Panasonic®

Dual DIN in-dash HDD Mobile Navigation System with 7″ Widescreen Color LCD Monitor/DVD Receiver

Système de navigation embarqué à disque dur de format 2-DIN avec récepteur DVD/moniteur couleur ACL grand écran de 7 po

Sistema de navegación portátil de doble DIN para tablero de mandos, con disco duro y monitor LCD panorámico de 7″ en color y receptor con DVD

Strada

CN-NVD905U

Operating Instructions
Manuel d'instructions
Manual de Instrucciones

- 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 manuel d'instructions 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.

DOLBY DIGITAL   SRS(●) CS Auto   DVD ROM/VIDEO   COMPACT disc DIGITAL AUDIO TEXT

MP3   WMA   SAT RADIO READY

Safety information

❏ Read the operating instructions for the unit and all other components of your car navigation 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.

❏ 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.

⚠ **Warning**	**This pictograph alerts you to the presence of important operating instructions. Failure to heed the instructions may result in severe injury or death.**

⚠ **Caution**	This pictograph alerts you to the presence of important operating 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. In some states and countries, passengers are also prohibited from watching the display.

❏ **Follow actual traffic regulations while driving.**
Even while following route guidance, always obey road signs and abide all traffic laws. Failure to do so could cause an accident or injury.

❏ **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. If it is used in the wrong type of car, it may cause a fire or an accident.

❏ **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.

❏ **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.

❏ **Use the mirror image rear view camera. Failure to do so may result in an accident or injury.**

❏ **When using the in-car camera (rear view camera), always reverse slowly, while checking for safety with your eyes.**
The camera image is perceived differently from the actual distance. The field of view which can be displayed is also limited. Reverse slowly, checking safety by eye, rather than relying on the screen. Reversing without checking safety can cause collisions with people and objects.

❏ **Keep the SD Memory card out of the reach of children.**
There is a risk that it could be swallowed accidentally. If the card is swallowed, seek medical attention immediately.

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 PROCEDURES 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.**
Continuing to use those in abnormal conditions may cause fire, electrical shock or a traffic accident.

❏ **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.**

❏ **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.

❏ **TO REDUCE THE RISK FOR FIRE OR ELECTRIC SHOCK AND ANNOYING INTERFERENCE, USE ONLY THE INCLUDED COMPONENTS.**

❏ **This unit operates with a 12 V DC negative ground auto battery system only. Do not attempt to use it any other system.**

❏ **Do not install the monitor in a location which obstructs driving, visibility or which is prohibited by applicable laws and regulations.**
If the monitor is installed in a location which obstructs forward visibility or operation of the air bag or other safety equipment or which interferes with operation of the car, it may cause an accident.

❏ Never use bolts or nuts from the car's safety devices for installation. If bolts or nuts from the steering wheel, brakes or other safety devices are used for installation of the monitor, it may cause an accident.

❏ Attach the wires correctly. If the wiring is not correctly performed, it may cause a fire or an accident. In particular, be sure to run and secure the lead wire so that it does not get tangled with a screw or the moving portion of a seat rail.

❏ **For safety, make sure that the side brake cord is wired correctly.**
If not wired correctly following the instructions, safety features may cease working and may cause an accident.

⚠ 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.**
These will raise the interior temperature of the unit, and may lead to smoke, fire, or other damage to the unit.

❑ **Do not use the product where it will be 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.

❑ **Do not place items on the opened monitor.**
There is risk of breakage to the Liquid crystal panel. Additionally, spillage from drink containers onto the device may cause smoke, fire, electric shock and breakdown.

❑ **Do not expose to strong impact.**
Impact such as dropping or hitting the device may cause breakdown or a fire.

❑ **Do not use the rear view camera except when backing the car into a parking space or confirming the location of a towed trailer, etc.**

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 must be installed. Consult your dealer for further details.

❑ **We strongly recommend that you wear gloves for installation work to protect yourself from injuries.**

❑ **Make sure that wiring is completed before installation.**

❑ **To prevent damage to the unit, do not connect the power connector until all wiring is completed.**

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

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

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

❑ Use the specified fuse. Be sure to always use the specified fuse. If a fuse other than specified fuse is used, it may cause a fire or an accident.

❑ Do not damage the cord by pinching or pulling it. Do not pull or damage the cord. If the cord is not treated properly, it will short out or be severed and may cause a fire or an accident.

❑ When bending the mounting tab of the mounting collar with a screwdriver, be careful not to injure your hands and fingers.

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

❑ Be sure to insulate any exposed wires from the car chassis. Bundle all cables and keep cable terminals free from any metal parts.

❑ Note that if your car has a driving computer or a navigation computer, disconnecting the cable from the battery may clear the memory.

❑ Run the cords avoiding the spots where the temperature can be extremely high.

❑ **Route the cords of GPS antenna attached to the outside of the vehicle and in-car camera (rear view camera) to the inside the vehicle, to stop water seeping in.**
If water seeps in the vehicle during rain or car washing, it could cause fire or electric shock.

❑ **Mount the navigation unit and the GPS antenna securely, so that it won't come off and fall.**
Wipe the mounting area clean of dirt, wax etc., then fasten the camera securely in place.
Re-affixing adhesive parts or use of general-purpose double-sided tape could cause weak bonding that would allow the equipment to drop off while the vehicle is in motion, causing accident or injury.
Check the state of bonding or mounting (loose screws etc.) occasionally.

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

⚠ CAUTION:

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

● **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.**

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

● Park your car in a safe place and apply the parking brake before watching the monitor.

● A rear monitor (option) displays moving pictures while driving.

Note:
● Be sure to connect the parking brake connection lead. (➡ Installation Instructions)

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

Part 15 of the FCC Rules

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

Notice:
This product has a fluorescent lamp that contains mercury. Dispose may be regulated in your community due to environmental considerations. For disposal or recycling information, please contact your local authorities, or the Electronics Industries Alliance :
http://www.eiae.org

Notice about handling of a CR coin cell lithium batteries

This product contains a CR Coin Cell Lithium Battery which contains Perchlorate Material – special handling may apply.
See www.dtsc.ca.gov/hazardouswaste/perchlorate.

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Notes on use

- The technology and software contained in this system cannot be taken out of the country without permission from the US Government.
- Use by government agencies and government-related bodies is deemed to involve "corporation rights" requiring use under "DFARS 252.227.7013".
- Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.
- This product is fully compliant with the IC (Industry Canada) RSS-310 standard.
- It is strictly prohibited to reproduce and use this map in any form without permission from the copyright owner.
- The traffic regulation data used in the map database applies only to passenger cars. Note that regulations for larger vehicles, motorbikes, and other non-standard cars are not included in the database.
- The marks of companies displayed by this product to indicate business locations are the marks of their respective owners. The use of such marks in this product does not imply any sponsorship, approval, or endorsement by such companies of this product.

Liquid crystal panel

- Do not strongly impact the liquid crystal panel.
- Usage temperature range: 0 °C to 40 °C
    {32 °F to 104 °F}
  When the temperature is very cold or very hot, the image may not appear clearly or may move slowly. Also, movement of the image may seem to be out of synchronization or the image quality may decline in such environments. Note that this is not a malfunction or problem.
- In order to protect the liquid crystal panel, keep it out of direct sunlight while the unit is not in use.
- Sudden changes in the temperature inside the car such as those which occur immediately after the car's air conditioner or heater has been turned on may cause the inside of the liquid crystal panel to cloud over due to water vapor or it may cause condensation (droplets of water) to form and, as a result, the panel may not work properly. Do not use the unit while these symptoms are in evidence but leave the unit standing for about an hour, and then resume or start use.

Limitation of liability

- If malfunction or damage occurs due to fire, earthquake, third-party action, other accident, error or intent by the customer, misoperation, or use under other improper conditions, resulting repairs will, as a general rule, require payment.
- Panasonic shall not be liable for any incidental losses resulting from the use of this product, or from inability to use this product (loss of business profits, change or loss of memory contents, etc.).
- The warranty certificate for this product is invalidated in the event that it is installed in a commercial vehicle (bus, truck, taxi, commercial car, etc.).
- When disposing of this product or transferring it to a third party, the customer is responsible for the handling and management (deletion, etc.) of personal information entered into the system (such as addresses and telephone numbers of Address Book) for privacy protection.
  Panasonic shall not be liable for such information.
- No compensation will be provided for alteration or loss of map data or basic programs on the hard disc, caused by improper operation of the system by yourself or a third party, or by the effects of static electricity or electrical noise.
- No compensation will be provided for content in case of alteration or loss of information stored in the system (such as Address Book) caused by improper operation of the system by yourself or a third party, the effects of static electricity or electrical noise, or breakdowns or repairs.
  The user is advised to make notes of important information (such as Address Book) in case of accidental loss.

Discs that can be played back

Disc type

Disc	DVD	CD	CD-R/RW
Mark/Logo	DVD VIDEO ™ / DVD VIDEO ™	COMPACT disc DIGITAL AUDIO / COMPACT disc DIGITAL AUDIO TEXT	COMPACT disc Recordable / COMPACT disc ReWritable
Disc Size	12 cm {5″}		
Video Format	NTSC/PAL		
Audio Format	LPCM, MPEG1, MPEG2, Dolby Digital	LPCM (CD-DA)	LPCM (CD-DA), MP3/WMA
Region No.	1 (ALL)		

Note:
- About CD-R/RW and DVD-R/RW, refer to "Notes on discs". (➡ page 107)
- Some copy-protected music CDs are not playable.

Discs not supported

The following discs are not played back on this product.
- DVD-Audio
- DVD-ROM
- DVD-RAM
- DVD+R
- DVD+RW
- dts-DVD
- SVCD
- VSD
- dts-CD
- CD-G
- CD-ROM (except MP3/WMA)
- CD-RW (except MP3/WMA and CD-DA)
- CD-R (except MP3/WMA and CD-DA)
- SACD
- Photo CD
- CDV
- Hybrid SACD (except CD-DA)
- CVD
- Divx Video Discs
- Video-CD
- CD-EXTRA (audio-only playback possible)
- DVD 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.**

Notes about playing DVD with dts audio content

- This system is not compatible with dts. When playing, always play non-dts sound. (If dts sound is selected, this system will output no sound.)
- On some discs, sound automatically switches to dts when playback is stopped and resumed from the beginning of the disc, so that sound output will be lost, or the subtitle settings may be changed. If that happens, reset to the previous settings manually.

Symbols used on jackets

(Examples of such symbols include)

- [3....] : Number of subtitle languages

- (4)) : Number of audio tracks

- 4 🎥 : 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] : 4:3 standard size

- [LB] : Letterbox

- 16:9 wide size

| 16:9 | LB | : Playback in Letter box format on a standard screen (4:3).

| 16:9 | PS | : Playback in Pan & Scan format on a standard screen (4:3).

Note:
- The size of the image that is displayed on the screen depends on the screen mode ("Switch aspect setting" ➡ page 92), 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" and "ALL".

Example:

(1) (1 2 4 6) (ALL)

Notes on DVD-R/RW

- 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.

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.
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 ASSISTANCE, please contact:
Our Customer Care Centre:

Telephone #:	(905) 624-5505
1-800 #:	1-800-561-5505
Fax #:	(905) 238-2360
Email link:	"Contact Us" on www.panasonic.ca

FOR PRODUCT REPAIRS, please locate your nearest Authorized Servicentre at www.panasonic.ca:

Link : "Servicentres™ locator" under "Customer support"

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 date of original purchase.

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 Defective Car Audio Speakers under warranty must be exchanged at the place of purchase. Contact your Dealer for details.	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 prepaid during the warranty period. If nonrechargeable 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, bug infestation, 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 sevicer, 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)
ACCESSOIRES - NINETY (90) DAYS, (IN EXCHANGE FOR DEFECTIVE ITEMS)

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.

About the data of the map

English

■ Disclaimer of Liability:

Panasonic AND ITS LICENSORS (INCLUDING THEIR LICENSORS AND SUPPLIERS) SHALL NOT BE LIABLE TO YOU: IN RESPECT OF ANY CLAIM, DEMAND OR ACTION, IRRESPECTIVE OF THE NATURE OF THE CAUSE OF THE CLAIM, DEMAND OR ACTION ALLEGING ANY LOSS, INJURY OR DAMAGES, DIRECT OR INDIRECT, WHICH MAY RESULT FROM THE USE OR POSSESSION OF THE INFORMATION; OR FOR ANY LOSS OF PROFIT, REVENUE, CONTRACTS OR SAVINGS, OR ANY OTHER DIRECT, INDIRECT, INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF YOUR USE OF OR INABILITY TO USE THIS INFORMATION, ANY DEFECT IN THE INFORMATION, OR THE BREACH OF THESE TERMS OR CONDITIONS, WHETHER IN AN ACTION IN CONTRACT OR TORT OR BASED ON A WARRANTY, EVEN IF Panasonic OR ITS LICENSORS HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. Some States, Territories and Countries do not allow certain liability exclusions or damages limitations, so to that extent the above may not apply to you.

■ Export Control.

You agree not to export from anywhere any part of the Data provided to you or any direct product thereof except in compliance with, and with all licenses and approvals required under, applicable export laws, rules and regulations.

■ Entire Agreement.

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Features

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 enjoyments, 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.

High performance Navigation

Goal !

Detour routes
When there is congestion or another problem along the route, search for detour routes to avoid it.

Add a destination
After the destination has been set, it is still possible to set other destinations (up to 5).

Autoroute
If the vehicle deviates from the guidance route, a new search is performed automatically.

Start
Set the destination from the Destination menu, and start route guidance.
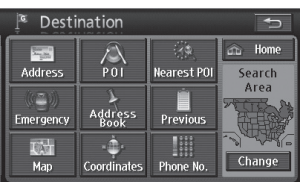
Near the intersection
Enlarged intersection map is displayed.
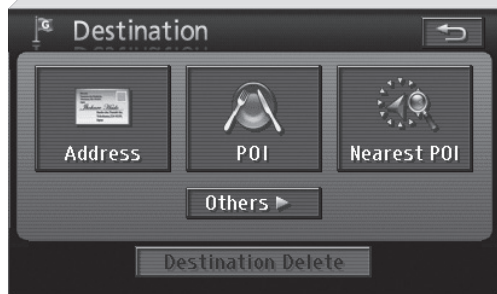
Easy to use

High usability and easy understand GUI

Information menu

Navigation menu
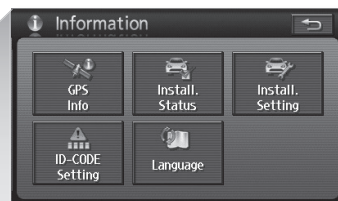
Setup menu

Destination menu

AV features

Various AV sources

| DVD | CD | MP3 WMA | FM | AM |

Connectable Optional devices

iPod®	• iPod • Direct cable for iPod (CA-DC300U, option)
XM	• Optional XM Satellite Radio Tuner (XMD1000) • Optional Digital Adapter Cable (XMDPAN110)
SIRIUS	• Optional SIRIUS Satellite Radio Tuner (SIR-PAN1)
Bluetooth®	• Bluetooth hands-free kit (CY-BT100U, option)

Rear Monitor	• Over-Head monitor (CY-VHD9401U, option)
TV TUNER	• TV tuner (CY-TUN153U, option)
Rear View Camera	• Rear view camera

Please refer to the separate "System Upgrade Guidebook" for how to operate this unit when optional devices are connected.

❏ No device is connected to this unit. Basic operations are covered only by this book.

❏ Optional devices are connected to this unit. Refer to the "**System Upgrade Guidebook**" in addition.

13

Contents

English

English

Français

Español

Components

Car navigation unit	Quick Reference Guidebook (YEFM262812)	Operating Instructions (YEFM285972)	System Upgrade Guidebook (YEFM285973)	Installation Instructions (YEFM294342)	Owner Information Card (YEFM07481)
Qty: 1	**Instruction kit Qty: 1**				

Installation hardware (screws, cords, etc.)
(➡ Installation Instructions)

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.

Names of controls and functions

── VOL ── ＋ ／ (Volume)
● Adjusts audiovisual volume.
 (➡ page 20)

OPEN (Open)
● Displays/hides the Open/Tilt/
 Eject screen. (➡ page 21)
● Closes the monitor.
 (➡ page 73)
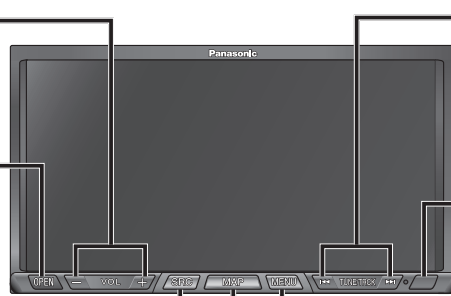
◄◄ TUNE/TRCK ►►／ (Tune/Track)
● Selects a station. (➡ page 71)
● Skips a track/chapter.
 (➡ page 77, 81)
● Fast forward/Fast reverse
 (➡ page 77, 81)

Remote control sensor
● Use this to operate the Car TV
 (CY-TUN153U, option) with the
 remote control unit provided.
 Navigation and other audiovisual
 operations cannot be performed
 from the remote control unit.

SRC (Source)
● Displays the Audiovisual source operation screen.

Audio Off/Audio On: (➡ page 70)

<Audiovisual source operation screen>

Current source

● Switches the source.

AM:	(➡ page 71)
FM:	(➡ page 71)
DISC:	(➡ page 74)
XM*1:	(➡ System Upgrade Guidebook)
SIRIUS*2:	(➡ System Upgrade Guidebook)
iPod*3:	(➡ System Upgrade Guidebook)
AV:	(➡ System Upgrade Guidebook)

*1 This is displayed when an XM Satellite Radio
 Tuner (XMD1000) is connected.
*2 This is displayed when a SIRIUS Satellite Radio
 Tuner (SIR-PAN1) is connected.
*3 This is displayed when an iPod is connected.

MENU (Navigation)
● Displays the Navigation menu.

<Navigation menu>

● Displays the Destination menu.

<Destination menu>
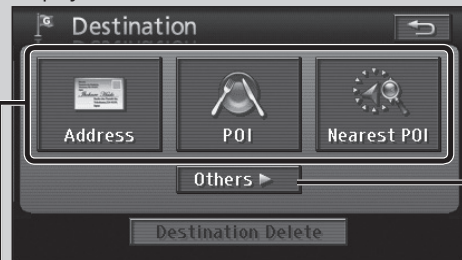
● Displays three commonly used search methods
 (shortcuts).
 Any three desired search methods can be
 selected as shortcuts. (➡ page 34)

MAP (Map)
● Displays the vehicle position (current position).
 (➡ page 28)

To go back to the previous screen

Touch ⮌ in the top right of the screen.

Panel open

SD Memory card slot
● Only used for map data and
software updates.
It cannot be used for playing
back audio format such as SD
audio.

CD/DVD slot

● Displays the Information menu.

<Information menu>
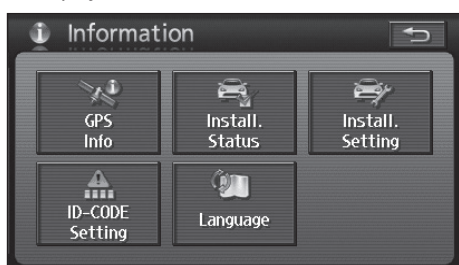
GPS Info:	(➡ page 23)
Install. Status:	(➡ page 22)
Install. Setting:	(➡ page 23)
ID-CODE Setting:	(➡ page 24)
Language:	(➡ page 25)
Rear View*:	(➡ System Upgrade Guidebook)

* This is displayed when a rear view camera is
connected.

● Displays the Setup menu.

<Setup menu>
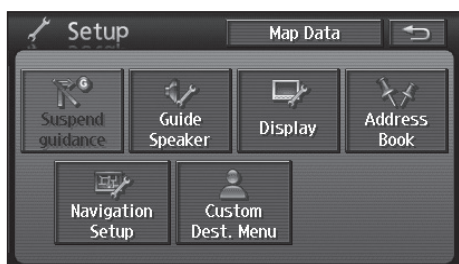
Suspend (Resume) guidance*:	(➡ page 39)
Guide Speaker:	(➡ page 20)
Display:	(➡ page 92)
Address Book:	(➡ page 62)
Navigation Setup:	(➡ page 84)
Custom Dest. Menu:	(➡ page 34)
Map Data:	(➡ page 26)

* Only be operated during route guidance.

● Displays all search methods.

<Destination menu (All)>

Address:	(➡ page 40)
POI (Point Of Interest):	(➡ page 42)
Nearest POI:	(➡ page 44)
Emergency:	(➡ page 46)
Address Book:	(➡ page 47)
Previous:	(➡ page 47)
Map:	(➡ page 48)
Coordinates:	(➡ page 48)
Phone No.:	(➡ page 49)
Home:	(➡ page 49)
Change:	(➡ page 36)

Turn on the power

1 Start the engine. (Or turn the key to ACC.)

● Turn on the navigation system power. (It takes a few seconds for the screen to appear.)

When setting the ID CODE (➡ page 24)

After moving this unit to a different vehicle, or after changing the battery or disconnecting its cables, the Input ID Code screen is displayed the next time the system starts.
Generally, it is not necessary to enter the ID code each time when using the unit if it has not been disconnected from the main power supply (car battery).

Enter the 4-digit ID code.

Note:
● In case you forget the ID code, please consult your nearest Panasonic Servicenter.

```
Input the ID-CODE

This product will not operate
with an invalid ID-CODE

1  2  3  4  5  6  7  8  9  0
```

---
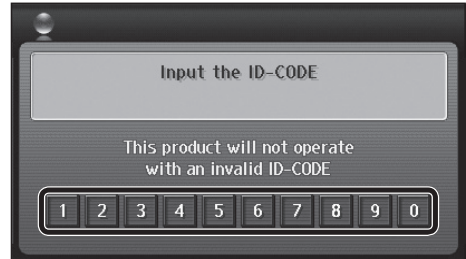
2 Read the precautions on the WARNING screen, then touch [I agree].

● The current position screen (vehicle position) is displayed.
● Change the language used. (➡ page 19)

Note:
● If 〔 MAP 〕 is pressed when the audiovisual screen is displayed, the display switches to current position screen.
● If ACC is left on for a long period of time without running the engine, it can run the battery down.
● Do not start driving until the current position screen is displayed.
  The system is preparing to boot up.

```
⚠ WARNING

Do not watch the screen while driving as this
can result in serious accident and personal
injury, including death.
Make selections only if stopped.
Read safety instructions in the Operating
Instructions Manual before operating the system.

Language                        I agree
```
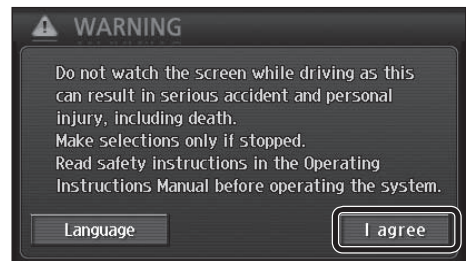
Select a language

First, select the language to use on this system. The available languages are English, French and Spanish.

1 Touch [Language] on the WARNING screen.

⚠ WARNING

Do not watch the screen while driving as this can result in serious accident and personal injury, including death.
Make selections only if stopped.
Read safety instructions in the Operating Instructions Manual before operating the system.

[Language]   [I agree]

2 Touch the language to use.

[Eng.]: English (Default)
[Fr.]: French
[Es.]: Spanish

● The system restarts if the language is changed.

Note:
● The language used for the touch keys, explanatory text, voice guidance and other content can be changed. Place names and street names do not change.
● The language can also be changed on the Information menu. (➡ page 25)

Select Language

The program will restart when the language is changed.

[Eng.]   [Fr.]   [Es.]

English   French   Spanish
(Default)

Check the vehicle position

When the power is first turned on, the map display may differ from the actual vehicle position. Once the GPS receives satellite signals, the map display will eventually shift to the area around the vehicle (the current position screen). Use a clearly visible point to check your position. **If the vehicle position is not displayed correctly, check GPS reception.** (➡ page 23)

1 Check that the GPS mark (GPS) is displayed.

● It may take some time for the GPS mark to appear.
● If there is no GPS mark, or if the mark continues to flash, check GPS reception. (➡ page 23)

2 Press MAP to display the current position screen.

3 Continue for a while along a road with good visibility. (60 minutes or more)

● The discrepancy between the position of the vehicle mark on the map screen and the actual vehicle position will be corrected.

19

Adjust the volume

Adjust navigation volume

1 **Select [Setup] from the Navigation menu.** (➡ page 16)

2 **Select [Guide Speaker].**
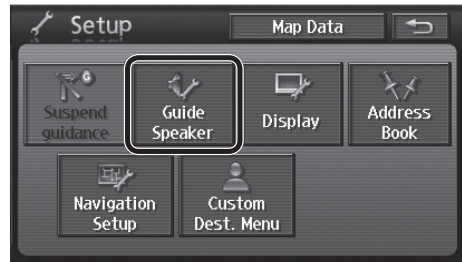
3 **Select a setting [1] – [7] to adjust volume.**
- Select [Off] to cancel voice guidance.

Note:
- The navigation volume cannot be adjusted by
  `— VOL +`.

Adjusts the volume for voice guidance.

Checks the volume.

To switch the volume automatically according to the speed

When vehicle speed exceeds 50 miles (80 km) per hour, the guidance volume is automatically raised by one step.
Touch [Adaptive volume control].
- Touch it again to cancel Adaptive volume control.

To set voice guidance speaker

Sets the speakers which output navigation voice guidance.
Touch [Both]/[Lch]/[Rch].

default : On

Note:
- If guidance volume is set to [Off] or [7], it will not switch.

Adjust audiovisual volume

Press `— VOL +`.
Down   Up

- Adjustment range: 0 – 40
- Each press turns the volume up (down) one level.
- Pressing and holding `+` or `—` turns the volume up or down continuously.

Note:
- Volume settings for DVD and AV are stored separately from the volume settings for other sources.
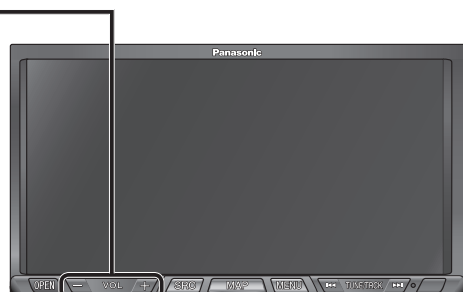
Operate the monitor

Adjust the monitor angle (TILT)

Adjust the angle to give easy visibility at the position mounted.

1 **Press OPEN.**

* The Open/Tilt/Eject screen is displayed.
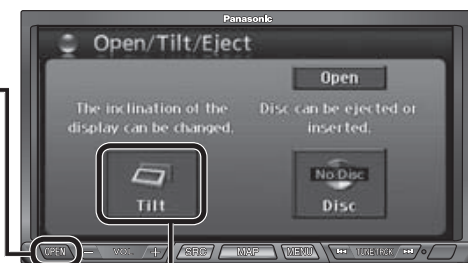
2 **Touch [Tilt] to adjust the angle.**

* Each touch switches the angle as shown below.

    1 → 2 → 3 → 4 → 5
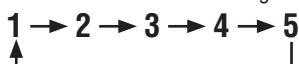
* When operation is complete, press OPEN, MAP, MENU or SRC.
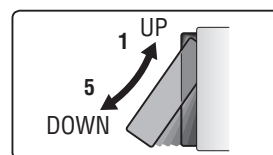
⚠ **Caution:**

* **Take care to avoid your fingers from becoming trapped as the monitor opens and closes.**

Note:
* When the engine is turned off, the monitor returns to the fully closed position.
* Next time the engine is started, the monitor opens to the previously adjusted angle.
* Adjust the brightness of the screen for easy visibility. (➡ page 92)
* Do not force the monitor forward by hand, or block its operation.
* Do not strike the monitor strongly. (For example, take care when moving luggage in and out of the vehicle.)

Screen off

Select [Screen Off] from the Navigation menu. (➡ page 16)

* **The system operates as follows, depending on the specific Screen Off settings.** (➡ page 86)
  [On]: Screen display is switched off, but sound remains on.
  [Off]: Both screen display and sound are switched off.
* Illumination (button illumination) is not switched off.

To display the screen

Press MAP, MENU or SRC.

Check mounting and wiring

Installation confirmation

Check the state of mounting and wiring.
● Refer to the Installation Instructions for details.

1 Press [MENU].

● The Navigation menu is displayed.

2 Select [Information].

● The Information menu is displayed.

3 Select [Install. Status].
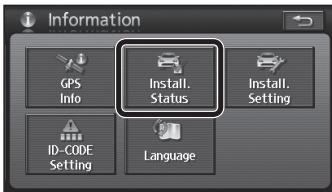
4 Check mounting.

● The items you can check are shown in the table on the right.

■ The items you can check

GPS Antenna	If the antenna is connected normally, this indicates "ON".
Lighting Switch	If the vehicle side lights are switched on, this changes to indicate "ON".
Reverse	When the shift lever is shifted to reverse, this changes to indicate "ON".
Parking Brake	When the parking brake is pulled, this changes to indicate "ON".

Speed	Vehicle speed is displayed.
ACC Voltage	The display should normally be approximately 12 V. (11 to 16 V)

Speed Pulse	The reading changes to "0" when [Pulse Reset] is pressed. If the system is functioning normally, the number should be different after the vehicle has moved.
Accuracy Level	The reading changes to "0" when [Level Reset] is pressed. The number changes after the vehicle has moved. (Level 4 is the maximum)
Sensor Reset	The reading changes to uncorrected when [Sensor Reset] is pressed.

Note:
● In the following situations, please reset "Speed Pulse", "Accuracy Level" and "Sensor Reset".
  • The unit has been transferred to another vehicle.
  • The tires have been changed.
  • The tires have been rotated.
● On routes that involve congestion and frequent stop-start driving, such as in town, routes with many left and right turns, and routes where GPS signal reception is poor, the correction process could take a long time and leave errors in the stored content.
● For some vehicle models, the vehicle mark may stop moving when speed increases, but that does not indicate a malfunction when it takes place during the correction process.

Installation setting

Set the state of mounting and wiring.
● Refer to the Installation Instructions for details.

1 Select [Install. Setting] from the Information menu.

● The Install. Setting screen is displayed.

2 Make settings.

● Speed Signal:
Set the speed signal detection level. (It should be set to [Normal] in normal circumstances.) Select [Low Level] if the voltage of the speed signal is low and the signal cannot be detected.
default: [Normal]

● Rear View Camera:
Set whether or not to switch to the image from the rear view camera when the shift lever is in the reverse position.
(➡ System Upgrade Guidebook)
 [On]: Set this if a rear view camera is connected.
 [Off]: Set this if no rear view camera is connected.

default: [Off]

Note:
● The image from the rear view camera may be blurred in the night or a dark place.

● H/F Speaker:
Set the speakers to use for audio output of hands-free conversation if a hands-free kit featuring Bluetooth® technology (CY-BT100U, option) is connected.
 [Both]: Front Left/Right speaker
 [Lch]: Front Left speaker
 [Rch]: Front Right speaker

default: [Both]

GPS information

Check GPS information reception.

1 Select [GPS Info] from the Information menu.
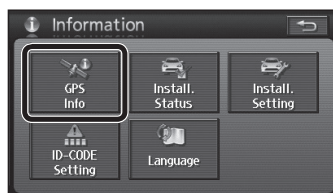
● The GPS Info screen is displayed.

2 Check the reception.

● Use a clearly visible point to check reception.
● Check that at least three satellite numbers are being received, and that the latitude and longitude are displayed.

Note:
● If GPS reception is not continuous, check connections to the GPS antenna, and its mounting position.

ID CODE setting

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

default: None

Record your registered ID code and keep it in a secure location. If you forget it, you will be unable to use this unit.

● Copy and use the ID code memo at the back of this manual.
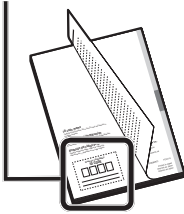
■ To set the ID code

1 Select [ID-CODE Setting] from the Information menu.
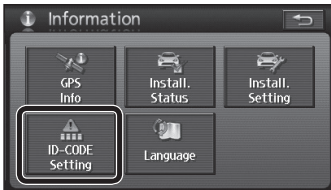
● The ID CODE setting screen is displayed.

2 Enter the 4-digit ID code.

3 Re-enter the 4-digit ID code, then select [OK].

● The ID code is set.

■ To change the ID code

1 Enter the current ID code on the ID CODE setting screen.

2 Enter the new ID code.

3 Re-enter the new ID code, then select [OK].

● The ID code is updated to the new entry.

Language

■ To cancel the ID code

1 **Enter the 4-digit ID code on the ID CODE setting screen.**

2 **Select [Clear].**

3 **Select [Yes].**
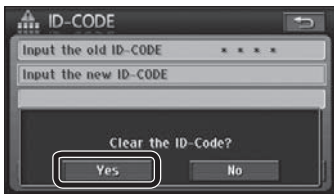
● The ID code setting is cancelled.

Note:
● Should your unit ever require service, cancel your ID code before sending for repair.
● The ID code setting cannot be eliminated even by the memory clear function.
● The inputted code is not displayed for your security.

■ If you forget the ID code…

If you forget the ID code, please consult your nearest Panasonic Servicenter.

Select the language to use on this system.
● The language can also be changed at boot up. (➡ page 19)

default: [Eng.]

1 **Select [Language] from the Information menu.**
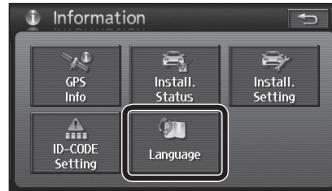
2 **Select the language to use, from [Eng.]/[Fr.]/[Es.].**
● Eng. : English
  Fr. : French
  Es. : Spanish

● Restarts the system to change the language setting.

Clock display

Check map data

Clock display
The clock is adjusted automatically, using a signal from GPS satellites.
(The clock cannot be adjusted manually.)

Note:
- The clock can only display on the map screen.
  It cannot be displayed on audiovisual screen and menu screen.
- The time zone can be changed (➡ page 84).
  It does not change automatically.
  default : EST (Eastern Standard Time)
- It can be set to display/not display. (➡ page 84)

The current version of the map data can be checked.

1 **Select [Setup] from the Navigation menu.**

2 **Select [Map Data].**

3 **Check the map data.**
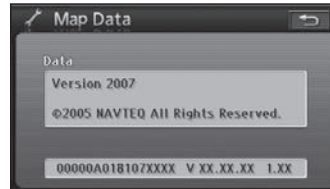
Navigation Operations

● **Map operations**
● **Create a route to the destination**
● **Search for a destination**
● **Edit the route**
● **Check the route**
● **During route guidance**
● **Register a location**
  - Contact
  - Area to avoid

Map operations

English

Current position screen (displays the vehicle position)

Press ⎵MAP⎵ to display the current position (vehicle position) screen.

3D landmark
Displays specific POIs as 3D landmarks.
Scale: 150 ft – 0.5 mile (50 m – 500 m*)
* This is the scale when "km" is set as the distance setting (➡ page 84).
● Screen can be set to display/not display. (➡ page 84)

Orientation mark (➡ page 32)
Displays the orientation of the map.
Touch the icon to switch between North up and
Heading up orientations.
● North up: North is at the top of the map.
● Heading up: The direction of motion is towards
                the top of the map.

Scale display
The scale of the map is displayed.

GPS mark
This is displayed when vehicle position is
calculated using GPS satellites.
● When it is not displayed, or when it flashes
   continuously, check the GPS antenna
   mounting position.

Type of guidance map (➡ page 30)
Displays the type of the current guidance
map. Touch the icon to display the Guidance
map switch menu.

● ▲   : One-screen display
● ▲▲   : Two-screen display
● ▲≡   : Turn list
● ▲▣   : Enlarged intersection map
● ▲▸▹   : Highway transition zoom map

Clock display (➡ page 26)

POI icons (➡ page 50)

Vehicle mark

Zoom in/Zoom out
(➡ page 33)
Zooms in/zooms
out the map scale.

[Map view]
Displays the Map view menu.

[Mark] (➡ page 62)
Registers the point at the center of the map as
a Contact (Address Book).

[<<Off]
Clears touch keys from the map.
Touch [On>>] to display the touch keys again.

City map

When the scale is 150 ft (50 m*), the display can be switched to a map showing detailed building shapes. (➡ page 33)

* This is the scale when "km" is set as the distance setting
   (➡ page 84).

Note:
● The display cannot switch to that content in areas which
   lack city map data.

Map mode screen

When the map is scrolled (➡ page 32), the display switches to the Map mode screen.
Unless stated otherwise, the touch keys function in the same way as on the current position screen.

Cursor
Displays the center of the map.

The distance from the center of the map
to the vehicle position.

[Enter ⓖ] (➡ page 53)
Sets the point at the center of the map as a
destination.
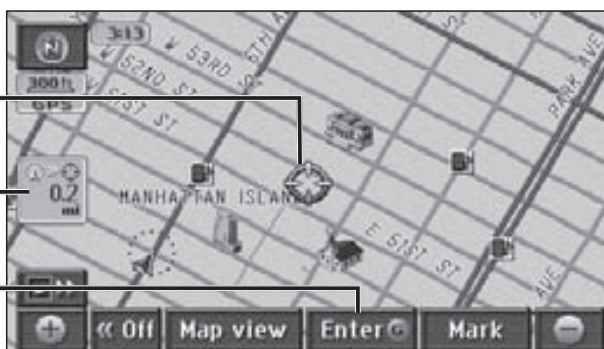
Display during route guidance

During route guidance, various guidance screens are displayed as circumstances require.
Unless stated otherwise, the touch keys function in the same way as on the current position screen.

Guidance route
The route is displayed by a yellow line.

Remaining distance display
The distance to the destination is displayed.
If multiple destinations have been set, the
distance to the next destination is displayed.

Arrival time
The estimated arrival time at the destination is
displayed.
● When in the Map mode screen, the straight
distance from the center of the map to the
destination is displayed.
● The display can be toggled to show remaining
time. (➡ page 39)

[Route]
Searches again for a route to the next destination.
● The search conditions, etc. can be changed. (➡ page 38)

Day mode and Night mode

When the headlights or side lights are lit, the screen display switches to improve map visibility.

Day mode

Lights lit

Lights turned off

Night mode

Note:
● If [DAY MODE] is selected from the night mode screen, the screen can be switched to Day mode. (➡ page 92)

Map operations (continued)

Switch the map

1 Touch ⬛▶▶.

2 **Select the map from the icons.**
- Refer below for the meanings of the icons.
- One-screen display is used when ⬛ is selected.

Note:
- ⬛, ⬛ and ⬛ are displayed during route guidance when there is map data that can be displayed.

⬛ Two-screen display

The screen is split in two for map display.
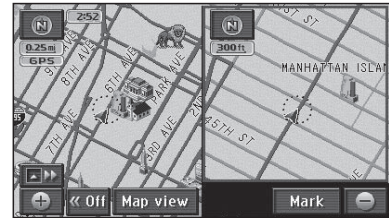
⬛ Turn list

Course information is displayed for intersections on the route.

⬛ Enlarged intersection map

The distance to the next intersection, the name of the road to turn onto, and the direction to turn are displayed.
- The intersection is displayed approximately 0.25 miles (400 m*) in advance. (In residential area)
  The intersection is displayed approximately 0.5 miles (800 m*) in advance. (In non-residential area)
- In some cases, an intersection may be displayed even if the route does not require a turn at that intersection.
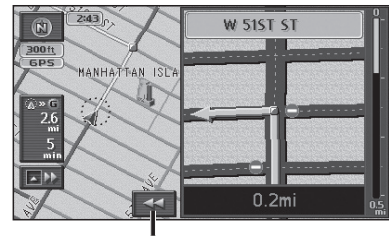
Remove the enlarged map.

⬛ Highway transition zoom map

During highway driving, the distance to the junction, the place the road heads to, the name of the road to turn onto, and the direction to turn are displayed.
- The junction is displayed approximately 2 miles (2 km*) in advance.

- A map such as the one on the right is displayed for junctions which are not in the database of the highway transition zoom map.
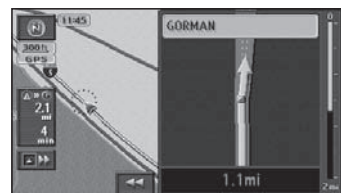
* This is the distance when "km" is set as the distance setting (➡ page 84).

Operation of two-screen display

Operation of the left screen

The screen can be operated in the same way as a one-screen display.

Operation of the right screen

1 **Touch the right screen.**
- The right screen becomes the screen that can be operated.
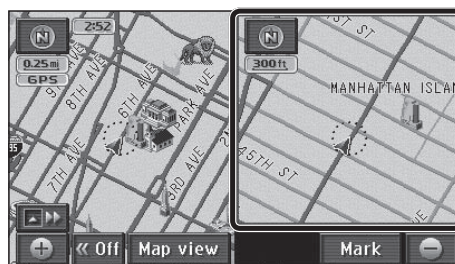
2 **Operate the right screen.**

Returns to left screen operation.

[Display POI icons]
Touch to toggle POI icon display on or off for the right screen.
- This cannot be used if POI icons are not displayed on the one-screen display or on the left screen. (➡ page 50)

Zoom in/Zoom out (➡ page 33)
Zooms in or out the map scale.

Note:
- The map cannot be scrolled.

Map operations (continued)

Move the map (scroll)

1 Touch the screen.

- The point touched becomes the center of the screen and the cursor "⬡" is displayed. (Map mode screen)
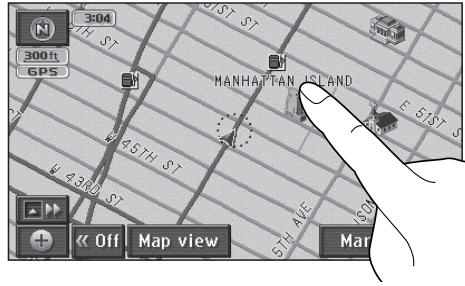
2 Touch and hold in the direction to scroll.

- Scrolling continues while the screen is touched. (Continuous scroll)*
- Touching near the center of the map causes low-speed scrolling, and the scroll speed increases the closer to the periphery the screen is touched.
- * The map cannot be scrolled while the vehicle is in motion.

Note:
- Even if the scale and orientation of the map are switched in Map mode screen, pressing `MAP` returns the display to the original settings.

Switch orientation (Heading up/North up)

The display can be switched between Heading up, with the heading direction towards the top of the map, and North up, with north at the top of the map.

To switch from North up to Heading up

Touch ⓝ.

- The display switches to Heading up.

Note:
- The Map mode screen cannot be switched from North up to Heading up.

North is up (North up)

To switch from Heading up to North up

Touch ◐.

- The display switches to North up.

Heading is up (Heading up)

Switch the scale

⊖ : Zooms out. ————

⊕ : Zooms in. ————

- Touch and hold to switch the scale as if zooming in or out.
- The scale range is from 150 ft (50 m*) to 300 miles (500 km*).
- * This is the distance when "km" is set as the distance setting (➡ page 84).

- Touch ⊕ or ⊖ to display the scale bar. Touch the number for each scale to switch to that scale.
  (The map cannot be switched to the scale while the vehicle in motion.)
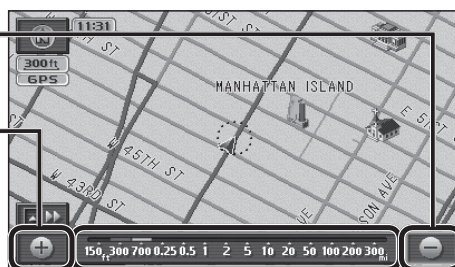
To display the city map

When the scale is 150 ft (50 m),
Touch ┿. ————

- The city map is displayed.

Touch ┿. ⬇   ⬆ Touch ⊖.

■To cancel city map display

Touch ⊖. ————

To see the entire route from the current position to the next destination

Touch Ⓐ»Ⓖ. ————

- The map is displayed at a scale which allows display of the entire route from the current position to the next destination.

Note:
- This function can be used when setting a destination.
- If the distance to the destination is so long that it cannot be displayed within a more detailed scale, it is displayed at the 300 mile (500 km*) scale.
- This operation is unavailable on city maps.

- * This is the scale when "km" is set as the distance setting (➡ page 84).

33

Map operations (continued)

Customize the Destination menu

Three items displayed in the Destination menu can be changed. It is convenient to set frequently used items on the Destination menu.
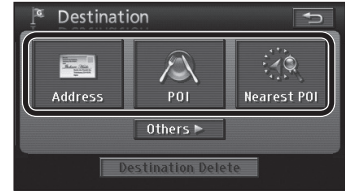
1 **Touch [Setup] from the Navigation menu.**

2 **Touch [Custom Dest. Menu].**

3 **Touch three items to select them for inclusion in the Destination menu.**

- Always select three items.
- Touch [Default] to select [Address], [POI] and [Nearest POI].

4 **Touch [OK].**
- The selected items are registered to the Destination menu.
- They are arranged in order of selection, from the left.

Clear or display route trace

■Route trace
The route the vehicle has driven along is marked for up to approximately 125 miles (200 km*). When the distance driven exceeds 125 miles (200 km*), the route trace is deleted, starting from the earliest recorded.
● The route trace can be cleared and re-displayed, as required.
● The display scale can be switched between 150 ft (50 m*) and 32 miles (50 km*).

* This is the scale when "km" is set as the distance setting (➡ page 84).

To clear route trace

1 Touch [Map view] on the current position screen.
● The Change map view screen is displayed.

Route trace

2 Touch [Stop].

3 Touch [Yes] to clear display and route trace data.

Touch [No] to clear the display without deleting the route trace data.

Note:
● When route trace is not displayed, the route trace data is not recorded.

To display route trace

Touch [Record] on the Change map view screen.
● Starts recording a route trace from the current position.
● If "No" was selected in step 3 of the "To clear route trace" procedure, the route trace that was displayed before it was cleared is displayed again.

Create a route to the destination

1 Search for the destination on the Navigation menu.

Use the search function to search for the destination.

Navigation menu

Touch [Destination].

Destination menu

Touch [Others].

● Setting frequently used items on the Destination menu makes it easier to search for destinations. (➡ page 34)

Destination menu (All)

The Destination setting screen (a map of the area around the destination) is displayed as the result of the search.

■The List screen

⚏ ⚏ : Moves the cursor to the previous/next screen.
▲ ▼ : Moves the cursor to the previous/next item.

POI
| Name | PANA | | 98 | USB |
| City | | | Category | |

- NICHOLAS PANARELLA JR
- GERARD P PANARO
- PANAROMA ELEMENTARY SCHOOL
- PANARO & PRETTYMAN PHOTOGRAP
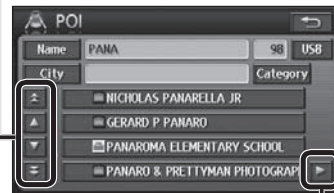
▶ : Scrolls to display the parts of names which cannot be displayed fully at first. Scrolling stops at the last name, and ◀ is displayed.
Touch ◀ to return to the previous display.

■To switch the search area

The Search area function divides United States, Canada and Puerto Rico into 14 areas, so that the search can be narrowed to a specified area. Areas other than the one specified are not subject to searching.

① **Touch [Change].**
② **Touch the area to search.**

Search Area

US1	US2
US3	US4
US5	US6
US7	US8
US9	US10

CAN

CT,MA,ME,NH,NJ,NY,RI,VT   OK

<Search Area screen>

③ **Select [OK].**
● The area to search switches.

Note:
● The default is [US8].
● Hawaii is [US12].
● The Search Area screen is also displayed when [US8] is selected from Address search (➡ page 40), POI search (➡ page 42) or Phone No. search (➡ page 49).

Address
| Street | Input street name | ... | USB |
| City | | | |

A B C D E F G H I J
K L M N O P Q R S
T U V W X Y Z &
A-Z A-Y 0-9 Space ← List

Display the current search area. Choose this to display the Search Area screen.

2 Touch [Enter] when the map displaying the destination appears.

A search is made for the route from the vehicle position to the destination.
- The destination (set location) is marked with a G.

3 Touch [Start] when the All route screen is displayed.

Route guidance begins.

Destination setting screen
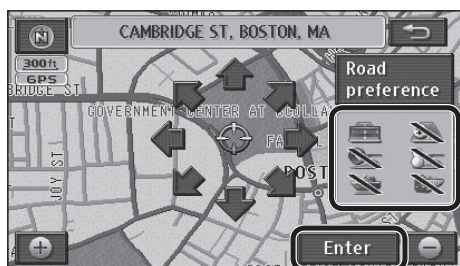
■ Checking the route to be used

The route selection status for the route to use is displayed.

Example:

$: Use

: Do not use

- : Highway
- : Time-restricted road
- : Ferry
- $: Toll road
- : Seasonally restricted road
- : Car train

- [Road preference]: The type of road to use can be changed. (➡ page 58)

■ If the destination has been set

The following two touch keys will be displayed instead of [Enter].
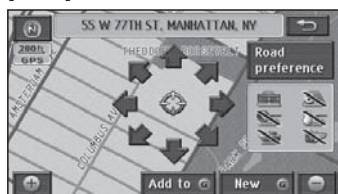
- [New Ⓖ]: The set destination is cancelled and a new destination is set.
- [Add to Ⓖ]: A new destination is set in addition to the previously set destination.

Note:
- [Info.]: Information on the POI is displayed. Nothing is displayed if there is no information. (➡ page 50)

All route screen

■ Distance and time display

The distance and time (such as estimated arrival time or remaining time) to the next destination are displayed. Refer to page 39 for how to switch the time display.

■ Roads and distances used

The total route length is displayed, together with the distances using highways, toll roads, time-restricted roads, seasonally restricted roads, ferries and car trains.

■ To check the route

- [3 routes]: Three types of routes to the destination are displayed. (➡ page 38)
- [Route]: The Change Route screen is displayed. (➡ page 38)

Note:
- If there are transit destinations (➡ page 52), [3 routes] will not be displayed.
- The demo starts if [Start] is touched for 3 seconds. (➡ page 59)
- The All route screen can be displayed even after guidance starts. (➡ page 60)
- The turn list cannot be displayed. To display the turn list, display the All route screen manually after route guidance starts. (➡ page 60)
- There are cases where a part of the route that you set is not displayed due to the scale of the map. However, it does not affect the audio assist function.

Create a route to the destination (continued)

Select the route from 3 routes

Select your favored route from among the 3 routes based on different search conditions.

1 Select [3 routes] from the All route screen.

● The 3 routes display screen is displayed.

2 Select a route.
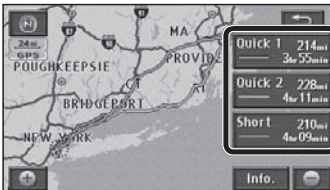
[Quick1]: The route searched for under the time priority search condition.

[Quick2]: A different route searched for under the same search conditions as the current route.

[Short]: The route searched for under the distance priority search condition.

● The All route screen is displayed for the selected route.

● Three types of color-coded routes are displayed.

● Select [Info.] to display the 3 Routes Information screen.

• Various route information (remaining time, total route length, toll road, highway, ferry, and car train) is displayed.

• When a route is selected, the All route screen is displayed for the selected route.

Note:
● The routes displayed may be the same in some cases.
● Maps cannot be scrolled on screens which display the 3 routes display screen.
● If there are transit destinations (➡ page 52), [3 routes] will not be displayed.
● [3 routes] cannot be displayed on the manually displayed All route screen.

Change the route

The conditions used for the search can be changed.

Select [Route] on the All route screen.

● The Change Route screen is displayed.

● Select [Search condition] to change the type of route search conditions. (➡ page 57)
● Select [Road preference] to select the road to use. (➡ page 58)
● Destination: Destinations can be added, re-ordered and deleted. (➡ page 52, 54, 55)

Change time display

Switches the display of time to destination between estimated arrival time and remaining time.

Select **.**

- Touch [Arrival time] ([Re-maining time]) to switch the display to estimated arrival time (remaining time).
- Touch [◄◄] to return to the previous display.

■ If a transit destination has been set
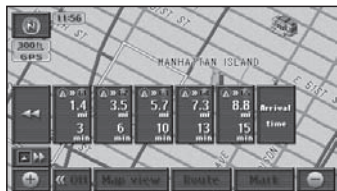
- If there is a transit destination (➡ page 52), the distance and the estimated arrival times and remaining times for each destination are listed. Touch a destination on the list to display the distance and time (estimated arrival time or remaining time) for that destination.
- Touch [◄◄] to return to the previous display.

Suspend route guidance

If guidance for the set route is not required, route guidance can be suspended. This is a convenient function for driving on smaller roads or in well-known areas.

1 Select [Setup] from the Navigation menu during route guidance.

- The Setup menu is displayed.

2 Select [Suspend guidance].
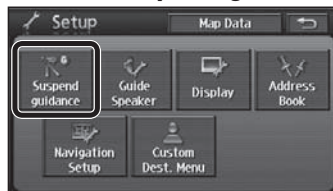
- Suspends route display and voice guidance.
- The set destination is not cancelled.

Note:
- To suspend voice guidance but leave the route displayed, set "Auto voice guidance" to [Off]. (➡ page 84)

■ Resume route guidance

While route guidance is suspended, Select [Resume guidance] from the Setup menu. (➡ above)

- Route display and voice guidance resume.

Search for a destination

Address search

Search for the destination address from the street name.

1 **Select [Address] from the Destination menu (All).**

● The Address search screen is displayed.

2 ■**To search by street**
Enter the street name.
➡ **Go to step 3 - ①**
■**To search by city**
Select [City].
➡ **Go to step 3 - ❶**

● How to enter text (➡ page 97)

■ To search by street

3 **Select [List].**
-
①

3 **Select the street from the list.**
-
②

3 **Select the city from the list.**
-
③
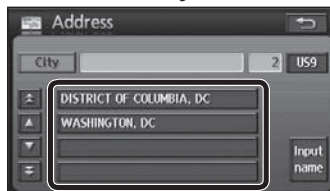
● The address range list is displayed.
➡ **Go to step 4**
● Select [Input name] to refine your search by city.

■ To search by city

3
-
❶
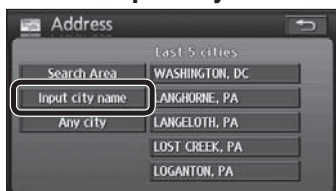
Select [Input city name].

■ **To search for a city from previous city searches**
Select the city from the list (up to 5).
➡ **Go to step 3 - ❹**
● Select [Search Area] to change the Search area. (➡ page 36)
➡ **Go to step 2**

3
-
❷

Enter the city name and select [List].

3
-
❸

Select the city from the list.

3
-
❹

Enter the street name and select [List].

● Choosing [List] without inputting a street name lists all streets in that city.

3
-
❺

Select the street from the list.

● The address range list is displayed.
➡ **Go to step 4**

4

Select the address range from the list.
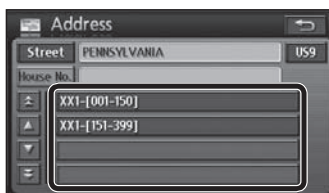
5

Enter the house number and select [OK].
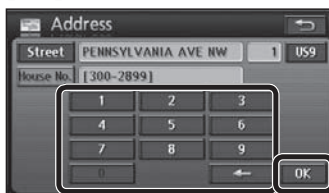
● The map is displayed.
● If you select [OK] without entering the house number, the map showing the vicinity of the street selected is displayed.

6

Select [Enter].

● The All route screen is displayed after the search is complete.

7

Select [Start].

● Route guidance starts .

Note:
● If there is only one candidate for city, address range and house number, the list is not displayed, and the process advances to the next step.
● If there is no city or address range data for the selected street, the map is displayed for an area centered around the street.
● To cancel refinement by city, select [City], then [Any city].

Search for a destination (continued)

POI (Point of interest) search

Use a POI name to search for a destination.

1 Select [POI] from the Destination menu (All).

● The POI search screen is displayed.

2 Enter the name.

● How to enter text (➡ page 97)

3 Set the search conditions.

■ **To refine your search by category**
  Select [Category].
  ➡ **Go to step 4 - ①**
■ **To refine your search by city**
  Select [City].
  ➡ **Go to step 4 - ❶**
■ **If there is no refine search setting**
  Select [List].
  ➡ **Go to step 5**

■ To search by category

4 ① Select a main category.

● Select [List all categories] to display the sub-categories within all main categories.
● Select [Cancel] to cancel the set category.

4 ② Select a sub-category.

● ➡ **Go to step 3**

■ To search by city

4
–
❶
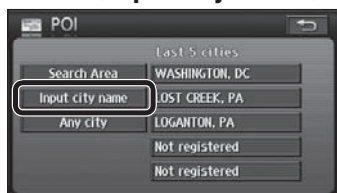
Select [Input city name].

■ **To search for a city from previous city searches**
Select the city from the list (up to 5).
➡ **Go to step 3**
● Select [Search Area] to change the Search area.
(➡ page 36)
➡ **Go to step 2**

4
–
❷

Enter the city name and select [List].

4
–
❸

Select the city from the list.
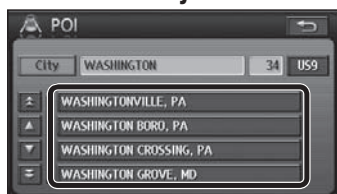
● ➡ **Go to step 3**

5

Select the POI from the list.

● The map is displayed.
● If there are multiple facilities of the same name in the same category, such as branches of a supermarket chain, the number of applicable facilities is displayed next to the icon. When a POI with multiple instances is selected, the branches are listed.

● The list can be sorted.
  • [Dist. sort]: The list is sorted in order of proximity.
  • [Name sort]: The list is sorted in alphabetical order.

6

Select [Enter].

● The All route screen is displayed after the search is complete.

7

Select [Start].

● Route guidance starts.

Note:
● To cancel refinement by city, select [City], then [Any city].

Search for a destination (continued)

Nearest POI search

Search for POIs in the area around the current position, the destination and the last map displayed.

1 Select [Nearest POI] from the Destination menu (All).

- The Nearest POI search screen is displayed.

2 Select the point for the center of the search.
- [Current Position]: Current position screen
- [Map]: Last displayed map
- [1]/[2]/[3]/[4]/[5]: Destination and transit destinations

- [1]/[2]/[3]/[4]/[5] are displayed according to the number of a destination and transit destinations set.
- If [Current Position] is selected
  ➡ **Go to step 4**

3 Move the cursor to the center of the area to search and select [Enter].

4 Select a main category.
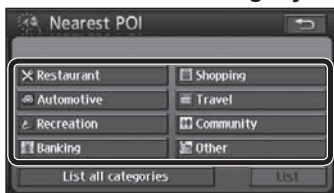
- Select [List all categories] to display the sub-categories within all main categories.

5 Select a sub-category and select [OK].

- Up to 5 sub-categories can be selected.
- To cancel a selected sub-category, select it again.

6 Select [Show list].

- POIs within a radius of 20 miles (32 km*) of the search position (the current position or the cursor position on the Map mode screen) are searched for and listed in order of proximity to the current position. Up to 200 matches can be made.
  * This is the range when "km" is set as the distance setting (➡ page 84).
- To re-select sub-categories, select [Select category] and repeat from step 4.

7 Select the POI from the list.

- The map is displayed.
- The displayed distance is the straight distance from the vehicle position to the POI.
- Select [Sort by] to sort the list.
  - [Distance]: The list is sorted in order of proximity.
  - [Category]: The list is sorted by category.
  - [Name]: The list is sorted in alphabetical order.
- Select [On route] to search for POIs along the guidance route. (➡ page 45)
- [On route] is not displayed if route guidance is not in use.

8 Select [Enter].

● The All route screen is displayed after the search is complete.

9 Select [Start].

● Route guidance starts.

Note:
● If multiple telephone numbers are registered under the same name, each is listed.

■ Search for POIs along the route

Only POIs that are on or close to the guidance route are searched for and displayed. The search range is a distance of 150 ft (50 m*) from either side of the route.
* This is the range when "km" is set as the distance setting (➡ page 84).

1 Select [On route] from the Nearest POI (➡ page 44, step 7) or nearest POI (➡ page 51, step 4) search list.

● POIs found by the search are listed, and the touch keys show the name, the icon, and the distance along the route from the current position.
● Select [Sort by] to sort the list.
  • [Distance]: The list is sorted in order of proximity.
  • [Category]: The list is sorted by category.
  • [Name]: The list is sorted in alphabetical order.

2 Select a POI.

● The map is displayed.
● The POI name and the distance along the route from the current position are displayed on the map.

3 Select [Add to Ⓖ].
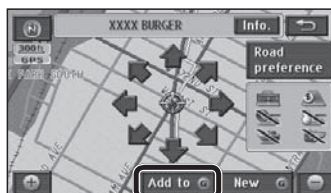
● Select [New Ⓖ] to delete all currently set destinations and set as new destinations.

4 Select [Add] for the section to add.

● The All route screen is displayed after the search is complete.

5 Select [Start].

● Route guidance starts.

Note:
● If no route is displayed on the map screen, it is not possible to search for POIs along the route.

Search for a destination (continued)

Emergency search

The search finds hospitals/police stations/service & maintenance within a radius of 100 miles (160 km*).
* This is the range when "km" is set as the distance setting (➡ page 84).

■ When stopped

1 Select [Emergency] from the Destination menu (All).
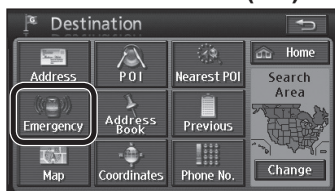
● The Emergency selection screen is displayed.

2 Select a category from the list.
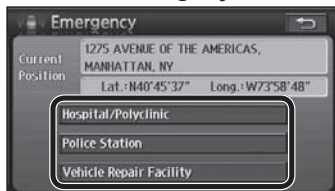
● The list of POIs is displayed.

3 Select the POI from the list.
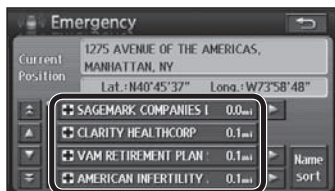
● The list can be sorted.
  • [Name sort]: The list is sorted in alphabetical order.
  • [Dist. sort]: The list is sorted in order of proximity.

4 Select [Enter].

● The All route screen is displayed after the search is complete.

5 Select [Start].

● Route guidance starts.

■ In motion

If the driver is also the operator of the navigation system, he or she must stop the vehicle in a safe place before operating it.

1 Select [Emergency] from the Destination menu (All).
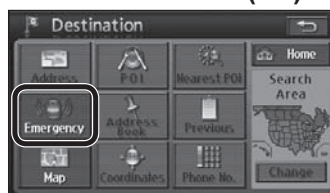
● The Emergency selection screen is displayed.

2 Select a category from the list.
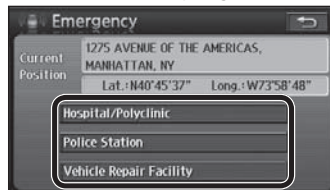
● The nearest POI to the current position is displayed.

3 Select [Enter].

● The All route screen is displayed after the search is complete.

4 Select [Start].

● Route guidance starts.

Address Book search

Search for a destination from among registered Contacts.
● You must register locations to use this feature. (➡ page 62)

1 **Select [Address Book] from the Destination menu (All).**
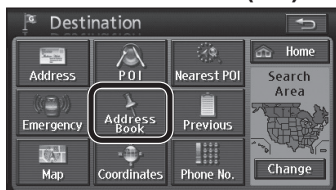
● The Address Book search screen is displayed.

2 **Select the Contact from the list.**

● The list can be sorted.
   • [Icon]: Display according to the type of icon. (➡ page 64)
   • [Date]: Display Contacts in order of registration.

3 **Select [Enter].**

● The All route screen is displayed after the search is complete.

4 **Select [Start].**

● Route guidance starts.

Previous search

Automatically store set destinations and search for destinations from that history. (Up to 20 destinations)

1 **Select [Previous] from the Destination menu (All).**
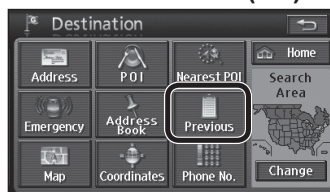
● The Previous search screen is displayed.

2 **Select a previous point from the list.**

● Select [Previous start point] to display the previous start point.

3 **Select [Enter].**

● The All route screen is displayed after the search is complete.

4 **Select [Start].**

● Route guidance starts.

Note:
● When there are more than 20 routes, the oldest are deleted sequentially. Register necessary points as Contacts. (➡ page 62)
● To clear previous points, refer to page 86.

Search for a destination (continued)

Map search

Search for a destination from the map.

1 **Select [Map] from the Destination menu (All).**

● The previously displayed map is displayed.

2 **Move the cursor to the position to set as the destination and select [Enter].**

● The All route screen is displayed after the search is complete.

3 **Select [Start].**

● Route guidance starts.

Coordinates search

Use coordinates to search for a destination.

1 **Select [Coordinates] from the Destination menu (All).**

● The Coordinates search screen is displayed.

2 **Enter the coordinates and select [OK].**
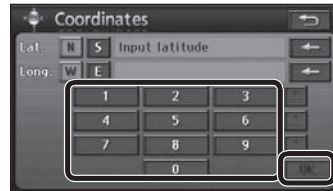
● When entering a latitude, select [N] for north and [S] for south; and select [E] for east and [W] for west when entering a longitude.
● To correct the coordinates, select [←] to delete digits one at a time.
● A map is displayed according to the coordinates input.

3 **Select [Enter].**

● The All route screen is displayed after the search is complete.

4 **Select [Start].**

● Route guidance starts.

Phone number search

Use a telephone number to search for a destination.

1 Select [Phone No.] from the Destination menu (All).
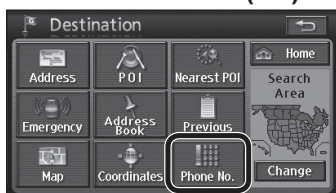
● The Phone number search screen is displayed.

2 Enter the telephone number and select [OK].

● The telephone number list is displayed.
● To correct the number, select [←] to delete digits one at a time.

3 Select the POI from the list.

● The map is displayed.
● Numbers with different area codes are also displayed.
● A list is not displayed if there is only one matching number.

4 Select [Enter].

● The All route screen is displayed after the search is complete.

5 Select [Start].

● Route guidance starts.

Return Home

Once the home location is registered, it is simple to find a route home from the current position.

● You must register the home location to use this feature. (➡ page 64)

1 Select [Home] from the Destination menu (All).

● Starts the route search.

2 Select [Start].

● Route guidance starts.

■ If home location has not been registered

Select [Home] from Destination menu (All) to display the Set Home confirmation screen.

1 Select [Yes] on the Set Home confirmation screen.
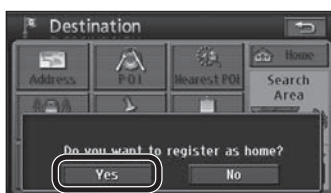
2 Search for home.

● Refer to pages 40 – 49 for the search method.

3 Select [Enter].

● Home is registered.

Search for a destination (continued)

Display POI icons

POI icons for frequently used POIs (Gas stations, restaurants, etc.) can be displayed on the map. Detailed information can also be shown for the displayed POI icons. (Scale: 150 ft – 0.5 mile (50 m – 1 km*))
* This is the scale when "km" is set as the distance setting (⇒ page 84).

1 Select [Map view] on the current position screen.

● The Change map view screen is displayed.

2 Select [Display POI icons].

● The Display POI Icons screen is displayed.

3 Select POI icons from the list and select [OK].

● Selected POI icons are displayed on the map.
● Up to 5 icons can be selected. Selected POI icons are displayed at the upper left.
● Selected POI icons can be cancelled by selecting them again.
● Select [Delete] to cancel all selected POI icons.
● The icons for displayed POIs can be changed. Refer to page 84 for the change method.

To select other POI icons, select [Other POIs] ⇒ Go to step 4

4 Select a main category.

● Select [List all categories] to display the sub-categories within all main categories.

5 Select POI icons displayed from the list and select [OK].

● Selected POI icons are displayed on the map.
● Up to 5 icons can be selected.
● To choose another category, select [More], then repeat from step 4.

■ To see information on POI icons

1 Put the cursor on POI icons, which will cause the cursor to flash.

● The POI name is displayed.

2 Select [Info.].

● POI information is displayed.
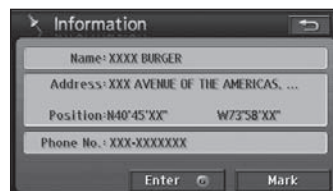
● Select [Enter ⓖ] to set it as the destination. If a destination has already been set, [Add to ⓖ] or [New ⓖ] is displayed. Refer to page 37 for details.
● [Mark]:   Registers the point at the center of the map as a Contact (Address Book).

Note:
● POI name display is automatically removed after it has been displayed for approximately 6 seconds.
● If multiple POIs exist for the same building, the POI icons may overlap on the map. In that case, the POI names are displayed sequentially as their POI icons are selected.
● Departments and sections within the same POI may, in some cases, be displayed as individual POI icons.

Search for nearby POI icons

This search covers POIs within a radius of 20 miles (32 km*) from the current position, or from the center of the cursor.

* This is the range when "km" is set as the distance setting (➡ page 84).

1 Select [Map view] on the current position screen.

● The Change map view screen is displayed.

2 Select [Display POI icons].

● The Display POI Icons screen is displayed.

3 Select the POI icons to search for, then select [List Nearest POIs].

● The names of POIs and their distance from the current position are displayed on touch keys.

4 Select a POI from the list.

● The map is displayed.
● Select [Sort by] to sort the list.
  • [Distance]: The list is sorted in order of proximity.
  • [Category]: The list is sorted by category.
  • [Name]: The list is sorted in alphabetical order.
● Select [On route] during route guidance to search for POIs along the guidance route. (➡ page 45)

5 Select [Enter Ⓖ].

6 Select [Enter].

● The All route screen is displayed after the search is complete.

7 Select [Start].

● Route guidance starts.

Note:
● This function cannot be used if POI icons are not displayed.
● The displayed distance is the straight distance from the vehicle position (if a nearby POI was searched for from the current position screen), or the straight distance from "◈" (if a nearby POI was searched for from the map screen).
● Up to 200 POIs can be searched for, in order of proximity.
● If multiple telephone numbers are registered under the same name, each is listed.

Edit the route

Add a destination

After the destination has been set, it is still possible to set other destinations (up to 5). If 5 destinations have already been set, delete one before adding another.

■ Add from the current position screen

1 **Select [Route] on the current position screen.**

● The Re-route search screen is displayed.

2 **Select [Route].**

● The Change Route screen is displayed.

3 **Select [Add].**

4 **Search for the destination to add.**

● Refer to pages 40 – 49 for the search method.
● [Home] is not displayed.

5 **Select [Enter] on the map screen.**

6 **Select [Add] for the section to add.**

● The Change Route screen is displayed.

7 **Select [OK].**

● The All route screen is displayed after the search is complete.
● To add further destinations, select [Add] and repeat the procedure from step 4.

8 **Select [Start].**

● Route guidance starts.

Note:
● [3 routes] is not displayed on the All route screen if multiple destinations have been set.
● Set destinations are marked by "**G1**" – "**G5**".

■Add on the Map mode screen

1 **Move the cursor to the intended destination and select [Enter Ⓖ].**

- Make the setting on a map of 0.5 mile (500 m*) or more detailed scale.
  * This is the scale when "km" is set as the distance setting (➡ page 84).

2 **Select [Add to Ⓖ].**

- The All route screen is displayed after the search is complete.
- Select [New Ⓖ] to delete all currently set destinations and set new destinations.

3 **Select [Start].**

- Route guidance starts.

Note:
- The destination set by the one-touch method is set as "Ⓖ₁" (the first destination).
- To change the order of destinations, refer to "Change the order of destinations" on page 54.

■Add from the Destination menu

1 **Search for the destination to add from the Destination menu (All).**

- Refer to pages 40 – 49 for the search method.

2 **Select [Add to Ⓖ].**
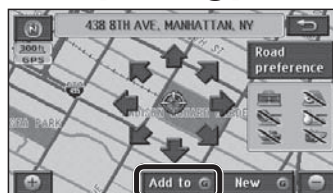
- Select [New Ⓖ] to delete all currently set destinations and set new destinations.

3 **Select [Add] for the section to add.**

- The All route screen is displayed after the search is complete.

4 **Select [Start].**

- Route guidance starts.

Edit the route (continued)

Change the order of destinations

1 Select [Change order] on the Change Route screen.

● The Reorder destinations screen is displayed.

2 Select the destination names in the order in which you want to pass through them, then select [OK].

● The names of the selected destinations are displayed in bold text, and numbered to indicate the order in which the route passes through them.
● To cancel the setting, select [Undo] or select the name of the destination to cancel.
● If there are no other operations for 3 seconds after the order of destinations is confirmed, the order is automatically confirmed and the Change Route screen is displayed.

3 Select [OK].

● The All route screen is displayed after the search is complete.

4 Select [Start].

● Route guidance starts.

Note:
● This function can only be used when multiple destinations have been set.

Delete a destination

■ Select a destination and delete it

1 **Select [Delete] on the Change Route screen.**

- The Delete Destinations screen is displayed.
- The Delete Destinations screen can also be displayed by selecting [Destination Delete] from the Destination menu.

2 **Select the destination to delete.**

- If only one destination has been set, the procedure moves to the next step without displaying the Delete Destinations screen.
- Select [Delete all] to delete all destinations.

3 **Select [Yes].**

- The destination is deleted.

■ Delete the next destination that the route passes through with one touch

Select [Delete next Ⓖ] on the Re-route search screen.

- Searching starts and guidance of new route begins.

Note:
- This function can only be used when multiple destinations have been set.

Edit the route (continued)

Search again for the route

During route guidance, the route search can be repeated when the current position screen is displayed. The search conditions used for the route currently followed can be changed for a new search.

1 **Select [Route] on the current position screen.**

● The Re-route search screen is displayed.

2 **Select search conditions from [Quick1]/[Quick2]/[Short].**

● Searching starts and guidance of the new route begins.
  - [Quick1]: The search looks for a route with the shortest travel time. (Recommended route)
  - [Quick2]: The search looks for a route that differs from the displayed route but uses the same search conditions as the current guidance route.
  - [Short]: The search looks for a route with the shortest distance to the destination.

Note:
● If multiple destinations have been set, the search to the next destination is repeated.

The search looks for nearby detour routes

It can search for a route that detours around the route ahead of the vehicle.

1 **Select [Route] on the current position screen.**

● The Re-route search screen is displayed.

2 **Select [Detour].**

● The Detour screen is displayed.

3 **Select the detour distance.**
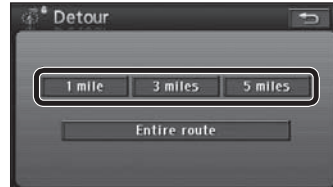
● The possible detour distance varies with the distance setting (➡ page 84) and the road currently used.

	miles	km
General road	1 mile 3 miles 5 miles	1 km 3 km 5 km
Highway	5 miles 15 miles 25 miles	5 km 15 km 25 km

● Searching starts and guidance of the new route begins.
● To detour around entire the whole route, select [Entire route].

Note:
● This function can only be used while driving along the route.
● In some cases the route displayed may not be a detour.

Set search conditions for each section of the route

Search conditions ([Quick1]/[Quick2]/[Short]) can be set for each section.

1 Select [Route] on the current position screen.

● The Re-route search screen is displayed.

2 Select [Route].

● The Change Route screen is displayed.

3 Select [Search condition].

● The Search Condition screen is displayed.

4 Select the search conditions for each section.

● Select search conditions from [Quick 1]/ [Quick 2]/[Short].
● If there are transit destinations, only [Quick] and [Short] will be displayed for sections after the first transit destination.
  • [Quick]: The search looks for a route with the shortest travel time. (Recommended route)
  • [Short]: The search looks for a route with the shortest distance to the destination.

5 Select [OK].

● The All route screen is displayed after the search is complete.

6 Select [Start].

● Route guidance starts.

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Edit the route (continued)

Select the road to use

Routes can be set that consider roads the driver wants to use and does not want to use.

1 Select [Route] on the current position screen.

● The Re-route search screen is displayed.

2 Select [Route].

● The Change Route screen is displayed.

3 Select [Road preference].

● The Road Preference screen is displayed.

4 Select desired roads to use and select [OK].

● The following six types of road can be selected. Operation indicators light for the selected items.
  • [Allow highway]
  • [Allow time-restricted road]
  • [Allow ferry]
  • [Allow toll road]
  • [Allow season-restricted road]
  • [Allow car train]
● To cancel the item, select it again.

5 Select [OK].

● The All route screen is displayed after the search is complete.

6 Select [Start].

● Route guidance starts.

Note:
● Even if the roads to use have been set, the search may find routes that do not use them, if using those would necessitate a major diversion. In that case, set a destination on the road to be used.

Check the route

Use the demo to check the route

Runs the route demo.

Touch and hold [Start] on the All route screen until there is a short "blip" sound.

- ● The demo shows route guidance to the destination.
- ● Press [MAP], [MENU] or [SRC] to end the demo.

Note:
- ● The demo cannot be used on the All route screen that is called up from the Change map view screen. (➡ page 60)
- ● If the driver starts driving during the demo, it stops and route guidance starts.

Route scrolling

The map screen can be scrolled along the route.

1 Select [Map view] on the map screen.

- ● The Change map view screen is displayed.

2 Select [Route preview].
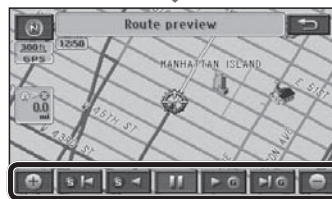
- ● [▶ⓖ] : The map scrolls in the direction of the destination at low speed.
- ● [ⓢ ◀] : The map scrolls in the direction of the starting point at low speed.
- ● [▶▶ⓖ] : The map scrolls in the direction of the destination at high speed.
- ● [ⓢ ◀◀] : The map scrolls in the direction of the starting point at high speed.
- ● [▶ⓖ] : Jumps to the next destination.
- ● [ⓢ ◀] : Jumps to the starting point, or to the previous destination (if multiple destinations have been set).
- ● [❚❚] : Pause scrolling.

Note:
- ● The map cannot be scrolled if the guidance route is not displayed on the screen.
- ● Only the jump function can be used while driving.
- ● Map scrolling stops if the map scale is switched.

During route guidance

Display the All route screen manually

The All route screen, displaying the route from starting point to destination, can be displayed manually.

1 Select [Map view] on the map screen.

● The Change map view screen is displayed.

2 Select [Route overview].

● The All route screen is displayed.

● Select [Start] to start route guidance.
● Select [Route] to display the Change Route screen. (➡ page 38)
● The distance to the next destination is displayed, together with estimated arrival time, remaining time, etc. (➡ page 29)
   • The estimated arrival time and remaining time can be switched. (➡ page 39)
   • If the vehicle is not on the route, the direction and distance to the destination are displayed.

● Select [Turn List] to display the turn list.

Road name

Section distance

Displays current position/destination/direction to turn, etc.

Displays the map for the selected point.

Note:
● The following operations are not available from the manually displayed All route screen.
   • [3 routes] display
   • Demo
Use the All route screen, which is displayed automatically after route searching is complete, to access [3 routes] and demo displays. (➡ page 37)

Autoroute

If the vehicle deviates from the guidance route, a new search is performed automatically and a new route to the destination from the current position is displayed.

Note:
● Autoroute does not operate for areas where there are no roads to the search target, such as within park sites. Autoroute only starts when it judges that the vehicle is moving along a search subject road.

Voice guidance on ordinary roads

In half of a mile (800 m*), right turn.

Next right, and then, left turn.

Non residential area

Residential area

In a quarter of a mile (400 m*), slight left turn.

Next slight left.

Slight right turn ahead.
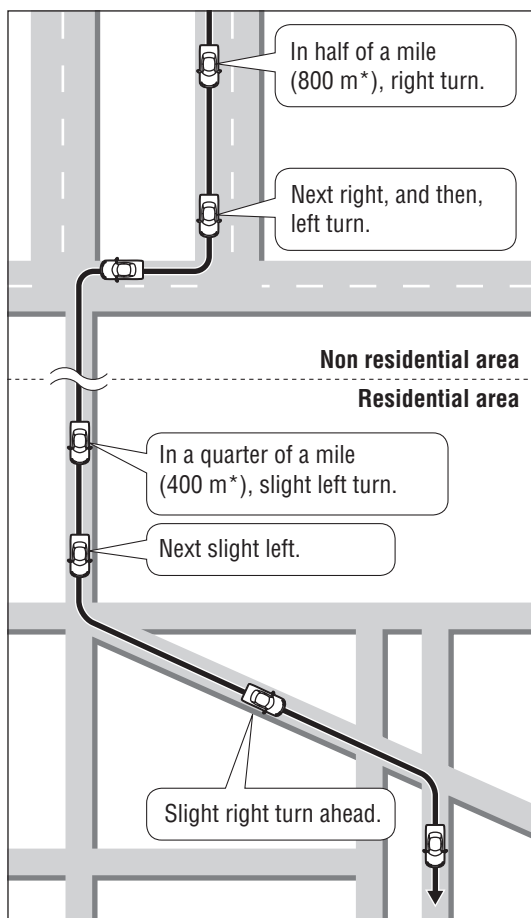
* This is the distance when "km" is set as the distance setting (➡ page 84).

■ Voice intersection guidance
The direction in which to turn is stated as one of eight directions.

Straight

Slight left turn

Slight right turn

Left turn

Right turn

Sharp left turn

Sharp right turn

Make a legal U-turn
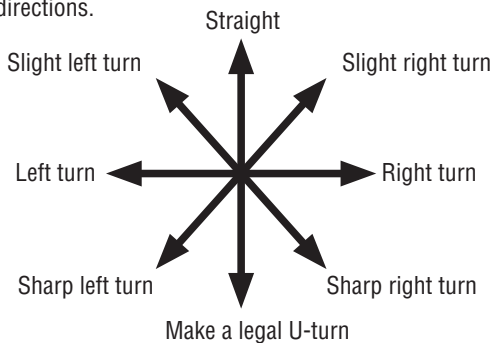
Note:
● Some voice guidance may be omitted, depending on the speed of the vehicle.

■ Guidance immediately before turns
A sound is played back immediately before a turn to let you know when to turn.

Voice guidance on freeways

■ Voice guidance on main routes

In 2 miles (3 km*), keep right onto XX.

Keep right onto XX.

■ Voice guidance near exits

The exit on the right.

Request voice guidance

Press /MAP\ during route guidance to display the name* of the current position and provide voice guidance of the distance to the next intersection, destination, etc.

* The name of the current position is displayed according to nearby place name, POI name or street name, etc.

Register a location (Contact)

Register a Contact

(Up to 106 locations, including home)

■ To register the current position

Select [Mark] on the current position screen.

● The position of the vehicle mark at that time is registered.

Note:

● The registered Contact is marked with a "🖈".

■ To register on the map screen

Move the cursor to the location to register and select [Mark].

● The cursor position is registered.
● Make the setting on a map of 0.5 mile (500 m*) or more detailed scale.
  * This is the scale when "km" is set as the distance setting (➡ page 84).

Note:

● The registered Contact is marked with a "🖈".

■ To register from the Navigation menu

1 Select [Address Book] from the Setup menu.

● The Address Book screen is displayed.

2 Select [Register] for "Contacts".

3 Search for the location to register.

● Refer to pages 40 – 49 for the search method.
● [Home] is not displayed.

4 Select [Enter].

● Make the setting on a map of 0.5 mile (500 m*) or more detailed scale.
  * This is the scale when "km" is set as the distance setting (➡ page 84).

5 Select [OK].
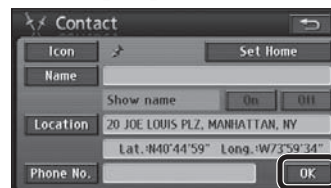
● Select the items to correct or input. (➡ page 64)

Display the Edit Contacts screen

1 Select [Address Book] from the Setup menu.

● The Address Book screen is displayed.

2 Select [Edit] for "Contacts".
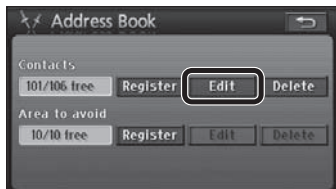
● The Contact list is displayed.

3 Select a Contact.

● The Edit Contacts screen is displayed.
● The list can be sorted.
  • [Icon]: The list is sorted according to the type of icon.
  • [Date]: The list is sorted in order of registration.

■ Display from the map screen

1 Move the cursor to the Contact.

● The Contact name is displayed on the top of screen.

2 Select [Info.].

● The Contact information is displayed.

3 Select [Edit].

● The Edit Contacts screen is displayed.
● Select [Enter ⑥] to set it as the destination. If a destination has already been set, [Add to ⑥] or [New ⑥] is displayed. Refer to page 37 for details.

Note:
Please be aware, that in the unlikely event of product failure or software malfunction, or in cases where your unit needs to be sent in for service, saved data in your address book may be lost.

Register a location (Contact) (continued)

Edit the Contact information

Preparation
- Select the Contact and display the Edit Contacts screen. (➡ page 63)

■ Change an icon

1 Select [Icon] on the Edit Contacts screen.

2 Select an icon.

- The selected icon is displayed on the map for the Contact.
- Select [Page 1]/[Page 2]/[With sound] to change the list. Select [With sound] to make a sound when the vehicle approaches a Contact.

■ If the icon was selected from the [With sound] list

- Select [🔊] to check the sound that will be made as the vehicle approaches the Contact.
- Select [Direction guidance bell] to sound a bell only when the point is approached from the desired direction.
  ① Use [◄] or [►] to adjust the direction from which to make the sound on approach.
  ② Select [Enter].
    • [Direction guidance bell] setting is complete.

Note:
- Select [No icon] from [Page 2] to avoid displaying an icon on the Contact.

■ Set a Contact for home
Only one Contact can be set as home.

Select [Set Home] on the Edit Contacts screen.
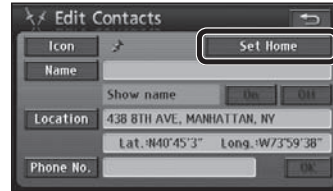
- A Contact is set for home.
- When [Del. Home] is selected, the home setting is cancelled.
- If another Contact has already been registered as home, select [Yes] to cancel the old home setting and change to the new home setting.

■ Set the name of a Contact

1 Select [Name] on the Edit Contacts screen.

2 Enter the name and select [OK].

- The entered text is set as the name.
- The name may have up to 70 characters.
- How to enter text (➡ page 97)

■ Set whether or not to display a name on the map

Select [On]/[Off] under "Show name".

- [On]: Displays the name of the Contact on the map.
- [Off]: Does not display the name of the Contact on the map.

■ Change the position of a Contact

1 **Select [Location] on the Edit Contacts screen.**

2 **Move the cursor to the location to which you wish to move the Contact and select [Enter].**

- Moves the Contact to the center of the cursor.
- Make the setting on a map of 0.5 mile (500 m*) or more detailed scale.
  * This is the scale when "km" is set as the distance setting (➡ page 84).

■ Register a telephone number to a Contact

1 **Select [Phone No.] on the Edit Contacts screen.**
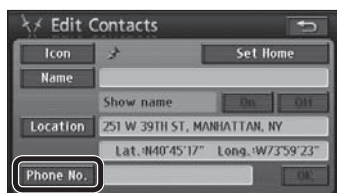
2 **Enter the phone number and select [OK].**

- The entered number is set as the phone number.

Delete a Contact

Once a Contact is deleted, it cannot be restored. Check thoroughly before deleting.

1 **Select [Address Book] from the Setup menu.**

- The Address Book screen is displayed.

2 **Select [Delete] for "Contacts".**
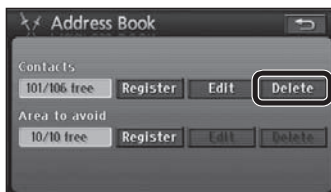
- The Contact list is displayed.
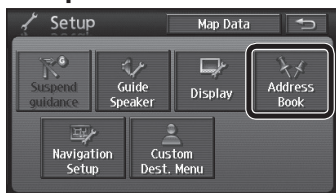
3 **Select the Contact to delete.**

- The list can be sorted.
  - [Icon]: The list is sorted according to the type of icon.
  - [Date]: The list is sorted in order of registration.
- Select [Del.all] to delete all destinations.

4 **Select [Yes].**

- The Contact is deleted.

Register a location (Area to avoid) (continued)

Register an Area to avoid

Points and areas to detour around on the route to the destination can be registered. When an Area to avoid is registered, route searches will look for routes that avoid that point or area. (Up to 10 locations)

1 Select [Address Book] from the Setup menu.

● The Address Book screen is displayed.

2 Select [Register] for "Area to avoid".

3 Search for the center of the Area to avoid.

● Refer to pages 40 – 49 for the search method.
● [Home] is not displayed.

4 Move the cursor to the Area to avoid and select [Enter].

● Make the setting on a map of 0.5 mile (500 m*) or more detailed scale.
   * This is the scale when "km" is set as the distance setting (➡ page 84).

5 Select ▲ or ▼ to change the size of the Area to avoid.

● Select ⊠ on the bottom line to register the area centered on the cursor as an Area to avoid.

6 Select [Enter].

● If the destination is set, route searching is performed.
● The registered Area to avoid is displayed on the map screen as ⊠ or ☐ (range).

Note:
● When [+] or [−] are used to switch the map scale, the map switches but the size of the square frame indicating the area does not switch.
● In the following situations, a route search may produce a route passing through an Area to avoid.
   • If the vehicle or the destination is inside the Area to avoid.
   • When a route that detours around the Area to avoid cannot be found, such as when there is only one road between the vehicle position and the destination.
● Highways, toll roads and ferries within an Area to avoid are not subject to detour.
   To make the highway you want to avoid as a subject to detour, set the size of the Area to avoid to ⊠ and set it on the highway.
● When near an Area to avoid, an indirect route may be produced to avoid any roads entering the Area to avoid.

Delete an Area to avoid

Once an area is deleted, it cannot be restored.
Check thoroughly before deleting.

1 **Select [Address Book] from the Setup menu.**

● The Address Book screen is displayed.

2 **Select [Delete] for "Area to avoid".**

● The list of areas to avoid is displayed.

3 **Select the Area to avoid to delete.**

● Select [Delete all] to delete all areas.

4 **Select [Yes].**
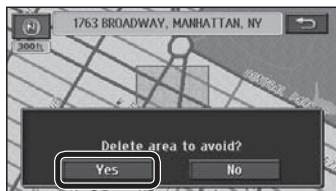
● If the destination is set, route searching is performed.

Display the Edit area to avoid screen

1 **Select [Address Book] from the Setup menu.**

● The Address Book screen is displayed.

2 **Select [Edit] for "Area to avoid".**
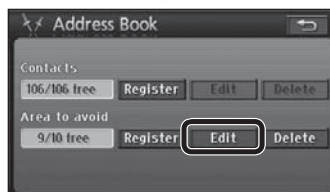
● The list of areas to avoid is displayed.

3 **Select the Area to avoid to edit.**

● The Edit area to avoid screen is displayed.

Note:
Please be aware, that in the unlikely event of product failure or software malfunction, or in cases where your unit needs to be sent in for service, saved data in your address book may be lost.

Edit Area to avoid information

Preparation
- Select the Area to avoid and display the Edit area to avoid screen. (➡ page 67)

■ Set the name of the Area to avoid

1 Select [Name] on the Edit area to avoid screen.
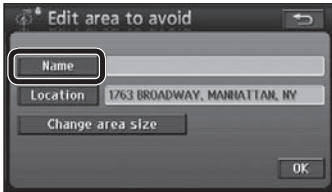
2 Enter the name and select [OK].

- The entered text is set as the name.
- The name may have up to 70 characters.
- How to enter text (➡ page 97)

■ Change the position of the Area to avoid

1 Select [Location] on the Edit area to avoid screen.
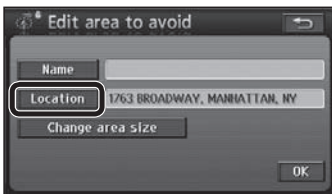
2 Move the cursor to the location to which you wish to move the Area to avoid and select [Enter].

- Move the Area to avoid to the center of the cursor.
- Make the setting on a map of 0.5 mile (500 m*) or more detailed scale.
  - * This is the scale when "km" is set as the distance setting (➡ page 84).

■ Change the size of the Area to avoid

1 Select [Change area size] on the Edit area to avoid screen.
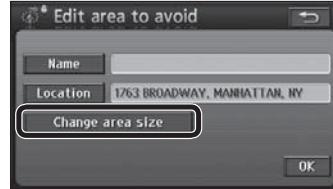
2 Select ▲ or ▼ to select the area size.
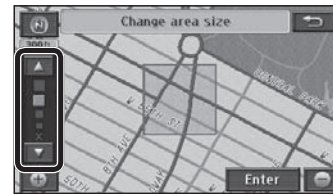
3 Select [Enter].

- If the destination is set, route searching is performed.

Audiovisual Operations

- **Radio**
- **Play a disc (DVD/Audio CD/MP3/WMA)**

Refer to the System Upgrade Guidebook for information on SIRIUS, XM, iPod and TV.

Video from the DVD/Line-in is not displayed while the vehicle is in motion.
Stop in a safe place and engage the parking brake before watching video.
(Even while the vehicle is in motion, video is output to the second monitor (see System Upgrade Guidebook).)

Basic audiovisual operations

Switch audiovisual source

1 Press SRC .

● The Audiovisual source operation screen is displayed.

2 Select an audiovisual source.

● The system switches to the selected source.
  - [AM]:   Switches to AM radio.
  - [FM]:   Switches to FM radio.
  - [DISC]*¹: Switches to a corresponding disc. (DVD, CD, MP3/WMA)
  - [XM]*²: Switches to XM Satellite Radio.
  - [SIRIUS]*³: Switches to SIRIUS Satellite Radio.
  - [iPod]*⁴: Switches to iPod.
  - [AV]:   Switches to Line-in.
  - *¹ This system is able to identify disc types automatically, switching to DVD, CD or MP3/WMA.
  - *² This is displayed when an XM Satellite Radio Tuner (XMD1000) is connected.
  - *³ This is displayed when a SIRIUS Satellite Radio Tuner (SIR-PAN1) is connected.
  - *⁴ This is displayed when an iPod is connected.

Note:
● When [▼] ([▲]) is displayed, there is a source that is not displayed on the screen. Select [▼] ([▲]) to switch the screen.
● [Traffic]: The Traffic Channels of XM Satellite Radio and SIRIUS Satellite Radio can be memorized for easy access to traffic information. (➡ System Upgrade Guidebook)
● Refer to the System Upgrade Guidebook for information on the operation of accessories sold separately.
● Refer to page 88 for operation of [Sound].

Turn the audiovisual source off

Select [Audio Off] on the Audiovisual source operation screen.

● The audio and video stop.

■ To turn audiovisual source back on

Select [Audio On] on the Audiovisual source operation screen.

● The audio and video display is shown.

Switch from the Audiovisual screen to the navigation screen

Press MAP while the audiovisual screen is displayed.

● The display switches to the current position screen, but audio output continues.

Note:
● Turn the audiovisual source off to output only navigation sound and image. (➡ above)

Radio

Switch to radio (AM or FM)

Select [AM] or [FM] on the Audiovisual source operation screen.

- The system switches to the Radio operation screen (AM or FM).

AM operation screen
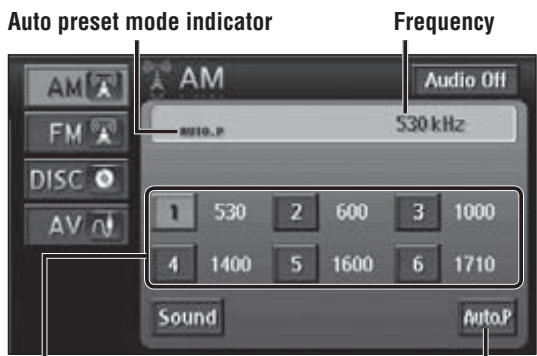
Auto preset mode indicator   **Frequency**

Preset stations   **Auto presetting**
Tune by selecting a preset number.

FM operation screen
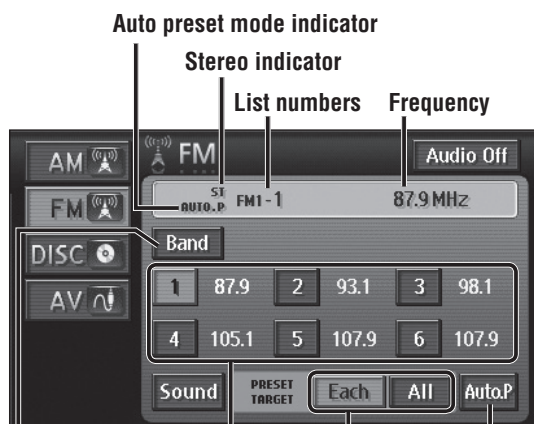
Auto preset mode indicator

Stereo indicator

List numbers   **Frequency**

List selection   **Auto presetting**

Preset stations
Tune by selecting a preset number.

Specify the range for Auto presetting
[Each]: Perform Auto presetting for the displayed list bands (6 ch).
[All]: Perform Auto presetting for the entire list from FM1 to 3 (18 ch).

Tuning

■ Station selection

Press I◄◄ TUNE/TRCK ►►I .
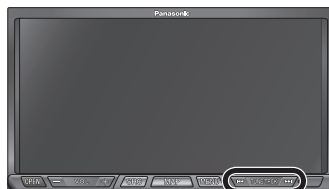
- The frequency switches.

■ Seek tuning

Press and hold I◄◄ TUNE/TRCK ►►I until the frequency changes, then release it.
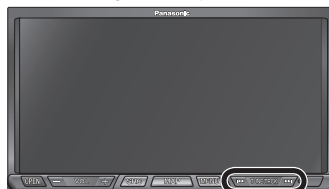
- Starts Seek tuning, which stops when a station is received.
- While the button is held down, stations will not be received even when they are detected.

Radio (continued)

Preset memory

The station being received can be stored manually under a selected number. (Manual preset)

Select the frequency, then touch and hold the number under which you wish to store the frequency for at least 2 seconds.

- The station being received is stored under the selected number.

Note:
- It is also possible to search automatically for receivable frequencies and store them.
- Under FM, 6 channels can be stored for each channel list (FM1, FM2 and FM3). (18 channels in total)
- The channel list switches as shown below, each time [Band] is selected.

FM1 ⟶ FM2 ⟶ FM3
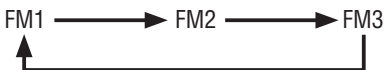
■ Select a stored station

Selects the stored station.

Select a station (number) from the Preset stations.

- The radio switches to the selected station.

Auto preset memory

Search automatically for receivable stations and store them. (Up to 18 FM and 6 AM stations)

Touch and hold [Auto. P] for at least 2 seconds.

- Auto preset mode is engaged and the Auto preset mode indicator illuminates.
- Stations are stored in order of reception quality.
- The stored stations are overwritten and updated every time this operation is performed.
- If no receivable stations are found, tuning goes through the whole frequency range and returns to the original station.

Note:
- Even in Auto preset mode, station selection and manual preset can still be used.
- Under FM, [Each] or [All] can be selected to specify the Auto presetting range.
  - [Each]: Auto presetting is performed for the displayed list band (6 channels). The other two lists are not subject to Auto preset mode.
  - [All]: Auto presetting is performed for all lists FM1 to 3 (18 channels).

■ To cancel Auto preset mode

Select [Auto. P].

- Auto preset mode is cancelled.
- Stations stored under Auto preset mode are cleared.
- The radio returns to the preset station that was stored before Auto preset mode was engaged.

Play a disc

Disc insert (CD/DVD)

1 **Press OPEN.**

● The Open/Tilt/Eject screen is displayed.

2 **Select [Disc].**
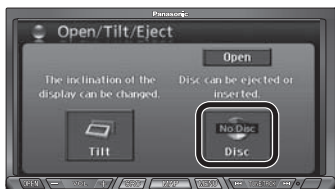
● The monitor opens.
● If there is a disc inside, it is ejected automatically.

3 **Insert a disc.**

Printed side
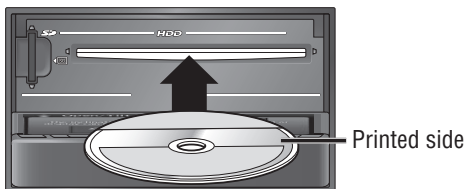
● The monitor closes automatically.

Note:
● The disc is played automatically after insertion.
● 3″ {8 cm} discs can only be inserted in a 3″ {8 cm} disc cartridge.

■ The DVD Hint screen

The DVD Hint screen is displayed when a DVD is inserted. It presents a simple explanation of DVD operation.

Check the explanation, then select [OK].

● The DVD Hint screen disappears.

Note:
● Once [OK] is selected, the DVD Hint screen will not be displayed again until the engine stops. It appears again after the engine is restarted or the key is turned to ACC ON.

Disc eject (CD/DVD)

1 **Select [Disc] on the Open/Tilt/Eject screen.**
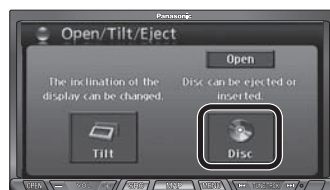
● The monitor opens and the disc is ejected.

2 **Remove the CD/DVD.**
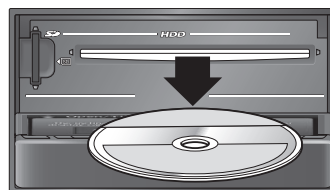
● Select [Close] to close the monitor.
● Pressing OPEN also closes the monitor.

Play a disc (continued)

Switch to disc (DVD, CD, MP3/WMA)

Select [DISC] (DVD, CD, MP3/WMA) on the Audiovisual source operation screen.

- The system switches to disc (DVD, CD, MP3/WMA).
- The Disc operation screen (DVD, CD, MP3/WMA) is displayed.

Note:
- Audio and video may be interrupted briefly while the format is identified.
- Restrictions on the disc itself may prevent operation from proceeding as described in this manual. ("⊘" is displayed on the monitor.) Refer to the disc instructions manual for details.

Read the section on "Discs that can be played back" carefully. (➡ page 7)

DVD operation screen

When the source is switched to DVD, the DVD operation screen is displayed automatically.
- To display the DVD operation screen manually, press SRC while DVD is the source.

Title No.   Chapter No.   Playing time

Switches the aspect ratio

Displays the DVD playback screen
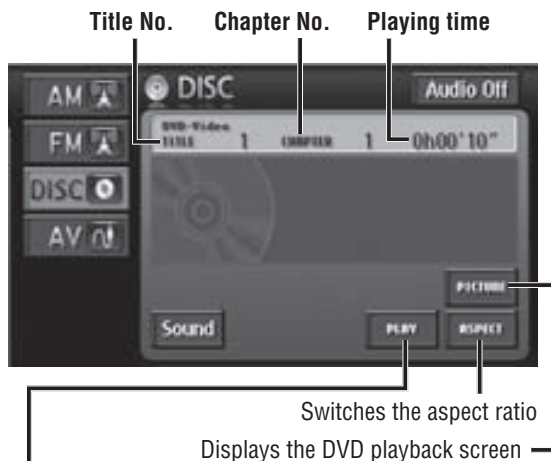
PLAY
- This screen can be operated while the vehicle is in motion. It is convenient for watching DVD videos on the rear monitor. (➡ System Upgrade Guidebook)

Note:
- Refer to page 92 for operation of [ASPECT].

DVD menu

Touching the screen during DVD playback displays Short menu 1. Select [NEXT PAGE] and [PREV PAGE] to switch between screens.

■ Short menu 2

This menu can be used for DVD menu operations, etc.

[MOVE BUTTONS]:	Switches touch key display positions. (➡ page 80)
[<<Off]:	Temporarily hides the touch keys. Touch [On>>] to display the touch keys again.
[DIRECT TOUCH]:	Turns on or off the direct touch function, for touching DVD menu items directly to select them. If the function is turned off, the cursor keys are displayed. (➡ page 80)

[PREV PAGE]: Switches to Short menu 2 **[NEXT PAGE]:** Switches to Short menu 1

■ Short menu 1

This menu can be used for DVD playback operations.

Displays title numbers/chapter numbers

Displays the current sound settings and number of channels

[DISPLAY]:	Adjusts tone. (➡ page 92)
[TOP MENU]/[Menu]:	Displays the disc menu (Refer to the instructions provided with the disc being played for how to operate). (➡ page 79)
[HIDE BUTTONS]:	Hides the touch keys.
[◄◄]:	Fast reverse (➡ page 77)
[■]:	Stop (➡ page 76)
[❙❙]:	Pause (➡ page 76)
[►]:	Play (➡ page 76)
[►►]:	Fast forward (➡ page 77)

[PREV PAGE]: Switches to Short menu 1 **[NEXT PAGE]:** Switches to Short menu 3

■ Short menu 3

This menu can be used for DVD playback-related settings.

[SETUP]:	Displays the Setup menu. (➡ page 94)
[SEARCH]:	Inputs the title number to cue the title. (➡ page 77)
[RETURN]:	Moves to a predetermined position on the disc and starts playback from that position.
[Audio]:	Switches the audio language. (➡ page 78)
[SUB-TITLES]:	Switches the subtitle language. (➡ page 78)
[Angle]:	Switches the angle. (➡ page 79)

Note:
● Aspect setting is fixed to wide while the Short menu is displayed.

Play a disc (continued)

Stop

Select [■] from Short menu 1.

■ Resume playback

Select [▶] from Short menu 1.

● Playback starts from where it stopped.

Pause

Select [❚❚] from Short menu 1.

■ Resume playback

Select [▶] from Short menu 1.

● Playback resumes from where it stopped.
● [❚❚] can also be selected to start playback.

■ Slow playback

Touch and hold [▶▶] while playback is paused.

● Slow playback continues for as long as it is touched.
● Release to return to pause.

Select chapter/title

■ Chapter selection

Press ⏮ TUNE/TRCK ⏭ .

- Press ⏭ to play from the next chapter.
- Press ⏮ to play the currently playing chapter from the beginning. Press twice or more to play the preceding chapter.

■ Input the title number to cue the title

1 **Select [SEARCH] from Short menu 3.**

2 **Enter the title number and select [Enter].**

- Playback starts from the input title number.
- If there is no title on the DVD matching the input title number, the currently playing title continues.
- Select [←] to delete one character.
- Select [<<Off] to display the video screen.
- Select [On>>] to return to the title number input screen.

Fast forward/Fast reverse

Press and hold ⏮ TUNE/TRCK ⏭ .

- Fast forward or fast reverse continues while the button is pressed.
  Press and hold ⏭ to fast forward.
  Press and hold ⏮ to fast reverse.
- Release to return to normal playback.
- Depressing [◄◄] or [►►] from Short menu 1 will also cause fast forward/reverse.

Play a disc (continued)

Switch the audio language

If the disc contains multiple audio languages, the audio language can be switched.

1 Select [Audio] from Short menu 3.

- The audio numbers and languages are displayed.

2 Select [Audio].
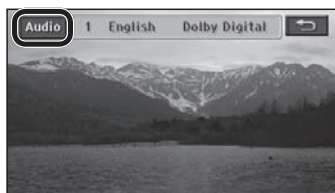
- The audio languages switch each time [Audio] is selected.

Note:
- The preferred playback language can be set. (➡ page 94)

Switch the subtitle language

If the disc contains multiple subtitle languages, the subtitle language can be switched.

1 Select [SUB-TITLES] from Short menu 3.

- The subtitle numbers and languages are displayed.

2 Select [SUB-TITLES].

- The subtitle languages switch each time [SUB-TITLES] is selected.
- The subtitle displays toggle between show and hide each time [Hide] is selected. The switch is displayed in bold-faced type when the subtitles are hidden.
- In some cases it may take time for the subtitles to appear.

Note:
- The preferred display language can be set. (➡ page 94)

Switch the angle

If the disc contains multiple angles, the angle can be switched.

1 **Select [Angle] from Short menu 3.**

2 **Select [Angle].**

● The angle switches each time [Angle] is selected.

Note:

● If the multi-angle mark display is switched on under DVD Setup menu (➡ page 94), the angle mark is displayed in the upper right of the screen when angle switching is possible.

■ Audio language, subtitle language and angle

● In some cases it may only be possible to switch these functions from the top menu or from DVD Setup menu. (➡ page 94)
● When the power is turned on or the disc is changed, the language set under DVD settings is prioritized as the audio and subtitle language.
● The number of audio languages, subtitle languages and angles varies between discs. Refer to the disc instructions for details.

Display the top menu

The top menu varies between discs. Refer to the disc instructions for details.

Select [TOP MENU] from Short menu 1.

● The top menu is displayed.

TOP MENU
Audio language
Subtitle language
Play all
Special

● Short menu 2 is displayed.
● Refer to page 80 for item selections.

Display the title menu

The title menu varies between discs. Refer to the disc instructions for details.

Select [Menu] from Short menu 1.

● The title menu is displayed.

TITLE MENU
Title 01
Title 02
Title 03
Next page

● Short menu 2 is displayed.
● Refer to page 80 for item selections.

Play a disc (continued)

Top menu and title menu operations

■ Use direct touch to select

Menu items can be selected by touching them directly (the direct touch function).

Preparation:
● When the direct touch function is off (when the cursor keys are displayed), select [DIRECT TOUCH] to turn the direct function on.

> #### Touch items in the top menu or title menu to select them.
>
>
>
> ● The display switches to the selected item.
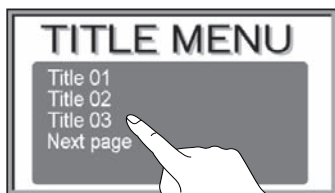
Note:
● The menu items included differ between discs. Functions may not always follow user operations, as playback differs according to the content of the disc.
● Direct touch may not be usable with some discs. In that case, use the cursor keys to make selections.
● If direct touch is switched on, the screen mode is fixed to wide, provided there is an item that can be selected for the DVD image.
● Select [<<Off] to hide the touch keys. Select [On>>] to display the touch keys.
● When an item was selected but the unit did not recognize which item was selected, the screen near the selected area is enlarged. If this occurs, select the item again.

■ Use the cursor keys to select

The cursor keys can be used to select menu items.

1 **Select [DIRECT TOUCH] from Short menu 2.**

● The cursor keys are displayed.
● Select [DIRECT TOUCH] again to turn the direct touch function on. When the direct touch function is turned on, the cursor keys disappear.

2 **Use the cursor keys to select an item, then select [Enter].**

● The display switches to the selected item.

■ Change the display positions of touch keys

> **Select [MOVE BUTTONS] from Short menu 2.**
>
>
>
> ● The display position changes between top and bottom every time the item is selected.

English

CD operation screen

Disc name*   **Track name***

Repeat play

Random play

Scan play

Fast forward/Fast reverse
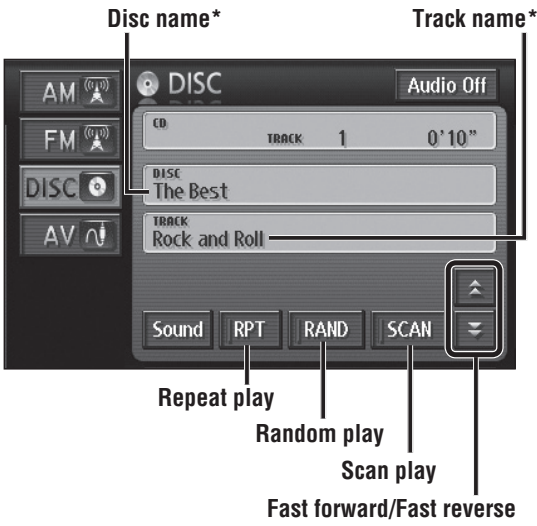
* Only displayed with CD-Text compatible discs.

Note:
- dts CD cannot be played.
- CD EXTRA video cannot be played.

MP3/WMA operation screen

Folder name   **File name**

Displays the Folder list

Folder selection

Scan play

Folder Scan play

Random play

Folder Random play

Repeat play

Folder Repeat play

Select track/file   CD MP3 WMA

Press I◄◄ TUNE/TRCK ►►I.

- Press ►►I to play from the next track/file.
- Press I◄◄ to play the currently playing track/file from the beginning. Press twice or more to play the preceding track/file.

Folder selection   MP3 WMA

Select [▲] or [▼].

- Starts playing the first track in the selected folder.

Fast forward/Fast reverse
CD MP3 WMA

Press and hold I◄◄ TUNE/TRCK ►►I.

- Fast forward or fast reverse continues while button is pressed.
  Press and hold ►►I to fast forward.
  Press and hold I◄◄ to fast reverse.
- Release to return to normal playback.
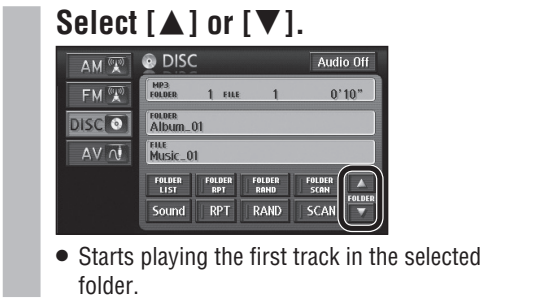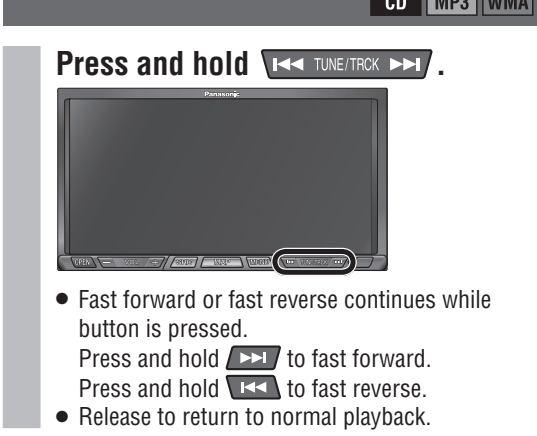
Note:
- For a CD, [▲] or [▼] on the CD operation screen can also be selected to fast forward/fast reverse.
  [▲]: Touch and hold the button to fast forward.
  [▼]: Touch and hold the button to fast reverse.
- Release to return to normal playback.

Play a disc (continued)

CD/MP3/WMA

Select a folder from the list

MP3 WMA

1 Select [FOLDER LIST].

● The Folder list screen is displayed.

2 Select a folder from the list.

● Starts playing the first track in the selected folder.
● If there are seven or more folders, select [▲] or [▼] to switch between pages of the list.

Select a file from the list MP3 WMA

1 Select [FILE] from the folder list.

● The File list screen is displayed.

2 Select a file from the list.

● Starts playing from the selected file.
● If there are seven or more files, select [▲] or [▼] to switch between pages of the list.
● Select 🔁 to return to the MP3/WMA operation screen.

Scan play

CD MP3 WMA

Select [SCAN].

CD : Scans all tracks.
MP3 : Files in the folder currently being played are scanned.
● Each track is played for approximately 10 seconds.
● Select [SCAN] again to return to normal playback.
● Scan will be automatically ended when it has run through all tracks/all files in a folder.

Folder scan play

MP3 WMA

Select [FOLDER SCAN].

● 10 seconds is played from the beginning of each file at the top of each folder, starting with the folder after the one being played.
● Select [FOLDER SCAN] again to return to normal playback.
● Scan will be automatically ended when it has run through the first files in all folders.

Random play   `CD` `MP3` `WMA`

Select [RAND].

`CD` : All tracks are played in random order.
`MP3` : Files in the folder currently being played are played in random order.
● Select [RAND] again to return to normal playback.

Note:
● Random selection means that the tracks/files are constantly played at random from among all tracks or all files in a folder, so the same track/file may be played any number of times.

Folder random play   `MP3` `WMA`

Select [FOLDER RAND].

● Files in all folders of the disc are played in random order.
● Select [FOLDER RAND] again to return to normal playback.

Note:
● Folder random selection means that the files are constantly played at random from among all files in all folders, so the same file may be played any number of times.

Repeat play   `CD` `MP3` `WMA`

Select [RPT].

● The track/file being played is played repeatedly.
● Select [RPT] again to cancel the repetition.

Folder repeat play   `MP3` `WMA`

Select [FOLDER RPT].

● The file in the same folder as the file being played is played repeatedly.
● Select [FOLDER RPT] again to cancel the repetition.

Display file information   `MP3` `WMA`

Select [Detail] on the Folder/File list screen.

● The Detail screen is displayed for the content being played.
● Select [↩] to return to the Folder list or File list screen.

Note:
● Depending on the recorded content, the text may be displayed incorrectly, or may not be displayed at all.
● For safety reasons, the file information is not displayed while the vehicle is in motion.

Change navigation settings

Basic navigation settings

1 Select [Setup] from the Navigation menu.

2 Select [Navigation Setup].

3 Make settings.
(➡ right table)

- Use [▲] or [▼] to display the next page.

Note:
- Select [Default] to go to the screen for selecting default setting.
  Select [Yes] to return settings to the defaults.

Items		
Distance Set the units for distances and scales displayed on the screen or used in voice guidance. default: [miles]		
Estimated travel time Changes the average vehicle speed that is the basis for estimated arrival time. Settings can be made for urban road, country road and highway road types. default: Urban road: 25 mph (40 km/h) Country road: 35 mph (55 km/h) Highway: 55 mph (90 km/h)	Select [Change speed].	
Keyboard layout Changes the key layout for text input. default: [ABC]		
Time zone Sets the Time zone and Daylight Saving Time to use. default: Time zone: [EST] Daylight Saving Time: [Off]	Select [Change].	
Display POI icons Changes the POI icons displayed on the Display POI Icons screen. (➡ page 50)	Select [Chg. category].	
3D landmark Sets to display/not display 3D landmarks. (➡ page 28) default: [On]		
Display clock Sets to display/not display the clock on the navigation screen. default: [On]		
Voice guidance in SRC mode Sets whether or not to use voice guidance output for navigation when displaying and listening to an Audiovisual screen (radio, DVD, CD, etc.). default: [On]		
Auto voice guidance Sets whether or not to automatically give voice guidance during route guidance, such as when approaching an intersection. default: [On]		

Settings			
• [km] ...... Sets kilometer for distance displays. • [miles]... Sets mile for distance displays.			

• Adjustment range <5 mph (5 km/h) steps>
  Urban road: 5 mph – 25 mph (5 km/h – 40 km/h)
  Country road: 5 mph – 35 mph – 55 mph (5 km/h – 55 km/h – 90 km/h)
  Highway: 5 mph – 55 mph – 75 mph (5 km/h – 90 km/h – 120 km/h)
• Select [Default] to return settings to the defaults.
			Select [OK].

• [ABC] .... Sets alphabetical order for the key layout. • [QWE] ... Sets QWERTY for the key layout. • [AZE].... Sets AZERTY for the key layout.			
• [PST]..... Pacific Standard Time • [EST]..... Eastern Standard Time • [AST]..... Atlantic Standard Time • [MST].... Mountain Standard Time • [HST] .... Hawaii Standard Time • [NST] .... Newfoundland Standard Time • [CST]..... Central Standard Time • [AKST] .. Alaska Standard Time			Select [OK].
Set Daylight Saving Time. • [On]....... Sets Daylight Saving Time. • [Off] ...... Does not set Daylight Saving Time.			
Select the POI icon to change. • Select [Default] to return settings to the defaults.	Select a main category. • Select [List all categories] to display all sub-categories within the main categories.	Select a sub-category as POI icon. 	Select [OK].
• [On]....... Displays the 3D landmark. • [Off] ...... Does not display the 3D landmark.			
• [On]....... Displays the clock. • [Off] ...... Does not display the clock.			
• [On]....... Provides voice guidance while an Audiovisual screen is displayed. • [Off] ...... Does not provide voice guidance while an Audiovisual screen is displayed.			
• [On]....... Provides voice guidance at intersections. • [Off] ...... Does not provide voice guidance at intersections.			

Change navigation settings (continued)

Basic navigation settings (continued)

1 Select [Setup] from the Navigation menu.

2 Select [Navigation Setup].

3 Make settings.
(➡ right table)

● Use [▲] or [▼] to display the next page.

Note:
● Select [Default] to go to the screen for selecting default setting.
Select [Yes] to return settings to the defaults.

Items		
Delete previous point The record of previously set destinations (➡ page 47) can be deleted.	Select [Delete].	
Current position Incorrect vehicle display position and direction on the map can be corrected.	Select [Adjust].	
Operation sound Sets whether or not to output sounds during operation. default: [Off]		
Audio output at "Screen Off" Sets whether or not to output audio when the screen is off. default: [On]		
Map color "Day" Changes the map display colors for day mode. (➡ page 29) default: [1]		
Map color "Night" Changes the map display colors for night mode. (➡ page 29) default: [3]		
Menu picture Changes the icon for the Destination button on the Navigation menu. The icon changes to represent morning, midday, evening and night, depending on the time of day. default: [1]		
Format SD card Formats the SD memory card. ● This function is for use with future versions of this software.	Select [Format].	

Settings		
Select the previous point to delete from the list. ● Select [Del.all] to delete all previous points.		Select [Yes].
Move the cursor to the position to set as the vehicle position, then select [Enter]. 	Select [⟲] or [⟳] to adjust the orientation of the vehicle. ● ⟲ : Rotates counterclockwise. ● ⟳ : Rotates clockwise.	Select [Enter].
● [On]....... Outputs sounds during operation. ● [Off] ...... Does not output sounds during operation.		
● [On]....... Outputs audio when the screen is off. ● [Off] ...... Does not output audio when the screen is off.		
● [1] ......Route has easy-to-see colors when driving during the day and under brightly lit conditions. ● [2] ......Icons have easy-to-see colors when driving during the day and under brightly lit conditions. ● [3] ......Route has easy-to-see colors when driving at night and under low light conditions. ● [4] ......Icons have easy-to-see colors when driving at night and under low light conditions.		
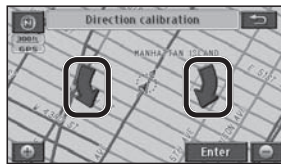
	Morning	Midday	Evening	Night
● [1]				
● [2]				
● [3]				

● [Off] ... Always displays the same icon, regardless of the time of day.

● [Yes] .... Formats the memory.
● [No]........... Does not format the memory.

Note:
● **Data deleted during formatting cannot be restored.**
  Consider this before formatting the memory.

Change audio and video settings

Surround effects

1 **Select [Sound] on any Source operation screen.**

(Example: AM)

2 **Select the item to set.**

3 **Make settings.**
(➡ right table)

Note:
● SRS CS Auto will be turned off automatically if you change Balance Fader/Speaker Setting/Graphic Equalizer setting.

Surround effects		
[SRS CS Auto] ■ **What is SRS CS Auto?** SRS CS Auto is a surround system tailored for use in a vehicle, using a Circle Surround decoder. It reproduces a sound field equivalent to 5.1 ch, without using a center speaker or subwoofer. ● SRS CS Auto is only enabled if a rear speaker (4 ch, 4.1 ch) is connected. default: [Off] SRS CS Auto is a trademark of SRS Labs, Inc. CS Auto technology is incorporated under license from SRS Labs, Inc.	Select [On].	

Settings

[Focus]
Adjusts so that the sound seems to be coming from ear height.
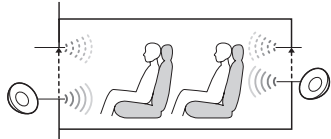 	
Actual height at which sound is generated from the speakers
 	
default: 5
	● Adjustment range:
	  Front: 0 – 5 – 10
	  Rear: 0 – 5 – 10

[TruBass]
Bass strength can be set for each speaker.
Even if no subwoofer is used, the bass sound is almost as powerful.
(If a subwoofer is used, the bass sound will be even more impressive.)
default: 4
	● Adjustment range:
	  Front: 0 – 4 – 10
	  Rear: 0 – 4 – 10
	  Subwoofer: 0 – 4 – 10

[Mix to Rear] When playing a DVD for which the dialog and music are played from the front channel and sound effects from the rear channel, it may be difficult to hear the dialog from the rear seats. Set Mix to Rear to combine output of front channel components (such as dialog) with the rear speaker output, making dialog easier to hear from the rear seats while maintaining the realism of surround sound. default: 40 %	● Adjustment range: 0 % – 40 % – 100 %
[Speaker Size] Make settings to match the size of the connected speakers. ● If the Speaker Size settings are changed, the TruBass setting value for the changed speakers is returned to the default setting. default: [Large]	Front: ● Select [Small] or [Large]. Rear: ● Select [Small] or [Large].

Surround effects (continued)

1 **Select [Sound] on any Source operation screen.**

AM 🔲	🖾 AM	Audio Off
FM 🔲		530 kHz
DISC ⚪		
AV 🔲	1 530	2 600	3 1000
	4 1400	5 1600	6 1710
	Sound	Auto.P

(Example: AM)

2 **Select the item to set.**

✓ Sound   ⤴

| SRS CS Auto | Balance Fader | Speaker Setting | Graphic Equalizer |

SRS CS Auto will be turned off automatically if you change Balance Fader/Speaker Setting/Graphic Equalizer setting.

3 **Make settings.**
(➡ right table)

Note:
- SRS CS Auto will be turned off automatically if you change Balance Fader/Speaker Setting/Graphic Equalizer setting.

Surround effects	
[Balance Fader] Adjusts output levels for left/right (Balance) and front/rear (Fader). default: 0	
[Speaker Setting] Adjusts the output level for each speaker. default: Speaker Level: 0 dB Speaker Delay: 0 cm Subwoofer: 120 Hz	**[Speaker Level]** Adjusts the output level for each speaker.
	[Speaker Delay] Sets the distance of each speaker from the reference point.
	[Subwoofer] When a subwoofer is connected, set the maximum number of Hz for audio to be output from the subwoofer. (Cutoff frequency)
[Graphic Equalizer] default: [EQ1]	Adjust the Graphic Equalizer.

Frequency (Hz) Settings	60	160	400	1 kHz	3 kHz	6 kHz	12 kHz
Flat	±0	±0	±0	±0	±0	±0	±0
EQ1	+3	+1	±0	−1	+1	+2	+3
EQ2	+2	+1	+1	+1	+1	+2	+2
EQ3	+1	+1	+1	+2	+2	+3	+3
EQ4	+3	+3	+1	−2	−1	+2	+4
EQ5	+4	+3	±0	+4	+2	+3	+4

Flat: (Flat) Flat frequency response
EQ1: (Rock) Speedy and heavy sound
EQ2: (Pop) Wide-ranged and deep sound
EQ3: (Vocal) Clear sound
EQ4: (Jazz) Jazz-specific deep sound
EQ5: (Club) Club and disco-specific sound

Register the current adjustment values.

Load registered adjustment values.

Settings

Adjust the Balance/Fader.
- Adjustment range: **Balance ([Left]/[Right])**: 7 (Left) – 0 – 7 (Right)
  Fader ([Front]/[Rear]): 7 (Front) – 0 – 7 (Rear)

Adjust the output level for each speaker.
- Adjustment range: −12 dB – 0 dB – 12 dB
- Make the speaker from which the test signal (a buzzing sound) is audible at the lowest volume the reference, then adjust other speakers so they are heard with the same speaker sound.

Input the distance to each speaker.
- Adjustment range:
  0 cm – 500 cm
- When the distance is set, the timing of sound output from the other speakers is delayed to match the speaker furthest from the reference point.
  (Approximately 0.3 ms per 10 cm)

Front L   Front R
50 cm   120 cm   Reference point
70 cm   130 cm
140 cm
Rear L   Rear R
Subwoofer
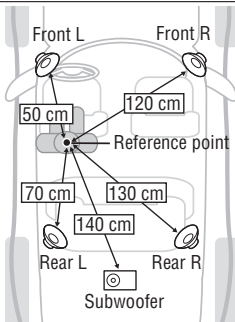
- Set the listening position as the reference point.
- Measure the distance horizontally.

Measure this distance   Reference point
Speaker
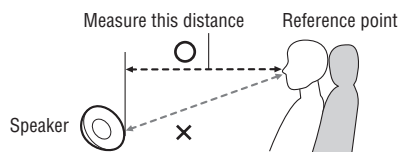
Set the frequency.
- Adjustment range: 60 Hz – 120 Hz – 200 Hz

Adjust the level for each frequency band.
- Adjustment range: −4 – 0 – 4
  (−10 dB – ±0 dB – +10 dB)

Graphic Equalizer
Flat EQ1 EQ2 EQ3 EQ4 EQ5

Touch and hold the setting to register, from [EQ1] to [EQ5], for at least 2 seconds.

Note:
- Settings cannot be registered to [Flat].
- Touch and hold [Flat] for 2 seconds or more to return all settings to the defaults.

Select the settings to load, from [Flat] to [EQ5].

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Change audio and video settings (continued)

Screen adjustment

■ Adjust image quality

1 Select [Display] from the Setup menu.
Or, when the screen is on DVD/AV/Rear view camera, touch part of the screen to display the touch keys, then select [DISPLAY].

(Example: DVD)

2 Make settings.
(➡ right table)

Note:
● Image quality adjustment settings are stored for day mode and night mode.

Items	
CONTRAST	[+]: Makes clearly defined contrast between black and white [−]: Reduces the contrast between black and white
BRIGHTNESS	[+]: Brighter [−]: Darker
TONE*	[RED]: Emphasizes red [GREEN]:Emphasizes green
COLOR*	[+]: Intensifies color [−]: Fades color
DAY MODE The night mode screen can be switched to day mode screen. **Note:** ● [DAY MODE] is displayed on the night mode screen. default: Off	

* The image quality of the DVD/AV/Rear view camera can be adjusted. Color/Tone cannot be adjusted on the map screen.

■ Switch aspect setting

1 Select [ASPECT] when the DVD/AV operation screen is displayed.
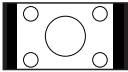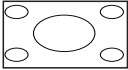
(Example: DVD)

2 Make settings.
(➡ right table)

Items	
Screen display can be switched. ● Compressing or extending the screen for business use or public performance risks infringing copyrights protected under copyright laws. ● Extending a non-wide screen (4:3) image to fill a wide screen hides part of the edge of the image, or distorts the image. View video in normal mode, which respects the intentions of the producer. default: [Wide]	

Settings	
● Adjust contrast. Adjustment range:　1 – 6 – 11 default: 6	Select [OK].
● Adjust brightness. Adjustment range:　1 – 6 – 11 default: 11	Select [OK].
● Adjust color. Adjustment range:　1 (Red) – 6 – 11 (Green) default: 6	Select [OK].
● Adjust color saturation. Adjustment range:　1 – 6 – 11 default: 6	Select [OK].
● When [DAY MODE] is selected during night mode display, it switches to day mode. Select it again to return to night mode. **Note:** ● The day mode switched to using [DAY MODE] is not the same brightness as normal day mode.	Select [OK].

Settings
● [Normal] ....4:3 (w × h) screen. Left and right sides are black.
● [Wide] ....16:9 (w × h) screen.

Change audio and video settings (continued)

DVD Setup menu

1 **Select [SETUP] on Short menu 3.**

2 **Select the item to set.**

3 **Make settings.**
(➡ right table)

Note:
● Select [Default] to go to the screen for selecting default setting.

Items	
[Audio Language] Sets the audio language. default: English	
[Subtitle Language] Sets the subtitle language. default: English	
[DVD Language] Sets the menu language displayed. default: English	
[Angle Mark] Sets whether to display or not display the angle mark. default: On	
[DVD software mode] Set the image size for use when playing video from a wide DVD. default: 16:9 Wide **Note:** ● Set the software setting according to the symbol used on jacket. (➡ page 7) ● DVD software mode is ignored if Pan & Scan or Letterbox is already set in the software. ● Screen aspect of the display unit is changed according to the aspect setting (➡ page 92) and DVD software's aspect.	
[Parental Control Level] Restricts the DVD video that can be played. default: 8	

Settings

- [English] • [French] • [Spanish] • [German]
- [Italian] • [Dutch] • [Japanese] • [Others]

Select [Others].

- To set a language other than those listed, select [Others] and enter the language code.

- Select [←] to delete one character.

Note:
- Refer to the "Language code list" on page 96 for language codes.
- If the priority audio language is already registered for the disc, the audio language registered on the disc is used to play back. If the disc does not contain the set audio language, that language cannot be played.

- On .... Displays the multi angle mark.
- Off .... Does not display the multi angle mark.

The setting changes as shown below, every time "DVD software mode" is selected.

16:9 Wide → 4:3 Letterbox → 4:3 Pan & Scan

- 16:9 Wide..............plays a video in wide screen (16:9).
- 4:3 Letterbox.........plays wide-screen video in Letterbox mode (in which black bands appear at the top and bottom of the screen).
- 4:3 Pan & Scan .....plays wide-screen video in Pan & Scan mode (in which the left and right edges of the screen are cut off).

Enter a 4-digit code number and select [Enter].

- Select [←] to delete one character.

Note:
- At the time of purchase, no code number has been set. The 4-digit number entered when making the initial settings becomes the code number.
- If no code number has been entered, the code number is displayed at the top as "----".
- Once a code number is entered, the code number will be required the next time the item is used, and thereafter. Do not forget the code number. If you forget your code number, touch [←] 10 times to initialize the setting (returning to the state with no code number setting).

Select the parental lock level, from [1] to [8].

- Parental lock levels are in three main types.
- Level 1: Only DVD for children can be played (playback of general and adult-oriented DVD video is prohibited).
- Levels 2 to 7: Only DVD for children and general audiences can be played (play of adult-oriented DVD video is prohibited).
- Level 8: All DVD can be played.

Note:
- If the parental lock applies to a DVD that is played, the code number input screen is displayed. Playback starts after the correct code number is input and [Enter] is selected.

Language code list

For "Others" (➡ page 95)
Input the 4-digit language code, pressing the buttons [0] to [9]. Select [Enter] to finalize.

Note:
● Setting is finished and the display returns to the main menu.
● For retrying selection during number entry, select [Clear].

Code	Language Name	Code	Language Name	Code	Language Name
0101	Afar	0905	Interlingue	1814	Kirundi
0102	Abkhazian	0911	Inupiag	1815	Rumanian
0106	Afrikaans	0914	Indonesian	1821	Russian
0113	Amharic	0919	IceLandic	1823	Kin
0118	Arabic	0920	Italian	1901	Sanskrit
0119	Assamese	0923	Hebrew	1904	Sind
0125	Aymara	1001	Japanese	1907	Sango
0126	Azerbaijan	1009	Yiddish	1908	Serbo-Croat
0201	Bashkir	1023	Javanese	1909	Shin
0205	Belorussian	1101	Georgian	1911	Slovak
0207	Bulgarian	1111	Kazakh	1912	Slovenian
0208	Bihari	1112	Greenlandic	1913	Samoan
0209	Bislama	1113	Cambodian	1914	Shona
0214	Bengali,Bangla	1114	Kannada	1915	Somali
0215	Tibetan	1115	Korean	1917	Albanian
0218	Breton	1119	Kashmiri	1918	Serbian
0301	Catalan	1121	Kurdish	1919	Siswati
0315	Corsican	1125	Kirghiz	1920	Sesotho
0319	Czech	1201	Latin	1921	Sudanese
0325	Welsh	1214	Lingala	1922	Swedish
0401	Danish	1215	Laotian	1923	Swahili
0405	German	1220	Lithuanian	2001	Tamil
0426	Bhutani	1222	Latvian	2005	Telugu
0512	Greek	1307	Malagasy	2007	Tajik
0514	English	1309	Maori	2008	Thai
0515	Esperanto	1311	Macedonian	2009	Tigrinya
0519	Spanish	1312	Malayalam	2011	Turkmen
0520	Estonian	1314	Mongolian	2012	Tagalog
0521	Basque	1315	Moldavian	2014	Setswana
0601	Persian	1318	Marathi	2015	Tongan
0609	Finnish	1319	Malay	2018	Turkish
0610	Fiji	1320	Maltese	2019	Tsonga
0615	Faroese	1325	Burmese	2020	Tatar
0618	French	1401	Nauru	2023	Twi
0625	Frisian	1405	Nepali	2111	Ukrainian
0701	Irish	1412	Dutch	2118	Urdu
0704	Scottish Gaelic	1415	Norwegian	2126	Uzbek
0712	Galician	1503	Occitan	2209	Vietnamese
0714	Guarani	1513	Afan	2215	Volapũk
0721	Gujarati	1518	Oriya	2315	Wolof
0801	Hausa	1601	Punjabi	2408	Xhosa
0809	Hindi	1612	Polish	2515	Yoruba
0818	Croatian	1619	Pashto,Pushto	2608	Chinese
0821	Hungarian	1620	Portuguese	2621	Zulu
0825	Armenian	1721	Quechua		
0901	Interlingua	1813	Rhaeto		

How to enter text

The text entry method explained here is used to enter or change names for address search, city names, Contacts, areas to avoid and other text.

1 Enter the text.

● Lower case text cannot be entered on the Input street name and Input city name screens.

2 Once text entry is complete, select [OK] or [List]*.

* [List] is displayed on the Input street name and Input city name screens.

Note:
● The number of characters that can be input varies between entry items. Refer to the descriptions of each item.
● The keyboard layout can be changed. (➡ page 84)

■ Enter alphabetic characters

Select [A-Z].

● Select [▼] to enter lower case characters.
● Select [▲] to enter upper case characters.
● When [▼] is selected, [▲] is displayed.

■ Enter accented characters

Select [À-Ý].

● Select [▼] to enter lower case characters.
● Select [▲] to enter upper case characters.

■ Enter numerals and symbols

Select [0-9].

● Select [1/2] to display the next page.

● Select [2/2] to display the previous page.

■ Enter spaces/Delete characters

● Select [Space] to enter a space.
● Select [←] to delete one character.

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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 checking and 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.
Never take measures except those indicated by *italic* letters in "Possible solution" described below because those are too dangerous for users to handle themselves.

⚠ Warning

● 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.
● 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.

Common

Problem	Possible cause ➡ **Possible solution**
No power to the unit	● The power cord (battery, power and ground) is connected the wrong way. 　➡ **Check the wiring.** ● Fuse blows out. 　➡ **Eliminate the cause of fuse blowout and replace the fuse with new one. *Consult your dealer.*** ● The vehicle engine is not running. 　➡ ***Start the engine. (ACC ON is also usable.)***
Sound is not generated.	● The wiring of speaker lines is not correct, or a break or poor contact exists. 　➡ **Check the wiring in accordance with the wiring diagram. (Installation Instructions)** ● Turn the volume up.
Noise	● 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. In case the noise cannot be eliminated due to the wiring harness of the car, consult your dealer.*** ● The contact of the ground lead is poor. 　➡ **Make sure that the ground lead is connected to an unpainted part of the chassis securely.**
Noise is made in step with engine revolutions.	● Alternator noise comes from the car. 　➡ **Change the wiring position of the ground lead.** 　➡ **Mount a noise filter.**
Some operations are not executable.	● 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.***
No sound from speaker(s)	● There is a break, a short circuit, poor contact or wrong wiring regarding the speaker wiring. 　➡ **Check the speaker.**
The power of the unit fails unintentionally.	● The safety device works. 　➡ ***Consult your dealer, or your nearest Panasonic Servicenter.***

Common

Problem	Possible cause ➡ **Possible solution**
Nothing is displayed on the monitor. Navigation images are not displayed.	● The screen is switched off. ➡ *Press* SRC *,* MAP *, or* MENU *.* ● The power cord is not connected properly. ➡ **Check the connection.** ● The fuse in the power cord or power connector has blown. ➡ *Consult your dealer.*
The navigation unit is hot.	● It has been running for a long period. ➡ *If the navigation is functioning normally, this is not a problem.*
The vertical angle of the monitor is not adjustable.	● *Check whether it is pressing against some obstruction, or if a cable is trapped somewhere.*
Sound does not come from one of the left/right/front/rear speakers.	● *Check the volume balance of the Balance and Fader controls.*
The sound quality is poor. (The sound skips.)	● *If the sound is from DVD/CD, clean dust off the disc.* ● The mounting of the unit needs adjusting. ➡ **Adjust the angle to within 30° and mount it securely so that it does not vibrate.**
There is sound, but no video.	● The parking brake cable is disconnected. ➡ **Check the wiring.** ● The parking brake is not engaged. ➡ *Engage the parking brake.*
Volume is too loud at startup (while the opening screen is displayed).	● Startup sound is output at the navigation volume. ➡ *Adjust navigation volume.*

Troubleshooting (continued)

Car navigation

Problem	Possible cause ➡ **Possible solution**
The vehicle position is not displayed.	● The display is on Map mode screen. ➡ ***Press*** `MAP`***.***
The vehicle position is not displayed correctly. **The GPS mark is not displayed.**	● The vehicle position changed while ACC was off. Movement of the vehicle by ferry or car train, rotation by parking lot turntable, towing, etc. ➡ ***Drive for a while on a road with good reception.*** ● Error in the signal from the GPS satellite is excessive. ➡ ***Drive for a while on a road with good reception.*** ● The GPS signal cannot be received due to obstructions. ➡ ***GPS signals will be received when the obstruction is no longer in the way.*** ● The GPS antenna is mounted in a bad position. ➡ **Mount antenna in a position where it can receive GPS signals easily.** ● Distance correction is not complete. ➡ ***Check distance correction precision (Accuracy Level).*** ● The GPS antenna cable is incompletely connected, or the vehicle speed signal cable, relay cable, etc., are not connected correctly. ➡ **Check the wiring.**
Registered points or detour memory are not registered. **Settings do not change.** **A searched route was deleted.**	● The power was turned off immediately after a Contact or area to avoid was registered or a setting was changed. ➡ ***Register those again.*** ● Power was turned off immediately after searching for a route. ➡ ***Search for the route again.***
The desired road is not included in the route.	● A road away from the start location and destination was specified. ➡ ***Add a destination close to the specified road.***
There is no voice guidance.	● The volume is set to "0" under Guide Speaker setting. ➡ ***Adjust the volume under Guide Speaker.*** ● The vehicle has deviated from the route. ➡ ***Check the route guidance display on the current position screen.*** ➡ ***Move back to the route.*** ➡ ***Search again for a route.*** ● The vehicle is moving backwards along the route. ➡ ***Check the direction to the next destination.*** ➡ ***Search again for a route.*** ● The audio cable is not connected correctly. ➡ **Check the wiring.**
Audio output is audible, but navigation voice guidance is not.	● The volume is set to "0" under Guide Speaker setting. ➡ ***Adjust the volume under Guide Speaker.***
The route uses toll roads even when ordinary road search is prioritized.	● Even when ordinary road search is prioritized, the route may employ toll roads due to the current position and the destination. ➡ ***This is not a malfunction. When making a route on ordinary roads, add a destination on the road you want to use.***

Car navigation

Problem	Possible cause ➡ **Possible solution**
A route is created on roads other than the specified road.	• A route is created if it is not possible to reach the destination without taking a road other than the one specified. • Depending on the current position and destination, a route may be created on roads other than those intended for use. ➡ *This is not a malfunction. To set a route on the specified roads, add a destination on the road you wish to use.*
Route cannot be searched.	• Distance to the destination is too far or a road to the destination cannot be found. ➡ *Change the destination and conduct a route search again.* ➡ *Conduct a route search by setting the destination midway to the final destination.* ➡ *There is a case that route search cannot be conducted depending on the destination. Drive the car referring to the map.*
Unable to scroll map while driving. Please use after stopping.	• As a safety feature, map scrolling is disabled while the vehicle is in motion. ➡ *Stop in a safe place and engage the parking brake before scrolling.*

Radio

Problem	Possible cause ➡ **Possible solution**
Poor reception or noise	• 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.** • No power is supplied to the antenna amplifier (when using a film antenna, etc.). ➡ **Check the wiring of the antenna power lead.** • The radio signal from the station is weak. ➡ *Change to a different station.* • *Check that the radio antenna is fully extended.* • **Check the auto antenna control cable connection.**
The number of auto preset stations is less than 6.	• The number of receivable stations is less than 6. ➡ *Move to an area where receivable stations number is maximum, and try presetting.*
Preset stations cannot be stored.	• 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.**
The vehicle's radio antenna extends and retracts when the engine starts.	• Starting the engine may cause the vehicle radio antenna to extend and retract, depending on the timing. ➡ *This is not a malfunction.*

Troubleshooting (continued)

CD, MP3/WMA, DVD

Problem	Possible cause ➡ **Possible solution**

■ Common

No playback or disc ejected	● The disc is inserted upside down. ➡ *Insert the disc correctly.* ● There is a flaw or foreign object on the disc. ➡ *Remove the foreign object, or use a flawless disc.* ● There is condensation on the disc or the pickup lens. ➡ *Leave the disc and the pickup lens undisturbed for a while before using.*
Sound skipping or noise	● There is a flaw or foreign object on the disc. ➡ *Remove the foreign object, or use a flawless disc.*
Sound skipping due to vibration	● The unit is not properly secured. ➡ **Secure the unit to the console box.** ● The unit is tilted at over 30º in the front-to-end direction. ➡ **Make the angle 30º or less.**
Disc unejectable	● Something such as a peeled label obstructs the disc coming out. ➡ *Press and hold [Disc] for more than 10 seconds (disc forced ejection). In case the disc forced ejection does not work, consult your dealer.* ● 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.*

■ MP3/WMA

No playback or disc ejected	● The disc has unplayable formatted data. ➡ *Refer to the description about MP3/WMA for playable sound data except CD-DA (i.e. music CD).* ● *MP3 files must have the ".mp3" (MP3) extension and WMA files must have the ".wma" (WMA) extension.*
The CD-R/RW that are playable on other devices are not playable on this unit.	● The playability of some CD-R/RW may depend on the combination of media, recording software and recorder to be used even if these CD-R/RW are playable on other devices such as a PC. ➡ *Make CD-R/RW in a different combination of media, recording software and recorder after referring to the description about MP3/WMA.*
Sound skipping or noise	● Playing VBR (Variable Bit Rate) files may cause sound skipping. ➡ *Play Non-VBR files.*

Note:
● Refer to "Notes on MP3/WMA" (➡ page 108)

■ DVD

Cannot switch the audio language/ subtitle language/ angle.	● It is not possible to switch if the disc does not have multiple audio languages/subtitle languages/angles recorded on it. (Refer to the guide provided with your disc.) ● Some discs permit switching through a menu screen. ● Sometimes, switching angles is possible only with certain scenes.

CD, MP3/WMA, DVD

Problem	Possible cause ➡ **Possible solution**
The audio/subtitle language selected in the DVD settings is not used.	● 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.)
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 7) *or "Notes on discs"* (➡ page 107) *for other cases.*
Touch panel operation does not operate the disc.	● For some discs, that operation may be prohibited.
Volume for DVD play is low.	● CD and DVD have different sound recording levels. ➡ *Play DVD at a higher volume setting than CD.*
Messages on the menu screens are not in the desired language.	● *Check the menu language setting.*
There is no sound even though a disc is inserted. (Disc cannot play)	● *Use a playable disc.* ● After inserting the disc, or after switching to DVD, the sound may break up for a short time while the format is recognized. ● A DVD with dts audio content was played. ➡ *This system is not compatible with dts. When playing, always play non-dts sound. (If dts sound is selected, this system will output no audio.)* ➡ *On some discs, audio automatically switches to dts when playback is stopped and resumed from the beginning of the disc, so sound output will be lost or the subtitle settings may be changed. If that happens, reset to the previous settings manually.*
Parental lock code number is forgotten.	● *Touch [Clear] 10 times to initialize the setting (returning to the state with no code number setting).*

Display Settings

Problem	Possible cause ➡ **Possible solution**
The picture is dark. **The picture is whitish.** **Something is wrong with the picture.** **The picture is light in color.**	● The screen is not adjusted properly. ➡ *Readjust the screen.*
Red, blue, or green spots appears.	● This is a characteristic of liquid crystal panels and is not a problem.

Troubleshooting (continued)

Sound settings

Problem	Possible cause ➡ **Possible solution**
No sound from left, right, front, or rear speaker.	● Cables are not correctly connected. ➡ **Connect the cables correctly.**
Left and right sounds are reversed.	● The speaker leads are connected in reverse between right and left. ➡ **Connect the speaker wires to the correct one.**
No sound from the subwoofer	● *Playing back a disc having a subwoofer channel.*

Error display messages

Display	Possible cause ➡ **Possible solution**
No map data	● A location not within the area of the recorded map is trying to be displayed. ➡ *It is not a malfunction. Use the unit within the area covered by the map.*
Destination too far. Please set a point within 3200 miles (5000 km*) in a straight line.	● Guidance is impossible because the destination is too far away. ➡ *Reconsider the area conditions, or set destinations to pass through, then search again.*
HDD cannot be read due to low temperature.	● The system could not start up due to abnormal HDD temperature. ➡ *Turn off the power and wait for a while before turning the power back on.*
HDD cannot be read due to high temperature.	
Not compatible with DTS. Please select alternative mode.	● A dts DVD was played. ➡ *This system is not compatible with dts. If the DVD contains non-dts sound, switch to that.*
No disc	● No disc is in the player. ➡ *Insert disc into the disc slot.*
Incorrect region disc	● An attempt was made to play a disc with a region number other than "1" or "ALL". ➡ *Check the disc.*

* This is the distance when "km" is set as the distance setting (➡ page 84).

Error display messages

Display	Possible cause ➡ **Possible solution**
Hardware error. Reboot or press reset switch.	● There was a malfunction in the amp. ➡ ***Press the reset switch on the system.*** (➡ follows)
Read error	● Some mechanical or operation error has occurred. ➡ ***If there is no response to pressing the eject button, restart the engine.***
Cannot play this disc	● The inserted CD/DVD cannot be read. ➡ ***Refer to "Discs that can be played back"*** (➡ page 7) ***and use the right kind of disc.*** ● Some mechanical or operation error has occurred. ➡ ***If there is no response to pressing the eject button, restart the engine.***

Product servicing

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

Replacing the Fuse

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

Reset the system

■ If the unit fails to operate

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

IMPORTANT
Push the switch only when the unit fails to operate with any buttons. (Stored settings and adjustments are cleared.) If the unit fails to return to normal, contact the nearest Panasonic Servicenter and have it repaired.

Note:
● If the ID code has been already set, you will be asked to enter the ID code right after the unit is restarted.
● A noise may occur when the reset switch is pressed, but that does not indicate a malfunction.

Maintenance

Caution on cleaning

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

Alcohol

Pesticide

Thinner

Wax

Benzine
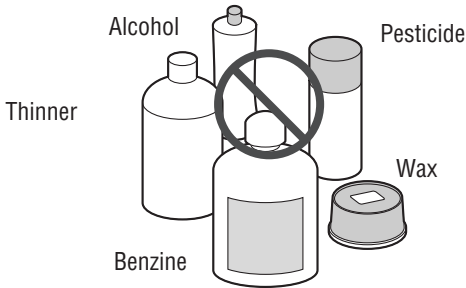
Cleaning this unit

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

Cleaning without the supplied cloth
① Moisten the soft cloth in dishwashing soap diluted with water and wring well.
② Wipe lightly. Go over the same surface with a dry cloth.

Note:
● **If water drops or similar wet substances get inside the monitor, it may cause a malfunction.**
● Since there is the possibility of water drops getting inside of the unit, do not directly apply cleanser to the surface.
● Do not scratch the screen with your nails or other hard objects. The resulting scratches or marks will obscure the images.

The pickup lens

Depending on the usage environment (temperature, humidity, etc.), the pickup lens may become dirty in the course of long-term use, as dirt and fine dust on discs and in the air build up on the lens.
If there is a problem reading a disc, check first for the dust on the disc.
If the disc is clean but the problem continues, the pickup lens must be replaced to repair the problem.
Consult your dealer or your nearest Servicenter. Please note that repairs after the warranty period expires must be paid for.
● Do not use commercially available lens cleaner discs. They could damage the pickup lens and cause product failure.

How to prevent pickup lens contamination
● Before using a disc, wipe away any dust, dirt or fingerprints on the surfaces.
● Occasionally take the disc out and wipe away any dust or dirt on the surfaces.
● Discs that are not inside the player should always be stored in their cases.

Notes on discs

DVD/Audio CD/CD-R/CD-RW

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

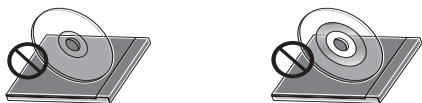Printed side
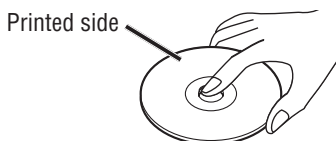
Do not use discs that fit any of the descriptions given below. Using these discs may damage the discs or cause the unit to malfunction.
- **Special discs in a shape which is not round**

- **Partly or wholly transparent disc**

Wholly transparent disc   Partly transparent disc

* Wholly semi-transparent disc may not be played back

- **Discs with adhered labels, etc. on them**

Disc with adhered stickers   Labels created by a printer
or tape

Protective films or sheets   Disc accessories
                               (stabilizers, etc.)

- **Damaged or deformed discs**

Poorly made discs   Discs with cracks,
                               scratches or parts missing

Discs with burrs
Please remove the burrs before use.

Disc insert

The surfaces of new discs tend to be slippery. Therefore, when using such a disc for the first time, it may not load satisfactorily even when it has been inserted into the unit. At a time like this, insert the disc into the unit as far as it will go until it is loaded properly.
- **When inserting a disc into or ejecting and removing it from the unit, insert it straight in or eject and remove it straight out in parallel with the unit. Otherwise, the disc may be scratched or marked in the process.**
- **When inserting a disc, do not put one disc on another. Failure to observe this may cause the discs to be jammed.**

Do not leave discs in the following places:
- Direct sunlight
- Near car heaters
- Dirty, dusty and damp areas
- On seats or dashboards

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

<Correct>   <Wrong>
- Do not attach any stickers or labels to your discs. Do not write on the disc label in a heavy pen or ballpoint pen.

Notes on CD-R/RW, DVD-R/RW

- You may have trouble playing back some CD-R/RW or DVD-R/RW discs recorded on CD/DVD recorders (CD-R/RW, DVD-R/RW drivers), 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 CD. Leaving them inside a car for extended periods may damage and make playback impossible.
- The unit may not successfully playback a CD-R/RW, DVD-R/RW that was made by the combination of writing software, a CD/DVD recorder (CD-R/RW, DVD-R/RW drive) and a disc if they are incompatible with one another.
- This player does not play CD-R/RW, DVD-R/RW discs if the session is not closed.
- Be sure to observe the handling instructions of CD-R/RW, DVD-R/RW discs.
- This player does not play CD-R/RW discs which contain other than CD-DA or MP3/WMA data.

Notes on MP3/WMA

What is MP3/WMA?

MP3 (MPEG Audio Layer-3) and WMA (Windows Media™Audio) are the compression formats of digital audio. The former is developed by MPEG (Motion Picture Experts Group), and the latter is developed by Microsoft Corporation. Using these compression formats, you can record the contents of about 10 music CD on a single CD media (This figures refer to data recorded on a 650 MB CD-R or CD-RW at a fixed bit rate of 128 kbps and a sampling frequency of 44.1 kHz).

Note:
● MP3/WMA encoding and writing software is not supplied with this unit.

Points to remember when making MP3/WMA files

Common
● High bit rate and high sampling frequency are recommended for high quality sounds.
● 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 user manual of your own encoding software and writing software.

MP3*
● It is recommended to set the bit rate to "128 kbps or more" and "fixed".
* MPEG Layer-3 audio coding technology licensed from Fraunhofer IIS and Thomson.

WMA
● It is recommended to set the bit rate to "64 kbps or more" and "fixed".
● Do not set the copy protect attribute on the WMA file to enable this unit to play back.

⚠ Caution:

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

Display information

Displayed items

● **CD-TEXT**	● **MP3 (ID3 tag)**
Disc title	Album name
Track title	Title name/artist name
● **MP3/WMA**	● **WMA (WMA tag)**
Folder name	Album name
File name	Title name/artist name

Displayable characters
● Displayable length of file name/folder name: within 64 characters. (Unicoded file and folder names are reduced by half in the number of displayable 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 and special characters in each language 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/WMA format files have been encoded, the character information may not be displayed properly.
● Undisplayable characters and symbols will be converted into an middle dot.

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Designed for Windows Media™

No warranty
Above description complies with our investigations as of February 2007. It has no warranty for reproducibility and displayability of MP3/WMA.

Recording MP3/WMA files on a CD-media

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

- The file extension ".mp3" or ".wma" should be assigned to each file depending on the file format.
- This unit does not have a play list function.
- Although Multi-session recording is supported, the use of Disc-at-Once is recommended.

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/WMA 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
Windows Media Audio Ver. 7, 8, 9*	32 k – 192 kbps	Yes	32, 44.1, 48 kHz

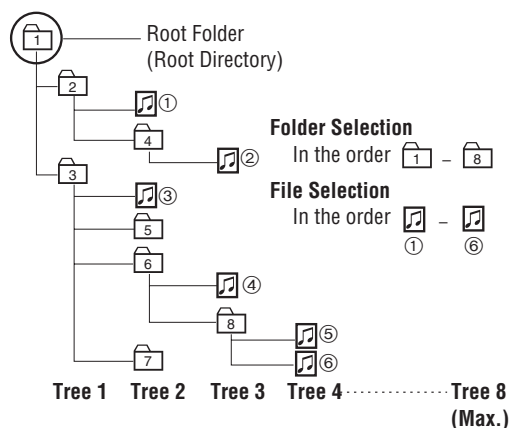* WMA 9 Professional/LossLess/Voice are not supported.

Folder selection order/file playback order

Maximum number of files/folders
- Maximum number of files: 511 (files + folders)
- Maximum number of files in one folder: 255
- Maximum depth of trees: 8
- Maximum number of folders: 192 (Root folder is included.)

Note:
- You can shorten the duration between data read and playback by decreasing the quantity of files or folders, or the depth of the hierarchy.
- This unit counts the number of folders irrespective of the presence or absence of an MP3/WMA file.
- If the selected folder does not contain any MP3/WMA files, the nearest MP3/WMA files in the order of playback will be played.
- Playback order may be different from other MP3/WMA players even if the same disc is used.
- "ROOT FOLDER" appears when displaying the root folder name.

Root Folder (Root Directory)

Folder Selection
In the order ☐1 – ☐8

File Selection
In the order ♫① – ♫⑥

Tree 1　Tree 2　Tree 3　Tree 4 ·········· Tree 8 (Max.)

What is a navigation system?

A navigation system marks a route to a destination or destinations on a map, guiding the user along the route to the destination.

Vehicle positioning system

■ GPS (Global Positioning System)

The positioning system uses communications satellites launched by the US Department of Defense. Signals are received from three or more satellites orbiting at 21 000 km altitude, and the principle of triangulation is used to find the position.
By receiving GPS signals, this system can position the vehicle within a margin of error of 30 to 200 m.

Time before the current position is found
When this system is used for the first time, or if it has not been used for an extended period, it may take as much as 5 minutes to find the current position. In normal conditions, at a location with good reception, positioning takes around 2 minutes.
Starting to move the vehicle immediately after turning on the power causes it to take longer to find the position, so the user is advised to remain parked in a location with good reception (with no buildings or trees to block the signals from GPS satellites) until the current position is found.
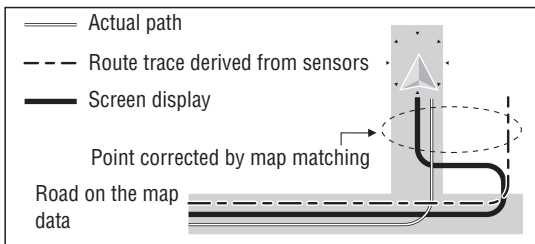
■ Locations where GPS signal reception is difficult

Reception may not be possible in locations such as the following:
● In tunnels
● Between tall buildings
● Under elevated roads
● Between trees

■ Map matching

This function displays the vehicle position obtained from GPS, the gyro sensor and other sources on the map.


```
———  Actual path
- - -  Route trace derived from sensors
▬▬▬  Screen display

       Point corrected by map matching
Road on the map
data
```

Vehicle positioning precision

The vehicle mark position may not be displayed correctly due to the driving environment and the GPS satellite status.
Continue driving without taking further action, and the map matching function and GPS satellite data will be used to automatically correct the vehicle mark position.
● When a highway and an ordinary road are close together
● When driving through a fork junction with a narrow angle between roads
● When driving on roads in a block grid pattern
● After moving on a ferry, car transporter, etc.
● When driving on steep mountain roads
● When driving on winding roads
● When turning right or left after driving on a straight road for a long period
● When driving in a weaving motion on a wide road

The vehicle mark position may not be displayed correctly in the following additional situations:
● Between turning the ignition switch on (after turning the power on) and receiving GPS signals.
● When driving for the first time after installing this system.
● After changing a tire, particularly when driving on an emergency tire.
● When driving on roads that are slippery due to snow, gravel etc., or when driving with tire chains.
● When the vehicle emerges onto a normal road after driving on a spiral route out of an underground or multi-story parking lot, or when the vehicle was turned on a turntable after stopping the engine (turning the power off).
● GPS satellites are under the control of the US Department of Defense, which may deliberately reduce positioning precision. In such situations, the vehicle mark not reflect the actual position of the vehicle.

Route searching

The following situations do not indicate a malfunction:

- Some roads may be impassable, such as roads closed in winter or temporarily closed for pedestrian.
- When searching for a route through narrow streets, the route may include impassable footpaths or stairs.
- Some roads may be impassable, due to opening of a new road.
- Roads may be displayed which are not actually passable.
- The route may not change even when the search is repeated.
- The route may be congested.
- If there is no road or only very narrow roads to the destination, the route may only be displayed to a point some distance from the destination.
- Guidance may lead to an ordinary road under an elevated road. The reverse can also happen.
- A route may be displayed which makes a U-turn.

Route guidance

The following situations do not indicate a malfunction:

- Guidance may not be displayed even though a turn is required at an intersection. Guidance of the name of the intersection may not be provided.
- Guidance for left or right turns may not match the actual shape of the road.
- Voice guidance may be provided when the vehicle deviated from the guidance route, for example, turning before the guided intersection.
- It may not be possible to display/provide audio direction guidance on some highways and toll roads.
- The Enlarged intersection map may not match the actual road shape.
- The guidance distances may be slightly inaccurate.

POI category list

Main-category	Sub-category	Icons
Restaurant	All Restaurants	
	American	
	Barbecue/Southern	
	Bistro	
	Brewpub	
	British Isles	
	Cajun/Caribbean	
	Californian	
	Canadian	
	Chinese	
	Coffee House	
	Continental	
	Fast food	
	French	
	German	
	Greek	
	Grill	
	Indian	
	International	
	Italian	
	Japanese	
	Korean	
	Latin American	
	Mexican	
	Middle Eastern	
	Sandwich	
	Seafood	
	Spanish	
	Steak House	
	Thai	
	Vietnamese	
	Other Restaurants	
Shopping	All Shopping	
	Book Store	
	Grocery Store	
	Pharmacy	
	Shopping Center	

Main-category	Sub-category	Icons
Automotive	All Automotive	
	Auto Club	
	Auto Dealership	
	Gas Station	
	Open Parking Area	
	Park & Ride	
	Parking Garage	
	Vehicle Repair Facility	
Travel	All Travel	
	Airport	
	Bus Station	
	Commuter Rail Station	
	Ferry Terminal	
	Hotel or Motel	
	Railway Station	
	Rental Car Agency	
	Rest Area	
	Tourist Attraction	
	Tourist Information	
Recreation	All Recreation	
	Amusement Park	
	Casino	
	Cinema	
	Golf Course	
	Historical Monument	
	Marina	
	Museum	
	Recreation Facility	
	Ski Resort	
	Sports Activity	
	Theater	
	Winery	
Community	All Community	
	City Center	
	City Hall	

Main-category	Sub-category	Icons
Community	Community Center	
	Court House	
	Hospital/Polyclinic	
	Library	
	Police Station	
	School	
	University or College	
Banking	All Banking	
	ATM	
	Bank	
Other	All Other	
	Business Facilities	
	Exhibition or Conference Center	

Note:
POIs that serve as landmarks are displayed as marks on the map. Icons to display or hide can be selected. (➡ page 50)
- Not all POIs are displayed, due to the ongoing development of map data.
- Changes may be made without notice, for the purpose of improvement.

Definition of terms

Accuracy Level
It indicates the precision of distance correction. Accuracy Level 4 has the lowest amount of errors. The system's internal computer automatically makes initial settings to match the distance coefficient and other properties of the vehicle in which it is mounted. After driving for around 60 minutes, any discrepancy is gradually eliminated, improving precision. Processing continues, to produce ongoing improvement in precision.

Address Book, Contact
When a landmark point or point to remember is registered, that location can be called up immediately. This is convenient when setting routes. The user's home location can also be set, making it simple to set a route for returning home.

Avoid area
If an area to avoid has been set when setting a route, the route will be created so as to avoid that area.

Digital Map Matching
This function compares the history data for the vehicle to the form of the road in the map data, to infer the road being used and display position on the road on the map.

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)

GPS (Global Positioning System)
This is a position detection system using satellites launched by the US Department of Defense. Signals are received from three or more satellites orbiting at an altitude of 21 000km, and the signals are triangulated to calculate the position.

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 DVD 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.

Pan & Scan screen
This refers to a screen on which the playback picture of wide-screen DVD is cut off at the left and right sides.

POI (Point of interest)
The positions of various points of interest stored in the map data, such as restaurants, hotels, stations and movie theaters.

Sensor
Internal sensors which enable the system to measure the movement of the vehicle. These measurements are combined with the GPS data to calculate the position of the vehicle.

SRS CS Auto
SRS CS Auto is a positional audio system tailored for in-car use. It converts various two-channel AV sources to virtual 5.1ch positional audio, generating a surround effect.
The four functions are SRS Circle Surround II, SRS FOCUS, SRS TruBass and Mix to Rear. The system uses four speakers to deliver an impressive positional audio experience.

Title, Chapter (DVD)
DVD 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 (CD)
Video CD or CD are divided into some sections (tracks). Each section is numbered; these numbers are called "Track number".

Track 1	Track 2	Track 3	Track...

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

Index

Specifications

General

Power supply	12 V DC (11 V – 16 V), test voltage 14.4 V, negative ground
Current consumption	Less than 10 A
Maximum power output	50 W × 4 ch
Compatible speaker impedance	4 Ω
Video input signal	NTSC 1.0 Vp-p (75 Ω RCA pin jack)
Audio input sensitivity	Stereo 2.0 Vrms (RCA pin jack)
Camera input	NTSC 1.0 Vp-p (75 Ω 5 pin connecter)
Video output signal	NTSC 1.0 Vp-p (75 Ω RCA pin jack)
Pre-Amp output voltage	2.0 Vrms
Pre-Amp output impedance	Less than 600 Ω
Dimensions (W × H × D)	178 × 100 × 165 mm {7″ × 3 $^{15}/_{16}$″ × 6 $^1/_2$″}
Weight	3.1 kg {6 lbs. 14 oz.}

Audio section

Output voltage/impedance	2.0 Vrms/600 Ω
Frequency characteristics Front L/R, Center, Rear L/R	20 Hz – 20 kHz (±1 dB)
Distortion	0.01 % (1 kHz, 0 dB, PCM input)
Dynamic range	96 dB
S/N ratio	100 dB

FM tuner

Frequency range	87.7 MHz – 107.9 MHz
Usable sensitivity	12.2 dBf
S/N ratio	63 dB
Stereo separation	40 dB (1 kHz)

AM tuner

Frequency range	530 kHz – 1 710 kHz
Usable sensitivity (S/N ratio 20 dB)	26 dB/μV
Image rejection ratio	50 dB

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

Amplifier Power Standard
CEA
CEA-2006 Compliant

Monitor

Liquid crystal panel	7″ wide
Screen dimensions (W × H × D)	156 × 82 × 176 mm {6 $^1/_8$″ × 3 $^3/_{16}$″ × 6 $^7/_8$″}
Number of pixels	336 960 pixels (234 vertical × 480 horizontal × 3)
Valid pixel ratio	Over 99.99 %
Display method	Transparent color filter format
Drive method	TFT (Thin Film Transistor) active matrix format
Light source	Internal light (Built-in small fluorescent lamp)
Touch panel	Pressure-sensitive touch panel, analog type (film & glass)

GPS antenna

Type	Microstrip
Cord length	6 m
Dimensions (W × H × D)	30.4 × 11.7 × 35.5 mm {1 $^{13}/_{64}$″ × $^{15}/_{32}$″ × 1 $^{13}/_{32}$″}
Weight (Including cord)	113 g (4 oz.)
Frequency range	1 575.42 MHz (C/A cord)
Receiver sensitivity	–130 dBm
Receiving method	Parallel 8 ch

Above Specifications comply with EIA standards.

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

ID code memo

Copy the memo below, fill in the ID code, and keep it in a secure location.

Note de code d'identification

Copier la note ci-dessous, remplir le code d'identification et conserver dans un endroit sûr.

Anotación del código de identificación

Copie la anotación abajo, rellene el código de identificación, y guárdelo en un lugar seguro.

Model No. CN-NVD905U

ID CODE

Memorandum

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Panasonic

CN-NVD905U

Installation