# INITIAL SETUP

Unpack the *Rondine 4 LTD* turntable the platter from its box, and place onto spindle protruding from the subplatter. The surface onto which the *Rondine 4 LTD* turntable is to be used should be relatively level and sturdy. Loop the belt around the platter and around the motor pulley.

## BASIC TONEARM SETUP

<u>The arm is shipped set for average use</u>, i.e., height of the anti-skating dial's platform bottom is 3/4" above the turntable base, and the arm bend 1-1/2" from base right side. To re-adjust, use a supplied hex wrench.





Caution: Do not loosen the set screws that hold the anti-skating mechanism to the arm bearing assembly.

- 1. Mount the cartridge to the headshell in the center of the slots as follows: white to left (+), red to right (+), blue to left (-), and green to right (-).
- 2. Attach the headshell to the end of the arm. Push it in as you turn the nut. Do not over tighten.
- 3. Rotate the counter weight back and forth to <u>balance</u> the tonearm for equal up and down motion.
- 4. Set the counter weight's numbered slip ring to line up its zero with the index line on the back of the tonearm. Turn the plastic slip ring, not the weight to do this.
- 5. Rotate the counter weight, <u>not the plastic slip ring</u>, so that the desired tracking force seen on the plastic slip ring is in line with the index line of the arm.
- 6. Set the anti-skating force to be the same as the tracking force by rotating the knob at the arm's right.

FINE TUNING THE ARM (You can skip this for awhile, and come back to it when convenient)

- 1. Adjust the arm height with the stylus in contact with a record (preferably junk disc) so that the arm tube is parallel to the surface of the record. (See above)
- 2. If necessary, adjust the perpendicularity of the stylus (azimuth) to the record with the hex set screw on the headshell. Just loosen with the 2.0 mm hex Allen wrench, adjust by twisting the headshell, and retighten.
- 3. Move the arm over the spindle and check the overhang of the stylus. It should be close to 15 mm (19/32"). If necessary, loosen the cartridge mounting screws and move the cartridge to bring it closer to spec.
- 4. Check that the cartridge is tangent to the grooves of records at maximum and minimum diameters. Use the supplied cartridge protractor.
- 5. Fit the protractor over the spindle and check that the cartridge body is as parallel to the horizontal lines as is possible. If you have to adjust, loosen its mounting screws and twist the body position slightly one way or the other. Then retighten. You will never get it perfect. Just try to minimize errors.

#### CONNECTIONS

- 1. Plug the round connector of the power adapter into to the POWER, DC 24V connector on the control box. Plug the power adapter's cord into a power outlet.
- 2. Plug the arm cable into you preamplifier, receiver, or integrated amplifier. You are now ready to use the turntable.

### SOME RECOMMENDED SPEEDS:

Acoustic Victor (many) = 76; "Modern" "78's" = 78; Edison, Pathe vertical (paper label), acoustic Columbia and Okeh, most vertical = 80; Some Pathe = 90.





# CARE

- 1. If you use a record cleaning brush, apply only light pressure to the record and platter.
- 2. Use only a water-dampened cloth to clean any surfaces.
- 3. If the belt gets greasy from improper handling, clean it in warm water with face soap.
- 4. Lubrication of the bearing should almost never be required. If you do so, wipe the spindle and ball bearing clean. Then add just enough 10 W 30 motor oil to cover the ball (about 4 drops).

# CALIBRATION

# (THE FOLLOWING IS <u>NOT RECOMMENDED</u> UNLESS YOU FIND A SPEED DRAMATICALLY OFF.)

For minor speed variations, or if extreme accuracy of speed is required for certain speeds, use the Pitch control. If speeds are obviously wrong, you can tweak the calibration by means of the adjustments at the rear of the motor control box. Use a small screwdriver or electronics alignment tool.

To access the calibration controls, move the base to the edge of a table till the control box's mounting screws are accessible, or prop up the front of the turntable. Loosen the left hand screw by a turn and remove the right screw. Then rotate out the right side to access the rear. Use the supplied strobe card for 33, 45, 78, and 90 rpm.



# SPECIFICATIONS

Platter	12 inch diameter 3.75 lbs Delrin
Drive System	Belt-Drive, 12 VDC Motor
Speeds	33.33, 45, 76, 78.26, 80, 90 rpm
Overall Ranges (w/Pitch Control)	28.6 to 51.3 rpm, 63.4 to 104 rpm
Pitch Control	+/- 15%
Wow & Flutter	0.09% max
Speed Accuracy	+/- 0.5%
Signal-To-Noise	-70 dBA
Power Requirements	110/240 VAC, 50/60 Hz
Arm Type	10 inch, static balance, S-shaped, tubular of aluminum and magnesium
Maximum Record Diameter	17 inches
Maximum Tracking Force Cal	3 Grams
Maximum Anti-Skating Cal	3 Grams
Dimensions	18.5" X 15" X 6.5"
Shipping Weight	30 Lbs
PROBLEMS	

Speed is way off	Maybe the turntable it very un-level. The belt may be on the pulley flange instead of in the
	pulley. The Pitch control may be misadjusted.
Repeating grooves	Too much anti-skating force. Dirty and clogged stylus. Too light a tracking force.
No power	The power supply plug could be pulled out from the speed box.
Can hear the motor purr	This is normal with DC motors. Should be a very soft purr, almost inaudible at 33.
Strobe lines wander	A little bit is OK. Don't worry; this is normal. If you hear the speed noticeably off or wow &
	flutter, then you may have a problem.
Record slides on platter	Usually a problem with records that are not flat. You may need a record clamp.

## WARRANTY

Return authorization must be obtained before making a return. It should be returned in its original packing, otherwise shipping damage cost may be charged. We can advise you as to alternate proper packing should this not be available. In the USA, such returns must be accompanied by a payment of \$45.00 for return shipping. Foreign locations must prepay return freight. Foreign customers will be given the option of having parts sent for their installation. It is fully warranted against defective materials or workmanship under normal use for the warranty period of one year from time of purchase to the original owner. Repairs, adjustment for defects or replacement of parts will be performed free of charge during the one year warranty period, except for:

a) equipment that has been damaged by accident or mishandling,

- b) equipment that has been serviced or modified by other than our authorized agents, or
- c) theft, loss, fire or other calamities.