

Deze download wordt u gratis aangeboden door Pick-upnaalden.nl

Web: www.pickupnaalden.com

Email : info@pick-upnaalden.nl

Facebook : www.facebook.com/pickupnaalden

Twitter : twitter.com/Pickupnaalden

Google+ : https://plus.google.com/+FCaris_pickupnaalden

Technics

Direct Drive Automatic Turntable System

SL-L2
Operating Instructions

is the standard mark for the "P-mount" plug-inconnector system. Products carrying this mark are interchangeable and compatible with each other.



The model number of this product is found on the back of the unit, and the serial number either on the back or on the bottom. Please note the model and serial numbers of this unit in the space provided below and retain this booklet as a permanent record of your purchase to aid identification in the event of theft.

MODEL NUMBER

SL-L2

SERIAL NUMBER

Contents

Suggestions for safety
Parts identification 3
Accessories 3
Product service 3
Parts identification and their functions 4
Set-up 5
Placement 5
Connections 5
Operation 6~8
Adjustments 9
Notes and maintenance9
Specifications 9

Thank you for selecting the SL-L2.

For optimum performance, we recommend that you read these instructions carefully.



Technics. The science of sound. Our name represents a multitude of high quality audio products, in every price range.

From the electronic wizardry of the Ultra-Slim Hi-Fi Component Systems to our revolutionary Honeycomb Disc Speakers, Technics has grown to become legendary among audio enthusiasts.

Technics is proud to be an industry innovator in the development of digital equipment.

Audio fans can choose from a selection of Digital Compact Disc Players. For those with discriminating taste, Technics offers a hi-tech digital audio cassette recorder. And, our PCM processors can turn your video cassette recorder into a high performance, dynamic stereo digital recorder.

Plus, Technics pioneered the Honeycomb Disc Speaker—the ultimate speaker for handling the demands of digital audio.

Our linear tracking and compact linear tracking turntables join the widely acclaimed belt-drive, direct drive quartz-locked models. To add to the illustrious high performance of the turntables, Technics engineers created the Plug-In Cartridge. Eliminating the tediousness of cartridge mounting, it has become an international cartridge mounting system.

Technics engineering is a driving force in the effort to link audio with video. A prime example is the Stereoplex receiver which delivers high quality television sound in simulated stereo.

And, Computer Driven New Class A Circuitry, the world's first use of a microcomputer to improve sound quality, in combination with most Technics receivers aids in providing a truly unique and satisfying listening experience.

Technics Cassette Decks, including the auto-reverse decks, provide audiophiles with as many as three exceptional noise reduction systems— Dolby B, Dolby C*, and dbx**.

The Technics list of high quality audio products continues. From multiband equalizers to tuners, pre-amps, microphones, and Honeycomb Disc headphones, Technics is a shining example of audio technology at its best. Technics is proud of the products it develops. At Technics, we are constantly trying to improve the efficiency, handling ease, and performance of all our products to make listening not only a pleasure, but an experience for all our customers.

*"Dolby" and the double-D symbol are a trademark of Dolby Laboratories Licensing Corporation.

**dbx is a registered trademark of dbx, Inc.



CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN



CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE SCREWS. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

Suggestions for safety

Before using this unit, be sure to read applicable items of the operating instructions and these safety suggestions carefully; afterwards keep them handy for future reference. Take special care to follow the warnings indicated on the unit itself as well as in the operating instructions.

- 1. Avoid places where there is water or humidity. Do not use this unit near a bathtub, wash basin, swimming pool, or the like. Damp basements should also be avoided.
- 2. Do not allow water or any foreign object to get inside this unit.

Do not place small metal objects or anything containing liquid on or near the unit.

- 3. Avoid placement of the unit where it will be exposed to the direct rays of the sun, or where ventilation is inadequate. Do not place this unit in a bookcase or between cabinets, unless proper ventilation is provided, or where curtains or furniture may obstruct the ventilation holes.
- 4. Place this unit away from heat-emitting appliances. Never place this unit on or near a radiator, heat register, stove, or any other heat-emitting equipment (including
- 5. Placement

amplifiers).

Place the unit on a stable, vibration-free, level shelf or stand.

6. Use of a cart or stand.

When deciding on a cart or stand, be sure to use only with the cart or stand recommended by the manufacturer.

7. Wall or ceiling installation.

If the unit is to be mounted on a wall or ceiling, be sure to do so only as recommended by the manufacturer.

8. Check the voltage rating of this unit before connecting the unit to a power source.

Be sure to connect the unit only to the type of power source indicated in the operating instructions, or as indicated on the unit itself.

9. Care of the power cord and plug.

Take care that the cord is not bent sharply (especially near its connection to the unit or near the plug), that nothing is placed on it, and that it is not pinched or crushed or frayed. 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 it.

- 10. If the unit will not be used for an extended period of time. Be sure to disconnect the power cord from the wall outlet.
- 11. Maintenance

Refer to the operating instructions for details.

- 12. Never attempt repairs yourself:
 - (a) If the power cord or plug is damaged.
 - (b) If a foreign object has fallen or liquid has spilled into it.
 - (c) If the unit has been exposed to rain.
 - (d) If the unit does not function normally, or if operation shows a distinct change in performance.
 - (e) If the unit has been dropped and the cabinet or chassis is damaged.

Unplug the power cord and have it checked by a qualified technician (or the dealer from whom the unit was purchased. or the nearest servicenter).

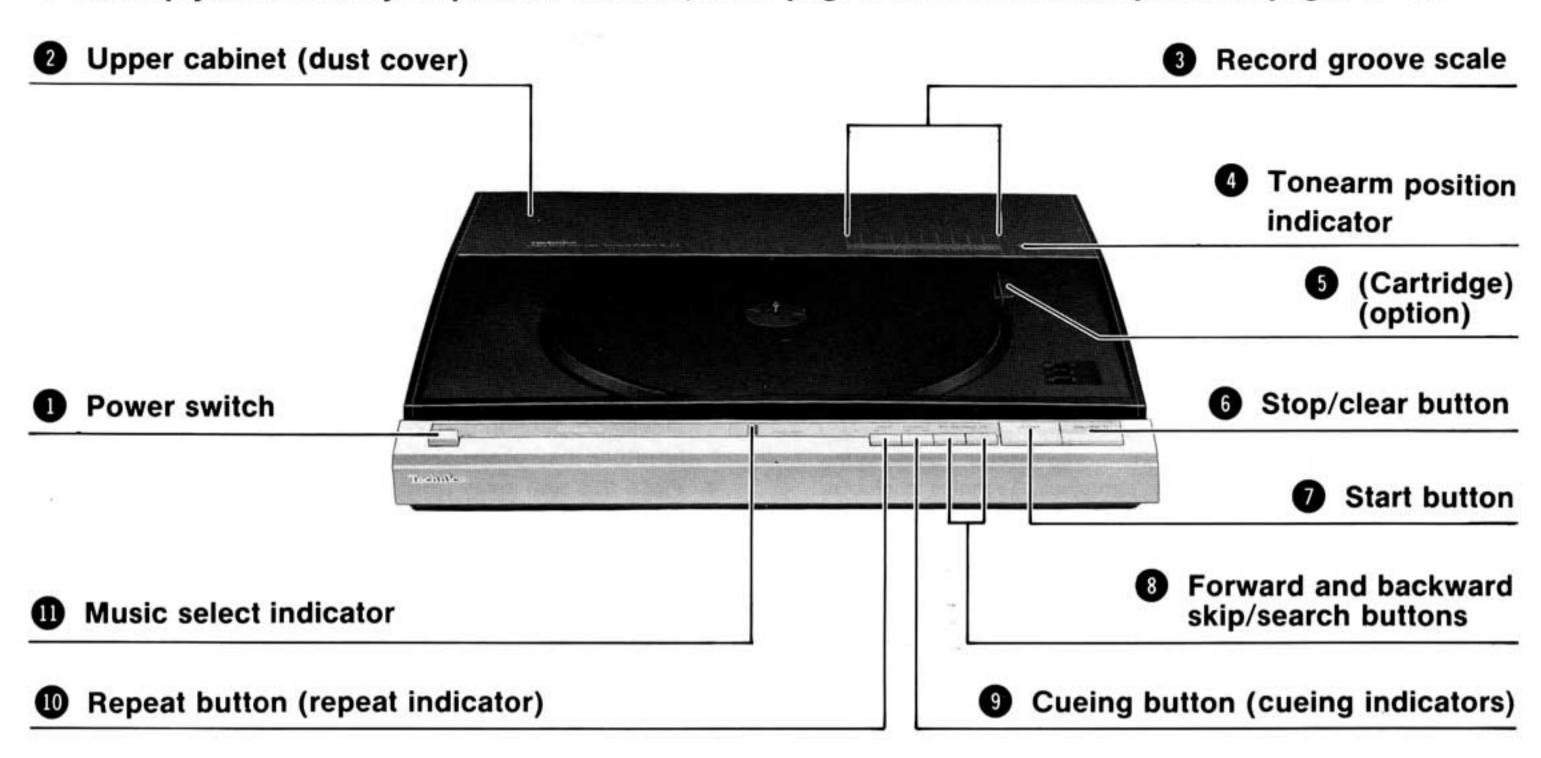
13. Repairs

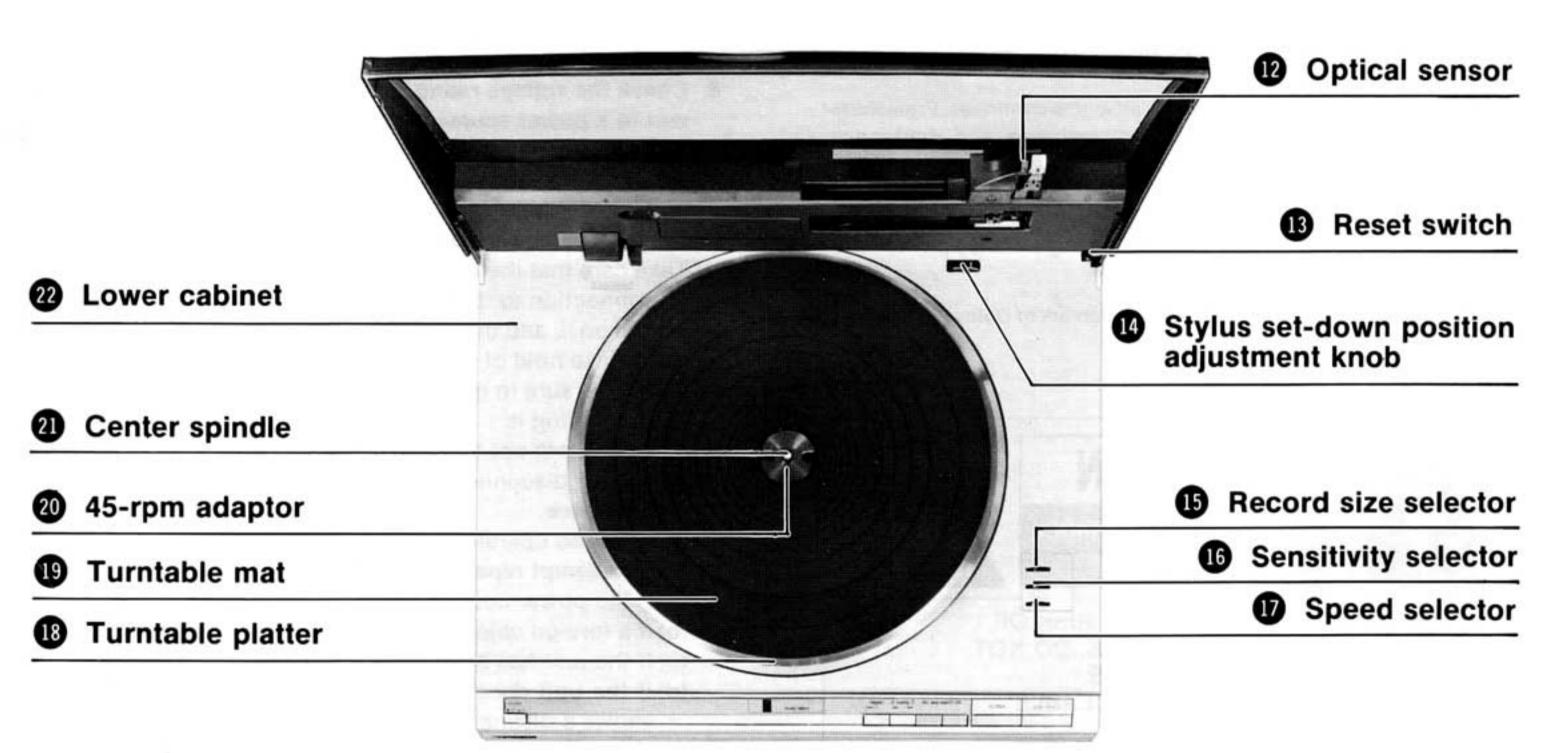
Except for adjustments explained in the operating instructions, do not attempt any repairs yourself. Be sure to request service from a qualified technician (or your dealer or nearest servicenter).

WARNING: To reduce the risk of fire or electric shock, do not expose this appliance to rain or moisture.

Parts identification

lacktriangle To help you to identify all parts of this unit, leave page 3 folded out when you read pages 4 \sim 9.





Accessories

Power cord	1
Stereo connection cable	1
Ground wire	1

Product service

Warning concerning removal of covers

This unit should be serviced by qualified technicians only. No service information is provided for customers. Should your "Technics" product ever require servicing, refer to the Directory of Authorized Servicenters or your franchaised "Technics" dealer for detailed instructions. (In the U.S.A., consult MESCO Authorized Servicenter for detailed instructions.)

Location of serial number

You will find the serial number located on the back or the bottom of the unit.

Parts identification and their functions

Power switch

Press $(\blacksquare \rightarrow \blacksquare)$ to switch power on and press again $(\blacksquare \rightarrow \blacksquare)$ to switch power off.

When power is switched on, the tonearm, cueing and music select indicators will be illuminated.

Upper cabinet (dust cover)

Contains the tonearm drive system. Must be completely closed before starting record play.

Record groove scale

A scale with 1 mm graduations that is useful for determining the tonearm position.

4 Tonearm position indicator (♥)

Shows the approximate tonearm position at all times.

(Cartridge)

The cartridge shown here is an option.

6 Stop/clear button (stop·clear □)

Press to stop record play.

The tonearm will move to the rest position and the platter will stop rotating (auto-return, auto-stop).

7 Start button (< start)

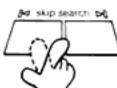
Press to begin record play.

- The tonearm will move to the specified start position and record play will begin (auto-start, auto-lead-in).
- When this button is pressed during record play, the tonearm will return to the rest position and begin record play again (auto-return play).

Forward and backward skip/search buttons (⋈ skip search ⋈)

These buttons function in two ways depending on how they are pressed.

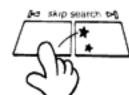
 If pressed momentarily, the tonearm will skip forward or backward one song for each time the button was pressed. (Forward and backward skip function)



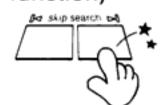
or



- Before record play is begun, the forward skip/search button can be used for direct music selection. For example, if you press the button five times, and then press the start button, record play will begin from the fifth song on the record (direct selection function).
- If either button is held down, the tonearm will move forward or backward until the button is released. (Forward and backward search function)



or



Cueing button and cueing (▽ cueing ▽)
indicators

Press to raise and lower the tonearm.

- During record play, the green indicator is illuminated to show that the tonearm is down.
- If this button is pressed during record play, the tonearm will rise and the orange indicator will illuminate.

Repeat button and repeat indicator (repeat)

Press to activate the repeat play function (indicator illuminates). Press again to cancel the repeat play function (indicator goes out).

Music select indicator

Displays the number of times the forward or the backward skip/search button was pressed for direct access or skip functions.

Ordinarily shows \Box .

12 Optical sensor

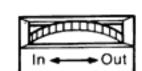
Used to detect the presence or absence of a record, record size and the locations of the spaces between the songs on a record.

Reset switch

There is no need to operate this switch yourself.

This switch causes the tonearm to return to the rest position when the upper cabinet is opened.

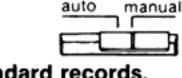
Stylus set-down position adjustment knob



size

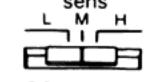
Used to adjust stylus set-down position if the tonearm is starting play at the wrong point. (See page 9.)

B Record size selector



Use this selector when playing non-standard records. (See page 8.)

Sensitivity selector

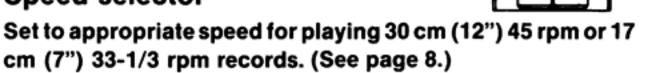


speed

33 auto 45

Use when playing special records. (See page 8.)

Speed selector



- **®** Turntable platter
- **⚠** Turntable mat

Do not use any turntable mat except the one supplied.

2045-rpm adaptor

Use this adaptor when playing 45-rpm records having a large center hole.

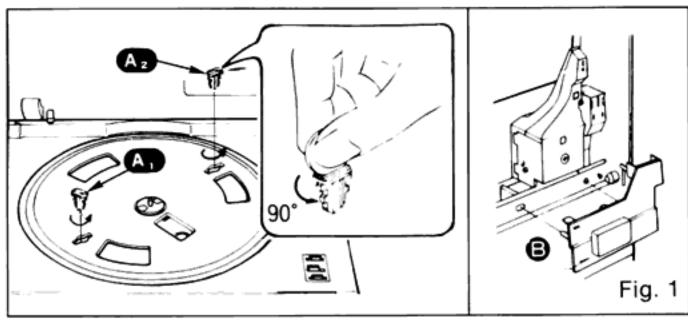
This adaptor is held down by the weight of LP records. When playing thin, flexible records, such as those included in magazines, lock this adaptor down by gently pressing downward and rotating it clockwise.

- Center spindle
- 22 Lower cabinet

Set-up

In order to avoid damage due to vibration or shock incurred during shipment, this unit is packed with protective materials A_1 , A_2 and B. Be sure to remove these before use. Keep these materials for reuse should it become necessary to transport the turntable again.

- 1. Remove turntable spacers A1 ~ A2. (Fig. 1)
- 2. Pull off the tonearm protection spacer B. (Fig. 1)

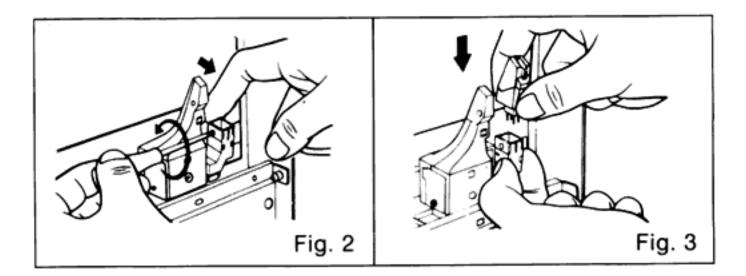


Put the turntable mat on after you have completed the setup. (Use only the supplied turntable mat.)

■ Cartridge installation

(An example of cartridge installation is shown in **Figs. 2** and **3**.) When installing a cartridge, follow the instructions supplied with the cartridge.

- Remove the cartridge securing screw from the tonearm with a screwdriver.
- 2. Align the pins on the cartridge with the tonearm connector and push it firmly into the tonearm. (Fig. 2)
- 3. Insert and tighten the cartridge securing screw. (Fig. 3)



Plug-in cartridges are now available from Technics and many other of the world's top cartridge manufacturers. All compatible cartridges are identified by the TP mark. These cartridges are designed for perfect matching with this turntable in all areas including weight, tracking force, stylus tip position, and center of gravity. The plug-in cartridge design eliminates the trouble of lead wire connections and tracking force adjustments.

Placement

- Place the unit in a stable and horizontal position where there is little or no vibration.
- Place the unit away from the speakers so that it will be subject to as little direct sound radiation as possible.
- Do not use or store this unit where it will be exposed to dust, dirt, high humidity or high temperature. Do not place it near heaters.

- Place it in a well-ventilated location.
- Do not use under direct sunlight, spotlights, or other extremely bright light sources.
- Do not place it near or on top of a power amplifier, since power amplifiers radiate much heat.
- Place the turntable away from the power amplifier to prevent hum.

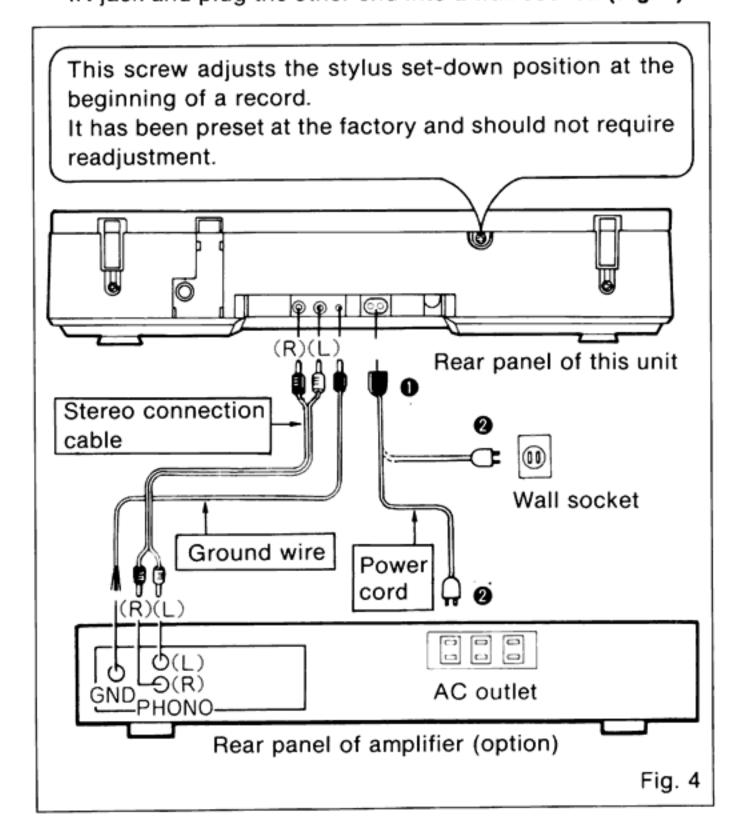
Hum may be caused by leakage flux from the transformer in the power amplifier (or integrated amplifier). Therefore, if you notice hum, try moving the turntable to a slightly different location, further away from the amplifier.

If you try to listen to a radio near the turntable while it is being used, you may hear some interference.

Connections

Precautions

- Make sure your hands are dry when making connections.
- Turn power off to all components before making connections.
- Be sure to read the operating instructions for all units connected.
- If the turntable is lifted vertically or turned over, remove the turntable mat to avoid damage to the stylus.
- Use the stereo connection cable to connect the turntable to your amplifier or receiver. Be sure that the white plugs are connected to the left channel jacks and the red plugs are connected to the right channel jacks.
- Plug the ground wire into the turntable's ground jack and connect the other end of the wire to the amplifier or receiver's ground (GND) screw.
 - Note that hum may occur if you neglect to connect the ground wire.
- Plug the female end of the power cord into the turntable's AC
 IN jack and plug the other end into a wall socket. (Fig. 4)



Operation

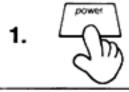
power Qu	IARTZ	repeat 2cueing2 baskip searchae	dstart	stop-clear O

Procedure

Automatic operation

(To play 30 cm (12"), 33-1/3 rpm/LP record)

Place a record on the platter and close the upper cabinet.



Press the power switch ($\blacksquare \rightarrow \blacksquare$).

2. (stan)

Press the start button.

Function/Notes

- Be sure that the upper cabinet is completely closed.
- Confirm that the record size selector is set to auto.
- Confirm that the speed selector is set to auto.
- To assure proper operation, wait about two seconds after switching power on before using any buttons.

Record play begins.



- If the upper cabinet is opened during record play, the tonearm will return to the rest position and all functions will be cancelled.
- If power is switched off during record play, the tonearm will rise and stop above the record at that point. Switch power back on to return the tonearm to the rest position.
- If the start button is pressed during record play, the tonearm will return to the beginning of the record and resume record play.
- If the start button is pressed when there is no record on the platter, the tonearm will move inward to the starting position for a 17 cm (7") record and then returns to the rest position without descending.

After record play has finished

 The tonearm returns to the rest position and the platter stops rotating.

3. power

Press the power switch ($\blacksquare - \blacksquare$).

(To play 17 cm (7") 45 rpm records/EP records)

To play a 45-rpm record having a large center hole, first press down lightly on the 45-rpm adaptor while turning it counterclockwise to raise it.



Press the start button.

 For thin, flexible records such as those included in magazines, lightly press the adaptor down and turn it clockwise. Then place the record on the platter.



-17 cm (7") record

■ Direct song (track) select play

This function can only be performed when the tonearm is in the start position.

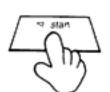
(Example: To begin play from the fifth song.)

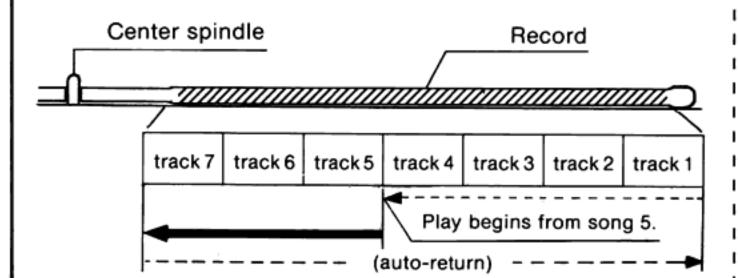
- Must be done before pressing start button.
- 1. Press the forward skip/search button five times.



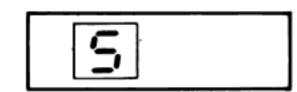
Press five times.

2. Then, press the start button.





 Check indicator to confirm number of times you press the forward skip/search button.



- •Selection and indicator can be no higher than number 3.
- If button is kept pressed (more than one second) then the function will change to search play. (Tonearm will move above record surface. In this case, press the stop/clear button to return the tonearm to the rest position.)
- If you skip too far forward, use the backward skip/search button to go back to the song you want.

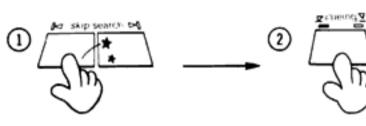
Procedure Remarks/Notes ■ Repeat play The repeat indicator illuminates and the repeat play mode is Press the repeat button. activated. Repeat can be activated either before or during record play. The repeat indicator goes out to show that the repeat mode 2. Press the repeat button. has been cancelled. Repeat is also cancelled when the stop/clear button is pressed. ■ To briefly interrupt record play Press the cueing button. Cueing indicator (orange) illuminates. ■ To resume record play Press the cueing button again. Cueing indicator (green) illuminates. ■ To stop record play The tonearm returns to the rest position and the platter stops rotating. Press the stop/clear button. ■ Music select play by skipping forward or ■ This can only be done during play (that is, when the stylus is) backward. in the grooves). • The number shown on the display is the number of times that you have pressed the forward and backward skip/search Forward skip buttons. (Example: Skipping forward to the fifth song during play of During play, the indicator shows . the second song on a 7-song record.) Press three times. track 2 track 1 track 6 | track 5 | track 4 | track 7 track 3 (forward skip) Tonearm will go to song five and begin play. press three times. In this case, the indicator should show | ∃ | since you want (auto-return) to skip forward three songs (from 2 to 5). Backward skip During backward skip, the song in play is included in the (Example: Skipping backward from the sixth to the second count. song.) Press five times. track 6 | track 5 | track 4 | track 3 | track 2 | track 7 track 1 (backward skip) •The indicator shows 5. Press five The tonearm will go to song two and begin play. times

(auto-return)

Procedure ■ Forward or backward search play (for manual play) Forward search 1. Keep the forward skip/search button pressed (more than one second). Release the button when the

tonearm reaches the song that you want.

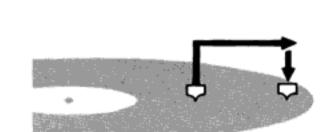
2. Press the cueing button to continue playing the record.



Backward search

1. Keep the backward skip/search button pressed (more than one second). Release the button when the tonearm reaches the song that you want.

2. Press the cueing button to continue playing the record.



Remarks/Notes

■ Playing non-standard and special records

Procedure	Remarks/Notes		
•17 cm (7") 33-1/3 rpm record. •30 cm (12") 45 rpm record.	Set speed selector to correct speed. For normal use, remember to return the speed selector to the "auto" position.		
Tonearm goes past desired song when using direct music select play or skip play. (Sets down on later song.) (On records with narrow gaps between songs.)	Set sensitivity selector to "H" position. Always return to "M" position for playing ordinary records.	The sensitivity of the optical sensor which detects the number of bands on the record and their positions has been factory adjusted for optimum performance. However, by setting the sensitivity selector to the H or L position, direct select play of some special records is possible. Always return the selector to the center position to play ordinary records. Sens	
 Tonearm starts playing song before desired song, or starts playing (or rises) from middle of song. 	Set sensitivity selector to "L" position.		
 Song is extremely short. Record is badly warped or eccentric (spindle hole is off center). Color printing on record groove area. Outer edge of record is raised (groove guard) on 17 cm (7") record. Record is very dirty or badly scratched. 30 cm (12") transparent (translucent) records. (Includes any colored records and extremely thin black records that allow light to pass through.) 30 cm (12") records that are transparent or colored, or Sonosheets, or black records that are highly reflective. 	Use the auto-play or search-play modes to play the record. Direct music select and skip play cannot be used. Center spindle		
•25 cm (10") records and non-standard records.	Use search-play mode to play the record. Direct music select play cannot be used.		

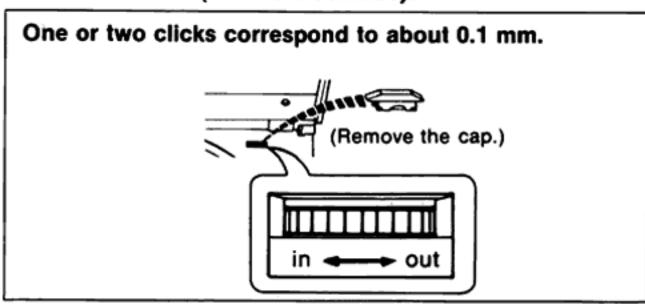
Adjustments

Stylus set-down position adjustment.

Perform adjustment as follows if tonearm does not start playing from the correct position when using direct music select play or skip play to play ordinary records.

- Take off cap from right rear of lower cabinet.
- If tonearm sets down before beginning of desired song.

 Turn toward IN (counterclockwise).



 If tonearm sets down in song (doesn't start from beginning).

Turn toward OUT (clockwise).

Notes and maintenance

Auto-return operation will not function if you press the power switch while a record is being played.

The tonearm will rise above the record surface but stay where it is.

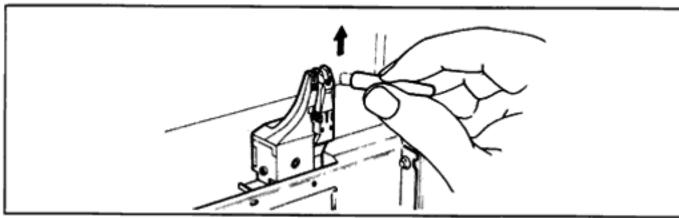
Therefore, if you then press the power switch again to turn it on, the tonearm will go back to the rest position.

Be sure to remove all dirt and dust from the stylus tip and the record.

The stylus is an extremely delicate and precisely manufactured device designed for picking up the subtle nuances of the record grooves. Therefore, be very careful not to touch it, push on it, or apply excessive force in any way.

The stylus tip cannot maintain proper groove contact when it is dirty. This causes bad sound reproduction and excess wear on the stylus tip and record grooves. Therefore, use a brush to remove dust and dirt from the stylus tip. Always brush in the direction of the arrow.

Also, use a good record cleaner to remove dust and dirt from the grooves.



Wipe the cabinet with a soft, dry cloth.

Never use volatile cleaners such as alcohol, benzine or thinner.

Do not use chemically treated dust cloths. Do not expose the panel to insecticide spray.

Before removing stubborn spots, first pull out the power plug.

Then wipe the cabinet with a soft cloth slightly moistened with a mild soap and water solution.

Do not wipe the upper cabinet during play, because the tonearm may be pulled toward the upper cabinet due to the generation of static electricity.

Open the upper cabinet gently.

Always close the upper cabinet completely.

If the upper cabinet is not completely closed, the stylus cannot contact the grooves properly and turntable will not operate correctly.

Check again before starting play.

Unplug from the AC outlet if the unit will not be used for an extended period of time.

Specifications

■ General

Power supply: AC 120 V, 60 Hz

Power consumption: 14W

Dimensions: $43 \times 9 \times 35 \text{ cm}$

 $(W \times H \times D)$ (16-15/16" \times 3-17/32" \times 13-

25/32")

(Maximum height when the dust

cover is open.) 39 cm (15-11/32")

Weight: 5.1 kg (11.2 lb.)

Turntable section

Features:

Type: Quartz direct drive

Automatic turntable system
Auto start/Auto lead-in

Auto return Auto stop Repeat play

Direct music select play

Forward and backward skip play Forward and backward search play

Auto size select

Record presence detection

Drive method: Direct drive

Motor: Brushless DC motor

Drive control method:

Quartz-phase-locked control

Turntable platter:

Diameter 30 cm (12")

Turntable speeds: 33-1/3 rpm and 45 rpm

Auto speed select

Aluminum die-cast

(Manual selection possible)

Wow and flutter: 0.012% WRMS*

0.025% WRMS (JIS C5521)

±0.035% peak (IEC 98A Weighted)

*Measured by obtaining the signal from the built-in

frequency generator of the motor assembly.

Rumble:

-56 dB (IEC 98A Unweighted)

-78 dB (IEC 98A Weighted)

■ Tonearm section

Type:

Linear tracking tonearm

4-pivot gimbal suspension 14D

Effective length:

10.5 cm (4-1/8")

Tracking error angle:

Within ±0.1°

Effective mass:

9 g (including cartridge)

Resonance frequency: Tonearm drive motor: 12 Hz DC motor

Stylus pressure:

1.25 g (Fixed)

Applicable cartridge

6 g

weight: Phono cable

capacitance:

90 pF

Specifications are subject to change without notice. Weight and dimensions are approximate.

Downloaded from www.vinylengine.com

CAUTION

This equipment has been tested and found to comply with the limits for a Class B computing device in accordance with the specifications set forth in Subpart J of Part 15 of the FCC Rules. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment on and off, use the equipment in another location and/or utilize an electrical outlet different from that used by the receiver.

Panasonic Company
Division of Matsushita Electric
Corporation of America
One Panasonic Way, Secaucus,
New Jersey 07094

Panasonic Hawaii, Inc. ("PHI") 91-238, Kauhi St. Ewa Beach P.O. Box 774 Honolulu, Hawaii 96808-0774 Panasonic Sales Company,
Division of Matsushita Electric
of Puerto Rico, Inc.
Ave. 65 De Infanteria, KM 9.7
Victoria Industrial Park

Carolina, Puerto Rico 00630



Matsushita Electric of Canada Limited 5770 Ambler Drive, Mississauga, Ontario L4W 2T3

Printed in Japan