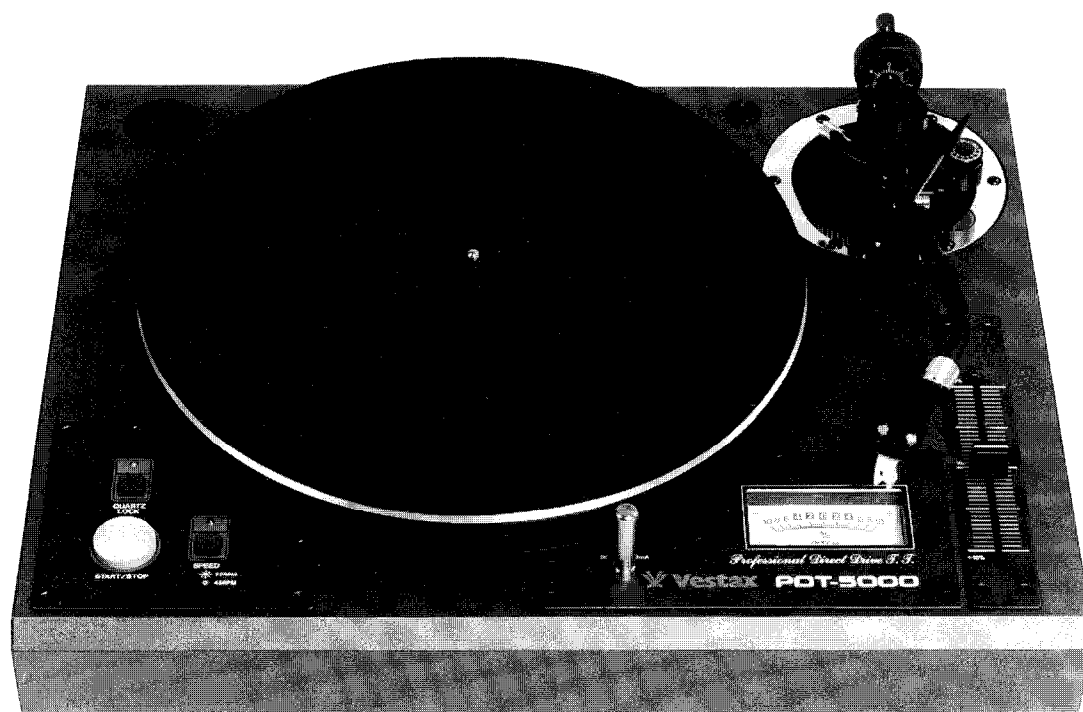


---

**Vestax**

# PDT-5000

## OWNER'S MANUAL



**VESTAX CORP.**

2-37-1 Kamiyama, Setagaya-ku, Tokyo 154

Phone: 03-3412-7011 Fax: 03-3412-7013

**VESTAX MUSICAL ELECTRONICS CORP.**

2860 Cordelia Rd. Suite 120 Fairfield, CA 94585 U.S.A.

Phone: 707-427-1920 Fax: 707-427-2023

**VESTAX (Europe) Ltd.**

18 St. Christopher's Road, Haslemere, Surrey GU27 1DQ England

Phone: (0) 1428-653117 Fax: (0) 1428-661021

---

## FEATURES

- **FAST STARTS BY HIGH TORQUE**  
Using high-torque direct motor, the integral motor delivers 1.6kg·cm start torque. The high-torque gives quick starts that enables the platter to reach 33- $\frac{1}{3}$  rpm within 0.5 second.
- **FLOATING SUSPENSION TONEARM**  
The tonearm is supported by a floating suspension system designed and introduced originally to the world-wide market by VESTAX. This newly invented system prevents from howling to the minimum.
- **QUARTZ-PHASE-LOCKED CONTROL**  
The pitch is variable continuously by up to approximately  $\pm 10\%$  and returned automatically to the predetermined speed (33- $\frac{1}{3}$  or 45 rpm) by on/off switch even if the pitch control is employed.
- **NON-CENTER-CLICK PITCH FADER**  
Pitch fader has no center click, and it allows delicate adjustment easy. PDT-5000 features detachable pitch control fader for ease of replacement when it is worn out.
- **PITCH METER**  
This meter is useful for the checking or adjusting pitch.
- **MINI LIGHT FOR ILLUMINATING STYLUS**  
PDT-5000 provides detachable small stylus illuminator for illuminating the stylus tip during play for low-light conditions.
- **OTHER FEATURES**  
Quick stops are achieved with an electronic braking system.  
Remote control jack is provided for controlling START/STOP by other equipment like a fader start etc..  
Four large insulated feet, heavy special platter and othe integral accoustic technology make the PDT-5000 ideal for use with extra-high sound presure levels.

## BEFORE USE

- **CAUTION** : Never connect the AC power plug before assembly has been completed.
- **CHECKLIST OF PARTS** :  
This unit includes the following parts ;

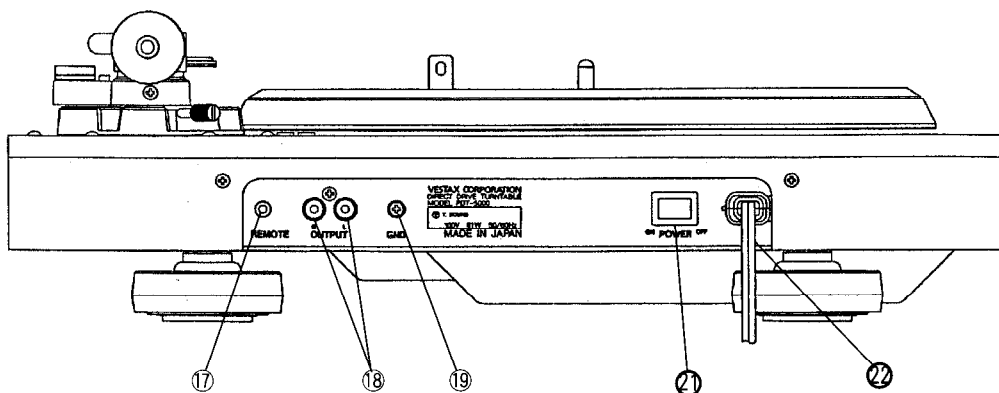
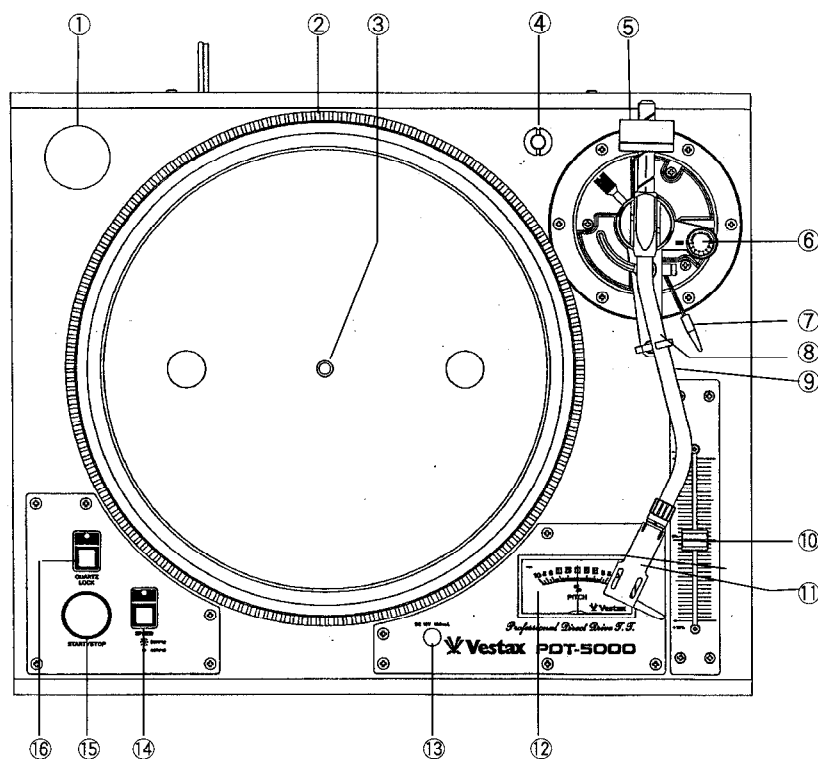
1. Turntable Unit	6. Balance Weight
2. Turntable Platter	7. 45-rpm Adaptor
3. Slip Mat	8. RCA Cable
4. Shell Weight	9. GND Cable
5. Headshell	10. Stylus Illuminator

## SAFETY INSTRUCTIONS

1. Avoid placement of the unit where it will be exposed to the direct sun light or where ventilation is inadequate.
2. Avoid places where there is water or humidity.
3. Don't allow water or any foreign object to get inside of this unit.
4. Place this unit away from heat-emitting appliances.
5. Place the unit on a stable, horizontal position, where there is little or no vibration.
6. Check the voltage rating of this unit before connecting the unit to a power supply.
7. Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed on or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the appliance. Never take hold of the plug or cord if your hand is wet, and always be sure to grasp the plug body when connecting or disconnecting.
8. Never attempt repairs yourself ;
  - A. The power supply cord or the plug has been damaged  
or
  - B. Objects have fallen or liquid has been spilled into the appliance  
or
  - C. The appliance has been exposed to rain  
or
  - D. The appliance has been dropped or the enclosure damaged  
or
  - E. The appliance does not appear to operate normally or exhibits a marked change in preformance.
9. Except for adjustments explained in the operating instructions, do not attempt any repairs yourself. Be sure to request service from a qualified technician or your dealer or nearest service center.

## FRONT

- ① Adaptor pocket for 45-rpm
- ② Turntable
- ③ Center Spindle
- ④ Spare Cartridge Stand
- ⑤ Balance Weight
- ⑥ Anti-skating Control Knob
- ⑦ Cueing Lever
- ⑧ Arm Rest
- ⑨ Tonearm
- ⑩ Pitch Control Knob
- ⑪ Headshell
- ⑫ Pitch Meter
- ⑬ Detachable Stylus Illuminator
- ⑭ Speed Select Button
- ⑮ START/STOP Button
- ⑯ ON/OFF Button for Quartz Locked Pitch



## REAR

- ⑰ Remote-control Jack
- ⑱ Output Jack
- ⑲ GND Jack
- ⑳ Power Switch
- ㉑ Power Cord

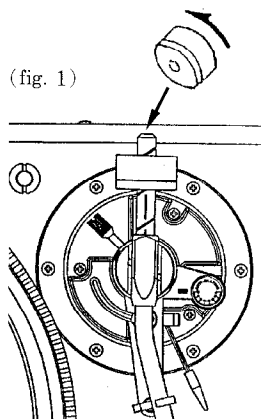
## ASSEMBLY AND SET-UP

### Installation of Turntable Platter

1. By placing the turntable platter on the center spindle, the platter adjusts to match the spindle by itself
2. Place the slip mat on the platter.
3. Extra care should be taken to avoid damaging magnet by dropping it.

### Installation of Balance Weight

Place the balance weight on the rear shaft of the tonearm (see fig. 1) winding the balance weight clockwise.



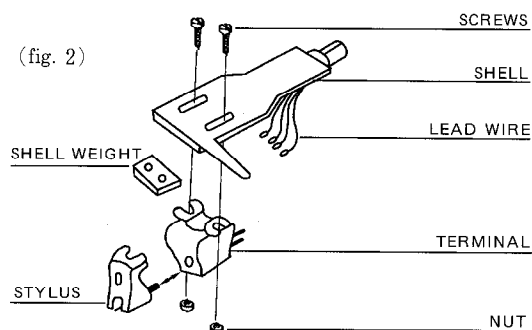
### Installation of Cartridge

In accordance with the instructions of the cartridge, install a cartridge properly.

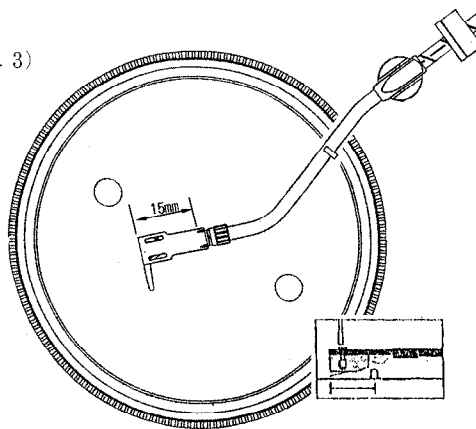
In case the cartridge weight is less than 8g, it is necessary to fix the attached shell weight on the cartridge.

Connect the lead wires to the cartridge terminals. The terminals of most cartridges are color coded. Connect each lead wire to the terminal of the same color.

Red	(R+)	.....Right Channel +
Green	(R-)	.....Right Channel -
White	(L+)	.....Left Channel +
Blue	(L-)	.....Left Channel -



(fig. 3)



### Adjustment of Overhang

Use a rule, etc. to carry out correct adjustment.

As shown in the illustration, overhang indicates the distance from the stylus tip to the center of the turntable spindle when the stylus tip falls on the extension of a straight line from the pivot of the tonearm to the center of the spindle. If the overhang adjustment is not properly made, the stylus will not be able to trace the record grooves correctly.

1. Loosen the two cartridge mounting screws.
2. Position the tonearm over the spindle.
3. Slide the cartridge forward or backward until the position of the stylus tip corresponds to the specified distance from the center of spindle (see illustration).
4. After obtaining correct overhang, tighten the two cartridge mounting screws firmly.

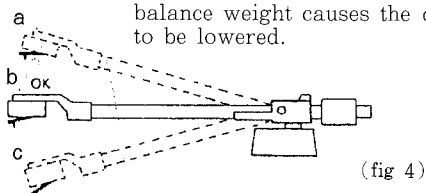
Note: Be sure not to touch stylus during adjustment with finger.

### Adjustment of Horizontal Zero Balance

1. Set the anti-skating control knob to the "0" graduation.
2. Release the tonearm from the armrest to free.  
Note: Be careful not to touch your finger to the stylus tip.
3. Turn the balance weight clockwise or counter clockwise until the tone arm is balanced horizontally.

Note: During the adjustment of the horizontal balance, the cueing lever should be downward.

4. (see fig. 4)
  - a. Excessive backward retreatment of the balance weight causes the cartridge side to be raised.
  - b. The balance weight and cartridge are balanced, the tonearm is held horizontal.
  - c. Excessive forward advancement of the balance weight causes the cartridge side to be lowered.

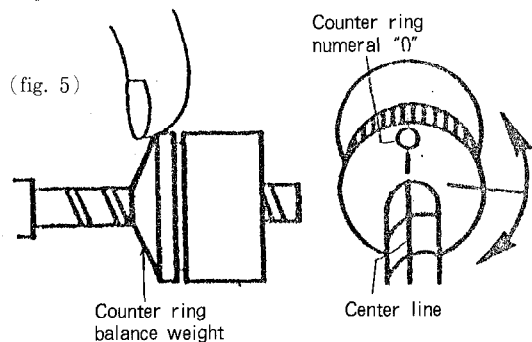


5. Return the tonearm to the armrest.

### Adjustment of Stylus Pressure

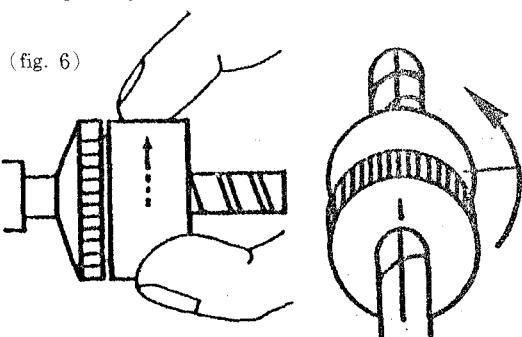
1. Hold the balance weight with one hand as shown in the drawing (see fig. 5), and rotate only counter ring to bring the numeral "0" of the ring into alignment with the center line on the tonearm rear shaft (see fig. 5).

Note: In case the balance weight moved, do the adjustment of horizontal zero balance again.



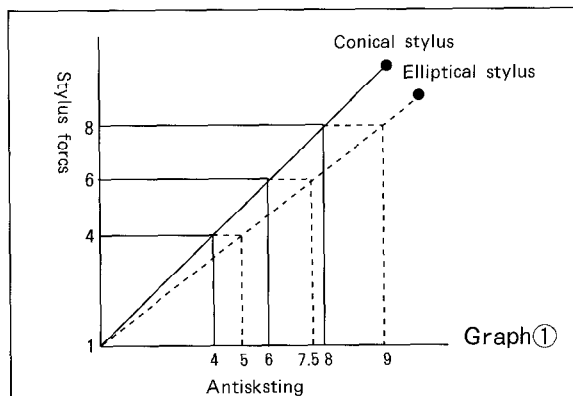
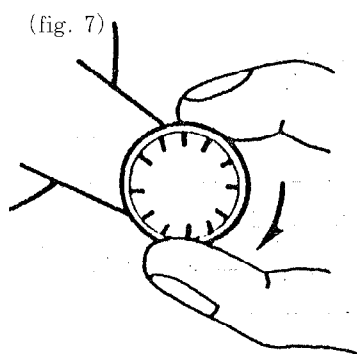
2. Turn the balance weight to present the reading on the gauge to the designed stylus force of your cartridge (see fig. 6).

As the counter ring moves in step with the balance weight, proper stylus pressure can be selected by reading the graduated ring directly.



### Adjustment of Anti-skating Control

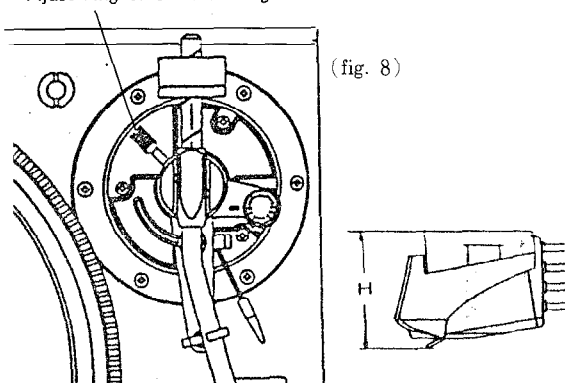
Turn and set the anti-skating control knob to the same value as the stylus pressure (see fig. 7).



### Adjustment of Tonearm Height

The height of the tonearm can be adjusted maximum 6mm by adjust ring (see fig. 8)

Adjust ring of tonearm height

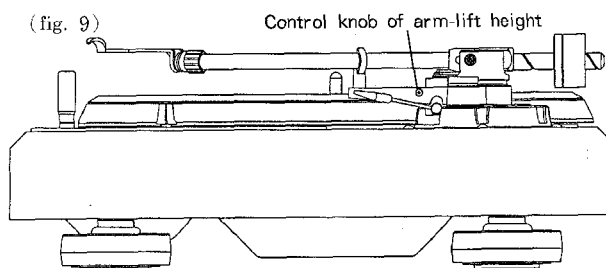


### Adjustment of Arm-lift Height

The arm-lift height (distance between record surface and the stylus tip when the cueing lever is raised) has been adjusted properly at the factory before shipping.

In case the clearance is too narrow or too wide, it can be adjusted by turning the screw as shown fig. 9.

Note: Be sure not to damage stylus tip using its cover and power should be off.



### STYLUS ILLUMINATOR (Detachable Mini Light)

This unit features a small light for illuminating the stylus. It is detachable and you can remove it when not in use.

### REMOTE CONTROL

In case you wish to control the START/STOP with using external equipment like a foot-switch etc., input jack is provided at the left side of rear panel.

### QUARTZ LOCKED CONTROL AND PITCH ADJUSTMENT

1. When the indicator lamp is lit showing the operating condition for the pre-determined speed (33- $\frac{1}{3}$  or 45 rpm).
2. During the operation of pre-determined speed, pitch control fader can not be functioned. And once press the quartz control button, the indicator lamp is put out, the speed can be adjusted by pitch control fader.
3. During the operation of above 2., if you want to change the speed to the pre-determined one, press the quartz button. The indicator lamp lights and speed will become pre-determined one even when the pitch control fader not in the center.
4. The pitch controlling is possible up to maximum approximately  $\pm 10\%$ . Adjust the pitch by sliding pitch control fader. The fluctuation of pitch is indicated on the pitch meter. Figures on the indicator show approximate percentages for valuable pitch control.

### HOWLING AND HUM

Howling is usually caused by vibration of speakers, which affects the sensitive cartridge. If such a phenomenon occurs, relocate the turntable or speakers as far apart from each other as possible. Hum is usually caused by nearby appliances that use transformer or thermostat. Relocating the unit further away from the noise sources will readily solve the problem. Hum may also be produced if the unit is not properly grounded. Make sure the grounding wire extending from the unit is securely connected to the GND terminal on the amplifier or mixer.

### INSTALLATION

Do not place the unit where it is exposed to direct sun light, high temperature or humidity to prevent possible troubles.

Place the unit in a stable and horizontal position, where there is little or no vibration.

Locate the unit as far away from the speakers as possible and isolate the unit from sound radiation from them.

If the unit is placed too close to the radio, interference to AM/FM reception may result.

### CONNECTION

Connect the output to inputs of amplifier or mixer.

WHITE(L) ..... L Channel

RED(R) ..... R Channel

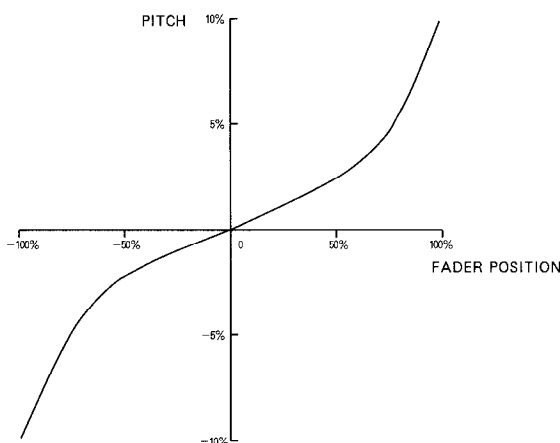
GND ..... GND

Note: Be sure to connect firmly the GND terminal to the amplifier or mixer, or a power source HUM will result..

### PITCH DISPLAY

The Pitch Display shows percentages by Electronically sensing the actual speed of the Drive Motor. This is accurate to within 5%. As the sliding fader is mechanical, (as with any turntable), it will be less accurate than the Display. Therefore you can rely on the Digital Pitch Display for best readings.

Relationship between Pitch and Fader Position



## OPERATION

1. Place the record on the turntable mat.
2. Press the power switch button provided at rear panel to turn "on" position.
3. Remove the stylus protector if cartridge is detachable one.
4. Push the start/stop button, then platter will start to turn.
5. Set the cueing lever to the up position.
6. Move the tonearm position over the record.
7. Set the cueing lever to the down position, and play will begin.
8. Move the tonearm to the armrest when play is finished.
9. Push the start/stop button, and platter will stop.
10. Turn off the power.

Note: If you wish to interrupt the play midway through the record, lift the cueing lever. Play will stop.  
The unit has been set to select 33- $\frac{1}{2}$  rpm automatically when the power button is pressed to on. Push the 45 rpm speed select button if you play 45 rpm record.

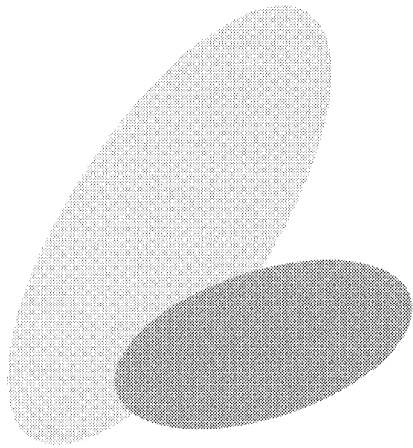
## NOTES

- Before detaching or attaching the headshell, be sure to turn the power of the amplifier or mixer off.
- Detaching or attaching of the headshell with the volume control turned up may cause damage to the speakers.
- Do not turn "ON" the power supply, with the turntable platter detached.
- When play is finished, be sure to secure the tonearm with the arm clamp. After play is finished, if the unit is not to be used for some time, care should be taken to secure the tonearm to protect the stylus tip. For the same reason, the stylus protector should also be attached.
- Wipe the headshell terminals from time to time. Dust and dirt at the headshell terminals may result in increased "HUM" noise or intermittent sound. Use a soft dry cloth to clean the headshell terminals.
- Dust and dirt should be carefully removed from stylus tip or records. Dust and dirt on the stylus tip or record may not only result in deterioration of tone quality, but also cause undue wear of the record and the stylus tip itself.
- Transportation of the unit to distant places for removal and the like. Pack up the unit in the reverse order to that for unpacking, using the packing materials furnished when the unit was purchased. Should there be no such packing materials, be sure to take the following steps.

Remove the turntable platter together with the turntable mat, and wrap it up to prevent any damage to them. Return the tonearm to the arm rest, and affix it with tape or the like. Remove the balance weight and the headshell/cartridge from the tonearm and then wrap them up to avoid any damage to them. Wrap up the turntable base with a blanket or soft paper also to prevent any possible damage to it.

## SPECIFICATION

TURNTABLE	MOTOR STARTING UP TIME STARTING TORQUE BRAKING SYSTEM RUMBLE (S/N RATIO) SPEED PITCH WOW & FLUTTER	DIRECT DRIVE QUARTZ 0.5sec (33 $\frac{1}{2}$ rpm) 70° 1.6kg·cm ELECTRONIC BRAKE 78dB (IEC 98A WTD) 33 $\frac{1}{2}$ rpm, 45rpm ±10% (DETACHABLE 100mm FADER) 0.03% W. R. M. S.
ARM	TYPE EFFECTIVE LENGTH OFFSET ANGLE OVER HANG TRACKING ERROR CUEING DEVICE ANTI SKATING STYLUS PRESSURE ARM HEIGHT	STATIC BALANCE'S SYSTEM (ALMOST ZERO ACOUSTIC F. B) 230mm ±1mm 22° 15mm +2° 32' ~ +0° 32' OIL DAMPING TYPE ADJUSTMENT RANGE 0~7.0 g ADJUSTMENT RANGE 0~7.0 g ADJUSTMENT RANGE 43~49mm
	LIGHT PITCH METER SPEED LOCK REMOTE DIMENSION WEIGHT POWER	DETACHABLE MINI LIGHT DC12volt 100mA ANALOG METER with INDICATOR QUARTZ LOCK MOMENTARY START (MINI JACK) (W)450mm×(H)136mm×(D)370mm 11kg AC 120V or 230V.



**Vestax Corporation**

---