



Reference Guide



AVN 30D

ESN E5 6.5" Wide TFT Touch-Panel Display
CD/DVD Multi-Source Receiver with DVD Navigation

We appreciate your purchase of this receiver.
Please read through this manual for correct operation.
We suggest that after reading it you keep this manual
in a safe place for future reference.

1 For the safe usage of this device

The symbols described below are found in this instruction manual as well as on the device itself to insure its proper and safe usage and to prevent injury or damage to property. Make sure you understand the meaning of these symbols before reading the rest of this manual.



Warning

This sign indicates a situation in which incorrect handling through disregard of a sign might result in death or serious personal injury.



Caution

This sign indicates a situation in which incorrect handling through disregard of a sign might result in personal injury or may result solely in damage to property.

The following symbols will precede information useful for preventing damage to the device as well as for its smooth operation.



ADVICE

Follow this advice to prevent malfunctions or damage to the device. Perform the indicated action in the event of a malfunction.



ATTENTION

Useful information for smooth operation
Facts to keep in mind when operating

- Please read all materials such as manuals and warranties that have come with the product.
Fujitsu Ten will not be responsible for unsatisfactory product performance due to failure to follow these instructions.
- Changes to product specifications may result in differences between content of the manual and features of the product.

Please use care in handling the manual.

Forcefully spreading or pulling on pages may result in falling out of the binding.
Use the manual carefully.

2 Safety precautions



Warning

- This device was made for vehicles equipped with a 12V battery. Do not use in a large truck, cold area vehicle or any other vehicle that uses a 24V battery. Otherwise, fires may result.
- Make sure to follow the actual traffic regulations when driving even during route guidance. Driving your vehicle while only following route guidance instructions may lead to traffic violations and cause accidents.
- For the sake of safety, the driver should as far as possible avoid operating the unit while driving. Operation while driving can lead to unforeseen accidents such as losing control of the vehicle. Stop the vehicle before operating the unit. When viewing screens while driving, spend the minimum possible time with your eyes off the road. This will distract you from the road ahead, potentially causing an accident.
- You should never register geographical points or perform memory settings while driving the vehicle. This will distract you from the road and cause accidents. Park the vehicle in a safe area before operating the device.
- Make sure to park the vehicle in a safe place and set the parking brake before watching DVDs or videos. For safety reasons, only the sound of DVDs or videos will be emitted while the vehicle is in motion.
- Do not insert foreign objects into the disc insert slot. This may cause fires or shocks.
- Do not disassemble or rebuild this product. Doing so may cause an accident, fire or electrical shock.
- Do not pour water or insert foreign objects into the device. This may cause smoke emissions, fires or shocks.
- Do not operate the product in a malfunctioning condition, for instance, when the audio does not play. Doing so may cause an accident, fire or electrical shock.
- When it is necessary to replace the fuse, always use a fuse of the correct rating (number of amperes). Use of fuses with higher amperage ratings may cause a fire.
- If an abnormal situation occurs, such as foreign matter entering or liquid splashing on the product, or smoke or a strange odor emitting from the unit, shut off the product immediately and consult the dealer from whom you purchased it. Continued operation may cause an accident, fire or electrical shock.
- Do not touch the antenna wire or the device itself whenever you hear thunder. There is a danger of electrocution due to lightning.
- Do not park your vehicle in an unauthorized area to operate the device.



Caution

- This device can be used when the engine switch is either at ON or ACC, however, to avoid depleting the battery, operate it with the engine running.
- This product must be operated only as on-board equipment, or it may cause electrical shock or injury.
- Play the audio at a moderate volume level that permits you to hear sounds from outside the car. Driving without being able to hear outside sounds may result in an accident.
- Check the volume prior to turning the device ON. If the volume is turned up when turning the switch ON, a loud sound will emit which may damage your hearing.
- Do not put your fingers into the disc insert slot. Otherwise, injury may result.
- Exercise caution as to avoid getting your fingers caught when closing the display or adjusting its angle. Otherwise, injury may result.
- Do not touch heated parts of the device. Otherwise, burns may result.
- For safety reasons when moving the device, have a specialist at the store of purchase reinstall for you. Specialized techniques are necessary to uninstall or install the device.
- Do not use the device in the event it emits a distorted sound or other such abnormality. Otherwise, fires may result.
- The device's liquid crystal display is equipped with a fluorescent tube. Check your local rules and regulations regarding its proper disposal.
- Using the device at extremely high or low temperatures may lead to improper operation and malfunctions. Lower your windows in order to bring down the temperature before using the device especially during the hot summer months.
- Letting water or metal objects go into the device or exposing it to strong shocks may cause malfunctions. Exercise caution.
- Take note of the following when ejecting a disc or setting the display tilt position:

For vehicles with an automatic transmission

- When removing each disc, switch to Neutral in the event of interference when in Park and proceed. (For a column automatic transmission, perform this operation when in either Park or Neutral.)
- When setting the tilt, make sure there is no interference generated from your hand or other obstructions when setting when either in Park, Reverse or Neutral. (If there is interference when in Drive, do not set the tilt.)

For vehicles with a manual transmission

- When removing each disc, if interference is generated when in 1st, 3rd, 5th or R (Reverse) gear, switch to Neutral and proceed. However, do not perform this operation while driving.
- When setting the tilt, make sure there is no interference generated from your hand or other obstructions when either in 1st, 3rd, 5th or R (Reverse) gear. (Do not set the tilt if there is interference.)



ADVICE

- When there is a lot of vibration – when driving on a bad road for example – the unit may become unable to operate normally because it cannot read data from the disc.
 - Condensation may accumulate on the lens, which functions to read CDs and DVDs, immediately after turning ON the heater in cold temperatures. Wait about 1 hour for the condensation to evaporate and the device will operate normally. Contact the store of purchase if normal operation does not resume after several hours.
 - If using this device immediately after having purchased it or after having stored it disconnected from the vehicle battery, the present location may not be accurately displayed. Wait a moment and the GPS positioning will correct the displayed position.
 - This device is precision equipment and the information that you record on it after purchase can be lost as a result of static electricity, electrical noise, vibration and other influences. You are recommended to keep a separate record of the information you store in the unit.
 - Note that the following events are not covered by the warranty.
 - ① Corruption or loss of the data stored in the unit by the purchaser resulting from failure or incorrect operation of the unit or trouble with it, or due to the effects of electrical noise or other influences
 - ② Corruption or loss of the data stored in the unit by the purchaser resulting from misuse of the unit by the purchaser or a third party
 - ③ Corruption or loss of the data stored in the unit by the purchaser on failure / repair of the unit
- * Please note that by installing or using this unit, you are regarded as having consented to the points above.

3 How the instruction manuals are organized

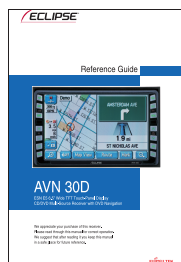
Use each instruction manual in the following order.

The instruction manuals for AVN 30D are composed of 3 versions. Reference Guide is included in the package. Use each manual separately depending on how you are using the device.

Until you are completely comfortable with all of the device's basic functions:

Read the **"Reference Guide"**.

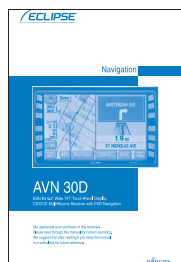
Only basic operations and most frequently used functions are described.



When wanting to master all navigation functions:

Read the **"OWNER'S MANUAL/Navigation"**.

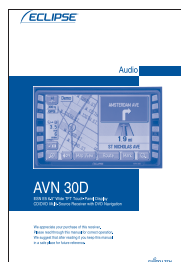
All navigation functions are described.



When wanting to master all audio functions:

Read the **"OWNER'S MANUAL/Audio"**.

All audio functions are described.



ATTENTION

The screens used in the instruction manuals may differ from the actual screens appearing on the device depending on the type of database and when it was compiled. Also, the GPS mark does not appear on the navigation screens.

MEMO

Read the following priority using this device

4 How to use this manual

Item title

A number and title is assigned for each item.

Section title

A title is assigned for each section.

Operation title

A title is assigned for each operation purpose.

Detailed operation title

A title is assigned for each detailed operation purpose.

Operation procedure

Describes the operation. Proceed with the operation as per the numerical order.

ADVICE

Additional points regarding the operations are given here.

Audio


5 CD/MP3 player operations

How to listen to a CD/MP3

Play a CD/MP3 file

When a disc is not inserted

- 1 Insert a disc.**
 - It automatically starts playing.
- When a disc is inserted**
 - 1 Touch **CD** or **MP3** for AUDIO MENU.**




ATTENTION If sound data and MP3 data are mixed on the same disc, only the data recorded in the first session can be played. For details, see "CD player operation" or "MP3 player operation" in the **OWNER'S MANUAL/Audio**.

Select the desired track or music file

1 Press **▲ or **▼**.**

Switch to the next track when playing a CD or to the next music file when playing an MP3.



Track selection (track start point), fast-forward, rewind buttons

82

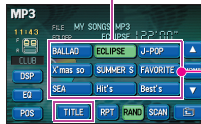
Easy folder and music file selection (MP3 player)

An MP3 compresses music data into 1/10 its original size enabling it to store about 10 times the music data of one CD. This device simultaneously displays 9 folders/files enabling the easy selection of desired music files.

1 Touch one of the folder/file selection switches.

- Touch a folder and the data stored in it will appear. Touch a music file to play that file.
- Touch **TITLE** to view the file information stored for the song being played (album name, song title).

Folder/file selection switches



Fast-forwarding/rewinding

1 Press and hold the **▲** or **▼** switch until a beep is heard.

Track selection (track start point), fast-forward, rewind buttons



Operation examples

Each definite operation is given here.

Operation switch

Switches needed to perform operations are displayed.

Section side heading

Only the section side heading will appear.

Operation screen

A screen showing the operation will appear.

➡ Go to the next page

The operation procedures are continued on the next page.

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MEMO

Read the following priority using this device

1 Name of parts

The unit can be operated by pressing buttons on the frame of the panel (panel buttons) and by touching buttons displayed on the screen (touch switches). This deck supports use of a remote control. The remote control is sold separately and can be purchased at your local retailer.

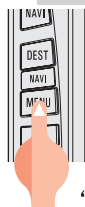
Panel buttons

Press the panel buttons found on either side of the screen to operate the device.



1	PWR button	Press to turn the DVD or audio ON or OFF.
2	CONT button	Press to display the audio or DVD operation screens.
3	(AUDIO) SOURCE Button	Press to display the audio menu screen that enables the switching of audio modes.
4	VOL buttons	Press to adjust the DVD or audio volume.
5	DISP button	Press to adjust the screen image quality or blacken the screen.
6	OPEN button	Calls up the TILT/EJECT screen.
7	NAVI button	Press to display the navigation screen and present location.
8	DEST button	Press to set the destination determined by the navigation system.
9	(NAVI) MENU button	Press to display the navigation menu screen.
10	TUNE/TRACK buttons	Press to select radio stations, CD audio tracks and DVD chapters.
11	INFO button	Press to operate each navigation information function.
12	MUTE button	Press to temporarily cut off the sound.

Press the MENU button.



“beep”



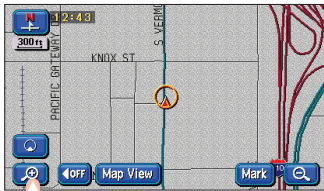
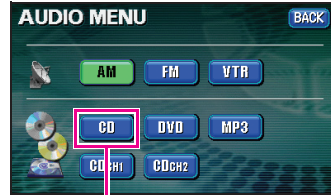
A menu screen appears.

Touch switches

Unit can be operated by touching buttons on screen.



Touch switch



“beep”

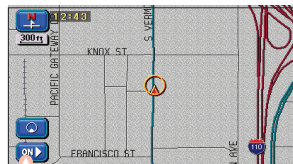
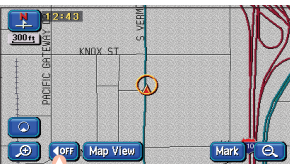


“beep”

[About operation of touch switch]

- Touch the buttons until a beep sound is emitted.
- Touch the buttons lightly to prevent damage to the screen.
- If a button does not respond, remove your finger and touch it again.
- An unavailable button is shaded.
- When the switch function is activated, the touch switch for that function will appear green.

Touch OFF



The touch switch displays will disappear.

Touch **ON** to display the touch switches.



Caution

Touch these switches with your fingers.

Using a pen, pencil or other object with a hard or sharp tip to touch on the screen may cause damage.

2 When using for the first time

Loading the program into the device

After purchasing the device and using it for the first time, load the map disc program into the device.

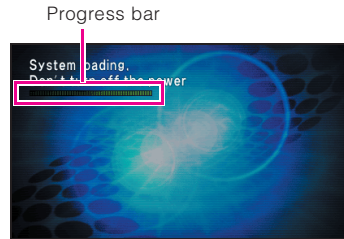
1 Turn the engine ON.



Screen after turning the power ON

2 Touch **DISPLAY OPEN/CLOSE** to open the display and insert the map disc into the map disc slot.

- The device will start reading the program.
- A progress bar will appear as the program is being read.
- On completion of program reading, the opening screen is displayed.



Program reading in progress screen (approx. 70 seconds)



Opening screen (approx. 10 seconds)



Caution

While program loading is in progress, do not turn the engine OFF or operate any other switch.

3 Select the language.

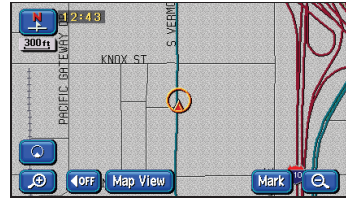
- Touch **I Agree** to use English.
- Touch **Français** and then **I Agree** to use French.



Map screen

4 Wait approx. 30 seconds.

- Press **NAVI** to display the map screen.



5 Turn the engine OFF.

6 Turn the engine ON and start the device.



- The same operation is necessary when starting the device for the first time after having replaced the vehicle battery or fuses.
- When inserting the map disc for the first time and the program is read after having cut the power from the vehicle battery, the following message may appear "DVD check in process."



After program reading is complete, the device will start reading the map data from the program approx. 30 seconds after the map screen appears. Attempting to operate the device during this time may result in improper operation. Do not operate the switches during this time.

3 Turning the power ON or OFF

How to turn the power ON or OFF

When the engine is turned ON, the DVD/audio power will automatically turn ON and the Caution screen will appear. Touch **I Agree** to switch to the Navigation screen. The power will turn OFF when turning off the engine.



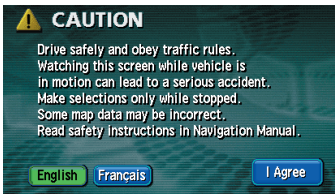
Engine key



<Opening screen>



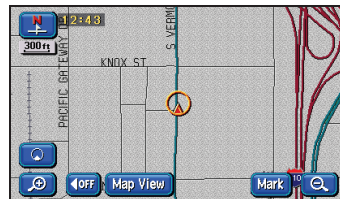
<Caution screen>



I Agree



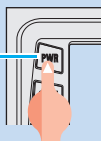
<Navigation screen>



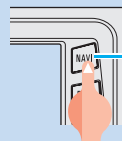
ATTENTION

- Press **NAVI** if the navigation screen does not appear.
- Press **PWR** if the audio or DVD does not turn ON.

PWR button



NAVI button



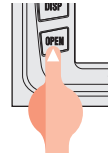
4 Inserting the disc

How to insert or eject a CD or DVD

Insert an audio CD when wanting to listen to music.

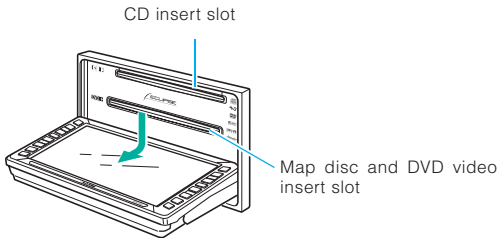
How to insert or eject a CD or DVD

1 Press **OPEN**.




2 Touch either **CD** , **DVD**  or **OPEN**.

The display opens and the disc slots become accessible.

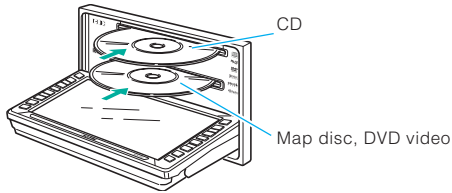


The display can be opened even after pressing **OPEN** for approx. 1 second until a "beep" sound is heard.

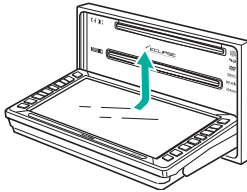


- If the vehicle's automatic transmission shift lever is in the "P" position or manual transmission lever is in the 1, 3, 5 or  position, or if a bottle or other container is in the cup holder, this could interfere with the opening and closing of the display. When it is safe to do so, move the shift lever to the "N" or "Neutral" position or remove the container from the cup holder before opening or closing the display.
- Do not place cups or cans on the display when it is opened. The display may be damaged.
- Quickly wipe away any liquid spilled on the display. Otherwise, damage may result.
- To protect the display from heat or dust, keep it closed at all times except when inserting or ejecting a disc.
- Do not press **OPEN** while inserting a disc.

3 Insert the desired disc into the slot.



4 When the CD or DVD is fully inserted, the display closes automatically.



- As soon as an audio CD is inserted, playback starts.
- As soon as a map disc is inserted, the navigation screen is displayed.
- As soon as a DVD is inserted, playback starts.



Caution

- Do not touch **CLOSE** or press **OPEN** while a disc is being inserted.
- Do not use an adapter when inserting 8cm CDs. Ejecting may be rendered impossible.



■ Map disc (DVD-ROM)

- Only use a specially made DVD navigation disc (For details, contact the store of purchase).

■ DVD

- DVDs labeled with the marks shown in the right can be used with this device. When using DVDR/RW (DVD-Recordable/ReWritable) and DVD+R/RW (DVD+Recordable/ReWritable) discs, note



- that only those whose contents were recorded in the video mode can be played. Discs whose contents were recorded in the video recording (VR) mode cannot be played.
- Some functions cannot be used depending on the type of DVD.
- When handling a DVD, hold it by pressing one finger on its center rim and another finger on its end with the label up.
- It is possible that a DVD-R/RW (DVD-Recordable/ReWritable) or DVD+R/RW (DVD+Recordable/ReWritable) disc will not play on the unit due to the circumstances of the recording, special disc characteristics, scratches, dirt or deterioration caused by long storage in the vehicle. DVD-R/RW or DVD+R/RW discs that have not been finalized will not play on the unit. It may not be possible to play a disc that has been recorded on a personal computer, depending on the application setting and the environment.

■ CD

- Audio CDs, CD-Rs (CD-Recordable) and CD-RWs (CD-Rewritable) labeled with the marks shown in the right can be used with this device.



(For details, see "**Before using the deck**" in the **OWNER'S MANUAL/Audio**.)

- It is possible that a CD-R (CD-Recordable) or CD-RW (CD-ReWritable) disc will not play on the unit due to the circumstances of the recording, special disc characteristics, scratches, dirt or deterioration caused by long storage in the vehicle. CD-R/RW discs that have not been finalized will not play on the unit. It may not be possible to play a disc that has been recorded on a personal computer, depending on the application setting and the environment.
- The CD-TEXT function can be used only with the CD-TEXT-compatible compact discs available on the market. If it is used with CD-R or CD-RW discs, characters may not be displayed normally.

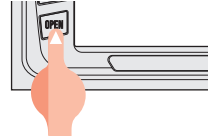
- Since the CCCD (Copy Control CD) does not comply with regular CD specifications, it may not be possible to play it.



- Do not use discs with transparent or semi-transparent portions within the recording area, or C-thru discs, since they may not be accepted and ejected properly and may not play properly.

How to eject a CD or DVD

- 1 Press **OPEN**.



- 2 Touch **CD** or **DVD** to eject either disc.

The display will open and the disc(s) are ejected.



- 3 After removing the disc, touch **CLOSE**.

The display can be closed even after pressing **OPEN** for approx. 1 second until a "beep" sound is heard.




ATTENTION

- The display can be opened even after pressing **OPEN** for approx. 1 second until a "beep" sound is heard.
- If the disc cannot be removed (e.g. if it is trapped), touch **CLOSE** to close the display and then press **OPEN** for at least 5 seconds.




Caution

- If the vehicle's automatic transmission shift lever is in the "P" position or manual transmission lever is in the 1, 3, 5 or  position, or if a bottle or other container is in the cup holder, this could interfere with the opening and closing of the display. When it is safe to do so, move the shift lever to the "N" or "Neutral" position or remove the container from the cup holder before opening or closing the display.
- Be careful of the following items while a disc is being ejected.

<Automatic transmission vehicle>

If the shift lever in the "P" position causes interference with disc ejection, switch the lever to the "N" position to eject discs. (Steering column mounted shift levers allow unit operation while lever is in either "P" or "N" position.)

<Manual transmission vehicle>

If the shift lever in the 1, 3, 5 or  position causes interference with disc ejection, switch the lever to the Neutral position to eject discs.

- Do not close the display by hand. This could damage the display.
- Do not place cups or cans on the display when it is opened. This could damage the display.
- Quickly wipe away any liquid spilled on the display. Otherwise, damage may result.
- To protect the display from heat or dust, keep it closed at all times except when inserting or ejecting a disc.

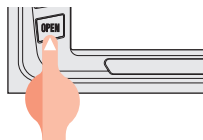
5 Display angle adjustment

Adjust the angle of the display

The screen viewing angle can be adjusted to any of 6 stepped positions when light from outside the vehicle makes viewing difficult.

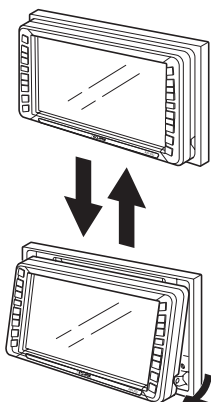
1 Press **OPEN**.

The TILT/EJECT screen is displayed.





2 Touch **TILT**.

The display will tilt upwards by one step (5°). Each touch of the switch tilts the panel by another step. Pressing the switch when the display is tilted to the 6th level (30°) will bring it back up to its original position (0°).



ATTENTION

- The display will open when pressing **OPEN** or touching **CD**  or **DVD**  even when tilted. When closed again, it will return to its tilted position.
- If the display is in an adjusted angle position when the vehicle ignition is turned off, the display will automatically return to the original position (0°). If the ignition switch is then turned to ACC or ON, the display will return to the adjusted angle position.




Caution

- Be careful not to pinch your hands or other objects when adjusting the angle of the display. This could cause an injury or damage to the display.
- When the display is in the TILT status, do not insert a disc or anything else into the gap at the top. This may damage the unit and the disc.
- Observe the following cautions when adjusting the angle of the display.

<Automatic transmission vehicle>

When setting the tilt, make sure there is no interference generated from your hand or other obstructions when setting when either in Park, Reverse or Neutral. (If there is interference when in Drive, do not set the tilt.)

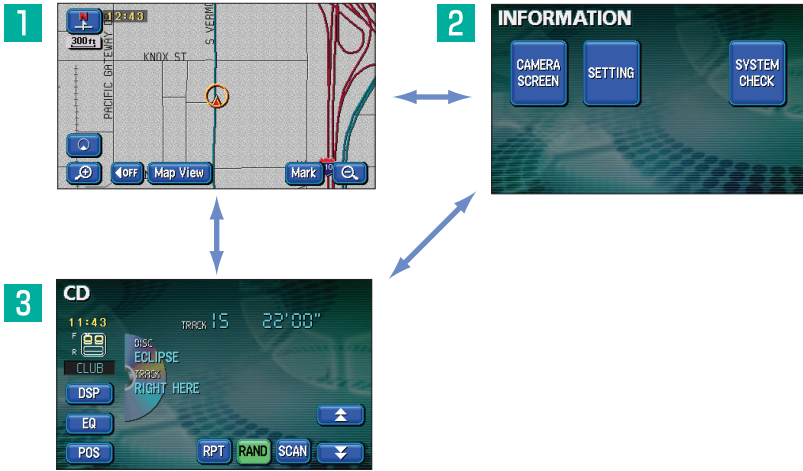
<Manual transmission vehicle>

When setting the tilt, make sure there is no interference generated from your hand or other obstructions when either in 1st, 3rd, 5th or  (Reverse) gear. (If there is interference, do not set a tilt position.)

Get to know each mode

This device has three main modes: "**Navigation**", "**Information**" and "**Audio DVD**".

You can switch from any mode to any mode.



	Mode	Main functions
1	Navigation	<ul style="list-style-type: none"> ● Present location display ● Instructions to destination ● Geographical point registration (home and memory points)
2	Information	<ul style="list-style-type: none"> ● Rear View Camera function (optional) ● Displaying the setting screen ● Displaying the system check screen
3	Audio/DVD	<ul style="list-style-type: none"> ● AM/FM broadcast reception ● HD RADIO broadcast reception ● SIRIUS broadcast reception ● CD player operation ● MP3 player operation ● DVD player operation

7 Operational conditions

Each operation condition for device functions

Depending on the following conditions (engine switch position), the device functions may or may not be operable.

○: Operable ×: Inoperable

Each function \ Engine switch	OFF (LOCK)	ACC/ON With parking brake set	ACC/ON With parking brake released	Display opened
GPS voice Navigation/ Information	×	○	Some functions are inoperable for safety reasons.	× Route and voice guidance continue.
Audio	×	○	Some functions are inoperable for safety reasons.	× Voice guidance continues.
DVD	×	○	For safety reasons, only the voice guidance is emitted.	× Voice guidance continues.

*Only the sound of DVD will be played while driving for safety reasons.



ATTENTION

Inoperable switches fade and are disabled while driving. Pressing inoperable switches while driving will display a message on the screen prohibiting operation.



Caution

When installing this device to vehicles, please be sure to connect a parking brake signal. If the parking brake signal is not connected, this device will not operate normally.

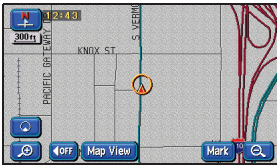
Switching modes

Get to know how to switch modes

Press the switches below to switch modes.

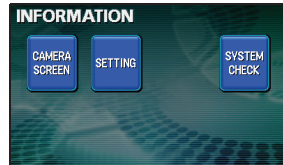
Navigation screen

Press **NAVI**.



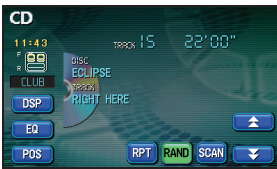
Information screen

Press **INFO**.

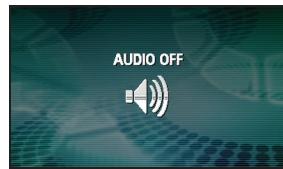


Audio operation screen

Press **CONT**. (Operation time) *1



(OFF screen) *2

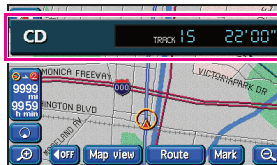


*1: Appears when the audio or DVD functions are in operation. See the "**OWNER'S MANUAL/Audio**" for audio and DVD operations.

*2: Appears when the audio or DVD functions are turned OFF.

Screen display

Turn on the audio or DVD (selecting a track or chapter) when the screen is showing the navigation display or is turned off and this screen will appear. The screen will disappear automatically in a moment.

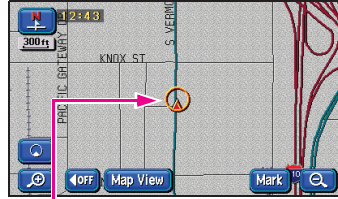
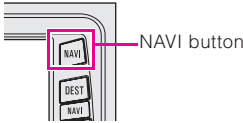


Screen display

1 Map operation

Check the positioning of your vehicle

Press **NAVI** to display the area in which your vehicle is located.



Vehicle position mark

The present location and the vehicle direction are displayed. The mark will move automatically as per the movements of the vehicle.

How to view the present location screen


Orientation mark

Indicates the orientation of the map.

Name of present location

Press **NAVI** to display it in the present location screen.

Scale display

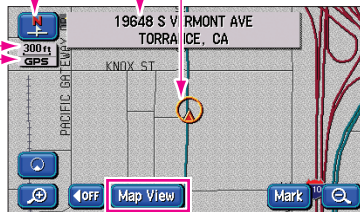
The reduction scale of the map being displayed is indicated. In this case, the length of the line segment () is 300ft.

Vehicle position mark

GPS mark

This mark will appear when utilizing the absolute positioning data from the GPS satellite.

GPS Indicates GPS signal is being received



Touch switch

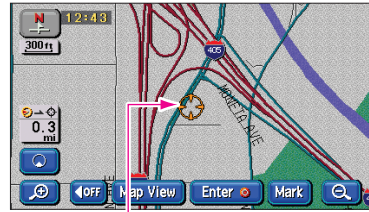
Each function switch is displayed depending on the screen.

Move the map (one-touch scroll)

Touch the screen directly to move the map.



While scrolling



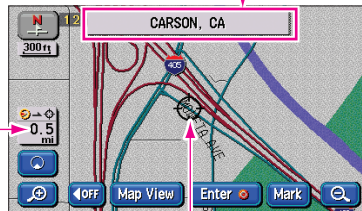
Cursor mark

Touch the map and the cursor mark will appear in the middle of the screen.

How to view the scroll screen

Position name


After moving the map, the name of the cursor position will appear for approx. 6 seconds.





Straight line distance display

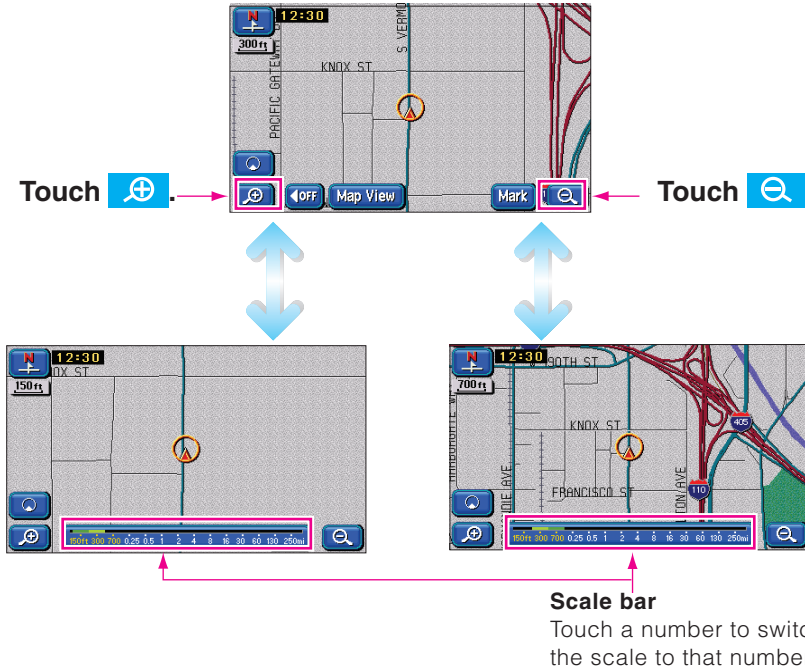
The distance in a straight line from the vehicle position mark to the center of the cursor mark is shown.





Cursor mark

Touch the cursor mark continuously and it will change color from black to yellow .

Change the map reduction scale

Touch the  switch and the map reduction scale increases making for a wider range display. Touch the  switch and the map reduction scale decreases for a more detailed map display.



Every time either  or  is pressed, the scale changes one level. Touch either  or  continuously for over 1 second to change the scale without going through each level.

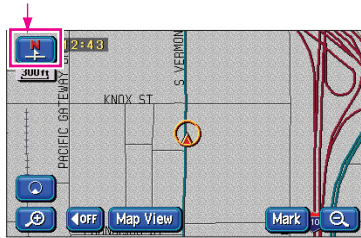
Change the orientation of the map

The orientation of the map displayed on the screen can be switched to either north up (always having the map oriented north) or heading up (always having the map oriented in the direction of the heading).

Touch the orientation mark ( or ) to switch the map orientation.

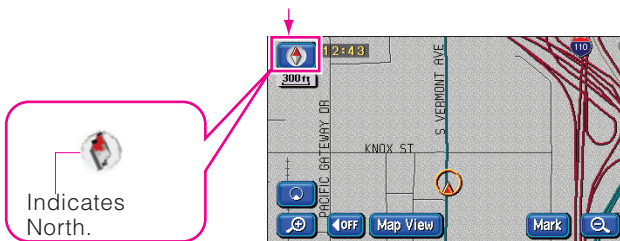
North up display

Orientation mark display





Heading up display

Orientation mark display



Change the map display method

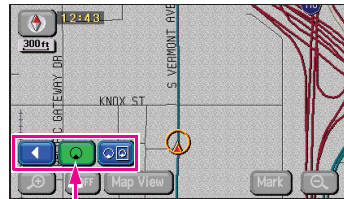
The map display can be changed according to several conditions. There are two types of map display methods:

	Shows a regular map (flat).
	Shows a map separated into two halves.

1 Touch .



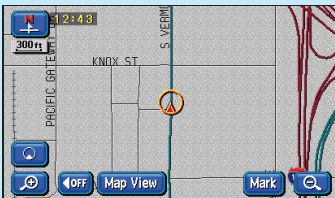
2 Touch the desired display method.



The touch switches on the displayed map brighter.

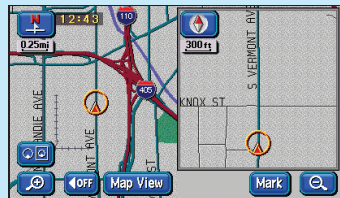
■ Touch and...

A regular map (flat) will be displayed.



■ Touch and...

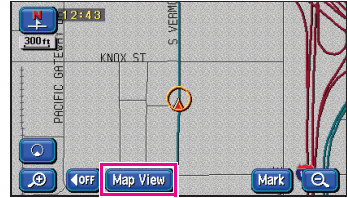
A map separated into two vertical halves will be displayed.



Display various points of interest on the map

Various points of interest (landmarks) can be shown on the displayed map.

1 Touch **Map View**.



2 Touch **Show POI Icon**.

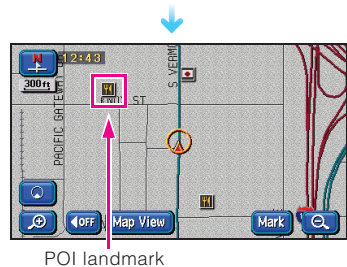


3 Touch the **POI Icon** to be displayed.

- Other than the 6 types of multiple landmarks and screens can be displayed. For details, see "POI display" in the **OWNER'S MANUAL/Navigation**.



- The selected POI landmark is displayed.



2 Registering places

Register your home

Register your home before starting to use the device.

Registering your home will facilitate the setting of return routes when driving.

When at home

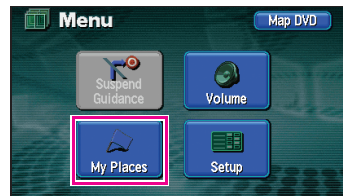


Press **NAVI** and proceed with operation after the map of the area surrounding your home appears.

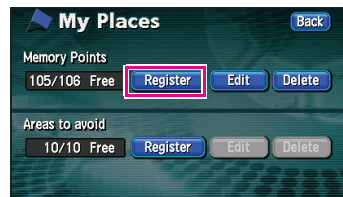
- 1 Press **(NAVI) MENU** to retrieve the **Menu screen**.



- 2 Touch **My Places**.



- 3 Touch **Register** for Memory Points.



- 4 Touch **Map**.



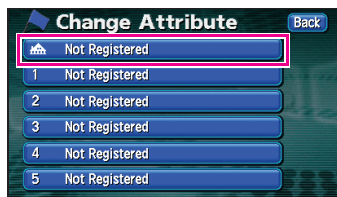
5 Touch **Enter**.



6 Touch **Attribute**.



7 Touch **Not Registered**.

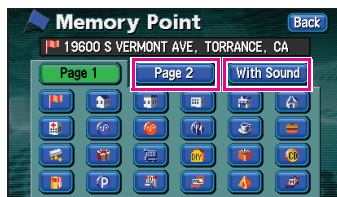


8 Touch **Icon**.



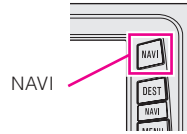
9 Touch the mark to be registered on the map.

- Touch **Page 2** or **With Sound** to select a different mark. For details see "**Changing the symbol of the memory point**" in the **OWNER'S MANUAL/Navigation**.



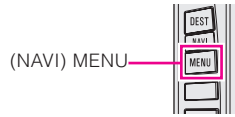
10 Touch **OK.****11 Press **NAVI**.**

- The present location will appear.



When at a location other than your home


- 1 Press **(NAVI) MENU** to retrieve the Menu screen.

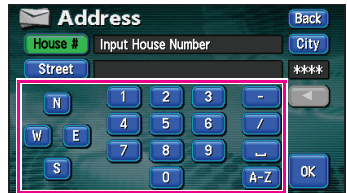


- 2 Touch **My Places**.
- 3 Touch **Register** for Memory Points.
- 4 Touch **Address**.

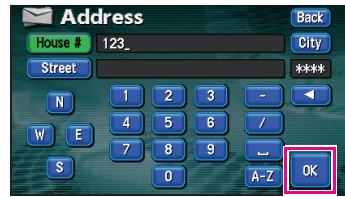


- 5 Enter the House Number one number at a time by touching the number switches on the screen.


- If you make a mistake, touch  to erase one entry at a time.

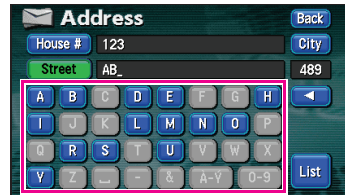


6 Touch **OK**.

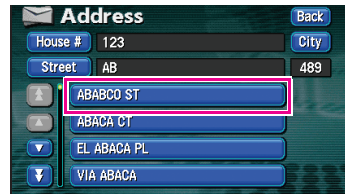


7 Enter the Street Name.

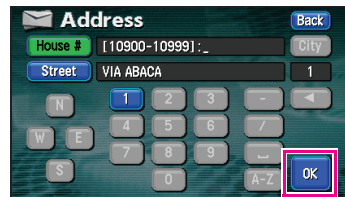
- If you make a mistake, touch  to erase one entry at a time.
- A list may appear as you enter the number to facilitate entry. Entering the entire number may not be necessary.



8 Touch the desired Street Name.



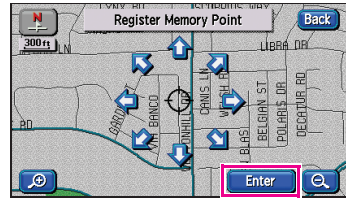
9 Touch **OK**.



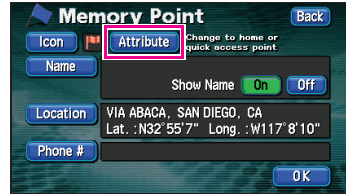
10 Touch to align the position of your home.



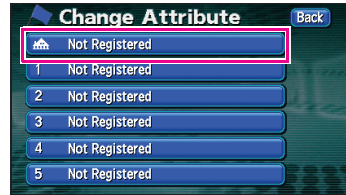
11 Touch **Enter**.



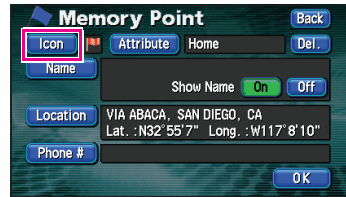
12 Touch **Attribute**.



13 Touch **Not Registered**.



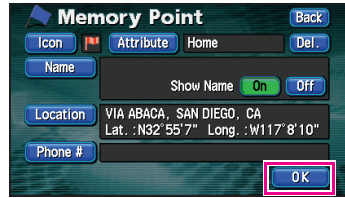
14 Touch **Icon**.



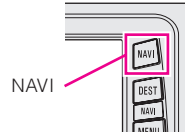
15 Touch the mark to be registered on the map.

- Touch **Page 2** or **With Sound** to select a different mark. For details see "Changing the symbol of the memory point" in the OWNER'S MANUAL/Navigation.




16 Touch OK .**17 Press NAVI .**

- The present location will appear.




Register favorite places

Up to 106 favorite places (including your home and special memory entries) can be registered on the map.

Registering a place will make a flag () or a name appear on that spot.




How to register from the map

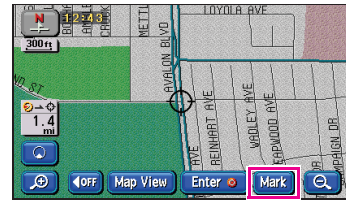
1 Touch the map and move the mark to the  spot to be registered.

- The map does not need to be moved when registering the present location.



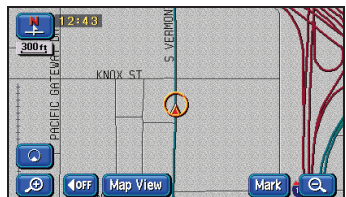
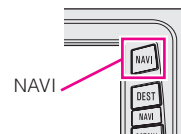
2 Touch **Mark.**

- The position of  when the map is not moved and  when having moved the map will be registered with a  mark.



3 Press **NAVI.**

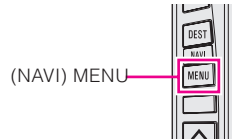
- The present location will appear.



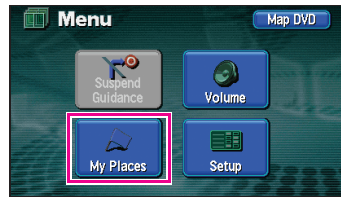
To register a far away place

■ Register SAFECO FIELD located in Seattle, Washington.

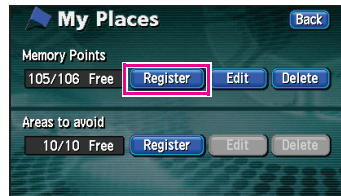
1 Press **(NAVI) MENU** to retrieve the Menu screen.



2 Touch **My Places**.



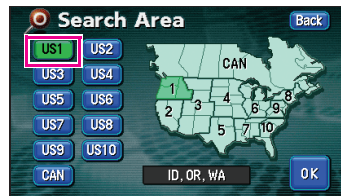
3 Touch **Register** for Memory Points.



4 Touch **Change**.



5 Touch **US1**.



6 Touch **OK**.

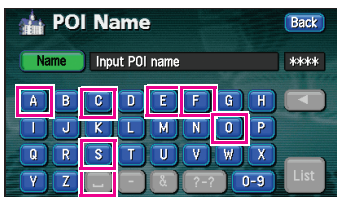


7 Touch **POI Name**.



8 Touch **S**, **A**, **F**, **E**, **C**, **O** and **List** in that order.

- If a list appears as you are entering the number, follow the procedure in (10) (**List** is not displayed).

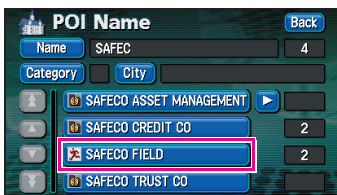


9 Touch **List**.

- If the number of candidates is high, narrow them down by selecting from **City** or **Category**.



10 Touch **SAFECO FIELD** in the list.



11 Touch **196 S ATLANTIC ST.** .

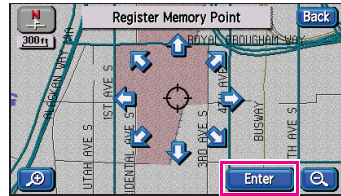


12 Touch **↑** to move the map.

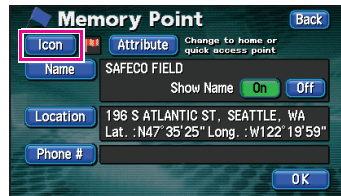
- When not moving the map, start from 13 .



13 Touch **Enter** .



14 Touch **Icon** .



15 Touch the **Icon** to be registered in the map.

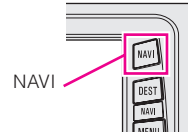
- Touch **Page 2** or **With Sound** to select a different mark. For details see "How to switch the list screens" in the **OWNER'S MANUAL/Navigation**.



16 Touch **OK**.



17 Press **NAVI**.



● The present location will appear.



3 Route guidance

How to start route guidance

Indicating the destination will automatically start a search for routes to that place. This is called "**Route Search**". When the route search is complete, a route to the destination is set. This is called "**Route Setting**". When starting to drive the vehicle after having set the route, the route to the destination will be guided by voiced instructions and screens that appear as per the set conditions.

The voice and screen instruction operation is called "**Route Guidance**".

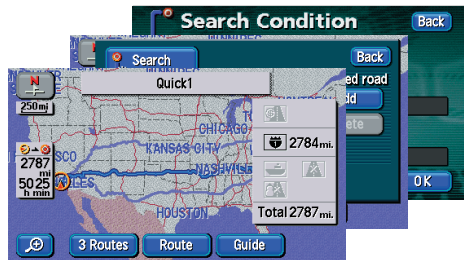
Route Search (indicate destination)

- One-touch search
- Search from registered points
- Search by making maps appear



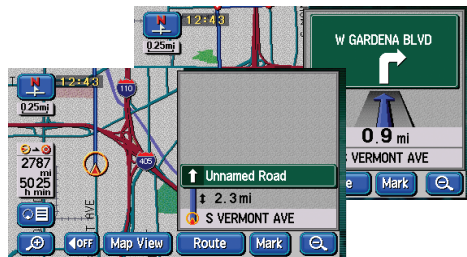
Route Setting

- Check the distance to the destination
- Select the desired route
- Add stops in your journey



Route Guidance

- Start guidance
- Announces intersections



4 Route Search (indicate destination)

Decide on a destination and start a route search

Give information on the desired destination and search for a place.

- ① When searching immediately after moving the map [Enter]
- ② When returning home (with your home being registered)..... [My Places]
- ③ If the freeway entrance/exit name is known [Freeway Ent./Exit]
- ④ If the latitude/longitude coordinates of the destination are known [Coordinates]

You can also search from the POI Name or the Intersection.

For details, see **"How to retrieve maps"** in the **OWNER'S MANUAL/Navigation**.



① When having moved the map

③ When searching using the freeway exit/entrance name




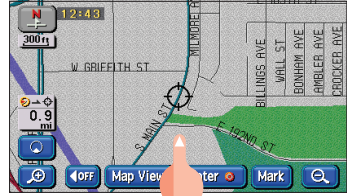
② When returning home



④ When searching using the latitude/longitude coordinates

How to search after moving the map

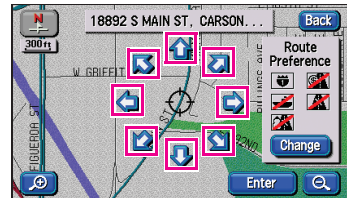
1 Touch the map and move the  mark.





2 Touch **Enter**.




3 Touch  and align the mark with the destination.

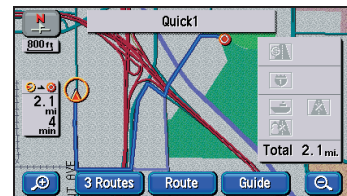


4 Touch **Enter**.

• A  symbol will appear on the  mark position.



All routes from the present location to the  symbol will be searched for and displayed.



All routes are displayed.

How to return home

1 Press **DEST.**

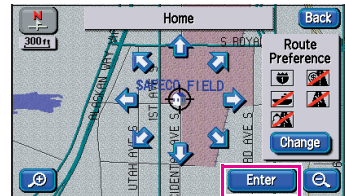


2 Touch .



3 Touch **Enter**.

All routes from the present location to your home will be searched for and displayed.



All routes are displayed.

When searching using the freeway entrance/exit name

1 Press **DEST.**




2 Touch .



3 Touch **Freeway Ent./Exit**.

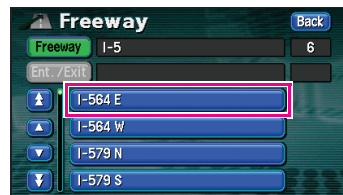


4 Enter the **Freeway Name** one letter at a time by touching the switches on the screen.

- If having made a mistake, touch  to erase one entry at a time.
- The screen will switch to a list display with 4 search results or less.

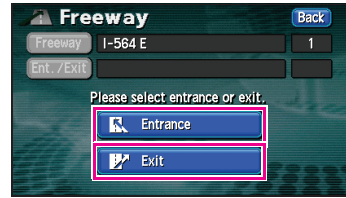


5 Touch the corresponding freeway name from the list.



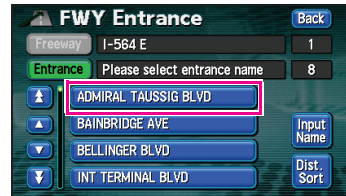
6 Touch either **Entrance** or **Exit** to select the freeway entrance or exit.

- The freeway entrance/exit names will be listed.




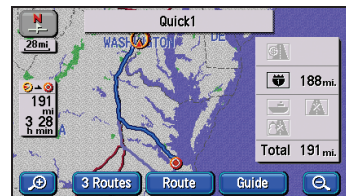
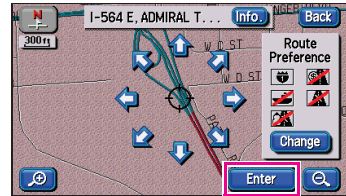
7 Touch the corresponding entrance/exit name.

- The indicated entrance/exit map will appear.



8 Touch **Enter**.

- Touch  to move the map. A route from the present location to the destination will appear.



All routes are displayed.

Searching using the latitude/longitude coordinates

- 1 Press **DEST.**



- 2 Touch .

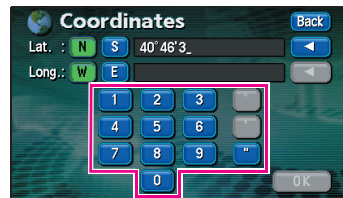


- 3 Touch **Coordinates**.



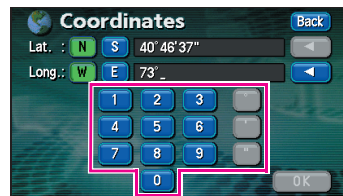
- 4 Enter the "Lat." one number at a time by touching the switches on the screen.

- Touch **N** or **S** to switch between north latitude and south latitude. If the geographical point entered is not within the area recorded in the map disc, a map will not appear. The recorded area is between N24° 0'0" and N64° 39'59".



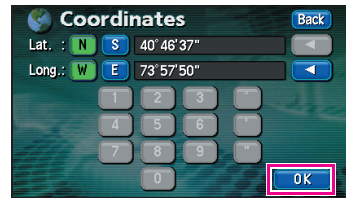
- 5 Enter the "Long." one number at a time by touching the switches on the screen.

- Touch **W** or **E** to switch between west longitude and east longitude. If the geographical point entered is not within the area recorded in the map disc, a map will not appear. The recorded area is between W61° 0'1" and W141° 0'0".




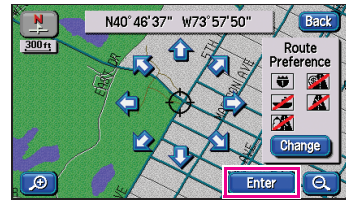
6 Touch **OK**.

- The entered point will appear.



7 Touch **Enter**.

- Touch  to move the map.
A route from the present location to the destination will appear.



All routes are displayed.

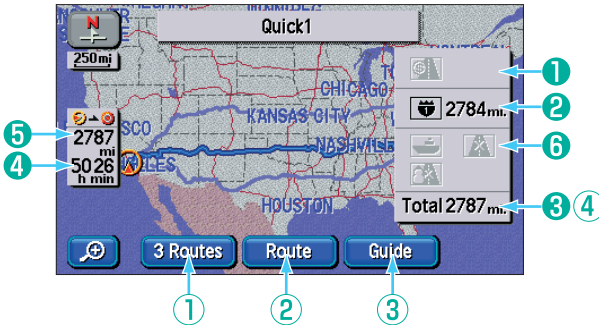
5 Route setting

Set the desired route

After deciding on a destination, recommended routes from the present location to the destination are searched for and displayed on the screen.

Routes to the destination will be colored into the screen and the required time and distance to the destination will be displayed. This is called the **"All Route Diagram"**.

From the all route diagram, you can check the progress of your journey, select a different route and add stops along the route.



Displays

①	Distance on toll roads	The distance on all toll roads is displayed.
②	Distance on freeways	The distance on all freeways is displayed.
③	Distance	The distance to the destination is displayed (in case of multiple stops, the last stop is displayed).
④	Required time	The required time and bearing to the destination is displayed.
⑤	Remaining distance	The distance to the destination for the route presently taken are displayed. In case of multiple stops, every time this switch is pressed, the required time and distance to each of them respectively are displayed.
⑥	Used road overview	Icons for freeways, toll roads, ferry crossings and restricted roads will be active up to the destination.

■ Touch switches

①	3 Routes	Different routes are displayed to enable a selection (Refer to page 58).
②	Route	Enables you to change the displayed route, add a destination or change an interchange (IC). (For details, see "Changing the search result route" in the OWNER'S MANUAL/Navigation.)
③	Guide	Starts route guidance.
④	Remaining distance display	When there are 2 or more destinations, touch the remaining distance display to switch distances to the destination (for details, see "Switching the required time/distance remaining display", "Changing the search result route" in the OWNER'S MANUAL/Navigation).



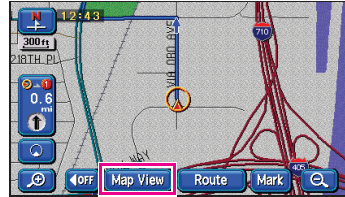
The search result route is a reference route to the vicinity of the destination. It is in no way the shortest, fastest or least congested route available.

Check the progression of your journey

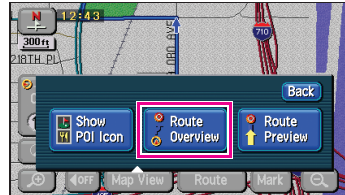
- 1 Touch **Guide** in the route guidance display.



- 2 Touch **Map View**.



- 3 Touch **Route Overview**.



- 4 Touch **Turn List**.



- 5 Touch **▲**, **▲** or **▼**, **▼**.

- The route information is displayed in segments at intersections, road type turning points, etc.
- Touch **Map** to display the map for that area.



How to view the route information screen



Select a different route

A total of 3 recommended routes will be displayed, Quick 1, Quick 2 and Short, from which you may select one.

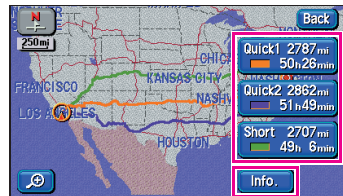
1 Touch **3 Routes** in the all route diagram display.

- The 3 routes are displayed in different colors.



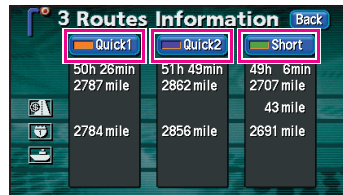
2 Touch **Info.**

- Touch **Route Name** to display the entire selected route.



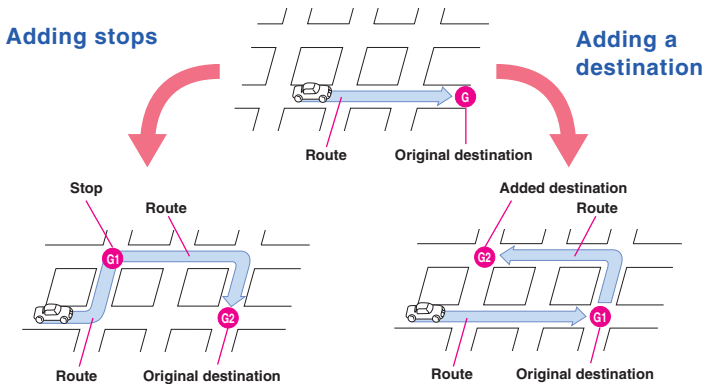
3 Touch the desired **Route Name**.

- The entire selected route will appear.



Add stops along the route

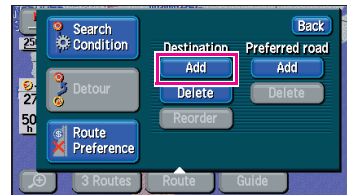
You can change the route in advance if, for example, wanting to pick up a friend along the way to your destination or add another destination further away from the original one.



- 1 Touch **Route** in the all route display screen.



- 2 Touch **Add** for Destination.



- 3 Touch on the stop and destination retrieval method.

- For "Retrieval Method", see "How to retrieve maps" in the **OWNER'S MANUAL/Navigation**.

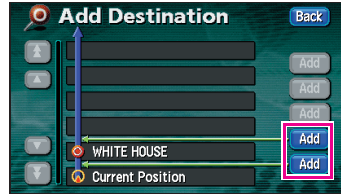


4 Touch **Enter in the retrieved map.**



5 Touch **Add in the space to be added.**

- An all route diagram display will appear with the changes.
- If setting between the present location and the destination, the addition becomes a stop.
- Setting after the destination will make it the next destination.
- Up to 5 stops and added destinations can be set. Repeat steps **2** to **5** for each setting.



All routes are displayed.

6 Start route guidance

Route guidance

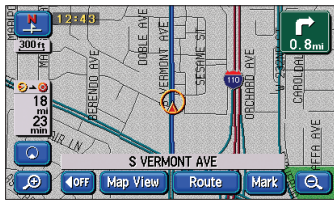
Start driving and the device switches screens for each set point of reference, such as intersections, in accordance with the movement of your vehicle. Also, each reference point is announced in a clear voice.

Present location screen during route guidance

Depending on the route being taken, reference points will be explained using various screens.

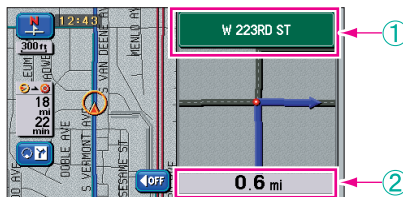
Announcing intersections

Present location



When approaching an intersection...

Intersection enlargement display



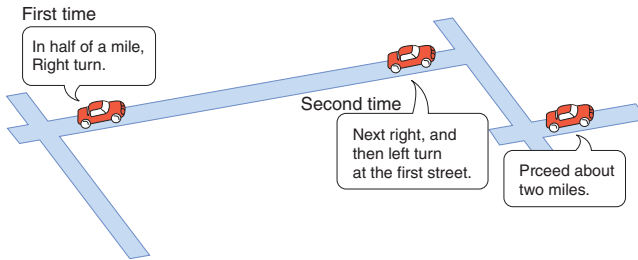
1	Intersection name display	Names of transit points or junction intersections appear.
2	Remaining distance display	The distance up to the intersection is indicated.

Voice route guidance

During route guidance, the distance up to a reference point and other information depending on road conditions and vehicle speed are announced with a clear voice.

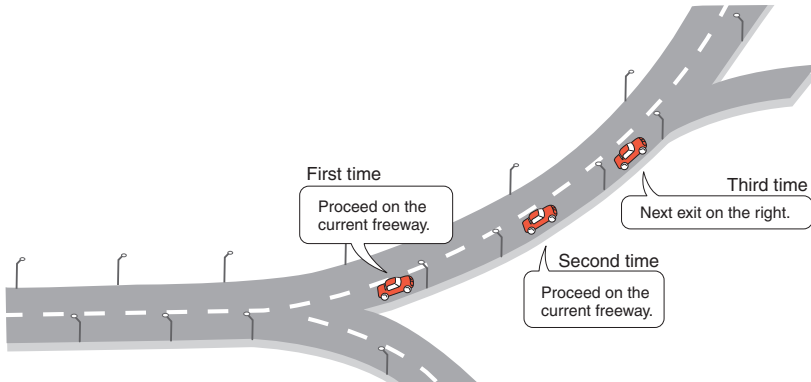
■ When on a local road

Corresponding with the vehicle speed, intersection names, the distances remaining up to intersections and the direction of the turn to be made are announced vocally in accordance with their conditions.



■ When on a highway

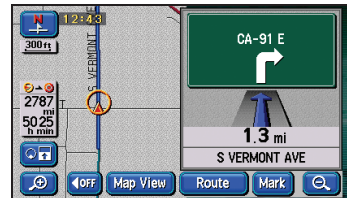
When about 1 mile before an interchange or a junction, a guidance screen appears and a voice announces your direction and heading. At tollbooths, the voice guidance will announce the fare and direction.



Start driving following the route guidance

1 Touch **Guide** in the all route display screen.

- The present location screen appears. Please proceed to the highlighted route, then the route guidance will start.



The voice guidance may differ depending on the route conditions.

2 Start driving.



In the event of having gone off the set route

Even if having driven off the set route, the device will automatically make an adjustment to return you to the guided route (auto search function). For details, see "**Automatic rerout search**" in the **OWNER'S MANUAL/Navigation**.

Stop and restart guidance while in progress

Guidance can be stopped and restarted while in progress.

1 Press (NAVI) MENU .




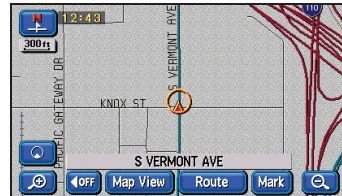
■ Stop guidance

2 Touch **Suspend Guidance** .

- Guidance is stopped.



- The route on the map disappears (the  mark for the destination remains).



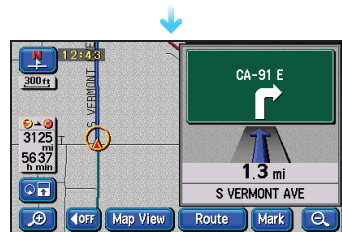
■ Restart guidance

2 Touch **Resume Guidance** .



- Guidance is restarted.



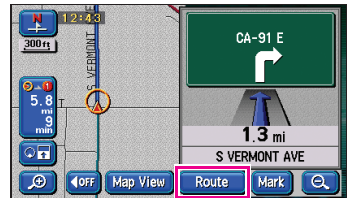
- The route is redisplayed on the map.



Delete the destination

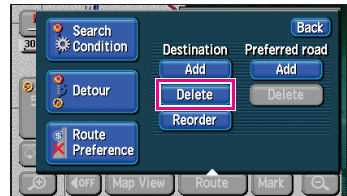
The set destination can be erased. Also, the set  mark does not disappear even after having arrived at your destination according to the prescribed route. Delete it by performing the operation described below. (However, if setting a new destination, the previous  mark will disappear.)

1 Touch **Route**.



2 Touch **Delete** for Destination.

- Go to **4** if there is only one destination.



3 Touch the destination name to be deleted.

- Touch **Delete All** to erase the entire list.



4 Touch **Yes**.

- If there are destinations remaining, the device will automatically search the remaining destination(s) and an all route diagram will be displayed.

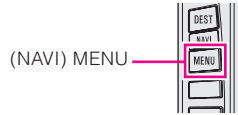


7 Other settings

How to display a clock on the navigation screen

A GPS clock can be displayed on the map screen.

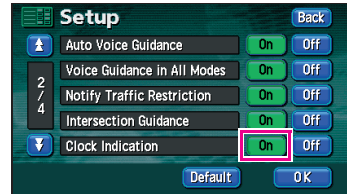
- 1 Press **(NAVI) MENU** to retrieve the **Menu** screen.



- 2 Touch **Setup**.



- 3 Touch **On** for Clock Indication.

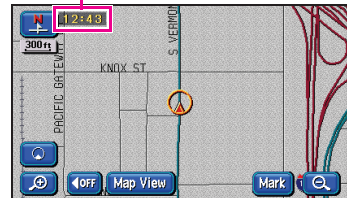


- 4 Touch **OK**.



Clock indication

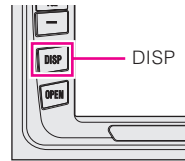
- A clock will appear in the upper left corner of the screen.



How to turn off the navigation screen

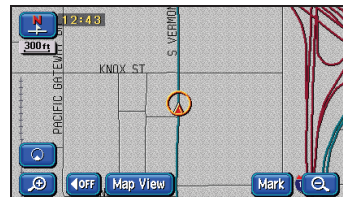
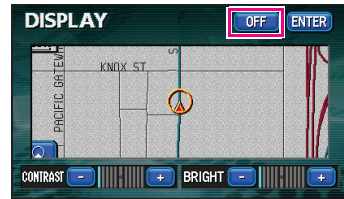
The map screen can be turned off when not using the navigation system.

- 1 Press **DISP** to retrieve the image quality adjustment screen.




- 2 Touch **OFF**.

- The contrast and brightness can be adjusted from the image quality adjustment screen. For details, see "Screen adjustment" in the **OWNER'S MANUAL/Navigation**.



- 3 Press **NAVI** to return to the navigation screen.

How to correct the present location






Even if the vehicle position mark  on the map gets out of alignment, the device will automatically correct the present location using map matching and GPS data while you drive (it may take up to several minutes depending on the case).

In the event the device does not use GPS data and the present location is not automatically corrected, park the vehicle in a safe area and perform present location correction.

A correction is necessary in the following situations:

- When changing a tire perform an automatic correction (**Distance correction**)

Also, a correction can also be made in the following situations.

- When the  vehicle position mark appears on a spot different from the actual present location (when the  vehicle position mark is misaligned) the direction and position of the  vehicle position mark can be corrected. (**Present location correction**)
- When the progression of the  vehicle position mark on the map and the actual progression of the vehicle while driving the  vehicle position mark progression can be corrected. (**Distance correction**)

Present location correction

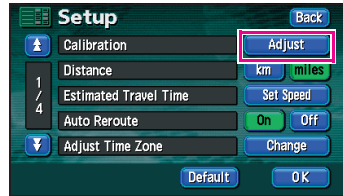
- 1 Press **(NAVI) MENU** to retrieve the **Menu screen**.



- 2 Touch **Setup**.



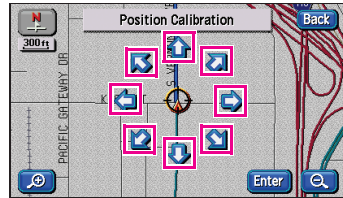
3 Touch **Adjust** for Calibration.



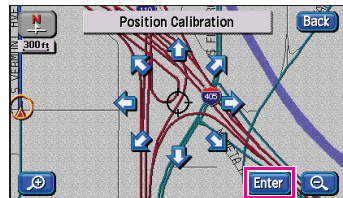
4 Touch **Position/Direction**.



5 Touch  and move the map to the actual present location.





6 Touch **Enter**.

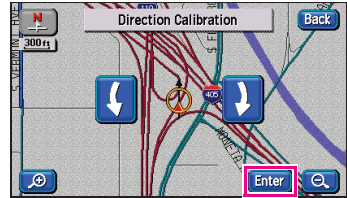
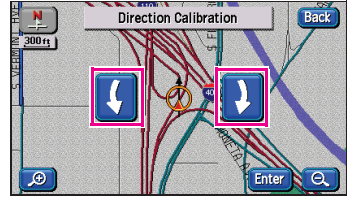


Maps with a scale of 0.5 mile or greater detail can be corrected.

7 Touch  or  to set the direction.

- To move the direction counterclockwise, touch . To move it clockwise, touch .

8 Touch **Enter**.



Correcting the distance

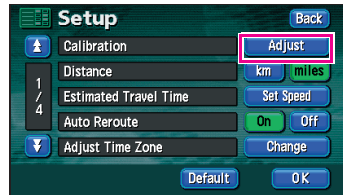
- 1 Press **(NAVI) MENU** to retrieve the Menu screen.



- 2 Touch **Setup**.



- 3 Touch **Adjust** for Calibration.



- 4 Touch **Tire Change**.

- Automatic correction is performed.



ATTENTION

- The device performs automatic distance correction (automatic correction) using GPS and vehicle speed signals. This may be delayed in the event of a sharp deviation that overwhelms the automatic correction function (changing a tire, being towed by another vehicle, etc.) In such a case, drive about 6 miles along a road indicated by favorable GPS signal reception conditions.
- If correction is impossible, have the device inspected at the store of purchase.
- During automatic correction, the vehicle position may be misaligned.
- Even if the automatic correction is complete, because the distance correction has a learning function, there may be variations in the progression of the vehicle position mark depending on the driving conditions.

1 Switch the audio source (mode)

Switching the audio source (mode)

How to switch to the FM source

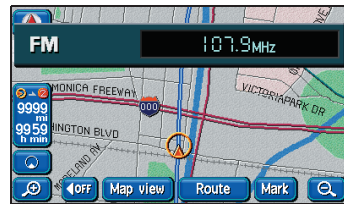
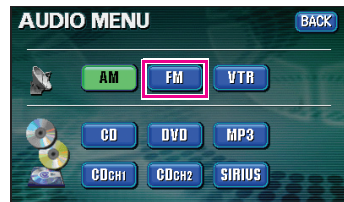
1 Press **(AUDIO) SOURCE**.

- The AUDIO MENU screen will be displayed.



2 Touch **FM**.

Touch the desired audio source and that source will appear on the screen.

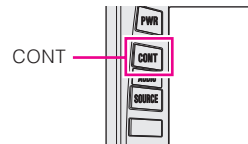


On-screen display screen

How to retrieve the operation screen

1 Press **CONT.**

- The operation screen will appear.
- Operation screens for each source are retrieved as per the next page.



AM radio operation screen

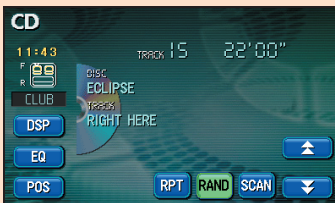
AM radio operation screen



FM radio operation screen



CD operation screen



MP3 operation screen



DVD operation screen



HD RADIO (IBOC) operation screen



SIRIUS operation screen (optional)



CD changer operation screen (optional)



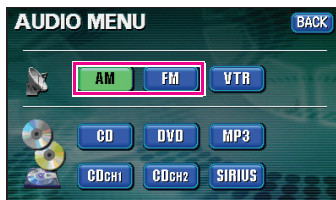
The device can automatically switch to the navigation screen or other screen while an audio operation screen is displayed. For details, see **"Adjusting/setting the screen"** in the **OWNER'S MANUAL/Audio**.

2 AM/FM radio operation

How to listen to the AM/FM radio

Select radio for the source

- 1 Touch **AM** or **FM** for AUDIO MENU.



ATTENTION

If an HD RADIO (IBOC) tuner is connected, IBOC reception is given priority. To listen to AM/FM radio in this case, touch **MODE** on the AM/FM radio operation screen and select "OFF".

Record broadcast stations into preset switches

- 1 Press **▲** or **▼**.

- Manual tuning: Press lightly.
- Automatic tuning: Press until a "beep" sound is heard.

TUNE/TRACK buttons



- 2 Choose a preset switch and touch it until a "beep" sound is heard.

To select a broadcast station from the preset switches, touch the desired broadcast station number.



Preset switches

Automatically search for broadcast stations and record them

This convenient function can search for broadcast stations from which a signal can be received and record them temporarily into preset switches. If they are not needed, they can easily be switched back to the broadcast stations originally recorded.

- 1 Touch **AUTO.P** until a "beep" sound is heard.

Touch **AUTO.P** once more to switch the display back to the broadcast station originally recorded.



Displaying information about the track being played

- 1 Touch **TITLE**.

The file information recorded on the music you are listening to (the album name and title of the track) can be displayed.



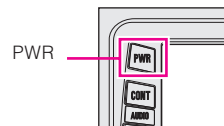
Touch **TITLE** ↓ ↑ Touch **TITLE OFF**



Turning off the radio

- 1 Press **PWR**.

Press **PWR** once more and the broadcast station signal last received will be tuned in.



3 HD RADIO (IBOC) operation

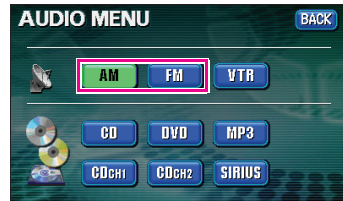
How to listen to the HD RADIO (IBOC)

When receiving HD Radio (High Definition Radio) broadcasts, FM reception has the same quality as a CD, and AM reception has the same quality as conventional FM sound.

Depending on the reception status, HD Radio can also receive analog broadcasts, which means reception is still possible in regions with no digital coverage.

Select radio for the source

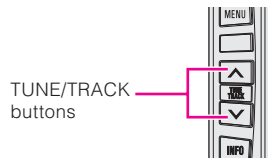
- 1 Touch **AM** or **FM** for AUDIO MENU.



Record broadcast stations into preset switches

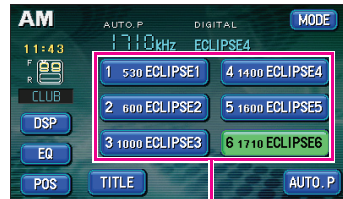
- 1 Press **▲** or **▼**.

- Manual tuning: Press lightly.
- Automatic tuning: Press until a "beep" sound is heard.



- 2 Choose a preset switch and touch it until a "beep" sound is heard.

To select a broadcast station from the preset switches, touch the desired broadcast station number.



Preset switches

Automatically search for broadcast stations and record them

This convenient function can search for broadcast stations from which a signal can be received and record them temporarily into preset switches. If they are not needed, they can easily be switched back to the broadcast stations originally recorded.

- 1 Touch **AUTO.P** until a "beep" sound is heard.

Touch **AUTO.P** once more to switch the display back to the broadcast station originally recorded.



Displaying information about the track being played

- 1 Touch **TITLE**.

The file information recorded on the music you are listening to (the album name and title of the track) can be displayed.



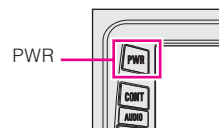
Touch **TITLE** ↓ ↑ Touch **TITLE OFF**



Turning off the radio

- 1 Press **PWR**.

Press **PWR** once more and the broadcast station signal last received will be tuned in.



4 SIRIUS satellite radio operation

How to listen to the SIRIUS satellite radio

With SIRIUS satellite radio, over 100 channels are available including music, news, and entertainment programs. You can select the channel you want from 14 categories such as POP and ROCK, or you can select a channel by direct input.

Select the SIRIUS for the source

- 1 Touch **SIRIUS** for AUDIO MENU.



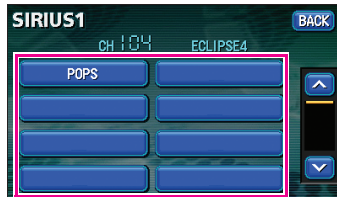
Select from the available categories

- 1 Touch **CATEGORY** on the SIRIUS operation screen.



- 2 Select the category that you want.

● Touch  or  to switch categories.



ATTENTION

If the selected category is unobtainable, the blank category button appears.

Select a channel by direct input

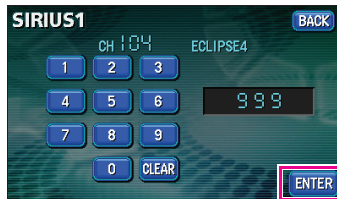
- 1 Touch **DIRECT** on the SIRIUS operation screen.



2 Input a channel.



3 Touch **ENTER**.



Displaying information about the track being played

1 Touch **TITLE** on the SIRIUS operation screen.

- The file information recorded on the music you are listening to (the album name and title of the track) can be displayed.

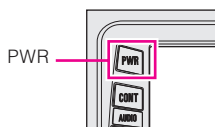


Touch **TITLE** ↓ ↑ Touch **TITLE OFF**



Turning off the SIRIUS

1 Press **PWR**.



5 CD/MP3 player operations

How to listen to a CD/MP3

Play a CD/MP3 file

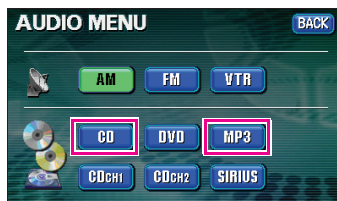
■ When a disc is not inserted

1 Insert a disc.

- It automatically starts playing.

■ When a disc is inserted

1 Touch **CD** or **MP3** for AUDIO MENU.



ATTENTION

If sound data and MP3 data are mixed on the same disc, only the data recorded in the first session can be played. For details, see "**CD player operation**" or "**MP3 player operation**" in the **OWNER'S MANUAL/Audio**.

Select the desired track or music file

1 Press **▲** or **▼**.

Switch to the next track when playing a CD or to the next music file when playing an MP3.

Track selection
(track start point),
fast-forward, rewind
buttons



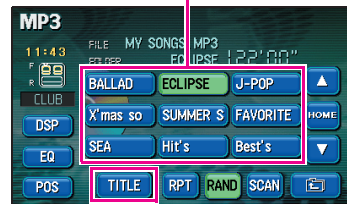
Easy folder and music file selection (MP3 player)

An MP3 compresses music data into 1/10 its original size enabling it to store about 10 times the music data of one CD. This device simultaneously displays 9 folders/files enabling the easy selection of desired music files.

1 Touch one of the folder/file selection switches.

- Touch a folder and the data stored in it will appear. Touch a music file to play that file.
- Touch **TITLE** to view the file information stored for the song being played (album name, song title).

Folder/file selection switches



Touch

TITLE

Touch

TITLE OFF



Fast-forwarding/rewinding

- ### 1 Press and hold the **▲** or **▼** switch until a beep is heard.

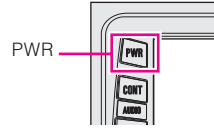
Track selection (track start point), fast-forward, rewind buttons





Stop playing

1 Press **PWR**.

Press **PWR** again to play the last song.



ATTENTION

- If there are 10 or more music files in the same folder, press  or  to switch and display the data.
- The file information (album name, song title) may not appear depending on the way the MP3 was compiled. For details, see "**How to use the MP3 player**" in the **OWNER'S MANUAL/Audio**.

6 DVD player operation

How to view a DVD video

Playing the DVD

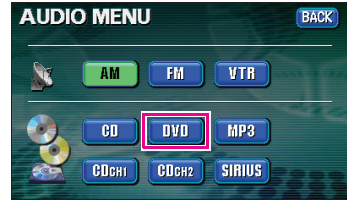
■ When a disc is not inserted

① Insert a DVD.

- It automatically starts playing.

■ When a disc is inserted

① Touch **DVD** for AUDIO MENU.



Some DVDs may not be played automatically. In this case, play the DVD from the disc menu stored in the DVD.

Manipulated the image

The image being played can easily be manipulated.

① Touch the operation switch.



Touch switch	Function	Touch switch	Function
	Touch to play.		Starts fast forward operation. When touched in the PAUSE status, starts slow playing.
	Stops the disc playing.		Fast rewind
	Pauses playing. When touch in the PAUSE status, starts playing frame-by-frame.	RETURN	Find a specified location on the disc and start playing from there.



The DVD operation screen can be displayed by pressing **CONT** or by touching the screen.

Fast-forwarding/rewinding

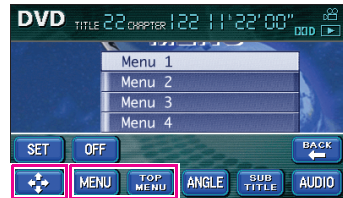
- 1 Press and hold the \wedge or \vee switch until a beep is heard.

Fast-forward/rewind Buttons



Operating the disc menu

- 1 Touch **NEXT**.
- 2 Touch **MENU** or **TOP MENU**.
- 3 Touch **+**.
- 4 Touch **↓**, **↑**, **←** or **→** and select the video to play.
- 5 Touch **ENTER**.

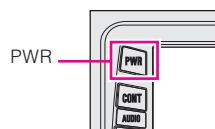


The menu screen displayed differs depending on the DVD disc.

Turning off the DVD

1 Press **PWR**.

Press **PWR** again to play the last video.



7 Adjusting sound quality

Adjusting sound quality

You can meticulously adjust the sound of the music you want to hear to create your own little pseudo-concert hall. The acoustic field can be adjusted to center around the desired position and each speaker's volume and balance can also be adjusted.

Recreate a concert hall as per the sound image

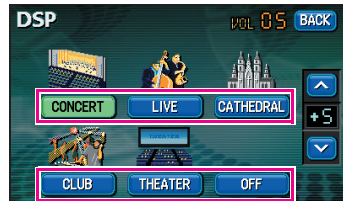
1 Touch **DSP**.

- **DSP** is displayed when touching **DISC** and then **SET** for a DVD or pressing **CONT** for a VTR or touch the screen.



2 Touch the desired acoustic field switch.

- Touch **BACK** to record the setting and return the display to the previous screen.



Touch switch	DSP Envioment	Touch switch	DSP Envioment
CONCERT	Mode that simulates concert-hall sound	CLUB	Mode that simulates disco/club sound
LIVE	Mode that simulates a live performance	THEATER	Mode that simulates movie theater/theater sound
CATHEDRAL	Mode that simulates the sound in a cathedral, with lots of reverberation	OFF	DSP OFF

Adjust the sound in tune with the music being played

1 Touch **EQ**.

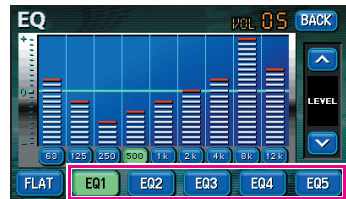
- **EQ** is displayed when touching **NEXT** and then **SET** for a DVD or pressing **CONT** for a VTR or touch the screen.



Select the set equalizer pattern

2 Touch **EQ1** to **EQ5**.

- Touch **BACK** to record the setting and return the display to the previous screen.



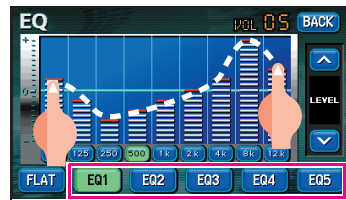
Touch switch	Equalizer Mode	Touch switch	Equalizer Mode
FLAT	No EQ correction	EQ3	Effective pattern for JAZZ
EQ1	Effective pattern for JAZZ	EQ4	Effective pattern for CLASSICAL
EQ2	Effective pattern for ROCK	EQ5	Effective pattern for VOCAL

Creating an equalizer pattern

2 Touch the screen and slowly draw the image of the preferred equalizer pattern with your finger.

3 Touch **EQ1** to **EQ5** until you hear a "beep" sound.

- The equalizer pattern just created is recorded into the touched touch switch.
- Touch **BACK** to record the setting and return the display to the previous screen.
- The default setting is **EQ3**.



Adjust the center of the acoustic field to center around the desired position

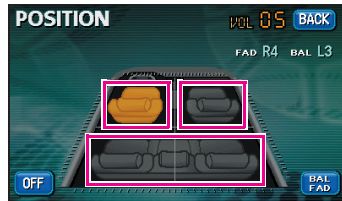
1 Touch POS .





- **POS** is displayed when touching **▶** and then **SET** for a DVD or pressing **CONT** for a VTR or touch the screen.



2 Touch POSITION (seat).

- Touch **BACK** to record the setting and return the display to the previous screen.



Touch switch	Function	Touch switch	Function
	Acoustics optimized for driver's seat		Acoustics optimized for passenger's seat
	Acoustics optimized for both front seats		Acoustics optimized for rear seats

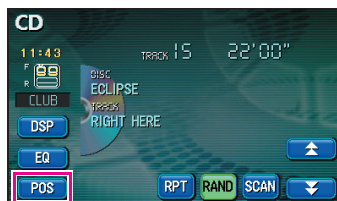


This setting cannot be done at the same time as adjustment of the volume balance (next page).

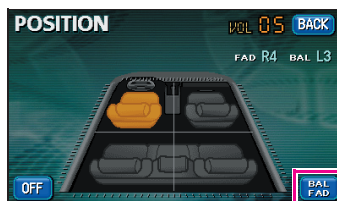
Adjusting the left/right front/rear volume balance

1 Touch **POS**.

- **POS** is displayed when touching **NEXT** and then **SET** for a DVD or pressing **CONT** for a VTR or touch the screen.



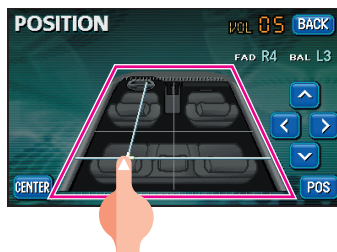
2 Touch **BAL FAD**.



3 Touch the desired spot within the



- Touch **BACK** to record the setting and return the display to the previous screen.



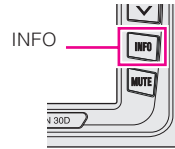
This setting cannot be done at the same time as POS (the position selector) adjustment (previous page).

8 Other settings

Cancel the "beep" sound made when operating the switches

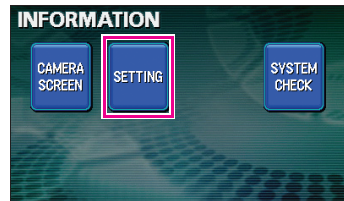
The sound emitted when operating the panel or screen switches can be canceled (muffled).

- 1 Press **INFO** to retrieve the **INFORMATION** screen.



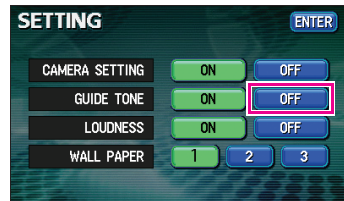
- 2 Touch **SETTING**.

- Various adjustments can be done from **SETTING**. For details, see "Setting background screen" or "Adjusting and setting the screen" in the **OWNER'S MANUAL/Audio**.



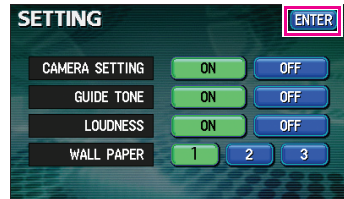
- 3 Touch **OFF** for **GUIDE TONE**.

- Touch **ON** to emit the sound.



- 4 Touch **ENTER**.

- This returns the display to the **INFORMATION** screen.



Switch the screen display size

The screen size of DVD and VTR displays can be switched.

Switch the DVD/VTR display screen size

1 Touch **WIDE**.

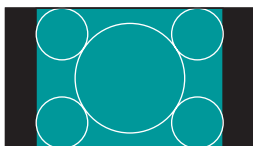
- **WIDE** is displayed when touching **WIDE** and then **SET** for a DVD.

2 Touch the desired size.



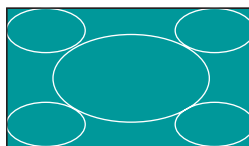
NORMAL mode

The size of a regular television screen with either side of the display having a black vertical bar.



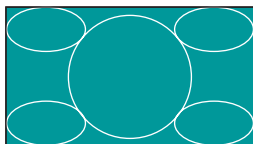
WIDE 1 mode

The size of a regular television screen widened evenly at the sides.



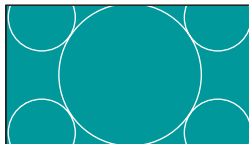
WIDE 2 mode

The size of a regular television screen widened unevenly at the sides.



WIDE 3 mode

The size of a regular television screen widened evenly sideways, upwards and downwards.



Caution

Viewing of wide screen modes is permitted when limited to the personal entertainment of the user, but caution is needed because using technologies such as image compression and expansion for the purpose of commercial benefit or public presentation may infringe upon the rights of the copyright holder being protected by applicable copyright law.

1 Specifications

GPS antenna

Dimensions	34(W) x 13.2(H) x 38(D)mm
Weight	approx. 25 g (Excluding cables and connectors)
Power supply voltage	4.5 +/-0.5(V)
Power consumption	10 to 30 (mA)
Usage temperature	-30 to 80 (°C)
Storage temperature	-40 to 100 (°C)

Display

Liquid crystal panel	6.5 type wide low reflection panel
Screen dimensions	143.4(W) x 79.3(H) mm
Pixel count	280,800 pixels (400(H) x 234(V) x 3)
Active pixel rate	Over 99.99%
Display format	Transmissive color filter format
Drive system	TFT (thin membrane transistor) active matrix format
Usage temperature range	-20°C to +65°C
Storage temperature range	-40°C to +85°C

Radio tuner

Reception frequency	AM 530 to 1,710 kHz FM87.75 to 107.9 MHz
Practical speed	AM 22µV (S/N20dB) FM 12 dBf (IHF)
Frequency characteristic	30 to 15,000 Hz (FM)
Stereo separation	38 dB (1 kHz)

CD

Wow and flutter	Below measurement limit
Higher harmonic distortion rate	0.01% (0 dB, 1 kHz)
Frequency characteristic	20 to 20,000 Hz
S/N ratio	90 dB (1 kHz)
Dynamic range	88 dB

Common component

Rated output	15 W x 4 (1 kHz, 1% 4 Ω) (EIAJ)
Maximum output	50 W x 4 (test voltage 14.4 V)
Suitable load impedance	4 Ω (each channel)
Power source voltage	13.2 VDC (11 - 16 V) Grounded
Power consumption	0.5 W x 4 output time approx. 3.7 A Approx. 15 A max
Exterior dimensions	180 mm (W), 100 mm (H), 165 mm (D)
Weight	Approx. 3.7 kg

Back eye camera (optional)

Image pickup device	1/4 inch color CCD
CCD pixel count	Approx. 270,000 pixels
Horizontal resolution	300TV (center) or above
Camera Focal distance	f = 1.7 mm
F value	1:3.5
Field angle (horizontal, vertical)	120°, 84°
TV format	NTSC
Standard image output level	1Vp-p (75 Ω)
Minimum object illumination	2 lux (25IRE)
White balance format	Automatic
Automatic sensitivity	1:1600 or above
Power source voltage	DC6V +/- 0.3 V
Power consumption	170 mA (max.)
Cable length	11.5 m
Usage temperature range	- 20°C to + 60°C
Storage temperature range	- 30°C to + 80°C
Camera unit exterior dimensions (W x H x D)	Approx. 34 mm (W) x 27 mm (H) x 28 mm (D)
Weight	Approx. 50 g (cable not included)

Please acknowledge that due changes in specifications and external appearance, the content of this manual may not correspond with the device.



This device complies with part 15 of the FCC Rules. Operation is subject to the condition that this device does not cause harmful interference.

CUSTOMER NOTICE

Please retain this booklet and write in the serial number of your AVN 30D for identification. The serial number is labeled or stamped on the chassis.

Serial No. _____

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