This is the LAB 80

More than an automatic turntable, it is an Automatic Transcription Turntable

The Lab 80 is designed for professional reproduction of LP/stereo records (33⅓ and 45 rpm) ... literally without compromise. It was created expressly for those who have not been willing to accept any automatic unit heretofore.

Now, feature-by-feature comparisons will verify that the concept of the single play turntable combination has been obsoleted by a superior new class of mechanism.

With the Lab 80, Garrard establishes a spectacular new precedent in record playing equipment ... combining precision, performance, and convenience of a standard not previously available, in single play or automatic units.

The price of the Lab 80 is $99.50
This new kind of Garrard is called the LAB 80
In these 32 pages we offer you technical and non-technical explanations of today’s most advanced record-playing equipment.

This includes LAB 80 the first Automatic Transcription Turntable
NEW BIAS COMPENSATOR
negates "skating"... keeps stylus evenly in groove no matter how light the tracking force.

NEW DYNAMICALLY BALANCED TONE ARM
made of lightweight, non-resonant wood, insures optimum performance from every cartridge.

NEW MASSIVE NON-MAGNETIC 12" TURNTABLE
is balanced in motion for perfect speed.

NEW INTEGRAL CUEING DEVICE
allows you complete control of tone arm, for manual play without damage to records or stylus.

NEW LOW-MASS SHELL
is compatible with the latest pickup designs.

NEW ANTI-STATIC MAT
discharges static electricity, prevents dust accumulating on records.

NEW ISOLATION MOTOR SUSPENSION
prevents even slightest vibrations from reaching turntable.

NEW MAGNETIC TRIP
permits virtually frictionless automatic operation and shut-off.
To visualize what the Garrard Laboratories have achieved in the Lab 80, we urge you to take the time to read the galaxy of advancements built into it.

(Here are some highlights... described in greater detail on the following pages)
What requirements should a record player meet ... to justify its inclusion in your high fidelity system?

The tone arm should be able to take your choice of any of the excellent low mass cartridges now on the market. These cartridges are sensitive, and the stylus assemblies are highly compliant. The arm must track them perfectly, and trip reliably, with very light stylus pressure.

The turntable, motor, and drive mechanism must be so silent ... so meticulously engineered ... that they will not add the slightest noise or distortion at any frequency or volume level.

To be compatible with wide range speaker systems and highly refined amplifiers (including solid state transistorized equipment), the entire record playing unit must be built to an exceptionally high order of precision.

Performance is the key factor, but automatic convenience and sensible price are also essential for maximum enjoyment.

Four years ago, these stringent requirements motivated Garrard to produce the original Automatic Turntable ... Type A ... a new concept which combined the advantages of single play turntables with the convenience of automatic record changers. The instantaneous, dramatic acceptance of the Type A established a significant trend, and today more people choose a Garrard than all other high fidelity record playing units combined.

Now ... Garrard presents three highly advanced automatic turntables, plus an entirely new class, the first Automatic Transcription Turntable! This exceptional development by the Garrard laboratories is for the ultimate in music systems...
Lab 80's tone arm is unique. It is built of Afrormosia, the least resonant of all woods, held in precision alignment by an aluminum stabilizer along its entire length.

This is a true dynamically balanced tone arm, and when adjusted as shown on these pages, it is the ideal transport for cartridges of professional calibre.

An important note regarding stylus pressure and protection of your records:

As a service, we wish to point out that under no circumstances should any cartridge be operated at a lower stylus pressure than that prescribed by its manufacturer. Specifications for stylus pressure are determined by the basic design of the cartridge. To track at a pressure lower than specified may cause many undesirable effects, in terms of damage to record grooves; intermodulation and other distortions.

To adjust the tone arm, first turn the knurled knob under the calibrated scale (on the side of the arm) until the pointer reads zero.

Because of today's featherweight tracking, the slightest interference with free movement of the tone arm may affect the performance of the cartridge. To avoid this, the Lab 80 arm moves on special needle pivots, set into ball bearings. The flat geometry of the arm cancels out warp-wow distortion; and the low center of gravity eliminates sensitivity to external jarring.
Next, balance the arm until it floats level at zero tracking force. This is done by rotating the fine adjustment on the movable counterweight at the rear of the arm. (Note that the counterweight is isolated in rubber.)

Then set the correct tracking force, as specified by the cartridge manufacturer. Turn the knurled knob under the scale, listening for the clicks, which can also be felt. Each click represents 1⁄4 gram, providing an accurate audible setting, confirmed visually by the indicator on the side of the arm. (Since some professional cartridges today may be tracked as lightly as a fraction of a gram, this uniquely accurate method of setting is necessary to insure the best performance.)

The lightweight design of the shell makes it compatible with all cartridges including the new low mass professional types. The shell slides into the tonearm on channels and is fixed rigidly with a knurled screw, so that it cannot resonate or rotate from side to side. A new long finger lift insures safety in handling the shell.

One major problem in all record playing equipment is the tendency of the arm to slide inward across the record. This is overcome in the Lab 80 through an exclusive, patented bias compensator which accurately cancels out any tone arm skating force, making it possible to use a cartridge with the highest compliance and most delicate stylus assembly. Setting the bias compensator is simplicity itself. A weight on the compensator is moved to a position along its scale corresponding to the stylus pressure which has been set, establishing a direct relationship with the stylus pressure reading on the tonearm.
Garrard has never been interested in gadgetry. The Garrard policy is to incorporate every convenience or refinement — but only when it serves a practical function. Three such refinements are shown on these pages:

Integral cueing. As cartridges have become lighter and stylus assemblies more delicate, so has the danger of damage from manual handling increased. Now, in the Lab 80, Garrard has incorporated an integral cueing device, which is activated whenever the manual lever is thrown. The tone arm is suspended safely and accurately ½ inch over any record groove selected. Then press the tab control on the front of the tone arm rest . . . and the arm gently lowers under featherweight control. The first demonstration will show you dramatically the convenience and safety which this feature imparts.

(If it is desired to lift the arm off the record during play, simply touch the manual switch, and the arm rises gently, directly over the record groove. You can then safely reposition the arm or reactivate the cueing device, and lower the stylus into the very same groove!)
Tab controls. Lab 80 features finger tip tab controls, handsomely designed and set into an engraved escutcheon. Switches for "manual" and "automatic" are separate, yet all functions are coordinated on this single panel. The tabs are easily accessible... require only featherweight touch to start, reject, or stop, and insure safety from damaging pickup jump due to accidental jarring of the record player. An illuminated indicator tells the record size selected and acts as a pilot light.

Automatic shutoff. At the end of a single record (or the last record in "automatic" position) the tone arm returns to its rest and the Lab 80 shuts off. This simple convenience can add more to the pleasure of listening to records than most other features. A spring-loaded lock can then be turned into position to protect the tone arm from accidents.
Concerning manual vs. automatic play: With the present state of the art in the design and manufacturing of tone arms—as exemplified most particularly by the low geometry of the Lab/80 and other dynamically-balanced Garrard arms—the maximum variation in stylus pressure between one record and a stack is in the order of 0.2 gram (two-tenths of a gram).

Thus, it will be seen that the significance of the question of whether or not it is important to play only single records at a time on any turntable, has been eliminated. The contention that stacking several records creates flutter and wow, is flatly untrue.

The convenience of automatic play, when desired, can hardly be overstated. It can add an entire area of pleasure to your record enjoyment. The problem, however, has been to provide this convenience without impairing the high standards of performance which are essential in a modern music system; and the search for perfection among methods of automatic record handling has been going on for years.

Now, the Garrard Laboratories have developed a remarkable new precision spindle for automatic play. It differs from all other automatic spindles by incorporating the reliable, time tested Garrard pusher platform principle.
In use, the automatic pusher spindle is relatively simple. The stack of records is securely held on three widely extended arms. Then, utilizing the basic Garrard technique, the arms retract and the individual records are pushed off gently.

This is the technique which established Garrard as the pre-eminent name in automatic record playing equipment, because it proved, over the years, completely reliable and gentle to records. Now, the pusher platform principle has been designed into the spindle, creating the safest, most positive-acting device of its kind.

(Of course, this spindle is used only for automatic play. A short spindle is provided for your use in playing single records.)

The trip mechanism is the device which activates the automatic record changing and the automatic shut-off at the end of the last record. Since the tone arm mechanism must engage the trip mechanism, the problem with automatic units has been to accomplish this with the least possible amount of friction or drag. Indeed, one of the points claimed in favor of single play turntables has been the lack of a trip mechanism, even though no one will dispute the tremendous advantage of the automatic feature. In the Lab 80, the trip mechanism is revolutionary and obviates this argument. The trip assembly is molded completely of Delrin® the remarkable new Dupont “slippery” material which has an exceptionally low co-efficient of friction. Resistance of the trip mechanism to the tone arm engaging it becomes virtually unmeasurable.

The tripping cycle is activated by ultra-sensitive magnetic repulsion (through the use of magnets with polarities which repel each other), eliminating the need for mechanical contact. The combination of these two principles, ingeniously applied for the first time to an automatic record playing device, is the answer of the Garrard engineers to the stringent requirements of ultra-sensitive cartridges, allowing the unit to trip reliably, at virtually zero force.
The cast turntable is 12 inches in diameter, and extremely heavy. In itself, it is an impressive example of precision craftsmanship. Each turntable is statically and dynamically balanced to eliminate any possibility of wow (uneven musical pitch) or rumble, and to insure precise, constant speed, through flywheel action, regardless of variations in voltage.

The special turntable mat is formulated from a remarkable new anti-static material. It dissipates the electrical charge on records, so that they will not attract dust. Dust is one of the key causes of record wear, as well as unwanted noise. The fine grooves of the mat have been scientifically designed to provide full support to the record.
Constant, reliable speed, of course, is essential. Recent tests confirm the traditional Garrard viewpoint that the motor type (induction or hysteresis) is not the key factor in fine reproduction. It is basic compatibility of the motor to the particular turntable/drive mechanism, and meticulous manufacturing, which determine outstanding results.

The Lab 80 is powered by the unsurpassed Laboratories Series® motor (with dynamically balanced armature), designed and built entirely by Carrard, which will maintain speed within NAB standards even through the unlikely line voltage variation of 95 to 135 volts.

The loose assumption or contention that only a hysteresis motor can maintain speed with such reliability is simply untrue.

It is isolated from the unit plate by a revolutionary suspension system of rubber anti-vibration devices and damping pads. This ingenious mounting system frees the Lab 80 from any vestige of spurious vibrations which might reflect in record reproduction.

The entire Lab 80 unit floats on a new 5-point foam-damped spring suspension system, which isolates it from external jarring and the mechanical interference known as “feedback”. Installation is simple and practical. The Lab 80 is stereo wired, with a 4-pin, 5-wire system; separate ground connections . . . the ideal wiring because it eliminates danger of hum-causing factors. Leads plug into the player with Amplok plug (for AC) and twin female phono sockets on the unit plate, for the audio connection. This simplifies connecting or disconnecting the player.

Dimensions are compact enough to fit most high fidelity cabinets.

Specifications:
2 speeds: 33 1/3 and 45 rpm.
100-130 volts, 60 cycles AC (50 cycle pulley available).

Minimum cabinet dimensions:
17" left to right; 14¼" front to rear;
5½" above and 3½" below motor board.
This, then is Garrard's Lab 80 Automatic Transcription Turntable ... a record-playing unit unequalled by any now on the market ... destined to establish a new milestone by Garrard in the continual striving toward perfection which characterizes our industry.

This superlative mechanism has been magnificently styled to grace the finest music system, the smartest decor. On its decorator base the Lab 80 is a symphony of shimmering satin metal, grained wood, and a special iridescent color that picks up and reflects the warmth of the cabinet finish. Into this excellent unit have been lavished every skill, every technique known to the Garrard Laboratories. To judge for yourself how well they have succeeded, use the convenient chart below to compare the Lab 80's main features with any other record playing unit you may be contemplating.

**COMPARATOR CHART**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Lab 80</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dynamically balanced, counterweighted tone arm of American made</td>
<td>True</td>
<td>False</td>
</tr>
<tr>
<td>Calibrated stylus pressure scale with click settings</td>
<td>True</td>
<td>False</td>
</tr>
<tr>
<td>Low mass shell</td>
<td>True</td>
<td>False</td>
</tr>
<tr>
<td>Anti-rolling device</td>
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<td>False</td>
</tr>
<tr>
<td>Integral tone arm</td>
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<td>False</td>
</tr>
<tr>
<td>Finger tip control</td>
<td>True</td>
<td>False</td>
</tr>
<tr>
<td>Automatic play, when desired, with revolutionary button开启</td>
<td>True</td>
<td>False</td>
</tr>
<tr>
<td>Delicate trigger mechanism with magnetic regulation</td>
<td>True</td>
<td>False</td>
</tr>
<tr>
<td>12 inch, balanced moving, antiscatch turntable with anti-scratch tone arm</td>
<td>True</td>
<td>False</td>
</tr>
<tr>
<td>Laboratory benchtop 4-pole motor</td>
<td>True</td>
<td>False</td>
</tr>
<tr>
<td>Motor isolation system</td>
<td>True</td>
<td>False</td>
</tr>
<tr>
<td>4-pin, Swivel stereo wiring with Replika plug connections</td>
<td>True</td>
<td>False</td>
</tr>
</tbody>
</table>