Your new REALISTIC LAB-2100 Direct Drive Linear Tracking Automatic Turntable uses the latest in audio technology to give the superior sound reproduction audiophiles demand. A powerful brushless DC FG servo motor gives unwavering, near-perfect speed. The stroboscope and bright LED lets you quickly and precisely adjust turntable speed.

The logic-controlled linear tracking arm maintains the stylus of the cartridge at the correct angle to the radius of the groove over the full surface of the record. This means low distortion and excellent tracking at less than 1.5 grams. The Turntable comes complete with Realistic/Audio Technica Dual Magnetic type cartridge with 0.4 x 0.7 mil diamond stylus that reproduces frequency between 20-20,000 Hz while maintaining superior channel separation.

UNPACKING AND PREPARING FOR USE

When you unpacked your unit, you doubtless noticed how carefully it was packed to avoid damage during transport. Remove the red transportation screw from the bottom cabinet. Keep the packing box and transportation screw for use in case you should need to transport it at some future date.

The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated “dangerous voltage” within the product’s enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.
INSTALLATION

Carefully lower the turntable platter onto the motor spindle. Set the rubber mat on the platter. (See Figure 2.)

Cartridge and counterweight are adjusted and fixed to the tone arm. (See Figure 3.) The counterweight is preset and should be changed/adjusted by a qualified service technician, only.

To ensure top performance, install your Turntable only on a solid surface that will not vibrate. Avoid areas of high humidity and direct sunlight or other sources of heat like heaters and hot air vents. Good air circulation would be helpful.

ELECTRICAL CONNECTIONS

1. Pickup leads with RCA type plugs:
   Connect the pickup leads (L and R) coming from the rear of the Turntable to the PHONO input jacks of your amplifier/receiver — red for right channel and white for left channel.

2. Ground wire:
   Connect the ground wire (thin wire) to the GND terminal on your amplifier/receiver. This will reduce or eliminate hum.

3. AC line cord:
   Plug the AC line cord coming from the rear of the Turntable into a convenient source of 120 volts, 60Hz (220/240 volts, 50Hz for European/Australian models) AC power (a wall outlet or an unswitched AC receptacle on your amplifier/receiver).
OPERATION

1. Plug the AC line cord into a source of AC power.
2. Press the POWER button; the stroboscope will light along with size and speed Indicators.

3. Check that the REPEAT button is not activated. (repeat indicator should be OFF.)
4. Remove the stylus protector.
5. Place a record on the platter.
6. Set the record SIZE selector to 12" or 7". Select the appropriate speed, 33 or 45.
7. Press the PLAY/CUT button. If you want to hear the record again, push the REPEAT button; repeat LED will light.

8. The tone arm will automatically move to set the stylus at the beginning of the record.

9. At any time during the play cycle, you can gently lift the tone arm from the record by pressing the CUEing button.

10. At the end of the record, the tone arm will automatically return to the arm rest and the turntable platter will stop. If you have set the REPEAT button, the tone arm will return to the first groove and repeat playing.

11. To stop playing before a record finishes its playing cycle, push the PLAY/CUT button. The tone arm lifts and returns to its rest and the turntable platter will stop.

12. To stop repeat play, push the REPEAT button again; the indicator LED will go out.

13. If you want to play manually:
   a. Shift and release the CUEing button; the tone arm comes up.
   b. Shift the tone arm horizontally over the desired part of the record, using buttons “◄◄” or “►►”; the tone arm will move either to the left or to the right depending on your choice.
   c. Press and release the CUEing button; the tone arm will descend and play, beginning at the selected groove.

NOTE:
1. Before playing, if the stroboscope dots move, rotate the PITCH control until the relevant dots appear motionless. If dots move toward the left, rotate PITCH toward “—”. If dots move to right, rotate PITCH toward “+”.

2. When the tone arm is moving automatically, do not touch it.

3. If the power fails, the tone arm raises automatically. When power is restored, the tone arm will return to the arm rest. Never move the tone arm manually.

45 R.P.M. adapter
When playing a 45 R.P.M. record with a large center hole, place the adapter over the turntable spindle.

REPLACEMENT OF CARTRIDGE

Remove the screw and nut that hold the cartridge assembly in place. Then carefully remove the cartridge assembly by pulling it straight out. Install the new cartridge assembly. Make sure it is all the way in and is straight.

Replace the screw and nut. (See Figure 9.)
HINTS FOR BETTER SOUND

Howling:
Cartridges are sensitive and may pick up slight sound pressure or vibrations of the speaker coming along the floor or through the air. This results in howl. Therefore, location of your Turntable is important. Find a location where it will be stable and free from vibration.

Induction Hum:
Your turntable utilizes a brushless DC FG servo motor to reduce inductive hum. If you notice annoying hum, it may be caused by an electromagnetic field produced by motors or transformers used in other products. Do not place the Turntable near such products. To prevent the Turntable from being affected by the power transformer of your amplifier, receiver or tape deck, position the Turntable on the side opposite the power transformer.

Record Care
When handling a record, always hold it by its edge and center label area. Never touch the groove surface. Make it a habit to return records to their jackets immediately after use.

Store the records in a vertical position and protect them from extremely high and low temperatures, high humidity, and direct sunlight.

MAINTENANCE

Dust and Dirt:
Because records carry dust-attracting static charges, they should be cleaned before use. Playing a dirty record grinds dust against the record walls until it wears away the high frequencies and increases background noise. The most effective cleaners use an ionizing formula to remove the static charge and a cut velvet pad to lift particles from the groove.

Occasionally you will need to remove dust and dirt from the needle. For best results, use Radio Shack's stylus cleaner and brush Cat. No. 42-1074. To clean the stylus, brush forward very gently to remove the dust. Brushing from front-to-back or side-to-side may cause permanent damage. Avoid touching the stylus tip when cleaning.
Your local Radio Shack store has a complete line of stylus and record care accessories.

Cabinet and Dust Cover
If the cabinet or dust cover requires cleaning, use a soft, damp cloth (do not use solvents). Don't use insecticide, benzine or thinner near the cabinet.

Stylus Replacement
The diamond stylus of the turntable can normally play for about 250 hours. However, when sound becomes noisy, check the stylus for wear. If worn out, replace it (refer to Figure 10). The worn stylus will damage the record permanently. It's better to replace your stylus than to replace your record library.
Clean the Elevation-rubber
Clean the elevation rubber when you first operate the unit after purchasing, and then periodically, by using a soft cloth dipped in alcohol and thoroughly wrung out. (See Figure 11.)

Note:
There may be times when the tone arm does not descend when you press the PLAY button — for example, the first time you use the unit after purchase, after long non-use, and in winter. This is caused by the silicon oil used, and it is easy to remedy: Lightly hold the tone arm near the counterweight and gently move it up and down a few times.

When transporting your unit, remember to:
– attach the stylus protector
– remove the turntable platter
– tighten the tone arm with a red transportation screw. (See Figure 13.)
– fasten the tone arm with vinyl tape, having the tone arm cushion placed under the arm pipe. (See Figure 12.)

Do not attempt to lubricate your Lab-2100. It does not require it and you could damage the unit. If you have some difficulty, bring it to your local Radio Shack store for our service personnel to check over.
SPECIFICATIONS

Type
2 speeds, direct drive, linear tracking, automatic turntable
Platter
Aluminum alloy die-cast, 295mm outer diameter, 0.6kg
Motor
4 phase, 8 pole magnetic field coreless DC FG servo
Speed
2 speeds; 33-1/3 and 45 RPM
Pitch control range
±4%
Signal-to-Noise ratio/rumble
75dB (DIN B)
Wow and Flutter
0.025% (WRMS)
Tone arm
Static balanced
Head shell
Plug in type
Effective length
165mm
Cartridge
Realistic/Audio Technica Dual magnetic
Frequency response
20-20,000Hz
Output voltage
3.5mV at 1kHz 35.4mm/sec.
Channel difference
2dB at 1kHz
Channel separation
25dB at 1kHz
Tracking force
1 – 1.5 grams
Stylus tip
0.4 x 0.7 mil elliptical diamond stylus
Power source
120 Volts, 60Hz AC (220/240V 50Hz for European/Australian models)
Power consumption
17 watts
Dimensions
4.53(H) x 13.78(W) x 14.96(D) inches
(115(H) x 350(W) x 380(D) mm)
Weight
15.43 lbs
(7 kg.)
Accessories
45 RPM adapter
RADIO SHACK LIMITED WARRANTY

This product is warranted against defects for 1 year from date of purchase from Radio Shack company-owned stores and authorized Radio Shack franchisees and dealers. Within this period, we will repair it without charge for parts and labor. Simply bring your Radio Shack sales slip as proof of purchase date to any Radio Shack store. Warranty does not cover transportation costs. Nor does it cover a product subjected to misuse or accidental damage.

EXCEPT AS PROVIDED HEREIN, RADIO SHACK MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Some states do not permit limitation or exclusion of implied warranties; therefore, the aforesaid limitation(s) or exclusion(s) may not apply to the purchaser.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

We Service What We Sell