



*REK-O-KUT*®  
TROVATORE  
TURNTABLE



SETUP AND OPERATION

## UNPACKING AND INITIAL SETUP

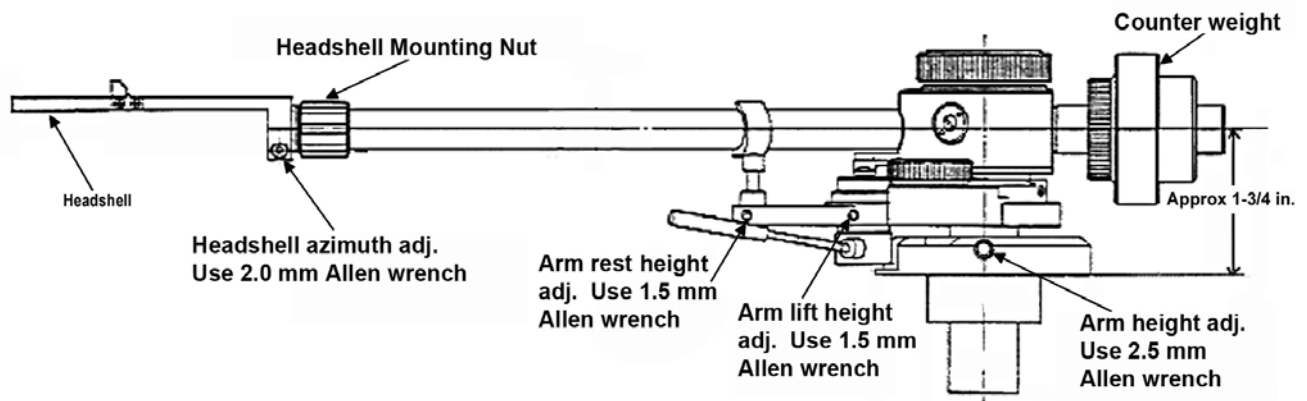
The carton contains the platter, platter/arm mounting T, motor base, and all accessories.

The surface onto which the Trovatore is to be used should be relatively level and sturdy. It should not rock in response to floor traffic.

1. Remove the motor base from its box carton. Save all packing material for re-shipping should that become necessary.
2. Carefully set the Base Unit on the surface onto which it is to be used. At this point, the feet have no protection underneath them to protect furniture surfaces – so be careful.
3. Normally, you should orient the speed switch somewhat toward the user for easier access.
4. Remove the platter/arm mounting T from its packaging.



## ARM MOUNTING



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

The arm is packaged in its OEM foam packaging. Be careful not to let it fly about loosely when handling it. You are supplied with a small package of hex wrenches. To mount the arm, you will need the largest of the group (2.5 mm).



1. Insert the vertical tube of the arm into the metal base ring on the platter/arm mounting T.
2. Rotate the arm to the right and position its headshell mounting nut 10-1/2 inches from the center of the spindle bearing. If only 12 inch maximum discs are to be played you can set it to 8-3/4 inches.
3. Lift the arm up till it is 3/8 inch above the metal base ring, and tighten the set screw with the 2.5 mm Allen wrench.

4. Plug the arm cable into the connector at the bottom of the arm. When all is in place, this cable will be routed toward the rear of the turntable base.



6. Place the T on the motor base so the three legs are centered on the vibration pods. This can all be done by eye. It is not overly critical.
7. Finally, double check the front to back at the rear of the motor base. The end of the T should line up fairly close to the motor base's rear.

## PLATTER INSTALLATION

1. Remove the platter from its packaging and observe the large round cutout on the bottom of the platter.
2. Place the platter on the spindle assembly, large indent down.
3. Place the spindle top into the recess of the platter.
4. Fit the belt around the platter, about half way down, and around the brass pulley of the motor.
5. Slowly rotate the platter a turn or two to make sure the belt is centered onto the motor pulley.



## TONEARM SETUP

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 balance 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, not the plastic slip ring, 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 base.

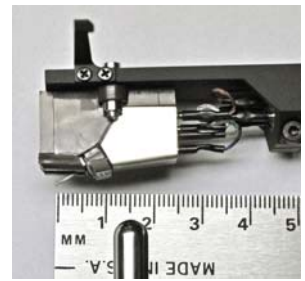


## FINE TUNING THE ARM (You can skip this for awhile, and come back to it when convenient)

1. With the stylus in contact with a record (preferably junk disc), check that the arm tube is parallel to the surface of the

record. If necessary, adjust the arm height with the hex screw in the right side of the metal base ring.

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 universal power adapter into to the POWER, DC 24V connector on the speed control box. This power cable should be routed out of the way and toward the rear of the turntable. Plug the power adapter into a power outlet.



2. Plug the arm cable into your preamplifier, receiver, or integrated amplifier. You are now ready to use the turntable.

## OPERATION

1. Place a record on the platter.
2. If the record is eccentric (hole not in the middle), remove the spindle top and center the record by eye.
3. Set the Cal/Var switch to Cal. (normal position).
4. Set the Speed Selector Switch to the appropriate reproduce speed.

### 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.

Note: For critical mastering, check the speed with a strobe disc. Use the Pitch Control as required.

5. Operate the Start/Stop switch to Start. The platter will begin to rotate and the Power LED will illuminate.
6. Lift up the cue lever, move the arm over the edge of the record and lower the cue arm.
7. To use the pitch control, set the Cal/Var switch to Var and rotate the Pitch Control as required.



## VERTICAL CUT RECORDS

For play of vertical records, you should reverse the leads to one channel of your phono cartridge, preferably the channel that has no connection to the cartridge's case. A pre-wired vertical only headshell with cartridge is available from us.

The following list includes some that could be cut vertically: Pathe, Edison, Sapphire, Arya, Lyric, Genet, Phono-Cut, Star, Crescent, Empire, Mozart, Okeh, Operaphone, Rex, Rishell, Aeolian Vocalion, World Transcription.

## 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. Be careful of the platter's surface as it can be marred by improper handling.
4. If the belt gets greasy from improper handling, clean it in warm water with face soap.
5. 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 NOT RECOMMENDED UNLESS YOU FIND A SPEED DRAMATICALLY OFF.)

For minor speed variations use the Pitch control. If extreme accuracy of speed is required for certain speeds, you can touch up 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, remove the screw nearest the vibration pod and loosen the other screw by a turn. Be careful to protect the furniture underneath the base. You can slide a piece of cardboard underneath. Now, the speed box can swing out. Be careful not to scrape the base with the speedbox. Use a "45" strobe disc band to calibrate 90 rpm.



## DUST PROTECTION

You can obtain a 10 mil, 22"X14" 10 mil plastic sheet and place it over the machine when not in use. Only the end of the arm would not be covered. We recommend that you lift off or place the sheet on from the pick up end to minimize any risk of damaging the stylus. Best solution is that you purchase our specially designed dust cover.

It is suggested that you occasionally whisk dust from areas where it may settle with a soft 1-2 inch, paint brush that is kept for that purpose only. A Proctor & Gamble Swiffer 360° Duster is very convenient for dusting the base in most inaccessible areas.



## PROBLEMS

Speed is way off	Maybe the turntable is 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	This is normal with DC motors. Should be a very soft purr, almost inaudible at 33.
Platter is scratched	Either leave it alone, or try using #0000 steel wool in the direction of groove travel to rub the scratch out. This will probably require you to go over most of the surface to blend it. You can practice on the platter's bottom.
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.

## **SPECIFICATIONS OF *REK-O-KUT* TROVATORE**

Platter	12 inch diameter, 8 lbs acrylic
Drive System	Belt-Drive, 12 VDC Motor
Speeds	33.33, 45, 76.59, 78.26, 80, 90 rpm
Pitch Control	+/- 15%
Wow & Flutter	0.05% max
Speed Accuracy	+/- 0.1%
Signal-To-Noise	>-72 dBA (limit of our test discs)
Power Requirements	100-240 VAC, 50/60 Hz (automatic selection)
Arm Type	12 inch, static balance, S-shaped, tubular of aluminum and magnesium
Maximum Record Diameter	20 inches
Maximum Tracking Force Cal	3 Grams
Maximum Anti-Skating Cal	3 Grams
Dimensions	20" X 12" X 6"
Shipping Weight	26 pounds

## **VINTAGE RECORDINGS**

Esoteric Sound regularly engages in selling vintage records at reasonable prices. This includes "78" rpm records, LP's, broadcast transcriptions, broadcast and commercial tape recordings, and occasionally audio equipment. For the latest list, go to [www.esotericsound.com](http://www.esotericsound.com).

## **WARRANTY**

This product has been manufactured to precise standards and rigid quality control. 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 \$30.00 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 by the Acts of God.

ESOTERIC SOUND  
1608 HEMSTOCK AVE.  
WHEATON, IL 60189  
PHONE/FAX: (630) 933-9801  
email: [EsotericTT@aol.com](mailto:EsotericTT@aol.com)