

YAMAHA CD-X1

Natural Sound Compact Disc Player

Natural Sound Compact Disc Spieler

Lecteur compact disc de la série "Naturel Sonore"

Natural Sound Kompaktskivspelare



OWNER'S MANUAL
P.2~P.14

BEDIENUNGSANLEITUNG
P.15~P.26

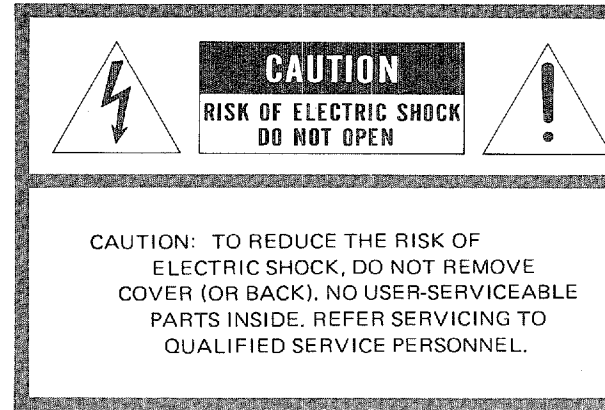
MODE D'EMPLOI
P.27~P.38

BRUKSANVISNING
P.39~P.50

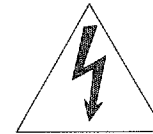
CAUTION:
Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

CAUTION (PREPARED IN ACCORDANCE WITH UL STANDARD 1270)

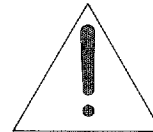
- 1. Read Instructions** — All the safety and operating instructions should be read before the appliance is operated.
- 2. Retain Instructions** — The safety and operating instructions should be retained for future reference.
- 3. Read Warnings** — All warnings on the appliance and in the operating instructions should be adhered to.
- 4. Follow Instructions** — All operating and other 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 swimming pool, etc.
- 6. Carts and Stands** — The appliance should be used only with a cart or stand that is recommended by the manufacturer.
- 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, stoves, or other appliances 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. 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.
- 12. Cleaning** — The appliance should be cleaned only as recommended by the manufacturer.
- 13. Nonuse Periods** — The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.
- 14. Object and Liquid Entry** — Care should be taken so that objects do not fall into and liquids not spilled into the inside of the appliance.
- 15. 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 cabinet damaged.
- 16. Servicing** — The user should not attempt to service the appliance beyond those means described in the operating instructions. All other servicing should be referred to qualified service personnel.



• Explanation of Graphical Symbols



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert you 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 you to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

CAUTION: READ THIS BEFORE OPERATING YOUR CD-X1

1. The CD-X1 is a sophisticated Compact Disc Player. To ensure proper operation for the best possible sound reproduction, please read this manual carefully.
2. Choose the installation location of your CD-X1 carefully. Avoid placing it in direct sunlight or close to a source of heat. Also avoid locations subject to vibration and excessive dust, heat, cold or moisture. Keep away from such sources of hum as transformers or motors.
3. Do not open the cabinet as this might result in damage to the circuitry or electrical shock. If a foreign object should get into the set, contact your dealer.
4. Be sure not to handle discs with dirty fingers. Never insert a disc which has a crack on the surface.
5. When removing the power plug from the wall outlet, always pull directly on the plug, never yank the cord.
6. Do not use force when using the switches and knobs.
7. When moving the set be sure to first pull out the power plug and remove cords connecting to other equipment.
8. To keep the laser-pickup clean, do not touch it, and do not forget to close the disc tray.
9. Do not attempt to clean the CD-X1 with chemical solvents as this might damage the finish. Use a clean, dry cloth.
10. Be sure to read the "troubleshooting" section for advice on common operating errors before concluding that your CD-X1 is faulty.
11. Keep this manual in a safe place for future reference.
12. The voltage selector switch on the back panel of this model must be set for the local voltage BEFORE the unit is plugged into the main supply.
13. This equipment generates and uses radio frequency energy and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio and television reception. It has been type tested and found to comply with the limits for a Class B computing device in accordance with the specifications in Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause 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 the receiving antenna

Relocate the computer with respect to the receiver
Move the computer away from the receiver
Plug the computer into a different outlet so that computer and receiver are on different branch circuits.

If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet prepared by the Federal Communications Commission helpful: "How to Identify and Resolve Radio—TV Interference Problems". This booklet is available from the U.S. Government Printing Office, Washington, DC 20402, Stock No. 004-000-00345-4

IMPORTANT

Please record the serial number of your unit in the space below.

Model: CD-X1

Serial No.:

The serial number is located on the rear of the cabinet. Retain this Owner's Manual in a safe place for future reference.

Special Instructions for British Model

THE WIRES IN THE MAINS LEAD ARE COLOURED IN ACCORDANCE WITH THE FOLLOWING CODE:

Blue: NEUTRAL
Brown: LIVE

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows. The wire which is coloured BLUE must be connected to the terminal which is marked with the letter N or coloured BLACK. The wire which is coloured BROWN must be connected to the terminal which is marked with the letter L or coloured RED.

WARNING

To prevent fire or electrical shock, do not expose this CD-X1 to rain or moisture.

BEFORE USING — REMOVE THE TRANSPORT SCREWS

• **Transport Screws**

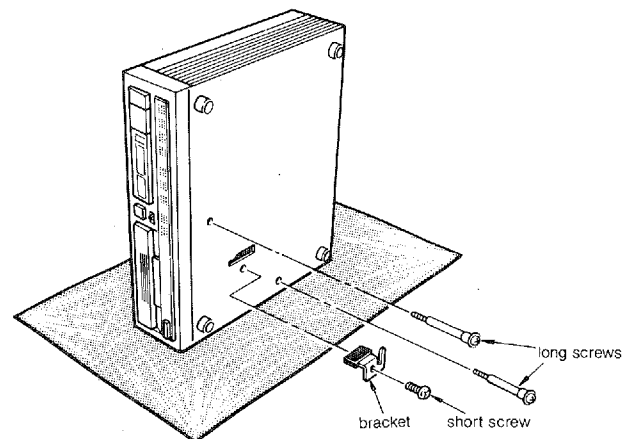
To protect the internal laser pickup mechanism from shocks and movement during transit, it has been secured by special transport screws. The positions of these screws are indicated on the player's bottom panel.

• **Removing the Screws**

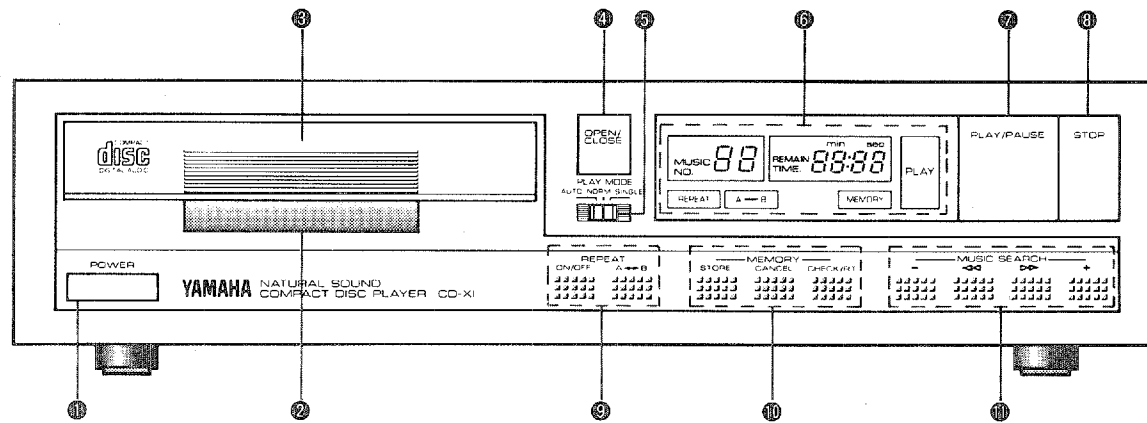
All the transport screws must be removed before the player is turned on. To remove the screws, place the player on its left side on a firm, smooth surface, as shown in the diagram. When removing the screws, be careful not to damage the player cabinet. (Keep the transport screws for later use).

• **Transporting the Player**

If the player is to be transported for long distances, the transport screws should be installed again. Before installing the screws, open the disc tray to make sure that there is no disc in it, then close the tray again. Turn off the player. Place the player on its left side and install the screws as shown in the diagram.



CD-X1



CONTROLS AND THEIR FUNCTIONS

1 POWER SWITCH

2 DISC INDICATOR

This indicator flashes when the disc tray 3 is closing. (It goes out when the disc tray is fully open.) After the disc is loaded and the tray fully closed, the light will stop flashing and remain on during normal operation.

* If the disc is improperly loaded in the tray, this indicator will flash for about 4 seconds and then go out. Check to see if the disc is loaded properly with the correct side up and repeat the loading operation.

3 DISC TRAY

4 OPEN/CLOSE BUTTON

The disc tray 3 slides out when this button is pressed. Pressing it again returns the tray to the player.

5 PLAY MODE SELECTOR

Playback mode selection is made with this switch.

AUTO: If a disc is in the player, playback will begin when the power is turned on. Similarly, if the power is already on, playback will begin as soon as the tray is closed after a disc is loaded. If an audio timer is used, the machine will be automatically turned on at a specified time for added convenience.

NORM: At this setting, playback begins when the PLAY/PAUSE button 7 is pressed. This setting is preferable for normal operation.

SINGLE: At this setting, playback will stop after a single selection is played.

To continue playback, press the PLAY/PAUSE button 7.

6 MULTIFUNCTION INDICATOR

These displays show the status of playback and operation.

A Time counter

Shows the elapsed playback time of the selection being played as well as the elapsed or remaining time of the disc.

B MUSIC NO. indicator

Shows the number of the selection being played.

C PLAY indicator

Shows the status of the playback mode.

Normal playback On
Pause Flashing
Stop Off

D REPEAT indicator

Lights when either the REPEAT function ON/OFF button or the A—B button is pressed. Turns off when the ON/OFF button is pressed again.

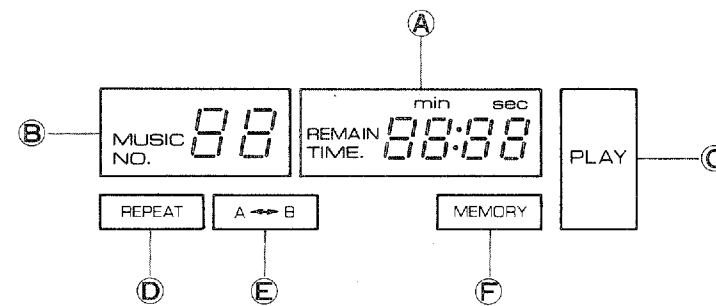
E A — B REPEAT indicator

Lights when the A — B REPEAT button is pressed during playback.
* Turns off when the REPEAT ON/OFF button or MEMORY STORE button is pressed.

F MEMORY indicator

Lights when the MEMORY STORE button is pressed. (Indicates that the selection is entered into MEMORY.) If the selection is not entered into MEMORY, this indicator flashes.

* Stays lighted during MEMORY playback.
* Turns off when the A — B REPEAT button is pressed.



▶ PLAY/PAUSE BUTTON

Press this button to begin playback (**play mode**). During playback, the PLAY indicator stays lighted.
If the button is pressed again, playback is momentarily suspended (**pause mode**). In PAUSE, the PLAY indicator flashes.
Pressing this button again resumes playback.

⏏ STOP BUTTON

When this button is pressed, playback stops and the pickup returns to the beginning of the selection being played. If pressed again, the pickup returns to the beginning of the first disc selection and the player remains in the stop mode.

⏮ REPEAT FUNCTION BUTTONS

These buttons are used to activate the various repeat functions.

ON/OFF: Press this button to repeat playback of a disc or the selections programmed in MEMORY. (The REPEAT indicator will light.)
Press the button again to return the player to normal playback.

A — B: This button allows repeat playback on any part of the disc between two preset points.

Press it once at the starting point of the desired repeat playback portion (the A — B REPEAT indicator will flash), and once again at the end point of the repeat portion (the A — B indicator light will stay lit). This enters the repeat playback portion into MEMORY and the portion will be repeated until the REPEAT ON/OFF button is pressed again.

* For details, refer to the section on REPEAT playback (Page 12).

⏮ MEMORY FUNCTION BUTTONS

These buttons allow quick programming of selections into MEMORY and confirmation of remaining disc playback time.

STORE: Press this button to enter desired selection numbers into MEMORY.

The MEMORY indicator will light.

CANCEL: Press this button to erase programmed selection numbers from MEMORY.

One selection is erased each time this button is pressed. To erase all the selection numbers, continue pressing this button.

CHECK/RT: When this button is pressed during normal playback, the total time remaining on the disc will be displayed for several seconds on the time counter.

If pressed during playback of a MEMORY selection, the total program time remaining will be displayed.

With the player stopped in the MEMORY playback mode, pressing this button will display the numbers of the selections programmed into memory memory.

(If this button is held down, programmed section numbers will be consecutively displayed.)

When this is done, the total playback time of the programmed selections will be displayed on the time counter.

Refer to the section on "MEMORY operation" on page 10.

⏮ MUSIC SEARCH FUNCTION BUTTONS

These buttons allow fast forwarding and rewinding to desired selections or to any preferred portion of the disc.

— : When this button is pressed once, the pickup head will return to the beginning of the selection being played.

If it is pressed again, the player will skip to the beginning of the previous track.
Pressing this button continuously causes selections to be changed in order back to the beginning of the disc.
(The pickup head will stop at the beginning of the first selection.)

◀◀ : Pressing this button during playback or when the player is in the PAUSE mode will put the player in fast reverse.

Reverse speed for the first 3 seconds is relatively slow; then high-speed reverse is automatically engaged.

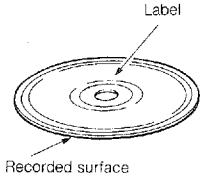
▶▶ : Pressing this button during playback or when the player is in the PAUSE mode will put the player in fast forward. As above, high-speed forwarding is engaged after 3 seconds.

+ : When this button is pressed once, the pickup head will advance to the beginning of the next selection.

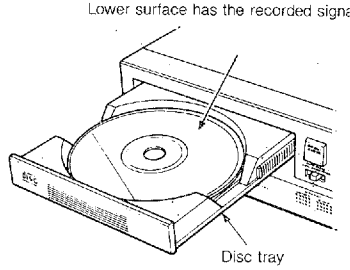
If it is pressed again, the player will skip to the beginning of the next selection, and so on, advancing in consecutive order each time the button is pressed, until the beginning of the last selection is reached.
(The player will stop at the last selection.)

HANDLING THE DISCS

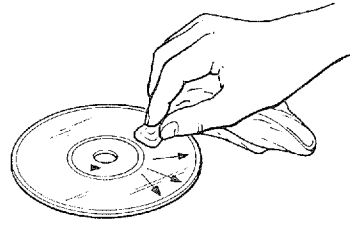
This unit has been designed specifically for reproduction of compact discs bearing the "CD" mark. No other discs can be reproduced.



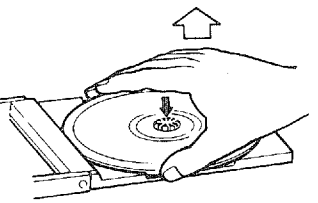
Label
Recorded surface



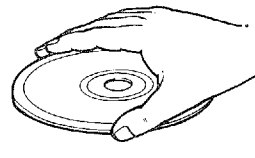
Lower surface has the recorded signal
Disc tray



- Fingermarks and dust should be carefully wiped off the disc's recorded surface with a soft cloth. Unlike conventional records, the compact disc has no grooves to collect dust and microscopic debris so gently wiping with a soft cloth should remove most particles. Wipe in a straight motion from the inside to the outside of the disc. Small dust particles and light stains will have absolutely no effect on reproduction quality.
- Always place the compact disc in the disc tray with the label facing upward. (Compact discs can be played only on one side.)
- To remove a disc from its storage case, press down on the center of the case and lift the disc out, holding it carefully by the edges.
- Never use such chemicals as record sprays, antistatic sprays or fluid, benzene or thinner to clean compact discs. Such chemicals would irreparably damage the disc's plastic surface.
- Discs should be returned to their cases after use to avoid serious scratches that could cause the laser pickup to "skip."
- Don't expose discs to direct sunlight or high humidity and temperature for extended periods. Long exposure to high temperatures can warp the disc.
- Don't stick paper or don't write anything with ballpoint pen on the surface of the label side.



Proper way to hold compact disc

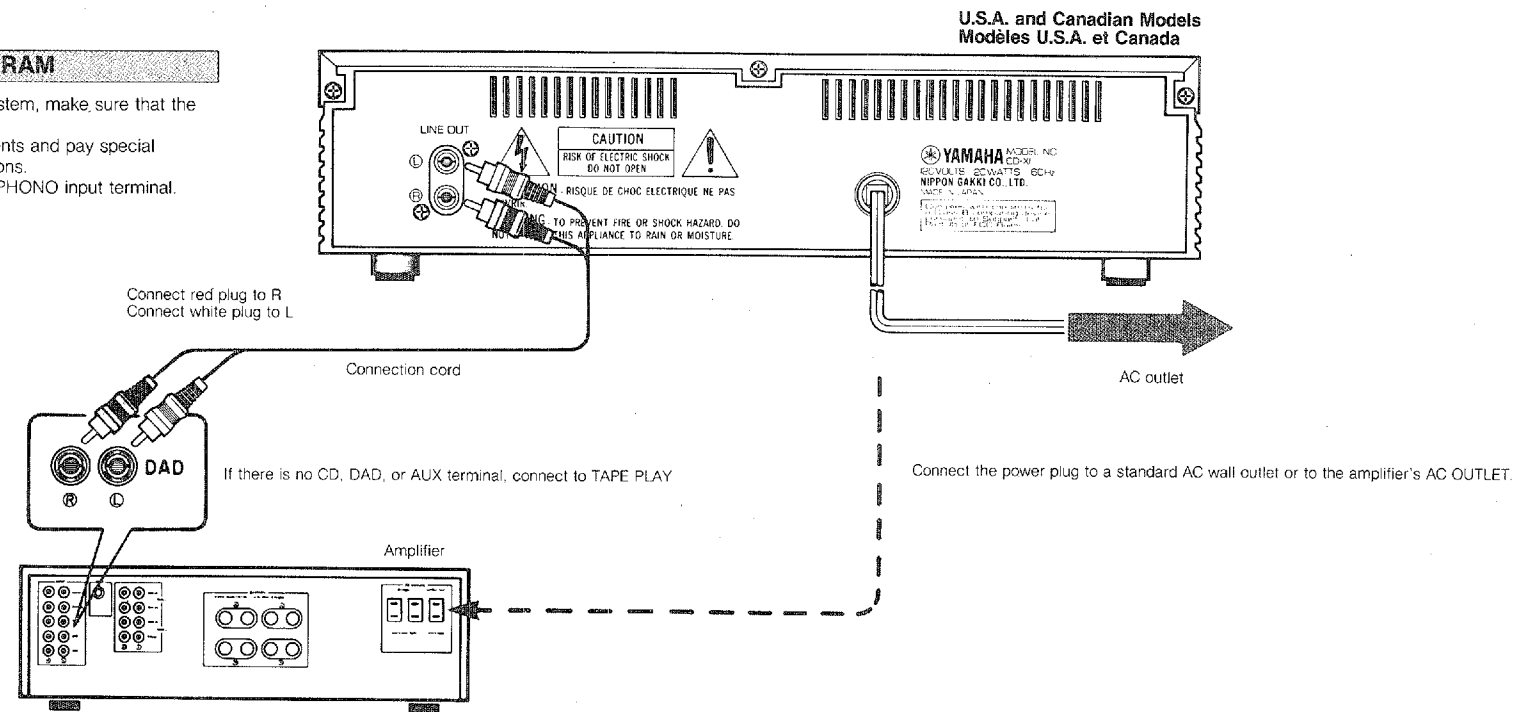


Compact disc inserted with the label facing upward

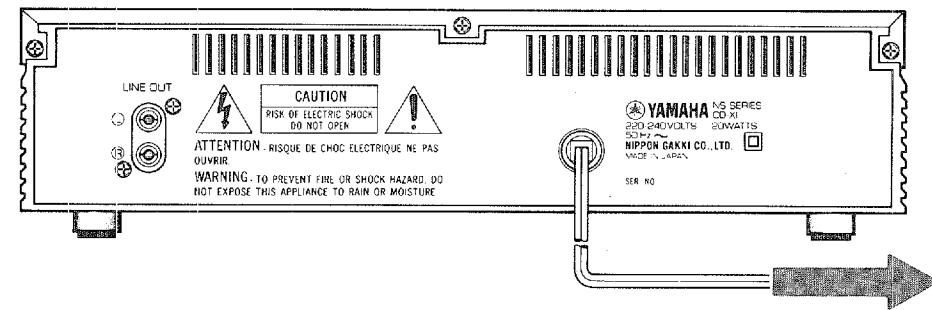
CD-X1

CONNECTION DIAGRAM

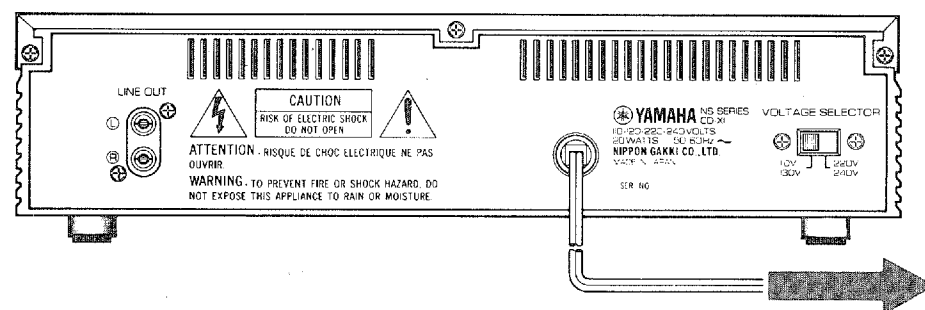
- Before connecting the CD-X1 to your audio system, make sure that the transport screws have been removed.
- During connection, turn off all stereo components and pay special attention to left (L) and right (R) channel indications.
- Do not connect the CD-X1 to your amplifier's PHONO input terminal.



Europe, U.K., and Australia Models
Modèles Royaume-Uni, l'Australie et l'Europe
Modelle für Großbritannien, Australien, und Europe



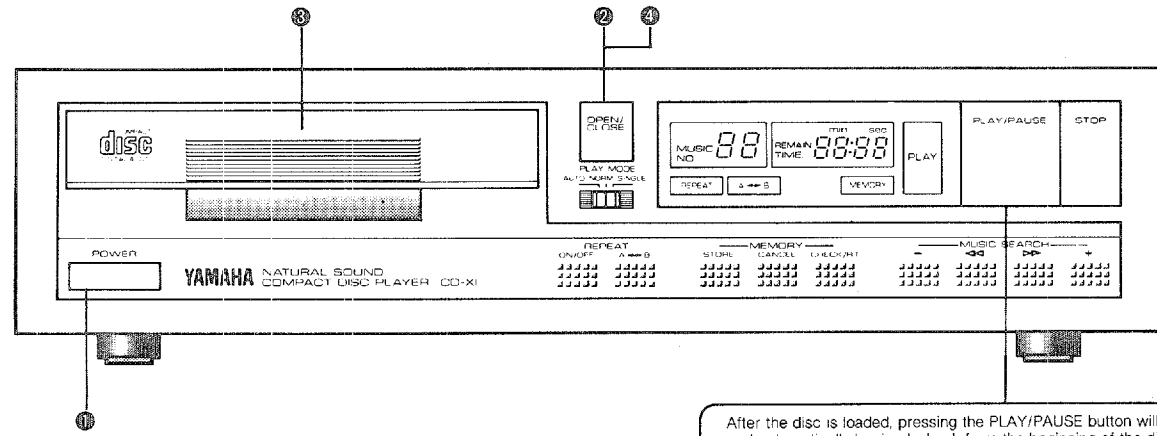
General Model
Modèle Général



CD-X1

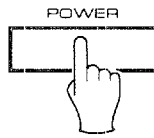
LOADING AND UNLOADING DISCS

- Before turning the power on, make sure that the transportation screws have been removed.
- Follow operating procedures in the indicated order.



After the disc is loaded, pressing the PLAY/PAUSE button will close the tray and automatically begin playback from the beginning of the disc.

- ① Press the POWER switch.
(At first, please set the PLAY MODE selector switch to NORM.)



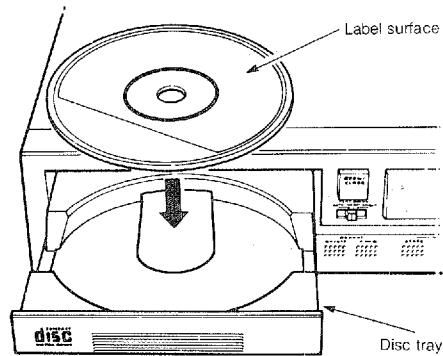
* If the disc tray is already open, it will close automatically.

- ② Press the OPEN/CLOSE button. The disc tray will slide out. (OPEN operation)



* If the disc tray is obstructed during opening, the tray will stop at that position. After 4 seconds have elapsed, the OPEN/CLOSE button can be pressed again to close the tray.

- ③ When the disc tray has opened fully, remove the disc from its case and place it carefully in the tray with the label side facing UP.

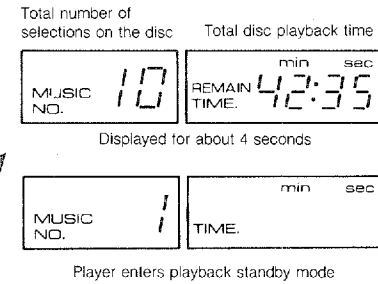


* As the side opposite the label is the recorded side, handle the disc carefully to avoid leaving fingerprints on the disc surface.

- ④ To close the disc tray, press the OPEN/CLOSE button again or gently push in on the front of the tray. (CLOSE operation.)
When the tray is fully closed, the disc indicator will flash for a few seconds and then stay lit continuously, and the player will be placed in the playback standby mode.



- If the disc is correctly loaded in the NORMAL or SINGLE playback mode, the following information will be displayed:



* After the disc tray is fully closed, the disc indicator may continue flashing (and then go out after about 4 seconds) and no information will appear on the displays. This means that the disc is improperly loaded (most likely it is upside down.) To check, open the disc tray again and reload the disc.

* If disc tray closing is hampered because of an obstruction, the disc tray will stop and return to the open position after about 4 seconds. If this happens, check the disc tray to find the obstruction and remove it before closing the tray again.

- **Removing the disc**
The disc tray can be opened at any time by pressing the OPEN/CLOSE button. Remove the disc only after the tray has opened fully.

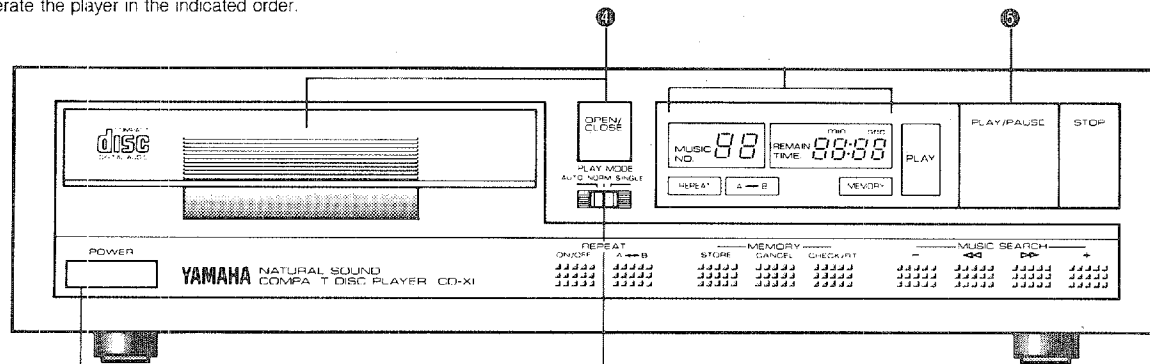
CAUTIONS

- Do not insert any objects into the tray as this can damage the mechanism.
- Do not force the tray by hand during opening and closing operations.
- Do not leave the disc tray open when the player is not in use to prevent dirt and dust from entering the mechanism.

CD-X1

NORMAL PLAYBACK

- Before playing a disc, check connections of the player's power and output cords by referring to the connection diagram.
- Operate the player in the indicated order.

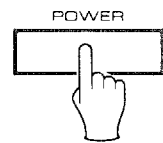


1 Set the PLAY MODE selector to the NORM position.



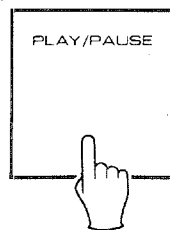
2 Turn the amplifier on and set its input selector to the position to which the CD-X1 is connected.

3 Turn on the POWER switch.

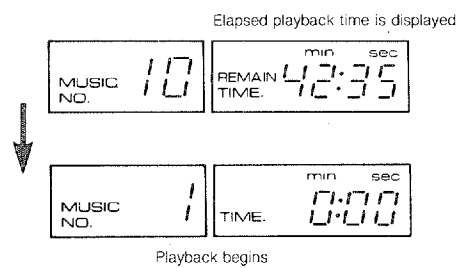


4 Open the disc tray and load a disc.

5 Push the PLAY/PAUSE button. The disc tray will close and playback will begin from the first selection automatically. The PLAY indicator will light.



• When the disc tray is closed:



The player "reads" the disc's index (contents). (This takes several seconds)

- * If there are deep scratches or heavy fingerprints on the disc, the start of playback may be delayed or playback may begin at some point other than at the beginning of the disc.
Ex: Playback will start from 0:05 instead 0:00
- * If an improperly centered disc is played, noise can be heard in the mechanism.
Use of discs such as this should be avoided.

- Even if the disc tray is open...
The door will be closed and playback started from the desired selection if the selection is first set by the "-" and "+" MUSIC SEARCH buttons and the PLAY/PAUSE button is pressed.
(For details, refer to the section on "Starting from the beginning of a selection" on page 9.)

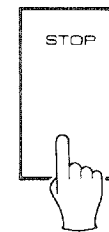
- When playback is finished...
The player will return to the playback standby mode (the pickup will move back to the beginning of the first selection.)

To stop playback

- To unload the disc
Press the OPEN/CLOSE button. The disc tray will slide out.



- To stop playback
Press the STOP button. The player will stop at the beginning of the current selection.



Ex: Display goes out.

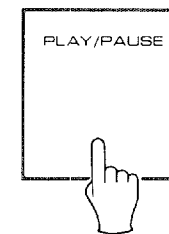


Press again



The player returns to the beginning of the first selection and waits in the standby mode.

- To temporarily suspend playback (pause mode)



Press the PLAY/PAUSE button. Playback will stop at the position the pickup is in.
The PLAY indicator will flash (indicates pause mode).
Press again to resume playback from the same position.

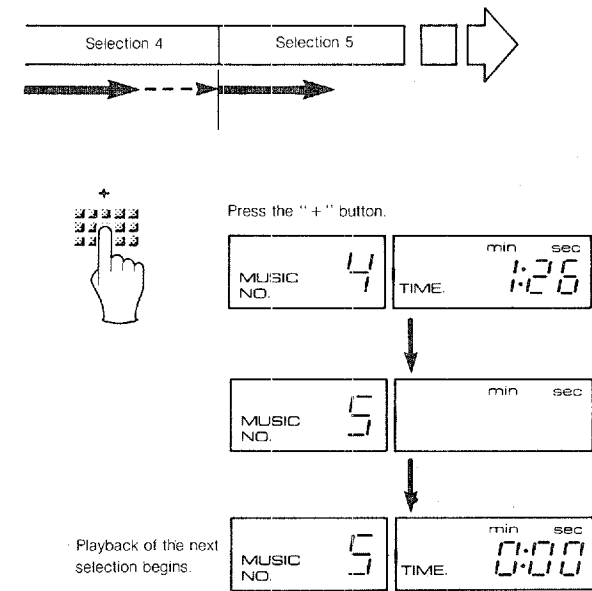
MUSIC SEARCH OPERATION

• Starting from the beginning of the selection

The beginning of any selection can be easily found using the "—" and "+" MUSIC SEARCH operation buttons. This operation is facilitated by the large MUSIC NO. display.

To skip to the next selection

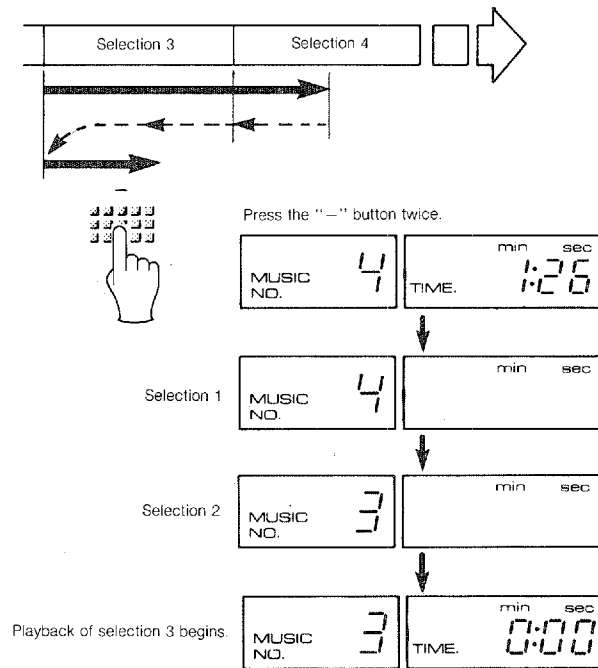
Ex: To skip ahead to the beginning of selection 5 while selection 4 is playing...



The player will skip ahead to the next selection each time the "+" is pressed. Continuously pressing the "+" button makes the player skip ahead through the disc selection by selection. Advance the selection number until you come to the selection you want to hear. The player can be advanced to the last selection this way, but once the beginning of the last selection is reached the player will not advance when the "+" button is pressed. Instead, playback of the last selection will begin.

• To skip back to the previous selection

Ex: To skip back to the beginning of selection 3 while selection 4 is playing...



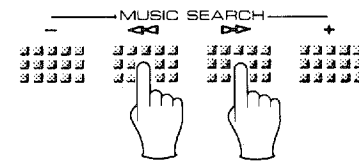
The player will skip back one selection each time the "-" button is pressed. (However, if this button is pressed in the middle of a selection, the player will skip back to the beginning of that selection. To make it skip back to the previous selection the button must be pressed twice.) The player can be returned to the beginning of the disc this way, but it will stop when the beginning of the first selection is reached.

- These buttons can be used to start playback from a desired selection even before playback begins (when the player is in the playback standby mode). In this case, the number of the designated selection will be displayed until the PLAY/PAUSE button is pressed. (The selection number will only advance to the last selection on the disc.)

- Selections can be designated even when the disc tray is open. However, if a larger selection number is designated than the actual number of selections on the disc, playback will begin from the first selection.

• Fast Forward and Reverse

Fast forwarding and reverse can be done when the player is in either the play or pause modes by using the << and >> MUSIC SEARCH buttons.



• During PLAY

When either the << or the >> is pressed, the speed of fast forward and reverse will be relatively slow for about the first 3 seconds. After that, high-speed fast forward and reverse will be engaged. The sound is muted during fast forward and reverse (to about 1/4 normal volume) to allow easy determination of the position of the pickup on the disc.

• During PAUSE

When "<<" or ">>" are pressed in the pause mode, the player is fast forwarded or reversed in 1-minute units. (This makes it the fastest forwarding or reversing method.) No sound will be heard while MUSIC SEARCH is used in the pause mode.

• During PLAY or PAUSE

- * If the ">>" button is held down until the player is fast forwarded to the end of the disc, the min sec display will change to "End" and the player will not play.

- * If the "<<" button is held down until the player is rewound to the beginning of the first selection, the min sec display will go off until the button is released.

• During STOP

Nothing will happen if either the "<<" or ">>" button is pressed.

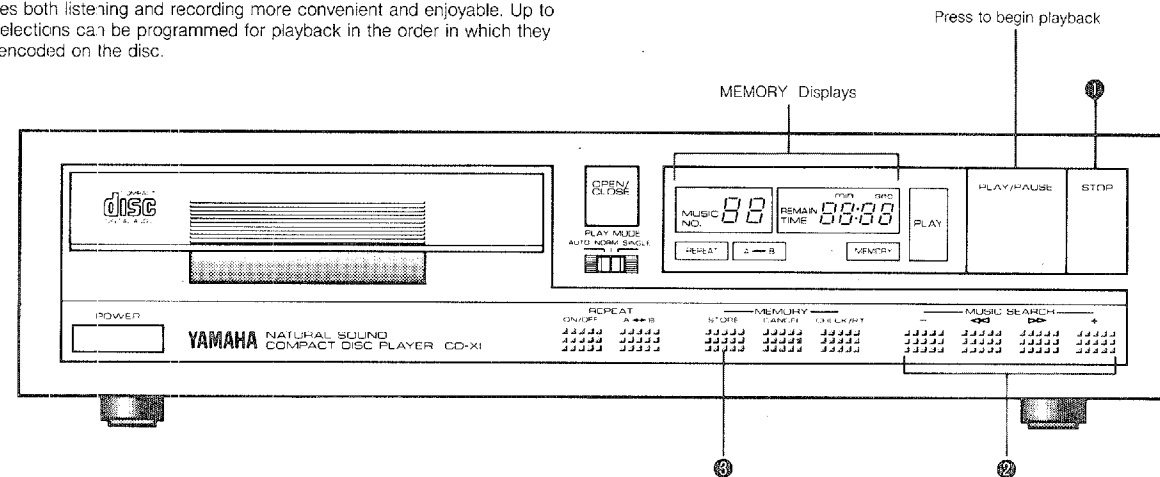
CD-X1

MEMORY OPERATION

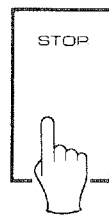
The MEMORY and MUSIC SEARCH function allow you to easily program the player to play only the selections on the disc that you want, which makes both listening and recording more convenient and enjoyable. Up to 23 selections can be programmed for playback in the order in which they are encoded on the disc.

Using MEMORY

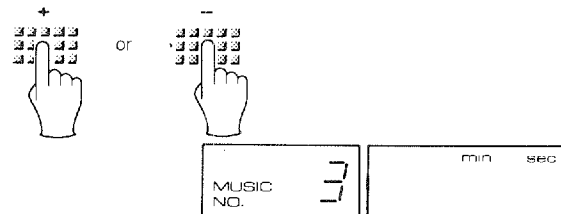
- Use the MEMORY function only when the player is in the STOP mode.
- To program a number of selections for playback, proceed as follows:



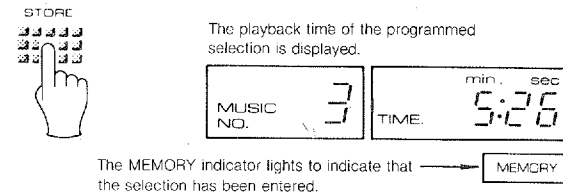
1 Press the STOP button.



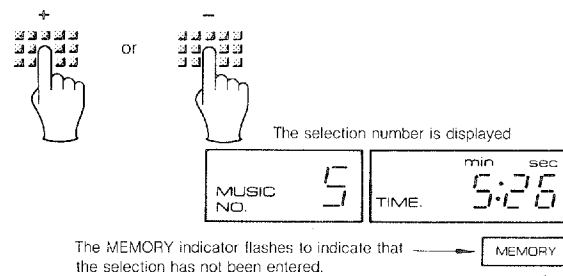
2 Select the playback selections using the "-" or "+" MUSIC SEARCH button. The selection number is displayed.



3 When the number of the desired selection is displayed, press the STORE button. The first selection is now programmed into MEMORY in the player.



4 Select the next selection using the "-" or "+" button.

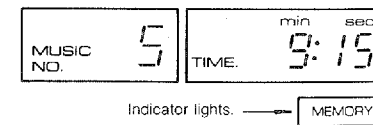


5 Press the STORE button.

The second selection is now programmed into MEMORY in the player.



The total playback time of the programmed selections is displayed.



6 Continue entering selection numbers until all the desired selections are programmed for playback (up to a total of 23). If more than 23 selections are entered, the MEMORY indicator will continue to flash even if the STORE button is pressed.

* During programming, selection numbers can be entered in any order (such as 3, 5, 2, 6, etc.) but playback will be in the order the selections are encoded on the disc (2, 3, 5, 6).

• When MEMORY programming is finished

Press the PLAY/PAUSE button. Playback will begin from the lowest selection number. (The MEMORY indicator will light.) When MEMORY playback is finished, the player will return to the first MEMORY selection and wait in the standby mode.

• Using MEMORY during playback or in the pause mode

The procedure is the same as in the STOP mode outlined above. However, the min sec display will only show the elapsed time for each selection (normal display). To engage MEMORY playback, press the STOP button, then the PLAY/PAUSE button.

When MEMORY is used, the A — B REPEAT function will be cancelled. Similarly, MEMORY is cancelled when the A — B REPEAT function is engaged. (For details, refer to the section on "A — B REPEAT playback".)

• To listen to selections that haven't been programmed into MEMORY

Find the desired selection using the MUSIC SEARCH buttons in the PLAY. The MEMORY indicator will flash while this is happening. To return the player to the MEMORY playback mode, press the STOP button, then the PLAY/PAUSE button. (Playback will resume from the smallest programmed selection number.)

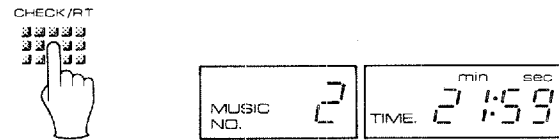
To Review MEMORY (Program) Contents

- This is done in the sequence of the selection numbers.

① Press the STOP button to put the player in the stop mode.

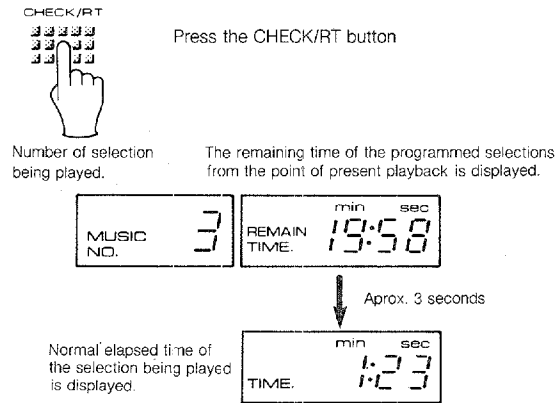


② Press the CHECK/RT button.



The total playback time of the programmed selections is displayed. The number of the first selection in MEMORY is displayed. Each time the CHECK/RT button is pressed again, the next selection number in the sequence is displayed. (If the button is held down the numbers will be display consecutively.) After the largest number is displayed the display will return to the smallest number and repeat the sequence.

- To check the remaining time of the programmed selections during MEMORY playback

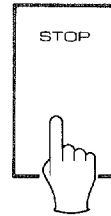


- * The same remaining time check can be made when the player is in the pause mode. After 3 seconds, the display will return to the previous numbers.
- * The remaining time check function can also be used for normal (non-programmed) playback.

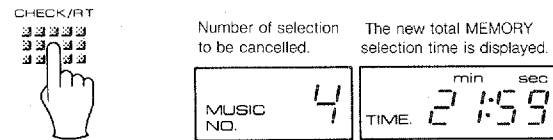
To cancel selections in MEMORY

- This should be done when the player is in the stop mode.
- The procedure for cancelling selections is as follows:

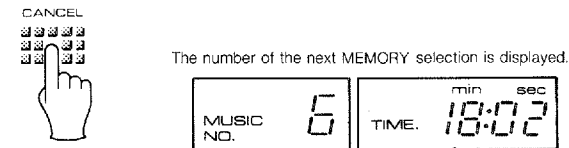
① Press the STOP button to put the player in the stop mode.



② Press the CHECK/RT button until the number of the selection to be cancelled appears on the music no. indicator.



③ Press the CANCEL button.



④ Repeat items ② and ③ to cancel other selections.
* If all MEMORY selections are cancelled, the PROGRAM light will go out and the selection number display will return to 1.

- * If the CANCEL button is held down, the MEMORY selections will be cancelled in sequence.

- If the CANCEL button is pressed when the player is in the play or pause modes... The selection number being displayed will be cancelled from MEMORY, and the MEMORY indicator will flash.

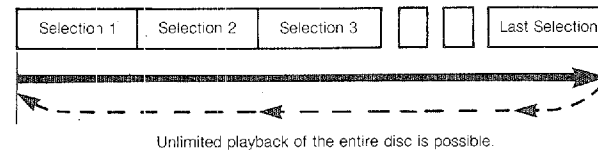
- To cancel the entire program... Besides using the cancel button as described above, the program is also cancelled when the disc tray is opened or if the player's power is turned off.

REPEAT FUNCTION

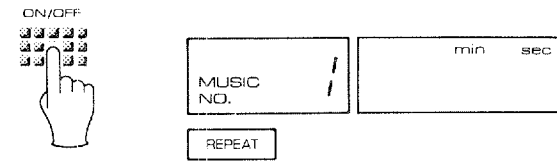
• REPEAT playback

The REPEAT function permits repeat playback of the entire disc or of any selected portion on the disc.

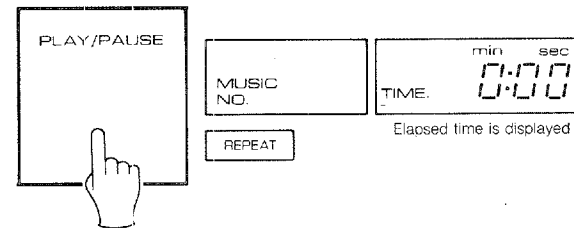
For REPEAT playback of the entire disc



1 Press the REPEAT ON/OFF button.

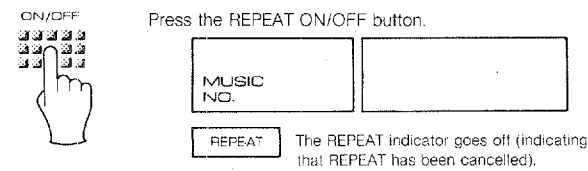


2 When the PLAY/PAUSE button is pressed, the disc will be played through to the end of the last selection, at which time the player will return to the beginning of the first selection and continue playback.



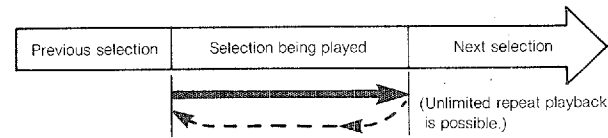
- The REPEAT function will continue to be engaged even if the PLAY/PAUSE or STOP buttons are pressed.
- The REPEAT function can also be used for repeat playback of MEMORY selections (MEMORY REPEAT).

• To cancel REPEAT playback

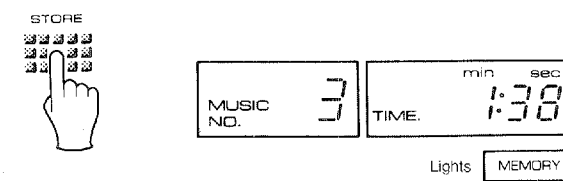


To repeat the selection being played (single selection repeat)

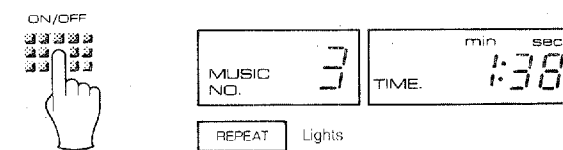
The selection being played can be repeated by using the MEMORY and REPEAT functions.



1 Press the STORE button (the selection will be entered into MEMORY).



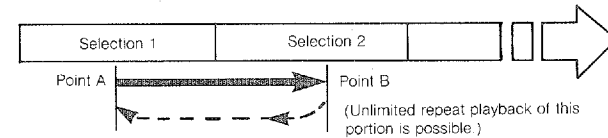
2 Press the REPEAT ON/OFF button.



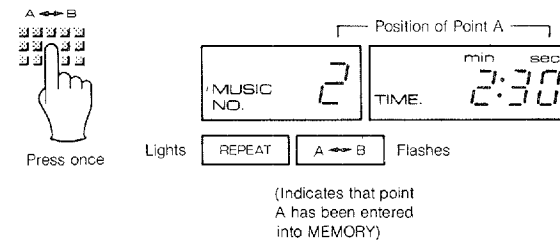
3 When the end of the selection is reached, the player will return to beginning of the selection and continue playback. To cancel the REPEAT function, press the ON/OFF button once again. (This will not cancel the previous MEMORY function.)

For REPEAT playback of a designated section of the disc

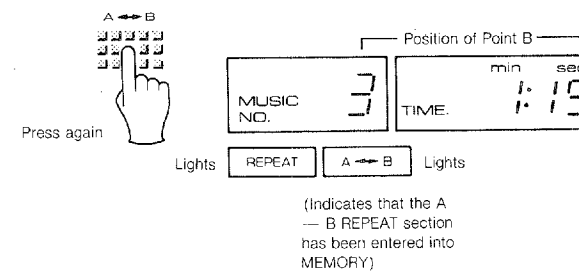
This permits repeat playback of any portion of the disc between two designated points.



1 Designate the starting point of playback (point A) by pressing the A — B REPEAT button.

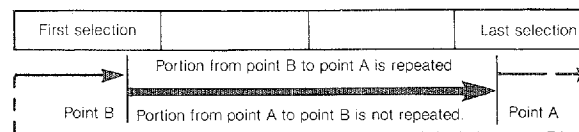


2 Designate the end point of playback (point B) by pressing the A — B button again.



3 The player will return to Point A and automatically begin playback. To cancel this REPEAT function, press the ON/OFF button.

* REPEAT from point A on the last selection to point B on the first selection is not possible. In this case, the portion from point B to point A will be repeated.



* If the MEMORY STORE button is pressed, A — B REPEAT will be cancelled. Conversely, if A — B REPEAT function is set, any previous MEMORY program will be cancelled.

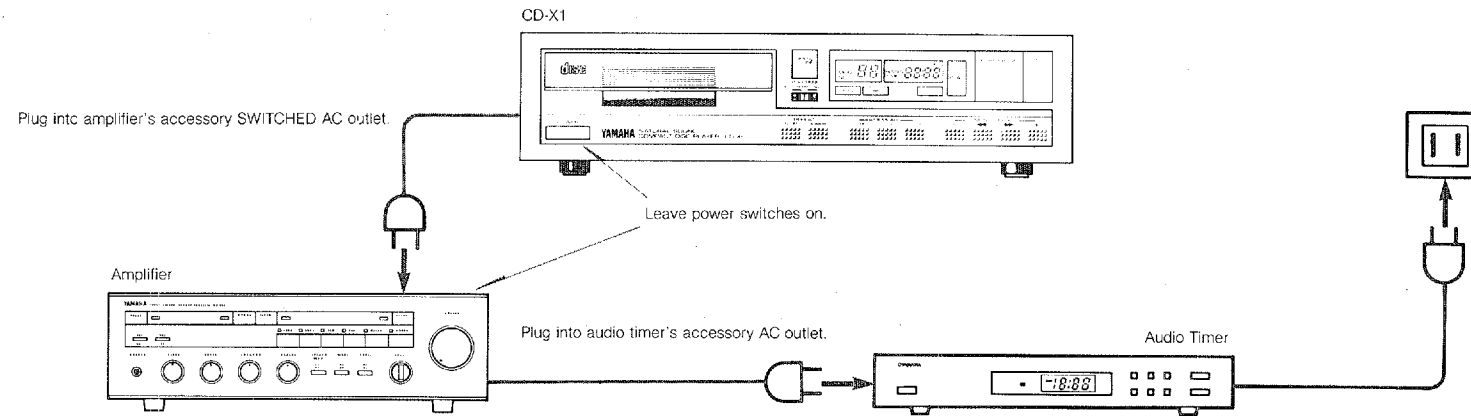
CD-X1

TIMER PLAYBACK

Using an optional audio timer, the player can be set to begin playback at any specified time.

1. Set the amplifier's input selector to the position for the terminal to which the CD-X1 is connected.
2. Load a disc into the CD-X1.
3. Set the audio timer to the time at which playback is to begin.
* When the time is set, the power to the amplifier and CD-X1 will be cut off.

4. Set the CD-X1's PLAY MODE selector to AUTO.
5. Playback will automatically begin at the time set on the audio timer.



ABOUT THE TIME COUNTER

The time counter displays the elapsed time of the selection or the entire disc.

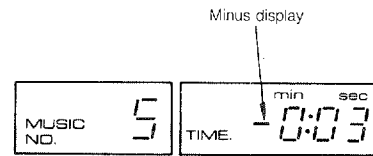
• Selection Elapsed Time Display (TIME)

When playback begins, the elapsed time of the selection is displayed in minutes and seconds.



Ex: 2 minutes 35 seconds have elapsed on selection 4.

When the blank space between selections is reached, a minus time will be displayed depending upon disc programming.

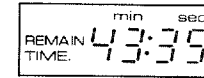


Ex: Playback of selection 5 will begin in 3 seconds.

The time will be counted down by the minus display to the beginning of the next selection for easy reference. Playback of the next selection begins when the counter reaches 0:00.

• Total playback time display (REMAIN TIME)

This provides easy checking of the total time required to finish the disc. The first time display is the total disc time, and the counter runs down to 0:00 during playback.



Ex: Total remaining disc time is 43 minutes 35 seconds.

CD-X1

SPECIFICATIONS

System: Compact disc digital audio system

AUDIO CHARACTERISTICS

Frequency Response: 5—20,000 Hz, ± 0.5 dB

Harmonic Distortion: Less than 0.0015% (1 kHz)

Noise + Harmonic Distortion: Less than 0.005% (1 kHz)

Dynamic Range: Better than 95 dB

Signal-to-Noise Ratio: Flat 95 dB (1 kHz)

IEC Flat 98 dB (1 kHz)

IEC A 100 dB (1 kHz)

Wow and Flutter: Unmeasurable

Channel Separation: Better than 90 dB (1 kHz)

Output Voltage: 2 V (at FS)

FUNCTIONS

Instant Program Selection: Sequential, with + and - keys

High-Speed Fast Forward/Reverse: 2 speed fast forward/reverse with sound,

high speed search in pause

Remaining Time Display: With check key

Memory Functions: 23 selections, total time display; (displayed in ascending order

during playback)

Space Play: Spaced at intervals of 3 seconds or more during playback

Repeat: A through B, all selections, or all selections in memory

Reset: Press the Stop key twice

Auto Pause: Pause for each selection, or each time A through B is repeated (Single

play mode)

Disc Loading: Motor driven horizontal loading

DIGITAL SIGNAL PROCESSING

Optical Pickup: 3 beam laser

Error Correction: CIRC

D/A Conversion: 18-bit linear

Filter: Digital filter + (7th order LC filter)

GENERAL

Power Consumption: 20 W

Dimensions (W x H x D): 340 x 92 x 290 mm (13-3/8" x 3-5/8" x 11-3/8")

Weight: 3.6 kg (7 lbs. 15 oz.)

Specifications subject to change without notice.

TROUBLESHOOTING

If the CD-X1 fails to operate normally, check the following points to determine whether the fault can be corrected by the simple measures given below. If it cannot, or if the fault is not listed in the SYMPTOM column below, disconnect the unit's power cord and contact the nearest Yamaha dealer for servicing.

SYMPTOM	CAUSE	CURE
Power fails to turn on when POWER switch is depressed.	Incomplete insertion of power plug.	Firmly insert power plug into socket.
Play back does not begin.	Disc is loaded upside down.	Reload the disc with the label side UP.
No sound.	Improper output cable connection.	Connect output cables properly.
	Improper operation of amplifier.	Make sure that amplifier controls are set properly.
Playback begins when the power is turned on.	PLAY MODE selector is set to AUTO.	Set to NORMAL.
Sound "skips".	Player subject to vibrations or physical shock.	Change location of installation.
Memory playback will not function.	Memory has been erased.	Re-enter memory.
	Unit is in normal playback mode.	Press STOP and then begin program playback.
Hum.	Defective cable connections.	Firmly connect all audio plugs.
Only one selection plays.	PLAY MODE selector is set to SINGLE.	Set to NORMAL.