SONY

# MDP-210
# MDP-322GX

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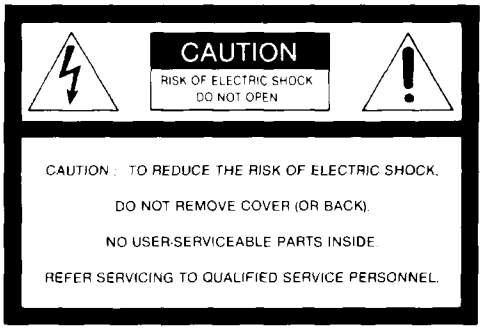
# Owner's Record

The model number is located at the rear. The serial number is located on the top panel. Record the serial number in the space provided below.
Refer to them whenever you call upon your Sony dealer regarding this product.

Model No. _____ Serial No. _____

# WARNING

**To prevent fire or shock hazard, do not expose the unit to rain or moisture.**



This symbol 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.

This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

## INFORMATION

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

Reorient the receiving antenna
*Relocate the equipment with respect to the receiver*
Move the equipment away from the receiver
Plug the equipment into a different outlet so that equipment and receiver are on different branch circuits.

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

## CAUTION

The use of optical instruments with this product will *increase eye hazard.*

As the laser beam used in this videodisc player is harmful to the eyes, do not attempt to disassemble the cabinet. Refer servicing to qualified personnel only.

## CAUTION:

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

## NOTICE FOR THE CUSTOMERS IN CANADA

This apparatus complies with the Class B limits for radio noise emissions set out in Radio Interference Regulations.

# Contents

This manual covers the MDP-210 verified to the FCC rules and available in the U.S.A. and Canada, the MDP-322GX available in other countries and the MDP-322GX tourist model. Operations are the same regardless of the model name. Specifications vary only with regard to power requirements and AC outlet on the unit.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# Precautions

**On safety**

- Should any solid object or liquid enter the cabinet, unplug the unit and have it checked by qualified personnel before operating it any further.
- Unplug the unit from the wall outlet if it is not to be used for an extended period of time.
  To disconnect a cord, pull it out by the plug. Never pull the cord itself.
- One blade of the plug is wider than the other for the purpose of safety and will fit into the power outlet only one way. If you are unable to insert the plug fully into the outlet, contact your dealer.

**On installation**

- Avoid placing the player in a location subject to:
  —high humidity
  —high temperature
  —excessive dust
  —mechanical vibration
  —direct sunlight
- Allow adequate air circulation to prevent internal heat buildup. Do not place the unit on surfaces (rugs, blankets, etc.) or near materials (curtains, draperies) that may block the ventilation holes.

**On moisture condensation**

- Do not operate the unit right after having transported it from a cold location to a warm location or in a room where the temperature rises suddenly, because moisture may condense in the operating section of the unit. Wait for about an hour before turning the power on in the new location or keep the rise in room temperature gradual. If the unit is operated with moisture condensation, the unit and the disc may be damaged. Therefore remove the disc immediately when there is a possibility of moisture condensation and no picture is obtained. To evaporate the moisture rapidly, leave the player turned on without a disc loaded.

**On operation**

- Remove the disc from the tray after playing it, if the unit will not be used for any length of time. Do not transport the set with a disc in place.
- When the disc tray is in the open position, do not press down on it strongly, or place heavy objects on it.

**On cleaning**

Clean the cabinet, panel and controls with a dry soft cloth, or a soft cloth lightly moistened with a mild detergent solution. Do not use any type of solvent, such as alcohol or benzine, which may damage the finish.

**On repacking**

Do not throw away the carton and the packing material. They make an ideal container to transport the unit in.

If you have any question or problem concerning your unit, please contact your nearest Sony dealer.

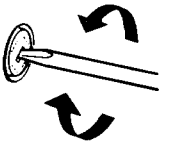
# Operating Voltage

Before operating the unit, be sure that the operating voltage of your unit is identical with that of your local power supply.

MDP-210: 120 V AC, 60 Hz.
MDP-322GX: 100, 120, 220, 240 V AC, 50/60 Hz.
MDP-322GX tourist model: 120, 220, 240 V AC, 50/60 HZ.

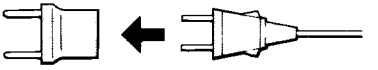
For the MDP-322GX, the voltage selector is located at the rear.

If the selector must be reset, **disconnect the AC power cord** and turn the selector with a minus screwdriver so that the arrow on the selector points to the appropriate voltage.



**How to use the AC power plug adaptor (supplied with the MDP-322GX)** E016SI

If the AC plug of your unit does not fit the wall outlet, attach the supplied AC plug adaptor.

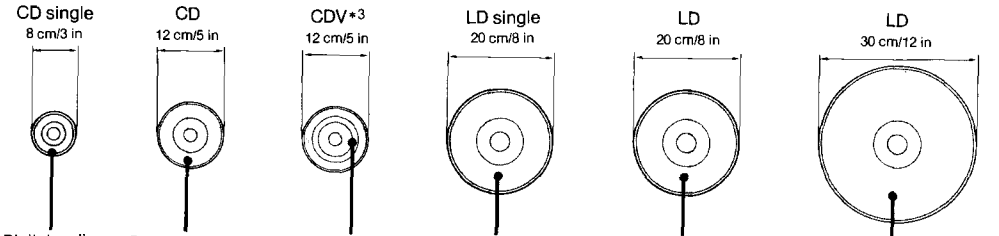


**For the customers in the USA**

For detailed safety precautions, see the leaflet "IMPORTANT SAFEGUARDS".

# Features

**This CD VIDEO System CD/CDV/LD Player*1 can play all six types of optical discs currently available for home entertainment use:*2**




**The following functions are available with this unit.**
**For the CDV disc, CD functions can be used on the audio portion and LD functions can be used on the video portion.**

## LD/CD/CDV

- **Custom index**
  Specify up to six index marks at any point on the disc, for convenient playback start at the push of a button.
- **Program play**
  Play back chapters or tracks in any desired order.
- **Shuffle play**
  Play all selections on a disc in random order.
- **Auto disc protection**
  Prevents damage to the disc during playback stop, etc.
- **AV calendar display**
  Shows the number of tracks (up to 20) on a disc and the total playing time at a glance.

## LD/CDV (Video Portion)

- **Variable speed playback**
  11 speed settings for normal and reverse playback, step (frame-by-frame) playback and high-quality freeze-frame.
- **Memory stop (LD only)**
  Resume playback from the last scene viewed.
- **Clear visual scan**
  Fast scan without picture distortion even on CLV discs.

## CDV

- **CDV button**
  Permits quick switching between the video and audio portion of a disc.
- **Video portion**
  All LD functions are available.
- ***Audio portion***
  All CD functions are available.

*1 "CD VIDEO system" refers to all hardware that combines the features of a CD player and an LD player in one unit and is able to play CDV discs.

CD VIDEO

*2 This unit plays back discs with any of the following logos on the label.

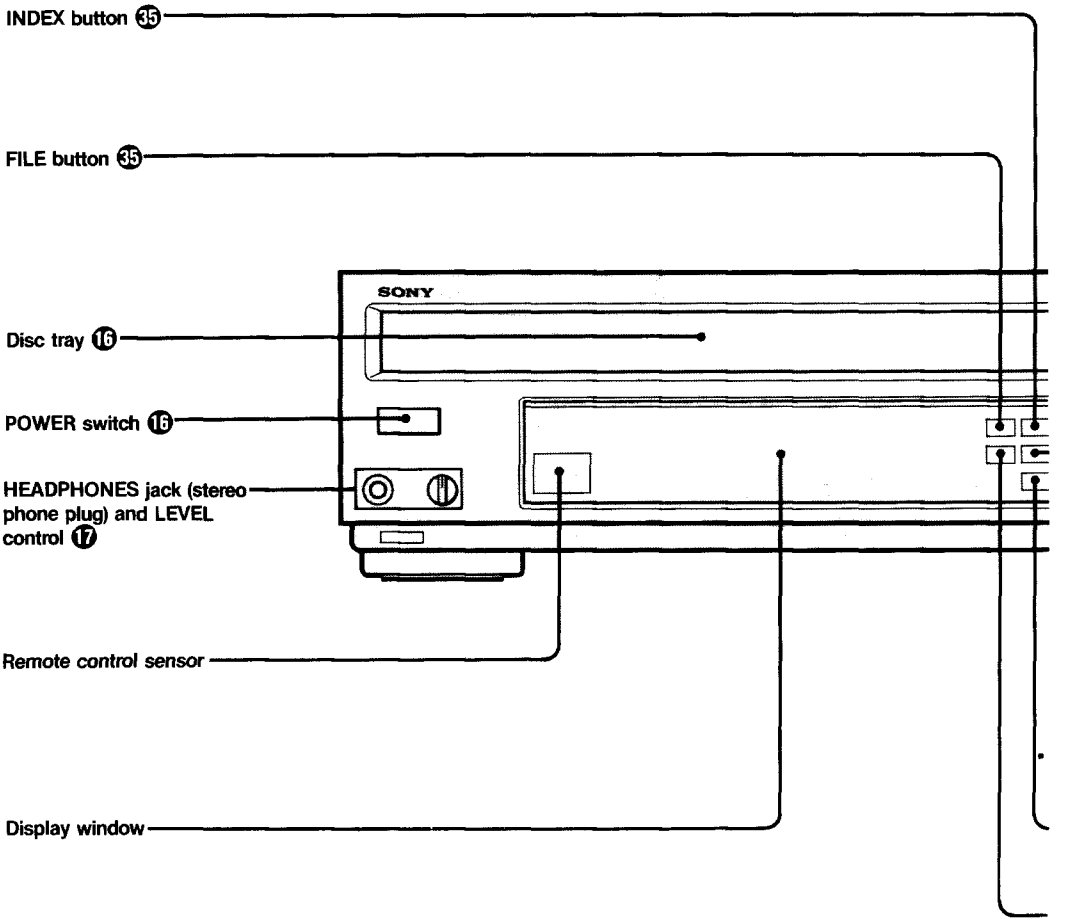
CD VIDEO LaserVision COMPACT disc DIGITAL AUDIO digital SOUND

- It cannot playback CED or VHD discs or discs with PAL, SECAM, or video signals other than the NTSC standard.

*3 The Compact Disc Video (CDV) format divides a CD into two sections. One is 20 minutes of digital audio playable on any CD player. The other, 5 minutes of video and digital audio, requires a CDV player.

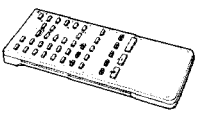
# Location and Function of Controls

## Front panel



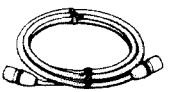

**Accessories** The shipping box should contain the following accessories.

RMT-322A Remote Commander



Coaxial cable with F-type connector

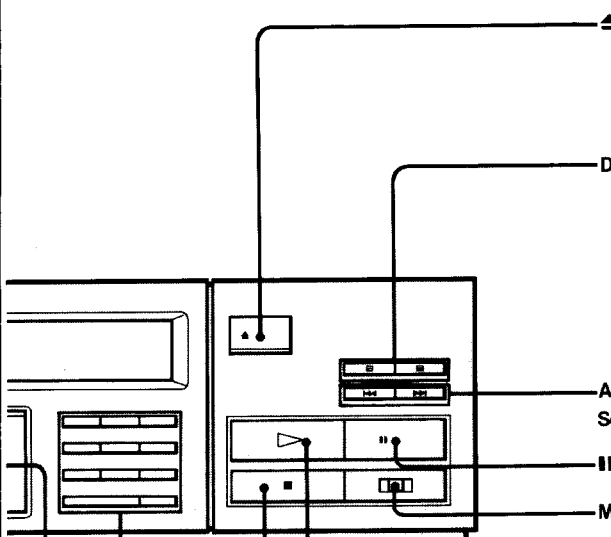
for MDP-322GX



for MDP-210

External antenna connector

for MDP-322GX only



▲ Disc tray OPEN/CLOSE button

DUAL SPEED ⏪/⏩ buttons ㉒, ㉙

ACS/AMS ⏮/⏭ (Automatic Chapter/Music Sensor) buttons ㉓, ㉙

❚❚ Pause button

MEMORY STOP switch ⑱

▶ Play button

■ STOP button ⑱

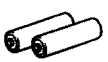
Number and file search buttons

CDV (video/audio selector) button ⑯

🔁 Repeat button ㉗, ㉛
Press to repeat the entire disc side

AV TIME button ㉚

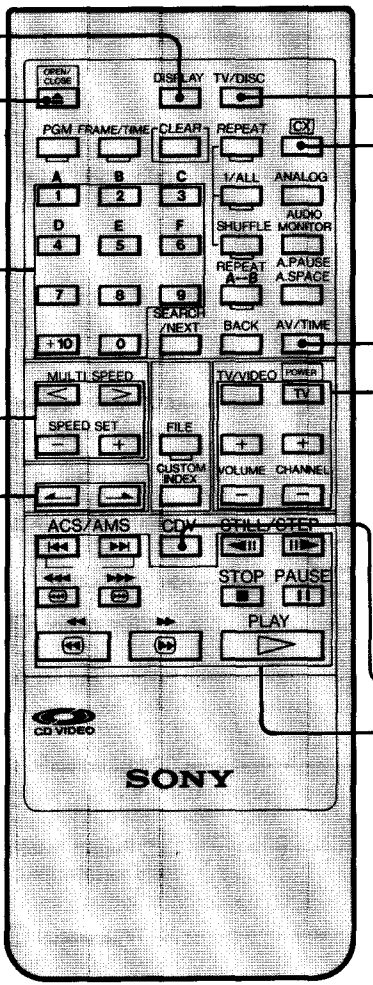
**Two size AA (R6) batteries**



**Video connecting cord (phono 1 ⟷ phono 1)**

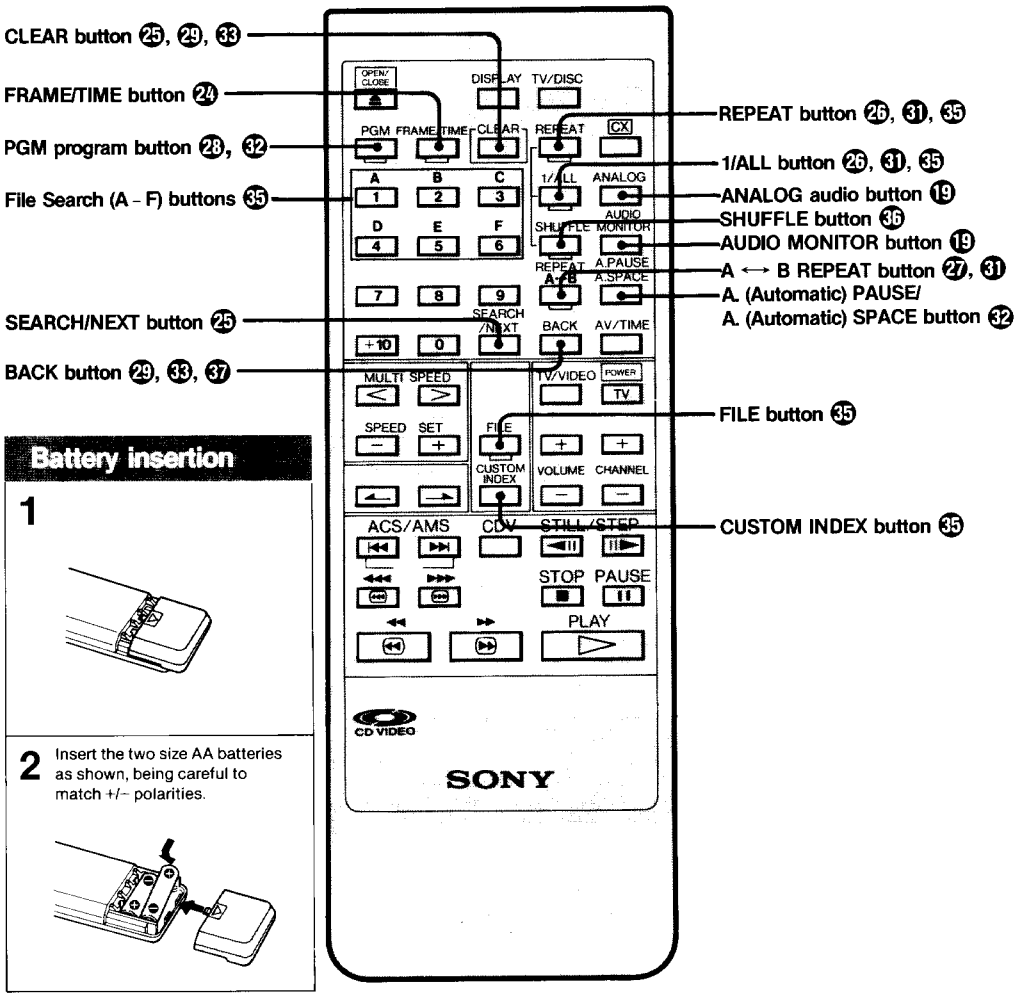
**Audio connecting cord (phono 2 ⟷ phono 2)**

## Remote Commander




### Remote Commander Precautions

- Do not let sunlight or light from a powerful artificial light source fall directly on the Remote Commander sensor on the front panel as it may interfere with operation or damage the sensor.
- Connecting the Control S input jack on the rear of the unit to the Control S output jack on a TV set or other piece of equipment deactivates the sensor on the front and shifts operation to the sensor on the other equipment. In this case, point the Remote Commander at the latter equipment's sensor and not at the disc player.




## Battery insertion

**1**



**2** Insert the two size AA batteries as shown, being careful to match +/– polarities.



**Battery life**

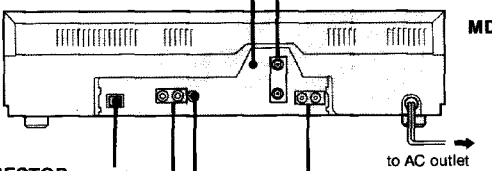
In normal operation, batteries will last for about six months. If the operating range of the Remote Commander becomes noticeably short, replace the batteries with new ones.

If the Remote Commander is not to be used for a long period of time, remove the batteries to avoid possible damage from battery leakage.

# Rear Panel

**RF channel selector**
Use this to change the VHF channel.

**VHF IN/OUT terminals (F-type)**
The VHF OUT terminal provides only monaural output.



**MDP-210**

to AC outlet

**DIGITAL OUTPUT CONNECTOR** (optical)
This jack permits optical fiber connection to an amplifier or D/A converter unit with optical input. *For connection, use the optional audio fiber cable* POC-15.

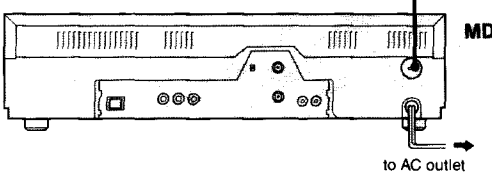
**AUDIO OUT jacks** (phono jacks)
Connect to the audio input jacks of a TV set or the AUX input jacks of an amplifier. The output signal is the same—that is, digital or analog—as that recorded on the disc.

**VIDEO OUT jack** (phono jack)
Connect to the video input jack of a TV set or VCR.

**CONTROL S IN/OUT jacks** (mini jacks)
Connect the IN jack to the CONTROL S OUT jack on a TV set and the OUT jack to the CONTROL S IN jack on a VCR.
- These connections permit the control of the player and the VCR using the remote sensor on the TV.
- Attaching the CONTROL S IN jack to the CONTROL S OUT jack on a TV set with the RK-G69 connecting cord (optional) allows you to operate the player by pointing the Remote Commander at the TV set instead of at the player.

Input/output terminals for the MDP-322GX are identical to those of the MDP-210. The only differences are that the MDP-322GX has a voltage selector and no AC outlet.

**Voltage selector**
(See page 4)



**MDP-322GX**

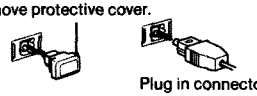
to AC outlet

**Connection Precautions**

- Make sure that all equipment is OFF before connecting or disconnecting any cables.
- *Check the color of the plugs: yellow indicates video; white, left* audio channel; red, right audio channel.
- Firmly insert the plugs into the jacks. A loose connection can lead to noise.
- When unplugging a cable, grasp the plug. Never pull on the cable.
- To prevent interference, turn off all equipment that is connected, but not currently in use.
- If there is noise in the audio or video output, try moving the equipment further apart.
- Connection methods differ. When in doubt, consult the manufacturer's manual.

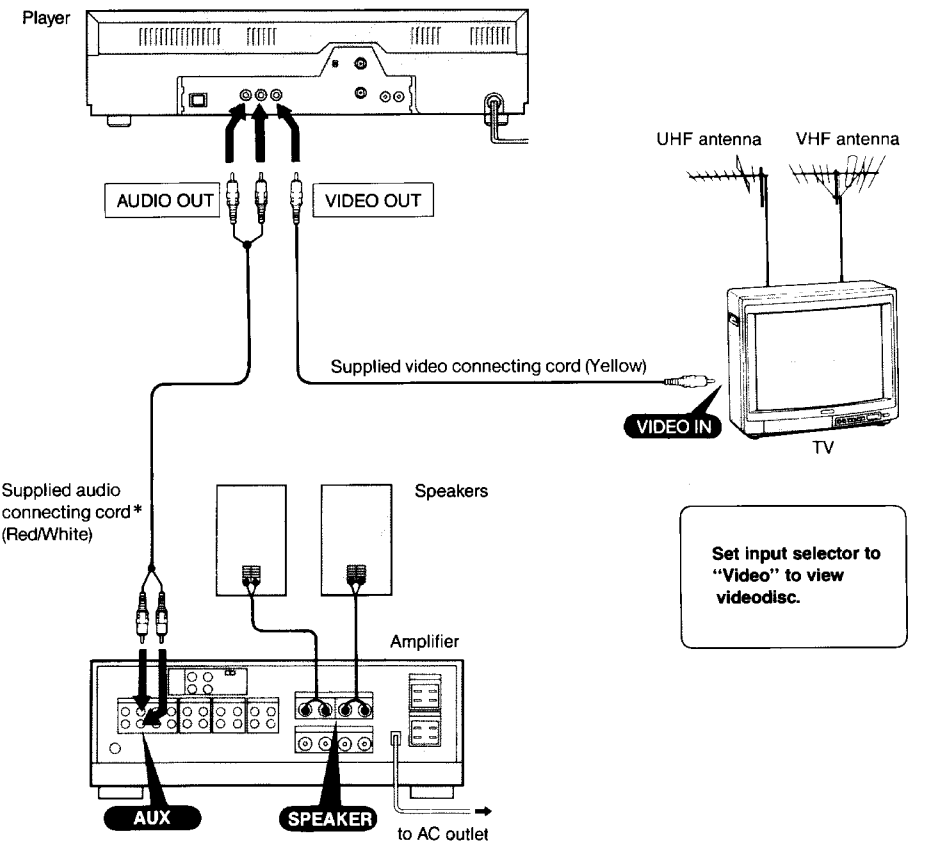
***Connection of optical fiber cable***

Remove protective cover.



Plug in connector firmly.

# To Connect to Audio System and to TV with Video Inputs



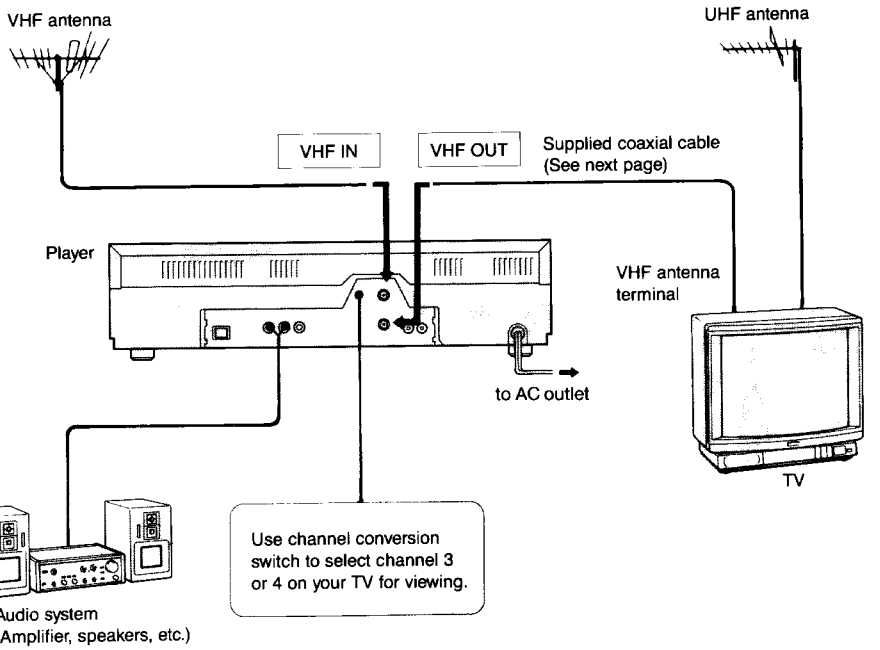

* You can connect the player's audio output to the TV instead of an audio system.
If the TV set has only a monaural phono jack for audio, use an RK-C71 connecting cord (optional).

**During FM or AM reception**
**Turn off the power to the player to prevent the possibility of noise interference.**

# To Connect to TV without Audio/video Inputs

## 1 Connect the VHF antenna and TV to the player.

**See next page for details.**




Connect to an audio system for reproduction in stereo. (See preceding page.)

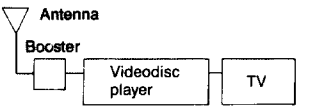
The sound from discs is always monaural when played over TV speakers—even with stereo TV sets.

To obtain a better picture

Always switch off the player when watching a TV programme.

**Using a booster**

**If the TV signal is already weak, inserting the videodisc player between the antenna and the TV set may weaken it further, significantly degrading the picture. In such a situation, a signal booster is highly recommended.**



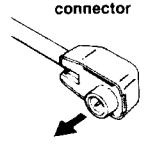

**Ask your dealer to recommend a suitable booster for your area.**

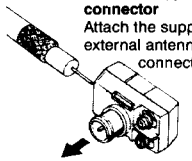
Continued overleaf

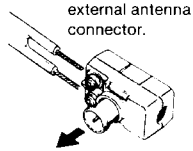
**VHF antenna**

**Connect the VHF antenna cable (optional) to the player.**

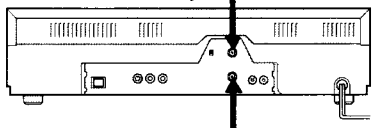
| Coaxial cable | | Twin-lead cable |
|---|---|---|
| with F-type connector | without F-type connector<br>Attach the supplied external antenna connector. | Attach the supplied external antenna connector. |



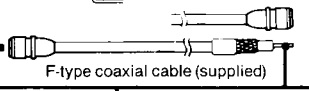




**Videodisc player**




**In order to view the player's picture, this second connection is necessary even in areas with UHF broadcasting only.**

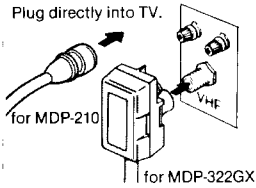



**Connect the player to the TV's VHF antenna terminal with the supplied cable.**

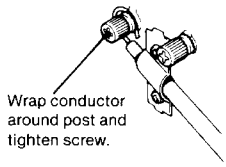
**TV set**

**F-type connector**

Plug directly into TV.




**75-ohm or 300-ohm screw terminals**



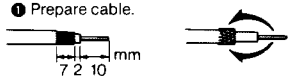

Shift 75/300-ohm selector to 75-ohm position.

## Attaching the external antenna connector (for MDP-322GX)

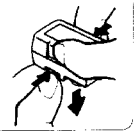
If your antenna cable does not have an F-type connector, attach the supplied external antenna connector.

### Coaxial cable

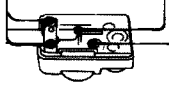
❶ Prepare cable.




❷ Remove cover.

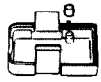


❸ Loosen screws, insert cable, and retighten screws.



❹ Wrap conductor around post.

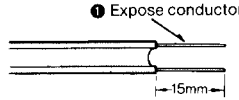
❺ Remove ring and place on post inside cover.



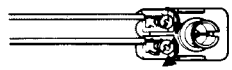
❻ Replace cover.

### Twin-lead cable

❶ Expose conductors.

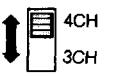


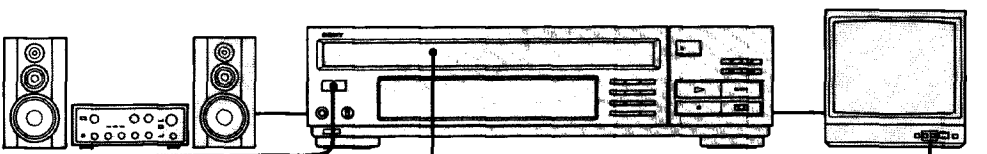

❷ Wrap conductors around posts and tighten screws.



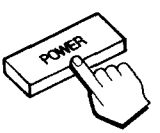
## 2 Select the channel for videodisc playback.

**1** Set channel selector on rear panel to an unused channel.

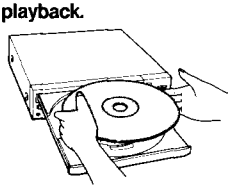


**2** Turn on the player.




**3** Press the OPEN/CLOSE button and open the disc tray. Insert the disc and start playback.



**4** Turn on the TV and switch to the selected channel.

The TV then receives the videodisc signals on the selected channel. The videodisc picture should appear.

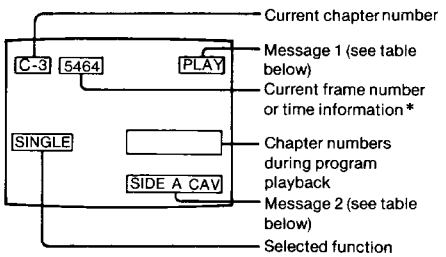
**To watch videodiscs, always set the TV to the selected channel.**

**Why is it necessary to select 3 or 4?**
The videodisc player sends its output to the TV as a VHF broadcast signal. Selecting an unused channel avoids interfering with regular broadcasts.
When watching regular TV programs, turn the player off or press the TV/DISC button on the Remote Commander so that the player's display window shuts off. If TV picture quality is not satisfactory, refer to the manufacturer's manual and adjust the reception.

# Screen Messages

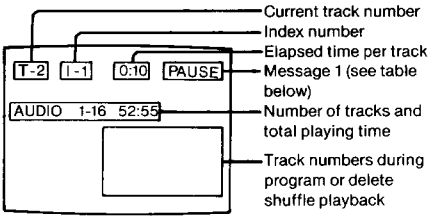
Information on the operating condition of the unit and chapter or track numbers can be superimposed on the TV or monitor screen. While no image is displayed, such as during search, information for LD and CDV is shown on a blue background and information for CD is shown on a green background.

## LD

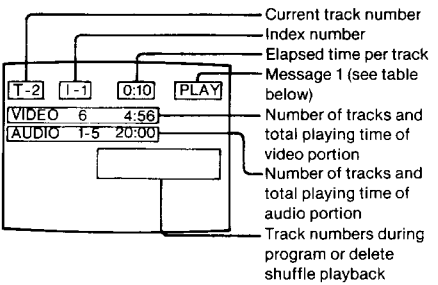



* If seconds are not recorded on the disc, only "0:22": is shown.

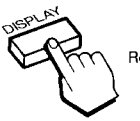
## CD




## CDV




### To call up the on-screen display




Remote commander

Press the button again to turn the display off.

**Message 1** (Examples)

| Display | Explanation |
|---|---|
| OPEN | Disc table open |
| CLOSE | Disc table closed |
| PLAY | Playback |
| STOP | Stop |
| PAUSE | Pause |
| ⏩/⏪ | Forward/reverse speed scan |
| SEARCH | Search |
| ▶ × 1/2 | 1/2 speed display in forward direction |

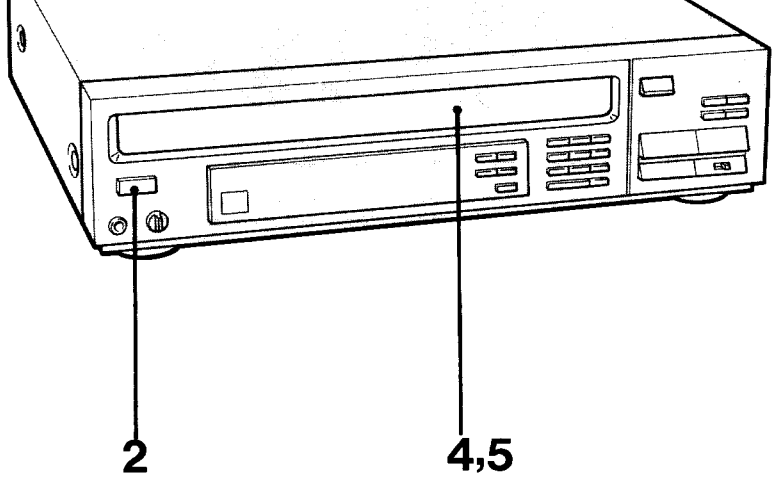
**Message 2** (Examples)

| Display | Explanation |
|---|---|
| SIDE A CAV | Standard-play disc side A |
| SIDE B CAV | Standard-play disc side B |
| SIDE A CLV | Long-play disc side A |
| SIDE B CLV | Long-play disc side B |
| 1L | Main soundtrack/left channel |
| 2R | Second soundtrack/right channel |
| ♪ DIGITAL | Digital sound |
| ♪ ANALOG | Analog sound |

**LD precaution**

Some discs do not contain the side A or B identification code. In this case, the disc side indication may not be correct.

# To Play a Disc



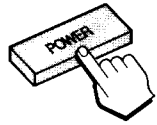

Identical buttons on the main unit can also be used.

## 1 Turn on the TV and stereo system.

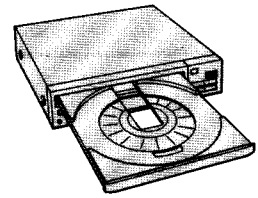
**TV: Select the channel used for videodisc playback or the video input. (See p.30)**

Stereo system:
Turn on the amplifier or receiver and select the proper audio input.

## 2 Turn on the player.




## 3 Open the disc tray.

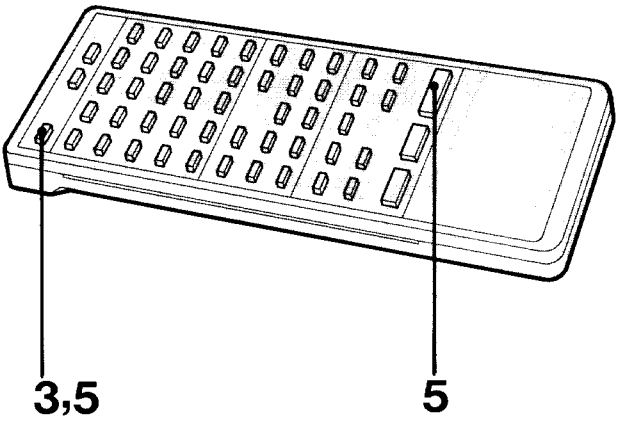


**Using an optional timer**
To automatically start playback with an optional timer, leave the POWER switch of the disc player in the depressed position. When the timer supplies power at the preset time, the unit turns on and playback begins.

**To pause at the beginning of a disc**
Press the ❚❚ button on the player or the Remote Commander. The tray closes, and the player pauses at the beginning of the disc.

**AV calendar**
When playing a CD, CDV, or an LD containing TOC (Table of Contents) data, the AV calendar shows information on the total number of selections. As selections are played, the corresponding numbers on the display go out.

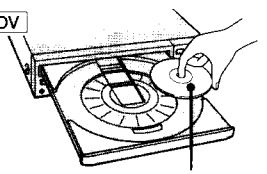
**To switch between the video portion and the audio portion**
Use the CDV button to locate the desired selection.




## 4 Place the disc on the tray.

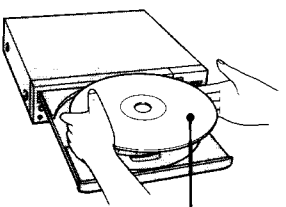
Place the disc on the center of the tray.
If the disc is not placed correctly, playback may not start.

CD/CDV



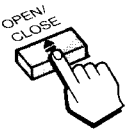
Label faces up

LD

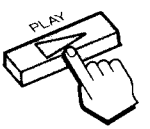


Desired side faces up

## 5 Start playback.




or

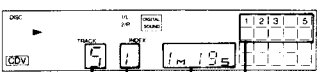



CDV playback starts from the video portion.

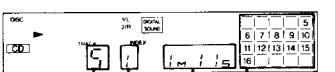
## Playback display

LD

CD/CDV Audio portion




CDV Video portion




**Notes on disc tray**

- Insert only one disc at a time.
- Make sure that the disc is placed properly in the tray. Incorrect positioning may result in permanent damage to the disc.

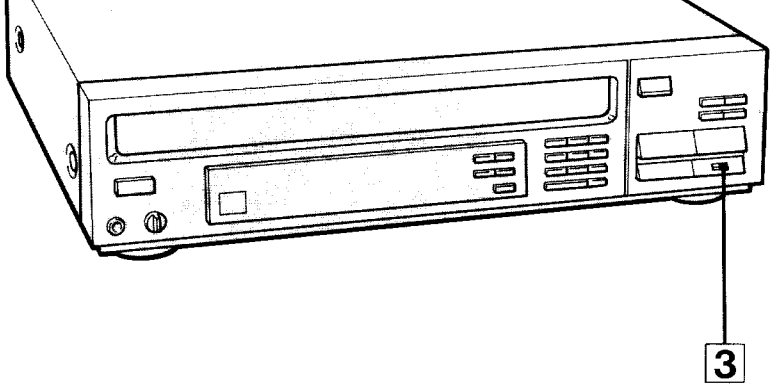
**When listening with headphones**

Plug stereo headphones into the PHONES jack and adjust the listening volume with the LEVEL control.

**Warning**

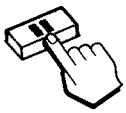
Do not insert a hand or finger in the player while it is operating. Although the player will stop automatically if an object is inserted while in play, serious injury could result. Be sure to place the unit out of the rearch of small children.

# To Play a Disc



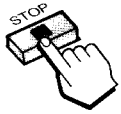

Identical buttons on the main unit can also be used.

## To temporarily interrupt playback 1



When playing CAV discs, the sound is cut off and a still picture is shown. When playing other discs, the unit enters the pause condition. To resume play from the same point, press the ▶ button.

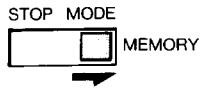
## To stop playback 2




Press the ▶ button to restart playback from the beginning of the disc.

## To stop playback and resume at the same point later 3

LD のみ



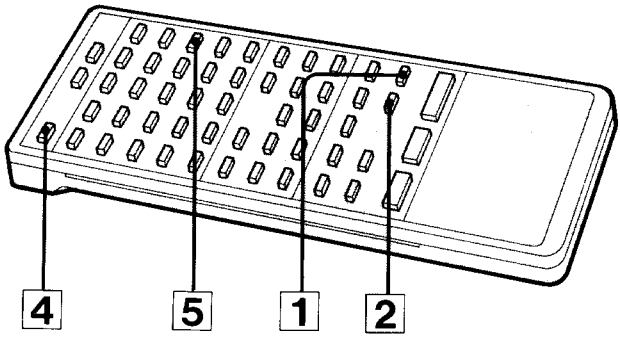

Set the MEMORY STOP switch on the main unit to MEMORY.

**Memory stop precaution**

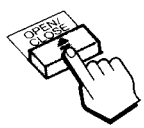
- Pressing any button other than ▶ or ■ (the OPEN button, in particular) deactivates the MEMORY STOP function.
- The MEMORY STOP function is only approximate. There may be a slight difference of a few frames between the stopping and starting positions when you use the MEMORY STOP function.
- The MEMORY STOP function does not operate during shuffle play, program play, single-selection repeat, A ⟷ B repeat, or single-selection stop.
- When the power was turned off, the MEMORY STOP function does not operate and playback will start from the beginning of the disc.

**Discs with CX Label**

Discs bearing the CX label are recorded with the CX noise reduction system, which gives lower noise levels and higher dynamic range. The CX indicator should automatically light up. Some CX discs do not include the code necessary to automatically activate the player's CX noise reduction system. If the CX indicator does not light, press the CX button on the Remote Commander to manually activate the system.




## To stop playback and remove disc 4




Remove disc and press the OPEN/CLOSE button to close the tray.

## To play a stereo LD or a second audio program (SAP) LD 5

After playback has started

| Reproduced sound | | Indicator lights |
|---|---|---|
| **Stereo disc** | **SAP disc** | |
| Stereo | Audio signal (1) (left channel) Audio signal (2) (right channel) | 1/L 2/R |

| | | |
|---|---|---|
| Left channel | Audio signal (1) (left channel) | 1/L |

| | | |
|---|---|---|
| Right channel | Audio signal (2) (right channel) | 2/R |

Return to start

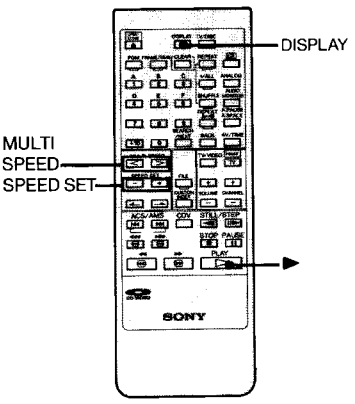
**To switch between digital and analog sound on an LD**
If the LD contains a digital stereo sound signal, the player automatically sends that to the output jacks. Pressing the ANALOG button on the Remote Commander switches to the analog audio signal and turns the DIGITAL SOUND indicator off. Press the ANALOG button a second time to return to digital sound output.

With certain discs, there may be a difference in volume between the digital and the analog sound.

LD

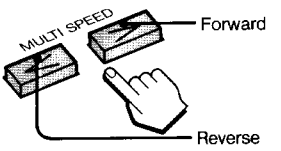
# To Change Playback Speed and Direction

**—Speed Play (CAV standard-play)**

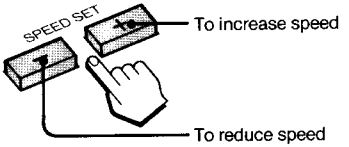



## To change the speed

**1 Select the playback direction.**



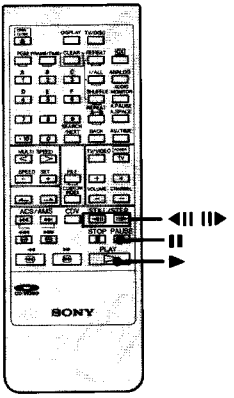

**2 Select the playback speed.**




LD

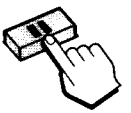
# To Play Frame by Frame

**—Freeze-frame, STEP playback (CAV standard-play)**




## To view a still picture:

**—Freeze-frame**

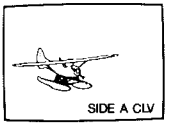


The screen stops at the current frame.
Press the ▶ button to resume normal playback.

**Sound during speed play**

Audio output occurs only during × 1 (normal) speed play in the forward direction. There is no sound output for other speed and direction combinations.

**CLV discs**

Speed play, freeze-frame and step playback are not possible with CLV discs.

When a multispeed button is pressed, the indication "SIDE A CLV" (or "SIDE B CLV") is shown for 3 seconds. When the II button is pressed, the screen becomes blue and the indication "SIDE A CLV" (or "SIDE B CLV") is shown.