

## I OPERATING PRECAUTIONS

Place the turntable on a horizontal support free of vibrations. For prevention of acoustical feedback, the speakers must be placed a sufficient distance from the turntable. Save packaging should shipping become necessary!

**Warning:** If not set for the power requirement in your area, adjust the selector switch as follows:

- 1) Locate the line power transformer .
- 2) Turn the switch actuator to the voltage indication corresponding to the power of your area.

## II ASSEMBLY/ADJUSTMENT

### Assembly:

- 1) Locate counterweight, headshell, dustcover hinges, and 45 rpm adapter-usually packed in foam packaging. Locate the platter packed in a small separate box and the line cord.
- 2) Set platter on turntable spindle; loop drive belt around motor pulley (see Fig 1). Access belt through opening in platter.  
Place the rubber mat on the platter. The belt is on the inside drive rim of the platter.
- 3) Attach the counterweight to the tonearm (see Fig. 2).

### Cartridge Mounting To The Headshell:

Punch a hole in the circle of the alignment gauge. Place the gauge on the platter spindle. Orient the pickup with aid of the gauge. Screws may enter from either side. The cartridge body should be parallel to the lines at both radii as much as possible before tightening the screws. You will have to slightly rotate the platter when checking this. If you must compromise, adjust for best tracking at smaller diameters. If in a hurry, towards the front will suffice for most pickups.

Adjust the cartridge such that its top is parallel in all directions to the record surface with small paper/cardboard shims at either side and/or the rear or front of the mounting surface. Wire as follows: green to right ground, blue to left ground, red to right, and white to left.

### Adjustment Of Tracking Force:

- 1) Mount the cartridge headshell to the arm and lightly twist the retaining collar to hold it.
- 2) Remove stylus protective cover if present.
- 3) Release the arm clamp and move the tonearm to between the arm rest and the platter, taking care not to damage the stylus.
- 4) Adjust for balance by turning the counterweight either clockwise or counterclockwise (Fig. 3).
- 5) Return the tonearm to the arm rest and fasten the arm clamp.
- 6) Keep the counterweight at the adjusted position and turn the tracking force dial until the "0" mark is aligned with the index line on the tonearm shaft (Fig. 4).
- 7) Turn the counterweight/tracking force dial assembly counterclockwise till the desired tracking force is opposite the index line. For forces above 3.0 grams, simply continue past the three for the additional force. Example: Once around = 3 grams, + 1.5 grams on scale = 4.5 grams total.

Vert/Lat switch    XLR lamp adapter

"45" adapter

xtra headshell

"Vintage"  
speed selector

Strobe

Power Switch

Start/Stop

Main speed  
selector    Pitch

Fig. 1

Tonearm

Counterweight

Fig. 2

Too little stylus pressure

Counterweight

Well-balanced

Scale ring

Too much stylus pressure

Fig. 4

Fig. 3

Fig. 5

### Adjustment Of The Platter Speed

- 1) For speeds 33 & 45 the Vintage Speed switch should be set to "45."
- 2) Press the 33 or 45 speed button.
- 3) Turn the "power" knob to "on."
- 4) Press the "start" button. Table will begin rotating.
- 5) Observe the appropriate strip of strobe calibration dots from the strobe lens. The lower strip is for 60 Hz mains, the upper for 50 Hz.
- 6) If necessary, adjust the "pitch" control until the strobe dots appear stationary. At 33 rpm, a slip of 25 dots is only about a 0.1% speed variation. At 45 rpm about 0.15%.
- 7) Vintage Speed Adjustment
  - A) For speeds 71 thru 90 rpm, the "45" button should be depressed.
  - B) To calibrate, use the supplied strobe disc. Use the pitch control and adjust it so that the strobe lines for "78" do not move. The other "Vintage" speeds will fall in line.

### Connection

The phono cables and ground lead attach at turntable rear. Connect one end of supplied stereo cable to turntable and other end to amplifier. Connect the black ground lead to the amplifier ground terminal (Fig. 5). Orient power plug to minimize hum when the volume is moderately high.

## III OPERATION

Note: Space is provided on the right rear corner for storing one extra headshell.

### Suggested Speed Settings For Vintage Records

The setting of the Auxiliary "Vintage" speed selector switch converts the main "45" setting only. Do not use it with the main selector at "33." The following are recommended settings for vintage records:

Berliner, Early Victor (no label), Zonophone - 71.29

Acoustic Victor (many) - 76.59

"Modern" "78's" - 78.26

Edison, Pathe vertical (paper label), acoustic Columbia & Okeh, Most vertical - 80

Some Pathe - 90

### **Remember:**

Depress "33" button for LP's

Depress "45" button for "45's" or "78's"

### Playing A Record

- 1) Select the speed for the record to be played (when playing 16" transcriptions use "slip mat" under rubber mat).
- 2) Rotate the "power" button to "on" position. This may start platter rotation. Press "start/stop" if necessary.
- 3) Place a record on the turntable platter - use the 45 adapter when playing a record which has a large diameter center hole.
- 4) Push in the "start/stop" button to start platter rotation.

- 5) Position the tonearm above the lead-in groove of the record and lower the tonearm to the playing surface.
- 6) At the end of the side, lift the tonearm off the record surface.

#### Record Cueing (especially useful when assembly editing on a tape recorder)

- 1) Engaging the stylus to the playing surface and rotate the platter manually to the beginning of sound desired.
- 2) Rotate platter by hand about 3/4 turn (33), 1 ½ turns (78) counterclockwise.
- 3) Push start button.

#### IV VERTICAL - LATERAL SWITCH

The normal position for this switch is towards the colored dot. This corresponds to lateral cut records including stereo Lp's. To play a vertical cut record, such as an Edison or Pathe:

- 1) Move Vert/Lat switch actuator away from colored dot.
- 2) Set amplifier or preamplifier "mode" control or equivalent to "mono."
- 3) Play record same way as regular records.
- 4) To Remove center solo performer or singer from stereo Lp record, set Vert/Lat switch away from color dot and set amplifier "mode" control to mono. Monophonic recordings can be produced less these soloists in this manner.

#### V PHONO CARTRIDGE

Wiring to the headshell is as follows: White(L), Red(R), Blue(LG), and Green(RG). Screws may enter from either side, whichever is more convenient. Orient the pickup forward or to the rear by aid of the gauge provided. The cartridge body should be parallel to the lines at both radii as much as possible before tightening the screws. If you must compromise, adjust for best tracking at smaller diameters. If in a hurry, towards the center will suffice for most pickups. Note: Some short or tall cartridges may require a small paper/cardboard shim either at the rear, front or either side of the mounting surface to align them properly with the surface of a record. Usually, you want to mount the pickup such that its top is parallel to the playing surface of the record.

For reproduction of "78's" heavier tracking pickups are recommended. Pickups tracking at 4 - 6 grams will do no harm to these discs. The Shure SC35C and Stanton 500 are highly recommended. Set tracking force per II.8.

Also useful on older and or worn discs are the special undersized and oversized styli made for Esoteric Sound to fit Grado DJ-100 cartridges. These styli are available in a variety of diameters, i.e., 2.0, 2.5, 3.0, 3.5, and 4.0 mil which either fit older grooves better or play above or below the wear caused by earlier more abusive styli.

#### VI FURTHER CONSIDERATIONS

The "mode" control of your amplifier should set to mono when listening to mono records so as to minimize rumble. Similarly, the feed to a tape recorder (which is not affected by the "mode" control) should be paralleled when making recordings. This can be done at the pickup with a small wire jumper, but this would render most click and pop filters inoperative. The right and left "tape output" of your amplifier may be combined with a "Y" connector set to accomplish this. This function along with proper record compensation for non-RIAA records is performed by the Esoteric Re-Equalizer.

#### VII PROBLEMS

**No belt**            Check again. It's on the inside rim of the platter.

<b>No platter rotation</b>	Belt fell off of platter.
<b>Runs slow at 78</b>	You forgot to set main speed to "45."
<b>Hum or no sound</b>	Check that the black ground wire is hooked between the turntable and the amplifier. Clean the headshell pins by rubbing them on a piece of cloth.
<b>Skipping</b>	Increase tracking weight, juri-rig anti-skating with string and small weights to pull arm from skipping.
<b>Hum when Vert/Lat Sw set to vert.</b>	Shure and some other cartridges are internally wired different from Stanton/Grado/etc. Reverse channel wiring in headshell. Then reverse cables coming from turntable base.
<b>Cartridge Sets funny with some records</b>	Mount another cartridge in another headshell and shim it for proper alignment for use with that type of record. You may probably have to do this for Edison records.

#### VI SPECIFICATIONS

Type: Belt-drive, DC motor, fully manual  
 Speeds: 33.33, 45, 71.29, 76.59, 78.26, 80, 90 rpm  
 Turntable platter: 13 1/16," 1.75 Lbs  
 Minimum recommended tracking force: 1.2 grams  
 Power supply: 110/220 VAC, 60/50 Hz

Minimum Recommended Tracking Force: 1.75 Grams  
 Wow and flutter: Less than 0.15 (WRMS)  
 Rumble: -75 dB (DIN)  
 Tonearm: Statically balanced, S-shape, Manual  
 Dimensions: 17 3/4" X 13 3/4" X 6"

#### - VINTAGE RECORDS -

Esoteric Sound regularly engages in selling vintage records by mail auction at reasonable prices. This includes "78" rpm records, LP's, broadcast transcriptions, broadcast and commercial tape recordings, and occasionally audio equipment. Please send a note if you wish to be included in our mailing list.

#### - WARRANTY -

This product has been manufactured to precise standards and rigid quality control. Return authorization must be obtained before making any return. **Unit should be returned in it's original packing otherwise cost of repair for damage incurred will be charged.** We can advise you as to alternate proper packing should this not be available. In the USA, such returns should be accompanied by a payment of \$15.00 for re-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 the normal use for the warranty period of 1 year from time of purchase to the original owner. Repairs, adjustment for defects or replacement of parts will be performed free of charge, except:

- a) If equipment has been damaged by accident or mishandling.
- b) If equipment has been serviced or modified by other than our authorized agents.
- c) In case of theft, loss, fire or other calamities by the Acts of God.

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