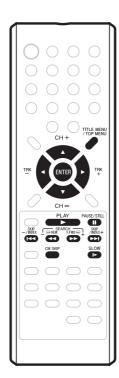
Erasing a scene (Edit title)

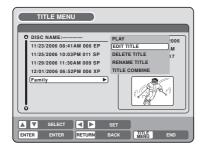
RAM VR mode

You can erase an unnecessary scene from the created playlist.

When you erase the scene from the playlist, the scene is not erased from the original title.



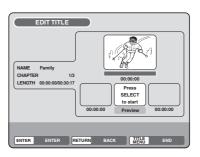
- 1 Press TITLE MENU to display the title menu.
- 2 Select the playlist where a scene you want to erase is included.
- Press \blacktriangle or \blacktriangledown to select the playlist.
- Press ► to display the editing menu of the playlist.
- Press ▲ or ▼ to select "EDIT TITLE".



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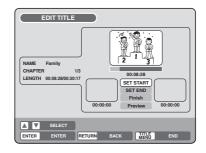
3 Press ENTER.

The EDIT TITLE screen appears.



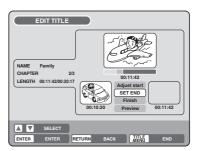
4 Press ENTER to playback the playlist on the EDIT TITLE screen.

Use each operation button (F.FWD, REW, SKIP +, SKIP -, PLAY, PAUSE/STILL, SLOW, CM SKIP) for the playback to search the starting point of the scene you want to erase.



5 Press ▲ or ▼ to select "SET START" at the start point of the scene that you want to erase and press ENTER. (To set the start point easily, search the start point while "SET START" is selected)

The still image at the start point appears at the left small screen.



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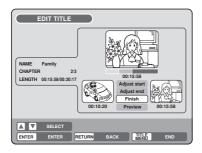
Fn





6 Press ▲ or ▼ to select "SET END" at the end point of the scene you want to erase and press

The still image at the end point appears at the right small screen.



7 Check the erased scenes.

- Select "Preview" and press ENTER. Then the video where the scenes between the start and end points are erased is played back.
- Each operation button (F.FWD, REW, SKIP +, SKIP -, PLAY, PAUSE/STILL) for playback also can be used.

8 Adjust the start and end points.

- To adjust the start point, select "Adjust start" and press ENTER. You can change the start point by pressing ◀ or ▶.
- To adjust the end point, select "Adjust end" and press ENTER. You can change the end point in the same way as the start point.

If you determine the scene to be erased, press **▲** or **▼** to select "Finish" and press ENTER.

• A chapter mark is automatically added at the location of the erased scene.



- It is no problem to omit the procedures for confirming the scene or adjusting start and end points.
- It is not possible to make any adjustments for 2 seconds after a title starts or 2 seconds before it
- To set a start point at the beginning of a title, set it during countdown.
- · The points during editing may be different from the preview.
- Start and end points are adjusted in units of 1 second.



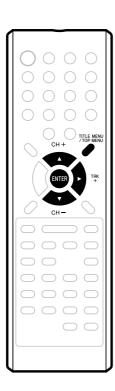


Combining the title

RAM VR mode

You can create a playlist by combining the several original titles or playlists.

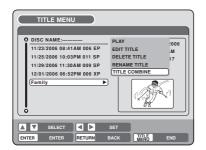
To combine the titles, it is necessary to create a playlist at first. By combining the titles in the playlist, a playlist where several titles are combined is created.



1 Press TITLE MENU to display the title menu.

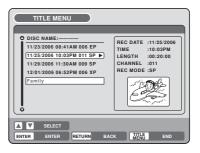
2 Select the playlist where you want to combine the titles.

- Press ▲ or ▼ to select the playlist.
- Press ► to display the editing menu of the playlist.
- Press ▲ or ▼ to select "TITLE COMBINE".



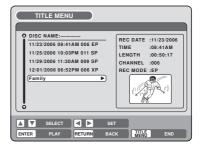
3 Press ENTER.

Select the title that you want to combine from the title menu.



4 Press ENTER.

Following the playlist, the selected title is combined. The several titles were combined so that the total recording time is displayed.





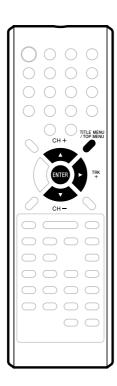




Erasing a playlist

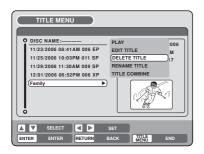


You can erase the created playlist. Even if you erase the playlist, the original title will not be erased.



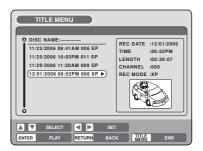
1 Press TITLE MENU to display the title menu.

- 2 Select the playlist that you want to erase.
- Press ▲ or ▼ to select the playlist.
- Press ▶ to display the editing menu of the playlist.
- Press ▲ or ▼ to select "DELETE TITLE".



3 Press ENTER.

The selected playlist will be erased.







Editing an original title

RAM VR mode

In VR mode, you can edit various items, whereas in Video mode, you can only edit the title names.



Note

- You can automatically add a chapter mark in recording. For more information, see page 31.
- In case the disc includes more than 9 titles, you can turn to the next or the previous page. (See page 34.)

Preparation:

- Turn ON the TV and set to the video input mode.
- · Load the recorded disc.
- Press **DVD/VCR** to select the DVD mode. (The DVD indicator will light.)

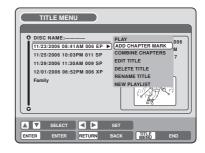
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Adding a chapter mark

RAM VR mode

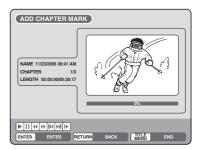
You can add a chapter mark to the original title. You can add up to 999 chapter marks to one disc.

- 1 Press TITLE MENU to display the title menu.
- 2 Select the original title where a chapter mark is
 - Press ▲ or ▼ to select the original title.
 - Press ➤ to display the editing menu of the original
 - Press ▲ or ▼ to select "ADD CHAPTER MARK".

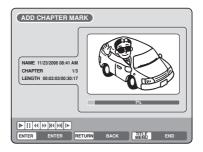


3 Press ENTER.

The ADD CHAPTER MARK screen will appear.



- 4 Press PLAY to search a scene where you want to add the chapter mark.
- Search the scene by using each operation button (F.FWD, REW, SKIP +, SKIP -, PAUSE/STILL, SLOW, CM SKIP) for the playback.



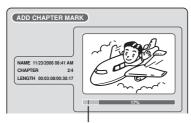
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5 At the point in the scene you want to add the chapter mark, press ENTER.

The playback is paused and the position of the added chapter mark appears green.



The added chapter mark

6 If you want to continue to add chapter marks, repeat step 5.

- To display the title menu, press RETURN.
 To return to the normal screen, press TITLE MENU.







Combining chapters

RAM VR mode

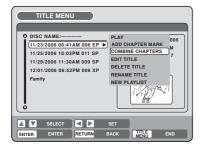
By erasing the added chapter marks, the chapters can be combined.



1 Press TITLE MENU to display the title menu.

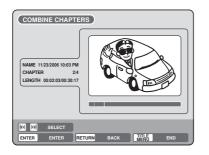
2 Select the original titles where you want to combine the chapters.

- Press \blacktriangle or \blacktriangledown to select the original title.
- Press ➤ to display the editing menu of original title.
- Press ▲ or ▼ to select "COMBINE CHAPTERS".



3 Press ENTER.

The COMBINE CHAPTERS screen will appear. At the beginning, the top still image in the chapter 2 is displayed.



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4 Press SKIP + or SKIP - to select the chapter marks to be erased.

5 Press ENTER.

The chapter marks are erased and 2 chapters are combined into 1 chapter.

6 To continue erasing chapter marks, repeat steps 4 and 5.

- To display the title menu, press **RETURN**.
- To return to the normal screen, press **TITLE MENU**.

Changing an original title name

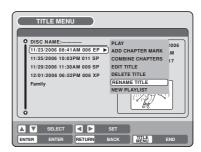


You can only add title names to DVD-R and Video mode discs before they have been finalized.

1 Press TITLE MENU to display the title menu.

2 Select the original title that you want to rename.

- Press ▲ or ▼ to select the original title.
- Press ➤ to display the editing menu of original title.
- Press ▲ or ▼ to select "RENAME TITLE".



3 Press ENTER.

The keyboard screen will appear.

The entering method of the title name is the same as for the playlist. See the steps **4** and **5** of "Changing a title name" in "Editing a playlist" (page 67) and enter the title name.



- The title name can be a maximum of 64 characters in VR mode and a maximum of 30 characters in Video mode.
 - Long names will be shortened in the title menu.
- "RENAME TITLE" can only be used with DVD-R discs and video mode DVD-RW discs before they have been finalized.



-n





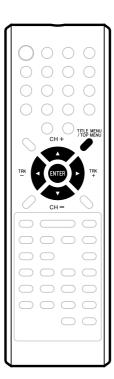
Erasing a scene (Edit title)

RAM VR mode

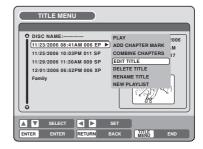
You can erase an unnecessary scene from the original title.

Erase the scene after checking the title. You cannot restore the erased scene.

When you erase the scene, you can increase the disc space.



- 1 Press TITLE MENU to display the title menu.
- 2 Select the original title where a scene you want to erase is included.
 - Press \blacktriangle or \blacktriangledown to select the original title.
 - Press ▶ to display the editing menu of original title.
 - Press ▲ or ▼ to select "EDIT TITLE".



3 By pressing ENTER, the following message screen will appear.



- 4 Press ◀ or ► to select "YES" and press ENTER, then the EDIT TITLE screen will appear.
 - By selecting "NO", the title menu appears.
- 5 The method for erasing a scene is the same as for the playlist. See the steps 4 to 9 of "Erasing a scene (Edit title)" in "Editing a playlist" (page 68).



- If the scene is erased from the original title, the created playlist is erased.
- Disc space will only be freed up if scenes lasting several minutes are deleted.
- A chapter mark is automatically added at the location of the erased scene.

15/5/06, 2:53 PM



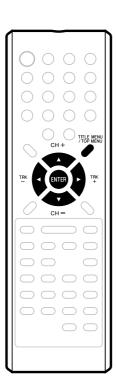


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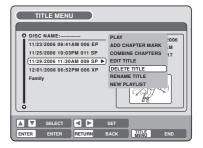
Erasing an original title



You can erase an original title. Erasing the title deletes both the title and the recording saved under that title name. Since the erased title cannot be restored, please make sure that it contains nothing you want to keep. When you erase the title, you can increase the disc space.



- 1 Press TITLE MENU to display the title menu.
- 2 Select the original title you want to erase.
 - Press ▲ or ▼ to select the original title.
 - Press ► to display the editing menu of original title.
 - Press ▲ or ▼ to select "DELETE TITLE".



3 By pressing ENTER, the following message screen will appear.



- 4 Press ◀ or ► to select "YES" and press ENTER, then the original title will be erased.
 - Erasing the title will be cancelled by selecting "NO".



Note

 If the original title is erased the created playlist is also erased.



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07

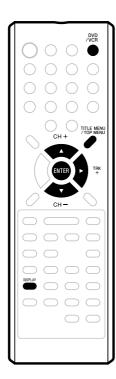


Editing

Changing a disc name



You can change a disc name from the title menu.

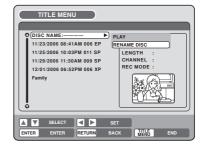


Preparation:

- Turn ON the TV and set to the video input mode.
- Load the recorded DVD disc.
- Press DVD/VCR to select the DVD mode. (The DVD indicator will light.)

Changing a disc name

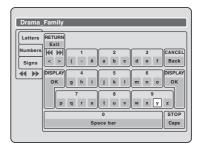
- 1 Press TITLE MENU to display the title menu.
- 2 Press ▲ or ▼ to select "DISC NAME".
 - Press ▶ to display the editing menu.
 - Press ▲ or ▼ to select "RENAME DISC".



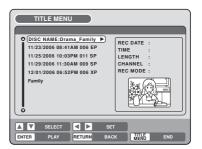
3 Press ENTER.

The keyboard screen will appear.

4 Use the keyboard screen to enter the disc name.



5 Press DISPLAY to return to the title menu.





- The disc name can be a maximum of 30 characters. Long names will be shortened in the title menu.
- For using the keyboard screen, see "Using the keyboard screen" (page 78).
- A DVD-R disc cannot be named after it is finalized.





Using the keyboard screen



This section explains the function of the keyboard screen and how to input characters. The disc name and the title name can be changed using the keyboard screen.

Keyboard screen types

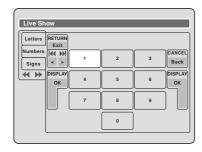
The keyboard screen has three types of "Letters", "Numbers" and "Signs". The type can be switched over by pressing **REW** or **F.FWD**.

Letters:

This is mainly used for inputting alphabetical letters. For the keyboard screen of Letters, see the previous page.

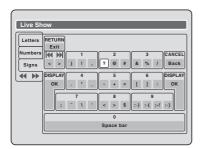
Numbers:

This is used for inputting numbers.



Signs:

This is used for inputting symbols.



Inputting characters

There are two methods for inputting characters.

Character input 1

1 Press **△**, **▼**, **⋖** or **▶** to select the character to be input.

2 Press ENTER.

The selected character will be input.

Character input 2

Example: Explained here is the procedure when you input "F" and "J".

1 Press the numeric keys continuously and select the character to be input.

To input F, press 3 three times.

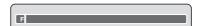




 When the interval between the pressing of the numeric keys is 2 seconds or more in selecting the input character, the selected character will automatically be input.

2 Stop the key operation when you select the character to be input.

The selected character will automatically be input.



3 Press the numeric keys where the following character is assigned.



4 When the character to be input is selected, stop the key operation.

The selected character is automatically input.



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Erasing a character

You can erase the input character.

Erasing method 1

1 Press **▲**, **▼**, **◄** or **▶** to select "Back".

2 Press ENTER.

The last input character will be erased.

3 To erase the characters continuously, press ENTER.

The input characters will be erased from the last to the top one by one.

Erasing method 2

1 Press CANCEL.

The last input character is erased.

2 To erase the characters continuously, press CANCEL repeatedly.

The input characters will be erased from the last to the top one by one.

Erasing method 3

Use the cursor to select the character and erase it.

1 Press SKIP – or SKIP + to move the cursor after the character you want to erase.

2 Press CANCEL.

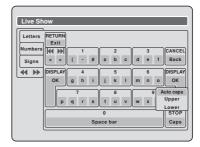
The character before the cursor position will be erased.

Selecting between uppercase and lowercase letters

You can select either uppercase or lowercase letters when modifying your titles, using the keyboard screen with the "Letters" tab.

1 Press STOP.

(Or, press ▲, \blacktriangledown , \blacktriangleleft or \blacktriangleright to select "Caps", then press **ENTER**.)



2 Press ▲ or ▼ to select the type of letters in the list below and press ENTER.

Auto caps:

Determines uppercase and lowercase automatically.

Upper:

Inputs all with uppercase letters.

Lower:

Inputs all with lowercase letters.

Determining a name

To determine the entered disc name and title name, press **DISPLAY**. Or, press \blacktriangle , \blacktriangledown , \blacktriangleleft or \blacktriangleright to select "OK", then press **ENTER**.

The keyboard screen disappears and the display will return to the title menu.

The entered disc name and title name are displayed in the title menu.

Cancelling character input function

When you want to cancel the input and changed characters function, press **RETURN**. Or, press ▲, ▼, ◀ or ► to select "Exit", then press **ENTER**.

The input and changed characters function are cancelled and the title menu will appear.





Dubbing

Chapter 8

Dubbing

Dubbing a tape onto a disc



You can record video or audio on a video tape onto a disc.



Preparation:

- Turn ON the TV and set to the video input mode.
- · Load a source video tape and a disc for recording.
- Remove the erase-protection tab of the source video tape to prevent the data from accidentally being erased.
- Confirm the disc space before operation.

1 Press DVD/VCR to set this unit to DVD mode. The DVD indicator will light.

2 Press REC MODE/SPEED and select the recording mode

- When REC MODE/SPEED is pressed each time, "SP", "LP", "EP" or "XP" is selected in this order.
- The recording mode is indicated on both the TV screen and the display window.
- For the details of the recording mode, see page 53.

Press DVD/VCR and set the unit to VCR mode.

Confirm that the VCR indicator lights.



4 Press DUBBING.

- The unit is changed to DVD mode automatically.
- The VCR is waiting for playback and the DVD is waiting for recording. Then the following message will appear.

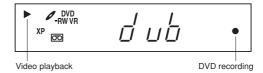
5 Press DUBBING, or press ◀ or ► to select "YES" and press ENTER.

Dubbing starts.

 To cancel dubbing, press STOP, or select "NO" and press ENTER.



During dubbing, VCR playback, DVD recording and "dub" (dubbing) indicator appear on the display window.



Press **CLOCK/COUNTER** to display the elapsed dubbing time in the display window.

6 To stop dubbing, press STOP.

Mote

- Dubbing cannot be accomplished when
 - a copy protected tape is used.
 - disc protection is set.
 - a disc has no recording space.
- Dubbing stops when
 - the video tape is played back to the end and stops.
 - recording space becomes full.
- The videos recorded from TV programs or movies can be used only for your personal enjoyment without permission of the copyright holder.

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Fn



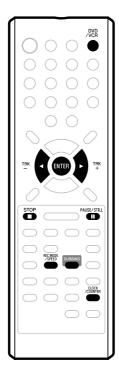


Dubbing

Dubbing a disc onto a tape



You can record both video and audio from a disc to a video tape. When a disc with a copy guard is used, a distorted image is recorded onto the video tape.





- When a title is played by selecting it from the title menu, only the title selected is played.
- Dubbing cannot be accomplished when
 - a copy protected disc is used.
 - the erase prevention tab of video tape is removed.
- Dubbing stops when
 - the disc is played back to the end and stops.
 - no recording space on the Video tape remains.
 - a length of about 10 seconds goes unrecorded.
- During dubbing, the unit is changed to interlaced scan mode automatically, if it has been previously set to progressive scan mode.
- If no special permission is obtained from the copyright owner, videos recorded from TV programs or movies can only be used for your own personal enjoyment.
- Please forward the first few seconds when you record at the beginning of tape.

Preparation:

- Turn ON the TV and set to the video input mode.
- Load a source disc and a video tape for recording.
- Confirm the remaining tape for recording before operation.

I Press DVD/VCR to set this unit to VCR mode.

The VCR indicator will light.

2 Press REC MODE/SPEED and select the recording mode.

- When **REC MODE/SPEED** is pressed each time, "SP" or "EP" is selected.
- The recording mode is indicated on both the TV screen and the display window.
- · For the details of the recording mode, see page 49.

3 Press DVD/VCR and set the unit to DVD mode.

Confirm that the DVD indicator lights.



4 Press DUBBING.

The DVD is waiting for playback and the VCR is waiting for recording. Then the following message appears.

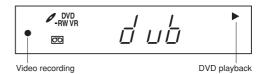
5 Press DUBBING, or press ◀ or ▶ to select "YES" and press ENTER.

Dubbing starts.

 To cancel dubbing, press STOP, or select "NO" and press ENTER.



In dubbing, DVD playback, VCR recording and "dub" (dubbing) indicator appear on the display window.



Press **CLOCK/COUNTER** to display the tape counter in the display window.

6 To stop dubbing, press STOP.

Dubbing only the specified titles or the playlist

When you want to dub only specific titles or playlists recorded on the disc, start the playback of the desired title or playlist, and then press **DUBBING** and proceed from step **5** above. Dubbing start from the beginning of the title or playlist.

Dubbing only a specified scene

When you want to dub only specific scene on the disc, press **PAUSE/STILL** at the desired scene, and then press **DUBBING** and proceed from step **5** above.

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Dubbing

Dubbing using other equipment

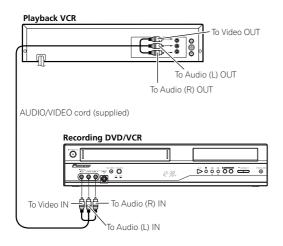




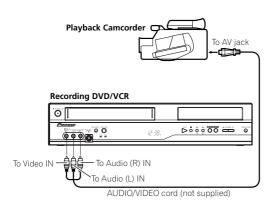
You can connect another VCR or camcorder for dubbing.

Preparation:

• Typical connection: When using this unit as a recording device



You can also connect to the audio/video input jack (L1) at the rear side of this unit. In addition, each S-Video input jack at the front and rear sides can be used for recording on the disc. (The S-Video input jack cannot be used for recording on the video tape.)



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When a video is recorded using this unit

Preparation:

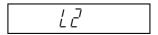
- · Turn ON the TV and set the unit to the video input mode.
- Select the input mode in LINE1 (LINE2) INPUT setting on page 30.
- Select the audio mode for the audio input jack in EXTERNAL AUDIO INPUT setting on page 31.
- Load a video tape where the erase-protection tab is not activated or a disc with enough recording space.
- To record onto a video tape, set the unit to VCR mode, whereas to record onto a disc, set it to DVD

1 Press INPUT SELECT and set the channel to L2 (or L1).

L1 (LINE 1):on the rear panel

L2 (LINE 2): on the front panel

Confirm that L2 (or L1) appears on the display window.



2 Press REC MODE/SPEED and select the recording

VCR: SP or EP (See page 49)

DVD: SP, LP, EP or XP (See page 53)

3 Press REC on this unit and PLAY button on the playback device simultaneously to begin the duplicating process.

To stop dubbing, press STOP.



- If using a monaural VCR or other equipment, connect Audio (L) IN jack to Audio OUT using only one audio cable.
- When this unit is used as a playback device, a mark or a character displayed on the screen is also dubbed as an image. When the screen display is set to OFF, see "DISPLAY" on page 29.
- If no special permission is obtained from the copyright owner, videos recorded from TV programs or movies can only be used for your own personal
- You may not dub a copy protected video or DVD disc.





Chapter 9

Additional information

Language code list

Enter the appropriate code number for the initial settings "DVD MENU", "AUDIO" and/or "SUBTITLE" (see page 24).

Language (Language code letter), Language Code

Abkhazian, 1112 Afar, 1111 Afrikaans, 1116 Albanian, 2927 Amharic, 1123 Arabic, 1128 Armenian, 1835 Assamese, 1129 Aymara, 1135 Azerbaijani, 1136 Bashkir, 1211 Basque, **1531** Bengali; Bangla, 1224 Bhutani, 1436 Bihari, 1218 Breton, 1228 Bulgarian, 1217 Burmese, 2335 Byelorussian, 1215 Cambodian, 2123 Catalan, 1311 Chinese, 3618 Corsican, 1325 Croatian, 1828 Czech, 1329

Danish, 1411 Dutch, 2422 English, 1524 Esperanto, 1525 Estonian, 1530 Faroese, 1625 Fiji, **1620** Finnish, **1619** French , 1628 Frisian , 1635 Galician, 1722 Georgian, 2111 German, 1415 Greek, **1522** Greenlandic, 2122 Guarani , **1724** Gujarati, 1731 Hausa, 1811 Hebrew, **1933** Hindi, 1819 Hungarian, 1831 Icelandic, 1929 Indonesian, 1924 Interlingua, 1911 Irish , 1711

Italian, 1930 Japanese, 2011 Javanese, 2033 Kannada, 2124 Kashmiri, 2129 Kazakh , **2121** Kirghiz, 2135 Korean , 2125 Kurdish , 2131 Laothian, 2225 Latin, 2211 Latvian, Lettish, 2232 Lingala, 2224 Lithuanian, 2230 Macedonian, 2321 Malagasy, 2317 Malay, **2329** Malayalam, 2322 Maltese, 2330 Maori, 2319 Marathi, 2328 Moldavian, 2325 Mongolian, 2324 Nauru, 2411

Nepali, 2415

Norwegian, 2425 Oriya, 2528 Panjabi, 2611 Pashto, Pushto, 2629 Persian, 1611 Polish, **2622** Portuguese, 2630 Quechua, 2731 Rhaeto-Romance, 2823 Romanian, 2825 Russian, 2831 Samoan, **2923** Sanskrit, 2911 Scots Gaelic, 1714 Serbian, 2928 Serbo-Croatian, 2918 Shona, **2924** Sindhi. 2914 Singhalese, 2919 Slovak, 2921 Slovenian, 2922 Somali, 2925 Spanish, 1529 Sundanese, 2931 Swahili, 2933

Swedish, 2932 Tagalog, 3022 Tajik, 3017 Tamil, 3011 Tatar, **3030** Telugu, 3015 Thai, **3018** Tibetan, 1225 Tigrinya, 3019 Tonga, **3025** Turkish, 3028 Turkmen, 3021 Twi, **3033** Ukrainian, 3121 Urdu, 3128 Uzbek, 3136 Vietnamese, 3219 Volapük, 3225 Welsh, 1335 Wolof, 3325 Xhosa, 3418 Yiddish, 2019 Yoruba, **3525** Zulu, 3631

Screen sizes and disc formats

When viewing on a standard TV or monitor

Screen format of disc Setting **Appearance**

16:9



4:3 (Letter Box)



The program is shown in widescreen with black bars at the top and bottom of the screen





The sides of the program are cropped so that the picture fills

the whole screen.

Please note that many widescreen discs override the player's settings so that the disc is shown in letter box format regardless of the setting.

4:3



16:9



The program appears squashed. Set to either 4:3 (Letter Box) or 4:3 (Pan & Scan).

4:3 (Pan & Scan)



The program is presented correctly on either setting.

When viewing on a widescreen TV or monitor

16:9

Screen format of disc





Setting

The program is presented in . widescreen.

Appearance

4:3





Your TV will determine how the picture is presented-check the manual that came with the TV for details.





Using the 16:9 (Wide) setting with a standard 4:3 TV, or either of the 4:3 settings with a widescreen TV, will result in a distorted picture.

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Glossary

A-B Repeat Playback

Playback that repeats between two set points, A and B.

Recorded onto some DVD discs are scenes which have been simultaneously shot from a number of different angles (the same scene is shot from the front, from the left side, from the right side, etc.). With such discs you can select the angle to view the scene from different angles.

auto chapter

Feature that automatically makes chapter marks on a DVD disc during recording.

auto clock

Feature that automatically sets the internal clock.

blue background

Feature that automatically changes unpleasant noise images to a blue screen when a channel without a broadcast or a channel on which the broadcast has ended has been selected.

BROWSER screen

Screen that appears when TITLE MENU is pressed during MP3, WMA, JPEG or DivX® CD is inserted.

CABLE

Cable television.

chapter

A section within a title is called a "chapter".

Chase playback

Feature that playback from the beginning of a program currently being recorded.

When pressed during playback, playback jumps 30 sec. ahead and resumes.

copy guard

Copyright protection signal. Software and broadcasts that contain this signal cannot be recorded.

DivX is a compressed digital video format created by the DivX® video codec from DivXNetworks, Inc. This player can play DivX video files burned on CD-R/RW/ROM

discs. Keeping the same terminology as DVD-Video, individual DivX video files are called "Titles". When naming files/titles on a CD-R/RW disc prior to burning, keep in mind that by default they will be played in alphabetical order.

Dolby Digital



Dolby® Digital Recording enables consumers to record high-quality video with stereo sound on recordable DVD discs. The technology, when utilized instead of PCM recording, also saves recordable disc space, allowing for higher video resolution or extended reording time on each DVD. DVDs created using Dolby Digital Recording will play back on all DVD-Video players.

Manufactured under licence from Dolby Laboratories. "Dolby" and the double-D symbol are trademarks of Dolby Laboratories.

DTS



DTS stands for Digital Theater System. DTS is a surround system different from Dolby Digital that has become a popular surround sound format for movies. "DTS" and "DTS Digital Out" are registered trademarks of Digital Theater Systems, Inc.

DVD menu

Menu recorded on a DVD-Video that enables the user to select subtitles language, dubbing, etc.

finalize

Operation that enables discs recorded or edited with this unit to be played back on other DVD players.

interlaced scanning

Technology that alternately displays odd-numbered scanning lines and even-numbered scanning lines. Also called "480i", "i" meaning "interlace".

letter box

Feature that displays black bands above and below the playback images during playback of a disc recorded in wide (16:9) format on a 4:3 TV connected to this unit.

One type of audio compression that uses MPEG1. This format compresses the sound to use up about 1/10 of the original file space, with minimal loss of sound













one touch repeat

If ONE TOUCH REPEAT is pressed during playback, playback returns to a point 10 sec earlier and resumes.

original title

The file created by recording something is called an "original title".

One-touch Timer Recording. Start a timed recording by pushing just one button (up to 6 hours).

Feature that cuts the left and right edges of playback images to a 4:3 size during playback of a disc recorded in wide (16:9) format on a 4:3 TV connected to this unit.

parental control

Some discs control viewing according to the age of the viewer. A control level can be set for those types of discs.

PBS

Acronym for Public Broadcast System. The PBS channel transmits data for auto clock setting.

User-created titles based on each original title.

Progressive scan

Technology that simultaneously displays odd-numbered scanning lines and even-numbered scanning lines from top to bottom. Also called "480p", "p" meaning "progressive".

Regions (DVD only)





(example region code marks)

Regions associate discs and players with particular areas of the world. This unit will only play discs that have compatible region codes. You can find the region code of your unit by looking on the rear panel. Some discs are compatible with more than one region (or all regions).

SETUP MENU

Menu that contains settings for various features of this unit, such as recording and playback. Timer recording is also set from the SETUP MENU.

slide show

Technique for flipping through and viewing many images (JPEG files).

subtitle language

Language used for subtitles of movies, etc. Viewers can watch in a language of their choosing.

A program recorded on a disc is called a "title".

title menu

Menu that lists titles and tracks recorded on the disc. It is used for playback and disc editing.

top menu

Menu on a DVD-Video for selecting chapters for playback, subtitle language, etc. Some DVD-Video call this top menu "Title".

track

A song on a music CD is called a "track".

TRACK INFO screen

The screen that appears when TITLE MENU is pressed, if a music CD disc is in the unit.

Video mode

This recording format is compatible with commercially available DVD players.

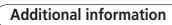
VR mode

This recording format is the basic DVD-RW recording format, and lets you enjoy the various editing functions available with this unit.





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Error/Warning message list

	ERROR/WARNING MESSAGE	CAUSE	POSSIBLE SOLUTIONS	PAGE
Power ON	SYSTEM ERROR PLEASE WAIT	The power was shut down with- out completing the termination process due to a power failure or disconnection of the AC cord plug. (Abnormal termination)	Wait until the message disappears.	
	SYSTEM ERROR PLEASE WAIT DISC CHECKING	The power was abruptly turned off before writing to the disc was completed.	The data is now restoring.	
	SYSTEM ERROR DISC MIGHT BE FAILED PRESS ENTER	The data restoration was completed.	Press ENTER , then the screen returns to the normal display. The data may not be restored even if the restoration process is performed.	53
Playback	NO DISC	When a disc was not loaded in the unit, PLAY was pressed.	Load a disc.	33
	REGION CODE ERROR	A disc specified other than "Region 1" or "Region ALL" was loaded.	A disc specified other than "Region 1" or "Region ALL" cannot be played back.	9, 85
	INCORRECT DISC - C104, C105, C106, C107	The disc cannot be identified.	Check the disc and load a proper disc.	9
	PROGRESSIVE OUTPUT. STOP DISC PLAY BACK THEN PRESS PROGRESSIVE TO CANCEL.	When the unit was not connected to the TV with the component video cables, PROGRESSIVE was pressed.	Press PROGRESSIVE in the stop mode to make the progressive scanning mode inactive.	48
Recording	NO DISC	When a disc was not loaded into the unit, REC was pressed.	Load a disc.	55
Recording	PROCESSING PLEASE WAIT	The recording termination is processing.	Wait until the process is completed.	
	NO SPACE ON THE DISC.	Disc became full during recording.	Erase unnecessary titles or load another disc and restart recording.	76
	CANNOT RECORD - C203	Recording was tried onto the disc having no space.	Check the disc space.	35
	CANNOT RECORD - C206	Recording was tried onto the disc which does not support recording.	Load a recordable disc.	9
	CANNOT RECORD, DISC PROTECTED	Disc erase-protection is applied.	Set "Protect disc" to "OFF".	28
	CANNOT RECORD - C208	Recording was tried onto the finalized disc.	Undo finalization or load another disc for recording.	28
	CANNOT RECORD - C209	Adding data was tried onto the disc recorded in the other unit.	Load another disc for recording.	
	CANNOT RECORD - C210	Adding data was tried to the disc where PC data was recorded.	Load another disc for recording.	
	DISC ERROR - C205, C211, C212, C213	A scratch or contamination was found on the disc.	Check the disc and reload it, or use another disc for recording.	
	CANNOT RECORD, EX- CEEDS LIMITED NUMBER OF TITLES	99 titles were recorded on the disc.	Erase unnecessary titles or load another disc.	76
	CANNOT RECORD, EX- CEEDS LIMITED NUMBER OF CHAPTERS	999 chapters exist on the disc.	Erase unnecessary chapters or load another disc.	74





	ERROR/WARNING MESSAGE	CAUSE	POSSIBLE SOLUTIONS	PAGE
	CANNOT RECORD PROTECTED IMAGE	You tried to record a copy-guard video.	You cannot record to the video containing copy-guard signal.	54
	RECORDING INTERRUPTED PROTECTED IMAGE	The video was changed to a copyguard format in recording.	You cannot record to the video containing copy-guard signal.	54
	CANNOT RECORD IN VIDEO MODE. COPY IMAGE ONCE ONLY.	Recording was attempted of a "Copy Once" program onto a disc (Video mode).	Load a DVD-RW Ver. 1.1/1.2(VR mode) with CPRM.	54
	CANNOT RECORD ON DISC. THIS IS NOT CPRM DISC.	Recording was attempted of a "Copy Once" program onto a disc without CPRM.	Load a DVD-RW Ver. 1.1/1.2(VR mode) with CPRM.	54
	TIMER RECORDING ERROR PLEASE CHCK THE DISC OR TAPE	When a recordable tape is not inserted or no disc space is available, TIMER REC was pressed	Load a recordabl tape or disc.	60, 62
	OPERATION HALTED TO START T-REC	From about 6 minutes before DVD timer recording starts, DVD playback cannot be done.	You cannot playback the disc from about 6 minutes before DVD timer recording starts.	60, 62
Dubbing	SWITCHING TO INTERLACE OUTPUT FOR COPYING	Dubbing was initiated from a disc to a video tape in the progressive scan mode.	The mode is automatically changed to interlaced mode if dubbing from a disc to a video tape.	81
	CANNOT COPY DATA - C251	No video tape or disc is inserted as a source for the recording.	Load a video tape or disc into the source drive.	80, 81
	CANNOT COPY DATA - C254, C255	The source video or disc to be copied is copy-guarded.	You cannot dub a video containing copy-guarded material.	54
	COPYING INTERRUPTED	The video tape or disc became full during dubbing.	Load another video tape or disc for recording and restart.	80, 81
Disc setup	DISC ERROR - C302	Cannot Format disc due to a scratch or contamination on the disc.	Check the disc and reload it, or use another disc for recording.	
	DISC ERROR - C304	Cannot Finalize disc due to a scratch or contamination on the disc.	Check the disc and reload it, or use another disc for recording.	
	DISC ERROR - C306	Cannot Undo Finalize disc due to a scratch or contamination on the disc.	Check the disc and reload it, or use another disc for recording.	
	DISC ERROR - C307, C308	Cannot Protect disc ON/OFF due to a scratch or contamination on the disc.	Check the disc and reload it, or use another disc for recording.	
Title Menu	CANNOT EDIT	Editing cannot be performed due to a scratch or contamination on the disc.	Check the disc and reload it, or use another disc for recording.	
	PROCESSING PLEASE WAIT	A process requiring a longer time such as editing is being performed.	Wait until the process is complete.	



• Any error/warning message other than those above might appear. Take measures against such a message by seeing the possible solutions above.





Troubleshooting

Incorrect operation is often mistaken for trouble and malfunction. If you think there is something wrong with this component, please check 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 the points below, ask your nearest Pioneer authorized service center or your dealer to carry out repair work.



If the unit does not operate normally due to external effects such as static electricity, disconnect the power plug
from the AC outlet and insert again to return to normal operating conditions.
 If the unit will not work even if the power cord is unplugged and plugged back in, unplug the cord from the AC
outlet for about 4 hours and then try plugging it back in and turn on the power.

DVD/VCR

DVD/VCR does not operate.		
	 Make sure the power cord is plugged in. 	15
	Try another AC outlet.	
	 Power is off, check fuse or circuit breaker. 	
	 Unplug unit, then plug it back in. 	15
	 Select the DVD or VCR mode before operating. 	33, 49
No picture.	 Antenna connection is not correct or antenna cable is disconnected. 	16~19
	• The video channel is not in the correct position or the TV is not set to the video channel 3 or 4.	22
	Check the unit is connected correctly.	16~21
	 The video input selector of the TV is not set to VIDEO. Set to VIDEO (or equivalent). 	
	Channel is set to the external mode.	
No sound.	Check the unit is connected correctly.	16~21
	 Check the input selector of the amplifier is set properly. 	
	The unit is in the Special playback mode.	36, 51
The remote control does not func-	Aim at the remote control at the remote sensor.	
tion.	 Operate within Approx. 5 meters or reduce the light in the room. 	
	Clear the path of the beam.	15
	 The batteries are weak. Replace the batteries. 	
	 Check the batteries are inserted correctly. 	
No Cable TV reception	Check all Cable TV connections.	18, 19
	Station or Cable TV system problems, try another station.	,
No function in DVD mode	 This unit may on rare occasions stop working in certain situations, such as when a soiled or damaged disc is used. If this occurs, hold down STANDBY/ON on the unit for 10 seconds or longer to reset the unit. 	
	The unit may also automatically reset itself if it detects a problem.	
	If the unit performs a reset of this sort while data is being recorded onto	
	a disc, it may in rare cases no longer be possible to successfully record	
	to or play back from the disc.	
DVD	respective sections	

טעט		
SYMPTOMS	POSSIBLE SOLUTIONS	PAGE
Display is not shown in your language.	Select proper language in the SETUP MENU.	24
Playback doesn't start.	 No disc is inserted. The disc may be dirty. Clean up the disc. Check that the disc is not a DVD-RAM, DVD+R/RW, dual disc (DVD/CD hybrid disc) or other incompatible format disc. 	33 90 9
Stopping playback, search, slow- motion play, repeat play, or program play, etc. cannot be performed.	Some discs may not do some of the functions.	
Recording does not work.	 Check the disc space, using the disc information. Check the disc for protection. Check if the video to be recorded is not "copy-guarded". Check that the number of recorded titles is 99 or less, using the disc information. 	35 28 54 35, 53
	• Check the number of the total chapters for the recorded titles is 999, using the disc information.	35, 72
	 In a DVD-RW of Ver.1.0, recording in Video mode does not work. Check the disc type. 	10



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SYMPTOMS	POSSIBLE SOLUTIONS	PAGI
A disc recorded using this recorder cannot be played back in other players.	 Check that the disc is finalized. Some DVD players will not play even if the disc has been finalized. If the disc was recorded in VR mode, the other player must be RW compatible in order to play the disc. 	28 10, 28 10, 28
VCR		
SYMPTOMS	POSSIBLE SOLUTIONS	PAGI
TV recording does not work.	The erase prevention tab of the video cassette is broken off.The unit is in the external input mode.	49, 5
Timer recording does not work.	 The time is not set correctly. The recording start/end time is not set correctly. TIMER REC has not been pressed (□ is not lit). 	26 61 62
Noise bars on screen.	 Tracking adjustment beyond range of automatic tracking circuit. Try Manual tracking adjustment. Video heads are dirty. The tape is worn or damaged. 	51 91
No on-screen display	When DVD Priority (Component OUT jacks and S-Video OUT jack) outputs are connected to the TV, the on-screen display only shows when VCR is playing.	21
OTHER		
SYMPTOMS	POSSIBLE SOLUTIONS	PAGI
No picture, or screen is blurred or divided into two parts.	The progressive scan mode is active through the unit is connected to a TV via the VIDEO OUT jack.	48
No 4:3 (16:9) picture	The setup does not match your TV.	29
No on-screen display	Select Display "ON".	29
Nothing appears in the display window	Check the DIMMER setting for SETUP.	29
No surround sound	The setup does not match your stereo system.	21
The unit or remote operation key is not functioning.	Turn off the unit and unplug the AC power cord for several minutes, then replug it.	
Playback does not start when the title is selected.	Check the Parental setup.	25
Audio soundtrack and/or subtitle language is not changed when you playback a DVD.	Multilingual language is not recorded on the DVD disc.	24
No subtitles	Some discs have no subtitles. Subtitles are cleared. Press SUBTITLE .	24, 4
Angle cannot be changed.	Multi-angles are not recorded on the DVD disc.	





• The function is prohibited with the unit or the disc.

"\" appears on the screen.

Handling discs

When holding discs of any type, take care not to leave fingerprints, dirt or scratches on the disc surface. Hold the disc by its edge or by the center hole and edge. Damaged or dirty discs can affect playback and recording performance. Take care also not to scratch the label side of the disc. Although not as fragile as the recorded side, scratches can still result in a disc becoming unusable. Should a disc become marked with fingerprints, dust, etc., clean using a soft, dry cloth, wiping the disc lightly from the center to the outside edge as shown in the diagram below.



If necessary, use a cloth soaked in alcohol, or a commercially available CD/DVD cleaning kit to clean a disc more thoroughly. Never use benzine, thinner or other cleaning agents, including products designed for cleaning vinyl records.

Storing discs

Although CDs and DVD discs are more durable than vinyl records, you should still take care to handle and store discs correctly. When you're not using a disc, return it to its case and store upright. Avoid leaving discs in excessively cold, humid, or hot environments (including under direct sunlight).

Don't glue paper or put stickers onto the disc, or use a pencil, ball-point pen or other sharp-tipped writing instrument. These could all damage the disc.



For more detailed care information see the instructions that come with discs.

Do not load more than one disc into the recorder.

Damaged discs

Discs spin at high speed inside the recorder. If you can see that a disc is cracked, chipped, warped, or otherwise damaged, don't risk using it; you could end up damaging the recorder.

This recorder is designed for use with conventional, fully circular discs only. Use of shaped discs is not recommended for this product. Pioneer disclaims all liability arising in connection with the use of shaped discs.



Cleaning the pickup lens

The DVD recorder's lens should not become dirty in normal use, but if for some reason it should malfunction due to dust or dirt, consult your nearest Pioneer-authorized service center. Although lens cleaners for CD players are commercially available, we do not recommend using them since some may damage the lens.

Handling video tapes

Please do not use the following kinds of video tape:

- Dusty or mouldy tape
- Tape on which liquid has been spilled
- Tape which has been broken and then repaired
- Tape which has become unwound from the spools in the cassette
- Dirty heads and very long length, thin video tape can cause problems such as uneven playback.
- When using a new video tape, fast-forward to the end, then rewind it back to the start before using.
- Avoid dropping video tapes or exposing them to severe vibration.

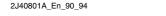
Storing video tapes

- After using a video tape, rewind it back to the beginning and return to its case.
- Do not store tapes:
 - in excessively dusty places
 - in excessively hot or humid places
 - in direct sunlight
 - near air-conditioners or heaters
 - near strong magnetic fields



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Video head cleaning

Video head clogging

The video heads are the means by which the DVD/VCR reads the picture from the tape during playback. In the unlikely event that the heads become dirty enough to be clogged, no picture will be played back. This can easily be determined if, during playback of a known good tape, there is good sound, but no picture (picture is extremely snowy). If this is the case, have the DVD/VCR checked by qualified service personnel.





Norma

When head is dirty



- DO NOT ATTEMPT TO CLEAN THE VIDEO HEADS OR SERVICE THE UNIT BY REMOVING THE TOP COVER.
- Video heads may eventually wear out and should be replaced when they fail to produce clear pictures.
- To help prevent video head clogging, use only good quality VHS tapes. Discard worn out tapes.
- We do not recommend using wet-type headcleaning cassettes as they may damage the unit.

Moving the recorder

If you need to move the recorder, first remove the disc and the cassette, if they are loaded, and close the disc tray. Next press **STANDBY/ON** to switch the power to standby. Lastly, disconnect the power cord.

Resetting the recorder

2J40801A En 90 94

If you need to, you can reset the recorder to all its factory settings.

- 1 Make sure that the recorder is on and remove the disc.
- 2 Press and hold STOP and press 🖰 STANDBY/ON.

The recorder turns off with all settings reset.

Hints on installation

We want you to enjoy using this unit for years to come, so please bear in mind the following points when choosing a suitable location for it:

Dο

- ✓ Use in a well-ventilated room.
- ✓ Place on a solid, flat, level surface, such as a table, shelf or stereo rack.

Don't

- Use in a place exposed to high temperatures or humidity, including near radiators and other heatgenerating appliances.
- ➤ Place on a window sill or other place where the recorder will be exposed to direct sunlight.
- ★ Use in a dusty or damp environment or in a room where it will be exposed to excessive cigarette smoke.
- X Place directly on top of an amplifier, or other component in your stereo system that becomes hot in use.
- ★ Use near a television or monitor as you may experience interference-especially if the television uses an indoor antenna.
- **X** Use in a kitchen or other room where the recorder may be exposed to smoke or steam.
- Use on a thick rug or carpet, or cover with cloththis may prevent proper cooling of the unit.
- × Place on an unstable surface, or one that is not large enough to support all four of the unit's feet.







Specifications

GENERAL

Power supplyAC 120V 60H:
Power consumption Operation: 29W
Standby: 2.5W (if display window is off
Weight 5.0 kg (11.0 lb.
Dimensions 430 mm (W) x 90 mm (H) x 330 mm (D
(16-5/16 in. (W) x 3-9/16 in. (H) x 13 in. (D)
Operating temperature 41°F to 95°F (5°C to 35°C
Operating humidity Less than 80% RF
Inputs/Outputs:
Video
Out: 1Vp-p/75 ohr
Audio In: -8dBm/50k ohm
Out: -8dBm/1k ohr
AntennaUHF/VHF IN/OUT: 75 ohm coaxia
Program12 programs/1 month
Power off memoryApprox. 30 min
VCR section

VCR section

Video head	4 Rotary Heads
Audio track	Hi-Fi Sound - 2 Tracks
	MONO Sound - 1 Track
Hi-Fi frequency response	20Hz to 20,000Hz
Hi-Fi dynamic range	More than 90dB
Tuner 181 C	
VHF	2-13
UHF	14-69
CABLE 14-36 (A)-(W) 37-59 (AA))-(WW) 60-85 (AAA)-(ZZZ)
86-94 (86)-(94) 95-99 (A-5	i)-(A-1) 100-125 (100)-(125)
	01 (5A)
RF channel outputC	Channel 3 or 4, Switchable

F.FWD/REW Time Approx. 1minute and 48 seconds

(with T-120 Cassette Tape)(at +25°C)

DVD section

Signal systemNTSC
Applicable disc DVD (12cm, 8cm[Self Recording/Playback
only]), CD (12cm, 8cm)
Recording format DVD-Video Recording (VR mode)
DVD-VIDEO (Video mode)
Recording discsDVD-RAM, DVD-RW, DVD-R
Recording time (based on a 4.7GB disc)
XP Approx. 60 min
SP Approx. 120 min
LP Approx. 240 min
ED Approx 360 min

22kHz
- 20kHz
90dB
nan 1%
Wrms
n 90dB
75 ohm
1k ohm
75 ohm
780 nm
8.5 mW
660 nm
20 mW

ACCESSORIES

Remote control	. 1
Dry cell batteries (AAA/R03)	. 2
Audio / Video cable (red/white/yellow)	. 1
RF antenna cable	. 1
Blank DVD-RW disc	. 1
Warranty card	. 1
Quick Start Guide	. 1
Operating Instructions	

Note: The specifications and design of this product are subject to change without notice, due to improvement.









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Should this product require service in the U.S.A. and you wish to locate the nearest Pioneer Authorized Independent Service Company, or if you wish to purchase replacement parts, operating instructions, service manuals, or accessories, please call the number shown below.

800-421-1404

Please do not ship your product to Pioneer without first calling the Customer Support Division at the above listed number for assistance.

> Pioneer Electronics Service Inc. Customer Support Division P.O. BOX 1760, Long Beach, CA 90801-1760, U.S.A.

For warranty information please see the Limited Warranty sheet included with your product.

Should this product require service in Canada, please contact a Pioneer Canadian Authorized Dealer to locate the nearest Pioneer Authorized Service Company in Canada.

Alternatively, please contact the Customer Satisfaction Department at the following address:

Pioneer Electronics of Canada, Inc. Customer Satisfaction Department 300 Allstate Parkway, Markham, Ontario L3R OP2 (905)479-4411 1(877)283-5901

For warranty information please see the Limited Warranty sheet included with your product.

Si ce produit doit être réparé au Canada, veuillez vous adresser à un distributeur autorisé Pioneer du Canada pour obtenir le nom du Centre de Service Autorisé Pioneer le plus près de chez-vous. Vous pouvez aussi contacter le Service à la clientèle de Pioneer:

> Pioneer Electroniques du Canada, Inc. Service à la clientèle 300, Allstate Parkway, Markham, Ontario L3R OP2 (905)479-4411 1(877)283-5901

Pour obtenir des renseignements sur la garantie, veuillez vous reporter au feuillet sur la garantie restreinte qui accompagne le produit. S018D enfr

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