

Technics

Compact Disc Player

SL-P1300

OPERATING INSTRUCTIONS



COMPACT
disc
DIGITAL AUDIO

Before operating this product, please read these instructions completely.

Thank you for purchasing this Compact Disc Player.

For optimum performance and safety, please read these instructions carefully.

To Our Valued Customer,

Technics, The Science of Sound, welcomes the challenge of new audio technologies and brings you a multitude of world-renowned, high quality audio components, all backed by our time-honored commitment to innovation, value, and quality.

Technics captures the power of new ideas and turns them into high performance components like digital Compact Disc players that feature High Speed Linear motor Transports, high speed editing cassette decks, professional and consumer turntables, Computer Drive New Class A amplifiers, and A/V receivers that integrate both audio and video equipment.

The Technics list of advanced audio components continues. From Class AA amplifiers, Honeycomb Disc speakers, and multi-disc CD changers to the world's first touch-sensitive graphic equalizer, Technics is a shining example of audio technology at its best.

The model number and serial number of this product can be found either on the back or bottom of the unit. Please note them 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: _____

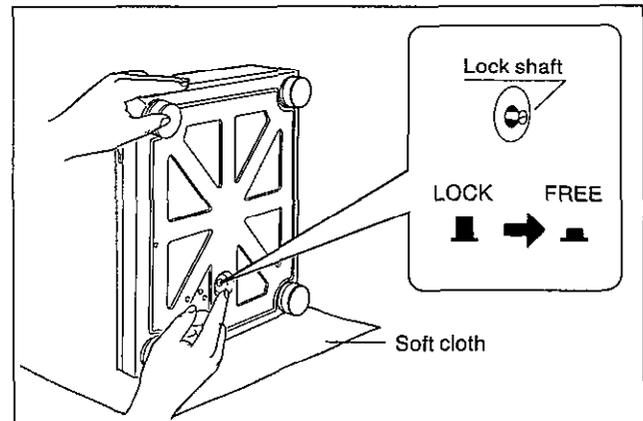
SERIAL NUMBER: _____

Contents

Before Use	2
Accessories	2
Suggestions for Safety	3
Concerning Compact Discs	4
Installation	4
Connections	5
Front Panel Controls and Functions	6~10
Playing a Disc	11~22
Using the Remote Control Unit (included)	23~24
Operation Notes	25
Troubleshooting Guide	26
Maintenance	26
Limited Warranty	27
Product Service	27
Technical Specifications	Back cover

Before Use

1. Place a soft cloth under the unit to protect it from scratches.
2. Press the lock shaft on the bottom panel to the in (FREE) position (■→■).



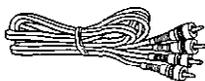
NOTE:
IF THE UNIT IS TRANSPORTED AGAIN, PERFORM THE FOLLOWING STEPS:

- 1) Remove the disc from the disc compartment.
- 2) Pull the lock shaft to the out (LOCK) position (■←■).

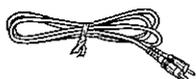
CAUTION:
Do not transport the unit without locking the lock shaft.
SEVERE DAMAGE WILL RESULT.

Accessories

Stereo connection cable

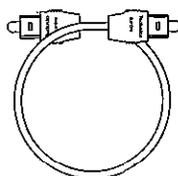


Coaxial cable



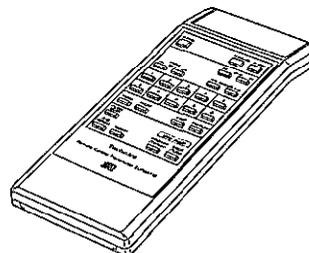
(Part No. SJPD19-1)

Optical cable



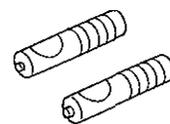
(Part No. SJPD16)

Remote control unit



(Part No. EUR64719)

Batteries



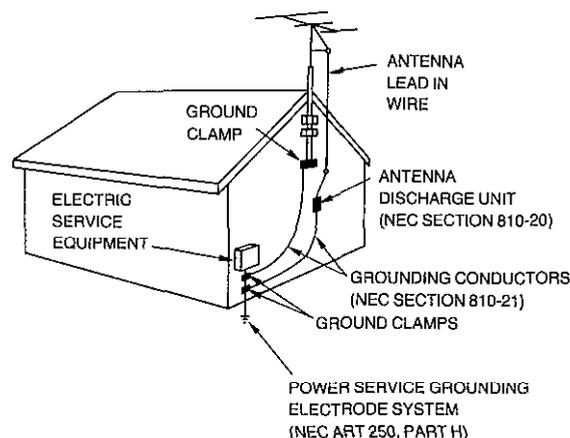
(IEC R03/"AAA" UM-4)

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. Water and Moisture** -- The unit should not be used near water -- for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, and the like.
- 2. Object and Liquid Entry** -- Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.
- 3. Ventilation** -- The unit should be situated so that its location or position does not interfere with its proper ventilation. For example, the unit should not be situated on a bed, sofa, rug, or similar surface that may block the ventilation openings; or placed in a built-in installation, such as a bookcase or cabinet that may impede the flow of air through the ventilation openings.
- 4. Heat** -- The unit should be situated away from heat sources such as radiators, heat registers, stoves, or other units that produce heat.
- 5. Power Sources** -- The unit should be connected to a power supply only of the type described in the operating instructions or as marked on the unit.
- 6. Power Cord Protection** -- AC 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 unit. Never take hold of the plug or cord if your hand is wet, and always grasp the plug body when connecting or disconnecting it.
- 7. Polarization** -- If the unit is equipped with a polarized AC power plug (a plug having one blade wider than the other), that plug will fit into the AC outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.
- 8. Carts and Stands** -- The unit should be used only with a cart or stand that is recommended by the manufacturer. The unit and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the unit and cart combination to overturn. 
- 9. Wall or Ceiling Mounting** -- The unit should be mounted to a wall or ceiling only as recommended by the manufacturer.
- 10. Cleaning** -- The unit should be cleaned only as recommended by the manufacturer.

- 11. Outdoor Antenna Grounding** -- If an outside antenna is connected to the receiver, be sure the antenna system is grounded so as to provide some protection against voltage surges and built-up static charges. Section 810 of the National Electrical Code, ANSI/NFPA No. 70 - 1990, provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode. See figure below.



NEC—NATIONAL ELECTRICAL CODE

- 12. Power Lines** -- An outdoor antenna should be located away from power lines.
- 13. Nonuse Periods** -- The AC power supply cord of the unit should be unplugged from the household AC outlet when left unused for a long period of time.
- 14. Damage Requiring Service** -- The unit should be serviced by qualified service personnel when:
 - (a) The AC power supply cord or the plug has been damaged; or
 - (b) Objects have fallen or liquid has been spilled into the unit; or
 - (c) The unit has been exposed to rain; or
 - (d) The unit does not appear to operate normally or exhibits a marked change in performance; or
 - (e) The unit has been dropped, or the enclosure damaged.
- 15. Servicing** -- The user should not attempt to service the unit beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel.

GROUNDING THE UNIT

Please note the following when making connections to the audio output terminals:

1. When using both the Unbalanced (① Line out terminals) and Balanced (② Line out sockets) outputs at the same time:

Make sure that pin 1 on both of the Balanced outputs (② Line out sockets) is disconnected.

2. When using only the Balanced outputs (② Line out sockets):

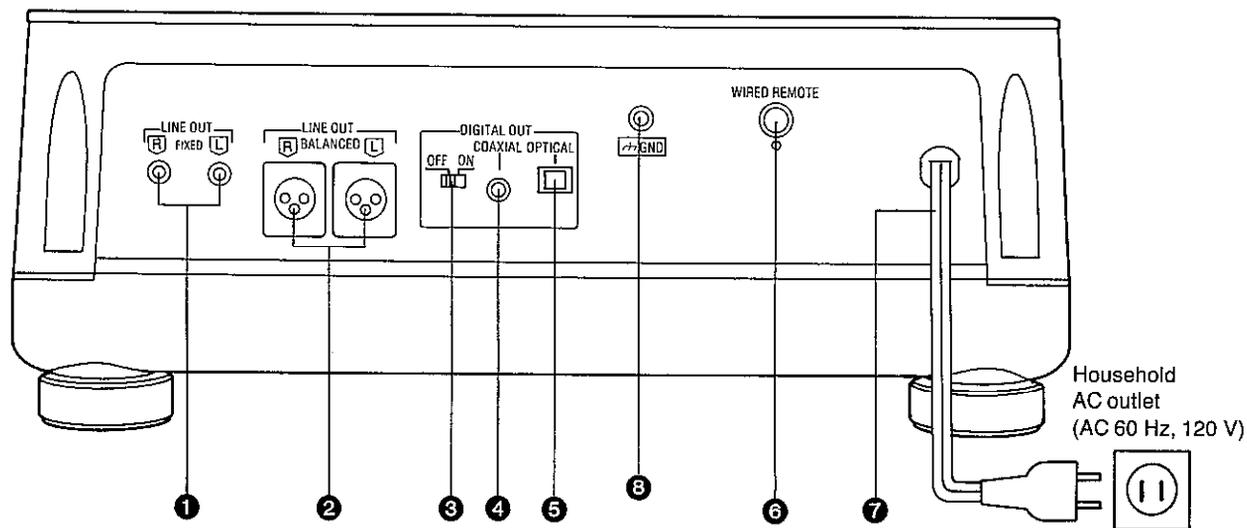
If pin 1 of the Balanced outputs (② Line out sockets) is disconnected, be sure to connect this unit's ground terminal ⑧ to the ground terminal of the component to which it is connected.

If pin 1 of the Balanced outputs (② Line out sockets) is connected, connection of the ground terminal is not necessary.

In either case confirm that the component to which this unit is connected is properly grounded.

3. When connecting to the Wired Remote Control Terminal ⑥:

Do not connect pin 4 of the Wired Remote Control Terminal ⑥ to the unit's ground.



- ① Line out terminals (LINE OUT)
- ② Line out sockets (BALANCED)
- ③ Digital output switch
- ④ Coaxial terminal (DIGITAL OUTPUT)

- ⑤ Optical terminal (DIGITAL OUTPUT)
- ⑥ Wired remote control terminal (WIRED REMOTE)
- ⑦ AC power supply cord
- ⑧ Ground terminal (GND)

Suggestions for Safety

CAUTION

THIS PRODUCT UTILIZES A LASER. USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

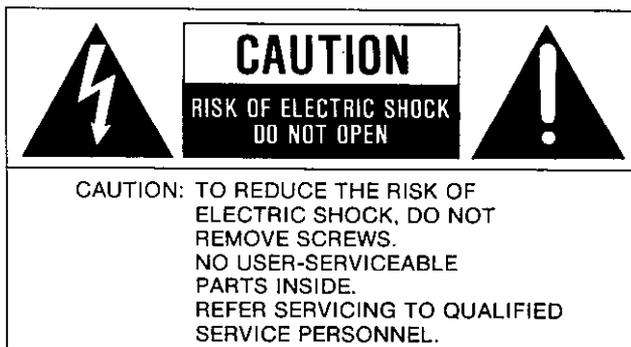
TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.

WARNING:

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

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. **Water and Moisture**—The unit should not be used near water—for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, and the like.
2. **Object and Liquid Entry**—Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.
3. **Ventilation**—The unit should be situated so that its location or position does not interfere with its proper ventilation. For example, the unit should not be situated on a bed, sofa, rug, or similar surface that may block the ventilation openings; or placed in a built-in installation, such as a bookcase or cabinet that may impede the flow of air through the ventilation openings.
4. **Heat**—The unit should be situated away from heat sources such as radiators, heat registers, stoves, or other units that produce heat.
5. **Power Sources**—The unit should be connected to a power supply only of the type described in the operating instructions or as marked on the unit.
6. **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 unit. Never take hold of the plug or cord if your hand is wet, and always grasp the plug body when connecting or disconnecting it.
7. **Polarization**—If the unit is equipped with a polarized AC power plug (a plug having one blade wider than the other), that plug will fit into the AC outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.
8. **Carts and Stands**—The unit should be used only with a cart or stand that is recommended by the manufacturer.
9. **Wall or Ceiling Mounting**—The unit should be mounted to a wall or ceiling only as recommended by the manufacturer.
10. **Cleaning**—The unit should be cleaned only as recommended by the manufacturer.
11. **Nonuse Periods**—The power cord of the unit should be unplugged from the household AC outlet when left unused for a long period of time.
12. **Damage Requiring Service**—The unit should be serviced by qualified service personnel when:
 - A) The power supply cord or the plug has been damaged; or
 - B) Objects have fallen or liquid has been spilled into the unit; or
 - C) The unit has been exposed to rain; or
 - D) The unit does not appear to operate normally or exhibits a marked change in performance; or
 - E) The unit has been dropped, or the enclosure damaged.
13. **Service**—The user should not attempt to service the unit beyond that described in the operating instructions. All other servicing should be referred 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.

Concerning Compact Discs

Handling precautions

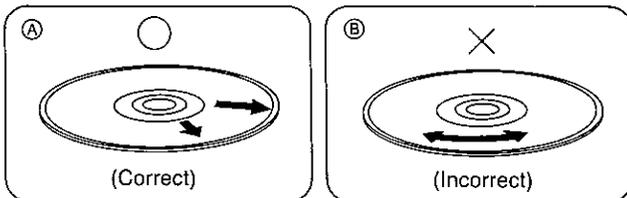
Only compact discs having this mark can be used with this unit.



Observe the following precautions to enjoy the same outstanding sonic performance from your compact discs for many years.

- Be careful not to scratch the surface with fingernails or other sharp objects, particularly when inserting and removing discs from their cases.
- Do not bend the disc.
- Do not use record cleaning sprays or static electricity prevention liquids.
- Fingerprints, dirt and scratches can cause skipping and distortion. If the surface is soiled, clean gently with a soft, damp (water only) cloth, then wipe dry.

Always wipe the disc from the center outward, never in a circle.



(In compact discs, circular scratches along a line of pits (B) are more likely to cause errors than straight scratches across many lines of pits (A).)

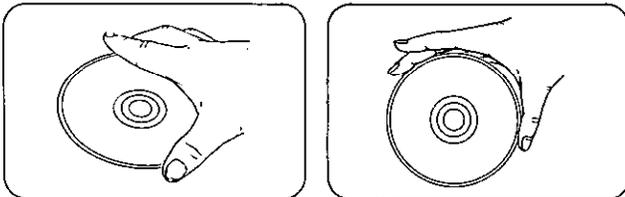
- Do not wipe the disc with benzine, thinner or any other solvent.
- If the disc is brought from a cold environment into a warm room, moisture may form on the disc. Wipe this off with a soft, dry, lint-free cloth before using the disc.
- Do not dry discs with a hair dryer.
- Do not write on the label side with a ball-point pen, hard pencil or other writing utensil.

Also do not stick a label or paper on the disc.

(Be particularly careful not to damage the playing surface of the disc from the label side.)

■ Holding compact discs

- Always hold the disc by the edges to avoid soiling the surface with fingerprints.



Storage precautions

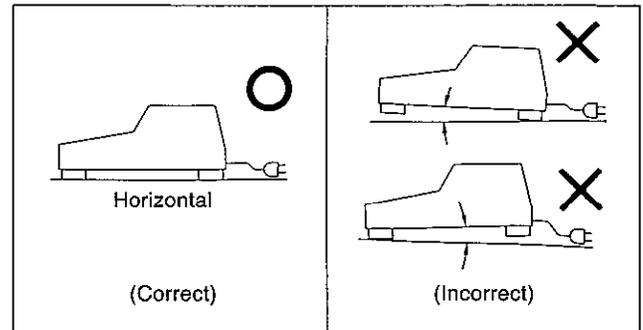
- Be sure to store discs in their cases to protect them from dust, scratches and warping.
- Do not place or store discs in the following places:
 - 1) Locations exposed to direct sunlight.
 - 2) Humid or dusty locations.
 - 3) Locations directly exposed to a heat outlet or heating appliance.
 - 4) In the glove compartment or on the rear ledge of an automobile.

Installation

■ This unit incorporates many sensitive optical components. To enjoy optimum performance at all times, avoid using this unit under the following conditions.

- In a closed vehicle or other location where the temperature could exceed 100°F (40°C).
- In very cold places (below 40°F; 5°C).
- For long periods of time in direct sunlight or under bright spotlights.
- In very humid locations.
- Near a heat outlet or heating appliance.
- In dusty or smoky locations.
- In locations prone to vibrations.
- On an unstable or uneven surface.
- Near appliances generating strong magnetic fields.
- Within reach of children.
- In locations where the rear panel is less than 10 cm (about 4") away from the wall or back of an audio rack.

■ For reliable performance, be sure to place the unit on a flat, level surface. Not doing so may cause the unit to malfunction.



■ Do not place near a tuner or television.

This unit uses high-frequency signals and can cause interference with tuner and television reception. If this occurs, move this unit farther away from the tuner or television, or change from an interior to an exterior television antenna. Otherwise turn off the power switch while using a tuner or television.

■ To avoid problems due to vibration.

- Do not place a book or similar object under this unit.
- Do not route the connection cables (of this or other units) across the operation panel, across the top, or under the unit.

Connections

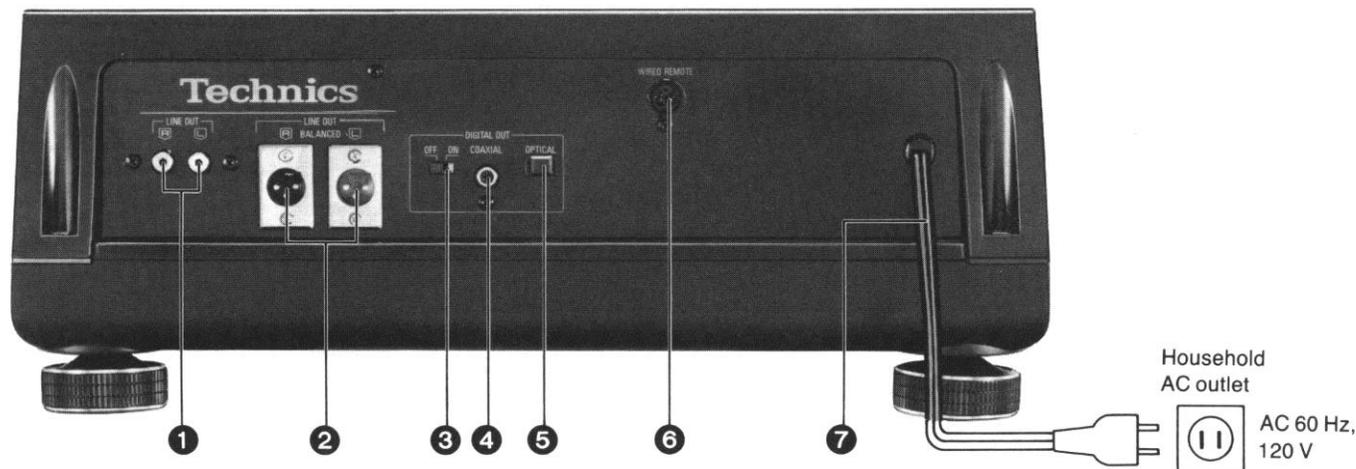
Notes:

1. Make sure your hands are dry when making connections.
2. Turn power off to all components before making connections.
3. Make all connections firmly.
4. Be sure to read the operating instructions for all connected units.

Connecting components to the digital output terminals:

Please do not attempt to connect a DAT (Digital Audio Tape recorder) to the digital terminals (coaxial or optical) of this unit. It is not possible to make direct digital-to-digital recordings of CD originals.

Rear panel of this unit



1 Line out terminals (LINE OUT)

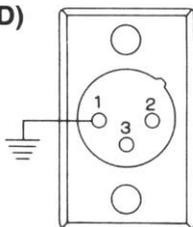
These are the audio output terminals.

- Connect the line out terminals to the CD, AUX, or TAPE PLAYBACK terminals on your amplifier or receiver.
- Do not connect the line out terminals to the PHONO terminals of your amplifier or receiver.

2 Line out sockets (BALANCED)

These sockets are provided to enable you to connect a cable equipped with an XLR type plug (option).

1. ground
2. signal output (cold)
3. signal output (hot)



3 Digital output switch

This switch should normally be in the OFF position. When it is ON, the digital signal is output to both terminals 4 and 5.

When in the ON position, the digital output indicator in the display section illuminates.

High-quality CD playback is possible if this unit is connected to an amplifier with a digital input terminal.

4 Coaxial terminal (DIGITAL OUTPUT)

Digital data output from the SL-P1300 can be input into another device with the appropriate digital input terminals by means of a coaxial cable (included). Consult your dealer for details.

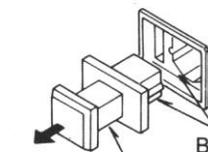
5 Optical terminal (DIGITAL OUTPUT)

Optical data output from the SL-P1300 can be input into another device with the appropriate optical input terminals by means of an optical cable (included). Consult your dealer for details.

Note:

A dust-tight cap has been inserted into this terminal. This cap is only to be removed when an optical cable is to be connected.

See additional "CAUTION" notes on page 25.



Dust-protection Cap

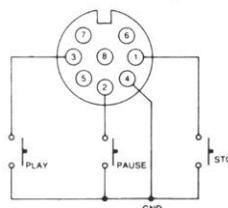
Be sure to insert properly, with the plug matched to the shape of the socket.

6 Wired remote control terminal (WIRED REMOTE)

Connect the wired remote control unit to this terminal. This terminal is used when the unit is operated using the wired remote control unit. (Play, stop and pause operations can be performed.)

WIRED REMOTE CONTROL TERMINAL (DIN 8-PIN Socket)

(Connection Diagram)



• Terminals

- ① stop
- ② pause
- ③ play
- ④ GND

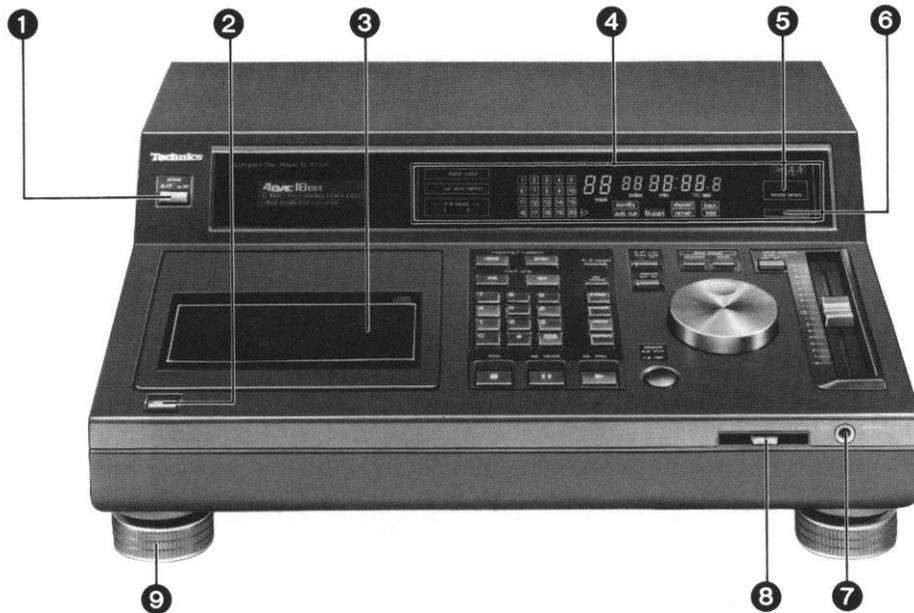
• Terminals ⑤~⑧: not used

7 AC power supply cord

Connect to an AC outlet on the wall or on the rear panel of your amplifier or receiver.

Front Panel Controls and Functions

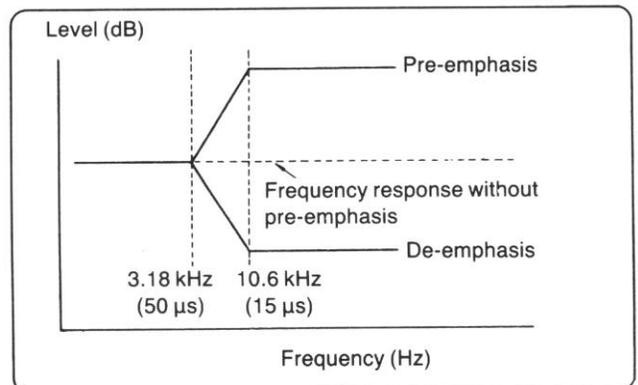
Front panel



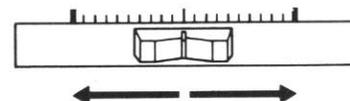
- 1 Power switch** (See page 11.)
 Press (■) to switch the power on.
 Press again (■) to switch the power off.
- 2 Open button**
 Press this button to open the disc compartment cover. Close the cover by hand after loading a disc.
Note:
 The cover does not open if this button is pressed during the following operating modes:
 1. While disc information is being read (disc is spinning).
 2. During disc play.
 3. While the unit is in the pause mode.
- 3 Disc compartment**
 The disc is inserted here with the label side up. This unit is also capable of playing the 8 cm (3 in) CD single discs.
- 4 Display panel** (See page 7.)
 This panel displays useful information on the unit's operating status.
- 5 Remote control sensor** (○)
 Receives signals from the infrared remote control unit.
- 6 Emphasis indicator** (□)
 Illuminates when a disc recorded with pre-emphasis is played.

In order to further improve the S/N ratio of compact discs, some discs include a degree of pre-emphasis in the high-frequency range. If a disc with pre-emphasis is inserted into this unit, the emphasis indicator on the display panel illuminates.

This indicates the recording characteristics of the compact disc being played. If a disc with pre-emphasis is played without any compensation, the high-frequency range will be unnaturally strong. Therefore, a corresponding amount of de-emphasis is needed to obtain the proper response. The de-emphasis circuitry of this unit is automatically activated when a disc having pre-emphasis is played. Some discs are made without pre-emphasis.

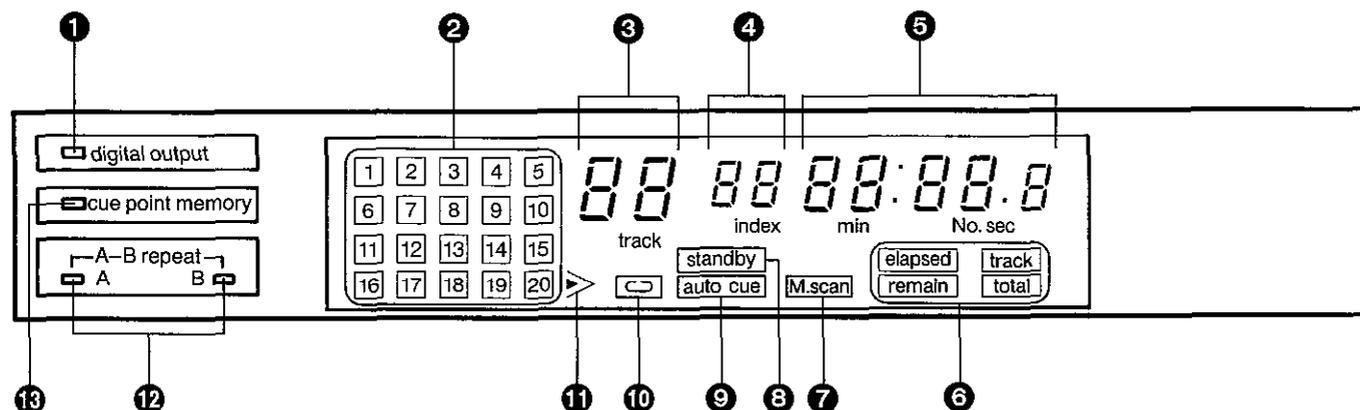


- 7 Headphones jack**
 Connect the optional headphones plug to this jack.
Note:
 When listening to music with stereo headphones, avoid listening for prolonged periods of time. Hearing experts advise against continuous extended play.
- 8 Headphones level control knob**
 Slide this knob to control the output level to the headphones.



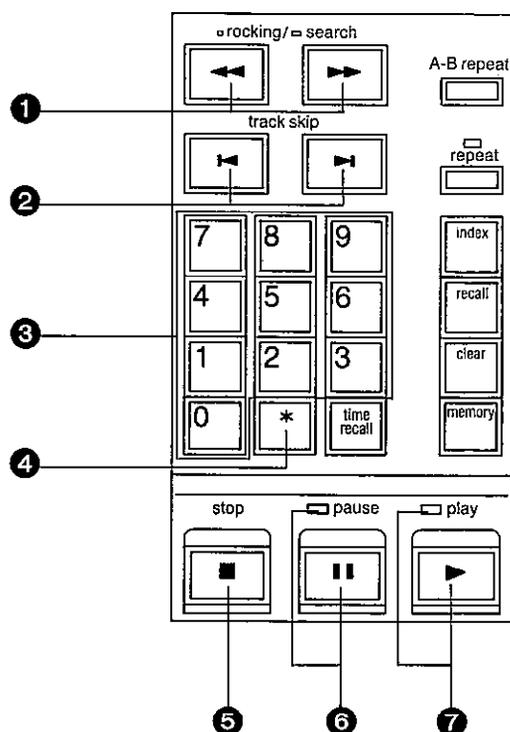
- 9 Insulator**

Display panel



- 1 Digital output indicator** (See page 5.)
Illuminates when digital output has been activated.
- 2 Music matrix**
Up to 20 tracks are displayed.
 1. When a disc is loaded, this display shows the total number of tracks. (See page 11.)
 2. When specifying or entering a track number in the memory, the border of the specified track number illuminates. (See page 15.)
 3. During play, the border around the track number currently being played flashes on and off. (See page 11.)
 4. When the track play is finished, the border around the track number goes out. (See page 11.)
- 3 Track number display (track)** (See page 11.)
Track numbers (up to 99) are shown here.
- 4 Index number display (index)** (See pages 11 and 17.)
Index numbers (up to 99) are shown here.
On discs having no indexes, this display always reads " / ".
*Index number
• In some compact discs, indexes are used to divide tracks into smaller sections for easy access. If a disc includes indexes, a list of the indexes is contained in the liner note included with that disc.
[(INDEX) is the symbol for index(es).]
- 5 Time display (min., No. sec.)**
This switches the display among the following options, depending on the operation mode.
 1. Shows time of track in play (minutes, seconds, 0.1 second). (See page 11.)
 2. Shows programmed order in sequence if the recall button is pressed during program play. (See page 16.)
 3. Shows cue point, if the cue point is specified and the time recall button is pressed during play. (See page 14.)
- 6 Time mode indicators** (See page 21.)
The time display mode is shown here during play.
- 7 Music scan indicator (M.scan)** (See page 24.)
Illuminates when the music scan function is activated using the remote control unit, and goes out when music scan function is cancelled.
- 8 Standby indicator (standby)** (See page 22.)
Illuminates when the unit switches to standby during the auto cue mode.
- 9 Auto cue indicator (auto cue)** (See page 22.)
Illuminates when the auto cue button is pressed to specify the auto cue mode.
- 10 Repeat indicator (repeat)** (See page 18.)
Illuminates when the repeat mode is activated and goes out when the repeat button is pressed once again.
- 11 Overflow indicator** (See page 11.)
 - > illuminates when a disc containing more than 20 tracks is inserted.
 - > flashes on and off when track number 21 or higher is being played.
- 12 A-B repeat indicator** (See page 18.)
Illuminates when the A-B repeat mode is activated by pressing the A-B repeat button.
- 13 Cue point memory indicator** (See page 14.)
Illuminates when the cue point mode has been activated.

Control panel



1 Forward and backward rocking/search buttons (See page 20.)

These buttons are used for the following search operations.

- To move the pickup forward or backward by one pit-track (**Rocking search play**).
- To move the pickup forward or backward to a desired point (**Search play**).

2 Forward and backward track skip buttons (See page 19.)

These buttons are used to move the pickup to the beginning of the next or previous track in the forward or backward direction (**Skip play**).

3 Numeric buttons

These buttons (0-9) are used for the following two operations.

- To specify track numbers for program play or access play. (See pages 15 and 17.)
- To specify a specific point on the disc as the disc play starting time (minutes, seconds, 0.1 second). (See pages 13 and 14.)

4 Asterisk (*) button (See pages 13 and 14.)

Press this button to separate track number, minutes, and seconds when entering specific play starting time.

5 Stop button (See page 12.)

Press this button to stop play and cancel all previous settings.

Note:

When this button is pressed, the unit goes to the stop mode.

Stop mode:

In the stop mode, the pickup is at the beginning of the first track and the display shows the total number of tracks and total playing time of the disc. The disc does not rotate.

6 Pause button/indicator (See page 12.)

Press this button to briefly stop play. The pause indicator illuminates.

To continue play, press the play button. The pause indicator goes out.

Pause mode:

Play is stopped, but the pickup remains where it was at the time when the pause button was pressed. The disc rotates while the unit is in the pause mode.

7 Play button/indicator (See pages 11 and 12.)

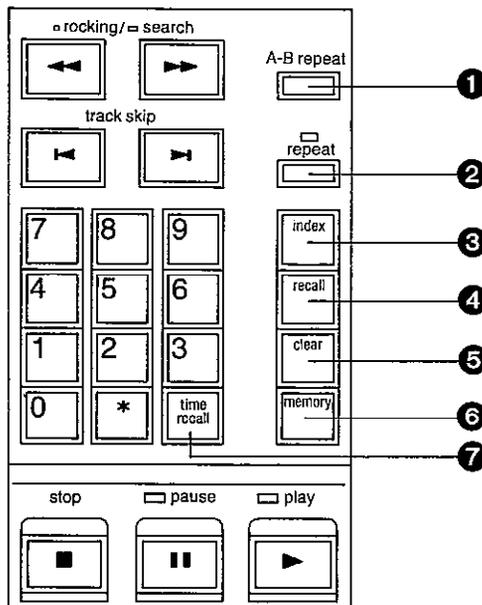
Press this button to begin play.

- If pressed during play, the pickup returns to the beginning of the first track, playing the disc again (**Auto-return play function**).
- During program play, the pickup returns to the beginning of the current track. (**Auto-return play function**)
- The play indicator illuminates when the play button is pressed and goes out when play is stopped.

Pickup:

The pickup is a laser device that reads the information on the disc surface. The pickup moves across the disc as the disc is played, but it is not visible from outside the cabinet.

Control panel



1 A-B repeat button (See page 18.)

Press to repeat a section between two specified points, A and B.

- The first time this button is pressed, the starting point (A) of the disc section to be played repeatedly is set. The (A) LED of the indicator illuminates.
- The second time, the ending point (B) of the repeat section is set. The (B) LED of the indicator illuminates and the repeat cycle begins.
- The third time, the A-B repeat mode is cancelled.

2 Repeat button (See page 18.)

Press this button to activate the repeat mode. (The repeat indicator illuminates.)

The repeat indicator (☰) on the display panel also illuminates.

Press again to cancel the repeat mode. (Both of the repeat indicators go out.)

3 Index button (See page 17.)

Press this button to specify an index number.

4 Recall button (See page 16.)

Press this button to check the contents of a program.

5 Clear button (See page 15.)

Press this button to clear individual program entries before program play is started.

If this button is pressed during program play, the entire program is cleared.

6 Memory button

This button is used for the following two operations.

- To memorize the desired track numbers (**Program play**). (See pages 15 and 16.)
 - A maximum of 20 selections can be programmed.
 - The letter "F" is displayed if you attempt to enter more than 20 selections. (See page 15.)
- To memorize the cue point during the play or pause mode (**Cue point play**). (See page 14.)

7 Time recall button (See page 14.)

When pressed during play or pause, the cue point is shown on the display, the pickup returns to the cue point, and the unit remains in the pause mode (**Cue point play**).

Note:

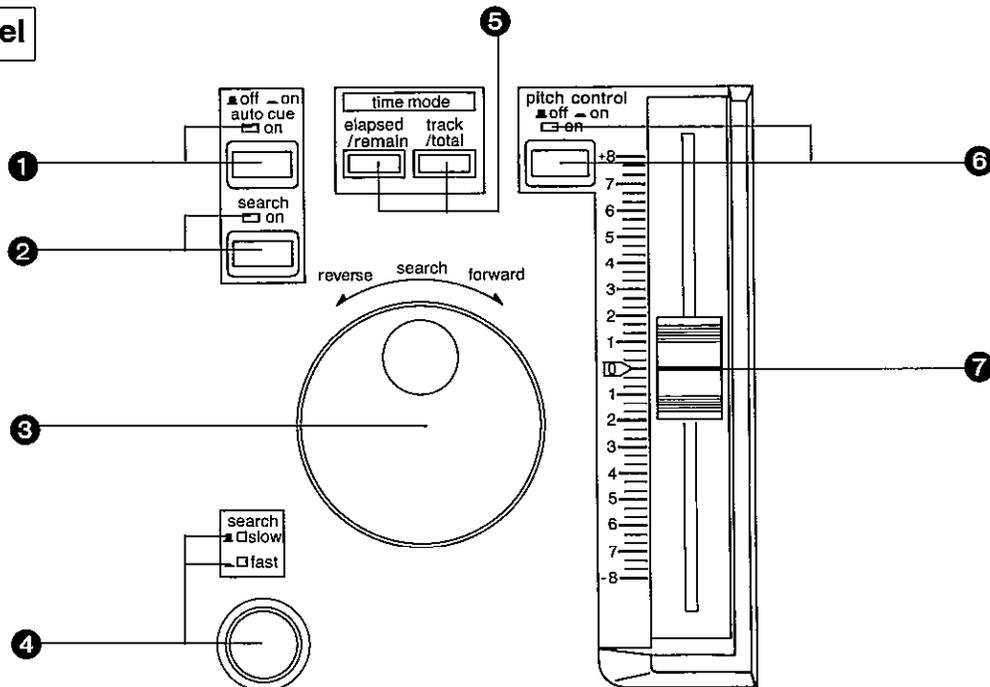
The cue point play function is not available for a track which has been divided into indexes.

(This button does not function during program play.)

This function is cancelled in the following situations:

- If you repeatedly store data in memory.
- If you play to the end of the disc.
- If you press the clear button or stop button.

Control panel



1 Auto cue button/indicator (See page 22.)

Press this button and press the play button to activate the auto cue mode. In this mode, the unit automatically switches to the standby mode immediately before the beginning of each track.

The **standby** indicator on the display panel illuminates. Play is resumed by pressing the play button again. The **auto cue** indicators (on the control and display panels) illuminate when the auto cue button is pressed to activate the auto cue mode.

Standby mode:

Play is stopped and the pickup moves to the beginning of the music portion of each track and stays there until the next command is received. The disc rotates while the unit is in the standby mode.

2 Dial search button/indicator (See page 20.)

Press this button to activate the search dial. The dial search indicator illuminates when the dial search button is pressed.

Note:

Dial search function does not work unless this switch is set to ON.

3 Search dial (See page 20.)

Turn this dial clockwise or counterclockwise to move the pickup forward or backward.

Dial search can be performed at two different speeds (slow and fast), depending upon the position of the dial search speed selector.

4 Dial search speed selector/indicator (See page 20.)

Press this selector to select the desired dial search speed. The appropriate dial search speed indicator illuminates.

5 Time mode select buttons (See page 21.)

Four time mode displays can be selected.

6 Pitch control button/indicator (See page 22.)

Press this button to activate the pitch control function. The pitch control indicator illuminates when the pitch control button is pressed. Press the button again to turn it off. The indicator goes out.

7 Pitch control knob (See page 22.)

Slide this knob to adjust the desired speed.

This control can only be used after the pitch control switch has been pressed.

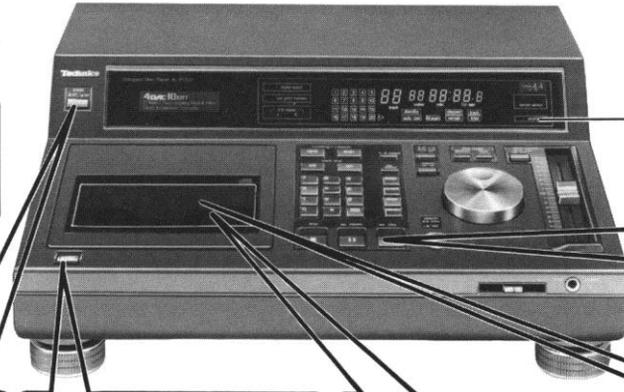
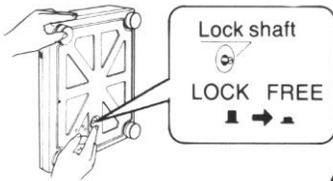
- Pitch change is displayed by an approximate percentage. Pitch is adjustable by approximately $\pm 8\%$.
- Press the pitch control switch again to return to standard speed.

Playing a Disc

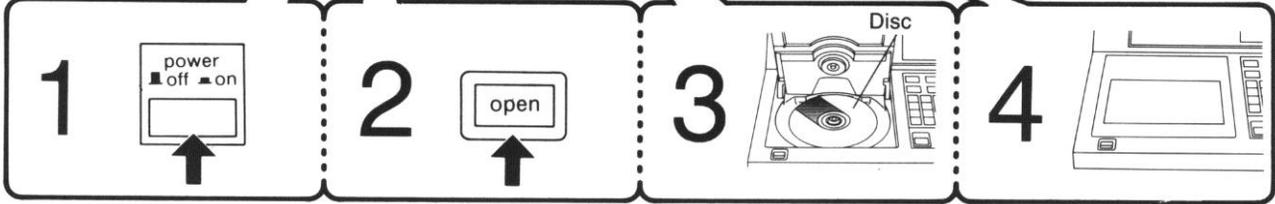
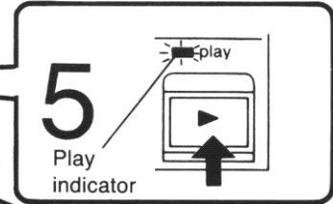
All of the examples on pages 11–24 refer to a disc which contains 7 tracks and a total playing time of 49 minutes and 58.3 seconds, as shown on page 12. Track 3 is divided into five indexes.

Automatic play (To play a disc from the first track to the end of the disc)

Is the lock shaft in the unlocked (free) position?



emphasis indicator



1 Press the power switch to turn the unit on ().

When the power is turned on, the display panel illuminates as shown below:



After about 5 seconds or after the disc compartment has been opened, the display panel shows the following:

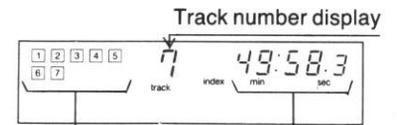


2 Press the open button to open the disc compartment.

3 Insert a disc with the label side facing upward.

4 Push the cover down by hand to close it.

After you insert the disc and close the cover, the disc begins to rotate. After the total number of tracks and total playing time are displayed, the player switches to the stop mode.



The seven-track music matrix illuminates.

Time display

• If a disc has more than 20 tracks, the overflow indicator () illuminates. When the 21st track is played, the overflow indicator () flashes on and off.

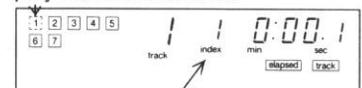


Overflow indicator

5 Press the play button to start play.

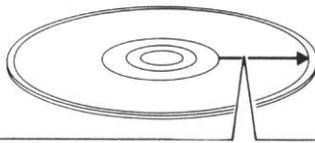
The play indicator on the control panel illuminates and play begins from track 1.

The music matrix for the track in play flashes on and off.

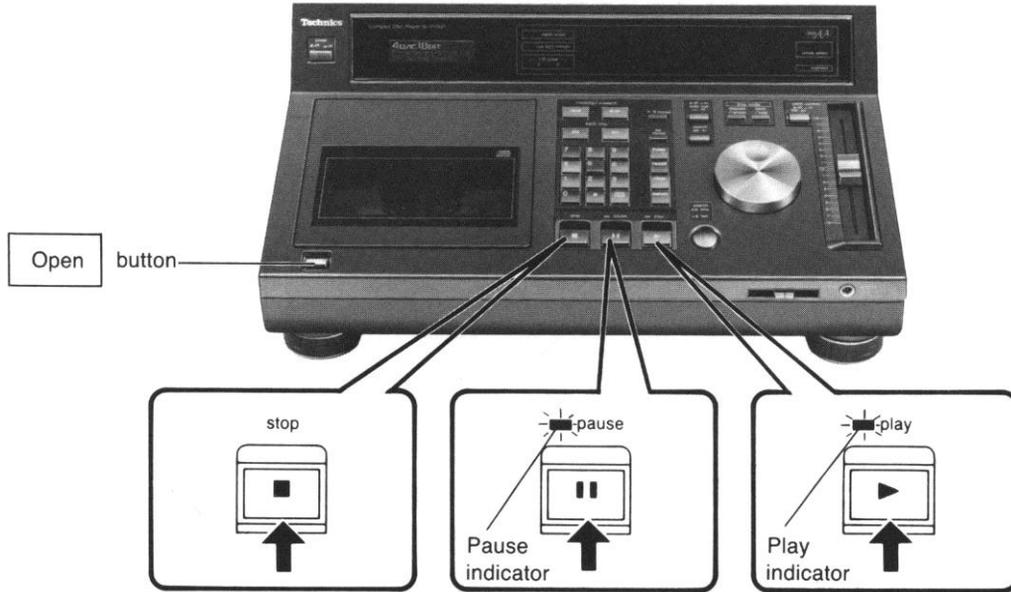


When a disc having no indexes is played, " / " is constantly displayed in the index section.

• If the play button is pressed during disc play, disc play is started again from the first track (**Auto-return play function**).



Track 1	Track 2	Track 3	Track 4	Track 5	Track 6	Track 7
5 min.	4 min.	21 min. 58.3 s.	5 min.	4 min.	4 min.	6 min.
Index No. →		1	2	3	4	5



To briefly interrupt play

■ **Press the pause button.**

The unit switches to the pause mode and the pause indicator illuminates.

■ **Press the play button again to resume play.**

■ **Pause mode time display when pickup is at the beginning of a track**

If the pause button is pressed while the unit is in the stop mode, the pickup moves to the beginning of the current track and then switches to the pause mode. In this case, the time display may show 0.1~0.5 second instead of 0 in the 0.1 second digit. The reason for this is that the pickup stops a little before* the beginning of the track to ensure that the track beginning is heard when play is resumed; it is not a malfunction.

*In this case minus (-) is not shown in the time display. (The same thing happens if skip play is performed during the pause mode.)

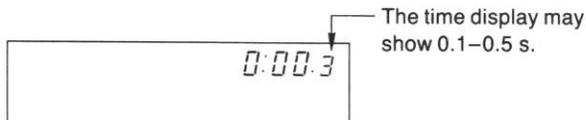
To stop play

■ **Press the stop button.**

All previous settings are cancelled and the unit switches to the stop mode.

When not in use

- Remove the disc from the disc compartment.
- Close the disc compartment.
- Turn off the power.



Time display when pickup is in the pause mode at the beginning of a track

Note:

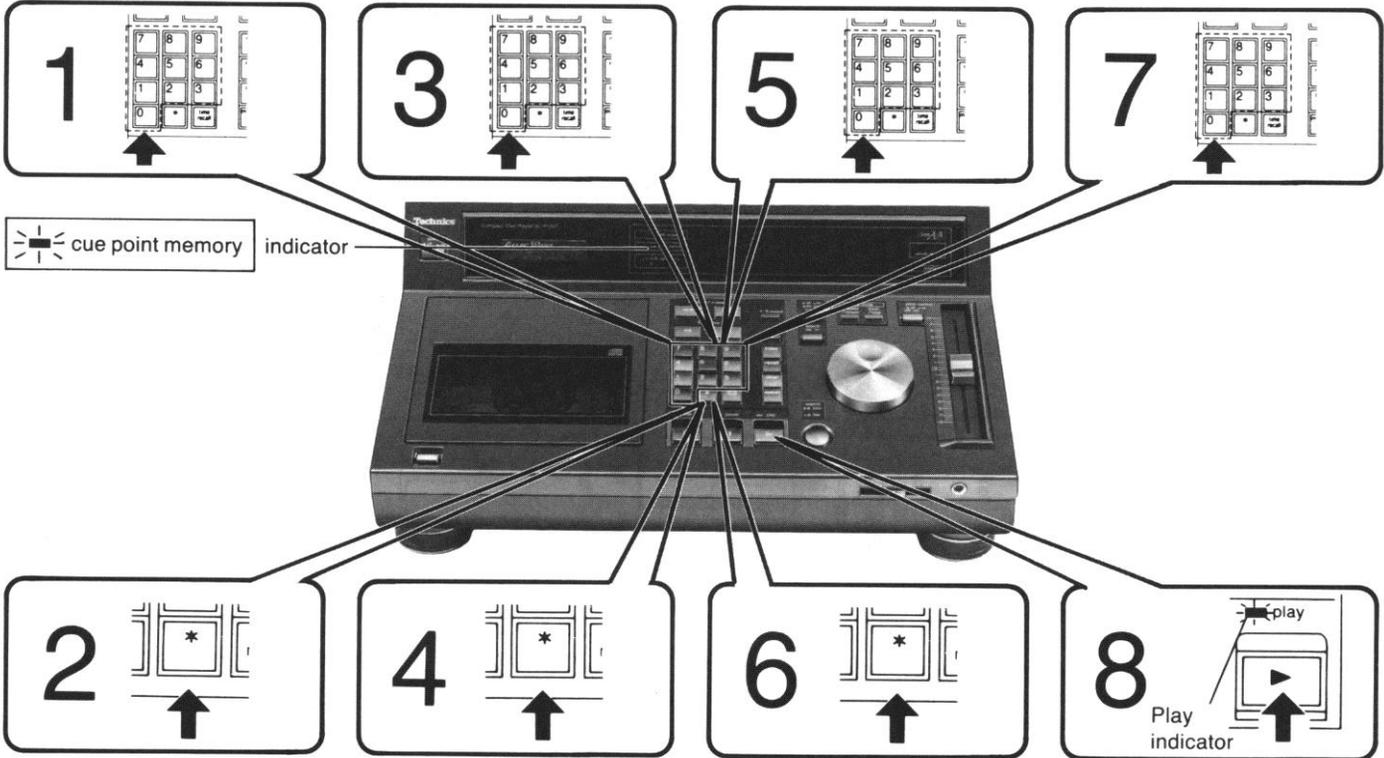
From this page onward the following basic operations are omitted:

- Power on/off
- Disc compartment open/close
- Interrupting play
- Stopping play

Time access play (To play a disc from a specific starting time)

There are two ways to initiate play from a specific starting time:

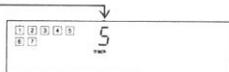
1. When you already know the starting time (**Time Access Play**).
2. When you determine the starting point during play or search operation (**Cue Point Play**).



1. To specify starting time

1 Press the numeric button(s) to specify the track.

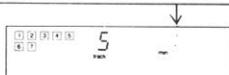
The selected number appears in the track section of the display.



2 Press the asterisk button.

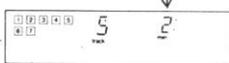
The cue point memory indicator illuminates.

Separates track from minutes



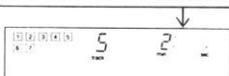
3 Press the numeric button(s) to specify the minutes.

The selected number of minutes appears in the time display section.



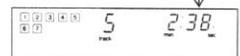
4 Press the asterisk button.

Separates minutes from seconds



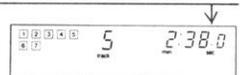
5 Press the numeric button(s) to specify the seconds.

The selected number of seconds appears in the time display section.



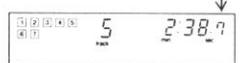
6 Press the asterisk button.

Separates whole seconds from tenths of a second



7 Press the numeric button to specify tenths of a second (0.1 second).

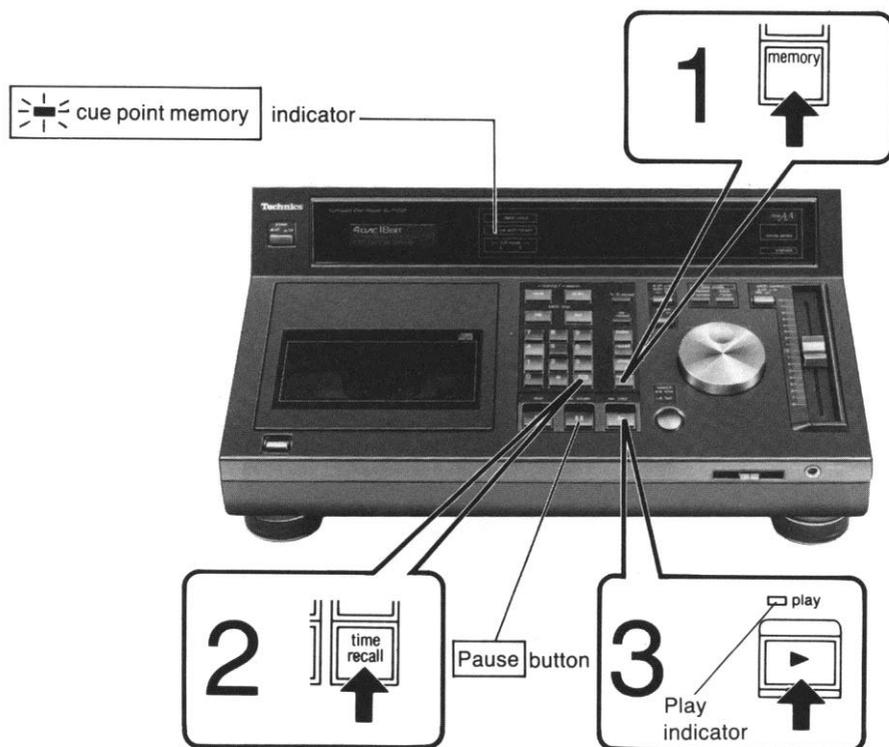
The selected number of tenths of a seconds appears in the time display section.



8 Press the play button.

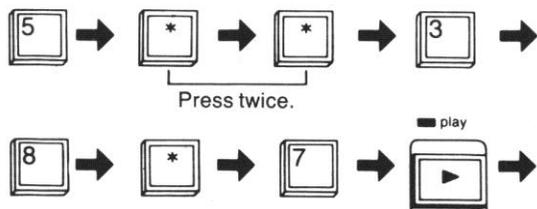
Play begins from the specified starting time. After the last track has been played, the unit switches to the stop mode. The cue point memory indicator goes out.

Time access play (continued)



Note:

- When no minutes are to be specified, for example, if play is to begin at the 38.7 s. point of track 5, press the numeric button "0" or press the asterisk button twice in a row, as shown below.



Restarting play from the same point of time

■ Press the time recall button during play.

The selected starting time is displayed, the pickup moves to that point and the unit pauses. Play commences from that point when the play button is pressed.

Notes:

- To cancel the specified starting time, press the clear or stop button.
- A new starting time cannot be specified by using the numeric button(s) until the previous starting time is cleared.

2. To specify cue point

1 Press the memory button at any point during play or pause mode which you later wish to return to.

The cue point memory indicator illuminates, and the point at which you pressed the memory button is entered into the memory. (Play continues uninterrupted.)

2 Press the time recall button.

The pickup returns to the point in memory (the cue point) and the unit pauses.

The pause indicator on the control panel illuminates.

3 Press the play button.

Play commences from the cue point.

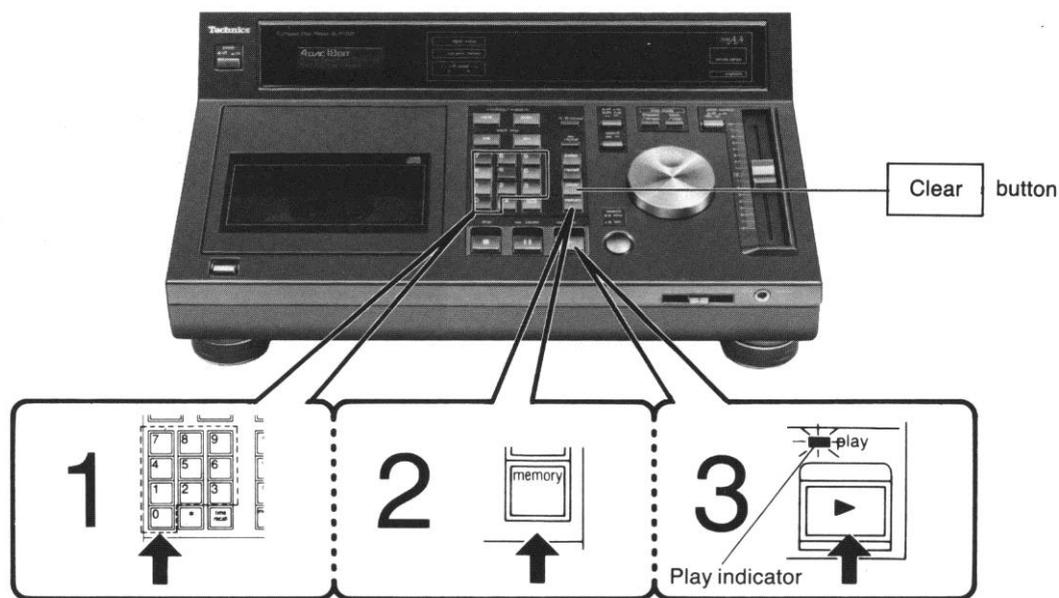
Notes:

- To cancel the specified cue point, press the stop or clear button. Pressing the memory button again (during play or pause mode) will specify a new cue point and cancel the previous cue point or specified starting time.
- If an index skip button (on the remote control unit) is pressed after a cue point is specified, the cue point play function may not operate properly.

How to obtain accurate cue point settings

It is possible to obtain very accurate cue point settings by using the dial search function described on page 20.

Program play



1 Press the numeric button(s) to specify the desired track.

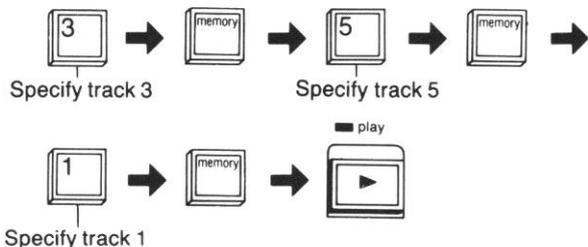
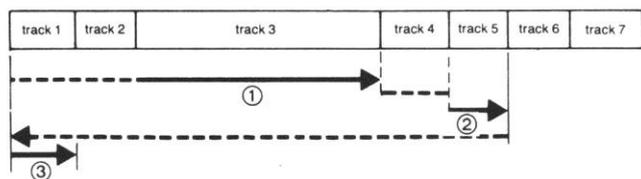
The specified track is shown on the track display.

2 Press the memory button.
Repeat steps 1 and 2 until the desired programming (up to 20 tracks) is completed.

3 Press the play button.

Play begins from the first programmed track. After the last programmed track has been played, the unit switches to the stop mode.

■ For example, to play track 3, track 5 and track 1 in that order



●When the play button is pressed, play begins from track 3.

The music matrix for the programmed tracks illuminates.



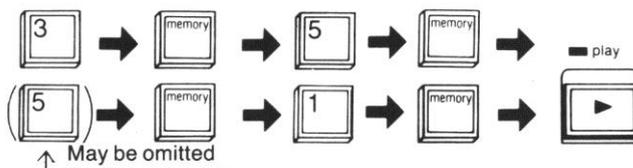
Notes:

- “E” (error) is displayed momentarily if a track number not on the disc is specified.

If more than 20 selections are entered “F” (full) is shown in the display panel and no further selections can be programmed.

- Programming two tracks in a row:

For example, if tracks 3-5-5-1 are programmed in that order, press the memory button twice, after pressing 5.



To clear a program entry

(When the unit is in the stop mode)

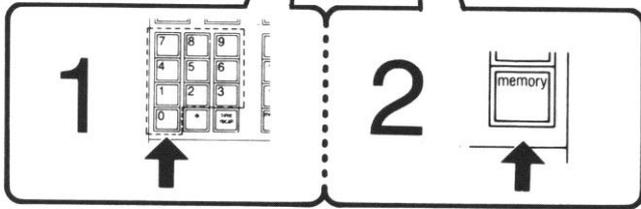
■ Press the clear button.

Each time the clear button is pressed, the last track in the programmed sequence is cancelled.

Note:

If the clear button is pressed during program play, all memory contents are cleared and disc play continues from the current point to the end of the disc (**Memory clear function**).

Program play (continued)



Entering additional program selections during play

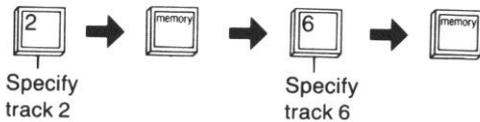
1 Press the numeric button(s) to specify the additional track.

The specified track is shown on the track display.

2 Press the memory button.

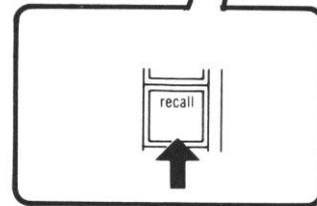
Repeat steps 1 and 2 until the desired programming (up to 20 tracks) is completed.

■ For example, if track 3 is being played and track 2 and track 6 are to be added to the program, proceed as follows:



Notes:

- If more than 20 selections are entered, "F" (full) is shown on the time display and further program entries are not accepted.
- If the memory button is not pressed within 25 seconds after specifying a track, the display returns to the playing time mode.



To check the contents of a program (Program confirmation)

Press the recall button.

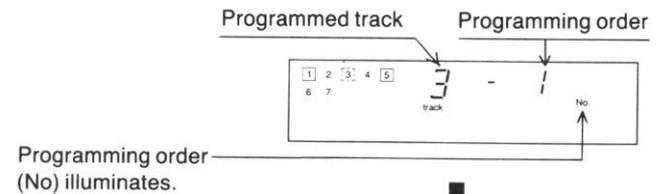
The programmed tracks are displayed in their programmed order. After the last programmed track has been displayed, the current track is shown.

Note:

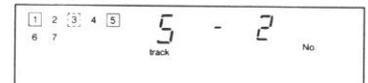
Tracks that have been played are not displayed, unless the repeat button is on.

■ For example, when track 3 → track 5 → track 1 are programmed in that order and the recall button is pressed while track 3 is being played.

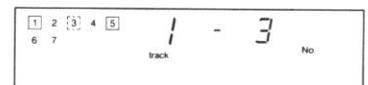
• First programmed track



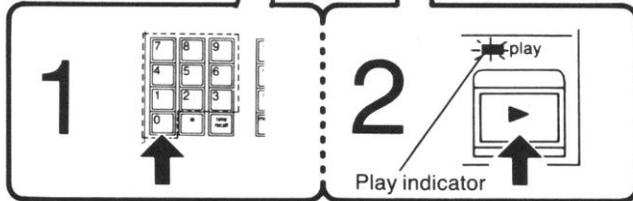
• Second programmed track



• Last programmed track



Track and index access play



To start disc play from a specific track (Track access play)

1 Press the numeric button(s) to specify the desired track.

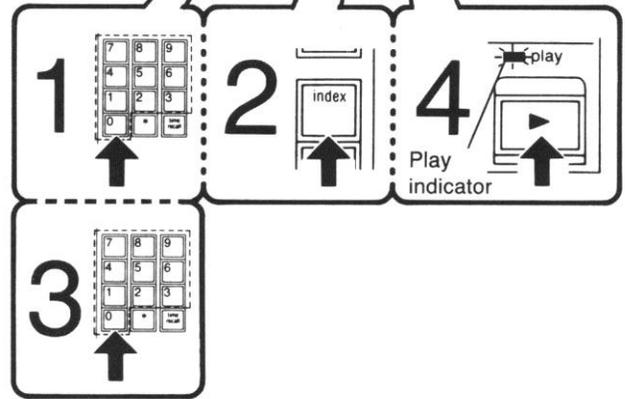
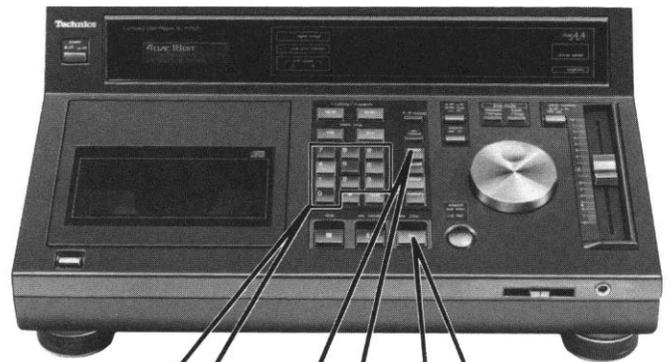
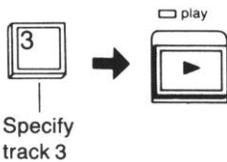
The specified track is shown on the track display.

2 Press the play button.

Play begins from the specified track.

The player switches to the stop mode when play has finished.

■ For example, to play from the beginning of track 3 to the end of the disc.



To play a disc from a specific index (Index access play)

Note:

This is possible only on discs having indexes.

1 Press the numeric button(s) to specify the track containing the desired index.

The specified track is shown on the track display. When playing discs having only one track, remember to enter track number 1, then specify the index number.

2 Press the index button.

3 Press the numeric button(s) to specify the desired index.

Index numbers up to 99 can be specified.

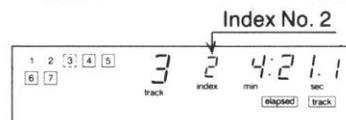
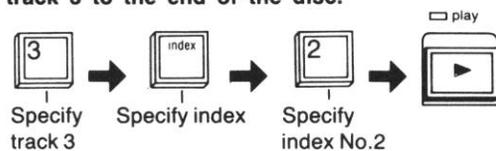
The specified index is shown on the index number display.

4 Press the play button.

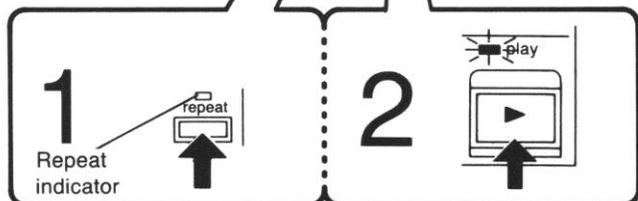
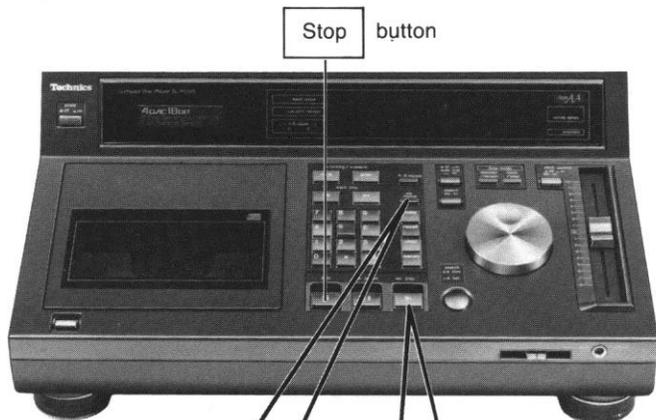
Play begins from the specified index.

● When the end of the disc is reached, the player switches to the stop mode.

■ For example, to play from the beginning of index 2 of track 3 to the end of the disc.



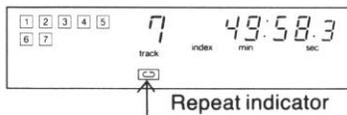
Repeat play



Entire disc repeat play

1 Press the repeat button.

The repeat indicator (■) on the control panel and the repeat indicator (□) on the display panel illuminate to show that the repeat mode is on.



2 Press the play button.

Repeat play continues until this mode is deactivated.

Program repeat play

- When the repeat button is pressed before beginning play, all programmed tracks will be played repeatedly.
- When pressed during play, the current track and the remaining programmed tracks will be played repeatedly.
- The programmed tracks that have already been played are not included in the repeat play cycle.

To cancel the repeat play mode

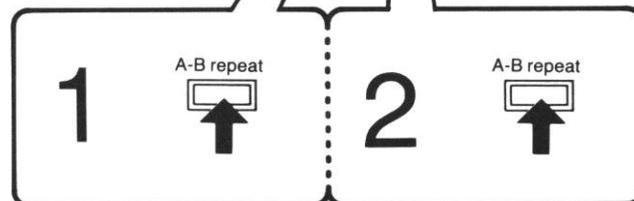
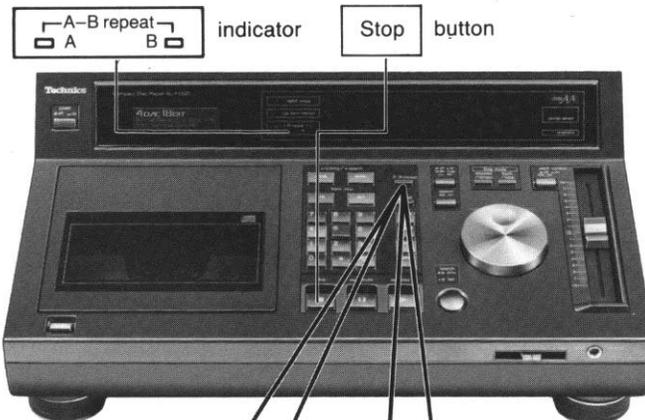
Press the repeat button again.

Both of the repeat indicators go out and repeat play is cancelled. The player switches to the stop mode when the last track has been played.

Note:

Pressing the stop button cancels everything and returns the unit to the stop mode.

A-B repeat play (Repeat play between points A and B) (During play)



1 Press the A-B repeat button during play at the point where repeat play is to start (A point is specified).

The A-B repeat indicator illuminates.

2 Press the A-B repeat button again at the point where repeat play is to end (B point is specified).

The A-B section is played repeatedly until the A-B repeat mode is cancelled.

To cancel the A-B repeat mode

Press the A-B repeat button.

The A-B repeat indicators go out.

- Everything is cancelled when the stop button is pressed.

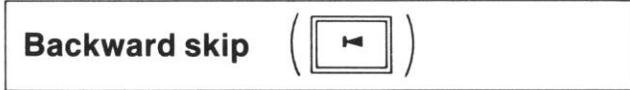
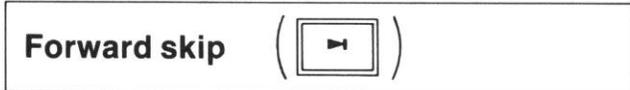
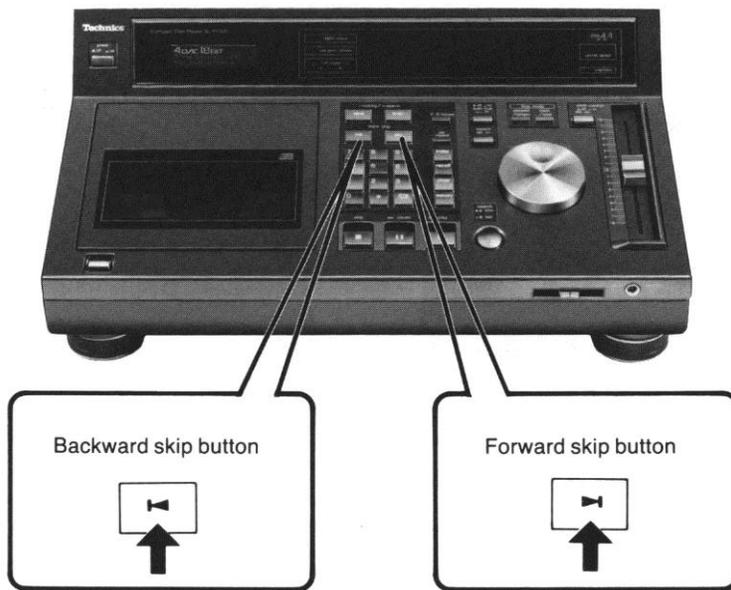
Notes:

- A-B repeat play is not possible when in the program play mode.
- If repeat play operation is attempted during A-B repeat, A-B repeat play takes precedence.
- Using the skip function during A-B repeat play cancels A-B repeat play.
- If you use the search function during A-B repeat play, the unit switches to the auto-play mode. Play will continue from the point where you finished searching to the end of the disc. Then, play will continue from the beginning of the first track on the disc. When point A is reached, A-B repeat play will resume.

Skip play

(Skip play can be performed when the player is in the play or pause mode.)

Note: Index number skip play can be accomplished using the included remote control.



Press the forward skip button.

- While watching the track number display, press the forward skip button until the desired track has been located.
- The pickup skips the same number of tracks as the number of times the button is pressed.
- During program play or program repeat play, the pickup skips to the beginning of the next programmed track.

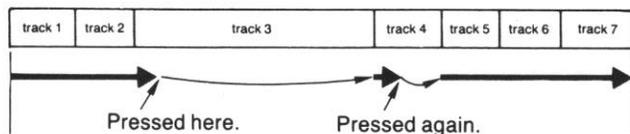
Press the backward skip button.

- While watching the track number display, press the backward skip button until the desired track has been located.
- The pickup skips the same number of tracks as the number of times the button is pressed.
- During program play (repeat function not activated), the pickup skips backward only to the beginning of the current track.
- During program repeat play, the pickup skips to the beginning of the current track. If pressed again quickly, the pickup skips to the beginning of the previous programmed track.

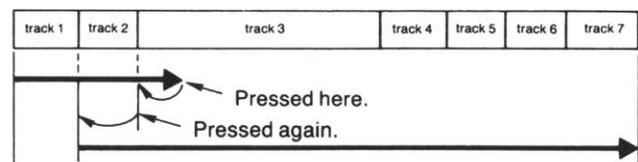
Notes:

- Remember that for backward skip, the present track is included in the count.
- Except in the case of repeat programmed play, it is not possible to perform backward skip to tracks which have already finished playing.

■ **Example:** To advance to the beginning of the fourth track and then to the beginning of the fifth track while listening to the third track.



■ **Example:** To return to the beginning of the third track and then to the beginning of the second track, while listening to the third track.



Search play

(Search play can be performed when the player is in the play or pause mode.)

- This function allows search to any desired point on the disc.
- Search play can be performed by using either the forward and backward rocking/search buttons **A** or the search dial **B**.
- For more accuracy, put the unit into the pause mode before initiating the search operation.



Backward search button



Forward search button



A Search play using the forward and backward rocking/search buttons (Button search)

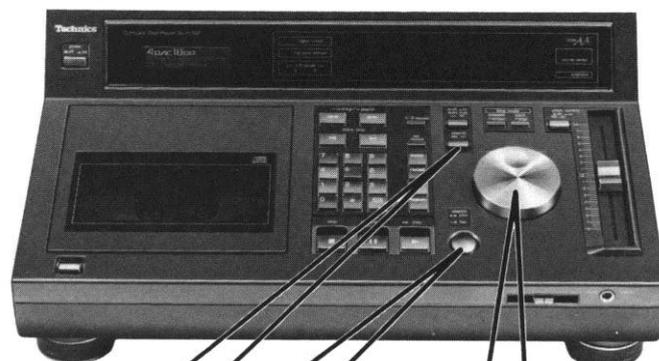
Depending on how these buttons are pressed, search with three different speeds is possible.

- 1) Press one of these buttons momentarily to move the pickup by one pit-track (one disc rotation). This allows very fine rocking search.
- 2) When one of these buttons is held down, the pickup moves slowly at first.
- 3) When one of these buttons is held down for more than about 3 seconds, the pickup moves rapidly.

- Release the button when the desired point has been reached (as shown by the display).
- If these buttons are pressed during play, sound can be heard during the search operation.
During steps 2 and 3, the output level is decreased by -12 dB (1/4) compared with the normal level.

About rocking search

When two or more CD players are used at a time, as often happens in a studio for example, fade-in and fade-out of the units have to be timed exactly. The rocking search function is useful for this because it permits movement of the pickup across one pit-track (at inner diameter in about 0.13 second) each time either button is pressed momentarily.



1

Dial search indicator



2



3



4

Dial search indicator



B Search play using the search dial (Dial search)

- 1 Press the dial search button "on".
The dial search indicator illuminates.
The dial search speed indicator for "slow" or "fast" illuminates also.
- 2 Press the dial search speed selector to change the selected search speed.
 - Dial search can be performed at two different speeds (slow and fast) depending on the position **■** or **▲** of the dial search speed selector.
- 3 Turn the search dial.
 - If the search dial is turned clockwise, the pickup performs forward search, and if it is turned counterclockwise, the pickup performs backward search.
 - Usually no sound can be heard while the unit is in the pause mode. However, if the dial search button is in the "on" position, sound can also be heard during the pause mode.
 - Perform search by continuing to rotate the search dial while watching the display panel or listening to the sound from the disc.
The sound level is not reduced during dial search.

Notes:

- The search speed changes according to the speed at which the search dial is turned. However, you cannot force the pickup to search faster or slower than its predetermined limits.
- When dial search is performed with the unit in the play mode, the normal play speed of the pickup is added to (forward search) or subtracted from (backward search) the dial search speed.

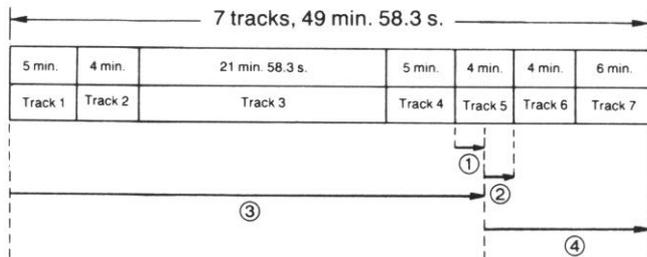
- 4 Press the dial search button again to stop the dial search.

Time mode display function

(During play or in the pause mode.)

■ Press the time mode select button.

- The appropriate time mode indicators illuminate to show which time mode display has been selected.
- Pressing the elapsed/remain button changes the mode from elapsed time to remaining time or vice versa.
- Pressing the track/total button changes the mode from track time to total (disc or programmed) time or vice versa.
- When changing the time display mode, use the time mode indicators to confirm selection of the desired time display mode.



- For example, if the time mode select button is pressed when playing a disc of 49 min. 58.3 s. at a point 2 min. 10 s. after the beginning of track 5:

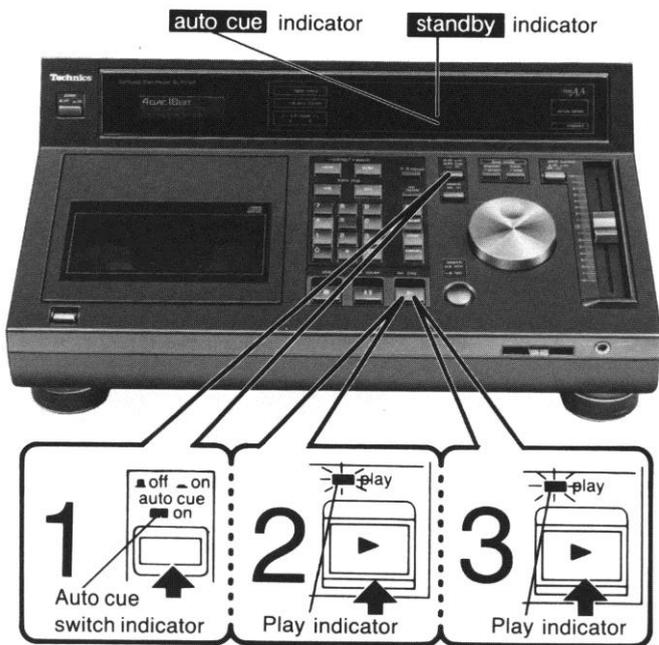
Illuminated time mode indicators	Time display	Display panel
① elapsed track	Elapsed playing time from the beginning of the current track.	
② remain track	Remaining playing time of the current track.	
③ elapsed total	Elapsed playing time from the beginning of the first track. • During program play, the total elapsed programmed playing time is displayed.	
④ remain total	Disc remaining playing time. • During program play, the total remaining programmed playing time is displayed.	

Notes:

- During access play, skip play and search play, the total time from the beginning of the first track is displayed in mode ③. (This is not the actual elapsed playing time.)
- Tracks skipped during program play are not included in the elapsed playing time.

- In the following cases, the time display shows "--:--:--":
 1. When a track number higher than 20 is played (in time mode ② only).
 2. When a track number higher than 20 is programmed (in time mode ④).
 3. When the programmed play time is more than 99 minutes (in time mode ④). (For example, when one 20-minute track is programmed to play six times, the total playing time of the program is 120 minutes.)

Auto cue function (automatic standby)



At the beginning of each track on most discs, a silent interval of about one second is recorded. Therefore, when play is started from 0 minute 00 second, music is not heard immediately. When the auto cue function is activated, the unit automatically detects the beginning of the music on each track and then switches to the standby mode. When play is started from this point (by pressing the play button), music is heard immediately.

1 Press the auto cue button (■—■).

The auto cue indicator above the button and the **auto cue** indicator on the display panel illuminate.

2 Press the play button.

The **standby** indicator on the display panel illuminates and the unit switches to the standby mode.

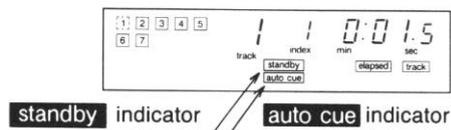
3 Press the play button again.

Play begins immediately.

The **standby** indicator goes out.

In this mode, the unit switches to standby at the beginning of each track. It is therefore necessary to press the play button to resume play at the beginning of every track.

Display of the actual point at which play begins.



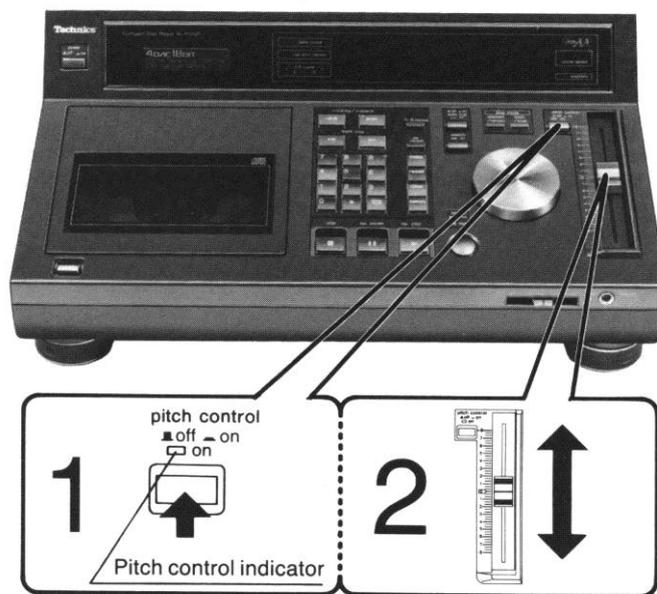
To cancel the auto cue function

■ Press the auto cue button again (■—■).

Notes:

- If the auto cue button is pressed during play, this function is activated at the beginning of the next track.
- The auto-cue function may not work properly if a selection begins with a very soft passage or if there is a lot of background noise.

Pitch control



This function allows fine adjustment of pitch (up to approx. $\pm 8\%$).

1 Press the pitch control button "on".

The pitch control indicator illuminates.

2 Slide the pitch control knob upward or downward to the desired setting.

In the center position (0), a "click" can be perceived. This position is the 0% standard pitch.

Notes:

- When the pitch has been changed, the elapsed or remaining playing time readings differ from the actual times by the amount of pitch adjustment.
- If this unit is connected to a dedicated D/A converter or a digital amplifier equipped with a built-in D/A converter using the digital output terminal, setting the pitch control switch to the ON position to enable pitch control can cause the output to become inaudible with certain digital equipment. Please check to make sure that normal audio output is obtained.

To cancel the pitch control function

■ Press the pitch control button again.

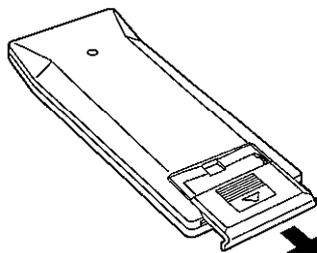
Using the Remote Control Unit

(included)

Inserting the batteries

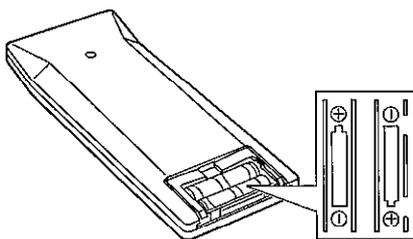
■ Be sure to insert the batteries before using the remote control unit for the first time.

1. Open the cover on the back of the remote control unit.

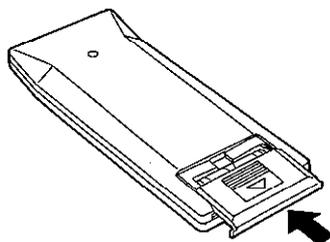


Press gently and move cover in the direction of the arrow.

2. Insert two UM-4 "AAA", IEC R03 or equivalent batteries in the direction indicated in the battery compartment.



3. Close the cover.



Notes:

- Use UM-4 "AAA" batteries or IEC R03 or equivalent.
- Do not use rechargeable batteries (Ni-Cd type).
- Although battery life varies depending on how often the remote control unit is used, the batteries should be replaced about once every year on the average.
- The batteries should also be replaced if commands from the remote control unit are not received by this player even when the unit is held close to the player's front panel.
- Remember to insert the batteries in the correct direction as shown in the battery compartment.
- To prevent damage to the battery holder from leakage:
 - * Replace both batteries at once; do not use one new and one old battery together.
 - * Do not use different types of batteries (for example one standard battery with one alkaline battery).
 - * Do not short or overheat batteries.
- Remove the batteries if the remote control unit is not to be used for a long period of time.
- If the batteries leak, clean the battery holder well before inserting new batteries.

Precautions:

- The signal from the remote control unit will not reach this player if there is an obstacle between the remote control unit and the front panel of this player. Be sure you have a clear signal path before pressing a remote-control unit button.
- Commands from the remote control unit may reach this player even if the remote control unit is pointed in a different direction due to reflection of the infrared signal off walls and other surfaces. To avoid mistaken operations, always use the remote control unit as close as possible to a right angle to the front panel receiver.
- Commands from the remote control unit may not be picked up by this player if the front panel receiver is exposed to direct sunlight or a very bright light. The front panel should be protected from bright lights (particularly fluorescent lights) to prevent this problem.
- Do not use remote control units for TV sets, VCRs or other components at the same time as this player's remote control unit since this could result in a mistaken operation.
- Do not try to take apart the remote control unit or touch it on the inside.
- Do not place any heavy objects on the remote control unit or place it in locations where it is subjected to direct sunlight or heat.
- Do not clean the remote control unit with specially treated cloths or chemical cleansers. When necessary, wipe with a dry cloth to remove dirt and dust.
- The surface of the remote control unit may be stained or damaged by benzine, thinner, insecticides and adhesive tape.
- The control panel of the remote control unit may be covered by a clear plastic protective sheet. This sheet may be removed if desired.

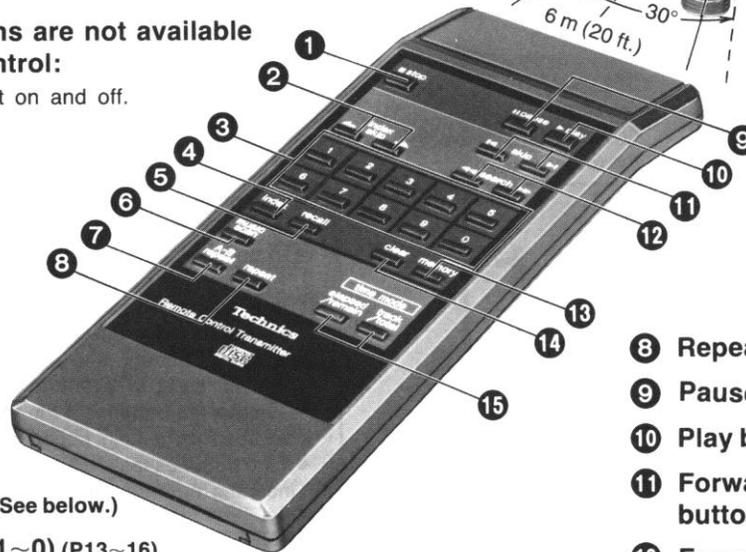
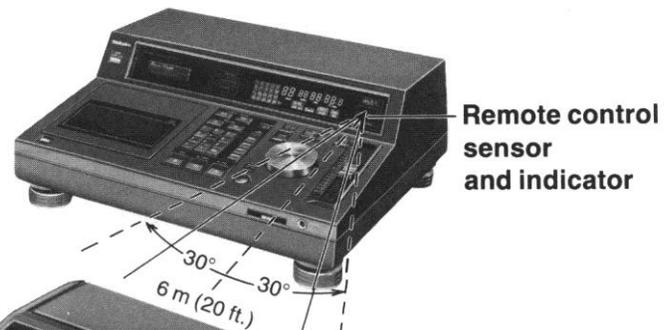
Remote panel controls

When using the remote control unit, press the buttons slowly and accurately to avoid incorrect operation.

- The remote control buttons perform exactly the same functions as the buttons on the unit.
- For detailed instructions, refer to the pages in parentheses ().
- Index skip play and music scan play can be performed using the included remote control.

The following functions are not available using the remote control:

1. Turning power to the unit on and off.
2. Open button operation.
3. Time recall operation.
4. Dial search operation.
5. Auto cue operation.
6. Pitch control operation.



1 Stop button (P12)

2 Index skip button (See below.)

3 Numeric buttons (1~0) (P13~16)

4 Index button (P17)

5 Recall button (P16)

6 Music scan button (See below.)

7 A-B repeat button (P18)

8 Repeat button (P18)

9 Pause button (P12)

10 Play button (P11, 12)

11 Forward and backward skip buttons (P19)

12 Forward and backward search buttons (P20)

13 Memory button (P14, 15, 16)

14 Clear button (P15)

15 Time mode select button (P21)

Index skip play

- Skip to next index number.
- Skip to previous index number.

- If one track contains many index numbers:
The index skip button can be used to skip to the index number of your choice.
- When an index number is in the next track:
After skipping to the next track as described on page 19, use index skip to the desired index number.

Note:

If an index number is in the next track, it is not possible to skip to it directly using the index skip button.

Music scan play

If the music scan button is operated, only the first 15 seconds of all tracks or all programmed tracks are played. (This is convenient for checking the contents of tracks.)

Press the music scan button.

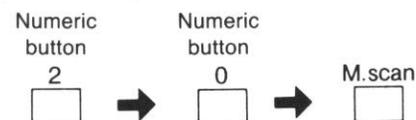
- The **M.scan** indicator illuminates and the first 15 seconds of each track on the disc are played.

Notes:

- The following functions are not effective during music scan play:
 1. Auto cue
 2. Time mode function
- After music scan play is finished, disc play begins from track 1.
- To play, press the play button at the desired track during music scan play. Normal play is resumed from that track.
- To stop, press the stop button.

Adjusting the music scan interval between 1 and 59 seconds (programmable music scan function)

For example, extending the music scan interval to 20 seconds.



- The music scan interval is specified as 20 seconds, and music scan begins.
When performing music scan play, remember that the specified scanning interval is effective for one scanning operation only.

Note:

- This function cannot be used with program play.

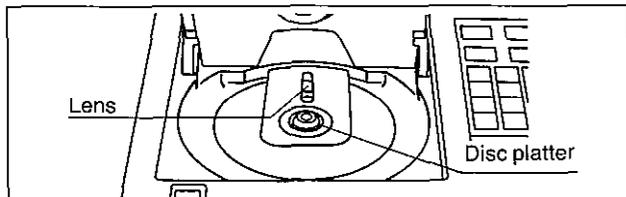
Operation Notes

- **Before transporting this unit, be sure to remove the disc and to lock the lock shaft or severe damage will result.**

(See page 2 for directions on shipping this unit again.)

- **Close the disc compartment when not in use.**

There is a precision-made focusing lens incorporated in this unit. Always close the disc compartment to protect it from dust. Also, never try to touch the disc platter or lens, or insert your hand inside.



- **When carrying or storing the unit, handle it with care, so it is not subjected to any strong bumps.**

Always remove the disc before storing the unit for any period of time.

- **Turn down the amplifier volume control.**

Compact discs are quieter and have a much wider dynamic range than phonograph records. Consequently, you may turn the volume up too high if you try to adjust it by listening to the surface noise as you might with a phonograph record. To prevent this problem, turn the volume down, increasing it as desired only after the music has started.

- **The rear panel of this unit becomes hot while a disc is being played.**

This is one way in which the unit dissipates heat and is not a malfunction. Be careful not to touch the rear panel when the unit is being used.

- **To avoid problems due to vibration:**

- Do not place a book or similar object under this unit.
- Do not route the connection cables (of this or other units) across the operation panel, across the top, or under the unit.

- **Do not take this unit apart or attempt to make any changes yourself.**

This unit is a very intricate device that uses a laser pickup to retrieve information from the surface of compact discs. The laser is carefully shielded so that its rays remain inside the cabinet. Therefore, never try to disassemble the unit or alter any of its parts since you may be exposed to laser rays and dangerous voltages.

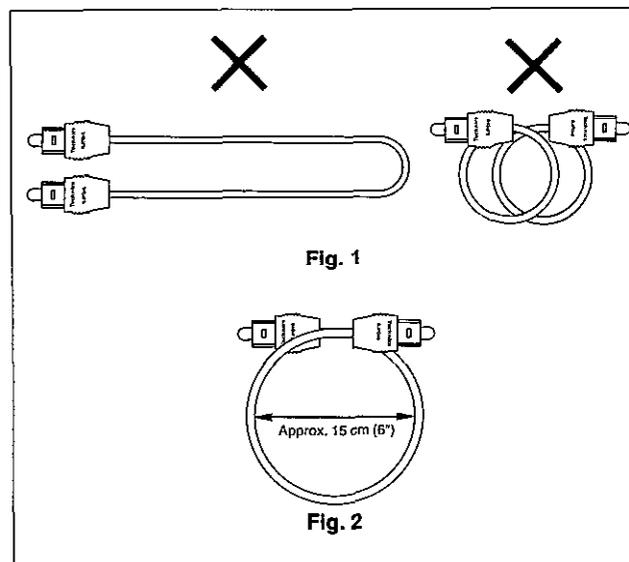
- **Times displayed by this unit may differ slightly from the track times in the disc liner note.**

The liner note included with each compact disc lists the playing time of each track. Since the times calculated by this unit include pause intervals, the displayed time may differ from the liner note time by this amount.

CAUTION

When using the optical cable, please keep the following points in mind:

1. The maximum length of optical cable to be used with this unit is 3 m (approx. 10 ft.).
2. Always make sure the plug is fully inserted. If the plug is not inserted all the way, an imperfect connection will result.
3. The optical cable must never be bent or coiled tightly (See figure 1). Doing so will permanently damage the optical fiber in the cable and, therefore, prevent proper data transmission. If the cable must be coiled (for storage, etc.), the diameter of the loop should be at least 15 cm (approx. 6 inches). (See figure 2.)
4. Handle the optical cable's plug very carefully. Keep the plug free from dust or damage. Dust can be removed by wiping the plug with a soft cloth. Do not use any cleaners or solvents to clean the plug.
5. When the connection terminal for the optical cable on this unit is not being used, cover it with the protective dust cap (included).



About moisture

Moisture may form on the lens in the following cases...

- Immediately after a heater has been turned on.
- In a steamy or very humid room.
- When the unit is suddenly moved from a cold environment to a warm one.

If moisture forms inside this unit, it may not operate properly. To correct this problem, turn on the power and wait about 20 to 30 minutes for the moisture to evaporate.

Troubleshooting Guide

If the unit does not operate properly, check all of following points, as well as connections and the control positions of all components connected to this unit, before requesting professional servicing. This table does not include checks for mistaken connections or incorrect settings of other components. If the problem is not solved by this table or is not included in the problems listed below, contact your Technics dealer for assistance.

Problem	Causes	Remedy
Disc compartment does not open when the open button is pressed during play or in the pause mode.	<ul style="list-style-type: none"> • This is not a malfunction. This is a design feature which protects the disc. 	<ul style="list-style-type: none"> • When opening the disc compartment, press the stop button to stop disc rotation, and then press the open button.
Disc is inserted but number of tracks and playing time are not displayed.	<ul style="list-style-type: none"> • The lock shaft is in the out position (■). • Disc is inserted upside down. • Disc is dirty. • Disc is scratched. • Disc is seriously warped. • A non-standard disc is inserted. • Moisture has formed inside the player. 	<ul style="list-style-type: none"> • Press to the in (unlocked) position (■ → ■). • Insert disc again properly. • Wipe clean with soft cloth. • Use a new disc. • Use a new disc. • Use only discs with the  mark. • Wait about 20 to 30 minutes.
Certain sections of a disc are not played normally.	<ul style="list-style-type: none"> • The lock shaft is in the out position (■). • Disc is dirty. • Disc is scratched. 	<ul style="list-style-type: none"> • Press to the in (unlocked) position (■ → ■). • Wipe clean with soft cloth. • Play disc skipping over scratched sections (if so desired); otherwise replace the disc.
No search performed when search dial is turned.	<ul style="list-style-type: none"> • The dial search button is not on. (Dial search indicator is not illuminated.) 	<ul style="list-style-type: none"> • Press the dial search button to "on". (Dial search indicator illuminates.)
Sound is strange.	<ul style="list-style-type: none"> • The pitch control switch is in the "on" position and the pitch control knob is in a position other than . 	<ul style="list-style-type: none"> • Slide the pitch control knob to the center position (.
Play stops at the beginning of each track.	<ul style="list-style-type: none"> • The auto cue button is on. (The auto cue indicator is illuminated.) 	<ul style="list-style-type: none"> • Press the auto cue button to cancel this function.
Elapsed playing time is not shown in the display.	<ul style="list-style-type: none"> • Time display mode is set to a different mode. 	<ul style="list-style-type: none"> • Press the correct button for the desired display mode.
Remote control commands are not performed.	<ul style="list-style-type: none"> • No disc is inserted in the holder. • The remote control unit batteries are weak. • The remote control unit is being used in an improper location. 	<ul style="list-style-type: none"> • Insert a disc. • Replace the batteries. • Be sure the distance and angle are correct and that no obstacles are blocking the signal path.
Disc is not played normally.	<ul style="list-style-type: none"> • The controls were not operated as described in the instructions. 	<ul style="list-style-type: none"> • Switch power OFF and then operate in accordance to instructions.

Maintenance

Maintenance

(Be sure to switch power off before cleaning.)

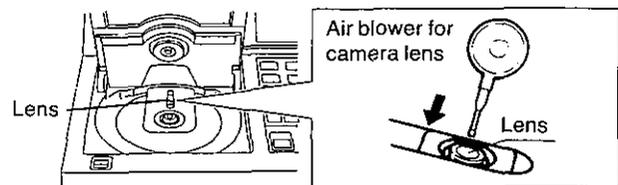
■ Wipe the cabinet with a soft, dry cloth.

To avoid harming the cabinet finish, do not clean this unit with solvents or volatile compounds such as alcohol, benzene or paint thinner. Do not use treated dust cloths or stick tape on the cabinet as it may lose its gloss or get discolored.

■ If the lens is dirty

A dirty lens will cause sound skipping and, if the lens is very dirty, disc play may not be possible. Open the disc compartment and clean the lens as shown in the figure.

Cleaning kit (option) Part number: SZZP1038C



- Use a cotton swab to clean away fingerprints, etc. on the lens.

TECHNICS PROFESSIONAL COMPACT DISC PLAYER LIMITED WARRANTY

Panasonic Company, Panasonic Hawaii, Inc. or Panasonic Sales Company (collectively referred to as "Panasonic") will repair this product with new or rebuilt parts, free of charge, in the U.S.A. or Puerto Rico for one (1) year from the date of original purchase in the event of a defect in materials or workmanship.

Carry-in or mail-in service in the continental U.S.A. can be obtained during the warranty period from a Matsushita Services Company (MSC) Factory Servicenter listed in the Servicenter Directory. Or call 800-447-4700, toll free, to locate an authorized MSC Servicenter. Carry-in or mail-in service in Hawaii or Puerto Rico can be obtained during the warranty period by calling the telephone numbers listed in the Servicenter Directory.

This warranty is extended only to the original purchaser. A purchase receipt or other proof of date of original purchase will be required before warranty performance is rendered.

This warranty only covers failures due to defects in materials or workmanship which occur during normal use and does not cover damage which occurs in shipment or failures which are caused by products not supplied by Panasonic or failures which result from accident, misuse, abuse, neglect, mishandling, misapplication, faulty installation, set-up adjustment, improper maintenance, alteration, inadequate signal pick-up, maladjustment of consumer controls, modification, or hotel or rental use of the product, or service by anyone other than an MSC Factory Servicenter or authorized MSC Servicenter or damage that is attributable to acts of God.

LIMITS AND EXCLUSIONS

There are no express warranties except as listed above.

PANASONIC SHALL NOT BE LIABLE FOR SPECIAL, INCIDENTAL, CONSEQUENTIAL OR PUNITIVE DAMAGES, INCLUDING, WITHOUT LIMITATION, LOSS OF GOODWILL, PROFITS OR REVENUE, LOSS OF USE OF THIS PRODUCT OR ANY ASSOCIATED EQUIPMENT, COST OF SUBSTITUTE EQUIPMENT, DOWNTIME COSTS, OR CLAIMS OF ANY PARTY DEALING WITH BUYER FOR SUCH DAMAGES, RESULTING FROM THE USE OF THIS PRODUCT OR ARISING FROM BREACH OF WARRANTY OR CONTRACT, NEGLIGENCE, OR ANY OTHER LEGAL THEORY. ALL EXPRESS AND IMPLIED WARRANTIES, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED TO THE APPLICABLE WARRANTY PERIOD SET FORTH ABOVE. Some states do not allow the exclusion or limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the above exclusions or limitations may not apply to you.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

If a problem with these products develops during or after the warranty period, you may contact your dealer or Servicenter. If the problem is not handled to your satisfaction, then write to the Consumer Affairs Division at the company address indicated on reverse side.

Product Service

■ Warning concerning removal of covers

The unit should be serviced by qualified technicians only. No service information is provided for customers. Your product is designed and manufactured to ensure a minimum of maintenance. However, should your unit ever require service, a nationwide system of factory servicenters and AUTHORIZED

INDEPENDENT SERVICENTERS is maintained to support your product's warranty.

(In the U.S.A., call 1-800-447-4700 to locate the MSC Authorized Servicenter nearest you.)

Technical Specifications [Measured by EIAJ (CP-307)]

General

Power supply:	AC 60 Hz, 120 V ($\pm 5\%$)
Power consumption:	35 W
Output voltage:	Unbalanced; Nominal 2.5 V (EIAJ) Balanced; Nominal 2 V (EIAJ)
Output impedance:	Unbalanced; Nominal 600 Ω Balanced; Nominal 200 Ω
Load impedance:	Unbalanced; More than 10 k Ω Balanced; More than 5 k Ω
Dimensions (W×D×H):	43×38×16.8 cm (16 ¹⁵ / ₁₆ "×14 ³ / ₃₂ "×6 ² / ₃₂ ") [When disc compartment is opened: 23 cm (9 ¹ / ₁₆ " (H))]
Weight:	16 kg (34.2 lbs.)
Headphone output level:	Max. 60 mW 32 Ω load (variable)
Headphone plug:	1/4 inch, stereo

Audio

Number of channels:	2 (left and right, stereo)
Frequency response:	2--20,000 Hz ± 0.2 dB
Dynamic range:	More than 100 dB (EIAJ)
S/N ratio:	More than 112 dB (EIAJ)
Harmonic distortion:	Less than 0.002% (1 kHz, 0 dB)
Total harmonic distortion:	Less than 0.003% (1 kHz, 0 dB) (EIAJ)
Channel separation:	More than 112 dB (EIAJ)
Wow and flutter:	Below measurable limit (EIAJ)
Channel phase balance:	Less than 3° (EIAJ)
Low-pass filter:	High resolution digital filter Digital; Eight-times oversampling, 266th order FIR Analog; Passive, third order

Signal Format

Sampling frequency:	44.1 kHz
Correction system:	Technics super decoding algorithm
D-A conversion system:	4 DAC system with 18-bit resolution

Pickup

Access time:	1 second (access to the last track)
Light source:	Semiconductor laser
Wavelength:	780 nm

Traverse system:

Type: High-speed linear access system

Spindle system:

Type: Brushless DD motor

Infrared remote control unit

Dimensions (W×H×D):	7.3×18.1×2.2 cm
Batteries:	UM-4 "AAA" batteries or IEC R03 or equivalent (1.5 V×2)
Weight:	130 g (0.3 lb.) (including batteries)

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

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.

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(M)