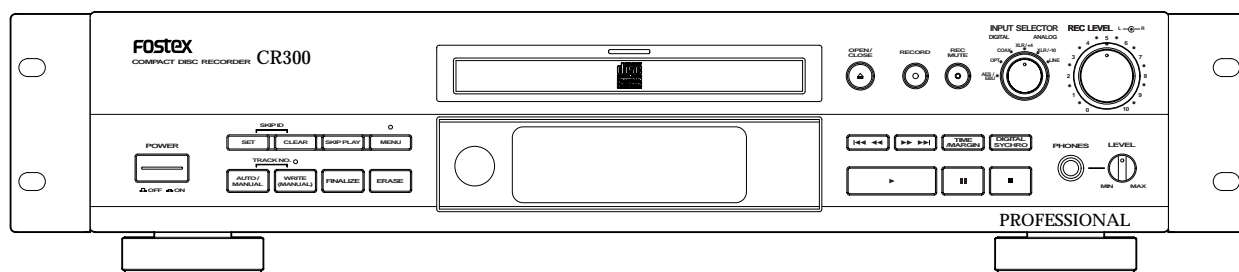


# Owner's Manual

## Model **CR300**

Compact Disc Recorder

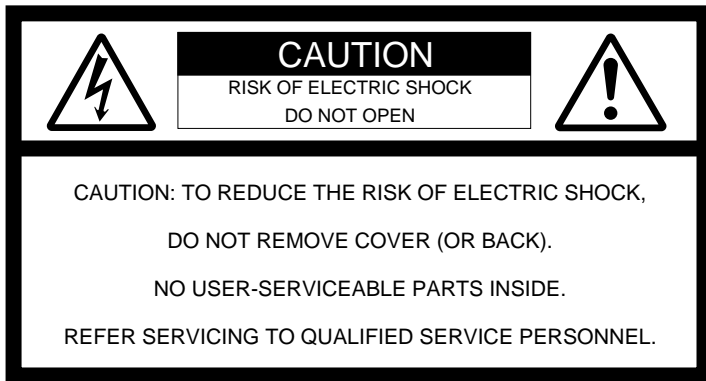


### FOR U.S. MODELS

NECESSARY INFORMATION FOR DHHS  
RULES MARKED ON THE REAR BASE AND  
ON THE TOP OF CD MECHANISM AS BELOW.

DANGER - LASER RADIATION WHEN OPEN.  
AVOID DIRECT EXPOSURE TO BEAM.

# Fostex®



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



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

## "WARNING"

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

## SAFETY INSTRUCTIONS

1. Read Instructions - All the safety and Owner's Manual should be read before the appliance is operated.
2. Retain Instructions - The safety and Owner's Manual should be retained for future reference.
3. Heed Warnings - All warnings on the appliance and in the Owner's Manual should be adhered to.
4. Follow Instructions - All operating and use instructions should be followed.
5. Water and Moisture - The appliance should not be used near water - for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, and the like.
6. Carts and Stands - The appliance should be used only with a cart or stand that is recommended by the manufacturer.



An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.

7. Wall or Ceiling Mounting - The appliance should be mounted to a wall or ceiling only as recommended by the manufacturer.
8. Ventilation - The appliance should be situated so that its location or position does not interfere with its proper ventilation. For example, the appliance should not be situated on a bed, sofa, rug, or similar surface that may block the ventilation openings; or, placed in a built-in installation, such as a bookcase or cabinet that may impede the flow of air through the ventilation openings.

9. Heat - The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.
10. Power Sources - The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.
11. Grounding or Polarization - The precautions that should be taken so that the grounding or polarization means of an appliance is not defeated.  
Alternate Warnings - This product is equipped with a three-wire grounding-type plug, a plug having a third (grounding) pin. This plug will only fit into a grounding-type power outlet. This is a safety feature. Do not defeat the safety purpose of the grounding-type plug.
12. Power Cord Protection - Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the appliance.
13. Cleaning - The appliance should be cleaned only as recommended by the manufacturer.
14. Nonuse Periods - The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.
15. Object and Liquid Entry - Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.
16. Damage Requiring Service - The appliance should be serviced by qualified service personnel when:
  - A. The power supply cord or the plug has been damaged; or
  - B. Objects have fallen, or liquid has been spilled into the appliance; or
  - C. The appliance has been exposed to rain; or
  - D. The appliance does not appear to operate normally or exhibits a marked change in performance; or
  - E. The appliance has been dropped, or the enclosure damaged.
17. Servicing - The user should not attempt to service the appliance beyond that described in the Owner's Manual. All other servicing should be referred to qualified service personnel.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

### Information to User

Alteration or modifications carried out without appropriate authorization may invalidate the user's right to operate the equipment.

### CAUTION

- Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.
- The use of optical instruments with this product will increase eye hazard.

### CAUTION:

This product satisfies FCC regulations when shielded cables and connectors are used to connect the unit to other equipment. To prevent electromagnetic interference with electric appliances such as radios and televisions, use shielded cables and connectors for connections.

### [For Canadian model]

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

### [Pour le modèle Canadien]

Cet appareil numérique de la Classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.



### Dear Customer:

Selecting fine audio equipment such as the unit you've just purchased is only the start of your musical enjoyment. Now it's time to consider how you can maximize the fun and excitement your equipment offers. This manufacturer and the Electronic Industries Association's Consumer Electronics Group want you to get the most out of your equipment by playing it at a safe level. One that lets the sound come through loud and clear without annoying blaring or distortion-and, most importantly, without affecting your sensitive hearing.

Sound can be deceiving. Over time your hearing "comfort level" adapts to higher volumes of sound. So what sounds "normal" can actually be loud and harmful to your hearing. Guard against this by setting your equipment at a safe level BEFORE your hearing adapts.

To establish a safe level:

- Start your volume control at a low setting.
- Slowly increase the sound until you can hear it comfortably and clearly, and without distortion.

Once you have established a comfortable sound level:

- Set the dial and leave it there.

Taking a minute to do this now will help to prevent hearing damage or loss in the future. After all, we want you listening for a lifetime.

### 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 a way that they are not likely to be stepped on. A damaged power cord can cause a fire or give you an electrical shock. Check the power cord regularly. When you find it damaged, ask your nearest FOSTEX authorized service station or your dealer for a replacement.

### We Want You Listening For A Lifetime

Used wisely, your new sound equipment will provide a lifetime of fun and enjoyment. Since hearing damage from loud noise is often undetectable until it is too late, this manufacturer and the Electronic Industries Association's Consumer Electronics Group recommend you avoid prolonged exposure to excessive noise. This list of sound levels is included for your protection.

### Decibel Level Example

30	Quiet library, soft whispers
40	Living room, refrigerator, bedroom away from traffic
50	Light traffic, normal conversation, quiet office
60	Air conditioner at 20 feet, sewing machine
70	Vacuum cleaner, hair dryer, noisy restaurant
80	Average city traffic, garbage disposals, alarm clock at two feet.

### THE FOLLOWING NOISES CAN BE DANGEROUS UNDER CONSTANT EXPOSURE

90	Subway, motorcycle, truck traffic, lawn mower
100	Garbage truck, chain saw, pneumatic drill
120	Rock band concert in front of speakers, thunderclap
140	Gunshot blast, jet plane
180	Rocket launching pad

Information courtesy of the Deafness Research Foundation.



# FEATURES

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This unit can be used to record CD-R (CD recordable) discs or CD-RW (CD rewritable) discs.

Once recorded, a CD-R disc cannot be erased. However, a recorded CD-RW disc can be erased later.

Both CD-R and CD-RW discs provide the high sound quality and excellent durability that is the hall mark of ordinary prerecorded CDs (compact discs).

## ● Playback of CD-R, CD-RW and CD discs

This recorder can be used to play partially recorded CD-R or CD-RW discs, finalized CD-R or CD-RW discs and ordinary prerecorded CD discs.

## ● Creation of CD-compatible discs

A CD-R disc can be played on any CD player just like ordinary prerecorded CD discs provided it has been finalized (by recording TOC) after recording.

CD-RW discs can only be played back on a player specially designed to handle CD-RW discs.

## ● Sampling frequency converter

When recording a digital source using 32 kHz or 48 kHz sampling frequency such as satellite broadcasting, DAT and DCC, this unit automatically converts the sampling frequency into 44.1 kHz which is the sampling frequency used with the CD.

However, the digital monitoring signal which is output during recording with this unit is based on the same sampling frequency as the recorded source.

## ● Digital-source synchro recording modes

When recording digital signals from a CD, DAT, MD or DCC, the recording on this unit can be started and stopped in synchronism with the starting and stopping of the playback of the source component.

A mode for synchro recording of a single track from the above-mentioned sources is available so that edited recording is easy.

## ● Build-in Multi-Level $\Delta\Sigma$ (Delta-Sigma) DAC

The multi-level Digital-Analog Converter achieves superior resolution compared to the conventional Delta-Sigma DAC, thus producing high conversion accuracy even when jitter is present in the system clock.

## ● 1-bit A/D converter

The A/D converter (analog-to-digital converter) of this unit uses the latest 1-bit conversion system. This system provides the following advantages compared to previous systems.

- Zero-cross distortion does not occur from the principle.
- Non-linear distortion does not occur throughout the frequency band.
- High accuracy is possible without adjustment.

These advantages preserve the original quality of the music including low-level signals.

## ● Newly-developed 3-beam differential push-pull pickup

The newly developed 3-beam pickup with differential push-pull system stabilizes operations and reproduces rich medium and low frequencies.

## ● Direct construction with minimized signal path and separated digital and audio

The direct construction reduces cross-interference between signals by achieving a correct signal transfer. It reproduces musical signals with high purity by thoroughly improving the distortion, channel separation and level linearity values. These improvements are not in terms of values at a single point but applied over a wide frequency range.

## ● Features Copy Bit

CD-R and CD-RW discs can be made by selecting one of the following three modes:

- Disc without copy prohibition ( Copy Bit = 1 )
- One-time-copy disc ( Copy Bit = 0 )
- Copy prohibited disc ( Copy Bit = 1/0 )

## ● Complies to standard EIA rack

The mounting holes on both left and right ends of the front panel comply to 19 inch EIA standard racks.

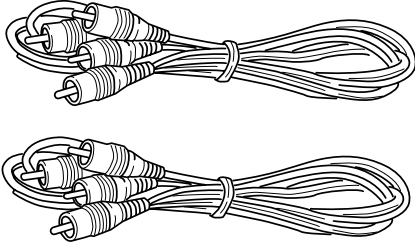
Use standard 3/16" diameter, 3/8" long screws sold in hardware stores for installation.

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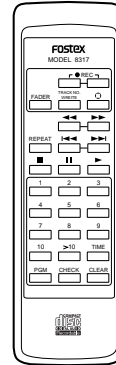
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# CHECKING ACCESSORIES

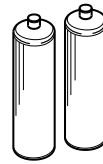
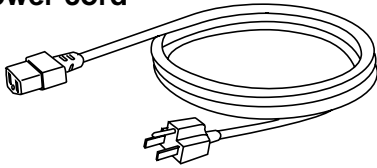
**Audio cables ... x 2**  
(analog recording, analog playback output)



**Remote control unit (Model 8317)**



**AC power cord**



**Owner's Manual**  
(this booklet)

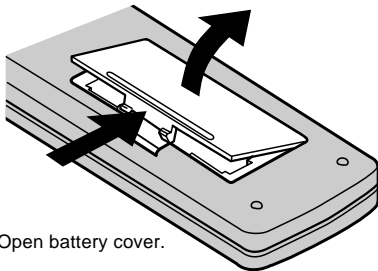
**AAA/R03 dry cell batteries ... x 2**

## Loading batteries in to the remote control unit Model 8317

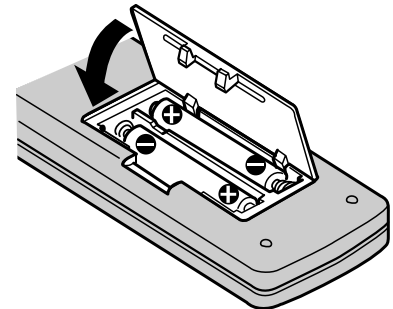
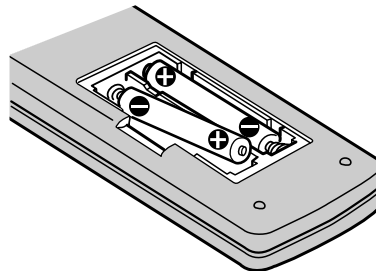
### Battery loading method

Remove the battery cover on the rear, insert 2 batteries matching the polarities (+, -) to the indications in the compartment and replace the cover.

Insert batteries according to the indications (+, -) in the compartment.



Open battery cover.



### <Caution on batteries>

- Load batteries with correct + and - orientations as indicated inside the battery compartment.
- Do not mix new and used batteries.
- Even when two batteries have the same shape, their rated output voltages may sometimes differ. Therefore, do not mix different brands of batteries.

### 2 batteries (AAA/R03 dry cell batteries)

- Some batteries are rechargeable while some are not. Read the instructions indicated on the batteries carefully before use.
- Battery life is about six months under normal use. Remove the batteries when the remote control unit is not to be used for a long period (more than 1 month).
- If the batteries leak, wipe the inside of the battery compartment well, and then load new batteries.

# CAUTIONS REGARDING HANDLING

## Location

Install the compact disc recorder in a well-ventilated location where it will not be exposed to high temperatures or humidity. Do not install the compact disc recorder in a location which is exposed to direct rays of the sun, or near stoves or radiators. Excessive heat can adversely affect the cabinet and internal components. Installation of the player in a damp or dusty environment may also result in a malfunction or accident. (Avoid installation near cookers etc., where the player may be exposed to oily smoke, steam or heat.) Do not install the compact disc recorder on an unstable or inclined surface.

## Precautions regarding installation

- Placing and using the compact disc recorder for long periods on heat-generating sources such as amplifiers will affect performance. Avoid placing the compact disc recorder on heat-generating sources.
- Install this compact disc recorder as far as possible from tuners and TV sets. A compact disc recorder installed in close proximity to such equipment may cause noise or degradation of the picture.
- Such noise may be particularly noticeable when an indoor antenna is used. In such cases, make use of an outdoor antenna, or turn off power to the compact disc recorder.
- Please place this unit on a level surface.

## Cleaning the compact disc recorder

To clean the compact disc recorder, wipe with a soft, dry cloth. For stubborn dirt, wet a soft cloth with a mild detergent solution made by diluting one part detergent to 5 or 6 parts water, wring well, then wipe off the dirt. Also use a dry cloth to wipe the surface dry. Do not use volatile liquids such as benzene and thinner which are harmful to the unit.

## Never move the unit during recording/playback

The disc rotates at a high speed during recording and playback. Do not lift or move the unit during these operations, otherwise the disc may be damaged or recording is impossible.

## CD lens cleaner

The compact disc recorder's pickup lens should not become dirty in normal use, but if for some reason it should malfunction due to soiling, consult your nearest FOSTEX authorized service center. Lens cleaners for compact disc recorders are commercially available, but special care should be exercised in their use since some may cause damage to the lens.

## Condensation

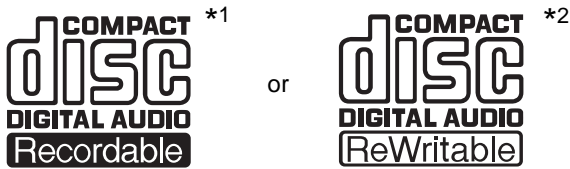
When this unit is brought into a warm room from previously cold surroundings or when the room temperature rises sharply, condensation may form inside, and the unit may not be able to attain its full performance. If this occurs, allow the unit to stand for about an hour or raise the room temperature gradually.

# DISCS

## Discs usable with this unit

### CD-R and CD-RW discs

When recording signals on a CD-R disc or a CD-RW disc with this unit, be sure to use the disc carrying the following mark and indication.



In countries where the copyright fee collection system has been established based on the respective copyright laws, the copyright fee for discs carrying the CD-R mark\*1 or the CD-RW mark\*2 and "FOR CONSUMER" or "FOR CONSUMER USE" indication has already been paid to the copyright owner as defined in the copyright law, so that the user can record music on such discs for personal use. However, if you want to use a disc for other purpose than personal use, you need to obtain permission from the copyright owner. Also note that the copyright laws are variable depending on the countries; be sure to follow the copyright-related law in your country.

### CD disc

The CD disc used with this unit should be a disc carrying the following mark (Compact Disc - digital audio with optical recording).

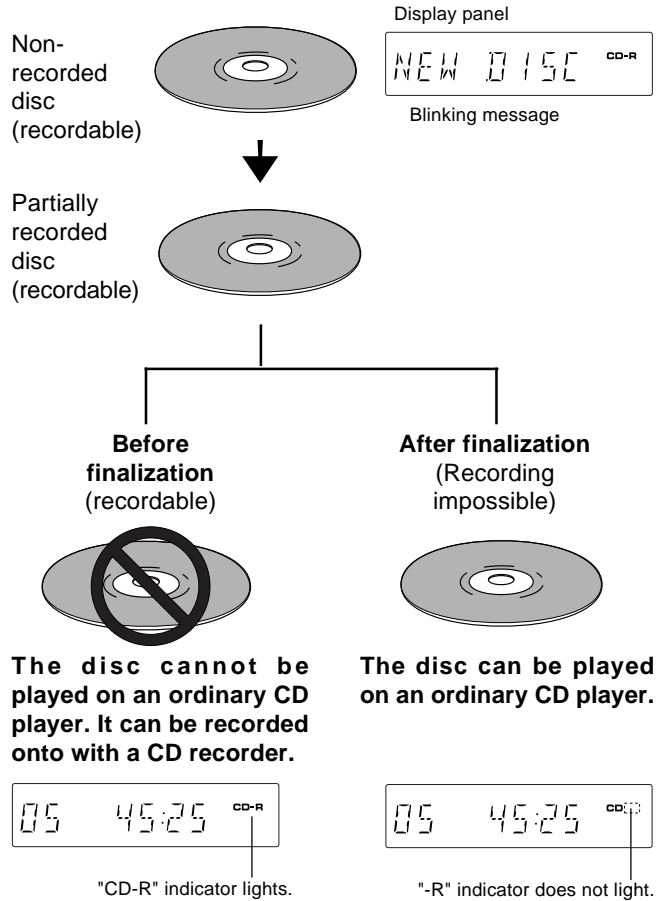


## Notes on the copyright

- Broadcast programs, records, other recording media (music tapes, cassettes, CD discs, etc.) and musical performance are protected by the copyright law in your country just like the verse and melody of musical pieces.
- Therefore, the copyright law dictates that permission should be obtained from the copyright owner if you sell, transfer, distribute or lease a disc recorded from the above mentioned sources or if you use it in business (including background music in your store).

## CD-R finalization

If it is desired to play a recorded CD-R disc on an ordinary CD player, the disc should be subjected to processing called finalization.



**CAUTION**  
After finalization;

- additional recording is impossible.
- Setting or clearing of skip IDs is impossible. (Refer to page 30 of the Owner's Manual.)

## CD-RW

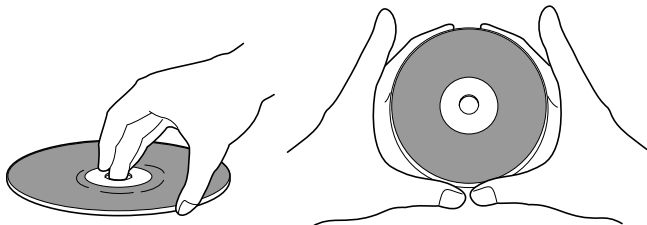
A finalized CD-RW disc cannot be played back on a standard CD player. A CD-RW disc player is required to play back such discs.

Recordings made on a CD-RW discs can be erased when they have been finalized (see page 32 for information on how to erase recordings). New recordings can be made after erasure.

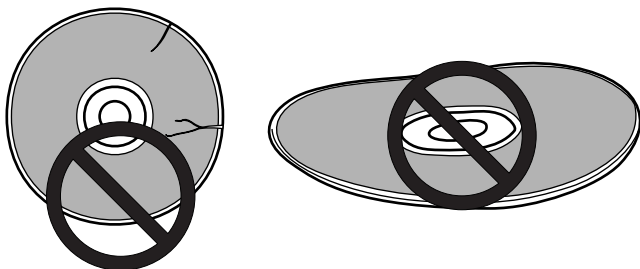


### Handling of disc

- When holding a CD-R, CD-RW or CD disc, be careful not to leave a fingerprint, dirt or a scratch on the signal-recording side. Hold the disc by placing your fingers on the edge or across the center hole and edge. A disc containing a fingerprint, dirt or a scratch can sometimes become unusable for recording or playback.

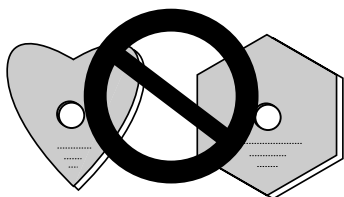


- Be careful not to scratch the label side. A scratched disc can sometimes become unusable for recording or playback.
- The disc rotates at a high speed inside the player. Do not attempt to use an abnormal disc (cracked disc, extremely warped disc, etc.).



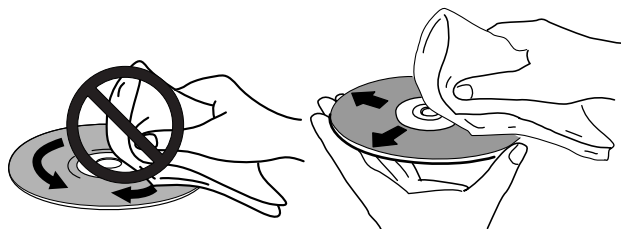
### Do not play a CD with a special shape

Do not play a CD having other shape than a circular disc, such as a heart shaped disc. Otherwise malfunction may occur.



### Disc maintenance

- When a disc is stained with a fingerprint or dust, the signal recorded on the disc itself is not affected but such a stain could degrade the sound quality by reducing the brightness of the light reflected from the signal recording side. Therefore, always try to keep the disc surface clean. For cleaning, use a soft cloth which is either dry or soaked in alcohol and wipe with a light force in straight directions from the center toward the edge.



Do not wipe in a circular direction.

Wipe lightly from the center toward the edge.

- For disc cleaning, it is recommended to use an optional disc cleaning kit.
- Do not use record spray or antistatic agent. Also take care that volatile chemicals such as benzine and thinner do not spill on the disc, for these substances may corrode the surface.

### Disc storage

- The CD-R, CD-RW and CD discs are made of plastic material just like analog record so. When storing a disc, take care so that it does not warp. Always put it in its case and stand the case upright and avoid places subject to direct sunlight, high temperatures, high humidity and extremely low temperatures. It is not recommended to leave the case on a car seat because the seat of a car in direct sunlight can become unbelievably hot.
- Be sure to read the instructions provided with the disc.
- Do not stick paper or seals on the label surface. Make sure the label surface is not scratched or damaged. Scratched or damaged surfaces may result in playback or recording failure. Use only a felt pen sold on the market or similar pen to write on the label. Never use a writing instrument with a hard point (ballpoint pen, pencil, etc.), as this will damage the disc.

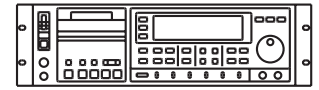
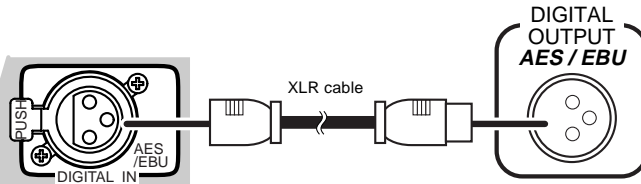


# CONNECTIONS

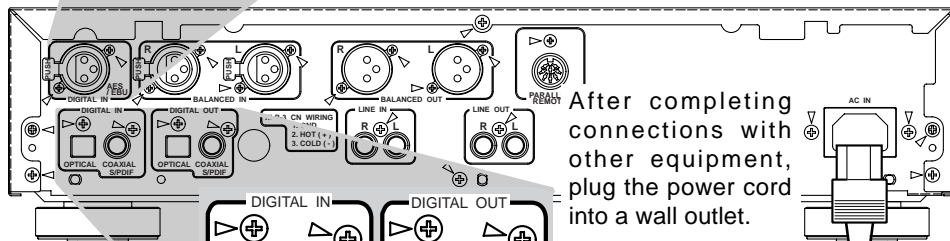
## DIGITAL SIGNAL CONNECTION

(Before connecting this unit with other equipment, unplug the power cord from the wall outlet.)

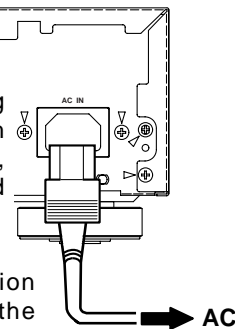
Align the connector with the shape of the socket and insert fully into the socket.



Connect to equipment with AES/EBU digital output jacks such as a professional DAT recorder.



After completing connections with other equipment, plug the power cord into a wall outlet.

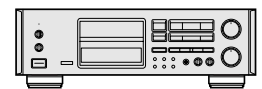
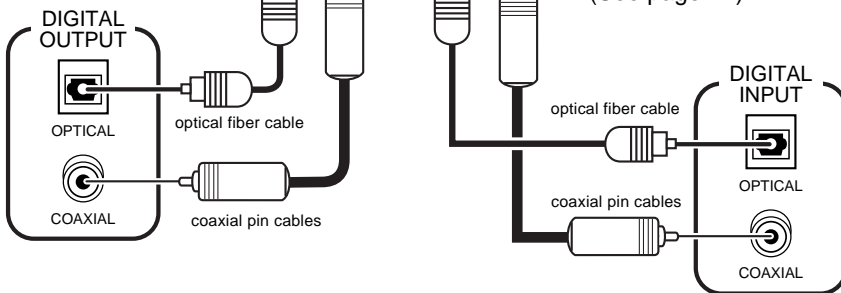


SRC(Sample Rate Converter) condition can be set using the MENU button functions. (See page 24)

Digital Out condition can be set using the MENU button functions. (See page 24)



Connect to equipment with a digital output jack, such as a CD player.



Connect to equipment with digital input/output jacks such as a DAT or MD recorder.

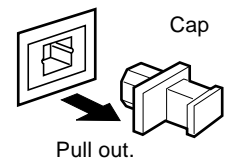
**CAUTION**  
Do not attempt to connect several units of the CR300 in a series.

### Caution in use of optical fiber cables

- Do not bend an optical fiber cable to a steep angle, for this could damage the cable. Be specially careful when mounting the unit in a rack, etc. When an optical cable is stored in the form of a loop, the loop should have a diameter larger than 15 cm (6 in.).
- An optical cable should be inserted deep into the socket. Avoid incomplete connection.
- Use optical cables with a length of no more than 3 m (10 feet).
- Be careful not to leave dust on or scratch the optical fiber cable plugs. If the plug is dusty, wipe with a soft cloth before connection.
- When the optical fiber cables are not connected, protect the OPTICAL sockets on the rear of the unit against dust by inserting dust protective caps into them.

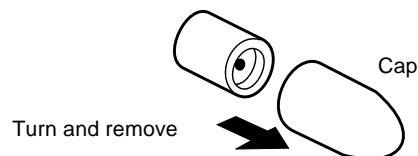
### Optical sockets are delicate!!

- When the OPTICAL sockets are used, pull out the dust protective caps from them. Be sure to insert them again when the OPTICAL sockets are not to be used.
- Retain the dust protective caps carefully.



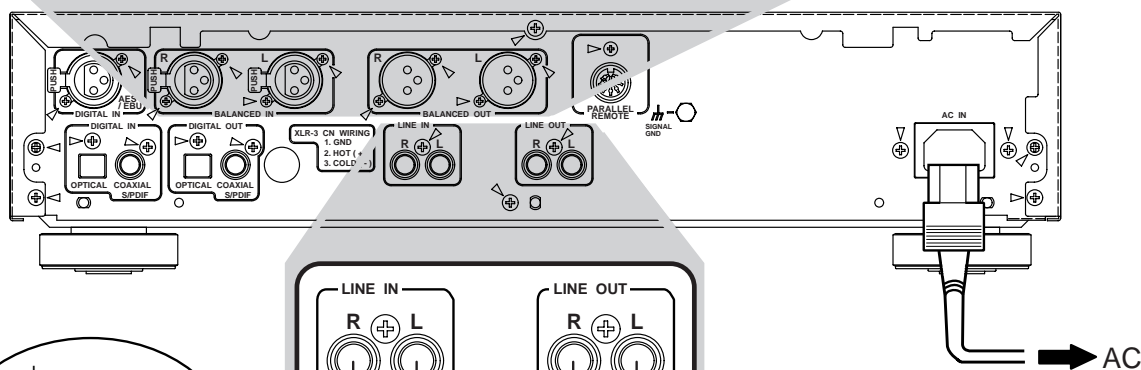
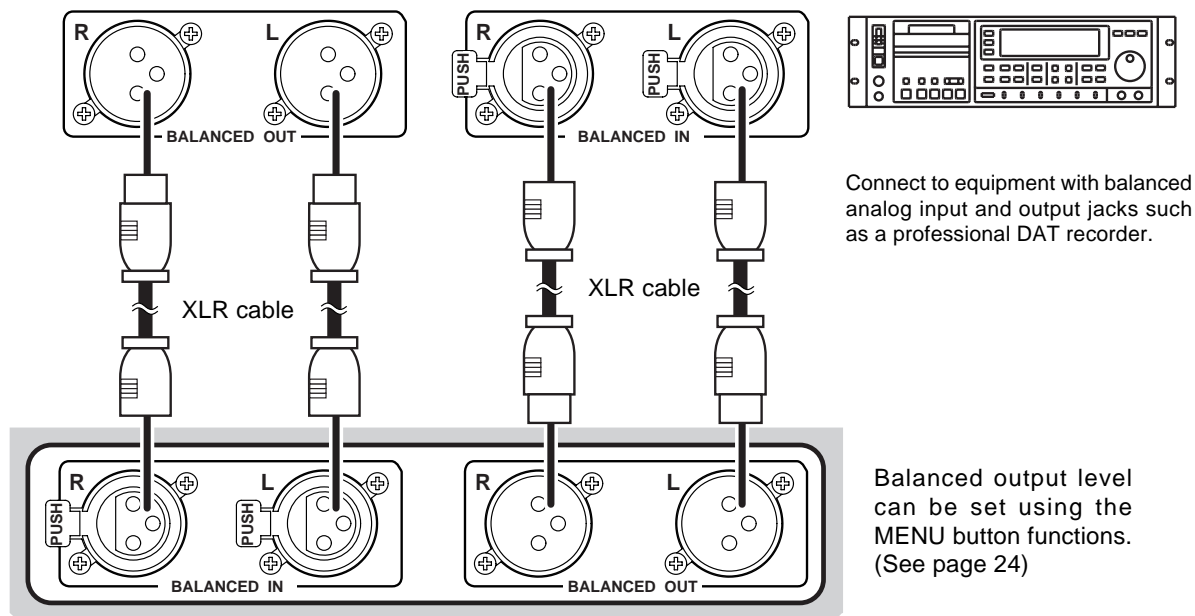
### Digital input/output (coaxial) terminal cap

- Remove the black cap before using the digital input/output terminal.
- Be sure to replace the black cap when not using the terminal.

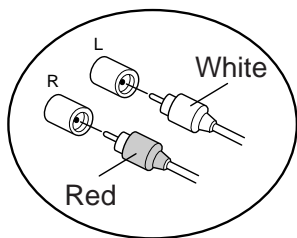


## ANALOG SIGNAL CONNECTION

(Before connecting this unit with other equipment, unplug the power cord from the wall outlet.)

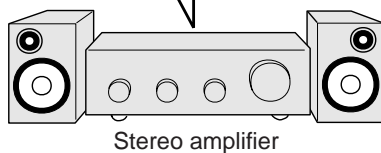
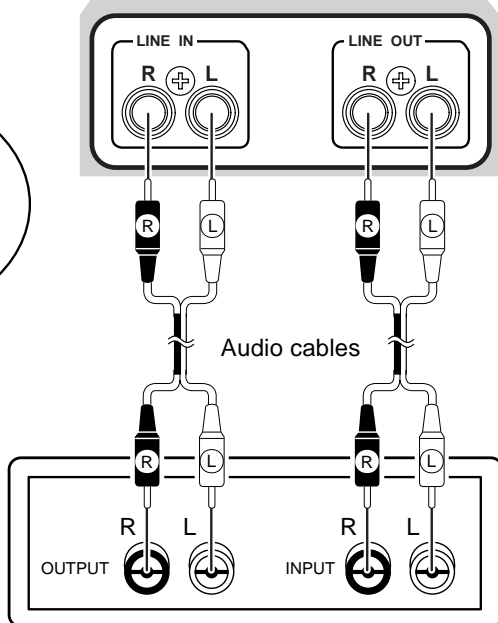


After completing connections with other equipment, plug the power cord into a wall outlet.



### Connection of input and output cords

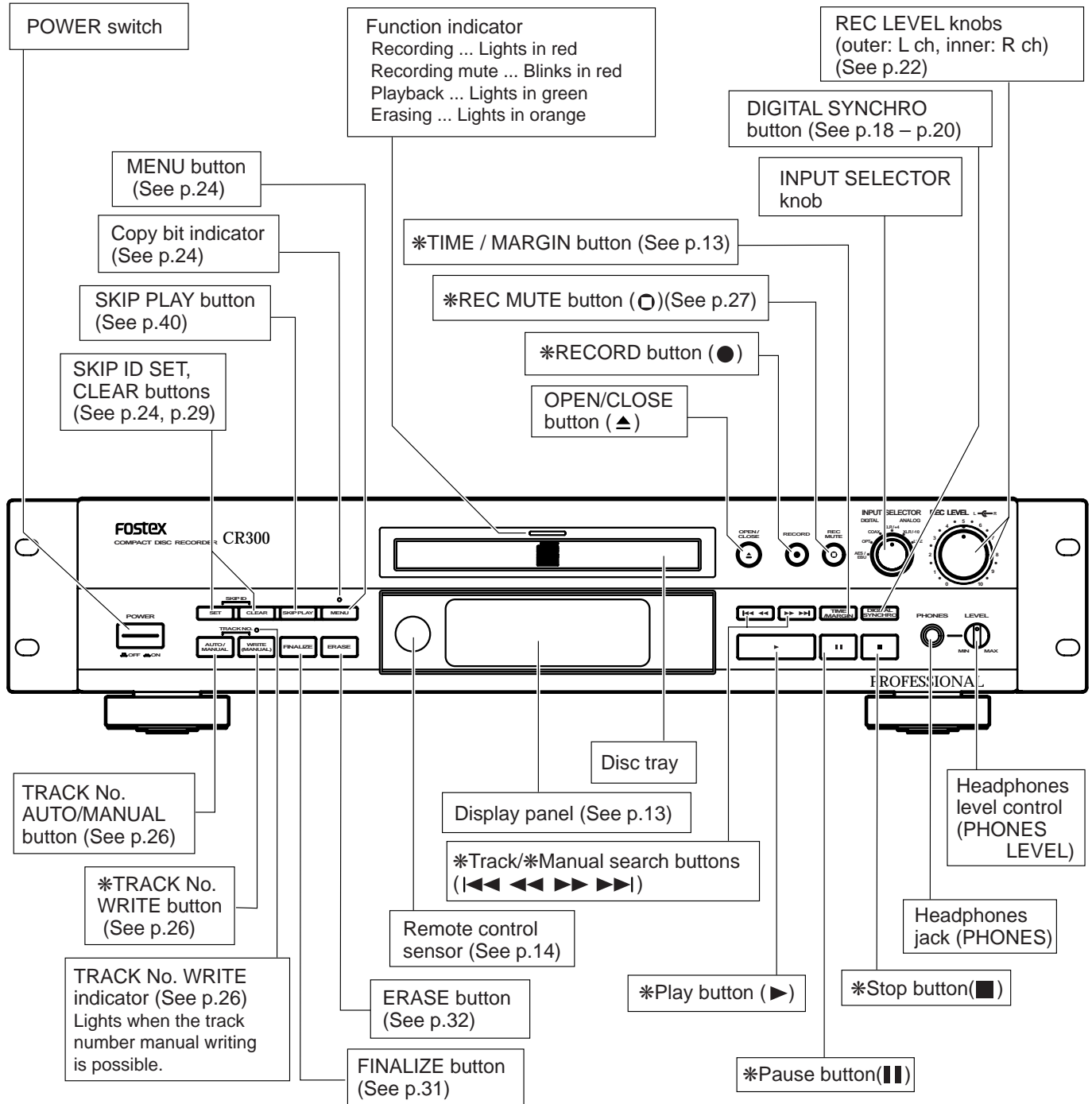
Connect the white plug to the (L) jack and red plug to the (R) jack. Be sure to fully insert the plugs into the jacks.



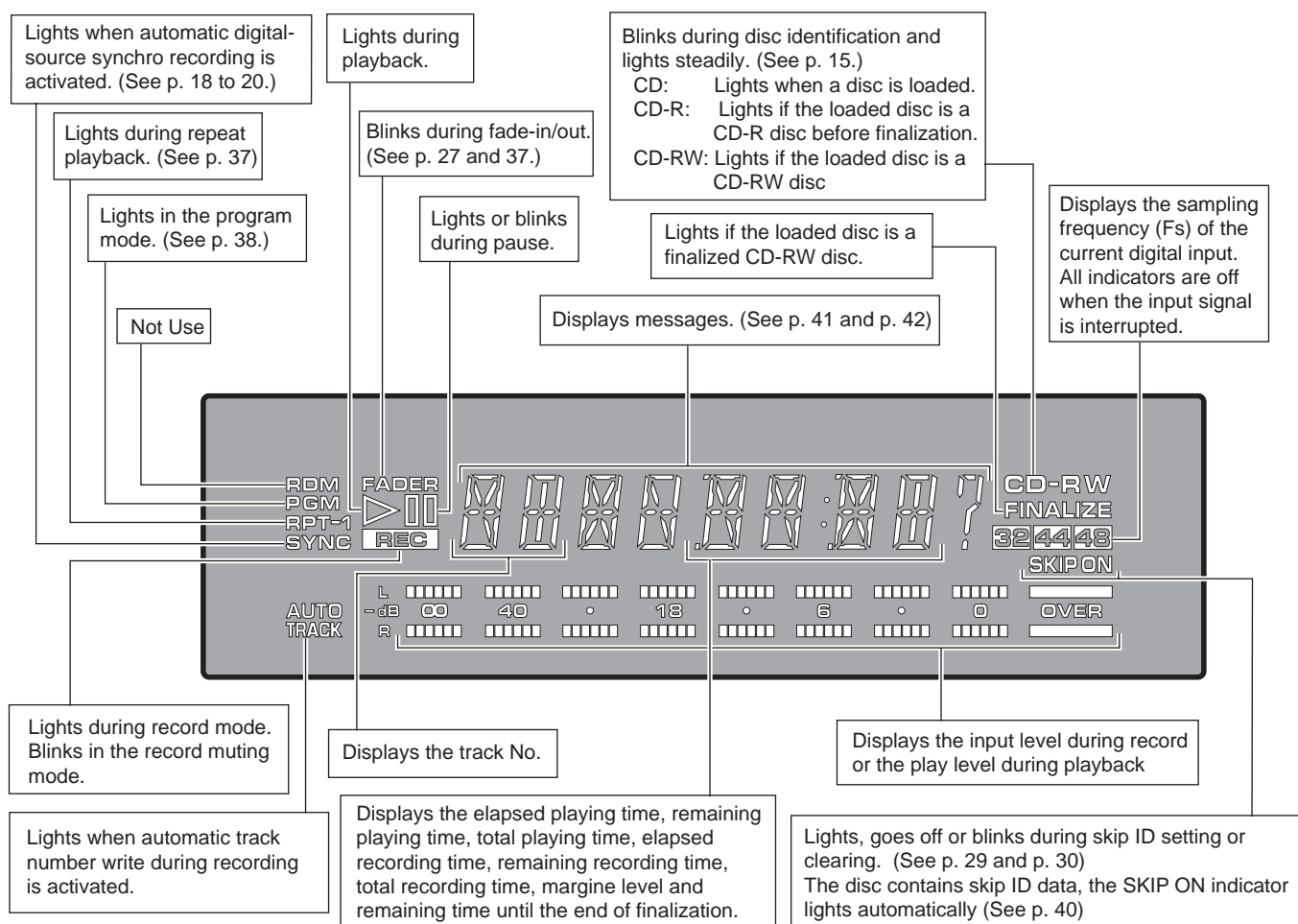
# CONTROLS AND INDICATORS

## FRONT PANEL

The operations available using buttons marked "\*" are also available using the buttons with the same names or inscriptions on the remote control unit 8317 (See page 14).



## DISPLAY PANEL



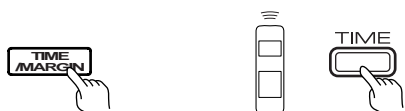
## Switching the time display

By pressing either the TIME/MARGIN button on the main unit or the TIME button on the wireless remote controller, the time display contents is switched.

Depending on a condition of loaded disc and CR300, the time display contents will be switched as shown below.

- Playing : All discs  
A → B → C1 → D → E → A → ...
- Recording : CD-R / CD-RW discs  
A → C2 → D → E → A → ...
- Stopping : CD-R (Not Finalized) / CD-RW (Not Finalized)  
A → B → C2 → D → A → ...
- Stopping : CD / CD-R(Finalized) / CD-RW(Finalized)  
A → B → C1 → D → A → ...

<b>A :</b> Elapsed playing/ recording time	02 03:14
<b>B :</b> Remaining playing time of track	02 -- 01:56
<b>C1 :</b> Remaining playing time of all tracks on disc	AL -- 58:34
<b>C2 :</b> Remaining recording time on disc	REM-- 17:29
<b>D :</b> Total playing/recording time	12-- -- 60:30
<b>E :</b> Margin indicator	L-02R--:01

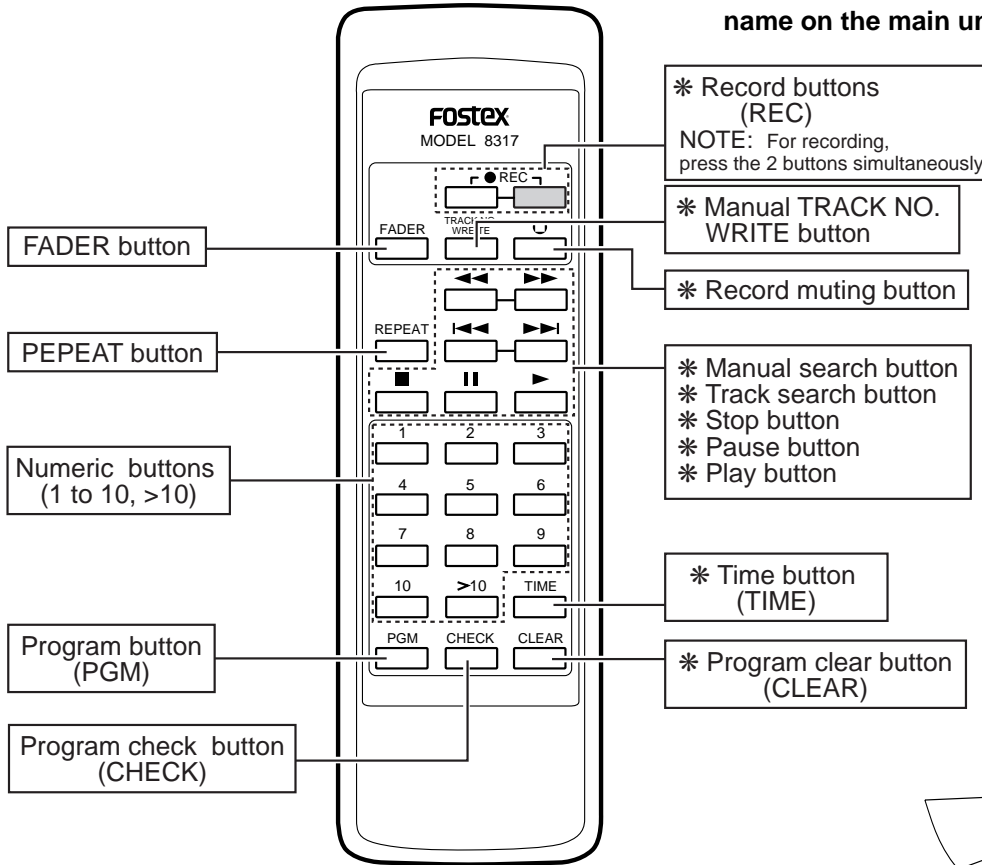


# CONTROLS AND INDICATORS

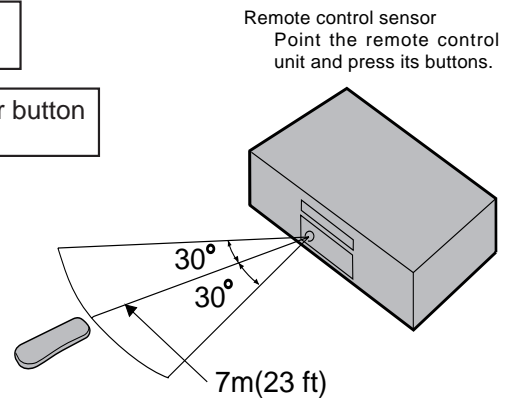
## REMOTE CONTROL UNIT

### ● Wireless remote control

Operations performed by buttons marked "\*" can also be carried out by using buttons with the same name on the main unit (See page 12).



Acceptance of commands from the wireless remote controller by the CR300 can be set using the MENU button function. (See page 24)



Remote controllable range

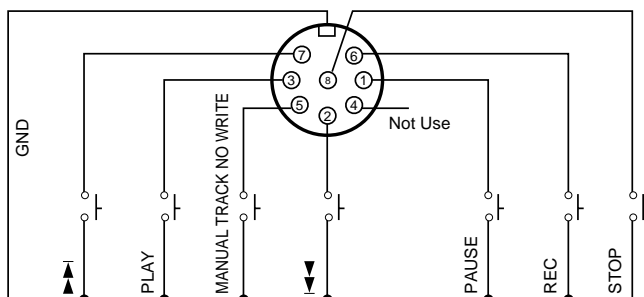
### ● Parallel remote control

The CR300 can be controlled through the rear panel parallel remote control input connector and also with the wireless remote controller included with the CR300.

DIN 8 pin connector



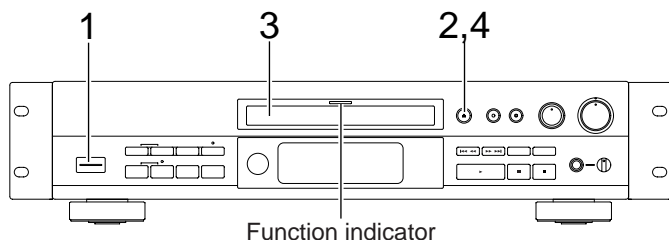
The CR300 can be controlled with external switches by utilizing the circuit shown below.



#### Caution on the remote control operation

- Remote control might not work if there is an obstacle between the remote control unit and the CR300 or if the remote control unit is operated at too great of an angle from the remote control sensor.
- Erroneous operation may occur in strong light such as direct sunlight or fluorescent lamp light shining into the remote control sensor.
- The CR300 may operate erroneously if it is used near equipment radiating infrared rays or if the infrared remote control unit of other equipment is used near the CR300. On the contrary, if this remote control unit is operated near another piece of equipment which can be controlled with infrared rays, that equipment might not work correctly.
- Replace batteries when the remote controllable range decreases noticeably.

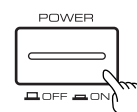
# DISC LOADING/UNLOADING



## A. OPEN THE DISC TRAY

### 1 Turn the power on.

- The function indicator will flash green.
- The display panel is illuminated.



### 2 Open the disc tray.

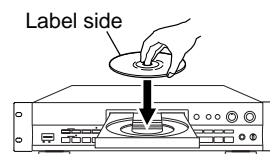
"OPEN" is displayed and the tray comes out.



- After recording or skip information recording, it takes a few seconds before the disc can be unloaded because the recording information is written on the disc. "OPEN" blinks in this period.

## B. CLOSE THE DISC TRAY (LOADING A DISC)

### 3 Place a disc.



### 4 Close the disc tray.

"CLOSE" is displayed and the tray is closed.



- Set a disc in the center of the tray with the label side up.
- When loading an 8-cm (3-inch) disc, set the disc in the groove in the very center of the tray.
- Load only one disc at a time.

The disc tray can also be closed by;

- pressing the play (▶) button.
- pushing the disc tray lightly.

When a disc is loaded, the disc type is identified and the information on the disc is read out. (In this period, "CD", "CD-R" and "CD-RW" are displayed alternately.)

Display for a non-recorded CD-R disc:		Display for a prerecorded CD or finalized CD-R disc:	 The total playing time is displayed.
Display for a non-recorded CD-RW disc:		Display for a prerecorded and finalized CD-RW disc:	 The total playing time is displayed.
Display for a partially recorded CD-R disc:	 The total recording time is displayed.	An attempt is made to start playback without loading a disc:	
Display for a partially recorded CD-RW disc:	 The total recording time is displayed.		

# MODE OF RECORDING

This section introduces the summary of the modes of recording available with this unit.

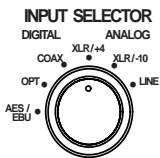
It is recommended to use the automatic digital-source synchro recording when **recording a CD, DAT, MD or DCC source (S/P DIF only)**.  
The track numbers are updated automatically by this unit.

For details, also refer to the corresponding descriptions.

This unit provides four mode of recording on CD-R and CD-RW discs.  
Select a mode according to the source recorded.

Automatic digital-source synchro recording (1-track)	..... When the source equipment starts to play, only one track is recorded automatically and the recording stops automatically after that track. This mode is convenient for edited recording of a CD, DAT, MD or DCC. (Refer to page 18 for the recording setup procedure.)
Automatic digital-source synchro recording (all-track)	..... When the source equipment starts to play, all tracks are recorded automatically and the recording stops automatically after the last track. This mode is convenient for recording an entire CD, DAT, MD or DCC. (Refer to page 19 for the recording setup procedure.)
Automatic finalization recording	..... This mode automatically performs finalization after an all-track automatic digital source synchro recording. (Refer to page 20 for the recording setup procedure.)
Manual digital-source recording	..... This mode is mainly used for recording the output from other digital sources than those mentioned above. Recording is started or stopped manually. (Refer to page 21 for the recording setup procedure.)
Analog-source recording	..... This mode is used for recording the line output of the source equipment. (Refer to page 22 for the recording setup procedure.)

**To monitor the recording input, set the INPUT SELECTOR to desired input position. Even if the position is the same, it must be changed to a different position and then switched back to monitor the input.**



When the input is selected, the input source equipment name is displayed as "INPUT" → "CD"(only from digital input) → "MONI".

- This display is available if the input source is a CD, MD, DAT or DCC.
- Before recording from LaserDisc, make sure that this unit's sampling frequency indicator lights in the display. Digital recording is not possible if this indicator does not light. Check the source with the record monitor.
- When recording from digital sources like CD, CDV, or LD players, the input source display may display "CD."
- A digital input source other than mentioned above such as AES/EBU is displayed as "-- --" .

**CAUTION**

This unit is a recorder for writable compact discs.

**\*1:**

**\*2:**

This recorder can record on discs carrying the CD-R mark\*<sup>1</sup>, the CD-RW mark\*<sup>2</sup>. The CD-R indicator lights when a CD-R (Compact Disc - Recordable) is loaded while the CD-RW indicator lights when a CD-RW (Compact Disc - Rewritable) is loaded. Recording on a partially recorded disc starts from the point where the previous recording left off. The CD-R disc is recordable once and cannot be erased once recorded. The CD-RW disc is recordable and can be erased and rerecorded again. In the following cases, recording is impossible even when the RECORD or DIGITAL SYNCHRO button is pressed.

- When the CD indicator is lit (CD or finalized CD-R), input monitoring is started by pressing any of the above buttons.
- When the CD-RW and FINALIZE indicators are lit (finalized CD-RW), input monitoring is started by pressing any of the above buttons.
- When there is no remaining recording time and "REC FULL" is displayed.
- When 99 tracks have been recorded and "REC FULL" is displayed. (No more recording is possible.)

When a CD-R or CD-RW disc is inserted, the unit automatically performs a series of adjustments designed to provide the best possible recording. It may take some time to complete the automatic adjustments if the unit is cold when the power is turned on. Please wait for the recorder to enter the record standby mode. Be sure to remove the disc before turning off the power. If the disc is left in the recorder, it may not operate normally next time.



**CAUTION:**

Do not play the DAT or DCC of the source player with programmed playback, for this may lead to incorrect writing of the track numbers. If programmed playback should be recorded, record each track separately using the 1-track recording procedure.

**Recording from the middle of a disc**

If a CD-R or CD-RW disc before finalization has some remaining recording time left and the total number of tracks which have been recorded is below 99, recording can be restarted from the position after the last recorded track.

**Recording of other-than-audio signals**

This unit is designed exclusively for recording audio signals. Non-audio signals such as the CD-ROM play signal cannot be recorded. Recording is possible only when the input digital signal is an audio signal.

Even when a digital signal contains a graphic or character information signal, for example the CD graphics play signal is input, the graphic or character information is not recorded.

**Precautions regarding power interruptions during recording or while the display shows "PMA REC."**

Never turn the power supply off during recording.

Be always sure to remove the disc before turning the power of the unit off.

In case the power supply is interrupted due to power failure or unplugging of the power cord by mistake during recording;

the last part of the recording will not be possible.

In this case, "RESUME" is displayed until recording is possible again.

**Caution in case the digital input is interrupted during recording**

In case the sampling frequency from the digital signal of DAT, DCC or satellite broadcasting is switched during recording, the digital input is interrupted but recording is continued. A non-recorded blank is recorded in this period.

In case the satellite broadcasting signal is interrupted, the digital signal line is disconnected or the power supply of the source player is cut off and if the digital signal is recovered in less than about 5-seconds, recording is continued while recording a non-recorded blank in this period. If the digital signal is not recovered in 5-seconds or more, recording is interrupted and "CAN NOT" and "REC" are displayed; recording restarts when the digital audio signal is input after the recovery of the digital signal.

**Cautions when making digital recordings from DAT**

Be sure to enter the start IDs in DAT tapes in positions located before the start of sound.

Tapes that are recorded using the DAT auto ID function records the start ID slightly after the beginning of the actual recording. This recorder uses the start ID to sense the transition between tracks in a digital recording from DAT tape.

Thus the following problems could occur when automatic updating of track numbers is used during automatic digital-source synchro recording or manual digital-source recording.

The beginning of a track is not recorded.

A new track number is created slightly after the beginning of a new track.

The beginning of the next track is recorded at the end of a recording.

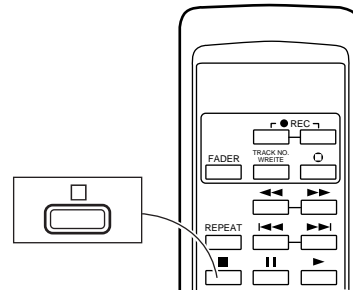
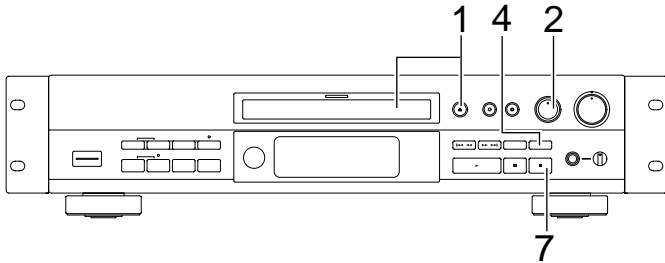
Manual recording of the DAT tape start ID is therefore recommended to avoid these problems.

For information on DAT operations, refer to the Owner's Manual provided with the DAT recorder.

# AUTOMATIC DIGITAL-SOURCE SYNCHRO RECORDING

## A. 1-track recording

When the source equipment starts to play, only one track is recorded automatically and the recording stops automatically after that track. This mode is convenient for edited recording of a CD, DAT, MD or DCC(only S/P DIF).



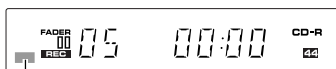
After loading the disc, check that the CD-R or CD-RW indicator stops blinking and starts to light steadily. In case it does not light steadily, refer to page 42.

- The AES/EBU digital input cannot be recorded with this function.
- The ANALOG input cannot be recorded with this function.
- Confirm the track to be recorded before recording.

- Every time the DIGITAL SYNCHRO button is pressed, the mode is changed in order of 1-SYNC → AL-SYNC → Record-pause mode. Select "AL-SYNC" when all-track recording is required.

- Do not start the playback of the source player until the SYNC indicator starts to blink.

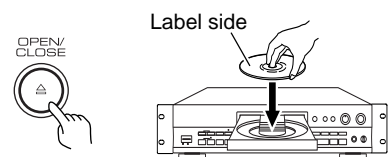
- If the SYNC indicator is not lit after 1-track synchro recording, the track to be recorded next can be confirmed on the source player. (Automatic recording cannot be started while the SYNC indicator is not lit.)



SYNC indicator is not lit.

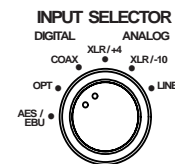
**1** Load a CD-R or CD-RW disc containing a recordable space.

For a disc loading, refer to page 15.



**2** Set the INPUT SELECTOR to DIGITAL.

Select OPTICAL or COAXIAL.

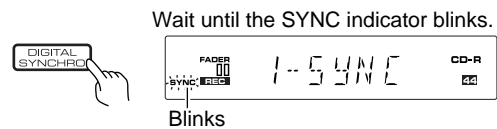


**3** Ensure that the source player is not playing (in stop or pause mode).

- This function cannot be activated if the source is being played.

**4** Press the DIGITAL SYNCHRO button.

- Check the copy bit indicator (refer to page 24).



Wait until the SYNC indicator blinks.

Blinks

**5** Start playing the source player.

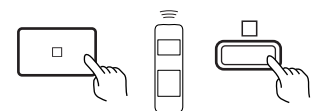
- This unit starts recording automatically.
- The SYNC indicator is flashing (1-track synchro recording standby), or during 1-track synchro recording, if the input signal is interrupted or the source is switched to a source for which auto synchro recording is not possible, the 1-track synchro recording mode will be canceled and the unit will enter the record-pause mode.

**6** If the track changes (when input source is CD or Mini Disc), or if the next start ID is detected (when input source is DAT or DCC), 1-track recording will be cancelled and the unit will enter the record-pause mode. The 1-track recording mode is also cancelled if no signal (less than -90dB) condition lasts for the length set by the MENU button functions. (See page 24)

- If it is required to record another track after 1-track recording, repeat steps 3 to 5 again.

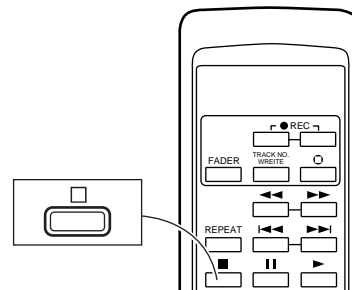
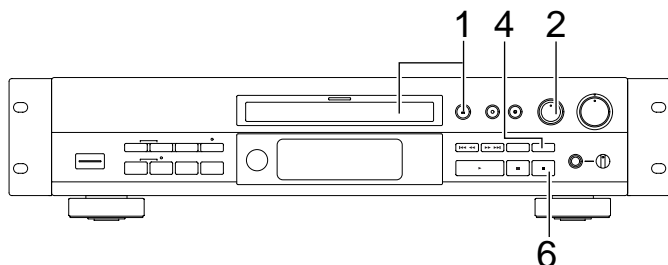
**7** After recording, press the stop (■) button to end recording.

"PMA REC" is displayed and the unit stops after recording the track data.



## B. All-track recording

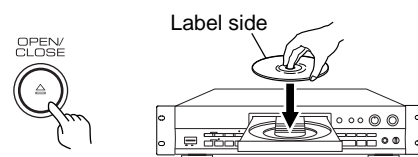
When the source equipment starts to play, all tracks are recorded automatically and the recording stops automatically after the last track. This mode is convenient for recording an entire CD, DAT, MD or DCC(only S/P DIF).



- After loading the disc, check that the CD-R or CD-RW indicator stops blinking and starts to light steadily. In case it does not light steadily, refer to page 42.

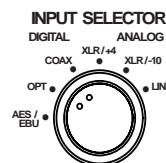
### 1 Load a CD-R or CD-RW disc containing a recordable space.

For a disc loading, refer to page 15.



### 2 Set the INPUT SELECTOR to DIGITAL.

Select OPTICAL or COAXIAL.



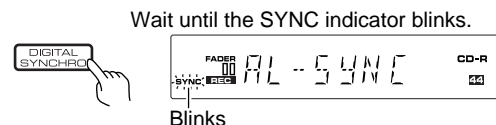
- The AES/EBU digital input cannot be recorded with this function.
- The ANALOG input cannot be recorded with this function.
- Confirm the track to be recorded before recording.

### 3 Ensure that the source player is not playing (in stop or pause mode).

- This function cannot be activated if the source is being played.

### 4 Press the DIGITAL SYNCHRO button.

- Check the copy bit indicator (refer to page 24).



Wait until the SYNC indicator blinks.

Blinks

- Do not start the playback of the source player until the SYNC indicator starts to blink.

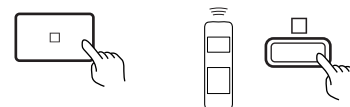
### 5 Start playing the source player.

- This unit starts recording automatically.
- When the SYNC indicator is flashing (all-track synchro recording standby), or during all-track synchro recording, if the input signal is interrupted or the source is switched to a source for which auto synchro recording is not possible, the all-track synchro recording mode will be canceled and the unit will enter the record-pause mode.

- The source unit stops playback and after no signal(less than -90dB) condition lasts for the length set by the MENU button functions(see page 24), the unit reverts to the status noted in step 4 and "AL-SYNC" is displayed again. Be careful not to restart playback of the source player under this condition, for this will start the recording again.

### 6 After recording, press the stop button to end recording.

"PMA REC" is displayed and the unit stops after recording the track data.



**CAUTION**

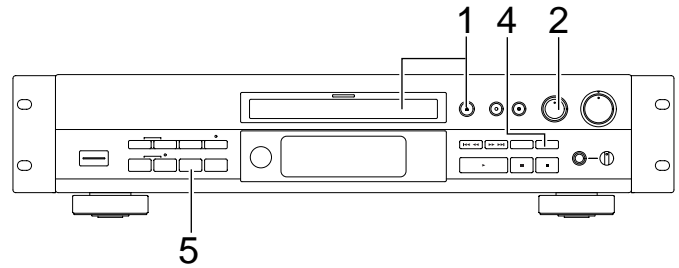
- Do not play the DAT or DCC of the source player with programmed playback, for this may lead to incorrect writing of the track numbers. If programmed playback should be recorded, record each track separately using the 1-track recording procedure.
- The track number is renewed when a start ID is detected during all-track synchro recording from DAT or DCC.
- When performing all-track synchro recording from a CD or Mini Disc player using normal playback, the track number is renewed just as the track changes on the playback side. When the CD or Mini Disc player is in the programmed playback mode, however, the track number is not renewed until the first sound is encountered after the track changes.

# AUTOMATIC DIGITAL-SOURCE SYNCHRO RECORDING

## C. Automatic finalization recording

This operation automatically performs finalization after an all-track recording (only S/P DIF). Finalization is the final process in recording a CD-R or CD-RW disc that is playable on standard CD players.

However, CD-RW discs, whether finalized or not, can only be played back on a CD-RW disc player. See page 31 for details.



- After loading the disc, check that the CD-R or CD-RW indicator stops blinking and starts to light steadily. In case it does not light steadily, refer to page 42.

- The AES/EBU digital input cannot be recorded with this function.
- The ANALOG input cannot be recorded with this function.

- Confirm the track to be recorded before recording.

- Every time the DIGITAL SYNCHRO button is pressed, the mode is changed in order of 1-SYNC → AL-SYNC → Record-pause mode. Select "AL-SYNC" when all-track recording is required.

- Press the FINALIZE button once again so that the FINALIZE indicator goes out; the Automatic Finalization will not occur (mode will revert to All-track synchro).

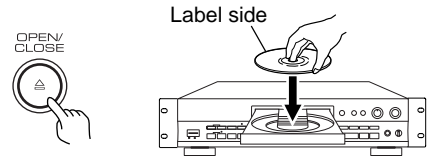
- Do not start the playback of the source player until the SYNC indicator starts to blink.

- The source unit stops playback and after no signal (less than -90dB) condition lasts for the length set by the MENU button functions (see page 24), the unit reverts to the status noted in step 4 and "AL-SYNC" is displayed again. Be careful not to restart playback of the source player under this condition, for this will start the recording again.

- Never turn off the power during finalization!

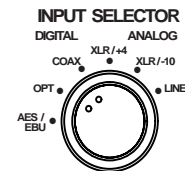
### 1 Load a CD-R or CD-RW disc containing a recordable space.

For a disc loading, refer to page 15.



### 2 Set the INPUT SELECTOR to DIGITAL.

Select OPTICAL or COAXIAL.

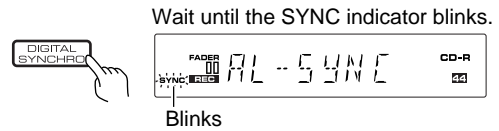


### 3 Ensure that the source player is not playing (in stop or pause mode).

- This function cannot be activated if the source is being played.

### 4 Press the DIGITAL SYNCHRO button twice.

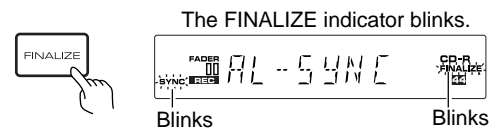
- Check the copy bit indicator (refer to page 24).



Wait until the SYNC indicator blinks.

Blinks

### 5 Press the FINALIZE button.



The FINALIZE indicator blinks.

Blinks

Blinks

### 6 When playback of the source is started, the All-track synchro recording starts.

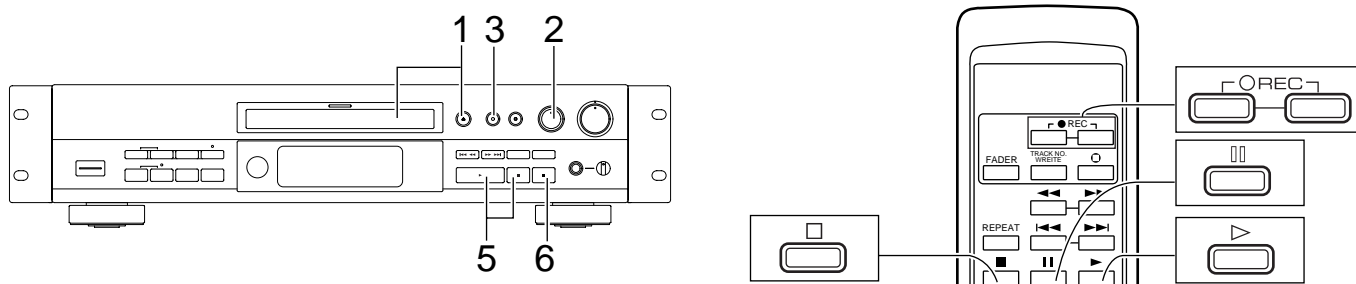
When the SYNC indicator is flashing (all-track synchro recording standby), or during all-track synchro recording, if the input signal is interrupted or the source is switched to a source for which auto synchro recording is not possible, the all-track synchro recording mode will be canceled and the unit will enter the record-pause mode.

### 7 When the source playback standby continues for more than 1 minute during an ALL-TRACK SYNCHRO RECORDING, the recorder assumes that the recording has stopped and finalization starts automatically.

- It usually takes about 4 minutes until the finalization completes.
- See page 31 for details.
- The finalize-standby mode can be cancelled by pressing the stop (■) button or FINALIZE button while the unit is in the finalize-standby mode.
- Operating buttons do not respond when finalization has begun.
- Operation stops automatically without performing finalization when no more recording time remains or when there are 99 or more tracks.

# MANUAL DIGITAL-SOURCE RECORDING

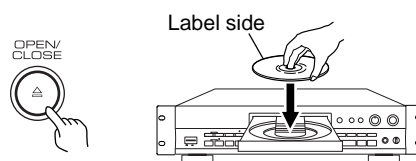
This function is for recording of digital output of other digital source than CD, DAT, MD and DCC.  
 (It is recommended to use the automatic digital-source synchro recording when recording signals from a CD, DAT, MD or DCC.)



- After loading the disc, check that the CD-R or CD-RW indicator stops blinking and starts to light steadily. In case it does not light steadily, refer to page 42.

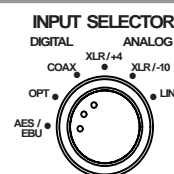
## 1 Load a CD-R or CD-RW disc containing a recordable space.

For a disc loading, refer to page 15.



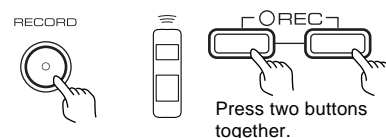
## 2 Set the INPUT SELECTOR to DIGITAL.

Select the digital input to be recorded.  
 AES/EBU or OPT or COAX



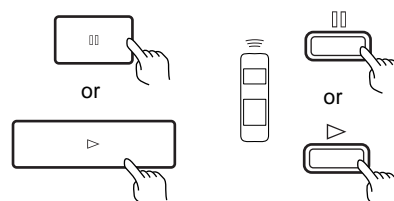
## 3 Press the RECORD (REC ●) button(s).

- This unit enters record-pause mode.
- Check the copy bit indicator (refer to page 24).



## 4 Start playing the source player to confirm whether recording of that source is possible.

## 5 Press the pause (||) or play (▶) button in record-pause mode.

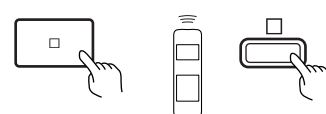


- Track numbers are automatically updated when the AUTO TRACK indicator is on.
- In recordings of CD, MD, DAT, DCC and other digital sources(S/P DIF only), track numbers are automatically updated based on start-ID and / or track number included in the digital signal information.
- AES/EBU digital signal or digital signal from media such as BS (satellite broadcasting) that contains no track number information are recorded in the same way as analog source.
- Track numbers are automatically updated if the following signal is input after 2-seconds of "no signal" condition.
- In the case of digital source input, the CR300 detects the signal less than -90dB as "no signal". Track numbers are automatically updated if the signal level exceeds this level.
- Therefore recordings of classical music and other music styles with long silent passages will be recorded on more tracks than required. Turn off the auto track function and create new tracks manually to avoid this problem.

- Press the PAUSE (||) or PLAY (▶) buttons after the counter displays "00:00".

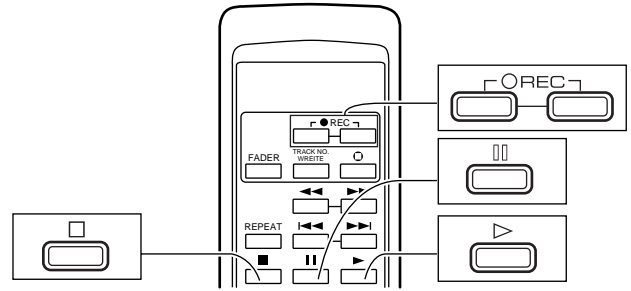
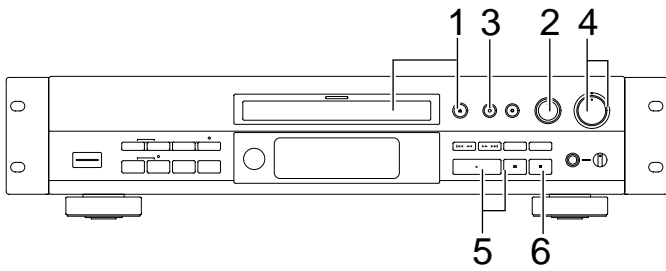
## 6 After recording, press the stop (■) button to end recording.

- "PMA REC" is displayed and the unit stops after recording the track data.



# ANALOG-SOURCE RECORDING

This function is for recording the analog output.



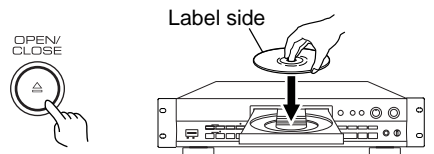
- After loading the disc, check that the CD-R or CD-RW indicator stops blinking and starts to light steadily. In case it does not light steadily, refer to page 42.

- Track numbers are automatically updated when the AUTO TRACK indicator is on.
- Track numbers are automatically updated if the following signal is input after 2-seconds of "no signal" condition.
- In the case of analog source, the CR300 detects the signal level selected by the "Automatic Track Number Renewal Level Sensitivity Setting" menu as "no signal". Track numbers are automatically updated if the signal level exceeds this level. (See page 24.)
- Therefore recordings of classical music and other music styles with long silent passages will be recorded on more tracks than required. Turn off the auto track function and create new tracks manually to avoid this problem.

- Press the PAUSE (||) or PLAY (▶) buttons after the counter displays "00:00".

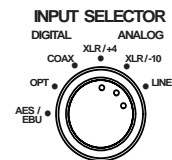
## 1 Load a CD-R or CD-RW disc containing a recordable space.

For a disc loading, refer to page 15.



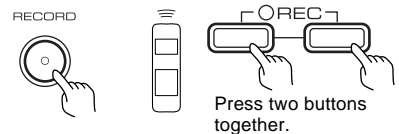
## 2 Set the INPUT SELECTOR to ANALOG.

Select the analog input to be recorded.  
XLR/+4 or XLR/-10 or LINE



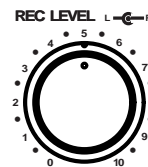
## 3 Press the RECORD (REC ●) button(s).

- This unit enters record-pause mode.
- Check the copy bit indicator (refer to page 24).



## 4 Adjust the recording level.

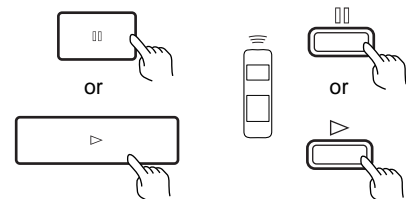
Refer to page 23 for the adjustment method.



- Start playback of the source player.

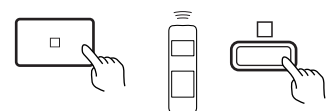
## 5 Press the pause (||) or play (▶) button in record-pause mode.

- This unit starts recording.
- Start playback of the source player after having started the recording of this unit.



## 6 After recording, press the stop (■) button to end recording.

- "PMA REC" is displayed and the unit stops after recording the track data.



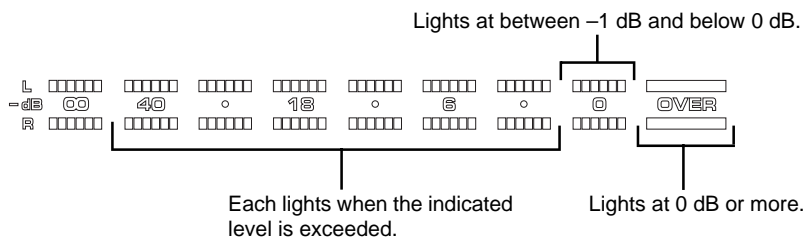
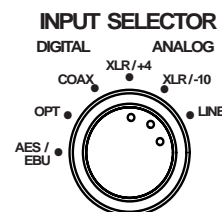
## Recording level adjustment

- **Adjustment reference**

For recording of analog input, adjust the recording level so that the OVER-level indicator does not light even when the highest, or peak level is input. Sound may be distorted if the OVER-level indicator lights.

- **Level meter**

The level meter segments light to indicate the input level during recording or play level during playback.



- **Minimum recording time per track**

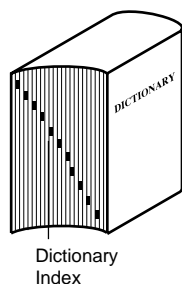
As the CD specifications dictate that each CD track should be no less than 4 seconds, even when the pause (II) or stop (■) button is pressed in less than 4 seconds after the start of recording, recording does not pause or stop until a 4-second track is created by leaving a non-recorded blank in the insufficient period.

In this case, the next operation cannot be activated until a 4-second track has been created.

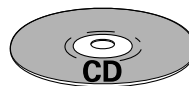
- **Track number write operation**

Ordinary CD-digital audio contains the recording of track numbers so desired tracks can be selected and played. When recording with a CD-R recorder, however, you need to write the track numbers yourself. When recording from digital sources containing track number information (such as a CD, MD, DAT, or DCC), a new track number is recorded automatically when this unit detects a change track number information and sound from the digital source. In case of recording of a source which does not contain track number information such as an analog source or satellite broadcasting (BS), you must write a new track number by yourself between tracks. (Be specially sure not to forget this for it is not possible to add track numbers once recording has completed.)

For the track number write operation procedure, refer to page 26.

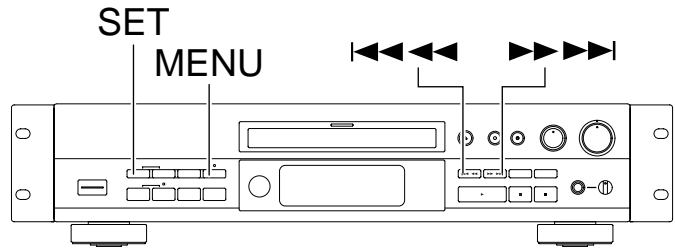


CD contains track number information just like a dictionary contains an index.



# MENU BUTTON FUNCTIONS

By pressing the MENU button while the CR300 is in STOP mode, operation of various functions can be selected as shown below. Pressing the MENU button every time would allow you to select a different MENU.

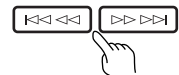


**1 Select a desired MENU by pressing the MENU button.**

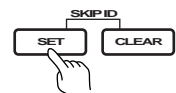
- Pressing the MENU button every time would allow you to select a different setup MENU.
- The current setup MENU condition is displayed.



**2 By pressing either the <<<< or >>>> button, the setting is altered.**



**3 Pressing the Skip ID SET button would register the above condition.**



## A. Copy Bit Setting

This menu selects the Copy Bit condition recorded onto a disk. (Refer to page 18, 19, 20, 21, 22)

- *Copy bit indicator: It indicates the Copy Bit condition while in the Record-Pause mode.*

Display	Meaning	Copy bit indicator	Copy Bit
PERM IT	Hereafter, unlimited digital copy is possible. <u>default</u>	Lit solid	1
ONCE ?	Hereafter, digital copy is possible only once.	Off	0
INHIBIT ?	Hereafter, digital copy is prohibited.	Blinking	1/0

## B. Auto stop delay time Setting in Digital Synchro

In this menu, length of no signal (less than -90dB) recorded section can be selected in order to stop Digital Synchro recording automatically. (Refer to page 18, 19, 20)

Display	Meaning
ASD 0	0 sec <u>default</u>
ASD 10 ?	10 sec
ASD OFF ?	Digital Synchro recording cannot be stopped automatically.

## C. Fade In / Fade Out Time Setting

This menu allows to select the Fade in/Fade out time. (Refer to page 27, 37)

Display	Meaning
FADE 6	Fade time : 6 sec <u>default</u>
FADE 9 ?	Fade time : 9 sec
FADE 12 ?	Fade time : 12 sec
FADE 18 ?	Fade time : 18 sec



### D. Automatic Track Number Renewal Level Sensitivity Setting

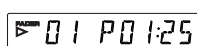
This menu selects the analog source input level sensitivity for automatic track number renewal. (Refer to page 22, 26)

Display	Meaning
AT-60dB	-60dB <u>default</u>
AT-54dB ?	-54dB
AT-48dB ?	-48dB
AT-42dB ?	-42dB
AT-36dB ?	-38dB
AT-66dB ?	-66dB

### E. Auto Pause Mode Setting

This menu allows to select whether the AUTO PAUSE PLAY mode is turned on or off. (Refer to page 37)

Display	Meaning
A-PA OFF	The AUTO PAUSE PLAY mode is turned off. <u>default</u>
A-PA ON ?	The AUTO PAUSE PLAY mode is turned on.



As shown in the drawing below, when the AUTO PAUSE mode is on, the letter "P" is displayed.

Note : If the power is once turned off and on again, this mode will become Off condition.

### F. Balanced Output Level Setting

This menu selects the standard level of Balanced Output. (Refer to page 11)

Display	Meaning
B-LEV HI	+4dBu <u>default</u>
B-LEV LO?	-10dBV

### G. Wireless Remote Control

This menu selects whether the CR300 is controlled by a wireless remote controller or not. (Refer to page 14)

Display	Meaning
IR ON	The CR300 can be controlled by a wireless remote controller. <u>default</u>
IR OFF?	The CR300 cannot be controlled by a wireless remote controller.

### H. Sample Rate Converter Thru

This menu selects whether the 44.1kHz digital signal is input through the SRC(Sample Rate Converter) or not. (Refer to page 10)

Display	Meaning
SRC OFF	The input signal passes through the SRC. <u>default</u>
SRC ON ?	The input signal goes around the SRC.

Note : If the power is once turned off and on again, this mode will become Off condition.

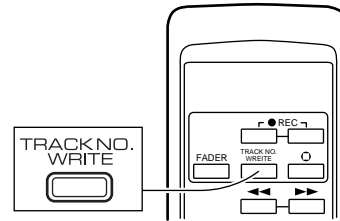
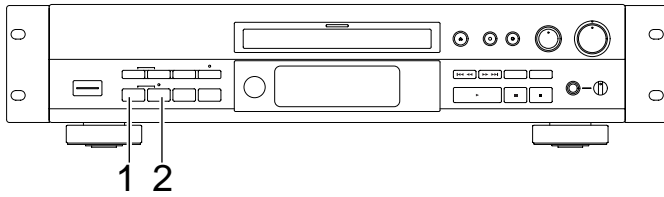
### I. Digital Out

This menu selects whether a signal is output from Digital Out terminal. (Refer to page 10)

Display	Meaning
DO ON	A signal is output from Digital Out terminal. <u>default</u>
DO OFF?	A signal is not output from Digital Out terminal.

# TRACK NUMBER WRITING

At the first, the track number automatic writing mode is selected automatically.

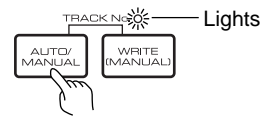


- Once the track number has been written, it cannot be modified or changed later.

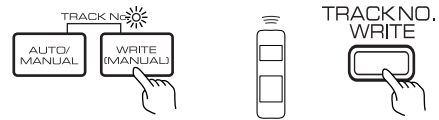
- The WRITE (MANUAL) button is defeated while the WRITE (MANUAL) indicator is not lit.
- The track number can be renewed by pressing the WRITE (MANUAL) button when recording has elapsed for 4 seconds or more.

## • Manual writing of track number

**1** Press the TRACK NO. AUTO/MANUAL button so that the WRITE (MANUAL) indicator lights.



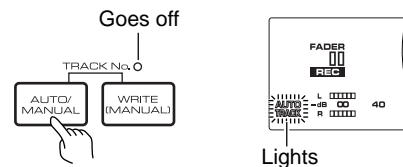
**2** Press the WRITE (MANUAL) button at the position where it is required to renew the track number during recording.



- During recording, the track number is automatically renewed by detecting the track changes based on the input musical signal and digital sub-code signal.
- If the space between tracks is extremely short, the track number may not be advanced.

## • Automatic writing of track number

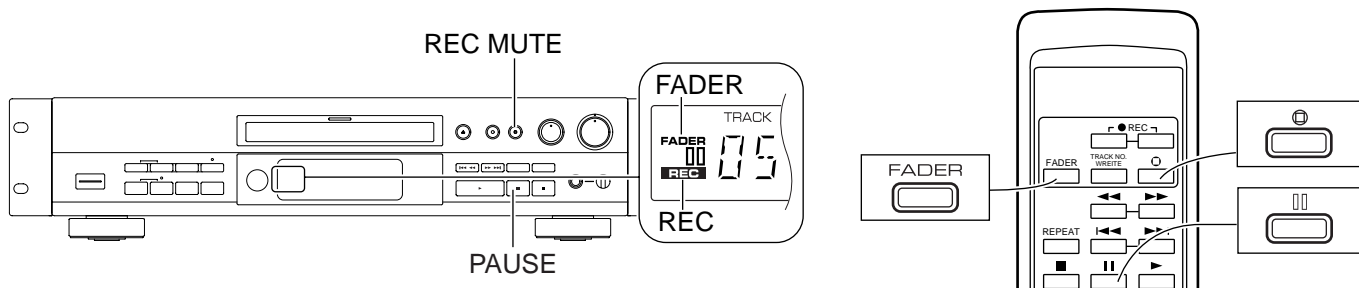
Press the TRACK NO. AUTO/MANUAL button so that the WRITE (MANUAL) indicator is not lit but that the AUTO TRACK indicator lights.



**CAUTION**

- Track numbers are automatically updated when the AUTO TRACK indicator is on.
- In recordings of CD, MD, DAT, DCC and other digital sources(S/P DIF only), track numbers are automatically updated based on start-ID and / or track number included in the digital signal information.
- AES/EBU digital signal or digital signal from media such as BS (satellite broadcasting) that contains no track number information are recorded in the same way as analog source.
- Track numbers are automatically updated if the following signal is input after 2-seconds of "no signal" condition.
- In the case of digital source input, the CR300 detects the signal less than -90dB as "no signal". Track numbers are automatically updated if the signal level exceeds this level.
- In the case of analog source, the CR300 detects the signal level selected by the "Automatic Track Number Renewal Level Sensitivity Setting" menu as "no signal". Track numbers are automatically updated if the signal level exceeds this level. (See page 24.)
- Therefore recordings of classical music and other music styles with long silent passages will be recorded on more tracks than required. Turn off the auto track function and create new tracks manually to avoid this problem.

# CONVENIENT FUNCTIONS FOR RECORDING

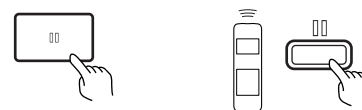


- When the record-pause mode has continued for about 10 minutes, the record-pause mode stops. To enter the record-pause mode, press the RECORD button(s).

## • To pause recording

**Press the pause (||) button to pause recording temporarily.**

To restart recording, press the play (▶) or pause (||) button.



- You can create 4-second or longer silent passages by pressing the REC MUTE button. The unit is set to the record-pause mode when the button is released.

• The REC MUTE button can be used during recording or when going from recording to record-pause mode. The REC MUTE button cannot be used when the record-pause mode is activated from the stop mode.

## • Creating a blank

**Press the REC MUTE button during recording.**

The REC indicator blinks and a blank is recorded. The unit automatically enters record-pause mode in about 4 seconds.

- To restart recording, press the play (▶) or pause (||) button.
- To end recording, press the stop (■) button.



## • Starting recording with fade-in

**Press the FADER button in record-pause mode.**

- Recording starts by gradually increasing the recording level. The FADER indicator blinks in this period.
- Fade time can be set using the MENU button functions (See page 24).



## • Stopping recording with fade-out

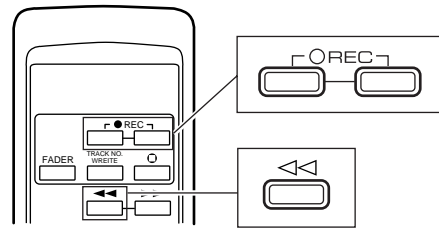
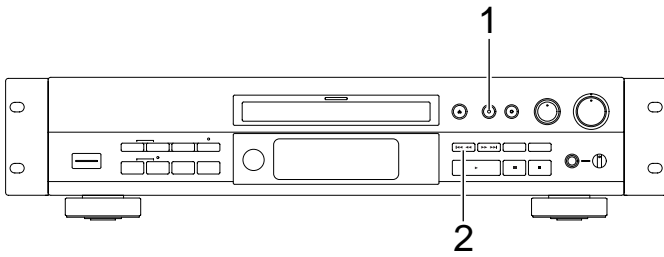
**Press the FADER button in record mode.**

- Recording stops by gradually decreasing the recording level. The FADER indicator blinks in this period. Recording stops in Fade-time after the button is pressed. The unit enters the record-pause mode.
- Fade time can be set using the MENU button functions (See page 24).



- To restart recording, press the play (▶) or pause (||) button.
- To end recording, press the stop (■) button.

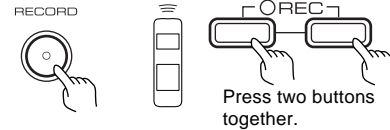
# CONVENIENT FUNCTIONS FOR RECORDING



• **Checking the recording end point from the middle of a disc**

- Holding the (or ) button depressed allows you to move the played position backward by about 2 minutes from the recording end point.
- Pressing the RECORD (REC ●) button(s) during playback puts the unit back to record-pause mode again.
- Pressing the (or ) button allows forward manual search of the recording end point.
- The indicator turns off during playback until the recording end point.

**1** Press the RECORD (REC ●) button(s) to initiate the record-pause mode.



**2** Press and hold the reverse search button in the record-pause mode.



The played position is moved backward and reverse play sound is heard while the button is held depressed. When the button is released, the previous recording is played until the end point, where the unit enters record-pause mode again.

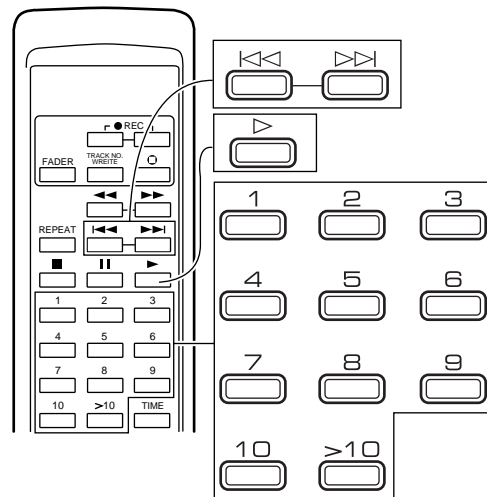
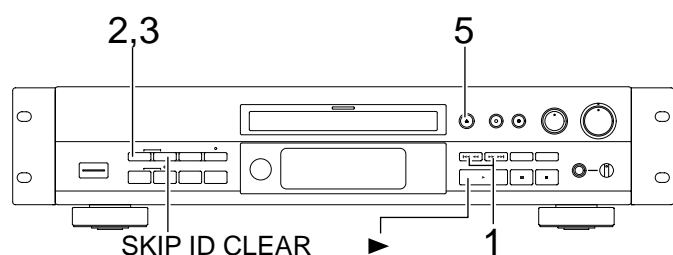
# SKIP ID RECORDING

By setting track skip IDs to the tracks which failed or which consist of a blank, they can be skipped when the disc is played later.

**CAUTION:**

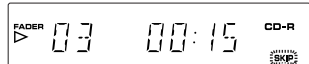
Skip IDs can be set or cleared for up to a total of 21 tracks. If skip IDs are set or cleared repeatedly, the number of tracks to which track skip IDs will decrease. Skip IDs cannot be set or cleared with CD discs or finalized CD-R, CD-RW discs.

• Skip playback is not possible with an ordinary CD player which does not incorporate the skip function.



## A. Setting skip ID to a track (Track skip)

- If skip IDs have already been set, the SKIP indicator lights on the display.



Lights.

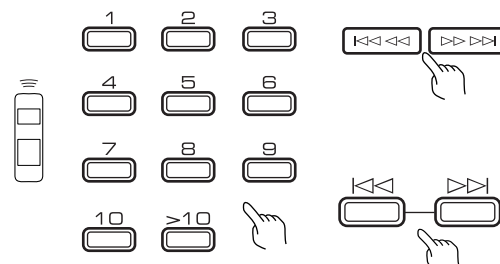
- When the track search button (◀◀ or ▶▶) is pressed while "SKIP" and "SET?" are displayed, tracks to which the skip IDs are not set will be played in order of track numbers.
- The selected tracks play back repeatedly.
- When the play (▶) button or SKIP ID CLEAR button is pressed during the setting operation, the setting mode is canceled.

- When an attempt is made to set or clear more skip IDs than possible, "FULL" is displayed and no more recording is possible.

- When the button is pressed to remove the disc, the skip ID setting data is recorded on the disc. At this time, "OPEN" is displayed for a few seconds, and the tray opens after the skip ID setting data has been recorded.

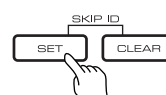
### 1 Play the track to be skipped.

Select it with the numeric buttons of the remote control unit or a track search button.

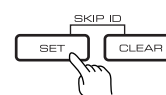


### 2 Press the SKIP ID SET button.

"SKIP" and "SET?" are displayed alternately.



### 3 To set the skip ID, press the SKIP ID SET button again.



### 4 Skip IDs can be set to other tracks by repeating steps 1 to 3 for each of them.

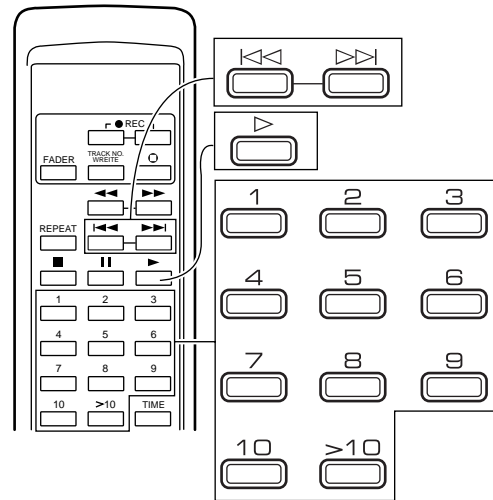
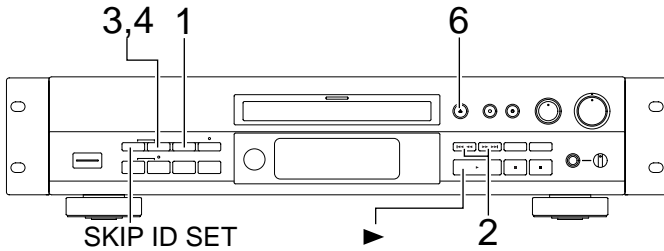
### 5 After having set the required skip IDs, press the OPEN/CLOSE button.



# SKIP ID RECORDING

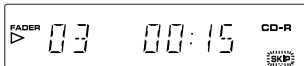
**CAUTION:**

Skip IDs cannot be cleared with CD discs or finalized CD-R, CD-RW discs.



- With a CD-R or CD-RW disc which does not contain skip IDs, the SKIP ON indicator will not light even when the SKIP PLAY button is pressed.

- If skip IDs have already been set, the SKIP indicator lights on the display.



Lights.

- When the track search button (⏮ or ⏭) is pressed while "SKIP" and "CLEAR?" are displayed, tracks to which the skip IDs are set will be played in order of track numbers.
- The selected tracks play back repeatedly.
- If you press the SKIP ID CLEAR button during playback of a track without a skip ID, the unit searches for the next track with a skip ID (or it returns to the beginning if there is no next track) and starts playback.
- To cancel the clearing mode, press the play (▶) button or SKIP ID SET button.

- When the button is pressed to remove the disc, the skip ID clear data is recorded on the disc. At this time, and blinks "OPEN" is displayed for a few seconds, and the tray opens after the skip ID clear data has been recorded.

## B. Clearing skip ID of a track

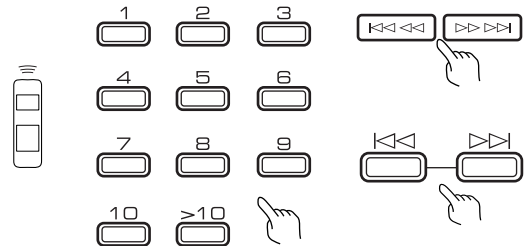
**1 Press the SKIP PLAY button to turn the SKIP ON indicator off.**



Turn SKIP ON indicator off.

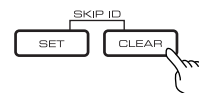
**2 Play the track which is not to be skipped.**

Select it with the numeric buttons of the remote control unit or a track search button.

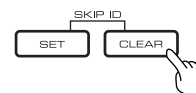


**3 During playback of the track which is not to be skipped, press the SKIP ID CLEAR button.**

"SKIP" and "CLEAR?" are displayed alternately.



**4 To clear the skip ID, press the SKIP ID CLEAR button again.**



**5 Skip IDs can be cleared from other tracks by repeating steps 2 to 4 for each of them.**

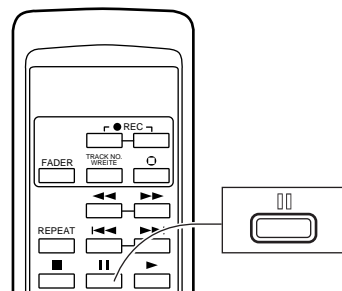
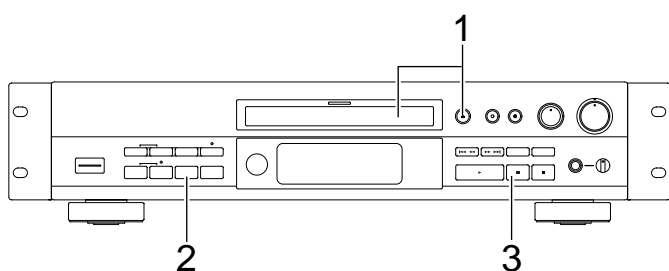
**6 After having cleared the required skip IDs, press the OPEN/CLOSE button.**



# FINALIZATION (TOC RECORDING)

## What is finalization?

- Finalization is the final process in recording a CD-R or CD-RW disc that is playable on standard CD players. (However, CD-RW discs, whether finalized or not, can only be played back on a CD-RW disc player.)
- Once a disc is finalized, neither recording nor skip ID setting/clearing is possible on the disc; be very careful.
- Never cut the power supply during finalization, for this may lead to disc damage.

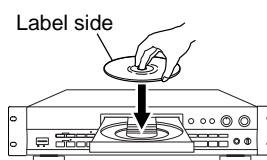


## Finalization procedure

- Ensure that there is no scratch, dust or stain on the disc. If the disc is dusty or stained, clean it by referring to "Disc maintenance" on page 9.

### 1 Load a CD-R or CD-RW disc which has been recorded on.

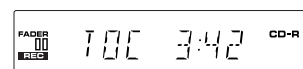
For a disc loading, refer to page 15.



- If finalization is not required, press the stop (■) button; finalization will be aborted.

### 2 Press the FINALIZE button.

The unit enters record-pause mode.



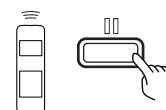
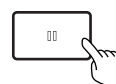
- The displayed time varies depending on discs.

• The procedure is canceled automatically when the unit has remained in record-pause mode for about 10 minutes or more.

### • Wait until the time information is displayed.

### 3 Press the pause (II) button.

Finalization starts now.



- The remaining time until the completion of finalization is displayed during finalization.

- It usually takes about 4 minutes until the finalization completes.
- When the CD-R finalization is completed normally, the CD-R indicator changes to the CD indicator, and the unit enters stop mode automatically.
- When the CD-RW finalization is completed normally, the FINALIZE indicator lights and the unit enters stop mode automatically.



### CAUTION:

- Once finalization is started, no operation button is accepted until the finalization completes.
- If a scratched, stained or dusty disc is subjected to finalization, the finalization may sometimes not complete. In case finalization does not complete in about 10 minutes from the start, it can be forced to be aborted by pressing the stop (■) button. But such a disc cannot be played on ordinary CD players.
- Never unplug the power cord during finalization. If the power supply is interrupted due to power failure or by mistake during finalization, the remaining finalization resumes as soon as the power supply is recovered. In this case "RESUME" is displayed until the finalization is completed. Note that the disc finalization may not resume properly in some cases.

# ERASING (CD-RW ONLY)

---

## Erasing CD-RW discs

CD-RW discs can be erased and new recordings can be made where data has been erased. The following types of erasing are provided.

### A Last Track Erasing:

Erases the last track. This operation is not possible on a CD-RW disc that has been finalized.

### B. All Tracks Erasing:

Erases all tracks.

### C. TOC Erasing:

The TOC data on the finalized disc is erased.

### D. All Disc Erasing:

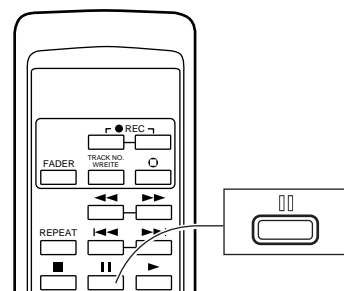
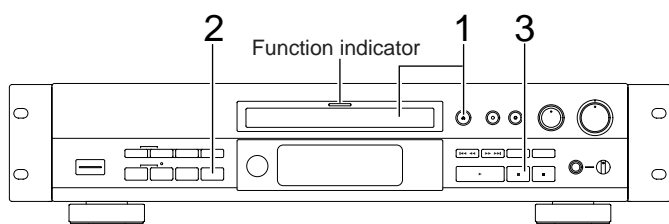
This operation deletes all data on the disc.

This operation is mainly performed to enable disc recovery and is not normally performed.

#### **CAUTION:**

- The power must not be turned off during erasing since this could destroy the disc. If a power outage occurs during erasing or you should inadvertently turn off the power during erasing, turn on the power when it comes back on again. The erase operation is then automatically restarted and takes 3 minutes for All tracks erasing and maximum recording time plus 5 minutes for Disc erasing. However, there is no guarantee that the disc will be erased normally. The erase operation that is restarted when the power comes back can be stopped by pressing the stop (■) button for 10 seconds. If this erase operation is stopped, the message "CHECK", "DISC" appears to indicate that the disc has not been normally erased.
- If the message "CHECK", "DISC" appears during erasing and erasing stops, the disc may be damaged. Should this happen, eject the disc and check it. Then try erasing it again.
- Be sure to remove the disc after the erase operation and before turning off the power. If the power is turned off with the disc still in the recorder, the backup data is deleted and the erase operation is cancelled.

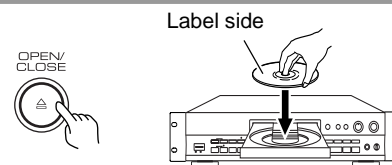




## A. Last track erasing (take a few seconds. Not possible on a finalized CD-RW)

### 1 Load a CD-RW disc which has been recorded on.

For a disc loading, refer to page 15.



### 2 Press the ERASE button.

- The display panel successively displays "LAST", "TRACK" and "ERASE?". Then the function indicator blinks in orange indicating that the recorder is in last track erase standby mode. The display panel displays the number of the track that can be erased and "TRACK" and "ERASE."

Do not allow more than 8 seconds to elapse after step 2 has been performed before proceeding with step 3.

### 3 Press the pause (||) button to start the last track erasing.

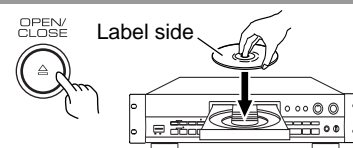
- The function indicator lights in orange and last track erasing starts.
- During last track erasing, the number of the erasing track and "TRACK" and "ERASE" blinks successively.

- The recorder stops when Last track erasing stops.

## B. TOC erasing (Possible on a finalized CD-RW)

### 1 Load a CD-RW disc which has been finalized.

- For a disc loading, refer to page 15.



### 2 Press the ERASE button.

- The display panel successively displays "TOC" and "ERASE?". Then the function indicator blinks in orange indicating that the recorder is in TOC erase standby mode.

Do not allow more than 8 seconds to elapse after step 2 has been performed before proceeding with step 3.

### 3 Press the pause (||) button to start the TOC erasing.

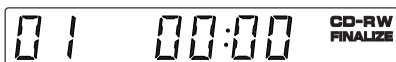
- The function indicator lights in orange and TOC Erasing starts.
- During TOC erasing, "ERS \*:\*:" while the remaining time is displayed.

- The recorder stops when TOC erasing is completed.

**Switching erase modes**  
Each press of the ERASE button switches erase modes in the order shown below.

Erase Off → A. Last track erasing  
← C. All tracks erasing ←

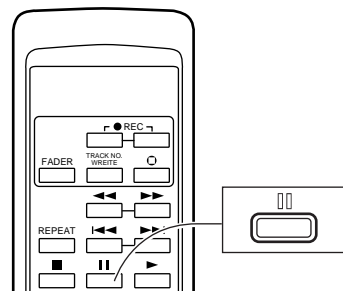
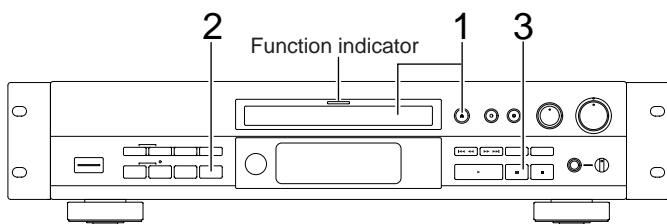
**Finalized CD-RW discs:**  
Erase Off → B. TOC erasing  
← C. All tracks erasing ←



- the FINALIZE indicator lights.

- You can stop the erase process by pressing the Stop (■) button for 10 seconds. However, if the erase operation is stopped, the message "CHECK", "DISC" appears to indicate that the disc has not been normally erased.

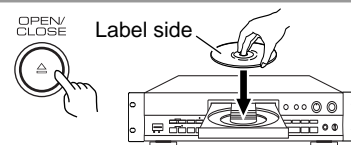
# ERASING (CD-RW ONLY)



## C. All tracks erasing

### 1 Load a CD-RW disc which has been recorded on.

For a disc loading, refer to page 15.



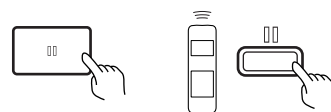
### 2 Press the ERASE button twice (once to start last track erasing or TOC erasing).



- The function indicator blinks in orange indicating that the recorder is in all tracks erase standby mode.

In the case of a CD-RW which has not been finalized, do not allow more than 8 seconds to elapse after step 2 has been performed before proceeding with step 3.

### 3 Press the pause (||) button to start the all tracks erasing.



- The function indicator lights in orange and All Tracks Erasing starts.
- During All tracks erasing of a CD-RW disc that has not been finalized, "ALL", "TRACK" and "ERASE" blink successively.
- During All tracks erasing of a finalized CD-RW disc, "ERS \*\*:\*)" while the remaining time is displayed.

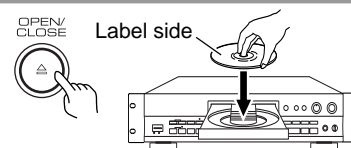
- The recorder stops when All tracks erasing is completed.

- All tracks erase is completed in several seconds for a CD-RW.

## D. All disc erasing (takes recordable time plus 5 minutes)

### 1 Load a CD-R or CD-RW disc which has been recorded on.

For a disc loading, refer to page 15.



### 2 Press and hold the ERASE button for about 4 seconds.



- The display panel displays "ALL," "DISC," "ERASE?" and "dE \*\*:\*)" successively. Then the function indicator blinks in orange indicating that the recorder is in the All disc erase standby mode.

### 3 Press the pause (||) button to start the all disc erasing.

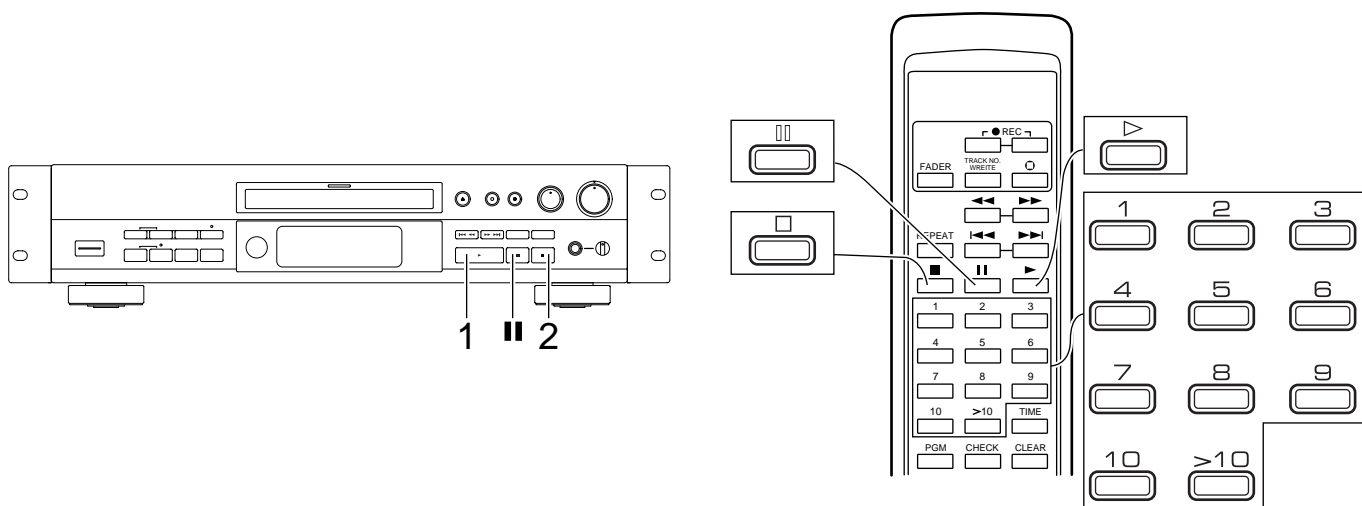


- The function indicator lights in orange and All Disc Erasing starts.
- During All disc erasing, "dE \*\*:\*)" while the remaining time is displayed.

- The recorder stops when All disc erasing is completed.

- You can stop the erase process by pressing the Stop (■) button for 10 seconds. However, if the erase operation is stopped, the message "CHECK", "DISC" appears to indicate that the disc has not been normally erased.

# PLAYBACK



Place the disc on the disc tray with the label side facing upward.

Label side



For a disc loading, refer to page 15.

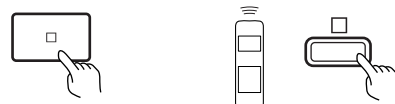
## Starting playback

**1 Press the play (▶) button.**

This unit starts playback.



**2 Press the stop (■) button to stop playback.**



## To pause playback

**Press the pause (||) button to pause playback temporarily.**

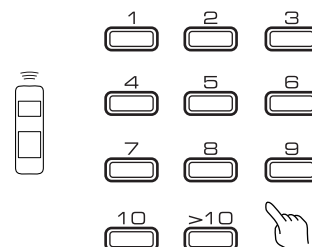
To restart playback, press the play (▶) or pause (||) button.



- When the pause mode has continued for about 10 minutes, the pause mode stops and unit enters the stop mode.

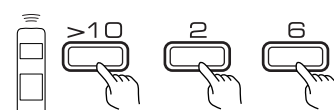
## Playing from the desired track (Direct track selection)

**Select the desired track with the numeric buttons of the remote control unit.**



**(Example) To select track No. 26**

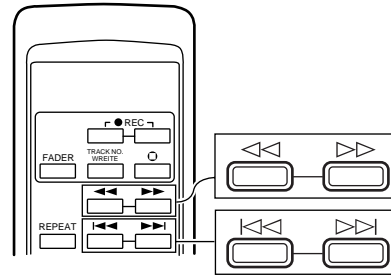
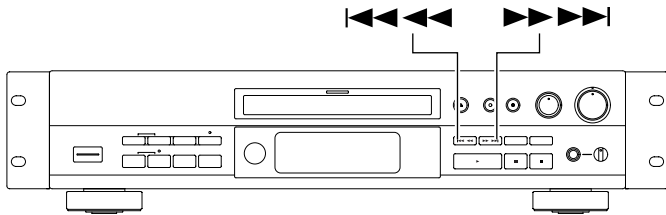
- Press in order of (>10), (2) and (6).



When selecting a track number, press numeric buttons at intervals of less than 5 seconds.

- To select track No. 1 to 10, simply press the corresponding button.
- To select track No. 11 or higher, press the >10 button first.

# PLAYBACK

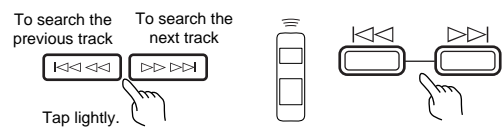


Each of the and buttons of the main unit provides two functions, as a track search button and manual search button.

## Searching an adjacent track (Track search)

A desired track can be searched by specifying it using the track search buttons.

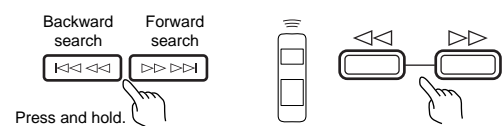
### Press the track search button.



- Pressing (or ) during playback or when playback is paused or stopped skips the played position to the beginning of the next track. To skip to a track located after the next track, press (or ) for the required number of times. When programmed playback is activated, pressing (or ) skips to the next track in the program.
- Pressing (or ) skips the played position to the beginning of the current track. To skip to a track located before the current track, press (or ) for the required number of times. When programmed playback is activated, pressing (or ) skips to the previous track in the program.

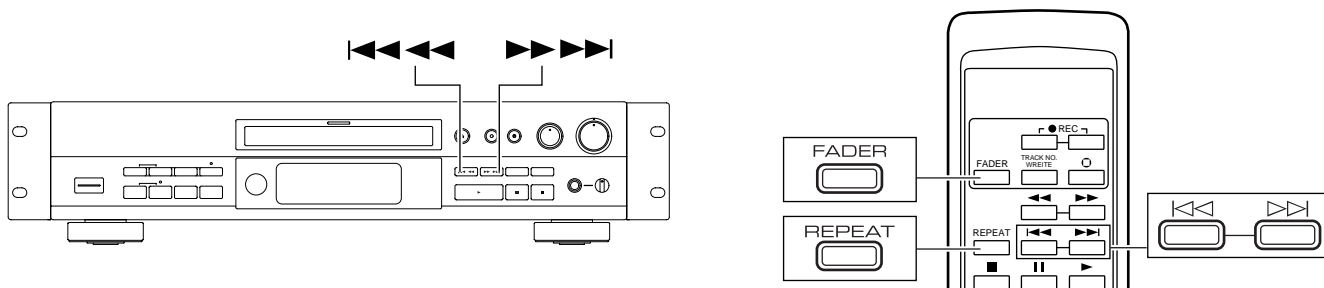
## Searching the desired point (Manual search)

### Press and hold the manual search button.



- During programmed playback, only the current track being played can be searched in the forward or reverse direction. When the current track has been searched in the forward direction until the end, the unit enters pause mode at the position immediately before the next track; press the play (), pause () or button to release the pause mode. When the current track has been searched in the reverse direction until the beginning, programmed playback restarts from the position immediately before returning to the previous track.

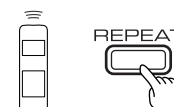
- Pressing and holding (or ) during playback or when playback is paused moves the played position in the forward direction at a high speed. When a disc has been searched until the end, "END" is displayed and the unit enters the pause mode, which can be released by pressing (or ) .
- Pressing and holding (or ) moves the played position in the reverse direction at a high speed. When a disc has been searched in the reverse direction until the beginning, the unit enters play mode.



## Playing tracks repeatedly (Repeat playback)

Press the REPEAT button of the remote control unit.

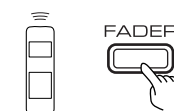
- Pressing once initiates 1-track repeat and the RPT-1 indicator lights. In this mode, the track being played is played repeatedly. This is possible in normal play, programmed play and random play modes.
- Pressing twice initiates all-track repeat and only the RPT indicator lights. In this mode, all tracks are played repeatedly.
- In normal play mode, all tracks on the disc are played repeatedly (all-track repeat).
- In programmed play mode, all tracks in the program are played repeatedly in the order they are programmed.



## Fade-in/fade-out during playback

- Fade time can be set using the MENU button functions (See page 24).

- When the FADER button is pressed during pause, playback restarts with fade-in.
- When the FADER button is pressed during playback, fade-out starts and playback pauses after it.



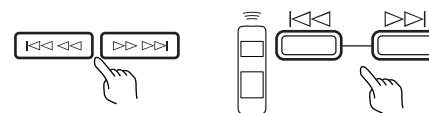
Fade-in and fade-out are not applied to the digital outputs.

## Checking the playing time of each track (1-track time display)

- The SKIP indicator lights with tracks to which the skip IDs have been set. (Refer to page 29.)

When the ►►► button is pressed in stop mode, each press displays the playing time of each track in order of track numbers.

Pressing the ◀◀◀ button displays the playing times in the reverse order.

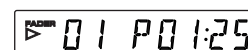


## Playback in Auto Pause Mode

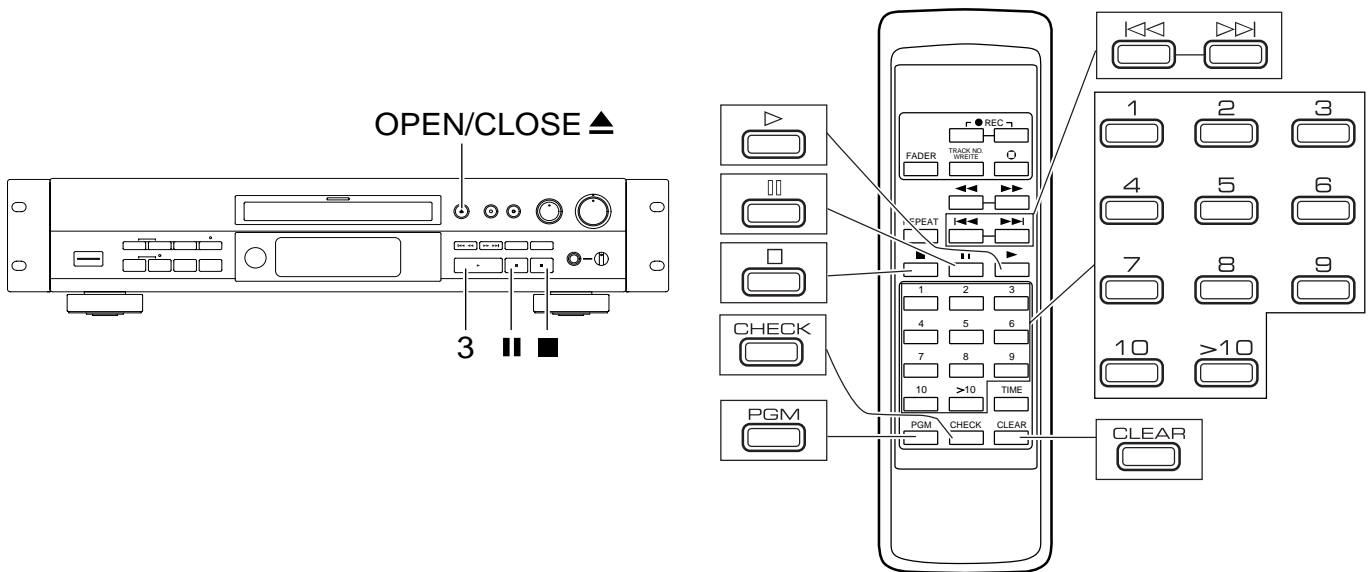
- Auto Pause Mode can be set using the MENU button functions (See page 24).

- In the case that the AUTO PAUSE mode is turned on, every time the current playback track advances to the next track, the CR300 is automatically put into PAUSE mode at the beginning of next track
- In order to put the CR300 back to PLAY mode, the PAUSE or PLAY button should be pressed.

As shown in the drawing below, when the AUTO PAUSE mode is on, the letter "P" is displayed.



# PROGRAMMED PLAYBACK

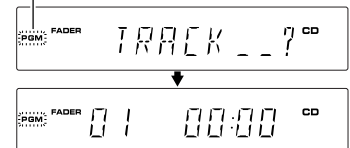


## Playing Tracks in the Desired Order

**1** Press the PGM button of the remote control unit.

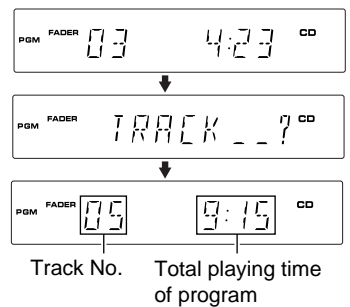
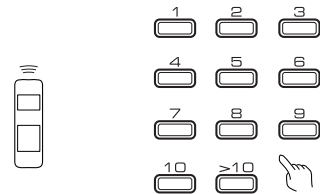


The PGM indicator lights.



- Up to 24 tracks can be programmed.
- If the total playing time of the programmed tracks is 100 minutes or more, the total playing time is not displayed.

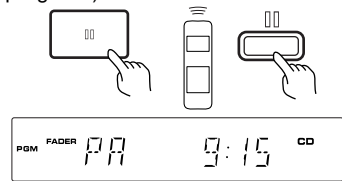
**2** Using the numeric buttons, select the tracks in the order you want to play them.



If the current mode is stop mode, each track can also be programmed by selecting its track number with the ◀◀ or ▶▶ button and pressing the PGM button.

### Programming pause

If the pause (||) button is pressed during programming in stop mode, a pause is programmed. (It cannot be programmed as the first step of a program.)



- Pause is also counted as a track.

### Add programs

- Even during programmed playback, tracks can be added to the program by selecting them with the numeric buttons.

**3** Press the play (▶) button.

The tracks are played in the order they are programmed.



## Program reservation

If tracks are programmed by pressing the PGM button during normal playback, the programmed tracks will be played from the beginning automatically when the playback of the track now being played is completed.

Programmed playback can also be started from the beginning by just pressing the play (▶) button before the normal playback completes.

## Clearing the entire program

The program can be cleared with either A or B below.

- A** Press the stop (■) button to stop programmed playback, then press the stop button again.



- B** Press the OPEN/CLOSE button.



## Clearing a track from the program

Press the CLEAR button of the remote control unit.

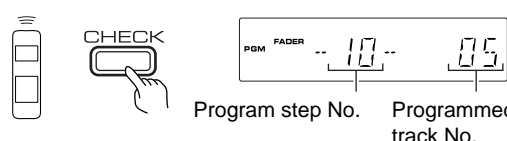


- If the button is pressed during programmed playback, the tracks after the track being played can be cleared.

- Each press clears the newest track in the program.

## Checking the programmed tracks

Press the CHECK button of the remote control unit.

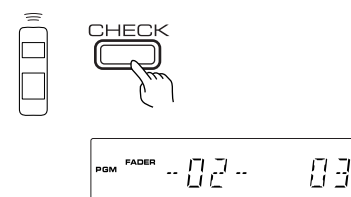


- This operation is available in stop mode and after tracks have been programmed. If the programmed tracks are being played, stop playback before proceeding to this operation.

- Each press displays the track number programmed for each step of the program.
- When the button is pressed while the last step of the program is displayed, "00" is displayed. Press again to display the first program step.

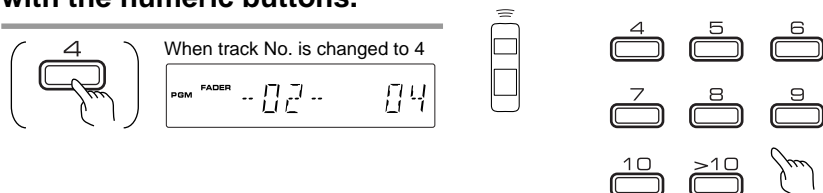
## Replacing a track in the program

- 1** Press the CLEAR button of the remote control unit the required number of times until the program step with the track number to be replaced is displayed.



- This operation is available in stop mode and after tracks have been programmed. If the programmed tracks are being played, stop playback before proceeding to this operation.

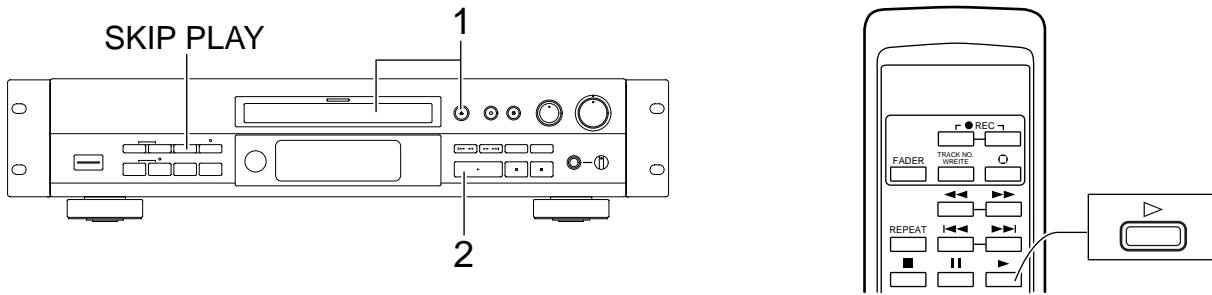
- 2** Select the new track number with the numeric buttons.



- The track number can also be selected with the ◀◀ or ▶▶ button.

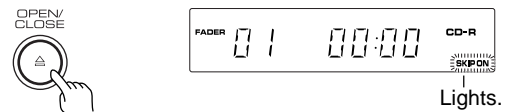
- 3** Other tracks can also be replaced by repeating steps 1 and 2.

# SKIPPING UNDESIRED TRACKS (SKIP PLAYBACK)



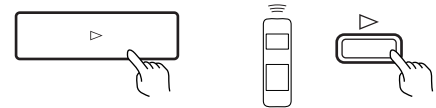
By setting skip IDs to the tracks which you do not want to play, these tracks can be skipped when the disc is played. For setting skip IDs, refer to page 29,

- 1** Load a disc containing the recording of skip ID data.



- In case the disc contains skip ID data, the SKIP ON indicator lights automatically.
- In case the disc does not contain skip ID data, the SKIP ON indicator does not light.

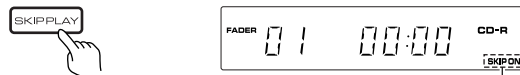
- 2** Press the play ( ▶ ) button.



- The disc is played by skipping tracks to which skip IDs have been set.

**• In case skip playback is not required**

Discs containing tracks to which track skip IDs have been set can also be played without skipping them. Just press the SKIP PLAY button to turn the SKIP ON indicator off before playing the disc.



- The SKIP PLAY button is not accepted if the disc does not contain skip ID data.



# CHARACTER MESSAGE LIST

Message	Description	Ref. Page
OPEN	The tray is being opened.	page 15
CLOSE	The tray is being closed.	page 15
“SET” “UP”	The unit is performing initial setup for recording. Please wait a while.	
“TOC” “READ”	The unit is reading the TOC of the disc. Please wait a while.	
1-SYNC	The unit is standing by for 1-track automatic digital recording. The recording will start in synchronism with the start of the player.	page 18
AL-SYNC	The unit is standing by for all-track automatic digital recording. The recording will start in synchronism with the start of the player.	page 19
“CAN NOT” “SYNC”	This display will appear when the DIGITAL SYNCHRO button is pressed if the INPUT selector is set for an analog source, or even in digital mode, if the source selected is other than a CD, Mini Disc, DAT, or DCC (S/P DIF only).	page 18, page 19, page 20
MONI	The unit is monitoring the input selected with the input selector.	page 16
“INPUT” “CD” (MD, DAT, DCC)	The unit displays the source it is monitoring (for CD, MD, DAT, and DCC). (S/P DIF only)	page 16
“PMA REC”	Temporary TOC data is being recorded in the disc's PMA (Program Memory Area). Never turn off the power while this display is showing.	page 17, page 18, page 19, page 21, page 22
“TRACK ?”	The current operation is the track programming operation. Select a track with the numeric buttons or ◀◀ or ▶▶ button.	page 38
“SKIP” “SET?”	The current operation is the track skip setting operation. If you want to skip a track, select it with the SKIP ID SET button.	page 29
“SKIP” “CLEAR?”	The current operation is the track skip clear operation. If you want to clear the skip designation of a track, select it with the SKIP ID CLEAR button.	page 30
“LAST” “TRACK” “ERASE?”	Erases the last track. If you want to erase the last track, press the pause (  ) button.	page 33
“TOC” “ERASE?”	Erases the TOC (initializing it). If you want to erase the TOC, press the pause (  ) button .	page 33
“ALL” “TRACK” “ERASE?”	Erases all tracks. If you want to erase the all tracks, press the pause (  ) button .	page 34
“ALL” “DISC” “ERASE?”	Erases the entire disc (initializing it). If you want to erase the disc, press the pause (  ) button.	page 34

In addition to above, other character messages are also displayed as the unit detects troubles during use. For other character messages than above, refer to “Self-diagnostics” on page 42.

# TROUBLESHOOTING

In case of trouble, first check the following list. What seems to be a failure of the unit is sometimes due to imperfect maintenance, defective disc or unaccustomed operation. Such troubles are often recovered by correcting simple mistake or misunderstanding or by simple maintenance operation. If your trouble cannot be recovered after checking the following list, please call you nearest FOSTEX service center or station.

## Self-diagnostics

This unit incorporates a self-diagnostic function.

When it detects trouble during an operation, it displays one of the following messages on the display panel.

Display	Cause	Treatment	Ref. Page
Alternate display of "CHECK" and "DISC"	The disc is stopped due to dirt, stain, scratch or vibration.  The disc may be loaded upside down.	Take out the disc and check for dirt, dust, scratch, etc.  Take out and check the disc.  (If the same messages are displayed again after the disc is reloaded, unplug the power cord and plug it in again. If the same messages are displayed again, please contact a FOSTEX authorized service center.)	Page 9  page 15
Display blinks "CHECK"	A system error occurred perhaps due to noise or static electricity.	Unplug the power cord and plug it in again. If the same messages are displayed again, please contact a FOSTEX authorized service center.	

## Information messages related to recording operation

Display	Cause	Treatment	Ref. Page
Alternate display of "CAN NOT" and "REC".	The digital input is interrupted.  The data (CD-ROM, etc.) provided cannot be recorded.	Check if the digital input cable is not disconnected and if the power of the source player is on. Check whether the source is a regular music source.	Page 10  page 17
Cyclic display of "CHECK", "INPUT" and "CD ?".	The source player was already playing when the DIGITAL SYNCHRO button was pressed.	Stop playing the source player. In a while, "1-SYNC" or "AL-SYNC" is displayed, and the unit is set to the synchro recording standby mode.	page 18 page 19 page 20
Alternate display of "SET" and "UP".	The unit is making preparations for recording.	Wait until these messages disappear.	
"REPAIR"	Because the disc was left in the unit after recording and the power plug was unplugged later, the track number and recording time data have been cleared without being recorded on the disc.	While "REPAIR" is displayed, the track number and recording time data are repaired by tracking the recorded area. Further recording or finalization is possible whenever the display returns to the previous condition. Tracing of the recorded area takes about 40 minutes if the disc has been recorded fully.	
"REC FULL"	No more recording is possible because the available recording time of the disc has been used fully or 99 tracks have already been recorded on the disc.	Replace the disc with a new one. Erase a CD-RW disc.	page 16 page 32

## Information messages related to playback operation

Display	Cause	Treatment	Ref. Page
"NEW DISC"	A blank disc is loaded. An attempt is made to play a blank disc.	The loaded disc is a blank CD-R or CD-RW disc. Recording is possible but playback is not.	page 8 page 15
"NO DISC"	An attempt is made to start playback without loading a disc.	Open the tray and check if a disc is loaded.	page 15
"RESUME"	The unit is resuming an operation. After the power supply is cut off by a power failure or by mistake during recording, the unit enters RESUME mode so that additional recording is possible.	Wait until the message disappears.	page 17 page 31

# TROUBLESHOOTING

Symptom	Cause	Remedy
Power cannot be turned on.	The power cord is unplugged from the power outlet.	Plug the power cord into a power outlet.
	The power was turned off from the component (stereo amplifier, audio time, etc.) to which it is connected.	Turn on the component into which the power cord is connected.
Playback is impossible.	Signal connections are incorrect.	Connect properly as indicated in "CONNECTIONS".
Recording is impossible.	Signal connections are incorrect.	Connect properly as indicated in "CONNECTIONS".
	The CD-R or CD-RW disc in use has been finalized.	Use a non-finalized disc. Erase a CD-RW disc.
	The input selection is incorrect.	Select the input connected to the desired source.
	The REC LEVEL control is set too low.	Increase the recording level to an optimum level.
Recorded sound is distorted.	Signal connections are incorrect.	Connect properly as indicated in "CONNECTIONS".
	There is interference from a TV set.	Turn the TV power off or install this unit apart from the TV.
	The disc is damaged or warped.	Use another disc.
	The recording level is set too high.	Decrease the recording level.
	The disc is extremely dirty.	Clean the disc.
Remote control operation is impossible.	The remote control batteries are exhausted.	Replace both of the remote control batteries with new ones.
	There is an obstacle between the remote control unit and main unit.	Remove the obstacle.
	The remote control unit is operated outside the remote controllable range.	Operate in the remote controllable range.
Certain tracks are skipped without being played.	The SKIP PLAY button is set to ON.	Set the SKIP PLAY button to OFF.
Skip playback does not occur.	The SKIP PLAY button is set to OFF.	Set the SKIP PLAY button to ON.
A recorded CD-R disc cannot be played on other CD players.	<ul style="list-style-type: none"> <li>The disc has not been finalized after recording.</li> <li>When such a disc is loaded in the unit, the CD-R indicator lights up. (Refer to page 8.)</li> </ul>	Finalize the disc. (Refer to page 31)

# INDEX

Term	Function	Ref. page
CD-R disc:	Compact Disc - Recordable.	p. 8, 16
CD-RW disc:	Compact Disc - Rewritable.	p. 8, 16
Consumer disc:	CD-R or CD-RW disc designed for recording music for personal entertainment use.	p. 8, 16
Digital synchro recording (automatic digital recording):	Function which starts/stops recording automatically by detecting the play/stop modes of a digital component.	p.18, 19, 20
Disc damage:	Phenomenon with which recording and playback of disc become impossible due to physical shock or power failure during recording.	p. 42
Disc identification:	Operation of checking whether the loaded disc is a CD, CD-R or CD-RW.	p. 15
Fader:	Function for recording or playing sound by smoothly varying the volume.	p. 27, 37
Finalization:	Operation for making a recorded CD-R disc playable on ordinary CD players.	p. 31
Label side:	The disc side on which letters, etc., are printed.	p. 15
PMA:	Program Memory Area. The area used for temporary storage of TOC data until finalization of a CD-R or CD-RW.	p. 17, 18, 19 21, 22
Recording permitted/inhibited:	Statuses set with the SCMS, in which digital recording is enabled/disabled respectively.	p. 8, 16
Remaining recording time:	Time of the disc's non-recorded section where recording is possible.	p. 13, 31
RESUME:	Operation initiated in case of trouble in recording, consisting of recovery of the disc to enable next recording.	p. 17, 31, 42
Skip:	Refer to "Skipping undesired tracks".	p. 29, 40
Skip ID:	Identification which sets or cancels skipping of undesired track before disc finalization.	p. 29, 40
Skip ON/OFF:	Switching on/off of the function to skip undesired tracks to which skip IDs have been set.	p. 38
TOC:	Table Of Contents of a disc which allows it to be played on ordinary CD players.	p. 31
Total recording time:	Time of the disc's section which has already been recorded onto.	p. 13, 31
Track number updating:	Function which, either automatically or manually, update the track number of the track being recorded by one.	p. 23, 26
Write-once:	A CD-R disc can be recorded only once and the recording cannot be erased. Recording always starts from the end of previous recording.	p.16

# SPECIFICATIONS

## 1. GENERAL

Model	Compact disc recorder
Applicable discs	CDs, CD-Rs and CD-RWs
Power supply	AC 120 V, 60 Hz AC 230 V, 50/60 Hz
Power consumption	24 W
Weight (without package)	7.0 kg
Max. dimensions	482 (W) x 105 (H) x 393 (D) mm

## 2. AUDIO UNIT (typical)

Frequency characteristics	4 Hz to 20 kHz
Playback S/N	110 dB (EIAJ)
Playback dynamic range	98 dB (EIAJ)
Playback total harmonic distortion	0.0027 % (EIAJ)
Recording S/N	90 dB (analog), 105dB (digital)
Recording dynamic range	90 dB (analog), 95dB (digital)
Recording total harmonic distortion	0.005 % (analog) 0.003 % (digital)

## 3. INPUT JACKS

### Analog Input

XLR-3-31 type (pin 2 = Hot) x2	
Standard input level	+4dBu / -10dBV (switchable)
Input impedance	10k
RCA type x2	
Standard input level	-10dBV
Input impedance	27k

### Digital Input

XLR-3-31 type (pin 2 = Hot)	IEC 60958 (AES/EBU)
RCA type	IEC 60958 (S/P DIF)
OPTICAL type	IEC 60958 (S/P DIF)

### Parallel Remote Input

Connector	DIN 8pin
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## 4. OUTPUT JACKS

### Analog Output

XLR-3-32 type (pin 2 = Hot) x2	
Standard output level	+4dBu / -10dBV (switchable)
Load impedance	Higher than 600
RCA type (x2)	
Standard output level	-10dBV
Load impedance	Higher than 10k

### Digital Output

RCA type	IEC 60958 (S/P DIF)
OPTICAL type	IEC 60958 (S/P DIF)

## 5. ACCESSORIES

• Remote control unit (Model 8317)	1
• Size AAA/R03 dry cell batteries	2
• Audio cable	2
• AC power cord	1
• Owner's Manual	1

### NOTE:

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

## Declaration of EC Directive

This equipment is compatible with the EMC Directive (89/336/EEC) - Directive on approximation of member nation's ordinance concerning the electromagnetic compatibility and with the Low Voltage Directive (73/23/EEC) - Directive on approximation of member nation's ordinance concerning electric equipment designed to be used within the specified voltage range.

### The Affect of Immunity on This Equipment

The affect of the European Specification EN61000-6-1 (coexistence of electromagnetic waves - common immunity specification) on this equipment are as shown below.

*In the electrical fast transient/burst requirements, and static electricity discharging environment, this could be affected by generation of noise in some cases.*

### FOSTEX DISTRIBUTORS LIST IN EUROPE

- Including non-EU countries.
- underlined>: contracted distributors (as of October, 2003)

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