

Operating Instructions

CD CDV LD PLAYER

CLD-2850

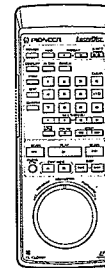
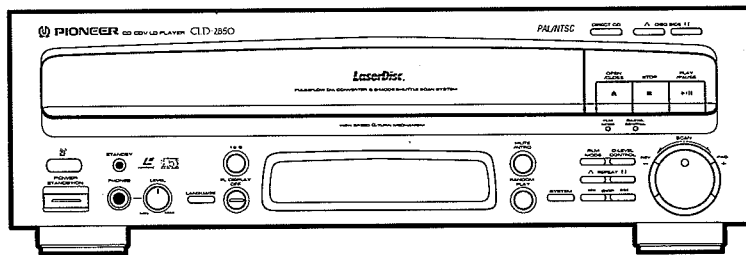
LaserDisc

PAL/NTSC

COMPACT
disc
DIGITAL AUDIO

L
LASER DISC

- This player does not apply to business use, and CD-ROM/CD graphic discs cannot be played with this player.



Thank you for buying this Pioneer product. Please read through these operating instructions so you will know how to operate your model properly. After you have finished reading the instructions, put them away in a safe place for future reference. In some countries or regions, the shape of the power plug and power outlet may sometimes differ from that shown in the explanatory drawings. However, the method of connecting and operating the unit is the same.

WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

IMPORTANT



The lightning flash with arrowhead, 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.

CAUTION

RISK OF ELECTRIC SHOCK
DO NOT OPEN

CAUTION:
TO PREVENT THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



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.

PIONEER
The Art of Entertainment

IMPORTANT

The wires in this mains lead are coloured in accordance with the following code :

blue neutral
brown live

If the plug provided is unsuitable for your socket outlets, the plug must be cut off and a suitable plug fitted. The cut-off plug should be disposed of and must not be inserted into any 13 amp socket as this can result in electric shock. The plug or adaptor or the distribution panel should be provided with 13 amp fuse. As the colours of the wires in the mains lead of this appliance may not correspond with coloured markings identifying the terminals in your plug, proceed as follows :

The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black. The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

Do not connect either wire to the earth terminal of a three pin plug.

NOTE

After replacing or changing a fuse, the fuse cover in the plug must be replaced with a fuse cover which corresponds to the colour of the insert in the base of the plug or the word that is embossed on the base of the plug, and the appliance must not be used without a fuse cover. If lost, replacement fuse covers can be obtained from your dealer.

This appliance is rated at 13 amps. Only 13 amp fuses approved to B.S. 1362 A.S.T.A. should be used.

IMPORTANT

CAUTION

This product contains a laser diode of higher class than 1. To ensure continued safety, do not remove any covers or attempt to gain access to the inside of the product. Refer all servicing to qualified personnel.

The following caution labels appear on your player.

Location: On the rear panel of the player



On the bonnet of the player



"This product complies with the Radio Interference requirements of the EC (European Community) Directive 87/308/EEC."

THE POWER SWITCH IS SECONDARY CONNECTED AND THEREFORE DOES NOT SEPARATE THE UNIT FROM MAINS POWER IN STANDBY POSITION.

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■ This player may be used with LaserDiscs, Compact Discs, and Compact Discs with Video bearing the following symbols:

(LASERDISC SYSTEM)/(LaserVision Disc)*



This is the unified symbol mark of LASERDISC (LaserVision videodisc).

* LaserDisc players and discs which bear this symbol and use the same television system, are mutually compatible.

(Compact Disc)



(CD VIDEO SYSTEM)**



(8 cm Compact Disc)



**A Digital Audio with Multi Audio Disc (CD VIDEO LD) and a CDV (CD Video CDV) are referred to as CD Video discs. CD Videodiscs are recorded with subcodes, which are the non-audio recordings of TOC data such as track numbers, index numbers, etc. However, there are some discs without these marks.

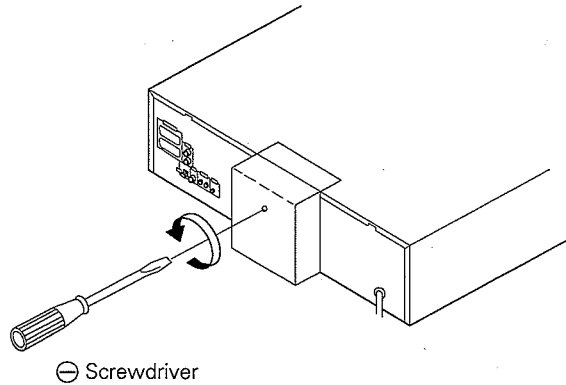
Only one disc can be loaded at any one time. Loading a LaserVision Disc, a Compact Disc, a 8 cm Compact Disc or a Compact Disc with Video on top of one another may result in breakdown, or in scratching of the discs. Please only load one disc at a time.

ATTENTION

At the rear panel, there is a red transit screw used for when the player is transported. Before using the player, turn this transit screw counterclockwise and remove.

If the transit screw is still in place and the power is turned on, "RELEASE TRANSIT SCREW" will be displayed on the screen. If this happens, turn off the power. After the "OFF" display goes out, remove the transit screw.

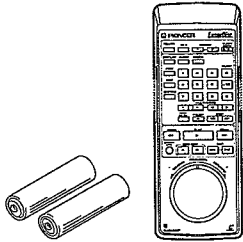
Retain this screw as it will be necessary when the unit is to be transported. Also, before transporting the player, take out the disc, close the disc table, turn off the power, and after the "OFF" display goes out, unplug the power cord from the outlet. Then install the transit screw by turning it clockwise. Fasten the screw securely.



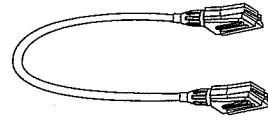
ACCESSORIES

When unpacking the player, first check to make sure that all of the accessories listed below are supplied.

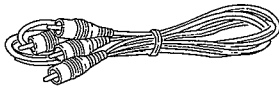
- Remote control unit
- Size "AAA" (IEC R03) dry cell battery x 2



- Euroconnector cable (SCART ↔ SCART)

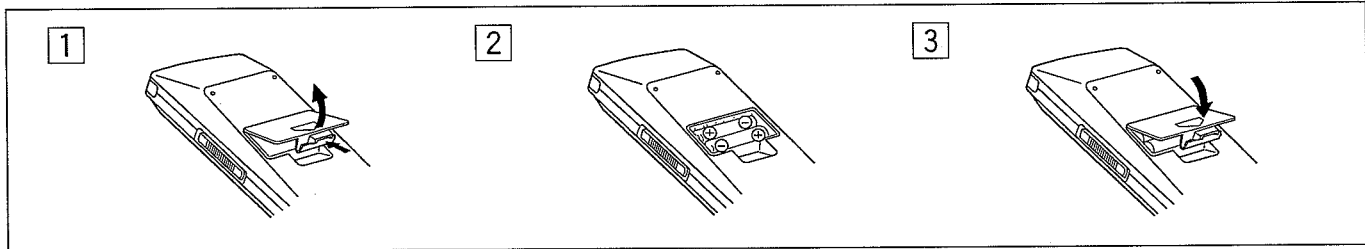


- Audio cord (Pin plug x 2 ↔ Pin plug x 2)
Use to connect the player to a stereo amplifier, etc.



- Operating instructions
- Warranty card

INSERTING BATTERIES INTO THE REMOTE CONTROL UNIT



- 1 Open the battery compartment cover on the back of the remote control unit. Press the knob and open the cover in the direction of the arrow.
- 2 Take out the two accessory size "AAA" (IEC R03) dry cell batteries, and insert them into the battery compartment in accordance with the display (+, -) inside the compartment.
- 3 Close the cover of the battery case.

Incorrect use of batteries may cause leakage or rupture.

Always be sure to follow these guidelines:

- A. Always insert batteries into the battery compartment correctly matching the positive (+) and negative (-) polarities, as shown by the display inside the compartment.
- B. Never mix new and used batteries.
- C. Batteries of the same size may have different voltages, depending on brand. Do not mix different brands of batteries.

PRECAUTIONS

If it becomes necessary to transport or ship this unit in the future, be sure to first remove the disc (if present), retract the disc table to its closed position, turn the power off, and, after the "OFF" goes off the display, disconnect the power cord.

INSTALLING THE PLAYER

- Place the player on a stable platform next to the television and stereo system to be used with the player.
- When using the player with a stereo system, your speakers should be placed away from your television (or TV monitor).
- Do not place heavy objects such as a television or TV monitor on top of the player.
- Do not place the player on top of your TV set or TV monitor. Also, keep the player away from devices such as cassette decks which are sensitive to magnetic fields.

When FM or AM stations are being received, signal noise may be generated if the player is turned on. Turn off the player when not in use.

Also, if there is signal noise when receiving radio stations with an indoor antenna, adjust the position or direction of the antenna.

INSTALL THE PLAYER IN A WELL VENTILATED PLACE AWAY FROM HEAT AND HUMIDITY

Do not install the player in a location subject to direct sunlight, or near a stove or radiator, etc. This could adversely affect the cabinet and internal components. Also avoid installing the player in a humid or dusty location. This could result in a malfunction or accident. Do not install near a cookstove where the player could be affected by smoke, steam, or heat.

AVOID SOURCES OF HEAT

Do not put the player on sources of heat, such as an amplifier. When installing with audio components on a rack, avoid components that generate heat, by placing the player below such components where there is adequate ventilation and not much dust. Avoid placing the player on surfaces such as shaggy carpets, beds, and sofas which may block ventilation under the player and cause damage.

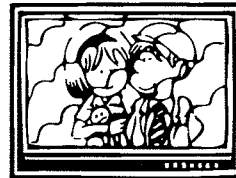
CAUTIONS FOR AUTOMATIC LOADING OPERATIONS

Since this player has an automatic loading construction, use the button on the player or the remote control unit for opening and closing of the disc table. To avoid damage, be careful not to apply any force to the moving disc table.

Even when the player is in the pause mode, the disc-drive motor is still revolving. Since leaving the player in this condition can shorten the lifetime of the motor, do not leave the player in the pause mode for long periods of time.

STRIPE PATTERNS APPEARING ON A TV PROGRAM

Stripe patterns may appear during a TV program if the player unit is turned on, depending on the quality of reception of the TV station. This is neither a malfunction of the television nor the player. If stripes appear while watching the TV, or when watching the TV for long periods of time, turn the player off.



CONDENSATION

Moisture will form in the operating section of the player if the player is brought from cool surroundings into a warm room or if the temperature of the room rises suddenly. When this happens, player's performance will be impaired.

To prevent this, let the player stand in its new surroundings for about an hour before switching it on, or make sure that the room temperature rises gradually.

The same, symptoms of condensation may be caused during summer, if the player is exposed to the breeze from an air conditioner. In such cases change the location of the player.

POWER-CORD CAUTION

Handle the power cord by the plug. Do not pull out the plug by tugging the cord and never touch the power cord when your hands are wet as this could cause a short circuit or electric shock. Do not place the unit, a piece of furniture, etc., on the power cord, or pinch the cord. Never make a knot in the cord or tie it with other cords. The power cords should be routed such that they are not likely to be stepped on. A damaged power cord can cause fire or give you an electrical shock. Check the power cord once in a while. When you find it damaged, ask your nearest PIONEER authorized service center or your dealer for a replacement.

CLEANING CARE

Use a soft, dry cloth for cleaning. For stubborn dirt, soak the cloth in a solution of household detergent diluted using 1 part detergent to five or six parts water; wring well first and wipe. Use a dry cloth to wipe it dry. Do not use any volatile agents such as benzine or paint thinner, as they may damage the surface of the player.

Abnormal functioning of this unit may be caused by lightning, static electricity, or other external interference. To restore normal operation, turn the power off and then on again, or unplug the AC power cord and then plug it in again.

FEATURES AND FUNCTIONS

Playback Functions

Program Playback

Up to 24 chapters/tracks can be selected from a disc and played in any desired order.

Random Playback (For LDs, this function is available with only discs containing TOC.)

All chapters/tracks on a disc can be played in random order.

Repeat Playback

Eight repeat modes - Memory Repeat, A-B Repeat, 1-chapter/track Repeat, One-side Repeat, All side Repeat (for two-side LDs only), Program Repeat, Random Repeat and Program Random Repeat - are available. (With discs having no TOC, Random Repeat cannot be carried out.)

Hi-Lite/Intro Scan Playback

Hi-Lite Scan - CD, CDV-audio part

Playback starts from a point 1 minute after the beginning of the track, and each track is played for about 8 seconds. Also, Hi-Lite Scan playback can be started from the desired minute and second on each track.

Intro Scan - LD, CDV-video part

The beginning of each chapter/track is played for about 8 seconds.

Auto Program Editing/Compu Program Editing

The player automatically selects and programs the tracks which can be played back within a specified time.

LD (LaserDisc) Playback Functions

NTSC → PAL System Conversion

NTSC discs can be played back onto a PAL colour TV.

Compatible with Wide Aspect Type TV

When watching a squeezed LD, the screen size will be fitted to the size of the wide aspect type TV. (Only when the AV CONNECTOR terminal is connected.)

Alpha-Turn System - Two-Side Playback

With this function, both sides of a two-sided LD can be played consecutively, eliminating the need to turn the disc over when the first side is completed.

A Side ↔ B Side Continuous Playback Programs

Through the use of the Alpha-Turn system, programs which go from side A to side B or from side B to side A can be freely created.

Digital Level Control

The digital sound level can be adjusted between 0 dB and -25 dB.

Last Memory Function

With this function, if you turn the power switch off during playback of an LD, a playback position slightly ahead of the last frame to be played is stored in memory (last memory). When the power is turned back on, playback begins from the memorized position by pressing ►/■ on the front panel.

CD (Compact Disc)/CDV (Compact Disc with Video) Playback functions

Direct CD function

Once DIRECT CD on the front panel is pressed, time for starting play becomes shorter. In addition, since the picture circuit does not function, the player eliminates the interference between signals and reproduces more pure sound.

ABS Time (elapsed play time from the beginning of the disc) Search

Any desired point can be searched for by specifying the elapsed time from the beginning of the disc.

Other Features

1-Bit DLC D/A Converters

(D/A Converters with Double-Step Noise Shaping)

D/A converters are devices for transforming digital signals into analog signals. The D/A converter used in this player employs an advanced 1-bit conversion system. Compared to conventional converters, this system has the following advantages.

- Theoretically no zero cross distortion is generated.
- The system is free of non-linear distortion throughout the frequency range.
- High-precision operation can be obtained without adjustments.

With this type of conversion, there is no loss of music quality even at minute signal levels. Moreover, the noise shaping function necessary for 1-bit conversion is implemented using a double-step noise shaping system. This system carries out noise shaping once in the preliminary digital filter stage and then again in the D/A converter section, thus minimizing quantization noise and providing extremely high-precision conversion.

Auto Loading and Automatic Disc Discrimination Functions

This unit has a built-in motor-driven auto loading mechanism which automatically opens and closes the disc table and makes disc loading easy.

Also, once a disc is placed on the table and the table is retracted into the player, the player automatically detects which type of disc (LD, CD, or CDV) is loaded.

Compatibility with Many Disc Types and Sizes

In addition to conventional LDs (30 cm, 20 cm), CDs (12 cm), and CDV discs (12 cm), the player can play thin-type 20 cm LDs and 8 cm CD singles without an adaptor.

Features "Film Mode" for Reproducing Natural Movie Ambience

Digital Level Control Using SCAN control Adjustment

DISCS

LD GLOSSARY

Chapter number

Chapter numbers are used to indicate the boundaries of the sections on a disc, similar to the "chapters" in a book. If chapter numbers are recorded on a disc, it is so indicated on the jacket of the disc, etc. Chapter numbers can be used to search for desired chapters (Chapter Search).

Frame number

Frame numbers are the numbers assigned to each picture frame on a CAV disc. Frame numbers can be used to search for desired frames (Frame Search).

Time number

Time numbers indicate the time elapsed from the beginning of a CLV disc. Time numbers can be used to search for desired scenes (Time Search).

CDV/CD GLOSSARY

Track number

Track numbers indicate the boundaries of the sections, or "tracks", on a disc. Track numbers are assigned consistently throughout the audio part and video part of a CDV disc. Track numbers can be used to search for desired tracks (Track Search).

TOC

Every CD/CDV-type disc is provided with a section called TOC (Table Of Contents) at the beginning of the disc. The TOC section is just like the table of contents of a book, and contains information on the contents (number of tracks, playing time, etc.) of the disc.

- Some LD discs are also provided with a TOC section.

LD DISCS

The CLD-2850 can play both LD Discs and Compact Discs. Unlike conventional phonograph records, these discs are played back from the inside edge out.

LD Discs are available as both active play discs and long play discs.

● ACTIVE PLAY/STANDARD PLAY (CAV) DISCS

Active play discs are played at constant angular velocity (CAV).

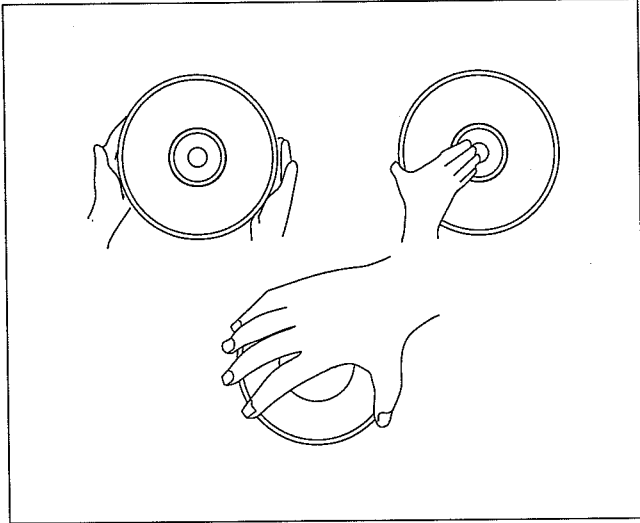
● LONG PLAY/EXTENDED PLAY (CLV) DISCS

These discs are played back at constant linear velocity (CLV), and are therefore able to play for a longer time than active play discs.

CARE OF DISCS

How to hold discs

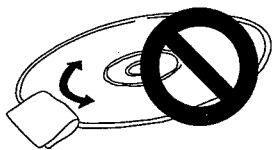
When loading or removing discs, try not to touch their playing surfaces.



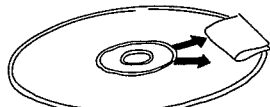
Cleaning

Fingerprints or other dirt on the disc may affect sound and picture quality.

To clean your discs, use a soft clean cloth to wipe them. If necessary, moisten a soft cloth with diluted neutral detergent to remove heavy dirt or fingerprints.



Do not wipe in a circular direction

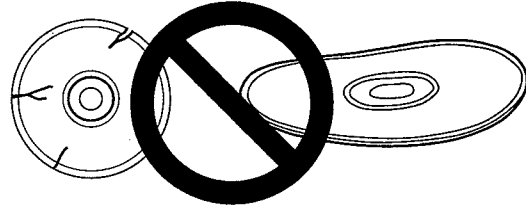


Gently wipe from the inside toward the outer edge.

Discs must not be cleaned with record cleaning sprays, or static prevention sprays, etc. Also do not use volatile liquids such as benzine, or thinner, etc.

NEVER PLAY CRACKED OR WARPED DISCS.

■ The disc revolves on the player at a high speed when it is played. Never play a cracked, scratched or warped disc. This may damage the player or cause it to malfunction.



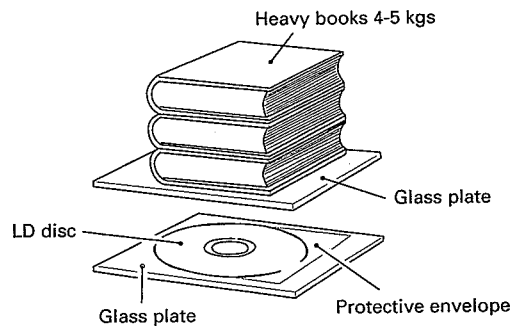
After using discs, store them upright

After playing a disc, always remove it from the player and return it to its jacket. Then store it standing upright away from heat and humidity.

- Store discs carefully. If you store discs at an angle, or stacked on top of each other, discs may become warped even when in their jackets.
- Do not leave discs in locations such as the seat of car, which may become excessively hot.

If an LD disc is warped...

If an LD disc is warped, put the disc into its protective envelope, and then place it between two flat plates of glass. Then place heavy books on top of the plates so that approximately 4 to 5 kgs is applied. Leave the disc like this for a day or so. This may correct the warp.

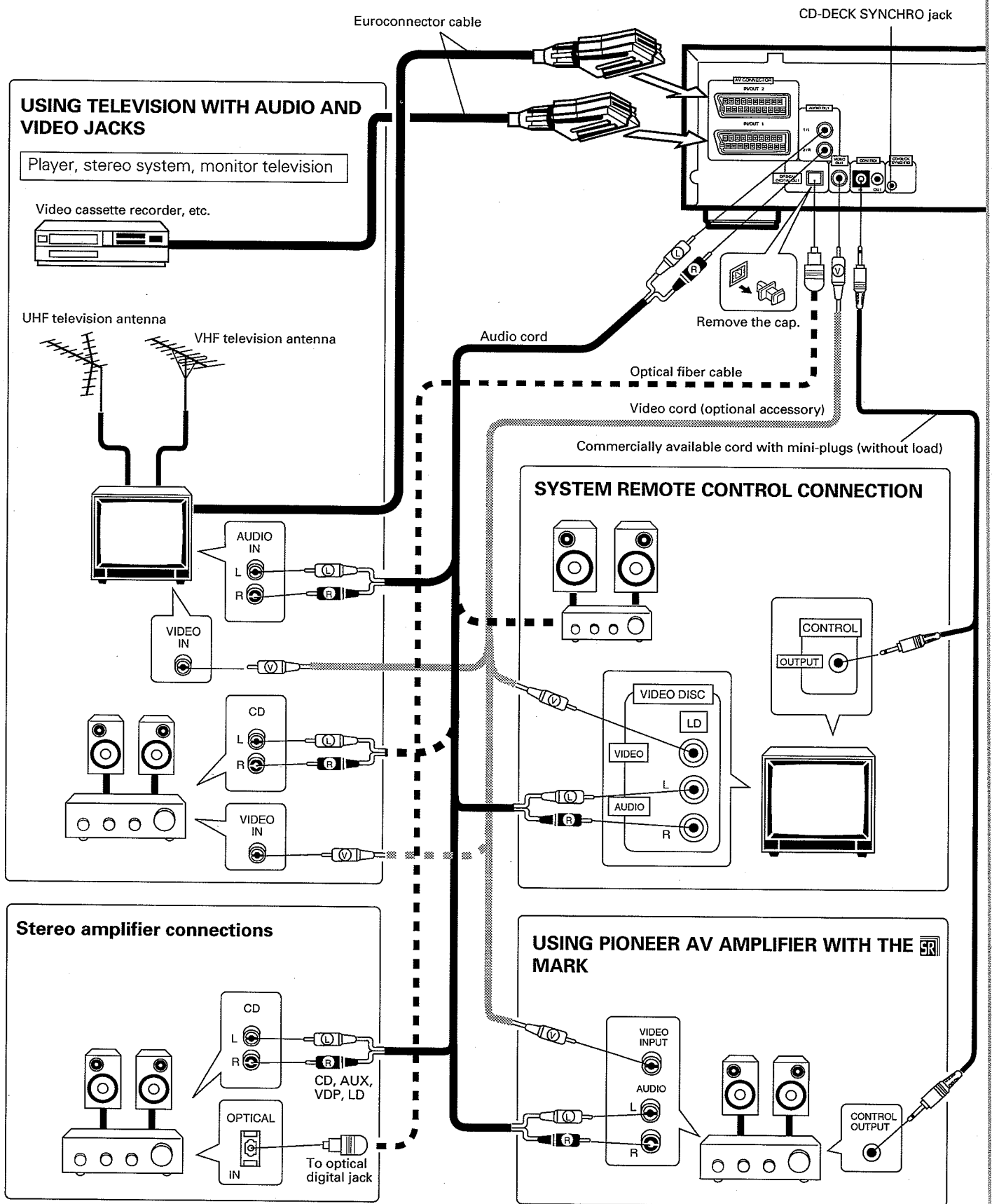


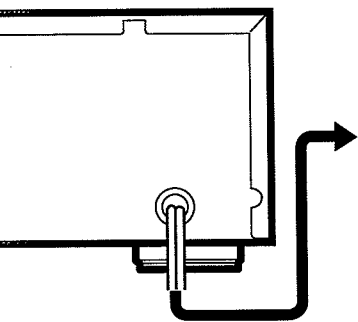
CAUTION WHEN USING THE DISC

All rights reserved.

Unauthorized public performance, broadcasting or copying is a violation of applicable laws.

CONNECTIONS





Plug the power cords into AC outlet.

Plug the AC power cords of the player, stereo amplifier and TV set into AC outlets.

When the power cord of this unit is connected to an AC outlet, power is supplied to the unit's internal memory (such as the last memory) even when the POWER switch is OFF. Therefore, be sure to connect the power cord directly to a wall outlet. If the power cord is connected to an outlet such as a switched outlet on an amplifier, the various memory contents will be erased whenever the amplifier's power switch is turned off.

USING TELEVISION WITH AUDIO AND VIDEO JACKS

- Connect the VIDEO OUT jack of the player to the video input jack of the monitor television.
- Connect the AUDIO OUT jacks to the stereo amplifier AUX, CD, LD, VDP or other jacks, except the PHONO input jacks. The television speakers can also be used by connecting the television audio input jacks and the player AUDIO OUT jacks, however connection to a stereo amplifier is recommended to obtain superior audio playback quality for Compact Discs and LaserVision Discs. Do not change the television antenna connections.
- When using a video TV monitor (or TV) with AV CONNECTOR terminal, connect the AV CONNECTOR terminal to the AV CONNECTOR IN/OUT terminal of the player. Use supplied Euroconnector cable.
- Connect the power cord to an AC wall outlet.
- Combined system control is possible when a Pioneer television and audio/video stereo receiver are connected. Refer to pages 12 for an explanation of the connection procedure.
- When making connections to stereo amplifier equipped with a built-in D/A converter and an optical digital jack, refer to the connection instructions on the page 10.
- When using a video cassette recorder with AV CONNECTOR terminal, connect the AV CONNECTOR terminal to the AV CONNECTOR IN/OUT terminal of the player.
When a TV has been connected to the player using the AV CONNECTOR terminal, signals from the video cassette recorder are fed to the TV set via the player while the player is turned off.
- When using wide aspect type TV (16:9), be sure to connect the AV CONNECTOR terminal to the AV CONNECTOR IN/OUT terminal of the player.

CD-DECK synchro function

If you have a Pioneer cassette deck provided with the CD-Deck synchro function, connect the CD-DECK SYNCHRO jacks of the player and cassette deck. With this function, synchro recording can be carried out between player and deck.

- With CD as well as CDV and LD, the CD-Deck synchro recording can be carried out.
- For details on connections and operation, refer to the instruction manual supplied with the cassette deck.

Stereo amplifier connections

Connect the AUDIO OUT jacks of the player to the AUX, CD, LD or VDP input jacks of your stereo amplifier.

NOTE:

Do not connect these jacks to your amplifier PHONO input jacks.

Connecting to an optical digital jack

This unit can be connected to an amplifier equipped with an optical digital jack.

1. Remove the protective dust cap from this unit's OPTICAL DIGITAL OUT jack.
 2. Use an optical fiber cable to connect OPTICAL DIGITAL OUT jack of this unit to the optical digital input jack of the amplifier.
- Align the plug of the optical fiber cable with the optical digital jack and fully insert the plug to make a secure connection.

NOTE:

With analog audio discs, no signal is output at the OPTICAL DIGITAL OUT jack.

Use a separately sold optical fiber cable for the optical digital jack connections. However, when making optical digital connections, the player can only be connected to an amplifier which uses the same type of optical transmission/reception module.

Precautions concerning use of optical fiber cables

- Fully insert the optical fiber cable plugs all the way into the jacks.
- Be careful not to fold or crimp the cable. When coiling an optical fiber cable for storage, make sure the diameter of the coil is 15 cm (6 inch) or larger.
- Use an optical fiber cable with a length of 3 m (10 feet) or less.
- Protect the optical fiber cable plugs from scratches and dust.
- When the unit is not connected using an optical fiber cable, be sure to keep the protective dust cap plugged into the optical digital output jack at all time.

CONNECTIONS

SYSTEM REMOTE CONTROL CONNECTION

WHEN COMBINED WITH OPTIONAL PIONEER PROJECTION MONITOR (or COMPONENT DISPLAY)

Connect the VIDEO OUT jack of the player to the video input jack of the projection monitor (or component display), and connect the AUDIO OUT jacks of the player to the audio input jacks of the projection monitor (or component display).

System Control

By connecting the CONTROL IN jack of the player to the remote jack of the projection monitor (or component display), the system can be controlled by the remote control unit of the player at the remote control sensor of the projection monitor (or component display).

- Use a commercially available cord with mini-plugs (without load) for the connection.

Please also refer to the operating instructions for the projection monitor (or component display).

NOTE:

When system control connections have been made, the player cannot be directly controlled by the remote control unit. To operate the player, aim the remote control unit at the projection monitor (or component display).

PERFORMING SYSTEM CONTROL WHEN THE PLAYER IS COMBINED WITH A PRODUCT THAT HAS THE SR MARK

System control can be performed when the player is combined with an optional AV amplifier, which can provide centralized control of Pioneer products with the SR mark.

Connect the VIDEO OUT jack of the player to the video disc video input jack of the AV amplifier and connect the AUDIO OUT jacks of the player to the audio input jacks of the AV amplifier.

Connect the CONTROL OUT jack of the AV amplifier to the CONTROL IN jack of the player using a commercially available cord with mini-plugs (without load).

- For details concerning the connection and operation methods, please refer to the operating instructions for the AV amplifier.

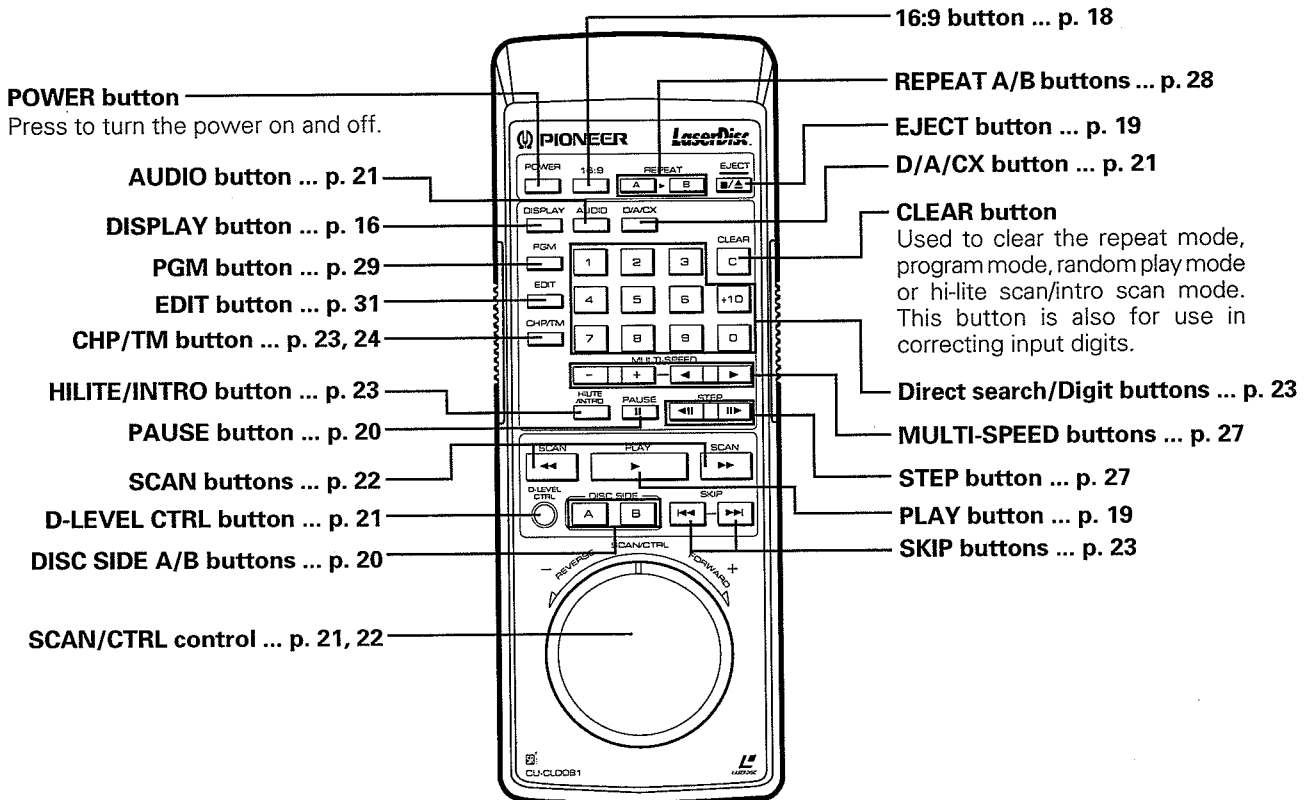
NOTE:

When a connecting cord has been connected to the CONTROL IN jack, direct control of the player with the remote control unit is not possible. Operate the player with the remote control unit by aiming it at the AV amplifier.

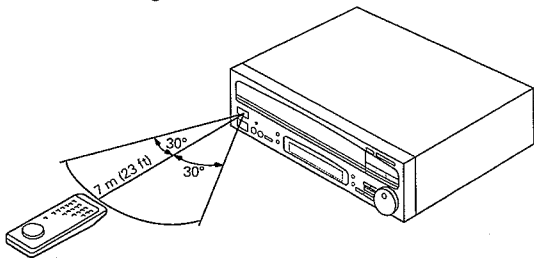
NAMES AND FUNCTIONS OF REMOTE CONTROL UNIT COMPONENTS

A detailed description is provided on the indicated page(s).

Remote control buttons with the same names or marks as buttons on the front panel of the player control the same operations as the corresponding front panel buttons.



When operating the remote control unit, point the unit's infrared signal transmitter at the remote control receiver (REMOTE SENSOR) on the front panel of the player. The remote control unit can be used within a range of about 7 meters (23 feet) from the remote sensor, and within angles of up to about 30 degrees.



NOTES FOR USING THE REMOTE CONTROL UNIT

- If a plug is connected to the CONTROL IN terminal at the rear of the player, remote control operations cannot be done with the remote control unit aimed at the player's remote control sensor. Aim the remote control unit at the AV amplifier or the component display's sensor instead.

- If there is any obstacle between the remote control unit and the player, or if the unit is held at too large an angle relative to the front panel of the player, the signal from the remote control unit will fail to reach the remote sensor.
- If the player is operating in the vicinity of other appliances generating infrared rays, or if other remote control devices using infrared rays are used near the player, the player may operate improperly. Conversely, if the player's remote control unit is operated in the vicinity of other appliances which use an infrared remote control device, the other appliance may operate improperly. If this should happen, change the place of installation so that improper operation does not occur.
- If the range of operation of the remote control unit becomes too short, replace the batteries.
- When the unit is not to be used for a long period of time (more than one month), remove the batteries to prevent them from leaking inside the compartment. If leakage occurs, wipe up the liquid inside the compartment and replace the batteries with new ones.
- Do not place books or other objects on the remote control unit, since they might depress the buttons and run down the batteries.
- If the remote control sensor window is in a position where it receives strong light such as sunlight or fluorescent light, control may not be possible.

NAMES AND FUNCTIONS OF FRONT PANEL COMPONENTS

A detailed description is provided on the indicated page(s).

Door/Disc table ... p. 19

16:9 button ... p. 18

LANGUAGE button ... p. 17

STANDBY indicator

REMOTE SENSOR ... p. 13

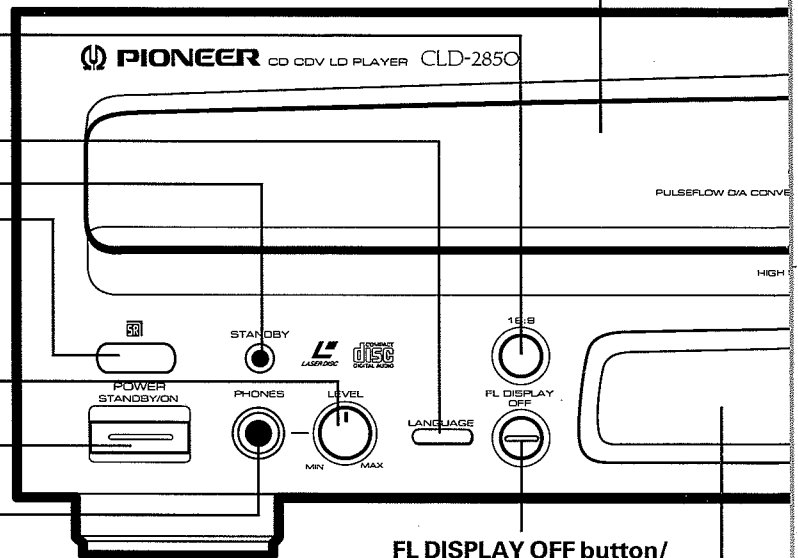
PHONES LEVEL control

Turn this control in the "MAX" direction to increase the output level from the PHONES jack. Turn this control in the "MIN" direction to decrease the output level from the PHONES jack.

POWER STANDBY/ON switch

Press to turn the power on and off.

PHONES jack



FL DISPLAY OFF button/
indicator ... p. 20

Display window

TRACK/CHP indicator

Indicates the TRACK number or CHP (chapter) number.

▶ play indicator

Lights during play. Blinks during search.

PGM EDIT indicator

Lights when editing is performed.

PROGRAM indicator

Lights during program play.

DISC SIDE A indicator

REMAIN/TOTAL indicator

Indicates the REMAIN TIME (remaining play time) or TOTAL TIME (total play time).

FRAME/TIME indicator

Indicates the FRAME number or TIME.

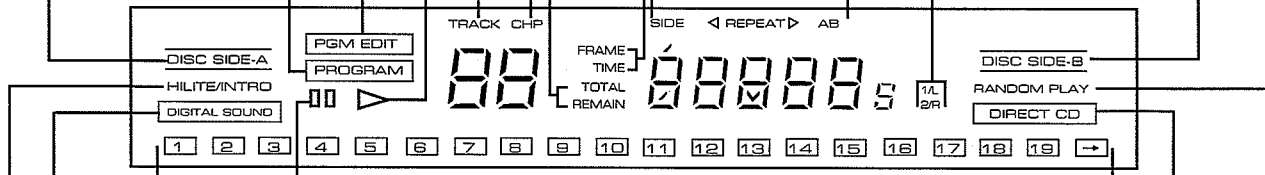
REPEAT indicator

Lights during repeat play.

1/L, 2/R indicator

Indicates the audio output channel.

DISC SIDE B indicator



|| pause indicator

Lights when the player is in pause mode.

DIGITAL SOUND indicator

Lights when the disc being played has a digital sound signal. With LD discs, this indicator lights when the digital sound signal is selected.

HILITE/INTRO indicator

Lights during Hi-Lite Scan or Intro Scan mode.

LD/CD/CDV visual calendar

When a disc is loaded, all of the chapter/track numbers recorded on the disc light up on the display. If the disc contains more than 19 chapters/tracks, the → indicator lights.

During program play, only the programmed chapter/track numbers light. When a disc without a TOC section is played, only the selection number being played lights.

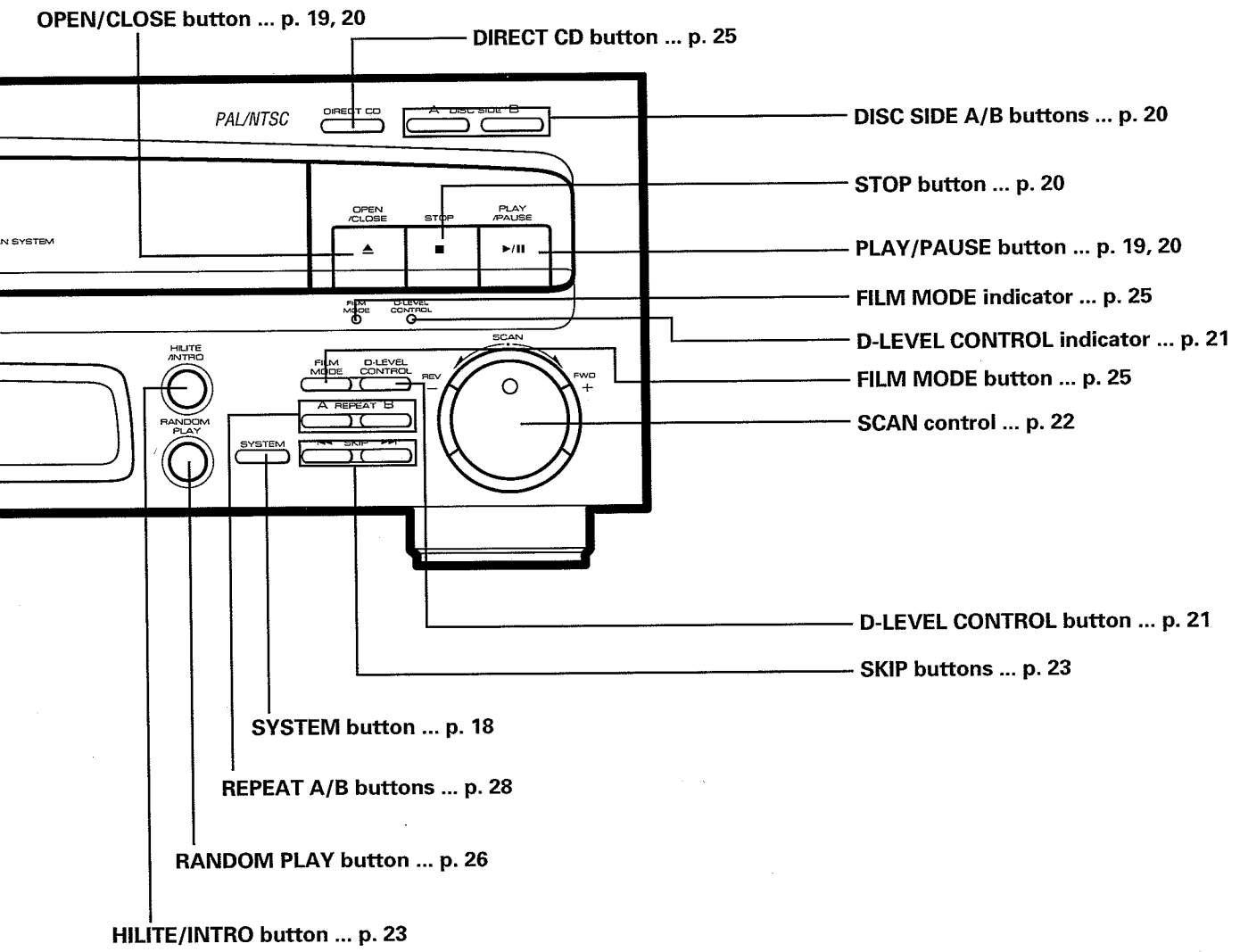
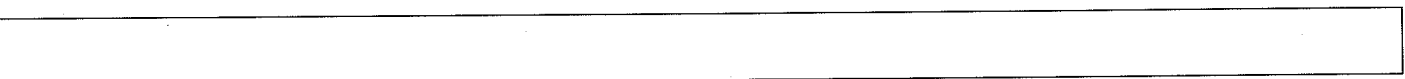
When a CDV disc is loaded, the track numbers of the video part light followed by the track numbers of the audio part.

After a chapter/track is finished playing, the corresponding number goes out.

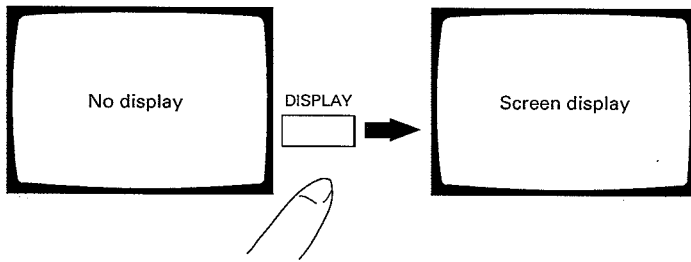
DIRECT CD indicator

RANDOM PLAY indicator

Lights during random play.



DISPLAY SWITCHING

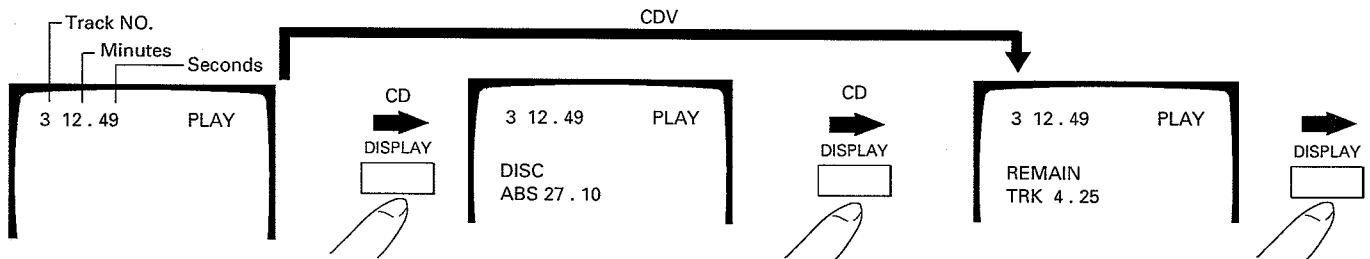
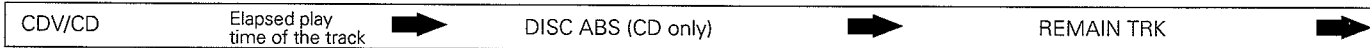
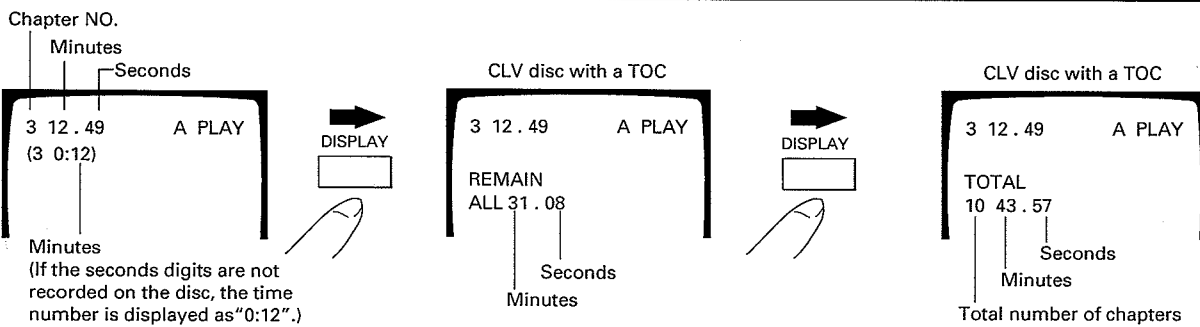
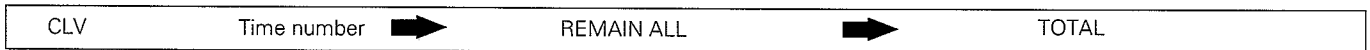


Information regarding the operations being carried out can be displayed on the screen of the monitor TV. When DISPLAY on the remote control unit is pressed the first time, the screen display appears.

With LD discs containing a TOC ...

Each time DISPLAY is pressed, the display changes in the following order: time/frame number (elapsed play time/frame from the beginning of the disc) → REMAIN ALL (remaining play time of the disc) → TOTAL (total play time of the disc) → display off.

- With CAV discs, the DISC ABS (elapsed play time from the beginning of the disc) is displayed after the frame number.



Other displays

Lights - Flashes	Function	Lights - Flashes	Function
OPEN	Opening of the table	REPEAT RANDOM	Random repeat play
CLOSE	Closing of the table	REPEAT PROGRAM	Program repeat
STOP	Stop mode	REPEAT PGM. RND	Program random repeat
PLAY	Play mode	EDITING	Edit mode
PAUSE	Pause mode	AUTO	Auto program edit
SEARCH	Search	COMPU	Compu program edit
STILL	Frozen picture	TAPE A, B	Total recording time for each side
1/2, 1/4...	Slow-speed play	INTRO	Intro scan mode
x2, x3	High-speed play	HILITE	Hi-Lite scan mode
FRAME	Frame number	OUTPUT LEVEL	Digital level control mode
TIME	Time number	STEREO	Stereo
CLV	CLV play	1/L	Main audio/Left channel
A	Side A play	2/R	Sub audio/Right channel
B	Side B play	CX ON	CX noise reduction system ON
LAST MEMORY	Last memory	CX OFF	CX noise reduction system OFF
PROGRAM	Program mode	-NTSC-	Using NTSC system disc
STEP-	Chapter/Track program step	-PAL-	Using PAL system disc
RANDOM	Random play	PAL	PAL system video output
PGM. RND	Program random play	NTSC 3.58	NTSC system video output
REPEAT MEMORY	Memory repeat	16:9	With wide aspect type TV, expanding the picture
REPEAT A-B	A-B repeat	ANALOGUE DISC NO SOUND	Cannot play back an analog audio LD with PAL system
REPEAT SIDE -A (B)	One side repeat		
REPEAT ALL	Two-side repeat		
REPEAT CHAPTER (TRACK)	Chapter/track repeat		

With LD discs not containing a TOC...

Each time DISPLAY is pressed, the display changes in the following order: time/frame number → display off.

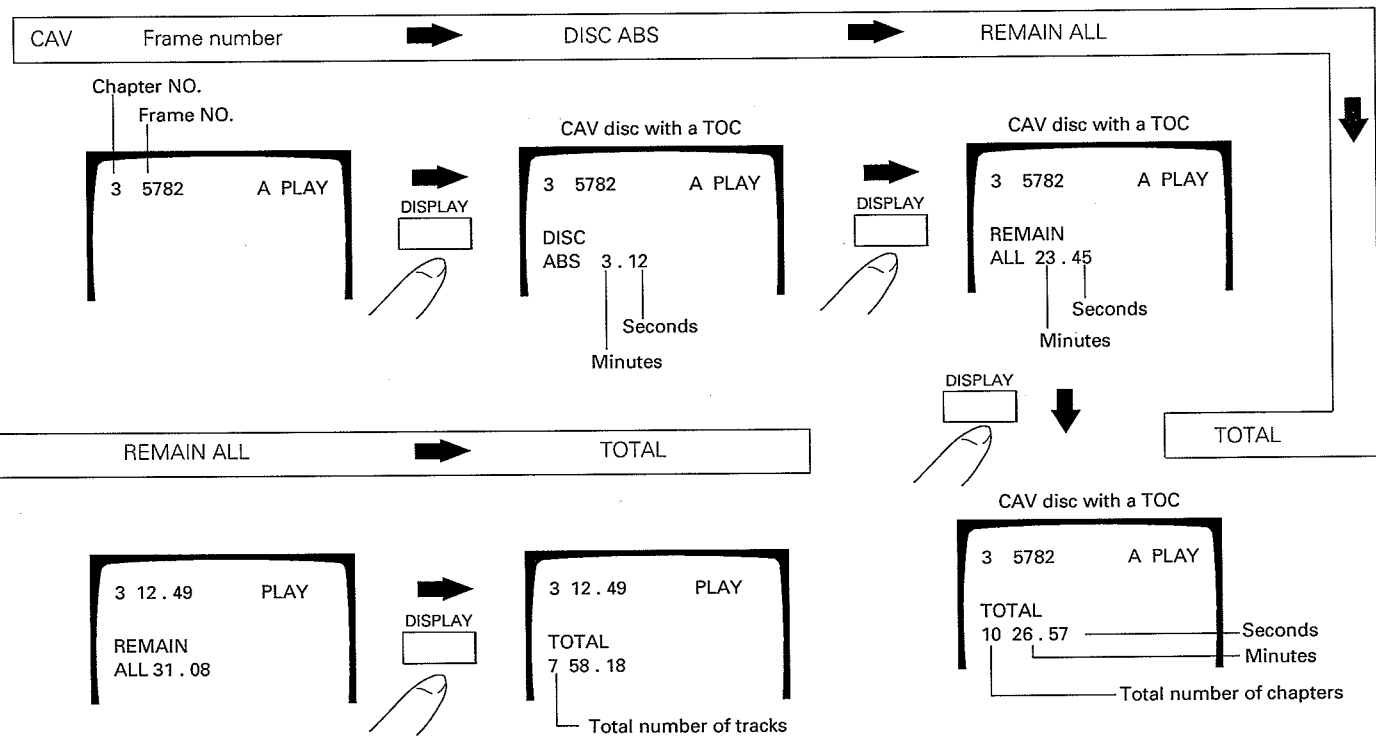
With CDV discs...

Each time DISPLAY is pressed, the display changes in the following order: elapsed play time of the track being played → REMAIN TRK (remaining play time of the track being played) → REMAIN ALL (remaining play time of the video or audio part being played) → TOTAL (total play time from the beginning of the video or audio part being played) → display off.

With CD discs ...

Each time DISPLAY is pressed, the display changes in the following order: elapsed play time of the track being played → DISC ABS (elapsed play time from the beginning of the disc) → REMAIN TRK (remaining play time of the track being played) → REMAIN ALL (remaining play time of the disc) → TOTAL (total play time from the beginning of the disc) → display off.

- These data are also displayed on the display window of the front panel.



To change language mode of the screen display

Press LANGUAGE on the front panel. Each time this button is pressed language mode changes in the following sequence: ENGLISH → FRANCAIS → DEUTSCH → ITALIANO.

- The setting of the LANGUAGE button will not be erased even if the power is turned off.
- The illustrations of the screen display found in these Operating Instructions are the case of ENGLISH mode.

NOTE:

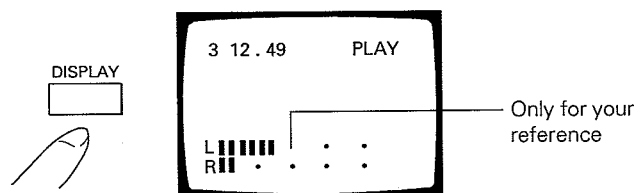
If the screen display is turned on for a long period of time, it is automatically turned off. To turn the display back on, press any button.

Audio output level meter display:

During elapsed play time of the track mode of CD playback or CDV (audio part) playback, the audio output level meter will be displayed on the monitor screen.

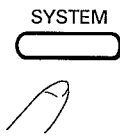
NOTE:

In some cases, the displayed output level may differ from the actual output level, but this is not a malfunction.



DISPLAY SWITCHING

SYSTEM button



Use this button to change mode according to the type of TV and disc to be used.

When playing an NTSC disc, press SYSTEM to switch the mode according to the TV system.

The mode changes according to the following table:

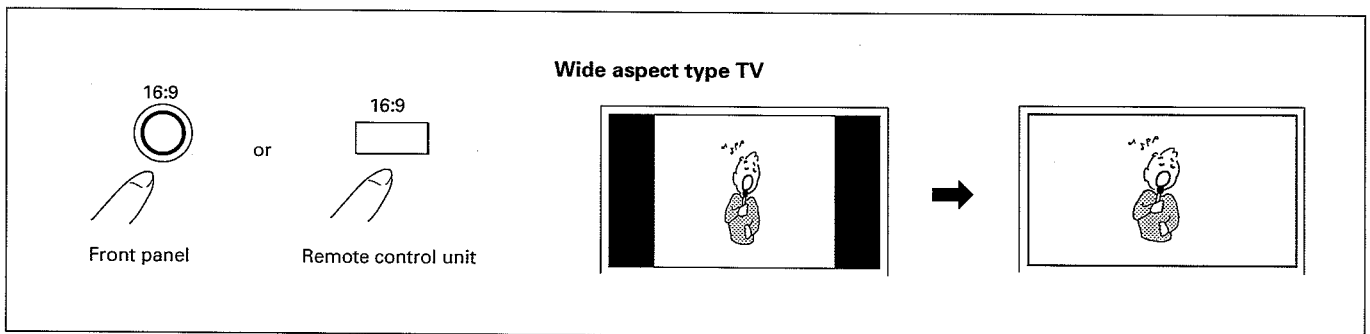
DISC	TV MODE	PAL		NTSC	
		COLOUR	SIZE	COLOUR	SIZE
PAL		COLOUR	FULL	BLACK/WHITE	STRETCH
NTSC	NTSC	BLACK/WHITE	*SHRINK	COLOUR	FULL
	MOD. PAL	COLOUR	*SHRINK	BLACK/WHITE	FULL

- In this table, "SHRINK" in the size column means that the screen shrinks in vertical direction; "STRETCH" means that the screen stretches approximately 120% in vertical direction; and "FULL" means normal size.
- In MOD. PAL mode, the colour of the background is black when the power is turned on or NTSC system discs are played.
In NTSC mode or PAL mode, the colour of the background is blue.

NOTES:

- *SHRINK
Most models of the newly developed countdown PAL TV system detect 50 Hz (PAL)/60 Hz (NTSC) and automatically switch vertical amplitude, resulting in a display without vertical shrinkage.
- If your PAL TV does not have a V-Hold control, you may not be able to view NTSC disc because the picture may roll. If the TV has a V-Hold control, adjust it until the picture stops rolling. On some TVs, the picture may shrink vertically, leaving black bands at the top and bottom of the screen. This is not a malfunction; it is caused by the NTSC → PAL conversion.

When using wide aspect type TV and playback squeezed LD

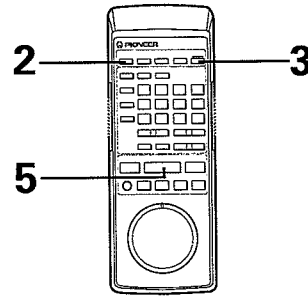
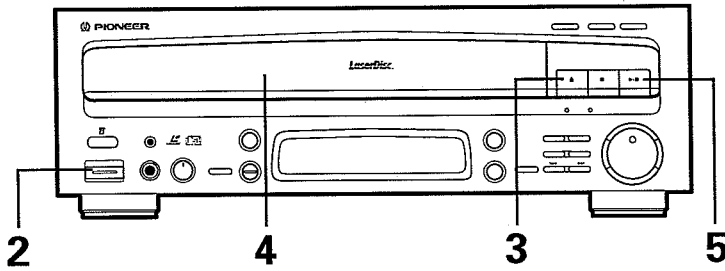


During playback, press the 16:9 button.
With discs of the squeezed LD, the picture is expanded suitable for the wide aspect type TV.

NOTES:

- On general screen (4:3) TV, with discs of the squeezed LD, the picture is shrunk horizontally.
- This function is carried out only when the AV CONNECTOR terminal is connected. When only the VIDEO OUT jack is connected, this function is not carried out.
- When general screen (4:3) TV is connected to the AV CONNECTOR terminal and the 16:9 button is pressed during playback, the input mode of the TV will change (such as TV tuner etc.).

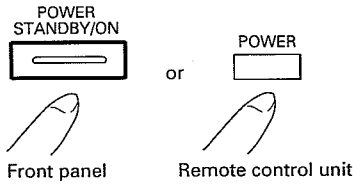
TO PLAY AN LD, CDV OR CD



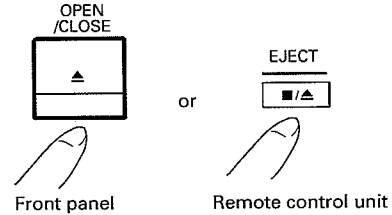
1
Turn on the power to the monitor TV and/or audio system.
When a stereo system is used for audio listening:

Turn on the power of the amplifier, and set its input selector to the proper position for listening to the player, such as "LD".

2
Press POWER to turn on the power to this unit.

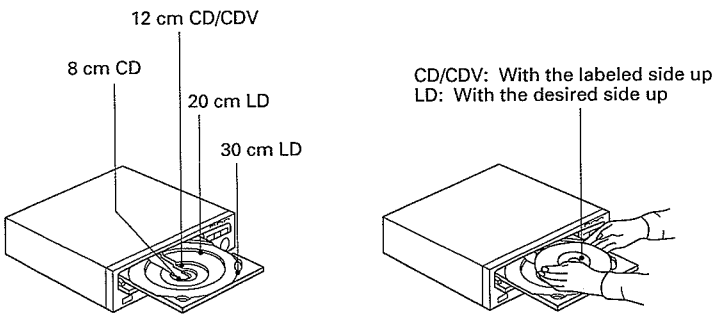


3
Press ▲ or ■/▲ to open the disc table.

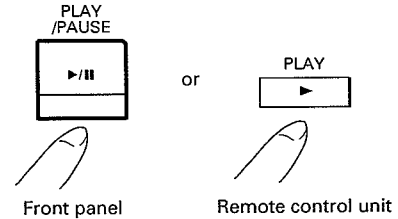


4
Load a disc.

As shown in the following diagram, place the disc on the disc table in the groove corresponding to the size of the disc. If the disc is not centered correctly on the disc table, the disc will not be played or the disc or the player may be damaged. Always place the disc correctly according to the required disc size on the disc table.



5
Press ►/II or ► to start playback.



- With CDV discs, the video part is played first.
- With two-sided LDs, after the A side of the disc (the side facing upward) is played, blue screen, or black screen (in the Film Mode → p. 25) is displayed, and then the unit automatically begins playing the B side.

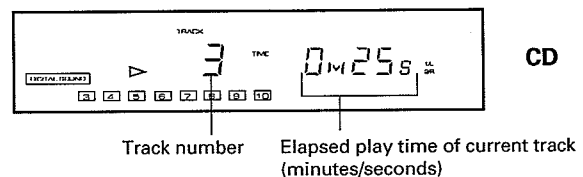
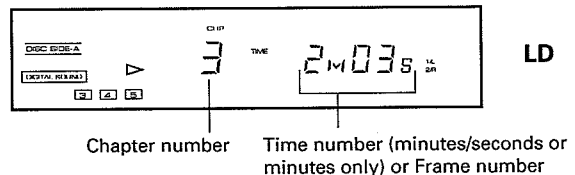
To avoid malfunctions, be especially careful about the following points.

- Do not place any object other than a disc on the disc table.
- Do not move the player while a disc is playing. This will cause the disc to be scratched.
- Be careful not to catch your finger in the disc table section while the disc table is being retracted into the unit. Also, be careful that children do not put their hands into the inside of the unit while the disc table is open. This may cause injury.

Precautions concerning disc loading

- Do not place more than one disc on the disc table. If two discs are placed one on top of the other on the disc table, discs may be scratched and/or malfunction may occur.
- With this unit, playback of all types of discs is carried out without the use of adaptors. Therefore, do not use any type of adaptor with this unit.
- With CDs, CDV discs, and single-sided LDs, always be sure to load discs with the label side facing upward.

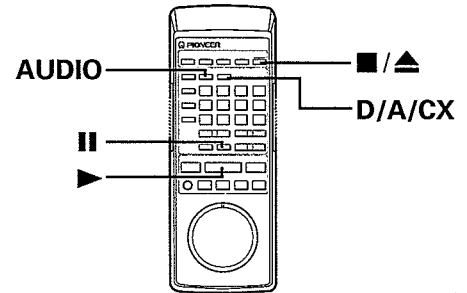
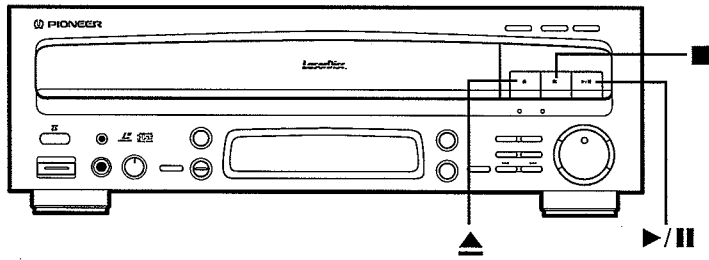
State of the display window during playback:



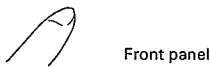
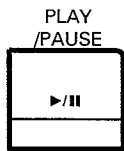
To play and listen to a disc without connecting this unit to an audio system:

Plug headphones into the PHONES jack on the front panel of this unit and adjust the volume with PHONES LEVEL.

TO PLAY AN LD, CDV OR CD



To pause playback temporarily



Front panel

or

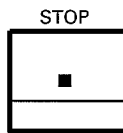


Remote control unit

The sound and/or video image disappears. Press ►/|| or || again to resume playback from the position where pause mode was entered.



To stop playback



Front panel

or



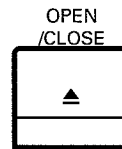
Remote control unit

Once

When ►/|| or ► is next pressed, disc playback starts again from the beginning.



To stop playback and take out the disc



Front panel

or



Remote control unit

Twice

After removing the disc from the disc table, press ▲, ►/|| or ► to close the table.

To specify and play a single side (side A or side B)

To play side A only, press DISC SIDE A instead of PLAY. Side A will be played and then playback will stop.

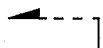
To play side B only, press DISC SIDE B instead of PLAY. Side B will be played and then playback will stop.

State of the display window during Alpha-turn:

- During switching from side A to side B



- During switching from side B to side A



Last Memory function:

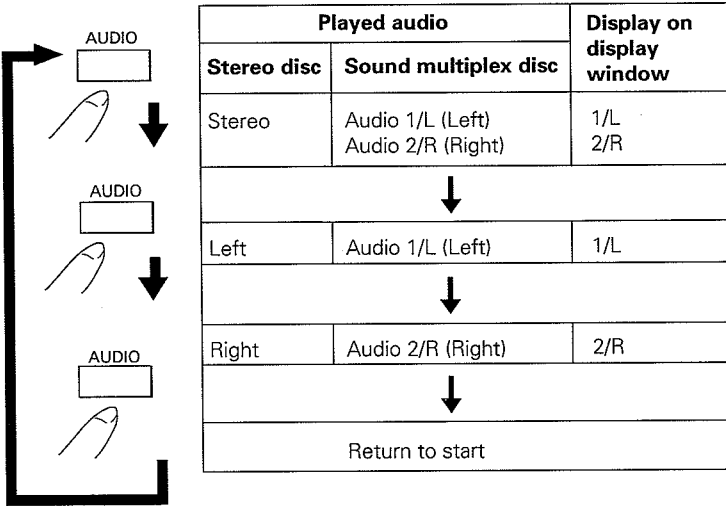
If the power is turned off during LD playback, a playback position slightly behind of the current frame is stored in the unit's memory (Last Memory). When the power is turned back on and playback begins from the memorized position by pressing ►/|| or ►.

To turn off the display

Pressing FL DISPLAY OFF turns off the display in the front panel display window and causes the DISPLAY OFF indicator to light. Press the button again to cause the display to return. Turning off the display prevents low levels of noise from adversely affecting sound quality.

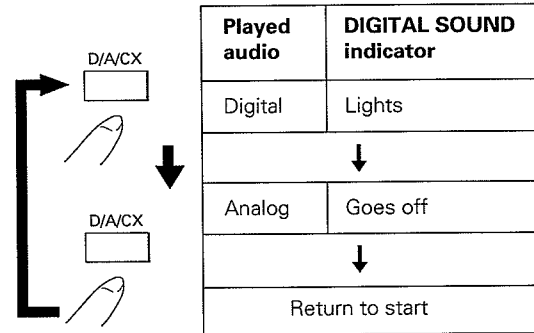
To listen to only one channel of a stereo disc, or to select the audio on a sound multiplex disc

During playback



To listen to the analog audio of an LD digital audio disc conforming to NTSC system:

During playback



With a Multi Audio disc (an NTSC system LD bearing the **MULTI AUDIO** mark), you can listen to the various audio tracks recorded on the disc by using DIGITAL/ANALOG to select between the analog and digital audio tracks, and by using AUDIO to select between the left (1/L) and right (2/R) channels.

Discs marked with the mark

Discs marked are recorded with the CX noise reduction system for powerful audio reproduction with little noise. (Analog audio only) However, some discs marked are not encoded with the signals necessary to instruct the unit to automatically switch on the CX system. If sound is noisy or undulates when a disc with a mark is played, press D/A/CX button on the remote control unit.

- is a trademark of CBS inc. This player meets the CX EXPANDING SPECIFICATION.

NOTE:

D/A/CX is not carried out with LDs of PAL system.

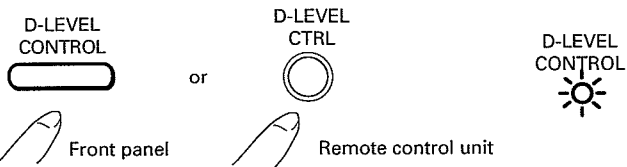
CAUTION:

If analog audio discs with PAL system is played, no sound comes out. At this time, "ANALOGUE DISC NO SOUND" appears on the screen.

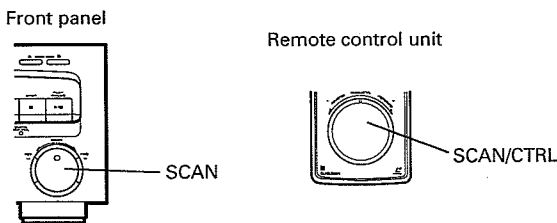
To adjust the level of the digital sound

The level of the digital sound can be adjusted between 0 dB and -25 dB.

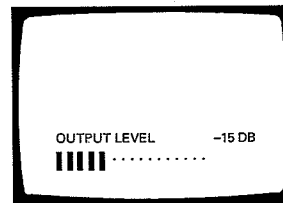
1. Press D-LEVEL CONTROL on the front panel or D-LEVEL CTRL on the remote control unit.



2. Rotate SCAN on the front panel or SCAN/CTRL on the remote control unit to adjust the level of the digital audio.



- While adjusting the level, the level meter will be displayed.
- When D-LEVEL CONTROL or D-LEVEL CTRL is pressed again, the unit enters SCAN mode. The level meter will disappear.
- The output level at the OPTICAL DIGITAL OUT jack cannot be adjusted.
- This function can be applied to discs which contain the digital sound.



TO SEARCH FOR A PARTICULAR PASSAGE

Scan

Scan

While rotating the SCAN control, playback advances or reverses at high speed. There are three scan modes which can be selected with rotational angles of the control.

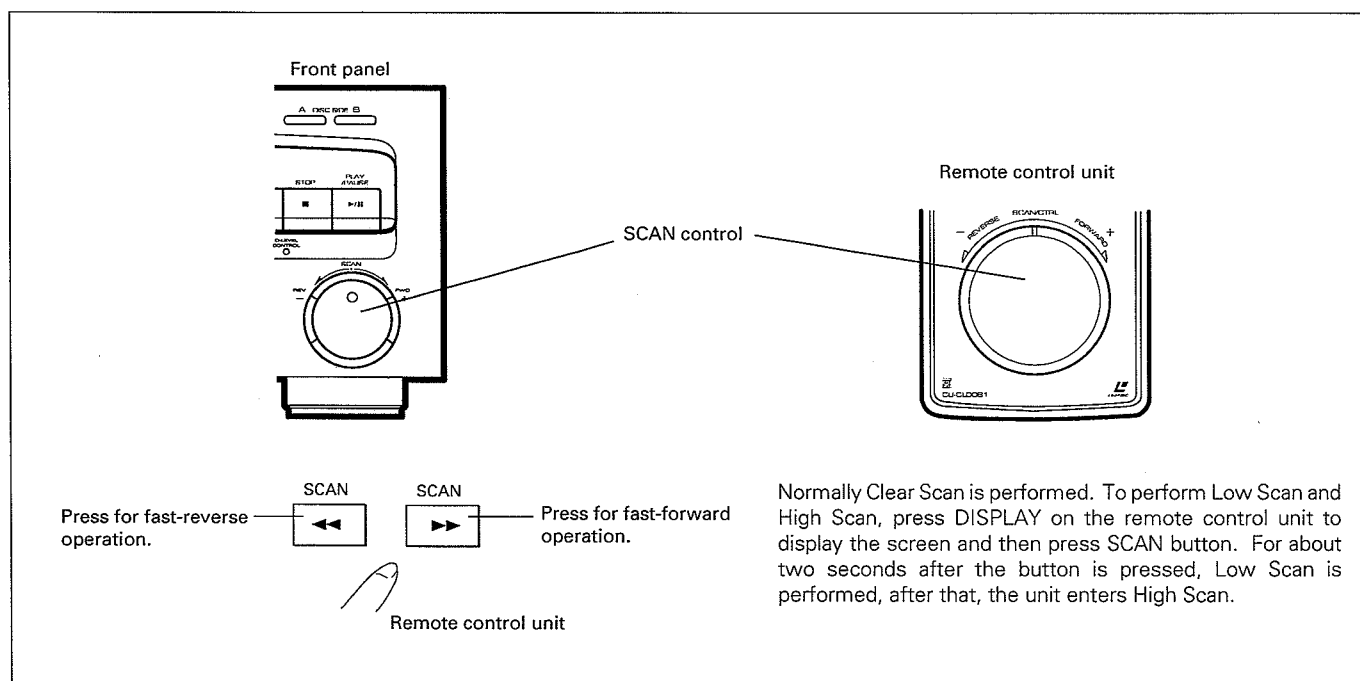
- If the SCAN control is rotated in digital level control mode, the output level is changed. Press D-LEVEL CONTROL or D-LEVEL CTRL to cancel the digital level control mode, and then rotate the SCAN control.

Clear Scan mode: Slightly rotate the SCAN control. The image may not fluctuate in this mode.

Low Scan mode: Slightly rotate the control. Scan speed becomes about x10 the normal playback speed.

High Scan mode: Fully rotate the control at greater angle. Scan speed becomes about x30 the normal playback speed.

- With video part of CDV, High Scan mode cannot be carried out.
- With CDs or audio part of CDVs, Clear Scan mode cannot be carried out.



- In Clear Scan mode, when digital sound is selected with digital audio discs, sound is heard at low volume level.
- With CDs or audio part of CDVs, sound is heard at low volume level while scanning
- Others: Sound is muted.

Note on CAV:

While scanning, noise may occur on the screen. This is not a malfunction.

Notes on CLV:

- While scanning, the colour of the image may fade out or the image sometimes fluctuates.
- The scan speed is different between inner tracks and outer tracks.

Even in the Clear Scan mode, the image sometimes fluctuates by the crack or warp of the disc.

TO SEARCH FOR A PARTICULAR CHAPTER/TRACK

Chapter (Track) Search/Chapter (Track) Skip/Hi-Lite Scan/Intro Scan

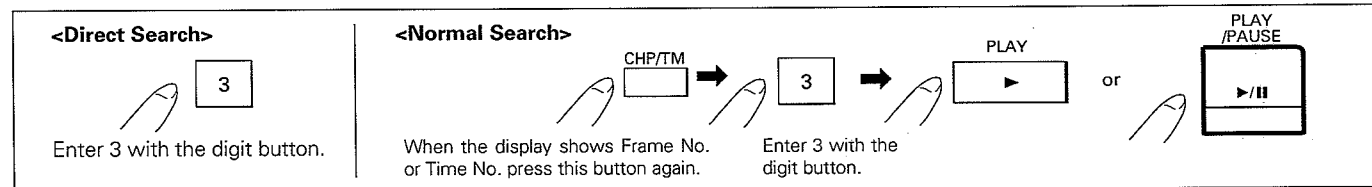
The term "chapter" refers to each section on an LD, and the term "track" refers to each section on a CD or CDV disc. If chapter or track numbers are encoded on a disc, it is so indicated on the disc jacket.

- Chapter Search is not possible with discs which are not divided into chapters.
- If chapter (track) number beyond the last chapter (track) number on the disc is specified, Chapter (Track) Search cannot be carried out.

Chapter (Track) Search – To search by designating the chapter/track number

Example:

To play from the beginning of Chapter/Track 3:



To search for chapter or track number 10 or above:

<Direct Search>

Use [+10] button.

(Example) To enter 17: [+10], [7]

To enter 30: [+10], [+10], [+10], [0]

<Normal Search>

(Example) To enter 17: [CHP/TM], [1], [7], [▶]

To enter 30: [CHP/TM], [3], [0], [▶]

To identify the present chapter number and frame (or time) number:

The numbers are displayed in the front panel display window.

The information can also be displayed on the monitor TV screen by pressing DISPLAY on the remote control unit.

CAV discs (for Normal Search):

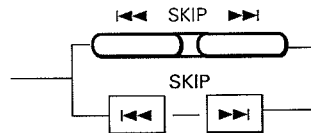
When Chapter Search is started by pressing ▶ on the remote control unit, the beginning of the designated chapter is played with still frame.

If you make a mistake in pressing the digit buttons during normal search operation:

Press CLEAR, and then press the correct button.

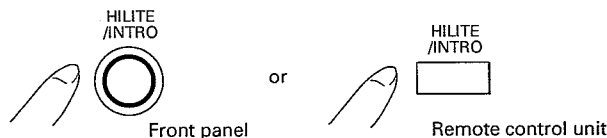
Chapter (Track) Skip – To search for the beginning of a chapter/track

Press once to return the playback position to the beginning of the chapter/track being played. If the button is pressed more than once before the picture reappears, the beginning of a chapter/track located before the chapter/track being played is searched for and played. The position of the located track corresponds to the number of times the button is pressed.



If this button is pressed once or a number of times, playback is advanced to the beginning of a chapter/track located after the chapter/track being played. The position of the located track corresponds to the number of times the button is pressed.

Hi-Lite Scan/Intro Scan



Hi-Lite scan (CD or audio part of CDV)

When HILITE/INTRO is pressed in the stop mode, playback starts from a point 1 minute after the beginning of the track, and each track is played for about 8 seconds. The HILITE/INTRO indicator is lit on the display during Hi-Lite Scan mode. (On the screen, "HILITE" is displayed.)

Hi-Lite Scan can be carried out from the desired elapsed time of the track. During playback, press HILITE/INTRO at the point you want to start Hi-Lite Scan playback. The unit memorizes the minute and second of the point and Hi-Lite Scan playback is carried out from the memorized minute and second on each track. For example, when HILITE/INTRO is pressed at the 1 minute and 30 seconds point of a track, the unit plays the portion from 1 minute and 30 seconds to 1 minute and 38 seconds of all tracks.

During the desired chapter or track is played, press ▶/|| or ▶. The unit enters play mode.

Intro Scan (LD or video part of CDV)

When HILITE/INTRO is pressed, the beginning of each chapter is played for about 8 seconds. The HILITE/INTRO indicator is lit during Intro Scan mode.

With two-sided LDs, the intro scan operation is carried out on the A side first and then carried out on the B side. After all chapters have been scanned, the normal playback starts from the beginning of the A side.

During the desired chapter or track is played, press ▶/|| or ▶. The unit enters play mode. If || on the remote control unit is pressed, the unit enters pause mode.

- With CDV, Intro Scan starts with the video part, and then the audio part will be played with Hi-Lite Scan.

NOTE:

With discs which do not contain the chapter number, Intro scan cannot be operated.

To cancel the search operation

Press CLEAR while the player is searching for the chapter or track.

TO SEARCH FOR A PARTICULAR TIME/FRAME

Time Number Search/Track Time Search/ABS Time Search/Frame Number Search

Time Number Search – Example: To search for the scene located at time number 12 min. 34 sec (CLV)

1. Press CHP/TM.

When the display shows chapter No., press this button again.

CAUTION

If a disc does not contain information on the digits of seconds, specify the time number only as far as the minute digits.

2. Enter [1], [2], [3] and [4] with the digit buttons.

If you make a mistake during entry:
Press CLEAR to reset the time number to "0.00", and then press the correct digit buttons.

3. Press ► or ►/II.

Track Time Search – To search for a time on a specified track (CD/CDV)

1. Press CHP/TM.

2. Press SKIP ◀◀ or ▶▶ so that the desired track number appears in the front panel display window.

3. Enter the track time (elapsed time from the beginning of the specified track) with the digit buttons (0 - 9).

4. Press ► or ►/II.

ABS Time Search (CD only) – To search for a point by designating the elapsed time from the beginning of the disc

1. Press CHP/TM so that "Ab" appears in the front panel display window. (On the monitor screen, "ABS" appears.)

3. Press ► or ►/II.

Playback starts from the specified elapsed time.

2. Enter the elapsed time from the beginning of the disc with the digit buttons (0 - 9).

Frame Number Search (CAV discs only) – To search by designating the frame number

Any desired frame can be searched for by specifying its frame number.

1. Press CHP/TM. When the display shows chapter NO., press this button again. "Frame 0" is displayed.

3. Press ► or ►/II.

When ► on the remote control unit is pressed, the designated frame is played as a still frame. To start normal playback, press ► again.

2. Enter the required frame number with the digit buttons (0 - 9).

NOTES:

- The +10 button does not function.
- If you make a mistake during entry, press CLEAR and press the correct digit buttons.
- If time/frame number beyond the last time/frame number on the disc is specified, Time/Frame Number Search cannot be carried out.

To exit search mode:

Press CLEAR.

WATCHING A MOVIE DISC

Film Mode

The film mode preserves the natural ambience of a movie theater in the following way:

- The screen display turns off.
- All indicators in the display window go off (The display window can be turned on/off with FL DISPLAY OFF in the film mode).

Pressing one of buttons on the front panel or remote control unit turns on the display for about 1.5 seconds.

- The screen is blanked (blanked) during stop mode and when disc is changing sides.
- The B-side TOC is not read.

The TOC is not read, in order to shorten the side-changing time as much as possible. As a result, random playback, and edit playback cannot be performed on the B side of LDs, even when the discs contain TOC codes. In addition, the remaining time, ABS time and total time displays will not function. (These displays will function normally if the side B is played back once before using the film mode).

Press **FILM MODE** on the front panel.



The FILM MODE indicator will light.

NOTE:

When set to Film mode, the display in the front panel display window will not appear, even when the power is turned on. In addition, the player memorizes the ON/OFF condition of the film mode even if the power is turned off, so the display will remain off the next time the power is turned on. To turn the display on again, press FL DISPLAY OFF.

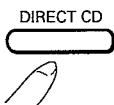
CD/CDV (Audio part)

PARTICULAR FUNCTIONS FOR CD

Direct CD

Since the picture circuit is deactivated and the interference between signals is eliminated with the Direct CD function, more pure sound can be reproduced.

1. Press **DIRECT CD** on the front panel.



- When the Direct CD function is activated, the player does not display information on the monitor screen.
- In Direct CD mode, time for starting play becomes short compared with that of normal play operation.

To exit Direct CD mode:

Press DIRECT CD again.

To play an LD:

Cancel the Direct CD mode. Otherwise, the LD cannot be set on the disc table.

NOTE:

During LD play, the player does not enter Direct CD mode even if DIRECT CD is pressed.

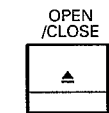
During CDV play, the player automatically turns on and off the picture circuit according to the video part or audio part in the Direct CD mode.

On screen display:

The information is displayed on the blue screen by pressing the DISPLAY button on the remote control unit. Also, when programming or editing, the information is displayed.

By turning off the screen display or canceling the input mode, the player automatically turns off the picture circuit, and the screen turns to black.

2. Press **▲** or **■/▲** to open the disc table.



or



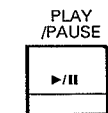
Front panel

Remote control unit

- The disc table comes out according to the CD size.

3. Load a CD on the disc table.

4. Press **▶/II** or **▶** to start playback.



or



Front panel

Remote control unit

TO PLAY ALL CHAPTERS/TRACKS IN A RANDOM ORDER

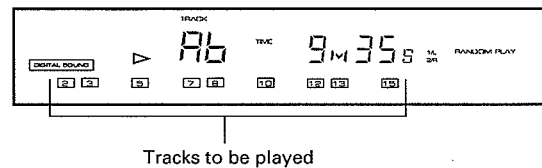
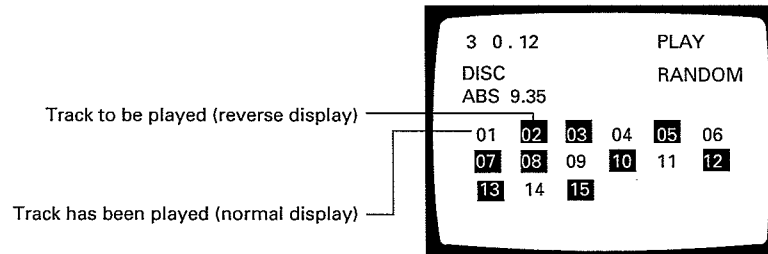
- Random Playback

Random Playback allows all chapters/tracks of one side of a disc in random order. Press RANDOM PLAY on the front panel.



Display during Random Play (CD)

To display the music calendar, press DISPLAY on the remote control unit so that the display shows time display.



NOTE:

With Random Playback, chapter No. 0 will not be played.

To go to the next chapter/track during Random Playback:

Press ►►.

(The previous chapter/track cannot be played by pressing ◀◀.)

To stop Random Playback:

Press CLEAR on the remote control unit.

After CLEAR is pressed, playback will continue in the order in which the chapters/tracks are recorded on the disc.

To enter stop mode:

Press ■ or ■/▲.

Random Playback with CDV discs:

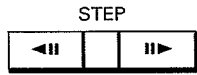
Tracks in the video and audio part are played in a random order.

Program Random Playback:

To play the programmed chapters/tracks in random order, press RANDOM PLAY during program playback.

EXTRA PLAYBACK (CAV discs only)


Still frame and Frame-by-Frame advance function



Remote control unit


During playback if STEP on the remote control unit is pressed, the picture will be frozen. At this point, the disc can be played one frame at a time in either the forward or reverse direction by pressing one of these buttons. The sound is muted during still frame or frame advance operation. To return to normal playback operation, press ►.

To vary the playback direction or speed

Press for reverse playback.  Press for forward playback.



Remote control unit

Press to decrease speed.  Press to increase speed.



Remote control unit

During playback, the playback direction can be changed with MULTI SPEED. 1/4 the normal playback speed is set automatically.

With + and - buttons, the playback speed can be changed from x3 to 1/90 the normal playback speed.

Sound is muted during Multi-speed playback operation. To return to normal playback operation, press ►.

- The selected speed is displayed by pressing DISPLAY on the remote control unit.

Faster
↑
↓
Slower

Speed display	Speed
x3	3 times the normal playback speed.
x2	Twice the normal playback speed.
x1	Normal playback speed.
1/2	1/2 the normal playback speed.
1/4	1/4 the normal playback speed.
1/8	1/8 the normal playback speed.
1/16	1/16 the normal playback speed.
1/30	1/30 the normal playback speed.
1/90	1/90 the normal playback speed.

No sound?

During Multi-speed playback, sound is not heard.

NOTE:

With CLV discs, Still Frame, Frame-by-Frame or Multi-Speed operation is not possible. If STEP or MULTI-SPEED is pressed during playback of a CLV disc, the warning message "CLV" will be displayed for about 2 seconds on the screen.

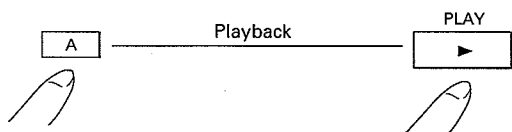
If playback automatically switches to still frame display mode

If a disc containing special signals called "picture stop codes" is played at x1, 1/2, 1/4, 1/8, 1/16, 1/30 or 1/90 speed, playback pauses automatically whenever the unit encounters a frame where a picture stop code is encoded, and the still picture of that frame is displayed on the monitor screen. To move from that position, press ►.

TO REPEATEDLY PLAY A DESIRED PASSAGE – Repeat Playback

- The REPEAT A/B buttons on the front panel are also used to carry out the following repeat playback function.

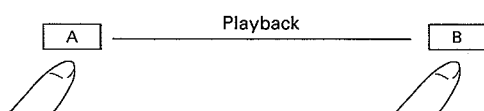
Memory Repeat – To specify a point to return to later



Press REPEAT A on the remote control unit at the point you want to see or listen to again (point A). The A indicator lights on the display window of the front panel.

When you wish to return to point A, press PLAY ► on the remote control unit.

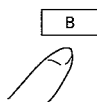
A-B Repeat – To repeat a specified section



Press REPEAT A on the remote control unit at the start point of the section to be repeated. The A indicator lights on the display window of the front panel.

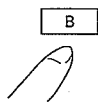
Press REPEAT B on the remote control unit at the end point of the section to be repeated. Playback returns to the beginning of the section and the section is repeated continuously. The REPEAT AB indicator lights on the display window of the front panel.

Chapter/Track Repeat – To repeat the current chapter or track



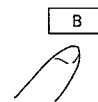
Press REPEAT B on the remote control unit while the chapter/track to be repeated is playing. The REPEAT indicator lights on the display window of the front panel. When the end of the chapter/track is reached, the player returns to the beginning of the chapter/track and the chapter/track is played back repeatedly.

One Side Repeat – To repeat an entire side of a disc (for CDs, CDV discs, and single-sided LDs)



Press REPEAT B twice. The REPEAT SIDE A or B indicator lights on the display window of the front panel. When playback reaches the end of the playback side, the player returns to the beginning of the disc and the same side is played back repeatedly.

All-Side Repeat – To repeat both side of a disc (for two-sided LDs only)

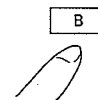


Press REPEAT B three times. The REPEAT SIDE AB indicator lights on the display window of the front panel. Sides A and B are played back repeatedly.

Program Repeat – To repeat a program

With the program repeat function, you can repeatedly play programmed chapters or tracks in their programmed order.

- See page 29 for details on programming.



Press REPEAT B while the program is being played.

Random Repeat – To repeat a random play (for CDs, CDV discs and LD with TOC)

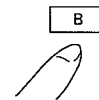
With the random repeat function, you can repeatedly play the chapters or tracks in random order.



Press REPEAT B during random playback.

Program Random Repeat – To repeat a program random play

With the program random repeat function, you can repeatedly play programmed chapters or tracks in random order.



Press REPEAT B during program random playback.

To exit repeat mode:

Press CLEAR on the remote control unit. Repeat mode is canceled and normal playback continues from the current point.

To specify a different point in Memory Repeat mode:

Press REPEAT A at the new point. The previously memorized point is erased and replaced with the new point.

Memory Repeat and A-B Repeat with CDV discs:

These repeat functions can only be carried out within the video part or within the audio part, and cannot be carried out between the two parts.

With LDs which have no chapter numbers:

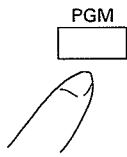
Chapter repeat cannot be carried out. With these LDs, REPEAT B is pressed once, one-side repeat will be carried out and REPEAT B is pressed twice, two-side repeat will be carried out.

TO PLAY ONLY DESIRED SCENES/TRACKS – Program Playback

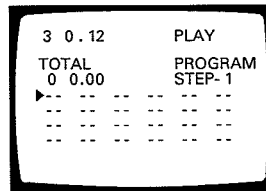
Selected chapters (LD) or tracks (CDV/CD) can be played in any desired order (max. 24 chapters or tracks).

- You can view the state of programming on the monitor TV screen.

1 Press PGM.



Screen display for programming (CD or CDV)

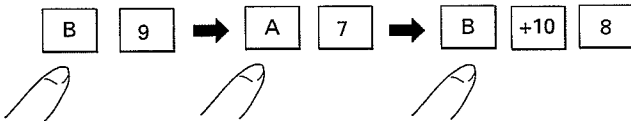


2 Select the desired chapters or tracks.

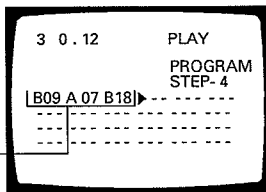
With two-sided LDs, first specify side A or side B with DISC SIDE A or B and then enter the number of the desired chapter with the digit buttons. With single-sided LDs, CDs, and CDV discs, just enter the number of the desired chapter or track with the digit buttons.

Example (A)

To program chapter 9 on side B, chapter 7 on side A, and chapter 18 on side B, in that order.



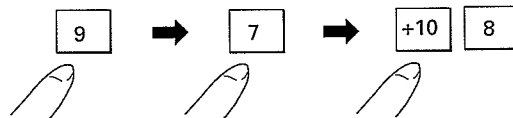
Screen display after programming is completed



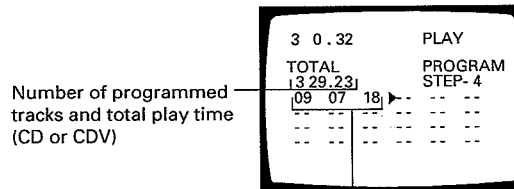
Programmed chapters

Example (B)

To program CD tracks 9, 7, and 18 in that order.



Screen display after programming is completed



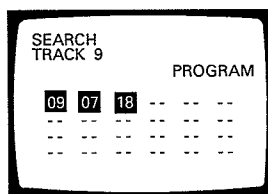
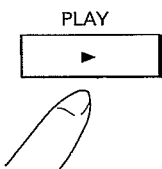
Number of programmed tracks and total play time (CD or CDV)

Programmed track numbers

If you make a mistake during entry:

Press CLEAR and enter the correct number with the digit buttons.

3 Press ►.



The chapters/tracks are played in the programmed order. When all programmed chapters/tracks have been played, the player enters stop mode.

To stop program play in the middle:

- Press ■ on the front panel of the player or EJECT ■/▲ on the remote control unit.
- Press CLEAR on the remote control unit.

To clear the program contents:

- Open the disc table.
- Press CLEAR on the remote control unit in stop mode.

Programming a pause:

When recording on a cassette tape, a programmed pause allows you to change the tape side or to record a blank section on the tape which is useful for music search functions, etc.

When a program is in pause mode, pressing PAUSE ■ resumes disc playback, so restart recording before pressing PAUSE ■.

To program a pause:

In step 2 of the above procedure, press PAUSE ■ instead of entering a chapter or track number.

NOTES:

- A pause cannot be programmed for step 1, nor for two consecutive steps.
- A pause can be programmed for the last program step, however, it will not be effective.

Program Playback

To check the program contents

During program playback or in stop mode, press PGM to display the program contents on the monitor screen. When PGM is pressed again, the program contents disappear.

To modify the program contents

To erase a programmed chapter/track or pause

1. Press PGM.
2. Press SKIP I◀◀ or ▶▶I to place the cursor (▶) on the left side of the chapter/track or pause to be erased.
3. Press CLEAR.
4. Press PGM to complete programming. Pressing ▶ also completes programming and starts program playback with the new program contents.

To change a programmed chapter/track or pause to a new one

1. Press PGM.
2. Press SKIP I◀◀ or ▶▶I to place the cursor (▶) on the left side of the chapter/track or pause to be changed.
3. Enter the new chapter/track number with the digit buttons. Press PAUSE II to enter a pause.
4. Press PGM to complete programming. Pressing ▶ also completes programming and starts program playback with the new program contents.
 - A programmed chapter/track being played cannot be erased or changed.
 - A programmed pause already engaged cannot be erased or changed.

Programmed pause indication:

On the monitor screen – II

In the front panel display window – PA

To go to the previous or next chapter (track) in a program:

Press SKIP I◀◀ or ▶▶I on the remote control unit.

Total time display (CD and CDV only):

When programming for CD or CDV, the total time of the programmed tracks is displayed. If the total time exceeds 100 minutes, 100's digit will not be displayed in the display window of the front panel.

- If track No. 33 or more is programmed, the total time will not be displayed.

To view the program contents:

Program contents can be viewed in the front panel display window.

- Programmed chapter/track numbers light up on the visual calendar.
- Program contents are sequentially displayed by pressing SKIP I◀◀ or ▶▶I.

CAUTION

- If SCAN control is rotated clockwise during Program Playback, the playback position will move to another chapter/track, but when SCAN control is released, the next chapter/track in the program will be played. If SCAN control rotated counterclockwise, the playback position returns to the beginning of the current chapter or track being played, but it will not go beyond it to a previous chapter or track in the program.
- If MULTI-SPEED ▶ is pressed during Program Playback, the next track in the program will be played. If MULTI-SPEED ◀ is pressed, the playback position returns to the beginning of the current chapter being played, and the player enters normal play mode.
- If a chapter number or track number which is not present on a disc is specified in a program, the program may not be executed.

PROGRAMMING CHAPTERS/TRACKS TO BE PLAYED BACK WITHIN A SPECIFIED TIME PERIOD – Compu Program/Auto Program Edit

If the total playing time of both sides of the tape is specified, chapters/tracks are automatically programmed for both sides of the tape.

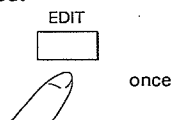
Compu Program Edit

The player selects the chapters/tracks so that their total playing time becomes the specified playing time as near as possible.

Auto Program Edit

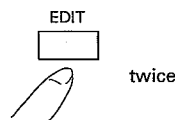
Chapters/tracks are selected within the designated time, starting from the first track.

1 Press EDIT once.

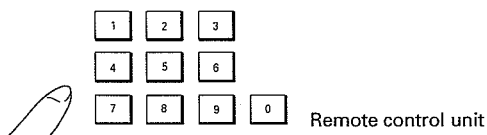


- With LD discs, after playback is performed, press EDIT.
- When EDIT is pressed during playback, the player enters pause mode.

1 Press EDIT twice.



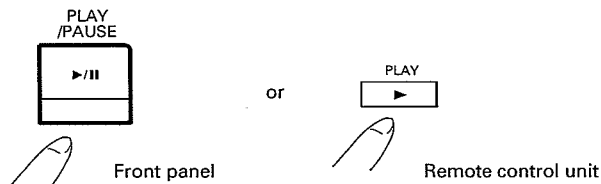
2 Set the total playing time of both sides of the tape in minutes with the digit buttons (0 - 9).



Press two digit buttons rapidly. For example, to enter 46 minutes, press the **4** button and the **6** button sequentially.

3 Press ►/II or ►.

Program playback starts.



When playback of the first program is completed, the player enters pause mode. To play another program, press ►/II or ►. When all programs have been played, the player enters stop mode.

To clear program contents:

Press CLEAR on the remote control unit.

To specify the first track to be programmed:

Only the track to be played first can be specified.

1. Press EDIT.
2. Select the desired track by pressing SKIP ◀◀ or ▶▶.
3. Set the playing time with the digit buttons.

If the specified time is too short for any track to be programmed:

Programming cannot be performed.

NOTES:

- With discs contained 33 tracks or more, programming may not be correctly performed.
- With Compu Program Edit function, the programmed total playing time is not occasionally close to the specified time compared with Auto Program Edit.
- With LD discs, chapter No. 0 will not be programmed.
- With LD discs, when chapter No. 1 is programmed, the programmed total playing time may slightly differ from the actual calculation. This is not a malfunction.

TROUBLESHOOTING

Incorrect operations are often for trouble and malfunctions. If you think that there is something wrong with this component, check the points below. Sometimes the trouble may lie in another component. Inspect the other components and electrical appliances being used. If the trouble cannot be rectified even after executing the checks listed below, ask your nearest PIONEER authorized service center or your dealer to carry out repair work.

SYMPTOM	CAUSE	REMEDY
1. Disc table is not ejected when OPEN/CLOSE is pressed.	<ul style="list-style-type: none"> ● Power cord is not properly plugged into AC wall socket. ● Power switch is not turned on. 	<ul style="list-style-type: none"> ● Plug in power cord. ● Turn on power switch.
2. Disc table comes out.	<ul style="list-style-type: none"> ● Disc is dirty. ● The disc is not properly set on the disc table. ● Moisture has condensed on parts in the player. ● Disc is warped. 	<ul style="list-style-type: none"> ● Clean disc. ● Set the disc properly. ● Remove disc and let player stand for 1 to 2 hours until it is dry. ● Try to alleviate the warp. (Refer to Symptom 7, remedy column.)
3. Remote control does not work.	<ul style="list-style-type: none"> ● The CONTROL IN terminal on the rear panel is connected to Pioneer projection monitor or AV amplifier. ● Batteries are weak. ● There is an obstacle between the player and the remote control unit. ● Remote control unit is not in a good location for transmission. 	<ul style="list-style-type: none"> ● Aim the remote control unit at the projection monitor or AV amplifier. ● Replace batteries. ● Remove the obstacle or shift the remote control position. ● Operate the remote control unit in front of the player.
4. Operation of the remote control unit causes the TV to operate improperly.	<ul style="list-style-type: none"> ● Some TV sets have remote control functions that operate improperly in response to the remote control unit of the player. 	<ul style="list-style-type: none"> ● Move the TV and the player further apart, or cover the remote sensor of the TV during disc playback.

Abnormal functioning of this unit may be caused by lightning, static electricity, or other external interference. To restore normal operation, turn the power off and then on again, or unplug the AC power cord and then plug it in again.

WHEN A LASERVISION DISC IS BEING PLAYED

SYMPTOM	CAUSE	REMEDY
5. Disc is rotating but there is no picture.	<ul style="list-style-type: none"> • The TV set is not turned on. • Wrong connections from player to TV. 	<ul style="list-style-type: none"> • Turn on TV. • Make correct connections.
6. Picture continuously moves vertically.	<ul style="list-style-type: none"> • The TV vertical hold control is not adjusted properly. 	<ul style="list-style-type: none"> • Adjust vertical-hold control on TV.
7. Particular disc does not playback properly. The playback stops in the middle of the disc program.	<ul style="list-style-type: none"> • The playing surface of the disc is dirty. • The disc is warped. 	<ul style="list-style-type: none"> • Use a soft cloth and lightly wipe off the dirt from the surface of the disc. If necessary, moisten a cloth with diluted neutral detergent to remove heavy dirt or fingerprints. • LD discs only Put the disc into the protective envelope, then place it on a flat desk top. Subsequently, place a flat board e.g. glass plate on the disc, and load it with about 4 ~ 5 kgs. If it is left in this state for one day, sometimes the warp will be alleviated. <div data-bbox="991 857 1361 1099" style="text-align: center;"> <p>Heavy books about 4 ~ 5 kgs</p> <p>Glass plate</p> <p>LD disc</p> <p>Glass plate</p> <p>Protective envelope</p> </div>
8. Sound is unnatural or distorted.	<ul style="list-style-type: none"> • CX system is turned ON for disc which has no CX mark. 	<ul style="list-style-type: none"> • Press D/A/CX to turn CX system OFF.
9. No sound output during playback.	<ul style="list-style-type: none"> • MULTI-SPEED or STILL/STEP playback is being performed. Sound is output only during the normal play mode. The audio signals are not output during other playback modes. • An analog audio disc with PAL system played. (No sound is output with analog audio disc with PAL system.) 	<ul style="list-style-type: none"> • Press PLAY or PLAY/PAUSE to set the player to normal play mode. • _____
10. During STILL playback, a part of the screen image shakes.	<p>_____</p>	<ul style="list-style-type: none"> • Even if the disc is an active play disc, there may be some cases in which a fully still image cannot be obtained, but this does not mean that the player or the disc is defective.
11. CHAPTER SKIP, CHAPTER PROGRAM PLAY and CHAPTER NUMBER SEARCH cannot be performed.	<ul style="list-style-type: none"> • Disc in which no chapter numbers are recorded is loaded. 	<ul style="list-style-type: none"> • Press DISPLAY to check if chapter number is displayed.
12. Certain discs take too long to search or are not searched.	<ul style="list-style-type: none"> • It takes time to read the recorded code, depending on the disc. 	<ul style="list-style-type: none"> • Press CLEAR and picture will appear. (At this point, a slightly different scene from that which has been searched for may appear.)

TROUBLESHOOTING

SYMPTOM	CAUSE	REMEDY
13. Certain discs take too long to start or do not start.	<ul style="list-style-type: none"> There are errors when the disc code is read (There is no damage to the unit). 	<ul style="list-style-type: none"> Press ■ or ■/▲ and stop the playback. Press ► or ►/ and start the playback again. (Repeat this operation a few times.)
14. The player takes too long to find point A during A-B (INTERVAL) REPEAT operation.	<ul style="list-style-type: none"> Same as item 12 above. 	<ul style="list-style-type: none"> Same as item 12 above. (The repeat mode is cancelled).
15. Picture other than instructed is searched in TIME NUMBER SEARCH mode.	<ul style="list-style-type: none"> Method of inputting numerals in the TIME NUMBER SEARCH mode differs, depending on whether time number is recorded on disc in minutes or minutes and seconds, as shown below: [e.g.] 12-minute search Disc in which time number is recorded in minutes <div style="text-align: center;"> <p>CHP/TM 1 2 PLAY "minutes"</p> </div> <ul style="list-style-type: none"> Disc in which time number is recorded in minutes and seconds <div style="text-align: center;"> <p>CHP/TM 1 2 0 0 PLAY "minutes" "seconds"</p> </div>	

WHEN PLAYING BACK A COMPACT DISC

SYMPTOM	CAUSE	REMEDY
16. Player stops immediately after playback is started.	<ul style="list-style-type: none"> Disc is loaded upside down (CD, CDV, onesided LD discs). The playing surface of the disc is dirty. Disc is not properly set on the disc table. 	<ul style="list-style-type: none"> Load the disc correctly with the label side upward. Use a soft cloth and lightly wipe off the dirt from the surface of the disc. If necessary, moisten a cloth with diluted neutral detergent to remove heavy dirt or fingerprints. Set the disc properly.
17. No sound output	<ul style="list-style-type: none"> The stereo amplifier is not correctly connected. You are not operating the stereo amplifier correctly. The connection terminals and/or the plugs of the connection cords are dirty. The plugs of the connection cords are disconnected, or are not fully pushed in. The player is in pause mode. 	<ul style="list-style-type: none"> Connect the amplifier correctly. Refer to the operating instructions for the amplifier, and operate the amplifier correctly. Clean the plugs and terminals and connect again. Make sure that connections are made correctly. Press ► or ►/ and restore the player to play mode.
18. Sound is distorted.	<ul style="list-style-type: none"> The audio output jacks are connected to the PHONO jacks. The connection terminals and/or the plugs of the connection cords are dirty. The plugs of the connection cords are not fully pushed in. 	<ul style="list-style-type: none"> Connect to the AUX, CD, VDP or LD jacks. Clean the plugs and terminals and connect again. Push the plug in firmly.

ERRATUM

There is an error under the heading "SPECIFICATIONS" on page 35 in the Operating Instructions. Please refer to the correct information shown below.

INCORRECT

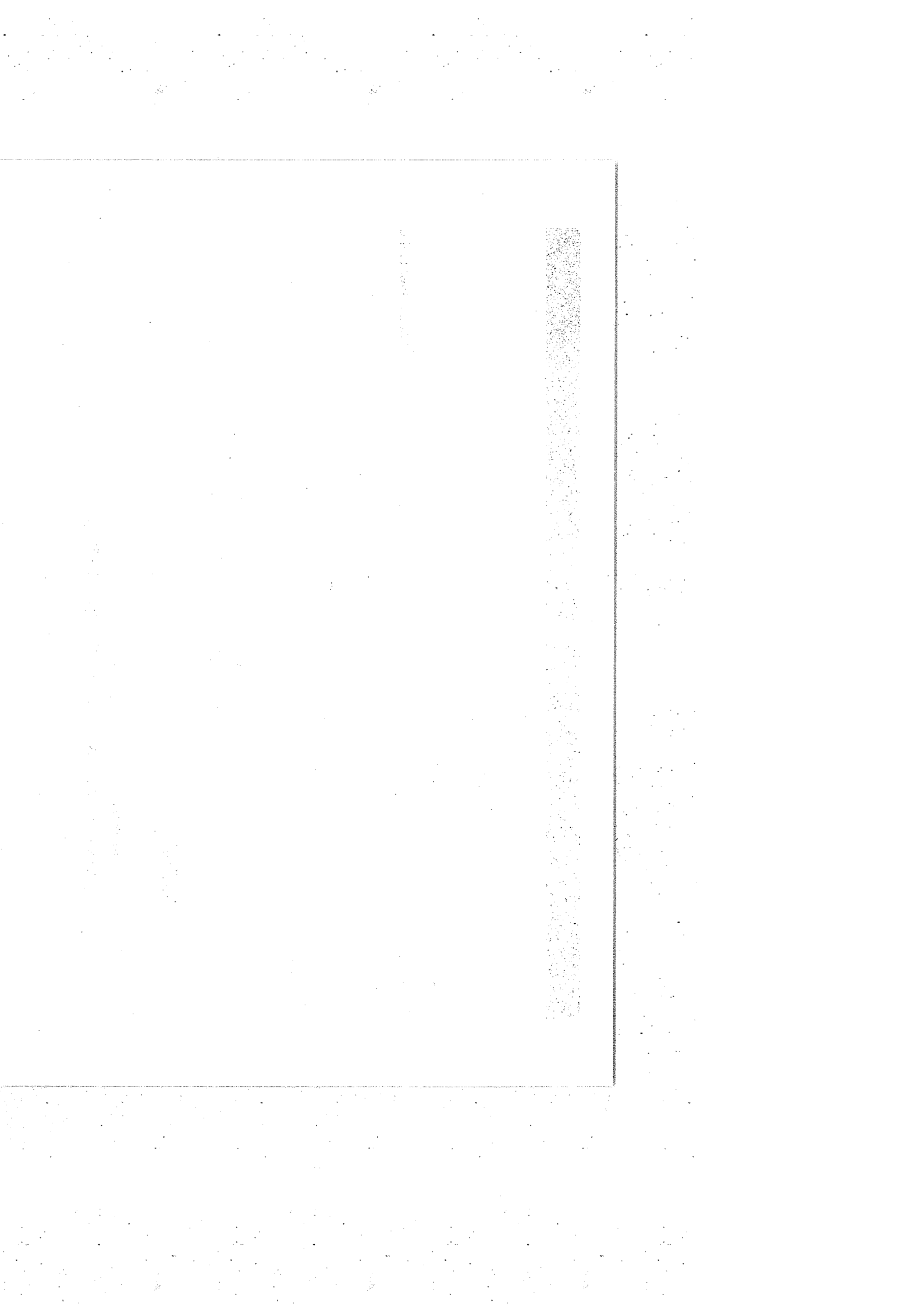
1. General

Power requirements.....AC 220~230V, 50/60Hz

CORRECT

1. General

Power requirements.....AC 220~240V, 50/60Hz



SPECIFICATIONS

1. General

System	LaserVision Disc system and Compact Disc digital audio system
Laser	Semiconductor laser wavelength 780 nm
Power requirements	AC 220 ~ 230 V, 50/60 Hz
Power consumption	43 W
Weight	8.6 kg
Dimensions	420 (W) x 435 (D) x 135 (H) mm 16-9/16 (W) x 17-1/8 (D) x 5-5/16 (H) in
Operating temperature	+5°C ~ +35°C (41°F - 95°F)
Operating humidity	5% ~ 85% (There should be no condensation of moisture.)

2. Disc

LaserVision Discs

PAL disc

*Maximum playing times	
30 cm active play disc	72 min/both sides
30 cm long play disc	2 hours/both sides
20 cm active play disc	28 min/both sides 14 min/one side
20 cm long play disc	40 min/both sides 20 min/one side
Spindle motor speed	
Active play disc	1,500 rpm
Long play disc	1,500 rpm (inner circumference) to 570 rpm (outer circumference) (For a 30 cm disc)

NTSC disc

*Maximum playing times	
30 cm standard play disc	1 hour/both sides
30 cm extended play disc	2 hours/both sides
20 cm standard play disc	28 min/both sides 14 min/one side
20 cm extended play disc	40 min/both sides 20 min/one side
Standard play disc	
Extended play disc	1,800 rpm (inner circumference) to 600 rpm (outer circumference) (For a 30 cm disc)

Compact Discs

DISC	Diameter: 12 cm, 8 cm, Thickness: 1.2 mm
Rotation direction (pickup side)	Counterclockwise
Linear speed	1.2 ~ 1.4m/sec
*Maximum playing time	
	74 min. 12 cm discs 20 min. 8 cm discs (For stereo playback)

Compact Discs with Video

Disc	Diameter: 12 cm, Thickness: 1.2 mm
Rotation direction (pickup side)	Counterclockwise
Linear speed	Audio portion: 1.2 ~ 1.4m/sec Video portion: 11 ~ 12m/sec
*Maximum playing time	
	Video portion: 5 min. (CLV) Audio portion: 20 min. (Digital)

* Actual playback time differs for each disc.

3. Video characteristics

Format	PAL/NTSC specifications
Video output	
Level	1 Vp-p nominal, sync. negative, terminated
Impedance	75Ω unbalanced
Jack	RCA jack

4. Audio characteristics

Output level	
During analog audio output	200 mVrms (1 kHz, 40%)
During digital audio output	200 mVrms (1 kHz, -20 dB)
Jacks	Both RCA jacks
Number of channels	2

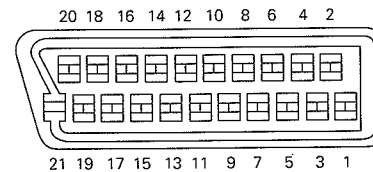
Digital Audio Characteristics

Frequency response	4 Hz - 20 kHz
SN ratio	112 dB (EIAJ)
Dynamic range	97 dB (EIAJ)
Total harmonic distortion	0.003 % (EIAJ)
Wow and flutter	Limit of measurement (EIAJ)

5. Other Terminals

Control input/output	Both miniature jacks
CD-DECK synchro	Miniature jack
Optical digital output	Optical digital jack
AV connector output	21-pin connector
This connector provides the video and audio signals for connection to a colour video TV monitor (or TV set) which has a "AV CONNECTOR" terminal.	

PIN assignment



PIN no.	1 Audio 2/R out	17 GND
	3 Audio 1/L out	19 Video out
	4 GND	21 GND
	8 Status	

6. Accessories

Remote control unit (CU-CLD081)	1
Size "AAA" (IEC R03) dry cell batteries	2
Euroconnector cable	1
Audio cord	1
Operating instructions	1
Warranty card	1

SPECIFICATIONS

7. Functions

Remote control unit operations (CU-CLD081)

	Function	Active play Disc (CAV)	Long play Disc (CLV)	Compact Disc with Video	Compact Disc
Basic Functions	Two-side play	YES	YES	NO	NO
	Single-side play	YES	YES	YES	YES
	Pause	YES	YES	YES	YES
	Stop	YES	YES	YES	YES
Search	Fast forward (forward and reverse)	YES	YES	YES	YES
	Chapter/Track skip	YES	YES	YES	YES
	Direct chapter/Track number search	YES	YES	YES	YES
	Frame number search	YES	NO	NO	NO
	Time number search	NO	YES	YES	YES
	Absolute time search	NO	NO	NO	YES
Program	Chapter/Track program play	YES	YES	YES	YES
	Program correction	YES	YES	YES	YES
Repeat	Repeat between 2 points	YES	YES	YES	YES
	Memory repeat	YES	YES	YES	YES
	Chapter/Track repeat	YES	YES	YES	YES
	One-side repeat	YES	YES	YES	YES
	All-side repeat	YES	YES	NO	NO
	Program repeat	YES	YES	YES	YES
	Random repeat	YES*1	YES*1	YES	YES
	Program random repeat	YES	YES	YES	YES
Trick play	Still/Step	YES	NO	NO	NO
	Multi-speed (Forward/reverse 9-level variable)	YES	NO	NO	NO
Time display	Elapsed time display	NO	YES	YES	YES
	Absolute time display	YES*1	NO	NO	YES
	Remaining track time display	NO	NO	YES	YES
	Remaining total time display	YES*1	YES*1	YES	YES
	Total number of selections, total time display	YES*1	YES*1	YES	YES
Others	Compu program/Auto program edit	YES*1	YES*1	YES	YES
	Hi-Lite scan	NO	NO	YES*4	YES
	Intro scan	YES	YES	YES*5	NO
	Digital level control	YES*3	YES*3	YES	YES
	CX system ON/OFF	YES*2	YES*2	NO	NO
	Audio channel selection (Stereo, 1/L, 2/R)	YES	YES	YES	YES

*1 Only discs with TOC

*2 Valid for analog audio playing a disc with the mark.

*3 Can only be used with discs with digital audio tracks.

*4 Audio part only

*5 Video part only

NOTE:

The specifications and design of this product are subject to change without notice, due to improvements.

PLAYER FUNCTIONS

- Display, Visual Calendar Display
- Intro Scan, Hi-Lite Scan, Direct CD, Digital Level Control, Random Playback, Program Random Playback and Compu Program/Auto Program Edit
- Digital Audio for LaserVision Discs
- Last Memory

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