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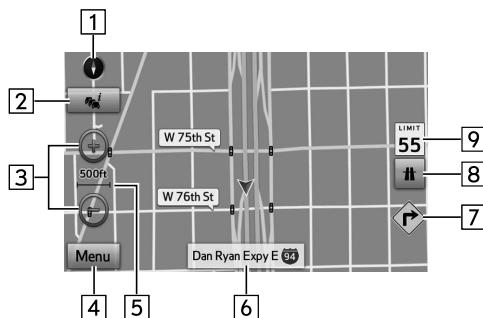
NAVIGATION SYSTEM (WITH NAVIGATION FUNCTION)

BASIC OPERATION

QUICK REFERENCE

MAP SCREEN

To display this screen, select **[MAP]**, or select **[HOME]** and then select **[MAP]** (MAP).



No.	Name	Information/Function	Page
1	2D North-up, 2D heading-up or 3D symbol	Select to change the map display mode between 2D north-up, 2D heading-up or 3D. In 3D map, only a heading-up view is available.	190
2*	Traffic button	Select to check the traffic detailed conditions.	192
3	Zoom in/out button	Select to magnify or reduce the map scale.	190
4	Menu button	Select to display the menu screen.	186
5	Scale indicator	This figure indicates the map scale.	190
6	Current street	Select to display the "Where Am I? (Where Am I?)" screen.	188
7*	Drive Alert Indicator	Display the drive alert indicator.	-
8*	Highway information	Select to display the highway information.	209

No.	Name	Information/Function	Page
9	Speed Limit indicator	Displays the speed limit for the road being driven on.	-

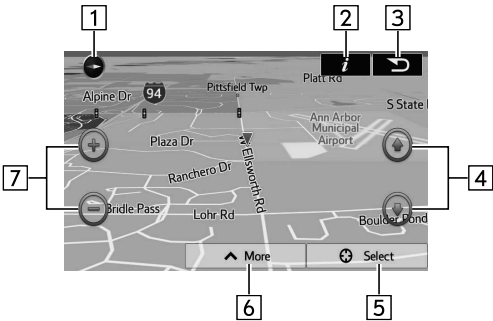
*: The default settings are hidden, and can be displayed from “Display on Map (Display on Map)” in “Map Settings (Map Settings)”. (→P.225)

NOTE

- An “Unable to read the map SD data. Check the map SD. If necessary, consult your dealer.” message appears if the map SD card is not inserted, or if an SD card containing no map data is inserted.

MAP OPERATIONS

You can touch a position on the map, and then check that position during navigation. The map’s current position tracking function stops (the car marker (a blue arrow by default) is not fixed in position on the screen), and the control buttons are displayed allowing you to change the map display.



No.	Operation	Function
1	2D or 3D display	Select to change the map display mode between 2D north-up, 2D heading-up or 3D.
2	Point information	Select to open another screen displaying information on the selected map position (cursor). When Bluetooth is enabled on your cellular phone, a call can be placed if the displayed information screen contains phone number information.

No.	Operation	Function
3	Return to normal navigation	Select to return the map to the current GPS position. Auto map rotation is also enabled. The map operation buttons are hidden, and navigation restarts.
4	Tilt up/down	Select to change the vertical display angle of the map in 3D mode. Select and hold to continue changing the motion of the map screen.
5	Selecting a destination	Select to select the cursor as a new destination. The route is researched automatically.
6	Additional functions	Select to display the additional functions list. For example, saving the cursor to the destination list, and searching the area around the cursor.
7	Zoom in/out	Select to change the area of the map displayed on the screen. Select and hold to continue changing the scale of the map screen.

NOTE

- The map screen scale can be changed by double-touching or pinching the screen. (→P.40)
- The map direction can be changed by rotating the screen. (→P.40)

NAVIGATION MENU

When you select **Menu** (Menu) on the navigation screen, the navigation menu (main menu) appears. You can access all of the software's functions from this menu.



No.	Function
1	Select to start navigation on the map. The button itself shows the current position, recommended route, and reduces the surrounding area to display on the map being used. Select to enlarge the map to full-screen size.
2	Select to search for a destination. You can select which method to use to reach your destination by entering the address, selecting a favorite spot, selecting a position on the map, or selecting from the destination list. You can also select recent destinations from Smart History, or enter coordinates into the system.
3	Select to perform various route related functions such as editing or canceling the route, setting the route departure point, selecting a different route, avoiding a part of the route, performing a navigation simulation, or adding an entry to the destination list.
4	Select to set the navigation software operating method, start the tutorial, show a demo route simulation, or start various other auxiliary applications.
5	Select  or  to adjust the guidance volume.
6	Select to clear the route and cancel navigation.

No.	Function
7	Select to open the "Traffic Summary (Traffic Summary)" screen.

NOTE

- Guidance volume can be adjusted during guidance by turning the **"POWER/VOLUME"** knob, or by using the volume control switch on the steering wheel.

GPS INDICATOR

The GPS reception quality icon at the top right of the menu screen indicates the current accuracy of positional information.

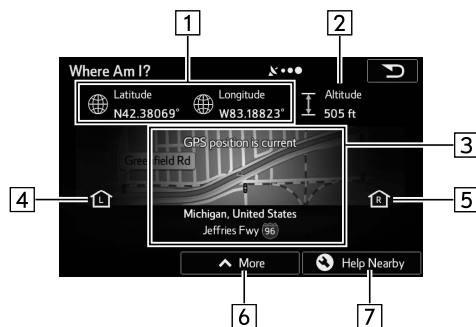
Indicator	Condition
	The software is not connected to the GPS receiver. Cannot perform GPS navigation.
	Although the software is connected to the GPS receiver, the signal is too weak to measure the GPS. Cannot perform GPS navigation.
	Only a few satellites are transmitting. Positional information is available, but altitude (elevation above sea level) cannot be calculated. GPS navigation is possible, but large positional errors may occur.

Indicator	Condition
	Elevation above sea level is available, and measurements can be performed in 3D. GPS navigation is available.

CHECK CURRENT POSITION

The button on this screen searches for information on the current position (if there is no GPS reception it uses the last confirmed position) and recommended spots in the area, and displays them on the screen.

1. Select “street name” on the map screen.
2. Check that the “Where Am I? (Where Am I?)” screen is displayed.

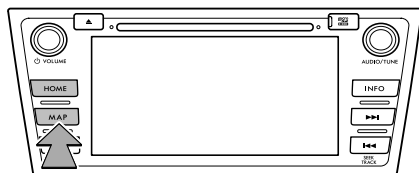


No.	Information/Function
1	Latitude/Longitude (Current positional coordinates use the WGS84 land survey system)
2	Altitude (Advanced information acquired by the GPS receiver - may not be accurate)
3	The latest location information is displayed, or the time after the latest information was acquired is displayed. A detailed address (when available) for the current position is displayed at the bottom of the screen.
4	Address of current position on left
5	Address of current position on right
6	Select to save the current position in the destination list. (→P.220)
7	Select to search for nearby help around the current position. (→P.203)

MAP SCREEN OPERATION

CURRENT POSITION DISPLAY

1. Select **MAP**, or select **HOME** and then select **MAP** (MAP).



2. Check that the current position map is displayed.



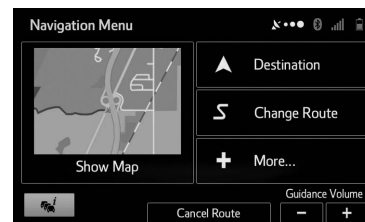
NOTE

- While driving, the current position mark is fixed on the screen and the map moves.
- The current position is automatically set as the vehicle receives signals from the GPS (Global Positioning System). If the current position is not correct, it is automatically corrected after the vehicle receives signals from the GPS.
- After the battery disconnection, or on a new vehicle, the current position may not be correct. As soon as the system receives signals from the GPS, the correct current position is displayed.

SHOW MAP

In the navigation menu screen, the currently active map is reduced and displayed in **Show Map** (Show Map).

1. Select **Show Map** (Show Map) on the navigation menu screen.



- This map shows the current position (shown as the vehicle marked as a blue arrow), recommended routes (blue lines), and the immediate surrounding area.
- When GPS positioning is not active, the vehicle marker is clear. The latest confirmed position is displayed. When GPS positioning is active, the vehicle marker is displayed in fullcolor, and the current position is shown.

MAP SCALE

AUTO ZOOM

► While driving the route

When approaching an intersection, the screen is enlarged and the viewpoint raised so that you can easily see which way to drive at the next intersection. After navigating the intersection, the screen is reduced and the angle lowered to check the road in front.

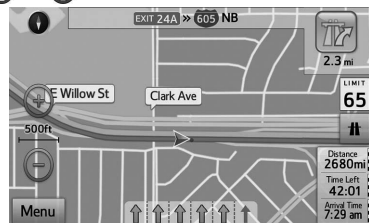
► When driving without route navigation

The screen is enlarged as you slow down and reduced as you speed up.

- This function is OFF by default, and can be turned ON from "Auto Zoom (Auto Zoom)" in "Map Settings (Map Settings)". (→P.225)

MANUAL OPERATION

1. Select or to change the scale of the map screen.



- Select and hold or to continue changing the scale of the map screen.
- You can also change the scale of the map screen by selecting double touch (→P.40) or pinch operation (→P.40).

NOTE

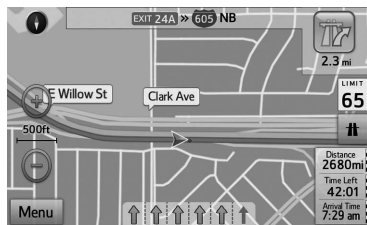
- In 3D mode, the map cannot be reduced endlessly. The map changes to 2D mode if you zoom out beyond the defined amount.

ORIENTATION OF THE MAP

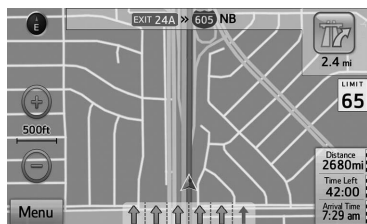
The orientation of the map can be changed between 2D north-up, 2D heading-up and 3D.

1. Select or .

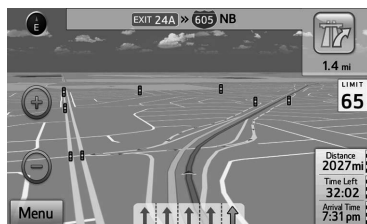
► North-up screen



► Heading-up screen



► 3D screen



- : 2D north-up symbol

Regardless of the direction of vehicle travel, north is always up.

- : 2D heading-up and 3D symbol
The direction of vehicle travel is always up.
- The letter(s) indicate the vehicle's heading direction (e.g. N for north).

POSITION MARKER

SELECTED MAP LOCATION (CURSOR)

Use one of the following methods to mark a map location.

- Select the map during navigation.
- Select the map when the destination you want is displayed in the search results.
- Select the map in “Find on Map (Find on Map)”.

You can use the cursor's position as the route's destination, search for locations around the cursor, and save the position in the destination list.

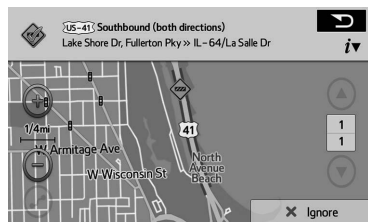
- After selecting a map location, a cursor is displayed at the point selected on the map. The cursor is displayed as a red point () and can be checked at all zoom levels.

TRAFFIC INFORMATION

DISPLAYING TRAFFIC INFORMATION

Road sections affected by traffic conditions are displayed in a different color on the map, and a small icon representing the type of traffic condition is displayed above the road. You can change the items displayed by setting the Traffic. (→P.224)

1. Select  on the map screen.
2. Select **Event List** (Event List).
3. Select the desired event type.
4. Select the desired traffic information.
5. Check that the traffic condition is displayed.



-  : Select to open another screen displaying information on the selected map position.

DESTINATION SEARCH

DESTINATION SEARCH SCREEN

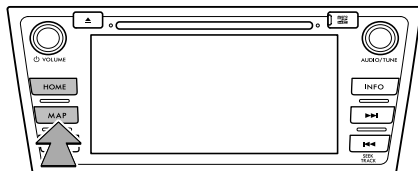
The “Destination (Destination)” screen enables to search for a destination. To display the “Destination (Destination)” screen, select **MAP**, or select **HOME** and then select **MAP** (MAP), and select **Menu** (Menu) on the “MAP (MAP)” screen. Then select **Destination** (Destination) on the navigation menu screen.



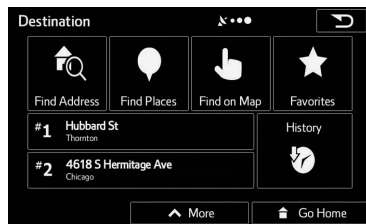
No.	Function	Page
1	Select to search for a destination by address.	195
2	Select to search for a destination by point of interest.	197
3	Select to search for a destination by the map.	201
4	Select to search for a destination from destination list.	201
5	Select to search for a destination from frequently used destination.	202
6	Select to search for a destination from previously set destinations.	202
7	Select to search for a destination by coordinates.	202
8	Select to set a destination by home.	195

SEARCH OPERATION

1. Select **MAP**, or select **HOME** and then select **MAP** (MAP).

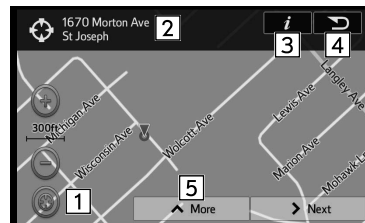


2. Select **Menu** (Menu).
3. Select **Destination** (Destination).
4. Search for a destination.



- There are different kinds of methods to search for a destination. (→P.193)
- The map is displayed in full-screen mode with the selected point at the center.

- If necessary, you can touch another point on the map to change the destination.
 - The cursor () is displayed at the new position.
5. Select **Next** (Next) (when a route has been set) or **Select** (Select) (when no route has been set) to set the destination.



No.	Function
1	Select to return to the previous location when the map has been moved.
2	Displays the name and address of the spot.
3	Select to open another screen displaying information on the selected map position.
4	Select to select another destination.
5	Select to display the additional functions list.

- After a summary of the route plan is displayed, the entire route is displayed on the map.

SETTING HOME AS DESTINATION

To use this function, it is necessary to register a home address. (→P.219)

- 1. Display the “Destination (Destination)” screen. (→P.193)
- 2. Select **Go Home** (Go Home).
- 3. Select **Next** (Next) (when a route has been set) or **Go!** (Go!) (when no route has been set).
 - The navigation system performs a search for the route and the entire route map is displayed. (→P.204)

SEARCHING BY FIND ADDRESS

There are 4 methods to search for a destination by address.

- 1. Display the “Destination (Destination)” screen. (→P.193)
- 2. Select **Find Address** (Find Address).
- 3. Select **Country or State/Province** (Country or State/Province).
 - By default, the country and district for your current position are displayed.

- 4. Select the desired country or state (province).



- 5. Select the desired search method.



No.	Function	Page
1	Select to search by city.	196
2	Select to search by street.	196
3	Select to search by intersection.	196
4	Select to search by city/town center.	196

SEARCHING BY CITY

1. Select **City** (City).
2. Enter a city name or ZIP Code.
 - Refer to “HINTS FOR QUICK ADDRESS ENTRY” for information on quicker searching. (→P.197)
3. Select the desired city name or ZIP Code.
4. Select **Street** (Street).
5. Enter a street name.
 - Refer to “HINTS FOR QUICK ADDRESS ENTRY” for information on quicker searching. (→P.197)
6. Select the desired street name.
7. Select **House Number** (House Number).
8. Enter a house number.
 - If the house number is not found, the center of the street is selected as the destination.
9. Select **Next** (Next) (When a route has been set) or **Go!** (Go!) (when no route has been set).

NOTE

- If the destination is to be used frequently, it can be saved to the destination list before selecting **Next** (Next) (when a route has been set) or **Go!** (Go!) (when no route has been set). (→P.220)

SEARCHING BY CITY/TOWN CENTER

1. Select **Select City** (Select City) without entering the street name.
 - Set the city/town center displayed as the route's destination.

SEARCHING BY STREET

1. Select **Street** (Street).
2. Enter a street name.
 - Refer to “HINTS FOR QUICK ADDRESS ENTRY” for information on quicker searching. (→P.197)
3. Select the desired street name.
4. Select **Select Street** (Select Street) without entering an address.
 - The center of the street is selected as the destination.

SEARCHING BY INTERSECTION

1. Select **Intersecting Street** (Intersecting Street).

2. Select from the list.

- If there are only a few roads at the intersection, the list is displayed immediately.
- If the road is a long way off, the keyboard screen is displayed. Use the keyboard to enter the start of the intersection name. A list is automatically displayed when the entered road name matches and can be displayed on one screen.
- Refer to “HINTS FOR QUICK ADDRESS ENTRY” for information on quicker searching. (→P.197)

HINTS FOR QUICK ADDRESS ENTRY

- When entering a city/town name or a street name:
 - Only characters that can be displayed in the search results are shown on the keyboard. Other characters are grayed out.
 - While entering text, the most likely search result is always displayed in the text entry field. If the search result is correct, select  to select it.
 - If you select **Results** (Results) after entering two characters, items that contain those two characters are displayed in the list.

- You can find intersections easily by using the following method.
 - First, when searching for an uncommon road name, you only need to enter the first few letters to acquire the name.
 - When one street name is shorter than the other, the shorter one is searched for first. This shortens the search time for the road with the longer name.
- You can search by road category as well as road name. When the same word is included in names such as the street, road, and main street, by entering the first character for the type of road, you can quickly bring up the search results. For example, if you are searching for “Pine Avenue” and you enter “Pi A”, roads such as “Pine Street” or “Pickwick Road” are not displayed.
- You can also search by using the ZIP Code. If the ZIP Code only contains a few characters, you can search more quickly than when entering the city/town name.

SEARCHING BY FIND PLACES

There are 3 methods to search for a destination by Find Places.

1. Display the “Destination (Destination)” screen. (→P.193)
2. Select **Find Places** (Find Places).
3. Select the desired search method.



No.	Function	Page
1	Select to search by name.	198
2	Select to search by location.	198
3	Select to search by preset category.	200

SEARCHING BY NAME

1. Select **Quick Search Along Route** (Quick Search Along Route).
 - When no route has been set, select **Quick Search Around Last Known Position** (Quick Search Around Last Known Position) (no GPS signal) or **Quick Search Around Here** (Quick Search Around Here) (on GPS signal).

2. Enter a spot name.
 - Select **Results** (Results) after entering the first few characters to open a list of spot names that include the characters you entered.
3. Select the desired spot.



- **Filter** (Filter): Select to narrow down the list.
- **More** (More): Select to change the sort order of the list or to display all listed spots on the map.

SEARCHING BY LOCATION

1. Select **Custom Search** (Custom Search).

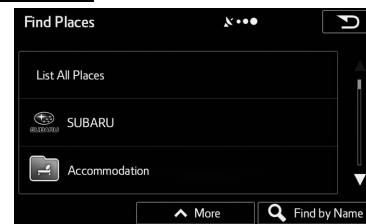
2. Select the spot area.



No.	Function
1	Select to search for city/town spots.
2	Select to search along the route being navigated, rather than around an optional point.
3	Select to search around your current position, or the latest confirmed position.
4	Select to search for spots at the destination during route navigation.

■ SELECTING FROM THE CATEGORIES

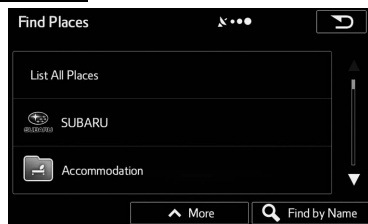
1. Select a main category (such as accommodation) or **List All Places** (List All Places).



2. Select a sub-category (such as hotel or motel) or **List All Places** (List All Places).
 - Brand names of services may also be displayed depending on the sub-category of the selected spot. Select a brand name or **List All Places** (List All Places).
3. Select the desired spot.
 - **More** (More): Select to change the sort order of the list or to display all listed spots on the map.

■ SEARCHING BY NAME

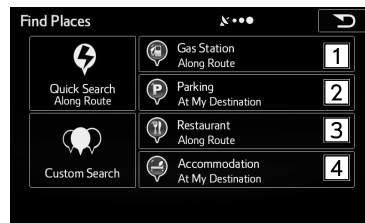
1. Select a main category (such as accommodations) or **Find by Name** (Find by Name).



2. Select a sub-category (such as hotels or motels) or **Find by Name** (Find by Name).
3. Select **Find by Name** (Find by Name) to search a sub-category of the select spot.
4. Enter a spot name.
 - Select **Results** (Results) after entering the first few characters to open a list of spot names that include the characters you entered.
5. Select the desired spot.

SEARCHING BY PRESET CATEGORY

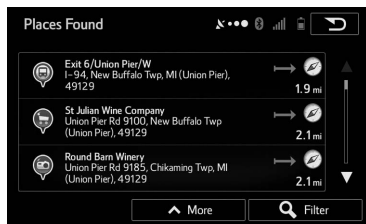
1. Select the desired search category.



No.	Function
1	Select to search for gas stations along the set route.
2	Select to search for parking lots at the destination.
3	Select to search for restaurant along the set route.
4	Select to search for accommodation at the destination.

- Searches around the current position if navigation is not being performed (if no destination is set).
- Searches the area around the last confirmed position if the current position is unavailable (no GPS signal).

2. Select the desired spot.



- **Filter** (Filter): Select to narrow down the list.
- **More** (More): Select to change the sort order of the list or to display all listed spots on the map.

SEARCHING BY FIND ON MAP

1. Display the “Destination (Destination)” screen. (→P.193)
2. Select **Find on Map** (Find on Map).
3. Scroll the map to the desired point and touch.



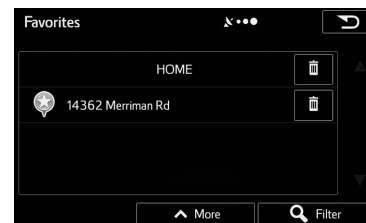
- The cursor () is displayed.

- : Select to return to the previous location when the map has been moved.

4. Select **Next** (Next).

SEARCHING BY FAVORITES

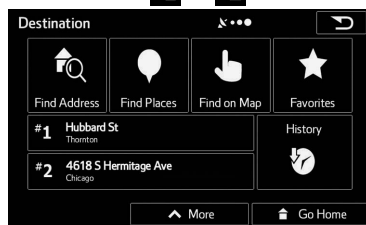
1. Display the “Destination (Destination)” screen. (→P.193)
2. Select **Favorites** (Favorites).
3. Select the desired destination.



- Refer to “SAVING DESTINATIONS” for information on how to save the destination. (→P.220)
- **Filter** (Filter): Select to narrow down the list.
- : Select to delete the favorites.
- **More** (More): Select to change the sort order of the list, to display all listed spots on the map or to delete all favorites on the list.

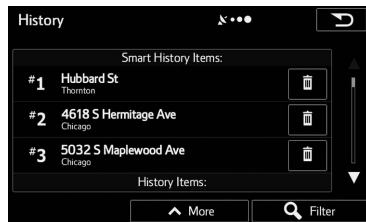
SEARCHING FROM A FREQUENTLY USED DESTINATION (SMART HISTORY)

1. Display the “Destination (Destination)” screen. (→P.193)
2. Select the destination **#1** or **#2**.



SEARCHING FROM HISTORY

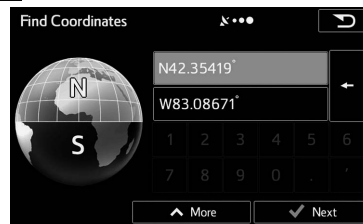
1. Display the “Destination (Destination)” screen. (→P.193)
2. Select **History** (History).
3. Select the desired destination.



- **Filter** (Filter): Select to narrow down the list.
- : Select to delete the previous destination.
- **More** (More): Select to delete all destinations on the list.

SEARCHING BY COORDINATES

1. Display the “Destination (Destination)” screen. (→P.193)
2. Select **More** (More).
3. Select **Coordinate** (Coordinate).
4. Select .



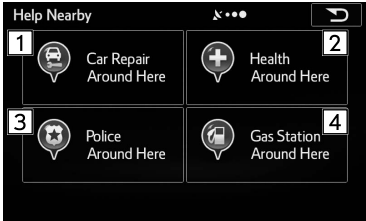
- Select to enable the numeric keypad input. Since the second time to erase one character at the cursor position.
 - Select **More** (More) to set the UTM coordinates.
5. Enter the latitude and longitude and then select **Next** (Next).

OTHER SEARCH OPERATION

SEARCHING BY WHERE AM I?

You can search for the closest assistance service by using the “Where Am I? (Where Am I?)” screen.

- 1. Display the “Where Am I? (Where Am I?)” screen. (→P.188)
- 2. Select **Help Nearby** (Help Nearby).
- 3. Select the desired search category.



No.	Function
1	Select to search for vehicle repairs / road-side assistance services.
2	Select to search for hospitals / emergency services.

No.	Function
3	Select to search for police stations.
4	Select to search for gas stations.

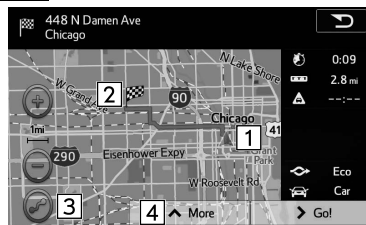
- This button searches for everything around your current position (or the latest confirmed position if it is unavailable).
- 4. Select the desired spot.

STARTING ROUTE GUIDANCE

When the destination is set, the entire route map from the current position to the destination is displayed.

STARTING ROUTE GUIDANCE

1. Select **Go!** (Go!) to start guidance.



No.	Information/Function
1	Current position
2	Destination point
3	Select to display the map around the current position.
4	Select to display the route options list.

- When the countdown is displayed in the **Go!** (Go!), guidance begins automatically after 10 seconds even if you do not select the button.

⚠ WARNING

- Be sure to obey traffic regulations and keep road conditions in mind while driving. If a traffic sign on the road has been changed, the route guidance may not indicate such changed information.

NOTE

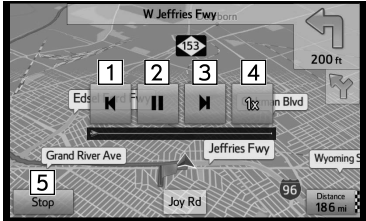
- The route for returning may not be the same as that for going.
- The route guidance to the destination may not be the shortest route or a route without traffic congestion.
- Route guidance may not be available if there is no road data for the specified location.
- If a destination that is not located on a road is set, the vehicle will be guided to the point on a road nearest to the destination. The road nearest to the selected point is set as the destination.

DISPLAYING ROUTE SIMULATION

You can run a simulation of the route currently being navigated.

1. Display the “Change Route (Change Route)” screen. (→P.211)
2. Select **More** (More).

3. Select **Simulate Navigation** (Simulate Navigation).
4. Check that the route simulation is displayed.
- The simulation begins from the start point and works through the entire route at the recommended speed.
 - You can use the following buttons during the simulation (although the control buttons disappear after a few seconds, you can touch the map to show them again).



No.	Function
1	Select to return to the previous route event (the previous change in the route).
2	Select to pause the simulation.
3	Select to go to the next route event (the next change in the route).

No.	Function
4	Select to change the speed of the simulation. You can select from speeds of 4x, 8x, or 16x. Select again to return to normal speed.
5	Select to stop the simulation.

CANCELING ROUTE

The route being navigated is deleted, including all waypoints.

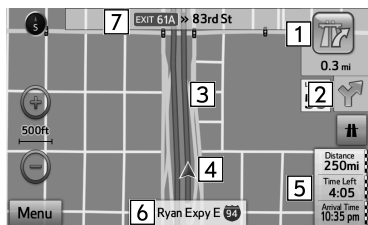
1. Select **Menu** (Menu) on the map screen.
2. Select **Cancel Route** (Cancel Route).
 - You can also cancel the route guidance by selecting **Cancel Route** (Cancel Route) on the “Change Route (Change Route)” screen. (→P.211)

ROUTE GUIDANCE

ROUTE GUIDANCE SCREEN

During the route guidance, various types of guidance screens can be displayed depending on conditions.

SCREEN FOR ROUTE GUIDANCE



No.	Information/Function
1	Distance to the next turn and an arrow indicating the turning direction
2	Arrow indicating the direction of the turn after the next turn
3	Guidance route
4	Current position
5	Data fields

No.	Information/Function
6	Current street name Select to display the "Where Am I? (Where Am I?)" screen. (→P.188)
7	Next street name

NOTE

- If the vehicle goes off the guidance route, the route is searched again.
- For some areas, the roads have not been completely digitized in our database. For this reason, the route guidance may select a road that should not be traveled on.

STANDARD MAP ICON

The following table shows the most frequently displayed route events.

Icon	Explanation
	Turn left
	Turn right
	U-turn left

Icon	Explanation
	U-turn right
	Keep left at the fork in the road.
	Keep right at the fork in the road.
	Turn left & sharp curve.
	Turn right & sharp curve.
	Stay in the left lane.
	Stay in the right lane.
	Go straight ahead at the intersection.
	Turn left at the T junction.
	Turn right at the T junction.
	Go left at the roundabout. Third exit (next change in direction).
	Join the roundabout (the route change after the next change).
	Join the expressway.
	Leave the expressway.
	Board the ferry.

Icon	Explanation
	Disembark from the ferry.
	You are half way to your destination.
	You have arrived at your destination.

DATA FIELDS

When the vehicle is on the guidance route, the data fields display the distance, the time left or the estimated arrival time to the destination.

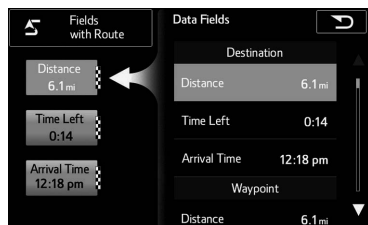
Each time data fields are selected, the distance, the time left, and the arrival time are displayed. A single data field can then be displayed by selecting from these three items.

CHANGING DATA FIELDS

If the waypoint has been set, the distance, the time left, and the arrival time to the waypoint can be displayed.

1. Select and hold the data fields to change the display of the data fields.

2. Select to display the desired item.



NOTE

- When the vehicle is on the guidance route, the distance measured along the route is displayed. Travel time and arrival time are calculated based on the average speed for the specified speed limit.

ROUTE OVERVIEW

The entire route from the current position to the destination can be displayed during the route guidance.

1. Select **Menu** (Menu) on the map screen.
2. Select **Change Route** (Change Route).
3. Select **Overview** (Overview).

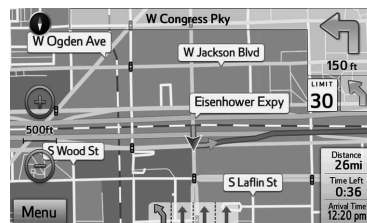
4. Check that the entire route map is displayed.



LANE INFORMATION AND SIGNS

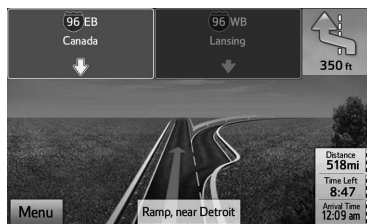
LANE INFORMATION

When lane information is available on the map, the lane and direction are indicated below the map with small arrows. The lane that you should drive in is highlighted.



SIGNS

When detailed information is available, the arrows are removed and signs are displayed. Signs are displayed at the top of the map. The color and design of the signs is the same as signs actually found at the side of the road or overhead signs. These signs show the district and the route number for the lane direction.

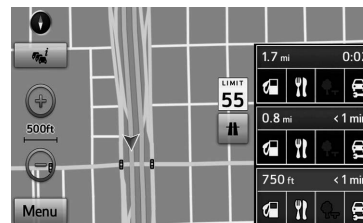


- All signs are displayed in the same manner even when driving without using the navigation system. During navigation, only the sign that shows the lane in which you should drive is highlighted, the other signs are toned down.

HIGHWAY SERVICES

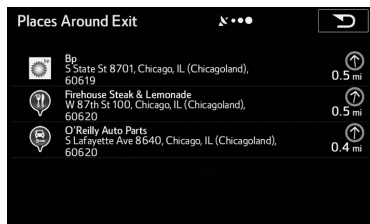
When driving on the expressway, this displays information on up to the next three highway service areas. By default, “Gas Station (Gas Station)”, “Restaurant (Restaurant)”, “Rest Area (Rest Area)”, and “Car Service (Car Service)” are displayed. You can change the items displayed by setting the “Visual Guidance (Visual Guidance)”. (→P.227)

1. Select  on the map screen.
 - When information is available for the highway service area,  is displayed.
2. Check that the highway service area information (distance, time needed, and services provided) is displayed.



- The highway service area information display disappears after 15 seconds.
3. Select the desired highway service area information.

4. Select one from the list to display more details.



- You can check it on the map and set it as a waypoint or as a destination.

JUNCTION DISPLAY

When approaching an expressway exit or a complicated intersection, the map switches to a 3D display if the necessary information can be displayed. An arrow indicates the lane in which you should drive. Signs are also displayed if the information is available.



TYPICAL VOICE GUIDANCE PROMPTS

As the vehicle approaches an intersection, or point, where maneuvering the vehicle is necessary, the system's voice guidance will provide various messages.

! WARNING

- Be sure to obey the traffic regulations and keep the road condition in mind especially when you are driving on IPD roads. The route guidance may not have the updated information such as the direction of a one way street.

NOTE

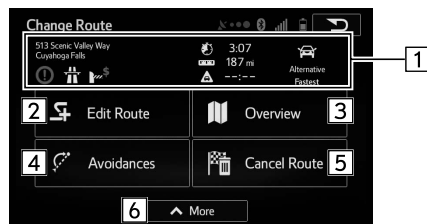
- To adjust the voice guidance volume: →P.181
- Voice guidance may be made early or late.
- If the system cannot determine the current position correctly, you may not hear voice guidance or may not see the magnified intersection on the screen.

ROUTE RELATED FUNCTIONS

DISPLAYING CHANGE ROUTE

You can check a variety of route settings recommended by the software.

1. Select **Menu** (Menu) on the map screen.
2. Select **Change Route** (Change Route).
3. Check that the list is displayed, or select the desired item.

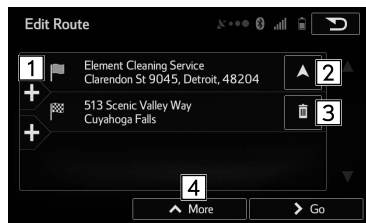


No.	Information/Function
1	• Destination Name/Address • Displays detailed information (unpaved roads, toll roads, and so on) on the warning icons (depending on conditions) for the current route. • Total time for route • Total distance for route • Estimated delay times calculated from traffic conditions on the route • Route planning method ("Priority to time" and so on)
2	Select to add or delete a destination, or change the order for the destinations. You can set the route departure point, excluding the current position. This is useful for creating a route in advance and saving it for later use. (→P.212)
3	Select to display the entire route on the map. (→P.208)
4	Select to avoid a section of the route. (→P.215)
5	Select to delete the route currently being navigated.
6	Select to display a list of various options such as selecting another route, displaying the itinerary list, changing the route settings, running a simulation of the route, saving the route being navigated, and reading a previously saved route.

EDITING ROUTE

You can change the destination list and edit the route. You can add or delete destinations, change the start point, or change the order of the list.

1. Display the “Change Route (Change Route)” screen. (→P.211)
2. Select **Edit Route** (Edit Route).
3. Select the desired item.



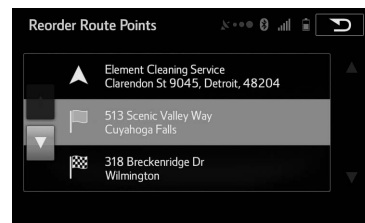
No.	Function	Page
1	Select to add a destination.	212
2	Select to change the start point of the route.	216
3	Select to delete a destination.	213
4	Select to change the display order of the list. You can also manually select the optimum route in the application.	212

ADDING DESTINATIONS

1. Display the “Edit Route (Edit Route)” screen. (→P.212)
2. Select **+**.
3. Search for an additional destination in the same way as a destination search. (→P.193)

REORDERING DESTINATIONS

1. Display the “Edit Route (Edit Route)” screen. (→P.212)
2. Select **More** (More).
3. Select **Reorder** (Reorder).
4. Select the desired destination and then select ▲ or ▼ of left side on the screen to change the arrival order.



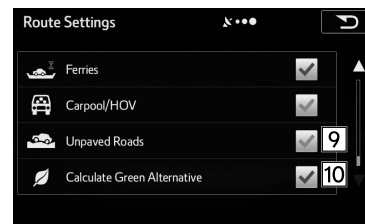
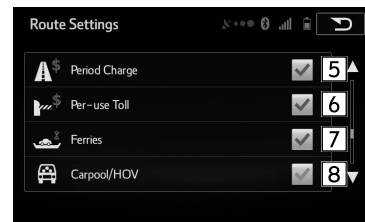
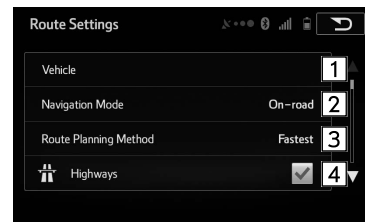
DELETING DESTINATIONS

1. Display the “Edit Route (Edit Route)” screen. (→P.212)
2. Select .
3. Select **Delete** (Delete) when the confirmation screen appears.

SETTING ROUTE PREFERENCES

The conditions to determine the route can be selected from various choices such as Highways, Toll Road, Ferries, etc.

1. Select **Menu** (Menu) on the map screen.
2. Select **More** (More).
3. Select **Settings** (Settings).
4. Select **Route Settings** (Route Settings).
5. Select the desired route preferences and then select .



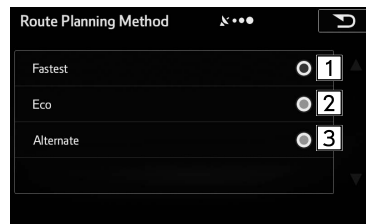
No.	Function
1	Sets various factors to take into account when performing a search, such as fuel consumption, fuel costs, and maximum speed.

No.	Function
2	You can change between On-road and Off-road. Set to On-road to perform normal navigation, or set to Off-road to navigate using the straightest possible route to the destination.
3	By changing the route search method, you can search for the optimum route for a variety of situations and types of vehicle.
4	Select whether or not to use the expressway when creating the route.
5	Select whether or not to use toll roads (Period Charge) in the route.
6	Select whether or not to use toll roads (Per-use Toll) in the route.
7	Select whether or not to use ferries when creating the route. (However, ferries might not always be selected for the route.) However, information on temporary service ferries may not be displayed on the map. There may be a fee for using the ferry.
8	Select whether or not to use Carpool/HOV lanes when creating the route.
9	Select whether or not to use unpaved roads when creating the route.
10	Select to search for the best green alternative route. If this alternative route is much better than the selected method, you can quickly switch to Green mode.

- The route is searched again, and the new recommended route is indicated by a blue line.

SELECTING ROUTE TYPE

1. Display the “Route Settings (Route Settings)” screen. (→P.213)
2. Select **Route Planning Method** (Route Planning Method).
3. Select the desired route type.



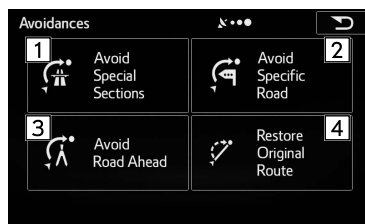
No.	Function
1	Select to search all roads for the quickest route following the speed limits of the roads.
2	Select to search for the route that conserves the most energy.

No.	Function
3	Select to search for a route that is easiest to drive, with few right and left turns. Using this option, the program allows you to avoid combinations of smaller roads and to take the expressway.

AVOIDANCES SETTING

The avoidances feature allows you to remove any of the roads or special sections on the planned route.

1. Display the “Change Route (Change Route)” screen. (→P.211)
2. Select **Avoidances** (Avoidances).
3. Select the item to be set.



No.	Function
1	Select to remove any special road types (e.g. highways or ferries) from your route. This feature is only available if there are special sections along the planned route.

No.	Function
2	Select to skip a specific road from your calculated route.
3	Select to skip a predefined length of the planned route (500m, 1000m, etc.) right ahead of the current position.
4	Select to delete the avoid route being navigated.

- In each case, the result of the selected avoidance is shown on the map with an indication of additional or saved time and distance. The user can review and confirm the avoidance on this screen.

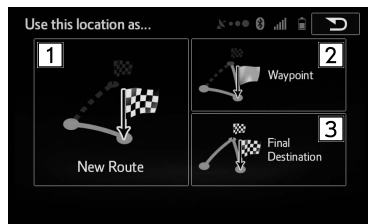
NOTE

- Avoidances are not permanent. They are only applied for the active route.

CHANGING ROUTE

When navigation has already begun, you can change the route being navigated by using one of the following methods.

If a recommended route is already available, and a new destination has been selected using the method described in the previous section, the start new route, add a new waypoint (midway point), and add the destination you selected as the final destination buttons are displayed.



No.	Function
1	Select to create a new route at the position you selected. Previous destinations and waypoints are deleted.
2	Select to add the position you selected as a new waypoint for the current route. Other destinations for the route are already enabled. Note: Waypoints are set so that the optimum route is maintained between destinations. You can use the route editing function to set the position for waypoints on the route.

No.	Function
3	Select to add the destination you selected as the final destination for the current route. Other destinations for the route are already enabled. Up to now, the position marked as the final destination becomes the final waypoint.

SETTING A NEW STARTING POINT

In standard navigation, all routes are created from the current position. You can turn off the GPS so that you can study a route that is not currently being driven, run a simulation, and check the time or distance for the route. This way, you can set a start point for the route without using the current GPS position.

1. Display the "Change Route (Change Route)" screen. (→P.211)
2. Select **Edit Route** (Edit Route) / **Create Route** (Create Route).
 - **Edit Route** (Edit Route) is displayed only when a route is set. **Create Route** (Create Route) is displayed when a route is not set.

3. Select . If a warning message is displayed, select which operation to perform.



- The first row shows the start position (displays the current position) for the route.
4. Select the route's start point by using the same method as selecting the destination.
 5. Set the new start point and then select **Go!** (Go!).
 - The vehicle marker goes clear on the map, indicating that there is no GPS reception.

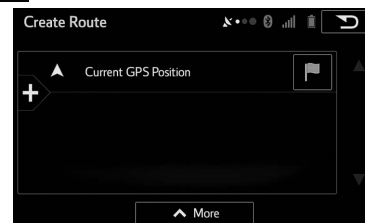


- If a route is already being navigated, it is recalculated using the position selected at that time.
- To return to standard navigation, select **Turn on GPS** (Turn on GPS), and if a warning message is displayed, select which operation to perform.

CREATING A ROUTE

You can create a route for each destination in the saved routes menu.

1. Display the "Change Route (Change Route)" screen. (→P.211)
2. Select **Create Route** (Create Route).
 - **Create Route** (Create Route) is displayed when a route is not set.
3. Select  to select a destination.



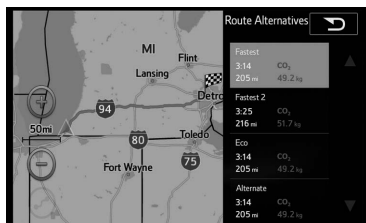
- Only one row showing the route's start point (current position displayed) is displayed in the route point list.
4. Search for a destination. (→P.193)

- Select the route's destination using the same method as described previously.
- After selecting a new destination, you are returned to the list.
- To add another destination, select **+** at the point where you want to add a new route point to the list, and repeat the steps above.

ROUTE ALTERNATIVES

Change the Route settings to perform a new search for the route being navigated using a different method. You can even search again by comparing different routes.

1. Display the "Change Route (Change Route)" screen. (→P.211)
2. Select **More** (More).
3. Select **Route Alternatives** (Route Alternatives).
4. Select the desired route.



- Using the current search method, three routes are displayed in order of recommendation.
- **More Results** (More Results): Select to search using a different method. Also, if only a short distance is being navigated or only a few search candidates are found, each search method displays only one route.

5. Select **↶** to return to the previous screen.
 - The route is searched again using the selected method. The new recommended route is indicated by a blue line.

MEMORY POINTS

MEMORY POINTS SETTINGS

Home and preset destinations can be set as memory points. The registered points can be used as the destinations. (→P.193)

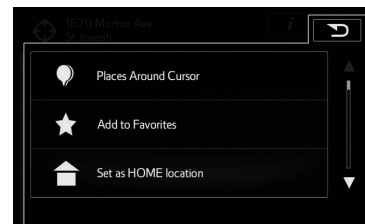
SETTING UP HOME

If home has been registered, that information can be recalled by selecting **Go Home** (Go Home) on the “Destination (Destination)” screen. (→P.195)

REGISTERING HOME

1. Select **More** (More) on the map screen.
 - You can also register home by touching **i** and then selecting **More** (More) on the displayed place information screen.

2. Select **Set as HOME location** (Set as HOME location).



- If home has already been registered, select **Yes** (Yes) when the overwrite confirmation screen appears.

3. Select **OK** (OK).

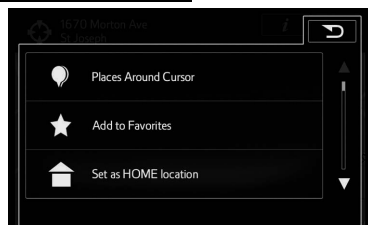
DELETING HOME

1. Display the “Destination (Destination)” screen. (→P.193)
2. Select **Favorites** (Favorites).
3. Select **HOME** (HOME) from the list, then select **Delete**.
4. Select **Delete** (Delete) when the confirmation screen appears.

SAVING DESTINATIONS

The destination list is a list of frequently used destinations. You can add any destination to this list.

1. Select the desired item to search for the location.
(→P.193)
 - The map is displayed in full-screen mode with the selected point at the center.
2. Select **More** (More).
3. Select **Add to Favorites** (Add to Favorites).



4. Enter a name and then select **OK** (OK).

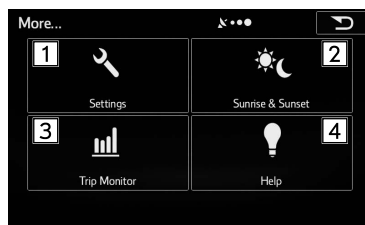
SETUP

NAVIGATION SETTINGS

OPTIONAL FUNCTIONS

Various options are available from the “More (More)” menu.

1. Select **Menu** (Menu) on the map screen.
2. Select **More** (More).
3. Select the items to be set.

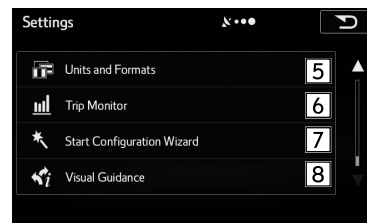
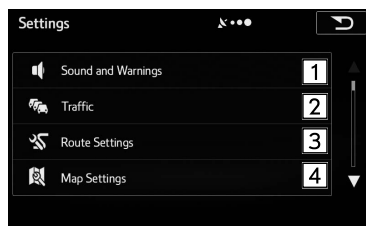


No.	Function
1	Select to configure programs and change operational patterns for the software. Performs functions such as fine tuning route search options, changing the map screen design, turning warnings on or off, and launching the “Configuration Wizard (Configuration Wizard)”.
2	Select to check global sunrise and sunset times. Places a mark on the map to show the user’s current position and route points. Select Details button to check accurate sunrise and sunset times for all points along the route (current position, all waypoints, final destination).
3	Select to display a list of all trip logs, whether they are saved by the user upon reaching the destination or whether they are saved automatically. Select an item from the trip that is displayed, you can check trip data, speeds, and more detailed contents. When a path log has been saved, you can display it on the map in the color selected.

No.	Function
4	Select to display a tutorial allowing for a quick grasp of the software's functions, and starts a demonstration showing a sample route simulation to check the navigation functions. The about section displays product information. Here you can view the software and database user license agreements, search for the contents license, and check the software ID. You can check statistical data for program use.

SCREENS FOR NAVIGATION SETTINGS

1. Display the "More (More)" screen. (→P.221)
2. Select **Settings** (Settings).
3. Select the items to be set.



No.	Function	Page
1	Select to change the voice guidance language. Select to specify various warnings and warning settings.	223
2	Select to set On/Off of traffic information display and the method to use the received real-time traffic information on route search.	224
3	Select to set the route search method.	213
4	Select to fine tune the map screen appearance.	225
5	Select to set display units and the date display.	226
6	Select to save trip logs automatically by turning this setting on, or save them manually when arriving at a destination.	227

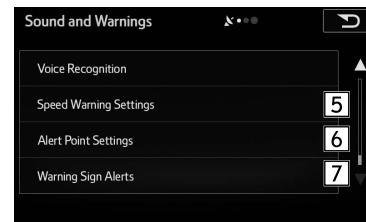
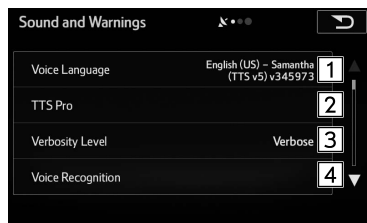
No.	Function	Page
7	Select to change basic software configurations set during the initial setup process.	34
8	Select to change settings related to map screen guidance.	227

SOUND AND WARNINGS

⚠ WARNING

- Be sure to set the volume of the audio at an appropriate level. Improper volume setting may result in hearing damage or a traffic accident.

1. Display the “Settings (Settings)” screen. (→P.222)
2. Select **Sound and Warnings** (Sound and Warnings).
3. Select the items to be set.



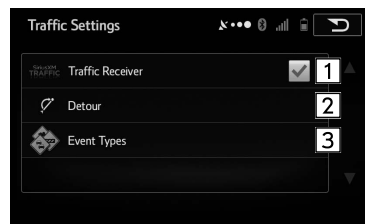
No.	Function
1	This button displays the current language for voice guidance. Select to change the selected a new language/narrator from the available languages and list of narrators. When you select an item from the list, a sample of the audio is played back.
2	Select to select the frequency of voice information, as well as turning on or off various voice information such as information on traffic conditions.
3	Select to select the Verbosity Level from “Minimal (Minimal)”, “Compact (Compact)”, or “Verbose (Verbose)”.
4	Select to turn on or off talk back voice recognition results, or change the voice recognition method.

No.	Function
5	Select to warn you if you exceed the current speed limit. This information may not be available for your region (ask your local dealer), or may not be fully correct for all roads in the map.
6	Select to receive a warning when approaching other alert points such as school zones or railroad crossings. You can set the different alert point categories individually.
7	Select to turn on or off warning sign alerts and to set the distance from the hazard to receive the warning at. These can be set individually for the different warning types.

TRAFFIC

1. Display the "Settings (Settings)" screen. (→P.222)
2. Select **Traffic** (Traffic).

3. Select the items to be set.

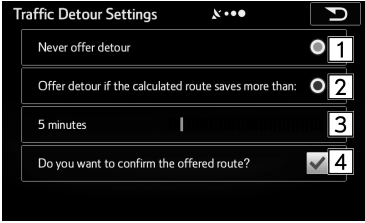


No.	Function
1	Select to turn on or off the traffic information display.
2	Select to set to use real-time traffic information when searching for a route. When searching for a new route, or when it is necessary to search again based on the traffic information received, it searches for merits to avoiding the current traffic conditions. Set so that confirmation is needed every time you perform another search by delaying the timing when the search is remade.
3	Select to open a list of types of traffic conditions, and select the events to take into consideration when searching for a route.

■ DETOUR SETTINGS

1. Display the "Traffic Settings (Traffic Settings)" screen. (→P.224)

2. Select **Detour** (Detour).
3. Select the items to be set.

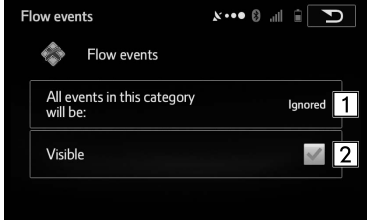


No.	Function
1	When this button is selected, routes that do not satisfy traffic conditions are not searched.
2	When this button is selected, routes that satisfy traffic conditions are searched.
3	Adjust the timing before starting another route search. (You can set 0 to 60 every 5 minutes)
4	Select to turn the route confirmation display on or off for each new search.

■ EVENT TYPES SETTINGS

1. Display the “Traffic Settings (Traffic Settings)” screen. (→P.224)
2. Select **Event Types** (Event Types).

3. Select an item from the event list.
4. Select the items to be set.



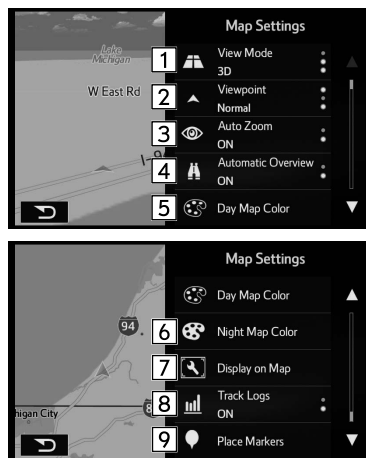
No.	Function
1	Select “Considered (Considered)” or “Ignored (Ignored)” when searching for a route.
2	Select to turn the icon display on the map on or off. The icon display does not appear when “Considered (Considered)” is selected at “All events in this category will be: (All events in this category will be:)”.

MAP SETTINGS

Fine tunes the map screen appearance. Because the map is displayed on the screen, you can check the results as you change settings.

1. Display the “Settings (Settings)” screen. (→P.222)
2. Select **Map Settings** (Map Settings).

3. Select the items to be set.



No.	Function
1	Select to select the display mode from 2D north-up, 2D heading-up or 3D.
2	Select to adjust the standard zoom and the angle of tilt. You can set the level in three stages.
3	Select to turn the auto zoom function on or off.
4	Select to automatically reduce the scale of the 2D map to display the entire route.

No.	Function
5	Select to select the screen color used in daytime mode.
6	Select to select the screen color used in nighttime mode.
7	Select to select the switches that display on the map.
8	Select to turn the path log save function on or off (saves in positional order for each trip).
9	Select a spot displayed on the map during navigation. Select the check box to show or hide the spot category. Select the spot category name to open a sub-category. More (More): Select to save the currently displayed spot position, or read spot displays saved previously. You can also restore the default display settings.

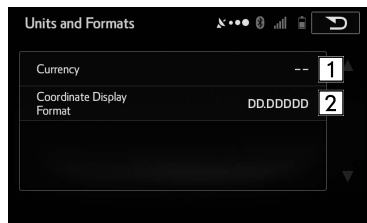
- By turning ON the “Auto Zoom (Auto Zoom)” function, “Viewpoint (Viewpoint)” and “Automatic Overview (Automatic Overview)” cannot be set.

UNITS AND FORMATS

Sets the units used by the program to measure distance. Voice guidance languages do not support all units displayed in the list.

You can select to display the time in various international date formats.

1. Display the “Settings (Settings)” screen. (→P.222)
2. Select **Units and Formats** (Units and Formats).
3. Select the items to be set.

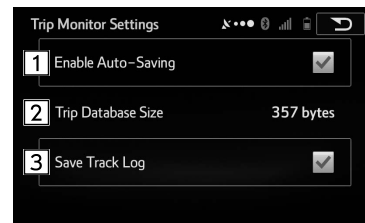


No.	Function
1	Select to enter the currency name.
2	Select to change the coordinate display format.

TRIP MONITOR

Contains useful information on the user's distance moved in the trip logs and path logs. You can save trip logs automatically by turning this setting on, or save them manually when arriving at a destination. You can view all logs on the trip monitor.

1. Display the “Settings (Settings)” screen. (→P.222)
2. Select **Trip Monitor** (Trip Monitor).
3. Select the items to be set.



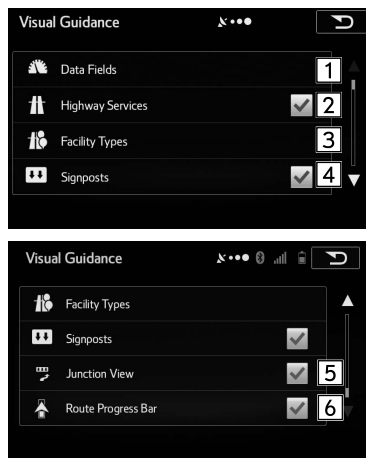
No.	Function
1	Select to save a log automatically.
2	This line indicates the current size of the trip database. This shows the total for all saved trip logs and path logs.
3	Select to save path logs (positional order acquired from GPS receiver) in the trip log.

VISUAL GUIDANCE

Changes settings related to map screen guidance.

1. Display the “Settings (Settings)” screen. (→P.222)
2. Select **Visual Guidance** (Visual Guidance).

3. Select the items to be set.



No.	Function
1	Select to set the data fields. Select the guidance you want to display. You can select route data related to the final destination or the next waypoint on the route.
2	Displays service area information while driving on the expressway. Select to turn this function on and off.
3	Select to select the service area information display items.

No.	Function
4	When information is available, lane information similar to overhead road traffic signs is displayed at the top of the map. Select to turn this function on and off.
5	When approaching an expressway exit or a complicated intersection, the map switches to a 3D display if the necessary information can be displayed. Select to turn this function on and off.
6	Select to turn on the route progress bar which is displayed as a straight line to the left of the map. This shows the progress made on the current route. When a blue arrow is used to indicate position, the arrow continues to rise as you drive towards your destination. Waypoints and traffic conditions are displayed on the line.

TIPS FOR THE NAVIGATION SYSTEM

GPS (GLOBAL POSITIONING SYSTEM)

REGARDING ERRORS IN CURRENT POSITION DISPLAY

The system displays the vehicle current position based on GPS information and data from various sensors and road maps. However, when the radiowave signals from GPS satellites are weak or when signals are received from only two satellites or less, errors may occur in the position. Modifying or adjusting the system will not prevent these errors.

LIMITATIONS OF THE NAVIGATION SYSTEM

This navigation system calculates the current position using satellite signals, various vehicle signals, map data, etc. However, an accurate position may not be shown depending on satellite conditions, road configuration, vehicle condition or other circumstances.

The Global Positioning System (GPS) developed and operated by the U.S. Department of Defense provides an accurate current position, normally using 4 or more satellites, and in some case 3 satellites. The GPS system has a certain level of inaccuracy. While the navigation system compensates for this most of the time, occasional positioning errors of up to 300 ft. (100 m) can and should be expected. Generally, position errors will be corrected within a few seconds.



The GPS signal may be physically obstructed, leading to inaccurate vehicle position on the map screen. Tunnels, tall buildings, trucks, or even the placement of objects on the instrument panel may obstruct the GPS signals.

The GPS satellites may not send signals due to repairs or improvements being made to them.

Even when the navigation system is receiving clear GPS signals, the vehicle position may not be shown accurately or inappropriate route guidance may occur in some cases.

**CAUTION**

● The installation of window tinting may obstruct the GPS signals. Most window tinting contains some metallic content that will interfere with GPS signal reception of the antenna in the instrument panel. We advise against the use of window tinting on vehicles equipped with navigation systems.

- Accurate current position may not be shown in the following cases:
 - When driving on a small angled Y-shaped road.
 - When driving on a winding road.
 - When driving on a slippery road such as in sand, gravel, snow, etc.
 - When driving on a long straight road.
 - When freeway and surface streets run in parallel.
 - After moving by ferry or vehicle carrier.
 - When a long route is searched during high speed driving.
 - After repeating a change of direction by going forward and backward, or turning on a turntable in a parking lot.
 - When leaving a covered parking lot or parking garage.

- When a roof carrier is installed.
- When driving with tire chains installed.
- When the tires are worn.
- After replacing a tire or tires.
- When using tires that are smaller or larger than the factory specifications.
- When the tire pressure in any of the 4 tires is not correct.
- Inappropriate route guidance may occur in the following cases:
 - When turning at an intersection off the designated route guidance.
 - If you set more than 1 destination but skip any of them, auto reroute will display a route returning to the destination on the previous route.
 - When turning at an intersection for which there is no route guidance.
 - When passing through an intersection for which there is no route guidance.
 - During auto reroute, the route guidance may not be available for the next turn to the right or left.
 - During high speed driving, it may take a long time for auto reroute to operate. In auto reroute, a detour route may be shown.

- After auto reroute, the route may not be changed.
- If an unnecessary U-turn is shown or announced.
- If a location has multiple names and the system announces 1 or more of them.
- When a route cannot be searched.
- If the route to your destination includes gravel, unpaved roads or alleys, the route guidance may not be shown.
- Your destination point might be shown on the opposite side of the street.
- When a portion of the route has regulations prohibiting the entry of the vehicle that vary by time or season or other reasons.
- The road and map data stored in the navigation system may not be complete or may not be the latest version.

NOTE

- This navigation system uses tire turning data and is designed to work with factory-specified tires for the vehicle. Installing tires that are larger or smaller than the originally equipped diameter may cause inaccurate display of the current position. The tire pressure also affects the diameter of the tires, so make sure that the tire pressure of all 4 tires is correct.

MAP DATA

REGARDING ROADS AND PLACE NAME DATA

When maps are created, land surveys are conducted and information on road improvements and reopening is collected to provide the most accurate information possible. However, modifications to roads, place names and facilities may be carried out at any time. Consequently, we cannot guarantee that map data contains no errors in road positions, configuration and names, or in facility names.

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.