# Specifications

## M71 and M73 Cartridge Series

**N71 and N73 Styli Series**

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Diamond Stylus Replacement</th>
<th>Output Voltage (1,000 Hz)</th>
<th>Stylus Color</th>
<th>Tracking (Grams)</th>
</tr>
</thead>
<tbody>
<tr>
<td>M71EB</td>
<td>N71EB: Elliptical Side Contact Radius: 0.009&quot; (.023 mm)</td>
<td>6.2 millivolts</td>
<td>Green</td>
<td>1 1/2 to 2</td>
</tr>
<tr>
<td></td>
<td>Frontal Radius: 0.007&quot; (.183 mm)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M71-6</td>
<td>N71-6: Radius: 0.006&quot; (.15 mm)</td>
<td>6.2 millivolts</td>
<td>Beige</td>
<td>1 1/2 to 2</td>
</tr>
<tr>
<td>M71C</td>
<td>N71C Radius: 0.009&quot; (.015 mm)</td>
<td>9.0 millivolts</td>
<td>Blue</td>
<td>3 to 5</td>
</tr>
<tr>
<td>M73G</td>
<td>N73G Radius: 0.006&quot; (.015 mm)</td>
<td>6.2 millivolts</td>
<td>Gray</td>
<td>1 1/2 to 3</td>
</tr>
<tr>
<td>N73-5</td>
<td>Radius: 0.009&quot; (.023 mm)</td>
<td>4.4 millivolts</td>
<td>(monaural)</td>
<td>Green</td>
</tr>
</tbody>
</table>

*The N75-3 stylus may be used to reproduce the standard 78 rpm records. In this case, the amplifier should be set to “Monaural” or “A+B.”

**Trackability:**

- M71EB at a stylus force of 1 1/2 grams 400 Hz. - 14.3 cm/sec.
- M71-6 at a stylus force of 1 1/2 grams 400 Hz. - 14.3 cm/sec.
- M71C at a stylus force of 3 grams 400 Hz. - 14.3 cm/sec.
- M73G at a stylus force of 1 gram 400 Hz. - 14.3 cm/sec.

Higher stylus forces within specified range improve trackability.

**Frequency Response:** From 20 to 20,000 Hz.

**Channel Separation:** More than 20 db at 1,000 Hz.

**Recommended Load Impedance:** 47,000 ohms per channel

**Inductance:** 720 millihenries

**D.C. Resistance:** 630 ohms.

**Mounting:** Standard 1/2" (12.7 mm) mounting center using new “Easy-Mount” snap-in bracket.

**Weight:** 5 grams

**Terminals:** 4 terminals

**General:** The M71 and M73 Series of Dynetic phonograph cartridges has been developed for use with all high fidelity amplifiers having magnetic and constant velocity inputs.

**Mounting:** The cartridge bracket has standard 1/2" mounting centers. Hardware is provided for mounting purposes. (The brass screws have British threads.)

1. Remove stylus guard and stylus from cartridge. (See paragraph on stylus replacement.)
2. Remove cartridge from “Easy-Mount” snap-in bracket. (See Figure 1)
3. Start mounting screws into tone arm head or plug-in shell.
5. Connect leads to phonograph cartridge. Note color code for proper connection to terminal “L,” “R,” “LG” and “RG” as indicated in tone-arm instruction manual.
6. Insert cartridge into “Easy-Mount” snap-in bracket. (See Figure 1)
Suggested Cleaning Your Stylus

To clean the stylus, use a camel's-hair brush (No. 2 size or smaller) dipped lightly in alcohol. The alcohol will remove any sludge deposits which the stylus may have gathered during use, and the bristles should be trimmed to a length no longer than ¼ inch. Always brush the stylus with a forward movement from the rear to the front. Never brush or wipe the stylus from front to back or side to side.

CAUTION: Do not make solder connections to cartridge terminals. Make all solder connections to terminal jacks provided before slipping them over the terminals.

EASY STYLUS REPLACEMENT

Grapm molded housing of stylus between thumb and forefinger. Carefully draw cartridge away from the stylus and insert outward on the cartridge. Grasp replacement stylus between thumb and forefinger and insert into stylus socket. Pay particular attention to the tip of the stylus as it mates with the cartridge case. Care must be taken not to allow the finger to slip off the molded housing of the stylus resulting in damage to the stylus tip or shank.

SPECIAL NOTE: The Dynetic stylus assembly used in these cartridges is the most critical component. To maintain the original performance characteristics of the cartridge, the replacement stylus you buy bear the following certification on the package: "This Stereo Dynetic stylus is precision manufactured by Shure Brothers, Inc.

AVOID INFERIOR IMITATIONS. THEY WILL SERIOUSLY DEGRADE THE PERFORMANCE OF YOUR CARTRIDGE. ANY STYLUS MANUFACTURED UNDER THE TRADEMARK "DYNETIC" ARE MANUFACTURED BY SHURE BROTHERS INC.

LABORATORY TEST FINDINGS: (Note: The following stylus test findings of the Shure N3D stylus are an example of the close scrutiny of Shure pays to all imitation Shure Dynetic stylus.) Shure laboratory tests show that the imitation stylus assemblies labeled as replacements for the Shure Model N3D Stylus Assembly vary dramatically in important performance characteristic. For example, the compliance varied from a low of 0.9 to a high of 11.5, requiring 5.0 grams to track a record with a low compliance stylus, and 2.5 grams with a high compliance stylus, and 4.7 grams with a high compliance stylus. This stylus was retracted at 4 grams needle force, allowing the cartridge case to drag on the record surface, thereby increasing wear. Response at high frequency (relative to the level) ranged from a 3.5db leak to a 3.5db leak. The stylus was made from 'good' (27db, "poor") (16.5db) at 1 kHz. These figures reveal that there is a great deal of variation in performance characteristics of the imitation Dynetic Stylus.

In each of the categories shown above the results ranged from the best to the worst. A stylus result was considered best when it met Shure performance standards for the Shure N3D Stereo Dynetic stylus. In addition, the stylus was required to be certificated and returnable for a period of one year, from date of purchase. Please retain proof of purchase. This guarantee includes all parts and labor.

SHIPPING INSTRUCTIONS: Carefully repackage the unit and return it prepaid to the factory. If outside the United States, return the unit to an authorized Shure Distributor or Service Center, for repair. The unit will be returned to you prepaid.

CONCLUSION: Obviously, if any imitation Dynetic Stylus is used, we shall guarantee that the performance of Shure Dynetic cartridges will meet the published Shure specifications. Accept no substitutes.

SHURE-SME INSTALLATION INSTRUCTIONS: To mount the cartridge, follow the Shure-SME Precision Pickup Arm, Model 3009 and 3012, refer to the paragraphs on Cartridge Installation and Balancing in the instruction manual supplied with the pickup arms.

OPERATION: Recommended needle forces for optimum results are listed under "Specifications." Forces greater than the indicated "maximum" should not be used.

CONNECTIONS

4-LEAD STEREO CONNECTION: Connect "hot" lead of right channel to terminal "R," and shield or ground lead of right channel to terminal "RG." Connect "hot" lead of left channel to terminal "L," and shield or ground lead of left channel to terminal "LG." To prevent "ground loops" and hum, no common connection should be made between cartridge terminals.

MONAURAL CONNECTION: For monaural or stereo recordings, connect "hot" lead to both "R" and "L" terminals and shield or ground lead to both ground terminals marked "RG" and "LG."