</tr>
<tr>
<td>M75ECS</td>
<td>10 26</td>
<td>37</td>
<td>21</td>
<td>12</td>
<td>3 Grams</td>
<td>2 to 4</td>
<td>10 microns x 18 microns (0.0004” x 0.0007”)</td>
<td>Snap-In Easy-Mount</td>
<td>$34.95</td>
<td></td>
</tr>
<tr>
<td>M75CS</td>
<td>10 25</td>
<td>39</td>
<td>25</td>
<td>15</td>
<td>4 Grams</td>
<td>3 to 5</td>
<td>15 microns (0.0006”)</td>
<td>Snap-In Easy-Mount</td>
<td>$28.50</td>
<td></td>
</tr>
<tr>
<td>M24H</td>
<td>9 20</td>
<td>28</td>
<td>47</td>
<td>50</td>
<td>¼ Grams</td>
<td>1 to 1½</td>
<td>15 microns (0.0006”)</td>
<td>Standard Mount with Snap-Down Stylus Guard</td>
<td>$74.95</td>
<td></td>
</tr>
</tbody>
</table>

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

These cartridges were designed prior to the development of trackability measurement techniques. They are intended for economy systems; however, the trackability of these cartridges is good, and will generally exceed the trackability potential of the associated equipment with which they are used.
The remarkable Shure V-15 Type III Phonograph Cartridge was designed for the connoisseur's high fidelity system. It clearly defines the outer limits of the state of the art of phonograph cartridge design, and is indeed the worthy successor to the world-acclaimed Shure V-15 Type II Improved.

Among its brilliant innovations is a laminated magnetic core structure, and an exquisitely designed stylus assembly with 25% reduction of effective mass.

Result: (1) Higher-than-ever trackability at the ultra-light tracking forces of the 1970's; (2) an astonishingly flat frequency response with no noticeable emphasis or de-emphasis at any frequency; (3) an extended dynamic range even beyond that of our V-15 Type II Improved; and (4) all this without a reduction in output level.

We call the Type III the Synergistic Cartridge because it maintains all performance factors in perfect equilibrium to produce a total audio effect that is greater than the sum of its individual improvements would indicate.

All in all, the V-15 Type III offers you an extraordinary listening experience.

Note: For a collection of critics' test reports published in high fidelity, electronics and audio publications throughout the world, write for the Shure Compendium of Critical Reviews (Ask for Booklet AL482).
For 4⅞ to 1⅛ Grams Tracking

THE SOUND OF THE V-15 TYPE III

The sound of the V-15 Type III is paradoxically due in no small part to an absence of a sound of its own. In no way does it interfere with 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 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.

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.

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

V-15 Type III Styli Available:

- VN3-B radial Elliptical Stylus, Diamond Tip
- VN3-G Spherical Stylus, (as supplied in V-15 III Cartridge)
- VN78E Biradial Elliptical Stylus, .8 grams (Biradial Elliptical Stylus)
- VN35E Spherical Stylus, (as supplied in V-15 III-G Cartridge)
- VN15IIIGZ Super-Track cartridge pre-mounted for GARARD Zero automatic turntables tracking from ¾ to 1¾ grams (Biradial Elliptical Stylus)
- VN79E Spherical Stylus, (as supplied in V-15 III-G Cartridge)
- VN3-G, 15 microns (.0006 inch) Spherical stylus fits V-15 Type III and V-15 III-G cartridges
- VN35E Spherical Stylus, .8 grams (Biradial Elliptical Stylus) designed for monophonic 78 rpm recordings, fits V-15 Type III and V-15 III-G cartridges

Frequency Response (using Optimum Load): 10 to 25,000 Hz

D.C. Resistance: 1350 ohms nominal

Inductance: 500 millihenries nominal

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 change in frequency response. Total capacitance includes both the tone arm wiring and amplifier input circuit. (Most amplifiers and tone arms meet this requirement.)

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. It normally requires no manual adjustment of the tone arm's tracking force setting.

Mounting: Standard 12.7 mm (½ inch) mounting centers.

Weight: Net Weight—6.9 grams

MODEL V-15 Type III Super-Track cartridge .................. $85.00
MODEL V-15 III-G Super-Track cartridge with .0006" Spherical stylus .......... $80.00
MODEL V-15 III-DL Super-Track cartridge pre-mounted for DUAL "1200 Series" automatic turntables tracking from ¾ to 1¾ grams (Biradial Elliptical Stylus) .................. $86.00
MODEL V-15 III-GZ Super-Track cartridge pre-mounted for GARARD Zero automatic turntables tracking from ¾ to 1¾ grams (Biradial Elliptical Stylus) .................. $86.00
MODEL VN33E Biradial Elliptical stylus fits V-15 Type III and V-15 III-G cartridges .................. $31.00
MODEL VN78E Spherical stylus fits V-15 Type III and V-15 III-G cartridges .......... $29.00
MODEL VN35E Spherical stylus, .8 grams (Biradial Elliptical Stylus) ....... $30.00

V-15 III-G Spherical Stylus, (as supplied in V-15 III-G Cartridge)

Diamond Tip (15 microns (.0006 inch) radius)

5 to 78000 Hz

Output Terminals: 4 terminals

Specifications:

- Tracking Force Range: 3⅜ to 1⅛ grams
- Frequency Response: 10 to 25,000 Hz
- D.C. Resistance: 1350 ohms nominal
- Output Terminals: 4 terminals
- Total capacitance includes both the tone arm wiring and amplifier input circuit. (Most amplifiers and tone arms meet this requirement.)

Weight: Net Weight—6.9 grams

Model VN35E Spherical Stylus, (as supplied in V-15 III-G Cartridge)

Diamond Tip (15 microns (.0006 inch) radius)

5 to 78000 Hz

Output Terminals: 4 terminals

Specifications:

- Tracking Force Range: 3⅜ to 1⅛ grams
- Frequency Response: 10 to 25,000 Hz
- D.C. Resistance: 1350 ohms nominal
- Output Terminals: 4 terminals
- Total capacitance includes both the tone arm wiring and amplifier input circuit. (Most amplifiers and tone arms meet this requirement.)

Weight: Net Weight—6.9 grams

Model VN78E Spherical stylus fits V-15 Type III and V-15 III-G cartridges

Diamond Tip (15 microns (.0006 inch) radius)

5 to 78000 Hz

Output Terminals: 4 terminals

Specifications:

- Tracking Force Range: 3⅜ to 1⅛ grams
- Frequency Response: 10 to 25,000 Hz
- D.C. Resistance: 1350 ohms nominal
- Output Terminals: 4 terminals
- Total capacitance includes both the tone arm wiring and amplifier input circuit. (Most amplifiers and tone arms meet this requirement.)

Weight: Net Weight—6.9 grams

Model VN33E Biradial Elliptical stylus fits V-15 Type III and V-15 III-G cartridges

Diamond Tip (15 microns (.0006 inch) radius)

5 to 78000 Hz

Output Terminals: 4 terminals

Specifications:

- Tracking Force Range: 3⅜ to 1⅛ grams
- Frequency Response: 10 to 25,000 Hz
- D.C. Resistance: 1350 ohms nominal
- Output Terminals: 4 terminals
- Total capacitance includes both the tone arm wiring and amplifier input circuit. (Most amplifiers and tone arms meet this requirement.)

Weight: Net Weight—6.9 grams

Model VN35E Spherical stylus, .8 grams (Biradial Elliptical Stylus) ....... $30.00

Extraordinary Trackability

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 — 25 CM/SEC*
- 1000 Hz — 35 CM/SEC*
- 5000 Hz — 55 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 20,000 Hz

Tracking Force Range: 3⅜ to 1⅛ grams

Optimum Load: 47,000 ohms resistance in parallel with 400 to 500 pic­farads total capacitance per channel. Load resistance can be up to 70,000 ohms with almost no 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 normal

D.C. Resistance: 1350 ohms nominal

Output Terminals: 4 terminals

V-15 Type III cartridges:

- VN3-B radial Elliptical Stylus, 15 microns (.0006 inch) side contact radii
- VN3-G Spherical Stylus, 15 microns (.0006 inch) side contact radii
STEREO + QUADRIPHONIC CARTRIDGES

For 1 to 1 1/2 Grams Tracking

The new Shure M24H Wide-Range Dynetick® 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 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, CDA) with traditional Shure fidelity.

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, phone cables, and the amplifier input circuit.
Tracking Force Range:
Minimum: 1 gram
Optimum: 1 1/4 grams
Maximum: 1 1/2 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 1 1/4 gram stylus force the trackability values are (see Figure):

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

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 “Dynetick® X” exotic high energy magnet assembly
- Low-loss laminated electromagnetic structure
- Low impedance design
- Uncompromised stereo trackability at 1 to 1 1/2 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.

400 Hz 1,000 Hz 5,000 Hz 10,000 Hz 30,000 Hz
20 CM/SEC* 28 CM/SEC* 47 CM/SEC* 50 CM/SEC* 25 CM/SEC*

Samples of reproduction of discrete four-channel quadriphonic records on the new M24H were heard as an incredible improvement over quadriphonic records on any other cartridge. Not a single instance of mistracking was found in long playing playbacks, even at a 1 1/4 gram stylus force. As a result, an essential characteristic of Shure’s quadriphonic cartridges, achieved in the past by a 1 gram stylus force, is now extended to a 1 1/4 gram force on the M24H.

The M24H 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 “Dynetick® X” exotic high energy magnet assembly
• Low-loss laminated electromagnetic structure
• Low impedance design
• Uncompromised stereo trackability at 1 to 1 1/2 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.

UNCOMPROMISED STEREO & 4-CHANNEL
the new way to add up total high 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 "Dynetick® X" exotic high energy magnet assembly
- Low-loss laminated electromagnetic structure
- Low impedance design
- Uncompromised stereo trackability at 1 to 1 1/2 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.

**Notes:**
- Peak recorded velocity
- 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

*Measurements made using a Shure/SME Tone Arm.*
M95EJ Deluxe high trackability cartridge with built-in snap-down stylus guard and biradial elliptical stylus

For 3½ to 1½ Grams Tracking

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 high-performance 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 electromechanical characteristics—especially at higher frequencies. As a result, magnetic losses have been minimized, and frequency response 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
  - 26 CM/SEC at 5,000 Hz
  - 33 CM/SEC at 1,000 Hz
  - 19 CM/SEC at 10,000 Hz

- Tracking Force: 9½ to 1½ grams

- Frequency Response: 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 as high as 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, phone 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

- Frequency Response: 25 microns (.0010 inch) wide between record contact points
- Frequency Response: 25 microns (.0010 inch) wide between record contact points
- Frequency Response: 17.8 microns (.0007 inch) frontal radius
- Frequency Response: 63 microns (.0025 inch) stylus tip radius
- Frequency Response: 10 microns (.0004 inch) side contact radius
- Frequency Response: 5 microns (.0002 inch) side contact radius

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

- Frequency Response: 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 as high as 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, phone 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

- Frequency Response: 17.8 microns (.0007 inch) frontal radius
- Frequency Response: 63 microns (.0025 inch) stylus tip radius
- Frequency Response: 10 microns (.0004 inch) side contact radius
- Frequency Response: 5 microns (.0002 inch) side contact radius

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

- Frequency Response: 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 as high as 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, phone 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

- Frequency Response: 17.8 microns (.0007 inch) frontal radius
- Frequency Response: 63 microns (.0025 inch) stylus tip radius
- Frequency Response: 10 microns (.0004 inch) side contact radius
- Frequency Response: 5 microns (.0002 inch) side contact radius

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

- Frequency Response: 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 as high as 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, phone 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

- Frequency Response: 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 as high as 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, phone 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

- Frequency Response: 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 as high as 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, phone cables, and the amplifier input circuit. (Most amplifiers and tone arms meet this requirement.)
DELUXE SERIES OF HIGH TRACKABILITY CARTRIDGES

For 3/4 to 1 1/2 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 superior 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 built-in 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
- 28 CM/SEC at 5,000 Hz
- 33 CM/SEC at 1,000 Hz
- 19 CM/SEC at 10,000 Hz

Tracking Force: 3/4 to 1 1/2 grams
Frequency Response: From 20 to 20,000 Hz

M81ICS 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 M81ICS (with spherical stylus tip) and the M81ECS (with biradial elliptical stylus tip) feature extremely high reduction of hum pickup. M81ICS has a tracking force of 3 to 5 grams; the M81ECS has a 2 to 4 gram tracking force.

Model M81ICS with Spherical stylus: $28.00
Model M81ECS with Biradial Elliptical stylus: $10.00
Model M81ICS with Spherical replacement stylus: $37.95
Model M81ECS with Biradial Elliptical replacement stylus: $14.95

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: 6.0 mv per channel at 1,000 Hz at 5 CM/SEC Peak recorded velocity

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

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

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 (.5 inch) mounting centers

MODEL M91ED Deluxe Hi-Track Cartridge with Biradial Elliptical stylus: $59.95
MODEL M91ED Biradial Elliptical replacement stylus: $29.95
MODEL M91ED Deluxe Hi-Track Cartridge with Spherical stylus: $69.95
MODEL M91ED Spherical replacement stylus: $49.95
MODEL M75ED Type 2 Deluxe Hi-Track Cartridge with Biradial Elliptical stylus: $59.95
MODEL M75ED Type 2 Deluxe Hi-Track Cartridge with Spherical stylus: $69.95
MODEL M75ED Type 2 Deluxe Hi-Track replacement stylus: $49.95

NOTE: Owners of M91E or M92E cartridges may upgrade their present systems by using an M91ED stylus.

NOTE: To play 78 rpm records with the M91EO or M91GO cartridges, use a Model N91-3 63 microns (.0025 inch) spherical stylus. To play 78 rpm records with an M75EO Type 2 cartridge, use a Model N75-3 63 microns (.0025 inch) spherical stylus.

PREMOUNTED DELUXE M91ED HIGH TRACKABILITY CARTRIDGES

PREMOUNTED CARTRIDGE REPLACEMENT STYLUS
MODEL M91ED Biradial Elliptical replacement stylus.
Fits all M91ED premounted cartridges: $27.05

PREMOUNTED DELUXE M91ED-GZ Cartridges

For Garrard Zero 100 Turntables
Model M91ED-GZ Premounted M91ED cartridge fits Garrard Zero 100 turntables: $61.25

For Dual Turntables
Model M91ED-DL Fits all Dual "1200" Series automatic turntables tracking from 3/4 to 1 1/2 grams: $61.25
About the Custom Hi-Track Series

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 critical Shure quality control program.

### M91E and M75G Type 2 SPECIFICATIONS

<table>
<thead>
<tr>
<th>M91E</th>
<th>M75G Type 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tracking Force: 3A to 1½ grams</td>
<td>Tracking Force: 3A to 3 grams</td>
</tr>
<tr>
<td>Frequency Response: 20 to 20,000 Hz</td>
<td>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.)</td>
</tr>
<tr>
<td>Output Voltage: 3.0 mV per channel at 1,000 Hz at 5 CM/SEC peak recorded velocity</td>
<td>Output Voltage: 3.0 mV per channel at 1,000 Hz at 5 CM/SEC peak recorded velocity</td>
</tr>
</tbody>
</table>

### M91E Type 2 and M75B Type 2 SPECIFICATIONS

<table>
<thead>
<tr>
<th>M91E</th>
<th>M75B Type 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tracking Force: 3A to 3 grams</td>
<td>Tracking Force: 3A to 3 grams</td>
</tr>
<tr>
<td>Frequency Response: 20 to 20,000 Hz</td>
<td>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.)</td>
</tr>
<tr>
<td>Output Voltage: 3.0 mV per channel at 1,000 Hz at 5 CM/SEC peak recorded velocity</td>
<td>Output Voltage: 3.0 mV per channel at 1,000 Hz at 5 CM/SEC peak recorded velocity</td>
</tr>
</tbody>
</table>

### PRE-MOUNTED CARTRIDGES

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>M91E-GSL</td>
<td>Pre-mounted M91E Cartridge fits Garrard SL75B and SL72B automatic turntables</td>
<td>$56.25</td>
</tr>
<tr>
<td>M91E-SDM</td>
<td>Pre-mounted M91E Cartridge fits Elac/Miracord automatic turntables tracking from 3A to 1½ grams</td>
<td>$56.25</td>
</tr>
<tr>
<td>M91E-D12</td>
<td>Pre-mounted M91E Cartridge fits all Dual “1200” Series automatic turntables tracking from 3A to 1½ grams</td>
<td>$56.25</td>
</tr>
</tbody>
</table>

### TRAVERSEABILITY CHART (at 1 Gram)

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 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 stylus data cartridges feature a built-in snap-down stylus guard. The M75EJ Type 2 and M75B Type 2 have identical trackability characteristics. The M75EJ Type 2 is offered for those who prefer a spherical stylus.

### TRACKABILITY CHART (at 2 Grams)

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 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 stylus data cartridges feature a built-in snap-down stylus guard. The M75EJ Type 2 and M75B Type 2 have identical trackability characteristics. The M75EJ Type 2 is offered for those who prefer a spherical stylus.
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 and M75ECS**

<table>
<thead>
<tr>
<th>FREQUENCY</th>
<th>2000</th>
<th>4000</th>
<th>8000</th>
<th>16000</th>
</tr>
</thead>
<tbody>
<tr>
<td>M75CS</td>
<td>26</td>
<td>21</td>
<td>12</td>
<td>19</td>
</tr>
<tr>
<td>M75E</td>
<td>26</td>
<td>21</td>
<td>12</td>
<td>19</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>FREQUENCY</th>
<th>2000</th>
<th>4000</th>
<th>8000</th>
<th>16000</th>
</tr>
</thead>
<tbody>
<tr>
<td>M93E</td>
<td>25</td>
<td>21</td>
<td>12</td>
<td>19</td>
</tr>
<tr>
<td>M75-6S</td>
<td>25</td>
<td>21</td>
<td>12</td>
<td>19</td>
</tr>
</tbody>
</table>

**MODEL CONFIGURATION FORCE STYLUS TRACKABILITY CHART**

<table>
<thead>
<tr>
<th>STYLUS TYPE</th>
<th>MODEL</th>
<th>FORCE</th>
<th>TRACKABILITY</th>
</tr>
</thead>
<tbody>
<tr>
<td>M93E</td>
<td>Hi-Track Cartridge</td>
<td>1½ to 3 grams</td>
<td>20,000 Hz frequency response is comparable to other brands of cartridges costing three or four times more.</td>
</tr>
</tbody>
</table>

**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 grams tracking force range makes the M70 cartridge series suitable for the vast majority of stereo systems made today. Channel separation: Minimum 20 dB at 1,000 Hz. Trackability (in CM/SEC peak recorded velocity) at 2 grams: 18 microns (.0007 inch) front radius, 10 microns (.0004 inch) side contact radii. 25 microns (.0010 inch) wide between record contact points. 25 microns (.0010 inch) wide between record contact points. 25 microns (.0010 inch) wide between record contact points. Stylus: N93E Biradial Elliptical with diamond tip, 5-7N93E and M75-6S, 5.6 grams.
SHURE®

M55E
For 1/4 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: 1/4 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 Balance: Minimum 22 dB at 1,000 Hz
- Channel Separation: Minimum 22 dB at 1,000 Hz
- 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
  - 10 microns (.0004 inch) side contact radius
  - 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

MODEL M55E Cartridge ........................................... $34.95
MODEL M55E Stylus ............................................... $15.55

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

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 M44E: 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
  - M44E, M44-7 and M44C: Minimum 20 dB at 1,000 Hz
- TRACKING FORCE:
  - For Light Tracking 1/4 to 1 1/2 Grams
  - For Heaviest Tracking 3 to 5 Grams

MODEL M44E Cartridge. With 18 microns (.0007 inch) radius spherical diamond stylus ............................... $29.95
MODEL M44-7 Cartridge. With 18 microns (.0007 inch) radius spherical diamond stylus ............................... $24.95
MODEL M44C Cartridge. With 18 microns (.0007 inch) radius spherical diamond stylus ............................... $22.95

MODEL M44-7 Stylus. 15 microns (.0006 inch) radius spherical stylus ................................. $10.15
MODEL M44C Stylus. 18 microns (.0007 inch) radius spherical stylus ................................. $10.15
MODEL N44E Stylus. 15 microns (.0006 inch) radius spherical stylus ................................. $10.15

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
MODEL M3C Stylus ............................................... $8.30
**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 lower levels.

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 % gram increments from 0 to 1% grams. Deluxe hydraulic cuing control.

Recommended for use with all Shure high trackability cartridges tracking at up to 1% 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 playback. 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) ................... $174.00**

**MODEL S2 Extra shell for 3009/S2 ................... $ 9.90**

**MODEL LC-4 Low-Capacitance Cable (for four-channel cartridges such as the M24H) ..................... $ 22.50**

Notes: 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 1½ grams or more.

**MODEL M24M for 12" recordings ....................... $42.50**

**MODEL M24M for 16" recordings ...................... $46.00**

**MODEL A25H extra plug in head .................... $ 3.75**

---

**SHURE M64 and M64-2E**

Universal Stereo Preamplifier

For Phonographs, Tape Decks, Microphones

- Converts phono 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
- 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 (2½") High x 142 mm (5½") Wide x 114 mm (4½") Deep

Weight: 794 grams (1¾ lb.)

**MODEL M64 Preamplifier—For 120 VAC. 50/60 Hz. .......... $57.50**

**MODEL M64-2E Preamplifier—For 240 VAC. 50/60 Hz. .... $64.50**

---

**SHURE SFG-2**

Stylus Force 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 gram in 1/10 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 tilted mirror 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**

---

**U.S. penny**

**SHURE SFG-2**

Height: 13 mm (½")

Width: 138 mm (5½")

Depth: 25 mm (1")

Weight: 20 grams (0.7 oz.)
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: a full diamound stoue (nude in the Super-Track “Plus” and Deluxe Series), with an aggregate weight of .01 gram (1/3200 of an ounce), and with an effective mass as low as .33 milligrams (referred to the record 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 “The Stereo Dynetic® stylus is precision manufactured by Shure Brothers Inc.” on the box.

**FREE STYLIST BOOKLET**

For more information about Shure styli, send for the authoritative booklet “Small Words of the Stylus.” Ask for booklet AL425E.

When you buy a replacement styli, don’t be surprised when you find that the cost translates to something like $70,000 a pound. It’s worth it, because all the parts you can 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 diamound stone** (nude in the Super-Track “Plus” and Deluxe Series)—Equal in quality to the finest quality gem stones. It is one closely aligned and polished, then assembled into an accurately machined mounting—not merely a small chip cemented to the end of the mounting—producing flawless Biralid (elliptical), spherical or hyperbolic stylus.

2. **Doubly secure mounting**—The diamond is first press-fitted, then high temperature epoxy-cemented to insure permanent axial orientation. No shortcuts are ever used.

3. **Ultra-thin-wall tubular styli bar**—Special heat-treated aluminum alloy gives necessary rigidity, with relatively small contribution to mass.

4. **Dynamic control lever (hidden)**—Optimizes stylus bar compliance. (V-15 Type I, II, M24H, M95 Series and M75 Type 2 Series only).

5. **Center-mounted stylus bar**—Precisely fitted into internal discharge,magnet machined aperture. (V-15 Type I Series, M24H, M95 Series and M75 Type 2 Series only).

6. **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 -52°C to 74°C, (10°F to 165°F) will not deteriorate cartridge performance in normal playback environment—nor will hum or 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.

9. **Tuned, resonance-free support wire**—Does not affect performance when the cartridge’s operating turned on or off.

10. **Stylus assembly carrier**—Holds the stylus assembly in precisely the correct position relative to pickup coils.

**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 (1/8 to 1/4 grams) extend diamound 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 affect record wear—and it can actually damage a record beyond redemption, in 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 imitation Shure Stereo Dynetic® Stylus is used, we cannot guarantee that the cartrigde 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:

- M30 or M7D ... Substitute N21D styli for greater compliance, lighter tracking (2 grams maximum).
- Any M44 cartridge ... Substitute N55E stylus for greater compliance and lighter tracking (at ¾ to 2 grams). For tracking at 1¾ to 4 grams, use the N44E stylus.
- Any M71, M73 or M75 Cartridge ... Substitute N75 Type 2 styli for higher trackability.
- Any M91, M92 or M93 cartridge ... Substitute N91ED styli for lower stylus tip mass and higher trackability at ¾ to 1½ 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 N21B Stylus.** 15 microns (.0006”) spherical tip radius.

Fits M22, M7/ N21D, M3/ N21D, M30 and M75-type cartridges. $25.75

**MODEL N44-1 Stylus.** 25 microns (.001”) spherical tip radius.

For mono L.P.’s. Fits M44 series, M55E and V-15 Type I cartridges. $10.40

**MODEL N77 Stylus.** 18 microns (.0007”) spherical tip radius.

Fits M77 cartridge. $11.95

**MODEL VN2E Stylus.** Biralid elliptical tip. Fits V-15 Type I. $27.00

**MODEL VN7 Stylus.** Spherical tip radius. Fits V-15 Type II. $26.00

**MODEL VN15E Stylus.** Biralid elliptical tip. Fits V-15 Type II. $25.00

**STYLI FOR 78 RPM RECORDS**

If you have a large collection of 78 rpm records, you can equip the M31, M21E, M3A, any M44 Series cartridge, M55E, M70, M73, M75, M75 Type 2 series, M81, M91, M92, M93 series, M95, V-15 Type I, II, III cartridges with a special stylus for 78 rpm records:

**MODEL N22-3 Stylus.** 63 microns (.0025”) spherical tip radius.

Fits the M31E and M23E cartridges. $10.40

**MODEL N44-3 Stylus.** 63 microns (.0025”) spherical tip radius.

Fits any V-15 Type I, M44 series or M55E cartridge. $10.40

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

Fits M70 series cartridges. $10.40

**MODEL N73-3 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. $10.40

**MODEL N95-3 Stylus.** 63 microns (.0025”) spherical tip radius.

Fits M95ED and M95ED cartridges. $11.45

**MODEL VN75E Stylus.** 63 microns x 18 microns (0.025” x .0007”). Biralid Elliptical tip radius. 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 N35-3 which tracks at 2½ to 5 grams.
<table>
<thead>
<tr>
<th>Cartridge Model</th>
<th>Replacement Stylus Model</th>
<th>Stylus Group</th>
<th>Stylus Radius</th>
<th>Stylus Color Code</th>
<th>Tracking Force (grams)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DM101MG</td>
<td>N91ED*</td>
<td>H</td>
<td>15 microns (.0006&quot;)</td>
<td>Red</td>
<td>3-1 1/2</td>
</tr>
<tr>
<td>DM103ME</td>
<td>N91ED*</td>
<td>H</td>
<td>15 microns (.0006&quot;)</td>
<td>Yellow</td>
<td>3-1 1/2</td>
</tr>
<tr>
<td>DU10 M75E Type 2</td>
<td>N75ED Type 2*</td>
<td>E</td>
<td>15 microns (.0006&quot;)</td>
<td>Black</td>
<td>3-1 1/2</td>
</tr>
<tr>
<td>M3D</td>
<td>N3D</td>
<td>B</td>
<td>18 microns (.0007&quot;)</td>
<td>Black</td>
<td>3-6</td>
</tr>
<tr>
<td>M3/N21D</td>
<td>N21D</td>
<td>B</td>
<td>18 microns (.0007&quot;)</td>
<td>Black</td>
<td>3-6</td>
</tr>
<tr>
<td>M7D</td>
<td>N7D*</td>
<td>B</td>
<td>18 microns (.0007&quot;)</td>
<td>Black</td>
<td>3-6</td>
</tr>
<tr>
<td>M7/N21D</td>
<td>N21D*</td>
<td>B</td>
<td>18 microns (.0007&quot;)</td>
<td>Black</td>
<td>3-6</td>
</tr>
<tr>
<td>M80</td>
<td>N80*</td>
<td>B</td>
<td>18 microns (.0007&quot;)</td>
<td>Black</td>
<td>3-6</td>
</tr>
<tr>
<td>M21</td>
<td>N21D</td>
<td>B</td>
<td>18 microns (.0007&quot;)</td>
<td>Black</td>
<td>3-6</td>
</tr>
<tr>
<td>M22 (Stereo only)</td>
<td>N22D</td>
<td>L</td>
<td>15 microns (.0006&quot;)</td>
<td>Hypertonic</td>
<td>Gold</td>
</tr>
<tr>
<td>M24H</td>
<td>N24H</td>
<td>G</td>
<td>63 microns (.0025&quot;)</td>
<td>Dark Green</td>
<td>2 1/2-5</td>
</tr>
<tr>
<td>M31E</td>
<td>N31E*</td>
<td>G</td>
<td>18 microns (.0007&quot;)</td>
<td>Gray</td>
<td>1/2-3</td>
</tr>
<tr>
<td>M32E</td>
<td>N32E*</td>
<td>G</td>
<td>18 microns (.0007&quot;)</td>
<td>Light Blue</td>
<td>3-5</td>
</tr>
<tr>
<td>M32-3</td>
<td>N32-3*</td>
<td>D</td>
<td>10 microns (.0004&quot; x .0007&quot;)</td>
<td>Yellow</td>
<td>3/4-2</td>
</tr>
<tr>
<td>M33-5</td>
<td>N99*</td>
<td>D</td>
<td>10 microns (.0004&quot; x .0007&quot;)</td>
<td>Yellow</td>
<td>3/4-2</td>
</tr>
<tr>
<td>M44C</td>
<td>N44C*</td>
<td>A</td>
<td>10 microns (.0004&quot; x .0007&quot;)</td>
<td>Brown</td>
<td>1/2-4</td>
</tr>
<tr>
<td>M44E</td>
<td>N44E*</td>
<td>A</td>
<td>10 microns (.0004&quot; x .0007&quot;)</td>
<td>Brown</td>
<td>1/2-4</td>
</tr>
<tr>
<td>M44EM</td>
<td>N44EM*</td>
<td>A</td>
<td>10 microns (.0004&quot; x .0007&quot;)</td>
<td>Brown</td>
<td>1/2-4</td>
</tr>
<tr>
<td>M44G</td>
<td>N44G*</td>
<td>A</td>
<td>10 microns (.0004&quot; x .0007&quot;)</td>
<td>Brown</td>
<td>1/2-4</td>
</tr>
<tr>
<td>M44MA</td>
<td>N44MA*</td>
<td>A</td>
<td>10 microns (.0004&quot; x .0007&quot;)</td>
<td>Brown</td>
<td>1/2-4</td>
</tr>
<tr>
<td>M44MB</td>
<td>N44MB*</td>
<td>A</td>
<td>10 microns (.0004&quot; x .0007&quot;)</td>
<td>Brown</td>
<td>1/2-4</td>
</tr>
<tr>
<td>M44MC</td>
<td>N44MC*</td>
<td>A</td>
<td>10 microns (.0004&quot; x .0007&quot;)</td>
<td>Brown</td>
<td>1/2-4</td>
</tr>
<tr>
<td>M44MG</td>
<td>N44MG*</td>
<td>A</td>
<td>10 microns (.0004&quot; x .0007&quot;)</td>
<td>Brown</td>
<td>1/2-4</td>
</tr>
<tr>
<td>M44S</td>
<td>N44S*</td>
<td>A</td>
<td>10 microns (.0004&quot; x .0007&quot;)</td>
<td>Brown</td>
<td>1/2-4</td>
</tr>
<tr>
<td>M44-7</td>
<td>N44-7*</td>
<td>A</td>
<td>10 microns (.0004&quot; x .0007&quot;)</td>
<td>Brown</td>
<td>1/2-4</td>
</tr>
<tr>
<td>M55E</td>
<td>N55E*</td>
<td>C</td>
<td>10 microns (.0004&quot; x .0007&quot;)</td>
<td>Light Green</td>
<td>1/2-3</td>
</tr>
<tr>
<td>M55EM</td>
<td>N55EM*</td>
<td>C</td>
<td>10 microns (.0004&quot; x .0007&quot;)</td>
<td>Light Green</td>
<td>1/2-3</td>
</tr>
<tr>
<td>M70B</td>
<td>N70B</td>
<td>C</td>
<td>10 microns (.0004&quot; x .0007&quot;)</td>
<td>Light Green</td>
<td>1/2-3</td>
</tr>
<tr>
<td>M710C</td>
<td>N75C*</td>
<td>C</td>
<td>10 microns (.0004&quot; x .0007&quot;)</td>
<td>Light Green</td>
<td>1/2-3</td>
</tr>
<tr>
<td>M71EB</td>
<td>N75EB Type 2*</td>
<td>C</td>
<td>10 microns (.0004&quot; x .0007&quot;)</td>
<td>Light Green</td>
<td>1/2-3</td>
</tr>
<tr>
<td>M71EMB</td>
<td>N75EMB Type 2*</td>
<td>C</td>
<td>10 microns (.0004&quot; x .0007&quot;)</td>
<td>Light Green</td>
<td>1/2-3</td>
</tr>
<tr>
<td>M71MB</td>
<td>N75MB*</td>
<td>C</td>
<td>10 microns (.0004&quot; x .0007&quot;)</td>
<td>Light Green</td>
<td>1/2-3</td>
</tr>
<tr>
<td>M71MC</td>
<td>N75MC*</td>
<td>C</td>
<td>10 microns (.0004&quot; x .0007&quot;)</td>
<td>Light Green</td>
<td>1/2-3</td>
</tr>
<tr>
<td>M71-6</td>
<td>N75-6*</td>
<td>C</td>
<td>10 microns (.0004&quot; x .0007&quot;)</td>
<td>Light Blue</td>
<td>3-5</td>
</tr>
<tr>
<td>M73G</td>
<td>N75G Type 2*</td>
<td>C</td>
<td>10 microns (.0004&quot; x .0007&quot;)</td>
<td>Beige</td>
<td>1 1/2</td>
</tr>
<tr>
<td>M73MG</td>
<td>N75G Type 2*</td>
<td>C</td>
<td>10 microns (.0004&quot; x .0007&quot;)</td>
<td>Beige</td>
<td>1 1/2</td>
</tr>
<tr>
<td>M75BM</td>
<td>N75-6*</td>
<td>C</td>
<td>10 microns (.0004&quot; x .0007&quot;)</td>
<td>Beige</td>
<td>1 1/2</td>
</tr>
<tr>
<td>M75CS</td>
<td>N75C*</td>
<td>C</td>
<td>10 microns (.0004&quot; x .0007&quot;)</td>
<td>Beige</td>
<td>1 1/2</td>
</tr>
<tr>
<td>M75E</td>
<td>N75ED Type 2*</td>
<td>E</td>
<td>15 microns (.0006&quot;)</td>
<td>Red</td>
<td>3-1 1/2</td>
</tr>
<tr>
<td>M75ED</td>
<td>N75ED Type 2*</td>
<td>E</td>
<td>15 microns (.0006&quot;)</td>
<td>Red</td>
<td>3-1 1/2</td>
</tr>
<tr>
<td>M75ED Type 2</td>
<td>N75ED Type 2*</td>
<td>E</td>
<td>15 microns (.0006&quot;)</td>
<td>Red</td>
<td>3-1 1/2</td>
</tr>
<tr>
<td>M75F</td>
<td>N75F Type 2*</td>
<td>E</td>
<td>15 microns (.0006&quot;)</td>
<td>Red</td>
<td>3-1 1/2</td>
</tr>
<tr>
<td>M75F Type 2</td>
<td>N75F Type 2*</td>
<td>E</td>
<td>15 microns (.0006&quot;)</td>
<td>Red</td>
<td>3-1 1/2</td>
</tr>
<tr>
<td>M75FB</td>
<td>N75FB Type 2*</td>
<td>E</td>
<td>15 microns (.0006&quot;)</td>
<td>Red</td>
<td>3-1 1/2</td>
</tr>
<tr>
<td>M75FB Type 2</td>
<td>N75FB Type 2*</td>
<td>E</td>
<td>15 microns (.0006&quot;)</td>
<td>Red</td>
<td>3-1 1/2</td>
</tr>
<tr>
<td>M75G</td>
<td>N75GB Type 2*</td>
<td>E</td>
<td>15 microns (.0006&quot;)</td>
<td>Red</td>
<td>3-1 1/2</td>
</tr>
<tr>
<td>M75G Type 2</td>
<td>N75GB Type 2*</td>
<td>E</td>
<td>15 microns (.0006&quot;)</td>
<td>Red</td>
<td>3-1 1/2</td>
</tr>
<tr>
<td>M75MB</td>
<td>N75MB Type 2*</td>
<td>E</td>
<td>15 microns (.0006&quot;)</td>
<td>Red</td>
<td>3-1 1/2</td>
</tr>
<tr>
<td>M75MG</td>
<td>N75MB Type 2*</td>
<td>E</td>
<td>15 microns (.0006&quot;)</td>
<td>Red</td>
<td>3-1 1/2</td>
</tr>
<tr>
<td>M75MG Type 2</td>
<td>N75MG Type 2*</td>
<td>E</td>
<td>15 microns (.0006&quot;)</td>
<td>Red</td>
<td>3-1 1/2</td>
</tr>
<tr>
<td>M75MG Type 2</td>
<td>N75MG Type 2*</td>
<td>E</td>
<td>15 microns (.0006&quot;)</td>
<td>Red</td>
<td>3-1 1/2</td>
</tr>
<tr>
<td>M75MB</td>
<td>N75MB Type 2*</td>
<td>E</td>
<td>15 microns (.0006&quot;)</td>
<td>Red</td>
<td>3-1 1/2</td>
</tr>
<tr>
<td>M75MB Type 2</td>
<td>N75MB Type 2*</td>
<td>E</td>
<td>15 microns (.0006&quot;)</td>
<td>Red</td>
<td>3-1 1/2</td>
</tr>
<tr>
<td>M75MB Type 2</td>
<td>N75MB Type 2*</td>
<td>E</td>
<td>15 microns (.0006&quot;)</td>
<td>Red</td>
<td>3-1 1/2</td>
</tr>
<tr>
<td>M75MG</td>
<td>N75MG Type 2*</td>
<td>E</td>
<td>15 microns (.0006&quot;)</td>
<td>Red</td>
<td>3-1 1/2</td>
</tr>
<tr>
<td>M75MG Type 2</td>
<td>N75MG Type 2*</td>
<td>E</td>
<td>15 microns (.0006&quot;)</td>
<td>Red</td>
<td>3-1 1/2</td>
</tr>
<tr>
<td>M75MG Type 2</td>
<td>N75MG Type 2*</td>
<td>E</td>
<td>15 microns (.0006&quot;)</td>
<td>Red</td>
<td>3-1 1/2</td>
</tr>
<tr>
<td>M75MG</td>
<td>N75MG Type 2*</td>
<td>E</td>
<td>15 microns (.0006&quot;)</td>
<td>Red</td>
<td>3-1 1/2</td>
</tr>
<tr>
<td>Cartridge Model</td>
<td>Replacement Stylus Model</td>
<td>Stylus Group</td>
<td>Stylus Radius</td>
<td>Stylus Color Code</td>
<td>Tracking Force (grams)</td>
</tr>
<tr>
<td>-----------------</td>
<td>--------------------------</td>
<td>--------------</td>
<td>---------------</td>
<td>-------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>M75-6S</td>
<td>N75-6</td>
<td>E</td>
<td>15 microns (0.0006&quot;)</td>
<td>Beige</td>
<td>1/2 - 3</td>
</tr>
<tr>
<td>M77</td>
<td>N77</td>
<td>D</td>
<td>18 microns (0.0007&quot;)</td>
<td>Black</td>
<td>3 - 6</td>
</tr>
<tr>
<td>M77MD</td>
<td>N77*</td>
<td></td>
<td>18 microns (0.0007&quot;)</td>
<td>Black</td>
<td>3 - 6</td>
</tr>
<tr>
<td>M80E</td>
<td>N55E</td>
<td>A</td>
<td>5 microns x 18 microns (0.0002&quot; x 0.0007&quot;)</td>
<td>Yellow</td>
<td>1/2 - 2</td>
</tr>
<tr>
<td>M80E-D</td>
<td>N55E</td>
<td></td>
<td>5 microns x 18 microns (0.0002&quot; x 0.0007&quot;)</td>
<td>Yellow</td>
<td>1/2 - 2</td>
</tr>
<tr>
<td>M80E-D19</td>
<td>N55E</td>
<td></td>
<td>5 microns x 18 microns (0.0002&quot; x 0.0007&quot;)</td>
<td>Yellow</td>
<td>1/2 - 2</td>
</tr>
<tr>
<td>M81NC</td>
<td>N75C*</td>
<td>E</td>
<td>15 microns (0.0006&quot;)</td>
<td>Light Blue</td>
<td>3 - 5</td>
</tr>
<tr>
<td>M81CS</td>
<td>N75C</td>
<td></td>
<td>15 microns (0.0006&quot;)</td>
<td>Light Blue</td>
<td>3 - 5</td>
</tr>
<tr>
<td>M81ECS</td>
<td>N75EC</td>
<td></td>
<td>10 microns x 18 microns (0.0004&quot; x 0.0007&quot;)</td>
<td>Brown</td>
<td>2 - 4</td>
</tr>
<tr>
<td>M81E</td>
<td>N91E</td>
<td></td>
<td>5 microns x 18 microns (0.0002&quot; x 0.0007&quot;)</td>
<td>Black</td>
<td>3 1/2 - 3</td>
</tr>
<tr>
<td>M91ED**</td>
<td>N91ED</td>
<td></td>
<td>5 microns x 18 microns (0.0002&quot; x 0.0007&quot;)</td>
<td>Yellow</td>
<td>3 1/2 - 3</td>
</tr>
<tr>
<td>M91MGD</td>
<td>N91MGD</td>
<td></td>
<td>15 microns (0.0006&quot;)</td>
<td>Red</td>
<td>3 1/2 - 3</td>
</tr>
<tr>
<td>M92E</td>
<td>N91E*</td>
<td></td>
<td>5 microns x 18 microns (0.0002&quot; x 0.0007&quot;)</td>
<td>Yellow</td>
<td>3 1/2 - 3</td>
</tr>
<tr>
<td>M92G</td>
<td>N92G</td>
<td></td>
<td>15 microns (0.0006&quot;)</td>
<td>Red</td>
<td>3 1/2 - 3</td>
</tr>
<tr>
<td>M93E</td>
<td>N93E*</td>
<td></td>
<td>10 microns x 18 microns (0.0004&quot; x 0.0007&quot;)</td>
<td>Light Green</td>
<td>1 1/2 - 3</td>
</tr>
<tr>
<td>M95ED</td>
<td>N94ED</td>
<td>K</td>
<td>10 microns x 18 microns (0.0004&quot; x 0.0007&quot;)</td>
<td>Light Green</td>
<td>1 1/2 - 3</td>
</tr>
<tr>
<td>M95E</td>
<td>N95E</td>
<td></td>
<td>15 microns (0.0006&quot;)</td>
<td>Yellow</td>
<td>3 1/2 - 3</td>
</tr>
<tr>
<td>M98/A</td>
<td>N44-7</td>
<td>A</td>
<td>18 microns (0.0007&quot;)</td>
<td>White</td>
<td>1 1/2 - 3</td>
</tr>
<tr>
<td>M99/A</td>
<td>N99</td>
<td>D</td>
<td>18 microns (0.0007&quot;)</td>
<td>Gray</td>
<td>1 1/2 - 3</td>
</tr>
<tr>
<td>M99/AT6</td>
<td>N99</td>
<td></td>
<td>18 microns (0.0007&quot;)</td>
<td>Gray</td>
<td>1 1/2 - 3</td>
</tr>
<tr>
<td>M99/M10</td>
<td>N99</td>
<td></td>
<td>18 microns (0.0007&quot;)</td>
<td>Gray</td>
<td>1 1/2 - 3</td>
</tr>
<tr>
<td>R7C</td>
<td>N75C*</td>
<td></td>
<td>15 microns (0.0006&quot;)</td>
<td>Light Blue</td>
<td>3 - 5</td>
</tr>
<tr>
<td>R2/E</td>
<td>N75ED Type 2*</td>
<td>E</td>
<td>5 microns x 18 microns (0.0002&quot; x 0.0007&quot;)</td>
<td>Black</td>
<td>3 1/2 - 3</td>
</tr>
<tr>
<td>R7/E3</td>
<td>N75E† Type 2*</td>
<td></td>
<td>10 microns x 18 microns (0.0004&quot; x 0.0007&quot;)</td>
<td>Light Green</td>
<td>1 1/2 - 3</td>
</tr>
<tr>
<td>R7/0E</td>
<td>N75ED Type 2*</td>
<td></td>
<td>5 microns x 18 microns (0.0002&quot; x 0.0007&quot;)</td>
<td>Black</td>
<td>3 1/2 - 3</td>
</tr>
<tr>
<td>RM900E</td>
<td>N91E*</td>
<td>H</td>
<td>5 microns x 18 microns (0.0002&quot; x 0.0007&quot;)</td>
<td>Black</td>
<td>3 1/2 - 3</td>
</tr>
<tr>
<td>RM910E</td>
<td>N75E† Type 2*</td>
<td></td>
<td>10 microns x 18 microns (0.0004&quot; x 0.0007&quot;)</td>
<td>Light Green</td>
<td>1 1/2 - 3</td>
</tr>
<tr>
<td>RM9300</td>
<td>N75C*</td>
<td></td>
<td>15 microns (0.0006&quot;)</td>
<td>Light Blue</td>
<td>3 - 5</td>
</tr>
<tr>
<td>RS100</td>
<td>N30*</td>
<td>B</td>
<td>18 microns (0.0007&quot;)</td>
<td>(c)</td>
<td>3 - 6</td>
</tr>
<tr>
<td>RS120E</td>
<td>N32*</td>
<td>G</td>
<td>10 microns x 18 microns (0.0004&quot; x 0.0007&quot;)</td>
<td>Brown</td>
<td>2 1/2 - 5</td>
</tr>
<tr>
<td>RS220E</td>
<td>N31E*</td>
<td></td>
<td>10 microns x 18 microns (0.0004&quot; x 0.0007&quot;)</td>
<td>Yellow</td>
<td>1 2/2</td>
</tr>
<tr>
<td>SL95-M75E Type 2</td>
<td>N75ED Type 2*</td>
<td></td>
<td>5 microns x 18 microns (0.0002&quot; x 0.0007&quot;)</td>
<td>Black</td>
<td>3 1/2 - 3</td>
</tr>
<tr>
<td>V-15</td>
<td>VN2E</td>
<td>F</td>
<td>5 microns x 18 microns (0.0002&quot; x 0.0007&quot;)</td>
<td>Black</td>
<td>3 1/2 - 3</td>
</tr>
<tr>
<td>V-15 Type II***</td>
<td>VN15E</td>
<td></td>
<td>18 microns (0.0007&quot;)</td>
<td>Gray</td>
<td>3 1/2 - 3</td>
</tr>
<tr>
<td>V-15 Type III</td>
<td>VN35E</td>
<td>J</td>
<td>5 microns x 18 microns (0.0002&quot; x 0.0007&quot;)</td>
<td>Black</td>
<td>3 1/2 - 3</td>
</tr>
<tr>
<td>V-15 Type II†</td>
<td>VN3-G</td>
<td></td>
<td>15 microns (0.0006&quot;)</td>
<td>Gray</td>
<td>3 1/2 - 3</td>
</tr>
<tr>
<td>24-0003</td>
<td>N30*</td>
<td></td>
<td>18 microns (0.0007&quot;)</td>
<td>(c)</td>
<td>3 - 6</td>
</tr>
<tr>
<td>24-0044</td>
<td>N44E</td>
<td>A</td>
<td>10 microns x 18 microns (0.0004&quot; x 0.0007&quot;)</td>
<td>Brown</td>
<td>1 1/2 - 4</td>
</tr>
</tbody>
</table>

**Notes:**
- 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.
- Includes both V15 Type II and V15 Type II (Improved) Models.
- Gold Spade—Large Silver Shank
- Gold Spade—Small Silver Shank
- Silver Spade—Silver Shank

**NOTE:** For units not listed, write to Shure.
SHURE SOLO-PHONE® Headphone Amplifiers

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

The Solo-Phone Series was specifically designed for private headphone listening. It is a small, all-transistor preamplifier that will deliver the depth and "presence" of high-fidelity stereo—in private—from whichever sound source you choose to connect to it: record player, tape recorder or AM/FM tuner. True-to-performance sound is assured by its broad frequency response and exceptionally low distortion, including the difficult low frequencies. Handsome walnut finish with beige face plate.

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-I SOLO-PHONE AMPLIFIER:
108-132 V. AC., 260 mm x 89 mm x 76 mm
(10½" x 3½" x 3"). Less Headphones...$54.00
MODEL SA-2E
Same as SA-I 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
(11¼" x 5" x 3¼"). Less Headphones...$63.50
MODEL SA-2FE
Same as SA-IF except for 120 V. or 240 V., AC, 50-60 Hz. No plug.

*The SA-IF 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.

<table>
<thead>
<tr>
<th>CARTRIDGE RECOMMENDATIONS</th>
<th>FOR THESE OPERATING PARAMETERS</th>
</tr>
</thead>
<tbody>
<tr>
<td>V-15 Type III</td>
<td>For ultimate performance in precision quality manual tone arms and automatic turntables capable of tracking at 1½ grams or less.</td>
</tr>
<tr>
<td>M24H</td>
<td>For uncompromised performance in BOTH stereo and quadriphone (matrix and discrete) systems capable of tracking at 1½ grams.</td>
</tr>
<tr>
<td>M95ED</td>
<td>Second only to V-15 Type III. Use in same general applications when cost is a factor.</td>
</tr>
<tr>
<td>M91LED</td>
<td>For deluxe performance in high quality manual tone arms and automatic turntables capable of tracking at 3½ grams or less.</td>
</tr>
<tr>
<td>M95EJ M75EJ Type 2</td>
<td>For custom performance in standard manual tone arms and automatic turntables that operate in the 1½-3 gram tracking force range.</td>
</tr>
<tr>
<td>M75ECS</td>
<td>For extra-durable high-track performance in older manual tone arms and record changers requiring 3-4 gram tracking for optimum operation.</td>
</tr>
<tr>
<td>M75CS</td>
<td>For upgrading older, heavier tracking cartridges or for maximum economy in virtually any tone arm or record changer tracking from 3½-5 grams.</td>
</tr>
<tr>
<td>M70EJ M70B</td>
<td>For maximum economy in upgrading hi-fi systems capable of tracking forces of 1½-3 grams.</td>
</tr>
<tr>
<td></td>
<td>NOTE: Other Shure cartridges, in the appropriate tracking force range, may be used if preferred.</td>
</tr>
</tbody>
</table>

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

Shure Brothers Inc.
222 Hartrey Ave., Evanston, IL 60204

© 1976, Shure Brothers Inc., Printed in U.S.A.  AL2105