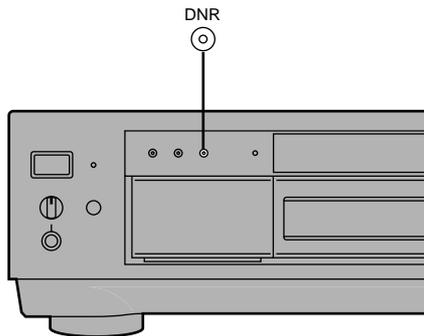


Digital noise reduction (DNR)

RAM **DVD-V** **VCD**



This unit comes with three digital noise reduction functions for reproducing pictures even more clearly. Supporting wide-screen and large-screen TVs, they enable viewers to watch pictures with a higher picture quality.

•The following 3 digital noise reduction functions are featured:

- 1 Block noise reduction
- 2 Mosquito noise reduction
- 3 3-dimensional noise reduction

After the picture quality levels for each of the noise reduction functions have been adjusted at the initial settings stage, these functions can be turned on or off using [DNR] on the unit.

•For a detailed description of each of the noise reduction functions and how to set them, refer to p. 120.

Press [DNR].

•The button's lamp on the front panel of the unit illuminates.

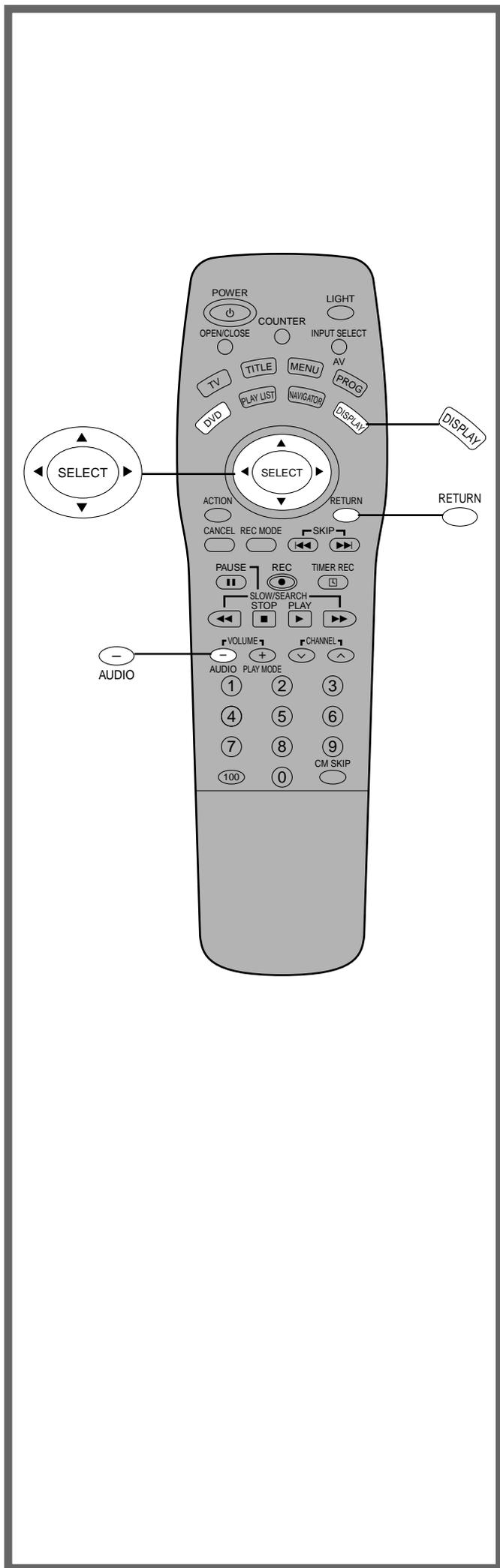
■Releasing the DNR function

Press [DNR] again.

•The button's lamp goes off.

■When using the unit as a player for editing

Since the noise reduction functions execute processing to ensure that the discs are played with clearer images, the picture quality may conversely deteriorate when the unit is used as a player for editing. If this happens, press [DNR] to release the functions (DNR button's lamp will turn off).



Audio mode

The kind of sound being received or played by this unit can be selected by following the steps below.

Preparation

- Press [DVD].

Press [AUDIO] several times to select the audio mode you want to hear.

- Each time the button is pressed, the sound is switched as shown below.
- The selected sound will remain selected until the power is turned off.

■ To select the sound being received (MTS stereo and SAP broadcasts)

Multi-channel Television Sound Stereo broadcasts (main language) and Secondary Audio Program (sub language) broadcasts are both being received simultaneously. Select Stereo or SAP audio mode.

MTS Stereo broadcast

Multi-channel Television Sound Stereo broadcast. Select Stereo audio mode.

- If the stereo broadcast is weak and the display flickers, select MONO audio mode for possibly better results.

SAP broadcast

Secondary Audio Program (sub language) broadcast. Select SAP audio mode for the sub language.

MONO broadcast

Normal monaural sound broadcast.



■ To select the sound during playback

- The sound mode changes as shown below.

1. With a DVD-RAM disc (When playing back an SAP broadcast)



2. With a DVD-RAM disc (When playing back a stereo or monaural program)



3. With a Video CD

■ To select the sound using the menu bar

1. Press [DISPLAY] to show the menu bar display.
2. Select the "Sound mode" using [◀] and [▶].
3. Select the sound to be heard using [▲] and [▼].

- The sound mode changes as shown below.

1. With a DVD-RAM disc (When playing back an SAP broadcast)



2. With a DVD-RAM disc (When playing back a stereo or monaural program)



3. With a Video CD



- Refer to p. 92 for details on showing the audio display on the TV screen.

To clear the menu bar

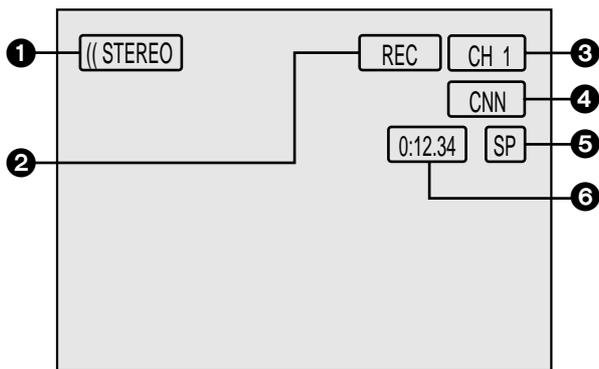
Press [RETURN].

Note:

- It is not possible to record the selected sound alone. Selecting the sound as described above during recording will have no effect on the sound recorded.

On-screen display information

Information such as the details of its operations and statuses can be monitored on the TV screen.



■ During TV reception or recording

① Audio display

When receiving a TV program, the DVD-Recorder automatically indicates when a TV program is broadcast with the stereo and/or SAP sound system.

- “STEREO”, “SAP” or “MONO” is displayed when the sound has been selected by pressing [AUDIO]. (p. 126)
- The stereo audio mode is indicated with the “((” mark when the audio button is pressed is the type of sound now being received from the broadcast station. However, when monaural sound is received, the “((” mark is not displayed.

② Recording mode display

- The unit's operating status is displayed here.
REC: Now recording
PAUSE: Recording pause
OPEN: The disc tray is open.
CLOSE: The disc tray is closed.
READING: The disc is being read.

③ Channel display

- The channel is displayed when the channel is selected or when recording has been started.

④ Channel Caption display

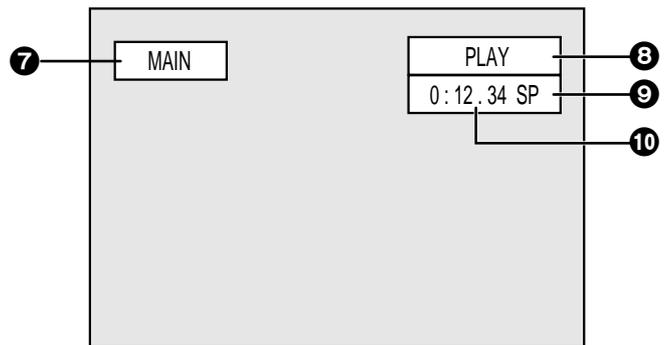
- The station name is displayed when the channel is selected or when recording has been started.

⑤ Recording mode display

- “XP”, “SP”, “LP” or “FR” appears depending on the current recording mode setting.

⑥ Remaining disc time, date/current time and counter display

- When [COUNTER] is pressed several times, the remaining disc time (for DVD-RAM discs only), date/current time and counter displays are indicated. (See page 93)



■ During playback

⑦ Audio display

- Audio mode for playback is displayed. (VCD)

“LR” (left + right) is displayed.

(DVD-RAM)

When recording with stereo or monaural:

- “LR” (left + right), “L” (left) or “R” (right) is displayed.

When recording with SAP:

- “MAIN”, “SAP” is displayed.

⑧ Playback mode displays

- These displays indicate the unit's operation mode.

●●●▶▶▶: Forward search 4 (at the highest speed)

●●▶▶●: Forward search 3

●▶▶●●: Forward search 2

▶▶●●●: Forward search 1 (at the lowest speed)

PLAY: Normal playback

●▶: Slow playback (at the highest speed)

▶●: Slow playback (at the lowest speed)

||: Still picture (pause)

●◀: Reverse slow playback (at the lowest speed)

◀●: Reverse slow playback (at the highest speed)

◀: Reverse playback

●●●◀◀◀: Reverse search 1 (at the lowest speed)

●●◀◀●: Reverse search 2

●◀◀●●: Reverse search 3

◀◀●●●: Reverse search 4 (at the highest speed)

⑨ Recording time display

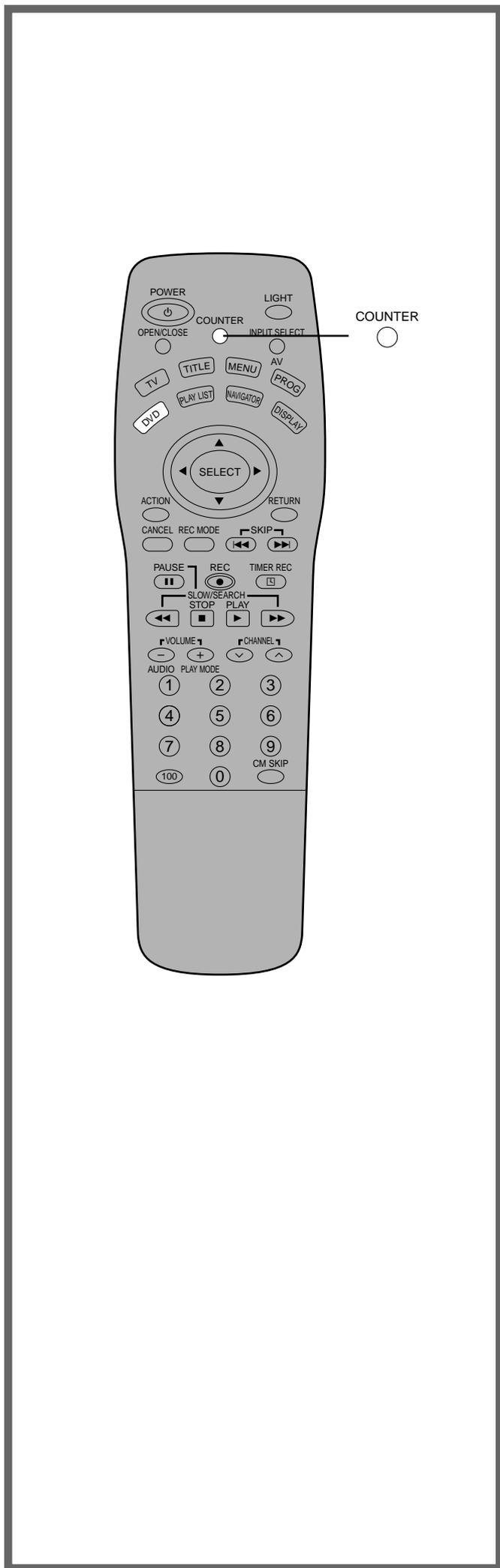
- “XP”, “SP”, “LP” or “FR” appears when recording is started or when the remaining disc time display is selected, etc.

⑩ Remaining disc time, date/current time and counter display

- When [COUNTER] is pressed several times, the remaining disc time (for DVD-RAM discs only), date/current time and counter displays are indicated. (See page 93)

Notes:

- The on-screen displays are not shown when the following selections are made: “1 Set Up” in the Initial Settings → “1 On-Screen Display” → “1 On-Screen Messages” → “3 Off”.
- Depending on the type of TV set used, the on-screen displays may roll or be disrupted. They may also be disrupted when the unit's operation is changed.



Counter display information

The remaining disc time (for DVD-RAM discs only), date/current time and counter value displays can be checked on the TV screen.

Preparation

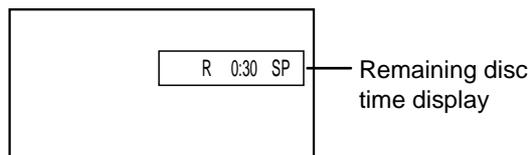
- Press [DVD].
- Select "1 Set Up" in the Initial Settings → "1 On-Screen Display" → "1 On-Screen Messages" → "1 Automatic" or "2 On". (p. 110)

RAM

■ Remaining disc time (recordable time) display

Press [COUNTER].

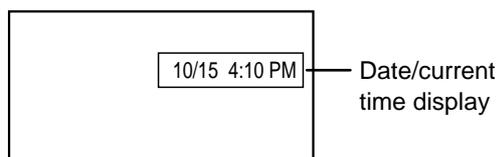
- The remaining disc display also appears on the unit display window.
- The disc's recordable time is displayed. (The value displayed is only a rough estimate.)



■ Date/current time display

Press [COUNTER] again.

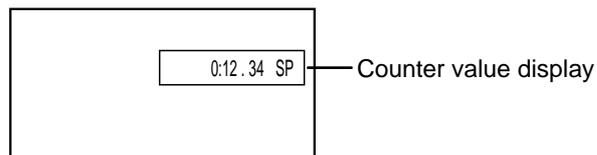
- The current time is now displayed on the unit display window.
- Even the seconds will be displayed when the automatic time setting function (p. 129) has been activated.



■ Counter display

Press [COUNTER] again.

- The counter value also appears on the unit display window.



- When [COUNTER] is pressed again, the remaining disc time display is restored.

■ When the counter button is operated in the stop mode (resume cancelled)

Each time the button is pressed, the display changes in the following sequence: date/current time → counter → remaining disc time

Handy Functions

On screen display information

(continued)

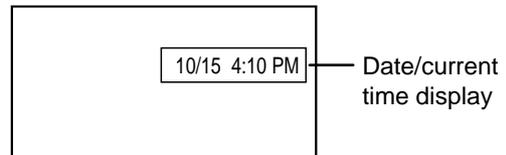
Switching the displays

DVD-V **VCD** **CD**

■ Date/current time display

Press [COUNTER].

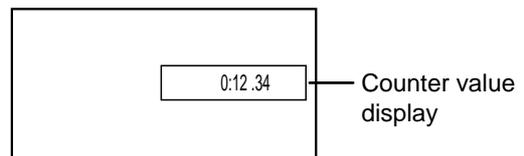
- The current time is now displayed on the unit display window.



■ Counter display

Press [COUNTER] again.

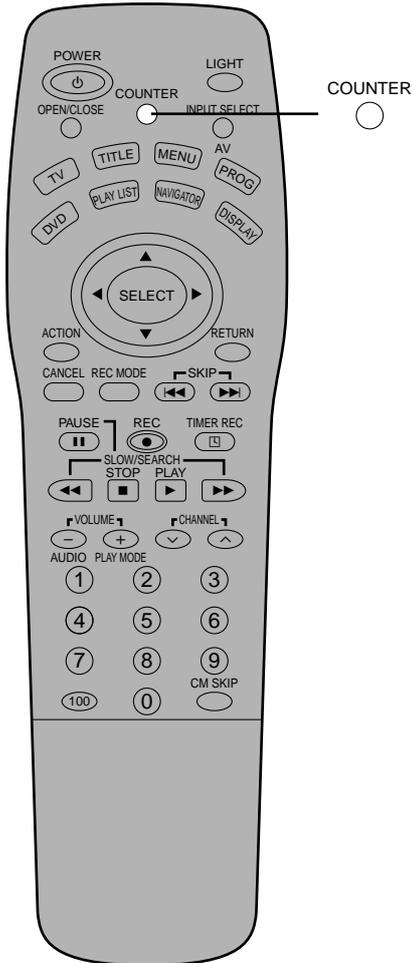
- The counter value also appears on the unit display window.



- When [COUNTER] is pressed again, the date/current time display is restored.

Notes:

- The display is cleared after about 5 seconds when the following selections are made: "1 Set Up" in the Initial Settings → "1 On-Screen Display" → "1 On-Screen Messages" → "1 Automatic". The on-screen displays will not appear when "3 Off" is selected as the "1 On-Screen Messages" setting.
- If a disc has not been inserted, only the date/current time will be displayed when the counter button is pressed.
- The remaining recordable time is indicated as the remaining disc time display. It appears only for DVD-RAM discs.
- The way in which the counter value is displayed for a video CD or CD differs depending on the menu bar setting. (The elapsed track time, remaining track time or remaining disc time can be selected as the counter value.)

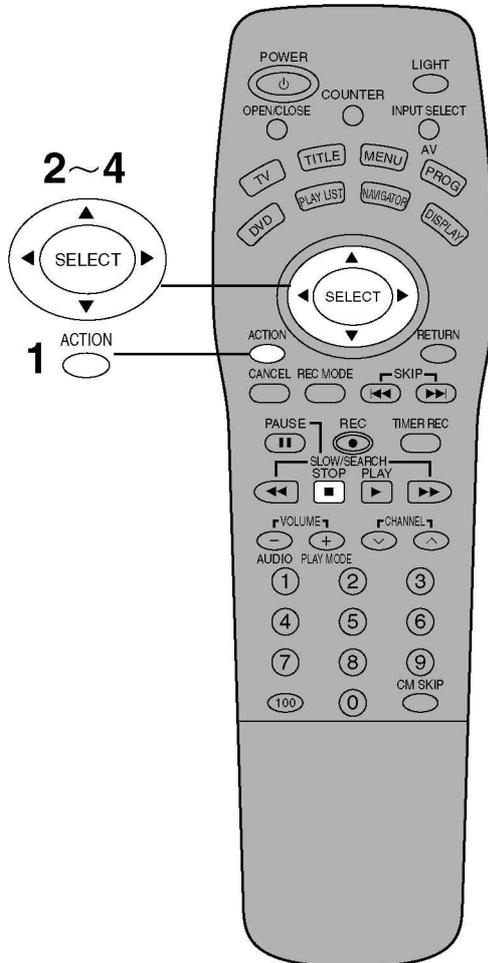


Programming the remote control

Changing the remote control code enables a Panasonic DVD recorder, DVD player and other Panasonic components besides this unit to be operated separately at the same location.

In addition to this unit, almost all of Panasonic's DVD recorders and DVD players use the same kind of remote control signals. This means that these components cannot be operated properly at the same location (with the remote control units). To rectify this, change the remote control code by taking the following steps.

- The factory setting for the remote control is "1".



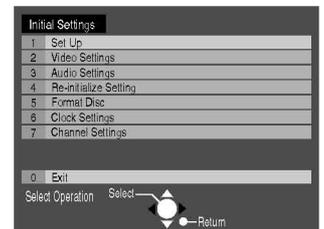
Changing the unit's code

Preparation

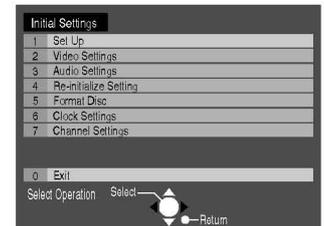
- Press [DVD].

1 During stop: Press [ACTION].

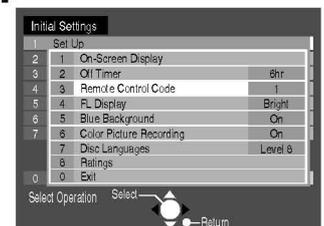
•If the unit is not in the stop mode, **DVD VIDEO RAM** may appear on the TV screen. In this case, first press [STOP], then press [ACTION].



2 Select "1 Set Up" using [▲] and [▼], and press [SELECT].



3 Select "3 Remote Control Code" using [▲] and [▼], and press [SELECT].



4 Select "Set Code (1, 2 or 3)" using [▲] and [▼], and press [SELECT].

- Example of when remote control code 2 has been selected

