MITSUBISHI INTEGRATED LOGIC CONTROL TURNTABLE DP-EC1

INSTRUCTION BOOK

COMPONENT TERMINOLOGY AND FUNCTIONS

CONGRATULATIONS

You have bought more than just a product that's built better. Your integrated logic control turntable like all of our products is built to better your life.

1. LIGHT EMITTER

The light emitter emits the light which automatically senses the record size.

2. LEAD-IN ADJUSTMENT SCREW

Remove the rubber cap for adjustment. See page 9 for details.

3. SPEED ADJUSTMENT KNOB

This is for adjusting the turntable speed. For details, see page 10.

4. PRISMS

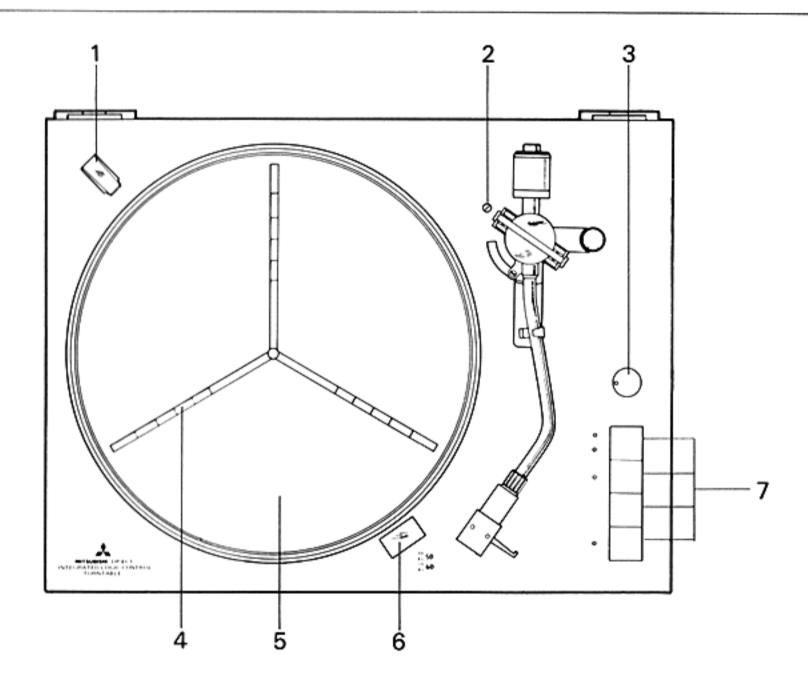
These receive the light emitted from the light emitter and transmit it to logic circuits which determine record diameter.

5. TURNTABLE PAD

The pad is mounted on the turntable so that the prisms project through the holes.

6. STROBOSCOPE WINDOW

The 33 and 45 RPM speeds are observed through this window. When it is necessary to adjust the speed, this is done with the speed adjustment knob.



7. OPERATING BUTTONS AND INDICATORS

*SPEED RESET

This button selects the proper speed when playing a record manually.

*REPEAT

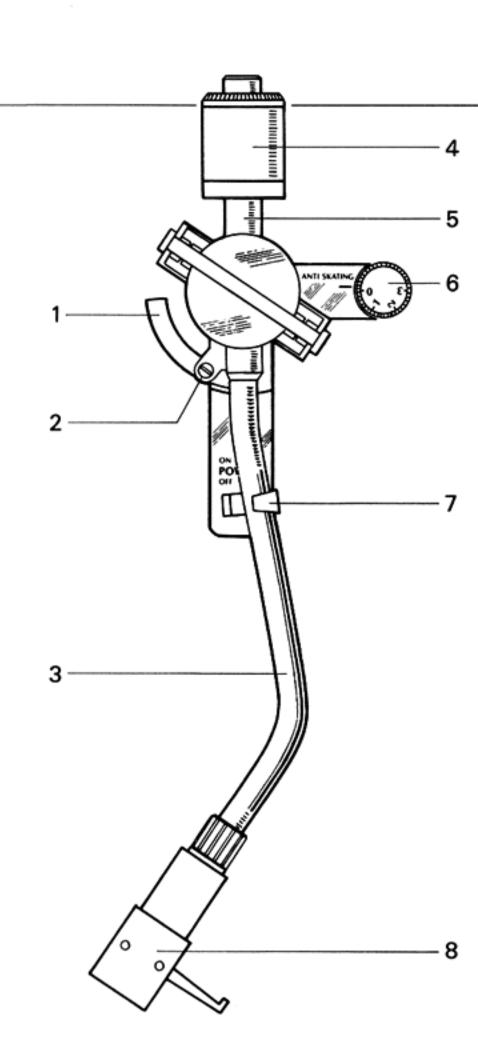
Press this button to play a record again. The repeat indicator light will come on.

*STOP/LIFT

Press this button to stop a record midway through its play or to lift the tonearm from the record.

*START/CUE

Press this button to start playing a record. The start indicator will light when the tonearm mechanism is operating. While this start indicator is on, nothing will happen if you again press the start button.



1. ARM LIFTER

2. STYLUS HEIGHT ADJUSTMENT SCREW

See page 6 for adjustment procedure.

3. TONEARM

4. COUNTER BALANCE WEIGHT

The counter balance weight is adjusted to provide the proper stylus pressure for the cartridge used. For details on adjustment, see page 6.

5. WEIGHT SHAFT

6. ANTI-SKATING ADJUSTMENT KNOB

This is set to the same value as the stylus pressure. See page 7 for details.

7. ARM REST

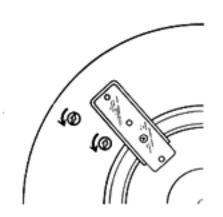
Placing the tonearm to the right shuts off the power to the turntable. Moving it to the left turns the power on. You will hear the popping of a microswitch.

8. HEAD SHELL

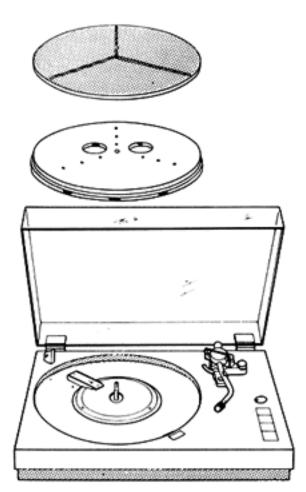
Install a cartridge (not supplied) here. For details on installation, see page 5.

ASSEMBLY INSTRUCTIONS

Remove the two transport locking screws by turning to the left. These are two screws that the label is attached to.



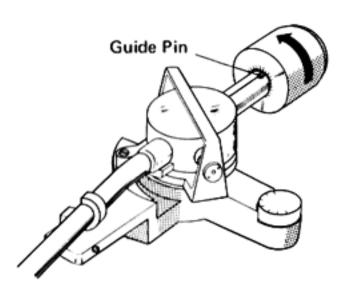
Place the turntable onto the turntable shaft. The turntable surface has two finger holes to facilitate installation.



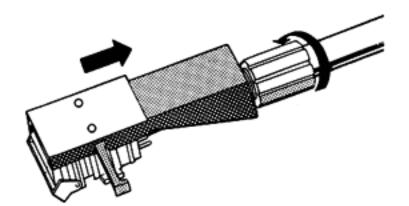
NOTE: The stroboscope surface has been especially conditioned so do not touch it directly with your hands.

Mount the turntable pad. On the surface of the turntable there are three rows of prisms. Place the pad on the turntable so that the holes in the pad line up properly with the prisms. Make sure that all of the prisms are projecting through the holes in the pad.

NOTE: The prisms reflect light to sensors inside the unit to determine record size. If the turntable pad is not correctly installed, the sensors cannot work properly. Install the counter balance weight. Remove the counter balance weight from the accessory box and install it on the weight shaft as shown in the illustration. While pressing down on the guide pin, turn the weight in a counterclockwise direction (as viewed from the front). Keep turning until it comes completely forward.

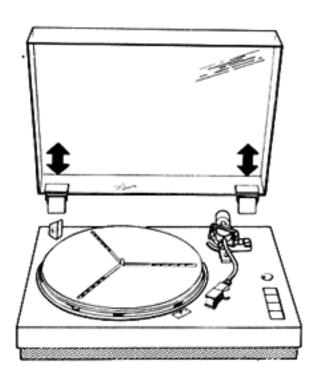


Attach the head shell. Instructions for installing the cartridge on the head shell are given on page 5. Once the cartridge has been installed, place the head shell onto the end of the tonearm and tighten the locknut while pressing in from the end as shown in the diagram.



HOW TO REMOVE AND INSTALL THE DUST COVER

The unit comes with the dust cover already attached. To remove, open the cover, grasp the cover with both hands and pull straight up. To re-mount, insert the hinges into the hinge mounts and push downward.

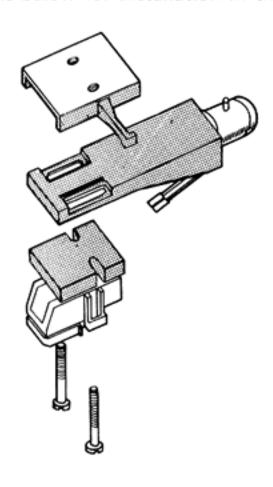


LOCATION

When assembly is completed, place the turntable on a steady, level surface. Leave enough space to open and close the dust cover. The unit requires 45 cm (18 in.) of space above and about 7 cm (2¾ in.) of space in the rear.

CARTRIDGE INSTALLATION

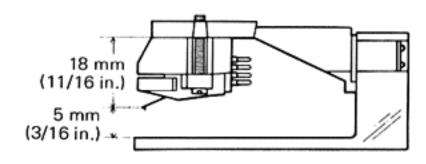
There is no cartridge supplied with this turntable. When you have purchased a cartridge, follow the instructions below for installation in the head shell.



STYLUS TIP HEIGHT

First check the height of the stylus tip on the cartridge that you are going to use. The cartridge used for this head shell should measure 18 mm (11/16 in.) from the stylus tip to the surface which is mounted on the head shell. Measure the cartridge and select from the supplied spacers the one which will make this distance 18 mm (11/16 in.). The thick spacer is 4 mm (5/32 in.), while the thin one is 2 mm (5/64 in.).

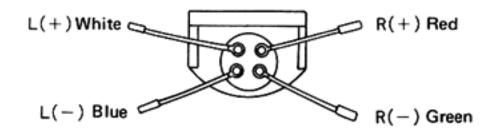
When you use a head shell or cartridge whose height you do not know, check it as shown in the illustration with the overhang gauge supplied with the turntable. The proper stylus tip distance is 13 mm (1/2 in.) as measured from the center of the head shell connector to the tip of the stylus. When the overhang gauge is inserted in the head shell, the distance to the bottom surface of the gauge is 18 mm (11/16 in.). When in this position there should be a gap of 5 mm (3/16 in.) between the stylus tip and the bottom surface of the gauge.



2 LEAD CONNECTIONS

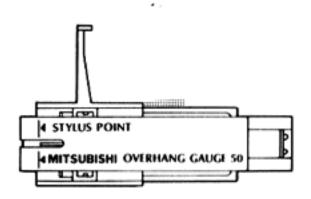
Attach the lead wires to the proper terminals on the cartridge:

| L(+) | | | | | | | White Lead |
|---------------|---|---|---|--|---|---|------------|
| L (-) (G) (E) | | | | | | | Blue Lead |
| R (+) | | | | | | | Red Lead |
| R (-) (G) (E) | _ | _ | _ | | _ | _ | Green Lead |



- Choose the proper length screws from those supplied and attach the cartridge to the head shell.
- STYLUS TIP ADJUSTMENT

Using the supplied overhang gauge, adjust the stylus tip so that it comes just to the positioning line (◄) on the gauge and secure it in place.

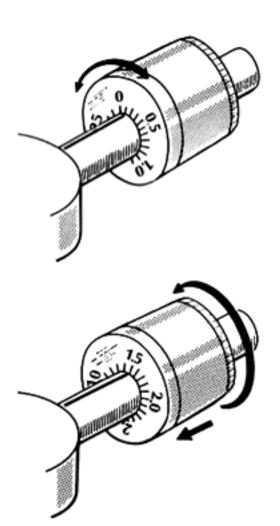


ADJUSTMENT INSTRUCTIONS

STYLUS PRESSURE ADJUSTMENT

Follow these steps to adjust the stylus pressure:

- Put the anti-skating knob in the "0" position.
- Remove the tonearm from the arm rest.
- While lightly holding the head shell finger with one hand, turn the counter balance weight left or right until the arm is in a balanced position.
- 4 Lightly hold the counter balance weight so that it does not turn and align the "0" position on the stylus pressure knob to the indicator line on the weight shaft.



6 Return the tonearm to the arm rest and turn the counter balance weight in a counterclockwise direction (as seen from the front) to increase the stylus pressure. Set the stylus pressure for your cartridge by aligning the proper weight with the indicator line on the weight shaft.

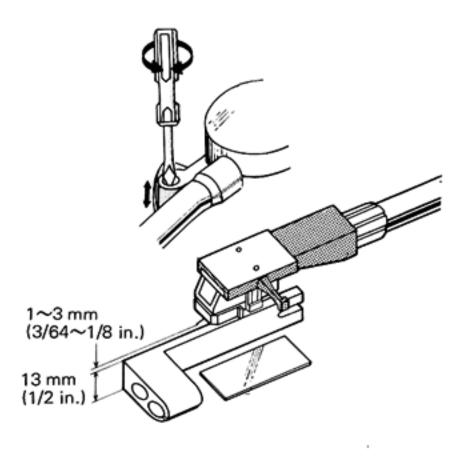
NOTE: When the weight of the head shell section weighs more than 16 grams, screw the supplied sub-weight on to the rear of the weight shaft before adjusting the stylus pressure.

NOTE: If you use a cartridge which makes the head shell section heavier than 20 grams, you will not be able to use the supplied sub-weight for adjusting your stylus pressure. In this event, ask for the proper sub-weight from the dealer where you purchased your turntable.

STYLUS HEIGHT ADJUSTMENT

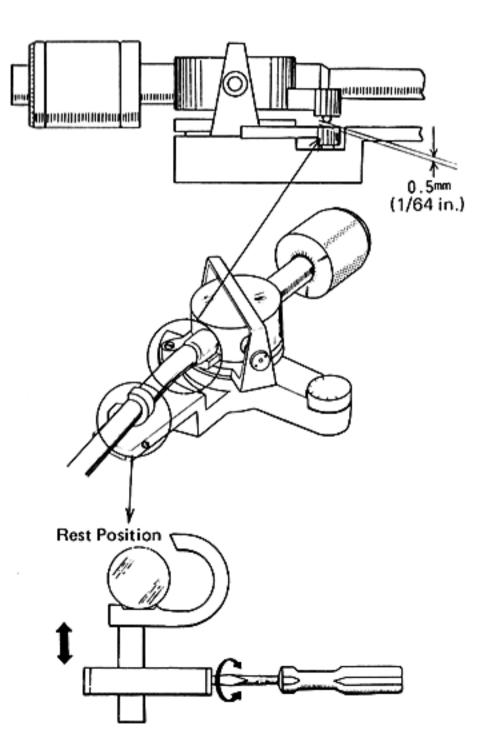
Before using auto play, check to see that the stylus tip height is correct (see CARTRIDGE INSTALLA-TION instructions).

- Place the overhang gauge on the turntable cabinet surface as shown in the illustration.
- The correct stylus height is 14-16 mm (9/16-5/8 in.) from the cabinet surface. As shown in the illustration, the gauge height is 13 mm (1/2 in.), so adjust the height adjustment screw with the supplied screwdriver so that the gap between the stylus tip and the gauge surface is between 1-3mm (3/64-1/8 in.).



ARM REST HEIGHT ADJUSTMENT

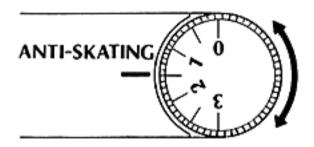
After adjusting the stylus height, return the tonearm to the arm rest and adjust the arm rest height so that when in the rest position the gap between the tip of the adjustment screw and the lifter is about 0.5mm (1/64 in.).



ANTI-SKATING ADJUSTMENT

This adjustment is made to enable the stylus to smoothly track in the record groove. Set the antiskating knob to the same value as the stylus pressure.

NOTE: If you set the anti-skating knob to a value greater than the stylus pressure, you may hinder the normal auto play functioning.



CONNECTION INSTRUCTIONS

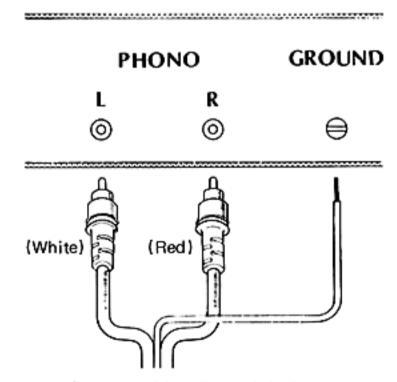
CONNECTION TO POWER SUPPLY

This unit operates from a 120 volt A.C. 60Hz power supply. Plug the power cord into the A.C. electrical outlet on your amplifier.

AMPLIFIER CONNECTIONS

This turntable can be connected to all stereo amplifiers, CD-4 demodulators, cartridge step up transformers, etc., which have the pin-type jacks.

NOTE: Turn off the power before making connections to amplifiers, etc. The popping noise made when connecting and disconnecting the output plugs can harm the speakers.



Connect white plug to L jack. Connect red plug to R jack.

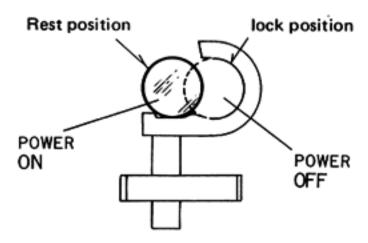
Make sure that you connect the cords properly. Also, be certain to connect the ground wire to the terminal marked GROUND or E on your amplifier.

OPERATING INSTRUCTIONS

AUTO PLAY

Before playing, the following preparations should be made:

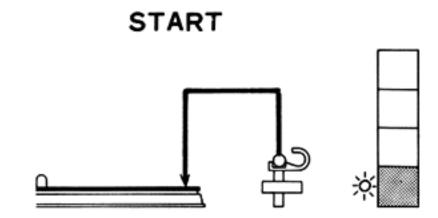
- Put a record on the turntable.
- Remove the tonearm from the lock position and put it in the rest position. By doing this the power will come on.



TO START PLAY

Press the start button The button may be released immediately after pressing as the circuit will be engaged immediately. The indicator lamp will come on and the turntable will begin to turn the proper speed to suit the type of record on the turntable. The arm lift will begin to work and the tonearm will quietly start to lift and then move horizontally toward the inside. When it reaches the outer grooves of the record it will stop and quietly lower on the record to commence playing the music.

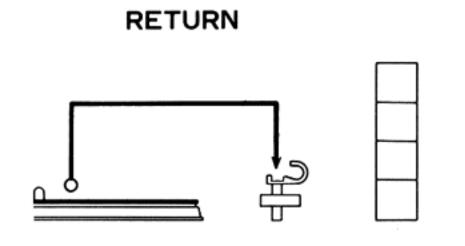
NOTE: Until the beginning of the music the cartridge output circuit is muted so that no noise will be produced.



AT THE END OF PLAY

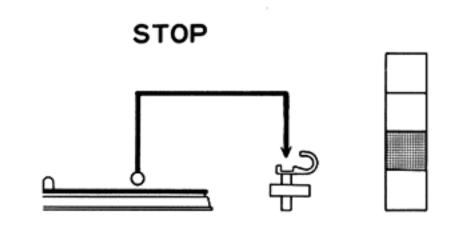
When the record is over the tonearm quietly lifts and returns to the arm rest and the turntable shuts off. Notice that the power remains on in preparation for the next record. When you have finished using the unit, put the tonearm in the lock position. This shuts off the power.

NOTE: Before shutting off the power, check to see that the start indicator is off.



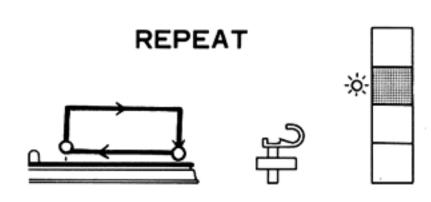
STOP

To stop play mid-way through a record, press the stop button. The tonearm will return to the arm rest from the position it was in when the button was pressed and the turntable will shut off.



REPEAT PLAY

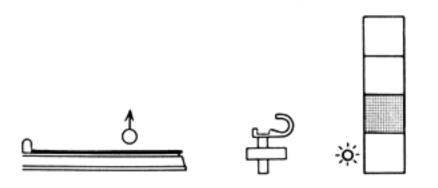
Press the repeat button to hear the same record a second time. The repeat indicator will light and when the record is finished the tonearm will lift, move out to the beginning of the record, and lower to play the record from the beginning again. Play will continue to be repeated as long as the repeat indicator is lighted. To cancel play-repeat, press the repeat button again. Play repeat will also be cancelled when play is stopped by pushing the stop button.



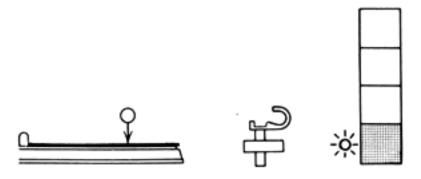
LIFT AND CUE

This unit is equipped with a lift function which allows the tonearm to be lifted from the record at any position, and a cueing function which allows the stylus to be lowered at any place desired. By holding the stop button down until the arm has finished its upward lift (until the start indicator goes out), the arm will remain in that place instead of returning to the beginning of the record.

In this condition you can move the arm with your hand freely left or right to the position you desire.

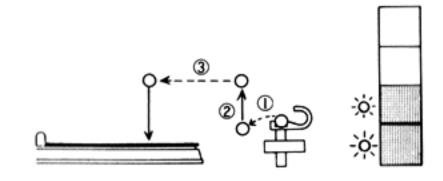


Then by pressing the start button, the tonearm will lower to the record at that spot. Also, you can return the tonearm to the arm rest by pushing the stop button while the arm is in its up position. Operate the start button with a single touch (since the connection is made when the button is released).



LIFT AND CUE - ADDITIONAL

- Move the tonearm from the arm rest by hand.
- Press the STOP button to lift the tonearm.
- Manually move the tonearm to the desired position over the record.
- Press the START button to lower the tonearm.

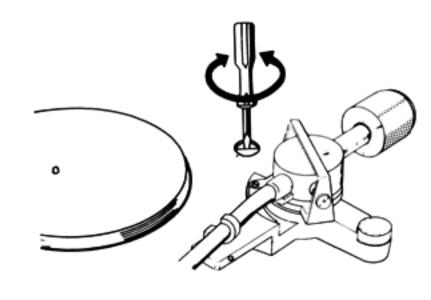


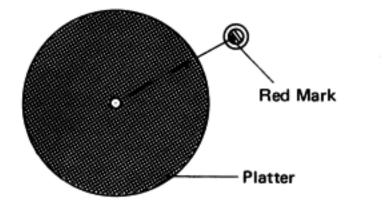
NOTE: While the arm is in the up position you will feel a small amount of resistance when moving it by hand to the desired spot on the record. This is because of the operation of a clutch inside the unit. This clutch is designed to withstand such movement.

ADJUSTING THE LEAD-IN POSITION

When the stylus does not drop onto the record at the correct place during auto play (the tip either lowers before the arm reaches the record grooves, or lowers in some place after the beginning of the music). Adjust this by using the screwdriver supplied with the turntable to turn the lead-in adjustment screw.

- First, remove the rubber cap from the adjustment screw.
- When the red mark on the screw is nearest the turntable the tonearm will lower itself closest to the center of the record. Adjust this screw so the stylus lowers in just the right place.

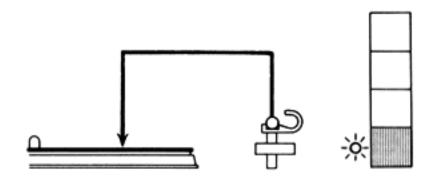




TO START PLAY IN THE MIDDLE OF A RE-CORD

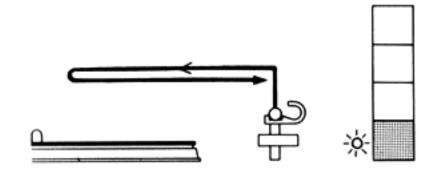
To begin listening at a particular spot on the record instead of starting at the beginning, follow these steps:

- Press the start button and continue to press. The tonearm will lift and move toward the middle of the record. The tonearm will travel at its normal speed until it gets to the edge of the record and then it will slow down.
- Release the start button when the stylus reaches the desired place on the record. The tonearm will then lower itself quietly onto the record surface and play will begin.



WHEN THERE IS NO RECORD ON THE TURN-TABLE

Even if the start button is pressed the stylus will not be lowered onto the turntable when there is no record there. The tonearm will simply move horizontally completely across the turntable and return to the arm rest.



RECORD SPEED SWITCHING

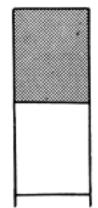
This turntable automatically changes its speed as follows to suit the record size being played. The speed indicator will light up and show the speed being played.

| 12 in. Record | | | | | | | 33RPM |
|---------------|--|--|--|--|--|--|-------|
| 10 in. Record | | | | | | | 33RPM |
| 7 in. Record | | | | | | | 45RPM |

When the speed is supposed to be different from the above, press the speed reset button after the turntable has started to turn.

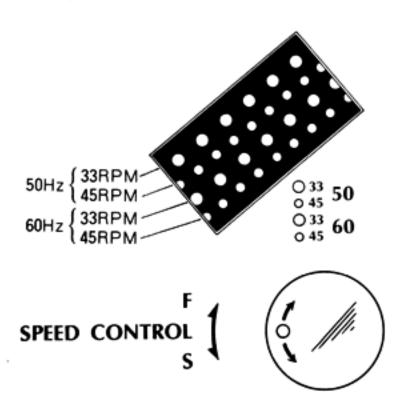
SPEED

SPEED RESET 450



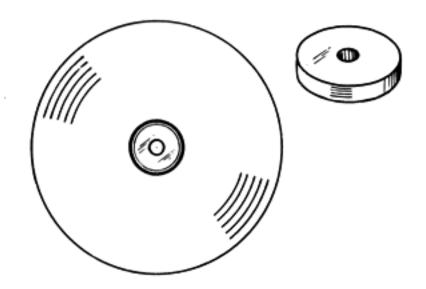
SPEED ADJUSTMENT

The speed accuracy is checked with the light emitting diode-type electronic stroboscope. The pattern indicator is under the stroboscope window. For example, to check a 33RPM speed when using a 60Hz current supply, watch the outside pattern of dots. When the pattern is completely stationary, the speed is correct. When the pattern is flowing in the direction of the turntable rotation, the speed is too fast. It is necessary then to turn the speed control knob in the direction of S (slow) to correct the speed. When the pattern is moving in the opposite direction, correction is made by moving the knob in the F (fast) direction.



45 ADAPTOR

When using records with the larger centers, place the supplied 45 adaptor over the turntable shaft.



RECORDS WHICH CANNOT BE PLAYED ON AUTO

The following types of records cannot be played in the regular automatic mode. Play them manually:

- * Transparent records
- * Records which are badly warped
- * Records not conforming to RIAA standards

IF A POWER OUTAGE SHOULD OCCUR

Take the following steps if the power should go off and then on again while you are using this turntable:

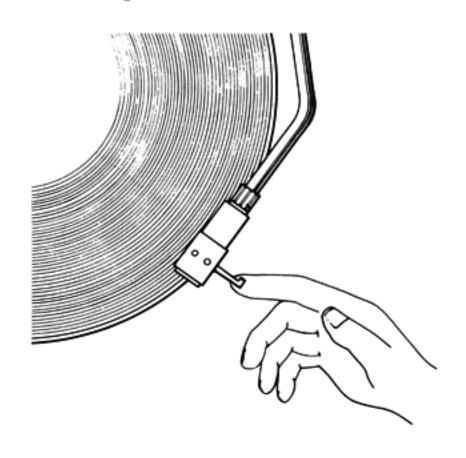
- * If the power outage should occur during play, just continue normal play upon resumption of power.
- * If the power should go out while the auto mechanism is in operation (while the start indicator is on), press the stop button when the power resumes and start the play over again after the tonearm returns to the arm rest.

MANUAL PLAY

Manual play is done on this turntable in the same way as on other turntables. Pick up the tonearm from the rest position and place it on the record. The turntable will start to turn the proper speed to match the record size and record play will begin. When play is completed, the return operation will be the same as in the automatic position and the arm will return to the rest position.

NOTE: When the start indicator is on, the tonearm mechanism is operating. At such times, do not touch the tonearm.

NOTE: You can freely move the tonearm even during automatic play as long as the start indicator is not lighted.



OPERATING PRECAUTIONS

1. GENERAL

BE SURE TO USE A 120 VOLT A.C. SUPPLY

Should you connect this turntable to a 220 volt power source used for large air conditioners and some central heating systems, there is the danger of burning out the turntable or receiving an electrical shock. Also, it cannot be operated on D.C. (direct current) voltage.

DO NOT PLUG IN OR UNPLUG THE POWER CORD WITH WET HANDS

There is a great danger of a severe electrical shock if you attempt to plug in or unplug the power cord with wet hands. In addition, do not attempt to unplug the cord from the electrical outlet by pulling the wire. You should firmly grasp the plug and pull it out.

DO NOT ALLOW WATER OR ANY FOREIGN MATTER TO GET INSIDE THE UNIT

If water or some other foreign matter should accidentally fall inside the turntable, immediately disconnect the plug and consult your authorized service dealer.

TAKE PROPER CARE OF THE POWER CORD

Do not needlessly bend or twist the cord or make any splices in it. If any defects, breaks or poor connections should occur, request repair from your authorized service dealer. If you should use it in this condition, there is a danger of fire or electrical shock.

DO NOT TOUCH THE INSIDE OF THE UNIT

There are high voltages inside the turntable. You should never remove the bottom and touch any of the parts inside. It is dangerous to attempt to replace the fuse by yourself should it burn out. This should be done by your authorized service dealer.

DISCONNECT THE POWER AT THE FIRST SIGN OF TROUBLE

At the first sign of unusual noise, odor or malfunction, you should disconnect the plug and consult your authorized service dealer. Should you continue to use a turntable with such symptoms, you could inadvertently increase the damage or cause additional unforeseen problems.

2. LOCATION

AVOID PLACES IN DIRECT SUNLIGHT, NEAR AIR CONDITIONERS, ETC.

After using this turntable for several hours the heat of the motor causes the temperature to rise. Put it in a place where the heat can readily dissipate. Avoid placement in direct sunlight, near air conditioners, in places with poor ventilation, or in places where there is a lot of dust. Placement near a heating duct could cause the dust cover to change shape from the heat.

LOCATE THE TURNTABLE ON A LEVEL SUR-FACE

Placement of the turntable on a non-level surface will disturb the normal operation of the tonearm. This will cause the stylus to jump, and may cause other operational difficulties. It is very important to locate the turntable on a level steady surface which is isolated from external vibrations.

PLACE THE TURNTABLE IN A VIBRATION-FREE SPOT

If the speaker vibrations are transmitted to the turntable, howling will occur. Place the turntable as far as possible from the speaker surface (where it receives the direct sound waves from the speaker).

LOCATE THE TURNTABLE AS FAR AS POSSI-BLE FROM THE AMPLIFIER

If the turntable is located above or near an amplifier or other unit which uses a transformer, hum due to the effects of transformer flux may occur.

ALLOW ABOUT 10 CM (4 IN.) OF ROOM BEHIND THE TURNTABLE FOR OPENING AND CLOSING THE DUST COVER

3. CONNECTIONS

DO NOT PLUG IN THE POWER CORD UNTIL ALL ASSEMBLY IS COMPLETED

To be safe, wait until all assembly is finished before connecting the power cord or any other connecting leads.

TURN OFF THE POWER WHILE MAKING CON-NECTIONS

The popping noise caused by plugging in and unplugging the leads and the head shell could damage the speakers.

USE EXTREME CARE IN MAKING THE COR-RECT CONNECTIONS

If the R (right) and L (left) leads on the turntable output are not connected properly, you will not be able to achieve the proper phase relationship.

MAKE SECURE CONNECTIONS

If the ground side of the plugs or the ground wire is loose or disconnected, hum will occur. If this is not corrected it could result in speaker damage.

4. OPERATION

USE THE PROPER STYLUS PRESSURE

If stylus pressure is too light the stylus will "float" during high-amplitude sections of the record and produce "jumping" or distortion. On the other hand, if stylus pressure is too heavy, the stylus tip will not be able to handle the weak sounds and distortion will occur. Use the proper stylus pressure.

NEVER TOUCH THE TURNTABLE WHILE IT IS TURNING

This could cause damage to the motor by increasing the burden on the moving parts.

DO NOT STACK RECORDS OR PLAY WARPED RECORDS

This can cause the stylus to jump and can cause distortion which may damage the stylus or the cartridge.

ARM FRICTION

When the stop button is pressed and held in the down position, the arm will rise up and stop. At this time the arm may be moved by hand to the right or left to any position desired. When moving the arm in this manner a small amount of resistance will be felt. This is due to clutch action and is not a malfunction.

5. CARE

DO NOT PLAY SOILED RECORDS

When a record is soiled, wet a piece of cotton in water, wring it out dry, and wipe off the dust following the direction of the record grooves. Wait until the record is completely dry before playing it. To help keep it clean, keep turntable mat clean as well.

HANDLE THE STYLUS WITH GREAT CARE

If dirt or dust accumulates on the stylus tip, distortion will be produced when playing records. Remove the dust with a soft brush. Be very careful not to touch the stylus tip as this may damage it.

KEEP THE DUST COVER ON THE TURNTABLE WHEN NOT IN USE

Dust is the biggest enemy of turntables. By keeping the dust cover on you will keep out dust and dirt.

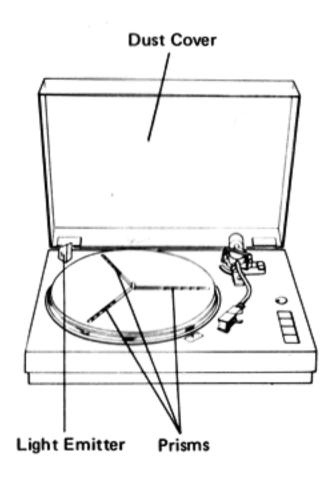
POOR CONNECTIONS OCCUR EASILY AT THE JUNCTION OF THE TONEARM AND THE HEAD SHELL. THEY MAY ALSO OCCUR AT THE AMPLIFIER WHERE THE OUTPUT LEADS ARE CONNECTED.

You should clean these points with alcohol occasionally.

CLEANING THE ELECTRONIC CONTROL SEC-TIONS

If the light emitter and the prisms become dirty, wipe them with a soft cloth. Use care so as not to damage them. This may cause these sections to function improperly.

PROPER CARE



Always use a clean cloth for cleaning the unit.

- * When cleaning the tonearm, be careful not to apply too much pressure. Take care not to touch or damage the stylus.
- * When dust or dirt accumulates on the turntable mat good results may be achieved by washing it in plain water. If oil or other substances should soil it, you can wash it in a small amount of soapy water. Make sure you dry it completely before replacing it on the turntable.
- * Wipe the dust cover lightly with a cloth to prevent static electricity from building up. If it should become very dirty, wash with soap and water.

* CLEANING THE STYLUS

If dust should accumulate on the stylus tip, sound quality will deteriorate. Remove the dust with a soft brush. Be sure to use the brush from the inside of the stylus toward the outside. You will injure the stylus tip if you touch it with your fingers so use care.

* RECORD CLEANING

If you play records when they have dust on them the stylus will wear down rapidly and the record grooves will be damaged. The best and simplest method for cleaning the record surface is to dampen a piece of cotton with water, wring it out completely, and wipe in the direction of the grooves. Make sure that the record is completely dry before playing. When the turntable mat is dirty the records will also become dirty, so it is important to keep it clean too.

* NO LUBRICATION NEEDED

The bearings of the turntable are lubricated with special oil and it is not necessary to lubricate them. Any attempt to oil this unit may cause damage.

* CLEANING THE ELECTRONIC CONTROL PARTS

When the light emitter and the prisms become dirty, wipe them off with a soft cloth. Use care in cleaning them for they may cease to function normally if damaged.

BEFORE TAKING YOUR TURNTABLE IN FOR SERVICING

First check to be sure that all other components are porperly connected to this unit and are operating normally. Then check the following items:

| SYMPTOM | CAUSE | REMEDY | | | | | |
|--|---|---|--|--|--|--|--|
| No sound. | Output leads not connected. Head shell is not completely connected to the tonearm. Stylus cover is on. | Completely plug in the plugs to the amplifier's jacks. Connect head shell properly to tone arm. Remove the cover. | | | | | |
| Turntable doesn't turn. | Power cord not fully plugged in. Speed selector button not completely engaged. | Plug power cord completely into electrical outlet. Completely engage the speed selector button. | | | | | |
| A low hum is produced while music is being played. | Output leads are too close to power cord. | Change the position of the output leads. Reverse the electrical plug at the outlet. | | | | | |
| A high hum is produced while music is being played. | • Interference from the TV is being picked up by the output leads. | ∘ Change the position of the output leads. | | | | | |
| Sounds become louder or booming sounds are produced when low notes are played. | This is what is called howling, and it occurs when vibrations from the speakers are transmitted to the turntable. | Place the turntable and the speakers as far apart as possible. Place a sponge, or rubber pad or other type of cushion under the turntable. Weak floorboards contribute to howling so look over your speaker location. | | | | | |
| A low-pitched hum is produced. | Ground wire is not connected. An amplifier or some other unit which uses a transformer is near. | Connect the ground wire on the output leads to the amplifier. | | | | | |
| A low-pitched, low-volume hum is heard. | The output leads are acting as an antenna in an area of strong electrical activity, producing noise. | Try changing the location of the amplifier and turntable. | | | | | |
| Broadcast volume and record volume are different. | The strength of the braodcast signals and the record level are different. | It is impossible to make them exactly the same, so adjust the amplifier volume. | | | | | |
| Sounds are distorted and highs are not clear. | Stylus pressure is not right. Stylus tip is dirty. Worn stylus. Bad record (poor recording, worn, scratched). Stylus tip in the wrong place. Record is soiled. | Correct stylus pressure. Clean stylus tip. Replace stylus. Change the record. Correct stylus position. Clean the record. | | | | | |
| Stylus mistracking. | Stylus pressure is incorrect. Stylus tip is worn. Stylus tip is dirty. Bad record (poor recording, worn, scratched). Record is warped. Record is soiled. | Apply correct pressure. Change the stylus. Clean stylus tip. Change the record. Change the record. Clean the record. | | | | | |
| Excessive scratching noise. | Stylus tip is dirty. Bad record (poor recording, worn, scratched). Stylus is worn. Record is soiled. | Clean the stylus tip. Change the record. Change the stylus. Clean the record. | | | | | |
| Stylus does not track. | ♦ Too much anti-skating. | • Reduce the anti-skating. | | | | | |

SPECIFICATIONS

TYPE: Electronically Controlled Fully Automatic Operation

DRIVE SYSTEM: Direct Drive System, 12-pole, 24-slot DC, FG Servo Motor

PLATTER: Aluminum Alloy Die-Cast

Diameter 312 mm (12-1/4 in.) Weight 1.8 kg (4.0 lb.)

SPEEDS: 33-1/3, 45 rpm, Electronic Selection

SPEED ADJUSTMENT: ±3%
WOW & FLUTTER: 0.025%

RUMBLE: -65 dB (IEC B-Weighted)

TONEARM: Static Balance Universal Type

Overall Arm Length 12-5/8 in. Pivot-Stylus Distance 9 in.

STYLUS FORCE RANGE: 0-3.0 gr. (0.1 gr. step)

OVERHANG: 9/16 in.
OFFSET ANGLE: 22°

TRACKING ERROR ANGLE: +2.9°, -1.5°
HEAD SHELL: Aluminum Die-Cast (9.8 gr.)

CARTRIDGE WEIGHT RANGE: 8-16 gr. (W/head shell)

12-20 gr. (W/head shell + subweight)

AUTO MECHANISM: Auto Lead-In

Auto Speed Select Auto Size Select Auto Return Repeat Lead-In Auto Cueing ANTI-SKATING MECHANISM: Force Adjustable Type

STROBOSCOPE: L.E.D. Electronic Stroboscope

LEGS: Large, Adjustable-Height Type
MOTOR BASE: Aluminum Die-Cast

CABINET: Aluminum Die-Cast

DUST COVER: Counter-ballanced, Smoked Acrylic Plastic

POWER: 120 Volt A.C. 60 Hz
POWER CONSUMPTION: 11 W

DIMENSIONS (W x H x D): 475 x 150 x 370 mm

(18-3/4 x 6 x 14-1/2 in.)

WEIGHT: 11 kg (24-1/4 lb.)
CARTRIDGE: Not Supplied

(1) IC 14, Transistor 46, Diode 14(2) Automatic Disc Size Detection(3) Electronic Stroboscope with LED

(4) Electronically Motor-Driven Cueing System

Supplied with: 45RPM Adaptor (1)

Overhang Gauge (1)

Adjustment Screwdriver (1)

Sub-Weight (1) Spacer (2)

Design and specifications subject to change without notice for improvements.