NAVIGATION SYSTEM

Preparation See page 4 for specific information.	Before Use
Immediate use See page 4 for specific information.	Getting started
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Accessories

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



Map Disc

CAUTION: THIS PRODUCT IS A CLASS I LASER PRODUCT. HOWEVER THIS PRODUCT USES A VISIBLE/ INVISIBLE LASER BEAM WHICH COULD CAUSE HAZARDOUS RADIATION EXPOSURE IF DIRECTED. BE SURE TO OPERATE THIS PRODUCT CORRECTLY AS INSTRUCTED. USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE. DO NOT OPEN COVERS AND DO NOT REPAIR YOURSELF. REFER SERVICING TO QUALIFIED PERSONNEL.

Laser products:

Wave length: 650 nm

Laser power: No hazardous radiation is emitted with safety protection.



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Advanced use

 Address Book Address Book Address Book (Memory Point Storage), (Memory Point Confirmation and Modification), (Preset Destinations or Home storage), (Memory Point Deletion), (All Memory Point Deletion), (Displays Icons at Memory Points), (Avoid Area Storage), (Avoid Area Confirmation and Modification), (Avoid Area Deletion), (All Avoid Area Deletion), (Category Name Modification), (Previous
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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.



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 on 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), then turn it off immediately and consult with an Expert 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.

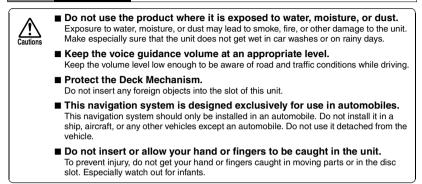
This product is designed for operation with a negative grounded 12 V DC battery system.

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 Expert dealer, we recommend an Authorized Mazda Dealer.



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.



Operation is subject to the following two conditions;

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

Caution

including interference that may cause undesired operation of the device.

Introduction

Use This Product Safety

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.

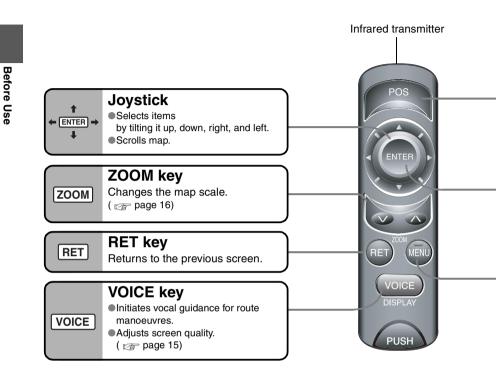
* : GPS (Global Positioning System) is a position detecting system utilizing the signals from GPS satellites deployed by the U.S. Defense Department.

Screens

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



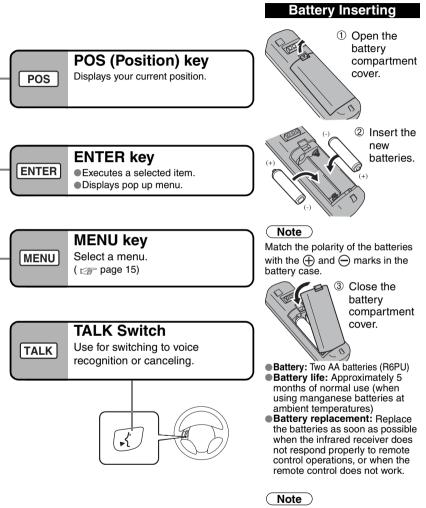
Names and Functions



• To remove the remote control from the cradle press PUSH



•When placing the remote control back in the cradle, press it until you hear it engage.



Activation

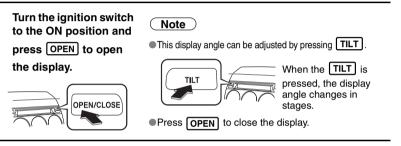
Insert the map disc into the unit to start the Mobile Navigation System.



 Refer to "Handling and Care of Map Discs" to know how to handle a map disc (1277 page 58).

Note

The map disc cannot be inserted or ejected while the ignition switch is in the OFF position.
Remember that the battery can run down if the ignition switch is kept in the ON or ACC position for a long time while the engine not running.



2 Insert the map disc with the printed side facing up.



Note

- The main unit is located under the front passenger seat.
- Condensation may form on the optical lens or the map disc inside the unit when the temperature in the vehicle increases in a short time such as when heating the car on a cold day. This condensation may cause malfunctions. If so, unload the map disc and do not operate the unit for approximately 1 hour. Wipe the condensation off the map disc with a soft cloth.

If the unit does not operate correctly after 1 hour, consult an Authorized Mazda Dealer.





Caution

Most functions are inhibited while the vehicle is in motion. Please read the handbook for operation instructions. Always obey traffic regulations.

•The Current Position screen appears.

Note

- You can select the language by select was and press ENTER. You can also change the selected language using Language Selection. ([™] page 49)
- The CAUTION screen remains on the display unless you select and press ENTER .

Removing the Map Disc

When the ignition switch is in the ACC position and press \blacktriangle (EJECT).



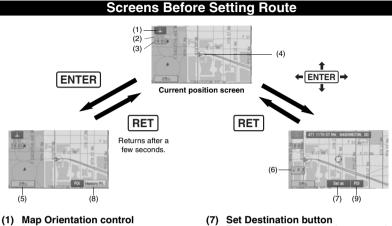


Do not get your hand or fingers caught in moving parts or in the disc slot. This can cause injuries. Children are inquisitive, try to install or remove the map disc without infants looking on.

Buttons on the screen

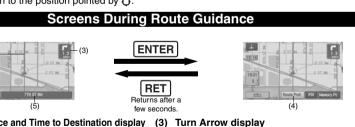
Select the buttons by using Joystick and press **ENTER**. Colors for unavailable buttons will be pale.

Screen Names and Functions



- (🖙 page 16) (2) GPS (Global Positioning System) marker
 - (🖙 page 52)
- (3) Clock Clock will be displayed when you set up Clock on Navigation Set Up On.
- (4) Vehicle marker Shows the current position and direction of your vehicle.
- (5) Scale display Displays the scale of the map. (6) Distance from current position
 - Displays the distance from the current position to the position pointed by O.

- The destination, memory point or way point will be set at the position pointed by () in the scroll screen.
- (8) Store Memory Point button Stores markers on the map.
- (9) POI (Point of Interest) Display button (page 26)



Distance and Time to Destination display (1) Displays the time* and distance to the destination or way point. Selecting this will display the next and further information on the way point or time and distance to the destination.

(* Either required time or estimated time arrival)

(2) Route display

Shows the provided route as a thick blue line.

- Turn Arrow display (3)
- Shows the direction to turn at the next junction and the distance to the junction. (4) Route Preferences button
- (🖙 page 30)
- (5) Current Road Name Shows the name of the road you are currently driving on.

(1)

Menu

Menu appears when pressing MENU.

NAVIGATION MENU	Destination Entry and Route Search (🖙 page 18)
A Destination Entry	Address Book (🖙 page 34)
Address Book	Cancel Guidance (🖙 page 29)
O Cancel Guidance	Route Options (🖙 page 30)
A Route Options	
w(→)) Volume	Volume (🖅 page 40)
می Navigation Set Up	——— Navigation Set Up (🖙 page 42)

Screen adjustments and settings

Display Menu screen will be shown when you press **VOICE** (DISP) and hold.

Note

Display Menu screen will be disappeared when they have been unused during a few seconds.

Adjusting the screen quality

Adjusts the screen brightness Select "ADJ", and then "BRIGHT". The screen will brighten when scrolling to the right, or darken when scrolling to the left.

Adjusts the screen contrast

Select "ADJ", and then "CONTRAST". The screen will lighten when scrolling to the right, or deepen when scrolling to the left.

Note

- Adjust by scrolling the Joystick to the right and left.
- Restore the adjustment value to the default when selecting "RESET", press ENTER .

Clearing the screen

Select "DISP OFF", press ENTER and the screen will disappear. The screen will appear again when pressing any buttons.

■ Daytime screen/Night screen

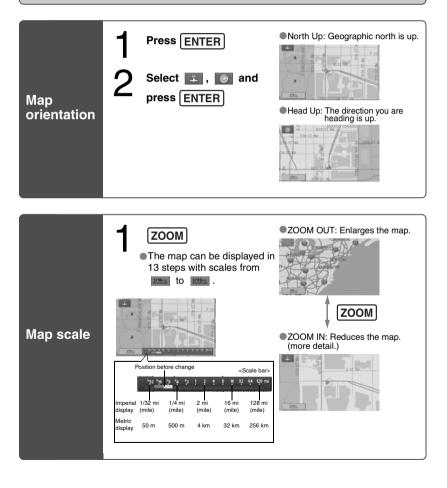
When the headlights are on, daytime mode can also be selected (if extra screen certain nighttime conditions). This selection can only be done when the headlights are on. Press

ENTER to switch between day and night modes.

Screen change Changing the Map Orientation/Scale

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

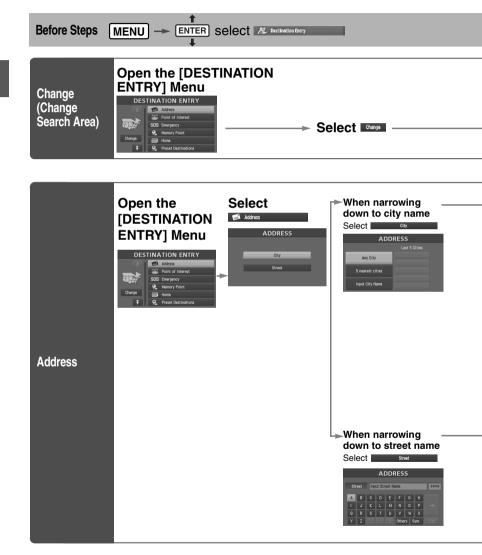
Do not change the settings and destination locations while driving. Minimize the time spent viewing the monitor screen and listening to the voice guidance while driving. Operating the system will distract the driver from looking ahead of the vehicle and may cause an accident. Always stop the vehicle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





Destination Entry and Route Search

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



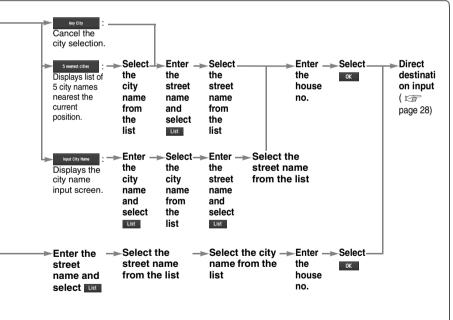


Do not keep your eyes fixed on the monitor screen or operate the system while driving. Do not change the settings and destination locations while driving. Minimize the time spent viewing the monitor screen and listening to the voice guidance while driving. Operating the system will distract the driver 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.

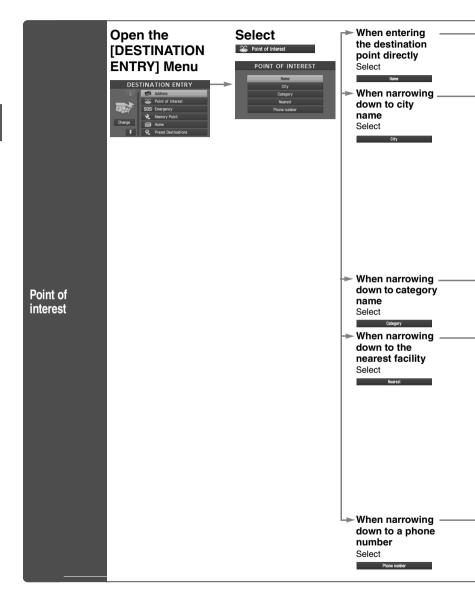
Select the desired Search Area

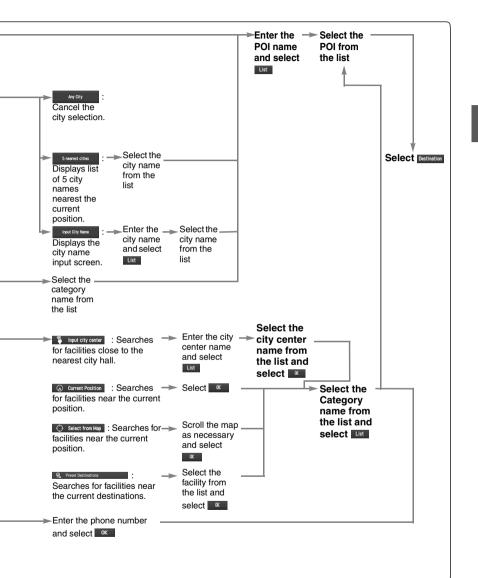




Routing

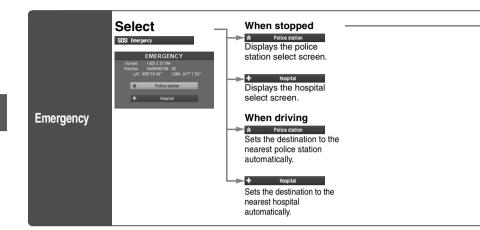
Destination Entry and Route Search





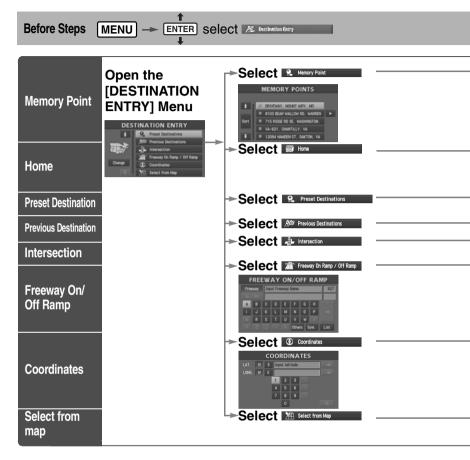
• For Character Entry, please refer to page 27.

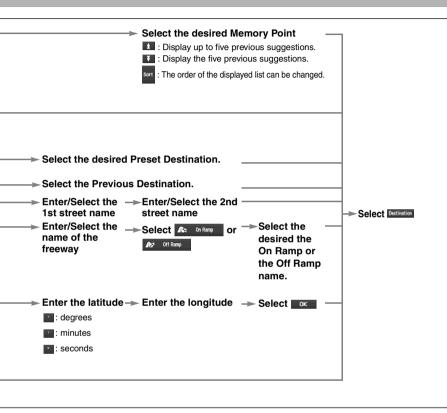
Destination Entry and Route Search



the hospital by Distance.
Sorts the police station or the hospital by name.

Destination Entry and Route Search

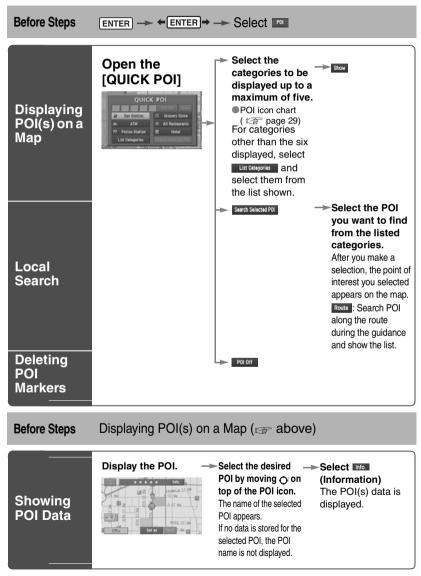




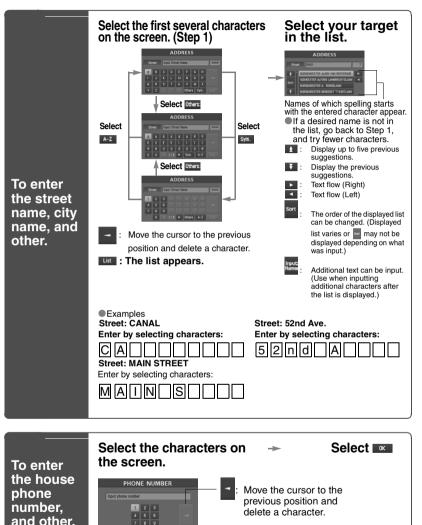
• For Character Entry, please refer to page 27.

Quick POI

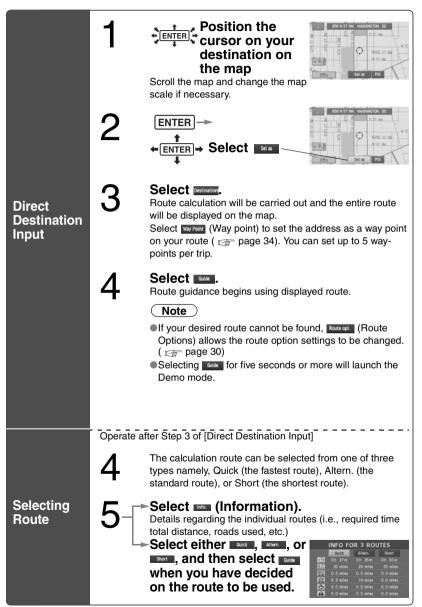
•You can select one of the Six Categories on the menu or List Categories and then select the POI(s) to be displayed on the map.



Character Entry



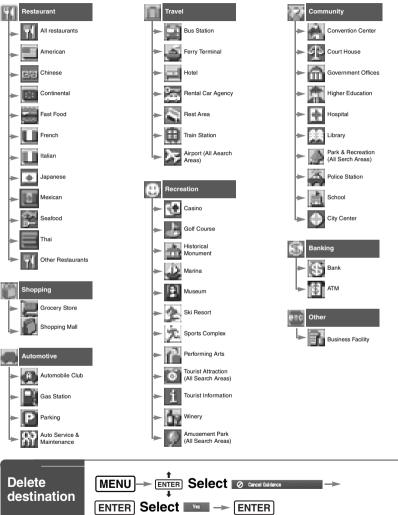
Direct Destination Input



POI Icons on Maps / Delete Destination

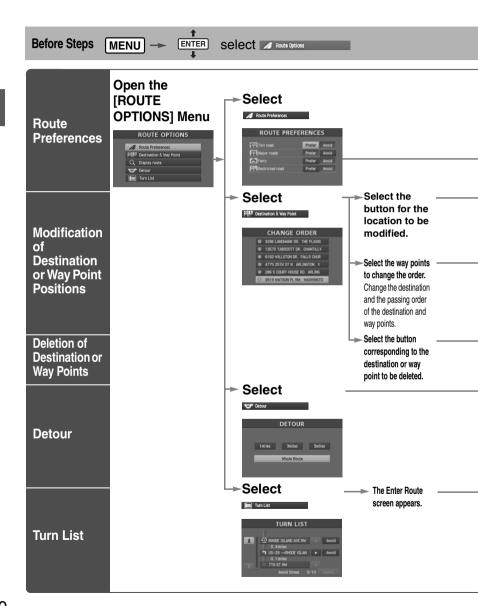
POI (Point of Interest) Icons

The following are POI icons shown on maps.



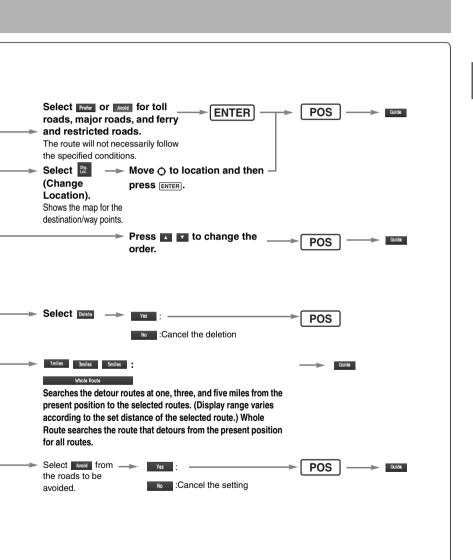
Route Options

 During route guidance you can change the route options, stop or check the route.

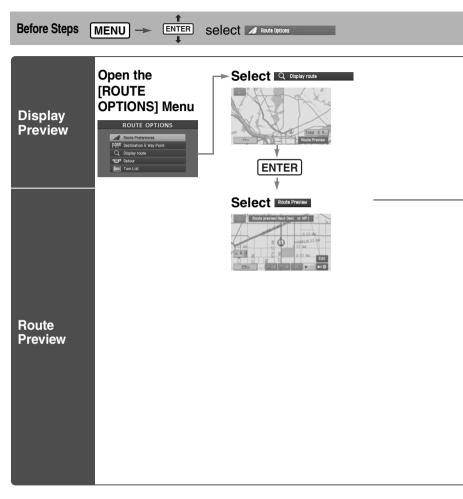


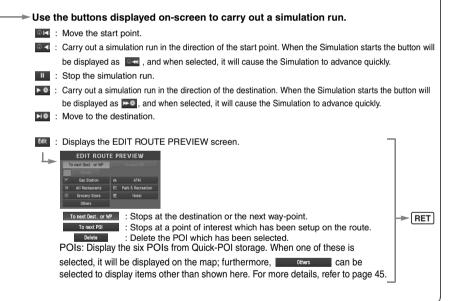


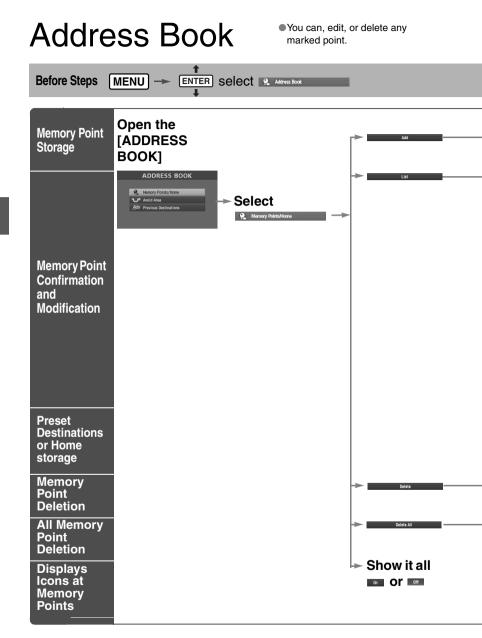
■ Do not keep your eyes fixed on the monitor screen or operate the system while driving Do not change the settings and destination locations while driving. Minimize the time spent viewing the monitor screen and listening to the voice guidance while driving. Operating the system will distract the driver from looking ahead of the vehicle and may cause an accident. Always stop the vehicle in a safe location and use the parking brake before operating the system.

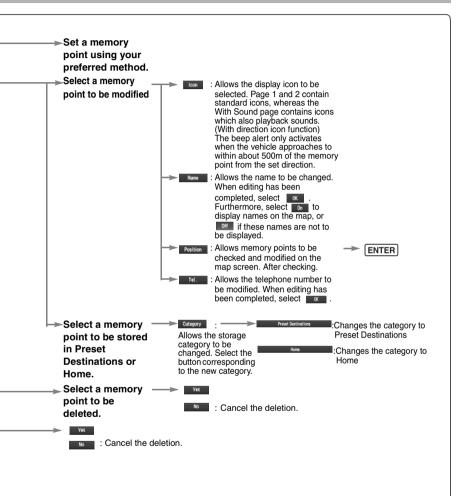


Route Options

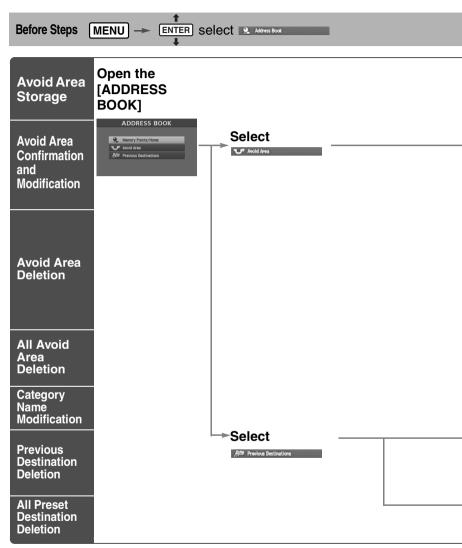


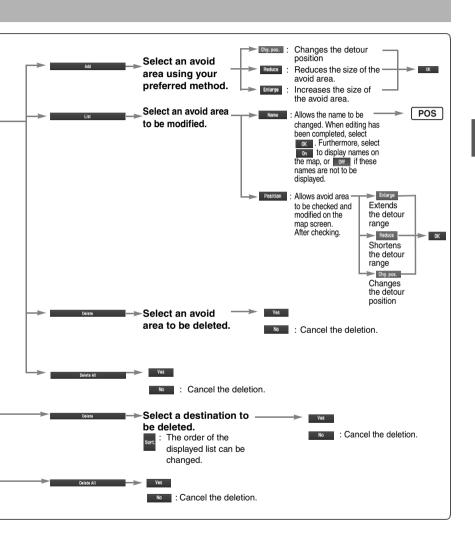




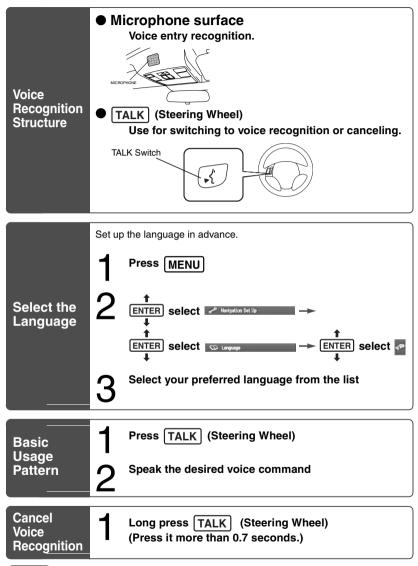


Address Book





Voice Recognition



Note

After the navigation system has been set, voice recognition needs approximately 2 minutes for activation on preparation. Wait momentarily.

Avoiding Voice Recognition Errors.

Read the notes listed below to allow the Voice Recognition function to recognize your voice properly. Speak a voice command clearly.

•Keep yourself in a safe driving position. Do not face or approach the microphone to make a voice command to recognize.

Voice recognition may fail to recognize your command due to voice tone. If this happens, change the tone of your voice by speaking more loudly and clearly.

Keep the inside of the vehicle quiet when making a voice command. Your command may be compromised by noises made by people, blinkers, the horn, vehicle vibration, and noises from outside the vehicle.

Voice Recognition Command

•Use the language you selected in voice recognition.

The following voice commands can be used with voice control. School (Go to/Previous) Starting Point Shortcut Commands Amusement Park [Go to] Previous Destination [Show] Current (Position/Location) Casino [Go to] Preset Destination [Number] 1 [Show] Map Golf Course [Go to] Preset Destination [Number] 2 Repeat [Voice] [Guidance] Historical Monument [Go to] Preset Destination [Number] 3 Cancel Marina [Go to] Preset Destination [Number] 4 Map Operation Commands Museum [Go to] Preset Destination [Number] 5 Zoom In Ski Resort/Skiina Cancel Zoom Out Sports Complex/Stadium Guidance Commands Zoom In Maximum Performing Arts Louder Zoom Out Maximum Tourist Attraction Softer Right Map Zoom In Tourist Information [Show] (Whole/Entire) Route [Map] Right Map Zoom Out [Show] Next Way Point [Map] Winerv Right Map (Zoom In Maximum/ Restaurant/I'm Hungry/Show Restaurant Show First Way Point [Map] Minimum Scale) American Restaurant/American Food Show Second Way Point [Map] Right Map (Zoom Out Maximum/Maximum Scale) Chinese Restaurant/Chinese Food Show Third Way Point [Map] [Change to/Show] North up [Mode] Continental Restaurant/Continental Food Show Fourth Way Point [Map] [Change to/Show] Heading up [Mode] Fast Food/Fast Food Restaurant Show Fifth Way Point [Map] [Change] Map Direction French Restaurant/French Food Show Destination [Map] Right Map [Change to/Show] North up [Mode] Italian Bestaurant/Italian Food (Delete/Cancel) Next Way Point Right Map [Change to/Show] Heading Up [Mode] Japanese Restaurant/Japanese Food Vac Right Map [Change Map] Direction Mexican Restaurant/Mexican Food No [Show/Change to] Dual Map [Mode] Seafood Restaurant/Seafood (Delete/Cancel) Destination [Show/Change to] Single Map [Mode] Thai Restaurant/Thai Food (Delete/Cancel) All Way Points and (Store/Mark) [This Point] Other Restaurant/Other Food Destination POI Display Commands Voice Guidance Off Automobile Club Grocery Store Voice Guidance On Gas Station/Gas Shopping Mall Quick Parking/Parking Lot/Parking Garage/Car Park Airport Alternative Bus Station Auto Service & Maintenance/Auto Service Ferry Terminal Short ATM Detour Hotel Bank Detour Entire Boute Rental Car Agency Town Center/City Center [Change to] Arrow (Guide/Guidance) Rest Area Convention Center/Exhibition Center [Change to] Turn List (Guide/Guidance) Court House Train Station [Change to] Freeway (Guide/Guidance) Business Facility Government Offices [Change to] Intersection (Guide/Guidance) Higher Education/University/College POI Off Destination Operation Commands **Display Commands** Hospital display [set] day [mode] [Go] Home Library Enter Destination display [set] night [mode] Parks & Recreation/Park & Recreation display [set] auto [mode] Add to Wavpoint Police Station

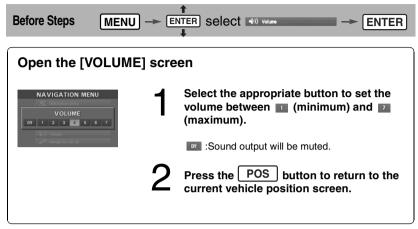
(): Indicates the commands to be the object of "/"

[]: Recognizes without saying the command in "[]"

"/": Recognizes when saying either commands before and after "/"

Volume Adjustment

You can adjust the volume control for the voice guidance.

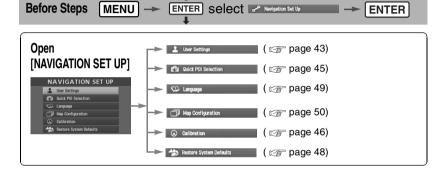


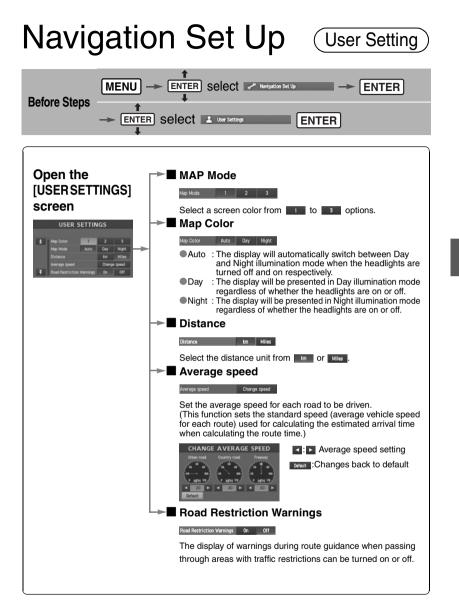


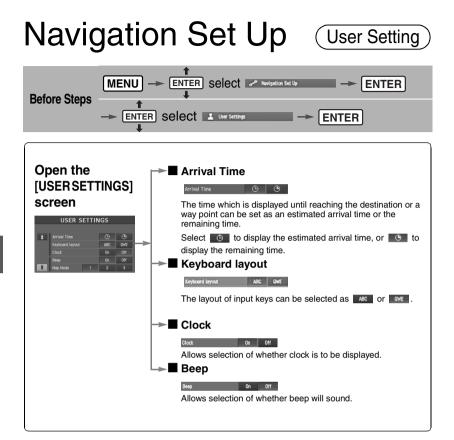
Navigation Set Up

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

Warning	■ Stop your vehicle before 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 put the parking brake on before operating the system.

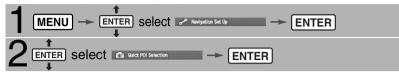


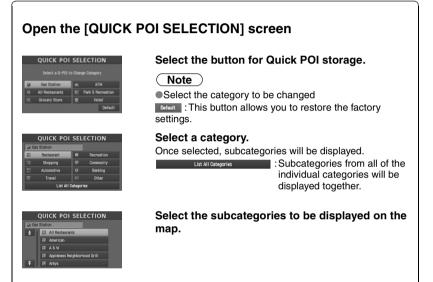




Navigation Set Up (Quick POI Selection)

This function allows you set the categories on the area displayed when the (Point of Interest) menu is selected on the map. Quick POI enables you store up to six different kinds of categories which you use most regularly.





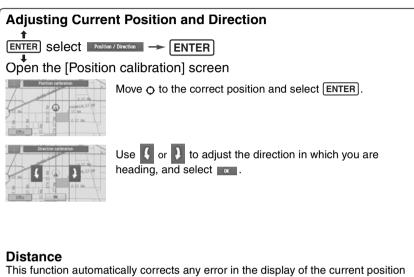
Repeat the above steps to add further POI markers displayed on the menu.

Navigation Set Up



This function allows you to correct any error in the position or direction of your vehicle display.

Before Steps MENU -> ENTER SELECT - Navigation Set U



that might occur after tire replacement.

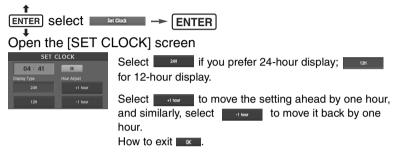


You will have to drive about 6 miles (10 km) before distance correction is complete.



Set Clock

The current time is set using this function. Since time notification is provided by a GPS satellite.



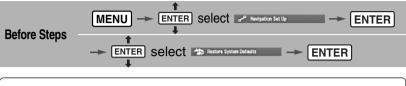
Map Version

The map and software version numbers can be confirmed using this function.



Navigation Set Up (Restore System Defaults

This function replaces all the settings in the mobile navigation system with the initial default settings.

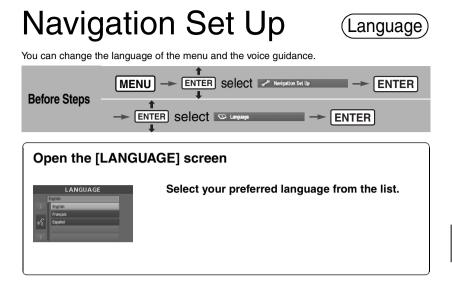


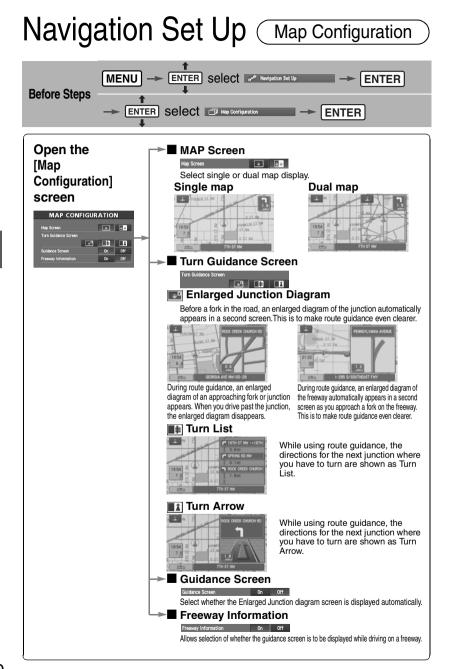


If you execute Restore System Defaults, all of your stored setting data will be deleted.

[Default List]

Item	Initial condition
Menu names	
Map Orientation	North up
Map display mode	Single-screen display
Map Display scale/Map scale for Dual-screen is not object of backup.	Single-screen: 10,000 map (1/16 mi)
Display guidance language	English
Quick-POI map display	All Off
Quick-POI Selection	A : Gas station
	B : ATM
	C : Police Station
	D : Grocery store
	E : All Restaurant
	F : Hotel
Search Area	US9 (including Washington DC)
Map Color	1
Day/Night/Auto Setting	Auto
Distance Units (Miles/KM) (Global setting)	Miles
Volume Presets	4
Time display change (12h/24h)	24h
Keyboard layout	ABC
Arrival Time	Time
Navigation Setup (Clock)	Off
Navigation Setup (Beep)	On
Map Configuration	
Freeway Information	Off
Guidance Screen	ON
Map screen	Single
Turn Guidance Screen	Turn List





Precautions/System Performance

Voice Guidance

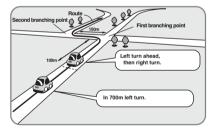


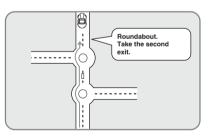
- The navigation system is just a support system for the driver. The driver should always pay attention to the traffic situation to safely make decisions. You may be unable at times to arrive at your destination due to out-of-date information on a map disc. You should be especially careful when selecting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





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.

GPS



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.

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

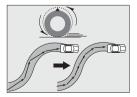
In wooded areas

- 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 turning on the ignition.

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.

Precautions/System Performance

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





g on a steep Runn in road road





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



Running on gridiron layout of roads Running on a



straight road

Running on a Si slippery road with ro tire chains



Snaking on a wide road



When your vehicle is on a turntable with the ignition turned off



After getting off a ferryboat or vehicle train

Route Guide

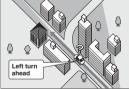
Although you may encounter the following problems in route guide, there is nothing wrong with the system.



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



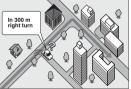
Some points where the road divides on highways or toll roads may not be displayed or announced.



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



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



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



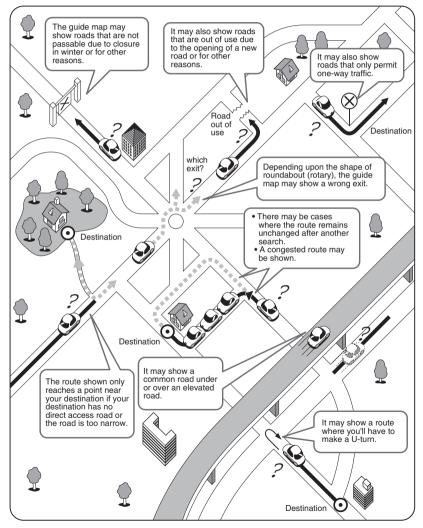
The announced distance to an upcoming turn may differ slightly from reality.



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

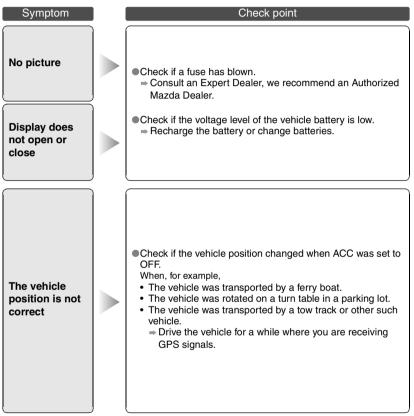
Although you may encounter the following problems in a route search, there is nothing wrong with the system.

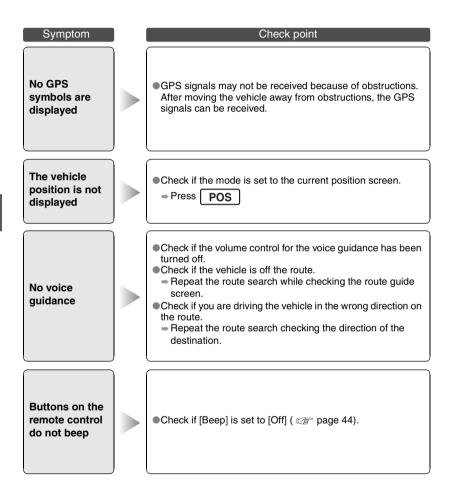


Troubleshooting (Verification First

Note

There may be some problems due to operational errors or mistakes. Please read this manual again and verify that there really is a problem before calling an Expert Dealer, we recommend an Authorized Mazda Dealer to ask for repair services.





Troubleshooting (Error Messages



Error message		Solution
Please insert a MAP DVD.		 The disc is not installed. Check if the disk is installed. If installed, check if the installed disk is correct.
MAP DVD-Read Error The disc installed is not a MAP DVD.		The disc is wet, dirty, scratched, or upside down, or the disc cannot be played with this unit or the incorrect disk is installed.
		⇒ Eject the disc and check it.

Maintenance

Care of the Product

■Cleaning this product

Use a dry, soft cloth to wipe it.

■Cautions for cleaning

Never use solvents such as benzene and thinners, they could mar the surface of the unit.

■Map disc

If you require the latest map disc, consult an Expert Dealer, we recommend an Authorized Mazda Dealer.

Handling and Care of Map Discs

■How to hold the disc

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

■ Disc Cleaning

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



Label side

<Right>

<Wrong>

Do not leave discs in the following places:

- Direct sunlight
- Near car heaters
- In dirty, dusty and damp areas
- •On seats and dashboards