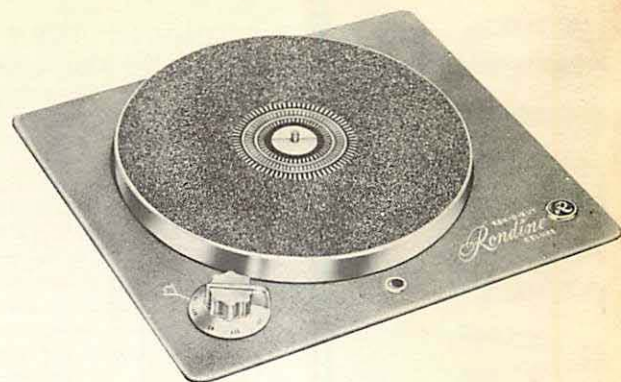


**BETTER THAN
ADVERTISED
CLAIMS...**

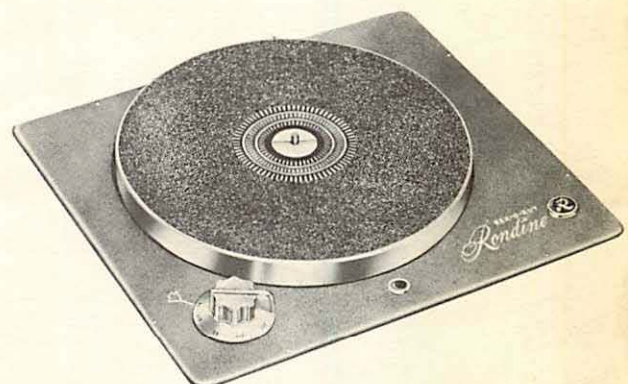
**the
REK-O-KUT**

Rondine **TURNTABLES**

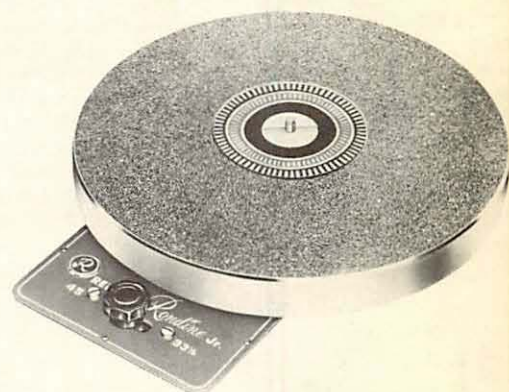
Regularly conducted tests of random-selected units show that the Rondine Turntables coming out of production are even better in performance than is indicated by the manufacturer's own claims and specifications. Two of the leading magazines in the sound field have reviewed their findings, and these are here reprinted without editorial change.



RONDINE Deluxe.....Model B-12H



RONDINE.....Model B-12



RONDINE Jr......
} Model L-34
} Model L-37



Read the Reports of AUDIO and High Fidelity Magazines

Equipment Report

REK-O-KUT "RONDINE" TURNTABLES—B-12H, B-12, and L-34

These three units have been introduced within the last few months, and measurements on the performance have just been made—within the limits of the facilities available. To explain this, let us discuss the measurement of rumble in a turntable.

This would seem to be a very simple measurement at first look, but it is not as simple as it appears. The logical method of making such a measurement is to play a frequency record of known velocity—for this purpose we have considered the practical stylus velocity as 20 cm/sec, although many records have been measured with velocities as high as 30 cm/sec. After taking this measurement, using the output of an equalized preamplifier as the reference point, the next step is to make a measurement of the output when playing an unmodulated groove. Since the difference is likely to be more than 40 db in a good turntable (as a minimum) the effect of high-frequency noise must be taken into account. This can be eliminated by connecting a capacitor across the output, reducing the high-frequency noise, but also making a change in the 1000- or 400-cps reference level.

By proper choice of capacitor, however, the effect on a 400-cps reference level used in our measurements can be reduced to a minimum while the high-frequency noise is reduced by some 20 db. For a standard level, we used the "+12" band on the Dubbings frequency record, since this band has a stylus velocity of 10.3 cm/sec. This gives a reference which is approximately 6 db below 20 cm/sec (exactly 6 db below 20.6 cm/sec) and this is considered close enough for measurements of this type.

After making the reference measurement by noting the voltage output from the preamplifier while the standard band is playing, the next step is to measure the output while playing an unmodulated groove. And here is where the trouble comes. At first, a level difference of only 33 db was noted. Since this was considerably below published specifications, the turntable was stopped and the stylus placed on a rubber stopper which was, in turn, placed on the turntable frame. When the output was measured, it was again 33 db below the reference. Obviously something was wrong. It was found that acoustic noises in the room were causing the turntable mounting

panel to act as a microphone diaphragm, so steps were taken to reduce noises to a minimum, the mounting panel was fastened tightly to a one-inch plywood board, and the whole unit covered with a heavy padding blanket. With this treatment it was possible to measure a difference of 58 db between the reference voltage and the signal output from the preamplifier with the stylus resting on the rubber stopper and the motor not running. With the motor turned on, the difference became 54 db, and when playing the unmodulated groove, it was 51.

This experience is given to show how many factors influence the performance of a high-grade turntable, for this was with the B-12H—the Deluxe model with the hysteresis motor—a unit which is rated at better than 50 db below average recording level. It is not certain how much of the noise was contributed by the amplifier itself, but in any case it must be stated that at normal playing level there is no rumble heard in a high-quality speaker system with unmodulated grooves.

Similar measurements were made on the B-12—which is the same as the B-12H except for the motor—with a resulting level difference of 44 db. The L-34 showed a difference of 38 db, and with both of the latter units, a slight rumble could be heard with the amplifier set for normal playing level. Using a typical commercial loudspeaker and enclosure, no rumble was heard on any of these three units—which was to be expected, for the "standard" test loudspeaker has good acoustic output down to about 24 cps, and is a critical test for any reproducing system.

The B-12H, Fig. 3, is the top of this line and is one which anyone would be well satisfied with. Using the hysteresis motor, it is necessarily expensive, since the motor itself costs more than many turntables complete, but the additional cost is justified by the improved performance. The motor used is built to Rek-O-Kut specifications, and consists of 24 slots, double wound, which gives a continuous flow of power which is almost completely free of "pulses"—especially noticeable with a 2-pole motor and slightly less so with a 4-pole motor. The construction of the Rondine turntables employs a stepped motor pulley which drives an idler, which in turn drives the inside of the turntable. The idler is carried on a bracket, is isolated from the turntable frame by rubber shock

mounts, and the bearing on the idler wheel is large enough to ensure true operation. The idler is a machined aluminum wheel with a bonded neoprene tire which is ground to a high degree of concentricity. The motor pulley—a piece of Micarta rod which is pressed onto the motor shaft—has three steps corresponding to the three turntable speeds, and it is ground after being assembled, using a large precision grinding wheel and with the motor itself turning the pulley during the grinding operation. This technique is employed to avoid any wobble in the pulley, and to ensure perfect concentricity.

The entire unit is mounted on a cast aluminum deck which is ribbed to provide greater rigidity, and it mounts in a rectangular cutout with eight screws to further solidify the mounting. There is adequate space to mount an arm on the base, but if the turntable is to be used with a studio-type arm to accommodate 16-in. transcriptions, the longer arm must be mounted on the outside.

A built-in retractable hub is provided for 45-rpm records, and it is held below the surface of the turntable by a bayonet-type catch. To release it for operation requires only a quarter turn with the fingers. A stroboscope is permanently located on the turntable, and a pilot light is provided to indicate when the motor is on. The speed selector switch starts the motor when it is placed into any of the three positions, and when turned to an off position it retracts the idler from contact with the motor pulley and from the inside of the turntable. The main turntable shaft is heavy, fitted with oil grooves, and runs in a well which is fabricated from one solid casting. The thrust is taken by a hardened ball at the bottom of the shaft well. The fit between the shaft and the well is so close that removal of the shaft is always accompanied by a "pop" like a champagne cork.

The workmanship on this unit is excellent, and simply by looking at it one would be impressed with its ability to do a good job. A turntable of this type is a new experience to those who have not been accustomed to broadcast equipment, and is sure to prove a lasting enjoyment.

Model B-12 is similar in all respects except the motor, which is a 4-pole unit of relatively heavy construction. As would be expected, there is slightly more rumble, and the long-time speed accuracy is not as high, but except for the most critical applications this model would be completely satisfactory.

The model L-34, is an improved version of the LP-743 in appearance, but the idler mechanism has been simplified by eliminating the 78 speed, and has been made heavier for quieter and more lasting operation. The mounting plate is smaller, but the workmanship is of the same high quality as the more expensive models. It features the same retractable hub as used on the B-12 and B-12H, and the stroboscope shows only two rings, since the third is not necessary.

Turntables of these types are a pleasure to use—there is no wobble, a minimum of rumble, and very low flutter. A listening comparison easily shows the difference in performance.



Fig. 3. The Rondine Deluxe B-12H turntable. The B-12 is identical in appearance.

Rek-O-Kut Rondines

SPECIFICATIONS (furnished by manufacturer): a line of 12-in. rim-driven turntables in three price ranges. All have heavy, dynamically-balanced aluminum tables with cork-neoprene mats, strobe disc sections, and retractable built-in 45-rpm hubs. All have single-knob speed controls with automatic drive disengagement in "off" positions. **MODEL L-34** — **Speeds:** 33 1/3 and 45 rpm. **Motor:** 4-pole induction. **Noise:** 40 db below average recording level. **Dimensions:** 12 by 15 in. Height above deck, 1 3/8 in.; below deck, 5 in. **MODEL B-12** — **Speeds:** 33 1/3, 45, and 78 rpm, controlled by rotary switch with "off" positions between speeds; pilot light goes on when in any speed position and off when between speeds. **Motor:** 4-pole induction. **Noise:** better than 40 db below average recording level. **Dimensions:** 15 3/4 in. wide by 14 in. Height above deck, 1 1/2 in.; below deck, 5 in. **MODEL B-12H** — same as for B-12 except that a hysteresis-synchronous motor is used; noise is better than 50 db below average recording level, and depth required below deck is 6 1/2 in. **Prices:** model L-34 (Rondine Jr.), \$49.95; model B-12 (Rondine), \$74.95; model B-12H (Rondine Deluxe), \$119.95. **Manufacturer:** Rek-O-Kut Company, 38-01 Queens Blvd., Long Island City 1, New York.

Rek-O-Kut's Rondine and Rondine Deluxe turntables are completely new designs; from our experience with them, we'd say they are definitely improved over their predecessors, not only in performance but in operating convenience also.

To begin with, they are easier to install. The cutout required is rectangular, about 13 by 15 inches. There are ribs under the cast-iron deck that fit into such a hole; you simply set the deck over the cutout and screw it down. No need to cut out an irregular hole with a jigsaw. The deck itself is big enough to hold standard 12-inch playing arms (it has a place all prepared for drilling holes for a GE arm, incidentally), and if you're going to use a 12-inch arm there's no necessity for a mounting board at all — just the side members of a base big enough to take the turntable deck.

The rotary speed control has five positions: 33 1/3, Off, 45, Off, and 78, and there are three sections on the motor pulley with different diameters. Turning the control to any of the three operating positions turns on the motor and a flush-mounted pilot light, adjusts the height of the idler wheel to contact the motor pulley section of the proper diameter for the speed selected, and engages the drive mechanism. In either of the Off positions the drive is disengaged (to prevent formation of flat spots on the idler) and the motor and pilot light are shut off. Note that there is an Off position next to each speed position, so that it is possible to shut off the unit without switching through other speeds. — Also, there are no pops in the loudspeaker when the motor is switched on and off.

The tables are quite heavy and are permanently covered in the groove area with a thick mat compounded of cork and neoprene rubber. This furnishes a non-slip surface that is slightly resilient and not so rough as to be difficult to keep clean. In the label area, recessed, is fastened a set of printed stroboscopic bands — one for each speed. When the spokes of the strobe appear to remain stationary while the table is turning under 60-cycle light, you know the speed is exactly right. So you have a continuous check on speed accuracy; furthermore, the fine speed adjustment is under the rotary control knob, and wrenches are furnished to remove the knob and make the adjustment!

In the very center of the table is a spring-loaded hub for 45 rpm records. Push down the large hub and twist

it to the right: it stays down and doesn't interfere with LPs and 78s. Twist it to the left and a spring pushes it up so that you can play 45s without adaptors. Clever idea, and convenient to use.

The Rondine has a four-pole induction motor that is very smooth-running and quiet in itself; rumble and wow in our sample were at a low level, quite unobjectionable. If you follow arm mounting directions you'll have no trouble with hum pickup from most magnetic cartridges. For \$45 more you can get the Rondine Deluxe with its hysteresis-synchronous motor, which has four advantages: absolute speed consistency regardless of line voltage variations; even less rumble and wow; substantially less hum pickup from the motor field when used with magnetic cartridges (this is of consequence with only a few cartridges); and tubes running from holes in the deck plate to the motor bearings — you can oil the motor from above.

The Rondine Jr. appears to be a simplified two-speed version of the older, very popular LP-743, with a new table (similar to that for the other Rondines) and a \$10 price reduction. It doesn't have the large cast-iron deck, but it can be mounted in a much smaller base. Speed is controlled by a shift lever; the drive mechanism is disengaged and the motor is shut off in the position midway between speeds. It seems compact, rugged and dependable, and is priced competitively.

Generally, we like these new Rek-O-Kuts. They reflect clearly a commendable design approach; consideration was given appearance, ease of installation and simplified operation, as well as good performance. These matters are all important in today's hi-fi market. The Rondines merit the success they will undoubtedly achieve. — R. A.

MANUFACTURER'S COMMENT: We would like to indicate that each Rondine model incorporates a system of mechanical and acoustical isolation between the idler wheel and the turntable frame or deck. This fact is especially important with reference to your description of the Rondine Jr. The isolation is effective in reducing to an absolute minimum any noises that might be imposed on reproduced music.

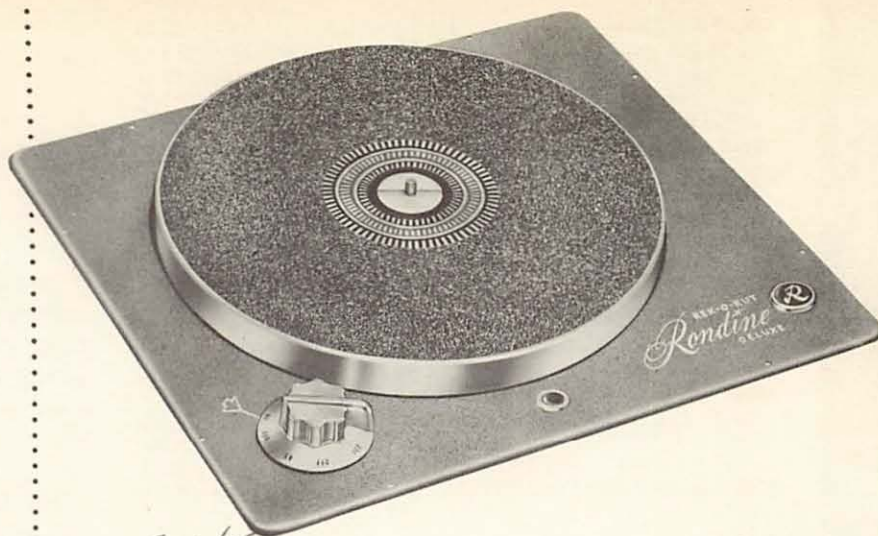


Rondine and Rondine Deluxe models differ in the drive motors.



New Rondine Jr. turntable turns at only the microgroove speeds.

REK-O-KUT
is Setting
New Quality
Standards



The
Rondine

**High Fidelity
TURNTABLES**

It is relatively simple to define 'high fidelity' in a turntable or a record changer. It is expressed in three terms: Rumble, Wow and Flutter...the presence of which tends to affect the quality of sound reproduction unfavorably.

Rumble is noise caused by some form of mechanical vibration introduced into the pickup cartridge. Wow and Flutter are slow and rapid changes in pitch which occur because of variations in turntable speed. It follows then, that the lower the rumble, the wow and the flutter, the better the quality of reproduction. It is the general practice to express rumble in decibels (db) below average recording level. Wow and flutter are expressed in percent of speed deviation.

The National Association of Radio and Television Broadcasters has set quality standards for turntables and record changers. These can be expressed as follows: Rumble -44db below average recording level (20 cm/sec.). Wow and flutter \pm .20%.

It is significant, that all of the Rondine turntables surpass NARTB standards prescribed for speed regulation. Wow and flutter never exceed \pm .12%, and in most instances are kept at \pm .10%. Equally sensational, is the success achieved by Rek-O-Kut in keeping the rumble

content of the Rondine and Rondine Jr. turntables at NARTB levels: -44db or better. The Rondine Deluxe provides unmatched rumble characteristics with a rating of -54db.

These figures were not obtained from specially selected units. To the contrary, each and every turntable that comes out of production is individually tested for rumble, wow and flutter and these measurements recorded. With such quality control, it is no wonder that the Rondine turntables are considered... the finest ever designed for home music systems.

These are the Rek-O-Kut RONDINE Turntables:

3-Speed

<i>Rondine Deluxe</i> (illustrated) with hysteresis motor.....	\$119.95
<i>Rondine</i> with 4-pole Induction motor.....	74.95

2-Speed

<i>Rondine Jr. Model L-34</i> (33 $\frac{1}{3}$ and 45 rpm).....	49.95
<i>Rondine Jr. Model L-37</i> (33 $\frac{1}{3}$ and 78 rpm).....	49.95

(4-pole Induction Motors)

Watch for future advertisements which will explain the parts played by the motor, the pulley, the idler, and the rotating turntable. Reprints of this and other ads in this series may be obtained by writing to Dept. 000



REK-O-KUT COMPANY

Makers of Fine Recording and Playback Equipment
Engineered for the Studio • Designed for the Home
38-01 Queens Boulevard, Long Island City 1, New York

**EVERY PERSON WHO OWNS OR PLANS TO OWN
A FINE HOME MUSIC SYSTEM MUST FACE THIS QUESTION:**

"Shall I buy a Turntable or a Record Changer?"

The following statement represents the point of view of one of America's leading manufacturers of professional recording and playback equipment.

The choice between record changer and turntable is, for the most part, entirely personal to the user. It depends upon what he wants. If it is merely the physical comfort of hearing hours and hours of just music, without manual intervention, then the choice would be a record changer. On the other hand, if it is his desire to enjoy the utmost in sound quality, then a quality turntable is certainly indicated. In broadcast studios, for example, where reproduction quality is of prime importance, turntables are used exclusively.

The Record Changer

The record changer is an extremely clever device, and much ingenuity has gone into its complex mechanism. It originated in the days when 78 rpm was the only popular record speed, and the playing time of a 12-inch record was only about 4 minutes per side. A complete 40 minute musical composition required at least 10 sides or 5 records. The record changer made it possible for these records to be played automatically, without the need for getting up every three or four minutes to change records.

The Long Playing Record

The long-playing, microgroove record has changed all of this. Each side of a

12-inch long-playing record disc provides about 25 minutes of music. The same 40 minute composition now requires only two sides of a 33 $\frac{1}{3}$ rpm 12-inch record. The long-playing record has also brought tremendous improvements in the quality of recorded sound. As a result, the older 78s are rapidly becoming obsolete among serious music lovers.

The High Quality Turntable

The turntable is basically a simple device. A manufacturer who desires to create a high quality instrument can devote all of his engineering skill to the one important function of the turntable: its rotating motion. A Rek-O-Kut turntable, for example, offers the closest approach to perfect motion; with virtually no rumble, wow, flutter, or other mechanical distortion.

There are other important advantages to the turntable. Once the angle between the stylus and record is established, it remains constant for all time. In the case of the record changer, this angle varies, depending upon the number of records stacked underneath the record 'in play'.

A turntable has a 'live' spindle, meaning that it rotates with the table and the record. The spindle of most changers remain stationary so that

there is an element of wear introduced whereby the spindle hole of the record may become enlarged, and cause off-center wow. Similar wear can result as the record is dropped, and it slides down the long spindle.

A third advantage peculiar to Rek-O-Kut is that the turntable itself is machined from aluminum castings. Aluminum is unaffected by magnetism, and therefore, the turntable exerts no 'pull' when used with a magnetic cartridge. With steel and other magnetic materials, the magnetic pull may actually cause the stylus to 'ride the groove' with a pressure considerably greater than recommended.

Conclusion

High fidelity is rapidly becoming a part of our home life. This is expressive of the typically American desire for the enjoyment of finer things. As specialists in the field of professional sound reproduction, and having served this field for years, we welcome the fact that this wonderful experience is now being adopted in the American home.

Rek-O-Kut precision turntables are among the finest in the world. Every detail of their construction is carefully engineered to provide the finest quality record reproduction. Whether you now own or plan to own a music system, we urge you seriously to consider one of the several Rek-O-Kut turntables. You will find that it makes all the difference in the world.

Literature on Request

Export Division: MORHAN EXPORTING CORP.
458 Broadway, New York 13, N. Y.
Cable: MORHANEX
In Canada: ATLAS RADIO CORP., Ltd.
560 King Street, W., Toronto 2B.



THE REK-O-KUT COMPANY

*Makers of Fine Recording and Playback Equipment
Engineered for the Studio • Designed for the Home*

38-01 Queens Boulevard, Long Island City 1, New York

"Which Rek-O-Kut Turntable Shall I Buy...

the RONDINE, the RONDINE Deluxe or the RONDINE Jr.?"

*In previous years, the question was: "Shall I buy a turntable or a record changer?" And about eight months ago we released an advertised statement in answer to this question. Thus far, more than 40,000 people have requested reprint copies of this statement.**

This year, we presented the Rondine line in Chicago. At the very first showing we knew that we had passed the severest test. The acclaim was overwhelming. It exceeded our wildest hopes and expectations. And the pattern has since been the same... New York... Boston... everywhere. Now the one question that stands out is: "Which shall I choose: the Rondine at \$74.95, the Rondine Deluxe at \$119.95 or the Rondine Jr. at \$49.95?"

The RONDINE Deluxe (3-speed) priced at \$119.95 is powered by a hysteresis motor. The speed of a hysteresis motor is synchronous with the frequency of the line current. Like the motor of an electric clock (which it resembles in principle only) the speed is constant and accurate to the split second. It has the least vibration of any motor, and therefore, the least rumble. The Rondine Deluxe represents the very finest equipment available. It is the indicated choice where the system and speaker with which it is to be used are capable of reproducing low frequencies to below 40 cycles.

The RONDINE (3-speed) priced at \$74.95 is driven by a specially built 4-pole induction motor. Vibration and noise have been effectively reduced through the use of selected motor bearings, dynamically balanced rotors and perfectly concentric drive pulleys. Each motor is individually tested for speed under load conditions, and permanent compensations are introduced for accurate timing. Rumble content is so low that in a system capable of reproducing 40 cycles, it can be detected only with appreciable bass boost. The Rondine meets the requirements of most high quality home systems.

The RONDINE Jr. (2-speed) priced at \$49.95 is driven by the same type of motor as the Rondine, and what has been said for the Rondine is equally applicable here. Where the user can dispense with the 78 rpm record speed, the Rondine Jr. represents true economy — without the slightest sacrifice in quality over the Rondine. It is the ideal home system turntable where there is no accumulated 78 rpm library, and where future record purchases will be limited to the modern 33 $\frac{1}{3}$ and 45 rpm types.

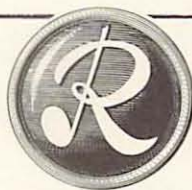
Select the Rek-O-Kut turntable suitable for your particular needs. For, whether you choose the Rondine, the Rondine Deluxe or Rondine Jr., you can expect rugged, reliable construction and precision performance. You can expect constant, steady motion — freedom from wow and flutter — and you can be sure of smooth, quiet operation.

So certain are we that the speeds, once set, are critically accurate that we make no provision for external adjustments by you — except for occasional maintenance. And we include a built-in strobe disc capable of revealing as little as $\frac{1}{10}$ th of 1% speed discrepancy. We know of no manufacturer who places greater reliance upon the dependability of his product.

Basically, this is all the result of specialized experience gained over many years in the service of recording and broadcast studios. It is this store of engineering 'know-how' which has enabled us to develop a completely simplified mechanics in turntable design; to streamline every operation with no more parts than are absolutely essential for efficient, functional performance. These efforts have been repaid in enabling us to achieve greater noise reduction, easier maintenance and added years of useful service.

No matter what turntable or record changer you now use, a Rek-O-Kut Rondine — any one of the three — will make a marked improvement in the performance of your high fidelity system.

*See Reverse Side



REK-O-KUT COMPANY

Makers of Fine Recording and Playback Equipment
Engineered for the Studio • Designed for the Home
38-01 Queens Boulevard, Long Island City 1, N. Y.

NOTE: Since the publication of these articles, Rek-O-Kut has announced an additional Rondine Jr., Model L-37, for 33 $\frac{1}{3}$ and 78 rpm.....\$49.95

