

Safety Information

WARNING:

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK OR PRODUCT DAMAGE, DO NOT EXPOSE THIS APPLIANCE TO RAIN, SPLASHING, DRIPPING OR MOISTURE.

CAUTION!

THIS PRODUCT UTILIZES A CLASS I LASER.
USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.
DO NOT OPEN COVERS AND DO NOT REPAIR YOURSELF. REFER SERVICING TO QUALIFIED PERSONNEL.

Laser products:

Wave length: 780 nm

Laser power: No hazardous radiation is emitted with safety protection.

CAUTION:

PLEASE FOLLOW THE LAWS AND REGULATIONS OF YOUR STATE, PROVINCE OR COUNTRY FOR INSTALLATION OF THE UNIT.

The following applies only in the U.S.A.

Part 15 of the FCC Rules

FCC Warning:

Any unauthorized changes or modifications to this equipment would void the user's authority to operate this device.

NOTICE:

This product contains lead in some components. Disposal of these materials may be regulated in your community due to environmental considerations. For disposal or recycling information please contact your local authorities, or the Electronics Industries Alliance: <<http://www.eiae.org>>

Find the model number and serial number on either the back or bottom of the unit. Please record them in the space below and retain this booklet as a permanent record of your purchase to help with identification in case of theft.

MODEL NUMBER

CQ-VD7200U

SERIAL NUMBER

DATE PURCHASED

FROM

Panasonic welcomes you to our ever growing family of electronic product owners. We know that this product will bring you many hours of enjoyment. Our reputation is built on precise electronic and mechanical engineering, manufactured with carefully selected components and assembled by people who take pride in their work. Once you discover the quality, reliability, and value we have built into this product, you too will be proud to be a member of our family.

Features

- **Integration of the monitor, TV tuner, FM/AM radio, DVD/Video CD player, and CD/MP3 player**
 - A CD-R and a CD-RW that hold CD-DA data can be reproduced.
 - A CD-ROM, a CD-R and a CD-RW that hold MP3 data can be reproduced.
 - MP3 ID3Tag is supported.
- **7-inch wide LCD (Liquid Crystal Display) display**

Delivers images of high quality and superb color reproduction.
- **Fully powered display positioning mechanism (except for lateral angle)**

Positioning of the display unit is fully power driven. This includes extending the unit, raising it to upright position, adjusting its vertical (tilt) angle and moving it to the front and rear. The lateral angle to the right and left can be adjusted manually.
- **GUI (Graphic User Interface)**

GUI displays various indications with colorful symbols to enhance visibility, enjoyment, and operability.
- **Image capture function**

Images can be imported from TV, VTR, DVD or Video CD for a wall paper.
- **Built-in automatic dimmer**

The brightness of the screen is automatically adjusted in response to surrounding brightness.
- **ID code**

4-digit ID code for increased security.
- **External extension terminal**
 - **Two video input (on the hide-away unit side)**

You can connect a car navigation system, VCR, camcorder and rear view camera with this unit if they have video output type terminal.
 - **One video output (on the hide-away unit side)**

You can connect optional monitor for passengers in the rear seat. For example, you can enjoy a map of the car navigation on the front monitor, and passengers in the rear seat can enjoy DVD movie on the rear monitor at the same time. Moreover, different sounds can be played in the front seat and rear seat in the private mode.
- **CD changer control function**

An optional CD changer (CX-DP880U) can be connected.

Note: Dual CD changers can be connected at once by incorporating with CA-CD55 (option).

- Please take note that this model does not support CD-DA/SACD hybrid discs.
- Please take note that this model does not support Sirius satellite radio.

This book refers to the connection to the Panasonic car navigation system that will come on the market in future. Descriptions regarding the car navigation system are boxed with dotted line.

Contents

□ Safety Information.....	2
□ Features	4
□ Use This Product Safely	10
□ Components/Remote Control Unit Preparation	12
□ Name of Controls and Functions	13
□ Indications on the Screen.....	16
□ Discs that can be Played Back.....	17
□ General	18
□ TV Tuner	20
□ VTR	22
□ DVD/Video CD Player	24
□ CD/MP3 Player	28
□ Audio Formats	32
□ Radio	34
□ CD Changer Control	36
□ SET-UP : User Settings	38
□ SET-UP : Display (Screen) Settings....	44
□ SET-UP : DVD Settings	46
□ SET-UP : Clock/date Settings.....	48
□ SET-UP : Capture Function	50
□ SET-UP : Sound Settings	54
□ SET-UP : Other Settings	56
□ Installation Guide	60
□ Electrical Connections.....	72
□ Troubleshooting	84
□ Maintenance.....	92
□ Definition of Terms	94
□ Language Code List	95
□ Specifications	96

Use This Product Safely

WARNING:

TO AVOID RISK OF SERIOUS INJURY OR POSSIBLE VIOLATION OF LAWS, NOT FOR USE WHERE VISIBLE TO DRIVER FOR ANY PURPOSE OTHER THAN NAVIGATION OR USE WITH REAR VIEW CAMERA.

When Driving

- The driver must not operate the color LCD (liquid crystal display) monitor. Operating the color LCD monitor may lead to carelessness and cause an accident. Stop your vehicle in a safe location when operating the unit.
- The driver must not watch videos while driving. It may lead to carelessness and cause an accident.
- Keep the unit at an appropriate sound level. Driving with the sound at a level that prevents you from hearing sounds outside and around the vehicle may cause an accident.

CAUTION:

Follow local rules and regulations for installing monitor and TV antenna.

When Car Washing
Do not expose the product, including the speakers and discs, to water or excessive moisture. This could cause electrical shorts, fire, or other damage.

When Parked
Parking in direct sunlight can produce very high temperatures inside your car. Give the interior a chance to cool down before switching the unit on.

Use the Proper Power Supply
This product is designed to operate with a 12 V DC, negative ground battery system (the normal system in a North American car.)

Disc Mechanism
Do not insert coins or any small objects. Keep screwdrivers and other metallic objects away from the disc mechanism and disc.

Protect the DVD Software
When you leave the car, be sure to eject the disc from this unit and take it with you.

Use Authorized Servicenters
Do not attempt to disassemble or adjust this precision product. Please refer to the Servicenter list included with this product for service assistance.

For Installation
The product should be installed in a horizontal position with the front end up at a convenient angle, but not more than 30°. The user should bear in mind that in some areas there may be restrictions on how and where this unit must be installed. Consult your dealer for further details.

This system is designed so that you cannot see the moving picture while you are driving.

- Park your car in a safe place and engage the side brake (parking brake) lever before watching the monitor.
- A rear monitor (option) displays moving picture while driving.



Note: Be sure to connect the side brake (parking brake) connection lead. (⇒ page 76)

Cautions:

- Picture might not be displayed, or it might take more time than usual to display picture at low temperatures. Also, movement of picture might become labored, or picture quality might deteriorate at low temperatures. [practicable temperature: 32 °F to 104 °F (0 °C to 40 °C)]
- Do not touch the LCD (liquid crystal display).
If you touch the LCD, your fingerprints will be visible because the surface of the LCD is specially processed.
- In some cases, noise is generated. It depends on the position or direction of a mobile phone and a CB transiever, etc. Change the position or direction of the mobile phone and a CB transiever, etc. or keep them away from the unit.

ID Code

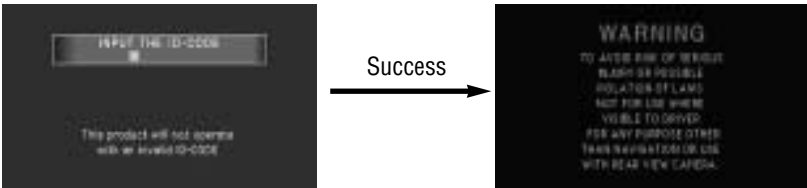
Prior to operating this unit, it is advisable to assign your 4-digit ID code for security. (Make sure to use **four digits** for ID code.)
Once the ID code has been set, the unit cannot be operated if the main power supply is disconnected then re-connected. It is electronically locked so that a thief could not use the stolen unit unless that person knows the code you have set. The ID code operation must be performed only by the person to whom the unit belongs.

Generally, it is not necessary to enter the ID code each time when using the unit if it has never been disconnected from the main power supply (car battery). For the ID code setting procedures, see pages 40-41.

Caution: Record your registered ID code and keep it in a secure location. If you forget it, you will be unable to use the unit. If you cannot operate the unit because you forget the ID code, please consult your nearest Panasonic Servicenter.

ID Code Input

Enter the ID code after turning on the power and activating the display.



Note: When you fail in entering the ID code, a screen on the right is displayed and the unit beeps three times. Enter a correct ID code.
If you fail to enter the correct ID code three times consecutively, the power is turned off. Turn on the power again and enter a correct ID code in this case.



[NAVI] (NAVIGATION)
● Activates/inactivates the car navigation. (➡ page 23, 38)

Remote Control Unit of the DVD/Video CD/CD/MP3 Playback (Operation only for the remote control)

Meaning of symbols		Indicates the compatible types of disc.
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Indications on the Screen

The State of the Current Output Appears

Note: Contents displayed and their positions partly vary with each mode. Refer to the description of each mode for details.

Example:
DVD Mode
(OSD on → see below)

When the car navigation mode is set to ON.

Volume Display
MUTE or **LOUD**
blinks when the MUTE or LOUD function is set to ON.

Prohibition
Input is not possible because a sound-track, subtitle language or angle number which was not recorded on the disc has been selected or because the user has attempted to perform an operation which is not supported by the unit.

Image•Sound/Mode Display
The current mode appears.
 : Image and sound (TV/VTR1•2/DVD/Video CD (VCD))
 : Sound (Radio (AM/FM)/CD/MP3/Changer (CH-C))

Clock Time
Default: off
(→ page 48)

Disc Indicator

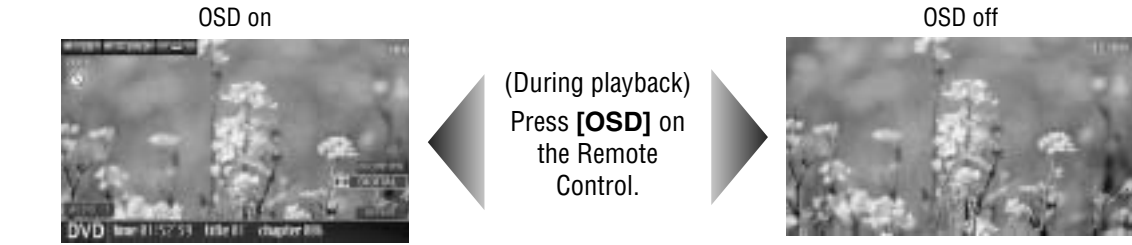
Additional Information
Channel, source type, various settings, etc.

Information of Each Mode
Playing elapsed time, title, preset list, etc.

Mode Display

OSD (On-Screen Display) On/off

You can switch between OSD-ON and OSD-OFF regarding the mode information.



- Notes:**
- On-Screen Display also appears when operation is made (for 4 seconds).
 - On-Screen Display can be toggled between on and off only in the TV, VTR1/2, DVD and VCD modes. (When the captured image is set as a wallpaper in the CD, MP3, RADIO and CD changer modes, pressing **[OSD]** switches captured images.)

Discs that can be Played Back

Disc	Mark (logo)	Disc size	Video format	Audio format	Region No.
DVD video		5" (12 cm)	NTSC	LPCM, MPEG1, MPEG2, dts, Dolby Digital	1 ALL
Video CD				LPCM, MPEG1	
CD				LPCM (CD-DA), dts	
CD-R/RW				LPCM (CD-DA), MP3	

Note: About CD-Rs and CD-RWs, refer to "Notes on CD-Rs/RWs". (→ page 93)

Example:



Region Management Information

This product is designed and manufactured to respond to the Region Management Information that is recorded on a DVD disc. If the Region number described on the DVD disc does not correspond to the Region number of this product, this product cannot play the disc.
The Region number for this product is "1" and "ALL".

Symbols used on jackets (Examples of such symbols include)

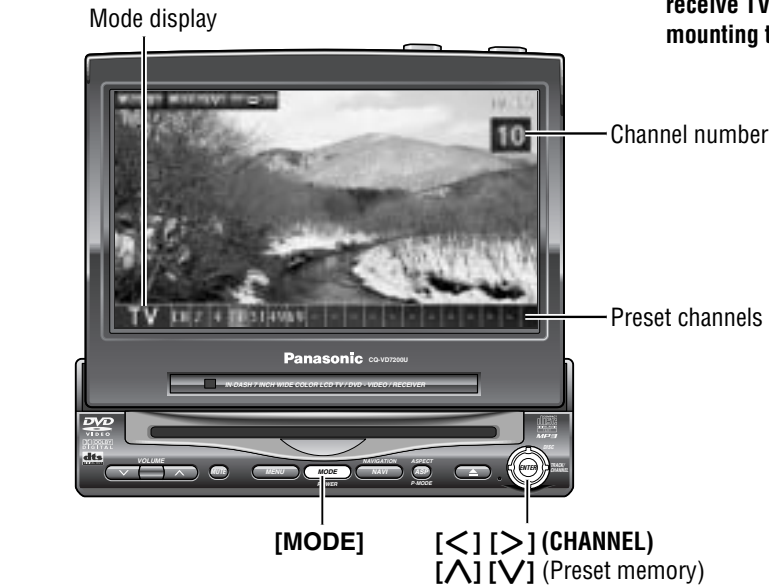
- Number of subtitle languages
 - Number of audio tracks
 - Number of angles
 - Screen size (H:V aspect ratio)
 - 4:3 standard size
 - Letterbox (→ page 94)
 - 16:9 wide size
 - : Play back in letterbox format on a standard screen (4:3).
 - : Play back in "Pan & Scan" (→ page 94) format on a standard screen (4:3).
- The numbers indicate the number of languages, tracks, angles, etc., recorded on the disc.
- Note:** The size of the image that is displayed on the screen depends on the screen mode ("Aspect Ratio" → page 57), and on the screen size for the content on the disc.

The following discs cannot be played back on this product.

- **DVD-Audio**
- DVD-ROM
- VSD
- CD-RW (except MP3 and CD-DA)
- CDV
- Discs recorded in PAL format, others
- DVDs with a region number other than "1" or "ALL"
- **Playing back a photo CD disc with this unit could damage the data that is recorded on the disc.**
- DVD-R
- DVD-RAM
- CVD
- CD-G
- CD-R (except MP3 and CD-DA)
- Divx Video Discs
- DVD+RW
- DVD-RW
- CD-ROM (except MP3)
- SCD
- photo CD
- CD-EXTRA (audio-only playback possible)
- CD-DA/SACD hybrid

DVD/VCD(Video CD)/
CD/MP3

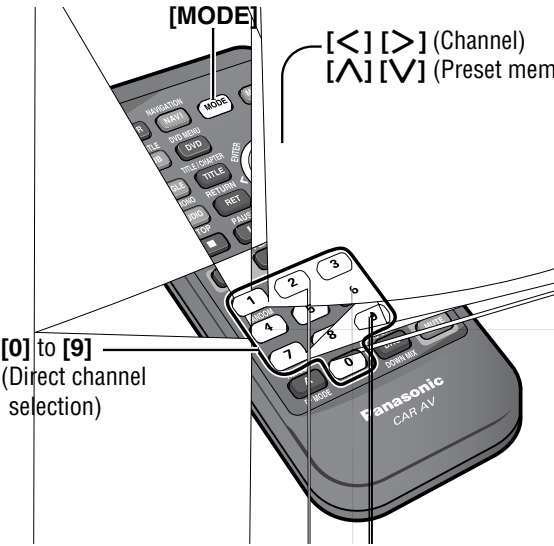
It is required to install the supplied antenna to receive TV broadcasts. Refer to the description of mounting the TV antenna. (➡ page 70)



1 TV Mode
Press [MODE] to change to TV mode.

2 Channel Setting
[>] (CHANNEL): up
[<] (CHANNEL): down
Press and hold [>] (CHANNEL) or [<] (CHANNEL) for more than 0.5 seconds. Seeking will start.

Direct Channel Selection (Only for remote control)
Enter a channel number by pressing [0] to [9].
Example: Channel Number 17
Press [1] and [7].

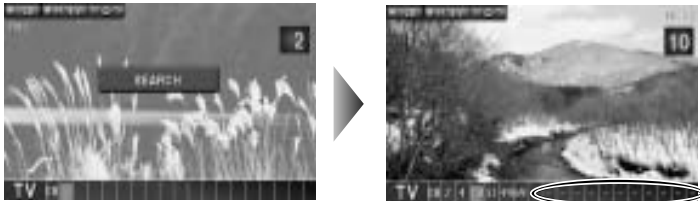


Preset Channels

This function can search for channels automatically. Up to 18 channels can be stored.

Auto Preset Memory

Press and hold [^] or [v] for more than 2 seconds.
[^]: the search starts from ch. 2 successively.
[v]: the search starts from ch. 69 in reverse successively.



* See below

- A stored channel can be renewed every time you store another channel.
- The unit may receive a channel that has poor-quality images depending on broadcasting conditions.
- The search returns to the start position if there is no receivable channel.

* “—” appears if the number of receivable channels is less than 18.

Preset Channel Calling

Press [^] or [v] to select the channel.

External Devices Connectable to VTR1/VTR2

Refer to “Electrical Connections” for each external device connection. (⇒ page 80-81)

VCR/Camcorder

Select the same mode (VTR1 or VTR2) as the terminal that is connected to a VCR or Camcorder (VTR1-IN or VTR2-IN).

Rear View Camera

Select the same mode (VTR1 or VTR2) as the terminal that is connected to a rear view camera (VTR1-IN or VTR2-IN).

Note: It can also be set to switch to an image through the rear view camera automatically if the shift lever is put into the reverse position. (⇒ page 40)

Car Navigation

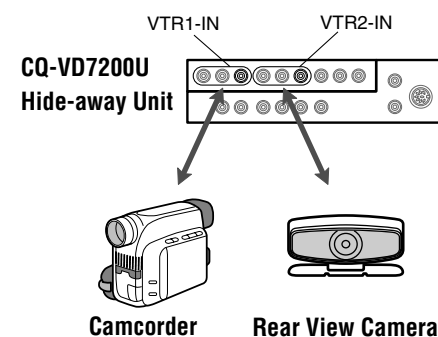
Select the same mode (VTR1 or VTR2) as the terminal that is connected to a car navigation system (VTR1-IN or VTR2-IN).

Note: It can also be set to switch to an image and sound through the car navigation system only by pressing **[NAVI] (NAVIGATION)**. (⇒ page 38)

You can view the images and listen to the sounds from the connected external devices in the VTR1 mode and VTR2 mode respectively.

Example:

VTR1 : Camcorder
VTR2 : Rear View Camera



VTR1/VTR2 Mode

Press **[MODE]** to change to VTR1 or VTR2 mode.

Note: You can set up the system so that the VTR mode is not selected (VTR skip). (⇒ page 42)

(VTR set to either CAMERA INPUT and NAVI INPUT is not skipped even if VTR skip is set to on.)



[MODE]





Indicates the compatible types of disc.



Note: It is possible to press [**<**] [**>**] on the display unit instead of [**◀◀**] [**▶▶**] on the remote control. ([**>**] on the display unit cannot be used in place of [**▶▶**] that is used for slow playback.)

Chapter/Title Selection

DVD Menu/ Video CD Menu

Use this menu during playback to select content, audio, subtitle, etc., from a menu (the DVD/Video CD menu) that is unique to each disc.

Title Menu

If the DVD has multiple titles recorded on it, it is possible to select the preferred title from the title menu to start playback.

Starting Playback from a Specific Title/Chapter

To return the previous display, press **[RET] (RETURN)**.



Indicates the compatible types of disc.

Useful Function

Switching the Subtitle Language

DVD VIDEO

Press **[SUB] (SUB TITLE)** during playback.

It is possible to change the subtitle language during play if the multiple languages are recorded on the disc.

Note: There may be a brief delay before the subtitles appear.

Switching the Audio Language

DVD VIDEO

Press **[AUDIO]** during playback.

It is possible to change the audio language during play if multiple audio languages are recorded on the disc.

Switching the Angle

DVD VIDEO

Press **[ANGLE]** during playback.

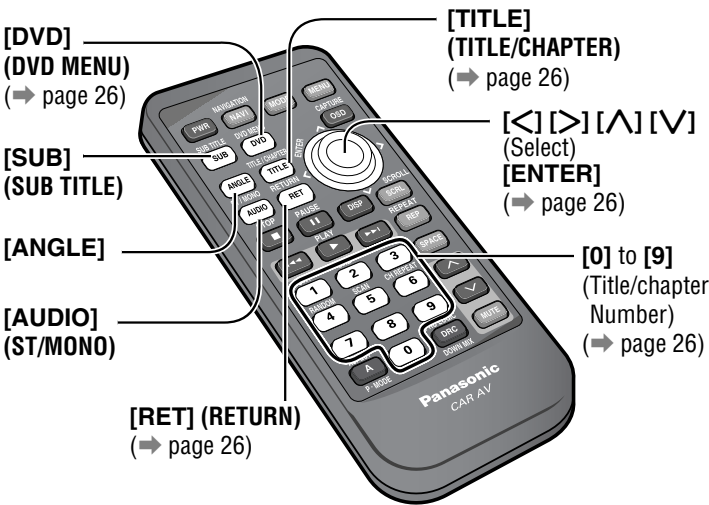
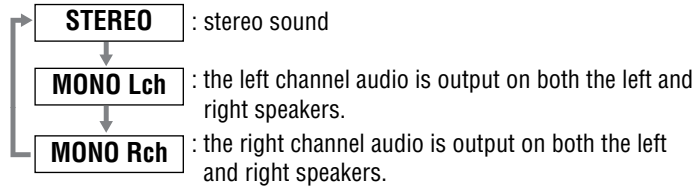
For DVDs which contain scenes which have been shot simultaneously from a number of different angles the same scene can be viewed from each of these different angles during play.

Switching between Stereo and Monaural

VIDEO CD

Press **[AUDIO] (ST/MONO)**.

It is possible to switch the audio between stereo sound and monaural sound (L or R).



- Notes:**
- If no operation is performed for 5 seconds, the display returns to the regular mode.
 - It may not be possible to switch the language unless the unit is at the DVD menu (⇒ page 26) or is at the DVD settings. (⇒ page 46)
 - The language on the DVD settings has a priority over when the power is turned on or the disc is loaded. (⇒ page 46)
 - The number of languages depends on the disc. Some discs have only one language or have no language.




Indicates the compatible types of disc.

Disc Insert

The mode that supports the disc is selected, and playback starts.

When a disc is in the player, press [MODE] to change to CD or MP3 player mode and playback starts.

Notes:

- Do not insert a disc when disc indicator  or eject button lights because a disc is already loaded.
- The power will be turned on automatically when a disc is loaded.
- You can play a disc even if the monitor is closed.

Disc Eject

Press [

This player allows you to play MP3 files recorded on CD-ROMs, CD-Rs (Recordable) and CD-RWs (Rewritable).

What is MP3?

MP3, short for MPEG-1 Audio Layer 3, MPEG-2 Audio Layer 3 LSF (Low Sampling Frequency), is a standard for compressing digital video data adopted for video CDs and similar media. It is one of the audio compression systems covered by MPEG's (Motion Picture Experts Group) digital audio compression standards. What it does is reduce the number of bytes in a song without detracting from the sound quality by eliminating big sound waves within the sound range that is imperceptible to the human ear. This compression allows you to reduce the contents of a conventional music CD by a factor of around 10. This means that you can record the contents of 10 music CDs on a single CD-R or CD-RW. (The figures refer to data recorded on a 650 MB CD-R or CD-RW at a fixed bit rate of 128 kbps and a sampling frequency of 44.1 kHz.)

Points to Remember When Recording an MP3 Disc

■ Converting (encoding) audio data to an MP3 file

- It is recommended that you set the bit rate to “128 kbps or more” and “Fixed”.
- Bit rate 8 kbps of MPEG-2 and sampling frequency 16 kHz of MPEG-2 can not be reproduced.
- VBR (Variable Bit Rate) is not supported.
- The playback sound quality differs depending on the encoding software and the bit rate. For details refer to the user manual of your encoding software.

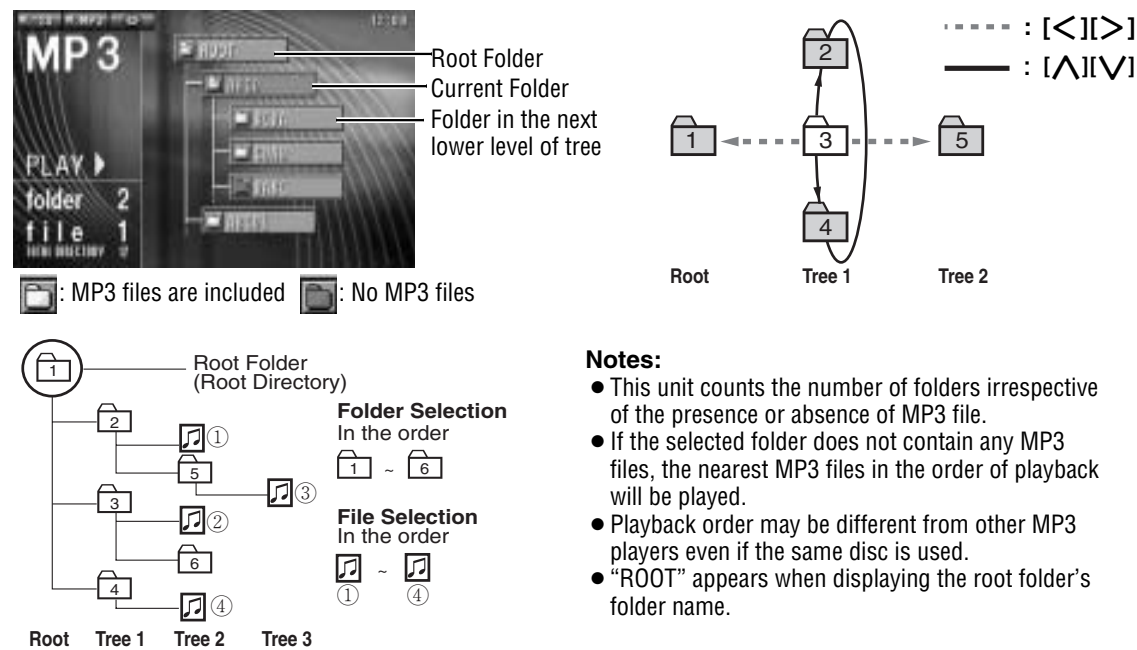
■ Recording MP3 files on a CD-R/RW

- Do not record files other than MP3s or unnecessary folders on a disc. If many folders or files other than MP3s are recorded on a disc, it may take some time before playback starts.
- Use ISO 9660 file system (Extension of the ISO 9660 file systems are included.) (⇒ page 31). APPLE HFS file system is not supported. If they do not conform to ISO 9660 file system, the file may not play normally, or the file or folder names may not be displayed correctly.
- Make sure to add the “.mp3” extension to each MP3 file name. A file with a different file name extension or none at all will not play.
- Although Multi session recording is supported, the use of Disc-at-Once is recommended. Make sure to close the session when you finished recording on a disc.
- A disc recorded by the packet writing software are not supported.
- A playlist function is not supported. Record files and folders in the order in which you want them to be played. Some writing software lets you specify the recording order by adding a prefix in the range of “01” - “99”, etc. to the file name. For details refer to the user manual of your writing software.

- Notes:
- You may encounter trouble in playing MP3s or displaying the information of MP3 files recorded with certain writing softwares or CD recorders (CD-R/RW drives).
 - If a disc contains both MP3 and CD-DA, only CD-DA data is reproduced properly. (MP3 files are played but no sound is output).

Warning: Never assign the “.mp3” file name extension to a file that is not in the MP3 format. This may produce noise from the speakers and cause speaker damage and can damage your hearing.

Folder selection order/MP3 file playback order (Example)



Maximum number of files/folders

- Maximum number of trees: 8
- Maximum number of folders: 254 (Root folder is not included.)
- Maximum number of files: 512

Note: If the number of files and folders exceeds the number mentioned above, successful playback may not be performed.

Supported file systems and file names

Supported file system	Displayable folder names and file names
ISO 9660 Level 1/Level 2	Name files and folders in accordance with the standard of each file system. Refer to the instructions of writing software for details.
Joliet*	● This player can display file names of up to 31 ASCII character set in scroll mode. * Up to 15 letters can be displayed when scrolling in the Joliet system. According to the standard, “ä”, “ç”, etc. can be used. However, this unit can not display those letters.
Romeo	● The unit recognizes only ASCII character set. Chinese characters, accented French characters and accented Spanish characters will be converted into an asterisk.
Apple Extension to ISO 9660	

Note: MP3 encode software and writing software are not supplied to this model.

Copyright

It is prohibited by copyright laws to copy, distribute and deliver copyrighted materials such as music without the approval of copyright holder except for personal use.

No warranty

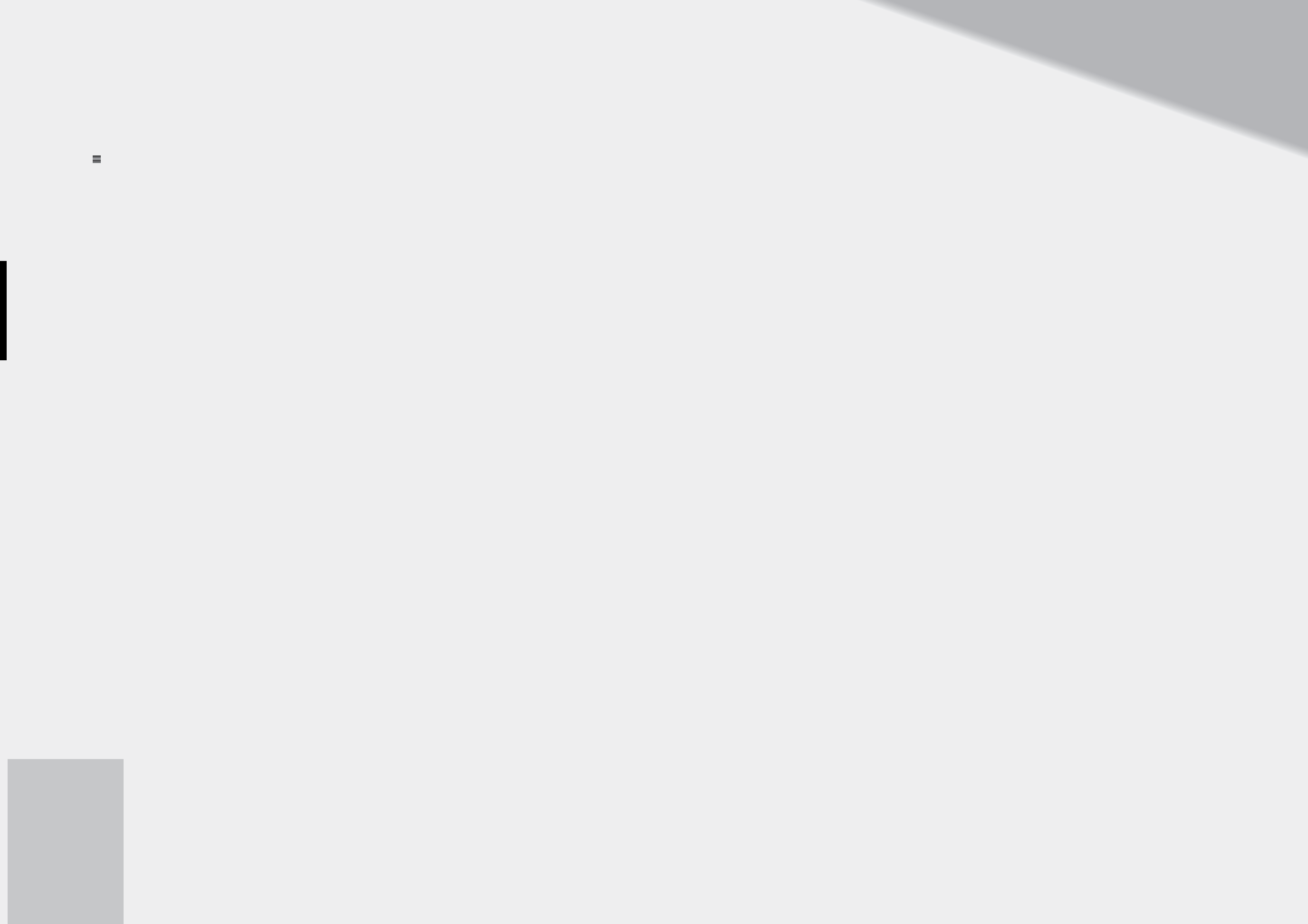
Above description complies with our investigations as of December 2003. It has no warranty for reproducibility and displayability of MP3.



—— [

Two changers can be connected to the terminals of
CA-CD55 respectively.
The changers are arranged as follows.

[1]:



SET-UP: User Settings (continued)

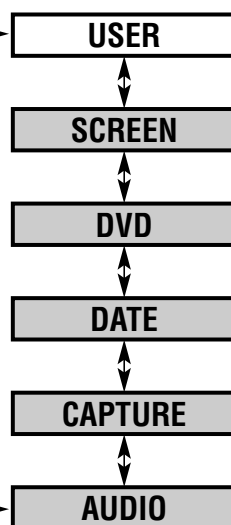


[MENU] [MODE] [▲][▼][<][>]
(End) (Select/adjust)
[ENTER]



1 Menu

- ① Press [MENU] to display the menu.
- ② Press [▶] or [◀] to select "USER".



2 Submenu

- ① Press [▲] or [▼] to select "CAMERA SETUP".
- ② Press [ENTER] to set.

CAMERA SETUP

- ① Press [▲] or [▼] to select "ID-CODE".
- ② Press [ENTER] to set.

ID-CODE

Rear View Camera Set up

CAMERA INPUT (Rear view camera input)
Selection of the terminal that connects to the rear view camera allows you to view images through the rear view camera automatically when you put the shift lever into the reverse position.

Preparation: Connect the reverse lead.
(→ page 81)

Default: OFF

SCALE (Rear view camera scale display)
Images through the rear view camera can be shown in the scale display mode.

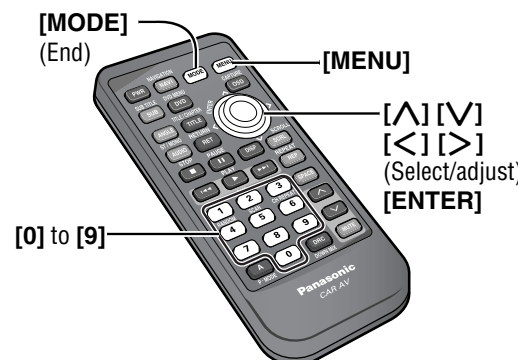
Default: OFF

SCALE ADJUST (Scale adjustment)
Default: 0 (width/angle)

ID Code setting

Prior to operating this unit, it is advisable to assign your 4-digit ID code for security. (Make sure to use **four digits** for ID code.) Once the ID code has been set, the unit cannot be operated if the main power supply is disconnected then re-connected. It is electronically locked so that a thief could not use the stolen unit unless that person knows the code you have set. The ID code operation must be performed only by the person whom the unit belongs to.

Generally, it is not necessary to enter the ID code each time when using the unit if it has not been disconnected from the main power supply (car battery).



Notes:

- Press [MODE] to return to the regular mode.
- The display returns to the previous one if there is no operation for more than 60 seconds after changing to the setting menu.

3 Setting



- ① Press [▲] or [▼] to select an item.
- ② Press [▶], [◀], [▲] or [▼] to select or adjust the setting.
- ③ Press [ENTER] to set.

CAMERA INPUT Rear view camera input

- OFF : unconnected
- VTR1 : connected to the VTR1-IN
- VTR2 : connected to the VTR2-IN

Note: Make sure to select "OFF" when no rear view camera is connected.

SCALE Rear view camera scale display

- OFF : scale display off
- ON : scale display on

SCALE ADJUST Scale adjustment

Press [▶] or [◀] to adjust the width.
Press [▲] or [▼] to adjust the angle.



Press [0] to [9] on the remote control to input the ID code.

Caution: Record your registered ID code and keep it in a secure location. If you forget it, you will be unable to use the unit. In case you forget the ID code, please consult your nearest Panasonic Servicer.

How to set your ID code (for the first time)

- ① Enter an 4 digit ID code.
- ② Enter the same 4 digit ID code again.

How to change your ID code

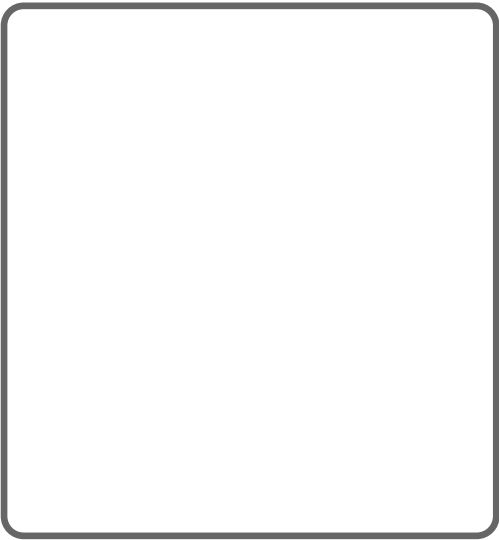
- ① Enter the preset (old) 4 digit ID code. If the wrong ID code is entered, a new ID code cannot be registered.
- ② Enter a new 4 digit ID code.
- ③ Enter the new 4 digit ID code again.

How to cancel the known ID code

Note: Should your unit ever require service, cancel your ID code before sending for repair.

- ① Enter the preset (old) 4 digit ID code. If the wrong ID code is entered, it is not possible to cancel the ID code function.
- ② Press and hold [ENTER] until "Complete!" is displayed. The ID code cancelling procedure is completed. The unit now works without an ID code.

Note: Refer to ID Code Input regarding how to enter the ID code. (→ page 11)



- Notes:**
- Press **[MODE]** to return to the regular mode.
 - The display returns to the previous one if there is no operation for more than 60 seconds after changing to the setting menu.

3 Setting

- ① Press **[^]** or **[V]** to select an item.
- ② Press **[>]** or **[<]** to select the setting.
- ③ Press **[ENTER]** to set.

BEEP

Beep setting

OFF : operation sound (Beep) OFF

ON : operation sound (Beep) ON

VIDEO-CNT

Video control setting

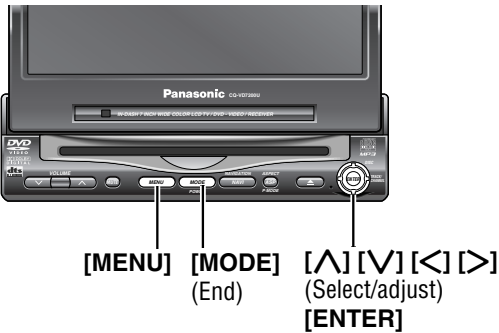
VTR1 : connected to the VTR1-IN

VTR2 : connected to the VTR2-IN

Notes:

- Select a terminal connected to the DVD output terminal of a Panasonic car navigation system with a built-in DVD player (available in future) through an RCA cord.
- When you connect a Panasonic car navigation system with a built-in DVD player, connect a video control lead as well. (➡ page 72)

SET-UP: Display (Screen) Settings



1 Menu

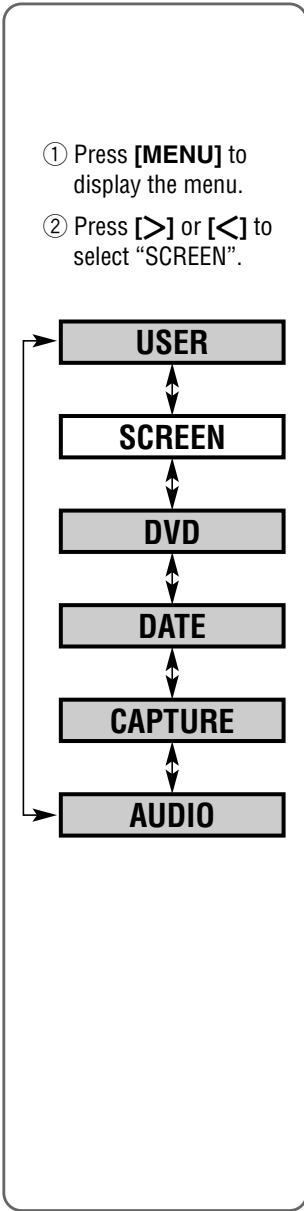
2 Submenu

Dimmer

Default: AUTO

Display Adjustment

Default: ±0
Setting range: -15 to +15

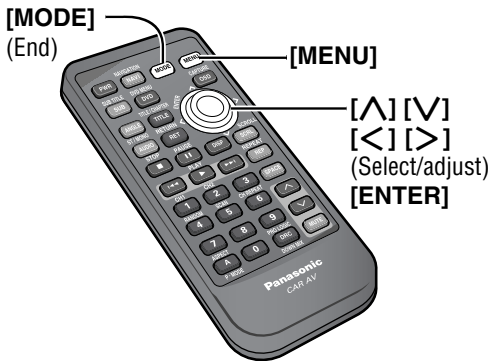


① Press [MENU] to display the menu.
② Press [>] or [<] to select "SCREEN".

DIMMER

① Press [^] or [V] to select "DIMMER".
② Press [ENTER] to set.

PICTURE



- Notes:
- Press [MODE] to return to the regular mode.
 - The display returns to the previous one if there is no operation for more than 60 seconds after changing to the setting menu.

3 Setting

① Press [>] or [<] to select the setting.
② Press [ENTER] to set.

AUTO : automatically adjusted according to ambient light intensity.

1 2 3 4

← Darker Brighter →

① Press [^] or [V] to select an item.
② Press [>] or [<] to adjust.

CONTRAST

Adjust the image contrast

CONTRAST ± 0 - [slider] +

Decrease the contrast between black and white Increase the contrast between black and white

① Press [^] or [V] to select an item.
② Press [>] or [<] to adjust.

BRIGHT

Adjust the image brightness

BRIGHT ± 0 - [slider] +

Darken Lighten

① Press [^] or [V] to select an item.
② Press [>] or [<] to adjust.

COLOR

Adjust the image color depth

COLOR ± 0 - [slider] +

Lighten the depth of color on the display Deepen the depth of color on the display

① Press [^] or [V] to select an item.
② Press [>] or [<] to adjust.

TINT

Adjust the image tone or tint

TINT ± 0 - [slider] +

Emphasize red in the color image Emphasize green in the color image

SET-UP: DVD Settings

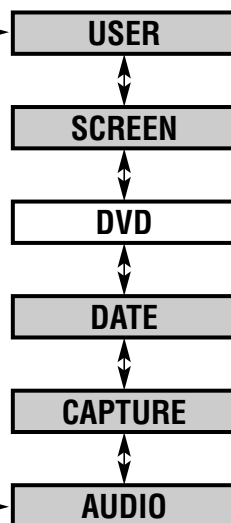


[MENU] [MODE] [^][V][<][>]
(End) (Select)
[ENTER]



1 Menu 2 Submenu

- 1 Press [MENU] to display the menu.
- 2 Press [>] or [<] to select "DVD".



- 1 Press [^] or [V] to select "LANGUAGE".
- 2 Press [ENTER] to set.

LANGUAGE

- 1 Press [^] or [V] to select "DISPLAY".
- 2 Press [ENTER] to set.

DISPLAY

Language Setting

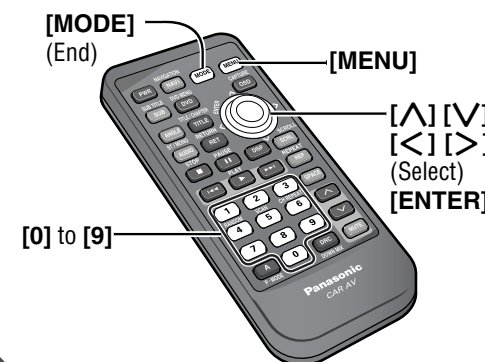
Default: ENGLISH

Note: This operation allows you to select a language for DVD software on the precondition that the DVD software supports your selecting language.

Display Aspect and DVD Software Mode

Default: DVD ASPECT...WIDE
LETTERBOX...PAN & SCAN

Note: Screen aspect of the display unit is changed according to the aspect ratio setting (→ page 57) and DVD software's aspect.



Notes:

- Press [MODE] to return to the regular mode.
- The display returns to the previous one if there is no operation for more than 60 seconds after changing to the setting menu.

3 Setting



- 1 Press [^] or [V] to select an item.
- 2 Press [>] or [<] to select the setting.
- 3 Press [ENTER] to set.



- 1 Input the four digit language code pressing the buttons [0] to [9] on the remote control.
- 2 Press [ENTER] to set.
(Language code list → page 95)

MENU DVD menu language	
ENG	: English
SPA	: Spanish
FRE	: French
OTHER	: other language Input the language code.

SUB TITLE Subtitle language	
ENG	: English
SPA	: Spanish
FRE	: French
OTHER	: other language Input the language code.

DISP OFF : subtitle are not displayed.

Note: A disc supporting closed captioning and subtitles may overlap each other on the screen. In this case, turn the subtitle off.

AUDIO Audio language	
ENG	: English
SPA	: Spanish
FRE	: French
OTHER	: other language Input the language code.



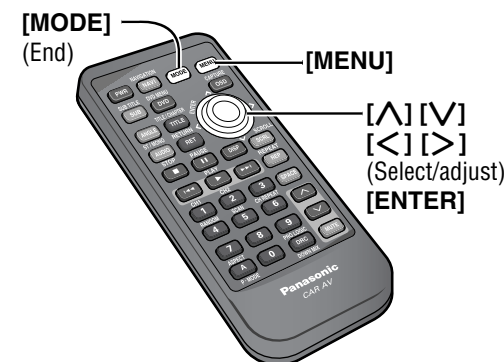
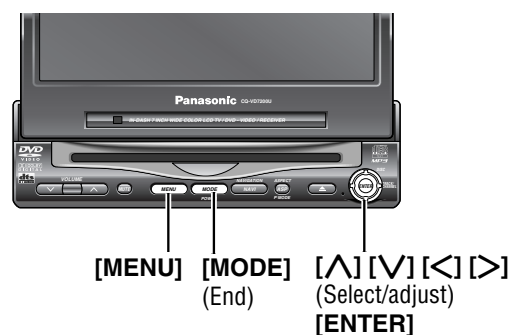
- 1 Press [^] or [V] to select an item.
- 2 Press [>] or [<] to select the setting.
- 3 Press [ENTER] to set.

DVD ASPECT Display aspect setting	
WIDE	: plays a video in wide screen (16:9).
NARROW	: plays a video in 4:3 screen.
LETTERBOX DVD software mode	
PAN & SCAN	: plays wide-screen video in Pan & Scan mode (in which the left and right edges of the screen are cut off).
LETTERBOX	: plays wide-screen video in letterbox mode (in which black bands appear at the top and bottom of the screen).

Notes:

- Set the software setting according to the symbol used on jackets. (→ page 17)
- DVD software mode setting is ignored if "PAN & SCAN" or "LETTERBOX" is already set in the software.

SET-UP: Clock/date Settings



- Notes:**
- Press [MODE] to return to the regular mode.
 - The display returns to the previous one if there is no operation for more than 60 seconds after changing to the setting menu.

Clock and Date Setting

Default: DISPLAY...OFF
YEAR ADJUST...2003
MONTH ADJUST...1
DAY ADJUST...1
HOUR ADJUST...AM 12
MINUTE ADJUST...00

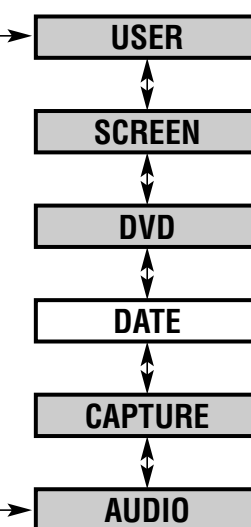
- Notes:**
- The clock starts after the unit returns to the regular mode by pressing [MODE].
 - Perform the setup of Daylight Saving Time manually.

Calendar Display

Note: The calendar is not editable. (e.g. Holidays cannot be marked.)

1 Menu

- 1 Press [MENU] to display the menu.
- 2 Press [>] or [<] to select "DATE".



2 Submenu

- 1 Press [^] or [V] to select "CLOCK".
- 2 Press [ENTER] to set.

CLOCK

- 1 Press [^] or [V] to select "CALENDAR".
- 2 Press [ENTER] to set.

CALENDAR

3 Setting



- 1 Press [^] or [V] to select an item.
- 2 Press [>] or [<] to select or adjust the setting.
- 3 Press [ENTER] to set.

DISPLAY	Clock display
OFF	: clock display OFF
ON	: clock display ON ([12:00] is displayed before adjusting the clock.)

YEAR ADJUST	Year adjustment
YEAR ADJUST	< 2003 >

MONTH ADJUST	Month adjustment
MONTH ADJUST	< 1 >

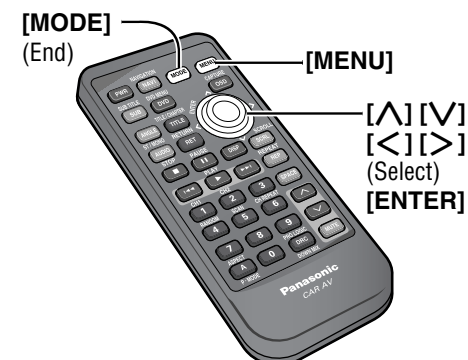
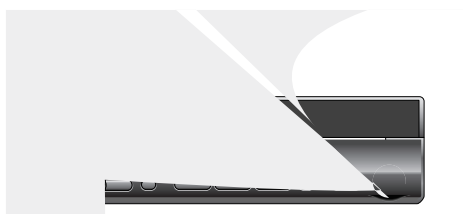
DAY ADJUST	Day adjustment
DAY ADJUST	< 1 >

HOUR ADJUST	Hour adjustment
HOUR ADJUST	< AM 12 >

MINUTE ADJUST	Minute adjustment
MINUTE ADJUST	< 00 >



- Press [^]: calendar from the current year to years in future successively
Press [V]: calendar from the current year to years in the past successively
Press [<]: calendar from the current month to months in the past successively
Press [>]: calendar from the current month to months in future successively



Notes:

- Press **[MODE]** to return to the regular mode.
- The display returns to the previous one if there is no operation for more than 60 seconds after changing to the setting menu.

3 Setting

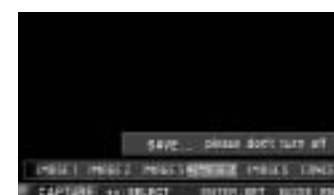


① Press **[ENTER]** to import the image.



② Press **[>]** or **[<]** to select a save area.

- You can store five images at maximum.
- The existing image is replaced with a new image when saving an image in an area. Check the right-hand smaller image on the screen before saving a new one. If you would like to keep the existing image, do not overwrite.



③ Press **[ENTER]** to save the image.



④ Image saving completed.

Notes:

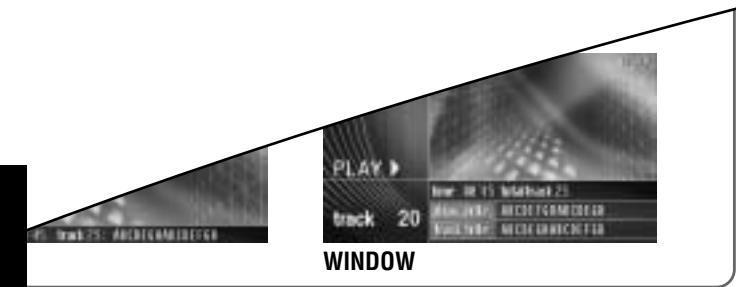
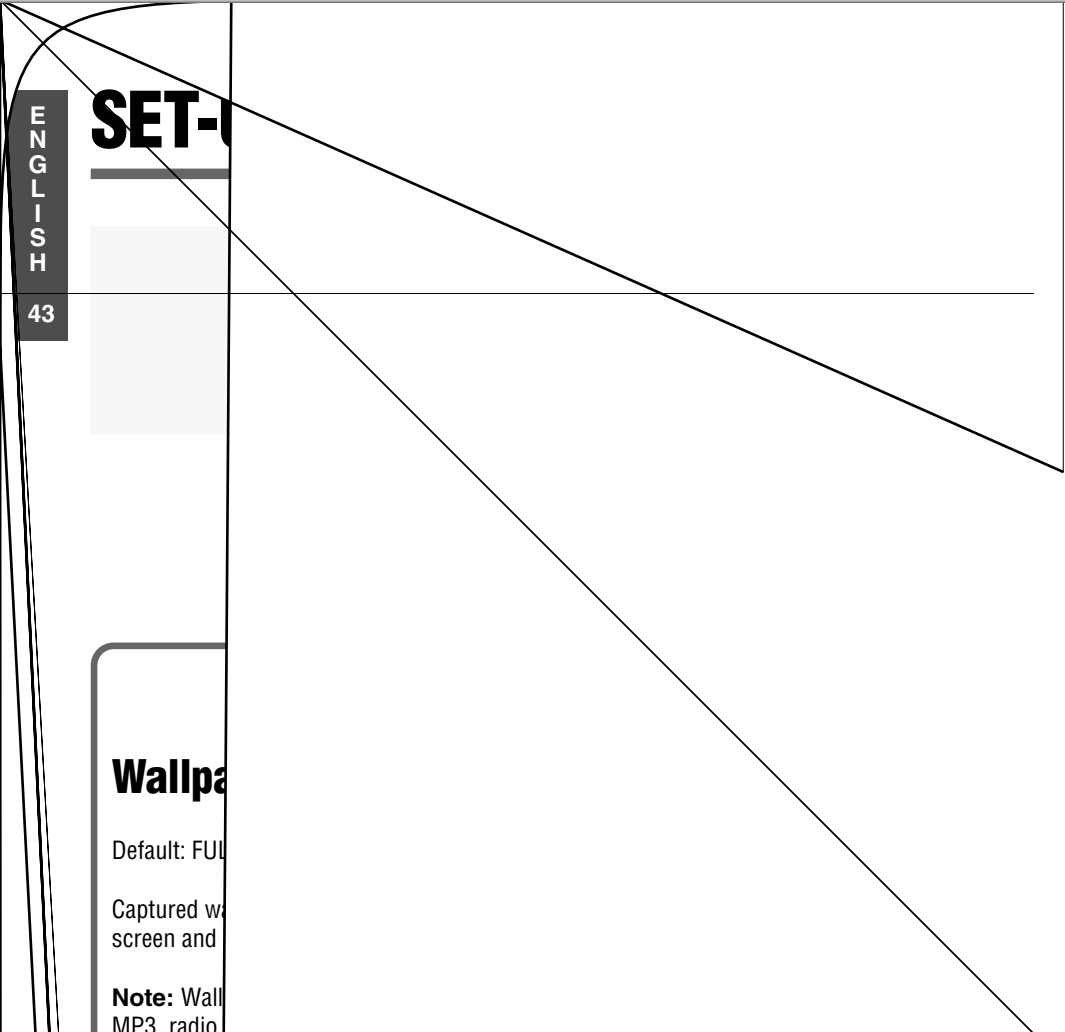
- Do not turn off the unit while saving an image.
- To capture an image from TV, the broadcasting conditions should be excellent.



Direct Image Capture (Only for remote control)

If you would like to capture a picture, press and hold **[OSD] (CAPTURE)** for more than 2 seconds.

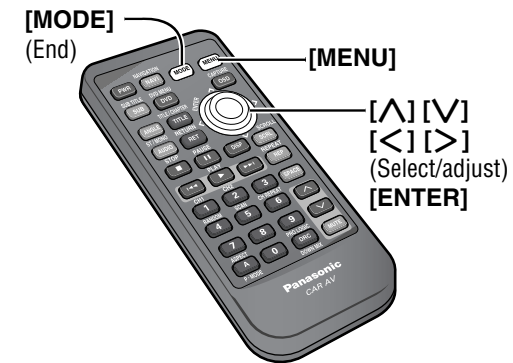
Subsequent steps are the same as the steps ② described above.



[>] or [<] to select the image to be deleted.
The default image is displayed on the right-hand smaller window.
[ENTER].

[>] or [<] to select YES. Press [ENTER].

The existing image is deleted and the default image is displayed.
Deleted images cannot be recovered.

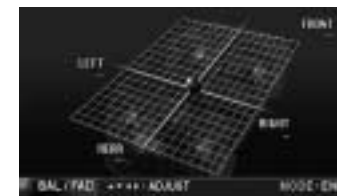
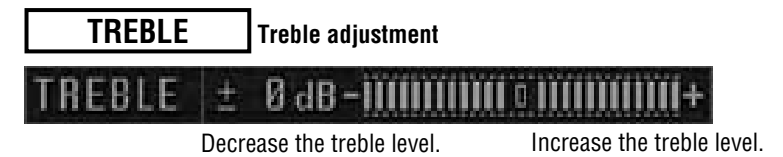


- Notes:**
- Press **[MODE]** to return to the regular mode.
 - The display returns to the previous one if there is no operation for more than 60 seconds after changing to the setting menu.

3 Setting



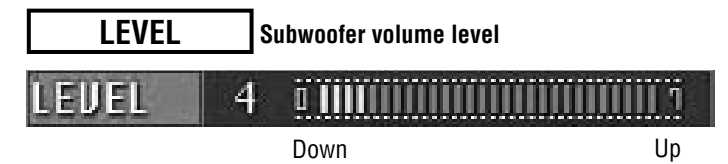
- ① Press **[^]** or **[v]** to select an item.
- ② Press **[>]** or **[<]** to adjust.



- Press **[^]**: front enhanced
Press **[v]**: rear enhanced
Press **[>]**: right enhanced
Press **[<]**: left enhanced



- ① Press **[^]** or **[v]** to select an item.
- ② Press **[>]** or **[<]** to select or adjust.
- ③ Press **[ENTER]** to set.



Note: No sound comes out from Subwoofer when set to level 0.

LPF		Subwoofer low pass filter (Cut off frequency)
120 Hz	:	no more than 120 Hz
80 Hz	:	no more than 80 Hz

SET-UP: Other Settings (continued)

Rear Monitor Set Up

You can have different picture and sound at the front and rear monitor at the same time.

Default: AUTO

Preparation: Connect another optional rear monitor. (e.g. CY-VMX6800U)(→ page 80)

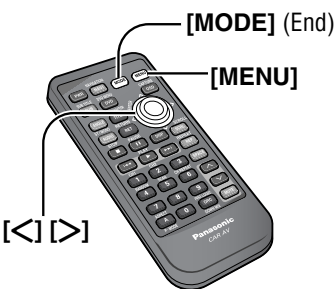


Rear monitor setting menu

- ① Press and hold **[MENU]** for more than 2 seconds.
- ② Press **[>]** or **[<]** to select the setting.
- ③ Press **[ENTER]** to set.



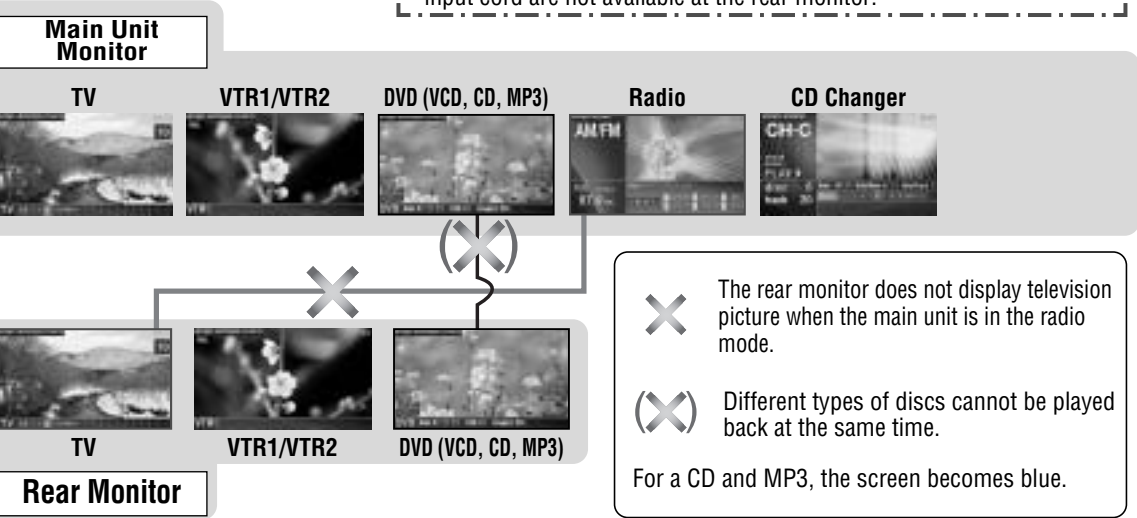
[MENU] [MODE] [**<**] [**>**]
(End)



- AUTO** : picture and sound come out. These are in the same mode as the front monitor.
- TV** : picture and sound in the TV mode always come out.
- DVD** : picture and sound in the DVD player mode (disc in the DVD player) always come out.
Only sound in the CD, MP3 player mode.
- VTR1** : picture and sound in the VTR1 mode always come out.
- VTR2** : picture and sound in the VTR2 mode always come out.

Notes:

- Press **[MODE]** to return to the regular mode.
- The display returns to the previous one with no operation for 60 seconds after changing to the rear monitor setting menu.
- You can mute the sound from the rear speakers connected to this unit, so that you can have different sound of modes at the front and rear monitor. (→ See Private Mode on next page)
- Picture and sound from the car navigation system connected to an RGB input cord are not available at the rear monitor.



Private Mode

You can mute the sounds from the rear speakers if necessary. Activation of the private mode allows you to enjoy the front monitor and rear monitor (e.g. CY-VMX6800U) independently with different sources at the same time.

Default: OFF



[ASP] (P • MODE)



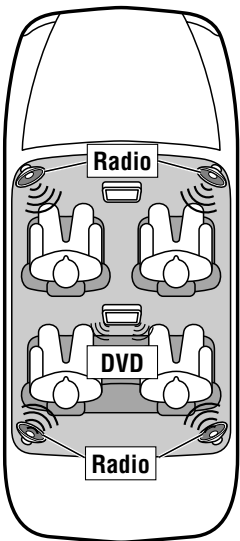
[A] (P • MODE)

Press and hold **[ASP] (P • MODE)** on the display unit or **[A] (P • MODE)** on the remote control for more than 2 seconds to activate the private mode function or inactivate it in turn.

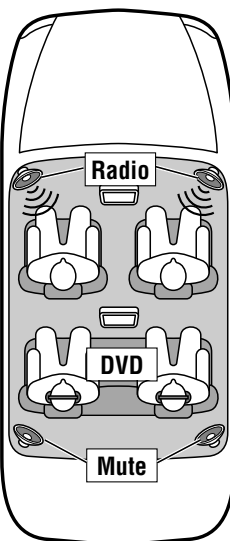


"P • MODE" indicator lights when the Private Mode is activated.

Private Mode OFF



Private Mode ON



It is recommended to use optional Over-head Monitor (CY-VMX6800U) and headphones supplied to CY-VMX6800U.

Note: Be sure to set to OFF when you do not use the private mode.

Installation Guide



WARNING

❑ This installation information is designed for experienced installers and is not intended for non-technical individuals. It does not contain warnings or cautions of potential dangers involved in attempting to install this product.

Any attempt to install this product in a motor car by anyone other than a qualified installer could cause damage to the electrical system and could result in serious personal injury or death.

❑ If your car is equipped with air bag and/or anti-theft systems, specific procedures may be required for connection and disconnection of the battery to install this product.

Before attempting installation of this electronic component, contact your car dealer or manufacturer to determine the required procedure and strictly follow their instructions.

FAILURE TO FOLLOW THE PROCEDURE MAY RESULT IN THE UNINTENDED DEPLOYMENT OF AIR BAGS OR ACTIVATION OF THE ANTI-THEFT SYSTEM RESULTING IN DAMAGE TO THE VEHICLE AND PERSONAL INJURY.

❑ Overview

This product should be installed by a professional. However, if you plan to install this product yourself, your first step is to decide where to install it. The instructions in these pages will guide you through the remaining steps: **(Please refer to the “WARNING” statement above).**



















- Identify and label the car wires.
- Connect the car wires to the wires of the power connector.
- Install the unit.
- Check the operation of the unit.







Caution: This unit operates with a 12 volt DC negative ground auto battery system only. Do not attempt to use it in any other system. Doing so could cause serious damage.

Before you begin installation, look for the following items which are packed with your unit.








- **Warranty Card** Fill this out promptly.
- **Panasonic Servicenter for Service Directory** Keep for future reference in case the product needs servicing.
- **Installation Hardware** Needed for installation.

❑ Installation Hardware (For Installation)

No.	Item	Diagram	Qty
①	Trim Plate		1
<YEP9FZ2739>			
②	Mounting Collar		1
<YEPG012694>			
③	Mounting Spring		2
<YEFX0052424A>			
④	Rubber Pad		1
⑤	Mounting Bolt (M5)		1
⑥	Flange Nut (M6)		1
⑦	Washer Assembling Hex.Bolt (M5 x 10 mm)		1
⑧	Washer Assembling Hex.Bolt (M6 x 20 mm)		1
<YEP9BS1152>			
⑨	Rear Support Strap		1
<YEPG04019>			
⑩	Binding-Head Screw (M5 x 6 mm)		2
⑪	Flat-Head Screw (M5 x 6 mm)		4
⑫	Binding-Head Screw (M4 x 3 mm)		4
<YEP9BS1169>			
⑬	Spacer		2
⑭	Double-Faced Adhesive Tape (for spacer)		1 set
<YEP9FZ2761>			
⑮	Double-Faced Adhesive Tape (for speaker)		1
⑯	Clamp (for speaker)		2
<YEP9FZ3040>			
⑰	Binding-Head Screw (M5 x 8 mm)		4
⑱	Tapping Screw (ø 6 x 20 mm)		4
⑲	Hex. Nut (M5)		4
<YEP9BS1194>			

No.	Item	Diagram	Qty
⑳	Mounting Bracket		2
<YEPG021010A>			
㉑	Base Bracket		2
<YEPG012424>			
㉒	Double-Faced Adhesive Tape (for hide-away unit)		2
㉓	Velcro Tape		2
<YEP9FZ3042>			
㉔	Antenna Clamp		4
㉕	Cord Clamp (for antenna)		4
<YEP9FZ3041>			

❑ Installation Hardware (For Wiring)

No.	Item	Diagram	Qty
㉖	Power Connector (for display unit)		1
㉗	Reverse Extension Cord (for rear view camera)		1
㉘	Clip Connector		1
<YEAJ011723>			
㉙	Display Unit/Hide-away Unit Connecting Cord		1
<YEAJ071458>			
㉚	Power Connector (for hide-away unit)		1
<YEAJ011666>			
㉛	Ground Lead		1
<YEAJ09271>			
㉜	Radio Antenna Extension Cord		1
<YEA09141>			

Note:

- The number in parenthesis underneath each accessory part name is the part number for maintenance and service.
- Accessories and their parts numbers are subject to modification without prior notice due to improvements.
- Trim Plate ① and Mounting Collar ② are mounted on the main unit at shipment.

Installation Guide (continued)

Before Installation

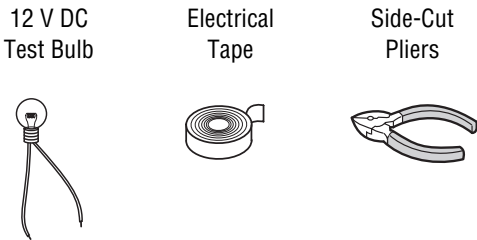
- Warning**
- Do not install the monitor in a location which obstructs driving, visibility or which is prohibited by applicable laws and regulations. If the monitor is installed in a location which obstructs forward visibility or operation of the air bag or other safety equipment or which interferes with operation of the car, it may cause an accident.
 - Never use bolts or nuts from the car's safety devices for installation. If bolts or nuts from the steering wheel, brakes or other safety devices are used for installation of the monitor, it may cause an accident.
 - Attach the wires correctly. If the wiring is not correctly performed, it may cause a fire or an accident. In particular, be sure to run and secure the lead wire so that it does not get tangled with a screw or the moving portion of a seat rail.
 - Use with 12 volt DC negative ground car. This unit is only for use with a 12 volt DC negative ground car. It cannot be used in large trucks or diesel cars which are 24 volt DC cars. If it is used in the wrong type of car, it may cause a fire or an accident.

Cautions:

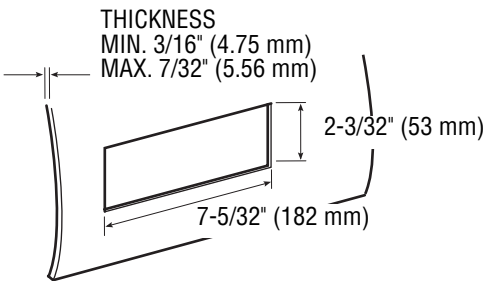
- Use the specified fuse. Be sure to always use the specified fuse. If a fuse other than the specified fuse is used, it may cause a fire or an accident.
- Do not damage the cord by pinching or pulling it. Do not pull or damage the cord. If the cord is not treated properly, it will short out or be severed and may cause a fire or an accident.

Required Tools

You'll need a screwdriver and the following:



Dashboard Specifications



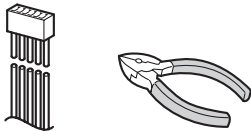
Identify All Leads

The first step in installation is to identify all the car wires you'll use when hooking up your LCD monitor. As you identify each wire, we suggest that you label it using masking tape and a permanent marker. This will help avoid confusion when making connections later.

Note: Do not connect the power connector to the display unit until you have made all connections. If there are no plastic caps on the hooking wires, insulate all exposed leads with electrical tape until you are ready to use them. Identify the leads in the following order.

Power Lead

If your car has a radio or is pre-wired for one: Cut the connector wires one at a time from the plug (leaving the leads as long as possible) so that you can work with individual leads. Turn the ignition on to the accessory position, and ground one lead of the test bulb to the chassis.



Touch the other lead of the test bulb to each of the exposed wires from the cut radio connector plug. Touch one wire at a time until you find the outlet that causes the test bulb to light.

Now turn the ignition off and then on. If the bulb also turns off and on, that outlet is the car power lead.

If your car is not wired for an audio unit: Go to the fuse block and find the fuse port for radio (RADIO) accessory (ACC) or ignition (IGN).

Battery Lead

If your stereo unit has a yellow lead, you will need to locate the car's battery lead. Otherwise you may ignore this procedure. (The yellow battery lead provides continuous power to maintain a clock or other functions.)

If your car has a radio or is pre-wired for one: With the ignition and headlights off, identify the car battery lead by grounding one lead of the test bulb to the chassis and checking the remaining exposed wires from the cut radio connector plug.

If your car is not wired for an audio unit: Go to the fuse block and find the fuse port for the battery, usually marked BAT.

Speakers (not supplied speaker)

Identify the car speaker leads. There are two leads for each speaker, usually color coded. A handy way to identify the speaker leads and the speaker they are connected with is to test the leads using a 1.5 V AA battery as follows. Hold one lead against one pole of the battery and stroke the other lead across the other pole. You will hear a scraping sound in a speaker if you are holding a speaker lead. If not, keep testing different lead combinations until you have located all the speaker leads. When you label them, include the speaker location for each.

Installation Guide (continued)

Connect All Leads

Now that you have identified all the wires in the car, you're ready to begin connecting them to the LCD monitor wires. The wiring diagram (⇒ page 72-83) shows the proper wiring and color coding of the leads. We strongly recommend that you test the unit before making a final installation. You can set the unit on the floor and make temporary connections to test the unit. Use electrical tape to cover all exposed wires.

Important: Connect the red power lead last, after you have made and insulated all other connections.

Ground

Connect the black ground lead of the power connector to the metal car chassis.

Speakers (not supplied speaker)

Connect the speaker wires. See the wiring diagram for the proper hookups. Follow the diagram carefully to avoid damaging the speakers and the stereo unit. The speakers used must be able to handle more than 45 W of audio power. If using an optional audio power, the speakers should be able to handle the maximum amplifier output power. Speakers with low input ratings can be damaged. Speaker impedance should measure 4–8 Ω, which is typically marked on most speakers. Lower or higher impedance speakers will affect output and can cause both speaker and stereo unit damage.

Caution: Never ground the speaker cords. For example, do not use a chassis ground system or a three-wire speaker common system. Each speaker must be connected separately using parallel insulated wires. If in doubt about how your car's speakers are wired, please consult with your nearest professional installer.

Battery

Connect the yellow battery lead to the correct radio wire or to the battery fuse port on the fuse block.

Equipment

Connect any optional equipment according to the instructions furnished with the equipment. Read the operating and installation instructions of any equipment you will connect to this unit.

Power

Connect the red power lead to the correct car radio wire or to the appropriate fuse port on the fuse block. If the LCD monitor functions properly with all these connections made, disconnect the wires and proceed to the final installation.

Final Installation

Lead Connections

Connect all wires, making sure that each connection is insulated and secure. Bundle all loose wires and fasten them with tape so they will not fall down later. Now insert the LCD monitor into the mounting collar.

Congratulations! After making a few final checks, you're ready to enjoy your new LCD monitor.

Final Checks

1. Make sure that all wires are properly connected and insulated.
2. Make sure that the LCD monitor is securely held in the mounting collar.
3. Turn on the ignition to check the unit for proper operation.

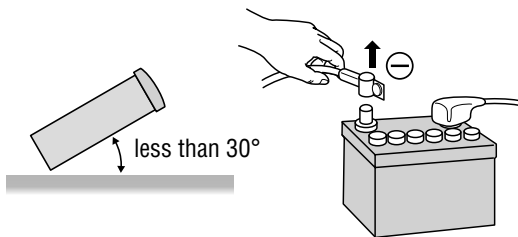
If you have difficulties, consult your nearest authorized professional installer for assistance.

Precautions

Cautions:

- We strongly recommend that you wear gloves for installation work to protect yourself from injuries.
- When bending the mounting tab of the mounting collar with a screwdriver, be careful not to injure your hands and fingers.

- Disconnect the cable from the negative (–) battery terminal (see caution at right).
- Unit should be installed in a horizontal position with the front end up at a convenient angle, but less than 30°.



Caution: Various settings that have been stored in the memory in other on-board equipment (car navigation etc.) may be lost if the battery terminals are disconnected. Therefore, we recommend to make a record of or to back up the settings before disconnecting the terminals. After completing installation of the main unit, set the equipment again according to the record.

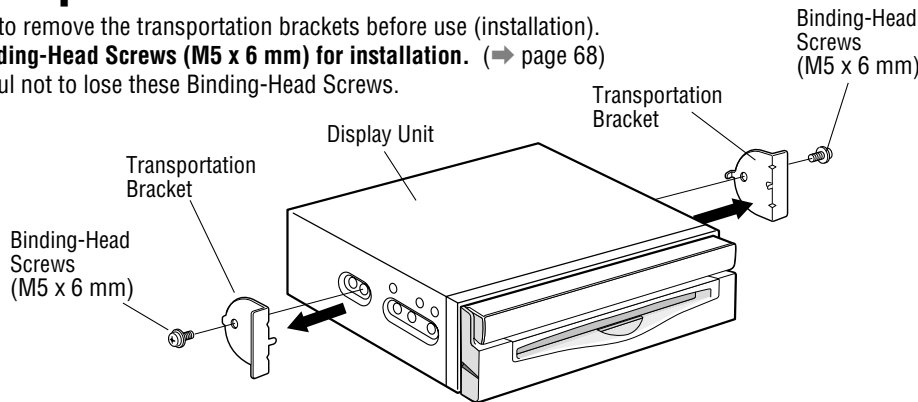
This unit should be professionally installed. In case of difficulty, please consult with your nearest professional installer.

1. This unit only operates in a 12-volt DC negative ground system.
2. Follow the electrical connections carefully (⇒ page 72-83). Failure to do so may result in damage to the unit.
3. Connect the power lead after all other connections are made.
4. Be sure to connect the battery lead (yellow) to the positive terminal (+) of the battery or fuse block (BAT) terminal.
5. Insulate all exposed wires to prevent short circuiting.
6. Secure all loose wires after installing the unit.
7. Please carefully read the operating and installation instructions of the respective equipment before connecting it to this unit.

Caution: Please follow the laws and regulations of your state, province or country for installation of the unit.

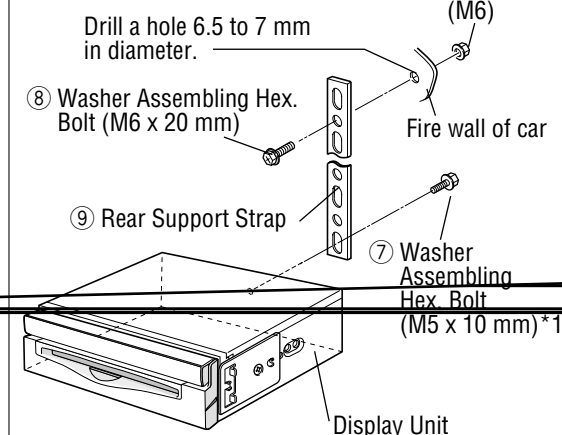
Transportation Bracket Removal

Be sure to remove the transportation brackets before use (installation). **Use Binding-Head Screws (M5 x 6 mm) for installation.** (⇒ page 68) Be careful not to lose these Binding-Head Screws.

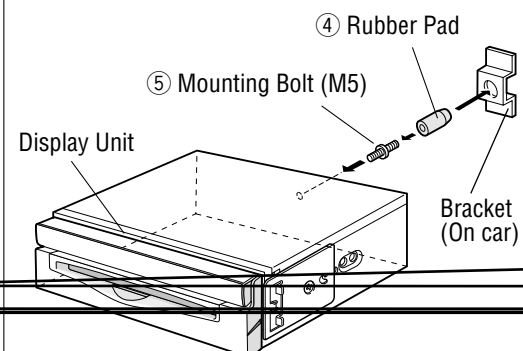


Method for Fixing the Rear of the Unit

(a) Using the Rear Support Strap ⑨



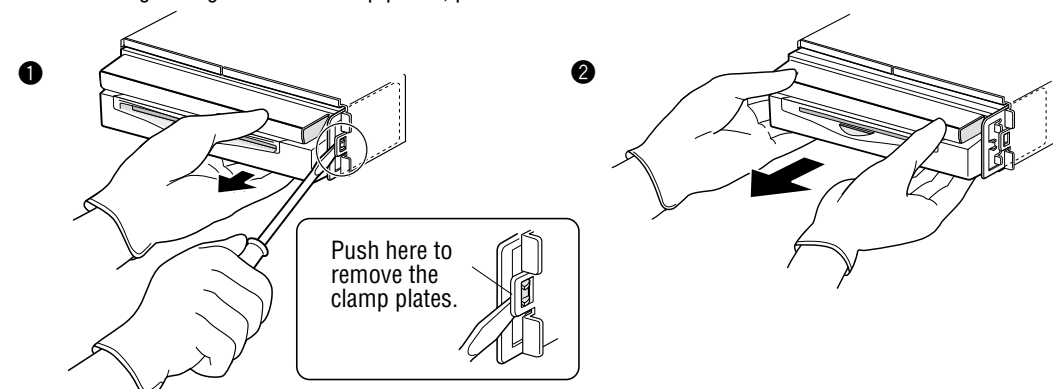
(b) Using the Rubber Pad ④



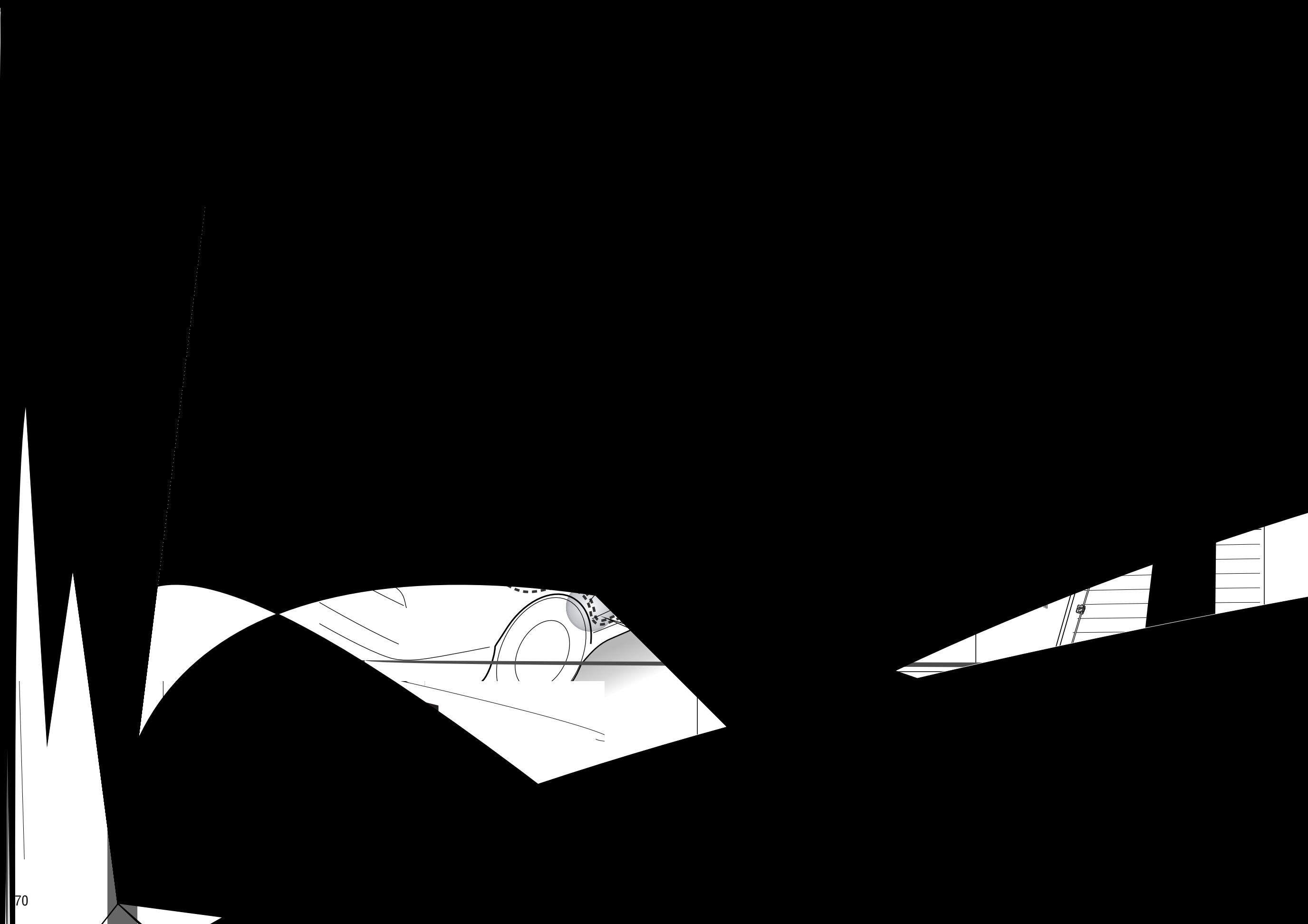
*1: Use M5 x 8 mm size bolt (optional) if bolts other than the supplied ones are to be used.

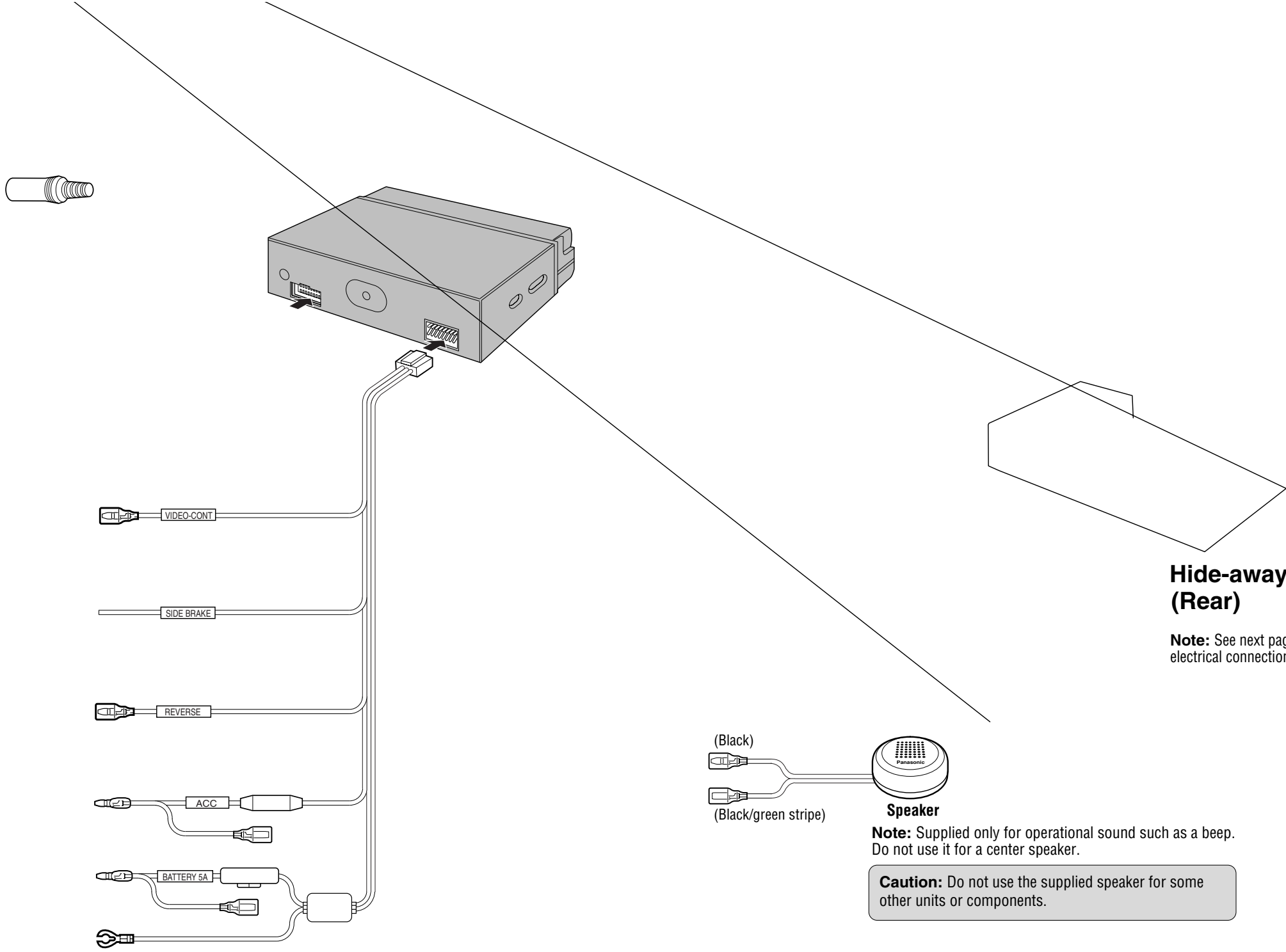
To Remove the Display Unit

- ① Push the right and left clamp plates outward, one at a time, and pull the display unit toward yourself.
- ② After removing the right and left clamp plates, pull the unit with both hands till it comes off.



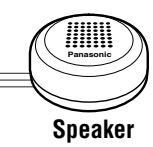






**Hide-away Unit
(Rear)**

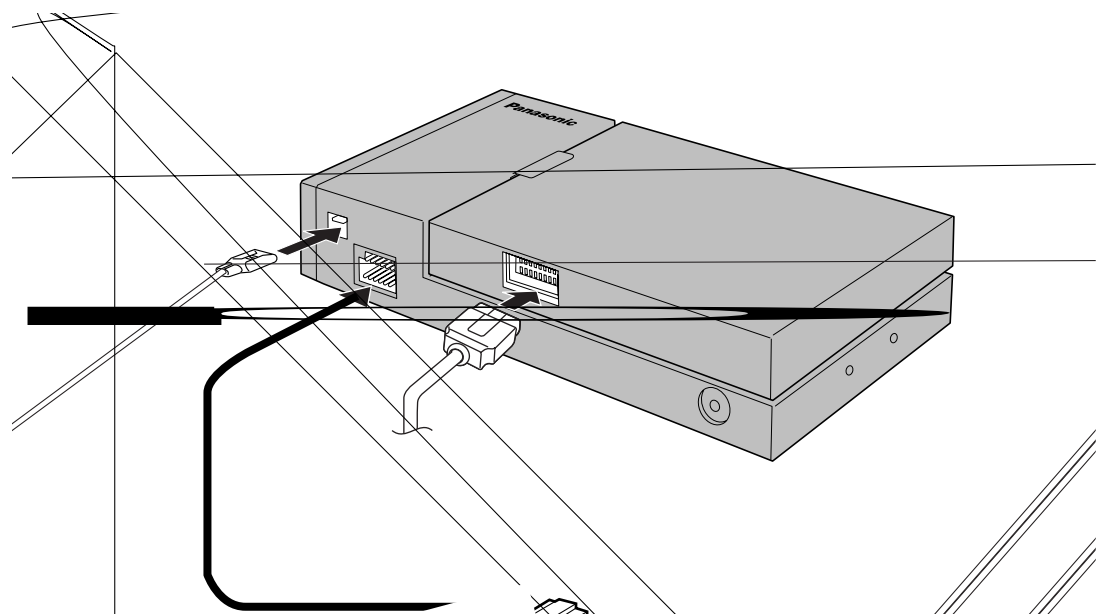
Note: See next page for hide-away unit electrical connection.



Speaker

Note: Supplied only for operational sound such as a beep. Do not use it for a center speaker.

Caution: Do not use the supplied speaker for some other units or components.



NAVI MUTE

ANT-CONT MAX 0.1A

TWIN CD•C-CONT

AMP-CONT MAX 0.1A

BATTERY 15A

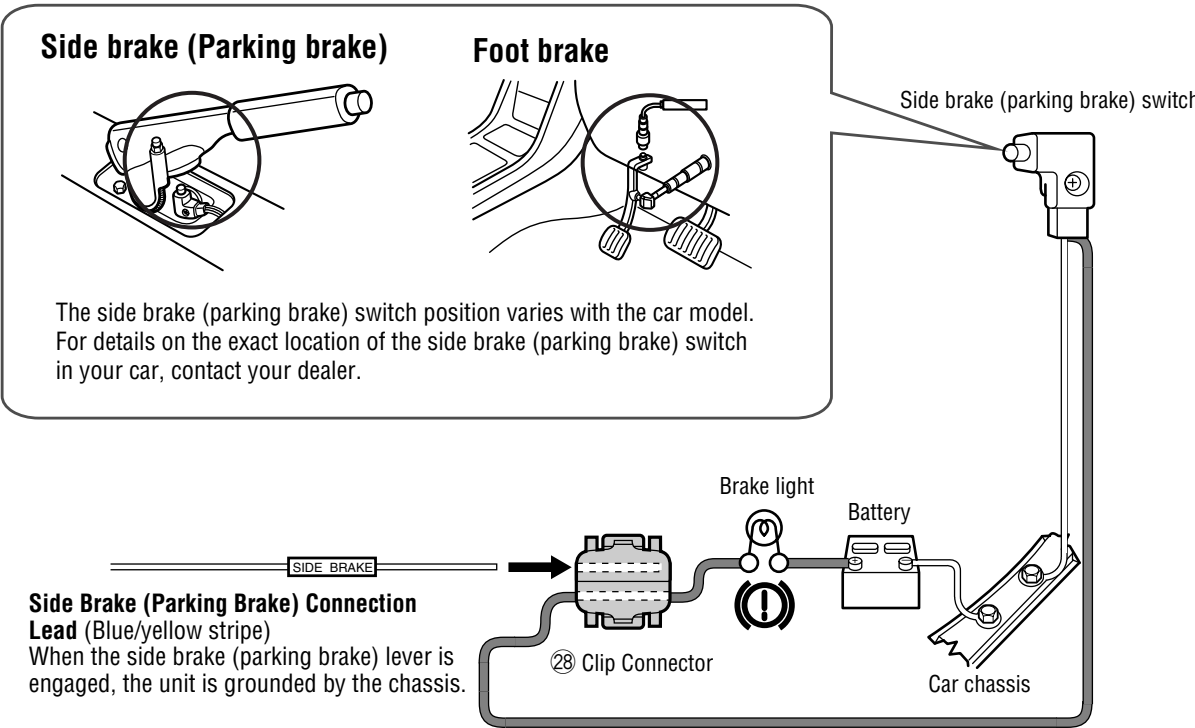
ACC



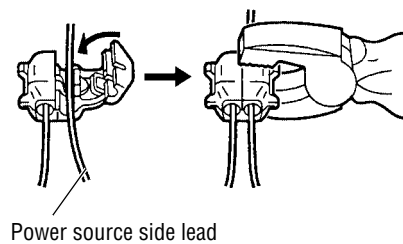
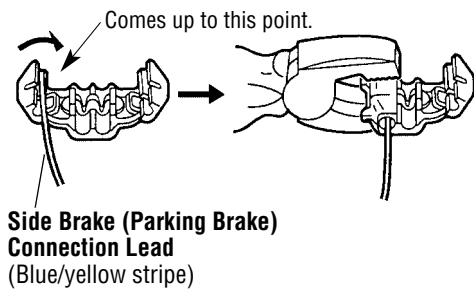
Electrical Connections (continued)

Connecting the Side Brake (Parking Brake) Connection Lead

Caution: For safety, be sure to ask your nearest professional installer to do this connection.

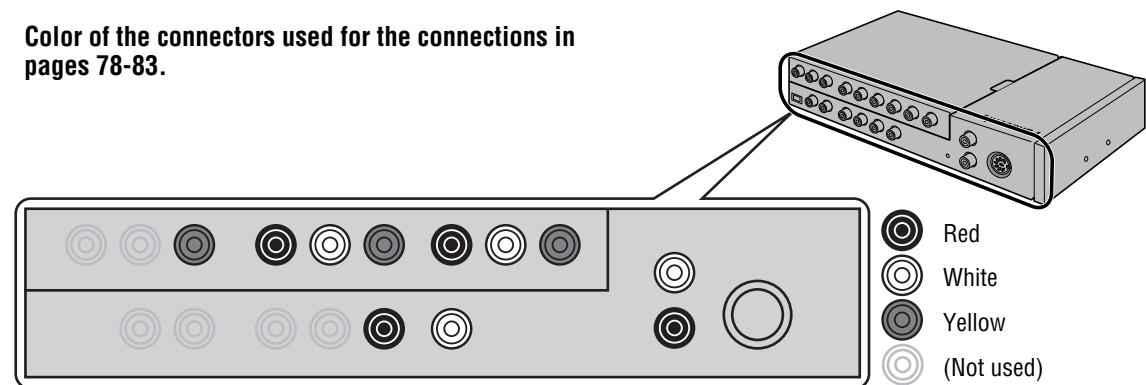


- 1 Attach a Clip Connector 28 to the end of the side brake (parking brake) connection lead.
- 2 The Clip Connector 28 is connected to the power source side lead of the side brake (parking brake) lever.



Color of the Connectors

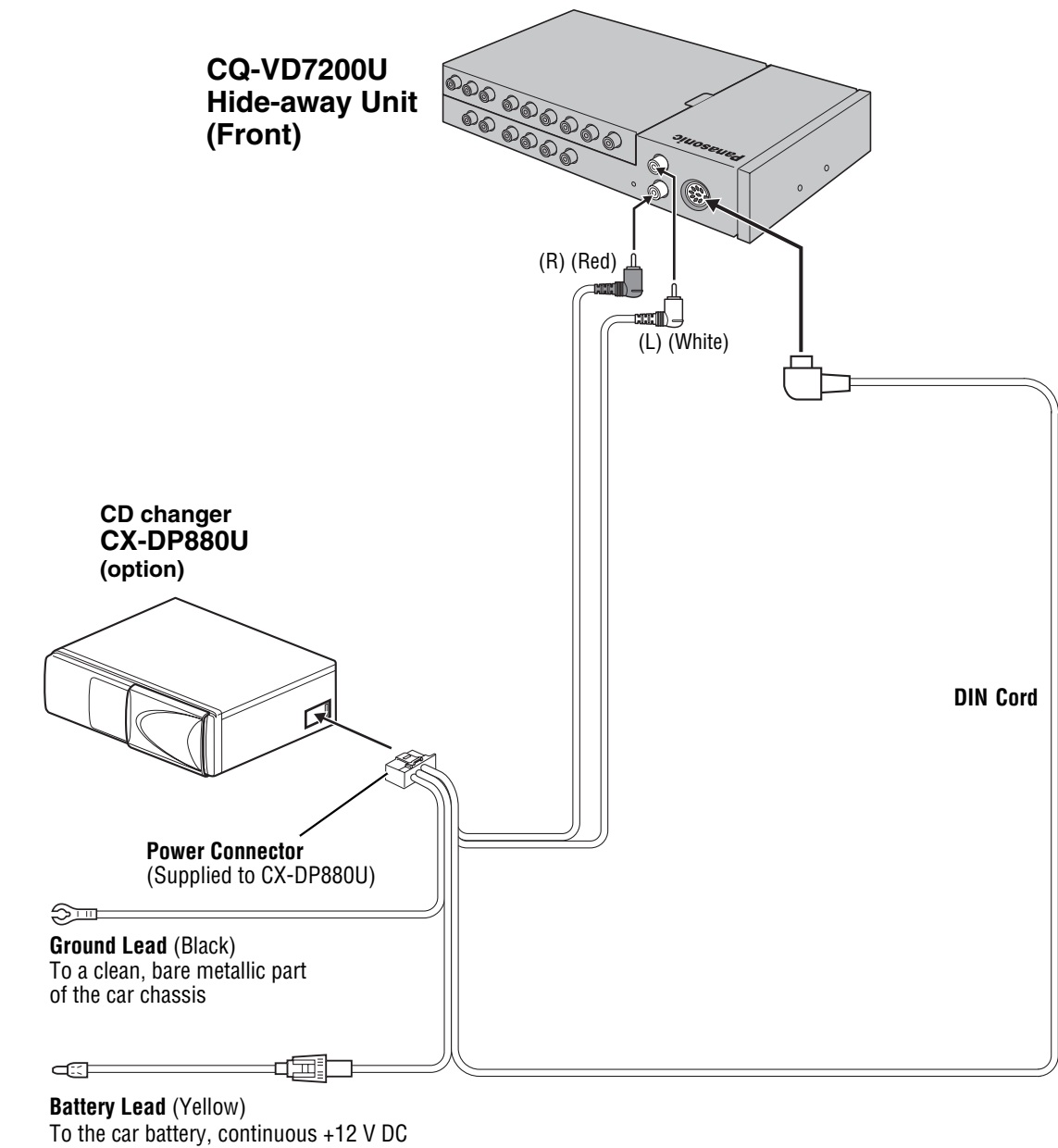
Color of the connectors used for the connections in pages 78-83.



Electrical Connections (continued)

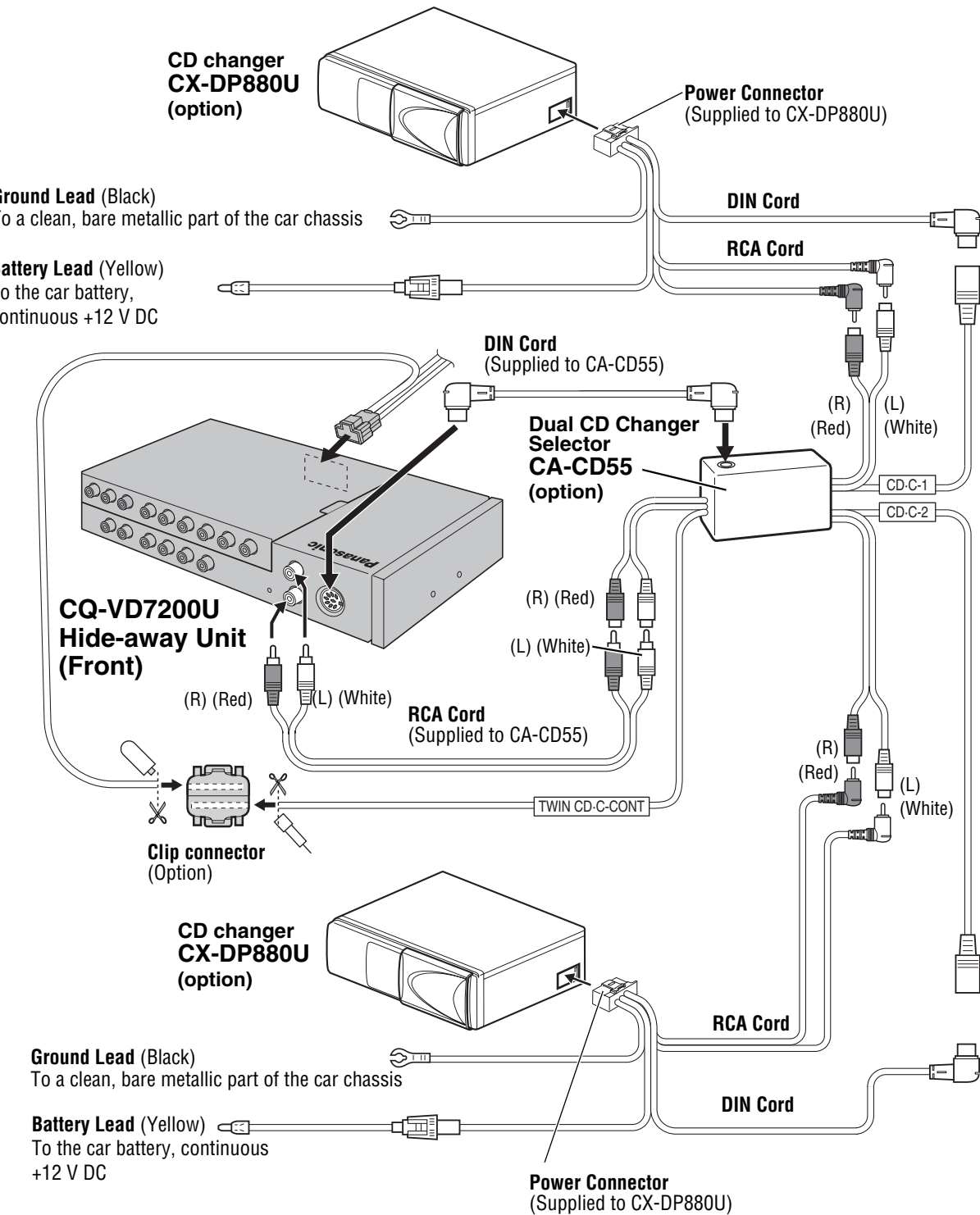
Connection with CD Changer (CX-DP880U)

Note: Refer to the operating instructions for the connected devices, in addition.



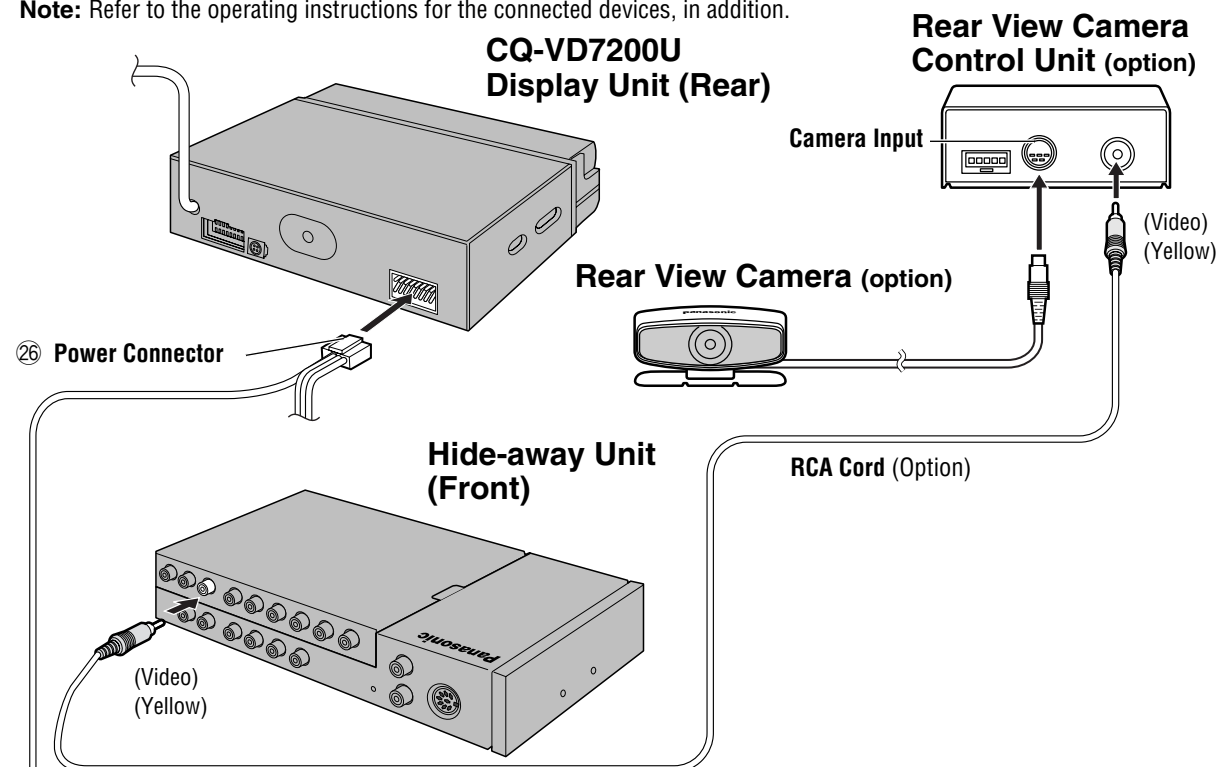
Connection with Dual CD Changer Selector (CA-CD55)

Note: Refer to the operating instructions for the connected devices, in addition.



Connection with Rear View Camera

Note: Refer to the operating instructions for the connected devices, in addition.



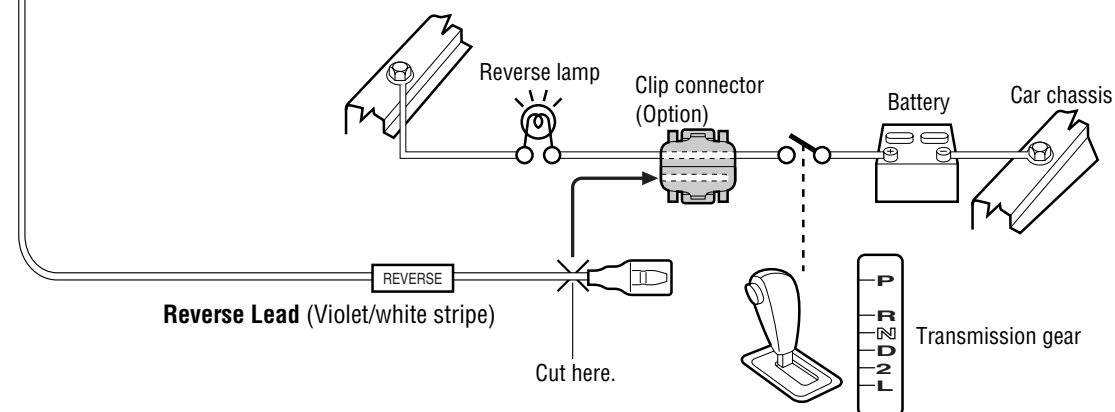
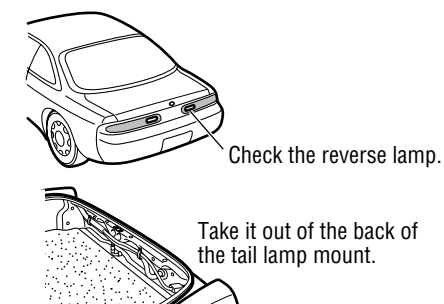
Connecting the Reverse Lead

If using an optional rear view camera, the reverse lead must be connected.

Connect the reverse lead (violet/white stripe) to the positive (+) lead of the reverse lamp (the lamp with a clear lens that lights when the transmission gear is shifted into the reverse position).

Notes:

- Connect the reverse lead after cutting the terminal at the end.
- Use a Reverse Extension Cord 27 if needed.



Electrical Connections (continued)

Connection with Digital Surround Processor (CY-AC300)

Note: Refer to the operating instructions for the connected devices, in addition.

**Digital Surround Processor
CY-AC300
Operating Unit (option)**

**Operating Unit/Main Unit
Connecting Cord
(Supplied to CY-AC300)**

**Digital Surround Processor
CY-AC300
(Rear)**

(Front)

SUB-W
REAR
FRONT
ANALOG-IN
DIGITAL-IN

**Power Connector
(Supplied to CY-AC300)**

Center Speaker Lead

**External Amplifier
Control Power Cord**
AMP-CONT MAX 0.1A

**RCA Cord (Option)
(When a two-way cord is used)**

**RCA Cord
(Option)**

**RCA Cord
(Option)**

(L)(White) (R)(Red)

(L)(White) (R)(Red)
(L)(White) (R)(Red)

**CY-M7052 (Option)
(Top)**

**CY-M9054 (Option)
(Top)**

**Amplifier Control Power
Cord (Blue/white stripe)**

**Amplifier Control Power
Cord (Blue/white stripe)
(Connect to AMP-CONT)**

**Center Speaker
EAB-CF2**

Subwoofer

**(Left) (Right)
Rear Speaker**

**(Left) (Right)
Front Speaker**

Notes on handling optical fiber cable:

- Do not allow the cable to be damaged by getting it caught in the door, placing a heavy object on it, etc.
- Make sure that the cable is not strained when it is connected.
- Do not bend the cable sharply.



**Optical Fiber Cable
(CA-LRD60: Option)**

29 Display Unit/Hide-away Unit Connecting Cord

**CQ-VD7200U
Display Unit (Rear)**

**Digital Audio Output
Connector (optical)**

26 Power Connector

**CQ-VD7200U
Hide-away Unit**

(Front)

(Rear)

30 Power Connector

Troubleshooting

Preliminary Steps

Check and take steps as described in the tables below.

If You Suspect Something Wrong

Immediately switch power off.
Disconnect the power cable and check that there is neither smoke nor heat from the unit before asking for repairs. Never try to repair the unit yourself because it is dangerous to do so.

Common

Trouble	Cause/Step
No power	Car's ignition switch is not on. →Turn your car's ignition switch to ACC or ON.
	Cables are not correctly connected. →Connect cables correctly.
	Battery cable is not correctly connected. →Connect the battery cable to the terminal that is always live.
	Accessory cable is not correctly connected. →Connect the accessory cable to your car's ACC source.
	Grounding wire is not correctly connected. →Connect the grounding wire to a metal part of your car.
No sound	Fuse is burnt. →Call the store where you purchased the unit, or your nearest Panasonic Servicenter (see the attached sheet) and ask for fuse replacement.
	The volume is adjusted to zero. →Raise the volume.
	Mute is set to ON. →Set it to OFF.
	Cables are not correctly connected. →Connect cables correctly.
Only sound, no picture.	Condensation (dew) →Wait for a while before use.
	Side brake (parking brake) cord is not correctly connected. →Connect the side brake connection lead correctly.
	You did not pull the side brake (parking brake) lever. →Pull the side brake (parking brake) lever.


Cautions:

- Do not use the unit if it malfunctions or if there appears to be something wrong.
- Do not use the unit in an irregular condition, for example, no sound, or if it is emitting smoke or foul smell, as this may cause ignition or electric shock. Immediately stop using it and call the store where you purchased it.

Common (Continued)

Trouble	Cause/Step
Noise Picture is not clear.	A mobile phone is used near the unit. →Keep the mobile phone away from the unit.
	The unit's grounding wire is not connected securely. →Check the metal areas of the car body (chassis), and connect the grounding wire more securely.

Monitor

Trouble	Cause/Step
The tilt angle or the front-rear position of the display is not adjustable.	There is an obstacle. →Install the unit where the unit moves freely.
The monitor does not go back into the unit.	The monitor direction is not proper. →Change the monitor direction to the center.
	The monitor stops on the way to the home position. →Raise the monitor a little and press [] (OPEN/CLOSE).

Remote Control

Trouble	Cause/Step
Buttons are invalid for operation.	Battery Poles (+) (–) are reversed. →Insert the battery correctly.
	Wrong battery. →Check the battery.
	Battery has run down. →Replace the battery.
	Remote control is in the wrong direction. →Direct the remote control at remote control sensor on the display unit.

TV

Trouble	Cause/Step
Unclear image due to noise	The intensity of the radio wave is too low. →Change the broadcast station.
	Connection or installation of the TV antenna has not been performed correctly. →Check the connection or installation.

Troubleshooting (continued)

DVD video, Video CD, CD, CD-R, CD-RW

Trouble	Cause/Step
The disc is inside but no sound. The disc is ejected automatically.	The disc is upside down. →Place the disc in the correction direction, the label side up.
	The disc is dirty. →Clean the disc, referring to the section on “Notes on Discs”(→ page 93).
	The unit can only play the following types of discs: DVD video, video CD, music CD and MP3.
CD sound skips, tone quality is low.	The disc is dirty. →Clean the disc, referring to the section on “Notes on Discs”(→ page 93).
Sound skip due to vibration.	Mounting angle is over 30°. →Adjust mounting angle to less than 30°.
	Unstable mounting. →Mount the unit securely with the mounting parts, referring to the section on installation.
The buttons do not work.	Some operations are not permitted with certain discs. (Refer to the guide provided with your disc.)
The disc is not ejected.	<ul style="list-style-type: none">• Disc is defective.• Mechanical trouble. →Press [▲]. If failure persists, press the reset switch. If normal operation is not restored, call the store where you purchased the unit or the nearest Panasonic Servicenter.

DVD video

Trouble	Cause/Step
Cannot switch the audio language/subtitle language/angle.	<ul style="list-style-type: none">• It is not possible to switch if the disc does not have multiple audio languages/subtitle languages/angles recorded on it. (Refer to the guide provided with your disc.)• Some discs permit switching through a menu screen.• Sometimes, switching angles is possible only with certain scenes.
The audio/subtitle language selected in the DVD settings is not used.	If audio or subtitles in the languages are not recorded on the disc, the audio or subtitles do not switch to that language. (Some discs permit switching through a menu screen. Refer to the guide provided with your disc.)

CD

Trouble	Cause/Step
CD text is not displayed normally.	Disc is dirty, or has scratches. →Clean the disc, referring to the section on “Notes on Discs”(→ page 93).
Time is counted but no sound comes out.	The 1st track of a mix mode disc was reproduced. (Mix mode is a format in which data, except music, is recorded on the 1st track and music data is recorded on other than the 1st track in a session.) →Play back music data recorded on other than the 1st track.

MP3

Trouble	Cause/Step
No playback.	The disc does not conform to any of the file systems supported by this player. →Insert a disc that conforms to the file systems supported by this player. (→ page 31).
	The MP3 file is missing the “.mp3” file name extension. →Make sure to add the “.mp3” extension to each MP3 file name.
It takes too long for playback to start.	The folders and files recorded on the disc are layered too much. →As checking of files takes longer in this case, do not record any unnecessary folders or files other than MP3s on the disc. (If there are many hierarchies of files and folders, it may take up to 150 seconds to start playback.)
Poor recording quality, sound skipping	→The recording quality differs depending on the encoding software used, and on settings such as the bit rate. Set the bit rate within the range specified in the specifications chart (→ page 96). It is recommended to set the bit rate to “128 kbps or more” and “Fixed”.
	High-speed writing was executed when MP3 data was recorded on the disc. →Decrease writing speed as low as possible.
Files are not played in the desired order.	Files or folders are not recorded in the desired playback order. →Some writing software lets you specify the recording order by adding a prefix in the range of “01” - “99”, etc. to the file name. For details refer to the user manual of your writing software.
Folder/file name is not displayed correctly.	The disc does not conform to the file systems supported by this player. →Insert a disc that conforms to the file systems supported by this player. (→ page 31).
	→There may be a problem with your writing software or CD recorder (CD-R/RW drive). For details refer to the user manual of your writing software.

Troubleshooting (continued)

MP3 (Continued)

Trouble	Cause/Step
File playing time is not displayed correctly.	You turned off the ignition switch of the car during playback. →Playing another file will return the file playing time to normal.
	You played a file in which character information had been recorded by use of ID3Tag 2.0 or later version. →A file in which character information was recorded by use of ID3Tag 2.0 or later version may not be reproduced normally. For example, the file playing time may not be displayed correctly.

Radio

Trouble	Cause/Step
Poor reception of FM stereo and monaural broadcasts.	Station is too far, or signals are too weak. →Select other stations of higher signal level.
	The motor antenna relay control lead is not connected correctly. →If there is a motor antenna in the car, connect the motor antenna relay control lead to the motor antenna lead that is installed in the car correctly.
	The radio antenna is not extended enough. →Fully extend the radio antenna.

Car Navigation, VCR, Camcorder, Rear View Camera, Rear Monitor

Trouble	Cause/Step
The picture from a car navigation system is not displayed.	The connection of a car navigation system is not correct. →Connect it correctly.
	Input setting of a car navigation system is not correct. →Make the input setting correct.
The picture from a VCR or a camcorder is not displayed.	A VCR or Camcorder is not connected correctly. →Connect a VCR or Camcorder correctly.
The picture from a rear view camera is not displayed.	Rear view camera is not connected correctly. →Connect a rear view camera correctly.
	Input setting of a camera is not correct. →Make the input setting correct.
The picture or the sound of the rear monitor is not switchable.	“AUTO” is not selected for the setting of a rear monitor. →Select “AUTO” for the setting.

Display Settings

Trouble	Cause/Step
The brightness of the screen is not stable.	“AUTO” dimmer is selected. →Select one of the dimmer levels from among 1 to 4 to make the dimmer adjustment become free from light intensity.
The picture is dark. The picture is whitish. Something is wrong with the picture. The picture is light in color.	The screen is not adjusted properly. →Make every adjustment of the screen.
Red, blue, or green spots appears.	This is a characteristic of liquid crystal panels and is not a problem.

Sound Settings

Trouble	Cause/Step
No sound from left, right, front, or rear speaker.	Cables are not correctly connected. →Connect the cables correctly.
Left and right sounds are reversed.	The speaker leads are connected in reverse between right and left. →Connect the speaker wires to the correct one.
No sound from the subwoofer.	Subwoofer volume level is set to zero. →Rise the volume of Subwoofer.
	Private mode is set to “ON”. →Set private mode to “OFF”.

Troubleshooting (continued)

Error Display Messages

■ CD/MP3/DVD/Video CD/CD Changer

Display	Cause/Step
- E1 -	Disc is dirty, or is upside down. ➔Check disc.
- E2 -	Disc has scratches. ➔Check disc.
- E3 -	No operation by some cause. ➔Press [▲]. If failure persists, press the reset switch. (Press the reset switch in the CD changer). If normal operation is not restored, call the store where you purchased the unit or the nearest Panasonic Servicenter.
- E4 -	The type of the file that is selected is not supported. ➔Check disc.
NO DISC	No disc is in the player. ➔Insert disc into the disc slot.
NO MAGAZINE	No magazine is in the changer. ➔Load the changer with CD-loaded magazine.
PAL/NTSC ERROR	An attempt was made to play a PAL disc. ➔Press [▲] and check the disc.
REGION ERROR	An attempt was made to play a disc with a region number other than "1" or "ALL". ➔Press [▲] and check the disc.

- Notes:**
- There may be cases when the disc numbers affected by an error are displayed before E1 and E2.
 - Displays and the steps to be taken for errors vary in part from changer to changer. For details, refer to the Operating Instructions for the changer used.

Maintenance

Your product is designed and manufactured to ensure a minimum of maintenance. Use a dry soft cloth for routine exterior cleaning. Never use benzine, thinner or other solvents.

Product Servicing

If the suggestions in the charts do not solve the problem, we recommend that you take it to your nearest authorized Panasonic Servicenter. The product should be serviced only by a qualified technician.

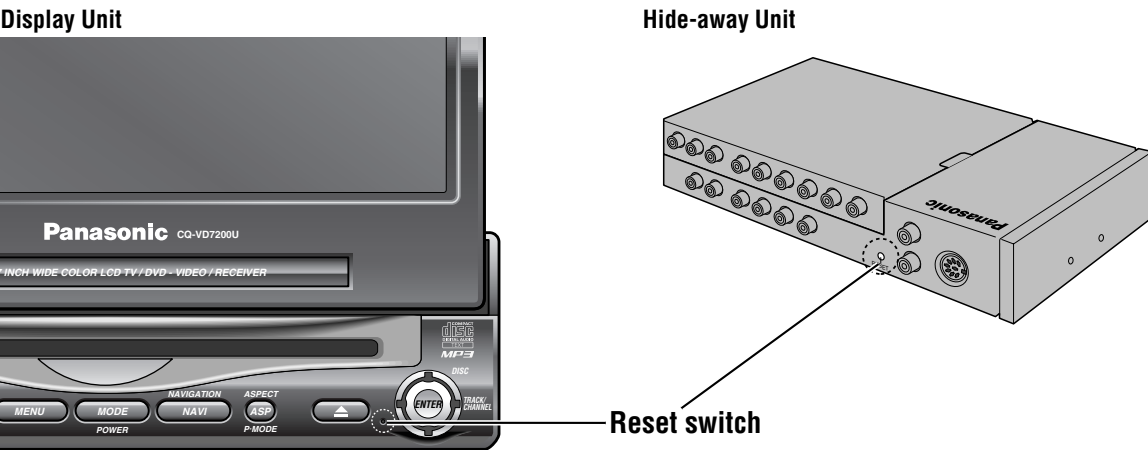
Replacing the Fuse

Use fuses of the same specified rating (5 A for display unit, 15 A for hide-away unit). Using different substitutes or fuses with higher rating, or connecting the product directly without a fuse, could cause fire or damage to this unit.
If the replacement fuse fails, contact your nearest Panasonic Servicenter for service.

If the Unit Begins to Malfunction...

Reset switch
Insert a hard, slender stick into the hole and push the switch.

Important
Push the switch only when the unit fails to operate with any buttons. (Stored settings and adjustments are not cleared.) If the unit fails to return to normal condition, call the nearest Panasonic Servicenter and ask for repairs.



- Notes:**
- We recommend that you press both of the reset switches on the Display Unit and the Hide-away Unit one by one in any order.
 - If the ID-CODE has been already set, you will be asked to enter the ID-CODE right after the unit is restarted.

Maintenance

To Prevent Damage to the System Exterior

Do not apply pesticides, benzine, thinner or other volatile substances to the unit. The cabinet surface primarily consists of plastic materials.

Do not wipe with benzine, thinner or similar substances because this will result in discoloration or removal of the paint.

When a cloth with a cleansing chemical is used, follow the caution points.

Do not leave the unit in contact with rubber or vinyl products for long periods of time.

Do not use cleaners which have polishing granules because this could damage the surface of the unit.



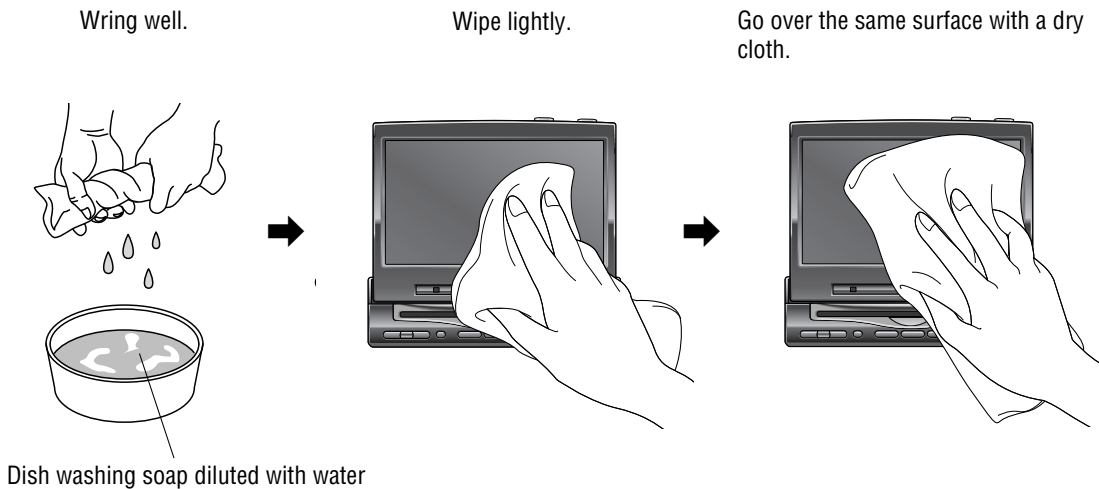
Clean Dirt by Wiping Lightly with a Soft Cloth

When the unit is dirty, wipe the surface of the display using the Wiping Cloth (supplied).

Without a Wiping Cloth

When the unit is dirty, wipe with a well-wrung cloth dipped in liquid dish washing detergent (neutral) diluted with water and then go over the same surface with a dry cloth.

(Since there is the possibility of water drops getting inside of the unit, do not directly apply cleanser to the surface.)



Note: Do not scratch the screen with your nails or other hard objects. The resulting scratches or marks will obscure the images.

Caution: If water drops or similar wet substances get inside the monitor, it may cause a malfunction.

Notes on Discs

How to hold the disc

- Do not touch the underside of the disc.
- Do not scratch the disc.
- Do not bend disc.
- When not in use, keep disc in the case.

Do not use irregularly shaped discs.

Do not leave discs in the following places:

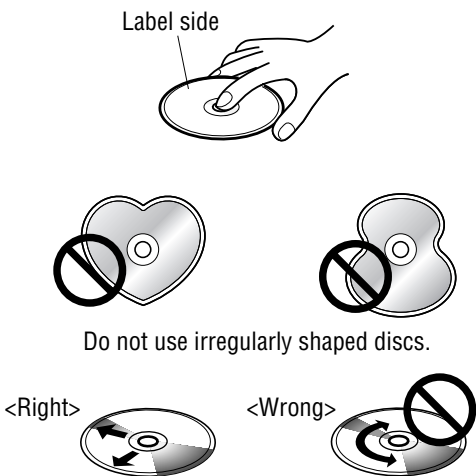
- Direct sunlight
- Near car heaters
- Dirty, dusty and damp areas
- On seats and dashboards

Disc cleaning

Use a dry, soft cloth to wipe from the center outward.

Do not attach any seals or labels to your discs.

Do not write on the disc label in a heavy pen or ballpoint pen.



Notes on CD-Rs/RWs

- You may have trouble playing back some CD-R/RW discs recorded on CD recorders (CD-R/RW drives), either due to their recording characteristics or dirt, fingerprints, scratches, etc. on the disc surface.
- CD-R/RW discs are less resistant to high temperatures and high humidity than ordinary music CDs. Leaving them inside a car for extended periods may damage and make playback impossible.
- The unit may not successfully play back a CD-R/RW that was made by the combination of writing software, a CD recorder (CD-R/RW drive) and a disc if they are incompatible with one another.
- This player cannot play CD-R/RW discs if the session is not closed.
- This player cannot play CD-R/RW discs which contain other than CD-DA or MP3 data.
- Be sure to observe the handling instructions of CD-R/RW discs.

Definition of Terms

Digital audio output connector (Optical)

The digital audio output connector (optical) converts electrical signals into optical signals and transfers them to the amplifier. Consequently, it has a number of features including its immunity from electrical interference from external sources and its ability to prevent the generation of noise and its minimal effect on the external environment.

Dolby Digital

This fully discrete format divides the music signals into 5.1 channels: Front Left (L), Front Right (R), Center (C), Left Surround (LS), Right Surround (RS) and Subwoofer (SW: 0.1 channel) for recording and playback. The number of channels that are recorded depends on the software. (1 to 5.1 channels)

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Dolby Pro Logic

This format records signals from four channels [Front Left (L), Front Right (R), Center (C), and Monaural Surround (S)] in two channels, decodes those channels through a Dolby Pro Logic decoder, and then outputs the resulting signals in four channels.

dts

This format requires more data than Dolby Digital, and provides higher quality surround playback. Similar to Dolby Digital, this fully discrete format divides the music signals into 5.1 channels: Front Left (L), Front Right (R), Center (C), Left Surround (LS), Right Surround (RS) and Subwoofer (SW: 0.1 channel) for recording and playback.

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Interactive DVD

An interactive DVD is DVD software which includes multiple angles, multiple plot endings, etc.

Letterbox screen

This refers to a screen on which the playback picture of wide-screen DVDs or Video CDs appears with black bands running along the top and bottom.

LPCM (Linear PCM audio)

In this format, the audio signal is converted to digital data and recorded in two channels without compression. Because the capacity of a DVD video disc is large, it can store more data with better accuracy than a CD.

Pan & Scan screen

This refers to a screen on which the playback picture of wide-screen DVDs or Video CDs is cut off at the left and right sides.

Playback control (Video CD)

If the Video CD has “With Playback Control” or others written on the disc surface or on the jacket, the scenes or information to be viewed (or listened to) can be selected interactively with the screen by looking at the menu shown on the screen. In these instructions, playback using the menu screen is referred to as the “menu play” for video CDs. This player supports Video CDs with playback control.

Title, Chapter (DVD)

DVDs are divided into some large sections (titles) or some small sections (chapters). Each section is numbered; these numbers are called “Title number” or “Chapter number”.

Title 1			Title 2	
Chapter 1	Chapter 2	Chapter 1

Track (Video CD/CD)

Video CDs or CDs are divided into some sections (tracks). Each section is numbered; these numbers are called “Track number”.

Track 1	Track 2	Track 3	Track
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Language Code List

How to input the language code, refer to page 46.

Code	Language Name
6565	Afar
6566	Abkhazian
6570	Afrikaans
6577	Ameharic
6582	Arabic
6583	Assamese
6588	Aymara
6590	Azerbaijani
6665	Bashkir
6669	Byelorussian
6671	Bulgarian
6672	Bihari
6678	Bengali; Bangla
6679	Tibetan
6682	Breton
6765	Catalan
6779	Corsican
6783	Czech
6789	Welsh
6865	Danish
6869	German
6890	Bhutani
6976	Greek
6978	English
6979	Esperanto
6983	Spanish
6984	Estonian
6985	Basque
7065	Persian
7073	Finnish
7074	Fiji
7079	Faroese
7082	French
7089	Frisian
7165	Irish
7168	Scots Gaelic
7176	Galician
7178	Guarani
7185	Gujarati
7265	Hausa
7273	Hindi
7282	Croatian
7285	Hungarian

Code	Language Name
7289	Armenian
7365	Interlingua
7378	Indonesian
7383	Icelandic
7384	Italian
7387	Hebrew
7465	Japanese
7473	Yiddish
7487	Javanese
7565	Georgian
7575	Kazakh
7576	Greenlandic
7577	Cambodian
7578	Kannada
7579	Korean
7583	Kashmiri
7585	Kurdish
7589	Kirghiz
7665	Latin
7678	Lingala
7679	Laothian
7684	Lithuanian
7686	Latvian, Lettish
7771	Malagasy
7773	Maori
7775	Macedonian
7776	Malayalam
7778	Mongolian
7779	Moldavian
7782	Marathi
7783	Malay
7784	Maltese
7789	Burmese
7865	Nauru
7869	Nepali
7876	Dutch
7879	Norwegian
7982	Oriya
8065	Panjabi
8076	Polish
8083	Pashto, Pushto
8084	Portuguese
8185	Quechua

Code	Language Name
8277	Rhaeto-Romance
8279	Romanian
8285	Russian
8365	Sanskrit
8368	Sindhi
8372	Serbo-Croatian
8373	Singhalese
8375	Slovak
8376	Slovenian
8377	Samoa
8378	Shona
8379	Somali
8381	Albanian
8382	Serbian
8385	Sundanese
8386	Swedish
8387	Swahili
8465	Tamil
8469	Telugu
8471	Tajik
8472	Thai
8473	Tigrinya
8475	Turkmen
8476	Tagalog
8479	Tonga
8482	Turkish
8484	Tatar
8487	Twi
8575	Ukrainian
8582	Urdu
8590	Uzbek
8673	Vietnamese
8679	Volapük
8779	Wolof
8872	Xhosa
8979	Yoruba
9072	Chinese
9085	Zulu

Specifications

Display Unit

General	
Power supply	: 12 V DC (11 V - 16 V), test voltage 14.4 V, negative ground
Current consumption	: Less than 1.5 A
Maximum power output (external speaker)	: 0.7 W
Compatible speaker impedance	: 8 Ω
Dimensions (W x H x D)	: 7" x 1-15/16" x 6-5/16" (178 x 50 x 160 mm)
Weight	: 5 lbs. 1 oz. (2.3 kg)
Monitor	
Liquid crystal panel	: 7" wide
Screen dimensions (W x H x D)	: 6-1/16" x 3-7/16" x 6-15/16" (154 x 87 x 177 mm)
Number of pixels	: 336,960 pixels (234 vertical x 480 horizontal x 3)
Valid pixel ratio	: Over 99.99%
Display method	: Transparent color filter format
Drive method	: TFT (Thin Film Transistor) active matrix format
Light source	: Internal light (Built-in small fluorescent lamp)
Supplied speaker	
Impedance	: 8 Ω
Maximum power input	: 2 W

Digital audio output

Disc	Sound recording format	Optical digital audio output from connector
DVD	Dolby Digital	Dolby Digital bitstream (1 – 5.1 ch)
	DTS*	DTS bitstream (1 – 5.1 ch) (The analog portion is not output.)
	Linear PCM (48 kHz 16/20/24 bit)	Linear PCM (2 ch) (48 kHz sampling/16 bit only)
Video CD	MPEG 1	MPEG 1 bitstream
	Linear PCM	Linear PCM (2 ch) (44.1 kHz sampling/16 bit)
CD	Linear PCM	Linear PCM (2 ch) (44.1 kHz sampling/16 bit)
	DTS*	DTS bitstream (1 – 5.1 ch) (The analog portion is not output.)
MP3	MP3	Linear PCM (2 ch) (32 kHz/44.1 kHz/48 kHz sampling/16 bit)

*DTS only works with optical outputs.

“DTS” and “DTS Digital Out” are trademarks of Digital Theater Systems, Inc.

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Hide-away Unit

General	
Power supply	: 12 V DC (11 V - 16 V), test voltage 14.4 V, negative ground
Current consumption	: Less than 10 A (during disc playback)
Maximum power output	: 45 W x 4 ch (at 16 V)
Compatible speaker impedance	: 4 Ω
Video input signal	: Composite video signal, 1.0 Vp-p (75 Ω)
Audio input sensitivity	: 2 Vrms
Video output signal	: Composite video signal, 1.0 Vp-p (75 Ω)
Pre-Amp output voltage	: 4 Vrms
Pre-Amp output impedance	: Less than 60 Ω
Dimensions (W x H x D)	: 9-5/8" x 1-5/8" x 5-7/8" (245 x 42 x 150 mm)
Weight	: 3 lbs. 16 oz. (1.8 kg)
FM stereo radio	
Frequency range	: 87.9 - 107.9 MHz
Usable sensitivity	: 12 dBf
Stereo separation	: 35 dB (1 kHz)
S/N ratio	: 70 dB
AM stereo radio	
Frequency range	: 530 - 1 710 kHz
Usable sensitivity	: 28 dB/μV
Image rejection ratio	: 50 dB
Video section	
Signal format	: NTSC (Standard signal format in U.S and Japan)
Video output	: 75 Ω, 1 Vp-p
Region number	: 1 and ALL
Audio section	
Output voltage/Impedance	: 4 Vrms/220 Ω
Distortion	
Front L/R (1 kHz, 0 dB, PCM input)	: 0.04 %
S/N ratio	: 90 dB (during CD playback and connected with optical fiber cable)

Above specifications comply with EIA standards.

Note: Specifications and the design are subject to modification without notice due to improvements in technology.