NAVIGATION SYSTEM

Preparation See page 4 for specific information.	Before Use
Immediate Use See page 4 for specific information.	Getting Started
	Routing
	Editing
If Necessary See page 5 for specific information.	If Necessary

Before Use

Accessories

Please contact an Authorized Mazda Dealer if you are missing the following.

Owner's Manual

CAUTION:

ALWAYS OPERATE THIS PRODUCT CORRECTLY AS INSTRUCTED.

DO NOT OPEN COVERS AND DO NOT REPAIR YOURSELF. REFER SERVICING TO QUALIFIED PERSONNEL.

Memo

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Safety Information

- Read this owner's manual for your Navigation System carefully before using the system. It contains instructions about how to use the system in a safe and effective manner. Mazda assumes no responsibility for any problems resulting from failure to observe the instructions given in this manual.
- This manual uses pictographs to show you how to use the product safely and to alert you to potential dangers resulting from improper connections and operation. The meanings of the pictographs are explained below. It is important that you fully understand the pictographs and explanations in order to use this manual and the system properly.



Warning

The presence of this warning symbol in the text is intended to alert you to the importance of heeding the operation instructions. Failure to heed the instructions may result in severe injury or death.



Do not keep your eyes fixed on the monitor screen or operate the system while driving.

Do not change the settings and destination locations while driving. Minimize the time spent viewing the monitor screen and listening to the voice guidance while driving. Operating the system will distract the driver from looking ahead of the vehicle and can cause accidents. Always stop the vehicle in a safe location and use the parking brake before operating the system.

■ Always obey local traffic regulations.

Your guided route may include roads that are not open to vehicles or are closed due to traffic regulations. Comply with the local traffic regulations and take another route.

■ Do not use the unit when it is out of order.

If the unit is out of order (no image, no sound) or in an abnormal state (has foreign matter in it, is exposed to water, is smoking, or smells), turn it off immediately and consult an Authorized dealer, we recommend an Authorized Mazda Dealer. Using the unit in an out-of-order condition may lead to accidents, fires, or electric shocks.

■ Use the proper power supply.

This product is designed for operation with a negative grounded 12 V DC battery system.

■ Do not disassemble.

Do not disassemble the product or attempt to repair it yourself. If the product needs to be repaired, take it to an Authorized dealer, we recommend an Authorized Mazda Dealer.



Caution

The presence of this caution symbol in the text is intended to alert you to the importance of heeding the operation instructions. Failure to heed the instructions may result in injury or material damage.



- Do not use the product where it is exposed to water, moisture, or dust.

 Exposure to water, moisture, or dust may lead to smoke, fire, or other damage to the unit. Make especially sure that the unit does not get wet in car washes or on rainy days.
- Keep the voice guidance volume at an appropriate level.

 Keep the volume level low enough to be aware of road and traffic conditions while driving.
- Protect the insertion slot for the SD card which contains the navigation map data.

 Do not insert any foreign object into the installation slot.
- This navigation system is designed exclusively for use in automobiles.

 This navigation system should only be installed in an automobile. Do not install it in a ship, aircraft, or any other vehicles except an automobile. Do not use it detached from the vehicle.

Operation is subject to the following two conditions;

- (1) This device may not cause interference, and
- (2) This device must accept any interference,

including interference that may cause undesired operation of the device.

This Category II radiocommunication device complies with Industry Canada Standard RSS-310.

Introduction

Safe Product Use

■ Extremely low or high temperatures may interfere with normal operation.

The inside of the vehicle can become very hot or cold when it is parked for extended periods in direct sunlight or in cold places with the engine turned off. The navigation system may not operate normally under such circumstances. Turn off the navigation system until the inside of the vehicle has cooled down or warmed up. If the system does not operate thereafter, consult an Authorized Dealer, we recommend an Authorized Mazda Dealer.

Navigation System

This navigation system utilizes GPS* satellite signals, a speed sensor and gyrosensor to track and display your vehicle's current position, and to guide you from your starting point to your destination along a calculated route.

*: GPS (Global Positioning System) is a position detecting system utilizing the signals from GPS satellites deployed by the U.S. Defense Department.

Screens

Screens displayed in this manual may differ from those on the actual display.

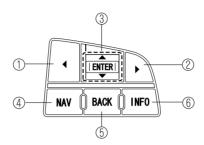
LCD (Liquid Crystal Display)

Direct sunlight or other outside light sources make it difficult to view the images on the display. For moonroof-equipped vehicles, close the sunshade to better view the display.

Names and Functions

Steering Switch

The navigation system can be operated by pressing the steering switches.



1 Left switch: Pressing the switch while the selection cursor is displayed

moves the selection cursor to the left.

Pressing the switch while the map scroll cursor is displayed

scrolls the Map screen to the left.

Pressing the switch while in map mode switches the screen in the order of Map, Compass, and Course List screens. To switch back to the Map screen, press the switch on the Course

List screen.

2 Right switch: Pressing the switch while the selection cursor is displayed

moves the selection cursor to the right.

Pressing the switch while the map scroll cursor is displayed

scrolls the Map screen to the right.

Pressing the switch while in map mode switches the screen in the order of Map, Course list, and Compass screens. To switch back to the Map screen, press the switch on the Compass

screen.



Note

The Course List screen is displayed only when the destination is set and the vehicle is on route.

③ Enter switch: Press the Enter switch.

Press the Enter switch to select the desired item. The navigation menu is displayed by pressing the Enter switch while the Map screen is displayed.

Press the Enter switch up or down.

To move the selection cursor up or down, press the Enter switch up or down while the selection cursor is displayed. Pressing the Enter switch up or down while the map scroll cursor is displayed scrolls the Map screen up or down. Press the Enter switch up or down while the Map screen is displayed

to zoom in/out of the Map screen.

④ Navi switch: Used to switch to the navigation mode. Pressing the switch

while the Navigation Menu screen or Map Scroll screen is

displayed switches the display to the Map screen.

Pressing the switch after the voice guidance has finished

repeats the voice guidance. (page 43)

⑤ BACK switch: Used to undo the previous screen operation.

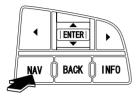
(6) INFO switch: Used to switch to the multi information display.

Activation

Activating the Navigation System

The following operation procedure is for activating the navigation system.

With the ignition switched to ACC or ON, press the Navi switch on the steering switch.



⚠ After a moment, the CAUTION screen is displayed.



- olf you are in agreement with the CAUTION statement, Press the Enter switch up or down to set the cursor to Agree 1. Press the Enter switch to switch to the Map screen 2.
- To change the language, set the cursor to

 ⑤ English/Español/Français**

 1. Press the Enter switch to switch the screen to LANGUAGE SELECTION*2.

 (☞ page 12)
- *1 :Press the Enter switch up or down.
- *2 :Press the Enter switch.

Note

While on the Map screen, Press the Enter switch up or down to change the map scale.

Setting the Language

The language can be changed using the Language setting displayed in the upper part of the screen.

Before activating the navigation system



After activating the navigation system

- 1. Press the INFO switch to display the SETTINGS screen.
- 2. Select PREFERENCES and press the Enter switch.
- 3. Select SELECT LANGUAGE and press the Enter switch.
- 4. Select the desired language from the list.

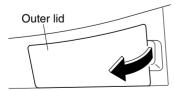
Setting the Clock, Ambient Temperature Display and Other Settings

- The following feature settings are possible, refer to the "Multi Information Display" in the owner's manual.
- Clock: Constant display of time.
- Ambient Temperature Display: Constant display of ambient temperature.
- Settings: Used to change the multi information display settings. (Distance unit, Display language)

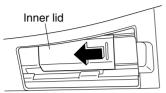
Upgrading the Map Information Version

The map information version can be upgraded. If you require the latest SD card of the Navigation Map data, consult an Expert Dealer, we recommend an Authorized Mazda Dealer.

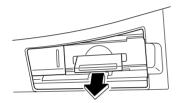
With the ignition switched to ACC OFF, insert a finger into the depression above the lid housing the SD card of the Navigation Map data (next to the navigation display), and open it.



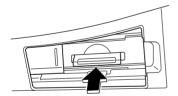
Slide the notch of the inner lid sideways with your finger to open the inner lid.



The SD card of the Navigation Map data will be visible. Press in the currently inserted SD card of the Navigation Map data with a finger. After pressing in the SD card, it will eject partially. Grab the card with your fingers to pull it out.



Insert the new SD card of the Navigation Map data all the way in and close all the lids.



If this screen is displayed, verify that the inner lid is not open. If this screen is displayed even though the inner lid is closed, consult an Authorized Mazda Dealer.





- If the inner lid is closed while the SD card of the Navigation Map data is not inserted all the way, the card could be damaged.
- Do not remove the SD card from the reader while the ignition is switched ON.
 This will damage the SD card.

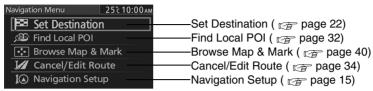
Notes

- After inserting the SD card of the Navigation Map data, firmly close all of the lids.
- If the inner lid is not firmly closed, the navigation system will not function.

Menu

Navigation Menu Screen

The menu is displayed by pressing the Enter switch while the Map screen is displayed.



Navigation Set Up

You can alter the map display conditions, the route guidance conditions and show the system information.

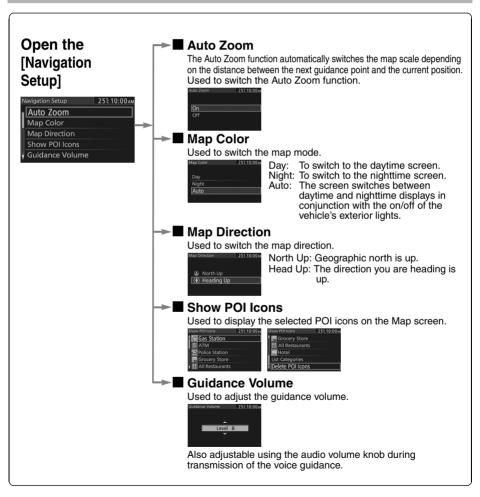


■ Stop your vehicle before performing the following operations.

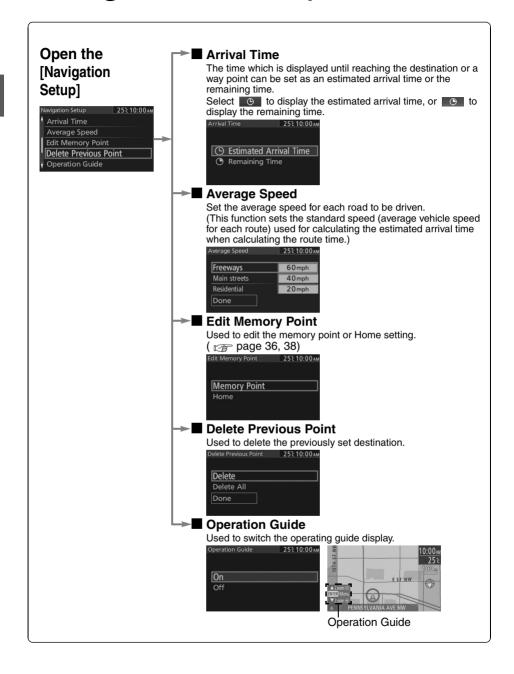
Do not change the settings and destination locations while driving. Minimize the time spent viewing the monitor screen and listening to the voice guidance while driving. Operating the system will distract the driver from looking ahead of the vehicle and may cause an accident.

Always stop the vehicle in a safe location and set the parking brake before operating the system.

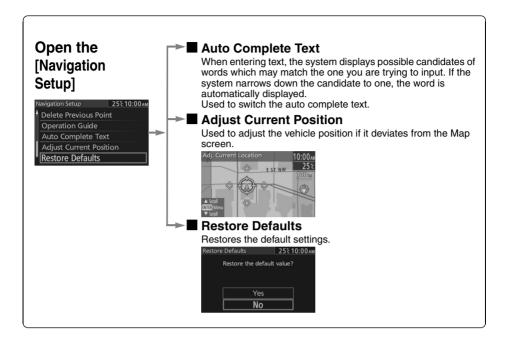




Navigation Set Up



Navigation Set Up



Screen Names and Functions

Screens Before Setting Route

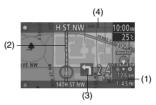


- (1) Map Direction (page 15)
- (2) Clock
- (3) Temperature
 Displays the ambient temperature.
- (4) Vehicle marker Shows the current position and direction of your vehicle.
- (5) Scale display

Displays the scale of the map.

- (6) Current Road Name Shows the name of the road you are currently driving on.
- (7) Operation Guide
 Displays the operational guidance.
 (page page 16)

Screens During Route Guidance



(1) The traveled distance to the destination and the estimated arrival time/remaining travel time

Displays the remaining time to the destination.

Estimated arrival time to the destination or the estimated remaining driving time can be displayed by selecting either of them. (page 16)

(2) Route display

Shows the provided route as a thick blue line.

(3) Turn Arrow display

Shows the direction to turn at the next junction and the distance to the junction.

(4) Next Guided Street Name display

Adjusting the Map Scale

The screen map can be scaled to 14 different sizes.

Press the Enter switch up or down while the Map screen is displayed to zoom in or out of the Map screen.



-Scale bar

Screen Adjustments

■ Brightness/Contrast

Brightness and contrast of the navigation screen can be adjusted.

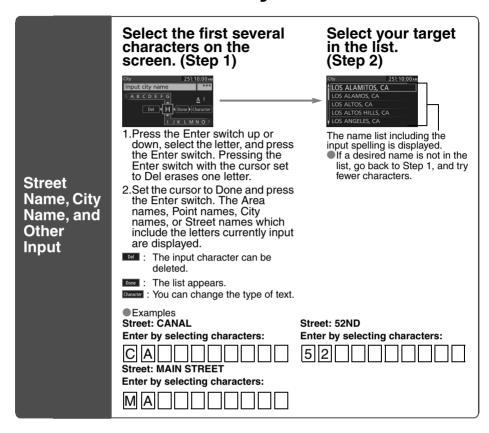
- 1. Press the INFO switch to display the SETTINGS screen.
- 2. Select PREFERENCES and press the Enter switch.
- 3. Select SCREEN ADJUSTMENT and press the Enter switch.
- 4. Select BRIGHTNESS/CONTRAST and press the Enter switch.
- 5. Select BRIGHTNESS or CONTRAST using the left or right switch.
- 6. Adjust the tone by pressing the Enter switch up or down.
- 7. After setting, press the Enter switch to finish the setting.

■ Daytime/Night screen

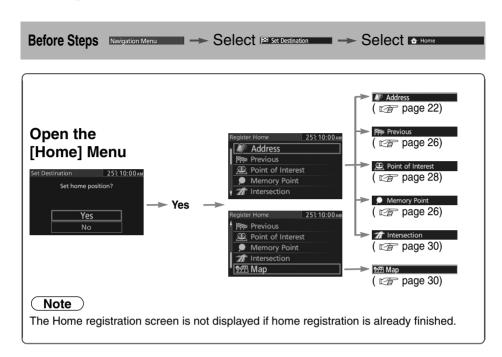
When the headlights are on, daytime mode can also be selected (if a brighter screen is needed at night). This selection can only be done when the headlights are on.

• The screen can be returned to the daytime screen while the headlights or running lights are on by pushing the dashboard illumination knob. You will hear a beep sound and the illumination dimmer will be canceled. With each press of the dashboard illumination knob, the dashboard illumination will change from dim to full bright and back to dim again.

Character Entry

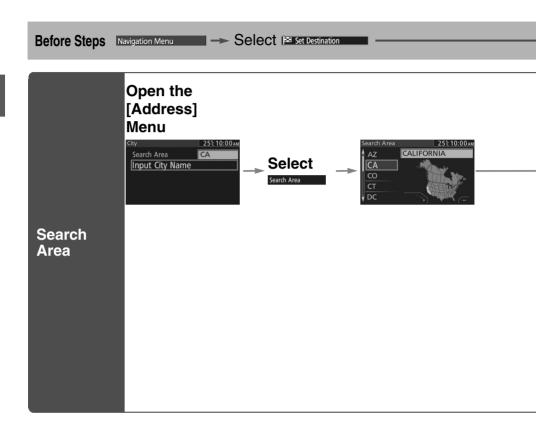


Register Home



Set Destination

• You can set the destination using various methods provided by the system.





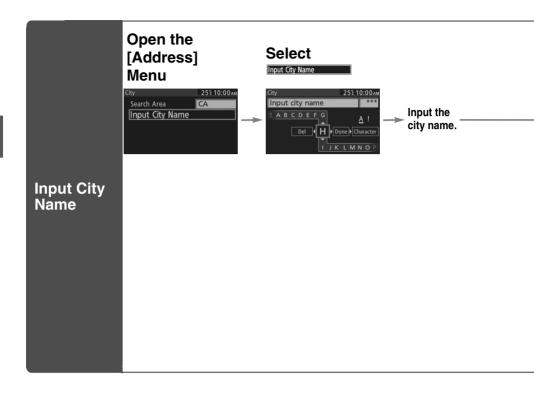
- Do not keep your eyes fixed on the monitor screen or operate the system while driving. Do not change the settings and destination locations while driving. Minimize the time spent viewing the monitor screen and listening to the voice guidance while driving. Operating the system will distract the driver from looking ahead of the vehicle and may cause an accident. Always stop the vehicle in a safe location before operating the system.
- Route searches with the navigation system can include roads that you cannot drive on and roads that you are prohibited from driving on due to traffic regulations. Please comply with the traffic regulations.

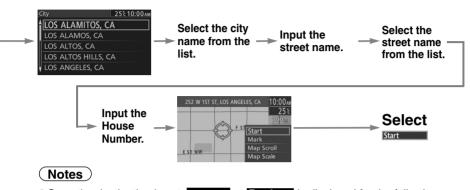
Select Address

Select the desired Search Area						
	: ALASKA	: MINNESOTA	: VIRGINIA			
	AL: ALABAMA	MO: MISSOURI	□ : VIRGIN ISLANDS			
	AR : ARKANSAS	: MISSISSIPPI	OF THE U.S			
	AZ : ARIZONA	MT: MONTANA	vī ∶ VERMONT			
	CA : CALIFORNIA	NC : NORTH CAROLINA	WA : WASHINGTON			
-	: COLORADO	: NORTH DAKOTA	w : WISCONSIN			
	: CONNECTICUT	NE : NEBRASKA	w : WEST VIRGINIA			
	: WASHINGTON, D.C.	: NEW HAMPSHIRE	w : WYOMING			
	: DELAWARE	NJ : NEW JERSEY	AB : ALBERTA			
	FL: FLORIDA	: NEW MEXICO	BC: BRITISH COLUMBIA			
	GA : GEORGIA	NV : NEVADA	: MANITOBA			
	HI : HAWAII	NY : NEW YORK	: NEW BRUNSWICK			
	IA : IOWA	OH : OHIO	N : NEWFOUNDLAND			
	: IDAHO	OK : OKLAHOMA	AND LABRADOR			
	: ILLINOIS	OR : OREGON	INS : NOVA SCOTIA			
	: INDIANA	PA : PENNSYLVANIA	: NORTHWEST TERRITORIES			
	: KANSAS	PR : PUERTO RICO	NU : NUNAVUT			
	: KENTUCKY	RHODE ISLAND	ON : ONTARIO			
	: LOUISIANA	sc : SOUTH CAROLINA	PE : PRINCE EDWARD ISLAND			
	: MASSACHUSETTS	so : SOUTH DAKOTA	□ : QUEBEC			
	: MARYLAND	: TENNESSEE	SK : SASKATCHEWAN			
	ME : MAINE	TX: TEXAS	YT: YUKON			
	: MICHIGAN	ய : UTAH				

For Character Entry, please refer to page 20.

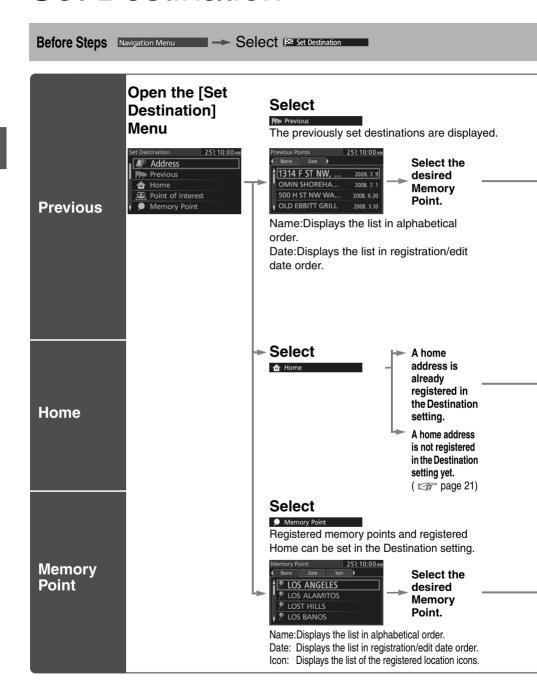
Set Destination

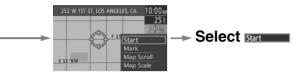




- Once the destination is set, Add to or Replace is displayed for the following destination settings.
- To add to the destinations, select Add to and follow the same procedure as that of the first destination setting.
- To re-set the destinations, select Replace and follow the same procedure as that of the first destination setting.
- The number of points which can be set as destinations are limited to two.
 - For Character Entry, please refer to page 20.

Set Destination





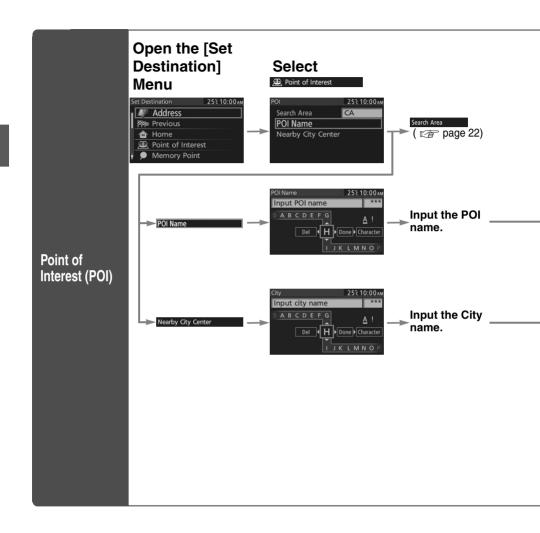
Notes

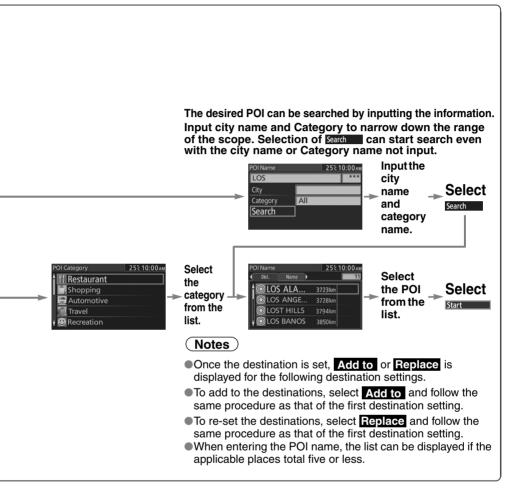
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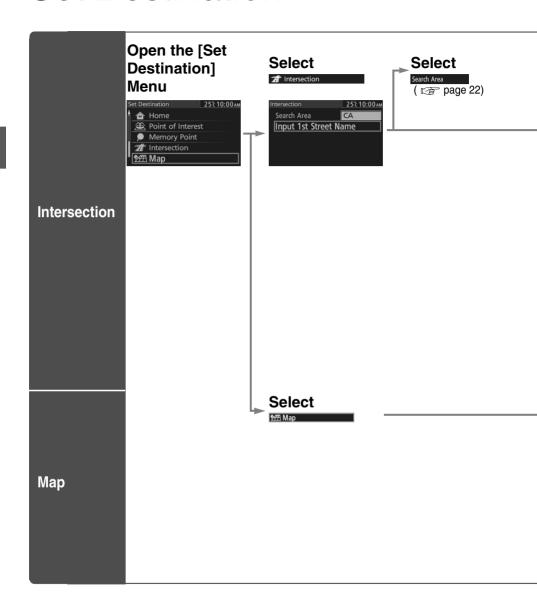
Set Destination

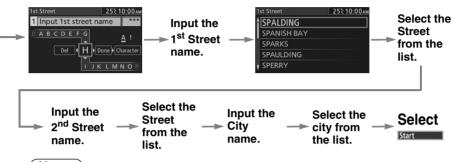




For Character Entry, please refer to page 20.

Set Destination





(Notes

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- To add to the destinations, select Add to and follow the same procedure as that of the first destination setting.
- To re-set the destinations, select Replace and follow the same procedure as that of the first destination setting.
- The number of points which can be set as destinations are limited to two.

Browse Map & Mark
(page 40)

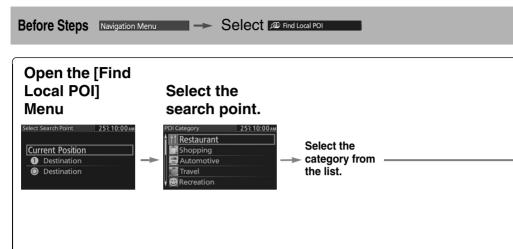
Notes

- Once the destination is set, Add to or Replace is displayed for the following destination settings.
- To add to the destinations, select Add to and follow the same procedure as that of the first destination setting.
- To re-set the destinations, select Replace and follow the same procedure as that of the first destination setting.
- •The number of points which can be set as destinations are limited to two.

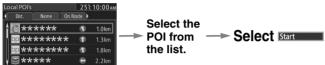
For Character Entry, please refer to page 20.

Find Local POI

The POI around current location or destination can be searched.



Pressing the left or right switch changes the order of the POI for each category.



Dist.: POIs around the current location and destination are displayed in order from

the POI closest to the current location.

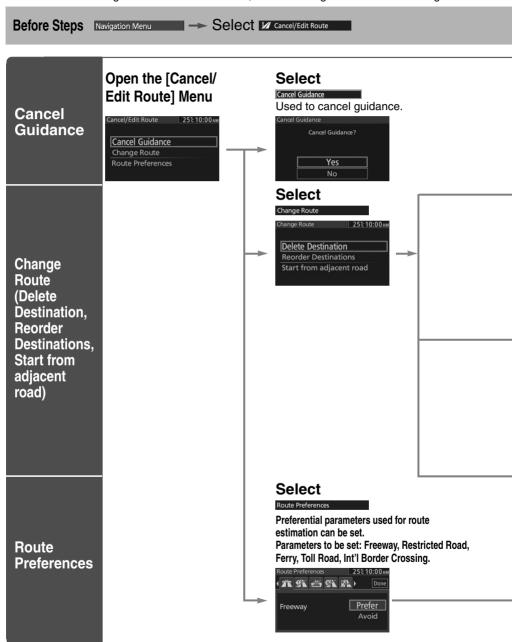
Name: POI are displayed in alphabetical order.

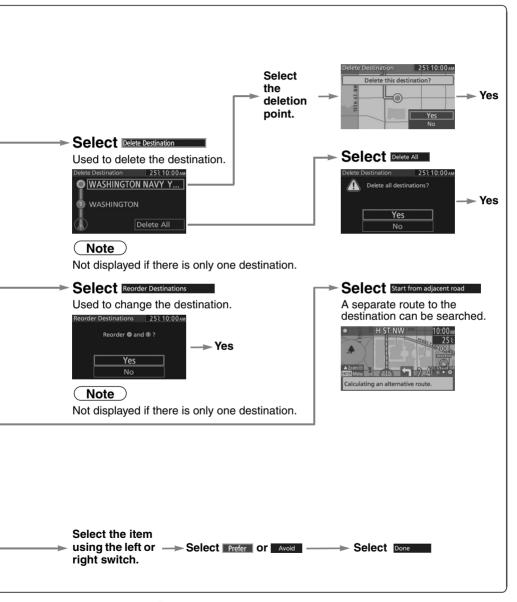
On Route: Displays the list of the icons along the route to the destination.

[•] For Character Entry, please refer to page 20.

Cancel/Edit Route

You can cancel the guidance to the destination, and for editing the destination setting.

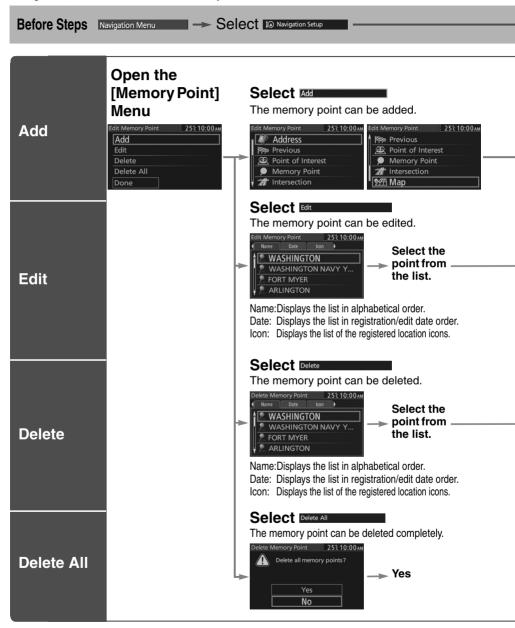


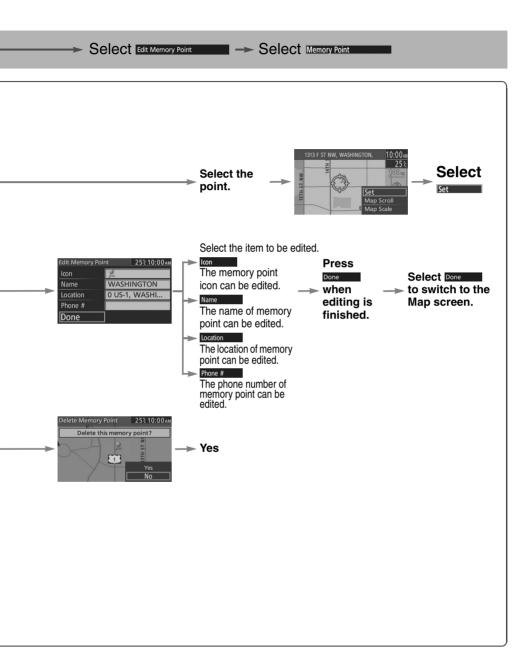


For Character Entry, please refer to page 20.

Edit Memory Point

Registers, edits and deletes the Memory Point.

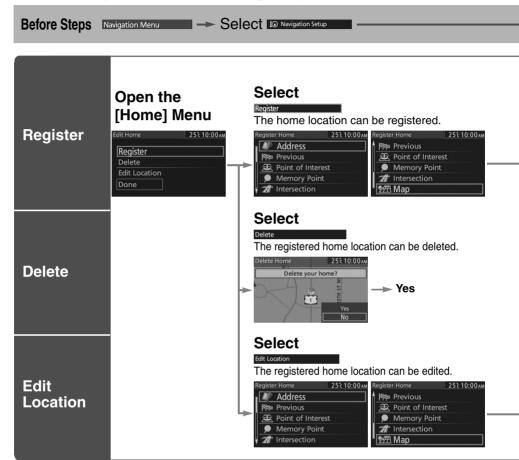


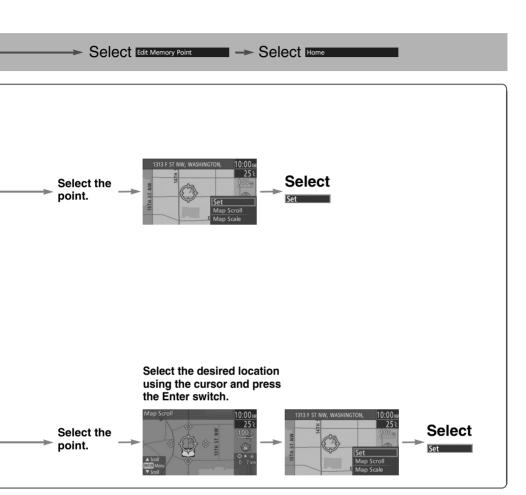


• For Character Entry, please refer to page 20.

Edit Home

 Registers, edits and deletes the Home location. (Deletion or editing of the home location can be done only when the home location is registered.)





For Character Entry, please refer to page 20.

Browse Map & Mark

You can set the destination browsing around the current position, and memory point registration.

Before Steps Navigation Menu

Select Browse Map & Mark

Browse Map & Mark

Open the [Browse Map & Mark] Menu



Select the desired place using the cursor and press the Enter switch.

Start: Sets the destination and starts the guidance.

Mark: Registers the center position of the Map screen to the memory point while in the browse map mode or the Map scroll mode.

Map Scroll: Switches to the map scroll screen. Map Scale: Switches to the map scale screen.

Note

Once the destination is set, Add to or Replace is displayed for the following destination settings.

POI Icons on Maps

POI (Point of Interest) Icons

The following are POI icons shown on maps.







Memo

Precautions/System Performance

Voice Guidance

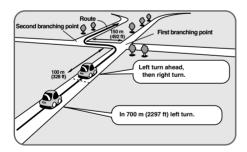


- The navigation system is just a support system for the driver. The driver should always pay attention to the traffic situation to safely make decisions. You may be unable at times to arrive at your destination due to out-of-date information on a map disc. You should be especially careful when selecting an urgent destination such as a hospital or a police station.
- Your route may sometimes include roads that are not open to vehicles or are closed due to traffic regulations. Please comply with the local traffic regulations.
- Do not change the settings and destination locations while driving. Minimize the time spent viewing the monitor screen and listening to the voice guidance while driving. Operating the system will distract the driver from looking ahead of the vehicle and may cause an accident. Always stop the vehicle in a safe location and use the parking brake before operating the system.

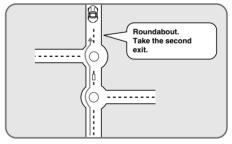
Voice guidance has the following functions:

■ Intersection guidance.

- The system voice announces the distance to an upcoming turn and the turning direction.
 - → This guidance function is automatic. Therefore, you do not have to set it, and it cannot be disabled.
- The system vocally announces the distance to an upcoming highway branching point or intersection.



When two intersections are close together, the voice guidance may be late.

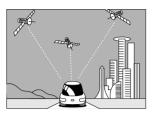


When two roundabouts are close together, the voice guidance for the second may be late.

Repeating Voice Guidance

Pressing the Navi switch in the steering switches repeats the guidance if the voice guidance has been missed.

GPS (Global Positioning System)



GPS is a position detecting system utilizing the signals from GPS satellites deployed by the U.S. Department of Defense. The Mobile Navigation System uses input from three or more satellites and calculates the vehicle position based on the principle of triangulation.

The positioning accuracy of the system corresponds to the error display of the GPS which is from about 30 to 200 meters (98 to 656 ft).

• If you are using the system for the first time, or if you have not used it for some time, it takes about 5 minutes (or about 2 minutes in open areas) to calculate your vehicle's position.

■GPS signal reception is poor in the following places.









In tunnels.

Among high-rise buildings. Under elevated roads.

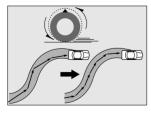
In wooded areas.

- The GPS satellites are controlled by the U.S. Defense Department, which may intentionally lower positioning accuracy. In such cases, there may be vehicle position deviations.
- There may be vehicle position deviations for some time until GPS signals are received after the ignition is switched ON.

Map Matching

This function compares your vehicle's tracking data with the road data on the map disc, applies dead reckoning to determine the road you are driving on, and displays your vehicle on that road on the map.

• Intelligent map matching addresses the following problems to achieve high accuracy in vehicle positioning.



Position Correction for Elevated Roads.

Position accuracy is improved by detecting if the vehicle is running on or under an elevated road.

Position Correction for Parking Garages.

Position accuracy is improved by detecting if the vehicle is driving in an elevated or underground parking garage.

High-precision Gyrosensor.

A gyro detects turns with an accuracy of 0.05° per second. Combined with a speed sensor, it enables the system to display the current vehicle position even where GPS signals may be blocked.

- Using a spare tire in place of the regular one may cause vehicle position deviations.
- Any difference between the direction which your vehicle actually travels and that shown on the map is automatically eliminated by azimuth correction.

Positioning Accuracy

In the following situations, your vehicle position may not be displayed correctly on the map. But, as you keep driving, your vehicle position will be automatically corrected utilizing map matching and GPS data.



Running on an elevated road.



Making a turn after driving on a long straight road.



mountain road.



road.



Running on a steep Running on a spiral Entering an intersection where a road branches off at a small angle.



Running on gridiron Running on a layout of roads.



slippery road with tire chains.



Snaking on a wide road.



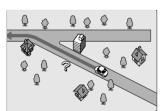
When your vehicle is on a turntable with the ignition switched off.



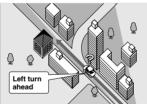
After getting off a ferryboat or vehicle train.

Route Guide

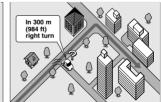
Although you may encounter the following problems in route guide, there is nothing wrong with the system.



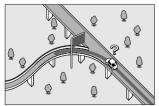
For certain intersection shapes, the upcoming turn or the name of the intersection may not be announced.



For certain intersection shapes, you may be prompted to turn right or left when you should actually stay on the same road.



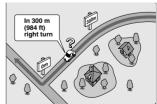
Voice guidance for the planned route may continue even after you have deviated from that route such as having turned too early.



Some points where the road divides on highways or toll roads may not be displayed or announced.



The Intersection Zoom Map may not always agree with the actual shape of the intersection.



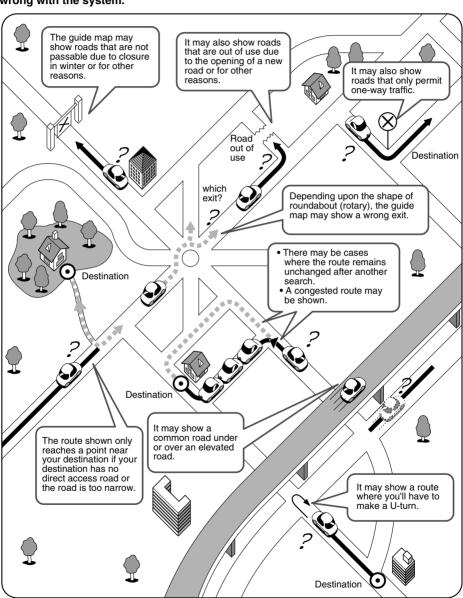
The announced distance to an upcoming turn may differ slightly from reality.



The navigation system is just a support system for the driver. The driver should always pay attention to the traffic situation to safely make decisions. You may be unable to arrive at your destination due to out-of-date information on a map disc. You should be especially careful when selecting an urgent destination such as a hospital or a police station.

Route Search

Although you may encounter the following problems in a route search, there is nothing wrong with the system.



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