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# **Vestax**

# PDX-d3 MK II

## OWNER'S MANUAL

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## FEATURES

- The stick controller gives instant speed adjustment of plus minus 50% and pitch bend of plus minus 1,2,3 or 6%(selectable). The DJ's don't need to touch the turntable for the tempo adjustment any more.
- The new mixing techniquis is now available with unique reverse mode feature. The turntable starts spinning backward by pressing the reverse button. All of the functions(pitch bend, speed control, etc.) apply to reverse play.
- The other unique feature, motor off switch gives natural "wind down" effect without turning the power switch off. Selectable range of pitch control allows wider or finer pitch control with 3,6 and 12% of range
- Fully logic controlled dual PLL synthesizer allows the most accurate speed control and totally continuous pitch control.
- The new synchronize features allows control of more than two PDX-d3mkII with a single operation. (optional cable required)

## IMPORTANT SAFEGURDS

### READ BEFORE OPERATING EQUIPMENT

This product was designed and manufactured to meet strict quality and safety standards. There are, however, some installation and operation precautions which you should be particularly aware of.

1. Read instructions - All the safety and operating instructions should be read before the appliance is operated.
2. Retain instructions - The safety and operating instructions should be retained for future reference.
3. Heed Warnings - All warnings on the appliance and in the operating instructions should be adhered to.
4. Follow Instructions - All operating and use instructions should be followed.
5. Cleaning - Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
6. Attachments - Do not use attachments not recommended by the product manufacturer as they may cause hazards.
7. Water and Moisture - Do not use this product near water - for example, near a bath tub, wash bowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool, and the like.
8. Accessories - Do not place this product on an unstable cart, stand, tripod, bracket, or table. The product may fall, causing serious injury to a child or adult, and serious damage to the appliance. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer, or sold with product. Any mounting of the appliance should follow the manufacturer's instructions, and should use a mounting accessory recommended by the manufacturer.
9. Ventilation - Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the product and to protect it from overheating, and these openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. This product should never be placed near or over a radiator or heat register. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.
10. Power sources - This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your appliance dealer or local power company.
11. Grounding or Polarization - This product is equipped with a polarized alternating-current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If this should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.
12. Power-Cord Protection-Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the appliance.

## NOTES

13. **Protective Attachment Plug** - The appliance is equipped with an attachment plug having overload protection. This is a safety feature. See Instruction Manual for replacement or resetting of protective device. If replacement of the plug is required, be sure the service technician has used a replacement plug specified by the manufacturer that has the same overload protection as the original plug.
14. **Lightning** - For added protection for this product during lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet. This will prevent damage to the product due to lightning and power-line surges.
15. **Overloading** - Do not overload wall outlets and extension cords as this can result in a risk of fire or electric shock.
16. **Object and Liquid Entry** - Never push objects of any kind into this product through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.
17. **Servicing** - Do not attempt to service product yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.
18. **Damage Requiring Service** - Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:
  - a. When the power-supply cord or plug is damaged.
  - b. If liquid has been spilled or objects have fallen into the product.
  - c. If the product has been exposed to rain or water.
  - d. If the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to its normal operation.
  - e. If the product has been dropped or cabinet has been damaged.
  - f. When the product exhibits a distinct change in performance - this indicates need for service.
19. **Replacement Parts** - When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original parts. Unauthorized substitutions may result in fire, electric shock or other hazards.
20. **Safety Check** - Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.
21. **Carts and Stands** - The appliance should be used only with a cart stand that is recommended by manufacturer.
22. **An appliance and cart combination** should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.



AC POLARIZED PLUG



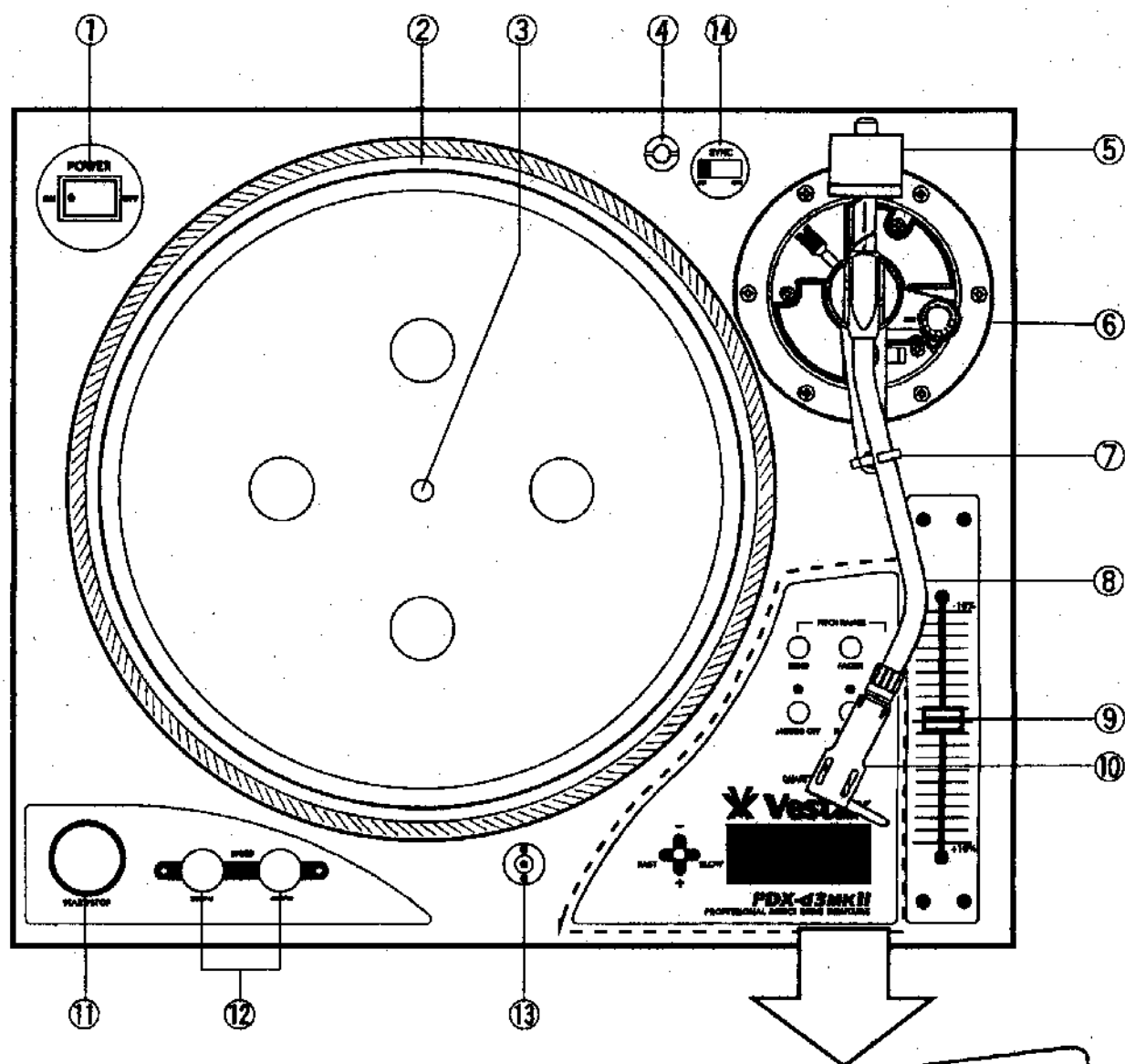
- Before detaching or attaching the headshell, be sure to turn the power of the amplifier or mixer off.
- Detaching or attaching of the headshell with the volume control turned up may cause damage to the speakers.
- Do not turn "ON" the power supply, with the turntable platter detached.
- When play is 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.

## ACOUSTIC FEEDBACK AND HUM

Acoustic Feedback 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.

# CONTROL AND FUNCTIONS

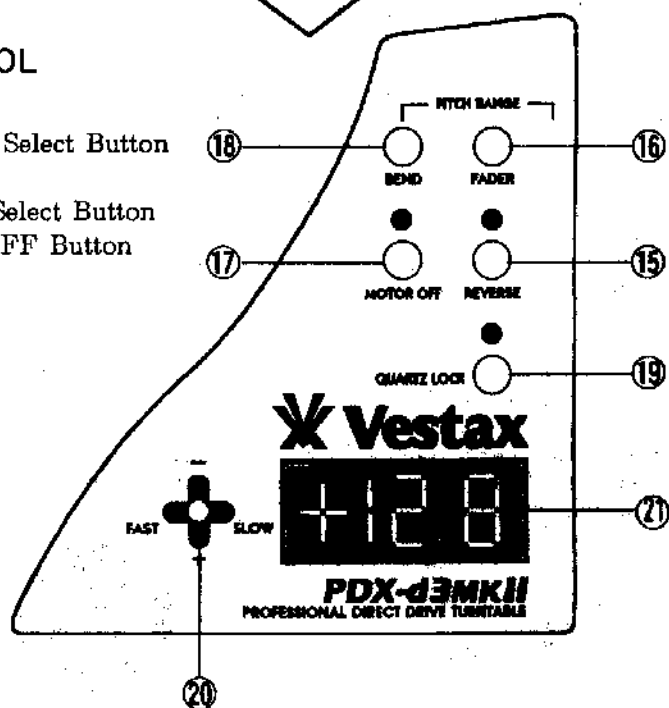


## FRONT PANEL

- ① Power Switch
- ② Turntable
- ③ Center Spindle
- ④ Spare Cartridge Stand
- ⑤ Balance Weight
- ⑥ Anti-skating Control Knob
- ⑦ Arm Rest
- ⑧ Tone-arm
- ⑨ Pitch Control Knob
- ⑩ Headshell
- ⑪ START/STOP Button
- ⑫ Speed Select Button
- ⑬ Detachable Styles Illuminator Jack
- ⑭ Sync Control Switch

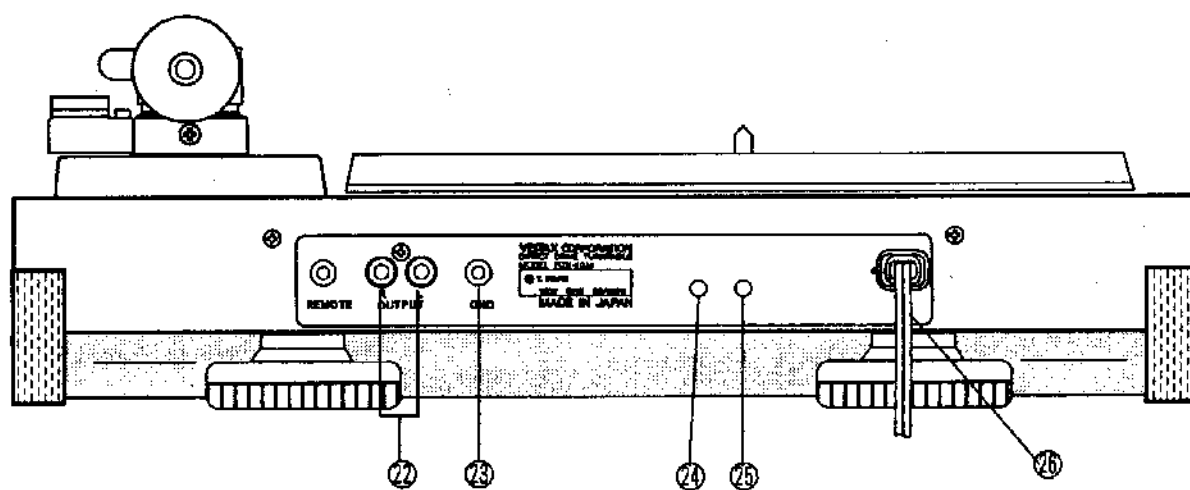
## DIGITAL CONTROL

- ⑮ Reverse Button
- ⑯ Fader Pitch Range Select Button
- ⑰ Motor Off Button
- ⑱ Bend Pitch Range Select Button
- ⑲ Quartz Lock ON/OFF Button
- ⑳ Stick Controller
- ㉑ Display



## REAR PANEL

- ② Output Jack
- ③ Ground terminal
- ④ Remote-control Input Jack
- ⑤ Remote-control Output Jack
- ⑥ Power Cord



## 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	5. Headshell
2. Turntable Platter	6. Balance Weight
3. Slip Mat	7. RCA Cable
4. Shell Weight	8. GND Cable

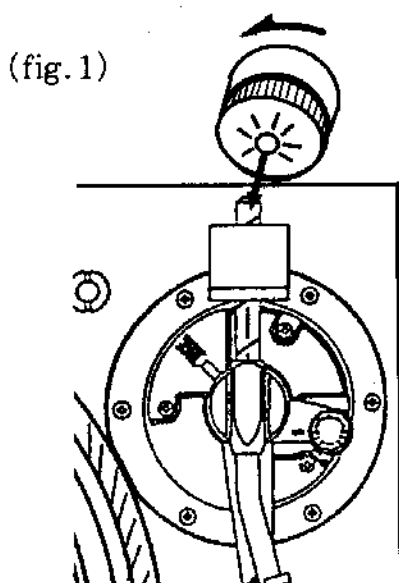
## ASSEMBLY AND SET-UP

### 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.



### Method of Using Slip Mat

Place slip mat on the turntable platter, and place the record on the slip mat. It is possible to stop and return the record by hand while the turntable revolving.

- Surface of slip mat (printed).....Disk side
- Inside of slip mat.....Slip side

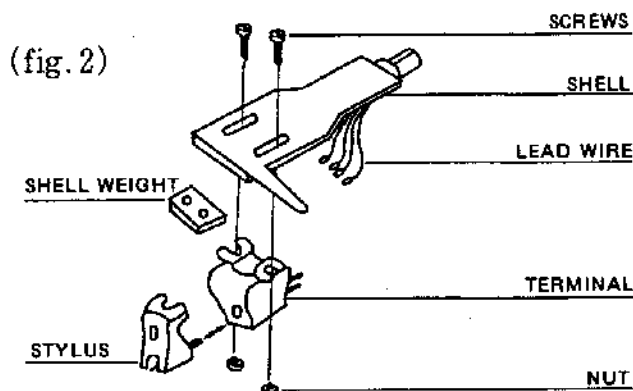
### Installation of Cartridge

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 -



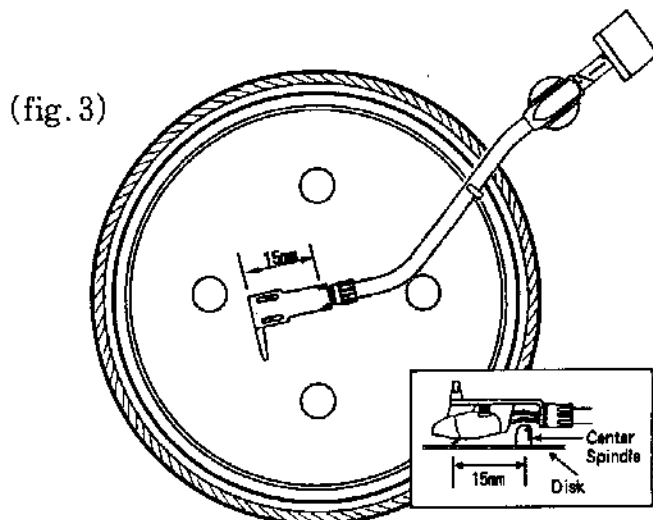
### Adjustment of Overhang

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.

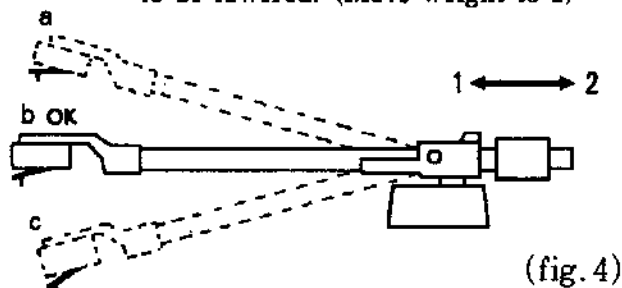
**Note** : Be shure not to touch stylus during adjustment with finger.



## ADJUSTMENT OF STYLUS PRESSURE

### Adjustment of Horizontal Zero Balance

- ① Release the tonearm from the armrest to free.  
Note: Be careful not to touch your finger to the stylus tip.
- ② Turn the balance weight clockwise or counter clockwise until the tone arm is balanced horizontally.
- ③ (see fig. 4)
  - a. Excessive backward retreatment of the balance weight causes the cartridge side to be raised. (Move weight to 1)
  - 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. (Move weight to 2)

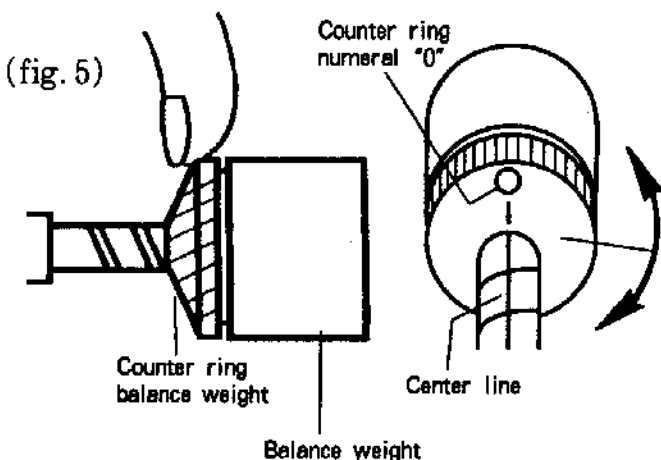


- ④ Return the tonearm to the armrest.

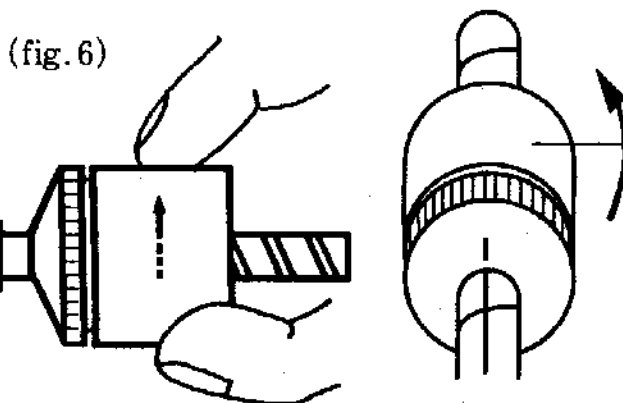
### Adjustment of Stylus Pressure

- 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.

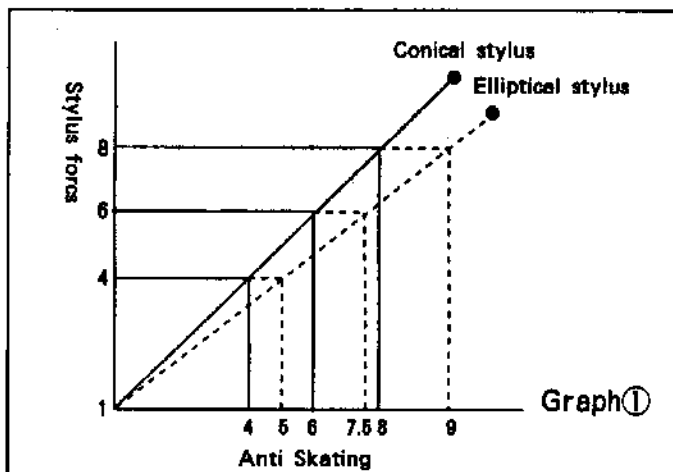
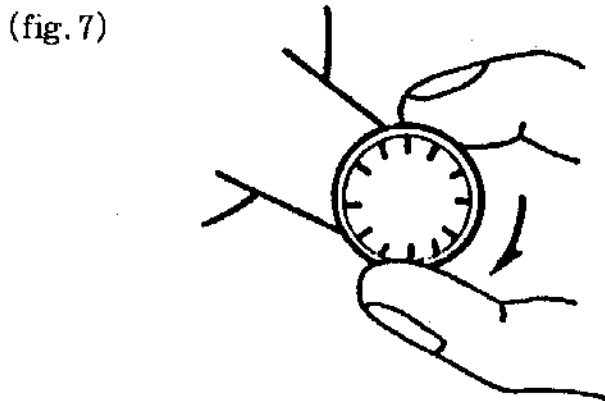


- ② Turn the balance weight to present the reading on the gauge to the designed stylus force of your cartridge (see fig. 6).  
As the counter ring moves in step with the balance weight, proper stylus pressure can be selected by reading the graduated ring directly.



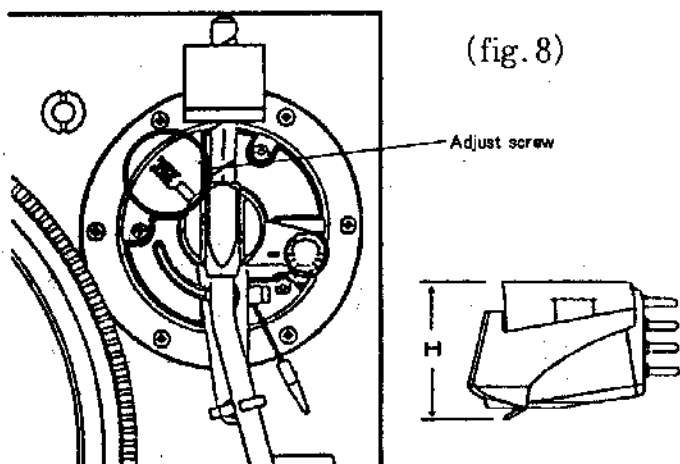
### Adjustment of Anti-skating Control

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)



## 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..

## STYLUS ILLUMINATOR (Detachable Mini Light)

The small light for the stylus illumination is available as an optional extra.

## 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 Pitch control is possible up to a maximum of approximately  $\pm 3\%$ ,  $\pm 6\%$ ,  $\pm 12\%$ . Adjust the Pitch by sliding the Pitch Control Fader.



## OPERATION

- ① Place the record on the turntable mat.
- ② Press the power switch button provided at top 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 Move the tonearm position over the record.
- ⑥ Put it down to the record, and play will begin.
- ⑦ Move the tonearm to the armrest when play is finished.
- ⑧ Push the start/stop button, and platter will stop.
- ⑨ Turn off the power.

## METHOD OF DIGITAL CONTROL

### 1. FADER PITCH SPAN SELECT SWITCH

Pushing the switch, fader pitch span can be selected between  $\pm 3\%$ ,  $\pm 6\%$ ,  $\pm 12\%$ . While watching the display (21), push this switch continuously until the indicated value of span to select and stop pushing. When the display return to pitch meter, selected value of span is set. But the value of span has error  $\pm 0.9\%$  because of limit of electric function. The display will indicate the value of pitch exactly. So that believe the value will be indicated at the display than the position of PITCH FADER VOLUME.

### 2. REVERSE SWITCH

Pushing REVERSE SWITCH, the display will indicate "ron" ("reverse on"), LED above this switch light on. Pushing this switch once more, reverse function is canceled and the display indicate "roF" ("reverse OFF"), the LED light off.

### 3. MOTOR OFF SWITCH

Pushing this switch, the motor is disconnected from the servo drive and the turntable turns to until it stops naturally, and it is possible to change rotation motion of turntable by touching the side of turntable. The display will indicate "SoF" ("SERVO OFF"). Pushing this switch once more, the function of MOTOR OFF is canceled and the display indicates "Son" ("SERVO ON"). In condition of MOTOR OFF, Function of pitch fader, Stick controller, Reverse start/stop etc.. are canceled.

### 4. QUARTZ LOCK SWITCH

Pushing this switch, LED above this switch light on. The pitch is returned automatically to the predetermined speed (33-1/3 or 45 rpm) in regardless of position of PITCH CONTROL FADER VOLUME. At this time, the display indicates "qon" ("quartz ON") for one second. After that, it indicates the value of pitch as "+00.0". By pushing this switch once more, The quartzlock is canceled and the LED lights off, then the display indicates "qoF" ("quartz OFF"). In quartzlock, pitch bend function of stick controller is canceled. In case of power switch being on, beginning set is quartz lock off at 33rpm.

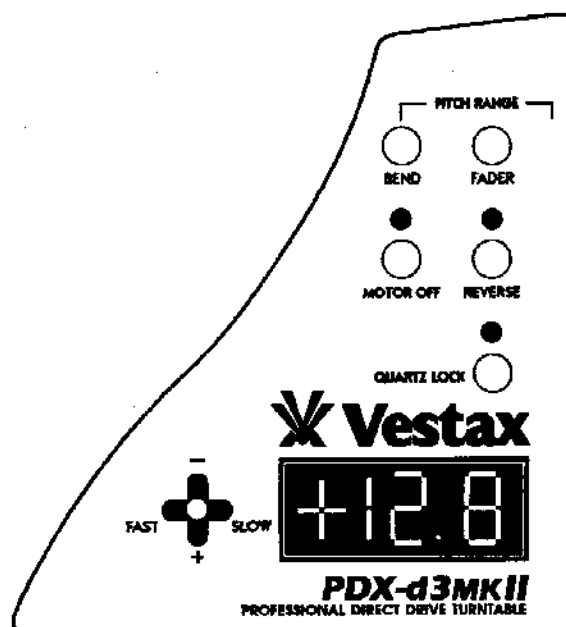
## 5. STICK CONTROLLER

### (a) FF, SPEED DOWN

Moving the stick controller to the left, the display indicate "FAS" ("FAST"), stick controller function is FAST FORWARD (FF), the pitch speed is up momentarily. Moving the stick controller to the right, the display indicates 'SLo' ("SLOW"), stick controller function is SPEED DOWN, the pitch speed is down momentarily. In quartz lock, this function is still efficiency.

### (b) PITCH ADJUSTMENT

Moving the stick controller down, the pitch speed is set in minus direction. Moving the stick controller up, the pitch speed is set in plus direction. The pitch bend span is set by PITCH BEND RANGE SELECT SWITCH. Select  $\pm 1\%$ ,  $\pm 2\%$ ,  $\pm 3\%$ ,  $\pm 6\%$  to change. Pushing PITCH BEND RANGE SELECT SWITCH, left glimmering number ranks with right blinking number. Number on the left side the display is number to be set. Number on the right side display is number newly selected. Pushing this switch continuously to the indicated number will set the right side of display. Then the left side numbers changes to lighting and left side number is same as right side number. After setting, soon the display returns to indicate the value of pitch speed. Though, in setting another function is canceled.



## REMOTE CONTROL

It is possible to control two turntables remotely.

1. Prepare for  $\phi 3.5\text{mm}$  monaural phone plug cable.  
Set the Remote Control switch, to turn "ON" position.
2. Connect REMOTE IN JACK at the rear panel with another PDX-d3MK II's REMOTE OUT JACK at the rear panel by using the cable.
3. The player that is connected at the REMOTE OUT JACK is the MASTER of the PDX-d3MK II. The player that is connected at the REMOTE IN JACK is the SLAVE of the PDX-d3MK II.
4. Pushing START/STOP SWITCH of the master PDX-d3MK II will make the connection between master PDX-d3MK II, and slave PDX-d3MK II acts the same as master PDX-d3MK II without touching slave PDX-d3. Connecting the REMOTE IN JACK of third PDX-d3MK II with REMOTE OUT JACK of slave PDX-d3MK II, third PDX-d3MK II will also act the same as master PDX-d3MK II. It is possible to connect a forth PDX-d3MK II, to be controlled the same as master PDX-d3MK II by REMOTE CONTROL.

### Note :

- By reversing the turntable by case of using stylus, sounds are distorted.
- If power is turned off, as soon as power is turned on, there are case that a part of display indication is not indicated.  
Because of unresetting microcomputer. At this time, taking a little time between power on and power off, PDX-d3 acts normally.

# SPECIFICATION

TURNTABLE	MOTOR STARTING UP TIME STARTING TORQUE BRAKING SYSTEM RAMBLE (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 ±3%, ±6%, ±12% (DETOUCHABLE 100mm FADER) 0.03% W. R. M. S.
ARM	TYPE EFFECTIVE LENGTH OFFSET ANGLE OVER HANG TRACKING ERROR ANTI SKATING STYLUS PRESSURE	STATIC BALANCE SYSTEM 230mm ±1mm 22° 15mm +2° 32' ~ +0° 32' ADJUSTMENT RANGE 0~7.0g ADJUSTMENT RANGE 0~7.0g
	LIGHT(OPTIONAL) SPEED LOCK REMOTE DIMENSION WEIGHT POWER	DETACHABLE MINI LIGHT DC12volt 100mA QUARTZ LOCK MOMENTARY START (MINI JACK) (W)450mm×(H)150mm×(D)370mm 9.5kg AC117V or 230V

## REMOTE CONTROL

It is possible to control two turntables remotely.

1. Prepare the turntable remote control plug cable. Set the Remote Control switch, to turn "ON" position.
2. Connect the REMOTE IN JACK at the rear panel with another turntable's REMOTE OUT JACK at the rear panel using the cable.
3. The plug cable is connected at the REMOTE OUT JACK of the turntable of the PDX-43MR. The player of the turntable at the REMOTE IN JACK is the turntable of the PDX-43MR.
4. Pushing the REMOTE SWITCH on the master PDX-43MR will operate the turntable between master and slave. The REMOTE IN JACK of the slave PDX-43MR will be controlled by the REMOTE OUT JACK of the master PDX-43MR. It is possible to connect the REMOTE IN JACK of the slave PDX-43MR to the REMOTE OUT JACK of the master PDX-43MR.

### Note:

- \* Be careful of the turntable when to use the remote control. The turntable will be damaged if it is used as a remote control.
- \* If power is not supplied to the turntable, it is possible to use the remote control.

### SPECIFICATION

TURNABLE		MOTOR	
STARTING UP TIME		STARTING TORQUE	
BRAKING SYSTEM		ELECTRONIC BRAKE	
RAMBLE (S/N RATIO)		SPEED	
PITCH		WOW & FLUTTER	
ARM		TYPE	
EFFECTIVE LENGTH		OFFSET ANGLE	
OVER HANG		TRACKING ERROR	
ANTI SKATING		STYLUS PRESSURE	
LIGHT (OPTIONAL)		SPEED LOCK	
REMOTE		MOMENTARY START (MINI JACK)	
WRIGHT		QUARTZ LOCK	
POWER		DETACHABLE MINI LIGHT DC12V 100mA	
AC 110V or 230V		(W) 40mm x (H) 180mm x (D) 370mm	
0.3kg		ADJUSTMENT RANGE 0-10g	
+2.3% -0.3%		ADJUSTMENT RANGE 0-10g	
15mm		STATIC BALANCE SYSTEM	
33°		0.03% W.R.M.S.	
1.0kg - cm		±3%, ±10%, ±12% (DETACHABLE 100mm PADER)	
0.3sec (33rpm) 70°		DIRECT DRIVE QUARTZ	
0.3sec (33rpm) 70°		0.3sec (33rpm) 70°	

Vestax Corporation