


















TV screen line-up

Depending on the combination of the type of disc format and TV set screen proportions (and the picture quality mode), the images appearing on the TV screen will be one of the picture formats shown below.

TV screen (picture quality mode) Disc format	4:3	16:9 (full mode)	16:9 (zoom mode)	16:9 (auto mode)
Wide-screen format (with pan & scan specification) 	Picture cut off at the left and right 	Full screen 	Picture cut off at the top and bottom 	Full screen 
Wide-screen format (without pan & scan specification) 	Letterbox (with black bands at the top and bottom) 			
4:3 format 	Full screen 	Picture extended to the left and right 	Picture cut off at the top and bottom 	Full screen (with black bands at the left and right) 
4:3 format (letter-box) 	Letterbox (with black bands at the top and bottom) 	Picture extended to the left and right (with black bands at the top and bottom) 	Full screen 	Picture extended at the left and right edges (with black bands at the top and bottom) 

- The specifications given to describe the types of disc format and picture quality modes may differ from one manufacturer to another.
- “Pan & Scan” refers to showing the pictures with both (or one) of the side edges of wide-screen format cut off so that the whole TV screen is filled with the image.

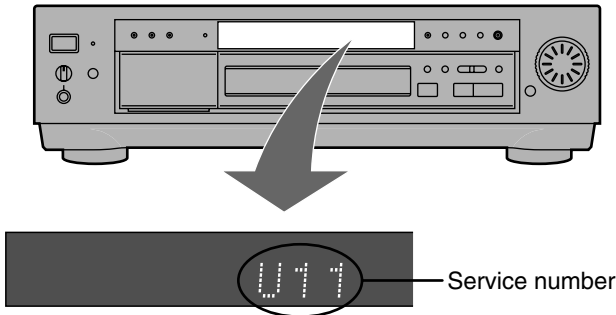
Troubleshooting

Self-diagnosis display function

This unit comes with a self-diagnosis display function for alerting the user to any abnormalities.

When the function detects a problem during installation or operation, one of the service numbers in the table below appears on the unit display window.

- Service numbers are indicated with a letter followed by a 2-digit number, such as “U11” shown in the example below.



Service number	Unit status		Remedial action	Page
U11	Disc is dirty or disc has some major scratches or marks.	▶	DVD-Video discs, video CDs and CDs <ul style="list-style-type: none">•If the disc is dirty, wipe it clean using a soft cloth.	7
			DVD-RAM discs <ul style="list-style-type: none">•If the disc is dirty, be absolutely sure to use the dedicated LF-K200DCA1 (optional accessory) DVD-RAM/PD disc cleaner to wipe it clean.•If the disc has some major scratches or marks, it cannot be played unless this display is cleared.	7
	A disc that the unit is not capable of recording onto and/or playing back has been inserted.	▶	<ul style="list-style-type: none">•Insert a disc which the unit can record and play.	—
				6
U14	The temperature inside the unit has risen.	▶	<ul style="list-style-type: none">•The power is forcibly turned off to ensure safety, and the unit is no longer operable. Wait (about 30 minutes) until the display goes off. Select an installation location for the unit that is as well ventilated as possible. Do not block the cooling fan in the unit's rear panel.	—
U99	Unit fails to operate properly.	▶	<ul style="list-style-type: none">•Hold down the unit's [POWER] for about 10 seconds to turn off the power. Then press [POWER] to turn the power back on.	—

Troubleshooting (continued)

Check the following symptoms before calling in a service engineer to repair the unit.
If the problem is not rectified by taking the suggested remedial action or if the symptoms are not listed, contact your dealer or your nearest service center.

◆Power supply

"No power."

- ☞ Power plug has been disconnected from the power outlet.

"Power is on but the unit cannot be operated."

- ☞ Unit is still in the programmed recording standby mode. (The TIMER REC lamp is on.)
→ Press [TIMER REC] to turn off the unit's TIMER REC lamp.
- ☞ The unit's inside temperature has risen. (Service number "U14" has appeared on the unit display window.)
→ Wait (about 30 minutes) until the display goes off.
- ☞ One of the safety devices may have been activated, in which case proceed as follows.
→ 1. Press the unit's [POWER] to turn off the power. If the power fails to be turned off, press and hold [POWER] for about 10 seconds.
(Alternatively, disconnect the power plug from the power outlet and wait about a minute before re-connecting the power plug to the outlet.)
2. Press [POWER] to turn on the power.

"Power is automatically set to off."

- ☞ The "2 Off Timer" setting selected from "1 Set Up" in the Initial Settings has been activated.
→ Press [POWER] to turn on the power.
- ☞ One of the safety devices may have been activated.
→ Press [POWER] to turn on the power.

◆TV screen

"Unit's picture fails to appear."

- ☞ TV input has not been selected.
→ Press [INPUT SELECT] to select the appropriate input (L1, L2, L3).
- ☞ When a TV that does not support 480i has been connected to the unit using the component video connector, select "2 Video Settings" → "3 Component Video Output Setting" → "2 480P" in the Initial Settings. (p. 117)

"Poor picture quality."

- ☞ This happens because the TV signals are split between the TV set and the unit.
→ A booster, etc. sold on the market will improve the picture. (If this has no effect, consult your dealer.)

"There is something wrong with the picture size."

- ☞ Check the TV set's settings.
- ☞ "1 TV Aspect" and "2 TV Mode (4:3)" selected from "2 Video Settings" in the Initial Settings have not been set properly.

"Playback picture shakes vertically."

- ☞ Try adjusting the TV set's vertical hold. (For details on how to make this adjustment, check the TV set's operating instructions or consult your dealer.)

"Screen messages fail to appear."

- ☞ Perform the following settings: "1 Set Up" in the Initial Settings → "1 On-Screen Display" → "1 On-Screen messages" → "1 Automatic" or "2 On."
- ☞ Not available in progressive video mode. (p. 117)

"No blue background for the screen."

- ☞ Perform the following settings: "1 Set Up" in the Initial Settings → "5 Blue Background" → "1 On."
- ☞ Blue background screen is not available in progressive video mode. (p. 117)

"The Menu bar is hard to see or cut off."

- ☞ Change the color and position of the Menu bar screen by performing the following settings: "1 Set Up" in the Initial Settings → "1 On-Screen Display" → "2 Color and position of Menu Bar."

◆Audio

"No sound, volume level is low or there is something wrong with the sound."

- ☞ The components have not been connected properly.
→ When the unit has been connected to the amplifier, check the input setting selected for the amplifier, etc.
- ☞ The speaker settings have not been performed.
→ Perform the following settings especially when a 3/2.1 channel sound system has been connected: "3 Audio Settings" in the Initial Settings → "4 Speaker Setting." (p. 124)
- ☞ V.S.S. setting is ON.
→ Press [V.S.S.] several times to select "OFF"
- ☞ The master volume on the Menu bar is set low.
→ Press [DISPLAY] twice to show the unit information screen, select the Master Volume icon and adjust the volume. (p.42)

"The desired sound cannot be heard."

- ☞ The correct sound has not been selected.
→ Press [AUDIO] and select the correct sound.

◆Playback

"Play fails to start even when [PLAY] is pressed or play stops immediately." "The screen stops or the sound cuts out during playback." "U11," "NO DISC" or "NO PLAY" is displayed in the unit's display window.

- ☞ Place the disc properly on the tray with its label surface facing up.
- ☞ A disc which is not a DVD-RAM disc, DVD-Video disc, video CD or music CD has been inserted.
- ☞ Disc is dirty.
→ Wipe the disc clean.
- ☞ A disc with some major scratches or marks has been inserted.
- ☞ An unrecorded DVD-RAM disc has been inserted.

“Unit fails to operate.”

- ☞ Operation may be prohibited with some discs.
- ☞ If the unit does not operate at all, try turning the unit's power off and back on again.
 - The unit may not be operating properly because of lightning, static, etc.

Playback fails to start even when a title or chapter is selected (on a DVD-Video disc)."

- ☞ Some titles or chapters cannot be played if viewing/listening restrictions have been set.

“Picture is disrupted during forward/reverse skip.”

- ☞ The picture is disrupted to some extent but this is normal and not indicative of trouble.

“Pictures are frequently accompanied by lag.”

- ☞ Press the [DNR] to release the DNR effect (and turn off the button's lamp).
- ☞ Alternatively, lower the three noise reduction levels by performing the following settings: “2 Video Settings” in the Initial Settings → “6 Noise Reduction (NR).” (p. 120)

“The audio or subtitle language cannot be switched.”

- ☞ No more than one language was recorded on the disc to begin with.
- ☞ With some types of discs, this facility is selected by menu settings only and not by the sound and subtitle icons on the Menu bar.


“Preset audio or subtitle language is not selected.”

- ☞ The language concerned was not recorded on the disc to begin with.

“Subtitles fail to appear.”

- ☞ Subtitles were not recorded on the disc to begin with.
- ☞ The subtitles icon on the Menu bar has not been set to “On.”

“Angle cannot be switched.”

- ☞ Even with a multi-angle DVD disc, the angle can be switched only at places where multiple angles have been recorded. (“” lights on the unit display window. In many cases, the multi-angle display appears on the TV screen.)

“Password for the viewing/listening restrictions were set has been forgotten.”

- ☞ Performing the steps below can release the viewing/listening restrictions.
 - Press [◀◀] and [▶▶] on the unit at the same time for at least 5 seconds while the disc tray is open.

◆Unit display window

“Displays are dark.”

- ☞ Change the brightness by making the following selection: “1 Set Up” in the Initial Settings → “4 FL Display” (p. 111)

“0:00” flashes for time display.”

- ☞ The unit's clock does not show the correct time.
 - Readjust the time by making the following selection: “6 Clock settings” in the Initial Settings. (p. 129)

◆Recording/programmed recording

“No recording possible.”

- ☞ No disc has been inserted; alternatively, a disc not supported by the unit has been inserted.
 - Use a 4.7GB DVD-RAM disc.
- ☞ Disc has not been formatted. (Recording may not be possible even with a DVD-RAM disc.)
 - Format the disc to enable the unit to record on it.
- ☞ The disc cartridge's write protection tab has been set to “PROTECT”.
 - Use the tip of a ballpoint pen or other pointed object to release PROTECT.
- ☞ The disc is full; alternatively, it is nearly full.
 - Delete the programs that are no longer required or use a new disc.

“VCR Plus+ cannot be performed correctly.”

- ☞ The guide channels have not been set properly.
 - Set the guide channels properly.
- ☞ The unit's clock does not show the correct time.
 - Readjust the time by making the following selection: “6 Clock Settings” in the Initial Settings.

“Programmed recording cannot be performed properly.”

- ☞ One or more of the programming details (such as the programming channel, start time or end time) are wrong.
 - Repeat the programming steps in their proper sequence. Then check the programming details.
- ☞ The unit is not set to the programmed recording standby mode. (The unit's TIMER REC lamp is off.)
 - Press [TIMER REC] to turn on the unit's TIMER REC lamp.
- ☞ One programmed recording time period overlaps another.
- ☞ The unit's clock does not show the correct time.
 - Readjust the time by making the following selection: “6 Clock Settings” in the Initial Settings.

“Unit's power is turned off during programmed recording.”

- ☞ When the disc fills up during programmed recording, the unit's power is turned off.
 - Insert a disc with more free time on it than the recording time of the program that has been programmed.

“The programming details are not cleared even when programmed recording has ended.”

- ☞ The programming details for daily or weekly recording are not cleared.

“Programmed recording fails to end even when [STOP] is pressed.”

- ☞ Press [TIMER REC] to turn off the unit's TIMER REC lamp. (Recording now ends, and the unit's power is left on.)

Troubleshooting (continued)

◆Editing

"Black band noise has been recorded."

- ☞ Since the player component is situated near the TV set, it is picking up interference from the TV set.
→ Place the player component at a distance from the TV set.

"No editing possible"

- ☞ The components have not been connected properly.
- ☞ External input channel "L1," "L2" or "L3" to which the player component is connected has not been selected on the recorder component.

"The post-edited pictures are disturbed or their coloring has deteriorated."

- ☞ The material edited was protected by copy safeguards.
→ Some video media (including rental videos) available on the market are protected by copy safeguards to prevent illegal copying. Media protected by copy safeguards cannot be recorded properly.

◆Remote control

"The remote control does not work."

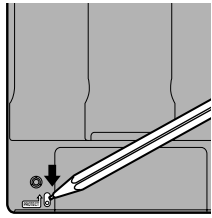
- ☞ The unit is still set to the programmed recording standby mode. (The unit's TIMER REC lamp is lighted.)
→ Press [TIMER REC] to turn off the unit's TIMER REC lamp.
- ☞ The "DVD" mode has not been established.
→ The [DVD] must be pressed when the unit is to be operated.
- ☞ The unit and remote control mode do not correspond.
→ Set the remote control mode to match the unit's mode. (p. 95-p. 96)
- ☞ The remote control batteries' life has expired.
→ Replace with new batteries.
- ☞ The remote control was not pointed at the unit's remote control sensor when it was operated.
- ☞ There is an obstruction between the remote control and unit.

"TV set cannot be operated. "

- ☞ The remote control's manufacturer number setting is not the correct one.
→ The TV button must be pressed when the TV is to be operated.
- ☞ The "TV" mode has not been established.
→ This must be at the TV position when the TV is to be operated.

Error Messages

When an error has occurred, a message is displayed on the TV screen.

Error message		Cause(s) and countermeasure(s)	Page
"This is a non-recordable disc."	▶	<ul style="list-style-type: none"> ●The disc you are attempting to use is a DVD-Video, video CD, music CD or other disc of a format that is not supported by this unit. → Insert a DVD-RAM disc that can be recorded onto by this unit. ●The disc you are attempting to use is an unformatted DVD-RAM disc. → Format the disc to enable the unit to record on it. 	6 128
"Please check write protect tab on the disc."	▶	<ul style="list-style-type: none"> ●The write-protect tab of the cartridge is set to "protect." → Release the write-protect setting using a ball point pen or other pointed object. 	—
"Contents of this disc are protected."	▶	<ul style="list-style-type: none"> ●The program is write-protected. → Release the protect by selecting "Cancel" protection in the sub menu of the direct navigation program list. ●The entire contents of the disc are write-protected. → Release the write-protect by selecting "Cancel" in the sub menu of the direct navigator disc list. 	73 79

Q&A

◆Power supply

Q: Will I be able to use the unit when I move?

A: The unit can be used in North America only.

→ Set the reception channels again properly.

◆Connections

Q: Can a microphone be connected?

A: No, it cannot.

→ Connect the microphone to an amplifier or other component connected to the unit.

Q: Can speakers be connected directly?

A: No, they cannot.

→ Connect them to an amplifier or other component connected to the unit.

Q: Why are the video/audio cable plugs and connectors color-coded?

A: This enables the colors of the plugs and connectors to be matched to facilitate the connections.

(Yellow: video, white: left channel sound, red: right channel sound, black or white: monaural sound)

◆Playback

Q: Can DVD discs purchased overseas be played?

A: Yes, they can, provided that region number is "1" or "ALL" and that they use the NTSC system. PAL system discs cannot be played.

Q: Can a DVD disc without a region number be played?

A: The region number indicates that the disc complies with the DVD standards. Discs which fail to meet these standards cannot be played.

Q: Can Video CDs purchased overseas be played?

A: Yes, they can, provided that they use the NTSC system. PAL system Video CDs cannot be played.

◆Recording

Q: Can the sound be switched over and heard while an MTS stereo broadcast is being recorded?

A: Yes, it can.

→ Use [AUDIO] to select the sound to be heard.

Q: Can the sound of only one channel of a stereo broadcast be recorded?

A: No, it cannot.

→ Use [AUDIO] to select the sound to be heard during play.

◆Programmed recording

Q: Are the programmed recordings recorded in the sequence in which they were programmed?

A: No, they are recorded in the date/time sequence.

Q: Can another disc be viewed up until the time when programmed recording is scheduled to commence? Can a disc be changed while the unit is in the programmed recording standby mode?

A: No, it cannot unless the programmed recording standby mode is released.

→ Press [TIMER REC] to turn off the unit's TIMER REC lamp, and then proceed with the operation.

Q: Is it OK for the TV set's power to remain off?

A: The TV set's power can be set on or off.

◆Editing

Q: Can the contents of discs be copied onto videotape?

A: This is not possible with discs which are protected by copy safeguards.

Glossary

Video terms

Field:

A field has one half of the video information contained in a frame. On a regular TV set, each frame is composed by showing these fields in succession one after the other.



Frame:

This is a single image of the connected multiple images on a moving-picture media. On a TV set, for instance, the images are made to move by showing 30 frames (still images) per second in succession.

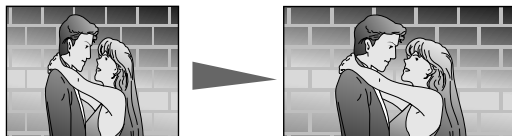


Frame still and field still:

Stills refer to the still pictures produced when the moving pictures are temporarily stopped. With frame still, two fields are alternatively shown on the TV screen so that the picture shakes but the resulting picture quality is superior to the field still pictures. With field still, only one half the video information is shown on the TV screen so that the pictures appear rough to the eye but they do not shake.

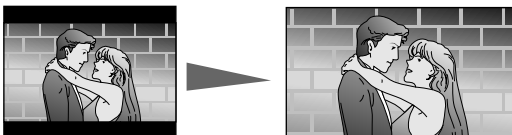
S1 video signals:

These are shown when the wide-screen disc format that was compressed to 4:3 is automatically restored to the 16:9 size



S2 video signals:

In addition to the S1 function, these automatically show letterbox format on the full screen.



Digital audio terms

Bitstream:

This refers to audio signals that have been replaced by digital codes and compressed. Using a decoder, the bitstream is decoded into the 2/3.1 channel or other individual channel audio data.

Dolby Digital:

This is a digital audio compression technology developed by Dolby Laboratories Inc. It supports stereo (2 channel) sound reproduction as a matter of course and 5.1 channel surround sound as well. It can store large volumes of audio data on discs very efficiently.

Dolby Pro Logic:

This is a surround sound system that records 4-channel signals on two channels and then restores them to the signals of the 4 separate channels for play. Surround signals are monaural signals that are played up to a frequency of 7 kHz.

dts (digital theater systems):

This is a digital audio recording system that was developed by DTS. It features a lower compression rate from the perspective of giving higher priority to the sound quality.

Dynamic range:

This refers to the difference between the softest sounds that are not overwhelmed by the noise generated from the component and the loudest sounds at which the sound will not break up.

Linear PCM (Pulse Code Modulation):

This refers to audio signals that are replaced with digital codes without compression. Compared with CD signals which are recorded using a 44.1 kHz/16-bit format, DVD signals are recorded using a 48 kHz/16-bit to 96 kHz/24-bit format. This means that DVD discs can be played back with a higher sound quality than CDs. In this unit, linear PCM sound is always output through 2 channels.

Sampling frequency:

Sampling refers to selecting samples of analog waves at recurring fixed time intervals and obtaining numerical values for the height of each wave in order to create digital codes (digital signals). The number of samples taken per second is called the sampling frequency, and the larger this number is, the more accurately the original sound can be reproduced.

Disc-related terminology

Chapter:

This is a subdivision of a title on a DVD-Video disc. The numbers used for these sub-divisions are called chapter numbers. They correspond to the tracks on a CD.

Interactive DVD discs:

These are discs on which multiple angles or stories have been recorded and whose elapsed play time is not displayed during playback.

Program:

This is a division of a DVD-RAM disc.

Title:

This is a major division on a DVD-Video disc. The numbers used for these divisions are called title numbers.

Video CDs with playback control (PBC):

Using the version 2.0 Video CD playback system, users can select scenes or information to be viewed by way of an interactive format while looking at the menu screens which are displayed during playback. In this manual, playback using menu screens is referred to as Video CD menu playback. (This unit does not support the auto pause function of playback control.)

Other terms

Component video output connectors:

The video information separated into luminance (Y) signals and component (C_B, C_R) signals is transferred straight through from these connectors to the TV set so that the colors are reproduced faithfully.

Interlace/progressive:

Whereas the conventional video signals (NTSC) were called 480I (I: interlace scanning) signals, the high-density video signals which have twice as many scanning lines as the 480I signals are called 480P (progressive scanning) signals. When connection is made to the component video output connectors (Y, $P_B/C_B-P_R/C_R$) on the unit's rear panel, progressive video signals can be output. This enables you to enjoy pictures with an even higher quality than that yielded when connection is made to the conventional video output connectors or S-video output connector.

Menu bar:

This means that operations can be performed while watching a screen. In the case of this unit, the long, thin strip of screen that displays the disc and unit information is called the "menu bar."

This screen enables a number of different operations to be performed during play by initiating changes to the settings while checking the information displayed.

Program navigator:

When [PROGRAM NAVIGATOR] is pressed, a list showing details of the recorded programs appears on the TV screen, making it possible to search for a desired program. The programs recorded on the disc are listed by date/time, channel and title (only for programs with titles that have been input), and the selected program is played as a moving picture in the background behind the list for easy confirmation. Programs can be write-protected to prevent accidental erasure or erased in part.

Play list:

The play list enables you to play in numerical order a series of favorite scenes which you have selected and put together. It also enables you to search specific scenes directly. Scenes no longer required can be removed and new scenes added at will. You can enjoy original videos consisting of all your favorite scenes of music or sports programs, for instance, or you can dub the pictures you have shot using a video camera, and then select only those scenes you need and play them one after the other, too.