Warnings and caution signs, illustrated below, are posted throughout this manual as well as on the AVN52D. They show safe and correct ways to handle the product to prevent personal injury to you and others and avoid damage to property. Before reading through the manual, take time to read through and learn the important information listed in this section.

#### Cautions for use

- Start driving only after the GPS mark appears. Starting to drive with improper positioning may lead to vehicle positioning errors.
- \* The images appearing on the screen may differ from those shown in this manual depending on the type of map DVD-ROM used and when it was created.



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



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

The symbol shown below indicates that you should know about the information in order to carefully follow it or you should remember the information for its helpfulness.



This ATTENTION sign indicates helpful information to remember and know.

- Please read all materials such as manuals and warranties that have come with the product.
- Eclipse 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.



LAMP(S) INSIDE THIS PRODUCT CONTAIN MERCURY AND MUST BE RECYCLED OR DISPOSED OF AS HAZARDOUS WASTE ACCORDING TO LOCAL, STATE, OR FEDERAL LAWS APPLICABLE TO YOU. DO NOT PLACE IN THE TRASH.

## **Table of Contents**

## Introduction

How t	to use this manual	8
Featu	ıres	. 10
GPS i	navigation system	. 14
	How to view the navigation screen	
000		
GPS	Situations when GPS signal reception is impossible	
Bas	ic operation	
Menu	screen and list screens	. 18
	Menu screen  How to switch the list screens  Up/down switch display  Page switch display  POI switch display	20
Adjus	sting the screen and setting the sound	
	Screen adjustment  How to display the image quality adjustment screen  Contrast/Bright  How to switch to daytime display when the lights are ON  How to turn the screen OFF.  Switching the map display color.  Switching the clock display  Switching miles and km display.  Switching the Time Zone  Switching the Time Zone  Setting the Daylight Saving Time.  Setting the volume  Adjust the volume  Set the automatic highway volume switch function	21 22 22 23 23 24 24 24 25 26 26
Марс	displays	. 27
	Present location display	27

	Moving the map (one-touch scroll)
	Moving the map
	Setting the Street Name display while scrolling29
	Switching the touch switch display29
	Switching the touch switch display
	Setting touch switches to display or not display30
	Switching the map reduction scale
	Switching to the desired reduction scale
	Displaying city maps
	Switching to city map display32
	Canceling the city map display32
	Displaying the building data
	Switching the building shape display
	Switching the map orientation
	Switching the map orientation
	Switching to double screen display
	Switching to double screen display
	Operating the screen on the right
	Canceling the double screen display
	POI display38
	Display landmarks by a simple operation while driving 40
	Delete a POI landmark40
	Displaying multiple types
	Search for POI vicinity
	Displaying a list of POIs along the set route
	Displaying POI information
	Setting the type of POI vicinity to be retrieved while driving 45
How t	o retrieve maps
	Changing the search area
	Retrieving a map using an address
	Retrieving a map using a POI name52
	If narrowing down candidates per area
	When narrowing down the list by POI type55
	Retrieving a map in the event of an emergency
	Retrieving a map using a memory point
	Retrieving a map using the archive59
	Retrieving a map using an intersection name
	Retrieving a map using a freeway exit/entrance name
	Retrieving a map using the latitude/longitude
Perfo	rming operations on a retrieved map

	Performing operations on a displayed map
Nav	igation guidance
Settir	ng the destination and searching for a route 64
Set a	destination and search for a route 65
	Setting a destination
	One-touch setting
	Set from a registered point
	Set using the map retrieval method 67
	Route search
	All-route display
	Route displays
	All-route display and touch switches
	Display or bypass a restricted segment
	Bypassing a restricted segment72
	How to display message on a restricted segment
	Display route data (guided road information)74
	3-route simultaneous display (3-route search function)
Chan	ging the search result route
	Adding a destination
	Change the search conditions for each interval79
	Switching the destination order
	Deleting a destination
	Indicating a transit road
	Canceling a transit road indication
Starti	ng, pausing and restarting route guidance 85
	Starting route guidance
	Pausing and restarting route guidance
Route	e guidance
	Intersection guidance
	A non-junction intersection
	A junction intersection (enlarged guidance screen for an intersection) 86
	Set automatic display of the intersection guidance screen 88
	Canceling the intersection guidance screen

	Ferry crossing guidance	89
	Setting the required time display	89
	Setting the average speed	90
	Highway junction guidance	91
	Canceling the highway junction guidance screen	91
	Switching the highway junction guidance screen	92
	Voice guidance	93
	Setting the auto voice guidance	94
Perfo	rming operations on the guided route	. 95
	Guidance in another mode	95
	Setting the guidance when in another mode	95
	Redisplaying the all-route display	95
	Switching the required time/distance remaining display	
	On-route scroll	97
	Start on-route scroll	97
	On-route scroll screen operations	97
Reini	tiating a route search	. 98
	Reinitiating a route search	98
	Reinitiating a route search	
	Automatic reroute search	
	Setting the automatic reroute search	. 101
Poi	nt registration	
What	is point registration	102
Regis	stering, correcting or deleting a memory point	103
	Registering, correcting or deleting your home	. 103
	Registering your home	. 103
	Correcting your home	. 105
	Deleting your home	. 106
	Registering memory points	. 107
	One-touch registration	. 107
	Registering a far away point	. 108
	Correcting the position of a memory point	. 111
	Changing the symbol of the memory point	
	Enter a telephone number for a memory point	. 113
	Entering the name of a memory point	. 114

Displaying the name of a memory point
Registering, correcting or deleting a special memory point
Registering a special memory point
Registering, correcting or deleting detour memory points
Registering detour memory points
Destination archive
Deleting entries from the destination archive
Information function
Information screen
Information screen
Optional function
Rear View Camera operations
Rear View Camera image
Helpful tips
Correction of the present location and distance 134
Present location correction

## For reference

Map DVD-ROM data	. 137
Map DVD-ROM data display	137
Accuracy and error	. 138
Positioning accuracy GPS signal quality and reception conditions Present location display error.  Error due to having changed a tire.  Correcting the map matching vehicle position sensor Present location display, route guidance accuracy Road and geographic name data.  Route guidance	138 140 140 140 141 143
Information you should know	. 146
If one of these messages appears	146 149
Copyright	. 150
Glossary	. 159
Index by topic	. 161
Information about the maps	162
INDEX	166

The Index by Topic simplifies searches for explanations about individual features. When confused by an operation, use the Index by Topic to search for information about the operation.

## 1. How to use this manual

#### Section title

A title is assigned for each section.

#### Item title

A number and title is assigned for each item.

#### Point registration

## f. What is point registration

Up to 106 geographical points - categorized as "home," memory points or special memory points - can be stored on a map by registering them as memory points. There can be one "home" and up to five special memory points. Registering detour memory points (maximum of ten) also ensures that detours will be made through these points when route searches are performed.

Memory points can be registered by selecting from 46 types of symbol and 4 types of symbol with sound. It is possible to set a name, a name reading, and a telephone number for all these types of symbol. (This does not apply to detour memory points.)

Registering memory points and special memory points enables you to retrieve them on a map or when conducting a route search. Use these points effectively.

If you make a mistake in registration, correct it or delete the registration.

(If 106 memory points or 10 detour memory points have already been registered, delete unnecessary points and reattempt the registration.)

#### Memory Points

The memory points (including your home and special memory points) can be displayed and reordered according to registered type, symbol, or order of registration, and the points can be selected from a list during point searches and so on.

## Memory point with voice alarm

The following functions can be given to memory points with voice.

- ① Setting to announce the approach to a point with sound Bell, Chime, Music Box
- Setting to announce the approach to a memory point from a specified direction

Bell (With direction)

Home

Only one registration can be made for your home, and you can search for a route returning you home in a one-touch operation. **Registering this point** 

first is recommended.

Special memory points Up to 5 special memory points can be registered and allocated to touch switches to facilitate a search for geographical points. Also, when setting a destination, a route search can be initiated in a one-touch operation.

#### Areas to avoid

Up to 10 detour memory points can be registered with a name and detour range settable for each point. You can also set names for detour memory points.

#### Attention

Additional points regarding the operations are given here.



The symbol allocated to a detour memory point cannot be changed.

102

Operation title

#### A title is assigned for each operation. Point registration Registering, correcting or deleting a memory point Registering, correcting or deleting your home One point on the map can be registered as your home. Register your home to enable a route search to your home from the destination setting screen **Detailed operation** with one operation. (Refer to page 47) Registering your home A title is assigned for Touch My Places in the Menu screen. each detailed operation. Touch Register for Memory My Places Back Points. Memory Points 105/106 Free Register Edit Delete Section heading Areas to avoid 10/10 Free Register Only the section side heading will appear. 3 Select the map retrieval method Memory Point > 1/2 Back and the map on which your home M (1) Operation screen is to be registered will appear. MO • See pages 47 and 63, "How to A screen showing retrieve maps" and "Performing Search Are the operation will operations on a retrieved map". appear. 2 Touch Enter. Register Memory Point Touch to move the map. Operation procedure Describes the operation. Proceed with the operation as per the numerical order. Registration enabled on a detailed map with a reduction scale less than 0.5 miles. Go to the next page Edit and Delete can be operated only if a memory point is already reaistered. The operation Go to the next page 103 procedures are continued on the next page. The description shown above is for explanation, and therefore it may differ from the

actual one on the same page.

## 2. Features

# Several search methods to choose from (Refer to page 47)

Search using a POI name (Refer to page 52)

When the name of the POI is known, enter it to initiate a search. It is also possible to search by entering only a part of the name.

 Search using a freeway exit/entrance (Refer to page 61)

A search can be initiated using the name of a freeway or an exit/entrance

 Search using latitude/longitude coordinates (Refer to page 62)

A map can be displayed by directly entering the latitude and longitude coordinates.

Emergency search (Refer to page 58)

In the event of an emergency, a search can be initiated for the nearest police station or hospital.

 Search using the destination archive (Refer to page 59)

A map can be retrieved using entries previously set in the destination archive.

 Search using a registered point (Refer to page 58)

A map can be retrieved using your home or a point registered in the memory.













# Registering a desired point in the memory (Refer to page 102)

Your home or a geographical point you want to indicate on a map can be registered in the memory. Also, when initiating a route search, points through which you want to make a detour can also be registered in advance.



## POI icon display (Refer to page 38)

Various types of POIs can be displayed on a map using icons.



## Diverse screen displays (Refer to pages 35, 36, 74)

#### · Double screen display

The screen can be divided into two parts.

# 25% AOFF Map View Route Mark Q

#### Enlarged intersection display

While route guidance is in progress, an enlarged illustration of the area around an intersection where turn is to be made (junction) is displayed when approaching that intersection.

#### Route data

A list is displayed of all the distances up to intersections and turning directions prior to reaching the destination.





## 2. Features

## 3-route simultaneous display (Refer to page 75)

When initiating a route search, three routes (Quick 1, Quick 2 and Short) can be searched for simultaneously.



# The map display color can be switched (Refer to page 23)

Four map display colors can be selected for the daytime and nighttime screen display respectively.



## System upgrade (Refer to page 128)

Rear View Camera

When the optional Rear View Camera is installed, the view to the rear can be displayed on the monitor screen.



# MEMO

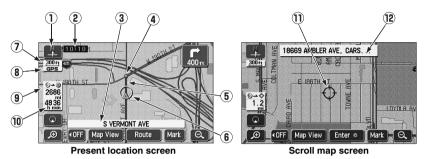


## 3. GPS navigation system

By setting your destination, the device will automatically perform a route search and guide you through the route using screen displays and voice announcements.

## How to view the navigation screen

The navigation map display consists of a present location screen and a scrolled map screen.



- ① Orientation mark ( ), when the bearing is pointing upwards) The map orientation is indicated.
- Refer to "Switching the map orientation" on page 34 for how to switch the map direction (North up or Heading up).

#### ② Clock display

The present time is indicated.

• See page 23 for information concerning this mark's display.

#### ③ Name display

The following names appear depending on the situation.

(Only geographical points represented as data in the map disk)

- Names of junction and non-junction intersections
- Names of roads taken
- Names of interchange exits

#### (4) Instruction points

Intersection guidance (intersection name display / intersection guidance screen) is displayed.

 Refer to "Intersection guidance" on page 86 for information concerning intersection guidance.

#### (5) Route display

When setting your destination, the route all the way to that point is displayed.

Route guidance will occur only when the present location appears on a dark blue line.

#### **(6)** Vehicle position mark

The present location and the vehicle direction are displayed.

#### ⑦ Scale display

The reduction scale of the map being displayed is indicated.

The length of the \_\_\_\_\_ appearing in the screen above represents 300ft.

#### GPS mark GPS

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

See page 16 for information concerning this mark's display. There may be misalignments
depending on the satellite conditions.

#### Distance remaining display

The distance from the present location to the destination is indicated.

- While route guidance is in progress, the distance calculated from the route now being taken to the destination is indicated.
- When deviating from the set route, the distance to the destination in a straight line is indicated.
- Refer to "Switching the required time/distance remaining display" on page 96 for information on how to switch the remaining distance display.

#### Required time display/destination direction mark

The following marks appear depending on the situation.

■ Required time display



While route guidance is in progress, the required time up to the destination is indicated.

 Refer to "Setting the required time display" on page 89 for information concerning the required time.

#### ■ Destination direction mark



When deviating from the set route, the direction towards the destination is displayed.

(f) Cursor mark

This mark is indicated on the map retrieved by a search or by scrolling.

To scroll, simply touch the map (on a spot other than the touch switches on the screen).

① Cursor position name display

The name of the cursor position on the map is displayed (approx. 6 seconds).

Except for some parts describing certain functions, this manual uses normal north-up map screen illustrations to describe the device's functions.

"Map touched" appears signifying that the map was directly touched (on spots other than touch switches).

## 4. GPS

Global Positioning System (GPS): a system developed and operated by the United States Government that pinpoints your present location by utilizing latitudinal and longitudinal data received from at least 4 satellites (sometimes only 3 are used).

## Situations when GPS signal reception is impossible

The following are situations when the GPS signal cannot be received.

- When the GPS signal is obstructed while driving through building clusters, tunnels or overpasses
- When the signal is obstructed by an object placed on or near the GPS antenna
- When the GPS satellite is not sending any signals to the earth (signal emission may be halted due to modifications or repairs conducted by the U.S. Tracking Control Center, the organization responsible for controlling







Screen with GPS signal reception in progress



#### Handling the GPS antenna

- Consult a specialist at the store of purchase for how to install the GPS antenna.
- Do not apply paint or wax onto the GPS antenna. Otherwise, signal reception sensitivity may be diminished or signal reception may be rendered impossible.
- Do not pull on the cord when uninstalling or moving the GPS antenna. Otherwise, short circuits or disconnections may result.
- See page 138 for information concerning GPS signal accuracy and errors. See page 159 for definitions of the terminology employed.

# MEMO



## 1. Menu screen and list screens

## Menu screen

- Press MENU to display the MAIN MENU screen.
- 2 Touch NAVI MENU.

- MAIN MENU

  SOURCE DEST NAVIMENU INFO

  AUDIO OFF
- The following operations can be performed from the Menu screen.
  - Touch the desired item's touch switch to activate.



Item (touch switch)	Function	Page
Suspend guidance/Resume guidance*1	Stopping or restarting route guidance	85
Volume	Setting the volume	26
volume	Setting the automatic highway volume switch	26
	Registering/correcting/deleting the geographical data for your home	103, 105, 106
My places	Registering/correcting/deleting memory geographical points*2	107, 111, 116
	Registering/correcting/deleting detour memory geographical points	121, 123, 124
	Correction of the present location and distance	134
	Switching the kilometer/mile display	24
	Setting the estimated arrival time	89
	Setting the automatic reroute search	101
	Switching the time zone	24
	Setting the automatic voice guidance	94
	Setting the guidance when in each mode	95
	How to display message on a restricted segment	73
Setup	Set automatic display of the intersection guidance screen	88
	Setting the street name display while scrolling	29
	Setting the switch display	30
	Switching the clock display	23
	Setting the type of POIs in the vicinity retrieved while driving	45
	Switching the map display color	23
	Deleting entries from the destination archive	125
Map DVD	Map DVD-ROM data display	137

<sup>\*1:</sup> The color is toned down if the destination is not set.
\*2: Including registering/correcting/deleting special memory geographical points.

## 1. Menu screen and list screens

### How to switch the list screens

#### Up/down switch display

Touch ▲ or ▼ to move the list one item at a time.



#### Page switch display

Touch ★ or ▼ to move the list one page at a time.



## POI switch display

Touch either Restaurant, Shopping,
Automotive, Travel, Recreation,
Community, Banking or Other to
move the list one POL at a time.

 The touch switch color is toned down for POIs without corresponding lists. Touching a toned-down touch switch will have no effect.



## 2. Adjusting the screen and setting the sound

## Screen adjustment

To make viewing easier, the display switches between day screen/night screen according to whether the vehicle lights (parking lights, taillights, license plate lights) are on/off.

(Default status)

- Lights turned OFF ...... daytime display
- Lights turned ON.....nighttime display





Daytime display (when lights are turned OFF)

Nighttime display (when lights are turned ON)

### How to display the image quality adjustment screen

- 1 Press MENU until a beep is heard.
- 2 Pressing ENTER after adjustment, or when more than about 20 seconds without operation, setting is completed automatically and the previously displayed screen is redisplayed.



Image quality adjustment screen

## 2. Adjusting the screen and setting the sound

#### Contrast/Bright

1 Contrast

Touch + to increase, touch - to decrease.

1 Bright

Touch + to increase, touch - to decrease.

#### How to switch to daytime display when the lights are ON

- The daytime display and nighttime display will be switched each time DAY is pressed.
  - When in daytime display, the touch switch changes into bright color.
  - DAY is displayed when the lights are ON.



#### How to turn the screen OFF

- 1 Touch OFF.
  - To return to the previous screen, touch MAP or AV .



- Even with the screen turned OFF, the GPS present location positioning continues to function.
- The daytime display screen and nighttime display screen can be separately adjusted.

## Switching the map display color

The map display color (5 color selection) can be switched for both the daytime and nighttime displays independently.

- 1 Touch Setup in the Menu screen.
- Touch Normal, 1, 2, 3 or

  4 for both Map Color (Day) and
  Map Color (Night) respectively.
  - The pressed touch switch will become brighter.
- 3 Touch OK.



## Switching the clock display

The present time display appearing on the map screen can be switched.

- 1 Touch Setup in the Menu screen.
- 2 Touch On or Off for Clock Indication.
  - The pressed touch switch will become brighter.
- 3 Touch OK.





- Touch **Default** in the Setup screen to return all items to the default settings.
- The present time displayed is automatically adjusted using GPS signals. (You cannot adjust the time yourself.)

## 2. Adjusting the screen and setting the sound

## Switching miles and km display

Miles and km display on the map screen can be switched.

- 1 Touch Setup in the Menu screen.
- 2 Touch miles or km for Distance.
  - The pressed touch switch will become brighter.
- 3 Touch OK .



## **Switching the Time Zone**

The time zone for every region in the U.S. can be switched.

#### Switching the Time Zone

- 1 Touch Setup in the Menu screen.
- 2 Touch Change for Adjust Time Zone.

- Touch either Pacific, Mountain,
  Central, or Eastern.
  - The pressed touch switch will become brighter.
- 4 Touch OK.







Touch **Default** in the Setup screen to return all items to the default settings.

## Setting the Daylight Saving Time

- 1 Touch Setup in the Menu screen.
- 2 Touch Change for Adjust Time Zone.

- Touch On or Off for Daylight Saving Time.
- 4 Touch OK .





- Touch **Default** in the Setup screen to return all items to the default settings.
- Touch On to gain the clock display 1 hour ahead.
  - Touch Off to return the clock display to the previous setting.
- The present time displayed is automatically adjusted using GPS signals. (You cannot adjust the time yourself.)

## 2. Adjusting the screen and setting the sound

## **Setting the volume**

The sound volume during route guidance can be adjusted.

#### Adjust the volume

- 1 Touch Volume in the Menu screen.
- 2 Touch either 1, 2, 3, 4, 5, 6 or 7.
  - The pressed touch switch will become brighter.
  - Touch Off to turn OFF the volume.
     When the volume is OFF, touch any of
     the navi volume switches to turn the
     volume back ON.

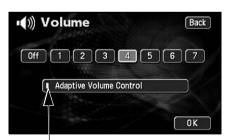


3 Touch OK.

#### Set the automatic highway volume switch function

When driving at high speeds, the set volume can be automatically raised one level. Either automatic switch ON (automatically raise) or OFF (not raised) can be selected.

- 1 Touch Volume in the Menu screen.
- 2 Touch Adaptive Volume Control .
  - When turned ON, the movement display light turns yellow.
- 3 Touch OK.



Movement display light



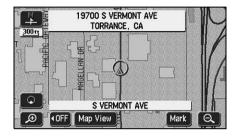
When exceeding 50 mph (80 km/h), the volume automatically increases one level and goes back down to its original level when the speed goes down below 43 mph (70 km/h).

## 3. Map displays

## **Present location display**

The present location screen appears when switching the engine to ACC or ON.

- The present location of your vehicle is displayed on the map.
- When the menu screen or any other map screen besides the present location map screen is displayed, press MAP to return to the present location screen.
- Press MAP in the present location screen to make all the geographical names near the present location appear.





After having installed the device, or after having reconnected the battery terminal, the vehicle position mark (a) may differ from the actual present location (misalignment of the vehicle position mark (a)). Continue driving and, in a moment, the present location will be automatically corrected using the map matching and GPS data. (Depending on the case, this may take several minutes.) If signals from the GPS are not utilized and the present location is left uncorrected, park the vehicle in a safe place and correct the present location. (Refer to page 134)

## 3. Map displays

## Moving the map (one-touch scroll)

When a map is displayed, touching the map directly (anywhere except the touch switches) makes the point scroll to the center of the display. The street name around the scrolled point may appear.

#### Moving the map

- Touch the map (anywhere except the touch switches).
  - On the bottom left of the map, the distance in a direct line from the present location is displayed.
  - Touch continuously around the center of the screen and the map will move slowly.
  - Touch continuously near the edge of the screen and the map will move quickly.



While scrolling



Scrolling stopped



- For safety reasons, the map can only be scrolled up to a predetermined distance while driving.
- The map orientation can be switched while driving.
  - \* For a scrolled map, you can only switch from "Heading up" to "North up". (Switching from "North up" to "Heading up" impossible)
- Move the map with one-touch scroll and the map will freeze into position and will
  not move even if moving the present location. Press MAP to return to the
  original status (moving map).

### Setting the Street Name display while scrolling

You can select between setting the Street Name display ON (display) or OFF (not display) while scrolling.

- 1 Touch Setup in the Menu screen.
- 2 Touch On or Off for Street Name on Scroll Map.
  - The pressed touch switch will become brighter.
- 3 Touch OK.

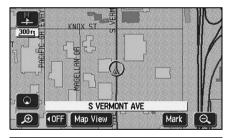


## Switching the touch switch display

When a map is displayed, the number of touch switches displayed on the screen can be reduced.

#### Switching the touch switch display

- 1 Touch **✓ OFF**.
  - If the touch switches are not displayed, this operation cannot be performed via a touch switch. First display the touch switches on the screen and then proceed.
  - If the touch switches are not displayed, touch ON to make them appear on the screen.







Touch **Default** in the Setup screen to return all items to the default settings.

## 3. Map displays

#### Setting touch switches to display or not display

You can set the switches to be hidden on pressing the **OFF** touch switch.

- 1 Touch Setup in the Menu screen.
- Touch Change for **◆OFF** Function.

- Touch the touch switches desired for non-display.
  - Touch OFF on the map screen and the touch switches selected here will not appear.
- 4 Touch OK.







- Touch **Default** on the switch display setting screen to return the switch display setting to default status.
- To display all the touch switches, touch those displayed in toned-down color.

**♦ OFF** or **ON** ▶ are not displayed.

## Switching the map reduction scale

The map reduction scale (map range) can be switched to any desired setting from 40,960,000:1 to 2,500:1. Also, if the destination is set, you can switch to the reduction scale showing the entire route to the destination with one touch.

Touch switch		Reduction scale	Scale display	Touch switch	Reduction scale	Scale display
City map	+	1/0.0025 million	75ft		1/0.64 million	4mi
	⊕	1/0.005 mi <b>ll</b> ion	150ft		1/1.28 million	8mi
	<u></u>	1/0.01 million	300ft		1/2.56 million	16mi
	<b>1</b>	1/0.02 million	700ft		1/5.12 million	30mi
		1/0.04 million	0.25mi		1/10.24 million	60mi
		1/0.08 million	0.5mi	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	1/20.48 million	130mi
		1/0.16 million	1mi	<u>a</u>	1/40.96 million	250mi
		1/0.32 million	2mi			

#### Switching to the desired reduction scale

- 1 To widen the map's range, touch
  - ⊕. To shrink it down, touch 
    ⊕.
  - Every time the touch switch is touched, the scale goes up/down one level at a time.
  - After having touched or , touch a number on the scale bar to switch to the reduction scale represented by that number.



- Touch continuously on a or p for at least 1 second to switch the scale with no increments (free zoom).
- The reduction scale switched to will be indicated with a yellow mark.

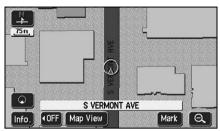


- The a switch will disappear when setting to the maximum range (250 mile scale diagram).
- For safety reasons, the scale cannot be free zoomed while driving.

## 3. Map displays

## **Displaying city maps**

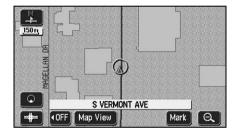
For the area where the city map is provided, 1/0.0025 million (75 ft) scale city map can be displayed.



Street map

#### Switching to city map display

- 1 When 150 ft scale map is displayed, touch .
  - 75 ft scale city map is displayed.



#### Canceling the city map display

1 When 75 ft scale city map is displayed, touch ੑ .

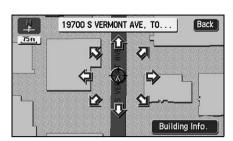


- Only in the area where the city map is provided, is displayed on the 150 ft scale map and becomes selectable (If you move the map or the present location to the area where the city map is not provided, the city map being displayed is automatically canceled).
- On city maps, the one-way traffic is indicated with mark. The city map cannot be moved while driving.

## Displaying the building data

On the 75 ft scale city map, the building data can be displayed.

- Touch Info. on the 75 ft scale city map.
- 2 Touch to move the cursor onto the building where you want to see the data.
- 3 Touch Building Info. .
  - The building data is displayed.
  - If several facilities are included in a building, the facilities list is displayed.
     Touch one of those where you want to see the data.



## Switching the building shape display

As well as city map (75 ft scale map), the Building Shape can be displayed on the 150 ft and 300 ft scale maps.

- 1 Touch Setup in the Menu screen.
- 2 Touch On or Off for Display Building Shape.
  - The pressed touch switch will become brighter.
- 3 Touch OK .





No data is recorded for the buildings displayed in yellow.

## 3. Map displays

## Switching the map orientation

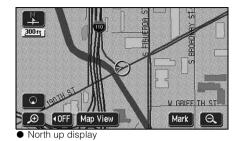
The orientation of the map being displayed can be switched.

North up display



The map appears with north pointing up at all times regardless of the vehicle's heading.

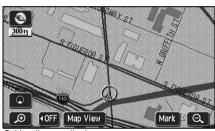
(The maps appearing in this manual are shown in north up display form.)



Heading up display



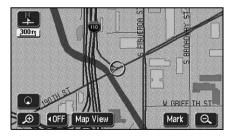
The map appears with the heading of the vehicle pointing up at all times.



Heading up display

#### Switching the map orientation

- 1 Touch 🖺 or 🔕.
  - Switches between "North up" display and "Heading up" display.





When in heading up display, maps retrieved by setting the destination and allroute display screens are shown with north up. However, when returning to the present location screen, the display will switch back to heading up.

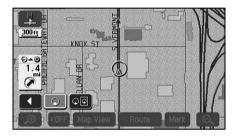
## Switching to double screen display

When a map is displayed, the screen can be divided into two parts as shown below.

Ex.) Two maps can be displayed with; different reduction scale screens, North up and Heading up screens, POI display ON and OFF screens.

#### Switching to double screen display

- Touch 🖸 when a map is displayed on the screen.
- **2** Touch **○ ○**.
  - The screen on the left can be operated the same way as when only one screen is displayed.



## 3. Map displays

### Operating the screen on the right

Touch the map shown in the screen on the right.



- 2 Touch any touch switch.
- Touch Back. Touch Back to return to the double screen map display.
  - Touch  $\bigcirc$  or  $\bigcirc$  to switch the map reduction scale.
  - Touch or to switch the map orientation





- When in double screen display, only the map appearing on the left screen can be moved with one-touch scroll.
- Maps retrieved by the destination setting screen or all-route display screen will
  appear as one screen. When returning to the present location screen, the
  double screen form will reappear.

### POI vicinity display

When a POI vicinity is displayed in the screen on the left, you can switch it either ON (display) or OFF (not display) to appear on the right screen.

Please refer to the POIs that can be displayed on "POI display" on page 38.

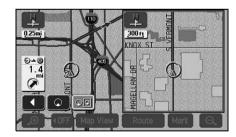
- Show POI Icons: ON
- 1 Touch Show POI Icons .
  - The actuation right is lit and turns "Show POI Icons" to ON.
- Show POI Icons: OFF
- Touch Show POI Icons while the Actuation right is lit.
  - The actuation right is off and turns "Show POI Icons" to OFF.



-Movement display light

### Canceling the double screen display

- Touch when a map is displayed on the screen.
- 2 Touch .
  - The pressed touch switch will become brighter and the monitor will return to single screen display.





- When a POI vicinity is displayed, the settings in the screen on the left and right are the same. However, POIs not displayed on the left screen cannot be shown on the right screen.
- If re-displaying the double screen, the reduction scale for the maps shown will be the same as the previous double screen display scales.

# 3. Map displays

# POI display

POI landmarks can be displayed on the map.

POI types

Restauran	All Restaurants
	American
	Chinese
	Continental
t	Fast Food
	French
	Italian
	Japanese
	Mexican
	Sea Food
	Thai
	Other Restaurants
1S	Convenience Store
dot	Department Store
Shopping	Grocery Store
ρſ	Home and Garden
	Pharmacy
	Shopping Mall
	Specialty Food Store
	Other Retail Stores
Αι	Auto Club
Ito	Car Wash
mo	Gas Station
tiv	Parking
е	Service & Maintenance
	Other Automotive Stores
Tra	Airport
ave	Bus Station
ķ	Campground
	Ferry Terminal
	Hotel
	Rental Car Agency
	Rest Area
	Train Station
Re	Amusement Park
Recreation	Botanical/Zoological Gardens
	Casino
	Cinema
	Golf Course
	Historical Monuments

	Horse Racing
	Marina
	Museum
	National and State Parks
	Ski Resort
	Speedway
	Sports Complex
	Theater
	Tourist Attraction
	Tourist Information
	Video Rental
	Winery
၁၁	City Center
mc	Convention Center
пш	Court House
Community	Fire Station
У	Government Offices
	Higher Education
	Hospital
	Library
	Parks
	Police Station
	Post Office
	School
Ва	ATM
nkiı	Bank
ÐΓ	Other Financial Services
Ó	Beauty and Barber Shops
Banking Other	Coffee House
	Dry Cleaning
	Health and Fitness Club
	Ice Cream Parlor
	Other Business Facilities



- Maps with a scale of 0.5 miles or greater detail can be displayed. (Excluding all route display screens.)
- $\bullet$  POI landmarks can only be displayed within a 20 mile radius from the  $\ \textcircled{a}$  or  $\ \textcircled{+}$  mark. (Up to 200 landmarks.)
- ullet Move the igotimes or igotimes mark to switch the POI landmark displays.

# 3. Map displays

### Display landmarks by a simple operation while driving

POI landmarks can be displayed by simple operations while driving.

- 1 Touch Map View if a map is displayed.
- 2 Touch Show POI Icon .
- Touch the POI to be displayed

  (Gas Station, ATM, Parks,
  Grocery Store, Restaurant,
  Hotel).
  - The POI landmark touched will appear.



#### Delete a POI landmark

- 1 Touch Map View if a map is displayed.
- 2 Touch Show POI Icon .
- 3 Touch POI Off.



### Displaying multiple types

Multiple POI landmarks (5 types) can be displayed simultaneously.

- 1 Touch Map View if a map is displayed.
- 2 Touch Show POI Icon
- 3 Touch More.

- 4 Touch the POI type to be displayed.
  - Touch List All Categories to show all the types of POI.
- Touch the POI name to be displayed.
  - Up to 5 POI landmarks can be displayed simultaneously.
  - If having made an error, touch

    Delete to cancel one POI landmark at a time.
  - Touch an already selected POI to cancel that POI.
- 6 Touch OK .
- 7 Touch Back
  - The selected POI landmark is displayed.







# 3. Map displays

### Search for POI vicinity

Names of POIs close to the  $\bigcirc$  or  $\bigcirc$  mark on the map and their distance in a straight line from the  $\bigcirc$  or  $\bigcirc$  mark can be displayed. With  $\bigcirc$ , it is also possible to display a direction.

- 1 If POI landmarks are displayed on the map, touch Map View
- 2 Touch Show POI Icon
- 3 Touch Local POI List
  - A list of the selected POIs appears.

- Touch the POI name to be displayed.
  - A map with the selected POI in the center is displayed with the POI name and its distance in a straight line to the present location is displayed.
  - If the mark is displayed, POIs
     ahead of it are shown with a mark
     (arrow pointing upwards). (Position viewable freedom)
    - (arrow pointing upwards). (Position viewable from the vehicle directional heading.)

• If a destination is set, a list of POIs along the route can be displayed. Refer to the Section "Displaying a list of POIs along the set route" on page 44.





- ullet Only landmarks within a 20 mile radius of the  $\bullet$  or  $\bullet$  mark can be searched for. (Up to 200 landmarks.)
- ullet POI landmarks can be listed in the order of proximity to the  $\begin{cal}$  or  $\begin{cal}$  mark or by POI icon category.
- Distance order display



Category order display



Name order display



- Touch **Dist.** to change the listing order to proximity to the **(a)** or **(b)** mark.
- Touch **Icon** to change to a POI icon category listing order.
- Touch Name to change the name listing order.

# 3. Map displays

### Displaying a list of POIs along the set route

If a destination has been set, a list of POIs whose distance and direction correspond to the set route can be selected. (The distances shown represent distances left to travel to the POIs.)

- 1 Touch On Route .
  - If a list displaying POIs along the set route is shown, the movement display light appears yellow.
  - Touch the POI name to display a map with that POI in the center, its name and the distance to that POI from the present location.



Displaying POI information

- Touch a POI landmark displayed on the map.
  - The name of the POI and the linear distance from the current location will be displayed.
- 2 If Info. is displayed, touch Info. to display a description of that POI.
  - The data for the POI is displayed.





- If a route is not displayed on the map shown on the screen, a list of POIs along the set route cannot be displayed.
- There may not be a description available for some POIs.

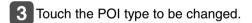
# Setting the type of POI vicinity to be retrieved while driving

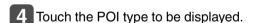
The 6 items appearing in the POI vicinity menu screen ( Gas Station, ATM , Parks

Grocery Store, Restaurant, Hotel) can be set at random.

This POI vicinity menu can be displayed even while driving and POI landmarks can be displayed on the map screen.

- 1 Touch Setup in the Menu screen.
- 2 Touch Change to Show POI Icons.











# 3. Map displays

Touch the name of the POI to be displayed.

6 Touch OK .



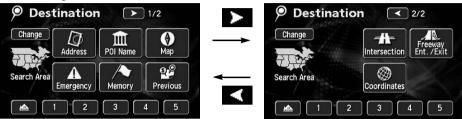


- Touch **Default** in screen **2** to return all items to their default settings.
- Touch **Default** in screen **3** to return the POI vicinity retrieved while driving to its default setting.

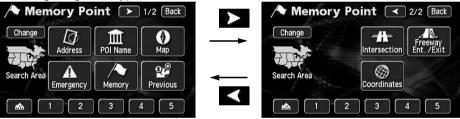
When setting or adding a destination, registering your home, memory points, special memory points or detour memory points, maps corresponding to these setting and registration points can be retrieved using various methods.

For procedures on how to select a map retrieval method, see the corresponding page for each item below.

■ When setting a destination



- Setting a destination (Refer to page 66)
- Add a destination (Refer to page 77)
- When registering a memory point



- Registering your home (Refer to page 103)
- Registering memory points (Refer to page 107)
- Registering special memory points (Refer to page 117)
- Registering detour memory points (Refer to page 121)

The screens above are examples of screens when setting a destination and when registering a memory point.

Touch the map retrieval method on the displayed Menu screen to select an item.

Item (touch switch)	Function
Address	By entering an address, the map corresponding to that point (or area) can be displayed. (Refer to page 50)
POI Name	By entering the name of a POI, the map corresponding to that POI's vicinity of can be displayed. Also, enter the name of an address to display the map of that area. (Refer to page 52)
<b>₩</b>	The map displayed on the screen before having opened the Menu screen can be returned.
Emergency	Police stations, hospitals are displayed in the order of proximity to the present location. (Refer to page 58)
Memory Memory	The map of the vicinity of a memory point can be displayed. (Refer to page 58) [Only for when memory points are registered. For information concerning memory points, see page 102.]
Previous	The map of the vicinity of a previously set destination or the previous start point can be displayed. (Refer to page 59) [Only for when an entry in the destination archive is registered. For information concerning the destination archive, see Page 125.]
Intersection	Intersections can be displayed by entering the names of two roads that cross each other. (Refer to page 59)
Freeway Ent. /Exit	A map can be displayed by indicating a freeway entrance/exit. (Refer to page 61)
Coordinates	A map can be displayed by entering latitude and longitude coordinates. (Refer to page 62)
Vicinity of special memory point	[When setting a destination] A route search is started for a registered geographical point. [Only when each respective point is registered.] [When registering a memory point] The map for a registered point can be displayed. [Only when each respective point is registered.] • Registering your home (Refer to page 103) • Registering 1 to 5 special memory points (Refer to page 117)

## Changing the search area

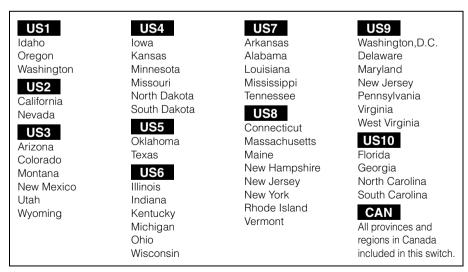
This navigation system divides the U.S. and Canada into 11 block areas.

For any search method employed, the system will conduct a search in the area you are occupying unless the search area has been changed. To conduct a search in another area, first set the search area prior to beginning the search.

1 Touch Change .

- 2 Touch the area where a search is to be initiated.
  - For a list of the areas, see the figure on the right.
- 3 Touch OK .





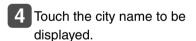
## Retrieving a map using an address

If the address is known, its corresponding map can be retrieved by selecting that address.

- 1 Touch Street and enter one character at a time.
  - If having made a mistake, touch to delete one character at a time.
  - Lettered touch switches with no corresponding search result will appear inverted. Input is not enabled even if touching them.



- 2 Touch List .
- Touch the street name to be displayed.







# Touch House # and enter one number at a time.

• If you make a mistake, touch \_\_\_\_ to delete one character at a time.



## 6 Touch OK .

- The map searched for by entering an address is displayed.
- If there is an address that corresponds with the entered house number, the map of the vicinity of that address will be displayed.
- If there is no address corresponding to the entered house number, a diagram of the vicinity of the corresponding street will appear.

### Retrieving a map using a POI name

A map can be retrieved by entering a partial POI name or by narrowing down from a list of several POI types, regions, street or city names, etc. Also, a map can be retrieved by entering the name of an address.

When the number of candidates is low, a map can be selected directly from the list screen.

- 1 Enter the POI name (or address) by touching one character at a time.
  - Up to 24 characters can be entered.
  - If having made a mistake, touch to delete one character at a time.
  - Lettered touch switches with no corresponding search result will appear inverted. Input is not enabled even if touching them.



# 2 Touch List .

- A POI list screen containing names searched for from the entered characters is displayed.
- Touch the POI name to be displayed.
  - Narrow down a long list of candidates
    using City and Category start
    a search after having eliminated items
    from the list.
  - When indicating the area of the POI to be displayed in the POI list screen,



touch **City** and then touch **Nearest 5 cities** or **Input City name**. When indicating the POI type, touch **Category**.



If entering less than 4 search candidates, the list screen will automatically be displayed.

### If narrowing down candidates per area

### When narrowing down candidates from the nearest 5 cities

- 1 Touch City on the list screen.
- 2 Touch Nearest 5 cities .
- Touch the name of the city when the desired POI is located.
- Touch the POI name to be displayed.
  - Touch Name to return to screen

    1 on "Retrieving a map using a
    POI name" (Page 52).
  - Touch Category to indicate the type of POI to be displayed on the POI list screen. (Refer to page 55)



### When narrowing down the list by entering a city name

- 1 Touch City on the POI list screen.
- 2 Touch Input City name
- Touch one character at a time to enter the city name.
  - Up to 24 characters can be entered.
  - If having made a mistake, touch to delete one character at a time.
  - Lettered touch switches with no corresponding search result will appear inverted. Input is not enabled even if touching them.
  - Every time a character is touched, the number of POI names searched for is indicated



- 4 Touch List .
  - A POI list screen containing names searched for from the entered characters is displayed.
- 5 Touch the POI name to be displayed.
  - Touch Name to return to screen 1 on "Retrieving a map using a POI name" (Page 52).
  - Touch **Category** to indicate the type of POI to be displayed on the POI list screen. (Refer to page 55)

### When narrowing down the list by POI type

This is one way to narrow down the list of POI types. This is convenient when knowing what type of POI is the destination. Narrow down a long list of candidates using **City** and start a search after having eliminated items from the list.

- 1 Touch Category on the POI list screen.
- 2 Touch the POI type to be displayed.
  - Touch List All Categories to show all the types of POI.



POI type indication screen

- Touch the POI name to be displayed.
  - Touch Name to return to screen
     on "Retrieving a map using a POI name" (Page 52).
  - Touch City to indicate the POI area to be displayed on the POI list screen. (Refer to page 53)





- POI type selection is set for 1 type. After setting in Category, City can also be selected
- If there is no corresponding POI for the set type, no list will appear. Set a different type.
- Depending on the POI, the displayed geographical point is not always the actual location of that POI but can be a representation of the address of that location.

POI types

Restau	All Restaurants
	American
	Chinese
an	Continental
7	Fast Food
	French
	Italian
	Japanese
	Mexican
	Sea Food
	Thai
	Other Restaurants
4S	Convenience Store
ğ	Department Store
Shopping	Grocery Store
ηg	Home and Garden
	Pharmacy
	Shopping Mall
	Specialty Food Store
	Other Retail Stores
Αι	Auto Club
Automotiv	Car Wash
mo	Gas Station
tiv	Parking
Ø	Service & Maintenance
	Other Automotive Stores
Τr	Airport
ave	Bus Station
<u>~</u>	Campground
	Ferry Terminal
	Hotel
	Rental Car Agency
	Rest Area
	Train Station
Recreation	Amusement Park
	Botanical/Zoological Gardens
	Casino
	Cinema
	Golf Course
	Historical Monuments

	Horse Racing
	Marina
	Museum
	National and State Parks
	Ski Resort
	Speedway
	Sports Complex
	Theater
	Tourist Attraction
	Tourist Information
	Video Rental
	Winery
က	City Center
mc	Convention Center
nm	Court House
Community	Fire Station
У	Government Offices
	Higher Education
	Hospital
	Library
	Parks
	Police Station
	Post Office
	School
Ва	ATM
nki	Bank
Banking Other	Other Financial Services
Q	Beauty and Barber Shops
he	Coffee House
ř	Dry Cleaning
	Health and Fitness Club
	Ice Cream Parlor
	Other Business Facilities



- Depending on the POI, the displayed geographical point is not always the actual location of that POI. The following cases may result in a search based on data that differs from general publications.
- Facilities such as art museums in department stores and amusement parks may be located in areas that differ from their customer service centers.
- The address appearing in maps may contain the geographic name of a neighboring area. Also, the address may only appear in part or may be abbreviated.

### Retrieving a map in the event of an emergency

In the event of a traffic accident, a problem with your vehicle or other emergency, a map for the nearest police station, hospital can be retrieved.

Switch to this mode and the address and longitudinal/latitudinal coordinates of the present location will be indicated on the upper part of the screen.

- 1 Touch Police Station or Hospital
  - While driving, the

Nearby Police Station or

Nearby Hospital will appear, and you will be able to call up a map for the nearest police station or hospital.

Touch the POI to be displayed from the list.





## Retrieving a map using a memory point

If at least a few memory points are registered in the device in advance (Refer to page 107), a map can be retrieved using one of these points.

Touch the memory point to be displayed from the list.



## Retrieving a map using the archive

Up to 100 latest previously set destinations are automatically recorded and a map for the same point can be easily retrieved.

- Touch the destination archive to be displayed from the list.
  - By touching
    - **Previous Start Point** you can call up the previous start point.



### Retrieving a map using an intersection name

An intersection can be retrieved from 2 intersecting streets.

- 1 Enter the Street Name by touching on the characters on the screen one character at a time.
  - Up to 24 characters can be entered.
  - If having made a mistake, touch to delete one character at a time.
  - Lettered touch switches with no corresponding search result will appear inverted. Input is not enabled even if touching them.



- Every time a character is touched, the number of POI names searched for is indicated
- Touch **List** to display a list of the applicable streets.



- Your home and special memory points are not recorded in the destination archive
- Refer to the Section "Deleting entries from the destination archive" on page 125, for information concerning the deletion of entries in the destination archive.

2 Touch Street Name from the list.



- 3 Enter one more Street Name in the same manner.
  - Up to 24 characters can be entered.
  - If having made a mistake, touch to delete one character at a time.
  - Lettered touch switches with no corresponding search result will appear inverted. Input is not enabled even if touching them.



- Every time a character is touched, the number of POI names searched for is indicated.
- Touch **List** to display a list of the applicable streets.
- 4 Touch Street Name from the list.
  - The map retrieved from the entered street names appears.



# Retrieving a map using a freeway exit/entrance name

A map can be retrieved using the name of a freeway or an exit/entrance.

- 1 Enter the freeway name by touching on the characters on the screen one character at a time.
  - Up to 24 characters can be entered.
  - If having made a mistake, touch 
     delete one character at a time.
  - Lettered touch switches with no corresponding search result will appear inverted. Input is not enabled even if touching them.



- Every time a character is touched, the number of POI names searched for is indicated.
- Touch List to display a list of the applicable freeways.
- 2 Touch the freeway name to be displayed.



Touch either Entrance or Exit to specify the freeway entrance or exit.



- Touch the entrance or exit name to be displayed form the list.
  - Touch **Input Name** to enter the entrance or exit name directly.
  - Touch Dist. Sort to sort the entries in order of the distance from the present location.



### Retrieving a map using the latitude/longitude

A map can be retrieved using the latitude/longitude.

- 1 Enter the number by touching the switches on the screen one number at a time.
  - If having made a mistake, touch to delete one number at a time



- 2 Touch OK .
  - The map retrieved from the entered latitude and longitude appears.

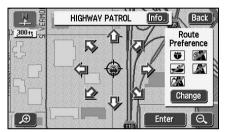
# 5. Performing operations on a retrieved map

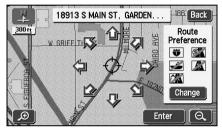
When retrieving a map, either a map with a pinpoint search result or without a pinpoint search result (vicinity) will be displayed. Information on POIs can be displayed from the map retrieved.

### Performing operations on a displayed map

The following conditions are necessary to display a map from a pinpoint:

- (1) When entering a POI name in "Retrieving a map using a POI name"
- ② When "Retrieving a map in the event of an emergency"
- ③ When "Retrieving a map using an intersection name"
- When a corresponding POI is made available when "Retrieving a map using a freeway exit/entrance name"





- When a search is made using a pinpoint
- When a search cannot be made using a pinpoint

The following operations are enabled on a retrieved map.

■ Changing the position

Scroll to change the position.

■ Displaying POI information

The POI data displayed as per the conditions described in steps (1) to (4) above is shown.

## **Displaying POI information**

- 1 Touch Info.
  - Information on the POI is displayed

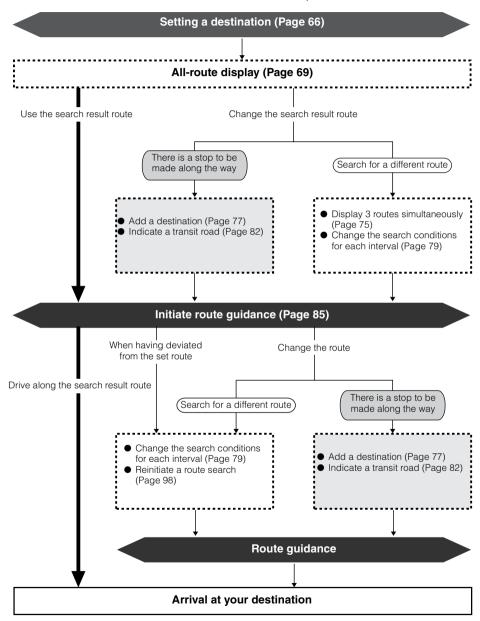




- Information on POIs can be displayed only when the method described in ① to
   ② above was used to call up a map.
- There may be no information available for some POIs.

# 1. Setting the destination and searching for a route

To search for a route to guide you to a destination, settings including a destination setting, additional destinations, and route search conditions are required.



### 2. Set a destination and search for a route

Route guidance begins after setting your destination.

The destination is set as per the following methods:

- One-touch setting
- Set using a registered point (your home, special memory point)
- Set using the map retrieval method

Item	Setting method
One-touch setting	Scroll the map and touch <b>Enter</b> to set the destination.
	Set your home as the destination only if your home is registered. This cannot be used if your home is not registered. (Refer to "Registering your home" (Page 103).)
Set from a registered point	Set an already registered special memory point (up to 5 points) as the destination. This cannot be used if there are no special memory points registered.  (Refer to "Registering a special memory point" (Page 117).)
Set using a map retrieval method	Search using a map retrieval method to set a destination. (Refer to <b>"How to retrieve maps"</b> (Page 47).)

Set the destination to automatically start a recommended route search.

When adding a destination or a route other than the recommended route or setting a transit road, proceed after the route search is complete.



- When setting the destination, use a detailed map with a reduction scale of under 0.5 miles.
- Geographical points on maps representing set destinations are automatically registered (up to 100 points) and can be used to retrieve a map when setting a destination. When exceeding 100 points, the oldest entry is deleted every time a new one is entered. Unnecessary points can be deleted. (Refer to "Deleting entries from the destination archive" (Page 125).)

### 2. Set a destination and search for a route

### **Setting a destination**

#### One-touch setting

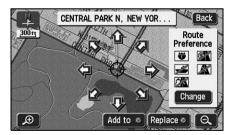
A destination can be set in the map presently displayed.

- Touch the map.
- 2 Touch Enter .



- Touch Enter.
  - Touch to move the map.
  - A symbol will appear for the destination point on the position and a route search will begin.
  - If a destination is already set, touch
     Replace to delete the set destination and set a new one.
  - Touch Add to to add a destination.
     It will be added as the next destination after the present location.





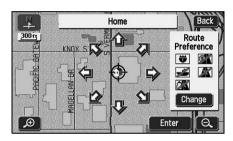


If a map with a reduction scale wider than 0.5 miles is displayed, switch to a 0.5 mile reduction scale.

### Set from a registered point

- 1 Touch DEST in the MAIN MENU screen.
- Touch "Home" icon or special memory points 1 to 5.
  - The symbol will be displayed at the location of your home or the special memory point and the route search will begin.
  - A registered icon is used to represent your home.
  - If a destination is already set, touch
     Replace to delete the set destination and set a new one.
  - Touch Add to to add a destination.
     "Adding a destination" (Page 77)
     (Refer to 5 to 6 .)





### Set using the map retrieval method

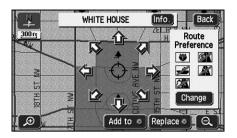
- 1 Touch **DEST** in the MAIN MENU screen.
- 2 Select the map retrieval method and the map corresponding to the point to be set as the destination will appear.
  - See pages 47 and 63, "How to retrieve maps" and "Performing operations on a displayed map".
- 3 Touch Enter.
  - A symbol will appear for the destination point on the position and a route search will begin.





### 2. Set a destination and search for a route

- If a destination is already set, touch
   Replace to delete the set destination and set a new one.
- Touch Add to to add a destination.
   "Adding a destination" (Page 77)
   (Refer to 5 to 6 .)



#### Route search

Set a destination and a route search will automatically start.

- A route search will continue even if switching to other screens.
- The route will not appear if the distance to the destination is too short.
- When a route search is complete, an all-route display (all routes from the present location to the destination) screen will appear.

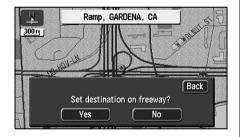


If the destination is on a freeway or in an inaccessible area, the following screen will appear. Touch the item corresponding to the situation.

- Touch Yes to set the destination on the highway.
- Touch **No** to set the destination on another road.

If the destination is inaccessible or if there is a river, railroad or other obstruction in its vicinity, the following screen may be displayed.

- Touch **No** to set that point as the destination.
- Touch **Yes** to move the destination.





If a route search is conducted on a freeway or toll road interchange (IC), the search result route may start from a nearby local road. In such a case, reinitiate a route search (Refer to page 98).

### **All-route display**

When the route search is complete, an all-route display screen appears.

• Press **MAP** after the all-route appears, or do not operate the device for at least 3 seconds after you start driving, and route guidance will automatically begin.

### Route displays

The routes will be displayed in the following colors.

#### • Blue

The route when only one destination is set or the present segment up to the first destination set in case of multiple destinations appears blue.

#### · Light blue

The traffic regulation data in the segment is not corresponded on the map disc. The route guidance with voice and screen display such as intersection guidance is not supported.

#### Purple

All segments other than the present segment up to the next destination when multiple destinations are set.

#### Orange

Display seasonally restricted segment (Refer to page 72)



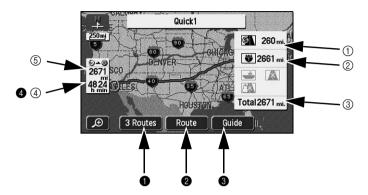
Route search complete screen (all-route)

### 2. Set a destination and search for a route

### All-route display and touch switches

On the all-route screen, routes from the present location to the destination, the estimated arrival time and distance are indicated.

Also, the search result routes can be changed and the guidance data can be displayed.



#### ■ Items displayed

Data up to the final destination is displayed.

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 total distance on all roads including toll roads, freeways, local streets to the destination (when multiple destinations are set, the final destination) are displayed.

(4) Required time

The required time up to the destination is indicated.

(5) Distance remaining

The distance to the destination for the route presently taken are displayed. (If deviating from the road after route guidance has started, the distance to the destination in a straight line is indicated.)

#### ■ Touch switches

The following operations are enabled using the touch switches appearing on the allroute display screen.

#### 3 Routes

Different routes are displayed to enable a selection. (Refer to page 75)

#### 2 Route

The route change screen is shown to enable the modification of the search conditions. Also, indicating an additional transit route to the destination is possible. (Refer to pages 77, 79 and 82.)

#### 3 Guide

Route guidance can be initiated.

(Refer to page 85) After route guidance is started, the display returns to the present location screen.

When two or more destinations are set, you can switch the display of the required time / remaining distance to each of the destinations by touching the remaining distance display. (Refer to page 96)

If deviating from the road after route guidance has started, the distance to the destination in a straight line is indicated.



- The search result route is a reference route to the vicinity of the destination. In no way is it the shortest, fastest or least congested route.
- The required time is calculated from the average vehicle speed (Refer to page 90) and may have a slight deviation depending on the driving conditions.
- In the following situations, 3 routes cannot be displayed.
  - •When 2 or more destinations are set
  - •When a transit road is indicated
  - •After route guidance has started
- An all-route diagram can be displayed even after route guidance has started. (Refer to page 95)

## 2. Set a destination and search for a route

### Display or bypass a restricted segment

#### Bypassing a restricted segment

### Bypass using the all-route display screen

- 1 Touch Route in the all route display screen.
- 2 Touch Route Preference
- 3 Touch

#### Allow Season Restricted Road

- If searching for a route that passes through a restricted segment, an indicator will light up.
- Touch **OK** to start the route search.



#### Bypass using the present location screen

- 1 Touch Route if a map is displayed.
- 2 Touch Route Preference
- 3 Touch

#### Allow Season Restricted Road

- If searching for a route that passes through a restricted segment, an indicator will light up.
- Touch OK to start the route search.



#### How to display message on a restricted segment

The message appearing if a search result route has a restricted segment can be turned ON (display) or OFF (not display).

- 1 Touch Setup in the Menu screen.
- 2 Touch either On or Off for Notify Traffic Restriction.
  - The pressed touch switch will become brighter.
- 3 Touch OK





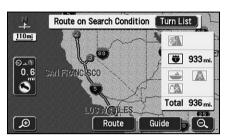
Touch **Default** in the Setup screen to return all items to their default settings.

### 2. Set a destination and search for a route

### Display route data (guided road information)

The divided route data to the destination by its entrances/exits of interchanges (IC), transit roads, national roads or local streets can be displayed. The map at the departure or destination area can also be displayed.

- Touch Map View in the present location screen.
- 2 Touch Route Overview
- 3 Touch Turn List .
  - Route data is divided at entrances/ exits of interchanges (IC), junctions (JCT) and at the turning points of each destination, transit and other roads.
  - The road name and distance appear for each piece of divided route data.
- 4 Touch Map.
  - Maps for the various set points are displayed.







- If the present location is on the route, the wehicle position mark will appear in the route data screen.
- If the present location is not on the route (if having deviated from the route), data will be displayed from the point the route is displayed.

# 3-route simultaneous display (3-route search function)

Set the destination and a recommended route will be searched for resulting in an all-route display from the present location to the destination. Other than the recommended route ("Quick 1"), "Quick 2" and "Short" routes will also be displayed to enable a selection.

- 1 Touch 3 Routes on the all-route display screen to start the route guidance.
  - 3 routes will be displayed in different colors along with the distance and required time.
- 2 Touch the route name.
  - The selected route is displayed and the all-route display screen is shown.
  - Touching **Info.** displays the information for the three routes.







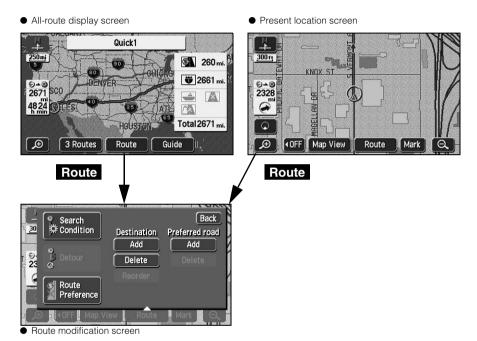
- In the following situations, 3 routes will not appear simultaneously.
- When 2 or more destinations are set
- When transit points (transit roads) are indicated
- · After route guidance has started
- Refer to the Section "Reinitiating a route search" on page 98, for the characteristics of each of the 3 routes.
- The required time is calculated from the average vehicle speed (Refer to page 90) and may have a slight deviation depending on the driving conditions.

## 3. Changing the search result route

After a route search is complete, the route can be changed by adding a destination or transit road. The following are methods for changing the route.

• Touch **Route** on the all-route display screen or the present location screen (during route guidance) to display the route modification screen.

The route modification method is set on the route modification screen.







The operations described here cannot be performed if a destination is not set.

### Adding a destination

After having set a destination, up to five more destinations can be added. In the following situations, set an additional destination.

- When setting a transit point between the present location and set destination
- When changing the set destination into a transit point and setting a new destination

Using the same method as setting a destination, touch Add to to add a destination. (Refer to "One-touch setting" (Page 66), "Set from a registered point" (Page 67) and "Set using the map retrieval method" (Page 67).)

- Touch Route
- 2 Touch Add for Destination.
- 3 Select the map retrieval method and display the map on which a destination is to be set.
  - See pages 47 and 63, "How to retrieve maps" and "Performing operations on a displayed map".



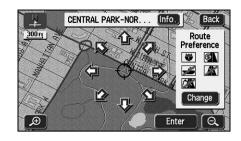




- The destination can be set on a map with a scale of 0.5 miles or greater detail.
- Geographical points on maps representing set destinations are automatically registered (up to 100 points) and can be used to retrieve a map when setting a destination. When exceeding 100 points, the oldest entry is deleted every time a new one is entered. Unnecessary points can be deleted. (Refer to the Section "Deleting entries from the destination archive" on page 125.)
- When adding a destination with a transit road (see pages 82 and 83) indicated, that transit road indication may be canceled depending on that geographical
- When 2 or more destinations are set, **Reorder** appears.

# 3. Changing the search result route

- 4 Touch Enter.
  - A destination point in the form of the
     symbol will appear in the position.
  - Up to a maximum of 5 destinations can be set.
  - When 5 destinations are already set, delete a destination and proceed. (For information concerning deletion of a destination, refer to "Deleting a destination" on page 81.)
- Touch Add in the segment to be set.





- 6 When a transit road is indicated, a cancellation screen may appear.
  - Touch Yes to cancel the transit road indication and initiate a route search.
  - Touch **No** to set the destination without canceling the indication.



Back

Preferred road

Add

· After having set the destination, the following operations are enabled from this screen:

Change the search conditions per segment (Page 79)



Search Condition

Destination

Add

• When adding more destinations, touch Add and the screen in step 3 on page 77 will appear. Repeat steps 3 to 6.

### Change the search conditions for each interval

The search conditions per segment can be changed and a search reinitiated.

Touch Search Condition in the route modification screen.



- 2 Touch the search conditions (for each route) per individual segment.
- Touch OK .
  - The route search is started.





For search condition characteristics, refer to "Reinitiating a route search" on page 98.

# 3. Changing the search result route

### Switching the destination order

The setting order of multiple destinations can be switched and a search reinitiated.

- 1 Touch Route .
- 2 Touch Reorder
  - When transit roads are indicated, a confirmation screen allowing you to cancel and reorder destinations is displayed.

Touch Yes to cancel and reorder.

Touch No to abort reordering and return to the original screen.





- Touch the name of the destinations in order starting with the next destination.
  - A new order will appear on the right of the selected destination names.
  - If having made a mistake, touch
     Cancel to cancel the destination
     name order selected



## 4 Touch OK

- When the new destination name order is determined, the route modification screen will appear automatically after about 3 seconds without having to touch **OK**.
- Without touching all the destination names, touch only the destination you want to change the order of and touch OK. That selection will move to the top of the destination order.



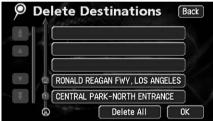
If changing the destination order with a transit road indicated (Refer to page 82), that transit road indication may be canceled.

### **Deleting a destination**

Multiple set destinations can be deleted. It is also possible to delete all the destinations at the same time.

- 1 Touch Route .
- 2 Touch Delete for Destination.
  - If only one destination is set, the screen in 4 will appear.
- Touch the destination name to be canceled.
  - Touch Delete All to delete all the destinations
- 4 Touch Yes .
  - Touch **No** to return to the original screen
  - When all destinations are deleted and only one point is set, the present location screen appears.
- 5 Touch OK
  - A route search is started and the allroute display screen appears.











When all destinations are deleted, route guidance cannot be restarted. Setting a destination is necessary to activate route guidance.

# 3. Changing the search result route

### Indicating a transit road

- 1 Touch Route .
- 2 Touch Add for Preferred Road.

- The map will move to the position of the indicated transit road.
- 4 Touch Enter.
- To indicate the road displayed, touch **OK**.
- To specify another road, touch
  - Transit roads are marked with ...
  - If only one destination is set and there are no interchanges or transit roads indicated, the screen in will appear.









- **Delete** will appear if there is a transit road already indicated.
- If a map with a reduction scale wider than 0.5 miles is displayed, switch to a 0.5 mile reduction scale.

7 If 2 or more destinations are set or if a transit road is indicated, touch

Add in the segment to be indicated.

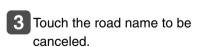


The route search is started.



### Canceling a transit road indication

- 1 Touch Route .
- Touch Delete for Preferred Road.
  - If only one destination is set, the screen in 4 will appear.



- Indicated transit roads appear with a mark.
- Touch **Delete All** to cancel all transit roads.





# 3. Changing the search result route

- 4 Touch Yes
  - Touch **No** to return to the original screen.
- Delete preference for this road?

  Yes

  No

- 5 Touch OK .
  - The route search is started.



# 4. Starting, pausing and restarting route guidance

### Starting route guidance

When the route search is complete, the all-route display screen appears. Touch **Guide** on the all-route display screen to start the route guidance. Route guidance can be paused and restarted.

- Touch **Guide** on the all-route display screen.
  - · Route guidance is started.
  - Press MAP after the all-route appears, or do not operate the device for at least 3 seconds after you start driving, and route guidance will automatically begin.



### Pausing and restarting route guidance

- Touch Suspend Guidance in the Menu screen.
  - Destinations will not be deleted even if pausing route guidance.
  - To restart route guidance, touch
     Resume Guidance on the Menu screen again.



### 5. Route guidance

When the route search is complete, guidance for the desired route can be started.

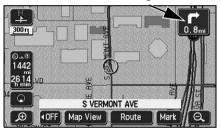
Drive towards your destination and the device will guide you along the route all the way to that destination.

### Intersection guidance

When approaching an intersection with a guidance point displayed on the present location screen (if the present location is located on the route) while route guidance is in progress, intersection guidance and voice guidance is performed. Also, when approaching a junction intersection (within about a mile), an enlarged intersection display screen will automatically appear.

#### A non-junction intersection

Distance to the next intersection where a turning is to be made and the turning direction



#### A junction intersection (enlarged guidance screen for an intersection)

- ① Intersection name display

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





- Enlarged intersection screens only appear if On is set for automatic enlarged intersection screen display. (Refer to page 88)
- Lane displays and names will not appear for intersections about which there is no data in the map disk.
- The intersection name indicated may differ from the actual intersection.
- In the following situations, intersection guidance is not performed:
  - Immediately after route guidance is started
  - In the vicinity of the destination
- Intersection guidance may be early or late.
- When approaching a junction intersection, an enlarged intersection display screen will appear.
- When an enlarged intersection display screen is displayed, the intersection name will be displayed for the junction intersection. There is no intersection guidance prior to junction intersections.
- Immediately before a turn is to be made, a chime will sound. However, the chime will not sound if the volume is set to **Off**.

# 5. Route guidance

#### Set automatic display of the intersection guidance screen

Select either to have the intersection guidance screen turned ON (display) or OFF (not display).

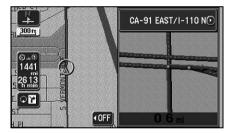
- 1 Touch Setup in the Menu screen.
- 2 Touch On or Off for Intersection Guidance.
  - The pressed touch switch will become brighter.
- 3 Touch OK.



### Canceling the intersection guidance screen

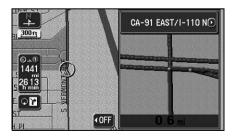
#### ■Cancel using **〈OFF**

- 1 Touch **∢OFF**.
  - Press **MAP** to redisplay the intersection guidance screen.



### ■Cancel using 🕡🗠

1 Touch ⊙r.





Touch **Default** in the Setup screen to return all items to their default settings.

# Touch to display the normal map.

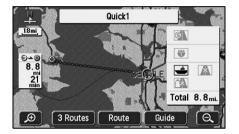
 Touch again on the screen to display the intersection guidance screen.



### Ferry crossing guidance

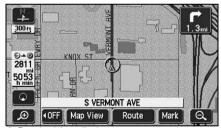
Ferry crossings are shown with a dotted line.

- Voice guidance occurs up to the ferry terminal.
- After having finished the ferry crossing, start driving and route guidance will resume in a moment.



### Setting the required time display

The required time can be indicated on the left of the map appearing on the present location screen (if the present location is on the set route) while route guidance is in progress.



Required time display



The required time include the ferry ride hours.

## 5. Route guidance

#### Setting the average speed

The following times are calculated based on the set average vehicle speed.

- Required time on the present location screen (Page 14)
- All route display screen required time (Page 69)
- Required times for the segments list (simultaneous 3 route display) (Page 75)
- 1 Touch Setup in the Menu screen.
- 2 Touch Set Speed for the Estimated Travel Time.
- 3 Set the speed for each road.
  - Touch to raise the speed, touch to lower it. (Each press raises or lowers 5 mph.)
- 4 Touch OK







- The required time is calculated from the average vehicle speed and may have a slight deviation depending on the driving conditions.
- When deviating from the set route, the destination direction mark will appear.
- When reaching the maximum speed (75 mph freeway, 55 mph main streets, 25 mph residential), the switch inverts. When reaching the minimum speed (5 mph), the switch inverts. These switches cannot be operated even if touched.
- Touch **Default** on the Change Speed screen to return to its default settings (Freeway;55 mph / Main street; 35 mph / Residential; 25 mph).

### **Highway junction guidance**

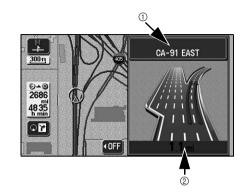
When driving on a highway with the present location screen displayed (if the present location is on the set route) while route guidance is in progress and a junction point approaches [interchange exits/entrances (IC), junctions (JCT)], the highway junction guidance screen will appear.

#### Junction point name display

The interchange exit/entrance name (IC) or the junction (JCT) direction name is displayed.

#### ② Remaining distance display

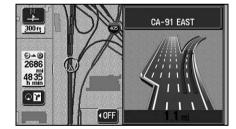
The distance up to the junction point is displayed. The distance decreases as you approach the junction point.



### Canceling the highway junction guidance screen

### 1 Touch **∢OFF**.

 Press MAP to redisplay the highway junction guidance screen.





- No highway junction guidance display will occur for junction points that do not have corresponding data in the map data. Also, the junction point name may not be displayed even if the highway junction guidance screen is displayed.
- The junction point name displayed may differ from the actual junction name.
- In the following situations, highway junction guidance is not performed:
  - Immediately after route guidance starts
  - In the vicinity of the destination
- The highway junction guidance screen may be early or late.
- When approaching the next junction point, the highway junction guidance screen will continue to be displayed.

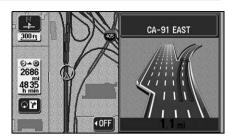
# 5. Route guidance

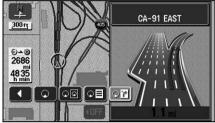
### Switching the highway junction guidance screen

Touch Or.

- To display the regular screen touch

  To display the turn list, touch
  - To redisplay the highway pattern screen, touch and ...





### Voice guidance

If approaching an intersection, junction point, transit point, interchange (ramp) exit/entrance, junction (JCT) or destination while route guidance is in progress, a voice will announce the remaining distance to those points and up to 10 turning directions (straight, right, left, slight right, slight left, sharp right, sharp left, make a legal u-turn, keep right, keep left). Voice quidance is performed in PCM voice (human voice).

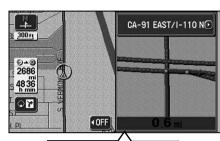
Press MAP to activate voice guidance as per the distance up to the junction intersection.

# [Example of voice guidance while route quidance is in progress]

 Intersection voice guidance (just guidance)

While route guidance is in progress, a chime will sound prior to a junction point.

◆ Example of voice guidance: In ○○ miles (km), ○○ turn



In six tenths of a mile, right turn.

#### · Highway junction voice guidance

While driving on a highway, junctions are shown as an enlarged display and the direction is announced vocally.

◆ Example of voice guidance: In ○○ miles (km), the exit ○○

# [Example of voice guidance in the vicinity of the destination while route guidance is in progress]

◆ Example of voice guidance:

You have arrived at your destination.

Your route guidance is now finished.



- Use the voice guidance only as a reference.
- After a voice guidance such as "Left turn in about 0.6 miles", drive for a moment and press MAP to change the announcement as per the approaching distance (ex.: Left turn in about 0.5 miles, etc.)
- The intersection voice guidance is activated by turning On the Auto Voice Guidance. (Refer to page 94)

# 5. Route guidance

#### Setting the auto voice guidance

The auto voice guidance can be turned ON (announced) or OFF (not announced).

- 1 Touch Setup in the Menu screen.
- 2 Touch On or Off for Auto Voice Guidance.
  - The pressed touch switch will become brighter.
- 3 Touch OK .





- The voice guidance examples mentioned above are the most common to be announced and may differ depending on the way the roads along your route are connected.
- If your vehicle position is not precisely specified, voice guidance may not occur
  or, in some cases, may be delayed or announce an erroneous instruction.
- The voice guidance volume may be adjusted (Refer to page 26). However, selecting Off will disable voice guidance.
- Touch Default in the Setup screen to return all items to their default settings.

# 6. Performing operations on the guided route

### Guidance in another mode

The route guidance continues (no vocal guidance output) even if switching to another mode (showing a screen other than the navigation screen). The voice guidance can be made to output even if switching to another mode.

#### Setting the guidance when in another mode

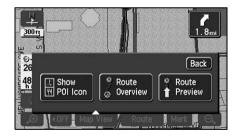
- 1 Touch Setup in the Menu screen.
- 2 Touch On or Off for Voice Guidance in All Modes.
  - The pressed touch switch will become brighter.
- 3 Touch OK



### Redisplaying the all-route display

The all-route display from the departure point to the destination can be shown.

- 1 Touch Map View if a map is displayed.
- 2 Touch Route Overview .
  - The all-route display screen appears.
  - For details pertaining to the all-route display screen, refer to "All-route display and touch switches" on page 70.
  - Touch Back to display the present location screen.





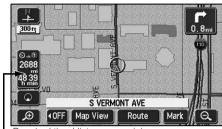
Touch **Default** in the Setup screen to return all items to their default settings.

# 6. Performing operations on the guided route

# Switching the required time/distance remaining display

If 2 or more destinations are set on the present location screen (if the present location is along the set route) while route guidance is in progress, the required time/ distance remaining can be switched.

- Touch the required time/distance remaining.
  - If 2 or more destinations are set, the required time/distance remaining for each destination appears.
  - Switching is impossible if having deviated from the set route.
- 2 Touch the distance remaining display up to the destination desired.



Required time/distance remaining

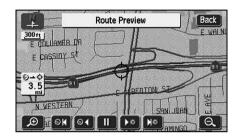


### **On-route scroll**

The map can be moved automatically along the set route to the destination or to the departure point on the screen showing the guided route.

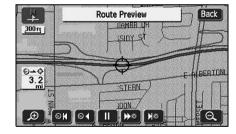
#### Start on-route scroll

- 1 Touch Route Preview on the display modification screen.
- Touch the scroll touch switches



#### On-route scroll screen operations

- Touch II to pause map scrolling.
- Press **MAP** to stop the on-route scroll.
- Touch or or to move the map quickly.





- If there is no route displayed on the map, on-route scroll is impossible.
- Using on-route scrolling during a double screen display will cause a reversion to single screen display. Press MAP to return to double screen display.
- If scrolling up to the next destination:
  - Use the switch to move the map up to the next destination.
  - Use the switch to move the map back to the departure point (previous destination).
  - Use the switch to display the next destination map.
  - Use the Simulation switch to display the departure point map (previous destination).
- The on-route scroll may stop depending on the map displayed.

# 7. Reinitiating a route search

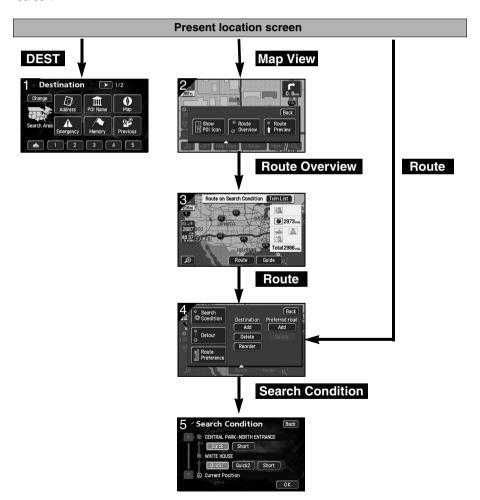
### Reinitiating a route search

While route guidance is in progress, additional destinations can be set, search conditions can be changed and a route search can be reinitiated.

To change the route, use either the "Change method using **Route**" or the "Change method using **DEST**".

A route search can be reinitiated from the following screens.

 See the next page for information concerning the touch switches appearing on each screen.



Screen No.	Touch switch	Function	Page
1	Map retrieval method	Retrieves the destination map Sets/ adds a destination	47
2	Route Overview	Shows the all-route display	69
3	Route	Displays the search condition setting screen	76
4	Destination, Transit destination Add , Delete , Reorder	Adds, switches the order or deletes destinations	77 80 81
	Transit point (transit road indication) Add , Delete	Indicates, corrects or deletes transit roads	82 83
	Search Condition	Displays the route modification screen	79
	Detour	Detour from the existing route ahead.	-
	Route Preference	Permits you to specify whether freeways, toll roads and other road categories are used or not.	100
5	Search conditions	Sets the search conditions for each segment	79

Search conditions	Function	
Quick 1	A common route from the present location to the next destination * is searched for.	
Quick 2	A route prioritizing toll roads from the present location to the next destination is searched for.	
Short	A route with the shortest distance from the present location to the next destination is searched for.	

<sup>\*</sup> When a transit road is indicated between the present location and the next destination, a route is searched for between the present location and the indicated transit road.

# 7. Reinitiating a route search

#### Reinitiating a route search

- Touch **Route** on the present location screen while route guidance is in progress.
- 2 Touch Route Preference
- Touch the item for which a search is to be reinitiated.
  - A route search is reinitiated
- 4 Touch OK.





- Because of the shape of the road, a route search may not be reinitiated and the same route may result from the reinitialized search due to a change in the search conditions.
- If having deviated far from the set route, a route to return you to the original route is not searched for. Rather, a new route search for the set destination (interchange, transit road) is initiated.
- If driving under an elevated road or along parallel local roads and a route search is initiated, the search result route may take you along elevated toll roads and parallel toll roads.

### **Automatic reroute search**

If having deviated from the road, a route search may be initiated automatically (vicinity search or all-route search).

The search result route may differ as per the conditions under which the set route was deviated.

- Vicinity search: a route search returning you to the original route is initiated
- All-route search: a route search is initiated under selected conditions between the present location to the destination.
- \* When a transit road is indicated between the present location and the next destination, a route is searched for between the present location and the indicated transit road.

#### Setting the automatic reroute search

The automatic reroute search function can be turned ON (enable) or OFF (disable).

- Touch Setup in the Menu screen.
- Touch On or Off for Auto Reroute.
  - The pressed touch switch will become brighter.
- 3 Touch OK .





- If having deviated from the set route while route guidance is in progress, the automatic reroute search is activated when the device determines that you are driving on a guidable road.
- Touch **Default** in the Setup screen to return all items to their default settings.

# 1. What is point registration

Up to 106 geographical points - categorized as "home," memory points or special memory points - can be stored on a map by registering them as memory points. There can be one "home" and up to five special memory points. Registering detour memory points (maximum of ten) also ensures that detours will be made through these points when route searches are performed.

Memory points can be registered by selecting from 46 types of symbol and 4 types of symbol with sound. It is possible to set a name, a name reading, and a telephone number for all these types of symbol. (This does not apply to detour memory points.)

Registering memory points and special memory points enables you to retrieve them on a map or when conducting a route search. Use these points effectively.

If you make a mistake in registration, correct it or delete the registration.

(If 106 memory points or 10 detour memory points have already been registered, delete unnecessary points and reattempt the registration.)

#### Memory Points

The memory points (including your home and special memory points) can be displayed and reordered according to registered type, symbol, or order of registration, and the points can be selected from a list during point searches and so on.

# Memory point with voice alarm

The following functions can be given to memory points with voice.

- ① Setting to announce the approach to a point with sound Bell, Chime, Music Box
- Setting to announce the approach to a memory point from a specified direction

Bell (With direction)

#### Home

Only one registration can be made for your home, and you can search for a route returning you home in a one-touch operation. **Registering this point first is recommended.** 

## Special memory points

Up to 5 special memory points can be registered and allocated to touch switches to facilitate a search for geographical points. Also, when setting a destination, a route search can be initiated in a one-touch operation.

#### Areas to avoid

Up to 10 detour memory points can be registered with a name and detour range settable for each point. You can also set names for detour memory points.



The symbol allocated to a detour memory point cannot be changed.

# 2. Registering, correcting or deleting a memory point

### Registering, correcting or deleting your home

One point on the map can be registered as your home.

Register your home to enable a route search to your home from the destination setting screen with one operation. (Refer to page 47)

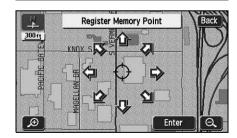
### Registering your home

- 1 Touch My Places in the Menu screen.
- Touch Register for Memory Points.

- 3 Select the map retrieval method and the map on which your home is to be registered will appear.
  - See pages 47 and 63, "How to retrieve maps" and "Performing operations on a retrieved map".
- 4 Touch Enter.
  - Touch to move the map.









- Registration enabled on a detailed map with a reduction scale less than 0.5 miles.
- Edit and Delete can be operated only if a memory point is already registered.

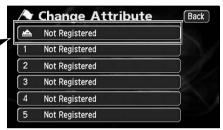
# 2. Registering, correcting or deleting a memory point

5 Touch Attribute



6 Touch A Not Registered

Touch switch for registering your home



7 Touch Icon .



- 8 Touch the symbol to be registered on the map.
  - Touch Page 2 and With Sound to select a different symbol. (Refer to page 108)





If your home is already registered, touch it to display the home cancellation screen.

### Correcting your home

- 1 Touch My Places in the Menu screen.
- 2 Touch Edit for Memory Points.







- Touch the touch switch for the item to be corrected or entered.
  - Touch **Del.** to cancel your home.
  - This correction and entry method is the same as for memory points.
    - Symbol (Page 112)
    - Name entry (Page 114)
    - Name display on a map (Page 115)
    - Position (Page 111)
    - Telephone number (Page 113)
- 5 Touch OK



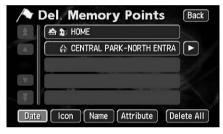
# 2. Registering, correcting or deleting a memory point

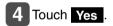
### Deleting your home

- 1 Touch My Places in the Menu screen.
- 2 Touch Delete for Memory Points.



3 Touch 📤 .





• Touch **No** to return to the original screen.



### **Registering memory points**

Up to 106 memory points (landmarks) can be registered on a map (including 1 home and 5 special memory points). (If registering more than 106 points, first delete unnecessary memory points and proceed.)

Registering memory points enables the following:

- Symbol and name displays on the map
- · An alarm that announces when approaching a point
- Maps corresponding to memory points can be retrieved when setting a destination (Refer to page 58)

#### One-touch registration

Memory points can be registered on a map presently displayed.

- Touch the position on the map where the memory point is to be registered.
  - It is not necessary to scroll the map when registering the present location.
- 2 Touch Mark.





- Maps with a scale of 0.5 miles or greater detail can be registered.
- Depending on the location, the address displayed for the memory point may include a name of a neighboring area.
- A registered memory point may display a neighboring name or address.

# 2. Registering, correcting or deleting a memory point

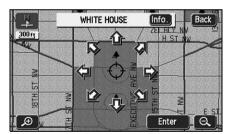
#### Registering a far away point

- 1 Touch My Places in the Menu screen.
- Touch Register for Memory Points.

- 3 Select a map retrieval method to display the map on which the memory point is to be registered.
  - See pages 47 and 63, "How to retrieve maps" and "Performing operations on a retrieved map".
- 4 Touch Enter .
  - Touch to move the map.









- When a memory point is not registered, **Edit** and **Delete** are toned down and will be inoperable even if touched.
- Depending on the location of the registered point and the map retrieval method, the name and telephone number may be entered simultaneously.

• Touch **Icon** to display the selected symbol in the Position.



• Touch Page 1 , Page 2 or With Sound for the memory point **con** to change the type of symbol.

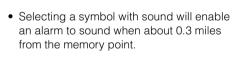


Page 1

• Touch No Icon to not display the registered memory point symbol on the map.



• Page 2



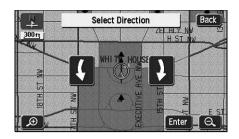


With Sound

## 2. Registering, correcting or deleting a memory point

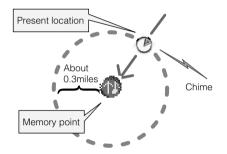
## 5 Touch Bell (with direction)

- Set the direction.
- To move the direction counterclockwise, touch . To move it clockwise, touch .
- The memory point will be displayed with ...

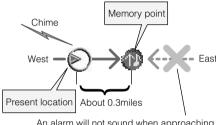


## 6 Touch Enter





#### [With direction]



An alarm will not sound when approaching this direction.

#### [When setting with direction]

• Touch **Bell (with direction)** to enable an alarm to sound only when approaching a memory point within about 0.3 miles from the set direction.

For example, when driving on a road running East-West, you can set an alarm to sound when approaching a memory point from the west and not sound when approaching it from the east.



- When selecting a symbol With Sound, an alarm is enabled.
- Touch 10) to hear each of the sounds.

Back

## Correcting the position of a memory point

- 1 Touch My Places in the Menu screen.
- 2 Touch Edit for Memory Points.
- Touch the memory point to be corrected.



- 4 Touch Location .
  - A map will appear.



CENTRAL PARK-NORTH ENT.

- **5** Touch **☆**.
  - Move the map to the position on which the memory point is to be corrected.
- 6 Touch Enter .
  - The symbol displayed in 4 appears in the position.
  - Correct the position and the name of the position displayed in 4 is also corrected.
- 7 Touch OK.



Maps with a scale of 0.5 miles or greater detail can be registered.

## 2. Registering, correcting or deleting a memory point

### Changing the symbol of the memory point

- 1 Touch My Places in the Menu screen.
- 2 Touch Edit for Memory Points.
- Touch the memory point whose symbol you want to change.



4 Touch Icon .



- 5 Touch the symbol to be changed.
  - Touch Page 2 and With Sound to select a different symbol. (Refer to page 108)
- 6 Touch OK.





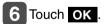
The items in memory point list can be sorted by the Date, Icons, Names or Attributes.

## Enter a telephone number for a memory point

- 1 Touch My Places in the Menu screen.
- 2 Touch Edit for Memory Points.
- Touch the memory point whose telephone number you want to enter.



- 5 Enter the number by touching the switches on the screen one number at a time.
  - If having made a mistake (or if the phone number is already entered), touch to delete one number at a time.











- Up to 20 digits can be entered.
- Depending on the registered point, there may be a telephone number already entered for it.

## 2. Registering, correcting or deleting a memory point

### Entering the name of a memory point

- 1 Touch My Places in the Menu screen.
- 2 Touch Edit for Memory Points.
- Touch the memory point for which you want to enter a name.



4 Touch Name.



- 5 Enter one character at a time by touching the switches on the screen.
  - If having made a mistake (or if the name is already entered), touch to delete one character at a time.



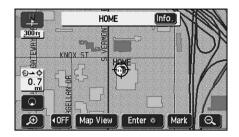
6 Touch OK.



Depending on the registered point, there may be a name already entered for it.

### Displaying the name of a memory point

The name of the memory point entered can be displayed.



- 1 Touch My Places in the Menu screen.
- 2 Touch Edit for Memory Points.
- Touch the memory point whose name you want to display.



- 4 Touch On or Off for Show Name.
  - The pressed touch switch will become brighter.



5 Touch OK.



Maps with a scale of 0.5 miles or greater detail can be displayed.

# 2. Registering, correcting or deleting a memory point

#### **Deleting a memory point**

- 1 Touch My Places in the Menu screen.
- 2 Touch Delete for Memory Points.
- Touch the memory point to be deleted.
  - To delete all the memory points, touch
     Delete All .
- 4 Touch Yes
  - Touch No to return to the original screen.





## 3. Registering, correcting or deleting a special memory point

Up to 5 special memory points can be registered on one map.

A special memory point is different from other memory points in that, when registered, they can be retrieved with one-touch from the screen appearing when retrieving a map. Also, when setting a destination, a route search can be initiated with one-touch from the destination setting screen. (Refer to page 67)

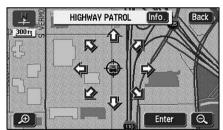
#### Registering a special memory point

- 1 Touch My Places in the Menu screen.
- Touch Register for Memory Points.

- 3 Select a map retrieval method and the map corresponding to the special memory point to be registered appears.
  - See pages 47 and 63, "How to retrieve maps" and "Performing operations on a retrieved map".
- 4 Touch Enter .
  - If is displayed, touch it to move the map.
  - The special memory point will appear on the position.





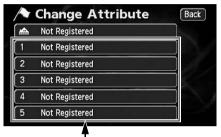


## 3. Registering, correcting or deleting a special memory point

5 Touch Attribute

- 6 Touch Not Registered for the special memory point (1 to 5).
- 7 Touch OK .





Touch switches for special memory point (1 to 5)



- Maps with a scale of 0.5 miles or greater detail can be registered.
- Depending on the location, the address displayed for the special memory point may include a name of a neighboring area.
- A neighboring name or address will be displayed for the registered special memory point.
- Depending on the location of the registered point and the map retrieval method, the name and telephone number may be entered simultaneously.
- Edit and Delete will appear only when a memory point is already registered.
- Select an already registered telephone number and touch it to display a deletion screen for the special memory point corresponding to that selected telephone number.

### Correcting a special memory point

- 1 Touch My Places in the Menu screen.
- 2 Touch Edit for Memory Points.
- Touch the special memory point to be corrected/entered.



- Touch the touch switch for the item to be corrected or entered.
  - This correction and entry method is the same as for memory points.
    - Symbol (Page 112)
    - Name entry (Page 114)
    - Name display on a map (Page 115)
    - Position (Page 111)
    - Telephone number (Page 113)
- 5 Touch OK .



## 3. Registering, correcting or deleting a special memory point

#### Deleting a special memory point

- 1 Touch My Places in the Menu screen.
- 2 Touch Delete for Memory Points.
- Touch the special memory point to be deleted.
  - To delete all the memory points, touch
     Delete All
- 4 Touch Yes
  - Touch No to return to the original screen.





Back

## 4. Registering, correcting or deleting detour memory points

#### Registering detour memory points

Up to 10 detour memory points can be registered. (If registering more than 10 points, first delete unnecessary detour memory points and proceed.)

By registering detour memory points, you can search for a route that takes you through the registered area when conducting a route search.

This function is convenient when knowing what roads are blocked due to construction or accidents or congested.

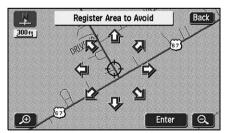
- 1 Touch My Places in the Menu screen.
- Touch Register for Areas to Avoid.



**My Places** 

- 3 Select the map retrieval method to display the map on which a detour memory point is to be registered.
  - See pages 47 and 63, "How to retrieve maps" and "Performing operations on a retrieved map".
- 4 Touch Enter .
  - Touch to move the map.



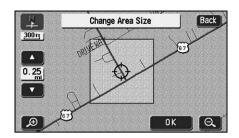




- Edit and Delete will appear only when a detour memory point is already registered.
- The route may take you through a detour depending on the position of the set destination or the present location.

## 4. Registering, correcting or deleting detour memory points

- 5 Touch or to set the area to be detoured.
  - To widen the area, touch , to narrow the area, touch .
  - When reaching the maximum or minimum permissible area, the
    - switches invert and are inoperable even if touched.



## 6 Touch OK.

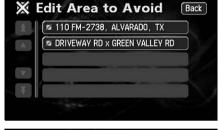
- 7 Touch OK.



- The following 10 values represent settable sizes for detour areas: Point, 150 ft, 300 ft, 700 ft, 1/4 mi, 1/2 mi, 1 mi, 2 mi, 4 mi, 8 mi
- A neighboring name or address will be displayed for the registered detour memory point.
- The address appearing for the detour memory point may differ depending on the location or the registration method.
- Depending on the location of the registered point and the map retrieval method, the name may be entered simultaneously.

#### Correcting a detour memory point

- 1 Touch My Places in the Menu screen.
- 2 Touch Edit for Areas to Avoid.
- Touch the Area to Avoid to correct/enter.



- Touch the touch switch for the item to be corrected or entered.
  - The correction/entry method is the same as for memory points.
    - Name entry (Page 114)
    - Position (Page 111)
  - Touch Area Size to change the detour area. (Page 121)
- 5 Touch OK.

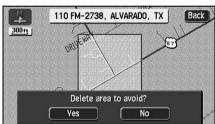


## 4. Registering, correcting or deleting detour memory points

#### Deleting a detour memory point

- 1 Touch My Places in the Menu screen.
- 2 Touch Delete for Areas to Avoid.
- Touch the Area to Avoid to be deleted.
  - To delete all detour memory points, touch **Delete All**
- 4 Touch Yes
  - Touch **No** to return to the original screen.





#### 5. Destination archive

#### Deleting entries from the destination archive

Points on a map set as destinations are automatically recorded and can serve to retrieve a map when setting a destination (maximum 100 destinations). When exceeding 100 destinations, the oldest entry is deleted every time a new one is entered. Unnecessary destinations can be deleted.

- 1 Touch Setup in the Menu screen.
- 2 Touch Delete for Delete Previous Point.

- Touch the point name to be deleted.
  - To delete all destination archive items, touch **Delete All**.
- 4 Touch Yes
  - Touch **No** to return to the original screen.







## 1. Information screen

The information function contains "SETTING", "ESN" and "SYSTEM CHECK". The "CAMERA SCREEN" and "SIRIUS ID" function can be operated by installing the optional items.

#### Information screen

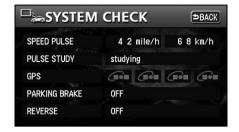
- 1 Press MENU and then touch INFO to display the INFORMATION screen.
- 2 Touch the touch switch.
  - · Select an item.
  - The following functions are possible from the information screen.



Display order/item (touch switch)		Function	Page
1	CAMERA SCREEN	Display of Rear View Camera	128
2	SETTING	Settings for the background, beep, etc.	OPERATION GUIDE/ Audio
		Setting for Rear View Camera	132
3	ESN	Settings for the ESN (ECLIPSE Security Network)	OWNER'S MANUAL
4	SYSTEM CHECK	Display of system status	127
5	SIRIUS ID	Display of the SIRIUS ID	OPERATION GUIDE/ Audio

## SYSTEM CHECK screen

- 1 Touch SYSTEM CHECK on the INFORMATION screen.
  - The SYSTEM CHECK screen is displayed.



Item (touch switch)	Function	
SPEED PULSE	Displays the current vehicle speed.	
PULSE STUDY	Studies the vehicle speed during events such as tire changes.  Studying: Pulse study in progress  Complete: Pulse study completed	
GPS	Displays the GPS reception status.	
PARKING BRAKE	Displays the parking brake status.  ON: Parking brake applied  OFF: Parking brake not applied	
REVERSE	Displays the reverse gear selection status.  ON: Reverse gear selected  OFF: Reverse gear not selected	

## 1. Rear View Camera operations

When the optional Rear View Camera is installed, the rear view image can be displayed on the monitor screen.



- Do not rely too heavily on the Rear View Camera.
- Please use the Rear View Camera as a back up means to check for obstructions behind the vehicle.
- Raindrops or other natural phenomena may blur the camera's image.
- Do not backup your vehicle looking only at the monitor. Use the rear view mirror and both side mirrors to check for any obstruction behind or around your vehicle.
- Do not use the Rear View Camera in the following situations:
  - On frozen, slippery or snowbound roads
  - With the trunk opened
  - When using tire chains or a spare tire
  - On a slope or any uneven road
- When the external air temperature is low, the image may darken or become faint. Images of moving objects in particular may be distorted, or they may not be visible on the screen, so the driver must confirm safety around the vehicle directly by eye.



- The actual position and distance of people or objects may vary depending on the features of the camera lens.
- Do not expose the camera to strong shocks such as hitting it or knocking it onto other objects. The Rear View Camera may not function properly if the position of the camera or its mounting angle is incorrect.
- The camera is waterproof. Do not uninstall, dismantle or reconfigure the unit. Otherwise, the Rear View Camera may not function properly.
- If strongly rubbing the camera cover or using a hard brush or abrasive to clean it, the camera may get scratched adversely affecting the image quality.
- The camera cover is made of plastic. Do not apply an organic solvent, body wax, oil remover, glass coating, etc. If having applied any of the above, wipe it off immediately.
- Pouring hot water on the Rear View Camera to deice it in cold weather can lead to a drastic change in temperature that may render normal operation impossible.
- The Rear View Camera may not operate normally if the camera is damaged as a result of having hit the unit. Immediately bring it to the store of purchase for an inspection.
- Do not leave it in direct sunlight for long periods of time. Otherwise, a printed image phenomenon may result.
- The figure is merely an example. The range appearing on the monitor screen varies depending on the vehicle model.
- The instant the vehicle is put in reverse, part of the monitor will appear white then gradually stabilize.
- A white vertical band will appear when struck by light from the sun, headlights or any other strong light beam source (Smear effect).
- After having used the unit for a long time, white scratches and vertical lines may appear due to a rise in temperature depending on the features of the CCD.
- The 50 Hz power source range fluorescent light may cause flickering in the screen. This is not a malfunction.
- Because the Rear View Camera uses a special lens, the image and distance appearing on the screen differs from the actual image and distance.

## 1. Rear View Camera operations

#### **Rear View Camera image**

#### Displaying the rear view image manually (MANUAL)





- 1 Touch CAMERA SCREEN on the INFORMATION screen.
  - The rear image appears on the monitor screen.
  - Touch any of the following switches to return to the normal screen:

MAP , MENU



CAMERA SCREEN button is available when backeye camera (BEC106) is conneted.

#### Displaying the rear view image in reverse gear (AUTO)

To display the rear view image in reverse gear, set "AUTO" for the "CAMERA SCREEN" setting in advance. (Refer to page 132)

- 1 Select reverse gear.
  - The rear image appears on the monitor screen.
  - On shifting to any gear other than reverse, the normal screen is redisplayed.



- The range of the image may vary depending on the vehicle and the road conditions.
- There is a limit to the range of the camera. Objects near the ends of the bumper and under the bumper cannot appear.
- The rear image color may vary from the actual objects.
- The image brightness and contrast can be adjusted. (Refer to "Adjusting/ setting the screen" in the OPERATION GUIDE/ Audio.)
- Depending on the vehicle, the back guideline may appear misaligned on the left and right. This is not a malfunction.
- In the following situations, the screen may be difficult to view but does not constitute a malfunction.
  - In a dark area (such as at night)
  - The temperature near the camera is high or low
  - Raindrops are on the camera lens or the humidity is high (when raining)
  - A foreign object is near the camera (such as mud)
  - When the sun or a beam from headlights strikes the camera lens directly
  - When a high-luminance point strikes the camera (such as the reflection of the sun's rays on the chassis), a Smear effect\* typical of CCD cameras may occur.

#### [Screen condition]



\*Smear effect: A phenomenon where a vertical line appears from a high-luminance point striking the camera (such as the

reflection of the sun's rays on the chassis).

- High-luminance point

## 1. Rear View Camera operations

### **Rear View Camera settings**

You can select whether or not the rear view image is automatically displayed on the monitor on selecting reverse gear.

- 1 Touch **SETTING** on the INFORMATION screen.
- 2 Touch AUTO or MANUAL for CAMERA SETTING.
  - AUTO : The rear view image is displayed in reverse gear.
  - MANUAL: The rear view image can be displayed by touching

#### **CAMERA SCREEN**

on the INFORMATION screen.



Even when "AUTO" is set, the rear view image can be displayed by touching **CAMERA SCREEN** on the INFORMATION screen.



## Optional unction

# MEMO



## 1. Correction of the present location and distance

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 in a location different from the actual present location (the vehicle position mark is misaligned), the vehicle position mark position and direction 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)

However, even if the vehicle position mark on the map is misaligned, continue driving for a moment and the present location will be automatically corrected using map matching and GPS data. (Depending on the case, this may take several minutes.)

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.

#### **Present location correction**

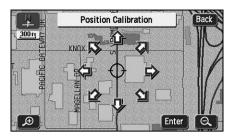
- 1 Touch Setup in the Menu screen.
- 2 Touch Adjust for Calibration.

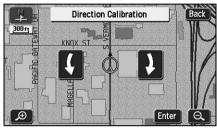


3 Touch Position/Direction .



- - Move to the actual position of the present location on the map.
- 5 Touch Enter .
- 6 Set the direction.
  - To move the direction counterclockwise, touch . To move it clockwise, touch .
- 7 Touch Enter.







## 1. Correction of the present location and distance

#### **Correcting the distance**

- 1 Touch Setup in the Menu screen.
- 2 Touch Adjust for Calibration.



- 3 Touch Tire Change
  - Automatic correction is performed.
  - The touch switch turns brighter during automatic correction.
  - Using GPS data, the correction will automatically be completed after driving a moment and the touch switch will turn back to blue.





- 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 (a) depending on the driving conditions.

## 2. Map DVD-ROM data

The information on the map DVD-ROM can be viewed.

The figure below is merely an example. The displays may vary depending on the type of map DVD-ROM and when it was made.

#### Map DVD-ROM data display





## 3. Accuracy and error

#### Positioning accuracy

The GPS is a very accurate satellite controlled by the U.S. Department of Defense. Errors may result due to the occurrence of a multipath caused by reflections off buildings or other structures.

#### GPS signal quality and reception conditions

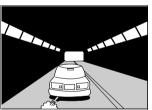
Any obstruction coming between the satellite and the GPS antenna will disrupt signal reception from the satellite.

Also, 3 or more signals must be received simultaneously to enable positioning. When driving along locations such as those shown below, GPS positioning is not possible.

In addition, obstructions placed on or near the GPS antenna (such as a load) will disrupt signals from the satellite.

- Because the GPS satellite orbits the earth, signal reception conditions may vary depending on the position of the satellite even if driving in the same area. Signals from a satellite orbiting near the horizon are more likely to be obstructed.
- The GPS satellite is controlled by the U.S. Department of Defense and can be deliberately made to lose positioning accuracy.

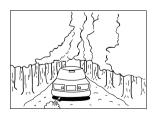
Underground, in a tunnel or in an indoor parking structure



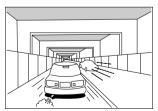


Surrounded by obstructions

such as tall buildings



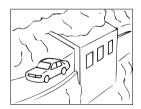
Densely wooded areas



Under an elevated road

In a building





On a cliff side road or at a cavern opening



Under the following conditions, make sure to install the GPS antenna in the position indicated in the instruction manual for your vehicle model.

- If the noise emitted from another electrical device diminishes signal reception.
- If this device may represent an obstruction to the proper operation of airbags.
- If the satellite signal received from the side or rear of the vehicle is diminished because of a windshield pillar or roof panel.

## 3. Accuracy and error

#### **Present location display error**

In order to find the exact position of the present location, this device uses compiled data from the GPS satellite, vehicle speed sensor and vibration gyro sensor. Because each of these contains a margin of error, the present location indicated may not coincide with your actual positioning.

If the indication is different from the actual positioning, the present location displayed can be corrected. Park the vehicle in a safe place first before proceeding.

#### Error due to having changed a tire

The device calculates the distance traveled by the vehicle using a speed sensor (in proportion to the tire rotation). The following situations would result in a significant error that may render proper present location positioning impossible.

- · When using a sub-standard tire
- When driving on a snow covered, gravel road or any slippery road
- When the tire air pressure is incorrect
- When using new tires (the distance correction coefficient setting can be changed and adjusted)

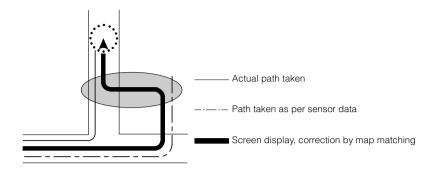
# Correcting the map matching vehicle position sensor

Map matching is a system that compares present location positioning data from the GPS and other sources with information concerning all the roads driven on until now in order to correct the present location onto the most appropriate road.

This device corrects the present location data compiled from a combination of independent navigation and satellite navigation and matches it with the shape of the road.

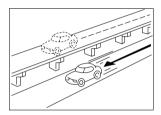
However, there may be instances when the present location error cannot be avoided and the position indicated on the map does not coincide with your actual positioning even after a correction using map matching.

Also, driving along a road whose actual shape differs from the map data may result in a vehicle position mark misalignment.

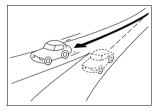


## Present location display, route guidance accuracy

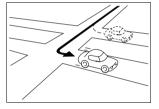
The following situations are not malfunctions but merely some examples where inaccurate present location positioning and/or route guidance occurs depending on the road and driving conditions.



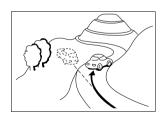
The present location appears on a road running parallel to the road taken.



When turning on a road forking into two roads making a "Y" shape, the present location appears on the other road.



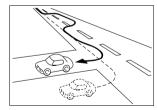
When making a turn, the present location appears on the road just before or after the road turned on.



The present location appears misaligned when driving on steep roads.

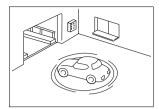


The present location appears misaligned when driving on a continuous curve in the same direction.

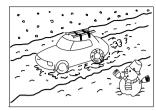


The present location appears misaligned when meandering such as changing lanes.

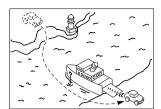
## 3. Accuracy and error



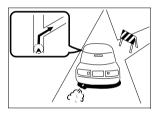
The present location appears misaligned when the vehicle is rotated on a parking structure turntable with the ACC turned OFF.



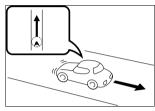
The present location appears misaligned when driving on a snowbound or slippery road or when using tire chains.



When the vehicle is moved by ferry or a means other than being driven, the GPS positioning will indicate a present location on the spot where the vehicle was prior to being moved.



When route guidance indicates a road that is actually blocked off (regular traffic prohibited).



The present location appears misaligned when turning back.

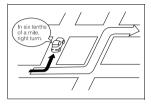


When having changed a tire(s), the vehicle position mark may be misaligned.

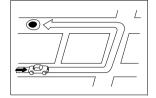
## Road and geographic name data

The roads and geographic names are subject to change after the compilation of the map database and may differ from the actual roads and names.

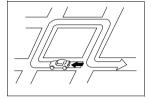
### Route guidance



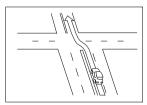
When having turned on an intersection that is not part of the route guidance, there may be an error in the voice guidance instructions.



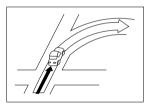
When searching for a route, the route provided may include a detour.



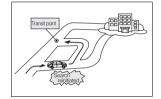
The route guidance may instruct a U-turn.



When driving on a straight road, the route guidance may instruct you to go straight (in cases where the shape of intersections is difficult to determine).

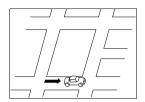


No route guidance may occur even if turning at an intersection.

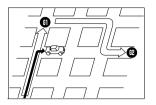


When driving towards the destination without passing through a transit point, the device may reinitiate a route search and provide a new route that takes you towards that transit point.

## 3. Accuracy and error



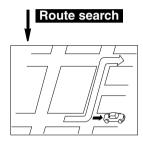
When searching for a route, the route display may not appear in time for the next turn.

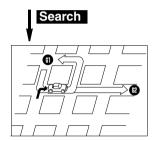


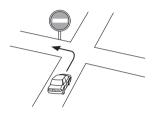
In case of multiple destinations, when having bypassed the next destination, a route search is reinitiated to provide a route returning to it.



While providing guidance on where you are headed, several geographical names may be indicated.







Drive following the actual traffic regulations.

- The time it takes the device to reinitiate a route search while driving on a highway may be lengthy.
- When correcting the present location mark manually and then driving under conditions where the positioning is not corrected, the position will not be properly indicated.
- The route may not change even if reinitiating a search.
- If having set a present location, destination or transit point on a remote island or in an area where there are no guidable roads, the device may not search for a route.
- The device may not search for a route if the present location and the destination are in close proximity.
- The route guidance will not necessarily recommend toll roads even if having selected to prioritize toll roads in the search conditions.

Similarly, even if having selected not to prioritize toll roads, a route using toll roads may be displayed.

(The "Prioritize/Do not prioritize toll roads" setting enables the prioritization of either toll roads or local roads when a selection of one is made possible.)

# MEMO



# 1. Information you should know

### If one of these messages appears

If any of the following messages are displayed, check the equipment while referring to the Cause and Remedy columns.

#### Messages related to general navigation

Messages	Cause	Corrective action
Check GPS antenna	The GPS antenna is not connected properly.	Connect the GPS antenna properly.
Check speed pulse	The device is not properly connected to the vehicle speed sensor. Each time the disconnected battery is reconnected, this is displayed.	Connect the vehicle speed sensor properly. The input status of the vehicle speed signal can be confirmed on the SYSTEM CHECK screen.
No DVD. Please insert map DVD.	The map disk is not inserted.	Insert the map disk.
Unable to read data. Check if map DVD is correct.	A disk other than the map disk is inserted.	Remove the inserted disk and insert the correct map disk.
Unable to read DVD correctly. Check if the DVD is damaged or dirty.	The data cannot be read due to scratches and/or dirt on the map disk.	Check whether there are any scratches and/or dirt on the map disk and contact the store of purchase.
DVD check in process.	The device is now reading the map disk data.	Wait until a map is displayed on the screen.
Unable to read data. Temperature is too high.	The DVD player temperature is high.	Wait until the temperature has fallen.
Too many characters were input.	Character entry count for memory point names beyond capacity.	Decrease the character entry count and reenter.
No previous points registered.	There are no previously set destinations.	Register a destination in the archive and proceed. (Setting a destination registers it in the archives.)
Home is not registered. Register in menu Memory Point.	Your home is not registered as a memory point.	Register your home as a memory point and proceed. (Refer to page 103)
No quick access point registered. Register in menu Memory Point.	A special memory is not registered for the memory point.	Register a special memory for the memory point and proceed. (Refer to page 117)

Messages	Cause	Corrective action
No roads possible for guidance near current position. Please refer to map.	There are no roads where route guidance is possible in the vicinity of the present location.	Refer to a map and proceed.
No roads possible for guidance near current position and destination. Please refer to map.	There are no roads where route guidance is possible in the vicinity of the present location and destination.	Refer to a map and proceed.
No roads possible for guidance near destination. Please refer to map.	There are no roads where route guidance is possible in the vicinity of the destination.	Refer to a map and proceed.
Seasonal traffic restricted roads on this route.	The system searched for a route that included a seasonally restricted segment.	If changing to a route that bypasses the seasonally restricted segment is desired, bypass the restricted segment after changing the route. (Refer to page 72)
Destination too far. Please change to a point within 5000 km in a straight line.	The set destination is too far.	Set the destination within a 5,000 km distance in straight line.
2 preferred roads have been set. Perform operation again after deleting them.	You attempted to set 3 or more transit road indications when changing the route.	Up to 2 transit roads can be indicated. Delete unnecessary transit roads before adding a new one.
No roads possible for guidance nearby. Perform operation again after moving.	There are no roads available to serve as transit roads when indicating one for a route change.	Move the map and indicate a transit road among the roads in the vicinity.
Unable to save additional points. Please delete some points.	You attempted to set more than 5 destinations.	Up to 5 destinations can be set. Delete unnecessary destinations and proceed with adding new ones. (Refer to page 81)
Unable to search for new route. Previous route will be displayed.	A new route could not be found when reinitiating a route search.	Route guidance will proceed using the present route. (Drive referring to the route guidance.)
Destination is nearby. Please check the map.	You attempted to set the destination in a nearby location.	The destination is nearby. Refer to the map and continue driving.
No corresponding POI nearby.	There is no corresponding POI found nearby for the POI search in the vicinity.	Search for the POI in another area.
No corresponding POI on route.	There is no corresponding POI found nearby for the POI search along the route.	Search for the POI in another area.
Position cannot be specified in this scale. Switching to more detailed map.	You attempted to set/register a destination/memory point on a map with a reduction scale of more than 0.5 miles.	Set/register a destination/memory point on a more detailed map (with a reduction scale of less than 0.5 miles).

# 1. Information you should know

Messages	Cause	Corrective action
The destination is surrounded by	There is a river or other body of water between the destination and	Touch <b>Yes</b> , move the map and set a destination near the road.
water. Change destination? the nearest road.		Touch <b>No</b> to set the destination on the position displayed.
No memory point registered. Register in menu Memory Point.	You attempted to retrieve a map using a memory point when there is none registered.	Register a memory point and proceed. (Refer to page 107)
Unable to register additional points. Perform operation again after deleting unnecessary points.	You attempted to register a memory point when there are 106 points already registered.	Delete unnecessary memory points and proceed to register a new one. (Refer to page 116)

### Before asking for repairs

Slight differences in operation can sometimes be mistaken for malfunctions, so check the following table before asking for any repairs.

If the following fail to solve the problem, contact the place of purchase.

#### Items related to general navigation functions

•	- "'	
Symptom	Possible reason	Corrective action
The map does not move even when driving.	Is the display showing a screen other than the present location screen?	Display the present location screen. (Refer to page 27)
The vehicle position mark (a) does not appear.	Is the display showing a screen other than the present location screen?	Display the present location screen. (Refer to page 27)
The GPS mark does not appear.	Is the device in a situation where GPS data cannot be utilized?	Move the vehicle to an area free of obstructions or remove the object placed on the GPS antenna.
	Is the "Voice Guidance" item for set up set to Off?	Touch On for "Voice Guidance" in set up.
Voice guidance not outputted.	Is the guidance paused?	If the route guidance is paused, resume guidance. (Refer to page 85)
	Is the guidance volume turned down (voice OFF)?	Turn up the volume. (Refer to page 26)
Small blemishes or luminescent spots on the monitor screen	This phenomenon is characteristic of liquid crystal panels. The liquid crystal panel is make with hightech precision and has 99.99% or more effective imaging.	This is not a defect, so please use the equipment in this condition.
For a moment after turning the engine switch ON, there is an irregular display on the screen.	In cold weather, the liquid crystal panel's backlight features may emit light unevenly.	This condition stops in a few minutes as the backlight warms up.
The screen is difficult to view.	Are the contrast and brightness correctly adjusted?	Adjust the contrast and brightness. (Refer to page 22)
The vehicle position mark (2) appears on a spot different from the actual present location. (The vehicle position mark (2) is misaligned.)	The vehicle position mark  may be misaligned depending on the satellite conditions or vehicle conditions (where and how the vehicle is driven). Also, the vehicle position mark  may be misaligned if driving on a newly constructed road or on a road with a shape that differs from the shape recorded in the map data.	Continue driving and, in a moment, the present location will be automatically corrected using the map matching and GPS data. (Depending on the case, this may take several minutes.) If signals from the GPS are not utilized and the present location is left uncorrected, park the vehicle in a safe place and correct the present location. (Refer to page 134)

#### ©2007 DENSO CORPORATION

©2005 NAVTEQ. All rights reserved.

©2005 Tele Atlas North America, Inc. All rights reserved. This material is proprietary and the subject of copyright protection and other intellectual property rights owned by or licensed to Tele Atlas North America, Inc. The use of this material is subject to the terms of a license agreement. You will be held liable for any unauthorized copying or disclosure of this material.

Data by infoUSA Copyright ©2005, All Rights Reserved.

©2005 VISA Corporation

National Research Bureau ©2005

The Bullseye Design is a registered trademark of Target Brands, Inc.

©MAPMASTER.

#### **END-USER TERMS**

The data ("Data") is provided for your personal, internal use only and not for resale. It is protected by copyright, and is subject to the following terms and conditions which are agreed to by you, on the one hand, and DENSO CORPORATION ("[CLIENT]") and its licensors (including their licensors and suppliers) on the other hand.

©2005 NAVTEQ. All rights reserved.

The Data for areas of Canada includes information taken with permission from Canadian authorities, including: © Her Majesty the Queen in Right of Canada, © Queen's Printer for Ontario, © Canada Post Corporation, GeoBase ®.

NAVTEQ hold s a non-exclusive license from the United States Postal Service ® to publish and sell ZIP+4 ® information.

© United States Postal Service ® 2005. Prices are not established, controlled or approved by the United States Postal Service ®. The following trademarks and registrations are owned by the USPS: United States Postal Service, USPS, and ZIP+4.

#### TERMS AND CONDITIONS

Personal Use Only

You agree to use this Data together with the navigation system for the solely personal, non-commercial purposes for which you were licensed, and not for service bureau, timesharing or other similar purposes. Accordingly, but subject to the restrictions set forth in the following paragraphs, you may copy this Data only as necessary for your personal use to (i) view it, and (ii) save it, provided that you do not remove any copyright notices that appear and do not modify the Data in any way. You agree not to otherwise reproduce, copy, modify, decompile, disassemble or reverse engineer any portion of this Data, and may not transfer or distribute it in any form, for any purpose, except to the extent permitted by mandatory laws. Multi-disc sets may only be transferred or sold as a complete set as provided by [CLIENT] and not as a subset thereof.

Restrictions

Except where you have been specifically licensed to do so by [CLIENT] and without limiting

the preceding paragraph, you may not (a) use this Data with any products, systems, or applications installed or otherwise connected to or in communication with vehicles, capable of vehicle navigation, positioning, dispatch, real time route guidance, fleet management or similar applications; or (b) with or in communication with any positioning devices or any mobile or wireless-connected electronic or computer devices, including without limitation cellular phones, palmtop and handheld computers, pagers, and personal digital assistants or PDAs.

#### Warning

The Data may contain inaccurate or incomplete information due to the passage of time, changing circumstances, sources used and the nature of collecting comprehensive geographic data, any of which may lead to incorrect results.

#### No Warranty

This Data is provided to you "as is," and you agree to use it at your own risk. [CLIENT] and its licensors (and their licensors and suppliers) make no guarantees, representations or warranties of any kind, express or implied, arising by law or otherwise, including but not limited to, content, quality, accuracy, completeness, effectiveness, reliability, fitness for a particular purpose, usefulness, use or results to be obtained from this Data, or that the Data or server will be uninterrupted or error-free.

#### Disclaimer of Warranty

[CLIENT] AND ITS LICENSORS (INCLUDING THEIR LICENSORS AND SUPPLIERS) DISCLAIM ANY WARRANTIES, EXPRESS OR IMPLIED, OF QUALITY, PERFORMANCE, MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT. Some States, Territories and Countries do not allow certain warranty exclusions, so to that extent the above exclusion may not apply to you.

#### Disclaimer of Liability

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

#### **Export Control**

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

#### **Entire Agreement**

These terms and conditions constitute the entire agreement between [CLIENT] (and its licensors, including their licensors and suppliers) and you pertaining to the subject matter hereof, and supersedes in their entirety any and all written or oral agreements previously existing between us with respect to such subject matter.

#### Governing Law

The above terms and conditions shall be governed by the laws of the State of Illinois, without giving effect to (i) its conflict of laws provisions, or (ii) the United Nations Convention for Contracts for the International Sale of Goods, which is explicitly excluded. You agree to submit to the jurisdiction of the State of Illinois for any and all disputes, claims and actions arising from or in connection with the Data provided to you hereunder.

#### Government End Users

If the Data is being acquired by or on behalf of the United States government or any other entity seeking or applying rights similar to those customarily claimed by the United States government, this Data is a "commercial item" as that term is defined at 48 C.F.R. ("FAR") 2.101, is licensed in accordance with these End User Terms, and each copy of the Data delivered or otherwise furnished shall be marked and embedded as appropriate with the following "Notice of Use," and shall be treated in accordance with such Notice:

#### **NOTICE OF USE**

CONTRACTOR (MANUFACTURER/SUPPLIER) NAME: NAVTEQ CONTRACTOR (MANUFACTURER/SUPPLIER) ADDRESS:

222 Merchandise Mart Plaza, Suite 900, Chicago, Illinois 60654

This Data is a commercial item as defined in FAR 2.101 and is subject to the End User Terms under which this Data was provided.

© 2005 NAVTEQ - All rights reserved.

If the Contracting Officer, federal government agency, or any federal official refuses to use the legend provided herein, the Contracting Officer, federal government agency, or any federal official must notify NAVTEQ prior to seeking additional or alternative rights in the Data.

#### **END USER LICENSE AGREEMENT**

PLEASE READ THIS AGREEMENT CAREFULLY BEFORE USING THE NAVIGATION SYSTEM

THIS IS A LICENSE AGREEMENT FOR YOUR COPY OF THE SPATIAL MAP DATABASE, INCLUDING LOCATION CODES AND RELATED PRODUCTS (COLLECTIVELY, THE "DATABASE"), USED IN THE NAVIGATION SYSTEM. BY USING THE NAVIGATION SYSTEM AND THE DATABASE, YOU ACCEPT AND AGREE TO BE BOUND BY ALL TERMS AND CONDITIONS SET FORTH BELOW.

#### LICENSE GRANT

Denso Corporation ("Denso"), as a licensed distributor of the DATABASE, grants to you a non-exclusive, non-perpetual license to use your copy of the DATABASE for your personal use or for your use in your business' internal operations and not for any other purpose.

This license does not include the right to grant sub-licenses.

#### **OWNERSHIP**

The DATABASE and the copyrights and intellectual property and neighboring rights therein are owned by Tele Atlas North America, Inc. ("TANA") and its licensors. This Agreement does not transfer any title or interest in the DATABASE, except for the license to use the DATABASE according and subject to the terms and conditions of this Agreement. You shall not alter, obscure or remove any copyright notices, trademark notices or other restrictive legends relating to the DATABASE.

The DATABASE comprises confidential and proprietary information and materials of TANA. Accordingly, you shall hold the DATABASE in confidence and trust. You shall take reasonable steps to protect the DATABASE from misappropriation or misuse. You shall not extract standalone data from or publish any part of the DATABASE without the prior written consent of TANA and its licensors.

#### LIMITATIONS ON USE

The DATABASE is restricted for use in the specific system for which it was created. Except to the extent explicitly permitted by mandatory laws, you may not extract or reutilize any portion of the contents of the DATABASE, nor reproduce, copy, duplicate, modify, adapt, translate, disassemble, decompile, or reverse engineer any portion of the DATABASE.

#### **TRANSFER**

You may not transfer the DATABASE to third parties, except together with the system for which it was created, provided that you do not retain any copy of the DATABASE, and provided that the transferee agrees to all terms and conditions of this AGREEMENT.

#### **DISCLAIMER OF WARRANTY**

THE DATABASE IS PROVIDED ON AN "AS IS" AND "WITH ALL FAULTS BASIS" AND DENSO AND TANA (AND THEIR LICENSORS AND SUPPLIERS) EXPRESSLY DISCLAIM ALL OTHER WARRANTIES. EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO.

THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY, SATISFACTORY QUALITY, ACCURACY, TITLE AND FITNESS FOR A PARTICULAR PURPOSE. NO ORAL OR WRITTEN ADVICE OR INFORMATION PROVIDED BY DENSO OR TANA (OR ANY OF THEIR LICENSORS, AGENTS, EMPLOYEES OR THIRD PARTY PROVIDERS) SHALL CREATE A WARRANTY, AND YOU ARE NOT ENTITLED TO RELY ON ANY SUCH ADVICE OR INFORMATION. THIS DISCLAIMER OF WARRANTIES IS AN ESSENTIAL CONDITION OF THIS AGREEMENT.

#### LIMITATION OF LIABILITY

IN NO EVENT SHALL DENSO OR TANA (OR THEIR LICENSORS OR SUPPLIERS) BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL, SPECIAL, INDIRECT OR EXEMPLARY DAMAGES ARISING OUT OF THIS AGREEMENT OR YOUR USE OF THE DATABASE, INCLUDING, WITHOUT LIMITATION, LOST PROFITS OR COSTS OF COVER, LOSS OF USE OR BUSINESS INTERRUPTION OR THE LIKE, REGARDLESS OF WHETHER THE PARTY WAS ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

IN NO EVENT WILL THE TOTAL LIABILITY OF DENSO OR TANA (OR THEIR LICENSORS OR SUPPLIERS) EXCEED THE AMOUNTS PAID BY YOU FOR THE DATABASE.

#### WARNINGS

The DATABASE comprises facts and information from government and other sources reflecting circumstances in existence before you received the DATABASE, which may contain errors and omissions. Accordingly, the DATABASE may contain inaccurate or incomplete information due to the passage of time, changing circumstances, and due to the nature of the sources used. The DATABASE does not include or reflect information relating to, among other things, neighborhood safety; law enforcement; emergency assistance; construction work; road or lane closures; vehicle or speed restrictions; road slope or grade; bridge height, weight or other limits; road or traffic conditions; special events; traffic congestion; or travel time.

#### U.S. GOVERNMENT RIGHTS

If you are an agency, department, or other entity of the United States Government, or funded in whole or in part by the United States Government, then use, duplication, reproduction, release, modification, disclosure or transfer of this commercial product and accompanying documentation, is restricted in accordance with the LIMITED or RESTRICTED rights as described in DFARS 252.227-7014(a)(1) (JUN 1995) (DOD commercial computer software definition), DFARS 252.7202-1 (DOD policy on commercial computer software), FAR 52.227-19 (JUN 1987) (commercial computer software clause for civilian agencies), DFARS 252.227-7015 (NOV 1995) (DOD technical data - commercial items clause); FAR 52.227-14 Alternates I, II, and III (JUN 1987) (civilian agency technical data and noncommercial computer software clause); and/or FAR 12.211 and FAR 12.212 (commercial item acquisitions), as applicable. In case of conflict between any of the FAR and DFARS provisions listed herein and this Agreement, the construction that provides greater limitations on the Government's rights shall control. Contractor/manufacturer is Tele Atlas North America, Inc., 11 Lafayette Street, Lebanon, NH 03766-1445. Phone: 603.643.0330. The DATABASE is ©1984-2005 by Tele Atlas North America, Inc. ALL RIGHTS RESERVED. For purpose of any public disclosure

provision under any federal, state or local law, it is agreed that the DATABASE is a trade secret and a proprietary commercial product and not subject to disclosure.

If you are an agency, department, or other entity of any State government, the United States Government or any other public entity or funded in whole or in part by the United States Government, then you hereby agree to protect the DATABASE from public disclosure and to consider the DATABASE exempt from any statute, law, regulation, or code, including any Sunshine Act, Public Records Act, Freedom of Information Act, or equivalent, which permits public access and/or reproduction or use of the Licensed Products. In the event that such exemption is challenged under any such laws, this Agreement shall be considered breached and any and all right to retain any copies or to use of the DATABASE shall be terminated and considered immediately null and void. Any copies of the DATABASE held by you shall immediately be destroyed. If any court of competent jurisdiction considers this clause void and unenforceable, in whole or in part, for any reason, this Agreement shall be considered terminated and null and void, in its entirety, and any and all copies of the DATABASE shall immediately be destroyed.

#### **END USER NOTICE**

PLEASE READ THIS NOTICE CAREFULLY BEFORE USING THIS NAVIGATION SYSTEM

The Point Of Interest Data ("POI" Data) in the navigation system is in part provided by infoUSA Inc. ("infoUSA"). By using the POI Data, you accept and agree to all terms and conditions set forth below.

#### 1. Ownership

All rights, title and interest to the infoUSA POI Data shall be retained by infoUSA.

#### 2. Limitations on use

Except to the extent explicitly permitted by mandatory laws, you may not extract or re-utilize any portion of the contents of the POI Data, nor reproduce, copy, modify, adapt, translate, disassemble, decompile, or reverse engineer any portion of the POI Data.

#### 3. Transfer

You may not transfer the POI Data to third parties, except together with the system for which it was created, provided that you do not retain any copy of the POI Data.

#### 4. Disclaimer of warranty

EXCEPT AS STATED HEREIN, INFOUSA MAKES NO EXPRESS OR IMPLIED WARRANTIES, INCLUDING, WITHOUT LIMITATION, ANY EXPRESS OR IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR WARRANTY OF MERCHANTABILITY

#### 5. Limitation of Liability

EITHER INFOUSA OR SUPPLIER OF POI DATA SHALL NOT BE LIABLE FOR ANY INDIRECT, CONSEQUENTIAL OR INCIDENTAL DAMAGES MADE OR ALLEGED IN CONNECTION WITH YOUR USE OF THE POI DATA.

#### **END USER LICENSE AGREEMENT**

#### Personal Use Only

You agree to use this information for solely personal, non-commercial purposes, and not for service bureau, time-sharing or other similar purposes. You may not modify the information or remove any copyright notices that appear on the information in any way. You may not decompile, disassemble or reverse engineer any portion of this information, and may not transfer or distribute it in any form, for any purpose. Without limiting the foregoing, you may not use this information with any products, systems, or applications installed or otherwise connected to or in communication with vehicles, capable of vehicle navigation, positioning, dispatch, real time route guidance, fleet management or similar applications.

#### No Warranty

This information is provided to you "as is," and you agree to use it at your own risk. DENSO and its licensors (and their licensors and suppliers, collectively "DENSO") make no guarantees, representations or warranties of any kind, express or implied, arising by law or otherwise, including but not limited to, and DENSO expressly disclaims any warranties regarding content, quality, accuracy, completeness, effectiveness, reliability, fitness for a particular purpose, non-infringement, usefulness, use or results to be obtained from this information, or that the information or server will be uninterrupted or error-free.

Some states, territories and countries do not allow certain warranty exclusions, so to that extent, the above exclusion may not apply to you.

#### Disclaimer of Liability

DENSO SHALL NOT BE LIABLE TO YOU FOR ANY CLAIM, DEMAND OR ACTION, IRRESPECTIVE OF ITS NATURE, ALLEGING ANY LOSS, INJURY OR DAMAGES, WHETHER DIRECT, INDIRECT, INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES, INCLUDING ANY LOSS OF PROFIT, REVENUE OR CONTRACTS ARISING OUT OF YOUR POSSESSION, USE OF OR INABILITY TO USE THIS INFORMATION, ANY DEFECT IN THE INFORMATION, OR THE BREACH OF THESE TERMS OR CONDITIONS, WHETHER IN AN ACTION IN CONTRACT OR TORT OR BASED ON A WARRANTY, EVEN IF DENSO OR ITS LICENSORS HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. Some states, territories and countries do not allow certain liability exclusions or damages limitations, so to that extent the above may not apply to you.

#### Indemnity

You agree to indemnify, defend and hold DENSO and its licensors (including their respective licensors, suppliers, assignees, subsidiaries, affiliated companies, and the respective officers, directors, employees, shareholders, agents and representatives of each of them) free and harmless from and against any liability, loss, injury (including injuries resulting in death), demand, action, cost, expense, or claim of any kind or character, including but not limited to attorney's fees, arising out of or in connection with any use or possession by you of this information.

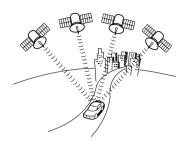
#### **END USER NOTICE**

The marks of companies displayed by this product to indicate business locations are the marks of their respective owners. The use of such marks in this product does not imply any sponsorship, approval, or endorsement by such companies of this product.

### 3. Glossary

In order to use this device effectively, please keep the following definitions in mind.

#### **GPS (Global Positioning System)**



The GPS is a system that uses signals received from a satellite in a maximum orbit of approximately 21,000 km above the earth to indicate your present position (latitude, longitude, altitude).

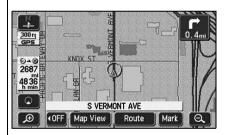
These satellites were launched into space by the U.S. Department of Defense to be used for military purposes. This system was released for public utility.

#### Independent navigation

This technology uses data from a vehicle speed sensor and vibration gyro sensor to track the path followed by your vehicle in order to pinpoint your present location.

The present location of your vehicle can be pinpointed even in tunnels and under elevated roads.

#### Positioning



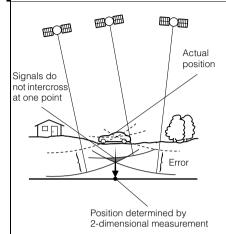
Signals are received from 3 or more GPS satellites to pinpoint the present location of your

vehicle. The device will display a **GP5** mark on the upper left part of the present location screen when it is receiving signals from 3 or more satellites and positioning is rendered possible.

(The **GP5**) mark is not displayed on the setting or registration screens.)

### 3. Glossary

#### 2- and 3-dimensional positioning



The GPS calculates your position using a 3-point measurement principle.

Signals received from one satellite are used determine the distance from that satellite to your vehicle. Signals received from 3 satellites can pinpoint your present location.

However, there exists a margin of error in the GPS satellite and navigation unit resulting in 2-dimensional positioning using latitudinal and longitudinal coordinates if signals from only 3 satellites can be received. In such a case, accuracy is low.

Also, when receiving signals from 4 or more satellites, 3-dimensional positioning is effectuated using the latitude, longitude and altitude of your vehicle. 3-dimensional positioning is more accurate than 2-dimensional positioning and the vehicle position display error margin is reduced.

#### Vibration gyro sensor

This sensor electronically detects in which direction your vehicle turned.

This sensor plays a very important role in the independent navigation function of this device.

# 4. Index by topic

## Information about the maps

Livia	ap displays]	
	■ Info on how to view the map screens	
	"How to view the navigation screen"	Page 14
	■ Info on the present location	
	"Present location display"	Page 27
	■ Info on how to move the map	
	How to view a map in the vicinity of the present location	
	"Moving the map (one-touch scroll)"	Page 28
	<ul> <li>How to view the street name while scrolling</li> </ul>	
	"Setting the Street Name display while scrolling"	Page 29
	■ Info on how to delete the touch switches appearing on the map	s
	"Switching the touch switch display"	Page 29
	■ Info on how to change the map size (reduction scale)	
	● How to switch from a 250 mile to a 75 ft scale	
	"Switching the map reduction scale"	Page 31
	■ Info on how to change the map display method	
	How to change the map orientation	
	"Switching the map orientation"	Page 34
	<ul> <li>How to display a double screen</li> </ul>	
	"Switching to double screen display"	
	■ Info on how to display various data on a map	
	How to display POIs	
	"POI display"	Page 38
	<ul> <li>How to display the arrival time at the destination</li> </ul>	
	"Switching the touch switch display"	Page 29
	How to display the present time	

# 4. Index by topic

	■ Info on how to switch the map image quality	
	How to change the brightness and contrast	
	"Screen adjustment"	Page 21
	<ul> <li>How to change the map color</li> </ul>	
	"Switching the map display color"	Page 23
[Ret	rieving a map]	
	■ Info on how to retrieve a map	
	"How to retrieve maps"	Page 47
	<ul> <li>How to retrieve a map by entering a POI name or part of an address</li> </ul>	
	"Retrieving a map using a POI name"	Page 52
	<ul> <li>How to retrieve a map by searching for an address</li> </ul>	
	"Retrieving a map using an address"	Page 50
	<ul> <li>How to retrieve a map for the police station/hospital</li> </ul>	
	"Retrieving a map in the event of an emergency"	Page 58
	<ul> <li>How to retrieve a map from a registered point</li> </ul>	
	"Retrieving a map using a memory point"	Page 58
	<ul> <li>How to retrieve a map from the previous destination</li> </ul>	
	"Retrieving a map using the archive"	Page 59
	<ul> <li>How to retrieve a map from the intersection name</li> </ul>	
	"Retrieving a map using an intersection name"	Page 59
	<ul> <li>How to retrieve a map from the freeway exit/entrance name</li> </ul>	
	"Retrieving a map using a freeway exit/entrance name"	Page 61
	<ul> <li>How to retrieve a map by entering the latitude/longitude</li> </ul>	
	"Retrieving a map using the latitude/longitude"	Page 62
F	Route guidance	
	or to starting route guidance]	
	■ Info on how to set a destination	
	"Setting a destination"	Page 66
	■ Info on how to start route guidance	
	"Starting route guidance"	Page 85
	■ Info on how to display alternate routes	
	"3-route simultaneous display (3-route search function)"	Page 75

Info on the route up to the destination (guided roads)	
"Display route data (guided road information)"	Pag
Info on how to add a destination	
"Adding a destination"	Pag
Info on how set a transit road	
"Indicating a transit road"	Pag
Info on how to change the displayed route	
"Change the search conditions for each interval"	Pag
route guidance is in progress]	
■ Info on how to change the voice guidance volume	
"Setting the volume"	Pag
Info on junction intersection landmarks	
"Voice guidance"	Pag
Stopping route guidance	
How to pause route guidance without deleting the destination	n(s)
"Pausing and restarting route guidance"	Pag
How to pause route guidance and delete the destination(s)	
"Deleting a destination"	Pag
■ Info on how to display all-route diagrams	
"Redisplaying the all-route display"	Pag
■ Info on how to change the displayed route	
■ What to do when having deviated from the displayed rou	te
"Reinitiating a route search"	Pag

# 4. Index by topic

# Others

[Usef	ul functions]
	■ Info on how to change the menu screen color
	"Setting the wallpaper""OPERATION GUIDE/Audio"
	■ Info on how to place a symbol on the map
	● How to mark your home
	"Registering, correcting or deleting your home"
	● How to mark a desired location
	"Registering memory points"Page 107
	"Registering a special memory point" Page 117
[Whe	n something isn't clear]
	■ I don't understand how to move the list screen
	"How to switch the list screens"
	■ I don't understand the screen message
	"If one of these messages appears"
	■ Was that a malfunction?
	"Before asking for repairs"
	■ When the GPS mark does not appear

# For reference

# MEMO



# 5. INDEX

Numerics	Highway junction guidance91
3-route simultaneous display (3-route search function) 75	How to retrieve maps47 How to view the
A	navigation screen14
Accuracy and error 138 All-route display	
Automatic reroute search 101	Indicating a transit road82 Intersection guidance86
В	N
Building shape display 33	Name entry114
C	North up display34
Correcting the distance 136	0
D	On-route scroll
Deleting entries from the destination archive 125	Р
Display seasonally restricted segment72	POI display38 Point registration102
Displaying the building data 33  Double screen display 35	Present location
Double screen display55	correction134
	R
Ferry crossings89 Free zoom31	Rear View Camera operations128
G	Registering detour
GPS16	memory points121 Registering memory points107
H	Registering special memory points117
Heading up display34	Registering your home 103 Reinitiating a route search 98

Route data (guided road information)74 Route search65
S
Scale display15
Setting a destination 64, 66
Setting the average speed 90 Starting, pausing and
restarting route guidance 85
Switching the distance
remaining display96
Switching the map
reduction scale31
SYSTEM CHECK127
V
Vehicle position mark 15
Voice guidance93