

DENON

DOUBLE CD PLAYER

DN-2200F

OPERATING INSTRUCTIONS

MODE D'EMPLOI

INSTRUCCIONES DE OPERACION



FOR ENGLISH READERS
POUR LES LECTEURS FRANCAIS
PARA LECTORES DE ESPAÑOL

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IMPORTANT TO SAFETY

WARNING:

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

CAUTION:

1. Handle the power supply cord carefully

Do not damage or deform the power supply cord. If it is damaged or deformed, it may cause electric shock or malfunction when used. When removing from wall outlet, be sure to remove by holding the plug attachment and not by pulling the cord.

2. Do not open the top cover

In order to prevent electric shock, do not open the top cover. If problems occur, contact your DENON dealer.

3. Do not place anything inside

Do not place metal objects or spill liquid inside the CD player. Electric shock or malfunction may result.

Please, record and retain the Model name and serial number of your set shown on the rating label.

Model No. DN-2200F

Serial No. _____



CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN



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.



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.

IMPORTANT (BRITISH MODEL ONLY)

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

Blue: Neutral Brown: Live

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.

• FOR U.S.A. & CANADA MODEL ONLY

CAUTION

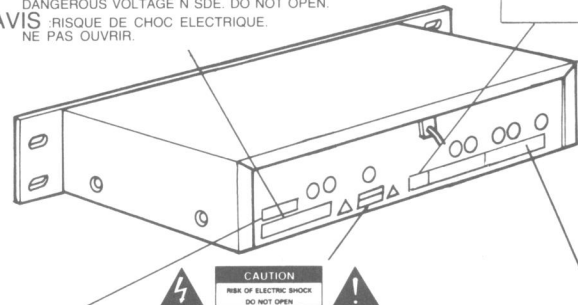
TO PREVENT ELECTRIC SHOCK DO NOT USE THIS (POLARIZED) PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

NOTE:

This CD player uses the semiconductor laser. To allow you to enjoy music at a stable operation, it is recommended to use this in a room of 5°C (41°F) – 35°C (95°F).

LABELS (for U.S.A. model only)

WARNING : SHOCK HAZARD.
DANGEROUS VOLTAGE INSIDE. DO NOT OPEN.
AVIS : RISQUE DE CHOC ELECTRIQUE.
NE PAS OUVRIR.



MANUFACTURED

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

CERTIFICATION		MODEL NO	DN-2200F	DENON®
THIS PRODUCT COMPLIES WITH DHS RULES 21 CFR SUBCHAPTER J APPLICABLE AT DATE OF MANUFACTURE.		~120V	22W	60Hz
NIPPON COLUMBIA CO., LTD. 1-1 AZA-OINOKUBOYAMA, SHIRAKAWA-CITY, FUKUSHIMA, 961 JAPAN		SER NO		NIPPON COLUMBIA CO., LTD. MADE IN JAPAN

CAUTION:

USE OF CONTROLS OR ADJUSTMENTS OR REFORMATION OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

THE COMPACT DISC PLAYER SHOULD NOT BE ADJUSTED OR REPAIRED BY ANYONE EXCEPT PROPERLY QUALIFIED SERVICE PERSONNEL.

NOTE:

This unit may cause interference to radio and television reception if you do not operate it in strict accordance with this OPERATING INSTRUCTIONS.

This unit complies with Class B computing device rules in accordance with the specifications in Sub-part J or Part 15 of the FCC Rules, which are designed to provide reasonable protection against such interference in a residential installation. If the unit does cause interference to any radio or television reception, try to reduce it by one or more of the following means:

- Turn the other unit to improve reception
- Move this unit
- Move this unit away from others
- Plug this unit respectively into a different AC outlet

* This is note in accordance with Section 15.838 of the FCC Rules.

• POUR LES MODELES AMERICAINS ET CANADIENS UNIQUEMENT

ATTENTION

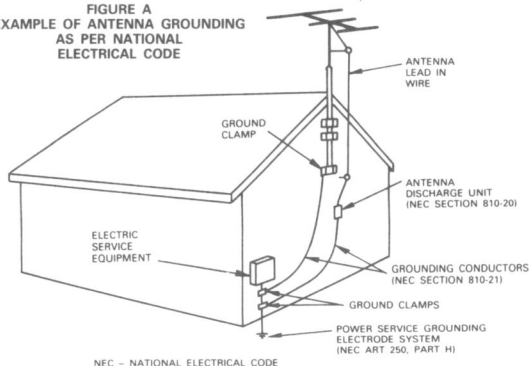
POUR PREVENIR LES CHOCES ELECTRIQUES NE PAS UTILISER CETTE FICHE POLARISEE AVEC UN PROLONGATEUR UNE PRISE DE COURANT OU UNE AUTRE SORTIE DE COURANT, SAUF SI LES LAMES PEUVENT ETRE INSEREES A FOND SANS EN LAISSER AUCUNE PARTIE A DECOUVERT.

SAFETY INSTRUCTIONS

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. Heed Warnings – All warnings on the appliance and in the operating instructions should be adhered to.
4. Follow Instructions – All operating and use instructions should be followed.
5. Water and Moisture – The appliance should not be used near water – for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, and the like.
6. Carts and Stands – The appliance should be used only with a cart or stand that is recommended by the manufacturer.
- 6A. An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.
7. Wall or Ceiling Mounting – The appliance should be mounted to a wall or ceiling only as recommended by the manufacturer.
8. Ventilation – The appliance should be situated so that its location or position does not interfere with its proper ventilation. For example, the appliance should not be situated on a bed, sofa, rug, or similar surface that may block the ventilation openings; or, placed in a built-in installation, such as a bookcase or cabinet that may impede the flow of air through the ventilation openings.
9. Heat – The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.
10. Power Sources – The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.
11. Grounding or Polarization – Precautions should be taken so that the grounding or polarization means of an appliance is not defeated.
12. Power-Cord Protection – Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the appliance.
14. Cleaning – The appliance should be cleaned only as recommended by the manufacturer.
15. Power Lines – An outdoor antenna should be located away from power lines.
16. Outdoor Antenna Grounding – If an outside antenna is connected to the receiver, be sure the antenna system is grounded so as to provide some protection against voltage surges and built-up static charges. Article 810 of the National Electrical Code, ANSI/NFPA 70, provides information with regard to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna-discharge unit, size of grounding conductors, location of antenna-discharge unit, connection to grounding electrodes, and requirements for the grounding electrode. See Figure A.
17. Nonuse Periods – The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.
18. Object and Liquid Entry – Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.
19. Damage Requiring Service – The appliance should be serviced by qualified service personnel when:
 - A. The power-supply cord or the plug has been damaged; or
 - B. Objects have fallen, or liquid has been spilled into the appliance; or
 - C. The appliance has been exposed to rain; or
 - D. The appliance does not appear to operate normally or exhibits a marked change in performance; or
 - E. The appliance has been dropped, or the enclosure damaged.
20. Servicing – The user should not attempt to service the appliance beyond that described in the operating instructions. All other servicing should be referred to qualified service personnel.

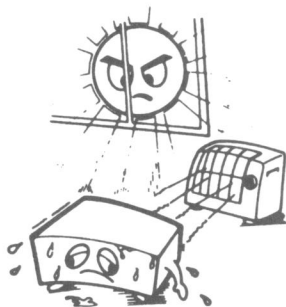


FIGURE A
EXAMPLE OF ANTENNA GROUNDING
AS PER NATIONAL
ELECTRICAL CODE



NEC – NATIONAL ELECTRICAL CODE

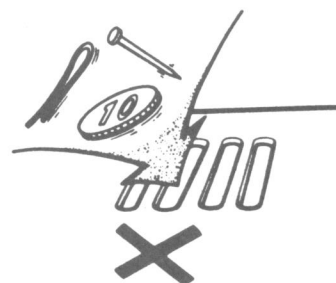
NOTE ON USE/OBSERVATIONS RELATIVES A L'UTILISATION/NOTAS SOBRE EL USO



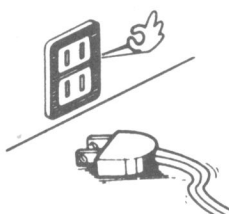
- Avoid high temperatures
Allow for sufficient heat dispersion when installed on a rack.
- Eviter des températures élevées
Tenir compte d'une dispersion de chaleur suffisante lors de l'installation sur une étagère.
- Evite altas temperaturas
Permite la suficiente dispersión del calor cuando está instalado en la consola.



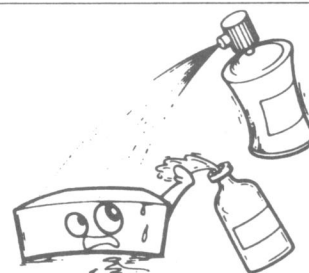
- Keep the set free from moisture, water, and dust.
- Protéger l'appareil contre l'humidité, l'eau et la poussière.
- Mantenga el equipo libre de humedad, agua y polvo.



- Do not let foreign objects in the set.
- Ne pas laisser des objets étrangers dans l'appareil.
- No deje objetos extraños dentro del equipo.



- Unplug the power cord when not using the set for long periods of time.
- Débrancher le cordon d'alimentation lorsque l'appareil n'est pas utilisé pendant de longues périodes.
- Desconecte el cordón de energía cuando no utilice el equipo por mucho tiempo.



- Do not let insecticides, benzene, and thinner come in contact with the set.
- Ne pas mettre en contact des insecticides, du benzène et un diluant avec l'appareil.
- No permita el contacto de insecticidas, gasolina y diluyentes con el equipo.



- Handle the power cord carefully.
Hold the plug when unplugging the cord.
- Manipuler le cordon d'alimentation avec précaution.
Tenir la prise lors du débranchement du cordon.
- Maneje el cordón de energía con cuidado.
Sostenga el enchufe cuando desconecte el cordón de energía.



*(For sets with ventilation holes)

- Do not obstruct the ventilation holes.
- Ne pas obstruer les trous d'aération.
- No obstruya los orificios de ventilación.



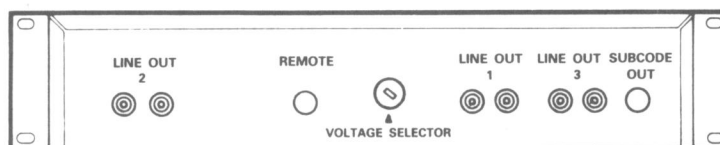
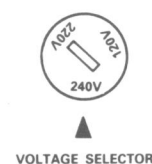
- Never disassemble or modify the set in any way.
- Ne jamais démonter ou modifier l'appareil d'une manière ou d'une autre.
- Nunca desarme o modifique el equipo de ninguna manera.

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• **Line Voltage Selection (for multiple voltage model only)**

- * The desired voltage may be set with the VOLTAGE SELECTOR knob on the rear panel, using a screwdriver.
- * Do not twist the VOLTAGE SELECTOR knob with excessive force as this may cause damage.
- * If the VOLTAGE SELECTOR knob does not turn smoothly, please contact a qualified serviceman.



CAUTION:

Whenever the power switch is in the OFF state, the apparatus is still connected on AC line voltage. Please be sure to unplug the cord when you leave home for, say, a vacation.

Be sure turn on POWER switch after a Remote cable of RC-35A is connected to the Player unit, otherwise, the apparatus may not work correctly.

1 GENERAL

Main Features

The DN-2200F is a double CD player which provides excellent performance as well as a variety of functions ideal for DJ mixing. The unit can be mounted in a standard 19-inch rack.

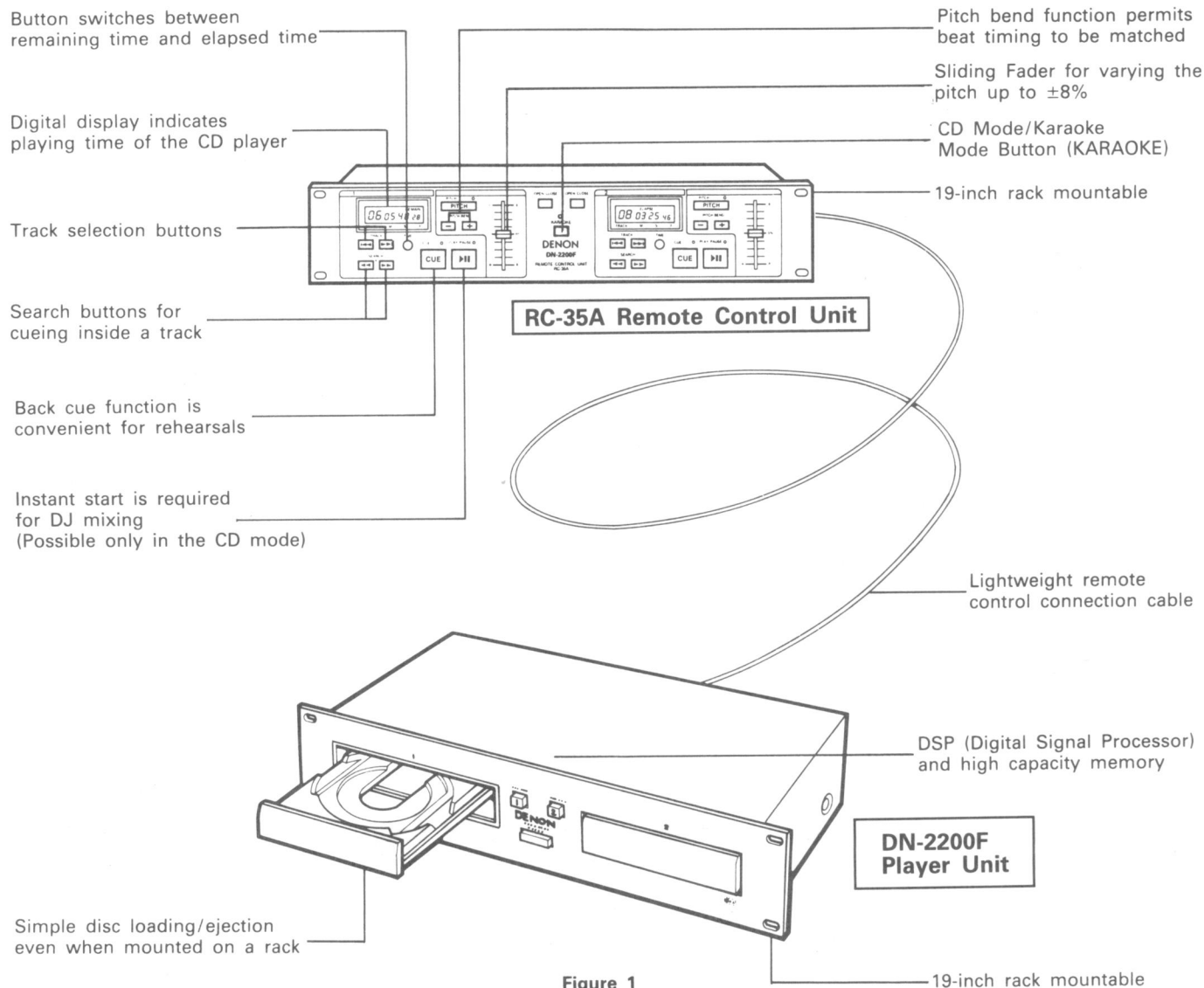


Figure 1

2 PREPARATION

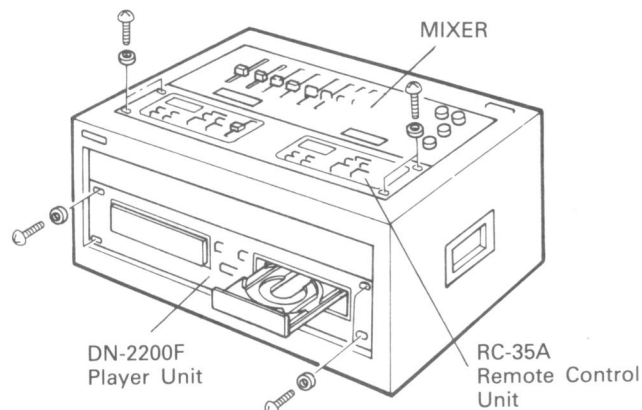
(1) Check the Contents

Check that the carton contains the following items in addition to the main unit.

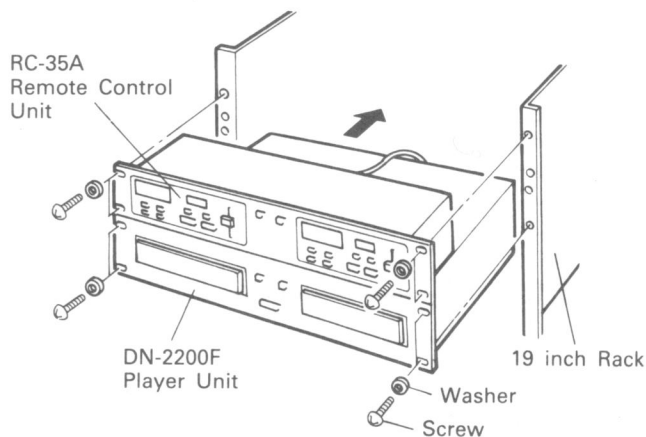
- ① Operating instructions 1
- ② Connection cords for signal output (RCA) 2
- ③ Remote control unit (RC-35A) 1
- ④ Remote control connection cable 1
- ⑤ Subcode connection cable 1
- ⑥ Connecting brackets with screws 1 pair

(2) Install the Units

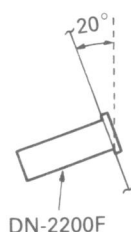
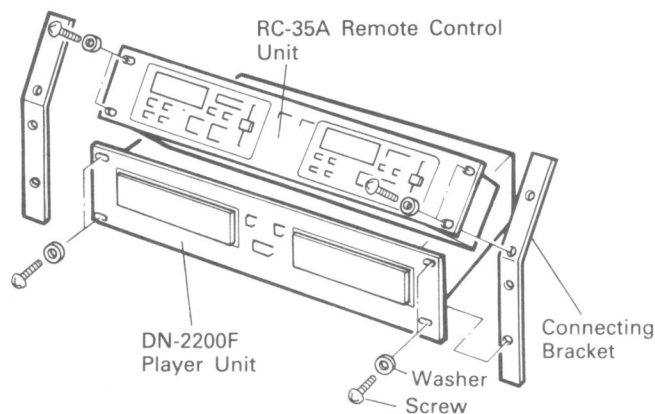
- ① Mount the units onto the DJ console with 19" EIA rack rails. (Example-1)



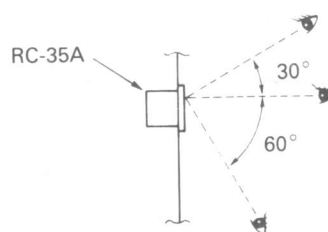
- ② Mount the units onto the rack with 19" EIA rack rails. (Example-2)



- ③ To operate the units on the desk top, use the connecting brackets provided.



The DN-2200F will work normally when the player unit is mounted within 20 degrees off the vertical plane at the front panel. If the unit is tilted excessively, the disc may not be loaded or unloaded properly.



Install the RC-35A to a rack so as to maintain an appropriate visual angle to read the display as shown here.

(3) Connections

Use this for reference as an example of typical connections between the mixer and the DN-820.

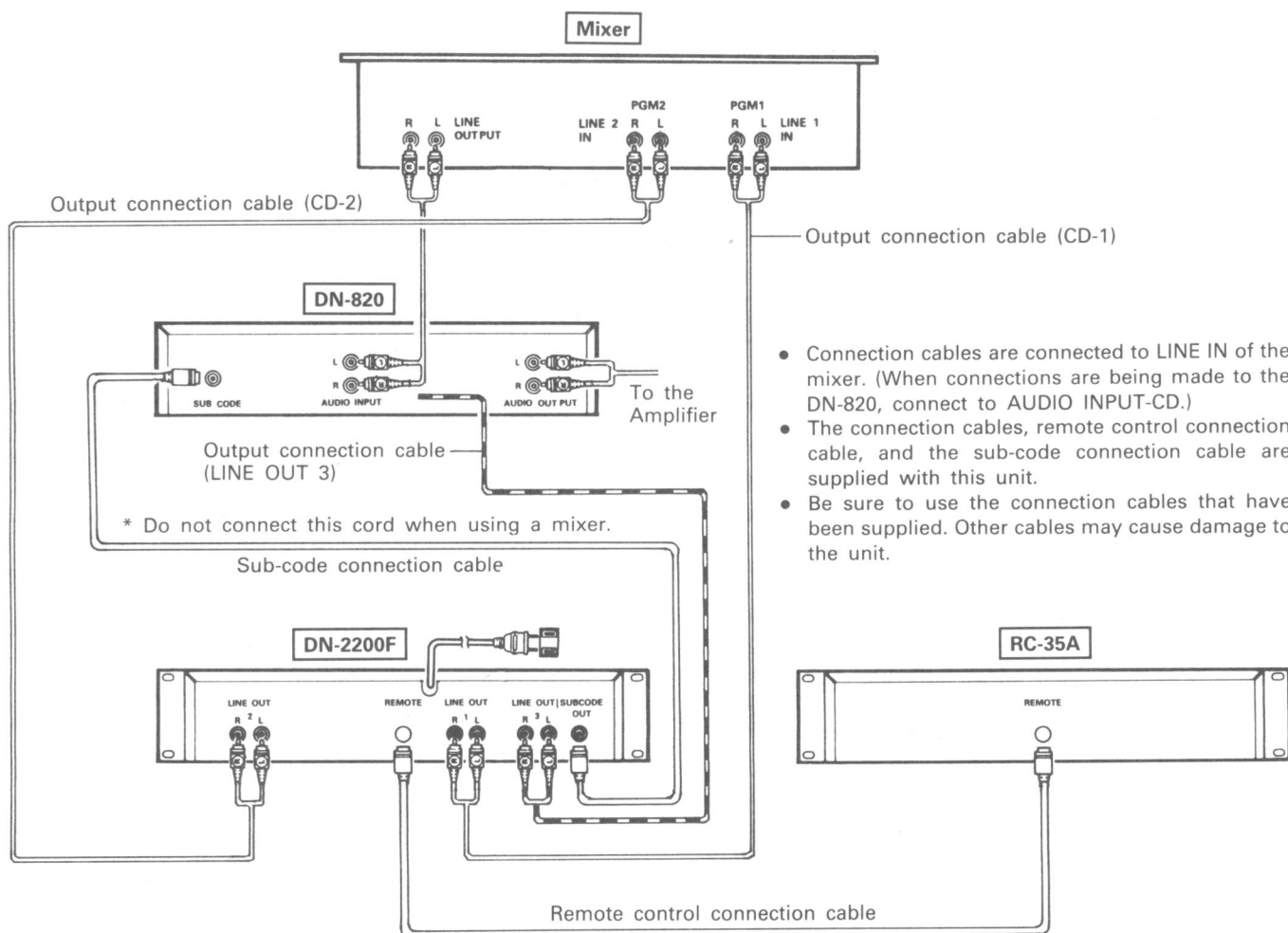


Figure 2

3 DESCRIPTION OF THE FUNCTIONS

Below is a description of the names of the various parts and the functions of the main unit.

(1) Names, Dimensions, and Functions of the Parts of the Main Unit

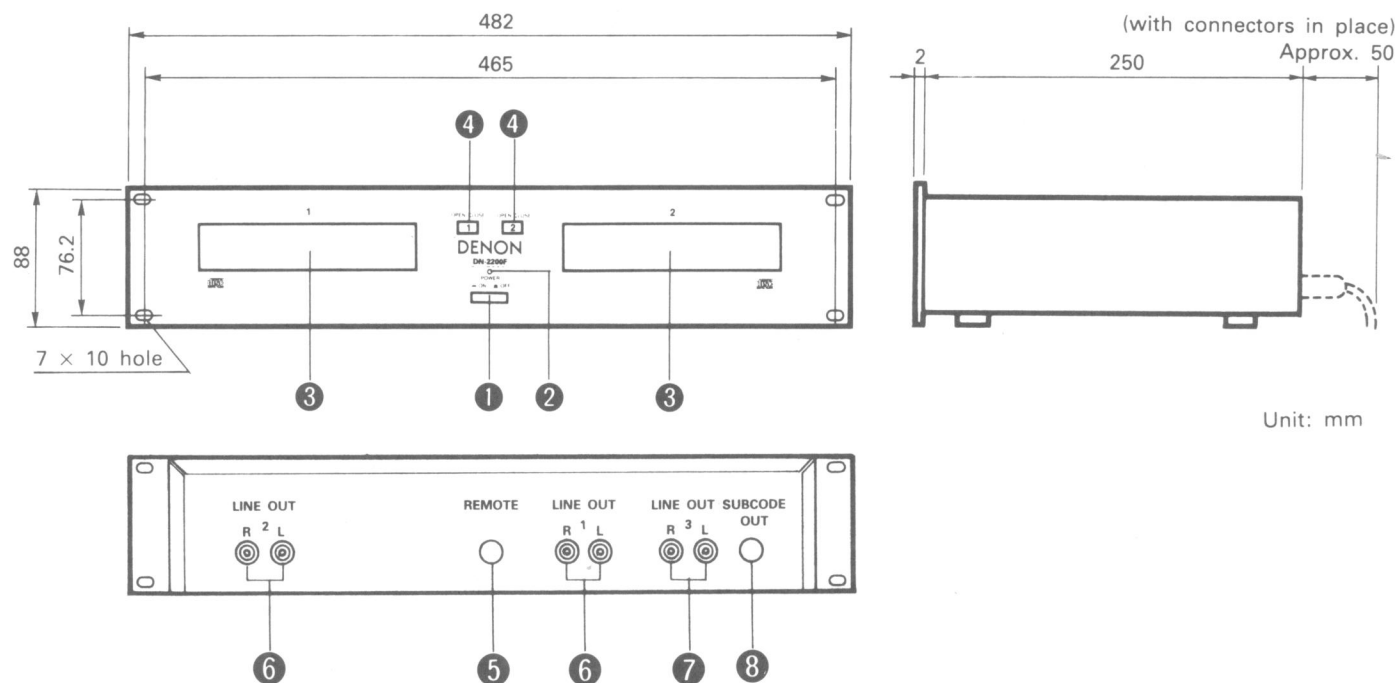


Figure 3

- 1 POWER (Power Switch)**
Switches the power of the main unit and the remote control on and off.
Power indicator **2** is lit when the power is on.
- 2 POWER (Power Indicator)**
Lights up red when power switch **1** is on.
- 3 Disc Holder**
The disc is placed on this holder. Pressing the disc holder open/close buttons **4** will open and close each of the holders.
When loading the CD, place it securely in the disc holder.
- 4 OPEN/CLOSE (Disc Holder Open/Close Button)**
Press to load or eject the disc. Each press will open or close the disc holder **3**.
The remote control is also equipped with similar buttons.
- 5 REMOTE (Remote Control Connector)**
This connector accepts the cable which connects to the remote control unit RC-35A. Insert the plug securely as far as it will advance.
- 6 LINE OUT 1, 2 (Output Jacks)**
The audio from each CD player is output from these jacks.
Connect to the line input of the mixer.
Red is for the right channel and white, the left channel.
- 7 LINE OUT 3 (Output Jacks)**
These jacks automatically select and output the audio portion from the CD player while in the karaoke mode. (See Page 7.)
- 8 SUBCODE OUT (Sub-code Output Connector)**
This connector plugs into the cable that connects with the microphone mixing preamplifier (DN-820).
Insert the plug securely as far as it will advance.

(2) Names, Dimensions, and Functions of the Parts of the Remote Control Unit

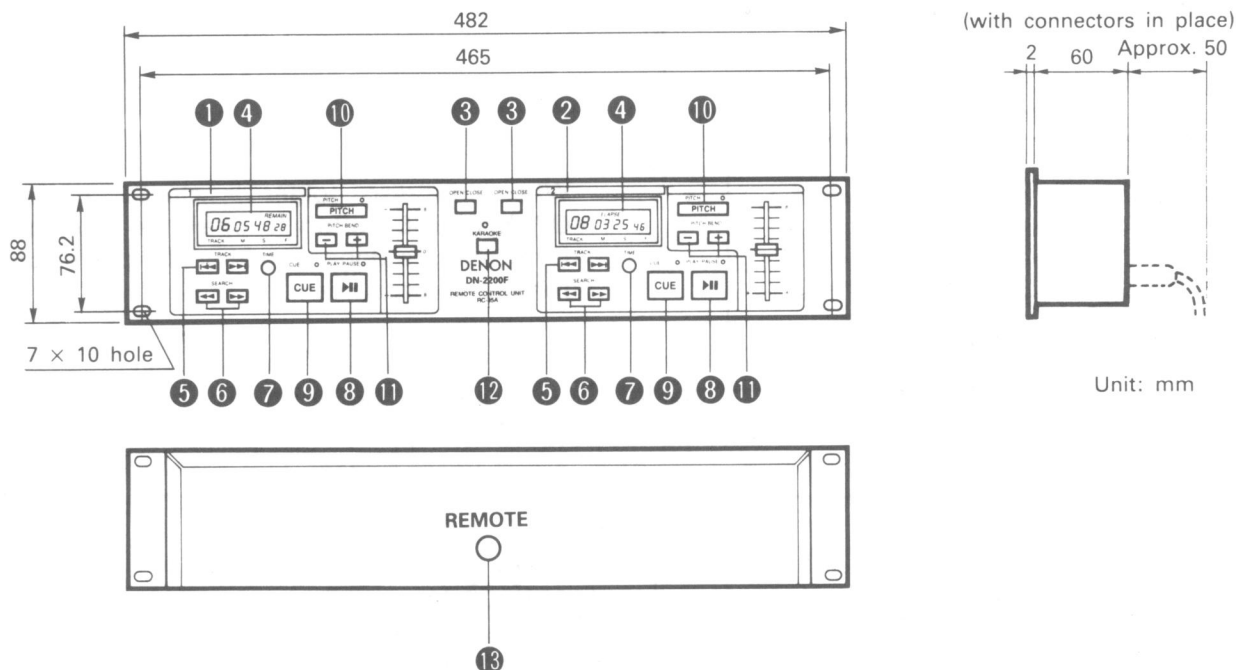


Figure 4

- 1 CD-1 Remote Control Operation Panel**
This operation panel remotely controls the main unit CD-1.
- 2 CD-2 Remote Control Operation Panel**
This operation panel remotely controls the main unit CD-2.
- 3 OPEN/CLOSE (Disc Holder Open/Close Button)**
Press to load or eject the disc. Each press will open or close the disc holder 3.
- 4 Time Display**
This display shows the track number, time (minutes, seconds and frames), and elapsed or remaining time. Each frame represents 1/75 of a second.
- 5 TRACK (Track Button)**
This button selects the track to be played.
- 6 SEARCH (Search Buttons)**
These buttons are used to accurately change the positions where disc play will start.
NOTE: Cannot be used in the karaoke mode
- 7 TIME (Time Button)**
The TIME button switches the time display between elapsed time and remaining time. ELAPSE or REMAIN will be shown on the display.
- 8 PLAY/PAUSE (Play/Pause Button)**
Each press of the PLAY/PAUSE button causes the operation to change from play to pause or from pause back to play.
NOTE: The pause operation is not possible in the karaoke mode.
- 9 CUE (Cue Button)**
Pressing the CUE button during play provides a return to the position at which play was started. Alternately pressing the PLAY/PAUSE button and the CUE button allows the CD to be played from the same position any number of times.
The red CUE LED will blink from the time the CUE button is pressed until the CD has reset to the position at which play was started. Steady lighting of this LED indicates the ready condition.
- 10 PITCH (Pitch Button)**
This button changes the play speed.
The pitch can be changed up to $\pm 8\%$ by pressing the PITCH button so the green PITCH LED is lit, then moving the sliding fader.
The pitch will not be changed if the green PITCH LED is off.
- 11 PITCH BEND (Pitch Bend Button)**
When each of the two CD players are playing a CD, the pitch bend function allows the positioning of the bass beats to be matched after the pitch has been matched. The pitch will automatically rise while the + button is pressed and return to the original pitch when the button is released.
The pitch will drop while the - button is pressed. By changing the pitch in this way, the positioning of the beats can be matched.
- 12 KARAOKE (Karaoke Button)**
This button is used to set the karaoke mode or to return to the CD mode.
- 13 REMOTE (Remote Control Connector)**
This connector accepts the cable which connects to the main unit. Insert the plug securely as possible.

4 BASIC OPERATION

(1) Loading and Ejecting the Disc

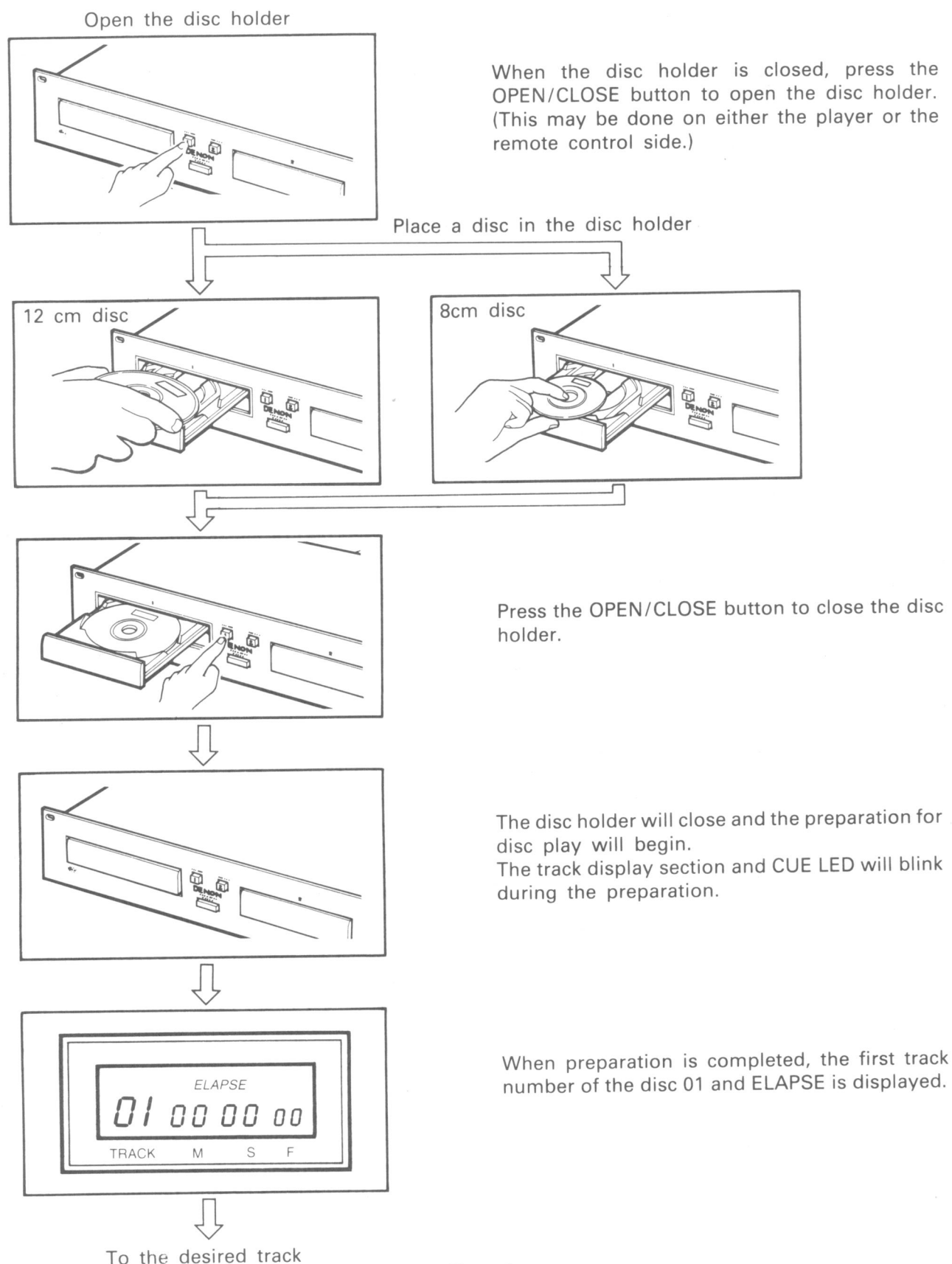


Figure 5

(2) Selecting Tracks and play mode

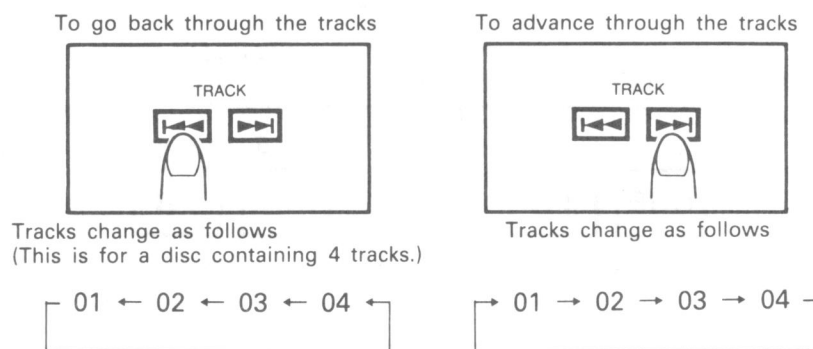


Figure 6

Each press of the TRACK button changes 1 track.

Continuing to hold the TRACK button down provides an automatic change at a higher speed which is convenient for discs that contain many tracks.

During the track selection operation, the track indication of the display will blink and the M S F indication will be off.

When a new track is selected during play, after the selection operation is completed in the CD mode, play will immediately start from the beginning of the newly selected track. Note that track selection is not possible during play in the karaoke mode.

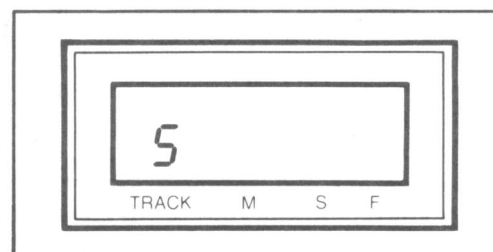
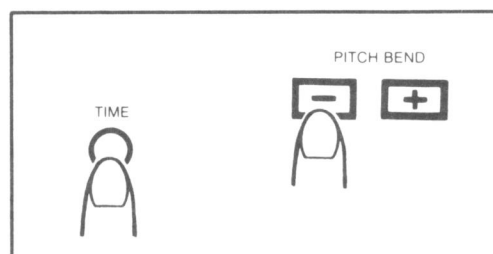
The track number can be selected before loading a disc on the player unit.

You can select a track to play on the controller, then load a disc. The player will cue up to your selected track automatically.

SINGLE/CONTINUE play mode selection

- Press the TIME and buttons of PITCH BEND simultaneously to set the player for SINGLE track playback mode, "5" is displayed on TRACK section.

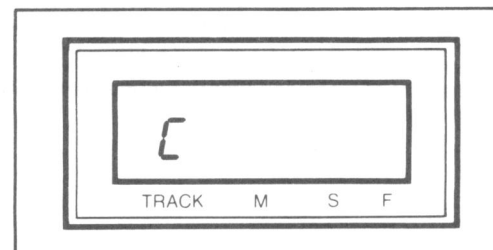
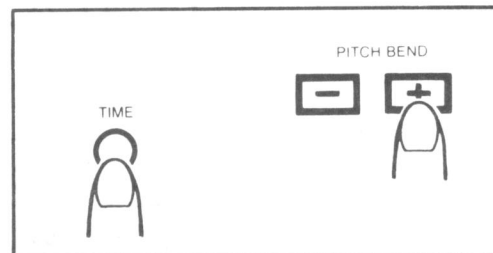
During single playback mode, the player stops after a specified track is played back.



- Press the TIME and button of PITCH BEND simultaneously to set the player for continuous playback mode, "∞" is displayed on TRACK section.

During continuous playback mode, the player continue playback until completion of playback of the last track on the disc.

- When the power switch to ON, the player automatically set to CONTINUE playback mode.



(3) Starting Play

Pressing the PLAY/PAUSE button during the pause condition or after the completion of back cue will start disc play.

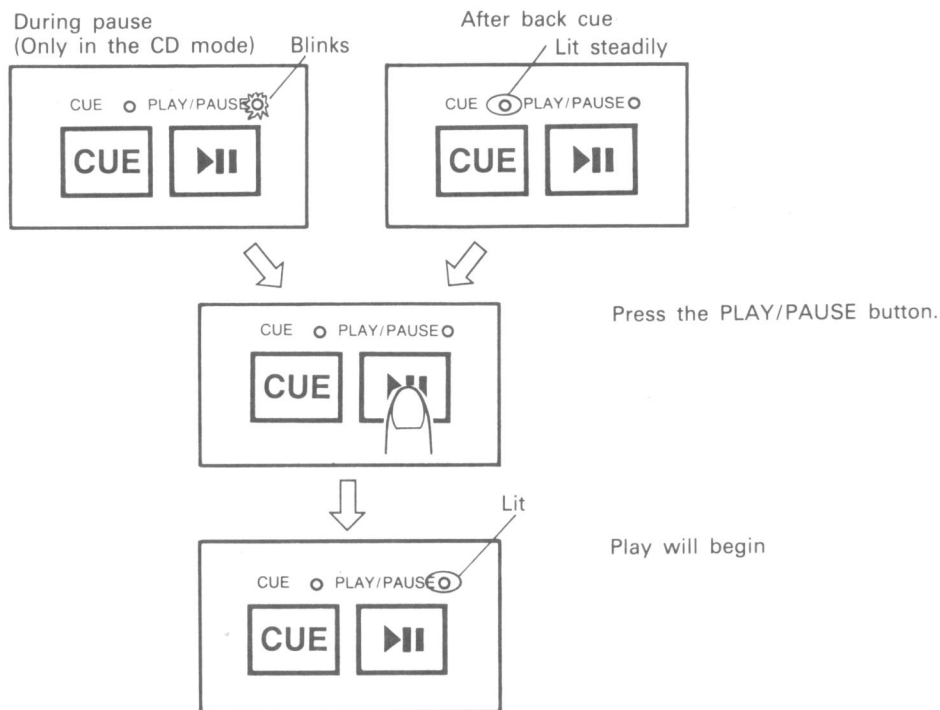
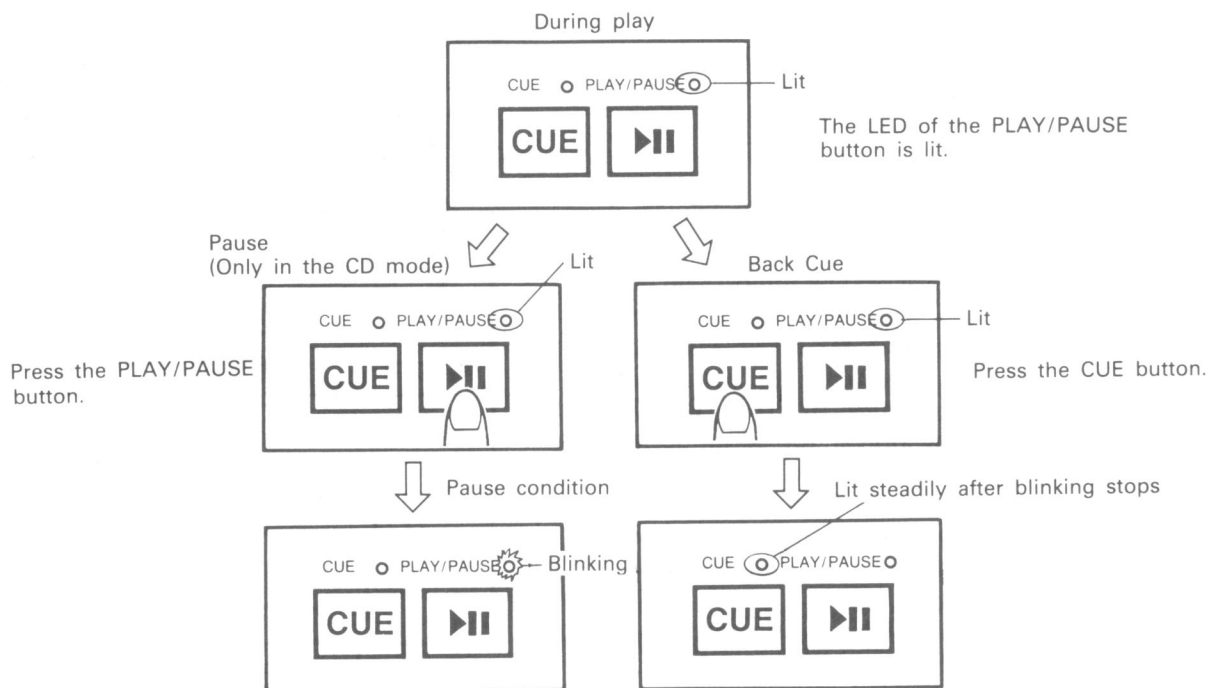


Figure 7

(4) Stopping Play

There are two ways of stopping play. One uses the pause function and the other the back cue function.



The LED of the PLAY/PAUSE button blinks.
(The CD pauses at the position where the PLAY/PAUSE button was pressed during play.)

Back cue operation.
First the LED of the CUE button blinks, then it lights steadily after the operation is completed.
(The CD returns to the position where the disc was started from.)

Figure 8

(5) Description of the PLAY/PAUSE, and CUE Operations

- Each press of the PLAY/PAUSE button causes the operation to change from play to pause or from pause back to play. (Only in the CD mode)
- The play operation of this CD player is performed via DSP (Digital Signal Processor) and memory, so the audio starts instantly after the PLAY/PAUSE button is pressed. (Only in the CD mode)
- Pressing the CUE button during disc play resets the CD to the position at which play was started. (This is called the back cue function.)

The steps through which disc play is performed when the PLAY/PAUSE and CUE buttons are pressed are described with the aid of the following illustrations in Figures 9 through 11.

PLAY and PAUSE (Only in the CD mode)

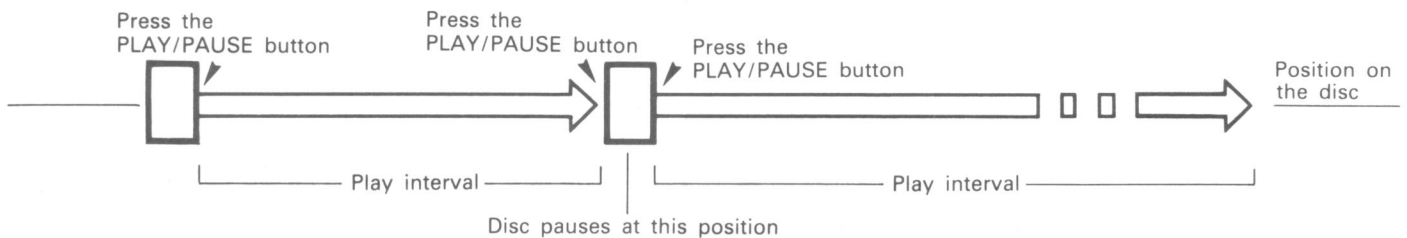


Figure 9

Pressing the PLAY/PAUSE button starts the disc play, the advancement of which is illustrated by the arrows of Figure 9. Pressing the PLAY/PAUSE button again during disc play causes the play operation to pause, and pressing this button once more causes the disc to be played again.

PLAY and CUE

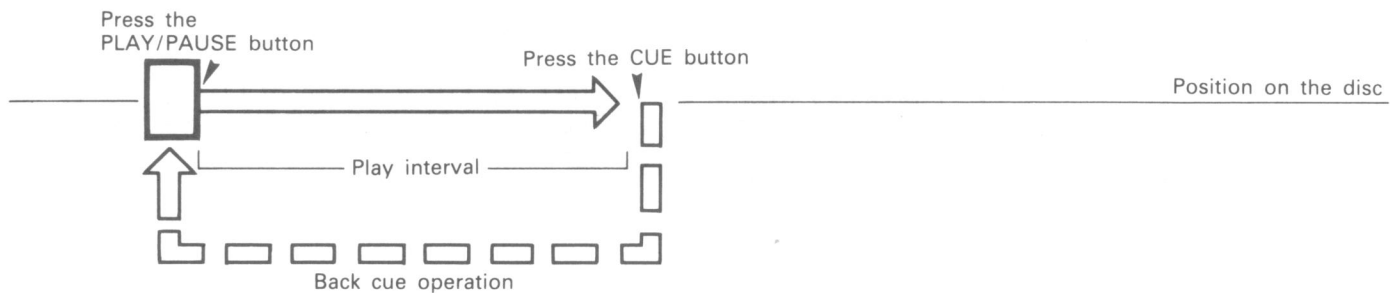


Figure 10

Pressing the PLAY/PAUSE button starts the disc. Pressing the CUE button will reset the disc to the position where play was started. By alternately pressing the PLAY/PAUSE button and the CUE button, the disc may be played from the same position any number of times. This function is called back cue.

PLAY, PAUSE, and CUE (Only in the CD mode)

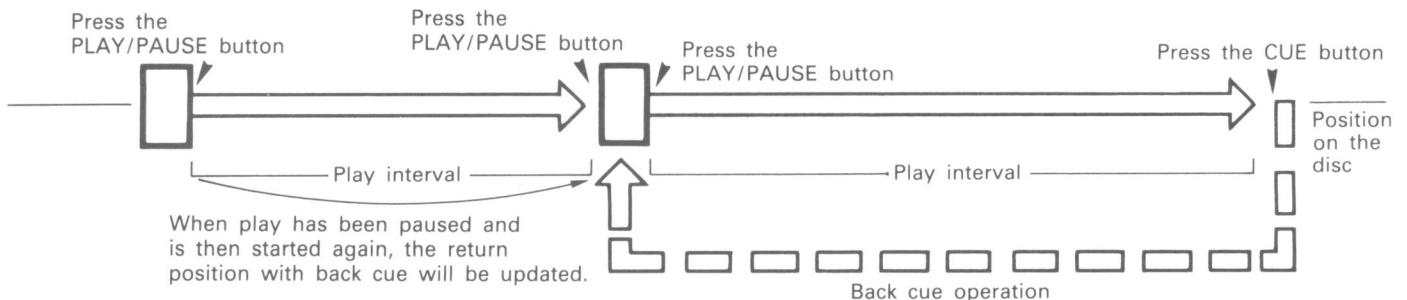
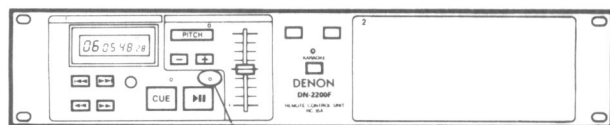


Figure 11

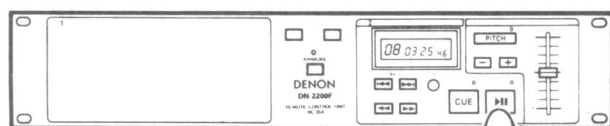
(6) Matching the Beats Per Minute

Match the pitch by monitoring the music of both CD-1 and CD-2 by ear. When the tempo of the music of the selected CD player is slow compared to the tempo of the other player, move the slider to the + side and match the tempo. When fast, move to the - side.

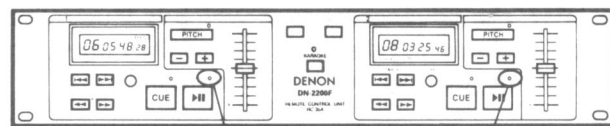
The following description is for the case of matching the pitch of CD-2 to the pitch of the music being played on CD-1.



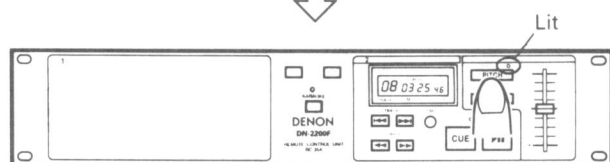
CD-1 is playing.



Press PLAY/PAUSE to start CD-2.
The LED of the PLAY/PAUSE button will light.

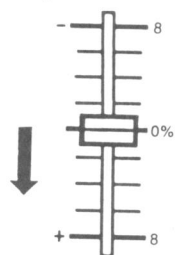


Both CD players are playing discs.
Listen to CD-2 in your headphones.



Press the PITCH button of CD-2.
The green LED of the PITCH button will light.

When CD-2 is slow compared to CD-1



When CD-2 is fast compared to CD-1

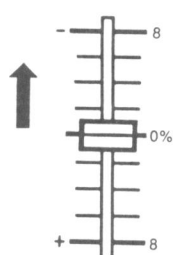


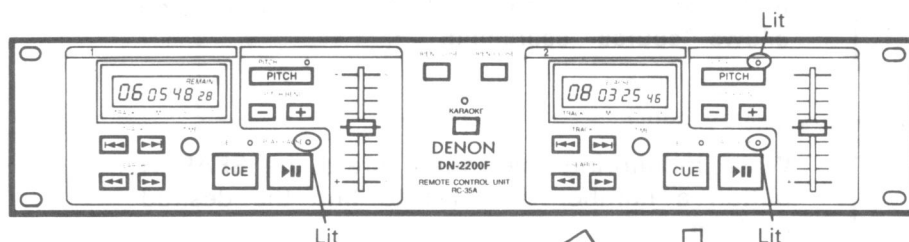
Figure 12

(7) Beat Matching Using Pitch Bend

A description of the procedure for matching the beat of CD-1 and CD-2 using the PITCH BEND button is given below.

This description is for the case of matching the beat of CD-2 to the beat of the music being played on CD-1.

After Matching the BPM's According to Section (6)



BPM's (Beat Per Minute) are the same, however the bass beats are not matched.

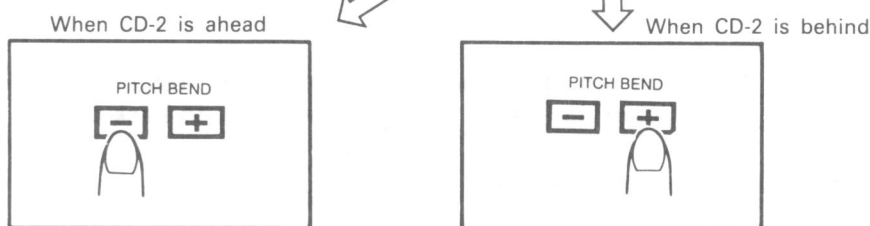
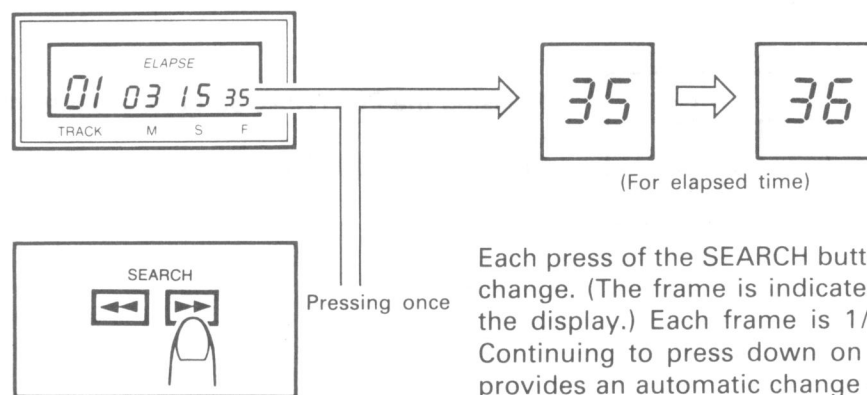


Figure 13

The pitch changes automatically while the **+** or **-** button is being pressed. Releasing the button results in a return to the original pitch. (So the BPM's are once again the same.)

(8) Moving the Play Start Position (Only in the CD mode)

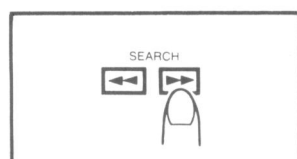
When a track is selected and the PLAY/PAUSE button is pressed, the play operation will start from the beginning of that track. However, when you want play to start from a different position, use the following procedure to find that position.



Each press of the SEARCH button causes 1 frame to change. (The frame is indicated at the F portion of the display.) Each frame is 1/75th of a second. Continuing to press down on the SEARCH button provides an automatic change of frames, the speed of which increases while the button is pressed.

Figure 14

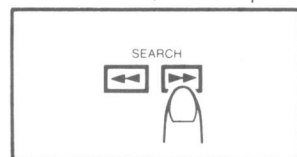
To Start Playback from the Middle of a track. (Only in the CD mode)



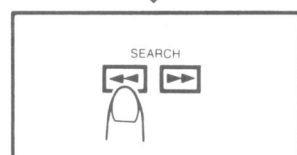
While monitoring the sound, press the SEARCH button until you come close to the desired position, in the track. Holding the SEARCH button down allows "course" searching.



One press at a time

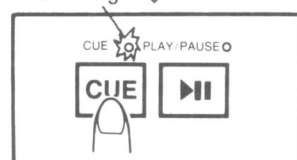


While monitoring the sound, press the SEARCH button a number of times to find the desired position. This allows "fine" searching.



If you go past the desired position, return by pressing the  button a few times to back up.

Blinking

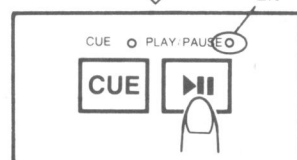
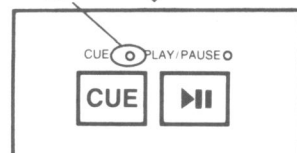


When the desired start position has been found, press the CUE button.

The sound will mute and the LED of the CUE button will blink.

When the CUE LED stops blinking, playback is ready.

Lit



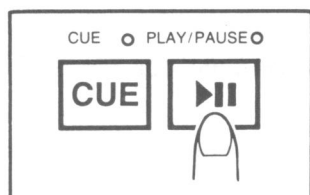
Pressing the PLAY/PAUSE button will start the play operation.

The LED of the PLAY/PAUSE button will light steadily.

Figure 15

(9) Checking the Play Start Position (Only in the CD mode)

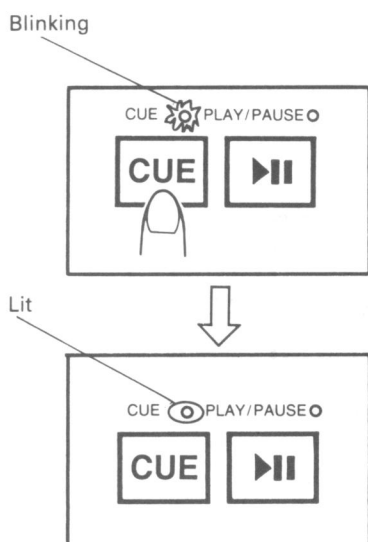
After selecting the track or after changing the play start position with the SEARCH button, use the following procedure to repeatedly check the position at which play will start.



Press the PLAY/PAUSE button.
Check that play will start from the desired position.

NOTE:

Once you have set up a new start position within a track, do not press the PAUSE or SEARCH buttons. Pressing these buttons will change your start position.



Press the CUE button after checking the start position.

The player will return to the position where play was started.

When the CUE LED stops blinking, it is ready to start again.

If the play start position is not to your liking, use the search function to change the position.

Figure 16

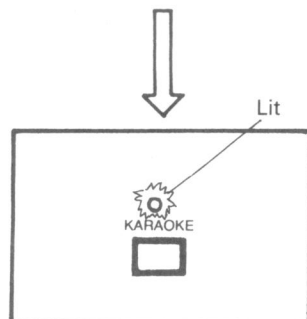
(10) Using the Karaoke Mode



Press the KARAOKE button (when the LED is off)

NOTE: When setting the karaoke mode, do so under the following conditions (for CD-1 and/or CD-2):

- ① When a disc is not set.
- ② When the disc is in the standby condition (the CUE LED is lit).

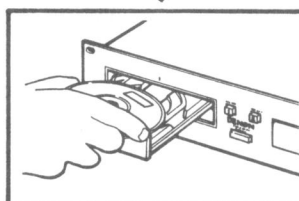


The LED will light and the karaoke mode will be set.

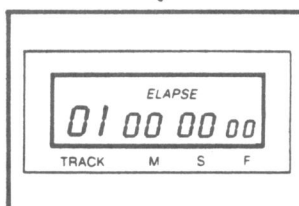
When a Disc is Not Set



The track that was in the standby mode will again be in stand by. (Example: Track 3)



Load the disc, press the OPEN/CLOSE button, and close the disc holder.



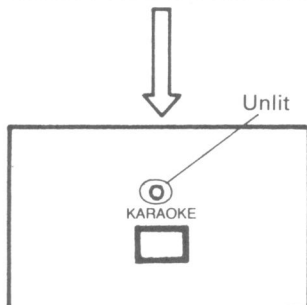
When preparations have been completed, the unit returns to the first track.

To the desired track

• To Cancel the Karaoke Mode:



Press the KARAOKE button (while the LED is lit).



NOTE: When cancelling the karaoke mode, do so under the following conditions:

- ① When a disc is not set
- ② When the disc is in the standby condition (the CUE LED is lit)

Figure 17

NOTE: Always cancel the karaoke mode when not using the DN-820 (microphone mixing pre-amplifier).

(11) Basic Operation in the Karaoke Mode

The basic operation in the karaoke mode is the same as the basic operation in the CD mode except for the following items. Refer to Section 4 -(1) through -(10) for the correct operation procedure.

• Operations Not Possible in the Karaoke Mode

- ① Pressing the PLAY button during play to set the pause mode.
- ② Pressing the TRACK button during play to select tracks.
- ② Pressing the SEARCH button to conduct a manual search.

(12) Play Output in the Karaoke Mode

The playback output of CD-1 and CD-2 is switched for the LINE OUT 3 and SUBCODE OUT jacks in the karaoke mode.

NOTE: To output the picture from the SUBCODE OUT jack, use a CD graphics disc (CD-G).

An example of play output switching of CD-1 and CD-2 is described next.

- ① Pressing the PLAY button of CD-1 provides audio output from LINE OUT 1 and also LINE OUT 3 and the sub-code from SUBCODE OUT.

NOTE: There is no output from LINE OUT 3 or SUBCODE OUT in modes other than the karaoke mode.

- ② Even when CD-2 is played under the condition of Item (1), the output of LINE OUT 3 and SUBCODE OUT will continue to be output from previously played CD-1.
- ③ Even when CD-2 is playing, when play of CD-1 is stopped, the output of LINE OUT 3 and SUBCODE OUT will be switched off.
- ④ Even when CD-2 is playing, when CD-1 is played again under the condition of Item (3), CD-1 will be output from LINE OUT 3 and SUBCODE OUT.

※ The same holds true when CD-1 and CD-2 are reversed.

NOTE:

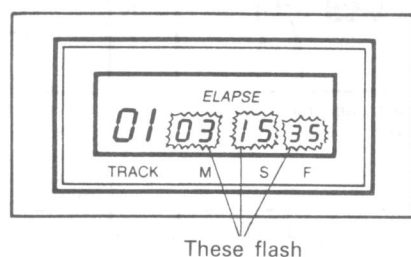


Figure 18

When there is an output from one of the drives and the other drive is set to the play mode, the display (minutes, seconds and frames) for the drive for which there is no output flashes. (In ② to ④, the CD-2 display (minutes, seconds and frames) flashes. The rest of the display remains lit without flashing.)

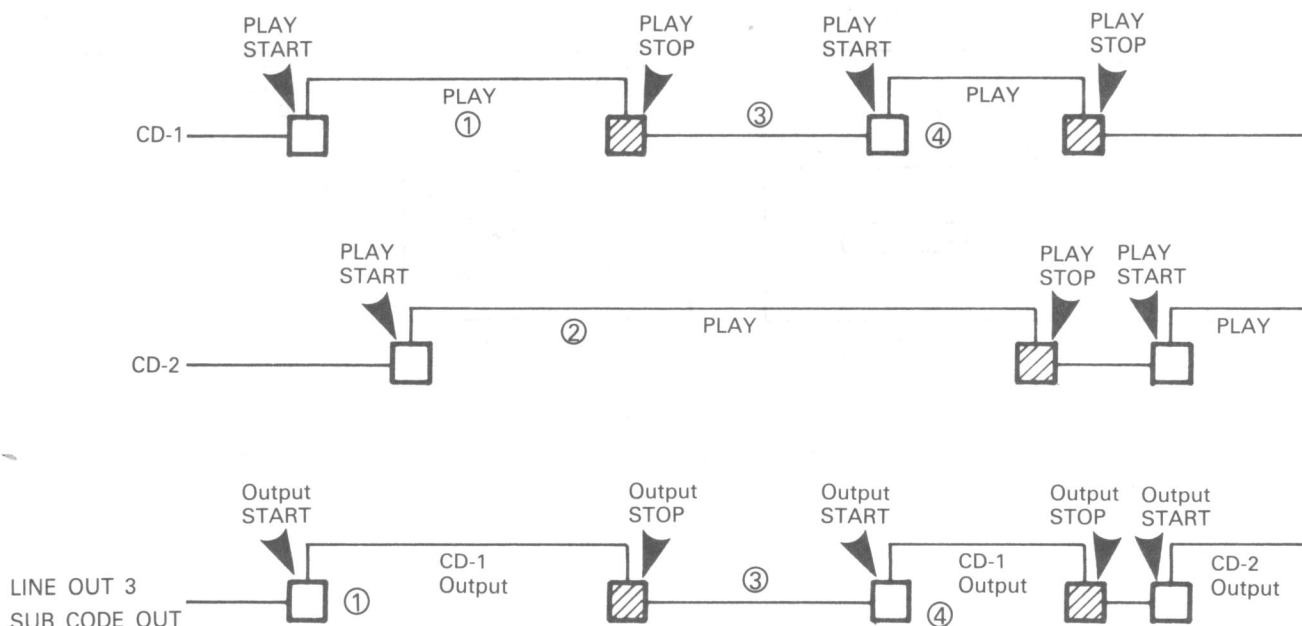


Figure 19

Thus, CD-1 and CD-2 can be used alternately by first stopping the player which is playing then setting the player at standby to the play mode to switch the output of the LINE OUT 3 and SUBCODE OUT jacks.

5 EXAMPLE OF MIXING WITH THE DN-2200F

A description of an actual example of mixing using the system illustrated in Figure 2 is given below. After playing back a track on CD-1, and after matching the pitch of CD-2, use cross fader on your mixer to fade from CD-1 to CD-2.

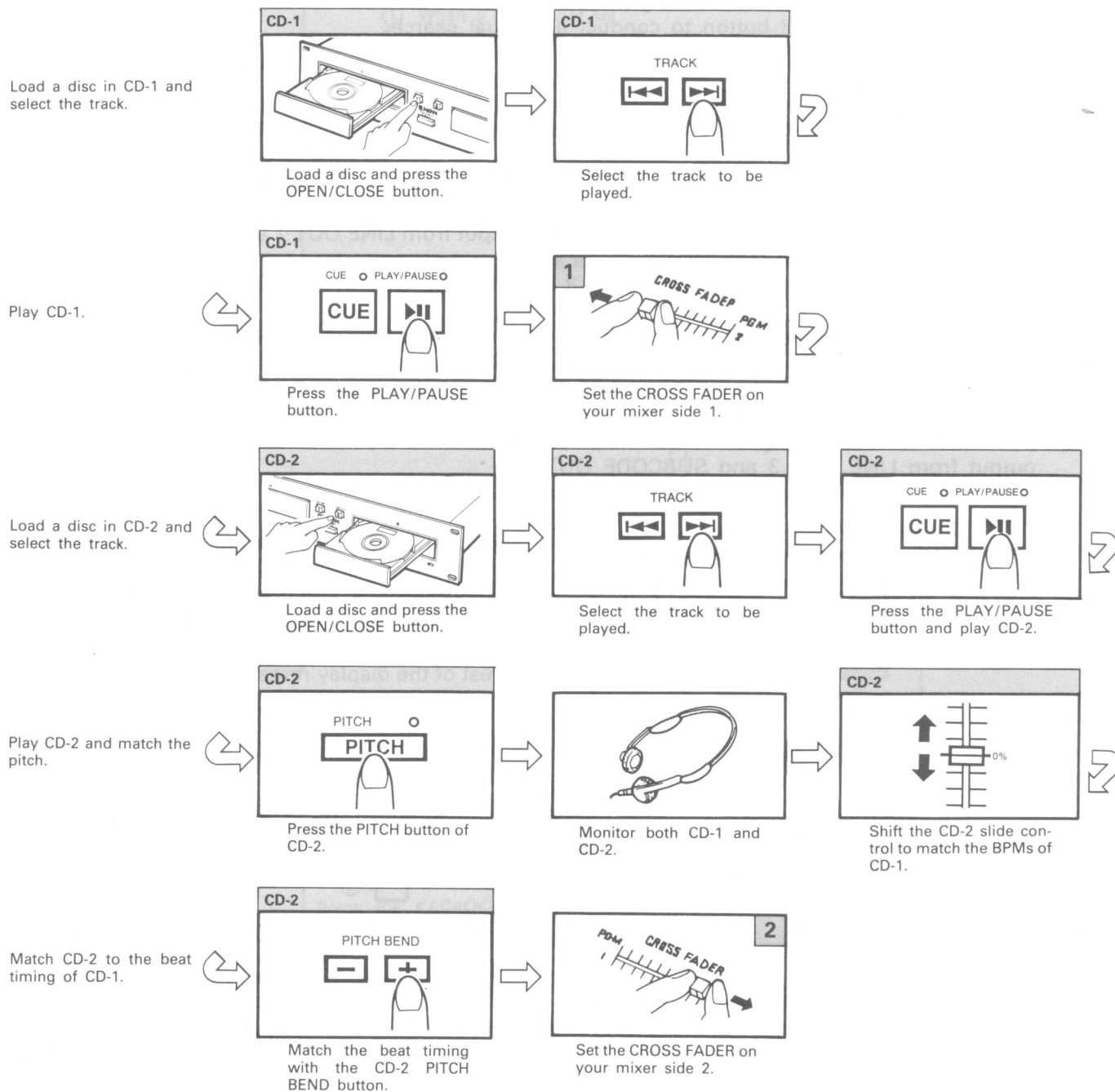


Figure 20

6 BEFORE SWITCHING OFF THE POWER

When you have finished using the CD player, before switching off the power be sure that the disc holder has been closed with the OPEN/CLOSE button.

CAUTION:

Do not forcibly close the disc holder when the power is off.
It may damage the unit when it is transported.

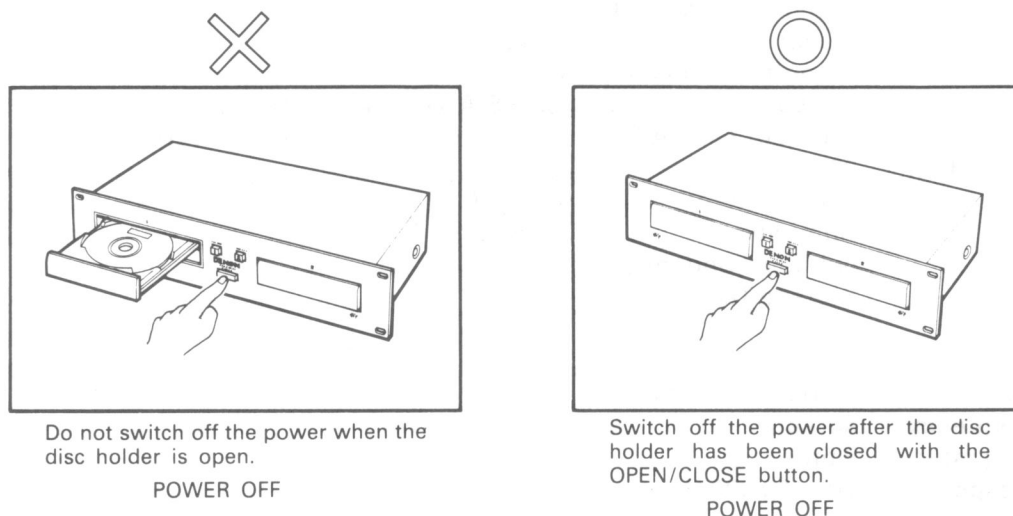


Figure 21

7 COMPACT DISCS

1. Precautions on handling compact discs

- Do not allow fingerprints, oil or dust to get on the surface of the disc.
If the disc is dirty, wipe it off with a soft dry cloth.
- Do not use benzene, thinner, water, record spray, electrostatic-proof chemicals, or silicone-treated cloths to clean discs.
- Always handle discs carefully to prevent damaging the surface; in particular when removing a disc from its case or returning it.
- Do not bend the disc.
- Do not apply heat.
- Do not enlarge the hole in the center of the disc.
- Do not write on the label (printed side) with a hard-tipped implement such as a pencil or ball point pen.
- Condensation will form if a disc is brought into a warm area from a colder one, such as outdoors in winter. Do not attempt to dry the disc with a hair dryer, etc.

2. Precaution on storage

- After playing a disc, always unload it from the player.
- Always store the disc in the jewel case to protect from dirt or damage.
- Do not place discs in the following areas:
 - 1) Areas exposed to direct sunlight for a considerable time.
 - 2) Areas subject to accumulation of dust or high humidity.
 - 3) Areas affected by heat from indoor heaters, etc.

8 SPECIFICATIONS

GENERAL

Type:	Twin mechanism Compact Disc player with wired remote control.
Disc type:	Standard Compact Discs (12 cm, 8 cm and CDG's)
Dimensions:	Player unit; 482 (W) × 88 (H) × 252 (D) mm Remote control unit; 482 (W) × 88 (H) × 62 (D) mm
Installation:	19-inch rack mountable Player unit; 2U Remote control unit; 2U
Weight:	Player unit; 5.5 kg Remote control unit; 1.5 kg
Power supply:	120 V AC ±10%, 60 Hz (for U.S.A. & CANADA models) 120/220/240 V AC ±10%, 50/60 Hz (for multi voltage version)
Power consumption:	22 W
Environment:	Temperature; 5 to 35°C Humidity; 25 to 85% (without condensation) Storage Temperature; -20 to 60°C

AUDIO SECTION

Quantization:	18-bit linear/channel
Sampling frequency:	44.1 kHz
Oversampling rate:	8 times
Frequency response:	20 to 20,000 Hz
Total harmonic distortion:	0.006 %
Signal-to-noise ratio:	103 dB
Dynamic range:	98 dB
Channel separation:	96 dB
Output level:	2.0 V
Load impedance:	10 Kohm or more

FUNCTIONS

Track selection:	1 to 99 tracks
Fast search:	1 frame step and continuous search
Automatic cueing:	Beginning of music Back cueing to cued point
Instant start:	Within 0.03 sec.
Variable pitch:	±8% Slider with resume switch
Pitch bend:	±10% max.
Display:	Track number, Remaining time or Elapsed time in Min. Sec. and Frame

* Specifications and design are subject to change without notice for purpose of improvement.

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