

aiwa

COMPACT DISC RECORDER
GRABADORA DE DISCOS COMPACTOS
GRAVEUR DE DISQUE COMPACT

XC-RW500

OPERATING INSTRUCTIONS
MANUAL DE INSTRUCCIONES
MODE D'EMPLOI

En (English)

E (Español)

F (Français)



For assistance and information

call toll free 1-800-BUY-AIWA

(United States and Puerto Rico)

WARNING

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

	CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN	
<p>“CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.”</p>		

Explanation of Graphical Symbols:



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.

Owner’s record

For your convenience, record the model number and serial number (you will find them on the rear of your set) in the space provided below. Please refer to them when you contact your Aiwa dealer in case of difficulty.


Model No. XC-RW500	Serial No. (Lot No.)
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PRECAUTIONS

Read the Operating Instructions carefully and completely before operating the unit. Be sure to keep the Operating Instructions for future reference. All warnings and cautions in the Operating Instructions and on the unit should be strictly followed, as well as the safety suggestions below.

Installation

- 1 **Water and moisture** — Do not use this unit near water, such as near a bathtub, washbowl, swimming pool, or the like.
- 2 **Heat** — Do not use this unit near sources of heat, including heating vents, stoves, or other appliances that generate heat. It also should not be placed in temperatures less than 5°C (41°F) or greater than 35°C (95°F).
- 3 **Mounting surface** — Place the unit on a flat, even surface.
- 4 **Ventilation** — The unit should be situated with adequate space around it so that proper heat ventilation is assured. Allow 10 cm (4 in.) clearance from the rear and the top of the unit, and 5 cm (2 in.) from each side.
 - Do not place the unit on a bed, rug, or similar surface that may block the ventilation openings.
 - Do not install the unit in a bookcase, cabinet, or airtight rack where ventilation may be impeded.
- 5 **Objects and liquid entry** — Take care that objects or liquids do not get inside the unit through the ventilation openings.
- 6 **Carts and stands** — When placed or mounted on a stand or cart, the unit should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the unit or cart to overturn or fall.


- 7 **Condensation** — Moisture may form on the CD pickup lens when:
 - The unit is moved from a cold spot to a warm spot
 - The heating system has just been turned on
 - The unit is used in a very humid room
 - The unit is cooled by an air conditioner

When this unit has condensation inside, it may not function normally. Should this occur, leave the unit for a few hours, then try to operate again.
- 8 **Wall or ceiling mounting** — The unit should not be mounted on a wall or ceiling, unless specified in the Operating Instructions.

Electric Power

- 1 **Power sources** — Connect this unit only to power sources specified in the Operating Instructions, and as marked on the unit.
- 2 **Polarization** — As a safety feature, some units are equipped with polarized AC power plugs which can only be inserted one way into a power outlet. If it is difficult or impossible to insert the AC power plug into an outlet, turn the plug over and try again. If it still does not easily insert into the outlet, please call a qualified service technician to service or replace the outlet. To avoid defeating the safety feature of the polarized plug, do not force it into a power outlet.
- 3 **AC power cord**
 - When disconnecting the AC power cord, pull it out by the AC power plug. Do not pull the cord itself.
 - Never handle the AC power plug with wet hands, as this could result in fire or shock.
 - Power cords should be firmly secured to avoid being severely bent, pinched, or walked upon. Pay particular attention to the cord from the unit to the power outlet.
 - Avoid overloading AC outlets and extension cords beyond their capacity, as this could result in fire or shock.

- 4 **Extension cord** — To help prevent electric shock, do not use a polarized AC power plug with an extension cord, receptacle, or other outlet unless the polarized plug can be completely inserted to prevent exposure of the blades of the plug.
- 5 **When not in use** — Unplug the AC power cord from the power outlet if the unit will not be used for several months or more. When the cord is plugged in, a small amount of current continues to flow to the unit, even when the power is turned off.

Maintenance

Clean the unit only as recommended in the Operating Instructions.

Damage Requiring Service

- Have the units serviced by a qualified service technician if:
- The AC power cord or plug has been damaged
 - Foreign objects or liquid have gotten inside the unit
 - The unit has been exposed to rain or water
 - The unit does not seem to operate normally
 - The unit exhibits a marked change in performance
 - The unit has been dropped, or the cabinet has been damaged
- DO NOT ATTEMPT TO SERVICE THE UNIT YOURSELF.**

FCC Part 15B, ClassB FCC NOTICE

NOTE

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 circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

CAUTION

Modifications or adjustments to this product, which are not expressly approved by the manufacturer, may void the user's right or authority to operate this product.

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FEATURES

Your XC-RW500 is capable of recording audio on, and playing back, both CD-R and CD-RW discs. Prerecorded music CDs can also be played back on this unit. Its special features include the following:

Finalization

This is the process of embedding a Table Of Contents (TOC) when all recordings are complete, which enables a CD-R disc to be played back on conventional CD players, and a CD-RW disc on CD players that are compatible with CD-RW discs.

Sampling frequency converter

This lets you record sources originally created at 32 kHz or 48 kHz like DATs, DCCs, DVDs as well as broadcasts on satellite at 44.1 kHz—the same sampling frequency used on music CDs.

CD-SYNC recording

The unit automatically starts and stops recording in response to the play and stop of external CD players.

20-bit Delta-Sigma codec

Using state-of-the-art 1-bit technology, the built-in A/D (analog-to-digital) converter eliminates distortion due to zero crossing and disturbance in linearity without the need for any manual adjustment.

BEFORE USING THIS UNIT

Before using this unit, read this section thoroughly.

TYPES OF DISCS

• CD-R and CD-RW Discs

For recording and playback you can use the CD-R and CD-RW discs with the following logos:



With a CD-R disc, you can add recordings until the disc is full, but you cannot erase any of them.

With a CD-RW disc, you can add and erase recordings as needed.

DISC	RECORDING	PLAYBACK
CD-R	Can be recorded only incrementally.	When finalized, can be played on conventional CD players.
CD-RW	Can be recorded and erased as needed.	Even when finalized, can be played only on CD-RW-compatible CD players.

• Conventional Music CDs

Discs with the following logo can be played back on this unit, but no recordings can be made on them.



When you load a CD-R, CD-RW or any other disc that is not compatible with this unit, "cd Err" (CD Error) may appear on the display to warn you that the disc cannot be used in this unit.

NOTE

- Do not use irregular-shaped discs with this unit or else this unit and the discs would both be damaged.
- Do not use a 3-inch (8cm) disc.
- Do not attach seal or label to either side (recording side and label side) of a CD-R/RW disc. It may cause malfunction.
- A CD-R/RW disc, which is recorded with a personal computer or other device than this unit, may not be able to be played or recorded with this unit.
- Do not use a CD-R/RW disc which contains non-audio data, such as MP3 or other computer files.
- A trouble may occur in this unit if a CD-R/RW disc with dirt or scratches is used. In such case, refer to ALERT MESSAGES.
- Depending on the conditions of the surface of CD-R/RW disc (e.g. dirt, scratch, fingerprint, etc.), the head part of the first recorded track may be cut off.

CAUTION

Do not open and close the disc tray unnecessarily with a non-finalized CD-R disc inside. See "NOTE" on page 8.

WARNING

Digital recording capabilities this unit provides you with are only for personal use.

Dubbing copyrighted material without permission of the copyright owner is a violation of the copyright laws.

INSTALLATION SITE

- Never install this unit in locations subject to the following:**
 - Extremely high or low temperatures
 - Direct sunlight
 - Excessive dust
 - Strong vibration
 - High levels of humidity
- Do not place this unit on top of or near speakers, television sets or other devices that use magnetic force.**
- Allow sufficient space at the top and rear of the unit to permit a flow of cooling air.**

PRECAUTIONS WHEN OPERATING THIS UNIT

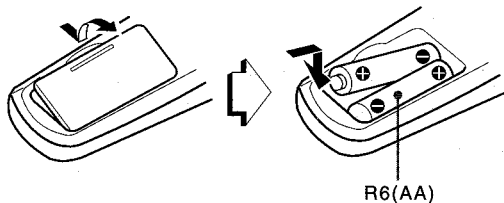
Never move or tilt this unit or subject it to mechanical shock when recording or playback is in progress. The disc spinning at high speed could be damaged.

LOADING THE BATTERIES IN THE REMOTE CONTROL UNIT

Battery handling precautions

- Do not use old batteries together with new ones.
- Insert the batteries with correct polarity as seen in the illustration below.
- Do not install different types of batteries together.
- When you are not using the remote control for a long period of time (more than one month), remove the batteries to prevent leakage. Wipe the compartment clean of all leakage if any before installing new batteries.

Load the batteries as illustrated.



REMOTE OPERATING PRECAUTIONS

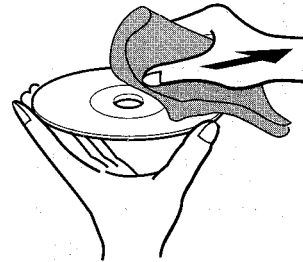
- Objects between the main unit and the remote control unit may block infrared commands. Direct sunlight or other intense light may also hinder proper operation from the remote control.
- If you operate other remote controls in the vicinity of this unit, the unit may operate erratically.
- Replace the batteries when you have to bring the remote control unit very close to the infrared window.

CLEANING THE CABINET

Use a soft, dry cloth. If the surfaces are extremely dirty, use a soft cloth lightly moistened with a mild detergent solution. Do not use strong solvents, such as alcohol, benzene or thinner, as these might damage the surface of the unit.

CARE OF DISCS

- Discs can be scratched. Handle them carefully.**
- When a disc becomes dirty, wipe it from the center out with a soft cleaning cloth.**



Do not use strong solvents such as alcohol, benzene, thinner, commercially available cleaners or anti-static spray intended for analog records.

STORING DISCS

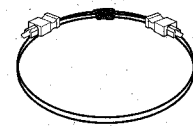
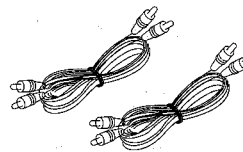
After recording or playing, store the disc in its case. Do not expose the disc to direct sunlight or sources of heat, or leave it in a parked car exposed to direct sunlight, as temperature may rise considerably inside the car.

ACCESSORIES

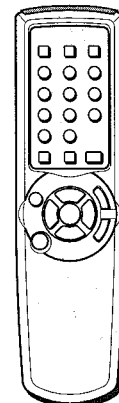
The package contains the following items apart from literatures:

2 audio cords

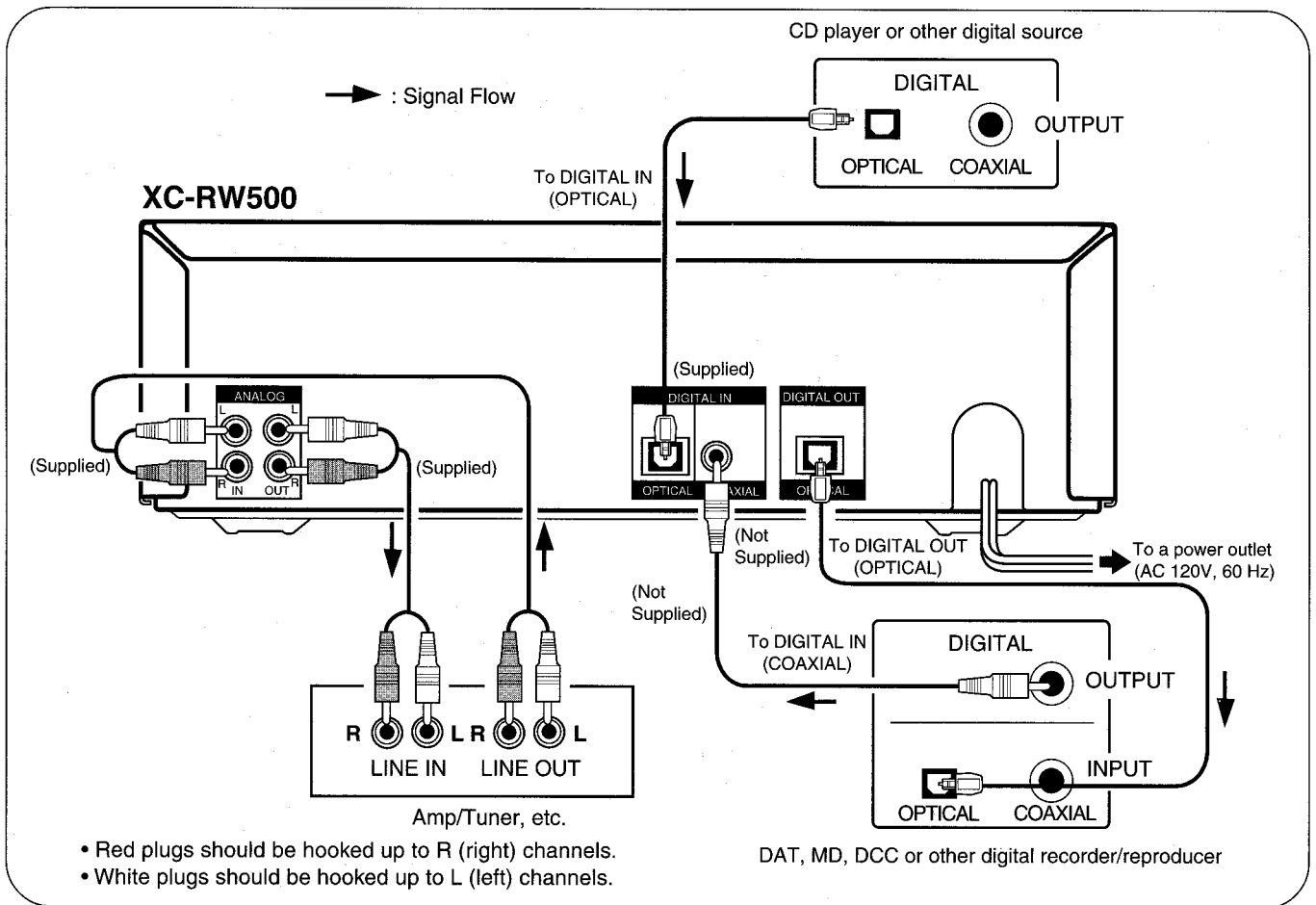
1 optical fiber cable



Remote control unit
(RC-AAC01)



CONNECTIONS

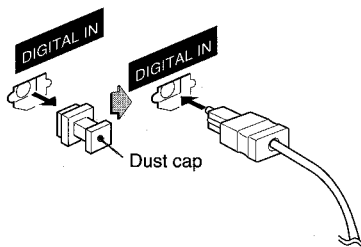


General precautions

- Do not connect the AC power cord before completing all other connections.
- Do not daisy-chain multiple XC-RW500s.

Precautions when handling the optical fiber cable

- Do not bend the cable sharply.
- Do not damage or allow dust to accumulate on the plug at both ends of the cable.
- When using optical connection, remove the dust cap from the DIGITAL IN (OPTICAL) jack on the rear of this unit. Keep the cap in store. When not using optical connections, the dust cap should be in place.



CONNECTING TO A CD PLAYER OR OTHER SOURCE DEVICE EQUIPPED WITH A DIGITAL OPTICAL OUTPUT JACK

Plug one end of the supplied optical fiber cable to this unit's DIGITAL IN (OPTICAL) jack and the other end of the cable to the CD player's optical output.

CONNECTING TO A SOURCE DEVICE EQUIPPED WITH A DIGITAL COAXIAL OUTPUT JACK

Using a commercially available digital cable (or a 75-ohm video cable), connect this unit's COAXIAL input jack to the source unit's coaxial output jack.

CONNECTING TO A DAT, MD, DCC RECORDER EQUIPPED WITH AN OPTICAL INPUT JACK

Using the supplied optical fiber cable (or a commercially available optical fiber cable), connect this unit's DIGITAL OUT (OPTICAL) jack to the digital recorder's optical input jack.

CONNECTING TO AN ANALOG DEVICE EQUIPPED WITH LINE INPUT AND OUTPUT JACKS

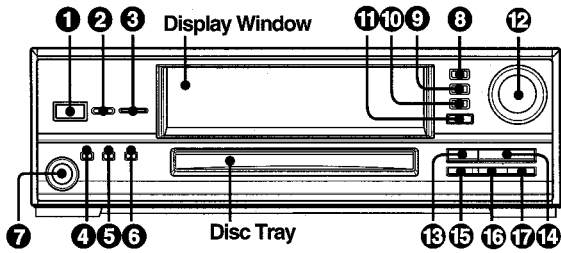
Using one of the supplied audio cables, connect this unit's left and right ANALOG IN jacks to the analog device's left and right line output jacks. Using the other audio cable, connect this unit's left and right ANALOG OUT jacks to the analog device's left and right line input jacks.

AC POWER CORD CONNECTION

The AC power cord has polarity. A white line running along one of the two leads of the cord indicates the ground (negative) side. Sound quality depends on whether or not the AC power cord polarity matches that of your power outlet. Reversing the negative and positive connections may improve sound. Do not switch power off when a disc is inside the unit.

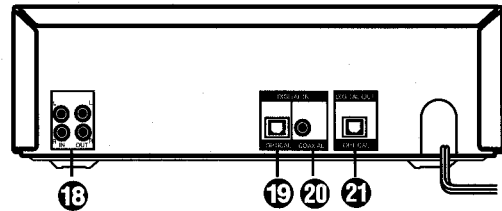
GENERAL GUIDE

FRONT VIEW



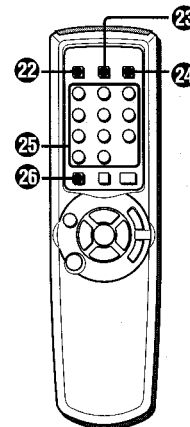
- 1 POWER switch**
Turns the power on and off.
- 2 INPUT switch**
Selects a recording source.
- 3 RECORD indicator**
Flashes in the record-standby mode. Lights steadily during recording and erasing.
- 4 CD SYNC button**
Starts and stops recording in sync with a CD player.
- 5 ERASE button**
Erases the last track, all tracks or the TOC (Table Of Contents) on a CD-RW disc.
- 6 FINALIZE button**
Writes a TOC into a CD-R or CD-RW disc.
- 7 PHONES jack**
Connect headphones with a 1/4 inch stereo plug.
- 8 DISPLAY switch**
Selects different time displays.
- 9 AUTO/MANUAL switch**
Selects automatic or manual track numbering.
- 10 TRACK INCR button**
Adds track numbers, in sequence, to recordings in both Auto Numbering and Manual Numbering mode.
- 11 OPEN/CLOSE button**
Slides the disc tray out and in.
- 12 REC LEVEL control**
Adjusts the recording level when recording analog input.
- 13 ■ button**
Stops recording or playback.
- 14 ►|| button**
Starts recording (except in the CD-SYNC mode), pauses recording or playback, or starts playing.
- 15 ● REC button**
Puts the unit into record-standby mode when recording sources other than compact discs or when recording a compact disc without using CD-SYNC. Records a 4-second blank segment when pressed during recording.
- 16 ◀◀ ◀◀ button**
Press to skip backward through the tracks on a disc. Hold down to 'review'.
- 17 ▶▶ ▶▶ button**
Press to skip forward through the tracks on a disc. Hold down to 'cue'.

REAR VIEW



- 18 ANALOG IN and OUT jacks**
Used for hooking up to analog devices equipped with line input and output jacks (two pairs).
- 19 OPTICAL DIGITAL IN jack**
Used for hooking up to digital source devices equipped with an optical output jack.
- 20 COAXIAL DIGITAL IN jack**
Used for hooking up to digital source devices equipped with a coaxial output jack.
- 21 OPTICAL DIGITAL OUT jack**
Used for hooking up to digital devices equipped with an optical input jack.

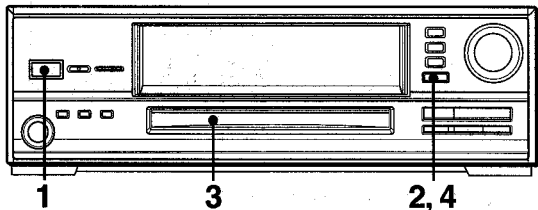
REMOTE CONTROL UNIT



- 22 PRGM button**
Programs tracks to play back in sequence.
- 23 CHECK button**
Checks the sequence of programmed tracks.
- 24 CLEAR button**
Clears any track in a programmed sequence of tracks.
- 25 Numbered buttons**
Specify tracks for normal playback or programmed play.
- 26 REPEAT button**
Sets the unit to play a single track or all tracks repeatedly.

The remaining buttons on the remote control provides the same functions as the buttons with the same or similar marks or names on the main unit.

LOADING DISCS



- 1 Press **POWER** to turn on the power.
- 2 Press **OPEN/CLOSE** to open the disc tray.
- 3 Place the disc in the tray.
 - Place the disc with the labeled side facing up.
 - Do not use a 3-inch disc.
 - Do not place more than one disc on the tray.
- 4 Press **OPEN/CLOSE** again to close the tray.

When a disc is loaded, "LOAD", then "rEAd" appear on the display.

If the disc is a non-finalized CD-R or a CD-RW disc, "OPC" (Optimum Power Control) then appears on the display. OPC determines the intensity and duration of the recording laser beam that is best for the currently loaded disc.

Notes on the OPC limit of CD-R discs

OPC can run only a limited number of times on a non-finalized CD-R disc. Do not open and close the disc tray unnecessarily, as OPC runs every time a non-finalized CD-R disc is loaded. OPC does not run when loading a finalized CD-R disc or a prerecorded music CD.

When a CD-R disc reaches its OPC limit, "OPC Full" will appear on the display after the OPC process.

This message warns you that this is the last chance to make additional recordings to the disc. Make additional recordings if desired, and finalize the disc (see "Finalization").

Important: If you press OPEN/CLOSE when "OPC Full" is displayed, "FinAL" (Final) will appear on the display, and the button will not work. The button will work again once the disc is finalized.

"OPC Err" (OPC Error) will appear on the display when loading a disc

- that reached or exceeded its OPC limit; or
- that is damaged and the OPC process cannot run.

When the disc is loaded, the type or status of disc is displayed as follows:

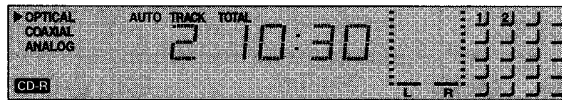
Blank CD-R



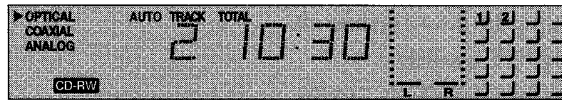
Blank CD-RW



Recorded CD-R, not finalized



Recorded CD-RW, not finalized



Prerecorded music CD, or Finalized CD-R

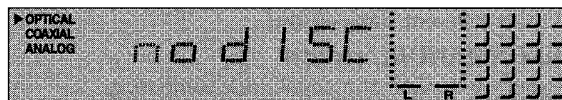
Music calendar (only first 20 tracks displayed)



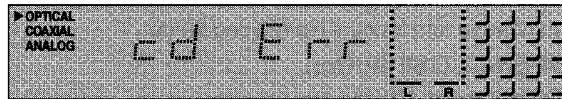
Finalized CD-RW



No disc loaded



Wrong type of disc



RECORDING

PRECAUTIONS

❑ On recording programmed play

Do not attempt to record a sequence of tracks, as programmed on your DAT, DCC or other digital sources. Those tracks would not be numbered contiguously. If you want to record a sequence of tracks, record them one by one.

❑ When recording is in progress or the "rEPAlr" message is being displayed

Never switch off the power to this unit. If you accidentally disconnect the AC power cord or a power failure occurs, audio data is cut off. Upon power recovery, the "rEPAlr" (repair) message is displayed. Only after that message disappears, the unit is available for further recording.

About the update process

The "UPdAtE" (Update) message is displayed after recording. The update process writes non-audio data in the PMA (Program Memory Area) of the disc. When finalizing the disc, TOC (Table Of Contents) is generated from the PMA data.

❑ When digital input is interrupted during recording

If incoming digital input from the source device is interrupted momentarily, such as when the sampling frequency is changed on the source, a blank segment is recorded. If there is an interruption of longer than 4 seconds, this unit stops recording and updates the PMA data.

❑ When recording additional tracks

Additional recordings are added in sequence to the end of the last track on a non-finalized CD-R or CD-RW if there is enough time remaining on the disc. Up to 99 tracks can be recorded on a single disc.

❑ Minimum length of recording you can make

The shortest possible length of recording is restricted to 4 seconds. In other words, you cannot terminate recording before the first 4 seconds are up. During this interval, pressing ►|| or ■ has no effect.

❑ Compressed audio, and video or graphics data

This unit is not capable of recording compressed audio like DTS and Dolby Digital Surround sounds. Non-audio data contained in a Graphics CD and HDCD cannot be recorded on this unit either.

A DIGITAL RECORDING

Digital recording records digital input, i.e. input from a digital source connected via the COAXIAL or the OPTICAL jack. Adjustment of the recording level is not necessary for digital input.

A-1 RECORDING FROM COMPACT DISCS — CD SYNC RECORDING

In CD SYNC recording, the unit automatically starts and stops recording in response to the play and stop of the source CD player. You can either sync-record a single track on a CD (CD SYNC 1) or the whole disc (CD SYNC ALL).

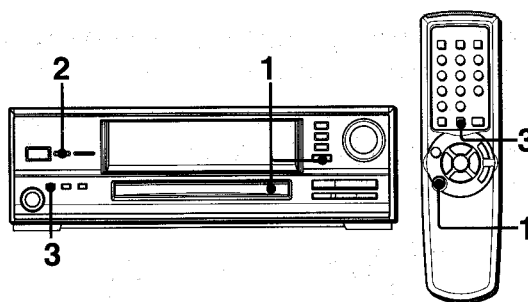
To record from other digital sources, see "A-2."

NOTE

You cannot start or resume recording from a halfway point.

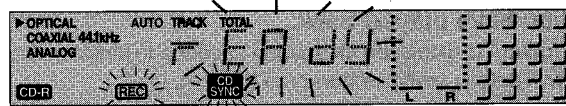
- If this unit is in its CD SYNC record-standby mode and you switch the source device from pause to playback, this unit does not start recording, but remains in the standby mode.
- If you switch the source device from playback to pause during CD SYNC recording, this unit stops recording and runs the update process.

CD SYNC 1—RECORDING ONE TRACK

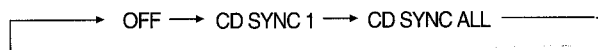


- 1 Load a CD-R or CD-RW disc.
- 2 Set INPUT switch to COAXIAL or OPTICAL, depending on the source connection.
- 3 Press CD SYNC once so that "CD SYNC" and "Hold" start flashing on the display. "Hold" changes to "Ready" in a few seconds.

Input Source Indicator



Pressing CD SYNC repeatedly cycles through the following:



- 4 After "Hold" has changed to "Ready," select the desired track to play on the source device.

This unit automatically starts recording.

- If you change the setting of the input source select switch during recording, recording stops.

En

5 Recording stops when playback reaches the beginning of the next track on the CD.

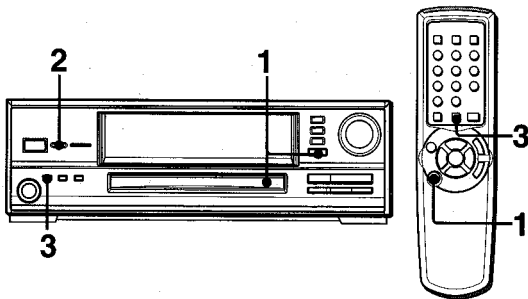
"Update" is displayed for several seconds to indicate that the PMA data is being written onto the disc.

Recording also stops and the update process runs when

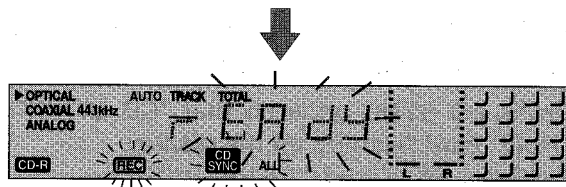
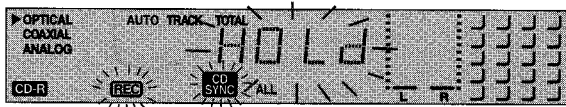
- the source playback stops or pauses;
- detecting a blank segment or a silent portion of more than 4 seconds.

6 To record other tracks from the same source, repeat steps 3 and 4.

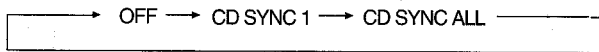
CD SYNC ALL—COPYING AN ENTIRE CD



- 1 Load a CD-R or CD-RW disc.
- 2 Set INPUT switch to COAXIAL or OPTICAL, depending on the source connection.
- 3 Press CD SYNC twice so that "CD SYNC ALL" and "Hold" start flashing on the display. "Hold" changes to "Ready" in a few seconds.



Pressing CD SYNC repeatedly cycles through the following:



- 4 Start playing the source CD.
- 5 Recording stops when all tracks on the source disc have played back.

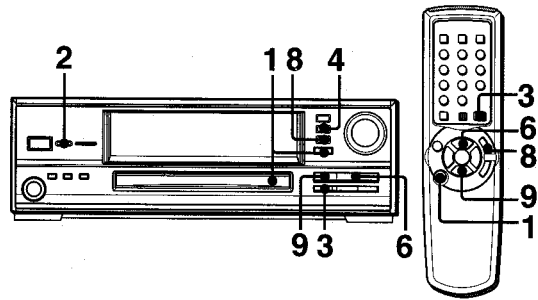
"Update" is displayed for several seconds to indicate that the PMA data is being written onto the disc.

Monitoring digital source in the CD SYNC-standby mode

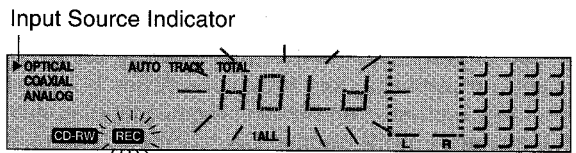
- 1 When this unit is in the stop mode, start playing the source.
- 2 Press CD SYNC. When "Hold" changes to "Ready," you can hear playback in the headphones plugged into this unit.
- 3 To leave the CD SYNC-standby mode, press ■.

A-2 RECORDING FROM SOURCES OTHER THAN A COMPACT DISC

Digital sources other than CDs cannot be recorded in the CD-SYNC mode; recording is started and stopped manually on this unit.



- 1 Load a CD-R or CD-RW disc.
- 2 Set INPUT to COAXIAL or OPTICAL, depending on the source connection.
- 3 Press REC. "Hold" is displayed. Wait until it changes to "0:00" to indicate that the unit is ready to record.



- 4 Press AUTO/MANUAL to turn off "AUTO" if you want to manually assign track numbers to recordings. See "Numbering Tracks."
- 5 Play the source device, then pause playback at the point where you want to start recording.
- 6 Press ►|| to start recording.
- 7 Start playback on the source device.
- 8 If you want to add a track number, press TRACK INCR at the desired point (typically at the end of a piece of music). See "Manual Numbering."

All control buttons including TRACK INCR is inoperative for 4 seconds immediately after recording is started.

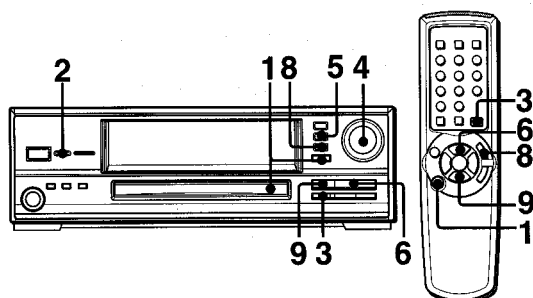
- 9 To stop recording, press ■. "Update" is displayed for several seconds to indicate that PMA data is being written onto the disc.

NOTE

- Depending on the source device, recording may not start on this unit by pressing ►|| in step 6. In this case, start playback of the source device before starting recording on this unit.
- If the Input Source Indicator ► blinks and the sampling frequency appears on the display, the incoming digital source is locked but the data is erroneous.
- If the Input Source Indicator ► blinks and the sampling frequency does not appear on the display, there is no incoming digital source or the sampling frequency is not supported.

B ANALOG RECORDING

Analog sources such as records or cassettes, or any source connected analogically, i.e. via the LINE IN jack, is recorded as analog input. Recording level needs to be adjusted manually for analog recordings.



- 1 Load a CD-R or CD-RW disc.
 - 2 Set INPUT switch to ANALOG.
 - 3 Press REC.
"Hold" is displayed. Wait until it changes to "0:00" to indicate that the unit is ready to record.
 - 4 Play the source and adjust the recording level with REC LEVEL.
Adjust REC LEVEL so that the peak level is kept as high as possible without the uppermost red meter segment flashing.

When level adjustment is complete, stop the source device and make it ready to play (rewind the tape, etc., as required).
 - 5 Press AUTO/MANUAL to turn off "AUTO" if you want to manually add track numbers to recordings.
See "Numbering Tracks."
 - 6 Press ►|| to start recording.
 - 7 Start playback on the source device.
 - 8 If "AUTO TRACK" has not been selected, press TRACK INCR at the desired point (typically at the end of a piece of music).
See "Manual Numbering."
- All control buttons including TRACK INCR is inoperative for 4 seconds immediately after recording is started.
- 9 To stop recording, press ■.
"Update" is displayed for several seconds to indicate that the PMA data is being written onto the disc.

NOTE

During recording, if there is no audio signal from the external source for about 60 seconds, or if there is a low-level segment of about 60 seconds, this unit stops recording and runs the update process.

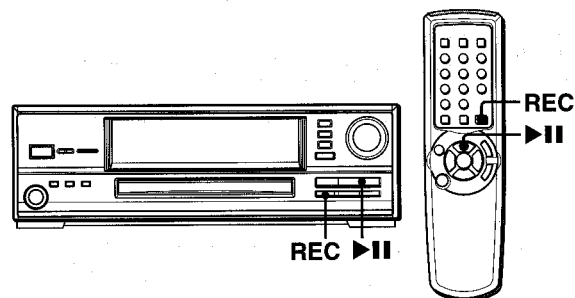
OTHER RECORDING OPERATIONS

PAUSING RECORDING

Press ►||.

To resume recording, press ►|| again.

INSERTING A 4-SECOND BLANK SEGMENT BETWEEN TRACKS



Press REC during recording. The unit records a 4-second blank segment and enters the record-standby mode. The track number is increased by one.

To record the next track after inserting a blank segment Press ►||.

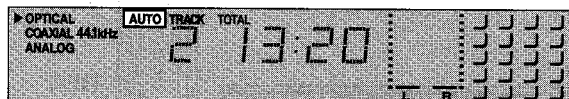
En

NUMBERING TRACKS

AUTO NUMBERING

Auto track numbering automatically numbers new tracks added to the disc in sequence. Auto numbering can be used with either Digital and Analog recording.

Auto numbering is selected by default. If you want to switch to auto numbering from manual numbering, press **AUTO/MANUAL** to turn on "AUTO" in the record-standby mode.

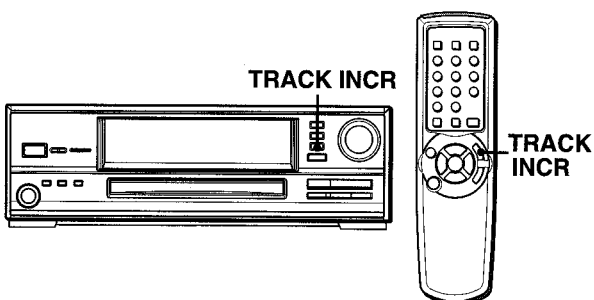


NOTE

During Analog recording

- If there is no signal from the source device for 4 seconds, a blank segment is recorded on the disc, and recording goes on.
- If there is no signal from the source device for 60 seconds after a new recording track was started, this unit leaves the record mode and runs the update process.
- If a piece of music contains low level passages, the unit will identify them as blank segments between tracks. Such music will thus be divided into sections with different track numbers. If preferred, avoid this by manually numbering tracks, as explained below.

MANUAL NUMBERING



Precautions

- Track numbers can only be increased during recording.
- Once increased, track numbers cannot be changed.
- To add a track number to a recording and stop recording at the same time, press **■**, and not **TRACK INCR**. If **TRACK INCR** is pressed, recording continues.
- **TRACK INCR** also works during the Auto Numbering mode.

1 In the record-standby mode, press **AUTO/MANUAL** to turn off "AUTO."

2 During recording, press **TRACK INCR** during recording at the desired point (typically at the end of a piece of music).

The point where **TRACK INCR** is pressed is defined as the end of the track. The track number flashing on the display at that point is assigned to the track.

At each press of **TRACK INCR**, the number flashing in the display increases by one, so that all individual recordings are numbered in sequence.

NOTE

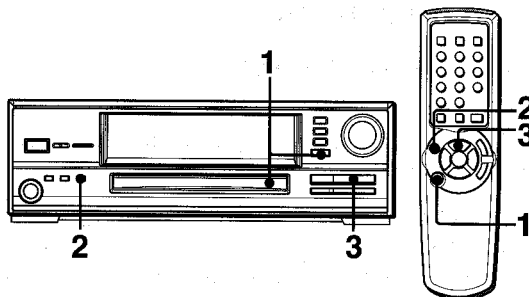
All control buttons including **TRACK INCR** is inoperative for 4 seconds immediately after recording is started. Also, once you press **TRACK INCR**, the button cannot be operated for 4 seconds.

FINALIZATION

Finalization is the process of recording the Table Of Contents (TOC) onto the disc. Both CD-R and CD-RW discs have to be finalized for them to be played back on external devices.

Precautions

- Once a CD-R disc is finalized, the disc cannot be unfinalized; you cannot erase the disc or add new tracks to the disc.
- A CD-RW disc can be unfinalized. See "Erasing Recordings on a CD-RW Disc".
- During the finalizing process, never switch the power off or the disc may be damaged.
- Once started, the finalizing process cannot be aborted.
- Dust or scratches on a disc may prevent it from being finalized successfully.
- The time the finalizing process takes depends on the disc and the number of tracks it contains.



1 Load the CD-R or the CD-RW disc to be finalized.

Make sure you are finished recording with the disc.

2 Press **FINALIZE**.

The finalizing time is displayed. The unit is now ready to finalize the disc.

NOTE

The finalizing time display shows an estimated approximate time.

To cancel finalization, press **■**. The unit switches back to stop mode.

3 To finalize the disc, press **▶||**.

When a CD-R disc is finalized completely, "CD-R" turns off, "CD" turns on instead on the display, and the unit goes into stop mode.

When a CD-RW disc is finalized completely, "FINALIZE" stops flashing and lights steadily, and the unit goes into stop mode.

NOTE

• If finalization is not completed in a few minutes because of dust or scratches on the disc, the process will be terminated automatically.

• A non-finalized CD-R disc cannot be played back on conventional CD players.

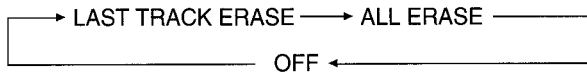
• If there is a power interruption during finalization, the unit automatically executes a recovery operation when switched back on. "REPAIR" (Repair) shows on the display during this process. Not all discs may be recovered successfully.

ERASING RECORDINGS ON A CD-RW DISC

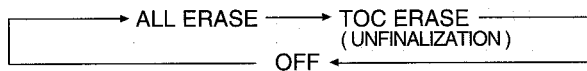
This unit offers three erasing modes for CD-RW discs:

- Last track erase
- All erase
- TOC erase

When a non-finalized CD-RW disc is loaded, pressing **ERASE** repeatedly cycles through the following:



When a finalized CD-RW disc is loaded, pressing **ERASE** repeatedly cycles through the following:



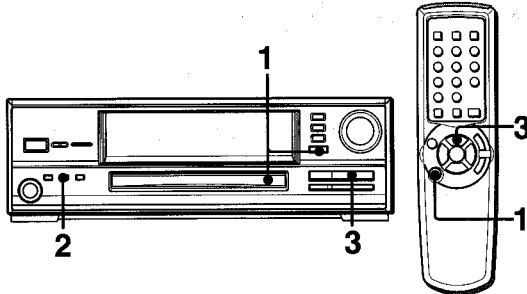
With All Erase, the TOC is erased as well as all audio data; the disc can thus be used as a new, blank disc.

TOC Erase erases the TOC but not the audio data, unfinalizing a finalized CD-RW disc, in effect. This enables you once again to add or erase tracks on the CD-RW disc.

NOTE

CD-R discs cannot be erased in any way.

ERASING THE LAST TRACK

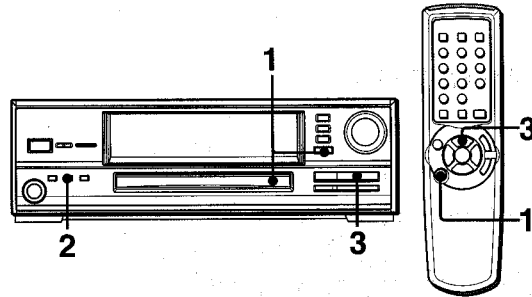


- 1 Load the non-finalized CD-RW disc.
- 2 Press **ERASE** once so that “ERASE” lights on the display.
- 3 Press **▶||** to start erasing.
“ERASE” starts flashing in the display, and the estimated erasing time is displayed.

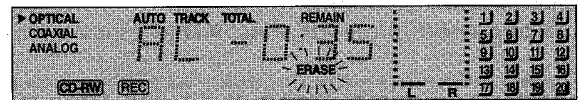
- Only the last track of the disc can be erased. If you want to erase the next-to-the-last track, for example, you have to erase last two tracks, the last track first.
- Last Track Erase is available only for a non-finalized CD-RW disc. If you want to erase a track in a finalized CD-RW disc, the disc has to be unfinalized first.

ERASING AN ENTIRE CD-RW DISC (ALL ERASE)

It takes less than one minute to erase an entire disc, whether finalized or not.



- 1 Load the CD-RW disc.
- 2 Press **ERASE** once or twice so that “AL” lights on the display.
- 3 Press **▶||** to start erasing.
“ERASE” starts flashing in the display, and the estimated erasing time is displayed.



UNFINALIZATION (TOC ERASE)

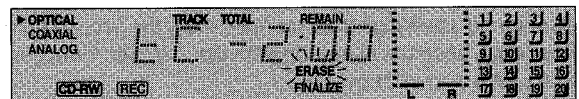
You can not add or erase tracks on a finalized CD-RW disc. If necessary, you can unfinalize the disc by erasing its TOC data as follows.

Only a CD-RW disc can be unfinalized.

NOTE

If the process does not complete in a certain time, TOC Erase may not have been successful. In this case, the disc can still be played back on this unit but not on any other device.

- 1 Load the finalized CD-RW disc.
- 2 Press **ERASE** twice so that “tC” lights on the display.
- 3 Press **▶||** to start unfinalizing the disc.
“ERASE” starts flashing in the display, and the estimated unfinalizing time is displayed.



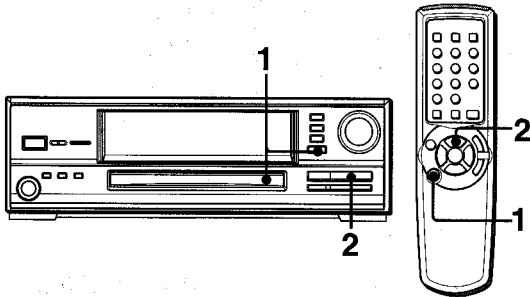
When the process is over, “FINALIZE” turns off.

- TOC Erase is available only for a finalized CD-RW disc.

PLAYBACK

CD-R discs, CD-RW discs and music CDs can be played back on this unit.

BASIC OPERATION

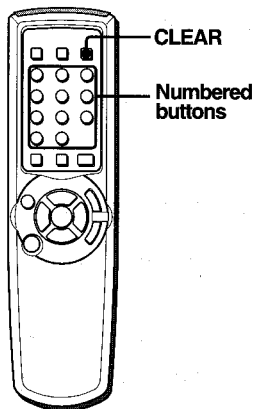


1 Load the disc.

2 Press ►||.

- To stop playback, press ■.
- To pause playback, press ►||. Press ►|| to resume playback.

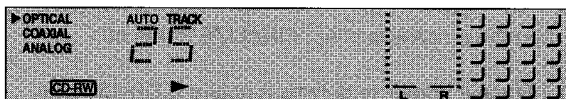
PLAYING A SPECIFIC TRACK (DIRECT PLAY)



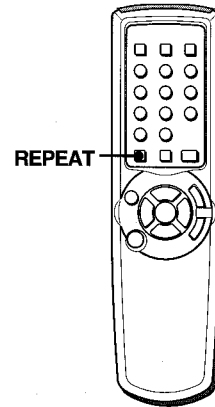
Select the desired track by pressing the corresponding numbered button.

To select track 25 for example, press **+10, +10, 5**.

When entering a two-digit track number, enter the second number within about 5 seconds of entering the first number. If necessary, press **CLEAR** and start over.



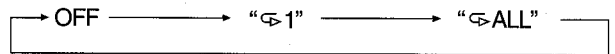
REPEAT PLAYBACK



Press **REPEAT** before or during playback. "◀1" lights up on the display and the unit is set to play a single track repeatedly.

To play the entire disc repeatedly, press **REPEAT** so that "◀ALL" lights up.

Pressing **REPEAT** repeatedly cycles through the following:



NOTE

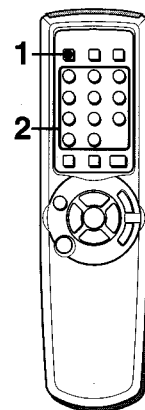
Single track repeat play cannot be performed during programmed playback.

PROGRAMMED PLAYBACK

Up to 30 tracks can be programmed to be played back in order of entry.

As you enter tracks, the total playback time is displayed (up to a maximum of 100 minutes).

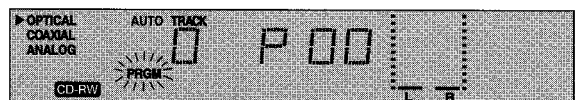
You can program tracks only in the stop mode.



To program tracks

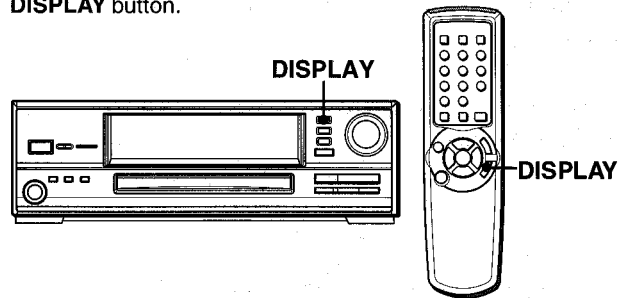
1 Press PRGM on the remote control unit.

"PRGM" starts flashing on the display.



CHANGING THE TIME DISPLAY MODE

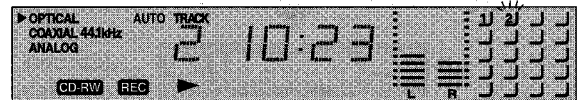
The time display mode has 2 different functions during recording and 4 different functions during playback, as controlled by the **DISPLAY** button.



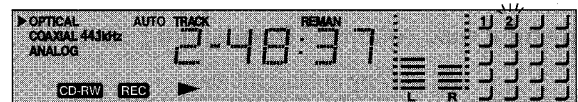
DISPLAY IN THE RECORDING MODE

During recording, press **DISPLAY** repeatedly to change the time display as follows:

Elapsed time from beginning of recording



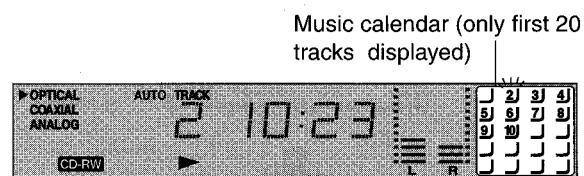
Remaining time on disc



DISPLAY IN THE PLAYBACK MODE

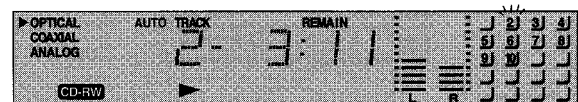
During playback, press **DISPLAY** repeatedly to change the time display as follows:

Elapsed time from beginning of the current track



Music calendar (only first 20 tracks displayed)

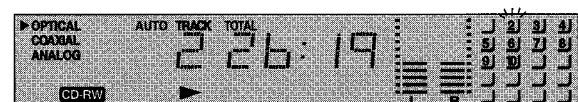
Remaining time of the current track



Total remaining time on disc (or on programmed tracks)

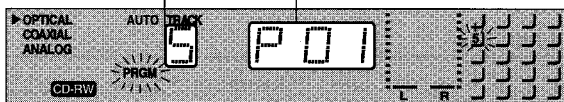


Total elapsed time from beginning of disc (or of programmed tracks)



2 Press a numbered button to program a track.

Selected track number Program number



3 Repeat step 2 to program other tracks.

Total number of programmed tracks. Total playing time of programmed tracks

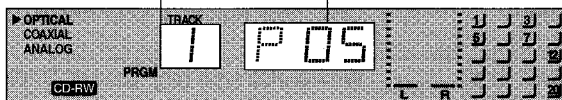


To check the program

You can check the order only in the stop mode. Press **CHECK** on the remote control unit.

With each press of **CHECK**, the programmed track number and program number are displayed.

Programmed track number Program number



To start programmed playback

Press **▶▶**.

To cancel an entire program

Press **■** during stop (or press **OPEN/CLOSE** to open the disc tray).

NOTE

Do not open and close the disc tray unnecessarily with a non-finalized CD-R disc inside.

To cancel the last programmed track

Press **CLEAR** during stop.

To add tracks to the program

Before playing back, repeat step 2. The track will be added to the end of the program.

To change the program

Cancel the program and repeat all the steps again.

TRACK SEARCH

Press **▶▶▶▶** to skip forward to other tracks during playback, pause or stop. Press the button as many times as necessary. To skip backward, press **◀◀◀◀**.

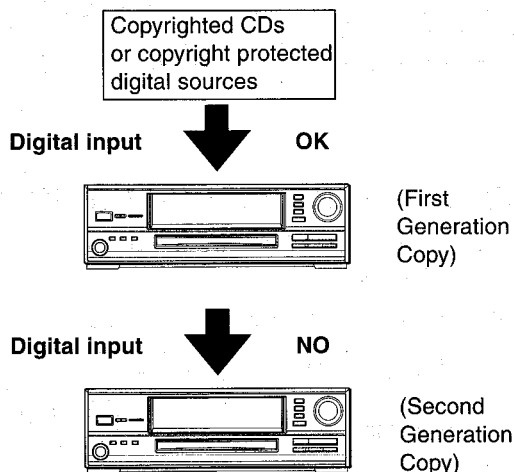
FAST-FORWARD ('CUE') OR REWIND ('REVIEW')

Hold down **▶▶▶▶** or **◀◀◀◀** during playback.

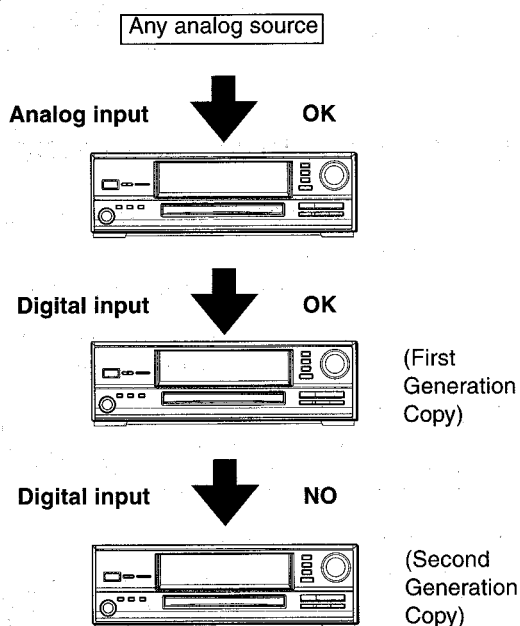
RESTRICTIONS ON DIGITAL RECORDING

The Serial Copy Management System (SCMS) is implemented in this unit to protect the rights of copyright holders. SCMS allows you to make a 'first-generation' digital copy—a digital copy of the original source—but not a copy of this copy. The SCMS copy restriction does not apply to analog recordings.

Recording from digital sources with copy prohibition code



Copying a disc recorded from analog sources



ALERT MESSAGES

DISPLAY	MEANING
OPC	OPC (Optimum Power Control) in progress
no dISC	No disc loaded
UPdAtE	PMA data being updated
FULL	30 tracks programmed; no additional programming possible
CdFULL	No space left for additional recordings or 99-tracks limit reached
Error	<ul style="list-style-type: none"> • FINALIZE failed; disc damaged or no audio on disc • CD SYNC pressed while no digital input selected • ERASE failed; disc damaged
FINALIZE blinking	Disc being finalized
rEPAlr	Recovery process in progress following power failure during recording
OPCErr	OPC process failed; OPC limit already reached or disc damaged
OPC Full	OPC limit reached; disc needs to be finalized
cd Err	Wrong disc type (e.g. CD-R/CD-RW for computer)
rEAd	Disc information being read off
FInAL	OPC limit reached; disc needs to be finalized
COPY PROHIBIT	Recording prohibited by the SCMS standard

TROUBLESHOOTING

Cannot be powered up

- Plug the AC power cord to a power outlet.
- Switch power on to the amplifier or other associated units.

No playback sound

- Check and correct the connections.

Cannot record

- Check and correct the connections.
- Use a non-finalized disc.
- Check and correct the INPUT switch setting.
- Turn up the recording level (when recording analog input).
- Wipe the disc clean of dust.

Playback sound is distorted

- Check and correct the connections.
- Switch off a nearby television set or move it away from this unit.
- Use another disc (the disc may be damaged).
- Try recording again at lower a level.
- Wipe the disc clean of dust.

Cannot operate from the remote control

- Replace all of the batteries in the remote control.
- Remove objects blocking infrared commands.
- Operate the remote control within its effective range.

Cannot play back a recorded CD-R disc on other CD players

- Finalize the disc.

SPECIFICATIONS

Discs supported	CD/CD-R/CD-RW for digital audio
Frequency response	20 Hz to 20 kHz
Playback signal-to-noise ratio	95 dB
Playback total harmonic distortion	less than 0.01%
Digital input sampling frequency range	32 to 48 kHz (sampling rate conversion)
Digital input format	IEC 60958
Recording format	16 bits, 44.1 kHz
Analog in	RCA
Analog out	RCA
Digital in	Optical, Coaxial
Digital out	Optical
Power supply	120 V AC, 60 Hz
Power consumption	18 W
Dimensions (W × H × D)	260 × 93 × 327.4 mm (10.24 × 3.66 × 12.89 in.)
Weight	3.5 kg (8 lbs 12 oz.)

Specifications and external appearance are subject to change without notice.

COPYRIGHT

Please check the laws on copyright relating to recordings from discs, radio or external tapes for the country in which the unit is being used.

For assistance and information

call toll free 1-800-BUY-AIWA (United States and Puerto Rico)
