

# Panasonic®

In-Dash 7 Inch Wide Color LCD TV/DVD-Video/Receiver

Moniteur/télé couleur de tableau de bord à ÉCL de 7 po (diagonale)/ récepteur/lecteur DVD-Vidéo

Reproductor de DVD-Video/CD con TV y LCD de 7" de Anhco a Color para el Tablero del Auto

## CQ-VD7200U

### Operating Instructions

### Manuel d'instructions

### Manual de Instrucciones



**MP3**



- Please read these instructions carefully before using this product and keep this manual for future reference.
- Prière de lire ces instructions attentivement avant d'utiliser le produit et garder ce manuel pour l'utilisation ultérieure.
- Lea con atención estas instrucciones antes de utilizar el producto y guarde este manual para poderlo consultar en el futuro.



*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.

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# 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.)

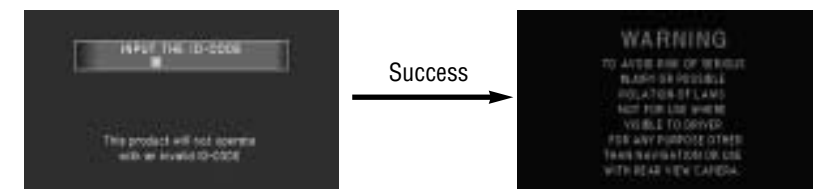
Once the ID code has been set, the unit cannot be operated if the main power supply is disconnected then re-connected. It is electronically locked so that a thief could not use the stolen unit unless that person knows the code you have set. The ID code operation must be performed only by the person to 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.



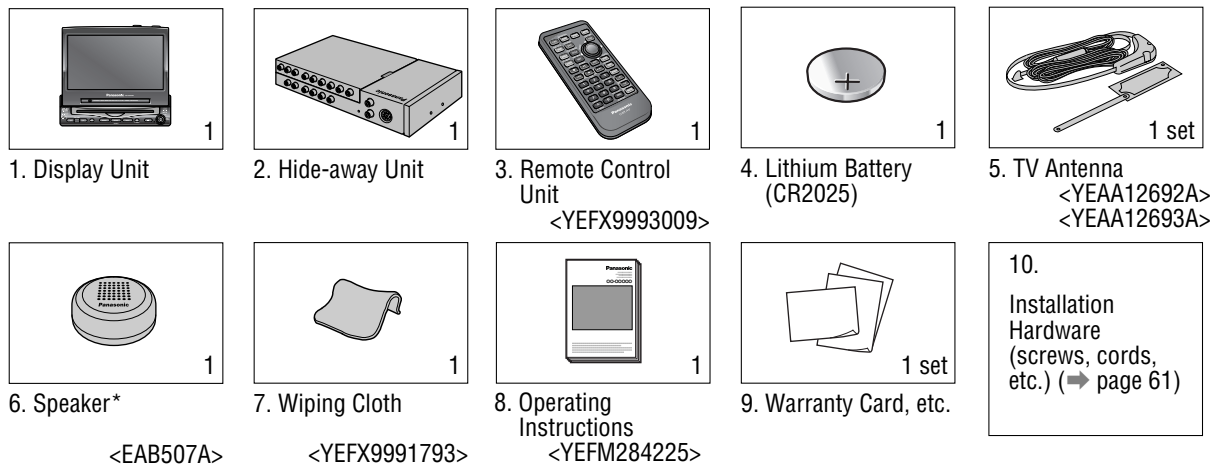
**Note:** When you fail in entering the ID code, a screen on the right is displayed and the unit beeps three times. Enter a correct ID code.

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.



# Components/Remote Control Unit Preparation

## Components



\*Do not use it for a center speaker.

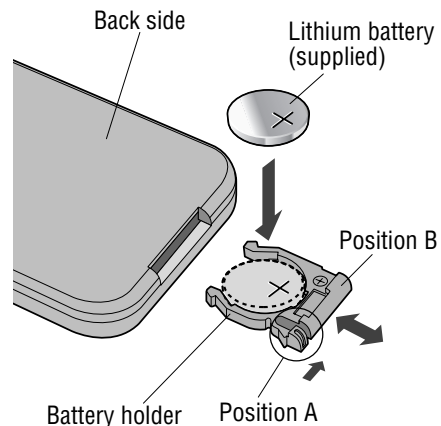
### Note:

- 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.

## Remote Control Unit Preparation

### Battery Installation (Inserting/Replacing the Battery)

- 1 Remove the battery holder.  
Pull the holder by the position B while pushing position A in the direction indicated by the arrow.
- 2 Install the battery on the battery holder.  
Set a new battery properly with its (+) side facing up as shown in the figure.
- 3 Insert the battery holder.  
Push the battery holder back into its original position.



### Battery Notes

Remove and dispose of the old battery immediately.

Battery Information:

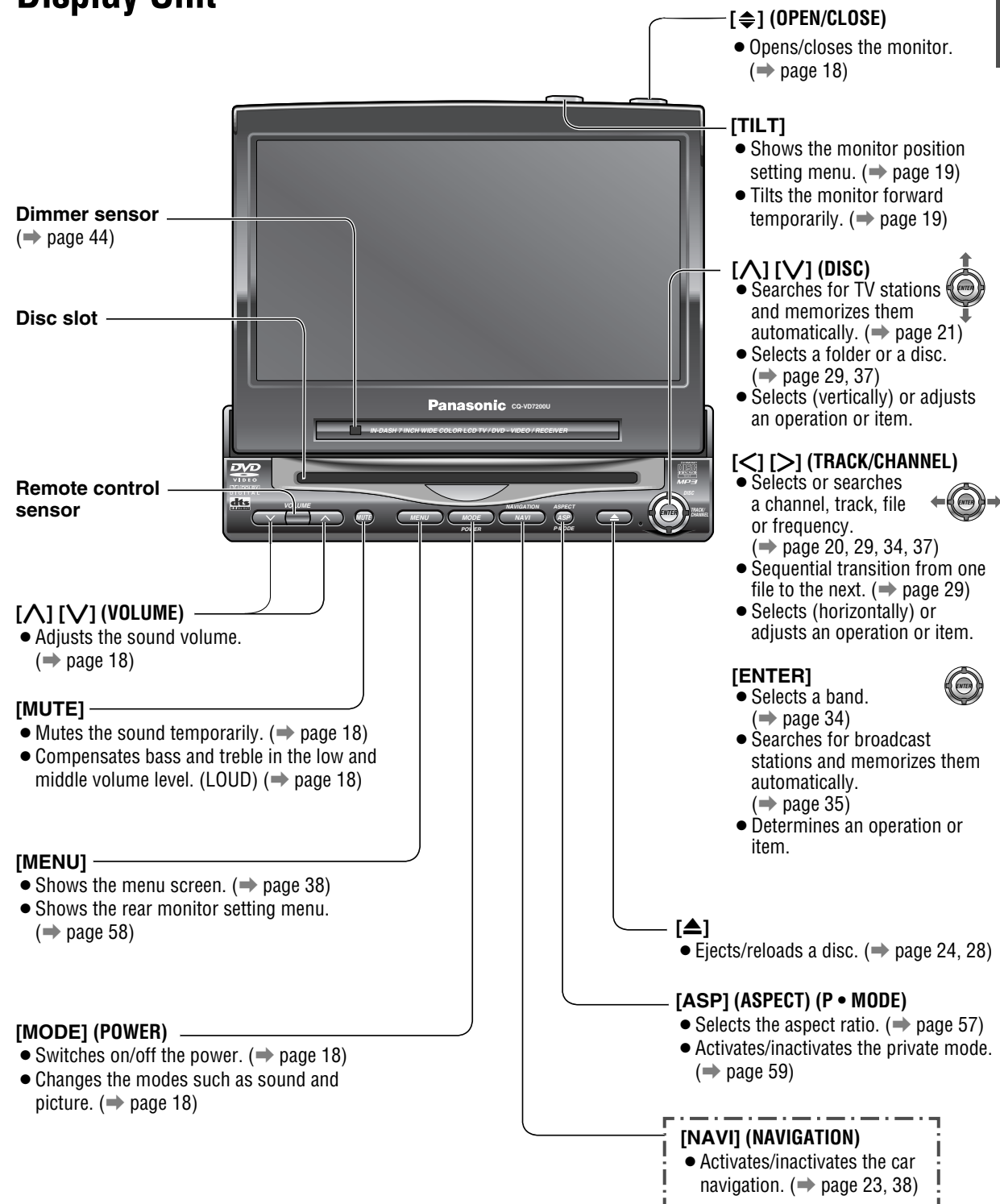
- Battery Type: Panasonic lithium battery (CR2025) (supplied)
- Battery Life: Approximately 6 months with normal use (at room temperature)

**Caution:** Improper use of batteries may cause overheating, an explosion or ignition, resulting in injury or a fire.

- Do not disassemble or short the battery. Do not throw a battery into a fire.
- Keep batteries away from children to avoid the risk of accidents.
- Be careful to observe proper local disposal rules when you dispose of batteries.

# Name of Controls and Functions

## Display Unit



**Note:** Refer to “Electrical Connections” for names on the rear of the hide-away unit. (⇒ page 74-75)



# Name of Controls and Functions (continued)

## Remote Control

Aim the remote control at the remote control sensor of the display unit and operate it.



**[NAVI] (NAVIGATION)**  
 • Activates/inactivates the car navigation. (⇒ page 23, 38)

**[PWR]**  
 • Switches on/off the power. (⇒ page 18)

**[MODE]**  
 • Switches the power on/off. (⇒ page 18)  
 • Changes the modes such as sound and picture. (⇒ page 18)

**[MENU]**  
 • Shows the menu screen. (⇒ page 38)  
 • Shows the rear monitor setting menu. (⇒ page 58)

**[OSD] (CAPTURE)**  
 • Displays information about each source on the screen. (⇒ page 16)  
 • Saves your favorite part of playing picture as a freeze-frame picture. (⇒ page 51)

**[DISP]**  
 • Changes the display. (⇒ page 56)

**[<|>]**  
 • Searches for TV stations and memorizes them automatically. (⇒ page 21)  
 • Selects a disc. (⇒ page 37)  
 • Selects (vertically) or adjusts an operation or item.

**[<|>]**  
 • Selects or searches a channel, frequency or track. (⇒ page 20, 34, 37)  
 • Selects (horizontally) or adjusts an operation or item.

**[ENTER]**  
 • Selects a band. (⇒ page 34)  
 • Searches for broadcast stations and memorizes them automatically. (⇒ page 35)  
 • Determines an operation or item.

**[A] (ASPECT) (P • MODE)**  
 • Selects the aspect ratio. (⇒ page 57)  
 • Activates/inactivates the private mode. (⇒ page 59)

**[0] to [9]**  
 • Selects a TV channel directly. (⇒ page 20)  
 • Memorizes and recalls broadcast stations. (⇒ page 35)  
 • Random [4], scan [5], repeat [6] for the CD changer mode. (⇒ page 37)  
 • Sets the ID code. (⇒ page 40)

**[MUTE]**  
 • Mutes the sound temporarily. (⇒ page 18)  
 • Compensates bass and treble in the low and middle volume level. (LOUD) (⇒ page 18)

**[&#94;] [V] (VOLUME)**  
 • Adjusts the sound volume. (⇒ page 18)

**[DVD] (DVD MENU)** **DVD VIDEO**  
 • Displays the DVD menu. (Operations vary according to the disc.) (⇒ page 26)

**[TITLE] (TITLE/CHAPTER)** **DVD VIDEO**  
 • Selects the title/chapter. (⇒ page 26)

**[RET] (RETURN)** **DVD VIDEO**  
 • Returns to the previous display. (⇒ page 26)  
 • Inputs the number again. (⇒ page 26)  
 • Displays the video CD's menu. (⇒ page 26)

**[SUB] (SUB TITLE)** **DVD VIDEO**  
 • Switching the subtitle language. (⇒ page 27)

**[ANGLE]**  
 • Switching the angle. (⇒ page 27)

**[AUDIO]**  
 • Switching the audio language. (⇒ page 27)

**[AUDIO] (ST/MONO)** **VIDEO CD**  
 • Switches between stereo or monaural sound. (⇒ page 27)

**[■] (STOP)** **DVD VIDEO** **VIDEO CD** **CD** **MP3**  
 • Stops playback. (⇒ page 25, 29)

**[■] (PAUSE)**  
 • Pause (⇒ page 25, 29)

**[▶] (PLAY)**  
 • Playback (⇒ page 25, 29)

**[◀▶] [▶▶]**  
 • Goes to beginning. (⇒ page 25, 29)  
 • Fast forward/fast reverse (⇒ page 25, 29)  
 • Sequential transition from one file to the next. (⇒ page 29)  
 • Slow playback [▶▶] (⇒ page 25)

**[&#94;] [V] [◀] [▶]** **DVD VIDEO** **VIDEO CD**  
 • Selects an operation or item.

**[ENTER]**  
 • Determines an operation or item.

**[&#94;] [V]** **MP3**  
 • Selects a folder. (⇒ page 29)

**[ENTER]**  
 • Changes to the direct folder selection mode. (⇒ page 28)

**[◀] [▶]** **CD** **MP3**  
 • Goes to beginning. (⇒ page 29)  
 • Fast forward/fast reverse. (⇒ page 29)  
 • Sequential transition from one file to the next. (⇒ page 29)

**[DRC]** **DVD VIDEO**  
 • Compresses the range of the playback level. (⇒ page 33)

**[REP] (REPEAT)** **CD** **MP3**  
 • Repeats a playback. (⇒ page 25, 29)

**[SCRL] (SCROLL)** **CD** **MP3**  
 • Title scroll. (⇒ page 29)

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

Meaning of symbols **DVD VIDEO** **VIDEO CD** **CD** **MP3** Indicates the compatible types of disc.

**[MODE]** **DVD VIDEO** **VIDEO CD** **CD** **MP3**  
 • Changes the modes such as sound and picture. (⇒ page 18)

**[&#94;] [V] [◀] [▶]** **DVD VIDEO** **VIDEO CD**  
 • Selects an operation or item.

**[ENTER]**  
 • Determines an operation or item.

**[&#94;] [V]** **MP3**  
 • Selects a folder. (⇒ page 29)

**[ENTER]**  
 • Changes to the direct folder selection mode. (⇒ page 28)

**[◀] [▶]** **CD** **MP3**  
 • Goes to beginning. (⇒ page 29)  
 • Fast forward/fast reverse. (⇒ page 29)  
 • Sequential transition from one file to the next. (⇒ page 29)

**[DRC]** **DVD VIDEO**  
 • Compresses the range of the playback level. (⇒ page 33)

**[REP] (REPEAT)** **CD** **MP3**  
 • Repeats a playback. (⇒ page 25, 29)

**[SCRL] (SCROLL)** **CD** **MP3**  
 • Title scroll. (⇒ page 29)

**[0] to [9]** **DVD VIDEO** **VIDEO CD**  
 • Selects an item on the menu. (⇒ page 26)

**[0] to [9]** **DVD VIDEO**  
 • Selects a title or chapter. (⇒ page 26)

**[4] (RANDOM)** **CD** **MP3**  
 • Random play. (⇒ page 29)

# 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

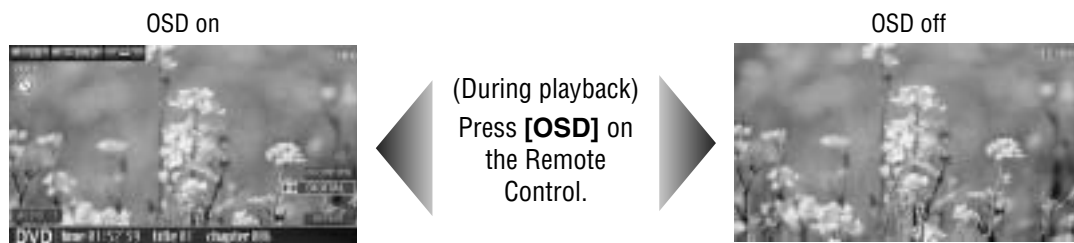
Playing elapsed time, title, preset list, etc.



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.

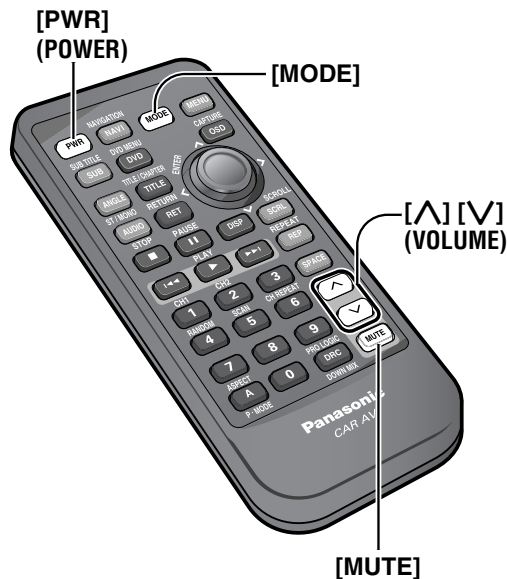
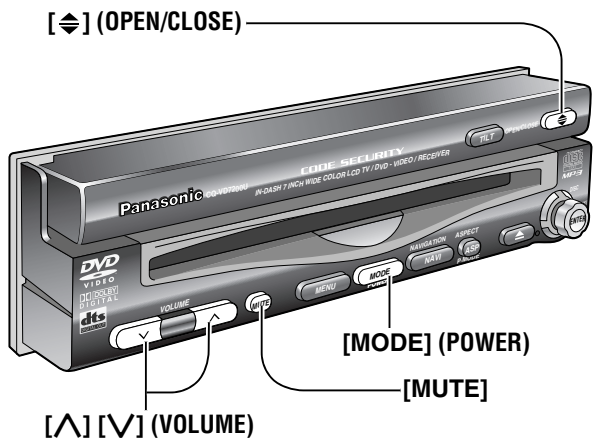
#### The following discs cannot be played back on this product.

- 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"
- DVD-R
- CVD
- CD-G
- CD-R (except MP3 and CD-DA)
- Divx Video Discs
- DVD-RAM
- CD-EXTRA (audio-only playback possible)
- DVD+RW
- DVD-RW
- SVD
- CD-ROM (except MP3)
- SACD
- photo CD
- CD-DA/SACD hybrid

• **Playing back a photo CD disc with this unit could damage the data that is recorded on the disc.**

## Power

- Turn your car's ignition key to ACC or ON position.
- ON:** press **[MODE] (POWER)** on the display unit.  
Press **[PWR]** or **[MODE]** on the remote control.
- OFF:** press **[MODE] (POWER)** again for more than 2 seconds on the display unit.  
Press **[PWR]** again or **[MODE]** again for more than 2 seconds on the remote control.



## Display Open/Close

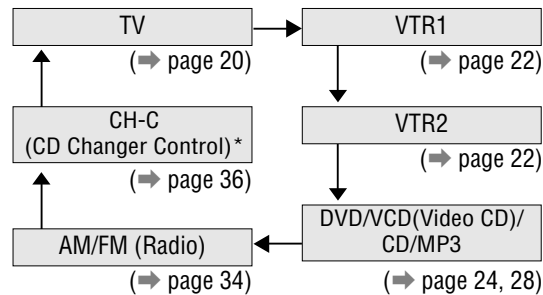
- OPEN:** press **[OPEN/CLOSE]**.
- CLOSE:** press **[OPEN/CLOSE]** again.  
(After returning the lateral angle to the neutral position.)

- Notes:**
- When the display unit is opened or closed, a loud beep sounds three times.
  - If the unit stops halfway, press **[OPEN/CLOSE]** again and draw it all the way in.
  - Opening/closing the display can be done when the power is off.

**Warning:** Do not touch the unit while the display is moving. Inserting hands, fingers or foreign objects into the unit can cause injuries and damage to the unit.

## Mode

Press **[MODE]** to change the mode.



\* Selectable only when a CD changer is connected.

## Volume

- [VOLUME UP]:** up
- [VOLUME DOWN]:** down
- Setting Range : 0 to 40



**Note:** The sound level for each source is stored in memory.

## Mute

- MUTE ON:** press **[MUTE]**.
- MUTE OFF:** press **[MUTE]** again.



## Loudness

- When listening at low or medium volume, enhance bass and treble tones.
- LOUD ON:** press and hold **[MUTE]** for more than 2 seconds.
- LOUD OFF:** press and hold **[MUTE]** for more than 2 seconds again.



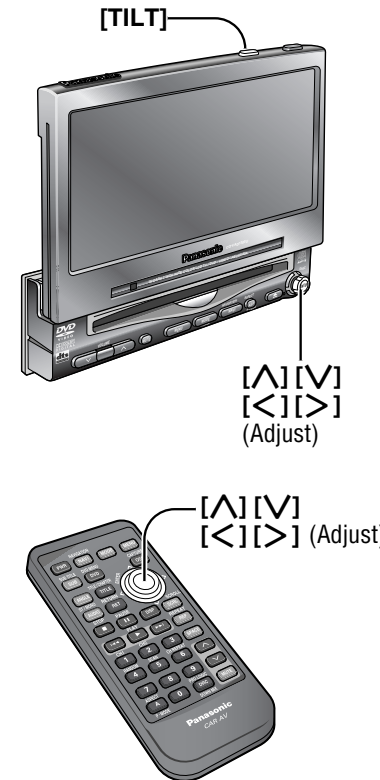
## Monitor Position Adjustment

### Cautions:

- For smooth adjustment, make sure to first return the lateral angle to the neutral position and then adjust the tilt angle.
- Avoid physical shock on the monitor.

## Tilt Angle/Front-Rear Position

- 1 Press and hold **[TILT]** on the display unit for more than 1 second.
- 2 Press **[VOLUME UP]**, **[VOLUME DOWN]**, **[LEFT]** or **[RIGHT]** to adjust.  
The setup is the same way as the one from MENU. Refer to "SET-UP : User Settings" for details. (→ page 38)



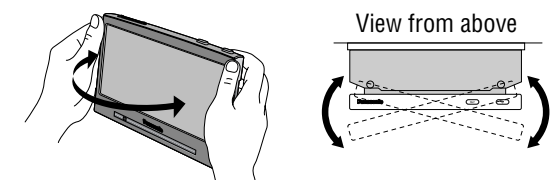
### Notes:

- Vertical angle (TILT) and front-rear position data are saved in the memory, so when the display unit is drawn out next, it is automatically set at the angle and in the position adjusted before.
- After adjusting its angle, also adjust the brightness to make it easy for you to watch. (→ page 44)
- The car model and installation condition may impose some restrictions on the adjustment of the monitor's angle and position.

**Caution:** Do not interfere with the movement of the monitor. Do not change the position of the unit forcibly.

## Display Unit Lateral Angle Adjustment

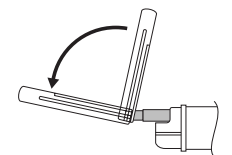
Hold the display unit by the non-slip part on the upper half of it, and adjust its lateral angle.



**Caution:** There is the danger of your fingers being pinched if you hold the unit by the lower part. Hold the unit by the upper half, and move it carefully without applying undue force.

## Folding Down the Display Temporarily

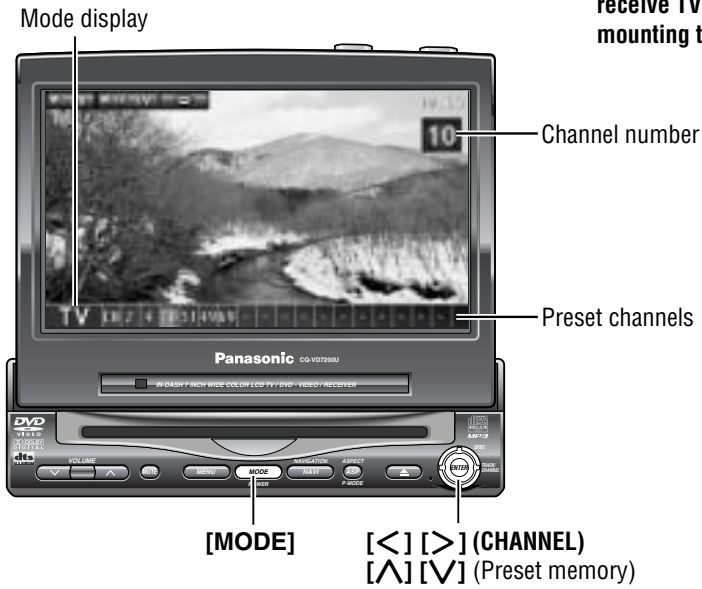
- Fold Down:** press **[TILT]** on the display unit.
- Raise:** press **[TILT]** again on the display unit.



**Note:** Even when the unit is off, you can fold down the display temporarily.

**Caution:** Do not place any object on the display unit, or subject it to undue force.





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.

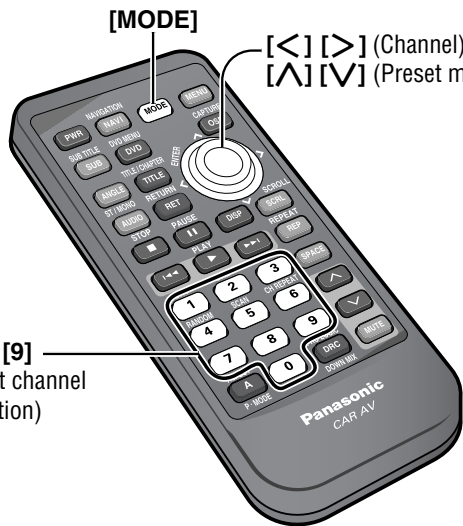
## 2 Channel Setting

[>] (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

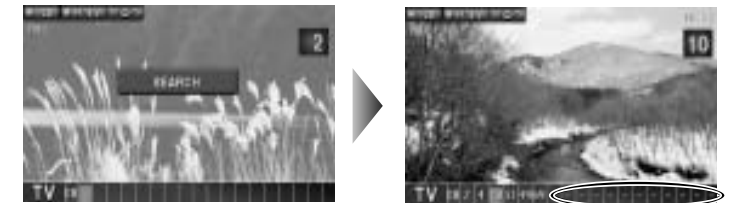
This function can search for channels automatically. Up to 18 channels can be stored.

### Auto Preset Memory

Press and hold [∧] or [∨] for more than 2 seconds.

[∧]: the search starts from ch. 2 successively.

[∨]: 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

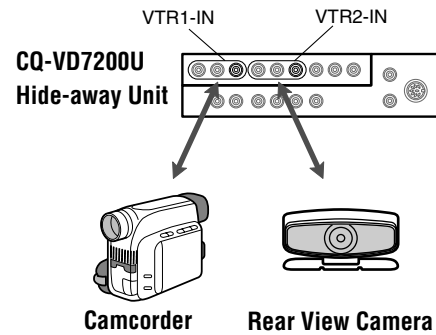
Press [∧] or [∨] to select the channel.



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.)

## 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).

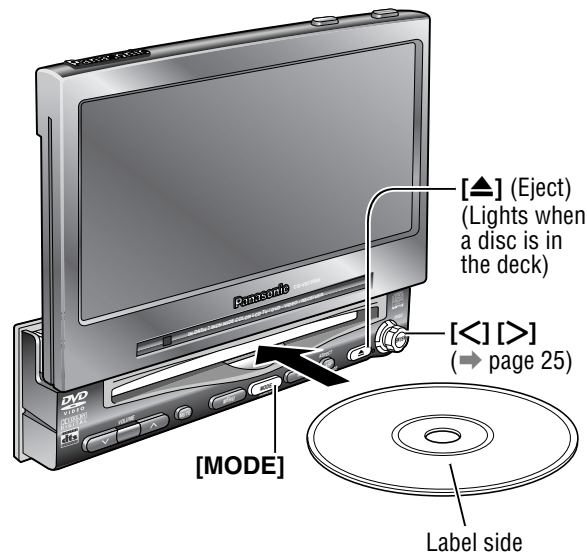
**Note:** It can also be set to switch to an image through the rear view camera automatically if the shift lever is put into the reverse position. (→ page 40)

### 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)

**Note:** VTR1 and VTR2 terminals are not used for the Panasonic car navigation system (available in future). Refer to "Electrical Connections" for connection (→ page 72-75) and "Navigation Set Up" for setting. (→ page 38)



## Disc Insert

- The mode that supports the disc is selected, and playback starts.
- The audio format is automatically identified. (→ page 32)
- When the menu screen appears, see “DVD Menu/Video CD Menu” on page 26.

When DVD or Video CD is in the player, press [MODE] to change to DVD or Video CD 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.
- The sound may be interrupted for a few moments while the audio format is being identified.

### Cautions:

- Do not use irregularly shaped discs.
- Do not insert foreign matter into the disc slot.

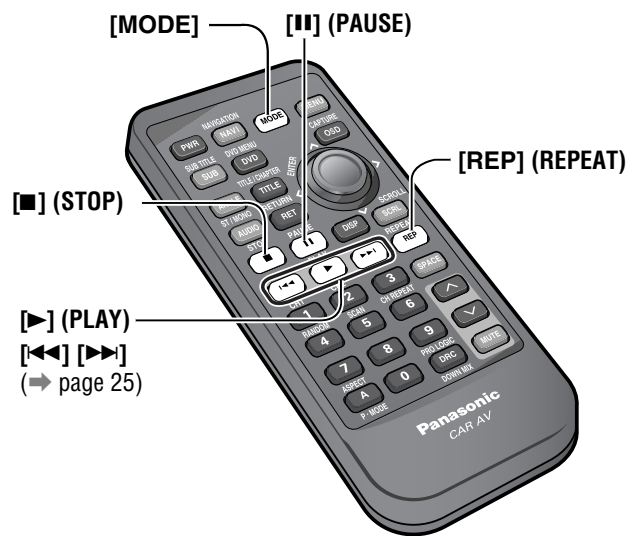
## Disc Eject

Press [▲] to stop playback and eject the disc. (Press [▲] again to reload the disc.)

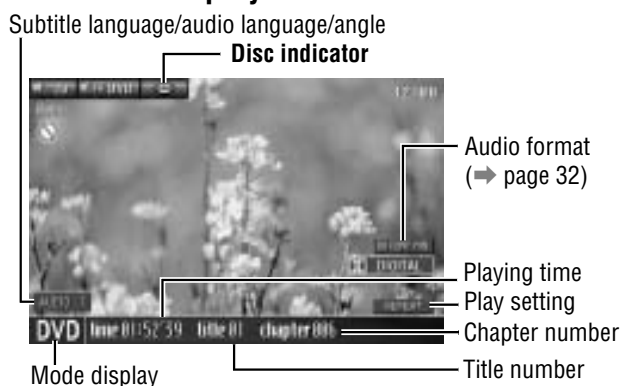
**Note:** If you leave a disc in the slot for more than 30 seconds after its ejection, the disc will be automatically reloaded after loud beep is energized three times.

### Notes:

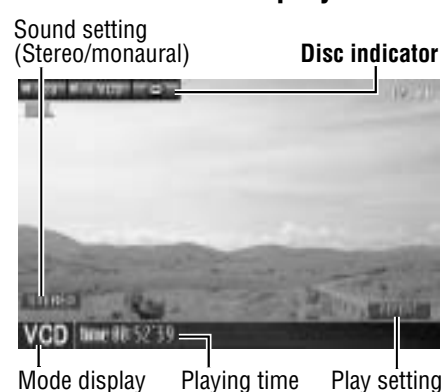
- Due to limitations of certain discs, some DVD video and Video CD discs may not operate as described in these Operating Instructions. Refer to the disc jacket for further details.
- This unit does not support DVD and Video CD karaoke functions.



## DVD mode display



## Video CD mode display



Perform these operations (→ page 25-27) with the remote control. Operations vary according to the disc. For details, refer to the guide provided with the disc.

## Basic Operation

### Go to Beginning

DVD VIDEO VIDEO CD

[▶▶]: next track (chapter)  
[◀◀]: beginning of the current track (chapter)  
Previous track (chapter) (Press twice.)

**Note:** When playing a DVD video, there are cases where it is not possible to return to the start of a chapter that spans 2 titles. (→ page 94)

### Fast Forward/ Fast Reverse

DVD VIDEO VIDEO CD

Press and hold  
[▶▶]: fast forward  
[◀◀]: fast reverse  
Release to resume playback.  
The speed changes if the button is held down as follows.  
Regular speed → 1.5 times → 10 times → 20 times

### Stop

DVD VIDEO VIDEO CD

Press [■] (STOP).  
Press [▶] (PLAY) again, and play will resume from the point where [■] (STOP) is pressed. (Continued playback function)  
To cancel continued playback, press [■] (STOP) again in the stop mode.

### Pause

DVD VIDEO VIDEO CD

Press [■] (PAUSE).  
To resume playback, [▶] (PLAY) or [■] (PAUSE) again.

### Slow Playback

DVD VIDEO VIDEO CD

Press and hold [▶▶] in the pause mode.  
Playback is at about 1/3 normal speed.  
To resume normal playback, press [▶] (PLAY).  
To pause, press [■] (PAUSE) again.  
**Note:** Reverse slow playback is not possible.

### Repeat Play

DVD VIDEO VIDEO CD

Press [REP] (REPEAT).  
Press [REP] (REPEAT) again to cancel.

**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.



- 1 Press **[DVD]** (**DVD MENU**) during DVD playback.  
(For the Video CD menu, press **[RET]** (**RETURN**) during playback.)
  - 2 Press **[<]**, **[>]**, **[^]** or **[v]** to select the preferred menu.  
For the DVD/Video CD with playback control (→ page 94), press **[0]** to **[9]** on the remote control.
  - 3 Press **[ENTER]**.
- To return the previous display, press **[RET]** (**RETURN**).

Example:

MENU DVD
1. SUBTITLE
2. AUDIO
3. ANGLE

Select your favorite music.  
1. Love Supremes  
2. Impressions  
3. In a Sentimental Mood  
Number:

### 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.



- 1 Press and hold **[DVD]** (**DVD MENU**) for more than 2 seconds during playback.
  - 2 Press **[<]**, **[>]**, **[^]** or **[v]** to select the preferred title.  
For the DVD with playback control (→ page 94), press **[0]** to **[9]** on the remote control.
  - 3 Press **[ENTER]**.
- To return the previous display, press **[RET]** (**RETURN**).

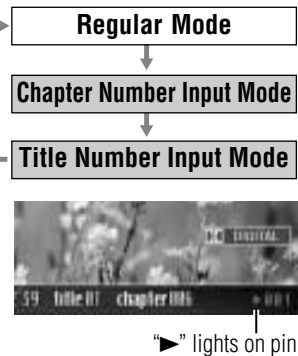
Example:

TITLE MENU	
Rivers	Castles
Lovers	Woods

### Starting Playback from a Specific Title/Chapter



- 1 Press **[TITLE]** (**TITLE/CHAPTER**) to select the input mode. The mode changes as shown at right every time **[TITLE]** (**TITLE/CHAPTER**) is pressed.
- 2 Press **[0]** to **[9]** to input preferred title/chapter number.  
To input the number again, press **[RET]** (**RETURN**).
- 3 Press **[TITLE]** (**TITLE/CHAPTER**).  
Playback will start automatically.



#### Notes:

- For the VCD mode, do not press **[TITLE]** (**TITLE/CHAPTER**) but press the numerical key to enter a number directly.
- If no operation is performed for 8 seconds after **[TITLE]** (**TITLE/CHAPTER**) has been pressed, the display returns to the regular mode.
- If the title/chapter number is pressed and no operation is performed for 2 seconds, the playback will start from the number of the title/chapter entered.

## Useful Function

### Switching the Subtitle Language



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



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



Press **[ANGLE]** during playback.

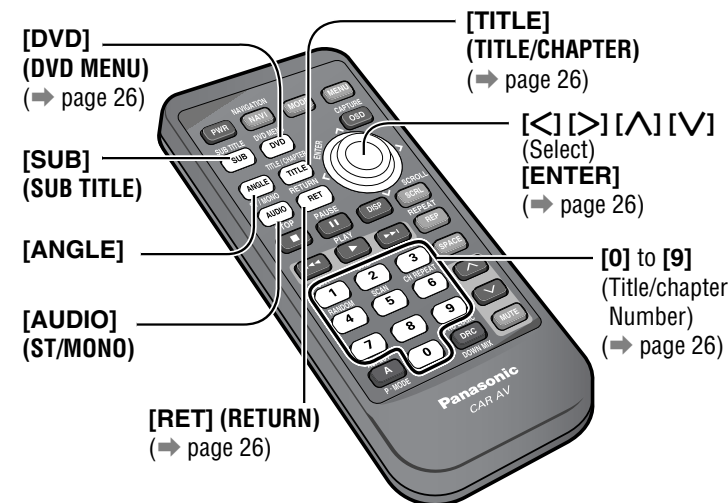
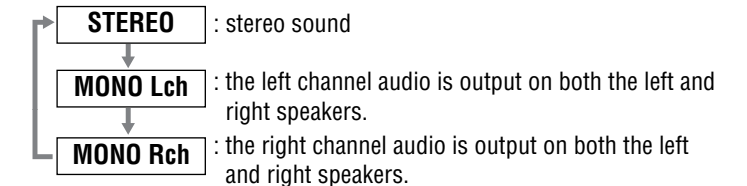
For DVDs which contain scenes which have been shot simultaneously from a number of different angles the same scene can be viewed from each of these different angles during play.

### Switching between Stereo and Monaural



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

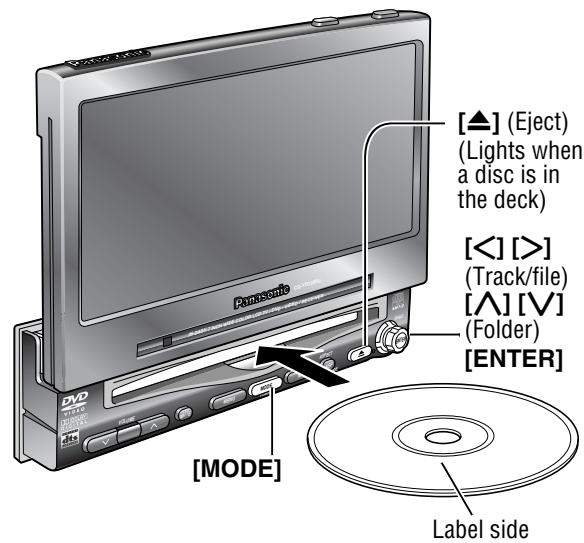
It is possible to switch the audio between stereo sound and monaural sound (L or R).



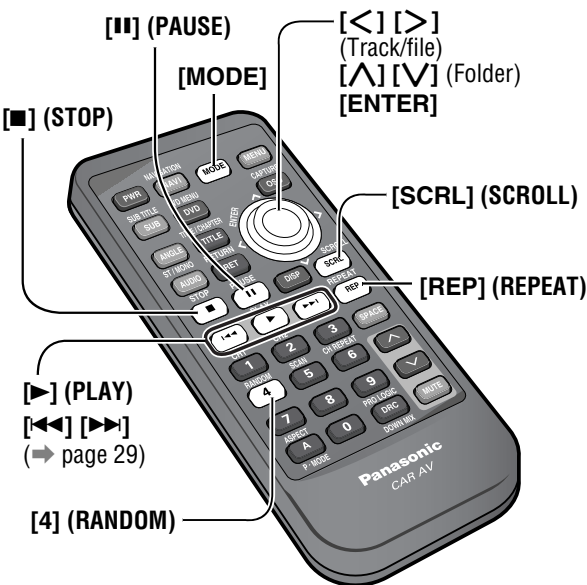
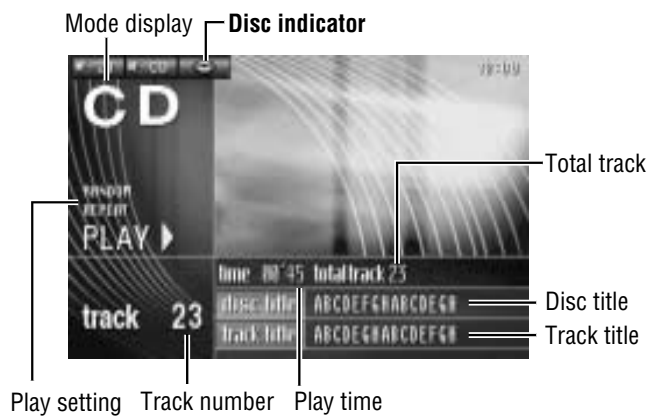
#### Notes:

- 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.





## CD/MP3 mode display



## 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.

### Cautions:

- Do not use irregularly shaped discs.
- Do not insert foreign matter into the disc slots.

## Disc Eject

Press [▲] to stop playback and eject the disc. (Press [▲] again to reload the disc.)

**Note:** If you leave a disc in the slot for more than 30 seconds after its ejection, the disc will be automatically reloaded after loud beep is energized three times.

## Direct Folder Selection MP3

- Press [ENTER] during playback.
- Press [<], [>], [^] or [v] to select a folder.  
[<] [>]: movement among different levels of trees  
[^] [v]: movement in the same tree
- Press [ENTER].



[Folder icon]: MP3 files are included

[No folder icon]: No MP3 files

**Note:** It is not possible to display the whole trees and a file list in a folder.

For "Folder selection order/MP3 file playback order". (→ page 31)

## Basic Operation

Perform these operations with the remote control.

### Go to Beginning

CD MP3

[>>]: next track/file  
[<<<]: beginning of the current track/file  
Previous track/file (Press twice.)

### Fast Forward/ Fast Reverse

CD

Press and hold.  
[>>>]: fast forward  
[<<<<]: fast reverse  
Release to resume playback.

### Folder Selection

MP3

[^]: next folder  
[v]: previous folder

**When the file list is displayed:**  
[^]: previous folder  
[v]: next folder

### Sequential Transition From One File to the Next

MP3

Press and hold.  
[>]: forward  
[<]: backward

### Title Scroll

CD MP3

Press [SCRL] (SCROLL).

### Stop

CD MP3

Press [■] (STOP).

### Pause

CD MP3

Press [■] (PAUSE).  
To resume playback, [▶] (PLAY) or [■] (PAUSE) again.

### Repeat Play

CD

MP3

Press [REP] (REPEAT).  
Press [REP] (REPEAT) again to cancel.

**Current File** Press [REP] (REPEAT).  
Press [REP] (REPEAT) again to cancel.

**Current Folder** Press and hold [REP] (REPEAT) for more than 2 seconds.  
Press and hold [REP] (REPEAT) again to cancel.

### Random Play

CD

MP3

Press [4] (RANDOM).  
Press [4] (RANDOM) again to cancel.

**All Files** Press [4] (RANDOM).  
Press [4] (RANDOM) again to cancel.

**All Files in the Current Folder** Press and hold [4] (RANDOM) for more than 2 seconds.  
Press and hold [4] (RANDOM) again to cancel.

**Note:** It is possible to press [<] [>] on the display unit instead of [<<<] [>>>] on the remote control.

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 audio 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:

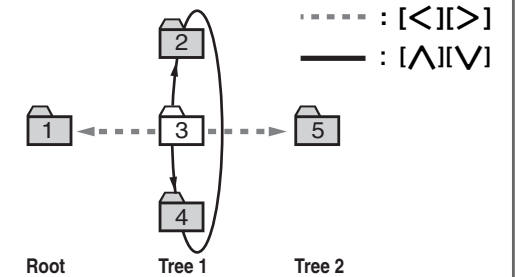
- You may encounter trouble in playing MP3s or displaying the information of MP3 files recorded with certain writing softwares or CD recorders (CD-R/RW drives).
- If a disc contains both MP3 and CD-DA, only CD-DA data is reproduced properly. (MP3 files are played but no sound is output).

**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.

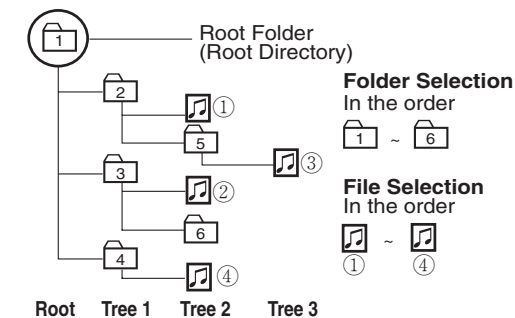
## Folder selection order/MP3 file playback order (Example)



Root Folder  
Current Folder  
Folder in the next lower level of tree



: MP3 files are included : No MP3 files



#### Notes:

- This unit counts the number of folders irrespective of the presence or absence of MP3 file.
- If the selected folder does not contain any MP3 files, the nearest MP3 files in the order of playback will be played.
- Playback order may be different from other MP3 players even if the same disc is used.
- "ROOT" appears when displaying the root folder's folder name.

## 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*	<ul style="list-style-type: none"> <li>● 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, "á", "ç", etc. can be used. However, this unit can not display those letters.</li> </ul>
Romeo	<ul style="list-style-type: none"> <li>● The unit recognizes only ASCII character set. Chinese characters, accented French characters and accented Spanish characters will be converted into an asterisk.</li> </ul>
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.



**LPCM (Linear PCM)** DVD VIDEO VIDEO CD CD

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.

**Note:** "LPCM" is displayed only for DVD video discs.



**Dolby Digital** DVD VIDEO 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)



**Surround Format** DVD VIDEO DOLBY SURROUND 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** DVD VIDEO CD dts DIGITAL OUT

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.

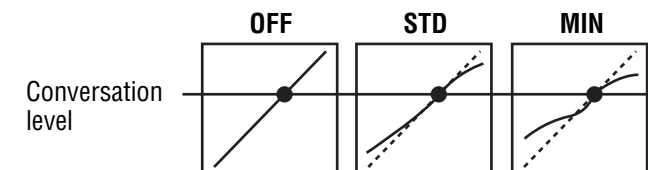
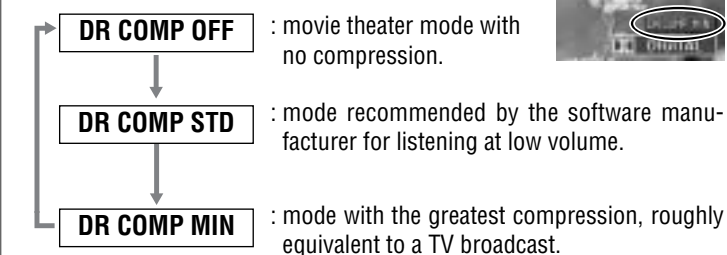


[DRC]  
(Dynamic Range Compression)

## Producing Audio That Is Audible at Low Volumes (Dynamic Range Compression)

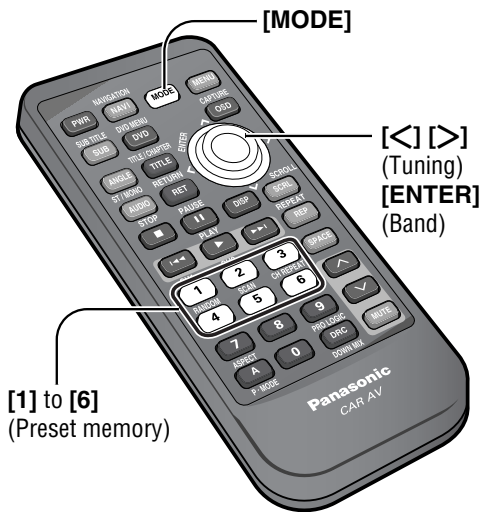
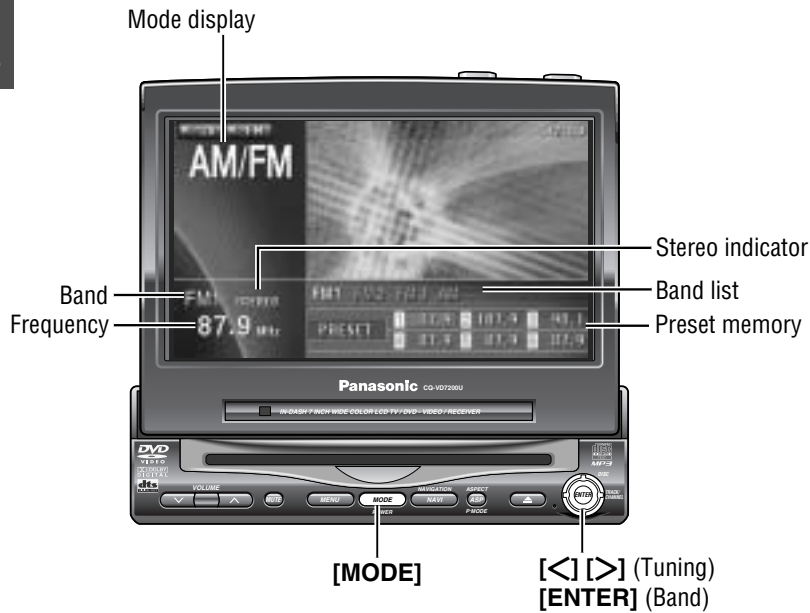
This function is effective for playback of Dolby Digital/Dolby Surround DVD video. The words of an actor hardly audible during playback at a low volume, for example, will become easier to listen to by selecting DR COMP MIN.

Press [DRC] to change the setting.



**Notes:**

- Only in cases where the Digital Audio Output (optical) of this product is connected, dts audio will be output. (⇒ page 82)
- To output 5.1-channel audio signals, other device must be connected. (⇒ page 82)
- DVD-recorded audio data, such as **DOLBY DIGITAL**, will be displayed on the screen. The audio to be actually reproduced may differ from the display on the screen depending on the setting.

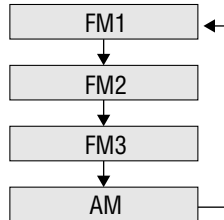


## 1 Radio Mode

Press **[MODE]** to change to radio mode.

## 2 Band

Press **[ENTER]** to change the bands.



**Note:** The stereo indicator lights during reception of an FM stereo broadcast.

## 3 Tuning

[>]: up  
[<]: down

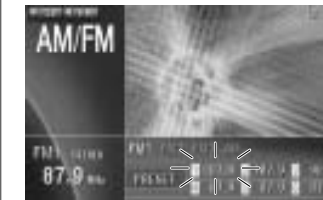
Press and hold [>] or [<] for more than 0.5 seconds, then release. Seeking will start and stops at next available station.

## One-touch Selection of a Station

Up to 6 stations each can be saved in the FM1, FM2, FM3 and AM preset station memories.

### Manual Preset Memory

Select a band and frequency. (step 2 and 3 on the previous page)  
Press and hold **[1]** to **[6]** on the remote control for more than 2 seconds.



The frequency blinks once, and a receiving station is saved in the memory.

### Auto Preset Memory

Select a band. (step 2 on the previous page)  
Press and hold **[ENTER]** for more than 2 seconds.



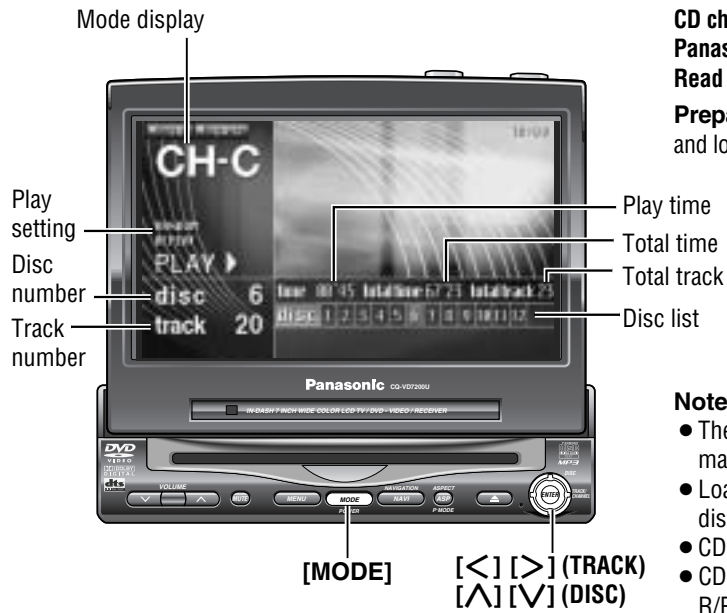
- The 6 strongest available stations will be automatically saved in the memory under preset numbers 1 to 6.
- Once set, the preset stations are sequentially scanned for 5 seconds each.
- To stop the scanning, press **[1]** to **[6]** on the remote control.

**Note:** New stations overwrite existing saved stations after following this procedure.

### Preset Station Calling

Select a band. (step 2 on the previous page)  
Press **[1]** to **[6]** on the remote control.

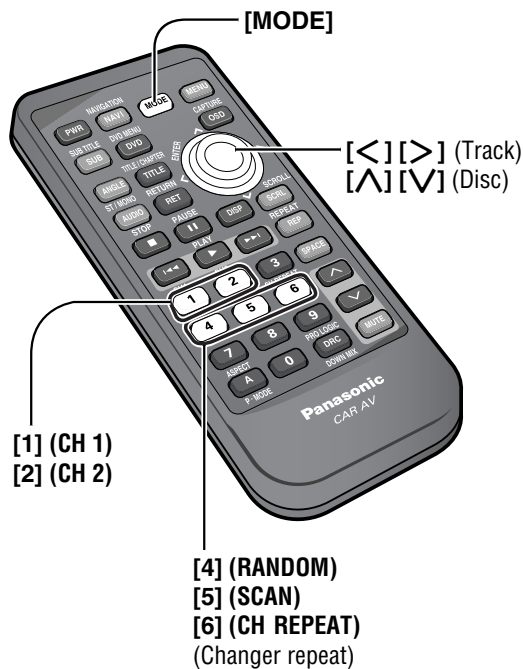




CD changer functions are designed for an optional Panasonic CD changer unit. Read the operating instructions for CD changer as well. Preparation: Connect the CD changer (→ page 78, 79), and load a magazine (disc).

- Notes:**
- The power will be turned on automatically when a magazine is loaded.
  - Load a magazine with CDs when "NO MAGAZINE" is displayed.
  - CD text is not supported in CD changer mode.
  - CD changer cannot play MP3 data recorded CD-R/RW discs.

**Caution:** Do not use irregularly shaped CDs.



## CD Changer Mode

Press **[MODE]** to change to CD changer mode and playback starts.

## System Expansion

The use of Dual CD Changer Selector CA-CD55 (option) allows you to make the following connections. (→ Page 79)

### Dual changers connection

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

- [1]: CH 1
- [2]: CH 2

## Basic Operation

Perform these operations with the remote control.

<b>Track Selection</b>	<p>[▶▶] (TRACK): next track</p> <p>[◀◀] (TRACK): beginning of the current track Previous track (Press twice.)</p>
<b>Disc Selection</b>	<p>[^] (DISC): next disc</p> <p>[v] (DISC): previous disc</p>
<b>Fast Forward/ Fast Reverse</b>	<p>Press and hold.</p> <p>[▶▶]: fast forward</p> <p>[◀◀]: fast reverse</p> <p>Release to resume playback.</p>
<b>Random Play</b>	<p><b>All Tracks</b> : Press [4] (RANDOM). Press [4] (RANDOM) again to cancel.</p>
	<p><b>All Tracks on the Current Disc</b> : Press and hold [4] (RANDOM) for more than 2 seconds. Press and hold [4] (RANDOM) again to cancel.</p>
<b>Scan Play</b> The first 10 seconds of each track will be played.	<p><b>All Tracks</b> : Press [5] (SCAN). Press [5] (SCAN) again to cancel.</p>
	<p><b>1st Track on Each Disc</b> : Press and hold [5] (SCAN) for more than 2 seconds. Press and hold [5] (SCAN) again to cancel.</p>
<b>Repeat Play</b>	<p><b>Current Track</b> : Press [6] (CH REPEAT). Press [6] (CH REPEAT) again to cancel.</p>
	<p><b>Current Disc</b> : Press and hold [6] (CH REPEAT) for more than 2 seconds. Press and hold [6] (CH REPEAT) again to cancel.</p>

**Note:** It is possible to press [**<|>**] on the display unit instead of [**◀◀**] [**▶▶**] on the remote control.

# SET-UP: User Settings

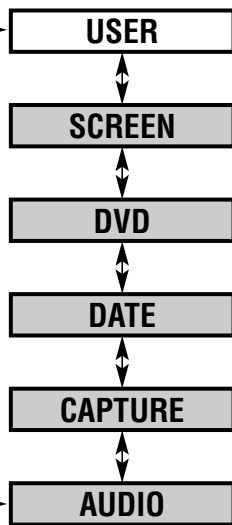


[MENU] [MODE] [^][V][<][>]  
(End) (Select)  
[ENTER]



## 1 Menu 2 Submenu

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



- 1 Press [^] or [V] to select "TILT/SLIDE".
- 2 Press [ENTER] to set.

**TILT/SLIDE**

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

**NAVI SETUP**

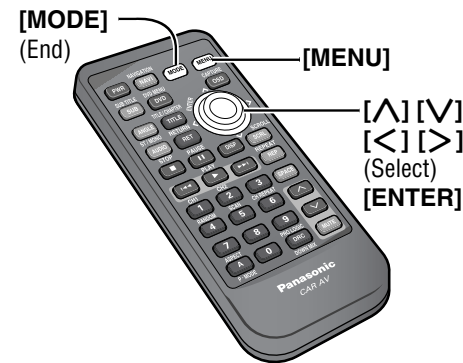
### Monitor Position

#### TILT (Tilting angle adjustment)

Default: 3  
Setting range: 1 to 5

#### SLIDE (Front-rear position)

Default: Front  
Setting range: Front, Rear



#### 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



#### TILT Tilting angle adjustment

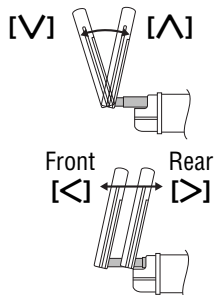
Press [V] or [^] to select the setting.

1 2 3 4 5

#### SLIDE Front-rear position

Press [<] or [>] to select the setting.

FRONT REAR



#### Notes:

- For smooth adjustment, make sure to first return the lateral angle to the neutral position and then adjust the tilt angle.
- Front-rear position "REAR" and tilt angle "5" cannot be selected at the same time.
- The monitor position setting menu can also be displayed by pressing the [TILT] button on the display unit for more than 1 second. (⇒ page 19)

### Navigation Set Up

#### NAVI INPUT (Navigation input)

Selection of the terminal that connects to the car navigation system allows you to switch to images and sounds of the car navigation system by pressing [NAVI] (NAVIGATION).

Default: RGB

#### NAVI VOLUME (Navigation volume)

Volume adjustment of the car navigation system is executed.

Default: 4

#### NAVI MUTE (Navigation mute level)

Select the mute level of this unit during the voice guidance from the Panasonic car navigation system (available in future).

**Preparation:** Connect the navi mute lead.

**Note:** You can set the navigation mute level when "RGB" is selected on navigation input.

Default: -10 dB



#### NAVI INPUT Navigation input

- RGB : connected to the RGB input cord, or a car navigation system not connected
- VTR1 : connected to the VTR1-IN
- VTR2 : connected to the VTR2-IN

**Note:** Make sure to select "RGB" when no car navigation is connected.

#### NAVI VOLUME Navigation volume

- 0 : the sound that a car navigation system generates does not come out.
  - 1 2 3 4 5 : volume level
- Low High

#### NAVI MUTE (dB) Navigation mute level

- 0 : unchanged
- 10 : decrease 10 dB
- 20 : decrease 20 dB
- ∞ : no sound

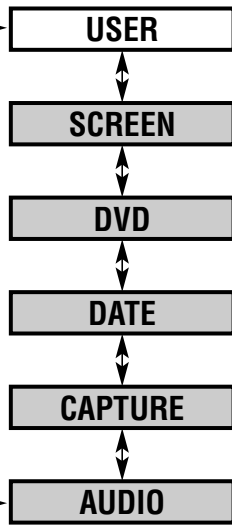


[MENU] [MODE] [^][v][<][>]  
(End) (Select/adjust)  
[ENTER]



## 1 Menu 2 Submenu

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

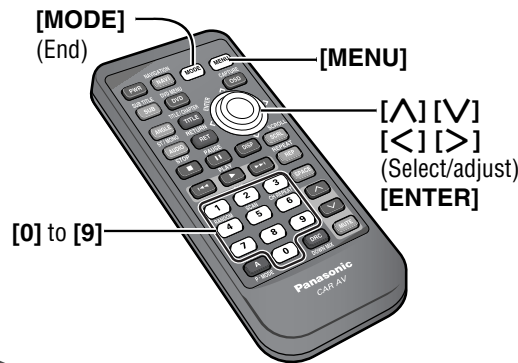


- 1 Press [^] or [v] to select "CAMERA SETUP".
- 2 Press [ENTER] to set.

**CAMERA SETUP**

- 1 Press [^] or [v] to select "ID-CODE".
- 2 Press [ENTER] to set.

**ID-CODE**



**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 [v] 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 [v] to adjust the angle.



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

**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)

**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.

### 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).**

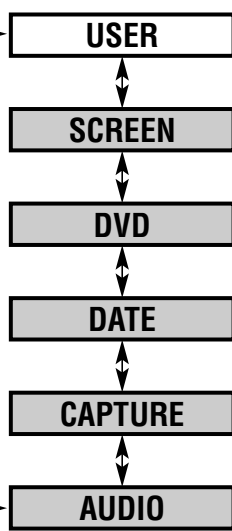


[MENU] [MODE] [^][V][<][>]  
(End) (Select)  
[ENTER]



## 1 Menu 2 Submenu

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



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

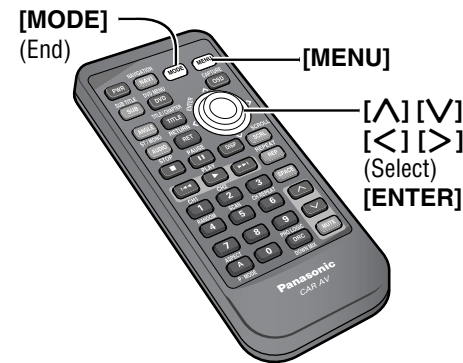
etc

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

MEMORY CLEAR

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

VTR SKIP



- 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



- 1 Press [>] or [<] to select NO or YES.
- 2 Press [ENTER] to set.

NO : no memory clear.  
The display returns to the previous one.  
 YES : default settings



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

**VTR 1** VTR skip  
 OFF : skip VTR1  
 ON : not skip VTR1  
**VTR 2** VTR skip  
 OFF : skip VTR2  
 ON : not skip VTR2

**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)

### Button Operation Sound

Default: ON  
**Note:** The beep sound cannot be silenced when the display opens and closes.

### Video Control Setting

This "Video Control Setting" is required when you connect a Panasonic car navigation system with a built-in DVD player (available in future).  
 Default: VTR1

### Memory Clearance

The state of all of the current memories are returned to default settings.

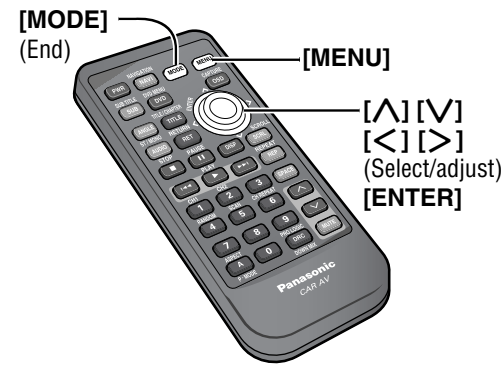
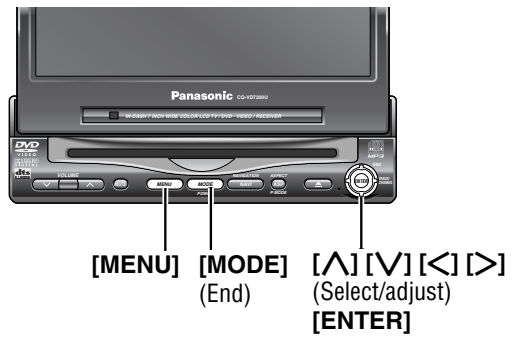
**Caution:** Be aware that this setting restores the unit to default settings, so that all the memories and settings that you have set will be eliminated.

### VTR skip

Default: ON  
 If a VTR is not used, the VTR mode is skipped when changing the mode.



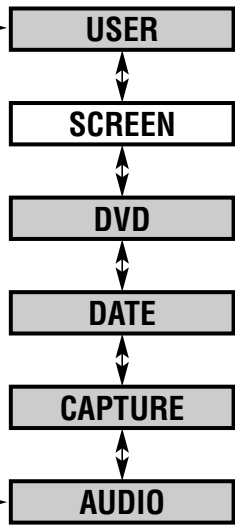
# SET-UP: Display (Screen) Settings



- 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.

## 1 Menu

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



## 2 Submenu

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

**DIMMER**

- 1 Press [^] or [v] to select "PICTURE".
- 2 Press [ENTER] to set.

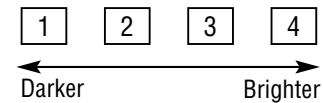
**PICTURE**

## 3 Setting



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

**AUTO**: automatically adjusted according to ambient light intensity.



### Dimmer

Default: AUTO

### Display Adjustment

Default: ±0  
Setting range: -15 to +15

**CONTRAST** Adjust the image contrast

▶ **CONTRAST** ± 0 - [slider] +

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

**BRIGHT** Adjust the image brightness

**BRIGHT** ± 0 - [slider] +

Darken      Lighten

**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

**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

### Language Setting

Default: ENGLISH

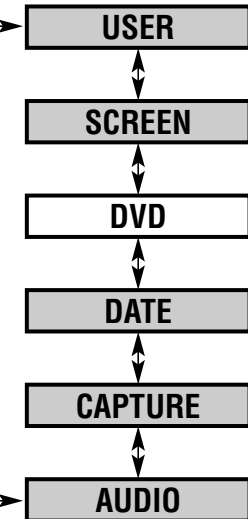
**Note:** This operation allows you to select a language for DVD software on the precondition that the DVD software supports your selecting language.

### 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.

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

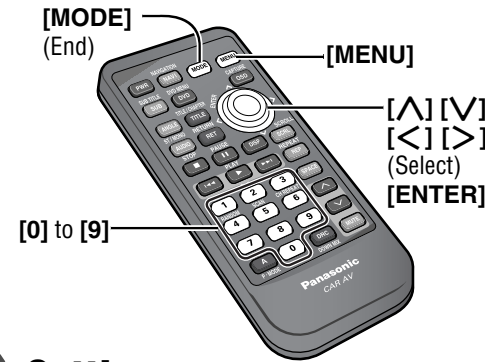


- Press [^] or [V] to select "LANGUAGE".
- Press [ENTER] to set.

**LANGUAGE**

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

**DISPLAY**



- 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



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



- Input the four digit language code pressing the buttons [0] to [9] on the remote control.
- 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.



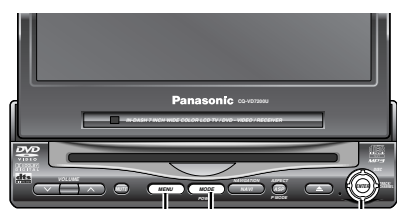
- Press [^] or [V] to select an item.
- Press [>] or [<] to select the setting.
- Press [ENTER] to set.

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

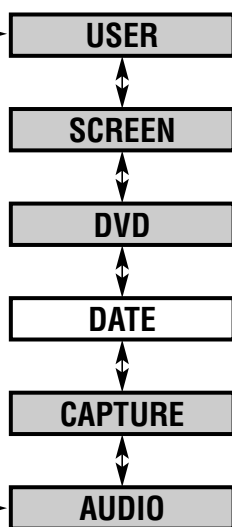


[MENU] [MODE] [^][V][<][>]  
(End) (Select/adjust)  
[ENTER]



## 1 Menu 2 Submenu

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

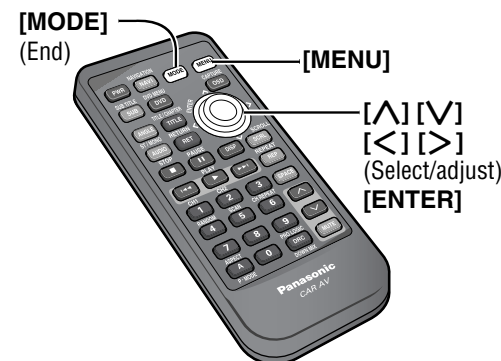


- 1 Press [^] or [V] to select "CLOCK".
- 2 Press [ENTER] to set.

**CLOCK**

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

**CALENDAR**



- 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 or adjust the setting.
- 3 Press [ENTER] to set.

<b>DISPLAY</b>	Clock display
OFF	: clock display OFF
ON	: clock display ON ([12:00] is displayed before adjusting the clock.)
<b>YEAR ADJUST</b>	Year adjustment
YEAR ADJUST < 2003 >	
<b>MONTH ADJUST</b>	Month adjustment
MONTH ADJUST < 1 >	
<b>DAY ADJUST</b>	Day adjustment
DAY ADJUST < 1 >	
<b>HOUR ADJUST</b>	Hour adjustment
HOUR ADJUST < AM 12 >	
<b>MINUTE ADJUST</b>	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

### Clock and Date Setting

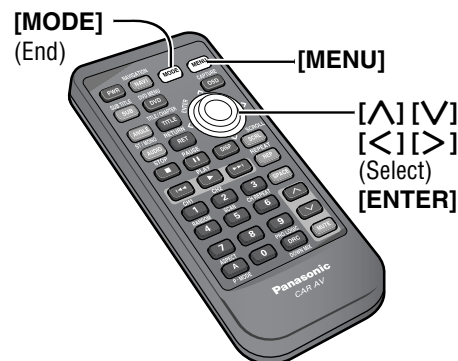
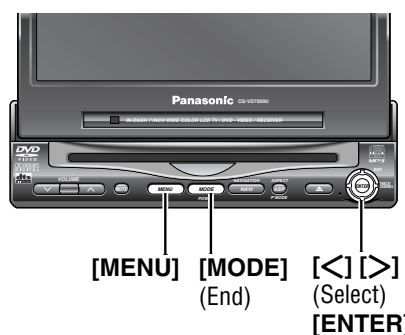
Default: DISPLAY...OFF  
YEAR ADJUST...2003  
MONTH ADJUST...1  
DAY ADJUST...1  
HOUR ADJUST...AM 12  
MINUTE ADJUST...00

- 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.)

# SET-UP: Capture Function



- 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.

## Image Capture

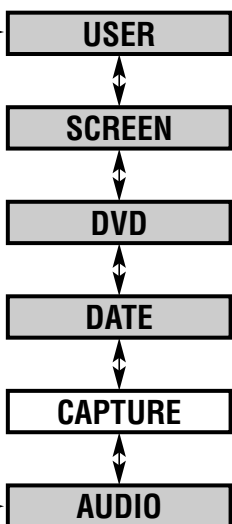
Up to five images can be imported from TV, VTR, DVD or Video CD (VCD).

**Preparation:** Show the image on the display that you would like to capture.

**Note:** Refer to "Wall Paper" and "Display Change" in the "SET-UP: Other Settings" page to display the imported image on the screen. (⇒ page 52, 56)

### 1 Menu

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



### 2 Submenu

- ① Press **[^]** or **[v]** to select "CAPTURE".
- ② Press **[ENTER]** to set.



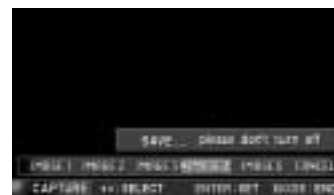
### 3 Setting



- 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.

## Copyright

It is prohibited by copyright laws to copy, distribute and deliver copyrighted materials such as commercial DVDs/Video CDs, other published or broadcast material without the approval of copyright holder except for personal use.

**Note:** A captured image may have some distortion or be otherwise different from the original image due to compression.



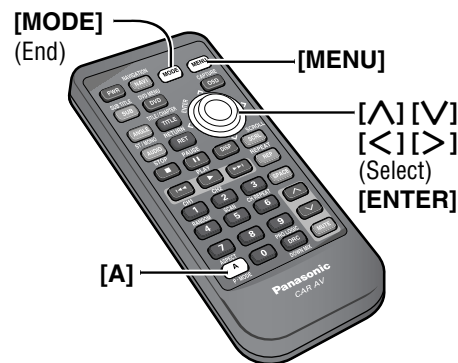
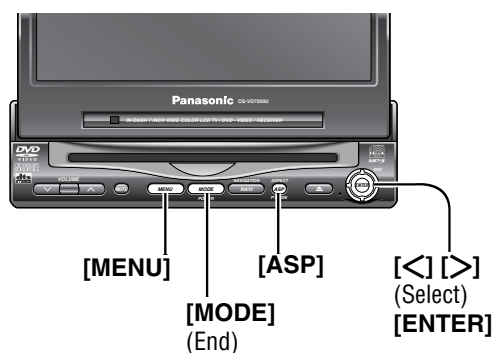
## Direct Image Capture (Only for remote control)

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.



# SET-UP: Capture Function (continued)



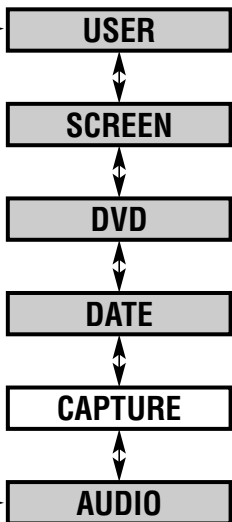
- Notes:**
- Press **[MODE]** to return to the regular mode.
  - The display returns to the previous one if there is no operation for more than 60 seconds after changing to the setting menu.

## Wallpaper

Default: FULL  
 Captured wallpaper scale selection between full screen and animation section.  
**Note:** Wallpaper is displayable only in the CD, MP3, radio and CD changer modes.

### 1 Menu

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



### 2 Submenu

- 1 Press **[^]** or **[v]** to select "WALLPAPER".
- 2 Press **[ENTER]** to set.

**WALLPAPER**

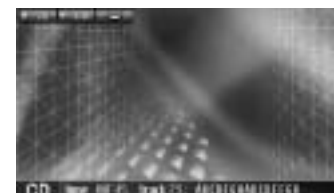
### 3 Setting



**WALLPAPER** Wallpaper scale  
**FULL** : full screen  
**WINDOW** : animation section

**Note:** When the wallpaper is set to FULL, you can switch the screen to NORMAL by pressing **[ASP]** (On remote control unit: Press **[A]**). To cancel, press **[ASP]** (or **[A]**) again.

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



FULL



WINDOW

## Image Deletion (INITIALIZE)

Deletion of saved image.

- 1 Press **[^]** or **[v]** to select "INITIALIZE".
- 2 Press **[ENTER]** to set.

**INITIALIZE**



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



- 3 Press **[>]** or **[<]** to select YES. Press **[ENTER]**.



- 4 The existing image is deleted and the default image is displayed.

**Note:** Deleted images cannot be recovered.

# SET-UP: Sound Settings

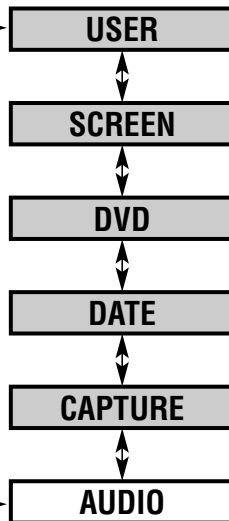


[MENU] [MODE] [^][V][<][>]  
(End) (Select/adjust) [ENTER]



## 1 Menu 2 Submenu

- Press [MENU] to display the menu.
- Press [>] or [<] to select "AUDIO".



Press [^] or [V] to select "TONE".

**TONE**

Press [^] or [V] to select "BAL/FAD".

**BAL/FAD**

Press [^] or [V] to select "SUB-W".

**SUB-W**

### Bass/Treble

Default: ±0 dB  
Setting range: -12 dB to +12 dB (2 dB steps)

### Balance/Fader

Default: Center  
Setting range: 15 levels for each

### Subwoofer Control

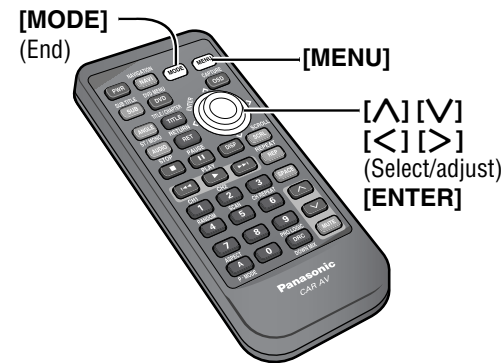
#### Subwoofer Volume Level

Default: 4  
Setting range: 0 to 7

#### Subwoofer Low Pass Filter (Cut off frequency)

Select the upper limit frequency of the sound from Subwoofer.

Default: 120 Hz  
Setting range: 80 Hz or 120 Hz



- 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



**BASS** Bass adjustment

BASS ± 0 dB - [Progressive Bar] +

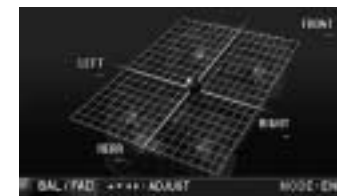
Decrease the bass level. Increase the bass level.

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

**TREBLE** Treble adjustment

TREBLE ± 0 dB - [Progressive Bar] +

Decrease the treble level. Increase the treble level.



Press [^]: front enhanced  
Press [V]: rear enhanced  
Press [>]: right enhanced  
Press [<]: left enhanced



**LEVEL** Subwoofer volume level

LEVEL 4 [Progressive Bar] Up

Down

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

- Press [^] or [V] to select an item.
- Press [>] or [<] to select or adjust.
- Press [ENTER] to set.

**LPF** Subwoofer low pass filter (Cut off frequency)

120 Hz : no more than 120 Hz  
80 Hz : no more than 80 Hz

## Display Change

Display is changeable only in the CD, MP3, radio and CD changer modes.

Default: Standard display

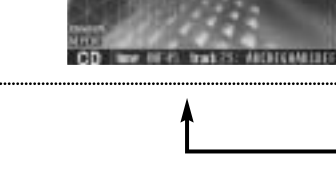
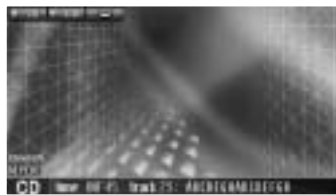
Press **[DISP]** on the remote control to change the display as follows.

### Standard display



### Captured display 1-5 (default)

Press **[OSD]** on the remote control to change the display as follows.

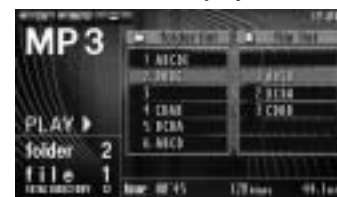


The following display is also available only in the MP3 mode.

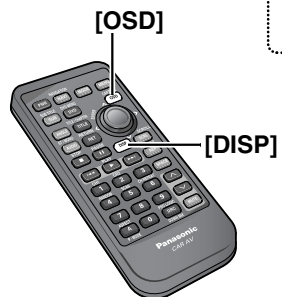
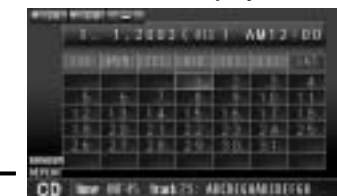
### ID3Tag information display



### Folder/file lists display



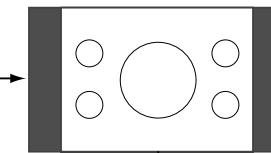
### Clock/calendar display



## Aspect Ratio

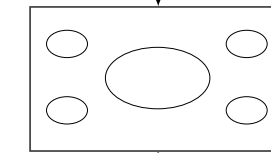
Default: NORMAL  
Mode: 4 types

Press **[ASP] (ASPECT)** on the display unit or press **[A] (ASPECT)** on the remote control to change the aspect ratio as follows.



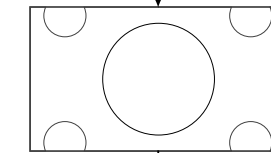
### NORMAL

- The conventional display image has a 4 to 3 ratio of horizontal to vertical.
- In this case, a blank area remains on the right and left sides of the display.



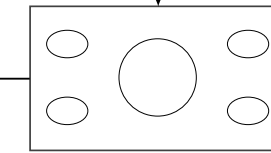
### FULL

- The screen is extended horizontally as a whole to the aspect ratio of 16 to 9.
- The extension ratio is the same at any point of the screen.



### ZOOM

- The screen is fully extended at the normal aspect ratio of 4 to 3.
- The top and bottom of the screen are slightly cut.



### JUST

- The screen is extended horizontally to the aspect ratio of 16 to 9.
- The extension ratio increases toward the right and left ends of the screen.

### Notes:

- This adjustment is common to TV, VTR1, VTR2, DVD and video CD mode.
- You cannot change the aspect in the menu screen and a screen in the CD, MP3, radio and CD changer mode. These are fixed to "FULL" as well as a Navigation image.
- When the rear view camera is in operation with the transmission gear shift in the reverse position, the image is shown on the "FULL" screen only.
- In some cases, the picture looks different from the original one due to your selection of aspect.

### Cautions:

- This is to remind you that compression or extension of the screen using the aspect ratio (screen mode) changing function of this product for commercial purpose of profit making or viewing/listening by the public could infringe on the rights of the author protected by the copyright law.
- If you expand normal picture (4 to 3) by using "JUST", "ZOOM" or "FULL" aspect to the full of the screen, you might not see the periphery of the picture, or you might see a distorted picture. Therefore, use the "NORMAL" mode to see the original picture as the author intended it.

# 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)

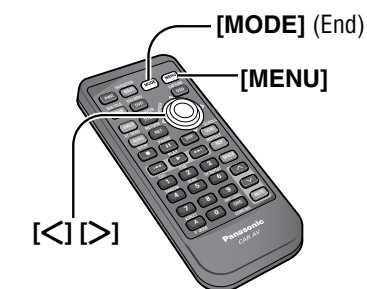


Rear monitor setting menu

- 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)



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

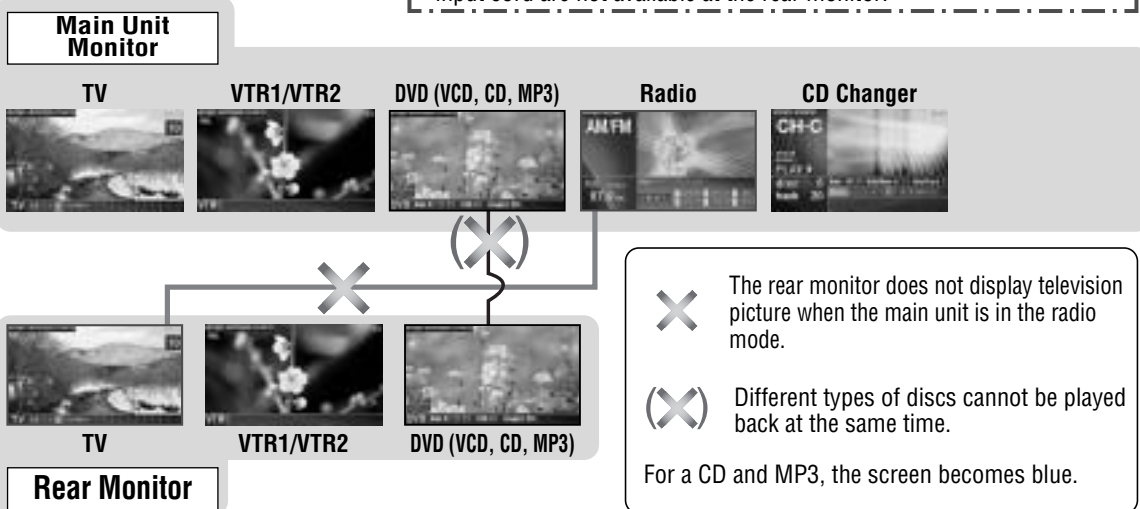
**[<]** **[>]**

- 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)



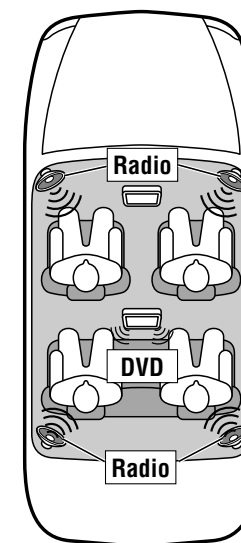
**[A]** (P • MODE)

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.

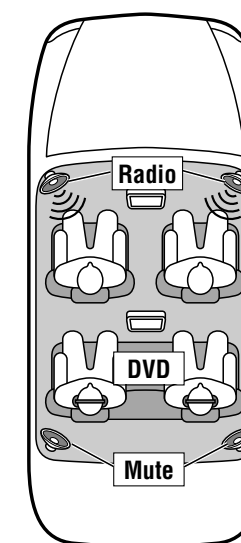


"P • MODE" indicator lights when the Private Mode is activated.

### 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
<YEFG012694>			
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
<YEFG04019>			
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
<YEFG021010A>			
㉑	Base Bracket		2
<YEFG012424>			
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:

12 V DC  
Test Bulb



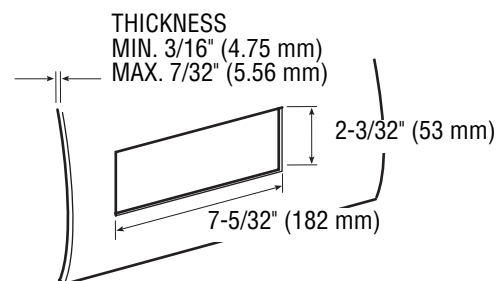
Electrical  
Tape



Side-Cut  
Pliers



## Dashboard Specifications



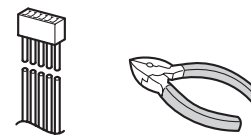
## Identify All Leads

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.

## 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.

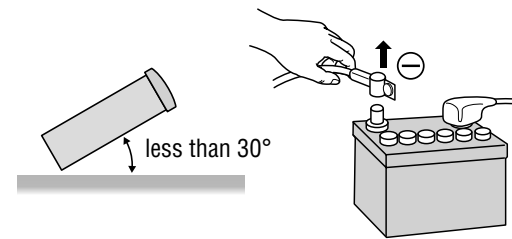
If you have difficulties, consult your nearest authorized professional installer for assistance.

## 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.

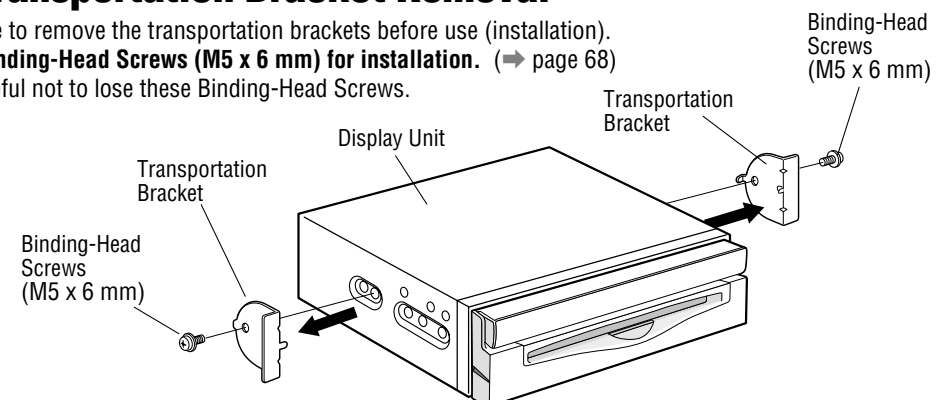
**Caution:** Please follow the laws and regulations of your state, province or country for installation of the unit.

## 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.

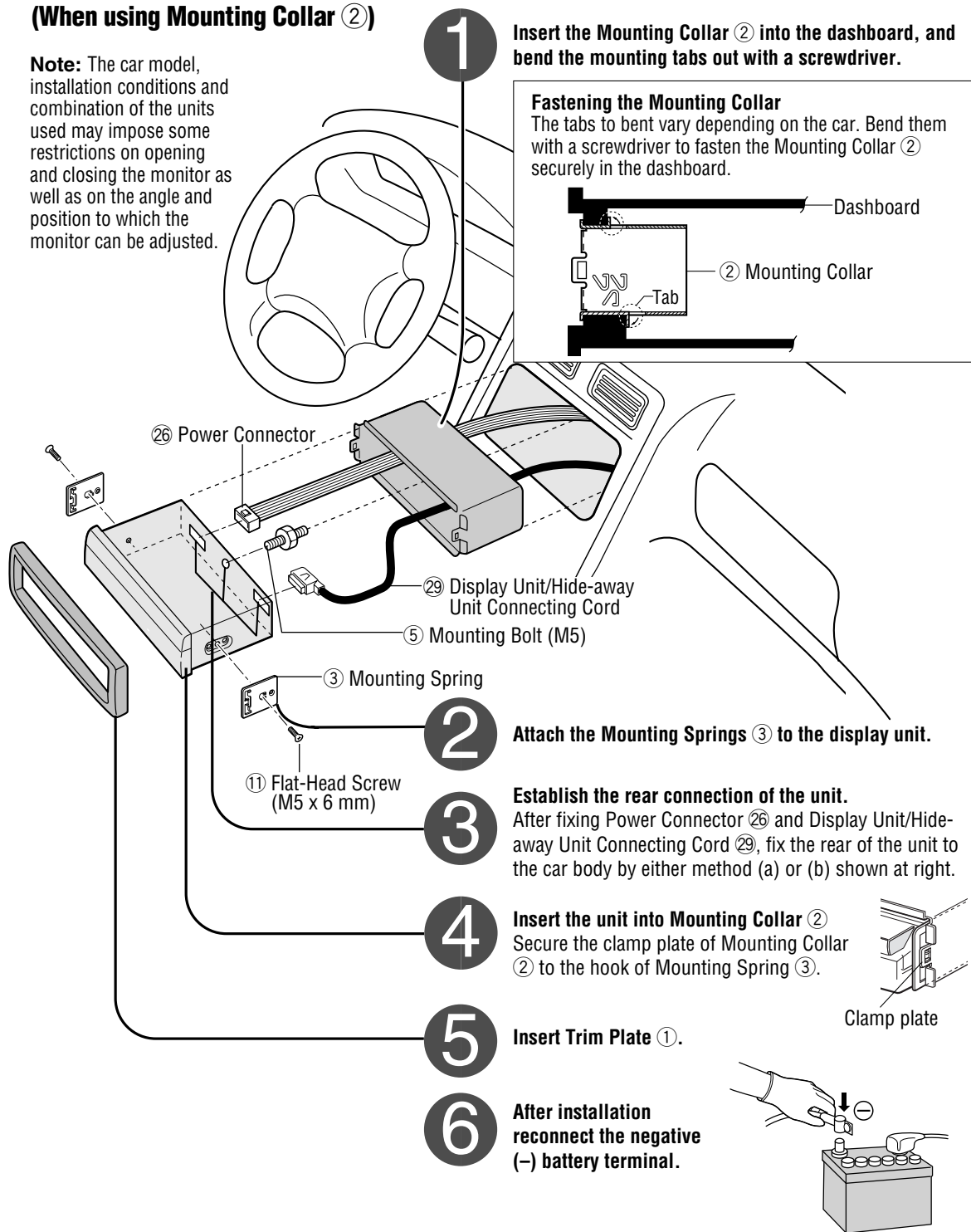


## Mounting the Display Unit

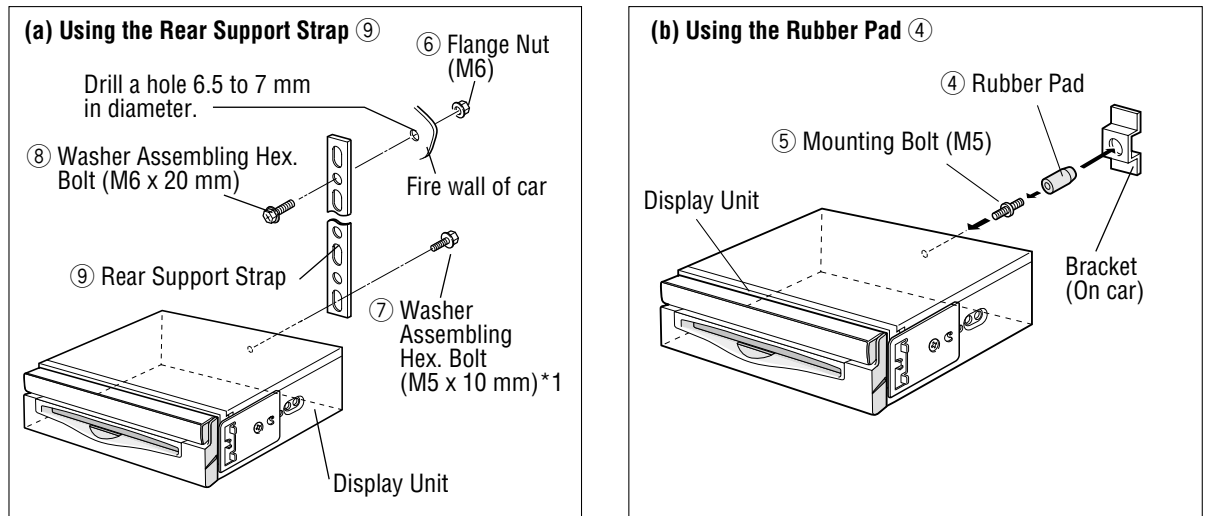
### Installation Procedures

(When using Mounting Collar ②)

**Note:** The car model, installation conditions and combination of the units used may impose some restrictions on opening and closing the monitor as well as on the angle and position to which the monitor can be adjusted.



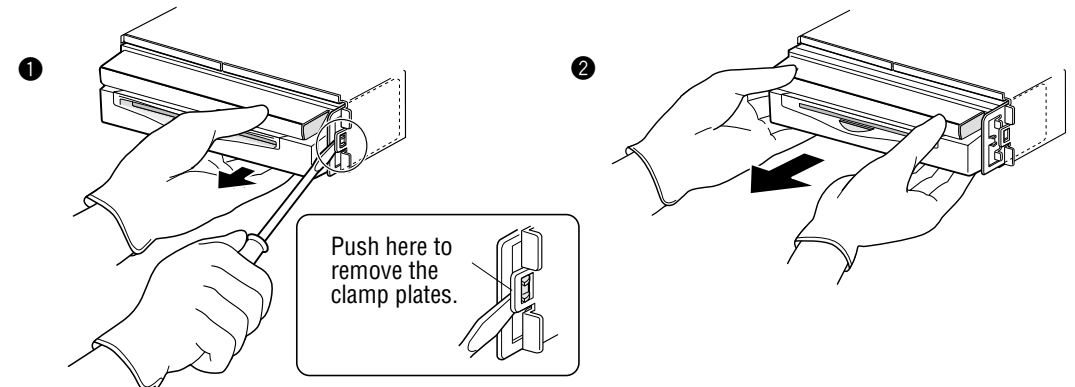
### Method for Fixing the Rear of the Unit



\*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.



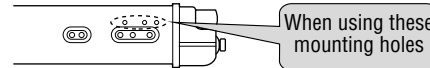


## Installation Procedures (When not using Mounting Collar ②)

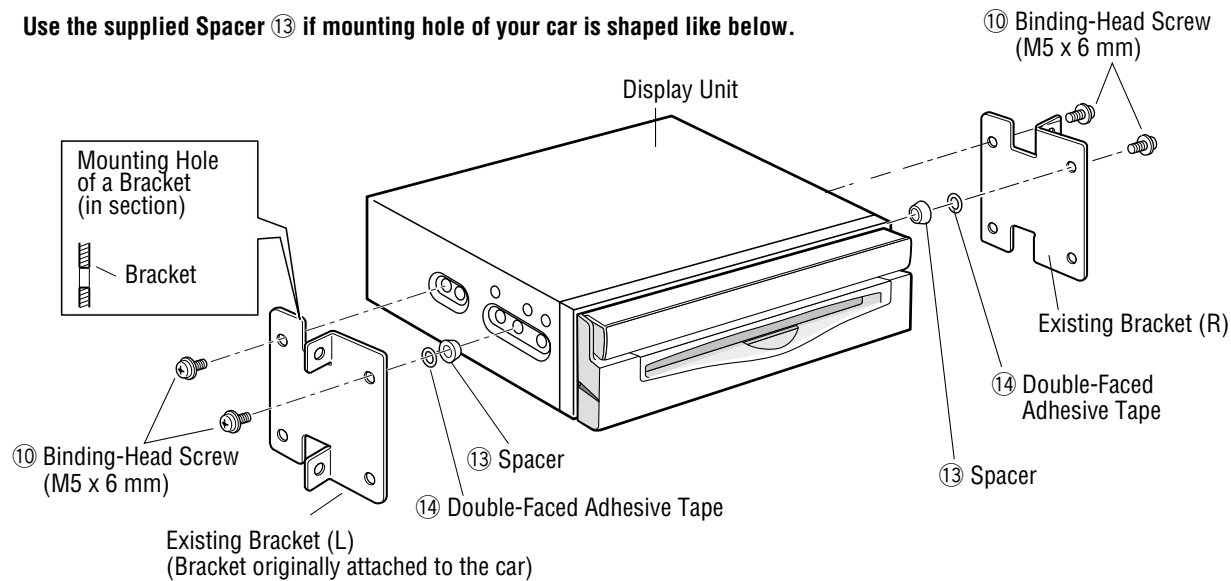
Use the brackets supplied with your car when mounting this unit. The bracket shape and mounting method vary with car manufacturers, car types and manufacturing year. Please consult your nearest dealer or installer.

Select mounting screws according to the hole positions and hole shape of the bracket.

	⑩ Binding-Head Screw (M5 x 6 mm) Recycle the Binding-Head Screws that fixed the transportation brackets for two more positions.	2 pieces
	⑫ Binding-Head Screw (M4 x 3 mm)	4 pieces
	⑪ Flat-Head Screw (M5 x 6 mm)	4 pieces



Use the supplied Spacer ⑬ if mounting hole of your car is shaped like below.

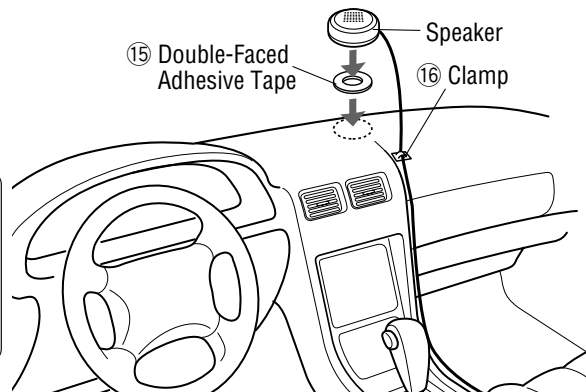


## Mounting the Speaker

Before mounting the speaker, wipe water, dust and oil stains off from the place where the speaker should be mounted to enhance adhesive strength.

### Cautions:

- Do not install the speaker in a location which obstructs operation of the air bag or other safety equipment.
- Do not leave a credit card or other magnetic cards near the speaker to avoid damaging the cards.



## Mounting the Hide-away Unit

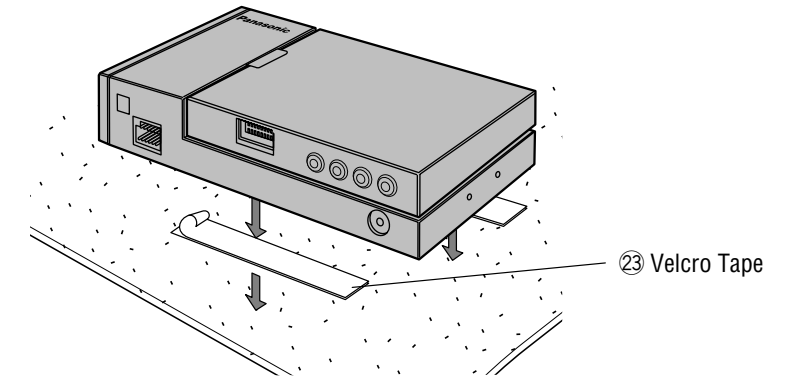
### Cautions:

- Never mount the unit in any of the following locations to avoid damage due to overheating;
  - Near the heater port.
  - Places like the dashboard or rear deck, where it may be exposed to direct sunlight.
- Do not mount the unit near the door, where it could be exposed to rain.
- Do not separate the hide-away unit.

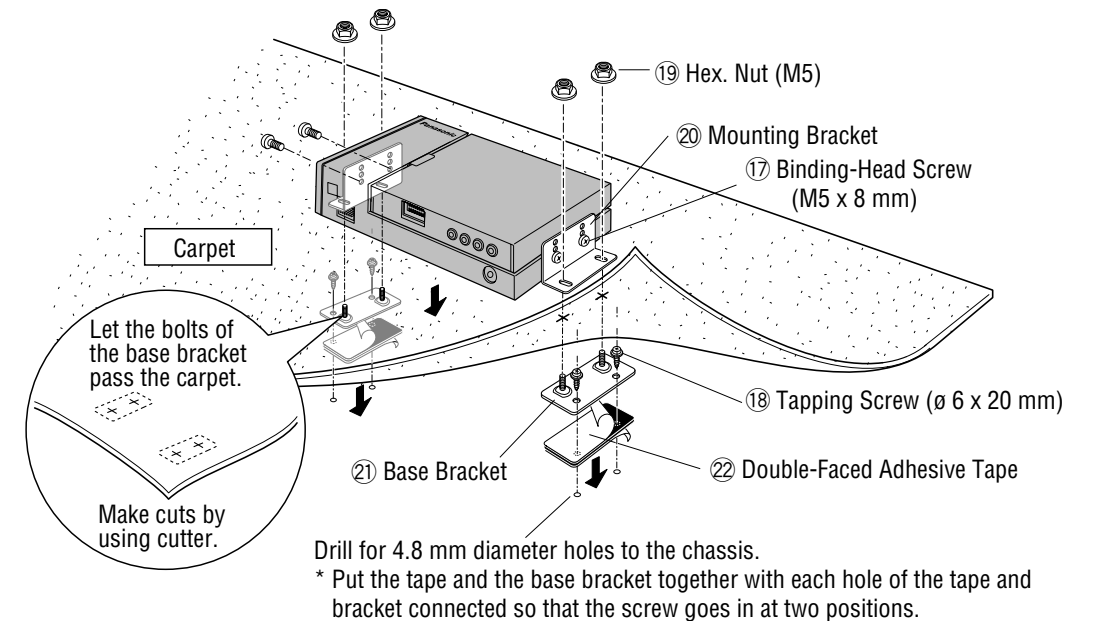
### Mount the unit on the car carpet by using Velcro Tape ⑳.

Attach the seal side of the Velcro Tape ㉓ to the hide-away unit, then mount the unit on the carpet.

**Note:** Some carpet materials may not be suitable for this mounting method. In this case, please contact your nearest Panasonic Servicenter for installation.



### Unit installation by using the Mounting Brackets ㉑ and the Base Brackets ㉒.



**Note:** Apply an anticorrosive to the holes and tapping screws.

**Caution:** You run the risk of interfering with the mounting or causing damage by drilling into the gas tank, a wiring harness, or other component.

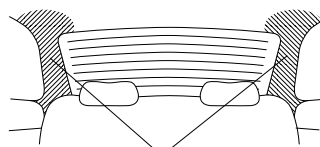
## Mounting the TV Antenna

### Cautions:

- Be sure to install the TV antenna on the inner side of the rear window.
- Be sure to connect the power lead of the TV antenna to ACC power DC 12 V.
- Keep the antenna away from the external amplifier and the rear speaker cord as much as possible.

### Preparations:

Remove the upholstery at the both sides of the rear window to establish a ground.

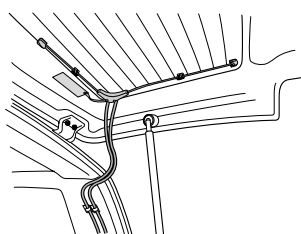


Remove the upholstery.

### Observe the following to enhance adherability.

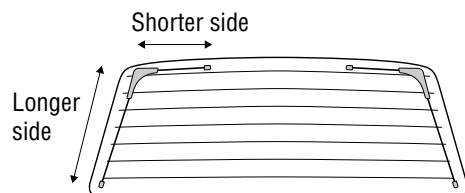
- Wipe the inner surface of the rear window with a wet and soft cloth along the heating wire. But do not leave water droplets on the glass.
- When the outside-air temperature is less than 68 °F (20 °C), switch on the rear window defogger or the car heater to warm the surface of the rear window for approx. 5 minutes.

### For a hatchback type:



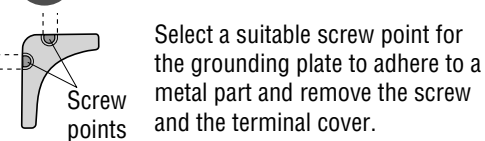
Stick the grounding plate skillfully and hold the loose antenna element with the Antenna Clamp 24 so that the element will not become caught in the hatchback door. Adjust the cord length so that the cord does not interfere with the movement of the hatchback door, and secure the cord with Cord Clamp 25.

### 1 Straighten the bent antenna element. Confirm the adhering positions.



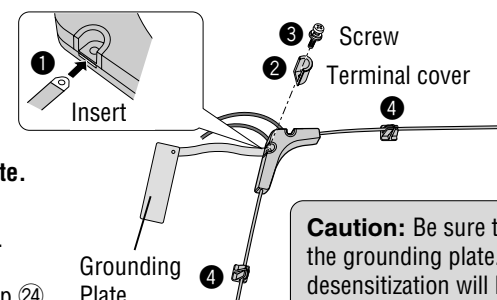
Affix the antenna temporarily with adhesive tape after confirming the antenna position.

### 2 Insert the grounding plate into the antenna body and hold the antenna element with the Antenna Clamp 24.



Follow the steps below to install the grounding plate.

- 1 Insert the grounding plate into the antenna body.
- 2 Hold the grounding plate with the terminal cover.
- 3 Screw the grounding plate.
- 4 Hold the antenna element with the Antenna Clamp 24.

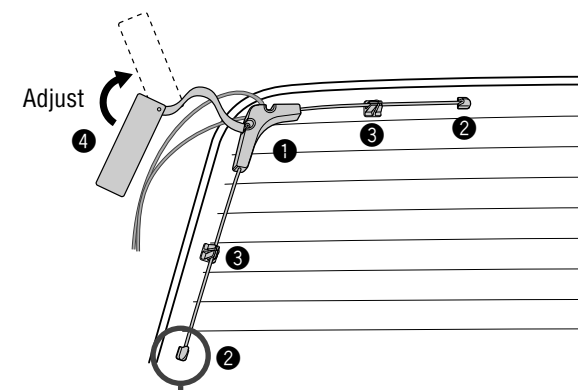


**Caution:** Be sure to connect the grounding plate. Otherwise, desensitization will be caused.

### 3 Peel the sheet from the back of antenna body and affix it. Then, affix the grounding plate on a metal part.

Follow the steps below to affix the antenna securely.

- 1 Affix the antenna body.
- 2 Straighten the antenna element and affix it.
- 3 Put the Antenna Clamp 24 on the center of the antenna element.
- 4 Adjust the angle and position of the grounding plate and affix it.

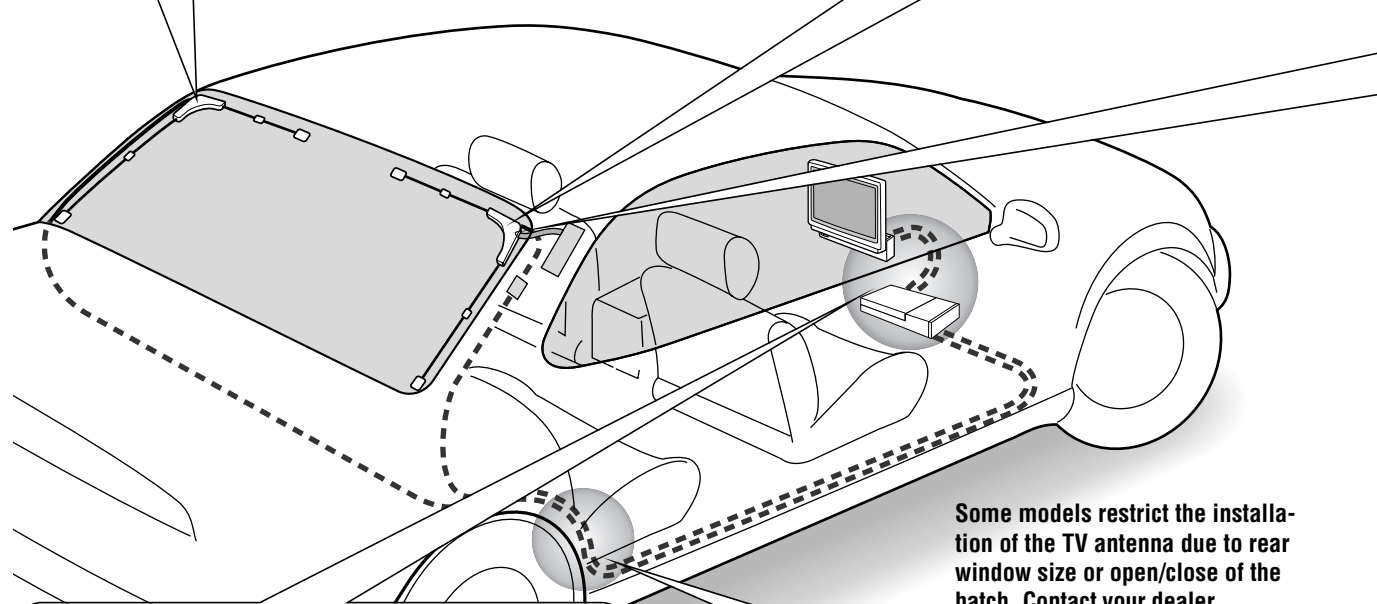


For some models, you cannot straighten the longer element.



### Cautions:

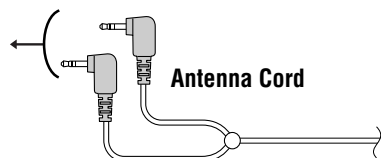
- Avoid contacting the adhesive surface.
- Do not re-adhere to avoid weakening adherability.
- Avoid adhering on the heating wire as much as possible.



Some models restrict the installation of the TV antenna due to rear window size or open/close of the hatch. Contact your dealer.

### 5 Antenna cable identification

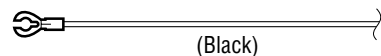
To TV antenna connector on the hide-away unit.



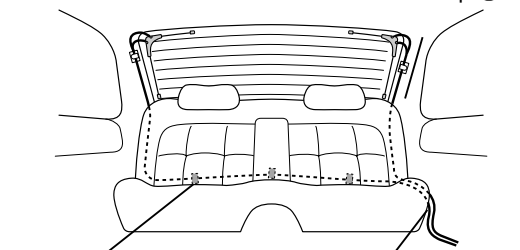
**Power Lead**  
To ACC power, +12 V DC.



**Ground Lead**  
To a clean, bare metallic part of the car chassis.



### 4 Cord routing



Route the cord behind the rear seat and affix it with adhesive tape.

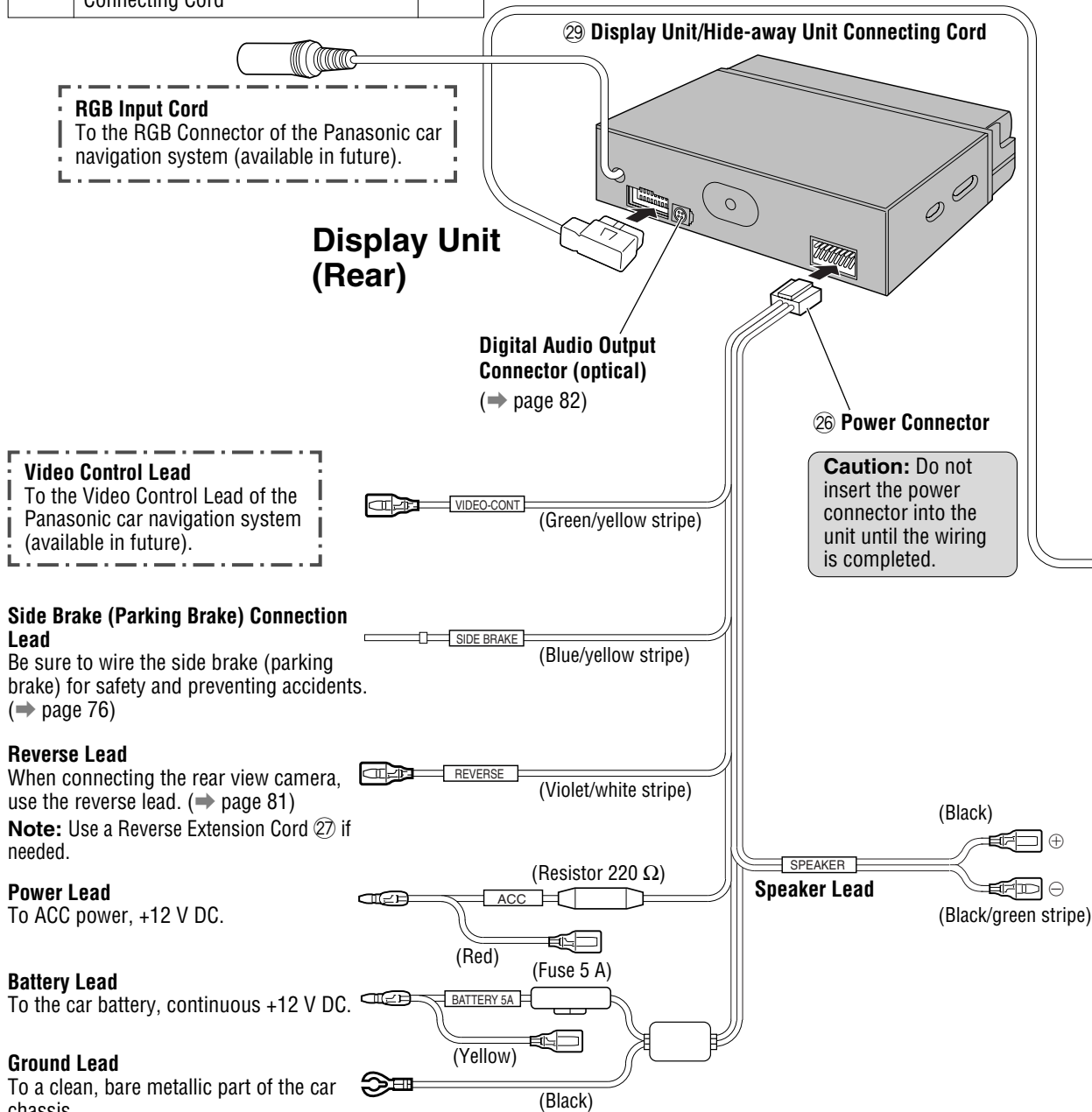
Route the cord inside the upholstery and under the carpet.

## Wiring Diagram

### Accessory used for wiring

No.	Item	Q'ty
⑳	Power Connector (for display unit)	1
㉑	Reverse Extension Cord (for rear view camera)	1
㉒	Clip Connector	1
㉓	Display Unit/Hide-away Unit Connecting Cord	1

No.	Item	Q'ty
㉔	Power Connector (for hide-away unit)	1
㉕	Ground Lead	1
㉖	Radio Antenna Extension Cord	1

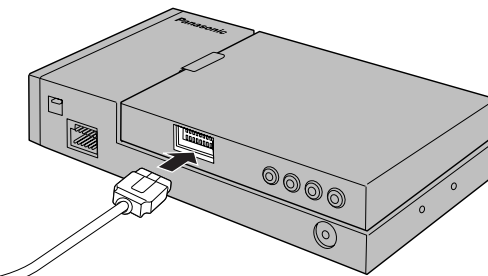


### Cautions:

- This unit is designed for use in a car having a 12-volt negative ground battery system.
- Be sure to insulate any exposed wires from a possible short-circuit from the car chassis. Bundle all cables and keep cable terminals free from touching any metal parts.
- Note that if your car has a driving computer or a navigation computer, disconnecting the cable from the battery may clear the memory.
- Install the cords avoiding the spots where the temperature should be extremely high.

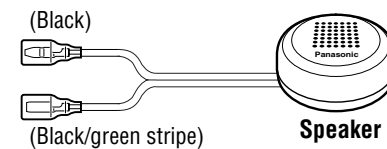
### Notes:

- To prevent damage to the unit, be sure to follow the connection diagram below.
- Be sure to fully plug in the connectors. Secure them with clamps and tape.
- When game machines are connected, the picture may be unstable.
- When removing the Power Connector ㉔ and Display Unit/Hide-away Unit Connecting Cord ㉓, be sure to press the clip.
- All other installation methods require the use of dedicated metal fittings. Consult with a qualified servicing engineer or your dealer if other methods are required.



### Hide-away Unit (Rear)

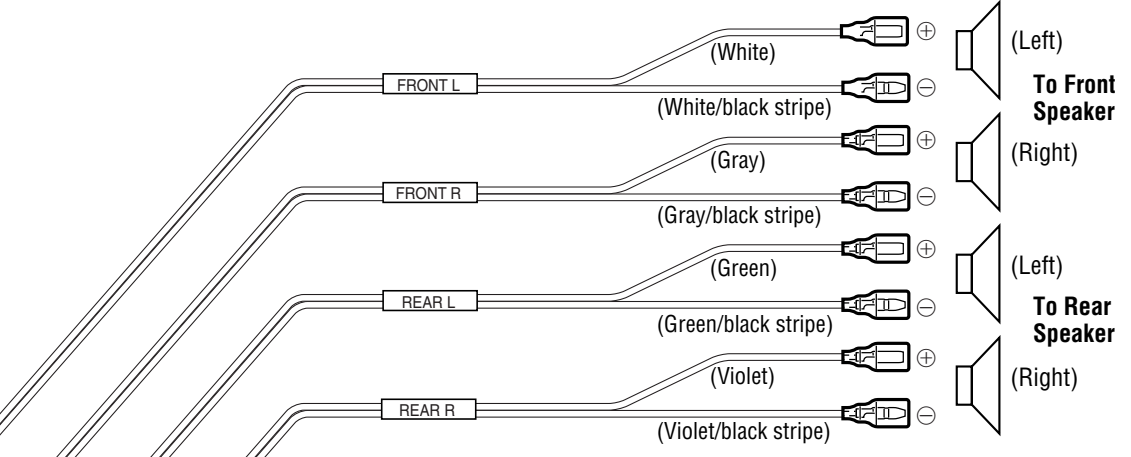
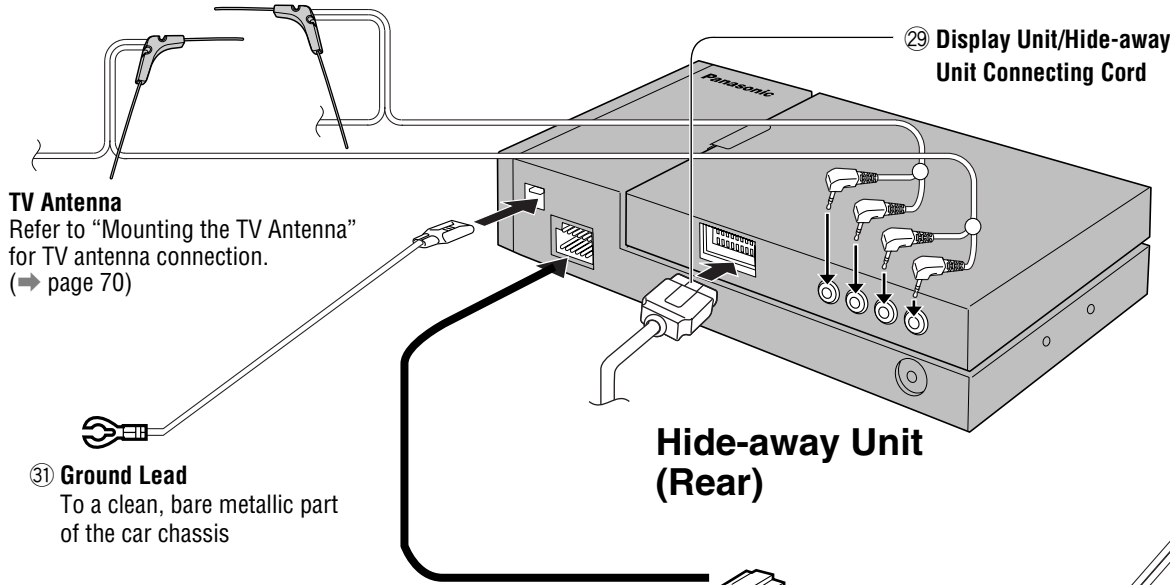
**Note:** See next page for hide-away unit electrical connection.



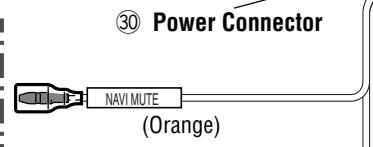
### Speaker

**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.



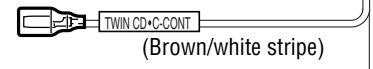
**Navi Mute Lead**  
Connect to the Navi Mute Lead of the Panasonic car navigation system (available in future).



**Motor Antenna Relay Control Lead**  
(To motor antenna) (Max. 0.1 A)  
This lead is not intended for use with a switch actuated power antenna.  
**Note:** The power antenna extends automatically when the radio mode is selected.



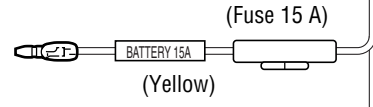
**Dual CD Changer Control Lead**



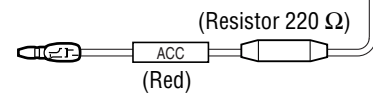
**External Amplifier Control Power Lead**  
To an external amplifier.



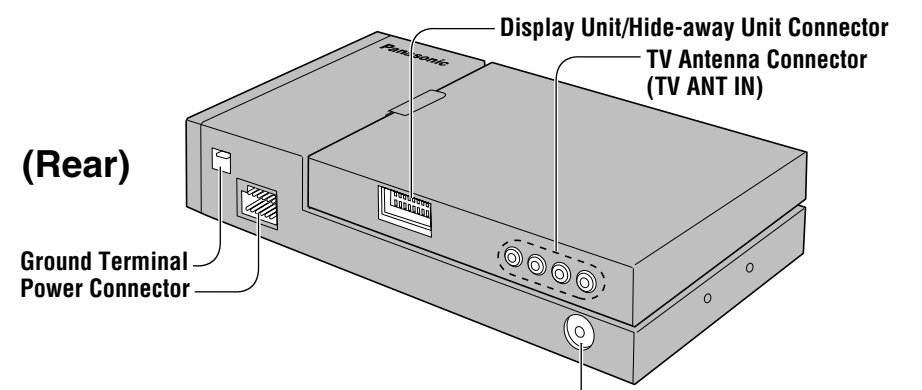
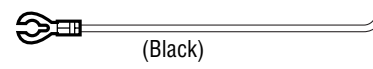
**Battery Lead**  
To the car battery, continuous +12 V DC.



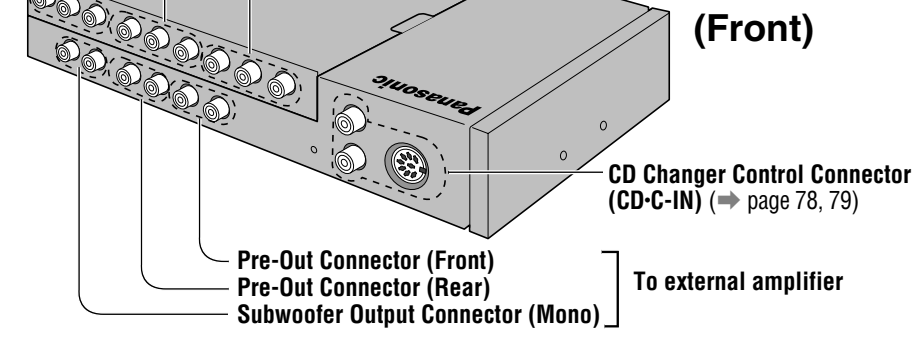
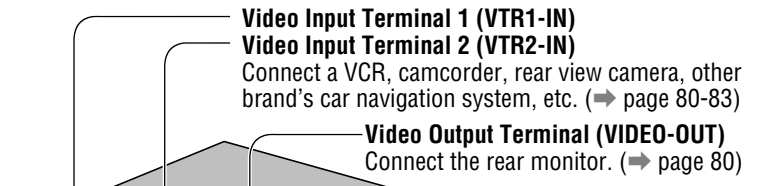
**Power Lead**  
To ACC power, +12 V DC.



**Ground Lead**  
To a clean, bare metallic part of the car chassis.



**Radio Antenna Connector (RADIO ANT IN)**  
**Note:** Use the Radio Antenna Extension Cord 32 if necessary.

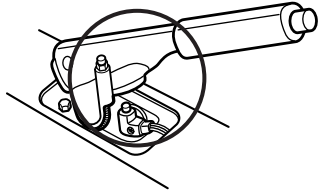




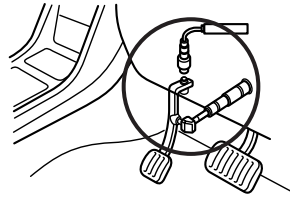
## Connecting the Side Brake (Parking Brake) Connection Lead

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

### Side brake (Parking brake)



### Foot brake

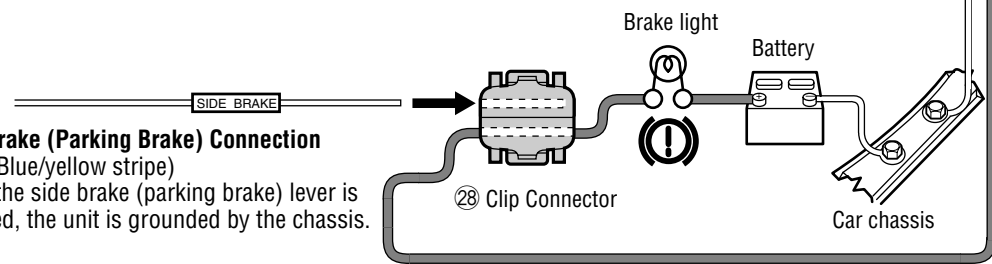


The side brake (parking brake) switch position varies with the car model. For details on the exact location of the side brake (parking brake) switch in your car, contact your dealer.

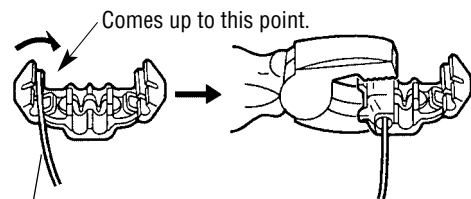
Side brake (parking brake) switch

### Side Brake (Parking Brake) Connection Lead

(Blue/yellow stripe)  
When the side brake (parking brake) lever is engaged, the unit is grounded by the chassis.

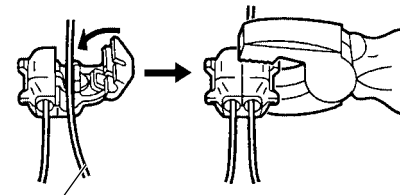


① Attach a Clip Connector ⑳ to the end of the side brake (parking brake) connection lead.



Side Brake (Parking Brake) Connection Lead  
(Blue/yellow stripe)

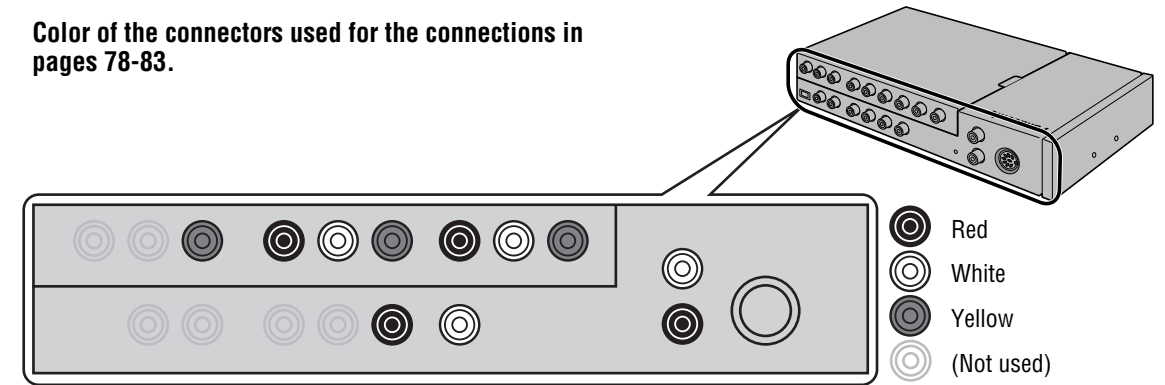
② The Clip Connector ⑳ is connected to the power source side lead of the side brake (parking brake) lever.



Power source side lead

## Color of the Connectors

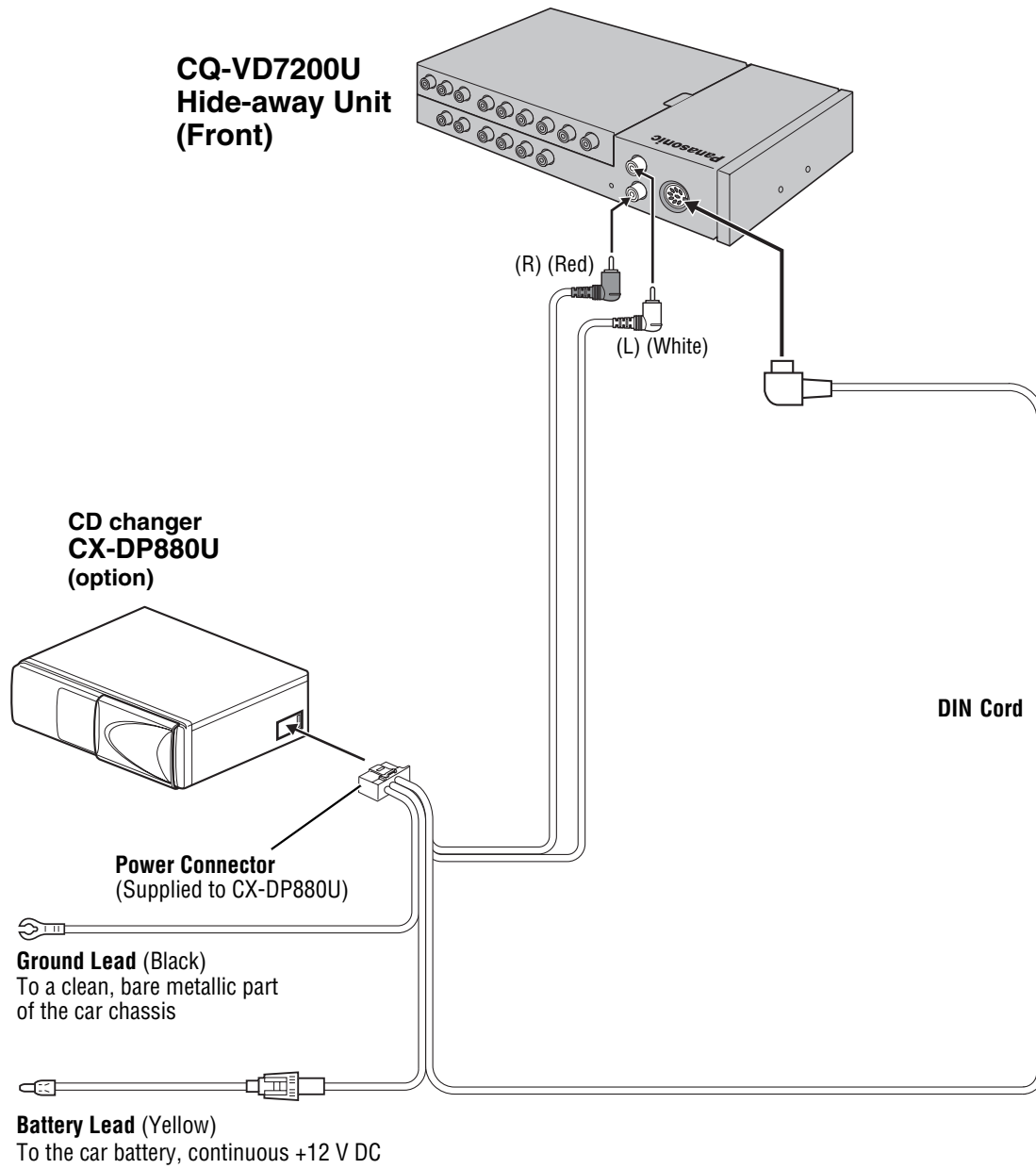
Color of the connectors used for the connections in pages 78-83.



- Red
- White
- Yellow
- (Not used)

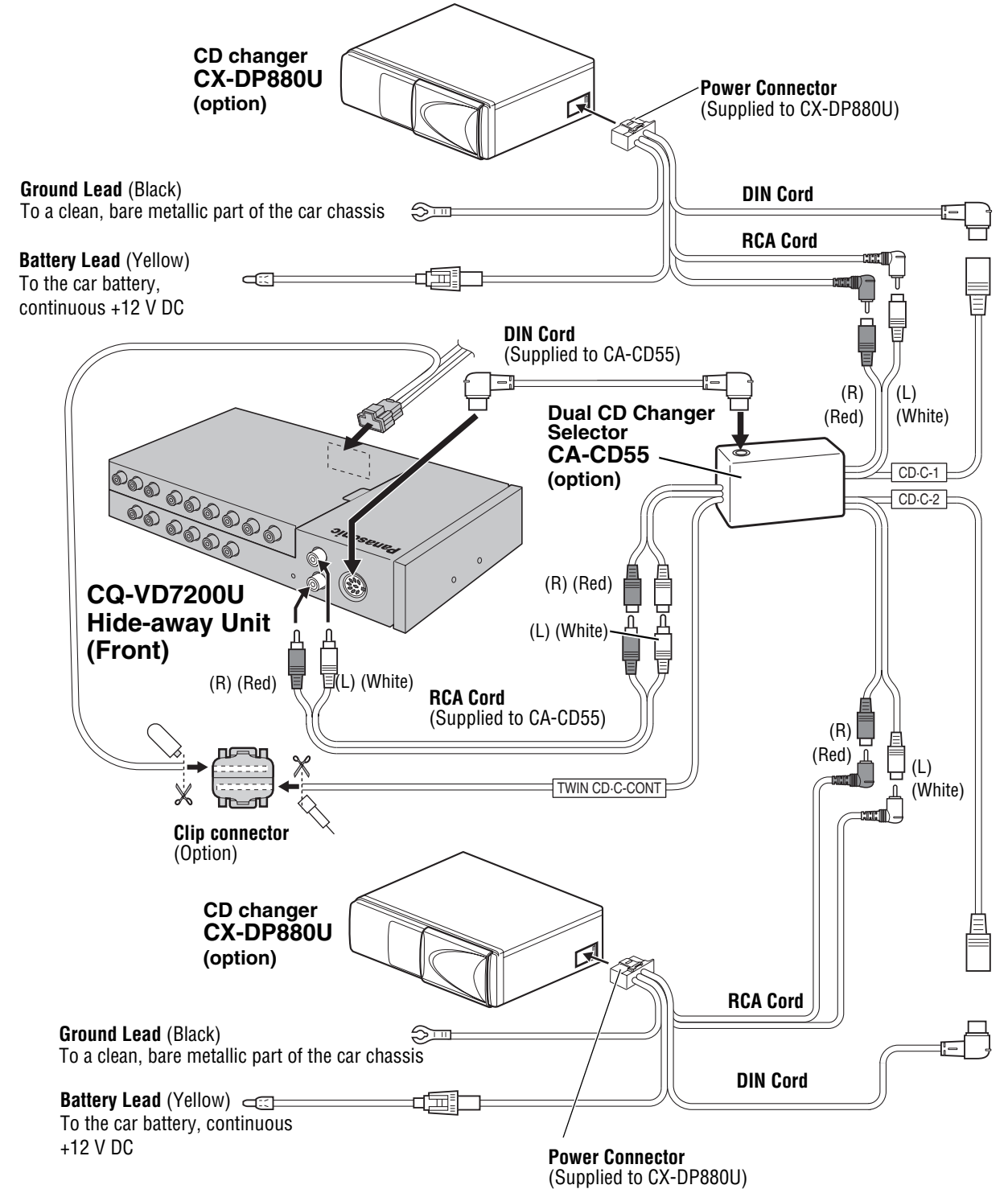
## Connection with CD Changer (CX-DP880U)

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



## Connection with Dual CD Changer Selector (CA-CD55)

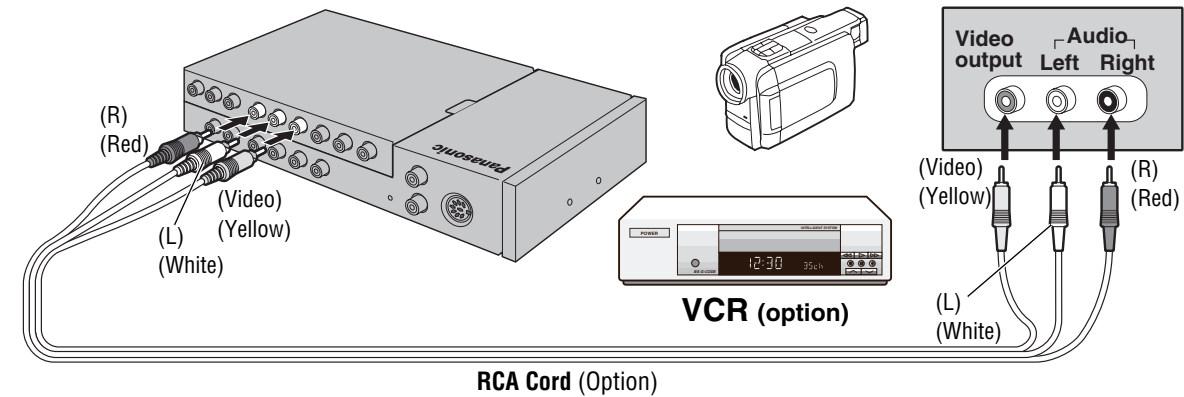
**Note:** Refer to the operating instructions for the connected devices, in addition.



## Connection with VCR or Camcorder

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

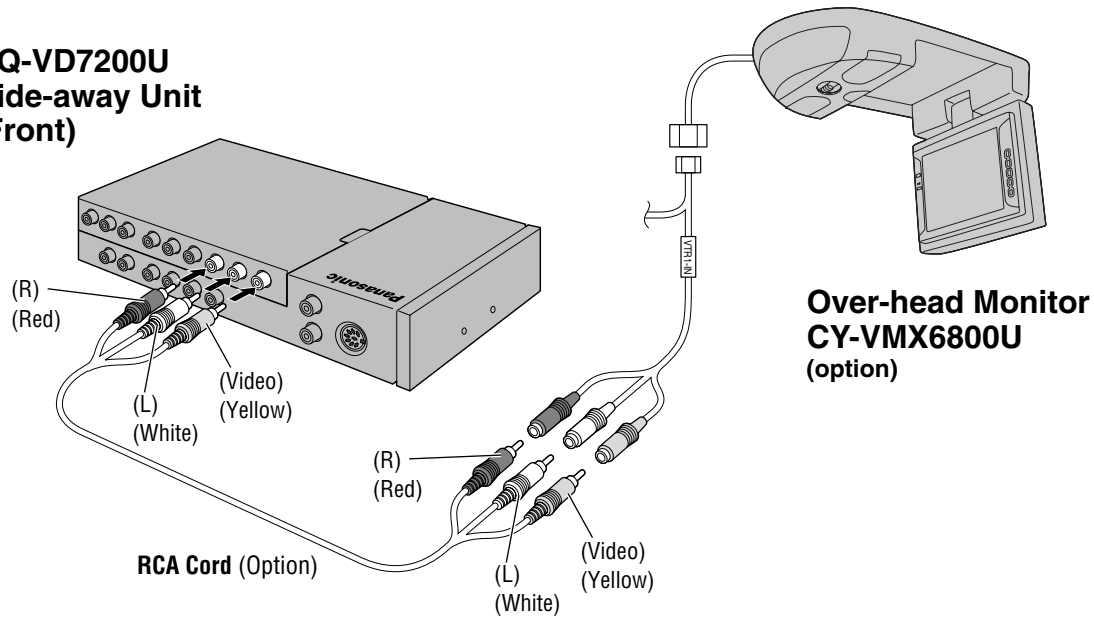
**CQ-VD7200U  
Hide-away Unit  
(Front)**



## Connection with Rear Monitor

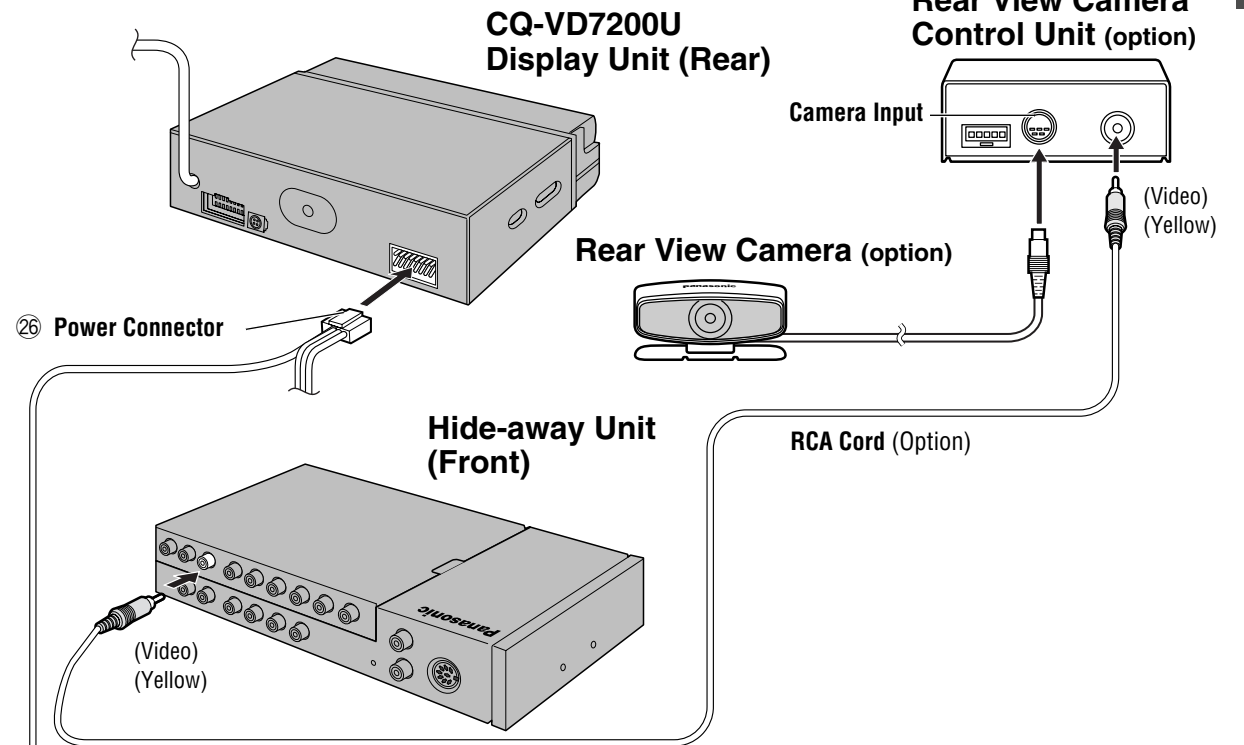
**Note:** Refer to the operating instructions for the connected devices, in addition.

**CQ-VD7200U  
Hide-away Unit  
(Front)**



## Connection with Rear View Camera

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



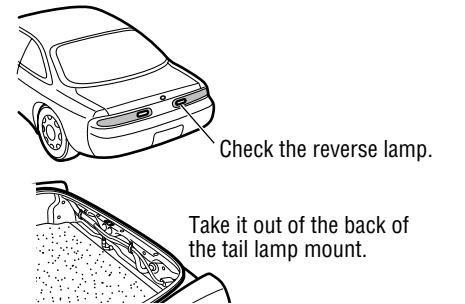
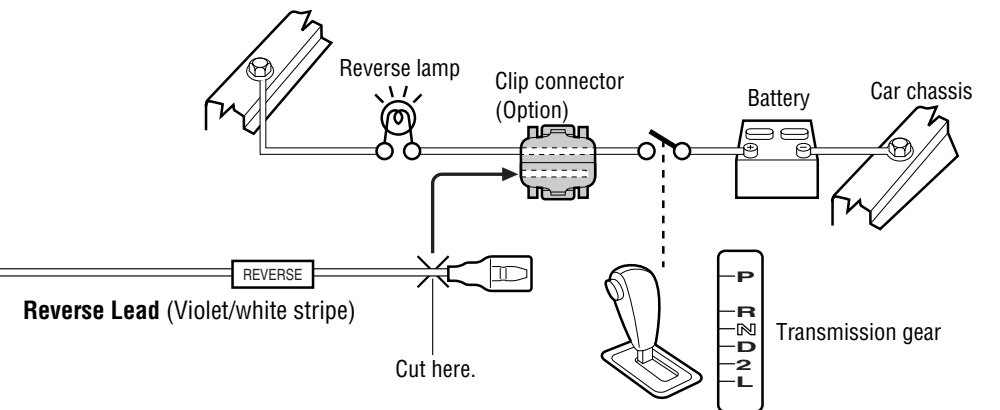
## Connecting the Reverse Lead

**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:**

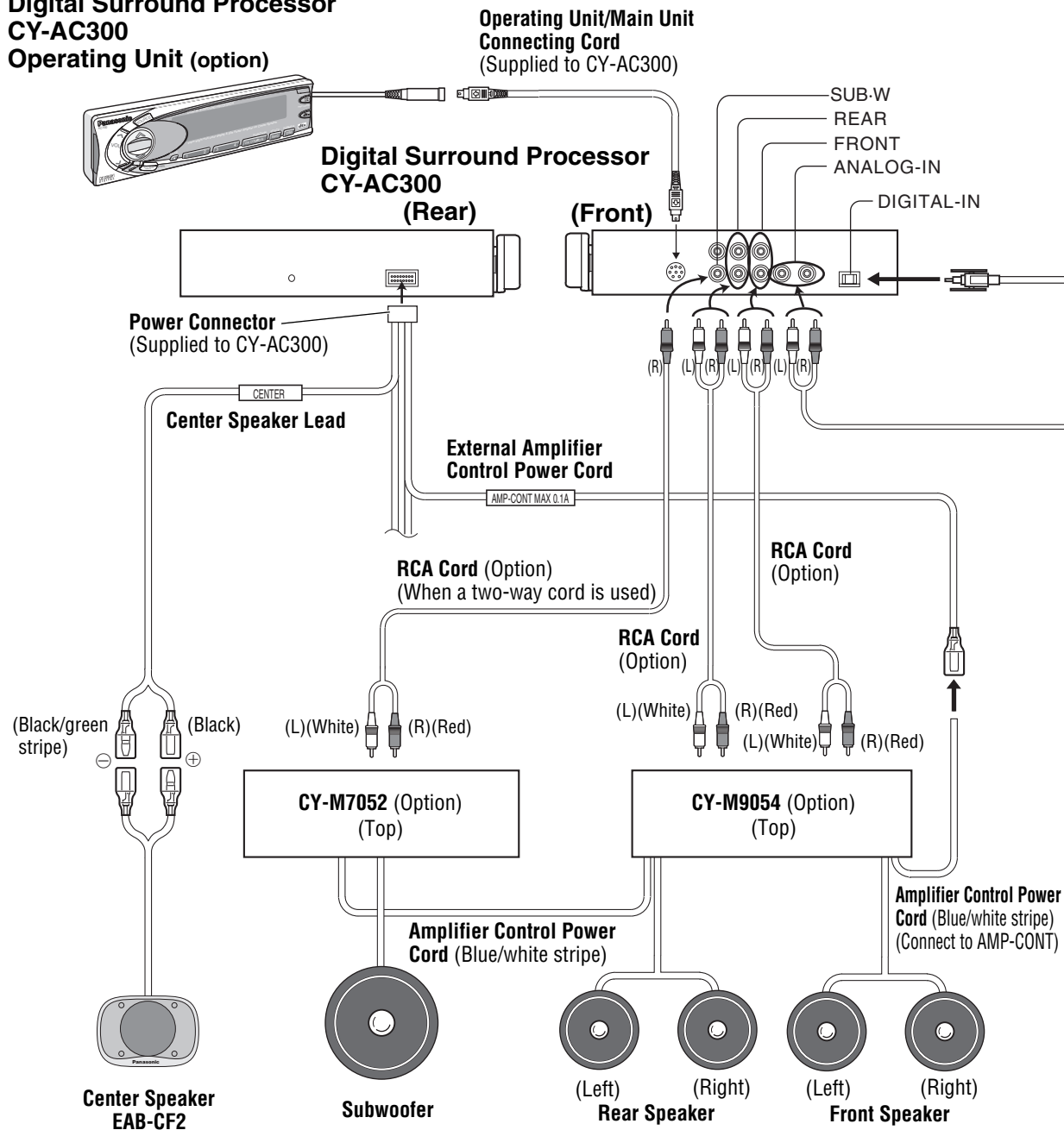
- Connect the reverse lead after cutting the terminal at the end.
- Use a Reverse Extension Cord 27 if needed.



## Connection with Digital Surround Processor (CY-AC300)

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

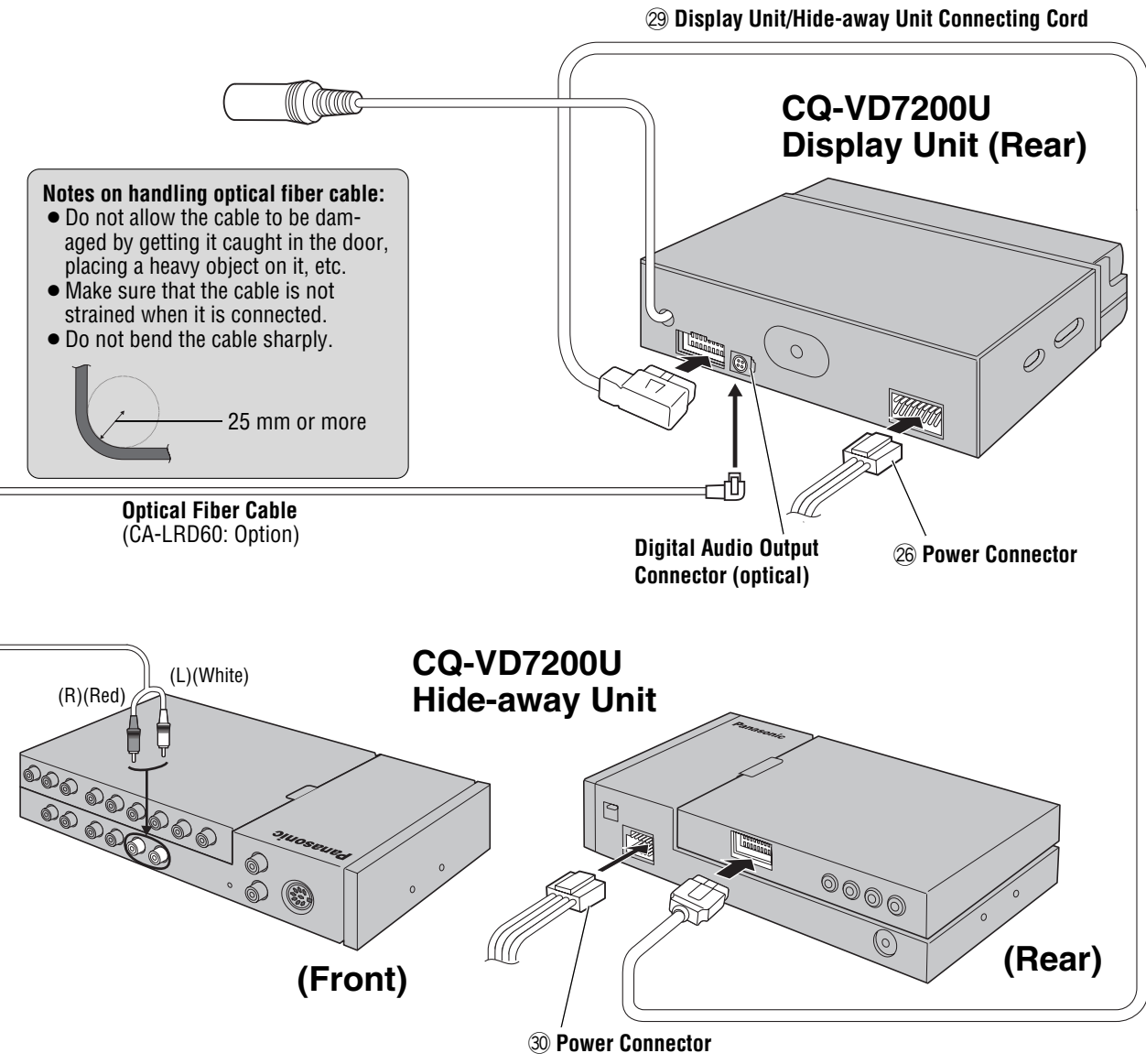
**Digital Surround Processor  
CY-AC300  
Operating Unit (option)**



**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.

25 mm or more





# 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.
Only sound, no picture.	Cables are not correctly connected. → Connect cables correctly.
	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.

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

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

## DVD video

Trouble	Cause/Step
Cannot switch the audio language/subtitle language/angle.	<ul style="list-style-type: none"> <li>• 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.)</li> <li>• Some discs permit switching through a menu screen.</li> <li>• Sometimes, switching angles is possible only with certain scenes.</li> </ul>
The audio/subtitle language selected in the DVD settings is not used.	<p>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.)</p>

## CD

Trouble	Cause/Step
CD text is not displayed normally.	<p>Disc is dirty, or has scratches. →Clean the disc, referring to the section on "Notes on Discs" (→ page 93).</p>
Time is counted but no sound comes out.	<p>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.</p>

## MP3

Trouble	Cause/Step
No playback.	<p>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).</p> <p>The MP3 file is missing the ".mp3" file name extension. →Make sure to add the ".mp3" extension to each MP3 file name.</p>
It takes too long for playback to start.	<p>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.)</p>
Poor recording quality, sound skipping	<p>→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".</p> <p>High-speed writing was executed when MP3 data was recorded on the disc. →Decrease writing speed as low as possible.</p>
Files are not played in the desired order.	<p>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.</p>
Folder/file name is not displayed correctly.	<p>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).</p> <p>→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.</p>

# 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. → <b>Playing another file will return the file playing time to normal.</b>
	You played a file in which character information had been recorded by use of ID3Tag 2.0 or later version. → <b>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.</b>

## Radio

Trouble	Cause/Step
Poor reception of FM stereo and monaural broadcasts.	Station is too far, or signals are too weak. → <b>Select other stations of higher signal level.</b>
	The motor antenna relay control lead is not connected correctly. → <b>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.</b>
	The radio antenna is not extended enough. → <b>Fully extend the radio antenna.</b>

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

## Display Settings

Trouble	Cause/Step
The brightness of the screen is not stable.	“AUTO” dimmer is selected. → <b>Select one of the dimmer levels from among 1 to 4 to make the dimmer adjustment become free from light intensity.</b>
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. → <b>Make every adjustment of the screen.</b>
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. → <b>Connect the cables correctly.</b>
Left and right sounds are reversed.	The speaker leads are connected in reverse between right and left. → <b>Connect the speaker wires to the correct one.</b>
No sound from the subwoofer.	Subwoofer volume level is set to zero. → <b>Rise the volume of Subwoofer.</b>
	Private mode is set to “ON”. → <b>Set private mode to “OFF”.</b>

# Troubleshooting (continued)

## Error Display Messages

### CD/MP3/DVD/Video CD/CD Changer

Display	Cause/Step
- E1 -	Disc is dirty, or is upside down. → <b>Check disc.</b>
- E2 -	Disc has scratches. → <b>Check disc.</b>
- E3 -	No operation by some cause. → <b>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.</b>
- E4 -	The type of the file that is selected is not supported. → <b>Check disc.</b>
NO DISC	No disc is in the player. → <b>Insert disc into the disc slot.</b>
NO MAGAZINE	No magazine is in the changer. → <b>Load the changer with CD-loaded magazine.</b>
PAL/NTSC ERROR	An attempt was made to play a PAL disc. → <b>Press [▲] and check the disc.</b>
REGION ERROR	An attempt was made to play a disc with a region number other than "1" or "ALL". → <b>Press [▲] and check the disc.</b>

**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.

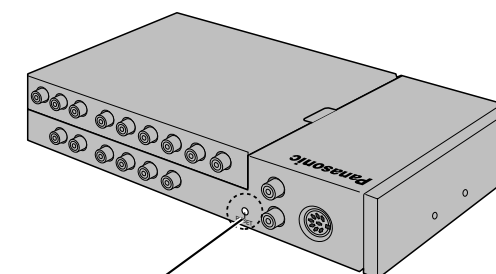
**Important**

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.

**Display Unit**



**Hide-away Unit**



Reset switch

**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

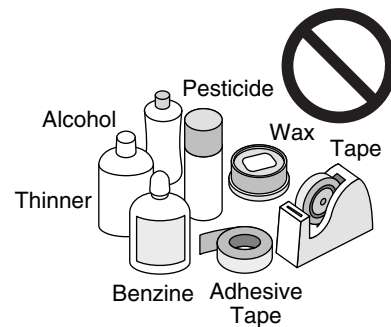
Do not apply pesticides, benzene, thinner or other volatile substances to the unit. The cabinet surface primarily consists of plastic materials.

Do not wipe with benzene, 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.



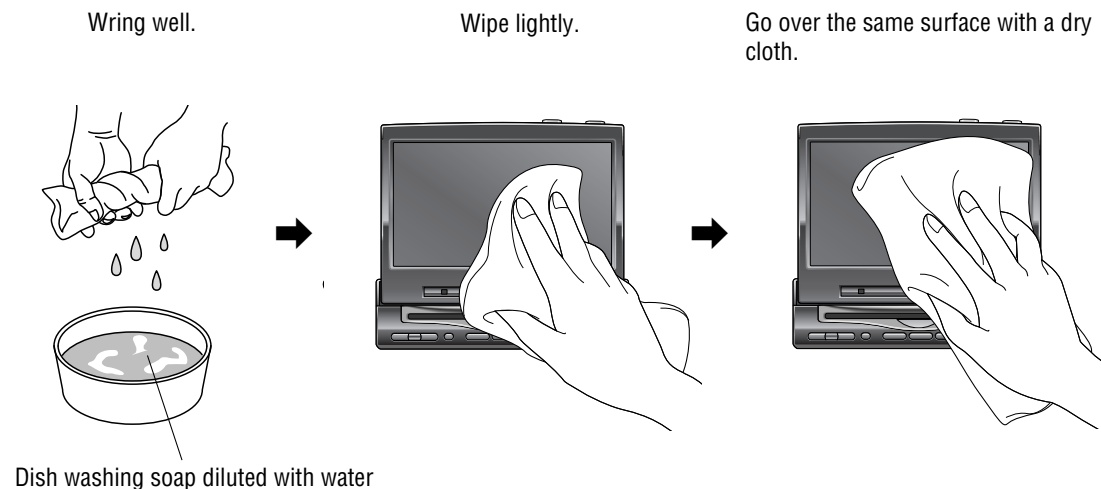
## Clean Dirt by Wiping Lightly with a Soft Cloth

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.)



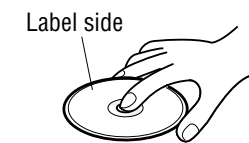
**Note:** Do not scratch the screen with your nails or other hard objects. The resulting scratches or marks will obscure the images.

**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:

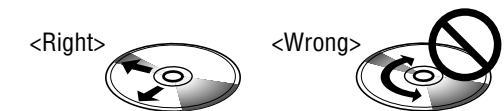
- Direct sunlight
- Near car heaters
- Dirty, dusty and damp areas
- On seats and dashboards



Do not use irregularly shaped discs.

### 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	Samoan
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.

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### Apparatus Claims of U.S. Patent Nos. 4,631,603, 4,577,216, and 4,819,098, licensed for limited viewing uses only.

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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.