

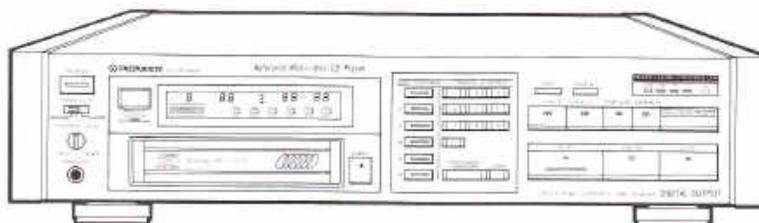
# Operating Instructions

COMPACT DISC PLAYER

# PD-M90X



COMPACT  
disc  
DIGITAL AUDIO



Thank you for buying this Pioneer product. Please read through these operating instructions and then you will know how to operate your model properly. After you have finished reading the instructions, put them away in a safe place for future reference. In some countries or regions, the shape of the power plug and power outlet may sometimes differ from that shown in the explanatory drawings, however the method of connecting and operating the unit is the same.

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

## IMPORTANT NOTICE

### [For U.S. and Canadian models]

The serial number for this equipment is located on the rear panel. Please write this serial number on your enclosed warranty card and keep in a secure area. This is for your security.

### [For Canadian model]

**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.

**ATTENTION:** POUR PREVENIR LES CHOCS 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.

*"This product is manufactured to comply with the radio interference requirements of EEC Directive 76/889/EEC and 82/499/EEC."*

## LINE VOLTAGE SELECTOR SWITCH

Only multi-voltage models are provided with this switch. U.S., Canadian, European, U.K., and Australian models are not provided with this switch.

Main voltages in Saudi Arabia are 127V and 220V only. Never use this model with 110V setting in Saudi Arabia.

The line voltage selector switch is located on the rear panel of this player. Before your player is shipped from the factory, the switch is set to the power requirements of the player's destination. Check that it is set properly before plugging the power cord into the outlet. If the voltage is not properly set or if you move to an area where the voltage requirements differ, adjust the selector switch as follows:

- Provide yourself with a medium-sized (flat-blade) screwdriver. Insert the tip of the screwdriver into the groove of the selector switch and turn it so that the power voltage marking of your area points to the arrow.



VOLTAGE SELECTOR  
SELECTEUR DE TENSION

 **PIONEER**  
The future of sound and vision.

# SAFETY INSTRUCTIONS

**READ INSTRUCTIONS** — All the safety and operating instructions should be read before the appliance is operated.

**RETAIN INSTRUCTIONS** — The operating instructions should be retained for future reference.

**HEED WARNING** — All warnings on the appliance and in the operating instructions should be adhered to.

**FOLLOW INSTRUCTIONS** — All operating and use instructions should be followed.

**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, etc.

**LOCATION** — The appliance should be installed in a stable location.

**WALL OR CEILING MOUNTING** — The appliance should not be mounted to a wall or ceiling.

**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.

**HEAT** — The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.

**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.

**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.

**POLARIZATION** — If your purchased product is provided with a polarized power plug, please read the following instructions. This product is equipped with a polarized alternating current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.

**CLEANING** — The appliance should be cleaned only with a polishing cloth or a soft dry cloth. Never clean with furniture wax, benzine, insecticides or other volatile liquids since they may corrode the cabinet.

**POWER LINES** — An outdoor antenna should be located away from power lines.

**NONUSE PERIODS** — The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.

**OBJECT AND LIQUID ENTRY** — Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.

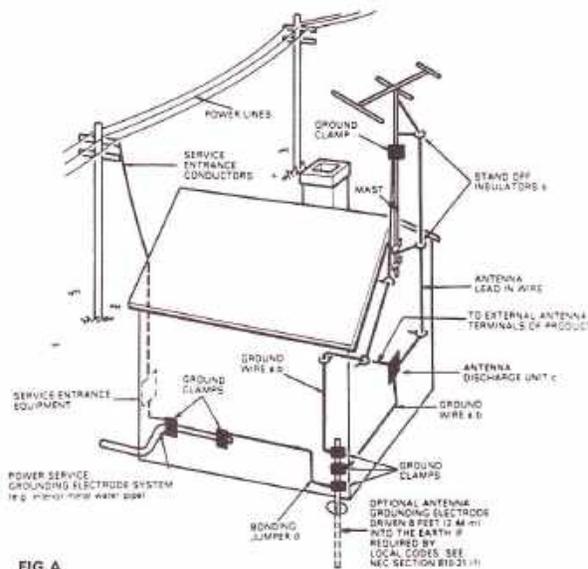
**DAMAGE REQUIRING SERVICE** — The appliance should be serviced by Pioneer authorized service center or qualified service personnel when:

- The power-supply cord or the plug has been damaged; or
- Objects have fallen, or liquid has been spilled into the appliance; or
- The appliance has been exposed to rain; or
- The appliance does not appear to operate normally or exhibits a marked change in performance; or
- The appliance has been dropped; or the enclosure damaged.

**SERVICING** — The user should not attempt to service the appliance beyond that described in the operating instructions. For all other servicing, contact the nearest Pioneer authorized service center.

**OUTDOOR ANTENNA GROUNDING** — If an outside antenna is connected to the antenna terminal, be sure the antenna system is grounded so as to provide some protection against voltage surges and built up static charges.

In the U.S.A. section 810 of the National Electrical Code, ANSI/NFPA No. 70-1984, provides information with respect 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 Fig. A.



- a) Use No. 10 AWG (5.3 mm<sup>2</sup>) copper, No. 8 AWG (8.4 mm<sup>2</sup>) aluminum, No. 17 AWG (1.0 mm<sup>2</sup>) copper-clad steel, bronze wire, or larger as ground wire.
- b) Secure antenna lead-in and ground wires to house with stand-off insulators spaced from 4 feet (1.22 meters) to 6 feet (1.83 meters) apart.
- c) Mount antenna discharge unit as closely as possible to where lead-in enters house.
- d) Use jumper wire not smaller than No. 8 AWG (13.3 mm<sup>2</sup>) copper or equivalent when separate antenna-grounding electrode is used.

## IMPORTANT 1



The lightning flash with arrowhead, within an equilateral triangle, is intended to alert the user of 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.

### CAUTION

**RISK OF ELECTRIC SHOCK  
DO NOT OPEN**

**CAUTION:**  
**TO PREVENT THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.**



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

## IMPORTANT 2

If the apparatus is fitted with AC mains power outlet(s), see REAR PANEL FACILITIES for convenient connection of additional Hi-Fi component(s). Make all connections to the AC outlet(s) and the signal terminals first. Connect the plug to the wall socket last, make sure that the power switch is off. Disconnect the wall plug when the equipment is not in (regular) use, e.g. when on vacation.

## FOR USE IN THE UNITED KINGDOM

The wires in this 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 marking 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.

Equipment sold in the U.K. is not supplied with a power plug.

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## [FOR EUROPEAN AND U.K. MODELS]

**PIONEER COMPACT DISC PLAYER [PD-M90X]**  
APPARATUS CONTAINS LASER OF HIGHER CLASS  
THAN 1.

The following caution label appear on your player.

Location: rear of the player



## [FOR U.S. MODEL]

### CAUTION

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

## INFORMATION TO USER [FOR U.S. MODEL]

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 this component with respect to the receiver
- move this component away from the receiver
- plug this component into a different outlet so that component 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 US Government Printing Office, Washington, D.C., 20402, Stock No. 004-000-00345-4

*The above instructions apply only to units which will be operated in the United States.*

# FEATURES

**Magazine type multiple compact disc player, enables six disc selection in succession.**

**Remote program transmission control unit — with crystalline liquid display.**

The remote control unit has eight programmable memories which can be transmitted to the player whenever necessary. Programs memorized are maintained whether the player is ON or OFF.

The remote control unit has the following features. The unit can be used as a conventional remote control.

Equipped with transmission indicator.

Battery indicator which shows when it is time to replace the batteries.

Memory back-up function makes it possible to maintain memory content for a few minutes during a battery exchange.

**Equipped with digital level controller.**

Volume control realized by digital circuit. Remote control unit may also be used.

**DIGITAL OUT terminal**

Equipped with DIGITAL OUT terminal to connect amplifiers which receive digital input signals or to accommodate separate D-A converters.

**High quality sound based upon non-resonance design.**

High quality sound components, including digital filter, gold plated output terminal and headphone terminal. Honeycomb structured chassis for enhanced anti-resonance.

**Accumulated programming time displayed. Other convenient tape editing functions all equipped.**

- When operating program during play, accumulated time of programming steps displayed.

- 32 step programming enables selection of any track of 6 discs to be played in desired order.
- Features direct programming to add the track currently being played to the program by simply pressing program key.
- Features PAUSE programming for temporary stop.

**Program random play, equipped with random play mechanism**

The microcomputer selects a program at random from previously input programs. When not programmed, tracks from inserted discs are played at random, but they will only be played once. If this function is combined with the repeat function, continuous repeat playback is possible which is ideal when the player is to be used as a source of background music.

**Multiple display indicates disc number, track number and passing time simultaneously.**

Total time and remaining time also displayed by switching.

**Independent 6 keys and 10 keys are located on player and remote control unit for speedy track selection.**

**Timer play start and timer random play start.**

**Headphone jack with volume control**

**Subcode output terminal for future subcode applications.**

**High-performance pickup and linear servo system ensures highly accurate playback.**

**The player is also provided with a single disc magazine to make it possible to use the player as a conventional compact disc player.**

# CAUTIONS REGARDING HANDLING

## LOCATION

**Install the player in a well ventilated location where it will not be exposed to high temperature or humidity.**

Do not install the player in a location which is exposed to the direct rays of the sun, or near stoves or radiators. Excessive heat can adversely affect the cabinet and internal components. Also, installation of the player in a damp or dusty environment may result in malfunction or accident. (Also avoid installation near cookers etc., where the player may be exposed to smoke from oil, steam or heat.)



## PRECAUTIONS REGARDING INSTALLATION

Install this compact disc player as far as possible from tuners and TV sets. A compact disc player installed in close proximity to such equipment, may cause noise or degradation of the picture. Such noise may be particularly noticeable when an indoor antenna is used. In such a case, make use of an outdoor antenna, or turn off power to the compact disc player.

**CONDENSATION**

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

**CARE OF DISCS**

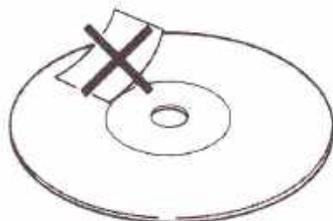
- With this player, use discs which display the mark shown below. (Optical audio digital discs.)

**COMPACT**  
**disc**  
**DIGITAL AUDIO**

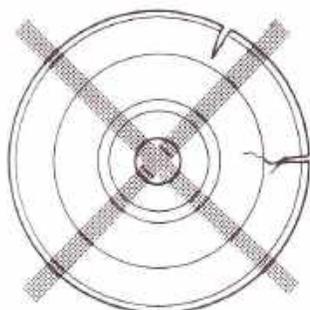
- When holding discs, do not touch their signal surfaces. Hold by the edges, or by one edge and the center hole.



- Do not affix gummed labels or tape to the label surfaces. Also, do not scratch or damage the label.



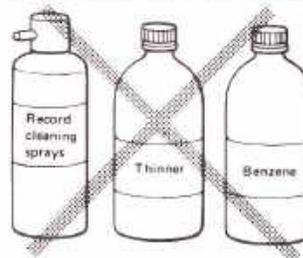
- Discs rotate at high speed inside the player. Do not use damaged (cracked or warped) discs.

**CLEANING DISCS**

- The presence of fingerprints or smudges on the surface of the disc will not directly affect the recorded signals, but depending on the degree of contamination, the brightness of the light reflected from the signal surfaces may be reduced, causing degradation of sound quality. Always keep your discs clean by wiping them gently with a soft cloth from the inner edge toward the outer periphery.



- If a disc becomes very dirty, dip a soft cloth in water and after wringing it out well, wipe the dirt away gently, and then remove any water drops with another soft, dry cloth.
- Do not use record cleaning sprays or anti-static agents on discs. Also, never clean discs with benzene, thinner, or other volatile solvents, since damage to the disc surface may result.

**STORING DISCS (Storing without using the 6 disc magazine)**

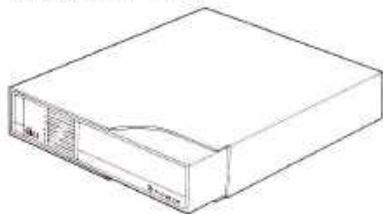
- Discs are made of the same kinds of plastics used for conventional analog audio records. Be careful not to allow discs to warp; always store discs in their cases vertically, avoiding locations with high heat or humidity, or extremely low temperatures. Avoid leaving discs in cars, since the seat of a car in direct sunlight can become unbelievably hot.
- Always read and abide by the precautionary notes listed on disc labels.



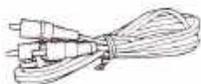
# BEFORE OPERATING PLAYER

## CONFIRM SUPPLIED ACCESSORIES

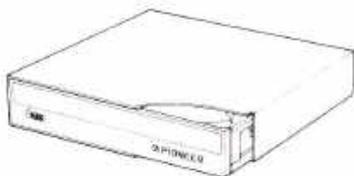
SIX-COMPACT-DISC MAGAZINE  
(Called 6 disc magazine in the explanatory text.)



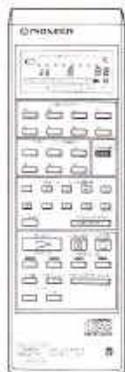
Output cable



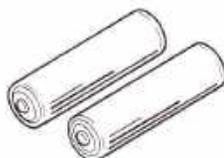
SINGLE-COMPACT-DISC MAGAZINE  
(Called single disc magazine in the explanatory text.)



Remote control unit x 1



AA/R6 dry batteries x 2

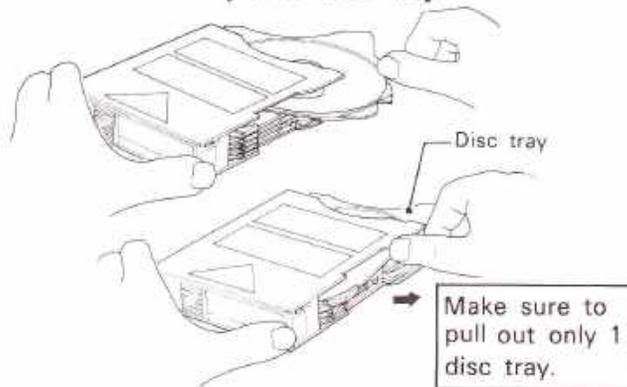


## INSERT DISCS INTO THE 6 DISC MAGAZINE

Insert any discs which you may have into the supplied magazine. Up to 6 discs may be inserted. The numbering of the discs begins with 1 at the topmost tray, and then increases in order from 2 to 6 for the lower trays.

The magazine has a window through which the pulled-out disc tray can be checked. Even during playback, the number of the disc being played back can be checked through this window.

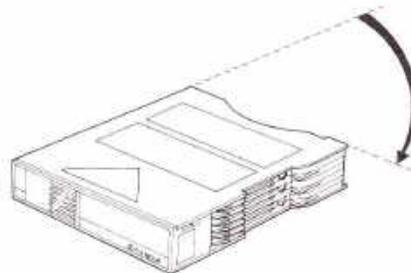
### 1. Pull out only one disc tray.



### 2. Position discs with the label side downward.



### 3. Put the disc tray back as it was originally.



#### 4. Insert other discs by repeating steps (1) to (3).

##### NOTE:

- Please make sure to only pull out one disc tray at a time. (When a disc tray has been pulled out, do not pull out other disc trays.)
- If discs are inserted label side upward, it will not be possible for them to be played. Please make sure to insert them with the label side downward.
- Objects other than discs (song cards, explanations of disc contents etc.), must never be inserted into the disc trays.
- Do not touch the playing surface of discs (the iridescent side) with hands or fingers.

Additional magazines identical to the one supplied are available as options (JD-M100). Please use them to make your own disc library, with separate magazines for each artist or genre.

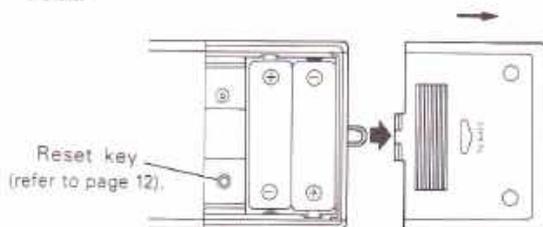
#### For U.S. customers only

You may purchase additional JD-M100 six-compact-disc magazines from your dealer. If, however, they are not available at your dealer in the United States, you may order from:

PIONEER ELECTRONICS SERVICE, INC.  
2265 East 220th Street  
P.O. Box 1760, Long Beach  
CA. 90801-1760  
U.S.A.  
Phone #(800) 421-1404

#### PUT BATTERIES INTO REMOTE CONTROL UNIT

- 1 Open the rear cover, and install batteries making sure that the  $\oplus$   $\ominus$  polarity is correct.



#### 2 Close the cover

##### NOTE:

- If the remote control unit will not be used for a long time (1 month or more), please remove the batteries to avoid battery leakage. If fluid should ever leak from batteries, please wipe away the fluid and then install new batteries. However, remember that a battery exchange that takes longer than a few minutes will erase memorized programs.
- Please do not put books etc. on top of the remote control unit. If keys are continuously depressed the batteries will run down.

The LCD display in the remote control unit is extremely delicate and should not be used in places where the temperature and humidity is high or extremely cold such as in cars. It should also be protected from strong shocks.

#### Battery Replacement

Replace the batteries when the battery indicator (  $\square$  ) starts to flash during operation. The memory backup function will protect the program memory for a few minutes during an exchange to render reprogramming after a battery replacement unnecessary.

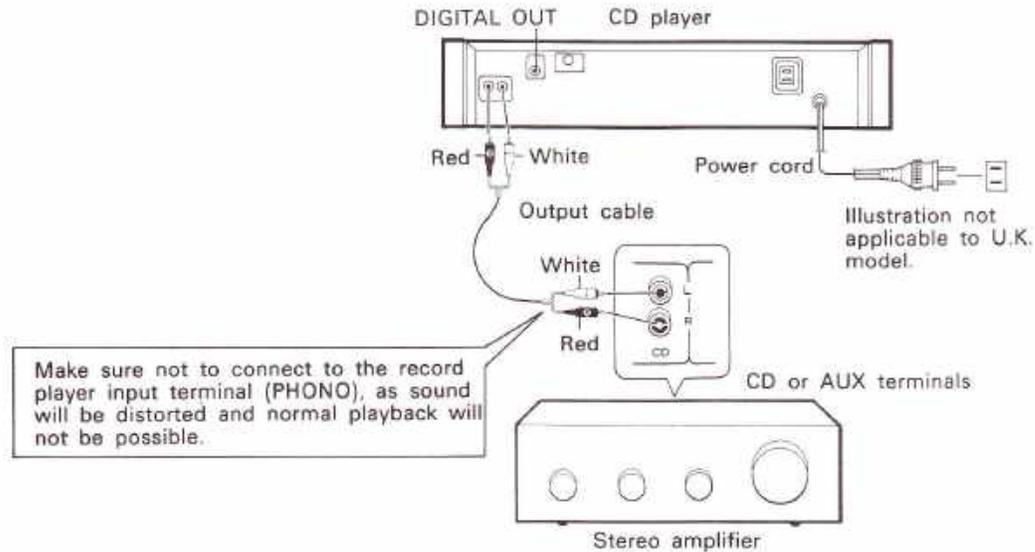
##### NOTE:

When the battery indicator starts to flash, the distance between the remote control unit and the player will have to be shortened to operate it and the indicators will occasionally fade. Continued use will lead to loss of memory content. Therefore, the batteries should be replaced as soon as the indicator starts to flash. Do not depress any of the remote control unit keys during a battery exchange as this may erase memory content.

Incorrect use of batteries may result in leakage of fluid, explosion of batteries and other dangers. Please pay particular attention to the following points.

- Please correctly install batteries so that the (+) and (-) battery polarity matches with the (+) and (-) markings inside the battery case.
- Do not use new batteries together with batteries which have already been used.
- The voltages of dry batteries may differ even though they are of the same size and shape. Please do not use different types of dry batteries together.
- Batteries may be either rechargeable or non-rechargeable. Before using batteries please read the cautions and notes printed on them.

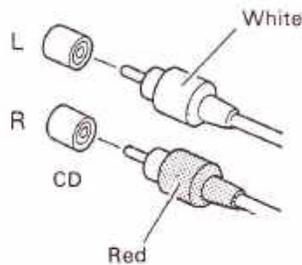
# CONNECTIONS



## Connecting the output cable

Connect the plugs of the cable to the input terminals of the amplifier (terminals marked CD or AUX), and to the output terminals of the compact disc player.

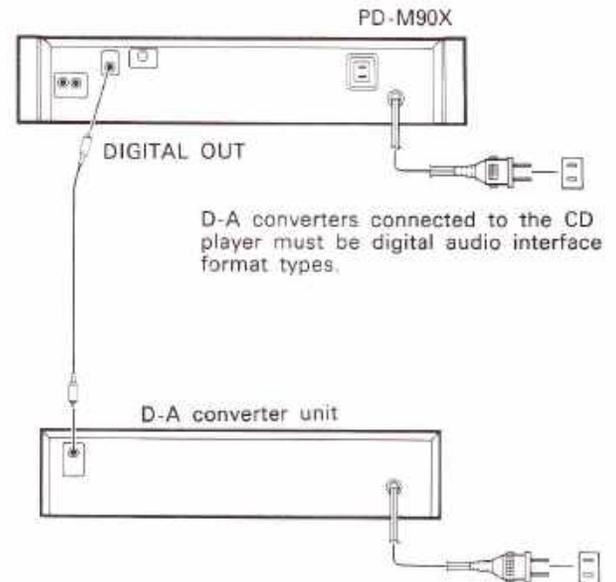
- Connect the white plugs to the left (L) terminals and the red plugs to the right (R) terminals.
- Make sure plugs are pushed fully into the terminals.



## CONNECT THE POWER CORD

Insert the power cord plug into the auxiliary AC outlet of your amplifier unit, or into a household wall outlet.

## WHEN USING THE DIGITAL OUT TERMINAL



**NOTE:** Connect the DIGITAL OUT terminal to the D-A converter unit, not to the audio input terminal of the amplifier. Do not connect a cord to the DIGITAL OUT terminal when you will not use the D-A converter unit (or amplifier with digital input terminal).

# NAMES AND USE OF PARTS

## FRONT PANEL

### POWER switch

Press to turn power to the unit ON and OFF.

### PHONES (headphones) jack

When you wish to use headphones, insert the plug for the headphones into the headphones jack.

### PHONES LEVEL control knob

Use to adjust the level of sound when using headphones. Turning the knob to the right increases the sound level.

### DISC NO. keys (DISC NUMBER 1 - 6)

Use to select disc numbers for playback or programming.

### TRACK NO. keys (TRACK NUMBER 1 - 0)

Use to select track numbers (track 1 - track 99) for playback or programming.

### Magazine insertion slot

### EJECT key

Press to eject a magazine or the disc tray. When pressed, any magazine (in case of single magazine, the disc tray) inside is expelled forward.

### PGM MEMORY key (PROGRAM MEMORY)

Use to program a sequence of tracks.

- Press this key after selecting a desired disc and track with disc and TRACK NO. keys. Tunes will be added to the program in the order in which they are specified.
- If only a DISC NO. key is pressed, all tracks on the specified disc will be added to the program. The letters AL will appear on the indicator.

### PLAY key and indicator

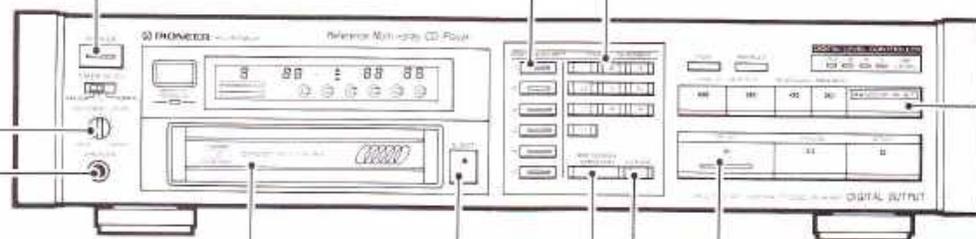
Press to begin playback, and to release the player from the pause mode.

### CLEAR key

Press to clear program.

### RANDOM PLAY key

Press to begin random playback.



**TIME key**

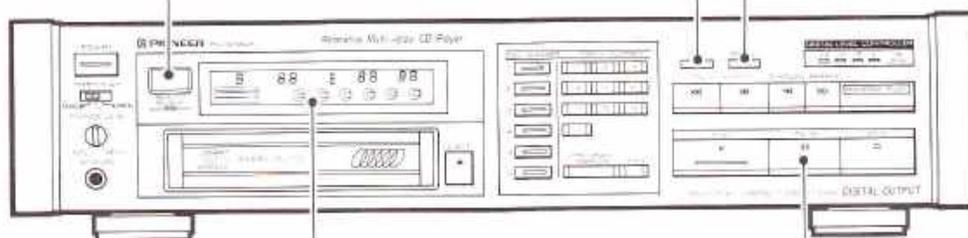
- Use to select the method for displaying the playing time on the indicator panel. Each time the key is pressed, the indication changes from TIME, REMAIN (track remain) and REMAIN (disc remain: This will not be displayed during programmed playback.) to TOTAL in that order. (For details concerning the display contents, refer to the explanation about the indicators.)
- If pressed after pressing the DISC NO. key, TRACK NO. key, the playback time of the selected track only is displayed.

**REPEAT key**

Press to perform repeat playback

- If pressed during normal playback mode, all tracks on the disc will be played back repeatedly.
- If pressed during programmed playback, the programmed tracks will be repeatedly played back in the programmed order.
- When all the tracks have been played at random during random play, the same tracks will be played again in a new random order.

**REMOTE SENSOR/Indicator**



**PAUSE key and indicator**

Press to temporarily interrupt playback. When pressed again, the player is released from the pause mode.

**INDICATORS**

- PROGRAM** : Lights after programming (after program has been memorized).
- RANDOM** : Lights during random playing.
- REPEAT** : Lights during repeat play.
- DISC** : Indicates disc number (1 - 6) during play or search.
- TRACK** : Indicates track number (01 - 99) during play or search.

**TIME/REMAIN/TOTAL**

Press the TIME key to change the playing time display mode.

**TIME:** Indicates the current playing time of the track being played.

**REMAIN:** Indicates the playing time remaining on the track being played. When the key is pressed again, the playing time remaining on the disc will be displayed in minutes and seconds.

**TOTAL:** Indicates the total playing time of the disc or programmed playback.

**MIN:** Playing or remaining time for the track indicated by the minute.

**SEC:** Playing or remaining time for the track indicated by the second.

Indicates output level volume (for 2 seconds) when the level control key on the remote control unit is depressed.

**TIMER PLAY switch**

This is to have the player start playing tracks automatically when the power is turned on by an audio timer (TIMER Start).

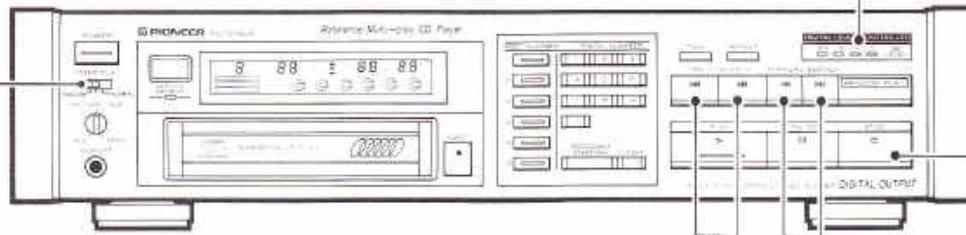
- [NORM] : With a disc magazine inserted into the player, playback will start with the first track of the first disc when power is turned on.
- [RANDOM] : With a disc magazine inserted into the player, the player will start to play at random the tracks on all the discs when power is turned on.
- [OFF] : In OFF mode, playback will not start automatically when power is turned on. Set to this mode for normal operation.

**STOP key**

Press to stop playback. When pressed, the player stops all operations.

**DIGITAL LEVEL CONTROLLER indicator**

This indicates output level.



**TRACK SEARCH keys**

When the player is in the normal play, programmed play or pause modes, these keys are pressed to search for a desired track. The player can advance to the beginning of the next track on the disc or program or back track to the beginning of the current or previous track. The keys are also used to check the order of programmed tracks (Program check) when the player is in stop mode.

- [>>] : When pressed once, play restarts at the beginning of the next track on the disc; when pressed continuously, the disc playback shifts to the beginning of succeeding tracks on the disc. (During programmed playback, it moves to the beginning of the next programmed track. In this way, the remaining programmed tracks can also be checked.)
- [<<] : When pressed once, the disc playback returns to the beginning of the currently playing track; when pressed continuously, the disc playback shifts to the beginning of previous tracks on the disc. (During programmed playback it returns to the beginning of the previously programmed track. In this way, the previous programmed tracks can be checked.)

**MANUAL SEARCH keys**

When the player is in play or pause modes, these keys are pressed to perform fast forward or fast backward operations, to allow manual searching. These operations are only carried out during the time either key is pressed.

- [>>>] : Fast forward operation (If fast forward operation is performed to the end of the disc, End will be indicated and the player will enter pause mode)
- [<<<] : Fast backward operation (If fast backward operation is performed to the beginning of the disc, the player will enter play mode.) If these operations are performed during programmed play mode, the player will enter pause mode (or play mode) just before transferring to the next (or previous) step.

**REMOTE CONTROL UNIT**

Refer player front panel section regarding other key functions not specified here.

The remote control unit is turned on by pressing any of its keys. It will stay on (POWER ON) for about 60 seconds, after which it will turn off (POWER OFF) automatically.

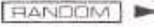
**INDICATORS**

**MEMORY(A - H)**: Indicates the pressed MEMORY Key.  
(Except during the programming operation, A to H will all be lighted. The indicators below the letters will light for those memories storing a program.)

 : This symbol will flash when the remote control unit sends signals to the player.

 : This symbol is usually lit. When the batteries are run down, it starts to flash to indicate that the batteries should be changed.

**STEP** : Indicates programming STEP  
**DISC** : Indicates disc number.  
**TRACK** : Indicates track number.

 : Indicate when program is entered.  
 : Indicates when RANDOM PLAY key is pressed.  
 : Indicates when PLAY key is pressed.  
 : Indicates when PAUSE key is pressed.  
 : Indicates when LEVEL CONTROL key is pressed.

**MEMORY key**  
 Use when calling memory A - H. Programs memorized in 8 memories (A - H). Programs for 8 magazines memorized in remote control for long term storage.

**DISC NUMBER keys**

**TRACK NUMBER keys**

**CLEAR key**

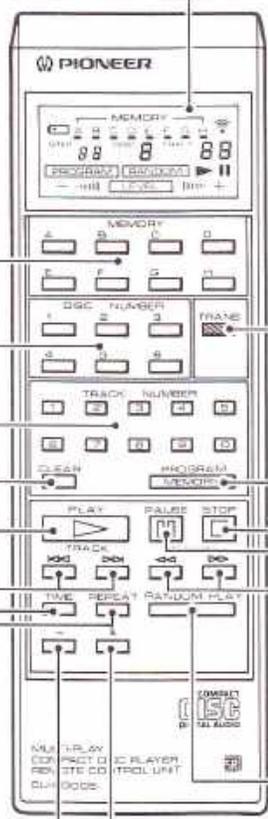
**PLAY key**

**TRACK SEARCH key**

**TIME key**

**REPEAT key**

**LEVEL Control key**  
 Adjusts reproduction volume of compact disc. (Adjusts signal level output from terminal and headphone jack.)  
 [ + ]: Increases volume.  
 [ - ]: Decrease volume.



**Transmission key (TRANS)**  
 Use when transmitting programs in memories A/-/H to memory in player.

**PROGRAM MEMORY key**

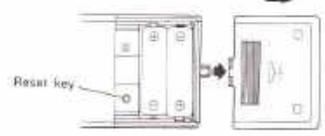
**PAUSE key**

**STOP key**

**MANUAL SEARCH key**

**RANDOM PLAY key**

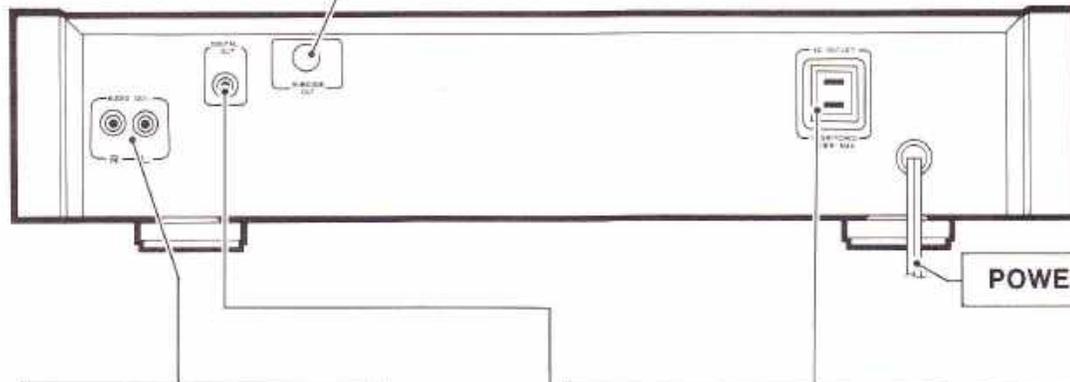
**RESET key (Battery Case Interior)**  
 This is the system reset key for the remote control unit. Depress this key when the display acts abnormally during operation or after a battery change. However, remember that this function cancels the program memory.



REAR PANEL

**Subcode Output Terminal (SUBCODE OUT)**  
Signal output terminal when using subcode signal (which can be memorized in compact disc with audio signal) in future.

Illustration not applicable to U.K. model.



**AUDIO OUT terminals**

**DIGITAL OUT terminal**  
Used to produce digital signals for audio data and subcodes of a CD.

**POWER CORD**

**AC OUTLET (UNSWITCHED, MAX. 100 W)**

- Power is continuously supplied to the component connected here, regardless of the setting of the power switch (ON/OFF). Turn the connected component ON/OFF by using its own power switch.
- Do not connect any component having a power consumption exceeding 100 W.

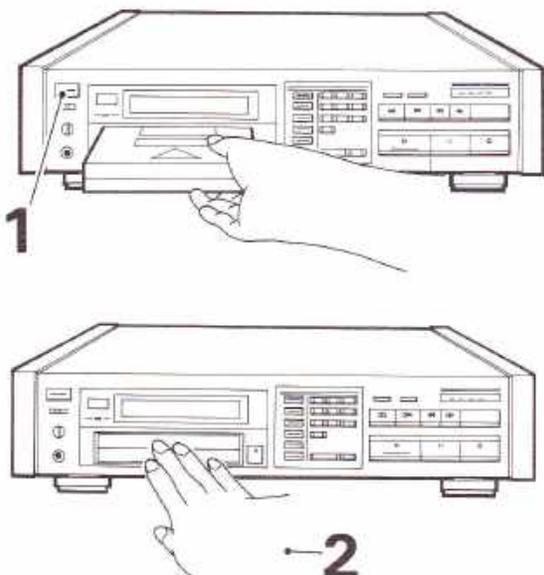
**NOTE:**

- Never connect any appliance (toaster, hair dryer, etc.) whose power consumption exceeds the wattage (W) noted on the outlet panel. Damage to components or fire hazards could result.
- Even if a television set has a rated power consumption less than the permissible outlet wattage, when its power is first turned on it may have a temporary electrical current flow that exceeds the permissible value. For this reason, do not connect television sets or monitors to this outlet.

# OPERATION (BEFORE PLAYBACK)

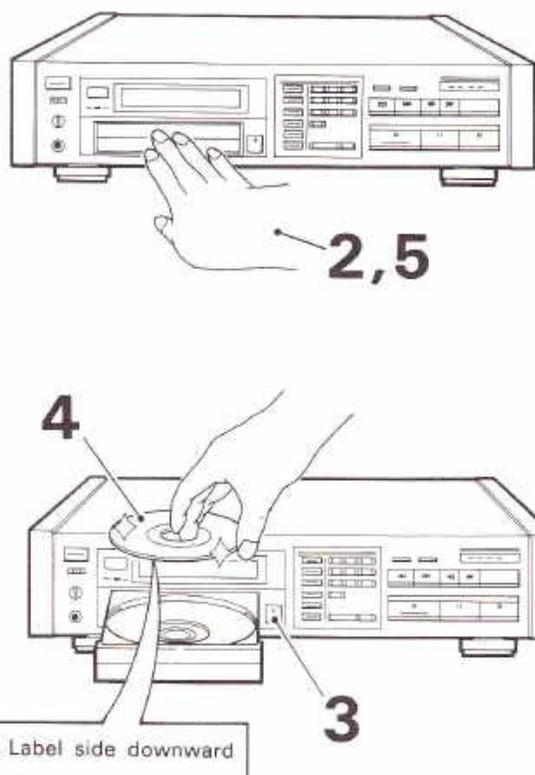
## OPERATION PROCEDURES BEFORE PLAYBACK (Insertion of magazine or discs)

### Case of 6 disc magazine



- 1 Push in the POWER switch and switch ON power.
- 2 Insert a magazine, pushing it in until a click sound is heard.  
Please insert the discs you want to play into the magazine beforehand. (Refer to 'BEFORE OPERATING PLAYER'.)
- 3 Set your stereo amplifier controls for compact disc playback.  
(For details refer to the operating instructions of your stereo amplifier.)

### Case of single disc magazine



- 1 Push in the POWER switch and switch ON power.
- 2 Insert the single disc magazine and push it fully in.
- 3 Press the EJECT key.  
The disc tray will be ejected forward.
- 4 Place a disc on the disc tray.

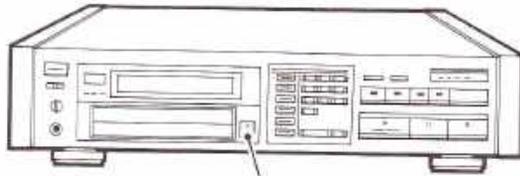
#### NOTE:

- Make sure to place the disc on the tray with the label facing downward.
- Hold the disc so that you do not touch the playing side (the iridescent side) with your hands or fingers.

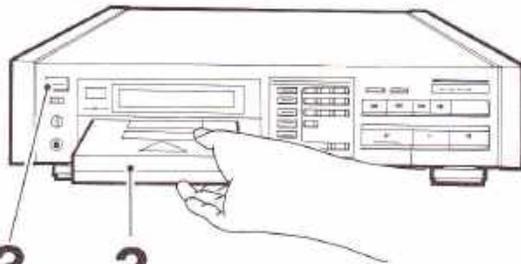
- 5 Push the disc tray into the player.  
Gently push the disc tray in with your fingers.
- 6 Set your stereo amplifier controls for compact disc playback.  
(For details refer to the operating instructions of your stereo amplifier.)

## PROCEDURES AFTER PLAYING (Removal of magazine or discs)

## Case of 6 disc magazine



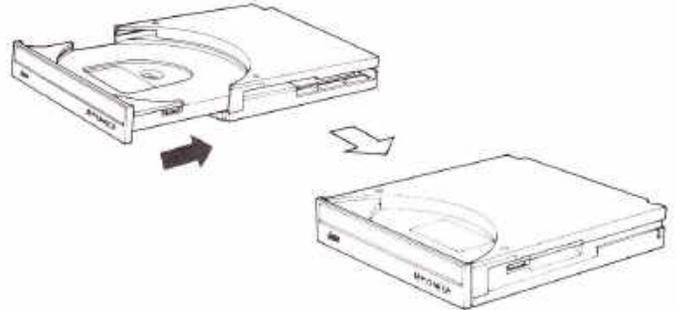
1



3 2

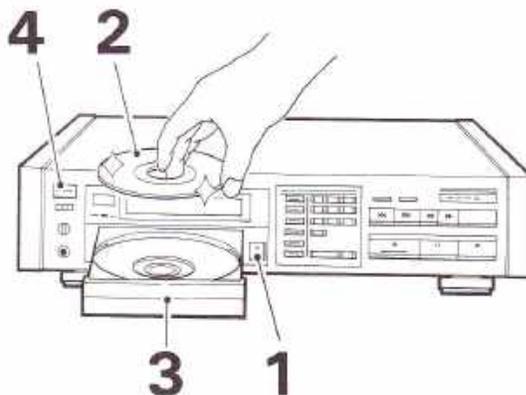
- 1 Press the EJECT key, and eject the magazine.
- 2 Pull the magazine forward and remove it.
- 3 Push in the POWER switch to turn OFF power.

- 1 Press the EJECT key and eject the disc tray.
- 2 Remove the disc and put it into its case. Be careful not to touch the playing side.
- 3 If you do not intend to use the player immediately, pull the magazine forward and remove it, and push in the disc tray.

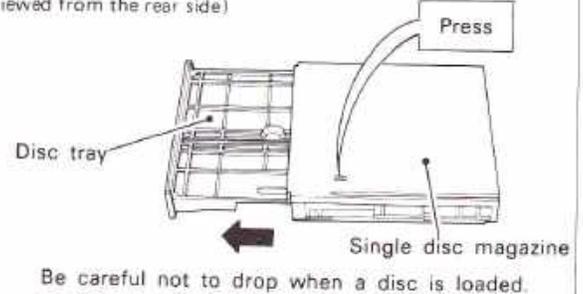


- If you intend to continue using the single disc magazine, leave the magazine installed in the player and push in the disc tray.
- 4 Push in the POWER switch to turn OFF power.

## Case of single disc magazine



Pulling out disc tray of magazine removed from player.  
(Viewed from the rear side)



● Key operations explained here, may be carried out with keys on either the player or the remote control unit. However, there is no eject key on the remote control unit and no level control key on the player.

● Explanations are given for operations when using the 6 disc magazine, but operations are the same when using the single disc magazine. The only difference is that in the latter case the disc number keys are not used.

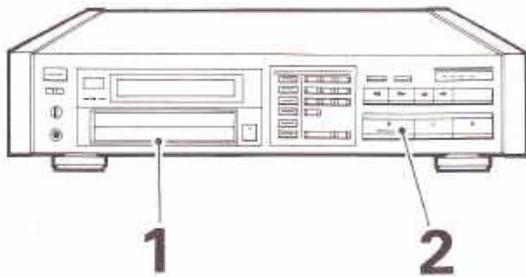
**OPERATIONS FOR NORMAL PLAYBACK**

Playback of all tracks, from the first track on the first disc, to the last track on the sixth disc.

**Operation example**

- Start playback

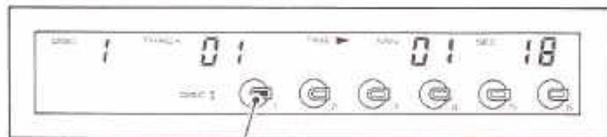
POWER → Insert magazine (disc) → PLAY



- 1 Carry out "OPERATION PROCEDURES BEFORE PLAYBACK", and insert the magazine.
- 2 Press the PLAY key.

The PLAY indicator will light, and playback will begin.

Indicators will display the current elapsed playback time and track number. This example shows the display when the first track of disc 1 is played.



Internal red light indicates the current disc being played. When disc is absent, indicator is turned off for only that particular part on the outer area.

- 3 Adjust volume and tone with stereo amplifier controls.

When the last track on the sixth disc finishes playing, the player enters stop mode. All operations stop and the player stops with the number of the first track on the first disc '01', showing on the indicator.

**TO START PLAYING BACK FROM A DESIRED TRACK (Direct Disc and Track Search Operation)**

Playback will begin from the track selected by specifying the disc number and track number, and will continue to the last track on the sixth disc.

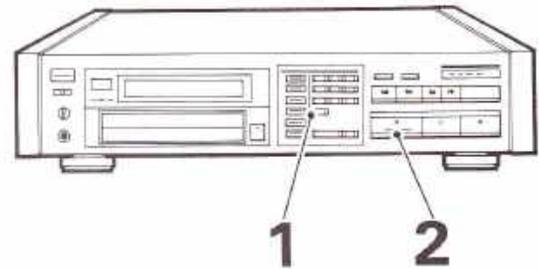
**Operation example**

- To play the third track on the fifth disc:

Key operations	Indicator display
DISC NO. key 5	5
TRACK NO. key 3	5 03
PLAY	5 03 00 01

- To play the 12th track on the first disc:

Key operations	Indicator display
DISC NO. key 1	1
TRACK NO. keys 1 2	1 12
PLAY	1 12 00 01



- 1 During playback or pause modes, select a disc number with a DISC NO. key and a track number with a TRACK NO. key.

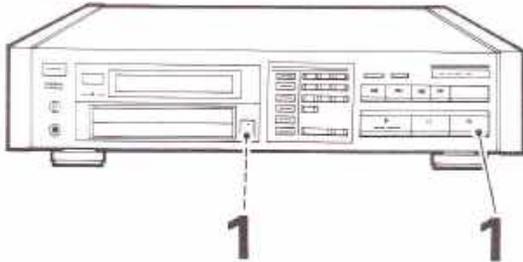
- If only a disc number is selected, playback will begin from the first track on the disc.
- If only a track number is selected, playback will begin from the specified track, on the disc which the player is currently playing or paused over.

- 2 Press the PLAY key to begin playback.

The selected number is cancelled after about 4 seconds in playback mode, so press the PLAY key within 4 seconds.

**NOTE:**

- When a track number of a track not on the disc is selected, playback starts from the first track.
- Playback cannot begin from the disc number of a magazine tray which does not contain a disc.
- Performing these operations during programmed playback causes the program to be cleared.
- Performing these operations during random playback causes random playback to be cancelled.
- Performing disc or track search operations is not possible while memorizing a program when player is stopped.

**TO STOP PLAYBACK**

- 1 Press the STOP key or the EJECT key.**
  - When the STOP key is pressed, the player enters stop mode. All operations stop, and the player is set to the position of the first track.
  - When the EJECT key is pressed, the magazine is also ejected.

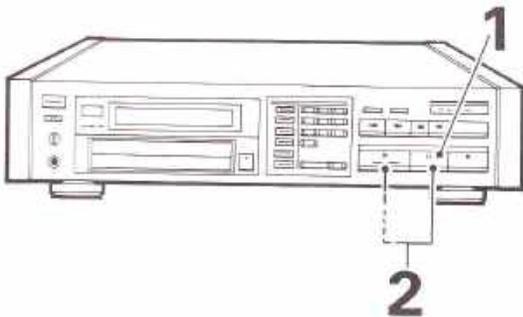
**PAUSE OPERATION****Operation example**

- To temporarily stop playback

PAUSE

- To resume playback

PAUSE or PLAY



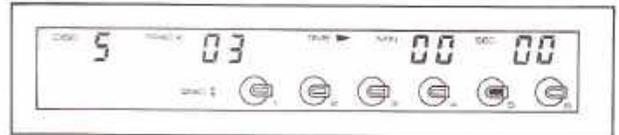
- 1 Press the PAUSE key**  
The PAUSE indicator will light, and the player will pause at the position at which it was playing.
- 2 To resume playback, press the PAUSE key again, or the PLAY key.**

**TO PAUSE AT THE START OF A TUNE****Operation example**

To pause at the beginning of the third track on the fifth disc:

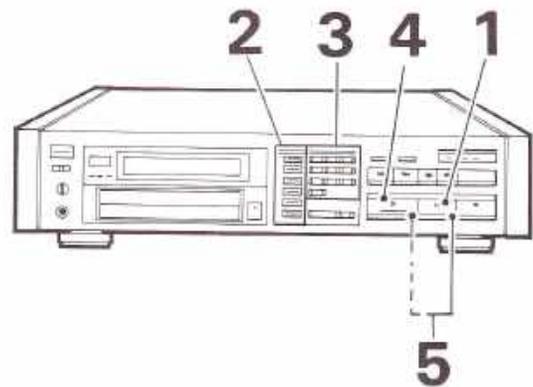
PAUSE → DISC NO. key 5 → TRACK NO. key 3

→ PLAY



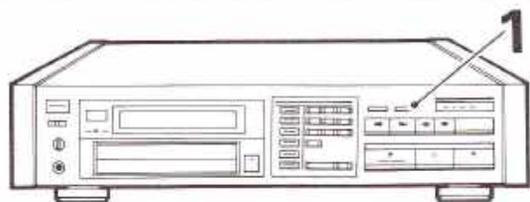
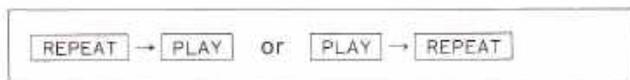
- To start playback:

PAUSE or PLAY



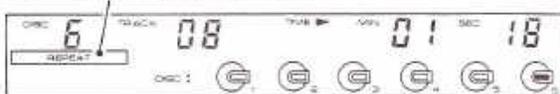
- 1 Press the PAUSE key.**
- 2 Select the disc number with a DISC NO. key.**
- 3 Select the track number with a TRACK NO. key.**
- 4 Press the PLAY key.**
- 5 To start playback, press the PAUSE key or the PLAY key.**

### OPERATIONS FOR REPEAT PLAYBACK



- 1 With the player in the play or stop mode, press the REPEAT key.

The REPEAT indicator will light.

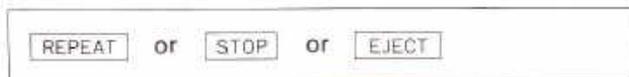


- 2 When the last track has been played back, playback will begin again from the first track.

Playback will be repeated until repeat playback is cancelled.

- During normal playback, all tracks on all discs in the magazine will be played back repeatedly. (All discs repeat)
- During programmed playback, the tracks programmed will be played back again in the order programmed. (Programmed repeat)
  - Programming of only one side — one-disc repeat
  - Programming of only one track — one-tune repeat
- When the RANDOM PLAY key is ON during normal playback, after all the tracks on the disc have been played at random, the same tracks will again be played at random (Random repeat).
- After all the programmed tracks have been played when the RANDOM KEY is ON during program play, program random play of the same tracks will continue (Program random repeat).

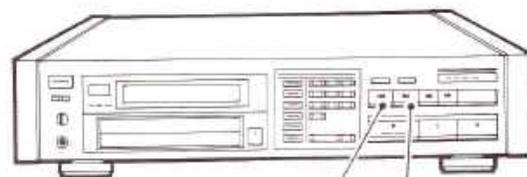
### TO CANCEL THE REPEAT MODE



- Press the REPEAT key once again. The REPEAT indicator will go out, and the player will revert to the normal (or programmed) playback mode.
- Press the STOP key or EJECT key. Playback will stop and the repeat mode will be cancelled simultaneously.

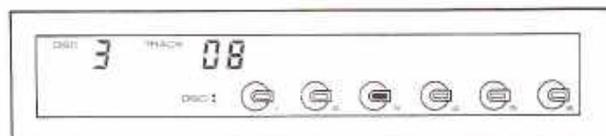
### TO LOOK FOR A DESIRED TRACK (TRACK SEARCH OPERATIONS)

During normal or programmed play, or during the pause mode, these functions allow you to quickly find the beginning of a desired track. Also, any number of tracks can be skipped during the search process when so desired.



- When the [ ] key is pressed once, the playback advances to the beginning of the next track. When pressed continuously, playback is advanced to further tracks. (During programmed play, playback advances to the beginning of the next programmed step.)
- When the [ ] key is pressed once, playback returns to the beginning of the currently playing track; when pressed continuously, playback returns to earlier tracks on the disc. (During programmed playback, playback returns to earlier programmed steps.)

The disc number and track number of the track currently being searched for will be displayed on the indicator; watch this indicator while searching for the desired track.

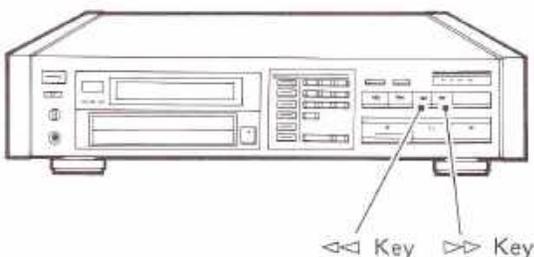


### FAST FORWARD AND FAST BACKWARD (MANUAL SEARCH OPERATIONS)

During playback or pause modes, this function allows you to quickly advance or reverse through the disc to find a desired track. Listen to the sound from your speakers or headphones while performing the search. (During playback mode only.) When the key is released the player returns to its original mode (playback or pause).

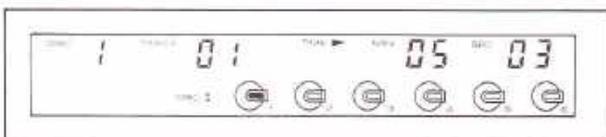
Comparison of fast advance and reverse speeds with playback speed.

- During playback mode: 20 x normal speed (sound is heard)
- During pause mode: 60 x normal speed (sound is not heard)



- When the [FF] key is pressed, the player will advance quickly through the disc. If the end of the disc is reached, the player will enter the pause mode. (The word 'End' will be displayed by the indicator.)
- When the [FF] key is pressed, the player will reverse quickly through the disc. If the beginning of the disc is reached, the player will enter the play mode.

During the search operation, the elapsed time will be displayed on the indicator; watch the indicator while searching for the desired track.

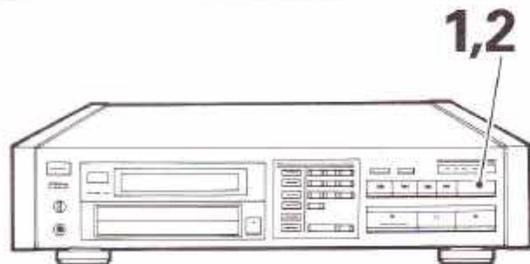


**NOTE:**

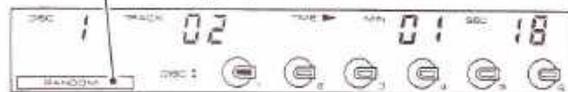
During programmed playback, the player can advance or reverse quickly only through the currently playing track. Also the player will enter the pause mode (or play mode) just before the next (or previous) track is reached. To resume playback, press the PLAY key.

### RANDOM PLAYBACK

- The player will select tracks at random from the disc set in the magazine for playback and play each track once (Random play). Playback stops when all tracks are played.
- When tracks are programmed, they are played only once in random order. Stops playing after all tracks are played. (Program random play)



- 1 Press the **RANDOM PLAY** key. Random playback will begin. (The **RANDOM** indicator will light)



- 2 Pressing the **RANDOM PLAY** key once more will have the player select track at random for playback.

#### When the REPEAT KEY is ON

Random play and programmed random play goes on continuously when this key is depressed.

#### To cancel random play operation

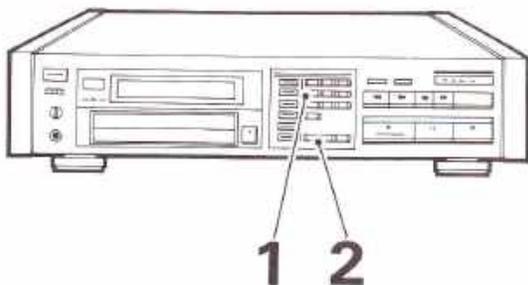


- Press the **STOP** key or the **EJECT** key. Playback will stop and random play operation will be cancelled simultaneously.
- Performing direct disc and track search operation for playback will also cancel random playback.

### TO PLAYBACK TRACKS IN A DESIRED ORDER (PROGRAMMED PLAYBACK)

- With this function, you can play back the tracks on the discs in the magazine in any order desired.
- By specifying disc numbers from 1 to 6, and track numbers from 1 to 99, you can select up to 32 steps for playback in any order you like.

#### Memorizing a program



- 1 During stop mode specify a disc with a DISC NO. key and a track with a TRACK NO. key.**
- 2 Press the PGM MEMORY key.**  
If the PGM MEMORY key is pressed after a disc number only has been specified, all tracks on the disc will be added to the program.
- 3 Repeat operations 1 and 2.**  
Repeat operations 1 and 2 for each track you want to be memorized, in the order in which you want the tracks to be played. The player can memorize up to 32 steps.

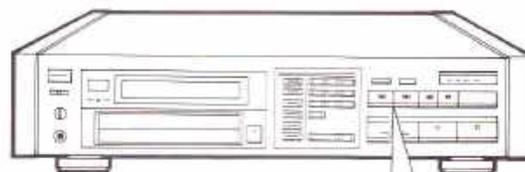
Each time you program a step, the indicator will display the program step and the programmed disc number and track number.

The figure below shows the display when track 5 on disc 2 is programmed as step 1.



The PROGRAM indicator lights.

#### Checking a program



Press TRACK SEARCH key during stop mode.

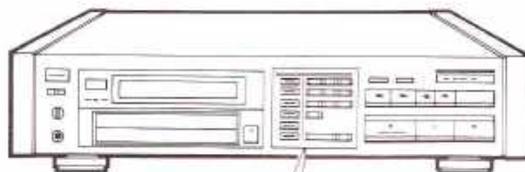
Each TRACK SEARCH key operation successively advances the player to the next programmed step which is shown on the display. (When the TRACK SEARCH keys are pressed after the last programmed step, 0 00 is displayed. Then the player goes back to the first step and shows the programmed steps all over again.)

The indicator displays the program step, programmed disc number, and programmed track number.



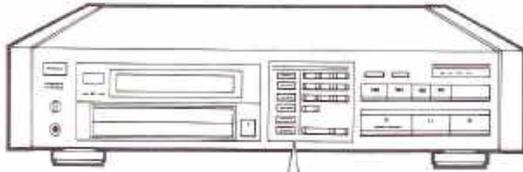
#### Revising a program

To revise program, press TRACK SEARCH key until program step to be changed is displayed, then input desired program step.



While checking the program, the program step that is currently displayed can be changed by pressing the PGM MEMORY, DISC NO. and TRACK NO. keys.

**NOTE:**  
When a program is made while the player is stopped, total program time will not be displayed. For total program time, see "Programming During Playback(Total Program Time)".

**Adding to a program**

When a program is being checked, new steps can be added at the end with the PGM MEMORY, DISC NO. keys and TRACK NO. keys. (When the last step has been reached, the indicator will display 0 00.)

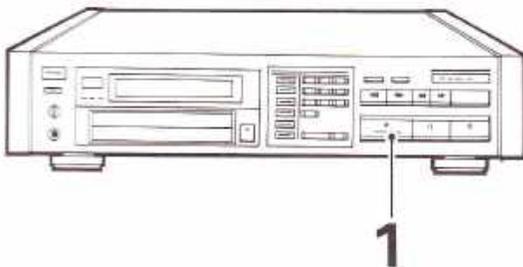
If fewer than 32 program steps have been input, additional program steps can be added at the end of the last program step, up to a total of 32 program steps. This can also be done during disc playback.

**Program Start**

[for ordinary program]

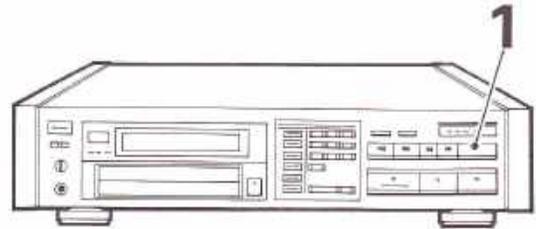
1. Press **PLAY** key to start playing in programmed order.
2. Play ends.

When the last programmed track ends, the player goes to stop mode at the first programmed track position.



[for random play]

1. Press **RANDOM PLAY** key for start.  
Plays only programmed tracks at random.
2. **Stops playing.**  
Becomes **STOP** mode after all programmed tracks are played.



- **When REPEAT mode is ON:**

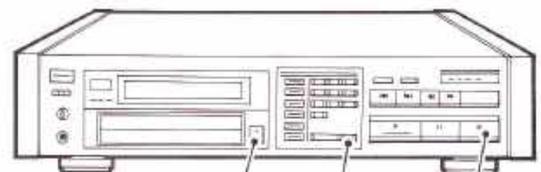
When the last programmed track ends, returns to the first programmed track to repeat the program.

(When **RANDOM PLAY** key is ON, only programmed tracks are played at random. Programs are repeated at random.)

Repeats playing until **REPEAT** key or **STOP** key is pressed.

- **Cancellation of programmed playback and clearing a program:**

- When the clear key is pressed during programmed playback, the program will be cancelled and the player will revert to normal playback. Program random play can also be cancelled with the clear key and the player will return to normal playback.
- When the eject key is pressed during playback, the magazine will be ejected and the program will be cleared.
- Carrying out operations for playback from a direct disc and track search will cause the program to be cleared.
- When the stop key is pressed, playback will stop but the program will not be cleared.



EJECT key CLEAR key STOP key

**Operation examples**

To playback track 5 on disc 2, track 3 on disc 5, and all of disc 3 in that order:

- Memorize the program:

Step	Key operations	Indicator display
0 1	DISC NO. <input type="text" value="2"/> TRACK NO. <input type="text" value="5"/> <input type="text" value="PGM MEMORY"/>	- 2 - 2 --- 05 - 2 --- 05 ---- P 01
0 2	DISC NO. <input type="text" value="5"/> TRACK NO. <input type="text" value="3"/> <input type="text" value="PGM MEMORY"/>	- 5 - 5 --- 03 - 5 --- 03 ---- P 02
0 3	DISC NO. <input type="text" value="3"/> <input type="text" value="PGM MEMORY"/>	- 3 - 3 --- RL ---- P 03

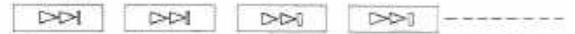
- Checking the program:

<input type="text" value="⏪"/>	— Step 01	- 2 --- 05 ---- P 01
<input type="text" value="⏩"/>	— Step 02	- 5 --- 03 ---- P 02
<input type="text" value="⏪"/>	— Step 03	- 3 --- RL ---- P 03
<input type="text" value="⏪"/>	— End of check	- 0 --- 00

- Revising the program:  
(To change step 02, from track 3 on disc 5, to track 4 on disc 1.)

<input type="text" value="⏪"/>	<input type="text" value="⏪"/>	- 5 --- 03 ---- P 02
DISC NO. <input type="text" value="1"/>		- 1
TRACK NO. <input type="text" value="4"/>		- 1 --- 04
<input type="text" value="PGM MEMORY"/>		- 1 --- 04 ---- P 02

- Adding to the program:  
(To add track 10 of disc 2, and track 2 of disc 6.)



(Press until disc and track numbers 0 00 are displayed.)

		- 0 --- 00
DISC NO. <input type="text" value="2"/>		- 2
TRACK NO. <input type="text" value="10"/>		- 2 --- 10
<input type="text" value="PGM MEMORY"/>		- 2 --- 10 ---- P 04
DISC NO. <input type="text" value="6"/>		- 6
TRACK NO. <input type="text" value="2"/>		- 6 --- 02
<input type="text" value="PGM MEMORY"/>		- 6 --- 02 ---- P 05

- To start play:

<input type="text" value="PLAY"/>	— ordinary program
<input type="text" value="RANDOM PLAY"/>	— random program play

- To cancel playback and clear the program:

<input type="text" value="CLEAR"/>	— Clears the program.
<input type="text" value="EJECT"/>	— Stops playback and clears the program.
<input type="text" value="STOP"/>	— Playback stop (program left intact).

## TO PROGRAM A PAUSE OPERATION (OPERATIONS FOR PAUSE PROGRAM)

During programmed playback, these operations cause the player to pause at the beginning of tracks for which a pause has been specified.

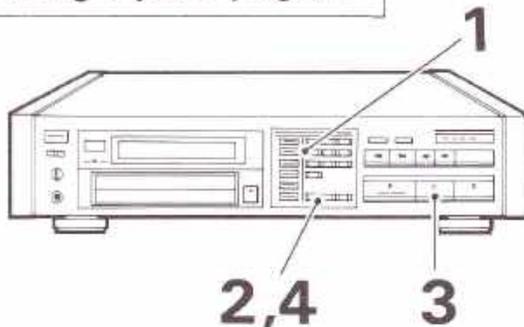
Application Example 1:

When recording on both sides of a cassette tape, programming for a pause to occur after the completion of the last track, before the first side of the tape runs out, will enable recording of the next track to begin, after the tape has been turned over.

Application Example 2:

When recording on tape, programming for pauses to occur between tracks, will allow blank intervals or narration to be recorded on the tape, after which recording can be resumed.

### Memorizing a pause program



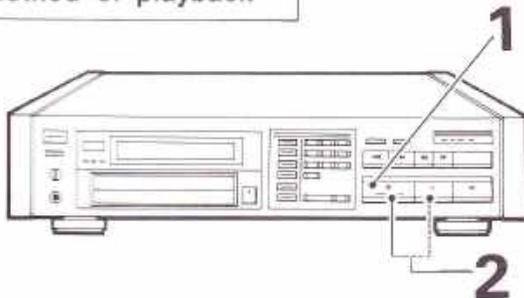
- 1 Select disc and track numbers.
- 2 Press the PGM MEMORY key.
- 3 Press the PAUSE key.

Operations 3 and 4 should be used only before those tracks before which a pause is desired.

- 4 Press the PGM MEMORY key.  
Programming another track by repeating operation 1 will result in a pause occurring during playback before the track is played back.

- 5 Repeat operations 1 to 4  
Up to 32 steps can be programmed.

### Method of playback



- 1 Press the PLAY key to begin playback.  
The player will pause at the beginning of the track before which a pause has been specified.
- 2 To resume playback, press the PLAY key or PAUSE key.

### Operation example

To program the player to playback track 5 on disc 2, track 3 on disc 5, and track 8 on disc 3, and to pause at the beginning of track 8 on disc 3 after playing back track 3 on disc 5:

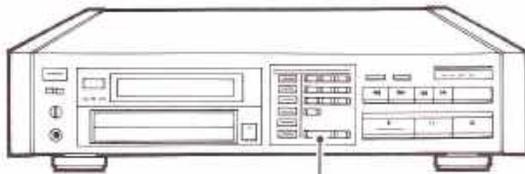
- Memorize the program:

Step	Key operations	Indicator display
0 1	DISC NO. key [2] TRACK NO. key [5] PGM MEMORY	- 2 - 2 - 05 - 2 - 05 P 01
0 2	DISC NO. key [5] TRACK NO. key [3] PGM MEMORY	- 5 - 5 - 03 - 5 - 03 P 02
0 3	PAUSE PGM MEMORY	- 5 - 03 P 02 The PAUSE indicator lights. - - - PR - - - P 03 The PAUSE indicator goes out.
0 4	DISC NO. key [3] TRACK NO. key [8] PGM MEMORY	- 3 - 3 - 08 - 3 - 08 P 04

- To start and resume playback:

PLAY ..... Player stops after playing track 3 on disc 5.  
PLAY or PAUSE ..... Player resumes programmed playback.

**PROGRAMMING DURING PLAYBACK (Total Program Time)**



PGM MEMORY key

When the program key is pressed during playback, the currently playing track will be programmed (Direct program).

When the track number is selected with the TRACK NO. key and the program key is pressed, the track number on the currently playing disc will be programmed. Since total program time is displayed for 5 seconds, it is particularly useful for tape editing. To program tracks on other discs, press the disc number key to put the disc to be programmed in playback mode.

Displays disc number, track number, and total programmed time for about 5 seconds when programming.

**NOTE:**

- Direct programming not available during ordinary programming play or random play.
- Programming and total time display not available in the following cases.
  - When total programming time exceeds 100 minutes.
  - When track number which over 31 is programmed.

**Operation Examples:**

Search and program 3rd track on Disc 2, 1st track on Disc 3, PAUSE, and 5th track on Disc 1, with total time display.

● Programming:

Procedures	Key Operation	Indicator Display
1	Press DISC No. <b>2</b>	2
2	Press <b>PLAY</b> (start playing Disc 2)	2 01 01 05
3	Press TRACK No. <b>3</b>	2 03
4	Press <b>PGM MEMORY</b>	2 03 04 13
5	Press DISC No. <b>3</b> (start playing Disc 3)	3 01 01 27
6	Press <b>PGM MEMORY</b> (direct program)	3 01 12 24
7	Press <b>PAUSE</b>	
8	Press <b>PGM MEMORY</b> (restart playing)	PR 12 24
9	Press DISC No. <b>1</b> (start playing Disc 1)	1 01 00 15
10	Press TRACK No. <b>5</b>	1 05
11	Press <b>PGM MEMORY</b>	1 05 16 54

● To start programmed track, press

**STOP** → **PLAY**

**TIMER PLAY**

This function will automatically start playback when the power to the player is turned on. With an audio timer, playback can start at a designated time.

1. Turn the **TIMER PLAY** switch to **[NORM]** or **[RANDOM]**.

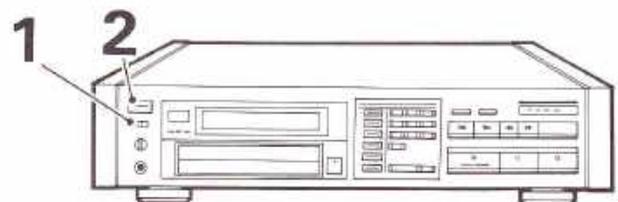
**[NORM]** Playback will start from the first track on the first disc.

**[RANDOM]** Tracks from the discs set in the magazine will be played back at random.

2. Turn power ON.
3. Set starting time on Audio Timer. (Power turned OFF automatically.)

**NOTE:**

- Turn power ON when setting Audio Timer.



# OPERATION WITH REMOTE CONTROL UNIT

Remote control unit enables various key function operations from a distance.

Remote control unit enables the following functions.

- Programming into memories A to H on remote control unit.
- Transmit programs in A to H to player.
- Adjust reproduction volume of compact disc.

## Normal Remote Control Operation

Normal remote control operation is possible when all the A - H memory symbols are lit on the remote control unit display. (Key operations on the remote control unit will be transmitted to the player.)

DISC NO., TRACK NO., PLAY, RANDOM PLAY, PAUSE and LEVEL key can all be displayed on the indicator.

To change displayed disc number and track number, press DISC NO. and TRACK NO. keys again.

## DIGITAL LEVEL CONTROLLER

By pressing the LEVEL - and + keys the digital circuit will control the level(volume) in 1 dB steps from 0 dB to - 25 dB.

- Raise the volume by pressing the + level key. (At 0 dB the level is not changed.)
- Lower the volume by pressing the - level key. (When pressed continuously, it will stop at -25 dB.)

The DIGITAL LEVEL CONTROLLER indicator and the SEC display will show the following indications. (Digital level controller indicator)

- 0 : lights when the level is 0 dB
- 6 : lights when the level is between 0 — -6 dB
- 12 : lights when the level is between 0 — -12 dB
- 24 : lights when the level is between 0 — -24dB

### Player display

The level will be indicated for two seconds when the key is pressed.

When the level is -12 dB, it will be displayed as follows.

Minute section	Second section
12	12

The level is 0 dB when the power is turned on and should be normally be used it in this condition. The digital level controller can be used to modify the output level for the rear terminals as well as the headphone jack.

## PROGRAMMING, TRANSMISSION, START OF PLAYBACK

1. Press MEMORY keys A - H.  
Make sure that selected memory indicator lights.
2. Select DISC No. key and TRACK No. key.
3. Press PGM MEMORY key.
4. Repeat operations 2 and 3.
5. Proceed as described in 1 - 4 above to program the other memories, too.

### NOTE:

- Each memory has a capacity of 32 steps and the total memory capacity of the remote control unit is 80 steps. Any steps programmed in excess of memory capacity will not be memorized. (When the 80 step memory capacity is exceeded, the indicator will show an "Err" message.)
- Operations to add, correct and clear programs are the same as for player operations.
- When the memory is being read and a program is being input, commands by pressing the remote control keys will not be transmitted to the player. To control the player, the memory write mode will first have to be cancelled. ( To enter a program in memory B, press key B.) Press the B key after the player has been controlled and the remote control unit will again be in memory write mode.

## Transmission to Player and Start of Playback

6. Press MEMORY key (A-H) to be transmitted.

Make sure that selected memory indicator lights.

7. Press TRANS key.

During program transmission (the indicator is flashed), the remote control unit should be aimed at the player.

### NOTE:

- If there are obstacles in the way, the distance too great or the angle between the player and the remote control unit is not appropriate, transmission may not be possible.
- The program stored in the player will then be cleared, and the player will enter the stop mode.
- During transmission, keys other than the RANDOM PLAY and PLAY keys cannot be use.

8. Press PLAY or RANDOM PLAY key to start.

### Operation Examples:

The example shows how to program track 3 on disc 2, track 1 of disc 3, a pause and track 5 of disc 1 in memory B.

- Programming

Step	Key Operation	Indicator Display
	Press MEMORY <b>B</b>	MEMORY <b>B</b>
01	Press DISC NO. <b>2</b> Press TRACK NO. <b>3</b> Press <b>PGM MEMORY</b>	DISC <b>2</b> DISC <b>2</b> TRACK <b>03</b> STEP <b>01</b> DISC <b>2</b> TRACK <b>03</b>
02	Press DISC NO. <b>3</b> Press TRACK NO. <b>1</b> Press <b>PGM MEMORY</b>	DISC <b>3</b> DISC <b>3</b> TRACK <b>01</b> STEP <b>02</b> DISC <b>3</b> TRACK <b>01</b>
03	Press PAUSE Press <b>PGM MEMORY</b>	DISC <b>3</b> DISC <b>3</b> TRACK <b>01</b> STEP <b>03</b> DISC <b>3</b> TRACK <b>PA</b>
04	Press DISC NO. <b>1</b> Press TRACK NO. <b>5</b> Press <b>PGM MEMORY</b>	DISC <b>1</b> DISC <b>1</b> TRACK <b>05</b> STEP <b>04</b> DISC <b>1</b> TRACK <b>05</b>

- Press **TRANS** to transmit.
- Press **PLAY** to start.

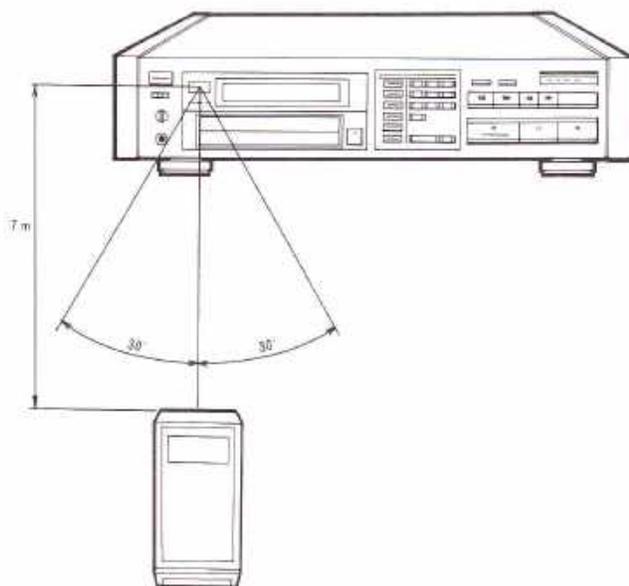
**CAUTIONS REGARDING USE OF REMOTE CONTROL UNIT**

If use is made of the supplied remote control unit, the functions explained so far can be operated from a distance.

To use the remote control unit, aim it at the remote sensor on the front panel of the player.

The operating range of the remote control unit, is up to about 7 m from, and within angles of 30 degrees left and right of the sensor window on the player.

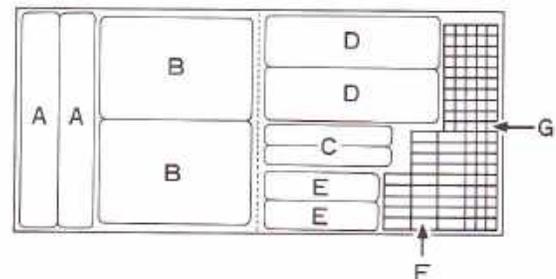
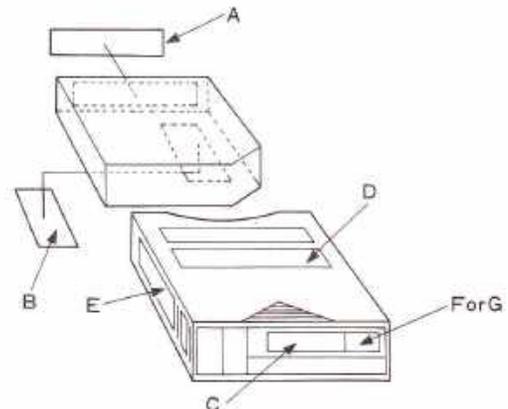
- Even when the remote control unit is operated within the specified operating range, operation may not be successful if there are obstacles between the unit and the player, or if the unit is not correctly aimed at the player.
- Use of the player near a device which emits infrared rays, or use of another remote control unit which emits infrared rays, may result in misoperation of the player. On the other hand, use of the remote control unit of the player when another device controlled by means of infrared rays is being used, may cause misoperation of that device.
- The life of the batteries used in the remote control unit will vary greatly depending on operating conditions. When they begin to run down, the remote control unit indicators will go black, the operating range will be reduced and the memory in the remote control unit may be cancelled. Consequently, the batteries should promptly be changed when the battery indicator starts to flash.

**MAGAZINE****CAUTIONS REGARDING HANDLING OF MAGAZINES**

- When inserting a magazine into the player, make sure that the direction of insertion is correct.
- After use, store in the case provided. Do not place in locations subjected to high temperatures or exposed to direct sunlight.
- Do not take magazines apart.
- Be careful not to drop, or hit magazines against things. Also, do not apply strong force to trays which have been withdrawn.
- Application of benzene, thinner, insecticide or other volatile liquids to a magazine may damage the surface, so keep magazines away from such substances.

**AFFIXING LABELS TO 6 DISC MAGAZINE**

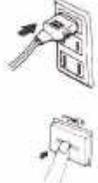
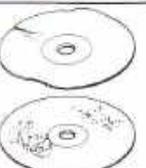
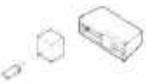
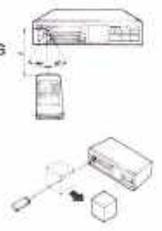
- When affixing the supplied labels, make sure to affix them to the specified positions. If labels or tape are affixed to other than the specified positions, the magazine and player may not operate correctly.



- Each label can be conveniently used as follows:
  - A: Titles
  - B: Names of stored discs and tracks
  - C: Titles
  - D: Names of stored discs
  - E,G,F: Classification
- Do not affix one label on top of another. (However, F and G may be affixed on top of label C.)

# TROUBLESHOOTING

Unnoticed operating errors are often mistaken for faults and malfunctions. If you think that something is wrong with this component, please check out the points below. Sometimes, the trouble may lie in another component. Investigate the other components and electrical appliances being used. If the trouble cannot be rectified even after checking each item below, and you have read the operating instructions for your stereo amplifier, ask your nearest PIONEER authorized service center or your dealer to carry out repair work.

Symptom	Probable cause	Remedy
Magazine is not expelled when EJECT key is pressed.	<ul style="list-style-type: none"> <li>● Power plug is disconnected from outlet</li> <li>● POWER switch is OFF.</li> </ul> 	<ul style="list-style-type: none"> <li>● Connect plug to amplifier or wall outlet.</li> <li>● Press POWER switch ON.</li> </ul> 
When playback is started, it stops immediately. Pauses or stops during playback.	<ul style="list-style-type: none"> <li>● Disc is loaded upside down.</li> <li>● Smudges on the disc, etc.</li> </ul>	<ul style="list-style-type: none"> <li>● Load the disc correctly with the label side DOWN.</li> <li>● Press the PLAY or PAUSE key.</li> </ul> 
No sound	<ul style="list-style-type: none"> <li>● Output cords are connected incorrectly or loosely.</li> <li>● Incorrect operation of stereo amplifier.</li> <li>● Pin plugs and/or amplifier terminals are dirty.</li> <li>● Player is in pause mode.</li> </ul>	<ul style="list-style-type: none"> <li>● Connect properly.</li> <li>● Check the settings of amplifier switches and sound volume controls.</li> <li>● Clean away dirt.</li> <li>● Press the PLAY key.</li> </ul> 
Sound is distorted, noise is output.	<ul style="list-style-type: none"> <li>● Incorrect connections.</li> <li>● Pin plugs and/or amplifier terminals are dirty.</li> <li>● Interference is being picked up from a TV set.</li> </ul>	<ul style="list-style-type: none"> <li>● Connect to amplifier's AUX or CD terminals. Do not connect to PHONO terminals.</li> <li>● Clean away dirt.</li> <li>● Switch OFF TV set, or move player away from TV set.</li> </ul> 
With certain discs, loud noise is produced, or play stops.	<ul style="list-style-type: none"> <li>● Disc has bad scratch or warp.</li> <li>● Disc is extremely dirty.</li> </ul> 	<ul style="list-style-type: none"> <li>● Replace the disc.</li> <li>● Clean disc.</li> </ul> 
Remote control will not function	<ul style="list-style-type: none"> <li>● Dead batteries.</li> <li>● A program is being entered in the remote control unit memory.</li> <li>● Too far from player or wrong angle.</li> <li>● Obstruction between player and remote control unit.</li> </ul> 	<ul style="list-style-type: none"> <li>● Replace batteries.</li> <li>● Press the same memory key.</li> <li>● The distance between remote control unit and player should be no more than about 7 meters. The operational angle against the front panel is within 30° from right or left end of player.</li> <li>● Relocate remote control unit or remove obstruction.</li> </ul> 
Program cannot be transmitted from the remote control unit.	<ul style="list-style-type: none"> <li>● The batteries have run down.</li> <li>● The distance between the remote control unit and the player is too great or the angle not appropriate.</li> <li>● Obstacles between the player and the remote control unit.</li> <li>● There are no programs in the memory.</li> </ul>	<p>See "Remote control will not function" above.</p> <ul style="list-style-type: none"> <li>● Enter program.</li> </ul>

# SPECIFICATIONS

## 1. General

Type.....Compact disc digital audio system  
Usable discs.....Compact Disc  
Signal format.....Sampling frequency: 44.1 kHz  
Sampling bit number: 16 bit linear  
Power requirements  
U.S., Canadian models.....AC 120 V, 60 Hz  
Other models.....AC 110/120—127/220/240 V  
(switchable) 50/60 Hz  
Power consumption  
U.S., Canadian models.....23 W  
Other models.....23 W  
Operating temperature.....+5 °C — +35 °C  
Weight.....6.8 kg (15 lb)  
External dimensions...457(W) x 315(D) x 104(H) mm  
18(W) x 12-13/32(D) x 4-1/8(H) in

## 2. Audio section

Frequency response.....4 Hz - 20 kHz ( $\pm 0.5$  dB) (EIAJ)  
S/N ratio.....more than 100 dB(EIAJ)  
Dynamic range.....more than 96 dB(EIAJ)  
Channel separation.....more than 93 dB(EIAJ)  
Harmonic distortion.....less than 0.0035 % (EIAJ)  
Output voltage.....2.0 V  $\pm 0.5$  V (EIAJ)  
Wow and flutter.....less than ( $\pm 0.001$  %W.PEAK)  
(below measurable level)(EIAJ)  
Channels.....2-channel (stereo)  
Digital output.....0.5 Vp-p  
(75  $\Omega$  for output of coaxial cable)

## 3. Output Terminal

Audio line output  
Headphone jack(includes volume control)  
AC outlet  
Subcode output terminal  
Digital output

## 4. Functions

Number of discs to be stored — maximum 6.  
Basic operation keys  
● PLAY, PAUSE, STOP  
Search function  
● Disc selection (6 keys) ● Manual search  
● Track selection (10 keys) ● Track search  
Programming  
● Maximum 32 steps ● Program check/change  
● Pause ● Program clear  
● Direct programming  
Repeat functions  
● All discs repeat ● 1 disc repeat (with program)  
● Program repeat ● Track repeat (with program)

## Random Play

- Random play
- Program random play (repeat also available)

## Switching display

- Time consumed, remaining time, and total time

## Timer Play functions

with NORM/RANDOM/OFF switching

## Digital Level Controller

Volume control available with remote control unit

## Remote control unit for program transmission

- Enables program transmission from remote control unit to player.
- LCD display
- Transmission indicator
- Battery indicator
- Memory backup function

## 5. Display

### FL tube display

- Passing time display (min, sec)-
- Remaining time display
- Total time display
- Disc number, track number
- Program step number
- Program indicator
- Repeat indicator
- Random play indicator
- Accumulated program time display

### Main unit

- Play LED, Pause LED
- Remote control answer LED
- Digital level controller LED

## 6. Accessories

- Remote control unit.....1
- size AA (R6) dry batteries.....2
- Six-compact-disc magazine.....1
- Single-compact-disc magazine.....1
- Output cable.....1
- Operating instructions.....1

### NOTE:

Specifications and design subject to possible modification without notice, due to improvements.

The Magazine Type Compact Disc Players with  mark and the magazines with the same mark are compatible.

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