SUPER AUDIO CD PLAYER

D-100 CENTENNIAL

Owner's Manual

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Precautions

Do not move this unit during playback.

During playback, the disc is rotating at high speed. Do not try to lift or move this unit as the disc may be damaged. Otherwise, the disc may be damaged.

When moving this unit

You must remove the disc and close the disc tray when moving this unit. Then, press the OPERATION button, and after "-STANDBY-" on the display window turns off, unplug the power cord from the AC outlet. If the unit is moved with a disc remaining inside, this can cause a malfunction.

Installation location

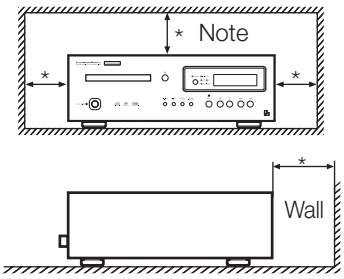
Install this unit in a location where good ventilation and heat radiation are assured.

Especially, installation of this unit where direct sunlight is present, where the temperature rises excessively high such as close to a heater, or where it is humid or dusty may cause a malfunction even if heat is efficiently released.

Therefore, do not install this unit in such places.

Note:

For heat dispersal, do not install this equipment in a confined space such as a book shelf or similar unit.



- Choose a stable place near the stereo system that is to be used in combination with this unit.
- Do not install this unit near a television or color monitor. Keep this unit away from magnetically sensitive devices such as cassette decks.
- Install this unit on a level surface.

Avoid the following locations for installation

- Locations exposed to direct sunlight
- Locations subject to humidity and which lack ventilation
- Locations that are extremely hot or cold
- Locations which experience strong vibration
- Dusty locations
- Locations subject to oil, steam, and heat (such as kitchens)

Do not cover.

Do not cover or place any items or other units on top of this unit.

Avoid sources of heat

Do not place this unit on top of any device as an amplifier that may emit heat. If the unit is installed on a rack install the unit below the rack where the amplifier is installed so as to avoid heat emission from the amplifier and other audio devices.

Notice when this unit is installed in a rack with glass doors

While the glass doors are closed, do not open the disc tray by pressing the open/close (⏏) button of the remote control. Disc tray performance will be blocked, and that may result in a malfunction.

Turn off this unit when it is not used.

Depending on the condition of radio waves emitted during television broadcasting, interference fringes may appear on the television monitor, but that is not a malfunction. In such a case, turn off the unit. There may also be a case where noises are heard on the radio due to radio wave interference.

Condensation

In winter, be careful when carrying this unit from a cold place to a warm place or if the room temperature where this unit is installed is suddenly raised by a heater. The unit interior operating mechanism and lens may collect condensation. Under such conditions, this unit will not work normally and playback may be impossible. This depends on the amount of condensation. If the unit is turned on and left untouched for one to two hours, the operating temperature of this unit will dry any condensation.

Even in summer, if air from an air conditioner blows directly on this unit, condensation may occur. In such a case, the installation place should be changed.

Batteries

Warning: Batteries used for the remote control shall not be exposed to excessive heat such as sunshine, fire or the like.

How to handle discs

- Do not use any deficient disc (cracked, warped, etc.).
- Do not damage the signal surface of the disc or make it dirty.
- Do not place paper or a stickers on the disc. Such awkward handling can warp the disc and playback may become impossible. In many cases, rental discs carry labels and glue may leak from under the label. Before use, check that the disc is free from leaking glue or the like.
- Do not play two discs in a stack.
- Some discs with a printable surface, so-called “printable CD-Rs”, easily stick to the mechanism which holds the CD during playback. Please do not use such discs as it may become impossible to eject the disc or cause a failure of the unit.

How to store discs

- Always put your discs in a case. Store them vertically where high temperature, high humidity, and direct exposure to sunlight are not prevalent. Places with extremely low temperature should also be avoided.
- Read the caution notes carefully that are attached to discs.

Disc cleaning

- If a disc is dirty from fingerprints or dust, this may affect sound quality. Lightly wipe the disc with soft cloth, from the inside to outer edge. (Don’t wipe it with a circular motion.)
- Do not use a volatile chemicals such as benzine or thinners. Record spray, anti-static agents, and other such cleaners must not be used either.
- If a disc seems to be very dirty, dip soft cloth in water, wring it well, wipe away the dirt and finally remove the moisture with dry cloth.

Specifically designed discs

This unit cannot play discs with specifically designed shapes such as heart-shaped or hexagonal discs. Never use such discs as they can cause malfunctions.

Lens cleaning

If the lens gets dusty, discs may skip during playback.
Please read “After-sales Services and Quality Assurance” and ask us for cleaning. Do not use any commercial cleaning discs available because they may damage the lens.

Notice on handling optical digital cables

- Do not fold the cables. For storage, wind each cable into a coil about 15 cm in diameter or larger.
- For connection, insert the cable connectors firmly into the terminals of this unit and the other device.
- Only use 3 meter long cables or shorter.
- When the cable connectors get dusty, wipe the dust away with a dry soft cloth before inserting into the terminals.

Cleaning

- Usually, wipe the unit with a dry soft cloth. When the dirt is hard to remove, dip a soft cloth in detergent diluted 5 or 6 times with water, wring it well, and remove contaminants. Then, remove the moisture with dry cloth.
- Do not use a solvent like alcohol, benzine, thinner, or pesticide because such a substance can damage the exterior. In addition, do not let this unit contact a rubber or plastic foam for a long time. That may damage the cabinet surface of the unit.
- Before cleaning, unplug the power cable from the AC outlet.

Safety caution

Warning

This unit is heavy. Be careful when unpacking, carrying, and installing it.
Take care if you try to perform all the installation work yourself to avoid injury.

Features of This Unit —— 2-channel-specific Super Audio CD/CD Compatible Player

LxDTM improved — Luxman original Disc Transport Mechanism —

The side frame, spanning front to rear, forms a highly rigid chassis made from 8 mm thick aluminum and is solidly integrated with the disc transport mechanism. Moreover, we have adopted an SSB (Stabilized Support Block) that ensures unshakable rigidity by connecting the left and right side frames with an 8 mm-thick aluminum base plate, together with a 5 mm-thick steel top plate.

The aluminum die-cast disc tray suppresses vibration and resonance, while the QLL (Quiet Linear Loader) ensures quiet, smooth opening and closing of the disc tray.

Shutter mechanism

The dust-proof shutter (DPS) prevents dust from entering the unit and provides sound insulation.

Analog circuitry

Four-channel discrete amplifiers using LIFES 1.1 are employed to achieve fully balanced signal transmission from the D/A converter.

The discrete amplifier features a raw gain of 6 dB and employs the LIFES (Luxman Integrated Feedback Engine System) architecture.

LIFES 1.1 further reduces distortion by paralleling the input-stage FETs in the error-detection circuit between the input signal and the output signal amplified by the main amplifier.

BD34302EKV manufactured by ROHM Co., Ltd. equipped

This unit features ROHM's BD34302EKV DAC chips in independent left and right dual monaural configuration.

USB input: Supports up to 768 kHz / 32-bit

The B-type USB input terminal makes it possible to input USB digital audio signals from a PC or Mac.

Sampling frequencies of up to 768 kHz with 32-bit quantization are supported.

USB input supports DSD

DSD formatted data can be input from a PC or Mac, or the like.

Sampling frequencies of 2.8 MHz/5.6 MHz/11.2 MHz/22.5 MHz are supported.

Asynchronous communication supported

The USB input's low jitter characteristics have been achieved by a dedicated DSP chip using asynchronous communication and PLL.

When using a PC or Mac, the user can select either normal isochronous transmission or Bulk Pet transmission, which levels the transmission load and achieves high sound quality, by using the dedicated driver software.

Ultra-low phase noise crystal oscillator circuit

This unit uses a large crystal resonator together with an extremely low-noise oscillator IC that exhibits very low phase noise near the oscillation frequency, supplying a low-jitter clock signal.

Disc layer switchover function

By pressing a single button on the main unit or the remote control, the listener can switch between the layers of a Hybrid Super Audio CD.

Zoom function

When the ZOOM button is pressed on the remote control, enlarged track number and time information can be displayed.

4 playback modes

Playback mode can be selected from regular, programmed, random, and repeat playback modes.

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*1 Mac and Mac OS are trademarks of Apple Inc., registered in the U.S. and other countries.
*2 Windows is a registered trademark of Microsoft Corporation in the United States and/or other countries.
*3 DSD is a trademark.
*4 Bulk Pet is a registered trademark of INTERFACE Co., LTD.
*5 The described company names and product names are trademarks or registered trademarks of each company.

Features of This Unit

Digital input terminals

This unit is equipped with a coaxial input terminal and two optical input terminals.

It is compatible with S/PDIF formatted signals between 44.1 kHz and 192 kHz.

The DoP (DSD over PCM) formatted signals support DSD64 (2.8 MHz).

Low jitter digital inputs (S/PDIF) have been achieved by using TI's PCM9211 PLL chips.

Digital audio signals from other audio devices are played back with significantly improved audio quality.

DD converter function

Signals encoded at 192 kHz/24 bit or less, including USB input, can be output digitally via S/PDIF.

Last memory function

Built-in flash memory stores settings such as digital input, Super Audio CD/CD, and digital filter selections.

High-definition organic EL display

A large and high-definition organic EL display is provided for easy viewing of the selected input, track information during CD playback, format during USB playback, and sampling frequency, and more.

Dimmer function

The brightness of the organic EL display can be adjusted with 4 brightness levels.

Digital output OFF

The digital audio output can be deactivated to improve the quality of the analog audio output.

Analog output terminals

The unit is equipped with original high-rigidity RCA terminals and Neutrik XLR terminals.

Analog output phase switching

Both balanced output and unbalanced output are phase switchable.

Original technologies

Our traditional, non-angled circuitry, OFC internal wiring, and original custom-made components are used throughout the unit.

Peel coat, PCB

By gold-plating 100 µm-thick copper foil on the audio circuit boards without applying resist, the dielectric effect of resist is minimized.

Cast-iron insulators

For stability and support, this product features cast iron feet with vibration reducing density gradient.

Remote control (RD-21)

The remote control is encased in aluminum.
Tactile switches will satisfy users with a light key touch.

Highly stable power supply

The unit is equipped with a high-inertia power supply circuit that combines a large-capacity CI-core-type power transformer with a custom-designed capacitor block consisting of four 10,000 µF capacitors and seven 3,300 µF capacitors.

Schottky barrier diodes

By using Schottky barrier diodes manufactured by KYOCERA Corporation in the power rectifier circuitry, this unit achieves high DC conversion efficiency while significantly reducing switching noise.

LUXMAN's original OFC wiring

Our original OFC cable, with non-plated core wire, is used for internal wiring to achieve smooth signal transmission.

About Discs This Unit Can Play Back

Types of discs that can be played

The following marks are printed on disc labels, packages, or CD jackets.

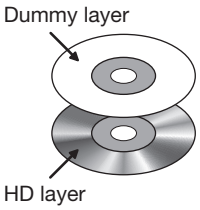
Marks for types of discs this unit can play back			
SACD			
CD	CD-R	CD-RW	

This unit can play back 8 cm CDs without using an adapter. Do not use an adapter for 8 cm CDs.

- **CD-R/CD-RW discs that have been written by a recorder or PC may not be played back (due to characteristics of discs, scratches, dirt on discs, dirt on the lens of the unit, condensation, etc.).**
- **Discs written by a PC may not be played back depending on the application settings or environment. Write the discs in a proper format. (Refer to the distributor of application for details.)**
- **Time information may not be displayed when an unfinalized CD-R/CD-RW disc is played back.**
- **Refer to the precautions for discs for details on how to handle CD-R/CD-R discs.**

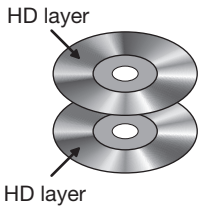
Super Audio CD — 3 types of disks —

• Single-layer CD



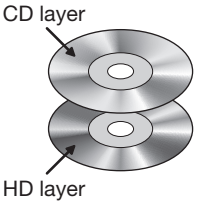
This is a disc which has a single Super Audio CD layer.

• Dual-layer CD



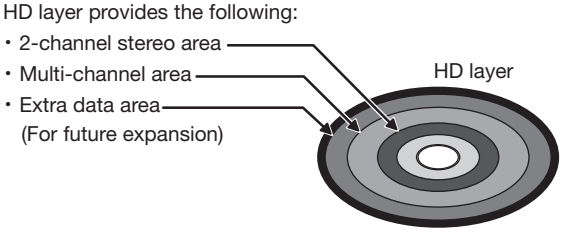
This is a CD which has a dual Super Audio CD layer that supports long recording times.

• Hybrid-layer CD



This is a CD which has both a standard CD layer and Super Audio CD layer. When the disc is played back on a Super Audio CD player, it is possible to enjoy improved sounds quality from the HD layer. When the disc is played back on an existing CD player, it is only possible to play back sounds from the CD layer.

HD layer: Super Audio CD layer
CD layer: Existing CD layer



Comparison of Super Audio CDs with CDs

Item	Super Audio CD	CD
Disc diameter (cm)	12	12
Disc thickness (mm)	1.2	1.2
Coding method	1-bit direct stream digital (DSD)	16-bit linear PCM
Sampling frequency	2.8224 MHz (64 times to CDs)	44.1 kHz
Maximum recordable time	109 minutes for 2ch only. 60 to 70 minutes for 2-channel stereo area + multi-channel area *1	74 minutes
Number of channels	2, 3, 3.1, 4, 4.1, 5, 5.1	2
Maximum number of tracks	255	99
Maximum number of indexes	255	99
Playback frequency range	DC to 100 kHz	5 to 20 kHz
Dynamic range *2	120 dB or more (audible range)	96 dB

*1 This is the maximum recordable time for a single-layer CD. Depending on the compression rate of DST (Direct Stream Transfer)*3, the maximum recordable time may vary.

*2 Theoretical value

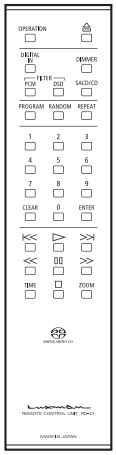
*3 Lossless compression method that applies a variable bit rate for DSD signals. The method has been developed, focused on the DSD signal characteristics.

Before Use

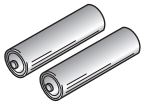
Check the accessories

Whilst unpacking, check if the following accessories are included.

- Power cable
- Remote control (RD-21)



- Two “AAA” batteries

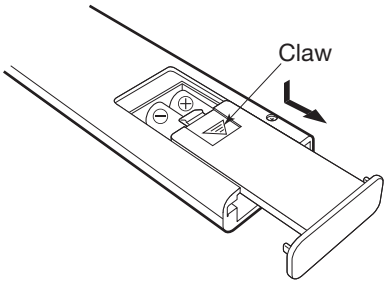


- Safety cautions
- Owner’s Manual (This document)

How to Use the Remote Control

Insert batteries into the remote control

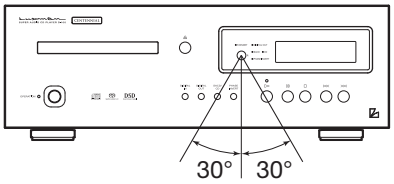
1. Remove the battery cover on the rear of the remote control. Put your finger on the battery cover claw and slide the cover downward to remove the cover.
2. Put 2 AAA batteries in the battery case as shown in the illustration on the battery case paying attention to the battery polarity ((+) and (–)).
3. In the reverse order of battery cover removal, put the battery cover back to the opening of the remote control and slide the cover upward until it clicks.

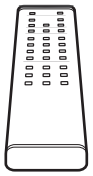


- **Do not use a combination of new and old batteries together.**
- **There may be a case in which the voltages are different between two batteries even though they are the same size. Do not use batteries of different types together.**
- **If the remote control is not used for a long time (more than 1 month), the batteries shall be removed from the case. If battery fluid is leaking, wipe away the liquid from the case before inserting new batteries.**
- **To discard exhausted batteries, follow the instructions from your local authority.**

Remote control's range

To use the remote control, aim it at the remote control infrared receiver on the front panel of main unit. The effective distance is approx. 5 m from the main unit and at 30° to either side of the remote control infrared receiver.



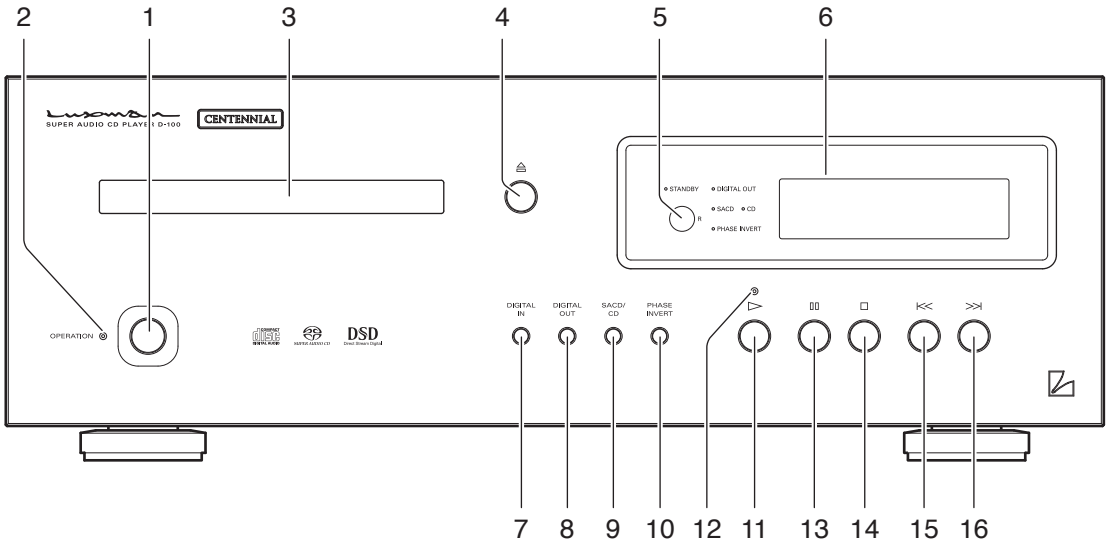


Effective distance:
approx. 5 meters

Do not expose the remote control infrared receiver to direct sunlight or strong light sources. That may cause a malfunction.

Names and Functions

Front panel



1. Operation button (OPERATION)

Turns this unit from the standby state to operation state.

2. Operation indicator (OPERATION)

Blinks during warm-up when the operation button is turned on and lights up when the operation state is activated afterward.

3. Disc tray, shutter

When inserting or removing a disc, this tray is opened or closed by pressing the open/close button (⏏).

4. Open/close button (⏏)

Opens or closes the disc tray.

5. Remote control infrared receiver (R)

Receives signals from the accessory remote control.

6. Display window

Displays the operation status of this unit.
This display is composed of 5 indicators and organic EL display.

7. Digital input selection button (DIGITAL IN)

Press this button when using the unit as a D/A converter. Switchover is performed among the coaxial, optical 1, optical 2, USB, and CD/SACD player inputs.

8. Digital output selection button (DIGITAL OUT)

Use this button to engage the unit's digital audio output. Each time the button is pressed, the output will be turned on or off. The digital audio output cannot be used when playing back the HD layer of Super Audio CD.

9. Super Audio CD/CD selection button (SACD/CD)

When playing back a Hybrid Super Audio CD, this button should be pressed to select between the HD (or SACD) layer and the CD layer of the disc.

10. Phase invert button (PHASE INVERT)

Use this button to invert the phase of the analog outputs on the rear panel.

Both the balanced output and unbalanced output are inverted.

This setting is stored on the flash memory even when the power is turned off.

Every time this button is pressed, the phase changes as follows: NORMAL → INVERT → NORMAL → INVERT …

[Phase Normal]

1. GROUND
2. COLD (–)
3. HOT (+)

[Phase Inverted]

1. GROUND
2. HOT (+)
3. COLD (–)

11. Play button (▷)

Plays back a disc.

12. Play indicator

Lights up while a disc is being played back.

Blinks while playback is being paused.

13. Pause button (▯▯)

When this button is pressed during playback, the playback stops. When this button is pressed again, the playback starts again. During pause, the play indicator blinks.

14. Stop button (□)

Stops playback.

15. Previous button (|<<)

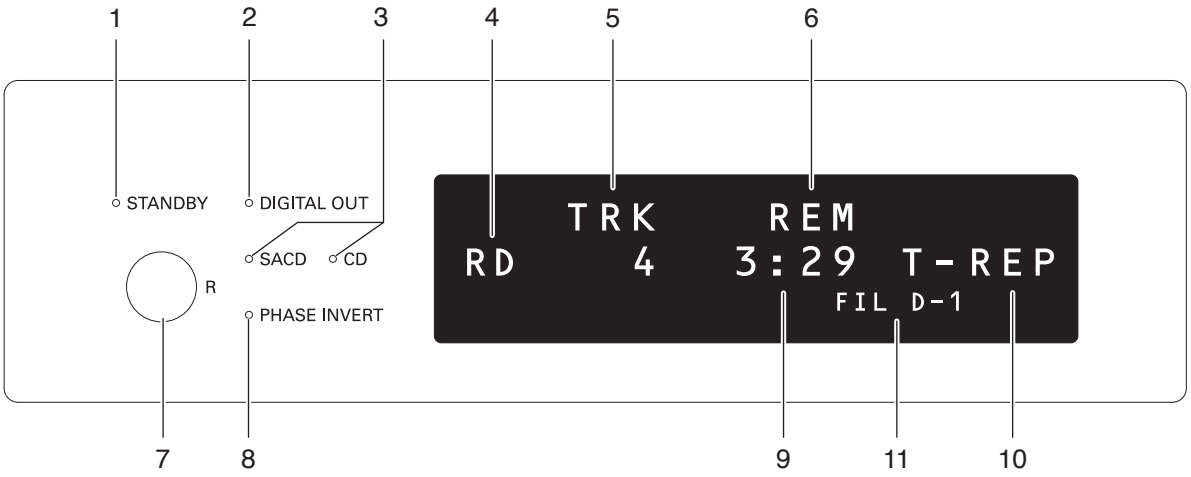
Pushing this button returns playback to the beginning of the track. When this button is pressed twice, the playback returns to the beginning of previous track.

16. Next button (>>|)

When this button is pressed, playback jumps to the beginning of next track.

Names and Functions

Display window



1. Standby indicator (STANDBY)

Lights up when this unit is in the standby state.

2. Digital output indicator (DIGITAL OUT)

Lights up when the digital audio output is ON. This indicator does not light up when playing back the HD layer of Super Audio CD because the digital audio signal cannot be output.

3. Super Audio CD/CD indicator (SACD/CD)

SACD indicator lights up when playing back the HD (or SACD) layer of Hybrid Super Audio CD

CD indicator lights up when playing back the CD layer of Hybrid Super Audio CD.

4. Playback mode

"RD" is displayed during random playback. "PG" is displayed during program playback.

This display area does not light up during regular playback.

5. Track number (TRK)

"TRK" is displayed above, and the track number is displayed below during playback.

6. Time display mode

The display shows different playback time modes. "REM" is displayed indicating the remaining time of the current track. "T-REM" is displayed indicating the total remaining time of disc. This display area does not light up when showing the elapsed time of a track.

7. Remote control infrared receiver (R)

Receives infrared signals from the remote control.

8. Phase invert indicator (PHASE INVERT)

Lights up when the analog output phase is inverted, which is caused by pressing the phase invert button.

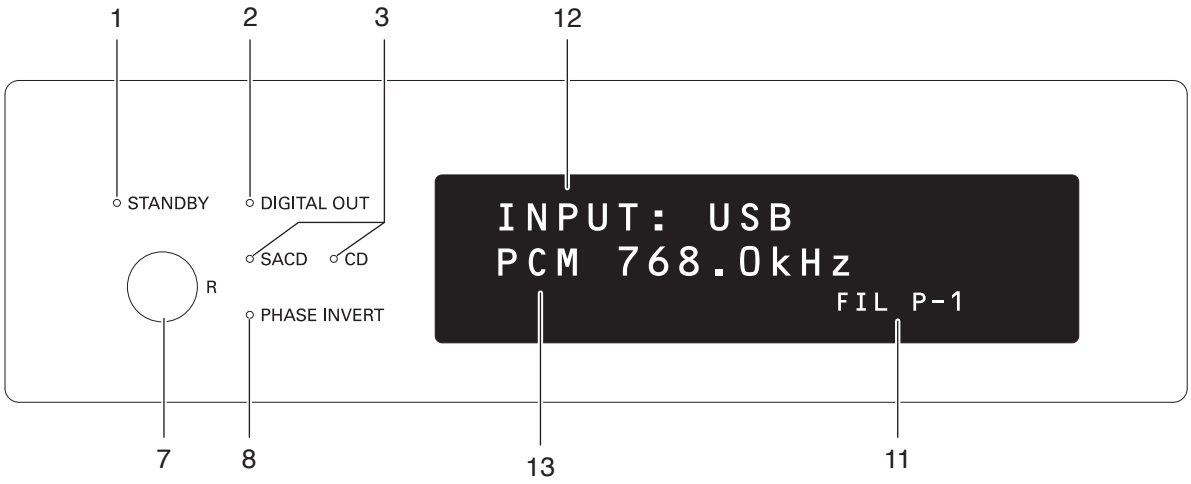
[Off (Phase Normal)]

1. GROUND
2. COLD (–)
3. HOT (+)

[On (Phase Inverted)]

1. GROUND
2. HOT (+)
3. COLD (–)

Display window



9. Time

Displays the elapsed time of current track, remaining time of current track, or remaining time of disc. Time display is switched over according to time display mode.

10. Repeat mode

Displays the mode for repeat playback.

There are two types of repeat playback: track repeat (T-REP) and all repeat (A-REP).

11. Digital filter / DSD filter display

Displays the digital FIR filter setting when playing back CD/PCM data, or the DSD filter setting when playing back Super Audio CD (HD layer) / DSD data.

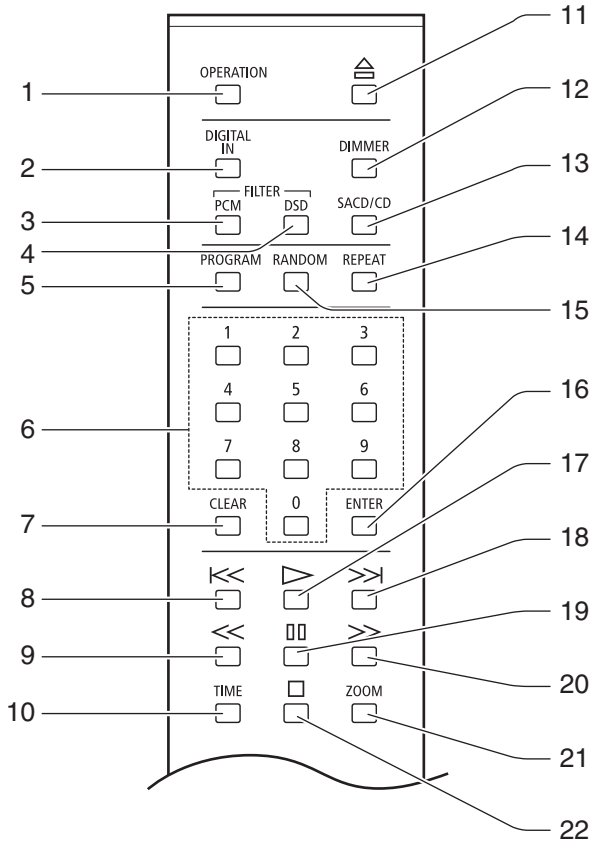
12. Input display (INPUT)

Indicates the input selected with the digital input selection button (DIGITAL IN) on the main unit.

13. Display of playback format mode (COAXIAL, OPTICAL-1, OPTICAL-2, USB)

Displays the operating status, such as the playback format (PCM/DSD) and sampling frequency, when COAXIAL, OPTICAL-1, OPTICAL-2, or USB is selected using the digital input selection button (DIGITAL IN).

Remote control



1. Operation button (OPERATION)

Turns this unit to the operating state after turning off the standby indicator at the standby state.

Pressing this button again at the operating state turns the unit to the standby state.

2. Digital input selection button (DIGITAL IN)

Press this button when using the unit as a D/A converter.

Switchover is performed among COAXIAL, OPTICAL-1, OPTICAL-2, USB, and internal player.

3. Digital filter selection button (FILTER PCM)

This button changes the digital FIR filter when a CD or PCM data is being played back.

Select a filter depending on your taste.

The sound quality can be changed by selecting one of 3 different filters: P-1, P-2, or P-3.

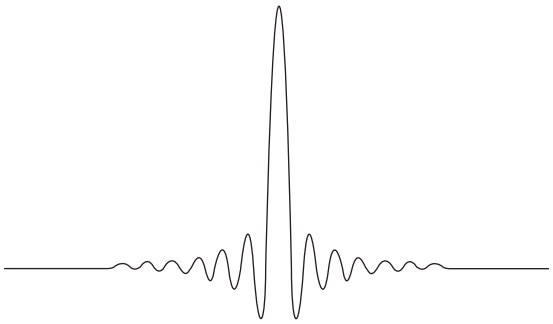
Pressing this button displays the current setting (P-1, P-2, or P-3) in the display window. Pressing this button again while the filter selection is displayed displays the next filter selection. Pressing the enter button (ENTER) while the setting data is displayed confirms the filter setting. If the enter button (ENTER) is not pressed, the digital filter will not be engaged.

The impulse response of the FIR filter is shown as the waveform on the right page.

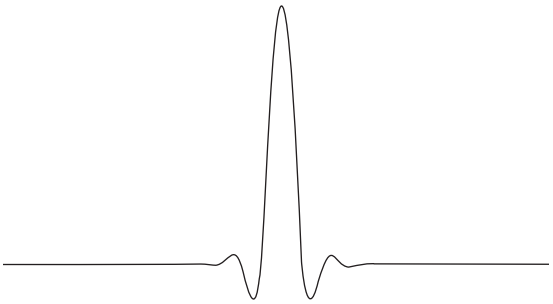
The $\Delta\sum$ modulation oversampling rates are 64× for P-1, 16× for P-2, and 16× for P-3.

This setting is stored on the flash memory even when the power is turned off.

P-1 and P-3 (Sharp Roll-Off Filter)



P-2 (Slow Roll-Off Filter)



4. DSD filter selection button (FILTER DSD)

This button changes the DSD filter while a Super Audio CD (HD layer) or DSD data is being played back.

Select a filter depending on your taste.

The sound quality can be changed by engaging one of 2 different filters, D-1 and D-2.

Pressing this button displays the current setting data (D-1 or D-2) on the display window.

Pressing this button again while the filter selection is displayed displays the next filter selection.

Pressing the enter button (ENTER) while the setting data is displayed confirms the filter setting.

If the enter button (ENTER) is not pressed, the filter will not be engaged.

DSD filter characteristics are as follows:

D-1 (Wide)

DSD signal	Cutoff frequency
2.8 MHz	52 kHz
5.6 MHz	104 kHz
11.2 MHz	208 kHz
22.5 MHz	416 kHz

D-2 (Narrow)

DSD signal	Cutoff frequency
2.8 MHz	39 kHz
5.6 MHz	78 kHz
11.2 MHz	157 kHz
22.5 MHz	314 kHz

5. Program button (PROGRAM)

Programs the track numbers to play back in a desired order.

6. Numeric keys (1, 2, 3, 4, 5, 6, 7, 8, 9, 0)

These keys are pressed to specify the track numbers for direct search or playback order programming.

7. Clear button (CLEAR)

Cancels the program settings.

8. Previous button (⏮)

Pushing this button returns playback to the beginning of the track. When this button is pressed twice, the playback returns to the beginning of previous track.

9. Rewind button (⏪)

Pressing this button during playback rewinds the audio.

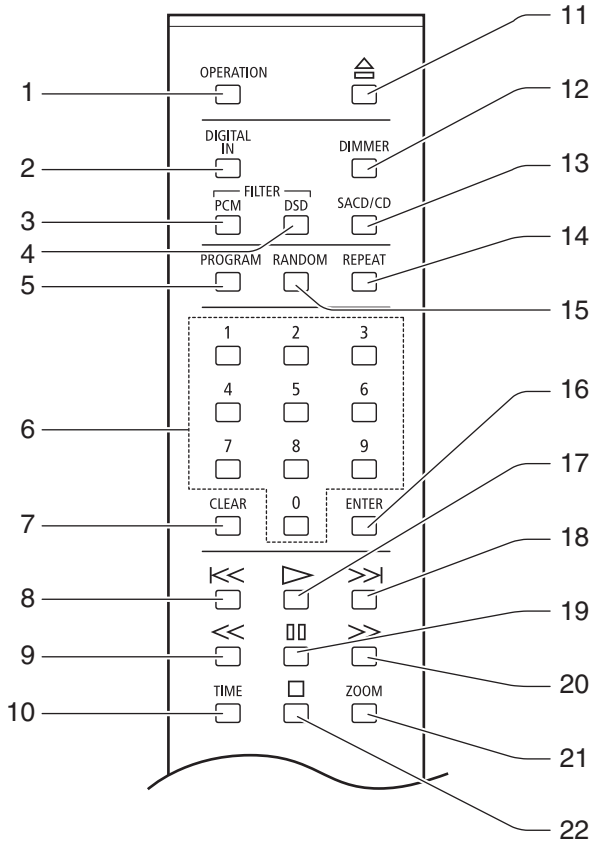
10. Time display button (TIME)

Switches the time display. This button adjusts the time display mode between the elapsed time of the current track, remaining time of the current track, or remaining time of disc.

11. Open/close button (⏏)

Opens or closes the disc tray.

Remote control



12. Dimmer button (DIMMER)

This button adjusts the brightness of the organic EL display. The brightness can be adjusted in 4 steps from off, through two dim levels, to normal. Press and hold for about 2 seconds to turn on/off the Auto Bright function, which automatically dims the display when no operation is performed using the unit's buttons or the remote control for about 15 minutes.

13. Super Audio CD/CD selection button (SACD/CD)

When playing back a Hybrid Super Audio CD, this button should be pressed to select between the HD (or SACD) layer and the CD layer of the disc.

14. Repeat button (REPEAT)

Pushing this button will enable repeat playback of the selected track or the whole disc. There are two types of repeat playback: track repeat (T-REP) and all repeat (A-REP).

15. Random button (RANDOM)

This button is pressed to perform random playback.

16. Enter button (ENTER)

Executes the set or selected items.

17. Play button (▷)

Plays back a disc.

18. Next button (>>|)

When this button is pressed, playback jumps to the beginning of next track.

19. Pause button (▯▯)

When this button is pressed during playback, the playback stops. When this button is pressed again, the playback starts again. During pause, the play indicator blinks.

20. Fast-forward button (>>)

Pressing this button during playback fast-forwards the audio.

21. Zoom button (ZOOM)

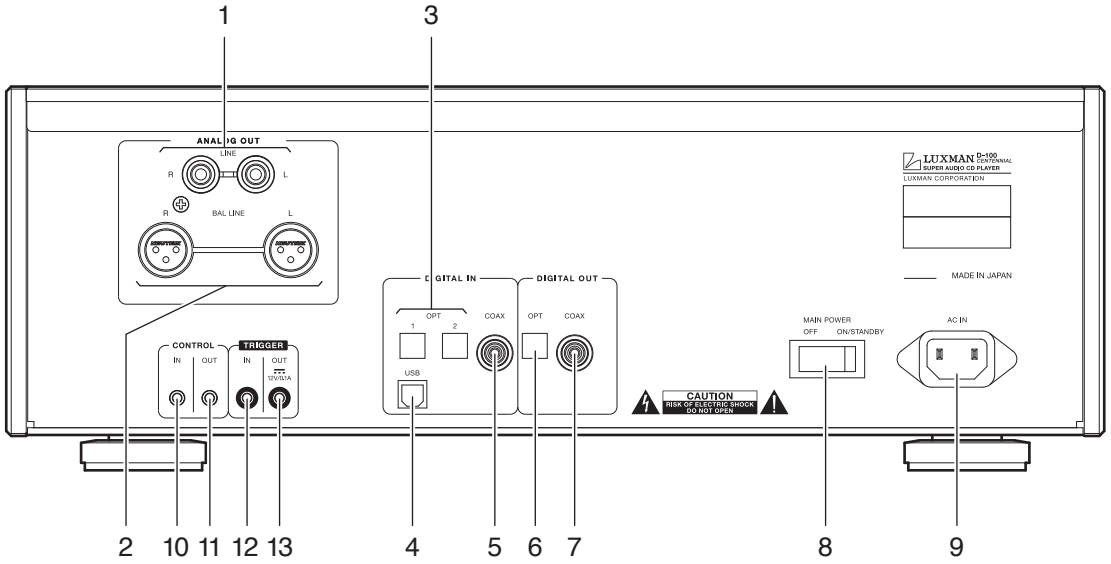
When this button is pressed during playback, the track number and time are displayed in an enlarged manner.

22. Stop button (□)

Stops playback.

Names and Functions

Rear panel



1. Unbalanced analog output terminals (LINE)

The RCA output terminals to provide unbalanced playback signals of this unit

Connect these terminals to the unbalanced inputs of a unit such as an integrated amplifier with a pin cable.

The output phase can be switched with the analog output phase selection button (PHASE INVERT) on the front panel.

2. Balanced analog output terminals (BAL LINE)

Use these XLR output terminals to output balanced audio signals from this unit.

Connect these terminals to the balanced inputs of a unit such as a preamplifier using balanced cables.

The output phase can be switched with the analog output phase selection button (PHASE INVERT) on the front panel.

The following table shows the unit's XLR output terminals pin configuration:

[Phase Normal]

1. GROUND
2. COLD (–)
3. HOT (+)

[Phase Inverted]

1. GROUND
2. HOT (+)
3. COLD (–)

3. Optical digital input terminals (OPT-1, OPT-2)

When using this unit as a D/A converter, transmit digital signals from a CD player or the like that has a digital output terminal to this unit using an optical digital cable.

The terminal supports the following signal data.

• PCM signal

Sampling frequency: 44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz, 176.4 kHz, 192 kHz

Quantization bit rate: 16-bit, 20-bit, 24-bit

• DoP (DSD over PCM) signal

Sampling frequency: 2.8 MHz

Quantization bit rate: 1-bit

This is a shutter-type optical terminal. Direct the cable connector correctly when inserting the cable into the terminal. If the cable connector is inserted forcibly in the wrong direction, the terminal may be deformed and the shutter may not be able to close even after disconnecting the cable.

4. USB digital input terminal (USB)

Use this USB (B-type) input terminal digital input signals from a PC or Mac using a USB cable.

The terminal supports the following signals.

• PCM signal

Sampling frequency: 44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz, 176.4 kHz, 192 kHz, 352.8 kHz, 384 kHz, 705.6 kHz, 768 kHz

Quantization bit rate: 16-bit, 24-bit, 32-bit

• DSD signal

Sampling frequency: 2.8 MHz, 5.6 MHz, 11.2 MHz, 22.5 MHz

Quantization bit rate: 1-bit

Before connecting this unit to a PC using Windows OS, the dedicated driver software needs to be downloaded from LUXMAN website and installed.

Refer to “Driver Installation Manual” on the LUXMAN website for detailed information.

With Mac OS, this unit is automatically recognized.

Caution:

Connection between a PC and this unit using a USB cable should not be performed before the installation of the dedicated driver software is completed. Failure to observe this may cause a malfunction.

---

5. Coaxial digital input terminal (COAX)

When using this unit as a D/A converter, connect a CD player or the like that has a digital output terminal to this unit using a coaxial digital cable.

The terminal supports the following signal data.

• PCM signal

Sampling frequency: 44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz, 176.4 kHz, 192 kHz

Quantization bit rate: 16-bit, 20-bit, 24-bit

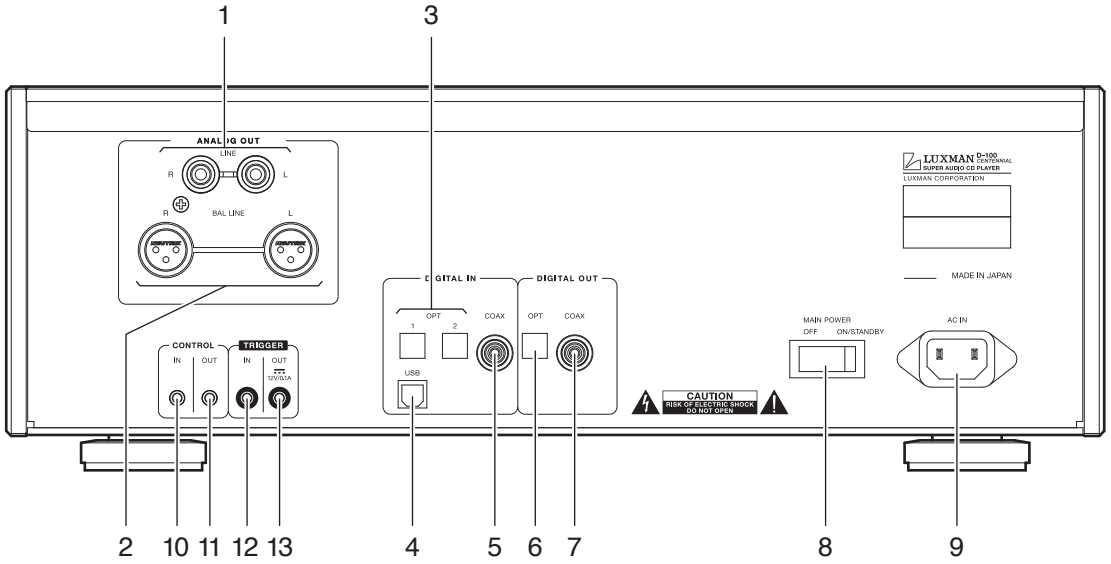
• DoP (DSD over PCM) signal

Sampling frequency: 2.8 MHz

Quantization bit rate: 1-bit

Names and Functions

Rear panel



6. Optical digital output terminal (OPT)

Connect this terminal to a device such as a D/A converter or an amplifier that has a digital input terminal using an optical digital cable. When a Super Audio CD (HD layer selected) or DSD data is played back, a digital audio output cannot be not provided. In addition, when PCM data of 352.8 kHz, 384 kHz, 705.6 kHz or 768 kHz sampling frequency is played back, digital audio output is not available. This is a shutter-type optical terminal.

Direct the cable connector correctly when inserting the cable into the terminal.

If the cable connector is inserted forcibly in the wrong direction, the terminal may be deformed and the shutter may not be able to close even after disconnecting the cable.

7. Coaxial digital output terminal (COAX)

This terminal is connected to an amplifier that has a digital input terminal using a coaxial digital cable. When a Super Audio CD (HD layer selected) or DSD data is played back, a digital audio output cannot be not provided. In addition, when PCM data of 352.8 kHz, 384 kHz, 705.6 kHz or 768 kHz sampling frequency is played back, digital audio output is not available.

8. Main power switch (MAIN POWER)

Turns this unit to the standby state.

When this switch is set to ON/STANDBY, the standby indicator on the front panel lights up to show that this unit turns to the standby state.

When this switch is set to OFF, the standby indicator on the front panel turns off to show that the main power is turned off.

For ecodesign requirements, turn the main power switch OFF when this unit is not in use.

---

9. Power cable terminal (AC IN)

Connect the accessory power cable here to supply power from the AC outlet on the wall.

10. Control input terminal (CONTROL IN)

Connects a LUXMAN's device with a control output terminal using a commercially available 3.5-mm monaural mini-jack cable. This connection enables the infrared receiver circuit of the connected device to receive signals from the remote control supplied with this unit and the remote control to operate the device, too.

(The infrared receiver of this unit will not function.)

11. Control output terminal (CONTROL OUT)

Connects a LUXMAN's device with a control input terminal using a commercially available 3.5-mm monaural mini-jack cable. This connection enables the infrared receiver of this unit to receive signals from the remote control of the connected device and the remote control to operate this unit, too.

(The infrared receiver of the device whose input is connected will not function.)

12. Trigger input terminal (TRIGGER IN)

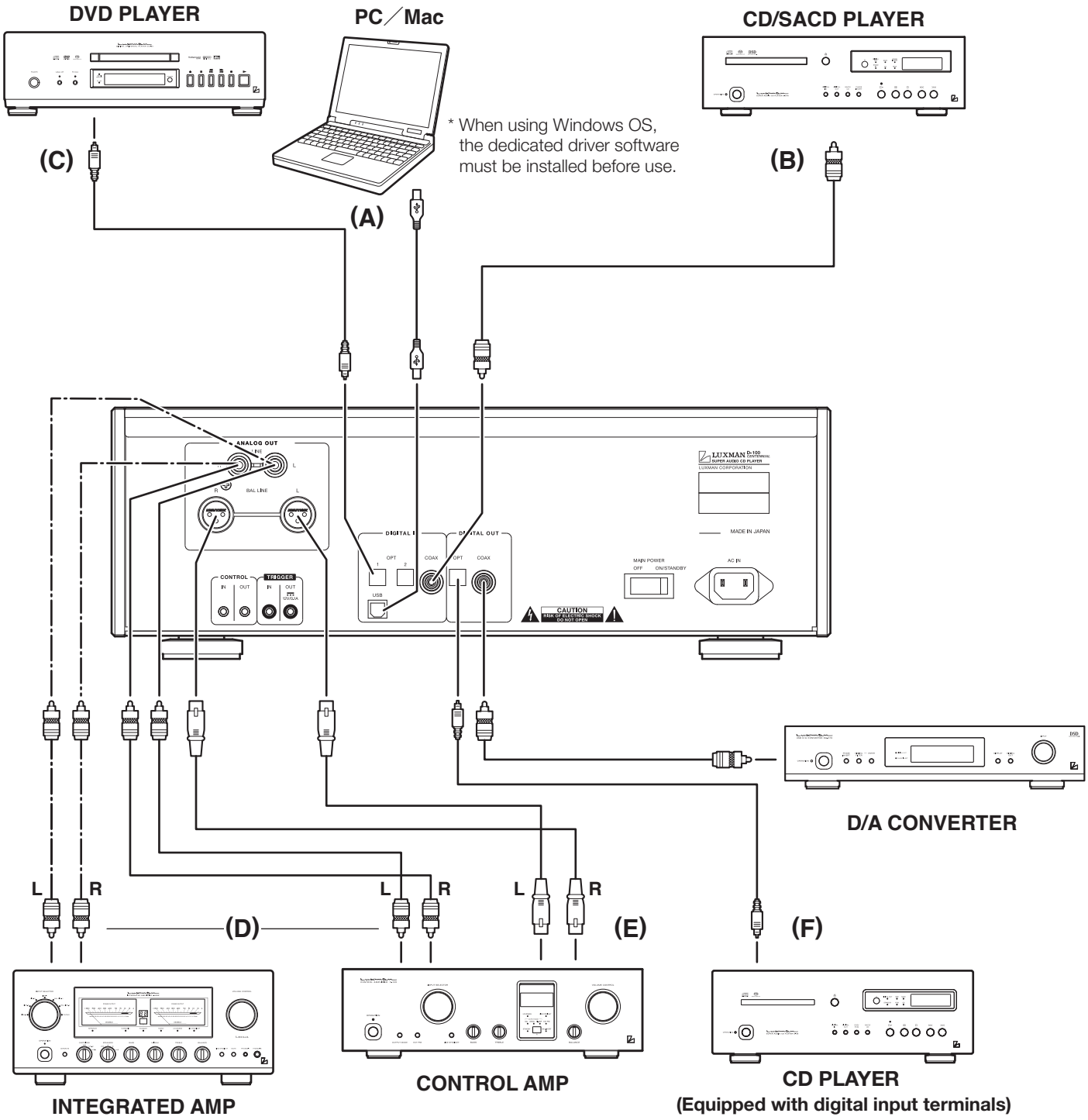
Trigger input terminal to be connected to a control amplifier, power amplifier and other devices that have a trigger output terminal. If the main power button is set to ON/STANDBY and this unit is turned to standby, this unit can be turned to operating or standby in conjunction with the operation button of a connected device.

When the main power button is set to OFF, this unit does not operate in conjunction with other devices.

13. Trigger output terminal (TRIGGER OUT)

Connection of this trigger output terminal to a device having a trigger input terminal enables the connected device to turn to operation or standby in conjunction with this unit.

Connections



Before connecting

Before connecting other devices, connect the jack side of the accessory power cable to the AC inlet of this unit.

When connecting, turn off the power button of this unit and the power supplies of auxiliary devices to prevent unexpected accidents that may be caused by noise.

Connecting to the power supply

Insert the accessory power supply cable plug into an AC outlet on the wall of the listening room.

How to connect input devices

1. Digital connection from a PC/Mac (Refer to the connection diagram (A).)

Connect between the USB terminal of the PC or Mac and the USB (B-type) terminal of this unit with a USB cable.
Before connecting this unit to a PC using Windows OS, the dedicated driver software needs to be downloaded from LUXMAN website and installed.
Refer to “Driver Installation Manual” on the LUXMAN website for detailed information.

With Mac OS, this unit is automatically recognized.

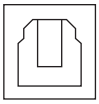
Caution:
Connection between a PC and this unit using a USB cable should not be performed before the installation of the dedicated driver software is completed. Failure to observe this may cause a malfunction.

2. Digital connection from a device such as a CD player (Refer to the connection diagrams (B) and (C).)

Connect between the (coaxial or optical) digital output terminal of a CD player, an SACD player, a DVD player or other such devices and the digital input terminal (COAX/OPT) of this unit with a coaxial digital cable and an optical digital cable.

This is a shutter-type optical terminal. Direct the cable connector correctly when inserting the cable into the terminal. If the cable connector is inserted forcibly in the wrong direction, the terminal may be deformed and the shutter may not be able to close even after disconnecting the cable.

Upper side



Lower side

The optical terminal is mounted as illustrated.

How to connect output devices

1. Unbalanced connection with a device such as an integrated amplifier (Refer to connection diagram (D).)

Connect between the analog unbalanced output terminals (LINE) of this unit and the unbalanced input terminals of a device such as an integrated amplifier with 2 (L/R) RCA cables.

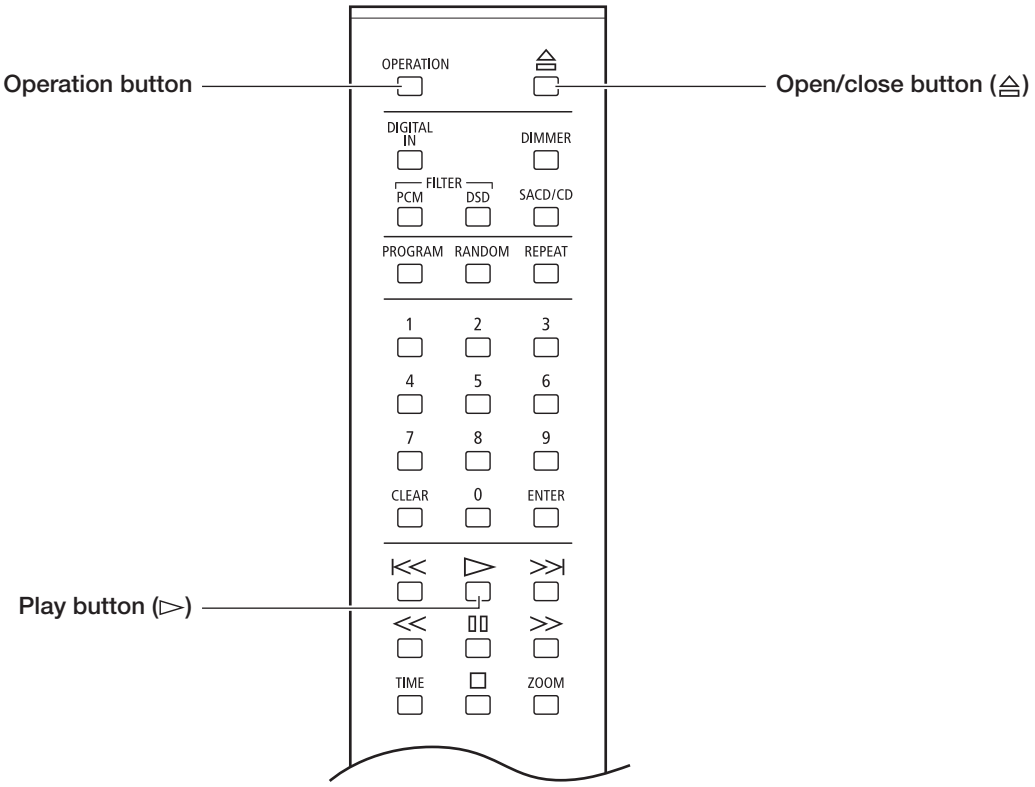
2. Balanced connection with a device such as a pre-amplifier (Refer to connection diagram (E).)

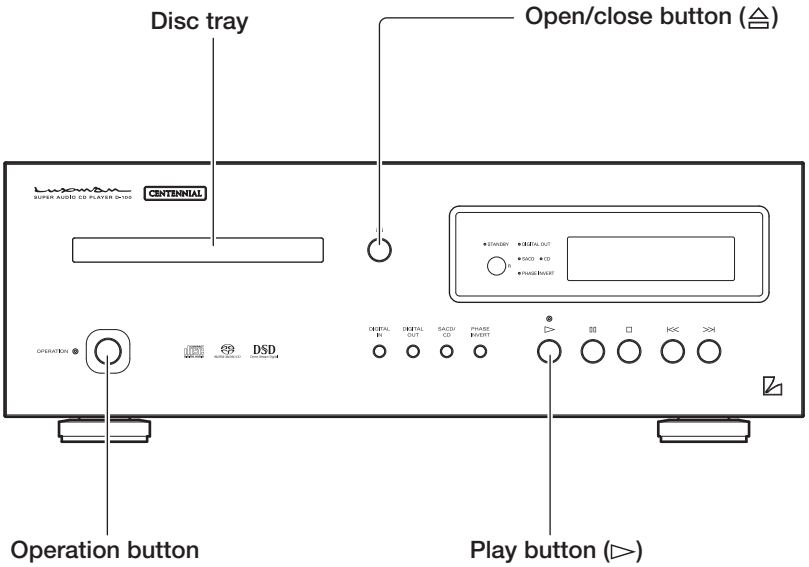
Connect between the balanced analog output terminals (BAL LINE) of this unit and the balanced input terminals of a device such as an integrated amplifier with two balanced XLR cables (L/R).

3. Digital output to a device such as another D/A converter (Refer to connection diagram (F).)

Connect between the digital output terminal (COAX/OPT) of this unit and a device such as a D/A converter or a unit equipped with digital input terminals with a coaxial digital cable or an optical digital cable.

How to Play Back Discs





Disc Playback

Remote control • Main unit

1. Press the OPERATION button.

When “Luxman” appears on the display and then disappears, the unit becomes operable.

2. Press the open/close (⏏) button.

The disc tray opens.

3. Place the disc on the disc tray according to the guide on the tray.

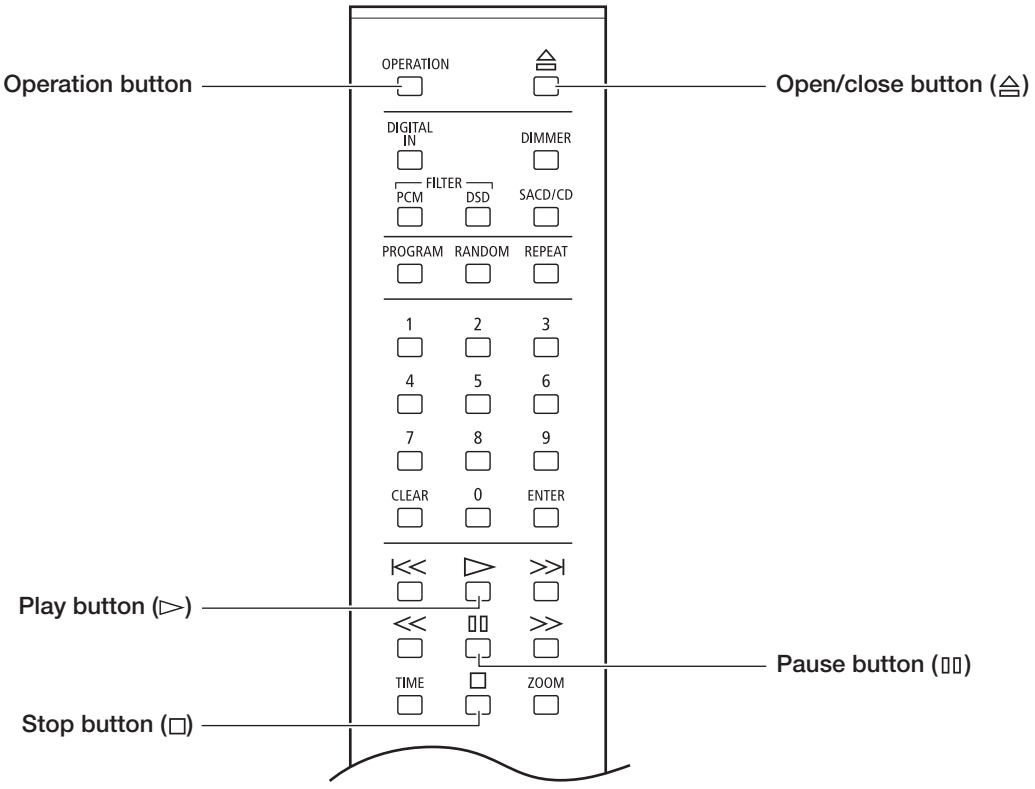
4. Press the open/close (⏏) button.

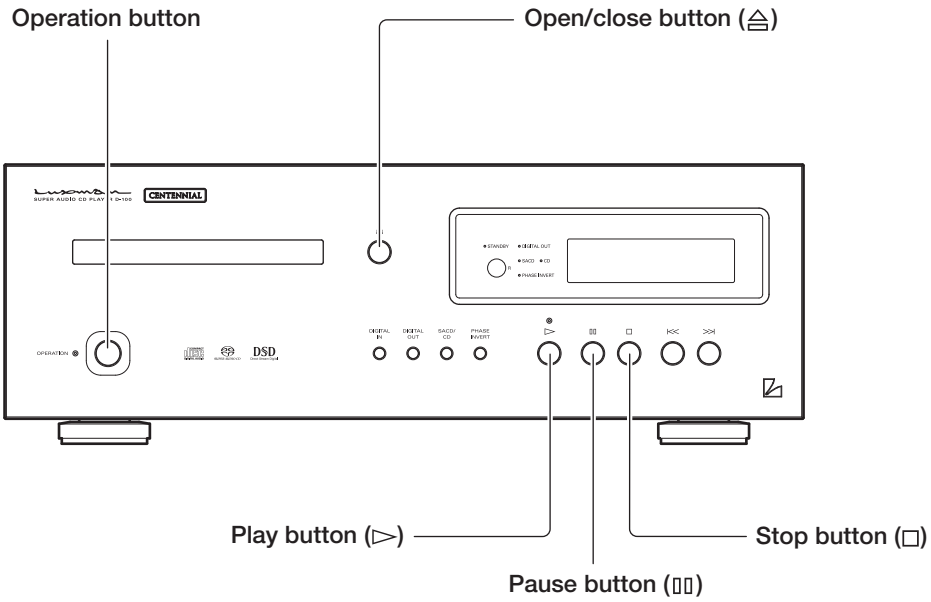
The disc tray closes and the disc is loaded.

To start playback quickly, press the play (▷) button without pressing the open/close (⏏) button.
Or select a track by pressing a numeric key without pressing the open/close (⏏) button, and press the ENTER button or play (▷) button.
Operation buttons and numeric keys are not functional during the period from disc loading to displaying of disc type. Specifying the next operation, for example specifying the number of tracks beforehand, can shorten the time before playback start.

5. Press the play (▷) button.

Stop/pause the Playback





Pause/stop the playback of the disc

Remote control • Main unit

How to pause playback

Press the pause (▯▯) button.

During pause, the play indicator blinks.

Resumes the regular playback.

During pause, press the play (▷) or pause (▯▯) button.

Stop the playback.

During playback, press the stop (□) button.

Eject a disc.

Press the open/close (⏏) button.

The disc tray opens.

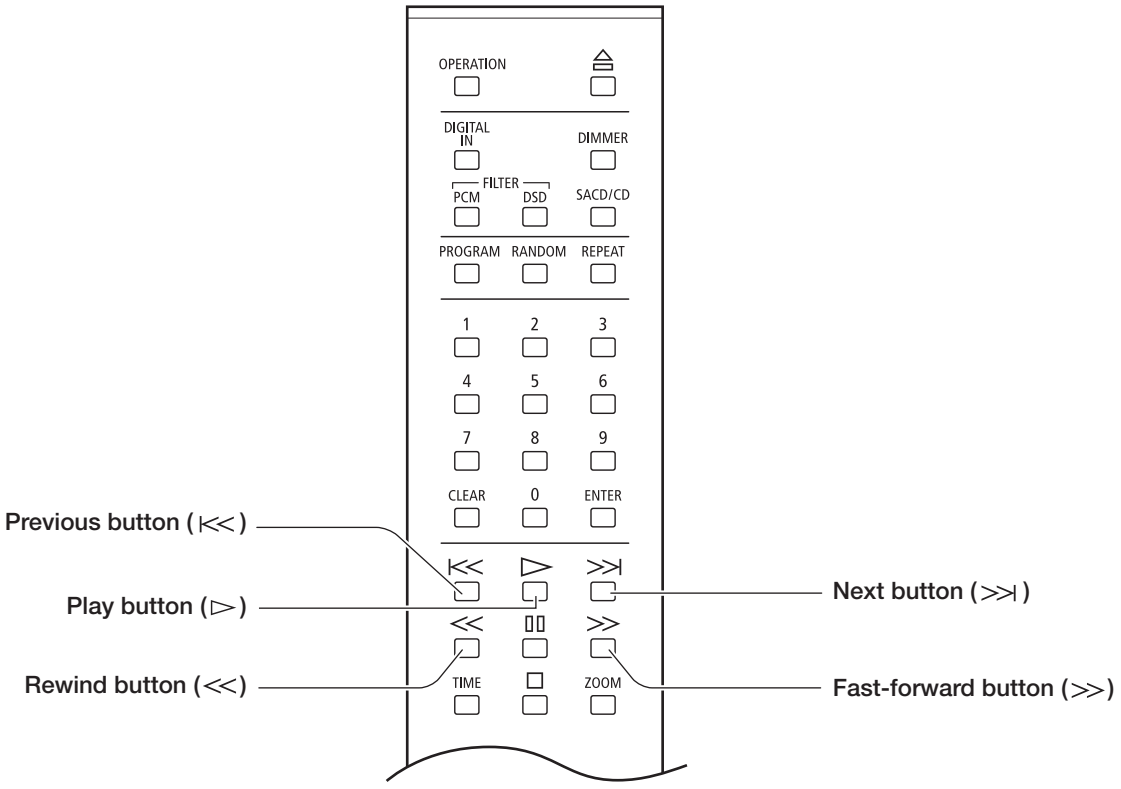
Turn off the power (Turn the unit to the standby state.)

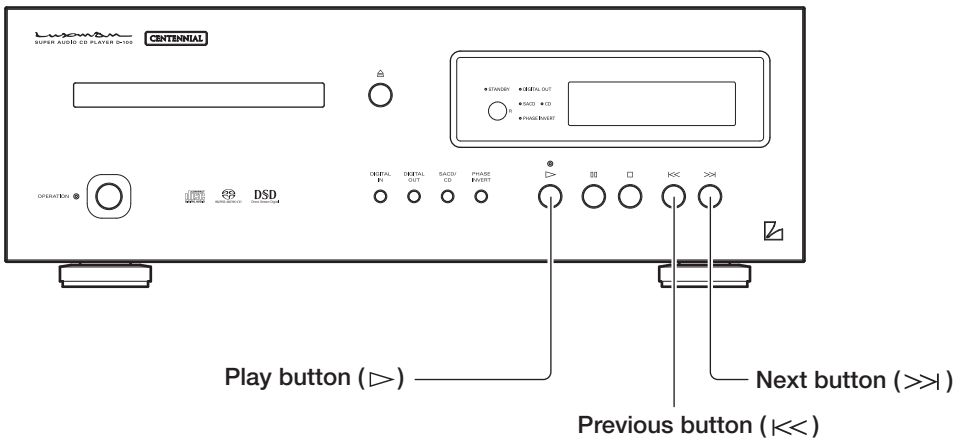
Press the OPERATION button.

"-STANDBY-" appears on the display, and the STANDBY indicator lights up.

To turn off the power completely, the main power switch on the rear panel needs to be turned off.

Skip/Fast-forward/Rewind





Skipping to a desired track (cue function)

Remote control • Main unit

Skip playback
Skip to a desired track

To skip to a particular track to play back, press the next button (⏭) repeatedly until the desired track is displayed.

Go back to a desired track

To go back to a particular track to play back, press the previous button (⏮) repeatedly until the desired track is displayed.

When this button is pressed once, playback returns to the beginning of current track. When this button is pressed twice, the playback returns to the beginning of previous track.

Disc fast-forward/rewind playback (Scan)

Remote control

1. **Fast-forward the playback.**
   During playback, press the fast-forward (≫) button.

   Each time the button is pressed, the speed can be changed in 4 steps.

   ">>1, >>2, >>3, >>4" appears on the display to indicate the fast-forward state and speed.

2. **To resume the regular playback, press the play (▷) button.**

Rewind the playback.

1. **During playback, press the rewind (≪) button.**

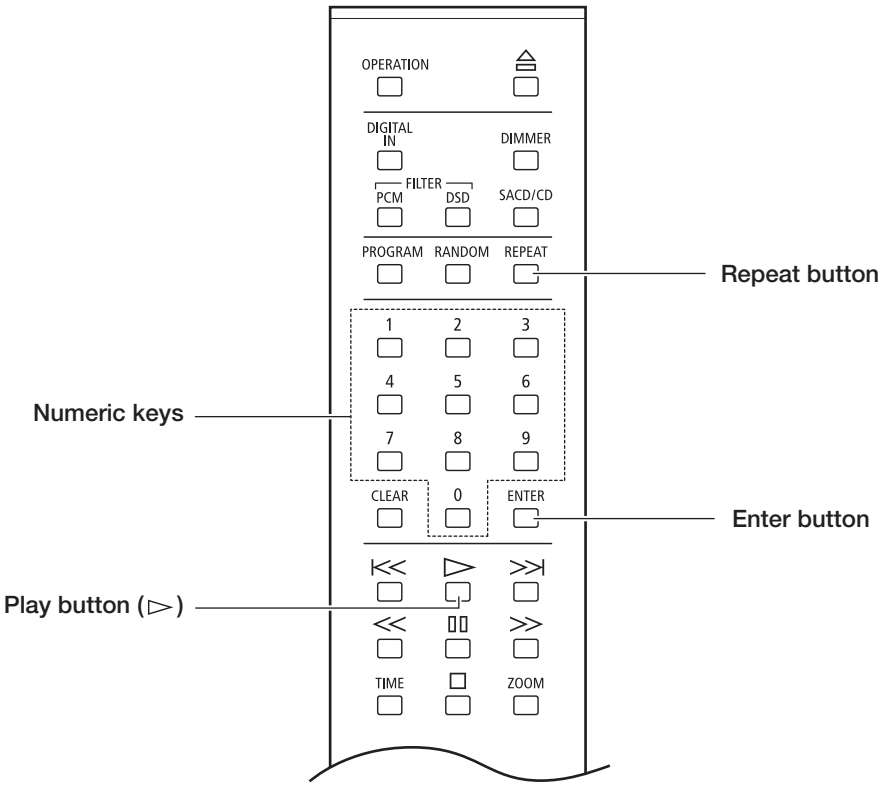
   Each time the button is pressed, the speed can be changed in 4 steps.

   ">>1, >>2, >>3, >>4" appears on the display to indicate the fast-forward state and speed.

2. **To resume the regular playback, press the play (▷) button.**

When a set of tracks are composed of two or more SACDs, the first track may not be Track 1.

Direct Search/Repeat Playback



Specify the desired track for playback

Remote control

1. Enter a track number by pressing numeric keys.

For example, when selecting the 15th track, press the “1” key, and then “5”.

2. Press the ENTER or play button.

Playback is started automatically even without pressing the enter button after the elapse of approx. 4 seconds. The maximum number of tracks is 255 for a Super Audio CD, and it may take longer time to enter a 3-digit track number. For this reason, approx. 4 seconds are given to CDs before auto jump.

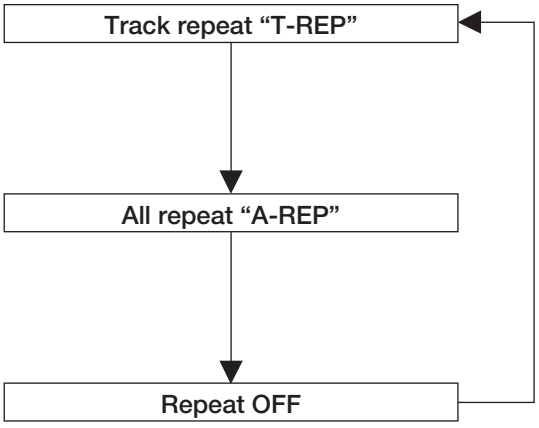
Repeat playback (Repeat playback)

Remote control

There are two types of repeat playback: track repeat (T-REP) and all repeat (A-REP).

Track repeat (T-REP)

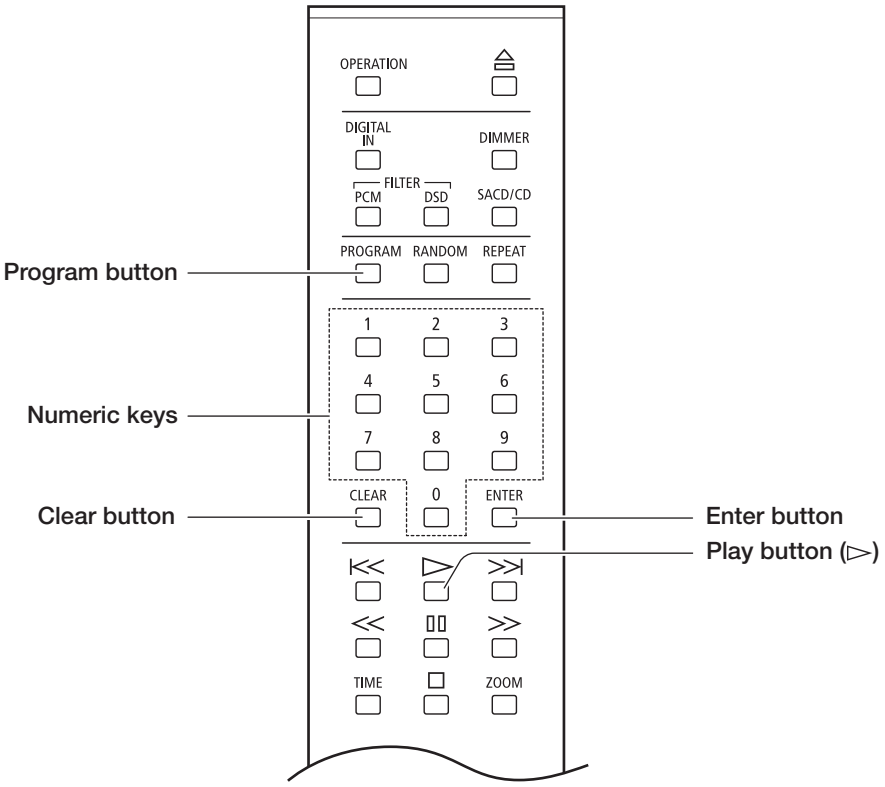
1. **During playback, press the REPEAT button once.**
2. **"T-REP" appears on the display to indicate the track repeat.**
3. **When this button is pressed twice again, the track repeat is canceled.**
   Repeat playback is also canceled when the disc is stopped.



All repeat (A-REP)

1. **During playback, press the REPEAT button twice.**
2. **"A-REP" appears on the display to indicate all tracks repeat mode.**
3. **When this button is pressed once again, the track repeat is canceled.**
   Repeat playback is also canceled when the disc is stopped.

Program Playback



Playback of tracks in a programmed order (Program playback)

Remote control

It is possible to program up to 24 tracks in the desired order.

1. During stop, press the PROGRAM button.

The following indication appears on the display.

```
          T-TIME
PG   00     0:00
```

2. Enter a desired track number by pressing the numeric keys of the remote control.

For example, when selecting the 5th track, press the “5” key.

```
PG   01        TRK    5
```

3. Press the ENTER button.

The order of the track is determined, and then track number and total time appear on the display.

```
          T-TIME
PG   01    01:28
```

4. Enter the track number to program next.

For example, when selecting the 15th track, press the “1” key, and then “5”.



5. Press the ENTER button.

The order of the track is determined, and then track number and total time appear on the display.



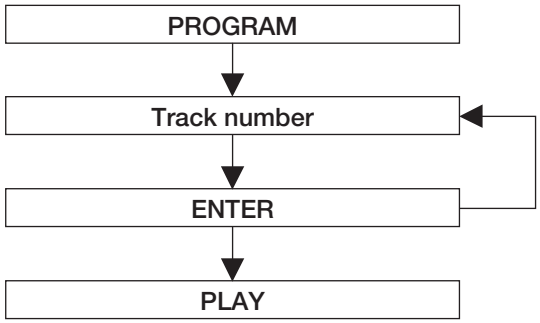
Program your desired track order by repeating Step 2 and 3.

6. Press the play (▷) button.

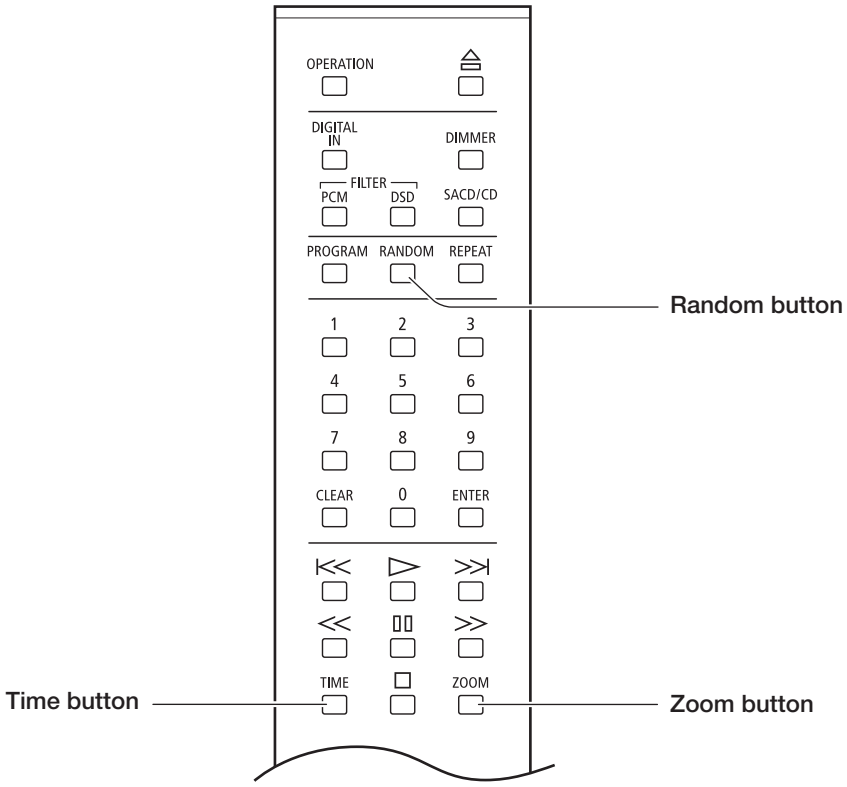


- When pressing the PROGRAM button during stop, all the program is deleted.
- Pressing the CLEAR button during stop allows the recorded tracks to be deleted in reverse chronological order.
- It is impossible to program a pause.
- Pressing the REPEAT button during program playback allows programmed all repeat playback to be activated.
- Track repeat is not available during program playback.
- When pressing the next (▷▷|) button during program playback, the playback jumps to the track programmed next.
- To perform the program playback again, press the play (▷) button when the disc has stopped.

Procedure



Random playback/disc information/zoom



Playback of tracks in a random order (Random playback)

Remote control

Each track is selected from all disc tracks and is played back once.

1. **Press the RANDOM button.**

2. **"RD" appears on the display to indicate random playback. Playback stops automatically after all the tracks on the disc have been played back.**

   Random playback stops when a disc is stopped or the RANDOM button is pressed once again. When pressing the next (>>I) button during random playback, the next track is randomly selected and played back.

   When pressing the previous (I<<) button, the playback returns to the beginning of current track.

Disc information

Remote control

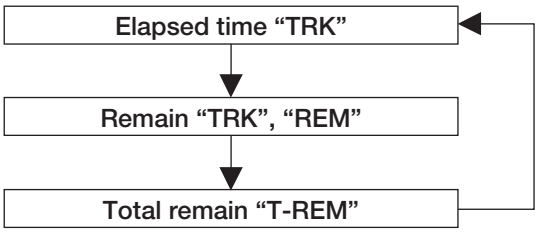
Altering the time display during playback.

Each time the TIME button is pressed during playback, the display changes as follows.

1. **The current track number and the elapsed time of the track (In the default setting)**
   "TRK" will appear on the display.

2. **The current track number and the remaining time of the track (Remain)**
   "TRK" and "REM" will appear on the display.

3. **"T-REM" is displayed indicating the total remaining time of disc (Total remain).**



Zoomed display

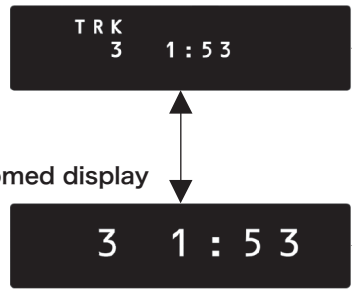
Remote control

Enlargement of displayed characters

1. **Pressing the ZOOM button allows the track number and time to be displayed larger.**

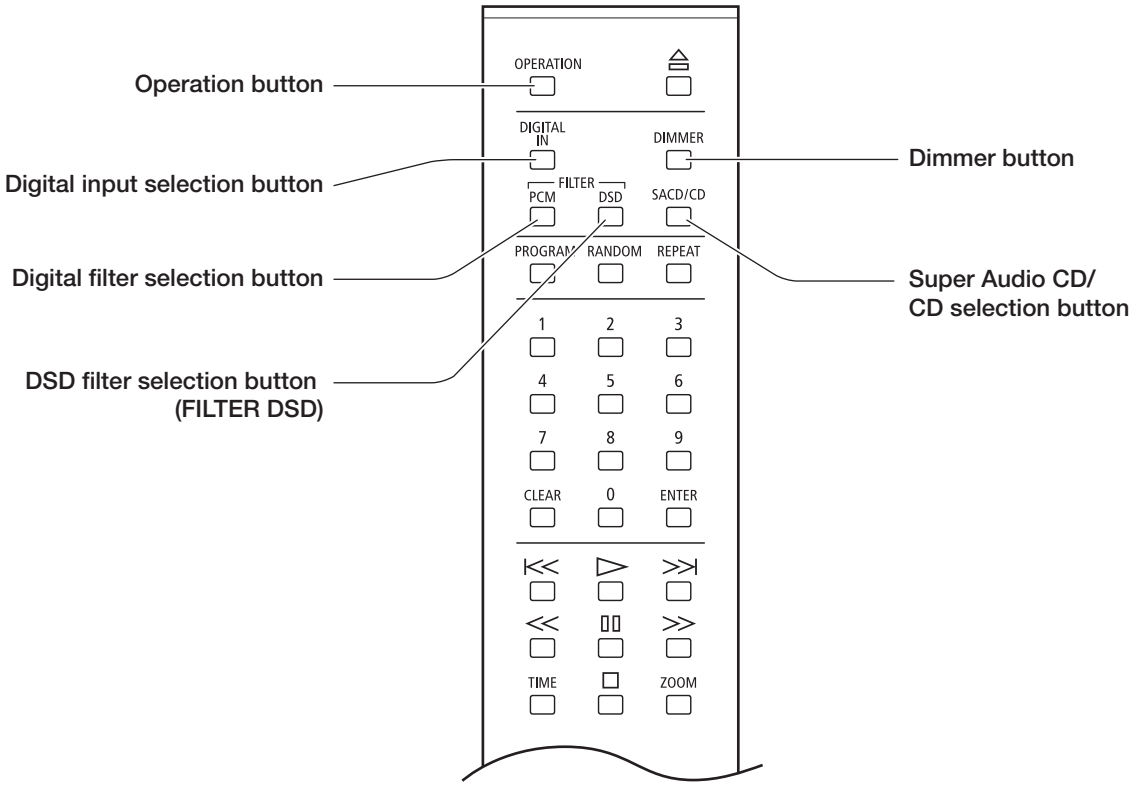
2. **When pressing the ZOOM button once again, the display returns to the normal state.**

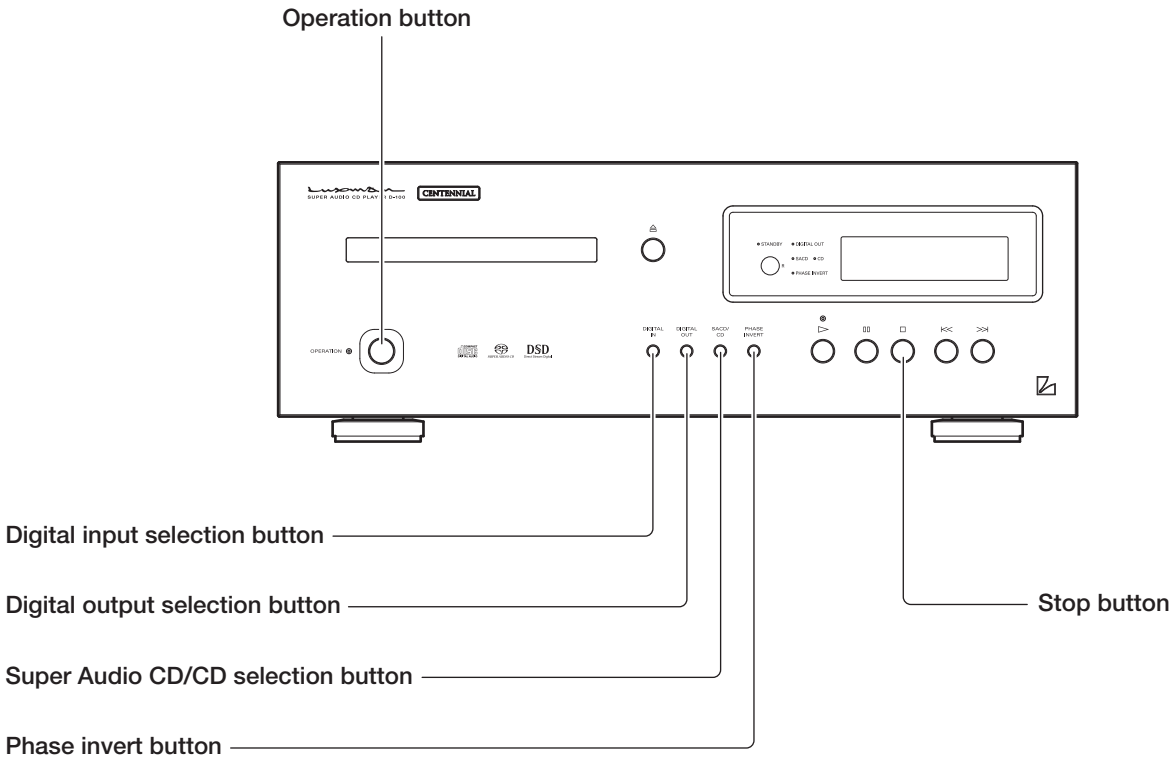
Normal display



Zoomed display

Detailed Settings





Dimmer button (DIMMER)

Remote control

This button adjusts the brightness of the organic EL display. This button adjusts the normal brightness of the organic EL display.

Each time the DIMMER button is pressed, the display changes as follows. Normal light (HI) → Dim (L01) → Very dim (L02) → No light (OFF) → Normal light (HI).....

This setting is stored on the flash memory even when the power is turned off.

Press and hold for about 2 seconds to turn on the Auto Bright function, which automatically dims the display when no operation is performed using the unit's buttons or the remote control for about 15 minutes.

Every time this button is pressed, the phase changes as follows: ON → OFF → ON .....

[DISPLAY AUTO BRIGHT OFF]

The display is always shown as the set brightness.

[DISPLAY AUTO BRIGHT ON]

After 15 minutes of no switch operation, the brightness is adjusted to the same brightness as Very dim (L02).

This setting is stored on the flash memory even when the power is turned off.

Factory default: OFF

It is impossible to change the brightness of LED.

Super Audio CD/CD selection button (SACD/CD)

Remote control • Main unit

When playing back a Hybrid Super Audio CD, this button should be pressed to select between the HD (or SACD) layer and the CD layer of the disc.

With the disc stopped, press the SACD/CD button.

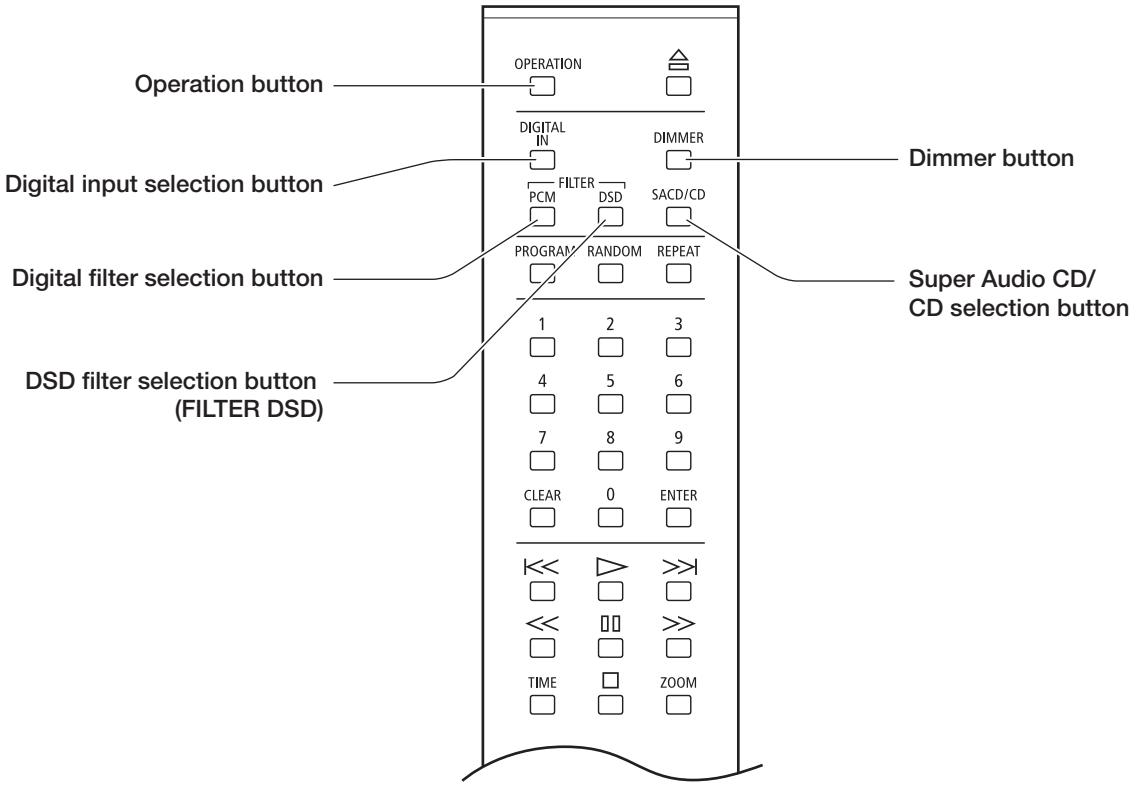
Every time this button is pressed, the playback layer alternates between the HD (or SACD) layer and CD layer of the disc.

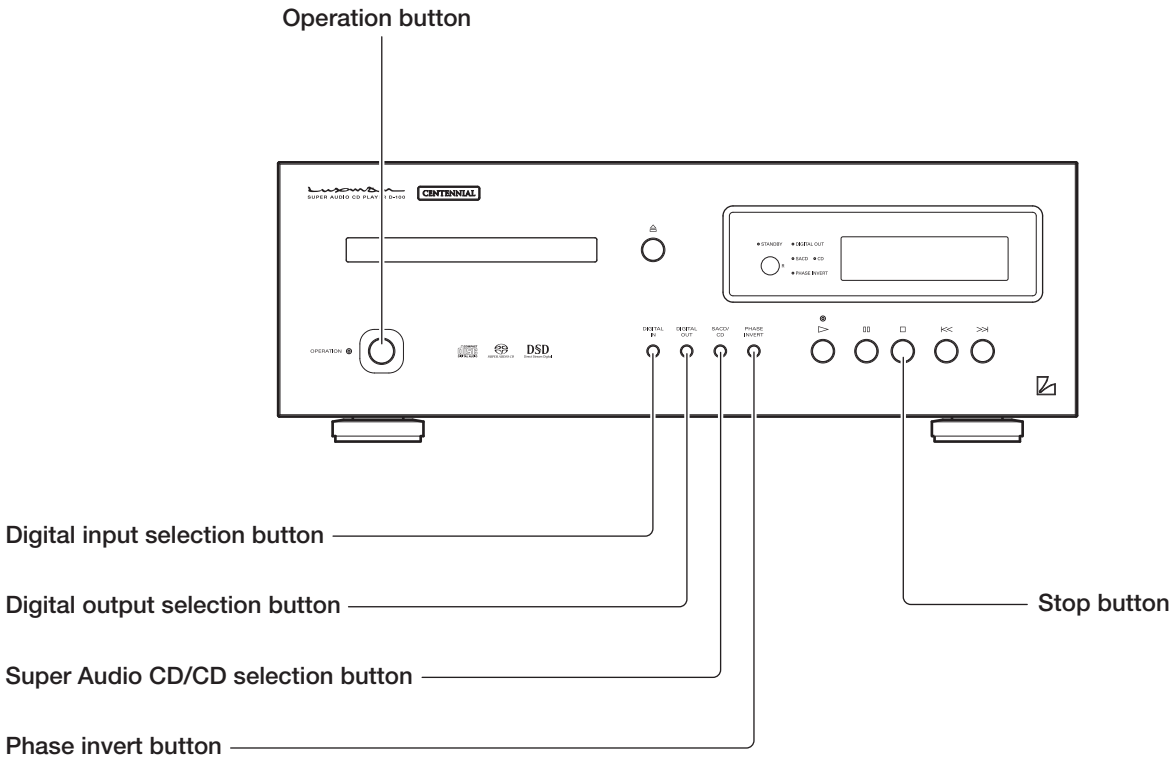
When the HD layer is selected, the Super Audio CD (SACD) indicator lights up on the main unit display.

When the CD layer is selected, the CD indicator lights up on the main unit display.

- **This setting remains active even when another Hybrid Super Audio CD is loaded.**
- **When a single-layer CD or dual-layer CD is loaded, the HD layer is automatically selected.**
- **This unit does not support SACD multi-channel areas.**

Detailed Settings





Digital input selection (DIGITAL IN) button



Press this button when using the unit as a D/A converter.

1. Each time the DIGITAL IN button is pressed, the display changes as follows. COAXIAL → OPTICAL-1 → OPTICAL-2 → USB → CD/SACD (Internal player)

The coaxial and optical inputs support the following signals.

Sampling frequency: 44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz, 176.4 kHz, 192 kHz

Quantization bit rate: 16-bit, 20-bit, 24-bit

• DoP (DSD over PCM) signal

Sampling frequency: 2.8 MHz

Quantization bit rate: 1-bit

The USB input supports the following signals.

• PCM signal

Sampling frequency: 44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz, 176.4 kHz, 192 kHz, 352.8 kHz, 384 kHz, 705.6 kHz, 768 kHz

Quantization bit rate: 16-bit, 24-bit, 32-bit

• DSD signal

Sampling frequency: 2.8 MHz, 5.6 MHz, 11.2 MHz, 22.5 MHz

Quantization bit rate: 1-bit

Before connecting this unit to a PC using Windows OS, the dedicated driver software needs to be downloaded from LUXMAN website and installed.

Refer to “Driver Installation Manual” on the LUXMAN website for detailed information.

When using Mac OS, this unit is automatically recognized.

Caution:

Connection between a PC and this unit using a USB cable should not be performed before the installation of the dedicated driver software is completed. Failure to observe this may cause a malfunction.

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2. The selected input type and sampling status are displayed on the main unit display window.

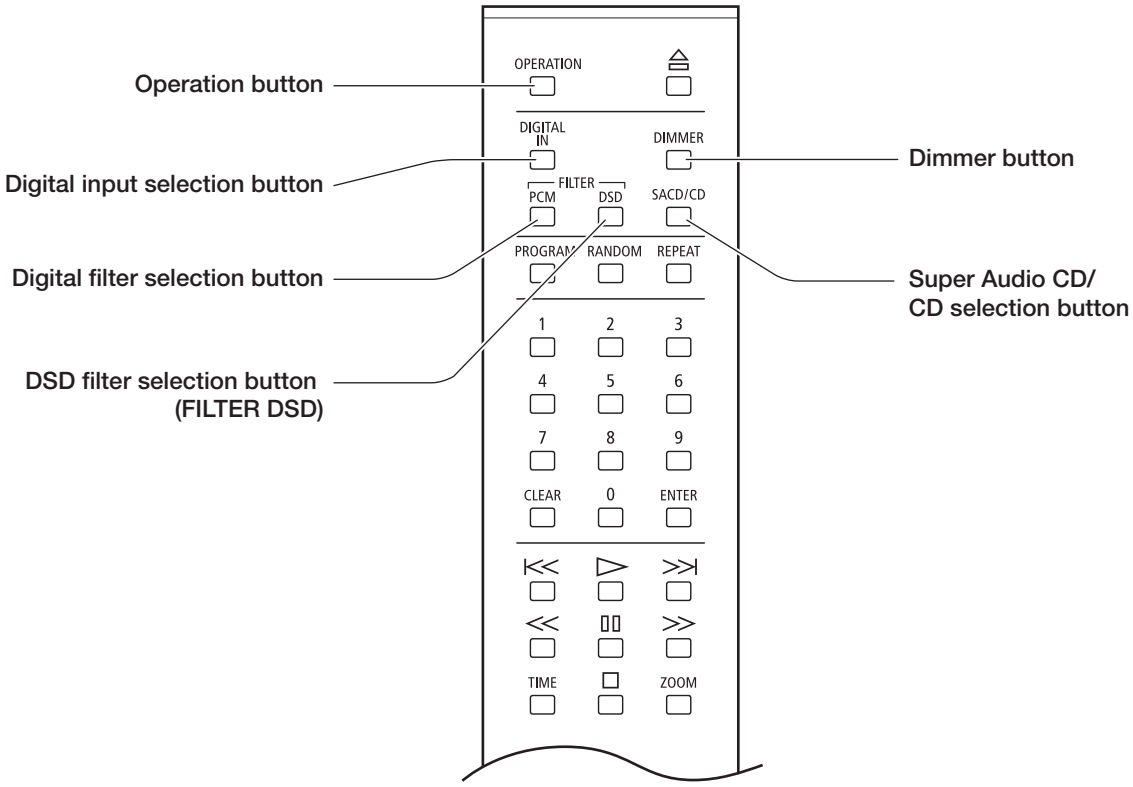
The sampling frequency and bit count of the current digital input signal are displayed, the input source connected to the digital input terminals (COAX/OPT-1/OPT-2/USB) are selected with the digital input selection button. When one of COAXIAL/OPTICAL-1/OPTICAL-2/USB is selected using the digital input selection button and the digital signal from each digital device and this unit are synchronized, the sampling frequency and bit count of the digital signal are displayed.

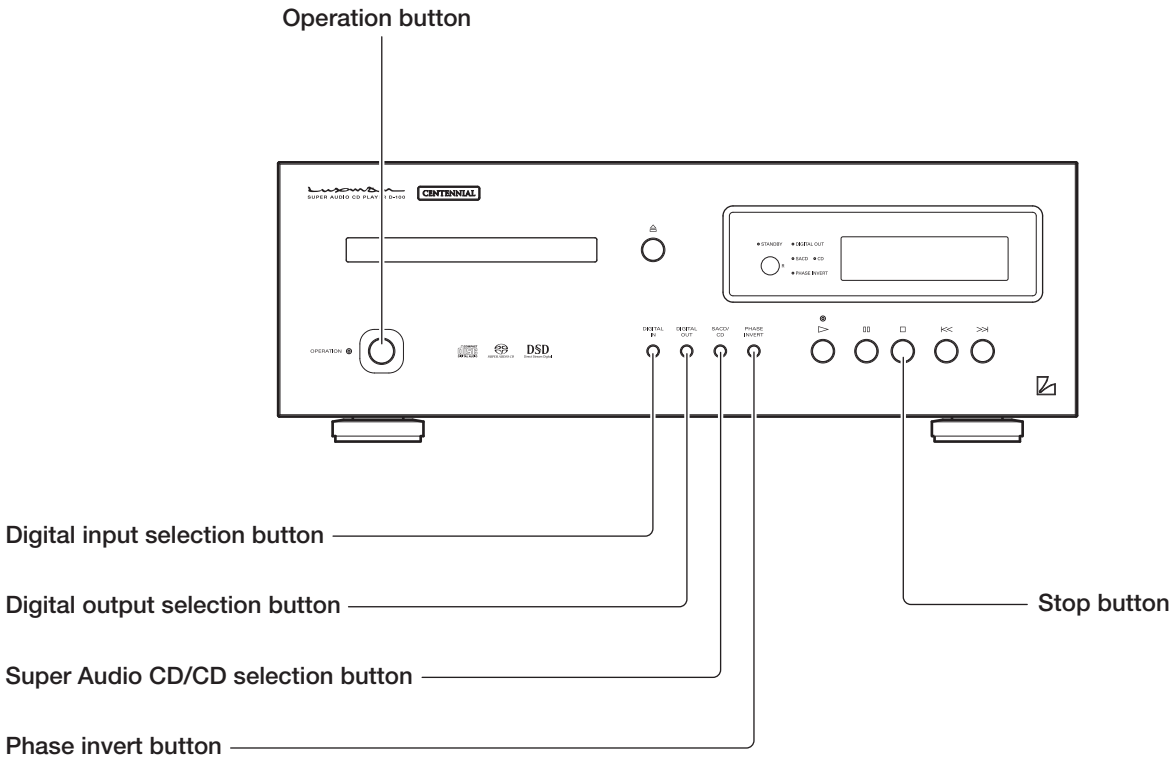
When a digital signal input is not provided or the signal is not synchronized even if the signal input is provided, “UNLOCK” is displayed.

When USB is selected, only the sampling frequency is displayed. The bit count is not displayed.

- **The bit count (word length) indicates the contents of the word length data included in the channel status which is specified in IEC60958-3 (digital audio interface - Part 3: consumer applications).**
  Some output devices may provide channel status data (word length data) whose content is different from the actual word length. In such a case, the contents of the channel status data are indicated on the display instead of the actual bit count.
  Alternatively, some devices or sources may provide data which states “word length is not specified". In such a case, the bit count is not displayed.
- **There may be a case where the display indicates “LOCK” shortly, and then “UNLOCK". (The reverse case is also possible.) That is because the former state (LOCK/UNLOCK) is indicated for approximately 0.5 seconds after an input signal is changed until the decoding circuit becomes stable. Please note.**

Detailed Settings





Digital output selection button (DIGITAL OUT)



Use this button to engage the unit's digital audio output. Each time the button is pressed, the output will be turned on or off.

When a Super Audio CD (HD layer selected) or DSD data is played back, a digital audio output cannot be not provided. It is possible to turn on or off the digital audio output when playing back the CD layer of Hybrid Super Audio CD.
When PCM data of 352.8 kHz, 384 kHz, 705.6 kHz or 768 kHz sampling frequency is played back, digital audio output is not available.

Phase invert button (PHASE INVERT)



Use this button to invert the phase of the analog outputs on the rear panel.
Both the balanced output and unbalanced output are inverted.
This setting is stored on the flash memory even when the power is turned off.
Every time this button is pressed, the phase changes as follows: NORMAL → INVERT → NORMAL → INVERT …
[Phase Normal]
1. GROUND
2. COLD (–)
3. HOT (+)

[Phase Inverted]
1. GROUND
2. HOT (+)
3. COLD (–)

How to restore all the settings to the factory defaults

All settings can be restored to the factory defaults by the following method.
1. Turn this unit to the standby state.
2. Press the operation button on the main unit while pressing the stop (□) button on the main unit.
   All the settings will be restored to the factory defaults.

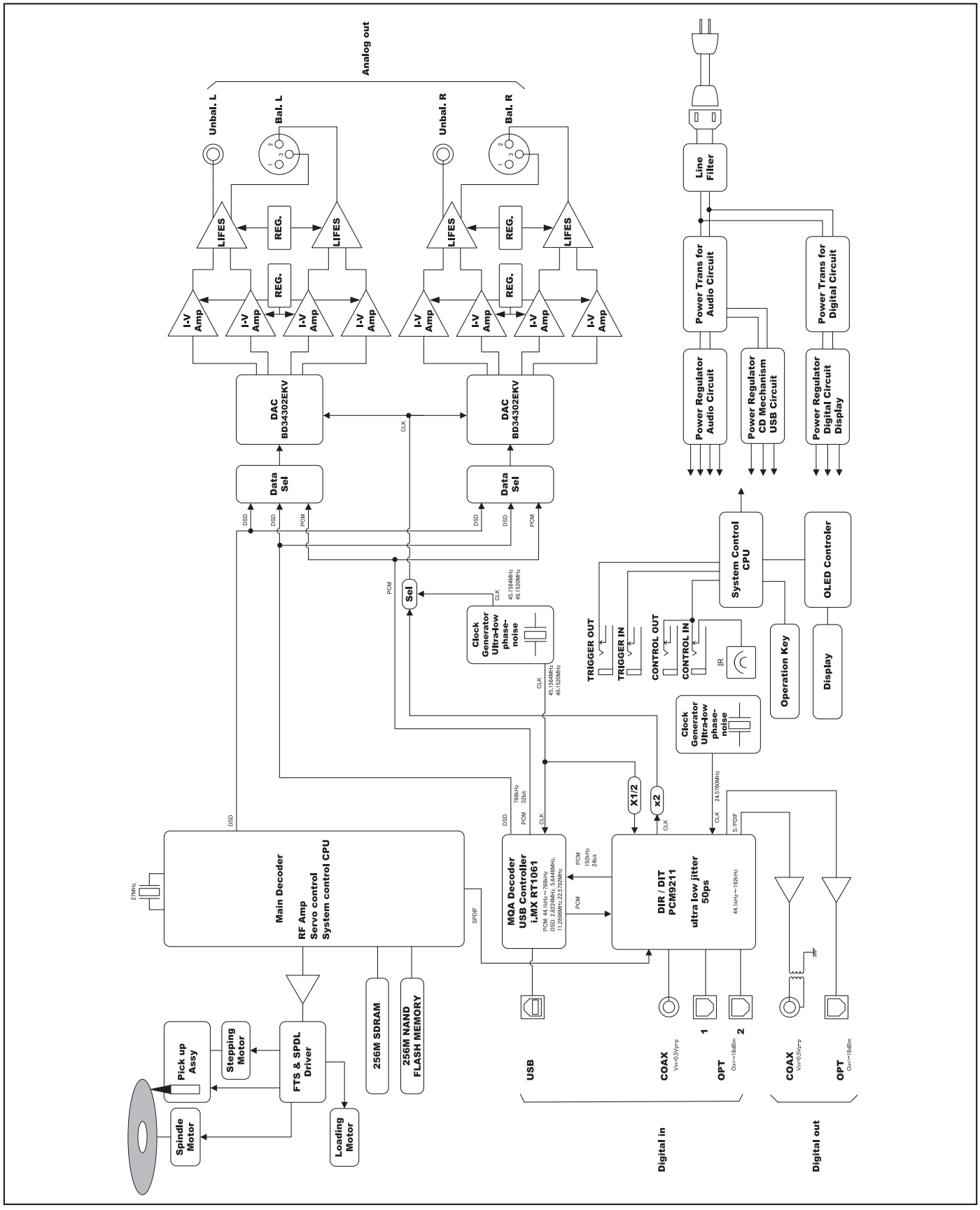
Item	Default
Digital input selection	CD/SACD
Digital output selection	ON
Super Audio CD/CD selection	Super Audio CD (SACD)
Phase invert changeover	Normal
Dimmer adjustment	Normal
Digital filter	P-1
DSD filter	D-1
Zoomed display	Normal
Auto brightness function	OFF

Last memory function (Memorization of each setting)

The following table shows the settings which are saved to the flash memory.
If the power is turned off immediately after changing any settings, the settings may not be successfully stored in the unit memory.

Item	Default
Digital input selection	CD/SACD, COAXIAL, OPTICAL-1, OPTICAL-2, USB
Digital output selection	ON, OFF
Super Audio CD/CD selection	Super Audio CD (SACD) CD
Phase invert changeover	Normal/invert
Dimmer adjustment	Normal, Dim, Very dim, No light
Digital filter	P-1, P-2, P-3
DSD filter	D-1, D-2
Zoomed display	Zoomed, Normal
Auto brightness function	ON, OFF

Block Diagram



Specifications

Format		2-channel SACD, CD	
Power supply		230 V ∿ (50 Hz)	
Power consumption		44 W 1.5 W (at standby)	
Weight		25.4 kg (main unit)	
Max. external dimensions		440 (W) x 154 (H) x 420 (D) mm (front side 2 mm knobs and rear side 13 mm terminals included in depth)	
Ambient operating temperature / Ambient operating humidity		+5 °C to +35 °C / 5 % to 85 % (non condensing)	
Audio output characteristics	Output voltage / output impedance	UNBALANCE terminal (RCA terminal) BALANCE terminal (XLR terminal) For SACD/DSD	2.4 Vrms/300 Ω 2.4 Vrms/600 Ω 2.3 Vrms
	Frequency response:	CD SACD USB	5 Hz to 20 kHz (+0, –0.5 dB) 5 Hz to 38 kHz (+0, –3.0 dB) 5 Hz to 58 kHz (+0, –3.0 dB) (192 kHzSF)
	Total harmonic distortion:	CD SACD COAX/OPT USB	0.0016 % 0.0007 % 0.0006 % (96 kHzSF) 0.0006 % (96 kHzSF)
	S/N ratio:	CD SACD COAX/OPT USB	125 dB 125 dB 125 dB (96 kHzSF) 125 dB (96 kHzSF)
	Dynamic range:	CD SACD COAX/OPT USB	100 dB 108 dB 124 dB (96 kHzSF) 124 dB (96 kHzSF)
	Channel separation:	CD SACD COAX/OPT USB	122 dB 122 dB 122 dB (96 kHzSF) 122 dB (96 kHzSF)
Digital input	Coaxial digital input:	0.2 to 2.5 Vp-p	
	Optical digital input:	–14.5 to –21 dBm	
	USB Input (Supported OS):	Microsoft Windows 10 or later, Mac OS X10.15 or later	
	Sampling frequency:	OPT/COAX: USB input:	44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz, 176.4 kHz, 192 kHz (16-bit, 20-bit, 24-bit) 2.8 MHz (DoP) 44.1 kHz, 48 kHz, 88.2 kHz, 96 kHz 176.4 kHz, 192 kHz, 352.8 kHz, 384 kHz 705.6 kHz, 768 kHz (16-bit, 24-bit, 32-bit) 2.8 MHz, 5.6 MHz, 11.2 MHz, 22.5 MHz (1-bit)
Digital output	Coaxial digital output:	RCA terminal 0.5 Vp-p/75 Ω	
	Optical digital output:	Optical digital terminal –15 to –21 dBm	

* Design and specifications are subject to change without notice.

Before Asking for Repair Service

While in use, this unit may display phenomena which may be confused as malfunctions. Before contacting your country's official LUXMAN distributor for repair services, please read the operating instructions for any connected input and output devices and check the troubleshooting table below. If the cause of the malfunction cannot be identified, please contact your dealer. After LUXMAN's representatives have accepted your request for repair services, inspection fees and transportation expenses may be claimed, even though the unit may be found to be operating normally.

Problem	Cause/Solution	Ref. page
No power is supplied even though the operation button is pressed.	• Connect the power cable to the AC inlet and the AC outlet firmly.	24
The disc tray comes out even after the tray is closed.	• Place the disc on the disc tray correctly.	26
	• Clean the disc to remove dirt.	2
Playback cannot be performed.	• Clean the disc to remove dirt.	2
	• Place the disc on the disc tray correctly.	26
	• Remove condensation from the interior of this unit.	1
	• Place the disc on the tray with the label facing upwards. (label face upward)	
No sound is generated. / Sound volume is too low. (Digital input)	• Connect digital cables correctly.	23 - 24
	• If USB is selected as an input source, select this unit (D-100C) as the output destination by configuring the sound setting of your PC/Mac.	Refer to the instruction manual of the PC/Mac or the software in use.
	• If the unit (D-100C) cannot be selected even when trying the solution above, disconnect, then reconnect the USB cable.	
	• If USB is selected as an input source, adjust the sound volume by configuring the sound setting of your PC/Mac.	
	• If USB is selected as an input source, adjust the sound volume on your PC/Mac player software.	
	• Ensure that this unit supports the sampling frequency and the quantization bit rate of the desired digital input signal.	19 - 22
	• Check to see whether digital input “UNLOCK” is displayed or not. (When a digital signal from a digital device is not synchronized with this unit, the source may not be played back.)	
The remote control cannot be operated.	• Operate the remote control within the specified operating range.	10
	• Replace the remote control batteries with new ones.	9
	• The remote control infrared receiver is exposed to direct sunlight or strong light sources (such as inverter fluorescent lights). Change the installation place or angle to avoid the exposure to strong light sources.	10
An electronic device such as a television malfunctions.	• Some devices equipped with a wireless remote control receiver may malfunction when the remote control of this unit is operated. Keep this unit away from such devices.	10

Problem	Cause/Solution	Ref. page
No sound is generated from the speakers, or sound is distorted.	• Confirm that all audio cable connections are correct.	23 - 24
	• If a digital output device is connected to this unit, set [Digital output] to [On].	11
	• Clean the disc to remove dirt.	2
	• When the output level of an amplifier, etc. is minimum, adjust the volume.	
	• Confirm that the cable connectors are connected and firmly inserted into the terminals of all unit.	
	• Clean the cable connectors and terminals by using a plain dry cloth or a cloth dipped in a small amount of dehydrated alcohol.	
Digital audio signals cannot be output digitally.	• Set [Digital output] to [On].	11
	• When the HD layer of a Super Audio CD, a DSD file, or a PCM file with sampling frequency of 352.8 kHz, 384 kHz, 705.6 kHz or 768 kHz is played back, a digital audio output is not available.	21
The output levels of SACD and CD are quite different.	• This is due to the difference in recording format.	

This unit may not work normally when the unit is subject to external influence such as static electricity. In such a case, normal operation may resume by turning off the power once and turning on the power again after several tens of seconds or returning the unit to the factory setting. If the problem is not solved, please contact your dealer or our service center.

MEMO



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