

Panasonic®

DVD Player/Receiver with CD Changer Control
Lecteur DVD/récepteur avec contrôle de changeur CD
Reproductor de discos DVD/receptor con control de cambiador de discos CD

CQ-D5501U

Panasonic®

CQ-D5501U



Panasonic Consumer Electronics Company,
Division of Panasonic Corporation of North America
One Panasonic Way, Secaucus,
New Jersey 07094
<http://www.panasonic.com>

Panasonic Sales Company,
Division of Panasonic Puerto Rico, Inc. ("PSC")
Ave. 65 de Infanteria, Km. 9.5
San Gabriel Industrial Park,
Carolina, Puerto Rico 00985
<http://www.panasonic.com>

Panasonic Canada Inc.
5770 Ambler Drive,
Mississauga, Ontario
L4W 2T3
<http://www.panasonic.ca>

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- Please read these instructions (including "Limited Warranty" and "Customer Services Directory") carefully before using this product and keep this manual for future reference.
- Prière de lire attentivement ces instructions (y compris la "Garantie limitée" et le "Répertoire des services à la clientèle") avant d'utiliser ce produit et conserver ce mode d'emploi pour s'y référer ultérieurement.
- Lea con atención estas instrucciones antes de utilizar el producto y guarde este manual para poderlo consultar en el futuro.

Safety Information

- Read the operating instructions for the unit and all other components of your car audio system carefully before using the system. They contain instructions about how to use the system in a safe and effective manner. Panasonic assumes no responsibility for any problems resulting from failure to observe the instructions given in this manual.



Warning

This pictograph intends to alert you to the presence of important operating instructions and installation instructions. Failure to heed the instructions may result in severe injury or death.



Caution

This pictograph intends to alert you to the presence of important operating instructions and installation instructions. Failure to heed the instructions may result in injury or material damage.

Warning

Observe the following warnings when using this unit.

- The driver should neither watch the display nor operate the system while driving.**
Watching the display or operating the system will distract the driver from looking ahead of the vehicle and can cause accidents. Always stop the vehicle in a safe location and use the parking brake before watching the display or operating the system.
- Use the proper power supply.**
This product is designed for operation with a negative grounded 12 V DC battery system. Never operate this product with other battery systems, especially a 24 V DC battery system.
- Keep batteries out of reach of infants.**
Batteries can be ingested, so keep them out of the reach of infants. If an infant ingests a battery, please seek immediate medical attention.
- Protect the Deck Mechanism.**
Do not insert any foreign objects into the slot of this unit.
- Do not disassemble or modify the unit.**
Do not disassemble, modify the unit or attempt to repair the product yourself. If the product needs to be repaired, consult your dealer or an authorized Panasonic Servicenter.
- Do not use the unit when it is out of order.**
If the unit is out of order (no power, no sound) or in an abnormal state (has foreign objects in it, is exposed to water, is smoking, or smells), turn it off immediately and consult your dealer.
- The remote control unit should not lie about in the car.**
If the remote control unit lies about, it could fall on the floor while driving, get wedged under the brake pedal, and lead to a traffic accident.
- Refer fuse replacement to qualified service personnel.**
When the fuse blows out, eliminate the cause and have it replaced with the fuse prescribed for this unit by a qualified service engineer. Incorrect replacement of the fuse may lead to smoke, fire, and damage to the product.

- This manual uses pictographs to show you how to use the product safely and to alert you to potential dangers resulting from improper connections and operations. The meanings of the pictographs are explained below. It is important that you fully understand the meanings of the pictographs in order to use this manual and the system properly.

Observe the following warnings when installing.

- Disconnect the lead from the negative (-) battery terminal before installation.**
Wiring and installation with the negative (-) battery terminal connected may cause electrical shock and injury due to a short circuit.
Some cars equipped with the electrical safety system have specific procedures of battery terminal disconnection.
FAILURE TO FOLLOW THE PROCEDURE MAY LEAD TO THE UNINTENDED ACTIVATION OF THE ELECTRICAL SAFETY SYSTEM RESULTING IN DAMAGE TO THE VEHICLE AND PERSONAL INJURY OR DEATH.
- Never use safety-related components for installation, grounding, and other such functions.**
Do not use safety-related vehicle components (fuel tank, brake, suspension, steering wheel, pedals, airbag, etc.) for wiring or fixing the product or its accessories.
- Installing the product on the air bag cover or in a location where it interferes with airbag operation is prohibited.**
- Check for piping, gasoline tank, electric wiring, and other items before installing the product.**
If you need to open a hole in the vehicle chassis to attach or wire the product, first check where the wire harness, gasoline tank, and electric wiring are located. Then open the hole from outside if possible.
- Never install the product in a location where it interferes with your field of vision.**
- Never have the power cord branched to supply other equipment with power.**
- After installation and wiring, you should check the normal operation of other electrical equipment.**
The continuation of their using in abnormal conditions may cause fire, electrical shock or a traffic accident.
- In the case of installation to an airbag-equipping car, confirm warnings and cautions of the vehicle manufacturer before installation.**
- Make sure the leads do not interfere with driving or getting in and out of the vehicle.**
- Insulate all exposed wires to prevent short circuiting.**

Caution

Observe the following cautions when using this unit.

- Keep the sound volume at an appropriate level.**
Keep the volume level low enough to be aware of road and traffic conditions while driving.
- Do not insert or allow your hand or fingers to be caught in the unit.**
To prevent injury, do not get your hand or fingers caught in moving parts or in the disc slot. Especially watch out for infants.
- This unit is designed for use exclusively in automobiles.**
- Do not operate the unit for a prolonged period with the engine turned off.**
Operating the audio system for a long period of time with the engine turned off will drain the battery.
- Do not expose the unit to direct sunlight or excessive heat.**
Otherwise these will raise the interior temperature of the unit, and it may lead to smoke, fire, or other damage to the unit.
- Do not use the product where it is exposed to water, moisture, or dust.**
Exposure of the unit to water, moisture, or dust may lead to smoke, fire, or other damage to the unit. Make especially sure that the unit does not get wet in car washes or on rainy days.

Observe the following cautions when installing.

- Refer wiring and installation to qualified service personnel.**
Installation of this unit requires special skills and experience. For maximum safety, have it installed by your dealer. Panasonic is not liable for any problems resulting from your own installation of the unit.
- Follow the instructions to install and wire the product.**
Not following the instructions to properly install and wire the product could cause an accident or fire.
- Take care not to damage the leads.**
When wiring, take care not to damage the leads. Prevent them from getting caught in the vehicle chassis, screws, and moving parts such as seat rails. Do not scratch, pull, bend or twist the leads. Do not run them near heat sources or place heavy objects on them. If leads must be run over sharp metal edges, protect the leads by winding them with vinyl tape or similar protection.
- Use the designated parts and tools for installation.**
Use the supplied or designated parts and appropriate tools to install the product. The use of parts other than those supplied or designated may result in internal damage to the unit. Faulty installation may lead to an accident, a malfunction or fire.
- Do not block the air vent or the cooling plate of the unit.**
Blocking these parts will cause the interior of the unit to overheat and will result in fire or other damage.

- Do not install the product where it is exposed to strong vibrations or is unstable.**

Avoid slanted or strongly curved surfaces for installation. If the installation is not stable, the unit may fall down while driving and this can lead to an accident or injury.

- Installation Angle**

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 can be installed. Consult your dealer for further details.

- Wear gloves for safety. Make sure that wiring is completed before installation.**
- To prevent damage to the unit, do not connect the power connector until the whole wiring is completed.**
- Do not connect more than one speaker to one set of speaker leads. (except for connecting to a tweeter)**

Observe the following cautions when handling the battery for the remote control unit.

- Use only specified battery (CR2025).
- Match the polarity of the battery with the (+) and (-) marks in the battery case.
- Replace dead battery as soon as possible.
- Remove the battery from the remote control unit when not using it for an extended period of time.
- Insulate the battery (by placing them in a plastic bag or covering them with vinyl tape) before disposal or storage.
- Dispose of the battery according to the local regulations.
- Do not disassemble, recharge, heat or short the battery. Do not throw a battery into a fire or water.

In case of battery leakage

- Thoroughly wipe the battery liquid off the battery case and insert new battery.
- If any part of your body or clothing comes into contact with battery liquid, wash it with plenty of water.
- If battery liquid comes into contact with your eyes, wash them with plenty of water and get immediate medical attention.

Safety Information (continued)



Caution

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

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

Part 15 of the FCC Rules

FCC Warning:

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

For your safety, this system is designed not to see the moving picture while you are driving.

When connecting this unit to the front monitor (on-dash/in-dash):

- Park your car in a safe place and use the parking brake lever before seeing the moving picture.
- For your safety, you must ensure that the connection of the parking brake lead is correct. (→ Page 50)

Warning

When driving please enjoy sound only.

Panasonic welcomes you to our constantly growing family of electronic products owners. We endeavor to give you the advantages of precise electronic and mechanical engineering, manufactured with carefully selected components, and assembled by people who are proud of the reputation their work has built for our company. We know this product will bring you many hours of enjoyment, and after you discover the quality, value and reliability we have built into it, you too will be proud to be a member of our family.

Customer Services Directory

U.S.A.

Obtain Product Information and Operating Assistance; locate your nearest Dealer or Servicenter; purchase Parts and Accessories; or make Customer Service and Literature requests by visiting our Web Site at:

<http://www.panasonic.com/support>

or, contact us via the web at:

<http://www.panasonic.com/contactinfo>

You may also contact us directly at:

1-800-211-PANA (7262),

Monday-Friday 9 am-9 pm; Saturday-Sunday 10 am-7 pm, EST.

For hearing or speech impaired TTY users, TTY : 1-877-833-8855

Accessory Purchases:

Purchase Parts, Accessories and Instruction Books online for all Panasonic Products by visiting our Web Site at:

<http://www.pasc.panasonic.com>

or, send your request by E-mail to:

npcparts@panasonic.com

You may also contact us directly at:

1-800-332-5368 (Phone) 1-800-237-9080 (Fax Only) (Monday-Friday 9 am to 8 pm, EST.)

Panasonic Services Company

20421 84th Avenue South, Kent, WA 98032

(We accept Visa, MasterCard, Discover Card, American Express, and Personal Checks)

For hearing or speech impaired TTY users, TTY : 1-866-605-1277

Service in Puerto Rico

Panasonic Puerto Rico, Inc.

Panasonic Sales Company

Factory Servicenter:

Ave. 65 de Infantería, Km. 9.5, San Gabriel Industrial Park,

Carolina, Puerto Rico 00985

Phone (787) 750-4300, Fax (787) 768-2910

CANADA

WARRANTY SERVICE

For product operation and information assistance, please contact your Dealer or our Customer Care Centre at:

Telephone #: (905) 624-5505 Fax #: (905) 238-2360

Web: www.panasonic.ca

For product repairs, please contact one of the following:

• Your Dealer who will inform you of an authorized Servicentre nearest you.

• Our Customer Care Centre at (905) 624-5505 or www.panasonic.ca

• A Panasonic Factory Servicentre listed below:

Richmond, British Columbia

Panasonic Canada Inc.

12111 Riverside Way

Richmond, BC V6W 1K8

Tel: (604) 278-4211

Fax: (604) 278-5627

Calgary, Alberta

Panasonic Canada Inc.

6835-8th St. N. E. Calgary,

AB T2E 7H7

Tel: (403) 295-3955

Fax: (403) 274-5493

Mississauga, Ontario

Panasonic Canada Inc.

5770 Ambler Dr.

Mississauga, ON L4W 2T3

Tel: (905) 624-8447

Fax: (905) 238-2418

Lachine, Quebec

Panasonic Canada Inc.

3075, rue Louis A. Amos

Lachine, QC H8T 1C4

Tel: (514) 633-8684

Fax: (514) 633-8020

Limited Warranty

U.S.A.

PANASONIC CONSUMER ELECTRONICS COMPANY,
DIVISION OF PANASONIC CORPORATION OF NORTH AMERICA
One Panasonic Way, Secaucus, New Jersey 07094

PANASONIC SALES COMPANY,
DIVISION OF PANASONIC PUERTO RICO, INC.
Ave. 65 de infanteria, Km. 9.5, San Gabriel Industrial Park
Carolina, Puerto Rico 00985

PANASONIC AUTO PRODUCTS LIMITED WARRANTY

LIMITED WARRANTY COVERAGE

If your product does not work properly because of defects in materials and workmanship.

Panasonic Consumer Electronics Company or Panasonic Sales Company (collectively referred to as "the warrantor") will, for the length of the period indicated in the chart below, which starts with the date of original purchase ("warranty period"), at its option either (a) repair your product with new or refurbished parts, or (b) replace it with a new or refurbished product. The decision to repair or replace will be made by the warrantor.

Categories	Parts	Labor
Audio Components (except items listed below)	One (1) Year	One (1) Year
MXE Series Audio Components (except items listed below)	Two (2) Years	Two (2) Years
Speakers	One (1) Year	Not Applicable
Accessories (in exchange for defective items)	Ninety (90) Days	Not Applicable

During the "Labor" warranty period, there will be no charge for labor. During the "Parts" warranty period, there will be no charge for parts. You must carry-in or mail-in your product during the warranty period. If non-rechargeable batteries are included, they are not warranted. This warranty only applies to products purchased and serviced in the United States or Puerto Rico. This warranty is extended only to the original purchaser of a new product which was not sold "as is". A purchase receipt or other proof of the original purchase date is required for warranty service.

CARRY-IN OR MAIL-IN SERVICE

For Carry-In or Mail-In Service in the United States, call 1-800-211-PANA (7262) or visit

Panasonic Web Site: <http://www.panasonic.com>

For assistance in Puerto Rico, call Panasonic Sales Company (787)-750-4300 or fax (787)-768-2910.

LIMITED WARRANTY LIMITS AND EXCLUSIONS

This warranty ONLY COVERS failures due to defects in materials and workmanship, and DOES NOT COVER normal wear and tear or cosmetic damage. The warranty ALSO DOES NOT COVER damages which occurred during shipment, failures which are caused by products not supplied by the warrantor, failures which result from accident, misuse, abuse, neglect, mishandling, misapplication, alteration, faulty installation, set-up adjustment, maladjustment of consumer control, improper maintenance, improper antenna, inadequate signal reception or pickup, power line surge, improper voltage supply, lightning, modification, commercial use (such as use in hotels, offices, restaurants, or other business uses) or rental use of the product, or service by anyone other than the technician from Factory Servicenter or other authorized service centers, or damage that is attributable to acts of God.

THERE ARE NO EXPRESS WARRANTIES EXCEPT AS LISTED UNDER "LIMITED WARRANTY COVERAGE". THE WARRANTOR IS NOT LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF THIS PRODUCT, OR ARISING OUT OF ANY BREACH OF THIS WARRANTY. (As examples, this excludes damages for lost time, cost of having someone remove or re-install an installed unit if applicable, travel to and from the servicer, and loss of media, data or other memory contents. The items listed are not exclusive, but are for illustration only.) **ALL EXPRESS AND IMPLIED WARRANTIES, INCLUDING THE WARRANTY OF MERCHANTABILITY, ARE LIMITED TO THE PERIOD OF THE LIMITED WARRANTY.**

Some states do not allow the exclusion or limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the

exclusions may not apply to you.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state. If a problem with this product develops during or after the warranty period, you may contact your dealer or Servicenter. If the problem is not handled to your satisfaction, then write to warrantor's Consumer Affairs Department at the addresses of the warrantor.

PARTS AND SERVICE WHICH ARE NOT COVERED BY THIS LIMITED WARRANTY ARE YOUR RESPONSIBILITY.

Customer's Record

Model

No. _____

Serial

No. _____

Dealer's

No. _____

Code

No. _____

Dealer's

Address _____

Date of

Purchase _____

CANADA

Panasonic Canada Inc.
5770 Ambler Drive, Mississauga Ontario L4W 2T3

PANASONIC PRODUCT LIMITED WARRANTY

Panasonic Canada Inc. warrants this product to be free from defects in materials and workmanship and agrees to remedy any such defect for a period as stated below from the date of original purchase.

CAR AUDIO PRODUCT – ONE (1) YEAR, PARTS AND LABOUR

(The labour to install or remove the product is not warranted)

LIMITATIONS AND EXCLUSIONS

This warranty does not apply to products purchased outside Canada or to any product which has been improperly installed, subjected to usage for which the product was not designed, misused or abused, damaged during shipping, or which has been altered or repaired in any way that affects the reliability or detracts from the performance, nor does it cover any product which is used commercially. Dry cell batteries are also excluded from coverage under this warranty.

This warranty is extended to the original end user purchaser only. A purchase receipt or other proof of the original purchase date is required before warranty service is performed.

THIS EXPRESS, LIMITED WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT WILL PANASONIC CANADA INC. BE LIABLE FOR ANY SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES.

In certain instances, some jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, or the exclusion of implied warranties, so the above limitations and exclusions may not be applicable.

IF YOU SHIP THE PRODUCT TO A SERVICENTRE

Carefully pack and send prepaid, adequately insured and preferably in the original carton.

Include details of the defect claimed, and proof of the date of original purchase.

Accessories

Operating Instructions (YEFM285697)	Owners Information Card	Lock Cancel Plate Q'ty: 2	Mounting Bolt Q'ty: 1	Rubber Bushing Q'ty: 1	Clip Connector Q'ty: 1
Instruction kit Q'ty: 1 set		Installation kit (YEP0FZ5724)			
RCA Cord (YEAJ071740) Q'ty: 1	Power Connector (YEAJ012851) Q'ty: 1	Mounting Collar (YEFX0217263) Q'ty: 1	Removable Face Plate Case (YEFA131839) Q'ty: 1	Trim Plate (YEFC05652) Q'ty: 1	Remote Control Unit (YEFX9995584) Q'ty: 1
Battery (CR2025) Q'ty: 1					

Note:

- The number in parentheses 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 and Mounting Collar are mounted on the main unit at shipment.

Features

■ DVD video, Video CD Playback

You can enjoy watching DVDs and VCDs if the optional monitor (CY-VH9300U or CY-V7100U) is connected. (DVD/VCD Player → Page 28)

■ MP3 Playback from CD-R/RW

(MP3 Player → Page 24)

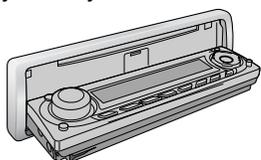
***This unit is not compatible with WMA file.**

■ DVD-R, DVD-RW Playback

(→ Page 10, 47 for details)

■ Fully Motorized Face Plate

A touch is all it takes to slide the face plate down for access to the disc slot. A three-stage tilt function permits viewing angle to be adjusted to 15, 25 or 35 degrees for optimum display visibility.



■ XM Satellite Radio Option

You can connect the optional XM receiver (XMD1000) with optional digital Adapter (XMDPAN100). For details, refer to the operating instructions for the XM receiver. (XM Satellite Radio → Page 20)

- Toll free number
XM Tuner P/N: XMD1000
Call 1-800-XM-RADIO(96-72346)
Extension cord P/N: XMDPAN100
Call 1-800-942-TERK(8375)

About XM

The direct satellite-to-receiver broadcasting technology is used to provide listeners with crystal clear sound smoothly from coast to coast. XM is over 130 channels of sheer variety: digital-quality music, news, sports, comedy, traffic & weather, talk, children's programs, and more. The XM name and related logos are trademarks of XM Satellite Radio Inc.

■ CD Changer Option

You can connect the optional Panasonic CD changer unit (CX-DP880). For details, refer to the operating instructions for the CD changer unit.

Note:

- This unit does not support a DVD changer due to shortage of displayable digit number or other causes.

■ Digital Audio Output

Digital audio output terminal for upgrading to Dolby Digital and dts surround [Requires separately sold optical cable (CA-LRD60) and digital surround processor (CY-AC300EX)].

■ SQ (Sound Quality)

You have 6 preset modes (FLAT, ROCK, POP, VOCAL, JAZZ, CLUB). You can customize your setting for these (except FLAT) and save them for instant recall.



SQ3 (3-Band Sound Quality)

Center frequency and level are adjustable in each of 3 bands. This lets you fine-tune sound quality for each genre to suit car-interior acoustics and your personal preferences. (→ Page 34)



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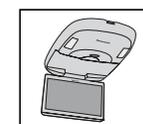
System Upgrade

□ Optional system (Example)

This unit can be combined with other components like shown below. For more details, refer to the operating instructions for the connected devices.

Preparation:

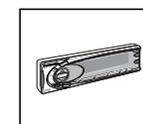
- The video signal setting of this unit ("TV Type" → Page 42) should be the same as the input signal setting (NTSC/PAL) of the monitor to be connected. Otherwise, pictures appear incorrectly.



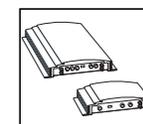
Over Head Monitor: CY-VH9300U



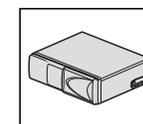
Headrest Monitor: CY-V7100U



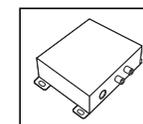
Digital Surround Processor: CY-AC300EX



External Power Amplifier



CD Changer: CX-DP880



XM receiver: XMD1000*

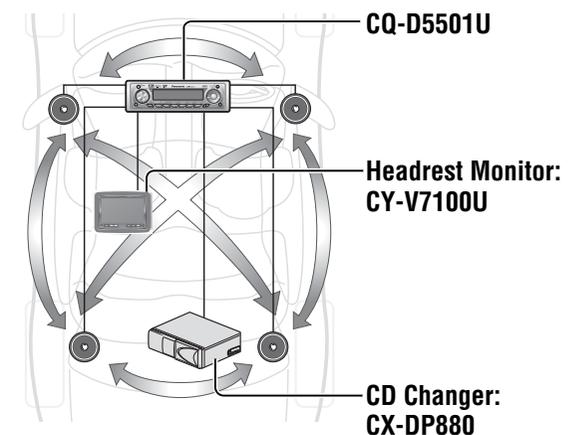
*manufactured by XM Satellite Radio

Note:

- A CD changer, an XM receiver and AUX cannot be connected at the same time.

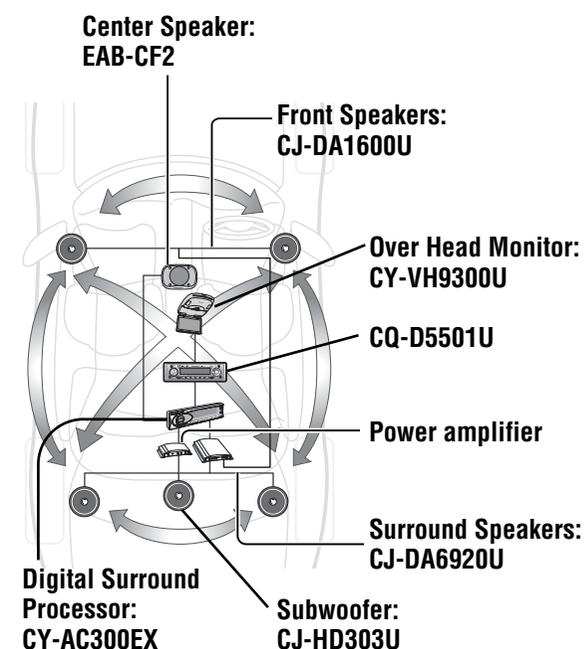
□ Basic System

Just connecting a monitor display and CD Changer with this unit.



□ 5.1-channel Surround System

This unit has an optical digital output. To connect the optional digital surround processor (CY-AC300EX) with this unit, you can build the 5.1-channels surround system in order to play DVD software in a way that creates "You are here" feel in a car.



Discs that can be Played Back

Disc Type

DISC	DVD	VCD (Video CD)	CD	CD-R/RW
Mark/logo				
Disc Size	12 cm {5"} / 8 cm {3"}			
Video Format	NTSC / PAL			
Audio Format	LPCM, MPEG1, MPEG2, Dolby Digital	LPCM (CD-DA*), MPEG1	LPCM (CD-DA*), MP3	
Region No.	1, ALL			

*CD-DA : A general music CD format.

Note:

- About CD-Rs and CD-RWs, refer to "Notes on CD-Rs/RWs, DVD-Rs/RWs". (→ Page 47)
- Some copy-protected music CDs are not playable.
- Even if you play a dts DVD or a dts CD, analog sound cannot be reproduced. (Only digital output comes out)

Notes on DVD-Rs/RWs

- Only video formatted discs are playable. **Discs in the video recording (VR) format are unplayable.**
- **Unfinalized discs are unplayable.**
- Some discs are unplayable depending on the disc itself, device, drive and software that are used for disc recording.

Discs not supported

The following discs are not played back on this product.

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

Symbols used on jackets

(Examples of such symbols include)

- : Number of subtitle languages
- : Number of audio tracks
- : Number of angles

The numbers indicate the number of languages, tracks, angles, etc., recorded on the disc.

Screen size (H:V aspect ratio)

- : 4:3 standard size
- : Letterbox (→ Page 43, 45)
- 16:9 wide size
- : Playback in letterbox format on a standard screen (4:3).
- : Playback in (pan and scan) (→ Page 43, 45) format on a standard screen (4:3).

Note:

- The size of the image that is displayed on the screen depends on the screen mode ("TV Display" → Page 42), and on the screen size for the content on the disc.

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 does not play the disc.

The Region number for this product is "1" or "ALL".

Example:

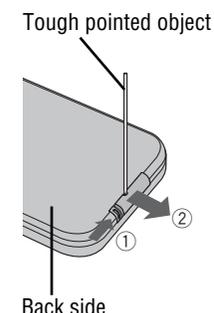


Preparation

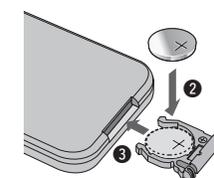
Remote Control Unit

Battery Replacement

- Remove the battery holder with the remote control unit placed on a flat surface.
 - Stick your thumbnail into the groove, and push the holder in the direction of the arrow at the same time.
 - Pull it out in the direction of the arrow using a tough pointed object.



- Put a battery in the case with (+)-side facing up.
- Put the case back.



Warning

- Keep batteries away from children to avoid the risk of accidents. If an infant ingests a battery, please seek immediate medical attention.

Caution

- Remove and dispose of an old battery immediately.
- Do not disassemble, heat or short a battery. Do not throw a battery into a fire or water.
- Follow local regulations when disposing of a battery.
- Improper use of a battery may cause overheating, an explosion or ignition, resulting in injury or a fire.

Note:

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

Main Unit

Cancellation of demonstration

The demonstration message appears for initial use.

- Set your car's ignition switch to the ACC or ON position. The demonstration screen appears.
- Press [DISP]. The demonstration screen is canceled, and no more appears.

Note:

- If you would like to turn on the power and make the demonstration message appear, press and hold [SRC] (PWR) for more than 4 seconds.



[SRC] (PWR: Power)
[DISP] (Display) [< >] (Hour/minute adjustment)

TV Type setting

Refer to "Optional system (Example)" (→ Page 9) and "TV Type" (→ Page 42).

Clock Setting

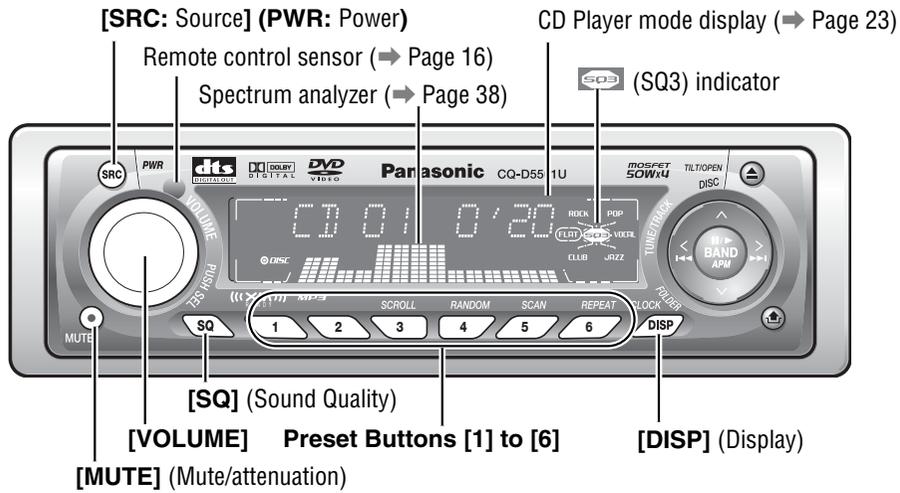
The 12-hour system is used for the clock.

- Press [SRC] (PWR) to turn on the power.
- Press [DISP].
 Clock display
- Press and hold [DISP] for more than 2 seconds.
 Hour blinks
- Adjust the hour.
 Hour entered
 [>]: put forward hour.
 [<]: put back hour.
- Press [DISP].
 Minute blinks
- Adjust the minute.
 Minute entered
 [>]: put forward minute.
 [<]: put back minute.
- Press [DISP].
 Completed

Note:

- "ADJUST" is displayed before adjusting the clock.
- Press and hold [>] or [<] to change numbers rapidly.

General (Main Unit)



Power

Set your car's ignition switch to the ACC or ON position.

ON : Press [SRC] (PWR).

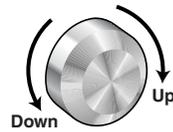


OFF : Press and hold [SRC] (PWR) until you hear a beep (approximately 1 second), then release it.

Note:

- When the ignition switch is set to ON, the face plate is tilted to secure their former positions.
- If you turn the key to the ACC OFF position during the security function is active, the security message appears with a warning alarm. (Default: SLED ON) (→ Page 38 about Security Function setting)

Volume



Default: 18
Setting range: 0 to 40

Note:

- The volume level can be set independently for each source. (For radio, one volume setting for AM, one volume setting for all FMs)

Mute/Attenuation



ON : Press [MUTE].

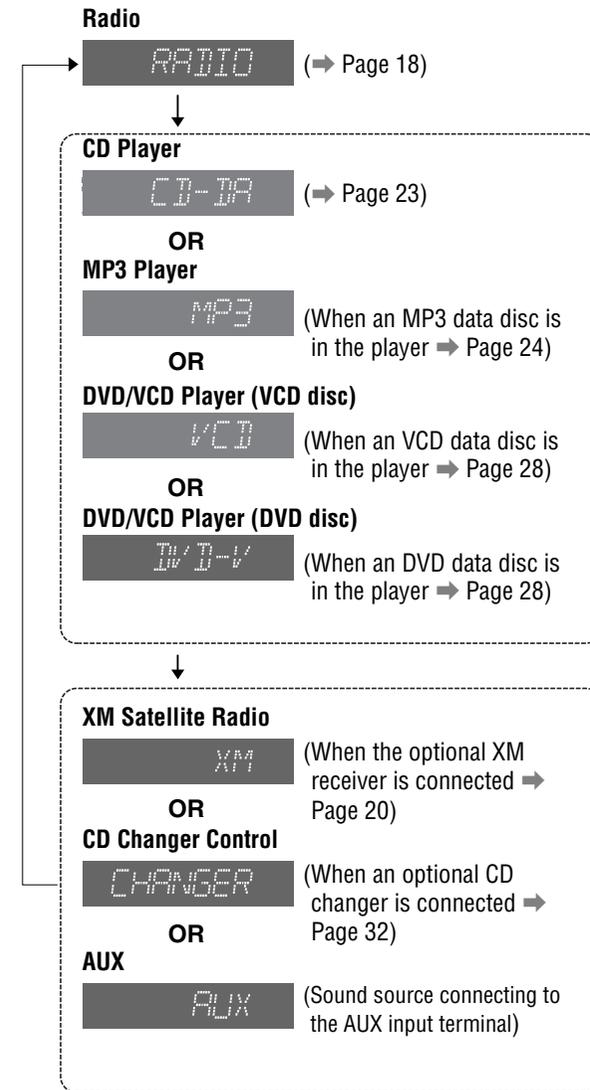
OFF : Press [MUTE] again.

You can select mute or attenuation. (→ Page 38)



Source

Press [SRC] to change the source.



Note:

- AUX cannot be used when the CD changer or XM receiver is connected to the DIN connector.

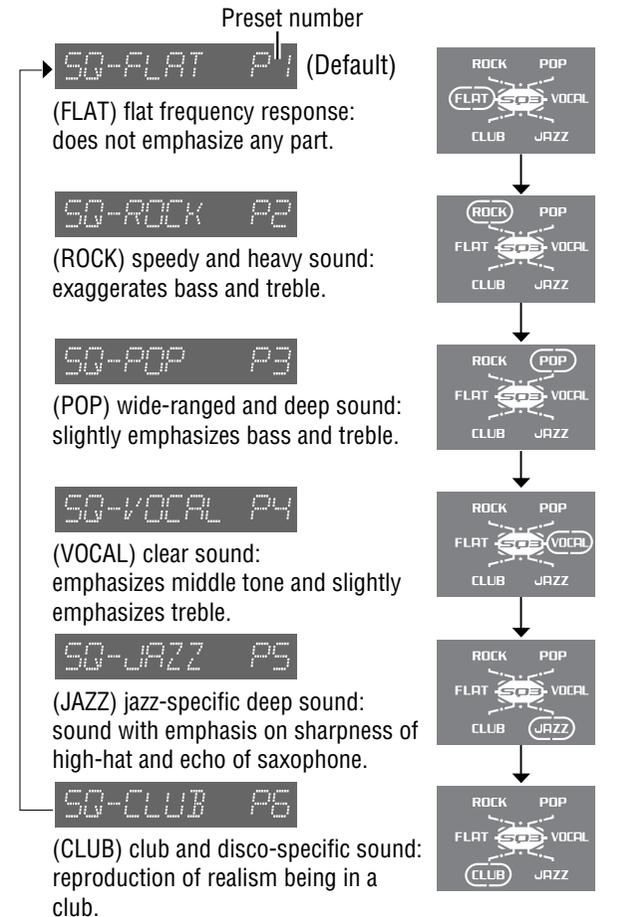
SQ (Sound Quality)

You have 6 preset modes (FLAT, ROCK, POP, VOCAL, JAZZ, CLUB). You can customize your setting for these (except SQ-FLAT) and save them for instant recall.

SQ3 (3-Band Sound Quality)

Center frequency and level are adjustable in each of 3 bands. This lets you fine-tune sound quality for each genre to suit car-interior acoustics and your personal preferences. (→ Page 34)

Press [SQ] to select the sound type as follows:



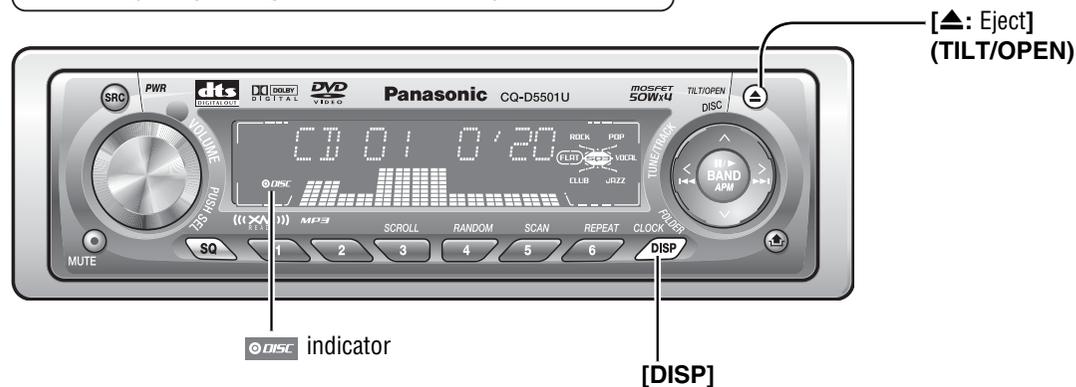
Press [DISP] to return to the regular mode.

Note:

- After pressing [SQ] on the main unit, you can also select a sound type by pressing the preset buttons [1] to [6].

General (Main Unit) (continued)

Caution
 • Do not pinch your finger or hand in the face plate.



Open the Face Plate

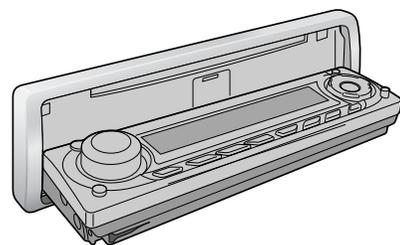
Press [▲] (OPEN).

Note:

- The face plate automatically closes after a warning alarm sounds if no operation is performed for approximately 20 seconds.
- When a disc is already loaded ([DISC] lights), the disc will be ejected after the face plate fully opens. (Disc Eject → Page 22)

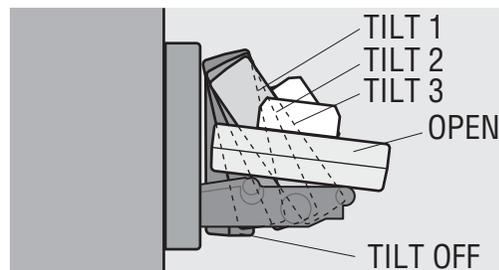
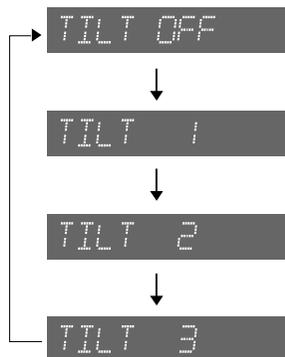
Close the Face Plate

Press [▲] (OPEN).



Face Plate Angle (Tilt)

Press and hold [▲] (TILT) until you hear a beep (approximately 1 second) from the speaker output, then release it. Set the face plate to the position at which it is easy to read what is on the display. Each time the above operation is repeated, the face plate angle changes in the sequence shown below.

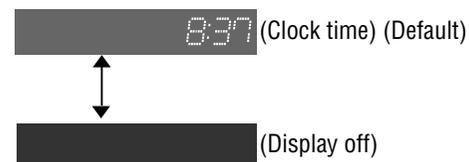


Note:

- The positions specified at “Face Plate Angle (Tilt)” are memorized even after the following operations.
 - Open/close
 - ACC on/off

Clock Display (at Power off)

When the power of the unit is set to OFF, press [DISP].



When the power is set to ON, refer to the description for each source mode.

General (Remote Control Unit)

General

In this manual, the pictographs shown below are used to indicate compatible types of discs and operating units.

- Discs** : DVD Video : VCD (Video CD)
 : CD : CD-R/RW's containing MP3 files

[SRC]
 • Toggles power on/off.
 • Selects a source.

[MENU]
 • Shows the menu screen.

[0] to [9]
 • Sets the language code.

[OSD] (On-Screen Display)
 • Displays information about each source on the screen.

[MUTE]
 • Mutes the sound temporarily.

[ENTER]
 • Determines an operation or item.

[VOL]
 • Adjusts the sound volume.

[^][v]
 • Selects (vertically) or adjusts an operation or item.

[<][>]
 • Selects (horizontally) or adjusts an operation or item.

Discs (DVD/VCD/CD/MP3)

- [■] (STOP)**
 • Stops playback.
- [||] (PAUSE)**
 • Pause.
- [|||]**
 • Frame to Frame Play.
- [▶] (PLAY)**
 • Playback.
- [◀◀] [▶▶]**
 • Goes to the beginning.
 • Chapter/track selection.
 • Fast forward/fast reverse.
- [◀◀] [▶▶]**
 • Goes to the beginning.
 • File selection.
- [▶▶]**
 • Slow playback.
- [RET] (RETURN)**
 • Return to the previous display.
 • Input the number again.
 • Displays the video CD's menu.
- [MENU] (TITLE)**
 • Displays the DVD menu. (Operations vary according to the disc.)
 • Displays the Title menu. (Operations vary according to the disc.)

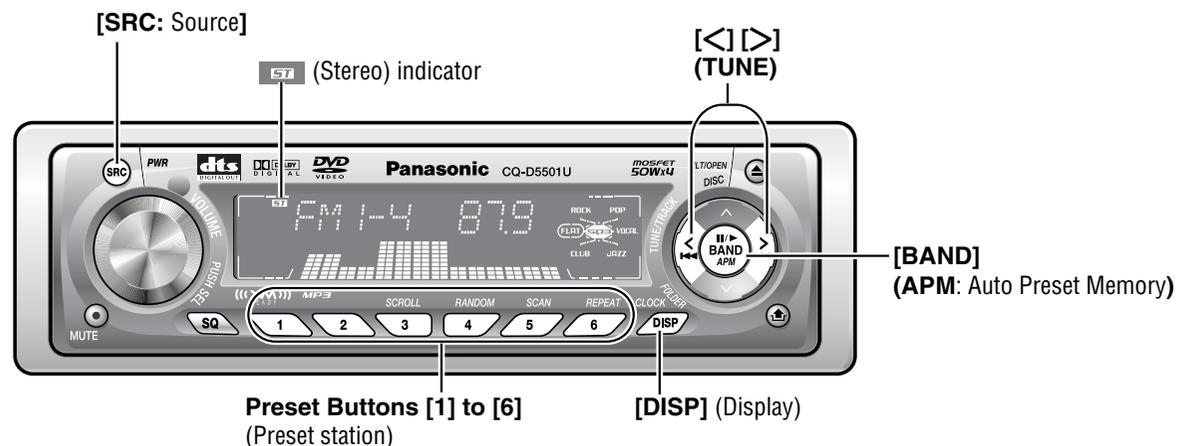
[^][v][<][>]
 • Selects an operation or item.

[ENTER]
 • Determines an operation or item.

[^][v]
 • Selects a folder.
 • Folder up/down.

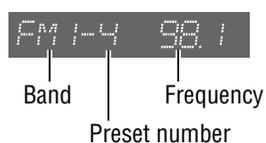
[GRP] (Group) (TRACK) (TITLE/CHAPTER)
 • Direct title/chapter selection.
 • Direct track selection.
 • Direct folder/file selection.

- [0] to [9]**
 • Selects an item on the menu.
- [0] to [9]**
 • Direct title/chapter selection.
 • Direct track selection.
 • Direct folder/file selection.
- [1] (SUBTITLE)**
 • Switches the subtitle language.
- [2] (AUDIO)**
 • Switches the audio language.
- [2] (AUDIO)**
 • Switches between stereo and monaural sound.
- [3] (ANGLE)**
 • Switches the angle.
- [4] (RANDOM)**
 • Random play.
- [5] (SCAN)**
 • Scan play.
- [6] (REPEAT)**
 • Repeat play.
- [0] (DRC)**
 • Selects a range of dynamic range compression.



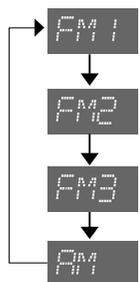
1 Radio Mode

Press [SRC] to select the radio mode.



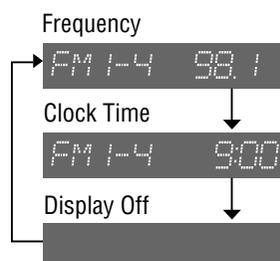
2 Band

Press [BAND].



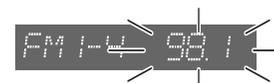
Display Change

Press [DISP] to change the display as follows.



3 Tuning

[>]: Higher frequency
[<]: Lower frequency
Press and hold [>] or [<] for more than 0.5 seconds, then release it. Seeking will start.



Note:

- To stop scanning, press one of the buttons from [1] to [6].

Station Preset

Up to 6 stations can be stored in each of the FM1, FM2, FM3 and AM band selections.

Note:

- New stations overwrite existing saved stations after these procedures.

Warning

- To ensure safety, never attempt to preset stations while you are driving.

Auto Preset Memory (APM)

With this operation, stations with good receiving conditions can be automatically stored in the preset memory.

- Select a band. (→ Previous page)
- Press and hold [BAND] (APM) for more than 2 seconds.

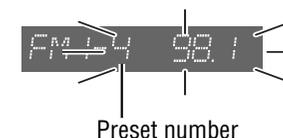
6 stations with first to 6th highest in signal strength will be preset to each band.

Once set, the preset stations are sequentially scanned for 5 seconds each. (scanning)

Manual Preset Memory

With this operation, a station can be manually stored in the preset memory.

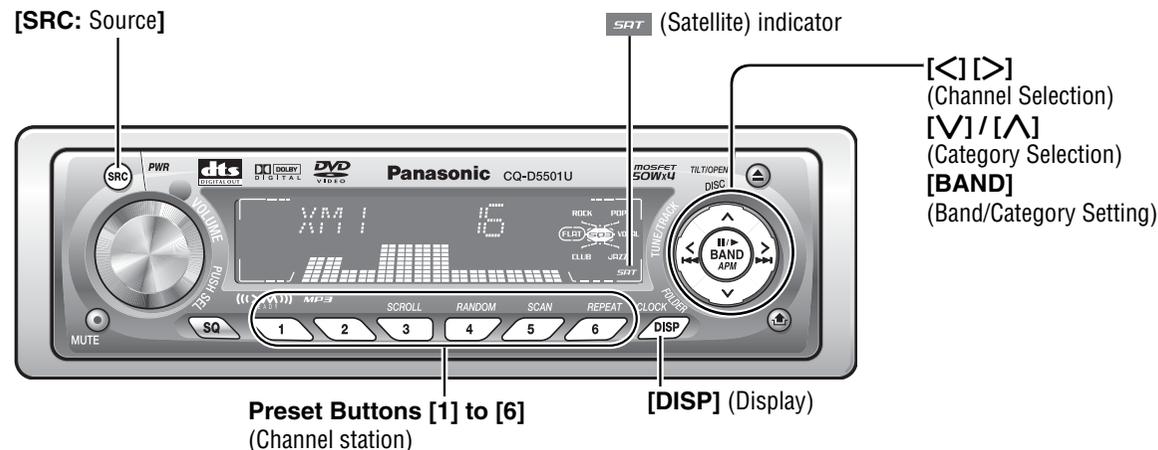
- Select a band and frequency. (→ Previous page)
- Press and hold one of the preset buttons from [1] to [6] until the display blinks once.



Preset Station Calling

- Select a band. (→ Previous page)
- Press one of the preset buttons from [1] to [6].

XM Satellite Radio

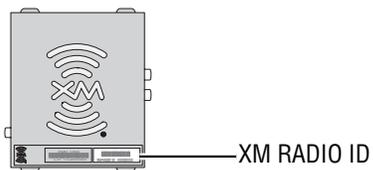


- Preparation:**
- Connect the optional XM receiver (XMD1000) with optional Digital Adapter (XMDPAN100).

Getting Started

It is required to sign up to become an XM Satellite Radio subscriber. After checking your XM Satellite Radio ID, sign up on the XM's website or by calling them.

- 1 Check of XM Satellite Radio ID
 - Write down the ID indicated on the lower right of your XM receiver (XMD1000).



- Check the ID shown by tuning your XM Radio to channel 0. (Refer to "Channel Selection" on this page.)



- 2 Activate the XM Satellite Radio
 - Select either of the below to sign up.
 - Web site: <http://www.xmradio.com/activation>
 - Phone number: 1-800-852-9696

1 XM Satellite Radio Mode

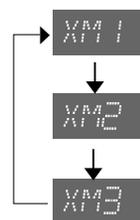
Press [SRC] to select the XM Satellite Radio mode.



- Note:**
- "LOADING" is displayed when it takes more than 2 seconds to receive the XM Satellite Radio.

2 Band

Press [BAND].



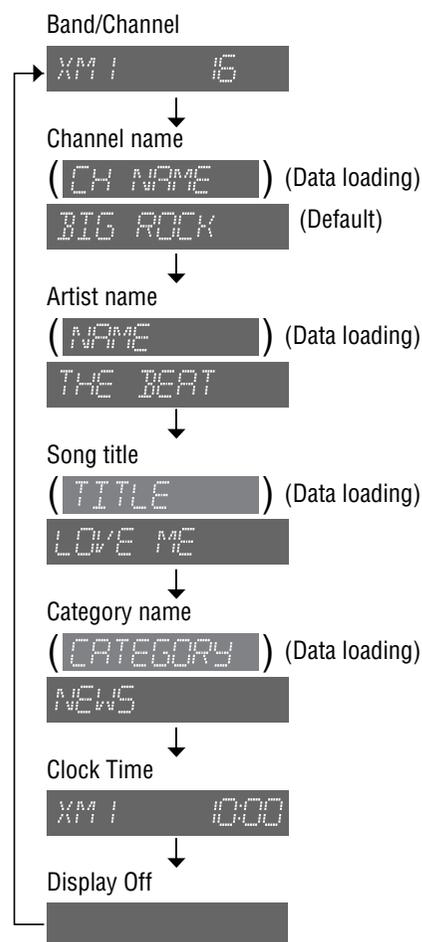
3 Channel Selection

[>]: Higher channel
[<]: Lower channel

- Note:**
- Channel selection is not available during the reception of channel 1 with category ON. To receive other channels, set the category to OFF or switch to another category. (⇒ Next page)

Display Change

Press [DISP] to change the display as follows.



- Note:**
- "UPDATING" is displayed when channel information is updated.

Channel Preset

Up to 6 channels can be stored in each of the XM1, XM2 and XM3 band selections.

With this operation, a channel can be manually stored in the preset memory.

- 1 Select a band and channel. (⇒ Previous page)
- 2 Press and hold one of the preset buttons from [1] to [6] until the display blinks once.

- Note:**
- New channels overwrite existing saved channel after this procedure.

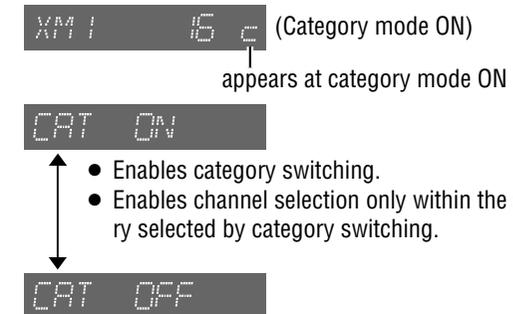
Preset Channel Calling

- 1 Select a band. (⇒ Previous page)
- 2 Press one of the preset buttons from [1] to [6].

- Note:**
- Because preset memory setting is performed with Service IDs in each channel, a channel may switch to another that has been stored under the same Service IDs when calling up a preset channel. However, broadcasting contents are the same as what the stored channel provides.

Category Setting

Press and hold [BAND] for more than 2 seconds to switch category mode ON or OFF.



- Enables category switching.
- Enables channel selection only within the category selected by category switching.

Category Selection

- 1 Press [^] or [V] to display the category name. (CAT ON)
- 2 Press [^] or [V] while the category name is displayed to select a category. Seeking will start.

Direct Channel Selection

(Only for remote control unit)

Example: Channel number 5



- 1 Press [GRP].
- 2 Press [5]
- 3 Press [ENTER].

- Note:**
- When a channel is selected, Category Setting is turned off.
 - The previous screen reappears if a nonexistent channel is selected.
 - "OFF AIR" is displayed and the previous screen reappears in a few seconds if an off-the-air channel is selected.

Before Disc Playback

Caution

- Do not use irregularly shaped discs.
- Do not use discs that have a seal or label attached.
- To avoid damaging the face plate, do not push it down or place objects on it while it is open.
- Do not pinch your finger or hand in the face plate.
- Do not insert foreign objects into the disc slot.

Note:

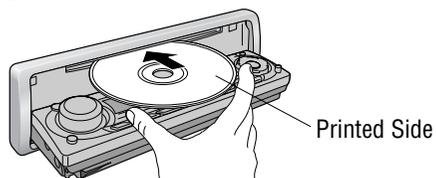
- Refer to "Discs that can be Played Back". (⇒ Page 10)
- Refer to the section on "Notes on MP3" (⇒ Page 26) and "Notes on Discs" (⇒ Page 47).
- The power will be turned on automatically when a disc is loaded.
- A disc which has both CD-DA data and MP3 data on it may not be played back normally.

Disc Insert

- 1 Press **[▲] (OPEN)**.
When a disc is already loaded (**DISC** lights), the disc will be ejected after the face plate fully opens.

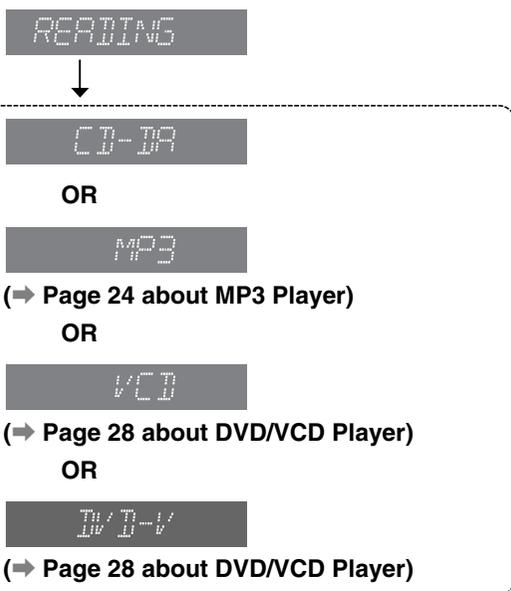


- 2 Insert a disc.



Note:

- It may take some time to start playing.
- Playback will start automatically after recognizing the data of the loaded disc.



Disc Eject

- 1 Press **[▲] (OPEN)**.
The disc will be ejected after the face plate fully opens.
- 2 Take the disc out.
- 3 Press **[▲] (OPEN)** to close the face plate.

Note:

- The face plate is automatically closed after a warning alarm sounds if no operation is performed for approximately 20 seconds.

For DVDs

When you select the DVD source for the first time since turning the key to ACC ON, the following message appears for 7 seconds during which you can only perform power off and disc ejection.

WARNING :

NOT FOR USE WHERE VIDEO MONITOR IS VISIBLE TO DRIVER TO AVOID RISK OF SERIOUS INJURY OR POSSIBLE VIOLATION OF LAWS

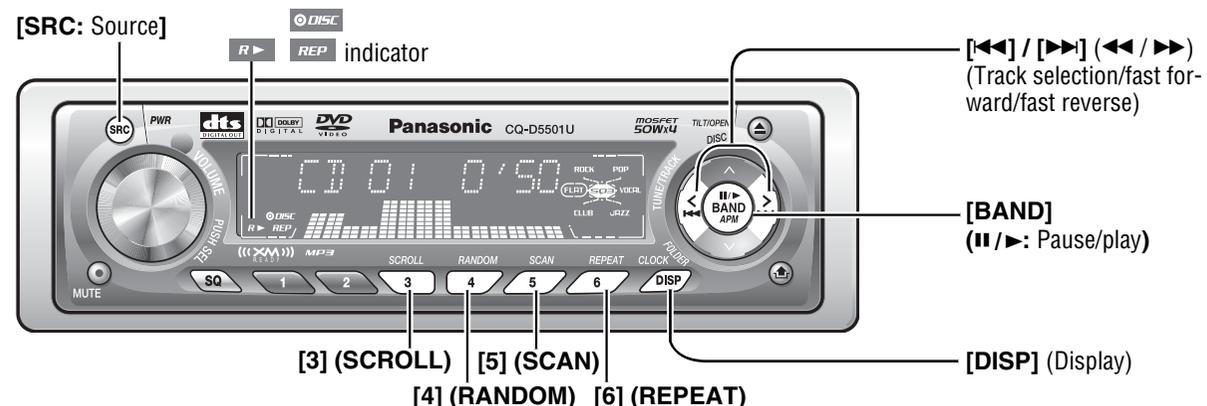
OSD (On-Screen Display)

(Only for remote control unit)

You can set up the optional monitor to display or hide the following information: title/artist name for CDs, album/title/artist name for MP3, playtime for VCDs and title/chapter/playtime for DVDs.

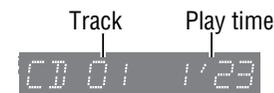
Press **[OSD]** to switch the OSD text displays. (⇒ Page 31)

CD Player

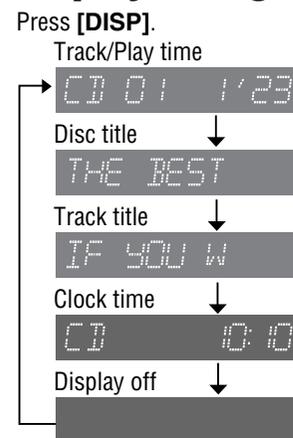


When CD is in the player

Press **[SRC]** to select the CD player mode and playback starts.



Display Change



Note:

- "NO TEXT" is displayed when there is no information on the disc.
- To have another circle scroll while a title is displayed, press **[3] (SCROLL)**.

Track Selection

- [▶▶]**: Next track
- [◀◀]**: Beginning of the current track
For the previous track, press twice.

Fast Forward/Fast Reverse

Press and hold for more than 0.5 seconds.
Each time you press the button, the speed changes as follows.
Regular speed → 2 times → 5 times → 10 times → 20 times
[▶▶] (▶▶): Fast forward
[◀◀] (◀◀): Fast reverse
Press **[BAND] (|| / ▶)** to cancel.

Pause (|| / ▶)

Press **[BAND] (|| / ▶)**.



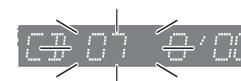
Press **[BAND] (|| / ▶)** again to cancel.

Random Play

All the available tracks are played in a random sequence.
Press **[4] (RANDOM)**.
[R▶] lights.
Press **[4] (RANDOM)** again to cancel.

Scan Play

The first 10 seconds of each track is played in sequence.
Press **[5] (SCAN)**.



Press **[5] (SCAN)** again to cancel.

Repeat Play

The current track is repeated.
Press **[6] (REPEAT)**.
[REP] lights.
Press **[6] (REPEAT)** again to cancel.

Direct Track Selection

(Only for remote control unit)

Example: Track number 10



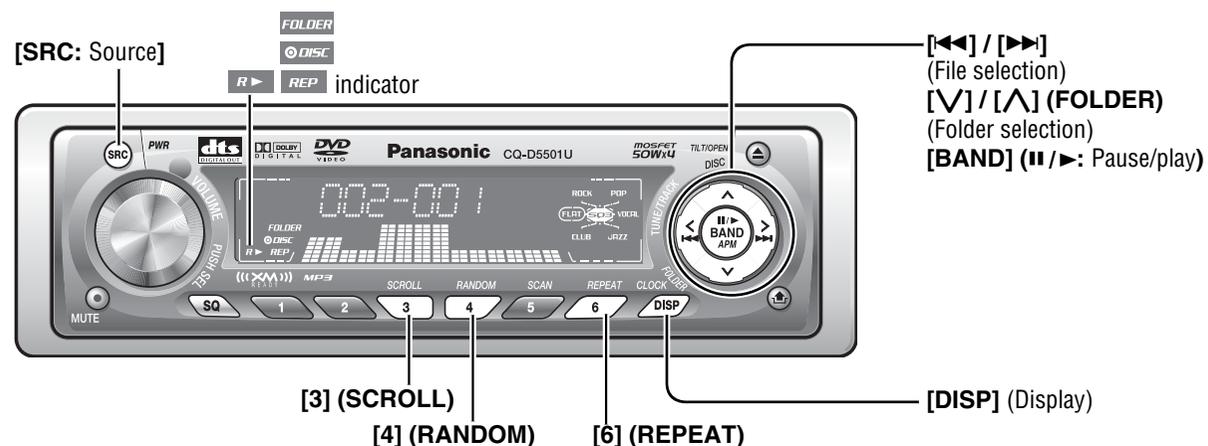
- 1 Press **[GRP]**.
- 2 Press **[1] [0]**. (Press **[RET]** to cancel.)
- 3 Press **[ENTER]**.

Note:

- To suspend direct selection, press **[DISP]**.
- Random, Scan and Repeat plays are canceled once **[ENTER]** is pressed.

MP3 Player

This unit is not compatible with WMA file.



When a disc is in the player

Press **[SRC]** to select the MP3 player mode and playback starts.

Note:

- "NO TEXT" is displayed when there is no information on the disc.
- To have another circle scroll while a title is displayed, press **[3] (SCROLL)**.

Folder Selection

[^]: Next folder
[v]: Previous folder

File Selection

[>>]: Next file
[<<]: Beginning of the current file
For the previous file, press twice.

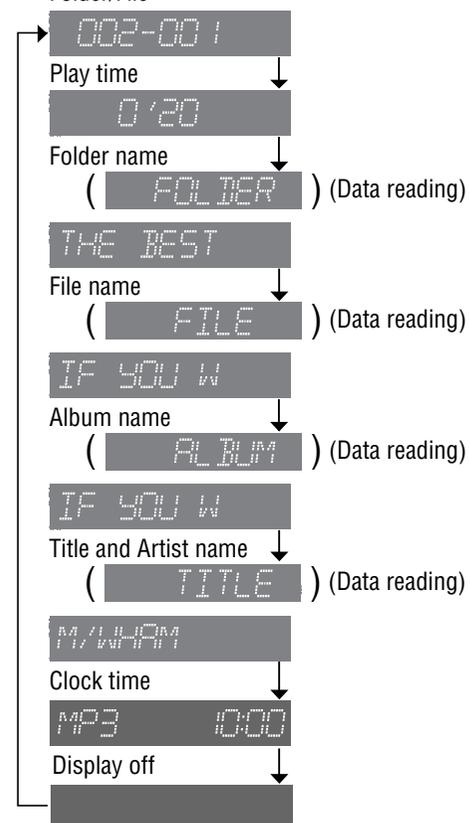
Pause (|| / >)

Press **[BAND] (|| / >)**.

Press **[BAND] (|| / >)** again to cancel.

Display Change

Press **[DISP]**.
Folder/File



Random Play

All the available files are played in a random sequence.

Press **[4] (RANDOM)**.

[R] lights.

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

Folder Random Play

All the files in the current folder are played in a random sequence.

Press and hold **[4] (RANDOM)** for more than 2 seconds.

[FOLDER] [R] light.

Press and hold **[4] (RANDOM)** again for more than 2 seconds to cancel.

Repeat Play

The current file is repeated.

Press **[6] (REPEAT)**.

[REP] lights.

Press **[6] (REPEAT)** again to cancel.

Folder Repeat Play

The current folder is repeated.

Press and hold **[6] (REPEAT)** for more than 2 seconds.

[FOLDER] [REP] light.

Press and hold **[6] (REPEAT)** again for more than 2 seconds to cancel.

Direct Selection

(Only for remote control)

Direct Folder Selection

Example: Folder number 10 (→ Page 27)



- ① Press **[GRP]** twice.
- ② Press **[1] [0]**. (Press **[RET]** to cancel.)
- ③ Press **[ENTER]**.

Direct File Selection

Example: File number 10



- ① Press **[GRP]**.
- ② Press **[1] [0]**. (Press **[RET]** to cancel.)
- ③ Press **[ENTER]**.

Note:

- To suspend direct selection, press **[DISP]**.
- Random, Folder Random, Repeat and Folder Repeat plays are canceled once **[ENTER]** is pressed.

Notes on MP3

What is MP3 ?

MP3 (MPEG Audio Layer-3) is the compression format of digital audio. It is developed by MPEG (Motion Picture Experts Group). Using this compression format, you can record the contents of about 10 music CDs on a single CD (This figure refers 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).

Note:

- MP3 encoding and CD writing software programs are not supplied with this unit.

Points to remember when making MP3 files

- High bit rate and high sampling frequency are recommended for high quality sound.
- Selecting VBR (Variable Bit Rate) is not recommended because playing time is not displayed properly and sound may be skipped.
- The playback sound quality differs depending on the encoding circumstances. For details, refer to the instructions of your own encoding software and writing software.
- It is recommended to set the bit rate to "128 kbps or more" and "fixed".

Caution

- **Never assign the ".mp3" file name extension to a file that is not in the MP3 format. This may not only produce noise from the speaker damage, but also damage your hearing.**

Display Information

Displayed items

- **CD-TEXT**
Disc title
Track title
- **MP3**
Folder name
File name
- **MP3 (ID3 tag)**
Album name
Title and Artist name

Displayable characters

- Displayable length of file name/folder name: within 64 characters.
- Name files and folders in accordance with the standard of each file system. Refer to the instructions of writing software for details.
- ASCII character set can be displayed.

ASCII character set

A to Z, a to z, digits 0 to 9, and the following symbols:
(space) ! " # \$ % & ' () * + , - . / : ; < = > ? @ [\] ^ _ ` { | } ~

Note:

- With some software in which MP3 format files have been encoded, the character information may not be displayed properly.
- Undisplayable characters and symbols will be converted into an asterisk (*).
- It is recommended that the length of the file name is less than 8 (excluding the file extension).

Recording MP3 files on a CD-media

- **You are recommended to minimize the chances of making a disc that contains both CD-DA files and MP3 files.**
- **If CD-DA files are on the same disc as MP3 files, the songs may not play in the intended order, or some songs may not play at all.**
- Do not record files other than MP3 files and unnecessary folder on a disc.
- The name of an MP3 file should be added by rules as shown in the following descriptions and also comply with the rules of each file system.
- The file extension ".mp3" should be assigned to each file depending on the file format.
- You may encounter trouble in playing MP3 files or displaying the information of MP3 files recorded with certain writing software or CD recorders.

- This unit does not have a play list function.
- Although Multi-session recording is supported, the use of Disc-at-Once is recommended.
- Packet writing software is not supported.

Supported file systems

ISO 9660 Level 1/Level 2, Apple Extension to ISO 9660, Joliet, Romeo

Note:

- Apple HFS, UDF 1.50, Mix CD and CD Extra are not supported.

Compression formats (Recommendation: "Points to remember when making MP3 files" on the previous page)

Compression method	Bit rate	VBR	Sampling frequency
MPEG 1 audio layer 3 (MP3)	32 k - 320 kbps	Yes	32, 44.1, 48 kHz
MPEG 2 audio layer 3 (MP3)	8 k - 160 kbps	Yes	16, 22.05, 24 kHz

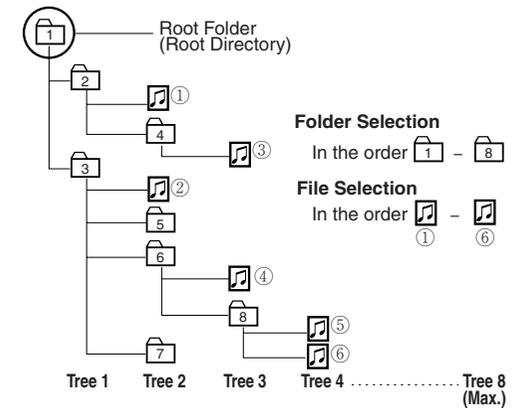
Folder selection order/file playback order

Maximum number of files/folders

- Maximum number of files: 999
- Maximum number of files in one folder: 255
- Maximum depth of trees: 8
- Maximum number of folders: 255 (Root folder is included.)

Note:

- This unit counts the number of folders irrespective of the presence or absence of an 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 name.



Copyright

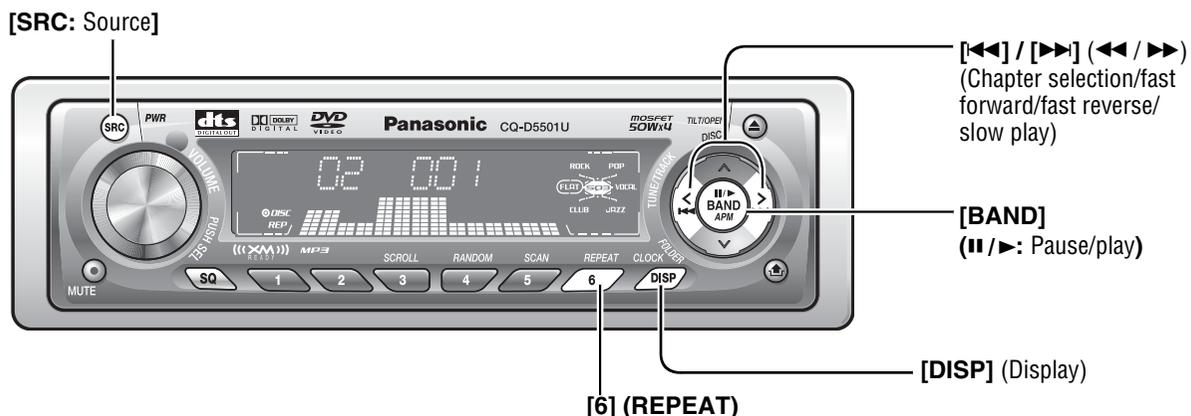
It is prohibited by copyright laws to copy, distribute and deliver copyrighted materials such as music without the approval of copyright holder except enjoying yourself personally.

No warranty

Above description complies with our investigations as of December 2004. It has no warranty for reproducibility and displayability of MP3.

DVD/VCD Player

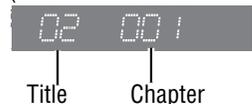
You can enjoy watching DVDs and VCDs if the optional monitor (CY-VH9300U or CY-V7100U) is connected.



When a disc is in the player

Press **[SRC]** to select the DVD/VCD player mode and playback starts. (If automatic start is not performed, press **[▶]** (PLAY) of the remote control, or try to operate it manually according to the menu screen of the disc.)

(When DVD disc is in the player)

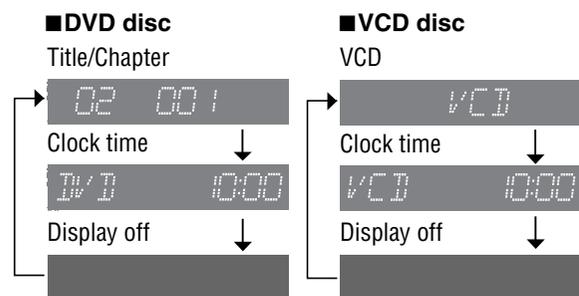


(When VCD disc is in the player)



Display Change

Press **[DISP]**.



Chapter Selection

[▶▶]: Next chapter
[◀◀]: Beginning of the current chapter
 For the previous chapter, press twice.

Fast Forward/Fast Reverse

Press and hold for more than 0.5 seconds.
 Each time you press the button, the speed changes as follows.
 Regular speed → 2 times → 5 times → 10 times → 20 times
[▶▶] (▶▶): Fast forward
[◀◀] (◀◀): Fast reverse
 Press **[BAND]** (II / ►) to cancel.

Pause (II / ►)

Press **[BAND]** (II / ►).



Press **[BAND]** (II / ►) again to cancel.

Slow play

Press and hold **[▶▶]** for more than 0.5 seconds during pausing.
 Press **[BAND]** (II / ►) again to cancel.

Repeat Play

The current chapter is repeated.

Press and hold **[6] (REPEAT)** for more than 2 seconds.
 light.
 Press and hold **[6] (REPEAT)** again for more than 2 seconds to cancel.

Functions Only by Remote Control Unit

Stop

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

Frame to Frame Play

Press **[III]** (PAUSE) to go to next frame in the pause.
 To resume normal playback, press **[▶]** (PLAY).

Direct Selection (during playback)

Direct Chapter Selection

Example: Chapter number 10



- 1 Press **[GRP]**.
- 2 Press **[1][0]**. (Press **[RET]** to cancel.)
- 3 Press **[ENTER]**.

Direct Title Selection

Example: Title number 10



- 1 Press **[GRP]** twice.
- 2 Press **[1][0]**. (Press **[RET]** to cancel.)
- 3 Press **[ENTER]**.

List Selection

(Only for PBC-applicable discs → Page 45)

Example: List number 10



- 1 Press **[1][0]**. (Press **[RET]** to cancel.)
- 2 Press **[ENTER]**.

Note:

- If a non-existent title/chapter/track/number is input and entered, the command is invalid and the display returns to regular mode.
- Direct title selections can be made by pressing **[GRP]** once in the stop mode.
- To return to the regular mode, press **[DISP]**.

Subtitle

You can select a subtitle language if the loaded disc has multi-language subtitles.

When **[1] (SUBTITLE)** is kept pressed for more than 1 second, the subtitle language is changed over at the intervals of 1 second.

Audio

You can select an audio channel if the disc holding multi-audio channels is loaded.

When **[2] (AUDIO)** is kept pressed for more than 1 second, the audio channel is changed over at the intervals of 1 second.

Audio

You can select audio output among "STEREO", "MONO L" and "MONO R".

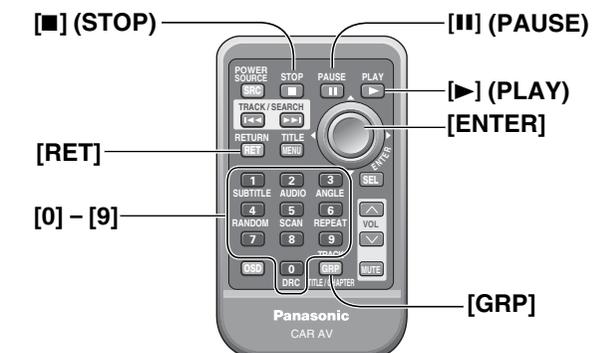
When **[2] (AUDIO)** is kept pressed for more than 1 second, the audio output is changed over at the intervals of 1 second.



Angle

You can select an angle if a multi-angle disc is loaded.

When **[3] (ANGLE)** is kept pressed for more than 1 second, the angle is changed over at the intervals of 1 second.



DVD/VCD Player (continued)

Functions Only by Remote Control Unit (continued)

Disc Menu DVD

You can stop playing the disc temporarily and call up the on-disc menu screen.

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

Title Menu DVD

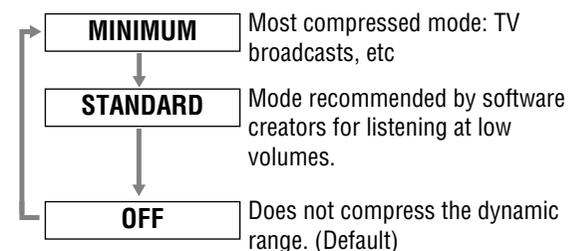
You can stop playing the disc temporarily and call up the on-disc title menu screen.

Press and hold **[MENU] (TITLE)** during playback for more than 2 seconds.

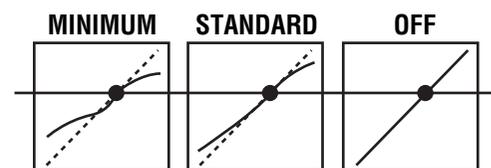
D.Range Compression DVD

You can select a range of 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 "MINIMUM".

- Press and hold **[0] (DRC)** during playback for more than 2 seconds to activate the DRC selection mode.
- Press and hold **[0] (DRC)** for more than 2 seconds to select a range of DRC.

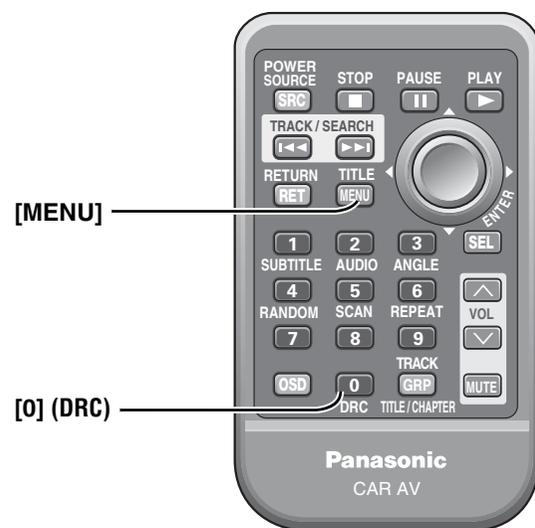


Conversation level



Caution

- The sound of DVD video covers a wide dynamic range of more than 100 dB. Thus, the reproduced sound volume of some DVD discs may be significantly low. When you increase the volume in this case, the sound may reach the peak level suddenly and it may lead to a traffic accident. To avoid such an accident, you can use this function.



OSD (On-Screen Display)

You can see OSDs (On-Screen Display) if the optional monitor (CY-VH9300U or CY-V7100U) is connected.

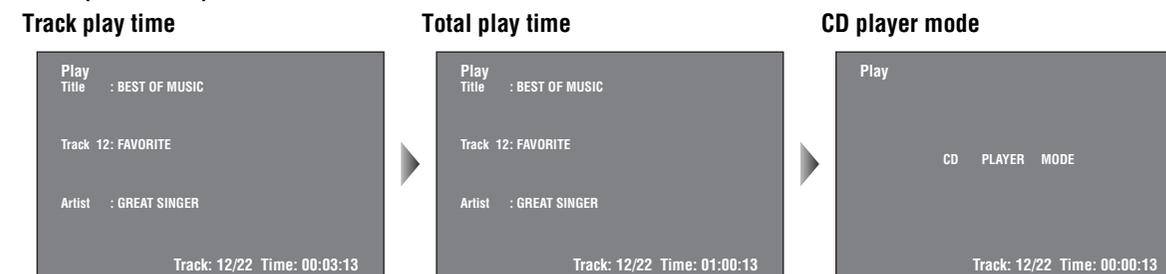
OSD (On-Screen Display)

(Only for remote control unit)

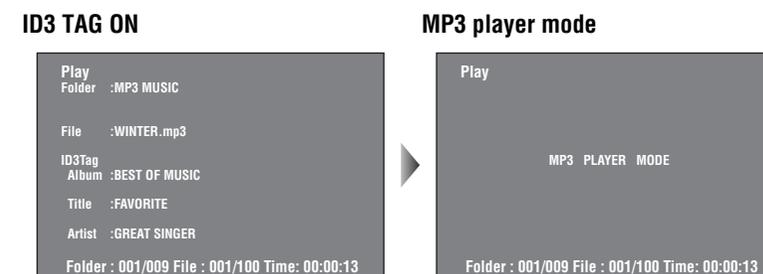
You can set up the optional monitor to display or hide the following information: title/artist name for CDs, album/title/artist name for MP3, playtime for VCDs and title/chapter/playtime for DVDs.

Each time you press **[OSD]**, the display changes according to the disc type.

CD (Music CD)



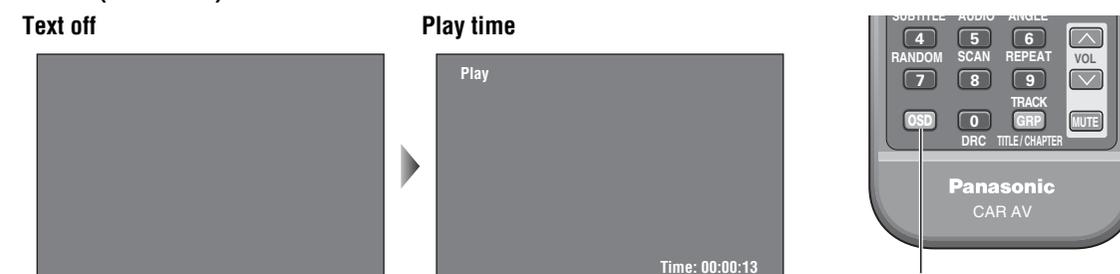
MP3



DVD (DVD Video)

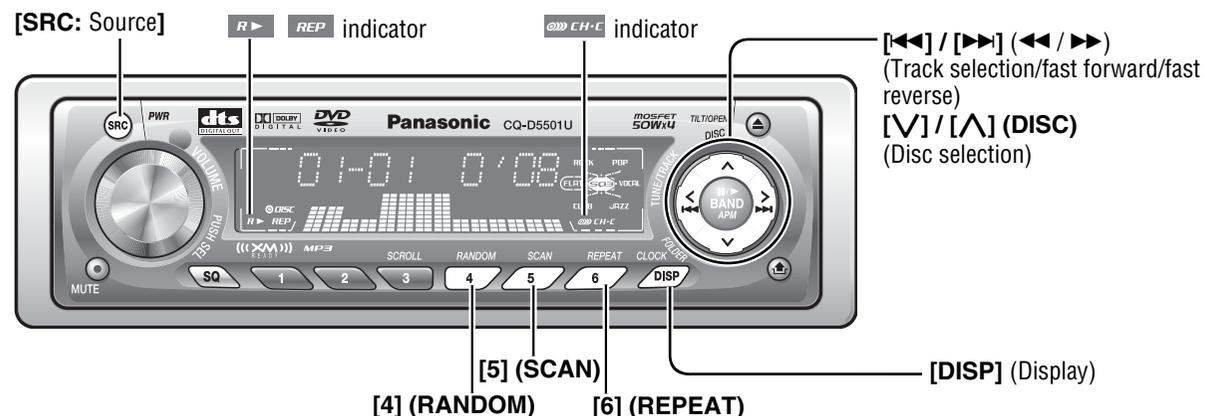


VCD (Video CD)



[OSD]

CD Changer Control



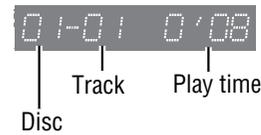
Note:

- **Trouble may occur while playing CD-Rs. Refer to the section on “Notes on Discs” (⇒ Page 47)**
- This unit does not support the following through the CD changer.
 - **CD-RW playback. (except when CX-DP880 is connected)**
 - **MP3/WMA playback.**
 - **CD text display**
- Pausing does not function in the CD changer mode.
- This unit does not support a DVD changer due to shortage of displayable digit number or other causes.

- CD changer functions are designed for optional Panasonic CD changer unit (CX-DP880).
- Preparation:**
- Connect the CD changer, and load a magazine (CDs).

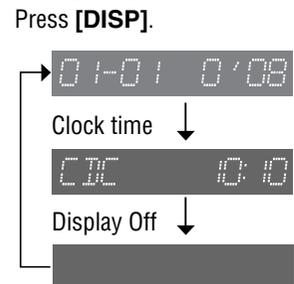
CD Changer Mode

Press **[SRC]** to select the CD changer mode and playback starts.



- Note:**
- Load a magazine with CDs when “NO DISC” is displayed.
 - The power will be turned on automatically when a magazine is loaded.

Display Change



Disc Selection

- [^]: Next disc
- [V]: Previous disc

Track Selection

- [▶▶]: Next track
 - [◀◀]: Beginning of the current track
- For the previous track, press twice.

Fast Forward/Fast Reverse

- Press and hold
- [▶▶] (▶▶): Fast forward
 - [◀◀] (◀◀): Fast reverse
- Release them to resume the playback.

Random Play R ►

All the available tracks are played in a random sequence.

- Press **[4] (RANDOM)**.
R ► lights.
 Press **[4] (RANDOM)** again to cancel.

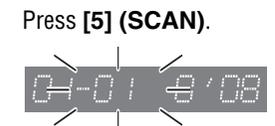
Disc Random Play R ►

All the available tracks on the current disc are played in a random sequence.

- Press and hold **[4] (RANDOM)** for more than 2 seconds.
R ► blinks.
 Press and hold **[4] (RANDOM)** again for more than 2 seconds to cancel.

Scan Play

The first 10 seconds of each track is played in sequence.

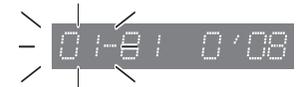


Press **[5] (SCAN)** again to cancel.

Disc Scan Play

From the next disc, the first 10 seconds of the first track of all the discs is played in sequence.

Press and hold **[5] (SCAN)** for more than 2 seconds.



Press and hold **[5] (SCAN)** again for more than 2 seconds to cancel.

Repeat Play REP

The current track is repeated.

- Press **[6] (REPEAT)**.
REP lights.
 Press **[6] (REPEAT)** again to cancel.

Disc Repeat Play REP

The current disc is repeated.

- Press and hold **[6] (REPEAT)** for more than 2 seconds.
REP blinks.
 Press and hold **[6] (REPEAT)** again for more than 2 seconds to cancel.

Direct Disc Selection

(Only for remote control)

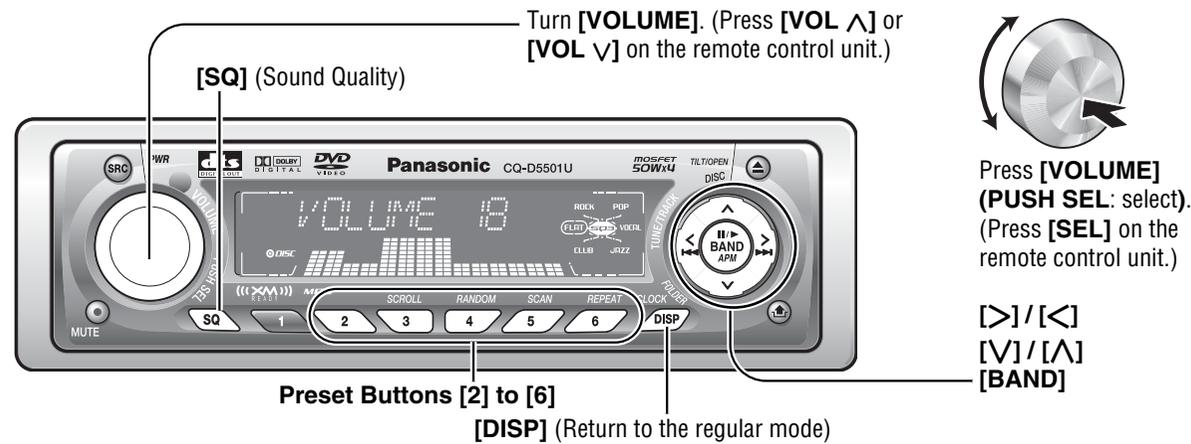
Example: Disc number 5

- ① Press **[GRP]**.
- ② Press **[5]**.
- ③ Press **[ENTER]**.



- Note:**
- To suspend direct selection, press **[DISP]**.
 - Random, Disc Random, Scan, Disc Scan, Repeat and Disc Repeat plays are canceled once **[GRP]** is pressed.

Audio Settings



Volume

Default: 18
Setting range: 0 to 40

Press **[VOLUME]** (**PUSH SEL**) to open the menu.

VOLUME 18

Bass/Treble

You can adjust the bass and treble sounds.
Default: BAS (bass) 0 dB
TRE (treble) 0 dB
Setting range: -12 dB to +12 dB (by 2 dB)

Press **[VOLUME]** (**PUSH SEL**).

BASS

Press **[VOLUME]** (**PUSH SEL**).

TREBLE

SQ Adjustment

You can adjust the characteristics of the currently selected sound type (SQ).
It is also possible to preset up to 5 different adjusted SQs.

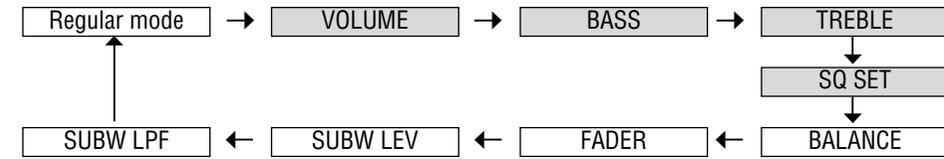
Tone/SQ adjustable range: -12 dB to +12 dB (by 2 dB)
SQ Low/Bass : ± 12 dB (at 60 Hz, 80 Hz, 100 Hz, 200 Hz)
SQ Mid : ± 12 dB (at 500 Hz, 1 kHz, 2 kHz, 3 kHz)
SQ High/Treble : ± 12 dB (at 10 kHz, 12 kHz, 15 kHz, 18 kHz)
• The bass/treble control frequency is fixed to the frequency that has been selected for SQ.

- To return an adjusted SQ to the default setting
 - ① Press **[SQ]**, and select the SQ which is to be returned to the default setting. (Only for main unit)
 - ② Press and hold **[BAND]** for more than 2 seconds.

Press **[VOLUME]** (**PUSH SEL**).

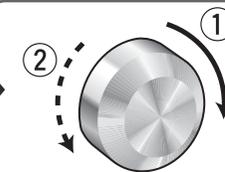
SQ SET

The SQ adjustment mode can be established also by pressing **[SQ]** for more than 2 seconds.



Note:

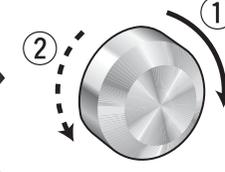
- To return to the regular mode, press **[DISP]**.
- If no operation takes place for more than 5 seconds in audio setting (2 seconds in the volume adjustment, 10 seconds in the SQ adjustment), the display returns to the regular mode.
- The volume can also be adjusted directly using **[VOLUME]** on the main unit. (→ Page 12)
- Please refer to page 13 for calling up a preset SQ.



Turn **[VOLUME]**.

- ① : Up
- ② : Down

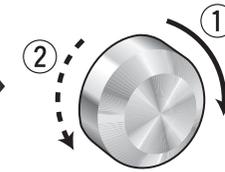
VOLUME 18



Turn **[VOLUME]**.

- ① : Up
- ② : Down

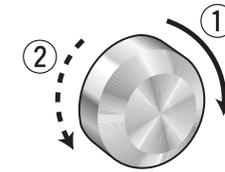
BASS 0dB



Turn **[VOLUME]**.

- ① : Up
- ② : Down

TREBLE 0dB



- ① Press **[>]** or **[<]** to select a frequency band (Low, Mid, High).
[>]: Higher frequency band
[<]: Lower frequency band
 Turn **[VOLUME]** to select a frequency.
 - ①: Higher frequency
 - ②: Lower frequency
- ② Press **[^]** or **[v]** to adjust the level.

Frequency
604Z/ 0

The selected frequency band blinks.

Level
604Z/+ 6

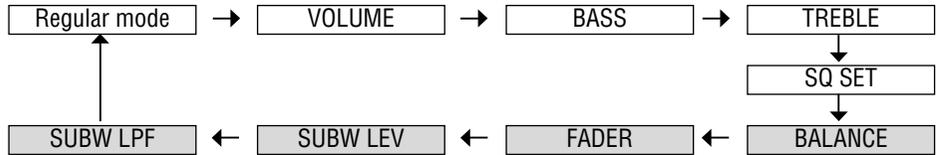
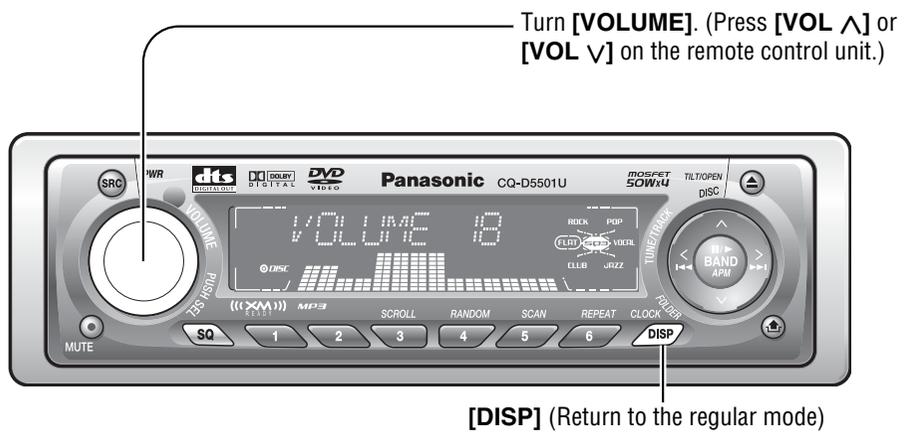
Note:

- You cannot save any SQ presetting value in **[1]** button.
- Any SQ adjustments will not change the call up screen names such as ROCK and JAZZ.

- ③ Press and hold one of the preset buttons from **[2]** to **[6]** for more than 2 seconds.
 - The adjusted SQ is preset in the number of the selected button, and return to the regular mode resumes.

- When you suspend the SQ preset adjustment, each level remains your recent adjustment until a new SQ presetting operation is performed or you call up the SQ preset.

Audio Settings (continued)



- Note:**
- To return to the regular mode, press **[DISP]**.
 - If no operation takes place for more than 5 seconds in audio setting, the display returns to the regular mode.
 - Adjustments of the subwoofer level and low pass filter are effective when the subwoofer is connected.

Balance/Fader
 You can adjust the sound level among the right, left, front and rear speakers.
 Default: BAL (balance) CNT (center)
 FAD (fader) CNT (center)
 Setting range: 15 levels each and CNT (center)



Subwoofer Level
 You can change the subwoofer volume level.
 Default: 0
 Setting range: MUTE (-∞), -6 dB to +6 dB (by 2 dB)



Subwoofer LPF (Low Pass Filter)
 You can select the upper limit frequency of the sound from subwoofer.
 Default: 80 Hz
 Setting range: 80 Hz, 120 Hz



Turn **[VOLUME]**.
 ① : Right enhanced
 ② : Left enhanced

BAL CNT

Turn **[VOLUME]**.
 ① : Front enhanced
 ② : Rear enhanced

FAD CNT

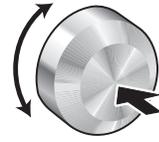
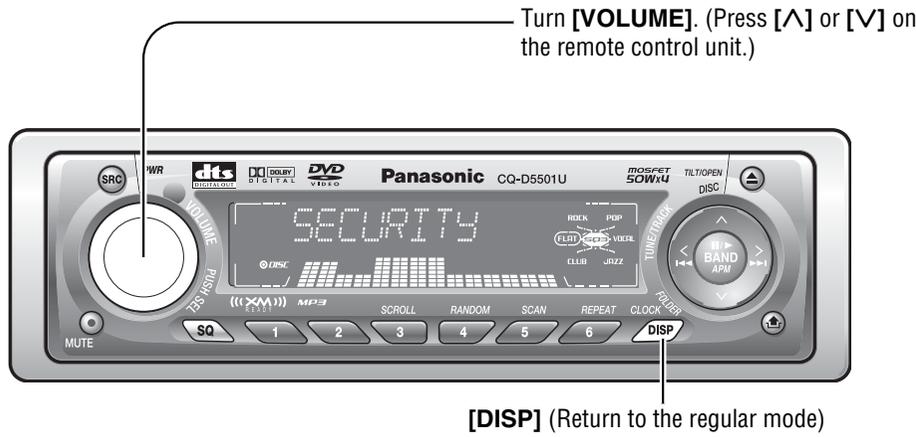
Turn **[VOLUME]**.
 ① : Up
 ② : Down

LEV 0dB

Turn **[VOLUME]**.
 ① : 120 Hz
 ② : 80 Hz

LPF 80HZ

Function Settings



Press and hold **[VOLUME] (PUSH SEL)** for more than 2 seconds. (Press and hold **[SEL]** for more than 2 seconds on the remote control unit.)



Note:

- To return to the regular mode, press **[DISP]**.
- If no operation takes place for more than 10 seconds in function setting, the display returns to the regular mode.

Spectrum Analyzer Display Patterns
Default: Pattern 1
Variety: 6 types, OFF

Press and hold **[VOLUME] (PUSH SEL)** for more than 2 seconds to open the menu.
PATTERN

Mute/Attenuation
You can select mute or attenuation. (→ Page 12)
Default: MUTE

Press **[VOLUME] (PUSH SEL)**.
MUTE KEY

Security Function
You can activate the anti-theft function when leaving your car.
Default: ON

Press **[VOLUME] (PUSH SEL)**.
SECURITY

Turn **[VOLUME]**.

PATTERN OFF : Off
PATTERN 1 : Pattern 1 (Default)
⋮
PATTERN 6 : Pattern 6

Turn **[VOLUME]**.

KEY ATT : 10 steps decrease (Attenuation)
↕
KEY MUTE : No sound (Mute) (Default)

Turn **[VOLUME]**.

SLED ON : The security function is activated. (Default)
↕
SLED OFF : The security function is not activated.

SLED (Security Light Emitted Diode) ON

When the ignition switch is turned OFF...

- The security message will be displayed.
- The face plate removal alarm will be active. (→ Page 46)

When the face plate is removed...

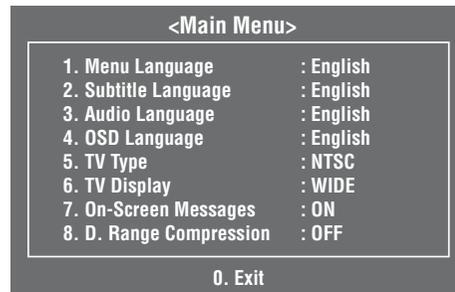
- The security indicator (SLED) blinks. (→ Page 46)

User Settings

The following information explains the settings only about the disc player and displayed contents on the screen.
(Only for Remote Control Unit)

1 Display "Main Menu".

Press [MENU].

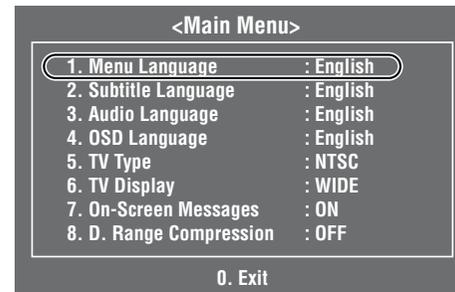


Note:

- The Main Menu has been set for this unit. It is not set for any DVD disc.
- Main menu setting is possible only if the disc source has been selected. (No disc playing)

2 Select each setting menu.

Press one of the numeric buttons from [1] to [8].
(Example: "1. Menu Language")



1. Menu Language

Default: English

2. Subtitle Language

Default: English

3. Audio Language

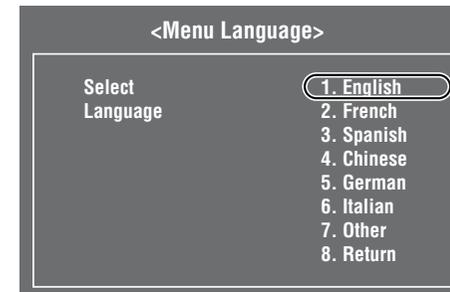
Default: English

4. OSD Language

Default: English

3 Select each item.

Press one of the numeric buttons from [1] to [9].
(Example: "1. English")



1. English
2. French
3. Spanish
4. Chinese
5. German
6. Italian
7. Other
8. Return

(⇒ Page 44)
The display returns to "Main Menu".

1. English
2. French
3. Spanish
4. Chinese
5. German
6. Italian
7. Other
8. Disp Off
9. Return

Note:

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

(⇒ Page 44)
Subtitle language is not displayed.
The display returns to "Main Menu".

1. English
2. French
3. Spanish
4. Chinese
5. German
6. Italian
7. Other
8. Return

(⇒ Page 44)
The display returns to "Main Menu".

1. English
2. Chinese
3. Return

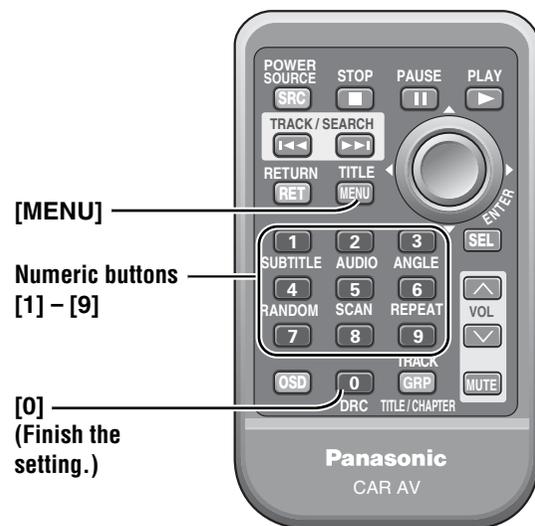
The display returns to "Main Menu".

4 Finish the setting.

Press [0] (Exit). (The setting is completed.)

Note:

- To apply changes to the setting, be sure to press [0] (Exit) at the end.
- After the user settings have been changed and entered, the player returns to the start of the disc.
- When the disc has predetermined language or other settings, the user settings are not reflected.

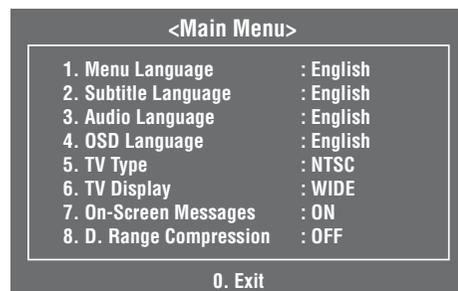


User Settings (continued)

The following information explains the settings only about the disc player and displayed contents on the screen.
(Only for Remote Control Unit)

1 Display "Main Menu".

Press [MENU].

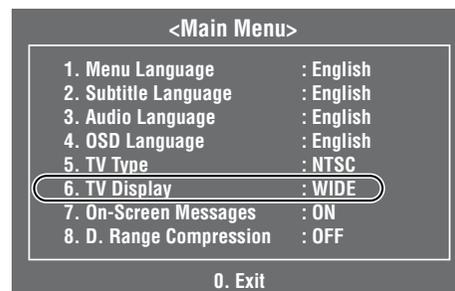


Note:

- The Main Menu has been set for this unit. It is not set for any DVD disc.
- Main menu setting is possible only if the disc source has been selected. (No disc playing)

2 Select each setting menu.

Press one of the numeric buttons from [1] to [8].
(Example: "6. TV Display")



5. TV Type

TV standard format setting
Default: NTSC

Note:

Setting should be made to match the format of the connected monitor. Select NTSC if connections are made possible for both NTSC and PAL. If you select PAL, a picture may be partly omitted.

6. TV Display

Display aspect setting
Default: WIDE

7. On-Screen Messages

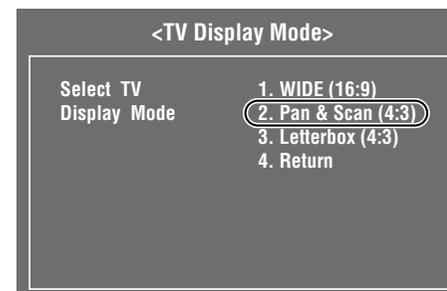
This is to select On-screen Display messages which will be displayed when On-screen Display is turned off by pressing [OSD] (→ Page 31).
Default: ON

8. D. Range Compression

By compressing the range of the playback level (the dynamic range), it is possible to maintain the impact of audio even at low volumes.
This function only works with Dolby Digital encoded material.
Default: OFF

3 Select each item.

Press one of the numeric buttons from [1] to [4].
(Example: "2. Pan & Scan (4:3)")



1. NTSC

The unit transmits the NTSC formatted signal in either case, playing an NTSC formatted video or a PAL formatted video.

2. PAL

The unit transmits the PAL formatted signal in either case, playing an NTSC formatted video or a PAL formatted video.

3. Multi

The unit transmits the same video signal as the output of playing video software.

Note:

- If the connected monitor cannot automatically select between NTSC and PAL according to the video signal of the disc to be reproduced, images on the screen may be distorted. Select NTSC or PAL at the monitor side depending to the disc to be reproduced.

4. Return

The display returns to "Main Menu".

1. WIDE (16:9)

Plays in Wide mode when a wide-screen monitor is connected.

2. Pan & Scan (4:3)

Plays in Pan & Scan mode when a conventional monitor is connected.

3. Letterbox (4:3)

Plays in Letterbox mode when a conventional monitor is connected.

4. Return

The display returns to "Main Menu".

Note:

- If "Pan & Scan" or "Letterbox" is already set in the software, this setting is ignored.

1. ON

When power is turned on, On-Screen Display message such as "Play" and "Pause" will be displayed on the screen for 5 seconds.

2. OFF

When power is turned on, On-Screen Display messages such as "Play" and "Pause" will not be displayed on the screen.

3. Return

The display returns to "Main Menu".

1. Minimum

Most compressed mode: TV broadcasts, etc

2. Standard

Mode recommended by software creators for listening at low volumes.

3. OFF

Does not compress the dynamic range.

4. Return

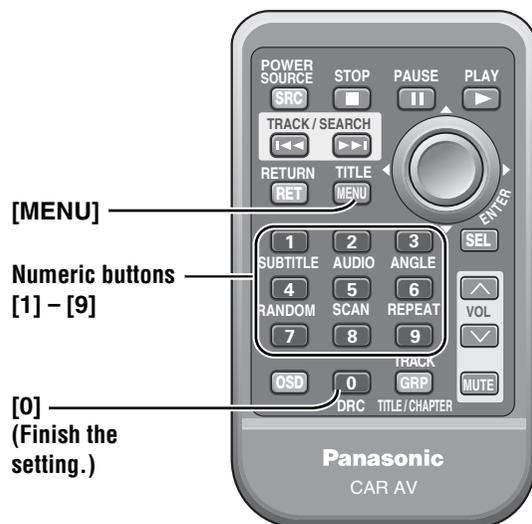
The display returns to "Main Menu".

4 Finish the setting.

Press [0] (Exit). (The setting is completed.)

Note:

- To apply changes to the setting, be sure to press [0] (Exit) at the end.
- After the user settings have been changed and entered, the player returns to the start of the disc.
- When the disc has predetermined language or other settings, the user settings are not reflected.

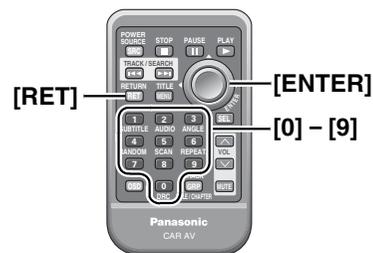


Language Code List

(Only for Remote Control Unit)

In “Other” cases (Menu Language, Subtitle Language, Audio Language) (→ Page 40)

- 1 Press numeric buttons from [0] to [9] to input the 4 digit language code. (See below.)
 - To input the number again, press [RET] (RETURN).
- 2 Press [ENTER] to finalize the selection.
 - Setting is finished and the display returns to “Main Menu”.



Code	Language Name
6565	Afar
6566	Abkhazian
6570	Afrikaans
6577	Ameharic
6582	Arabic
6583	Assamese
6589	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	Punjabi
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

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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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 VCD (Video CD)s 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 disc is large, it can store more data with better accuracy than a CD.

MPEG (Moving Picture Experts Group)

MPEG is an international standard format for the compression of motion video as defined by the Moving Picture Experts Group, a working committee which functions under the auspices the International Electrotechnical Commission. The Group established the MPEG 2 Standard in 1994. MPEG2 built on MPEG1 with many improvements, and it yield a higher picture quality level.

Pan & Scan screen

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

Playback control (VCD (Video CD))

If the VCD (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
---------	---------	---------	-------------

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

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Anti-Theft System

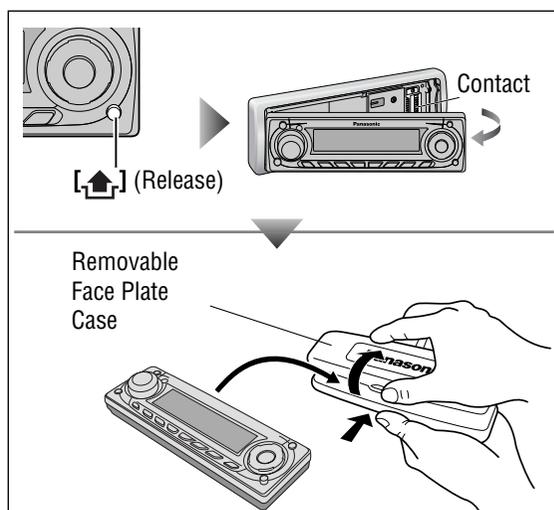
This unit is equipped with a removable face plate. Removing this face plate makes the unit totally inoperable. SLED will blink.

Remove the Face Plate

- 1 Switch off the power of the unit.
- 2 Press [, (Release) to remove the face plate. (The face plate disengages with a click when it is removed.)
- 3 Place the face plate into the case and take it with you when you leave the car.

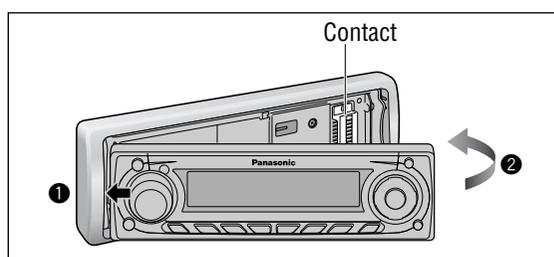
Note:

- Be absolutely sure to turn off the power of the unit before removing the face plate.
- Do not install or remove the face plate while it is moving.



Install the Face Plate

- 1 Slide the left side of the face plate in place.
- 2 Press the right end of the face plate until a “click” is heard.



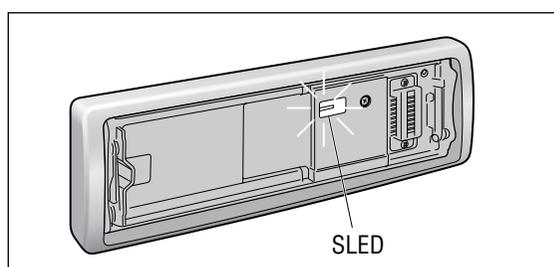
Security Indicator (SLED)

SLED blinks when the face plate is removed from the unit. This function is activated when the Security Function is ON. (→ Page 38)

Face Plate Removal Alarm

This alarm sounds to warn you not to forget to remove the face plate before leaving your car.

This function is activated when the Security Function is ON. (→ Page 38)



⚠ Caution

- This face plate is not waterproof. Do not expose it to water or excessive moisture.
- Do not remove the face plate while driving your car.
- Do not place the face plate on the dashboard or nearby areas where the temperature rises high.
- Do not touch the contacts on the face plate and on the main unit, since this may result in poor electrical contact.
- If dirt or other foreign substances get on the contacts, wipe them off with a clean and dry cloth.
- To avoid damaging the face plate, do not push it down or place objects on it while it is open.
- The face plate will automatically close about 5 seconds after [, (Release) is pressed while the face plate is tilted or open, so take care to ensure that your fingers will not be pinched by the closing face plate.

Fuse

If the fuse blows out, consult your dealer, or your nearest authorized Panasonic Servicenter.

⚠ Warning

- Use fuses of the same specified rating (15 A). Using substitutes or fuses with higher ratings, or connecting the unit directly without a fuse could cause fire or damage to the unit. **If the replaced fuse fails, contact your nearest authorized Panasonic Servicenter.**

Maintenance

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

Notes on Discs

How to hold a disc

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

Do not use irregularly shaped discs.

Do not leave discs in the following places:

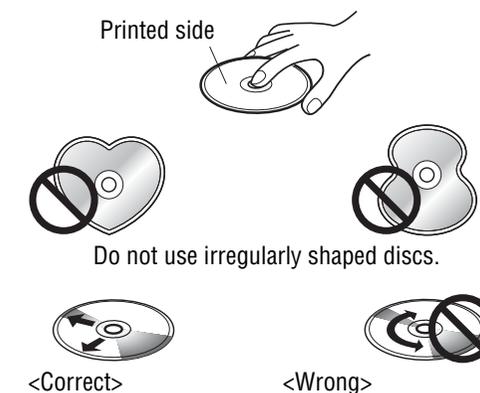
- In direct sunlight
- Near car heaters
- Dirty, dusty and damp areas
- On seats and dashboards

Disc cleaning

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

Do not attach any seals or labels to your discs.

Do not write on the disc label with a ballpoint pen or other hard-point pens.



Notes on CD-Rs/RWs, DVD-Rs/RWs

- You may have trouble playing back some CD-R/RW, DVD-R/RW discs recorded using CD/DVD recorders (CD-R/RW, DVD-R/RW drives), either due to their recording characteristics or dirt, fingerprints, scratches, etc. on the disc surface.
- CD-R/RW, DVD-R/RW discs are less resistant to high temperatures and high humidity than ordinary music CDs/DVDs. Leaving them inside a car for extended periods may damage and make playback impossible.
- Some CD-R/RWs, DVD-R/RWs cannot be played back successfully due to incompatibility among writing software, a CD/DVD recorder (CD-R/RW, DVD-R/RW drive) and the discs.
- This player cannot play the CD-R/RW, DVD-R/RW discs if the session is not closed.
- Be sure to observe the instructions of the CD-R/RW, DVD-R/RW disc for handling it.
- This player cannot play the CD-R/RW discs which contain other than CD-DA or MP3 data.

Installation

Warning

□ This installation information is designed for professional installers with knowledge of automobile electrical safety systems and is not intended for non-technical, do-it-yourself individuals. It does not contain instructions on the electrical installation and avoidance of potential harm to air bag, anti-theft and ABS braking or other systems necessary to install this product. Any attempt to install this product in a motor vehicle by anyone other than a professional installer could cause damage to the electrical safety 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 against the manufacturer's recommendation, you must 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 OR DEATH.

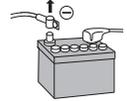
How to install the unit

Caution

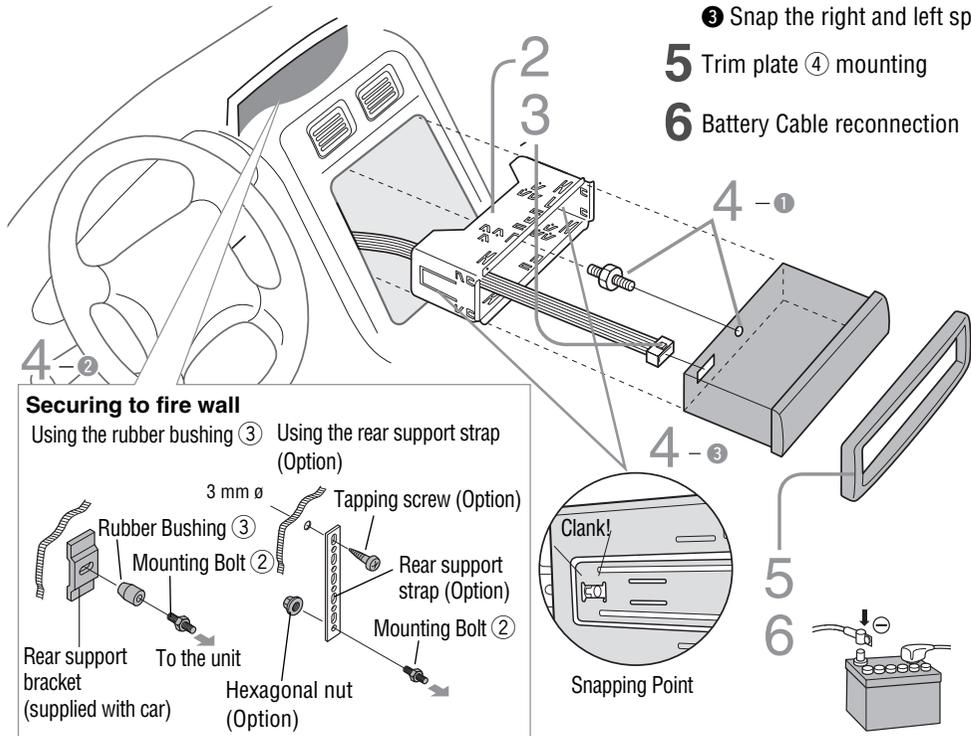
- Wear gloves for safety
- Make sure that wiring is completed before installation.
- When this unit is installed in dashboard, ensure that there is sufficient air flow around the unit to prevent damage from overheating, do not block any ventilation holes on the unit.



- 1 Remove the cable from the battery negative terminal.
- 2 Mounting collar ① insertion. Bend appropriate tabs to secure the unit without backlash.
- 3 Connection of power connector ⑤.
- 4 Main unit securing
 - ① Screw the mounting bolt ② into the main unit.
 - ② Secure to the fire wall.
 - ③ Snap the right and left springs into each hole.
- 5 Trim plate ④ mounting
- 6 Battery Cable reconnection



Remove Mounting Collar ① and Trim Plate ④ from the main unit temporarily, which are already mounted at shipment.

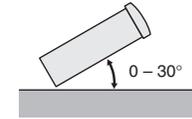


Consult a professional for installation.

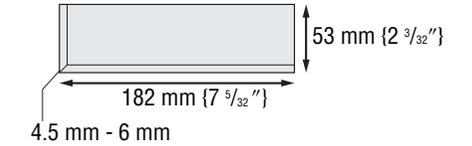
Verify the radio using the antenna and speakers before installation.

Mounting Angle

side to side : horizontal
front to rear : 0 - 30°



Mounting Space

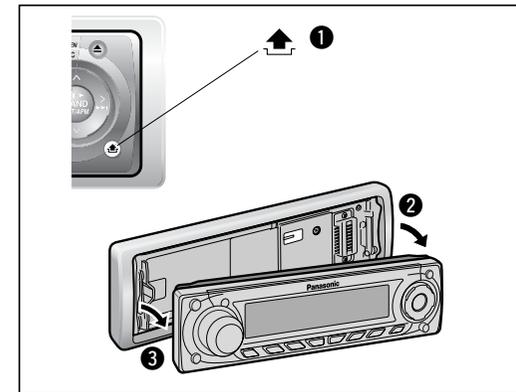


Supplied Hardware

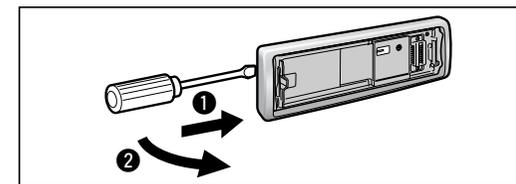
No.	Item	Diagram	Q'ty	No.	Item	Diagram	Q'ty
①	Mounting Collar (YEFX0217263)		1	④	Trim Plate (YEFC05652)		1
②	Mounting Bolt (5 mmø)		1	⑤	Power Connector (YEAJ012851)		1
③	Rubber Bushing		1	⑥	Lock Cancel Plate		2
				* ②, ③, ⑥ and ⑦ consist of a set. (YEP0FZ5724)			
				⑦	Clip Connector		1

How to remove the unit

1 Remove the face plate.

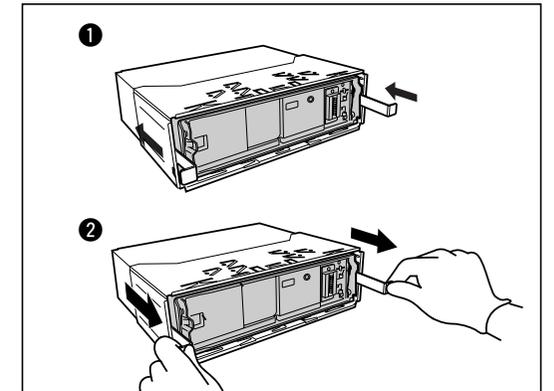


2 Remove the trim plate ④.

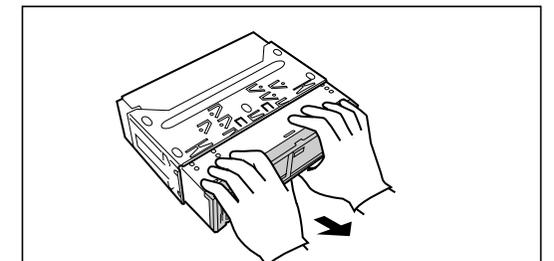


3 Lock release

- ① Insert the lock cancel plate ⑥ until you hear a click.
- ② Pull the main unit.



4 Pull out the unit with both hands.



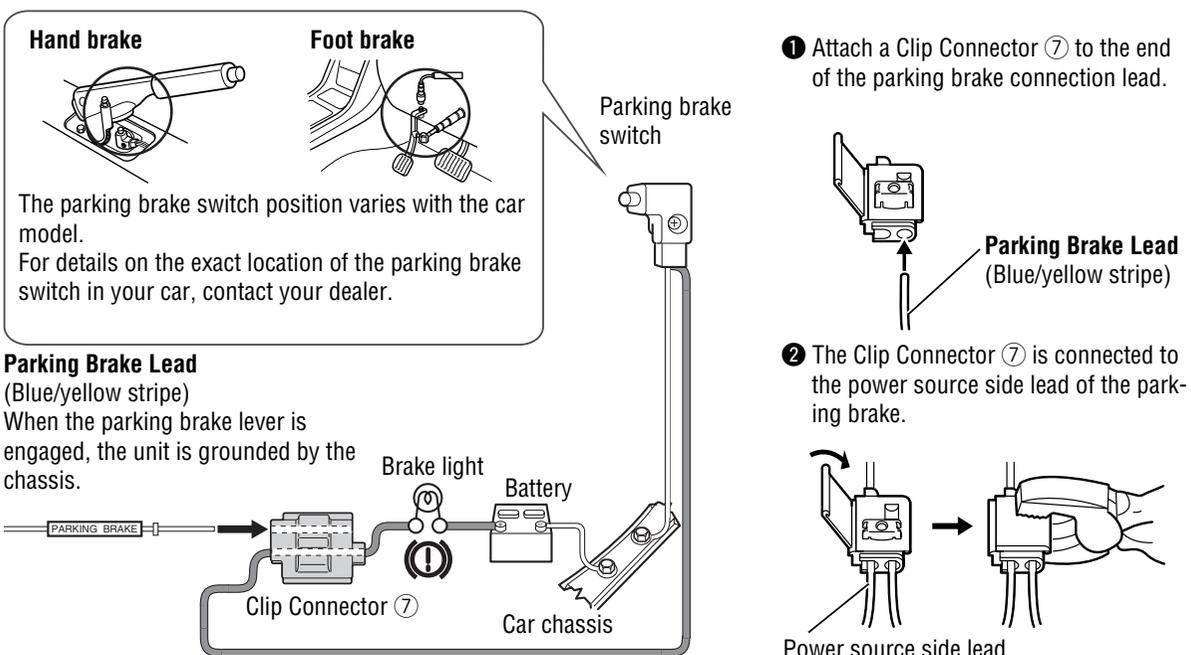
Before Wiring

- Exclusively operated with 12 V battery with negative (-) ground.
- Connect the power lead (red) very last.
- Connect the battery lead (yellow) to the positive (+) terminal of the battery or fuse block terminal (BAT).
- Strip about 5 mm {1/4"} of the lead ends for connection.
- Apply insulating tape to bare leads.
- Secure loosened leads.

Connecting the Parking Brake Connection Lead

Caution

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



When connecting this unit to the rear monitor (overhead/headrest):

- The parking brake lead and grand lead should be connected to the same terminal.

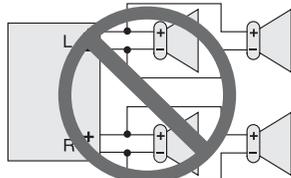
Speaker Connection

Connect as follows

- Use ungrounded speakers only.
Allowable input: 50 W or more
Impedance: 4 – 8 Ω
- Distance between speaker and amplifier: 30 cm {12"} or more
- Do not use a 3-wire type speaker system having a common earth lead.

Caution

- Do not connect more than one speaker to one set of speaker leads. (except for connecting to a tweeter)

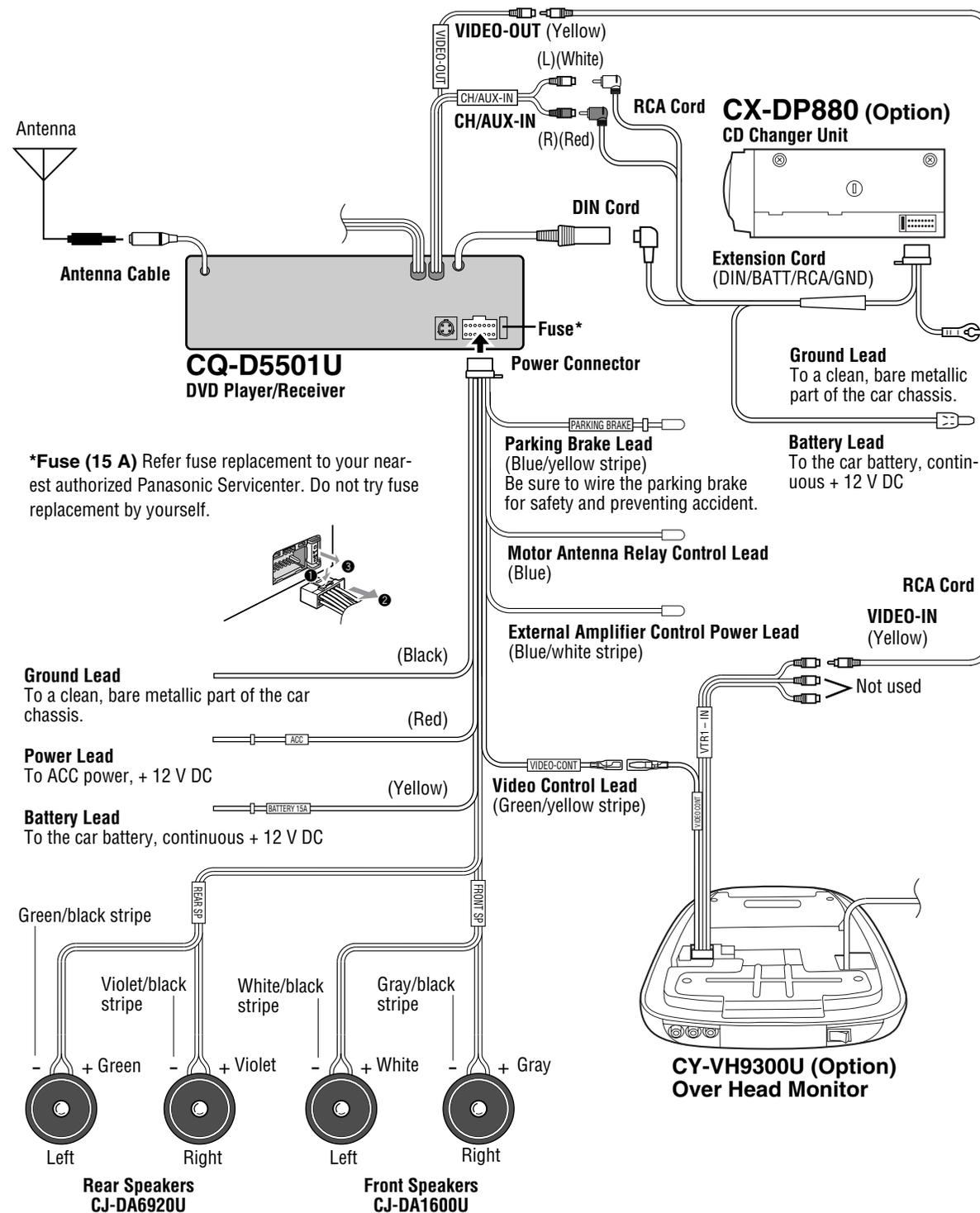


Connection with the CD Changer and the Overhead Monitor (CY-VH9300U)

Connection with CD changer and the overhead monitor (option, CX-DP880, CY-VH9300U).

Note:

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

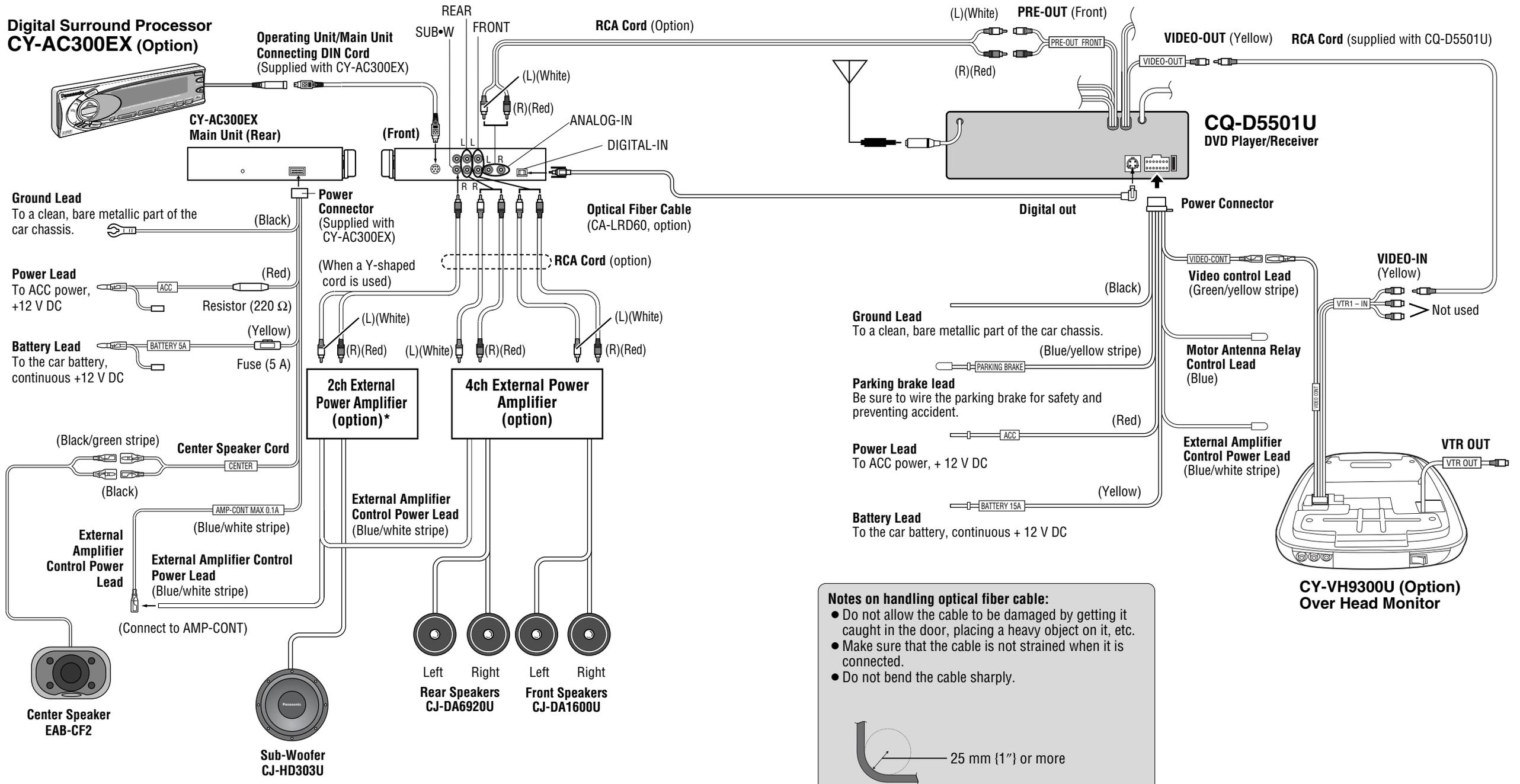


Wiring (continued)

Connection with the Digital Surround Processor (CY-AC300EX)

Connection with Digital Surround Processor (CY-AC300EX, Option) Power Amplifiers (Option) and monitors.

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



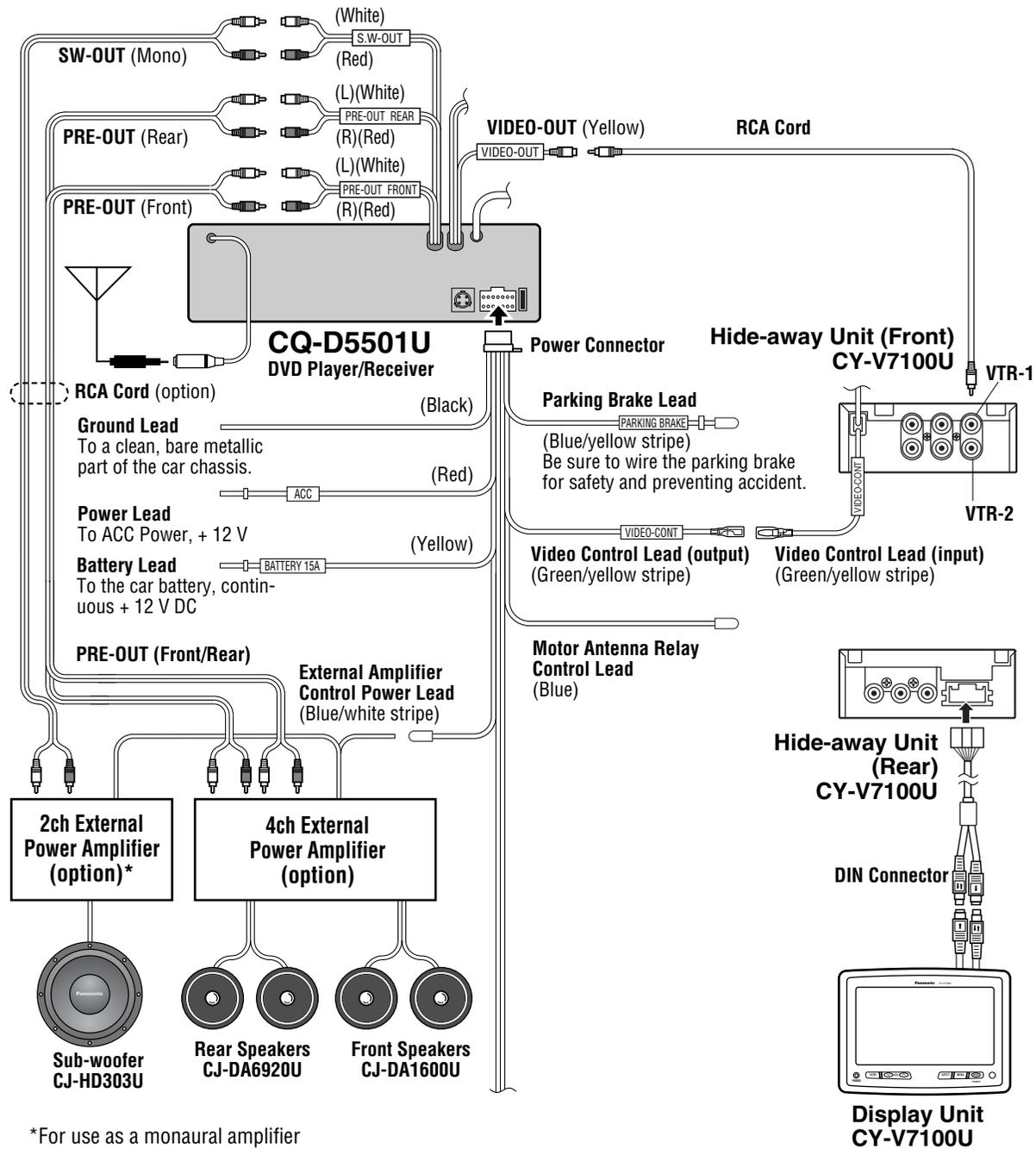
* For use as a monaural amplifier (Bridge connection)(option)

Connection with Headrest Monitor (CY-V7100U)

Connection with the headrest monitor (CY-V7100U) (Option).

Note:

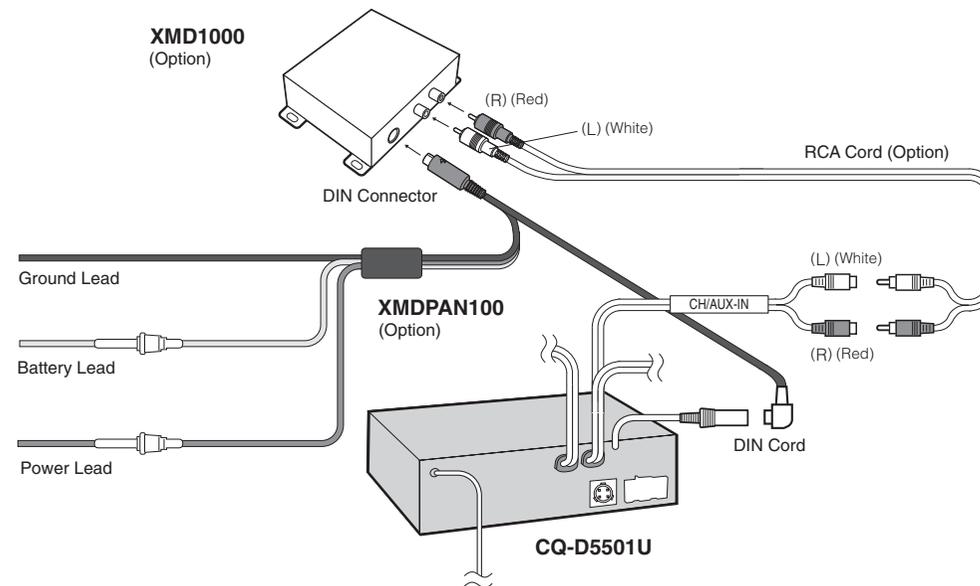
- Refer to the operating instructions for the connected devices, in addition.



*For use as a monaural amplifier (Bridge connection)(option).

Connecting with an XM Receiver

System Upgrade Example: Connecting with an XM Receiver



XMDPAN100: Please understand that Panasonic is not liable for modification of specifications, shape, name, and the like of the optional XM receiver and digital adapter without prior notice because they are not manufactured by Panasonic.

Note:

- A CD changer, an XM receiver and AUX cannot be connected at the same time.

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 unit into the mounting collar. Congratulations! After making a few final checks, you're ready to enjoy your new auto stereo system.

Final Check

1. Make sure that all wires are properly connected and insulated.
2. Make sure that the main unit 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.

Troubleshooting

If You Suspect Something Wrong

Check and take steps as described below.

If the described suggestions do not solve the problem, it is recommended to take the unit to your nearest authorized Panasonic Servicenter. The product should be serviced only by qualified personnel. Please refer the checking and the repair to professionals. Panasonic shall not be liable for any accidents arising out of neglect of checking the unit or your own repair after your checking.

Common

Problem	Possible cause → Possible solution
No power to the unit	<p>The power cord (battery, power and ground) is connected in the wrong way. → Check the wiring.</p> <p>Fuse blows out. → Eliminate the cause of fuse blowout and replace the fuse with new one. Consult your dealer.</p>
Sound is not generated.	<p>MUTE is set to ON. → Set MUTE to OFF.</p> <p>The wiring of speaker lines is not correct, or a break or poor contact arises. → Check the wiring in accordance with the wiring diagram. (→ Page 51)</p>
The demonstration screen displayed and no operable	<p>You cannot operate the unit while the demonstration screen appears. → Press [DISP] to end the demonstration screen.</p> <p>If the demonstration screen appears frequently, there is a possibility that poor contact or wrong wiring arises between the battery lead of the unit and the battery cable of the car. (The battery lead should be always powered.) → Check the battery wiring in accordance with the wiring diagram.</p>
Noise	<p>There is an electromagnetic-wave generator such as a cellular phone near the unit or its electrical lines. → Keep the electromagnetic-wave generator such as a cellular phone away from the unit and the wiring of the unit. If noise cannot be eliminated due to the wiring harness of the car, consult your dealer.</p> <p>The contact of the ground lead is poor. → Make sure that the ground lead is connected to an unpainted part of the chassis securely.</p>
Noise is made in step with engine revolutions.	<p>Alternator noise comes from the car. → Change the wiring position of the ground lead. → Mount a noise filter on the power supply.</p>
Some operations are not executable.	<p>Some operations are not executable in particular modes such as menu mode. → Read the operating instructions carefully and cancel the mode. If the unit is still out of order, consult your dealer.</p>

Warning

- Do not use the unit in an irregular condition, for example, without sound, or with smoke or a foul smell, which can cause ignition or electric shock. Immediately stop using the unit and consult your dealer.
- Never try to repair the unit by yourself because it is dangerous to do so.

Common (continued)

Problem	Possible cause → Possible solution
No sound from speaker(s)	<p>Balance/Fader setting is not appropriate. → Readjust Balance/Fader.</p> <p>There is a break, a short circuit, poor contact or wrong wiring regarding the speaker wiring. → Check the speaker wiring.</p>
The speaker channels are reversed between right and left.	<p>The speaker wiring is reversed between right and left. → Perform the speaker wiring in accordance with the wiring diagram.</p>
The sound field is not clear in the stereo mode. Central sound is not settled.	<p>The plus and minus terminals at right and left channels of speakers are connected reversely. → Perform the speaker wiring in accordance with the wiring diagram.</p>
The power of the unit fails unintentionally.	<p>The safety device works. → Consult your dealer, or your nearest Panasonic Servicenter.</p>

Radio

Problem	Possible cause → Possible solution
Poor reception or noise	<p>Antenna installation or wiring of antenna cable is faulty. → Check whether the antenna mounting position and its wiring are correct. In addition, check to see whether the antenna ground is securely connected to the chassis.</p> <p>No power is supplied to the antenna amplifier (when using a film antenna, etc.). → Check the wiring of the antenna battery lead.</p>
The number of auto preset stations is less than 6.	<p>The number of receivable stations is less than 6. → Move to an area where receivable stations number is maximum, and try presetting.</p>
Preset stations cannot be stored.	<p>The contact of the battery lead is poor, or the battery lead is not always powered. → Make sure that the battery lead is connected securely, and preset stations again.</p>

XM Satellite Radio Option

Problem	Possible cause → Possible solution
Channel unselectable	<p>No contract with XM Satellite Radio Inc. → Refer to page 20 of this book and the XM's website to sign up for XM Radio service.</p>

Troubleshooting (continued)

CD

Problem	Possible cause → Possible solution
No playback or disc ejected	<p>The disc is inserted upside down. → Insert a disc correctly.</p> <p>There is a flaw or foreign objects on the disc. → Remove the foreign objects, or use a flawless disc.</p>
Sound skipping or noise	<p>There is a flaw or foreign objects on the disc. → Remove the foreign objects, or use a flawless disc.</p>
Sound skipping due to vibration	<p>The unit is not sufficiently secured. → Secure the unit to the console box.</p> <p>The unit is tilted at over 30° in the front-to-end direction. → Make the angle 30° or less.</p>
Disc unejectable	<p>Something such as a peeled label obstructs the disc coming out. → Press and hold the [OPEN] for more than 2 seconds when the face plate is open (disc forced ejection). In case that the disc forced ejection does not work, consult your dealer.</p> <p>The microcontroller in the unit operates abnormally due to noise or other factors. → Unplug the power cord and plug it again. In case the unit is still out of order, consult your dealer.</p>

MP3

Problem	Possible cause → Possible solution
No playback or disc ejected	<p>The disc has unplayable formatted data. → Refer to the description about MP3 for playable sound data except CD-DA (i.e. music CD).</p>
The CD-R/RWs that are playable on other devices are not playable on this unit.	<p>The playability of some CD-R/RWs may depend on the combination of media, recording software and recorder to be used even if these CD-R/RWs are playable on other devices such as a PC. → Make CD-R/RWs in a different combination of media, recording software and recorder after referring to the description about MP3.</p>
Sound skipping or noise	<p>There is a flaw or foreign objects on the disc. → Remove the foreign objects, or use a flawless disc. For MP3, refer to the description about MP3.</p> <p>Playing VBR (Variable Bit Rate) files may cause sound skipping. → Play Non-VBR files.</p>

Note:
• Refer to “Notes on MP3”. (⇒ Page 26)

DVD/VCD

Problem	Possible cause → Possible solution
No playback or disc ejected	<p>There is a flaw or foreign objects on the disc. → Remove the foreign objects, or use a flawless disc.</p> <p>The disc has unplayable formatted data. → Refer to the description about available disc types.</p>
Sound skipping or noise	<p>There is a flaw or foreign objects on the disc. → Remove the foreign objects, or use a flawless disc.</p>
Sound skipping due to vibration	<p>The unit is not sufficiently secured. → Secure the unit to the console box.</p> <p>The unit is tilted at over 30° in the front-to-end direction. → Make the angle 30° or less.</p>
Disc unejectable	<p>Something such as a peeled label obstructs the disc coming out. → Press and hold the [OPEN] for more than 2 seconds when the face plate is open (disc forced ejection). In case that the disc forced ejection does not work, consult your dealer.</p> <p>The microcontroller in the unit operates abnormally due to noise or other factors. → Unplug the power cord and plug it again. In case the unit is still out of order, consult your dealer.</p>
The picture does not appear on the monitor.	<p>Cables are not correctly connected. → Connect cables correctly. → Stop the car and apply the parking brake.</p>
The picture appears incorrectly.	<p>The video signal setting of this unit (NTSC/PAL) does not match with the video signal setting of the connected monitor. → Make the same setting between this unit and the monitor.</p>
Video CD menu playback does not work.	<p>→ Video CD menu playback works only when playing a video CD that has the playback control feature.</p>
The picture becomes distorted while fast forwarding or reversing.	<p>→ A certain amount of distortion is normal.</p>
No subtitles appear.	<p>Subtitle must be recorded on the disc, or they will not appear. → Refer to the guide provided with your disc.</p>
It is difficult to hear small sounds. (Dolby digital DVD software only)	<p>→ Set “D.Range Compression” to “Minimum”.</p>
Cannot switch the audio language/subtitle language/angle.	<p>It is not possible to switch if the disc does not have multiple audio languages/subtitle languages/angles recorded on it. → Refer to the guide provided with your disc. → Some discs permit switching through a menu screen. → Sometimes, switching angle is possible only with certain scenes.</p>
The audio/subtitle language selected in the user settings is not used.	<p>If audio or subtitles in that language 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>

Troubleshooting (continued)

DVD/VCD (continued)

Problem	Possible cause → Possible solution
A DVD-R or DVD-RW is not playable.	The disc is still unfinalized. → Finalize the disc. Refer to “Discs that can be Played Back” (→ Page 10) or “Notes on Discs” (→ Page 47) for other cases.

Note:
• Refer to “Discs that can be Played Back”. (→ Page 10)

Remote control unit

Problem	Possible cause → Possible solution
No response to pressing buttons	The battery is inserted in the wrong direction. A wrong battery is inserted. → Insert a correct battery in the correct direction.
	The battery is weak. → Replace the battery with new one.
	The aiming direction of the remote control unit is wrong. → Aim the remote control unit at the sensor of the unit and press buttons.
	The sensor is exposed to direct sunlight. (The remote control unit may not be operable when the sensor is exposed to direct sunlight. In such a case, the system is not faulty.) → Block off sunlight to the sensor.

Error Display Messages

CD/MP3

Display	Possible cause → Possible solution
-E1-	The disc is dirty. The disc has scratches. → Eject the disc.
-E3-	No operation by some cause. → Eject the disc. If the disc is not ejected when you press [▲] (eject), unplug the power cord and plug it again. In case the unit is still out of order, consult your dealer.
-E4-	The disc is upside down. The player for some reason cannot read the file you are trying to play. (File recorded in an unsupported file system, compression scheme, data format, file name extension, damaged data, etc.) → Eject the disc. Select a file that the player can read. Check the type of data recorded on the disc. Create a new disc if necessary.

Error Display Messages (continued)

CD Changer Option

Display	Possible cause → Possible solution
-E1- -E2- ↓ After 5 seconds To next disc automatically	The disc is dirty or upside down. The disc has scratches. → Eject the magazine. • Check the disc. • Load the disc again.
-E3-	No operation by some cause. → Eject the magazine. If the failure persists, press the reset switch on the CD changer. If normal operation is not restored, consult your dealer or the nearest Panasonic Servicenter to ask for repairs.
NO DISC	No disc is in the CD Changer (magazine). → Insert discs into the changer (magazine).
CDL NON	The changer has become disconnected from the unit in the changer mode. → Verify the wiring.

Note:
• Messages in the action and display sections of the error chart vary with changer. Refer to the operating instructions for the CD changer for details.

XM Satellite Radio Option

Display	Possible cause → Possible solution
NO XM	Cannot receive XM satellite radio. → Verify the wiring.
ANTENNA	XM antenna unconnected. → Connect the XM antenna.
NO SIGNAL	XM broadcasts unreceivable because of poor receiving conditions. → Move to an area where XM broadcasts can be received well.
OFF AIR	Channel not in service. → This channel is not currently in service. Tune to another channel.

Troubleshooting (continued)

Error Display Messages (continued)

DVD/VCD

Display	Possible cause → Possible solution
	The disc is dirty. The disc has scratches. → Eject the disc.
	The player will not operate for some reason. → Eject the disc. If the disc is not ejected when you press [▲] (eject), unplug the power cord and plug it again. In case the unit is still out of order, consult your dealer.
	The disc is upside down. The player for some reason cannot read the file you are trying to play. (File recorded in an unsupported file system, compression scheme, data format, file name extension, damaged data, etc.) → Eject the disc. Select a file that the player can read. Confirm the type of data recorded on the disc. Create a new disc if necessary.
	This disc may not be played in your region. An attempt was made to play a disc with a region number that was not "1" or "ALL". → Eject the disc.

Specifications

General	FM Stereo Radio
Power supply : DC 12 V (11 V - 16 V), test voltage 14.4 V, negative ground	Frequency range : 87.9 MHz - 107.9 MHz
Current consumption : Less than 2.3 A (CD mode, 0.5 W 4-channels)	Usable sensitivity : 10.2 dBf. (0.9 μV, 75 Ω)
Maximum power output : 50 W x 4 (at 1 kHz) volume control maximum	50 dB quieting sensitivity : 15.2 dBf. (1.6 μV, 75 Ω)
Video Signal system : NTSC/PAL 1.0 Vp-p 75 Ω RCA pin jack	Frequency response : 30 Hz - 15 kHz (±3 dB)
Tone/SQ adjustment range : SQ Low/Bass: ± 12 dB (at 60 Hz, 80 Hz, 100 Hz, 200 Hz)	Alternate channel selectivity : 75 dB
	Stereo separation : 35 dB (1 kHz)
	Image rejection ratio : 55 dB
	IF rejection ratio : 100 dB
	Signal to noise ratio : 62 dB
	AM Radio
Speaker impedance : 4 - 8 Ω	Frequency range : 530 kHz - 1 710 kHz
Pre-amp output voltage : 2 V (CD mode, 1 kHz, 0 dB)	Usable sensitivity : 27 dB/μV (22 μV, S/N 20 dB)
Subwoofer output voltage : 2 V	Disc Player
Pre-amp output impedance : 200 Ω	DA converter : 1 bit DAC System
Subwoofer output impedance : 200 Ω	Pick-up type : Astigma 3-beam
Dimensions (W x H x D) : 178 x 50 x 160 mm {7" x 1 ¹⁵ / ₁₆ " x 6 ⁵ / ₁₆ "}	Light source : Semiconductor laser
Weight : 1.8 kg {3 lbs. 16 oz}	Frequency response : 20 Hz - 20 kHz (CD)
	: 20 Hz - 22 kHz (DVD video 48 kHz sampling)
	: 20 Hz - 44 kHz (DVD video 96 kHz sampling)
	Signal to noise ratio : 95 dB (IHF, A)
	Wow and flutter : Below measurable limits

Discs played

- | | |
|--|---|
| (1) DVD-Video disc | (2) Compact disc (CD-DA, Video CD, CD-R, CD-RW) |
| 12 cm {5"} single-sided, single-layer/double-layer | 12 cm {5"} disc |
| 12 cm {5"} double-sided, single-layer/double-layer | 8 cm {3"} disc |
| 8 cm {3"} single-sided, single-layer/double-layer | |
| 8 cm {3"} double-sided, single-layer/double-layer | |

Digital audio output

Disc	Sounds recording format	Optional digital audio output from connector
DVD	Dolby Digital	Dolby Digital bitstream (1 - 5.1ch)
	DTS*	DTS bitstream (1 - 5.1ch) (The analog portion is not output.)
	Liner PCM (48 kHz 16/20/24 bit)	Liner PCM (2 ch) (48 kHz sampling/16 bit)
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 - 5.1ch) (The analog portion is not output.)
MP3	MP3	Linear PCM (2ch) (32 kHz/44.1 kHz/48 kHz sampling/16 bit)

*DTS only works optical outputs.

Above Specifications comply with EIA standards.

Power Output:
18 W RMS x 4 Channels at 4 Ω and ≤ 1% THD+N
Signal to Noise Ratio:
85 dBA (reference: 1 W into 4 Ω)



Note:

- Specifications and design are subject to modification without notice due to improvements.
- Some figures and illustrations in this manual may be different from your product.