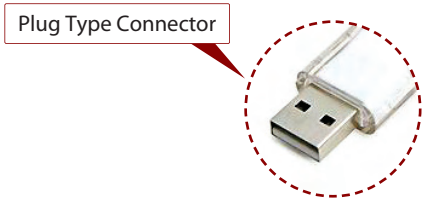
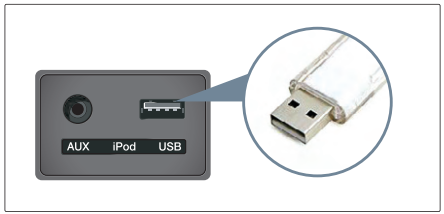
- The device may not support normal operation if MP3 Players, cellular phones, digital cameras, or other electronic devices (USB devices not recognized as portable disk drives) are connected to the device.
- The device may not support normal operation when using a USB memory type besides the Metal Cover Type USB Memory.
- The device may not support normal operation when using formats such as HDD Type, CF, or SD Memory.
- The device will not support files locked by DRM (Digital Rights Management).
- The device may not support. Please make sure to use normal operation if the proper connection with the USB memory fails due to vibrations caused by the vehicle. (i-stick type, etc.)
- Please avoid using USB memory products which can be used as key chains or cellular phone accessories as they could cause damage to the USB jack.

Please make certain only to use plug type connector products as shown below.



■ Connecting the USB devices

Connect the USB as shown in the picture.



■ Listening to USB music

1. Connect a USB or press the CD/AUX button on the control panel if the USB is already connected.

2. Select the desired file.
[Selecting the MP3 file], page 2-21.

INFORMATION

The USB screen and operation method is the same with MP3 mode.
Please refer to the MP3 mode section for more information.

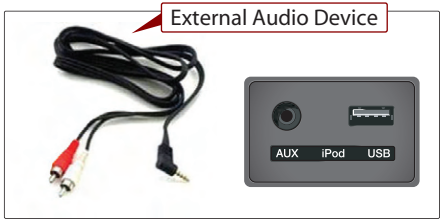
Voice Command

1. Press the button on the steering wheel remote controller.
2. After the beep sound, say a command.
   "USB"

AUX

■ Connecting AUX

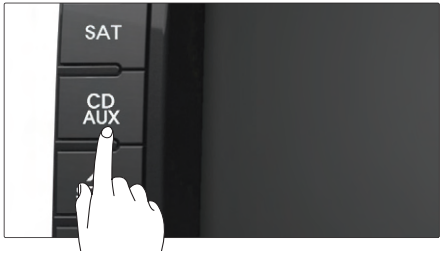
Connect the external Audio player as shown in the picture.



INFORMATION

Connect only by using AUX terminals.

■ Playing AUX



Connect an AUX or press the CD/AUX button on the control panel if the AUX is already connected.

Voice Command

1. Press the button on the steering wheel remote controller.
2. After the beep sound, say a command.
   "Line In"

■ AUX screen

Audio AUX screen

MEMO

PART 3
NAVIGATION SYSTEM

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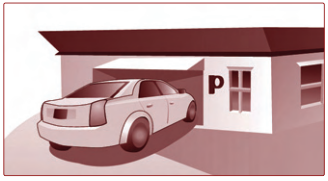
Limitations of the navigation system

GPS signal reception state

- As the GPS satellite frequency is received /transmitted in straight lines, reception may not work if hiding devices are placed on or near the GPS antenna or when traveling through the following locations.

- Tunnels



- Basement parking structures

- Underneath an overpass

- Roads within forested areas

- Areas near high rise buildings

- Roads within canyons

Vehicle position display

- If multipass errors occur due to reflections from buildings or related causes, the current position mark on the navigation may differ from the actual position of the vehicle.

- The position of the vehicle on the navigation may be different from the actual position if the vehicle is under the following conditions. If such differences occur, driving for a short period of time will automatically correct the position of the vehicle through map matching or GPS information (several minutes may be necessary in certain cases).

  - When driving on a Y-shaped road with a narrow angle, the current position may be displayed in the opposite direction.
  - If the vehicle is loaded onto a ferry or a car transport vehicle, the current position mark may be stalled on the last position prior to loading.
  - When driving on a spiral-shaped road.
  - When driving in mountain regions with sharp turns or sudden brakes.
  - When entering a road after having been in an underground parking structure, building parking structure, or turntable with many rotations.
  - When the tires have recently been replaced (Especially upon use of spare or studless tires)
  - If the battery terminal is removed.
  - When driving in city streets, the current position may be displayed on the opposite side or on an off-road position.
  - When changing the zoom level from the maximum zoom in level to a different zoom level, the current position mark may be displayed on a different road.
  - When driving in heavy traffic with frequent go · stops in traffic or intersections.
  - When driving under slippery conditions, such as heavy sand, snow, etc.
  - When driving with the tire chain in place.
  - When using a tire with an incorrect size specification.
  - When the tire pressure for the 4 tires are different.
  - When the replacement tire is a worn or used tire (Especially studless tires having passed a 2nd seasons, etc.)
  - When driving near high-rise buildings
  - If a roof carrier has been installed
  - When driving under high speeds or having calculated a long-distance route.

Route Guidance

- Suitable route guidance may not occur caused by search conditions or the driving position.
  - Guidance to go straight may be given while driving on a straight road.
  - Guidance may not be given even when having turned at an intersection.
  - There are certain intersections in which guidance may not occur.
  - A route guidance signaling for a U-Turn in a No U-Turn location may occur.
  - A route guidance signaling entrance into a no enter zone may occur (No enter zone, road under construction, etc.).
  - Guidance may be given to a position removed from the actual destination if roads to reach the actual destination do not exist or are too narrow.
  - Faulty voice guidance may be given if the vehicle breaks from the designated route (ex: if a turn is made at an intersection while the navigation provided guidance to go straight).
  - Map Data may be missing or incorrect causing route guidance to not be given.

Route Re-calculation

- The following phenomena may occur after conducting route recalculation.
  - Guidance may be given to a position differing from the current position when turning at an intersection.
  - Route Recalculation may take a longer period of time when driving under high speeds.
  - A route guidance signaling for a U-Turn in a No U-Turn location may occur.
  - A route guidance signaling entrance into a no enter zone may occur (No enter zone, road under construction, etc).
  - Guidance may be given to a position removed from the actual destination if roads to reach the actual destination do not exist or are too narrow.
  - Faulty voice guidance may be given if the vehicle breaks from the designated route (ex: if a turn is made at an intersection while the navigation provided guidance to go straight)

Starting navigation system

Press the Navigation mode key (MAPVOICE, DEST, ROUTE, SETUP). The Caution screen will always be displayed when first entering into Navigation mode. Read the contents of the caution screen carefully and press the Agree button.

Map Functions

Current position map screen (without route)

Press the MAPVOICE key on the control panel to display the map of current position and the neighboring area.

1. GPS signal state indicator : Displays the state of GPS signal reception.
   [Viewing GPS signal state], page 3-7.
2. Map scale level indicator : Displays the current map scale.
   [Changing the map scale], page 3-8.
3. Landmark icons : Landmark icons are displayed on the map when the map scale level is set to under 300 ft (100m depending on map data)
   [Appendix : Landmark icons], page 7-11.
4. POI icons : POI icons are displayed on the map when the map scale level is set to under 0.5 mi (800m).
   [Appendix : POI icons], page 7-8.
5. Current vehicle position icon : Displays the current position of the vehicle.

ⓐ North Up / Heading Up switch :
Displays the current map mode and the map mode can be switched between North Up and Heading Up.
[Switching map mode], page 3-6.

ⓑ POI : Displays or hides the POI icon on the map.
[Displaying/Hiding POI icons on the map], page 3-9.

ⓒ Map scale : Increases or decreases the map scale.
[Changing the map scale], page 3-8.

Switching map mode (North Up / Heading Up)

Each time the compass button is pressed, the screen will switch in the order shown below.
Heading Up → North Up → Heading Up

INFORMATION

All map screens (map screen after setting destination & whole route display screen) except the current position screen will always be displayed in North Up mode.

- North Up : displays the map always facing the North direction regardless of the direction which the vehicle is traveling.
The vehicle icon is displayed in the center position of the map.

- Heading Up : displays the map always facing the direction which the vehicle is traveling. The vehicle icon is displayed in the lower center position of the map.

Voice Command

1. Press the key on the steering wheel remote controller.
2. After the beep sound, say a command.
"North Up"
"Heading Up"

Viewing GPS signal state

The state of GPS signal reception is displayed as shown below.

- **GPS** (active) :
  GPS reception is satisfactory.
- **GPS** (inactive) :
  GPS reception is unsatisfactory.

[System information and update], page 3-51.

INFORMATION

- **GPS (Global Position System)** : GPS is a system developed and operated by the United States which determines the current location of the user (longitude, latitude, etc.) by generally using 4 or more satellites. This system is used with related GPS information, various sensors, road map data, and other navigation related information.
- GPS information may not operate under the following conditions.
  - When buildings, tunnels, or other obstructions block satellite signals.
  - When materials are placed above the GPS antenna and block satellite signals.
  - When the satellite does not transmit signals (signal transmission is controlled by the satellite control center in the United States and may not transmit when under repair, modification, etc).
  - When a digital cellular phone (1.5GHz) is placed near the GPS antenna.
- This system uses GPS information, various sensors, road map data, and other related information to display the current position. Errors may occur if the satellite is transmitting inaccurate signals or if which can only two or less satellite signals can be received.
  Errors which occur in such conditions cannot be corrected.

Changing the map scale

Press the [+] or [−] button. The map scale will be increased or decreased by one level.

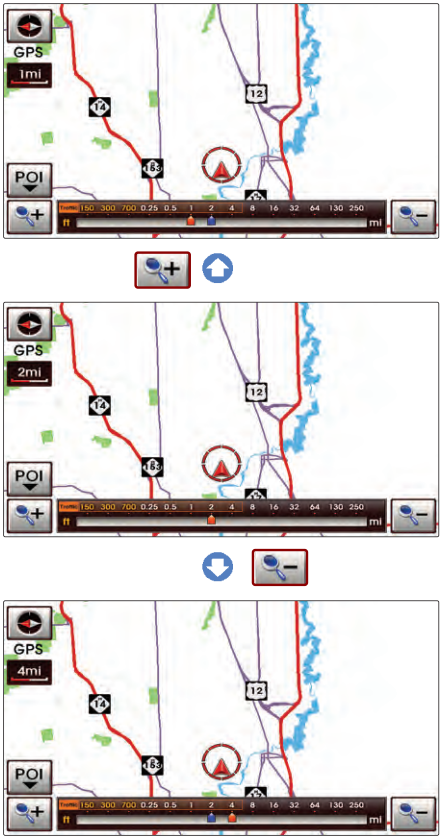
INFORMATION

Each time the [+] or [−] button is pressed, the scale bar will be displayed.

The scale can be changed by directly pressing the scale level on the scale bar.

The green color on the scale bar indicates the current scale level while the orange color indicates the selected scale level.

- Press the [+] or [−] button for over 0.8 second. The scale will continuously change.
- If the scale range limit is reached, the [+] or [−] button will be disabled.
- The map scale range is between 1 and 14: 10,240,000 ~ 1 : 5,000.



Level	Actual distance	
	mi / ft	km / m
1	150 ft	50 m
2	300 ft	100 m
3	700 ft	200 m
4	0.25 mi	400 m
5	0.5 mi	800 m
6	1 mi	1.6 km
7	2 mi	3.2 km
8	4 mi	6.4 km
9	8 mi	12 km
10	16 mi	25 km
11	32 mi	50 km
12	64 mi	100 km
13	130 mi	200 km
14	250 mi	400 km

Voice Command

1. Press the key on the steering wheel remote controller.
2. After the beep sound, say a command.
   "Zoom In"
   "Zoom Out"
   "Zoom Maximum"
   "Zoom Minimum"
   "Zoom level <1 to 14>"
   "Zoom <actual distance>"
   " (ex. Zoom 700ft)"

Displaying / Hiding POI icons on the map

■ Displaying/Hiding Q.POI icons

1. Press the POI ▼ button.
   Related menu buttons will be displayed at the bottom of the screen.

INFORMATION

The Q.POI icons are set to - Gas Station, - Parking, - Hotel, - Golf Course, - Bank, - Fast Food (6 icons) by default.

This setting can be changed in SETUP.

[Setting Q.POI icons], page 3-42.

2. Press the icon buttons to display or hide.
   To turn off all POI icons displayed on the map, press the ALL OFF button.

INFORMATION

- The current displayed POI icons are highlighted while the icons not being displayed are shown as normal buttons.
- If there are no POI icons being displayed, the ALL OFF button will be disabled.
- POI icons are displayed when the scale is under 0.5 mi (800m).

■ Displaying / Hiding icons other than Q.POI icons

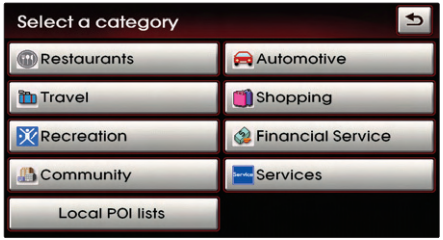
1. Press the POI ▼ button.
   Related menu buttons will be displayed at the bottom of the screen.

2. Press the Others button.

INFORMATION

Q.POI stands for Quick POI and refers to the function which turns POI icon display on or off on the map.

(a) by category list



3 Press the desired main category button.

4 Select the desired sub category menu to display or hide (Multiple selections are possible).
Press the selected menu again to cancel the selection.

5 If the Show Icon(s) button is pressed, the selected menus will be displayed or hidden on the map screen.

Voice Command

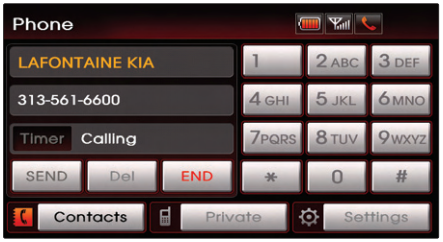
1. Press the key on the steering wheel remote controller.
2. After the beep sound, say a command.
   "Show <POI name>" (ex. Show ATM)
   "Hide <POI name>" (ex. Hide ATM)
   "Hide All"

Making a call to POI

After searching a POI, the POI phone number information can be used to make a call to the POI facility.

1 Use the various search methods, such as the map scroll function, Q.POI search function, and destination search function to search for a POI.

2 Press the button.



3 Bluetooth is used to make a call to the POI facility.

4 Once the call is ended, the map is restored to the current vehicle location.

INFORMATION

- Making a call is not possible if there is no telephone information for a POI or if there is no mobile phone connected through Bluetooth.
- For more information of mobile phone authentication through Bluetooth or detailed information on conducting search, refer to [Pairing and connecting a Bluetooth phone], page 5-4.

Scrolling map

Press the map area on the map screen.
The selected point will be centered on the screen and the scroll mark will be displayed. Information about the marked point and straight line distance from the current position will be displayed at the top of the screen.

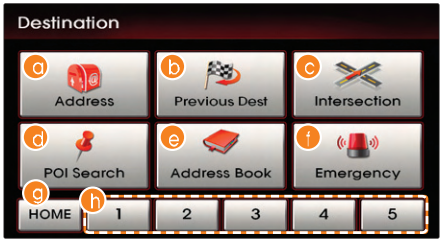
INFORMATION

If a map area on the map screen is pressed, the map will continuously scroll in the corresponding direction until the pressing is released.

Setting a destination

Destination menu screen and functions

Press the DEST key on the control panel to display the destination menu screen.



a Address : Sets the destination through address search.
[Searching an Address], page 3-13.

b Previous Dest : Sets the destination through the previous destination list.
[Searching a Previous Destination], page 3-17 .

c Intersection : Sets the destination through intersection search.
[Searching an Intersection], page 3-17.

d POI Search : Sets the destination through POI Category search.
[Searching a POI], page 3-20 .

e Address Book : Sets the destination through address book search.
[Searching from Address book], page 3-24 .

f Emergency : Sets the destination through emergency facilities search.
[Searching for Emergency facilities], page 3-25 .

g HOME : Sets the stored HOME as the destination.
[Searching your Home], page 3-25 .

h Favorite place 1 ~ 5 :
Sets the destination with one of the stored favorite places.
[Searching favorite places], page 3-26 .

Searching a Destination

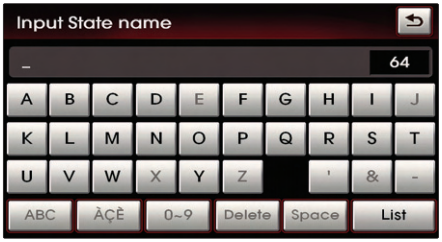
■ Searching an Address

There are 2 ways to set the destination through address search-(a) by street, (b) by city.

1) Press the DEST key.

2) Press the Address button.

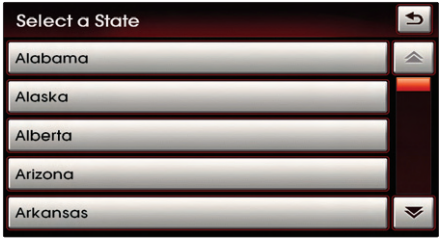
3) Press the State button to change the state.



4) Input the State name and press the List button.

If the number of matches with the input is less than 4 results, then the state list screen will be displayed automatically.

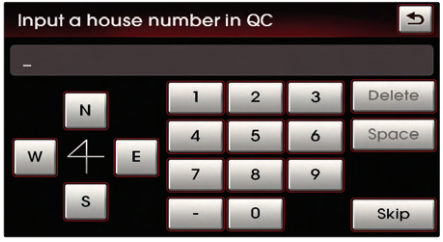
If the number of matches is only one result, then the state will automatically be changed without having to manually select the state.



5) Select the desired state from the list to change the state.

(a) by street

6) Press the Street button.



7. Input the House number and Press the Done button to complete.
   If the House number is not recognized, press the Skip button.
   In this case, the range of house numbers will be displayed during the last step.

8. Input the Street name and press the List button.
   If the number of matches with the input is less than 4 results, then the street list screen will be displayed automatically.

9. If the desired street from the list is selected, the corresponding position will be displayed on the map.

INFORMATION

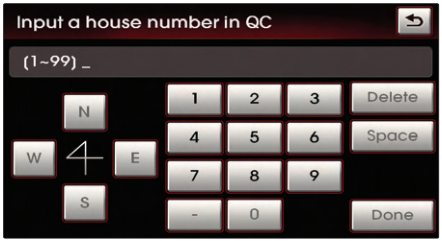
If more than 30 cities exist with the selected street, then the city input screen will be displayed. If less than 30 cities exist, then the city selection screen will be displayed.

10. Input the city name and press the List button to complete.
    If the number of matches with the input is less than 4 results, then the list screen will be displayed automatically.

11. Select the desired city from the list.

⑫ This screen will be displayed if the House number had not been inputted during step ⑥ and more than 2 house numbers ranges exist.

Select the desired House number range.



⑬ This screen will be displayed if the House number had not been inputted during step ⑥ and only one house numbers range exists.

Input the House number and press the Done button to complete.

The corresponding position will be displayed on the map.

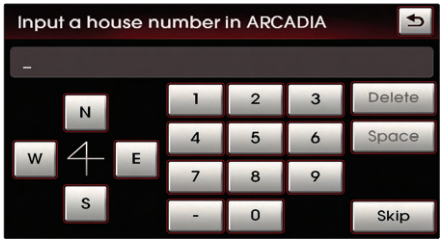
(b) by city

⑤ Press the City button.

⑥ Input the city name and press and press the List button.

If the number of matches with the input is less than 4 results, then the city list screen will be displayed automatically.

⑦ Select the desired city from the list.



⑧ Input the house number and press the Done button to complete.

If the House number is not recognized, press the Skip button.

In this case, the range of house numbers will be displayed during the last step.

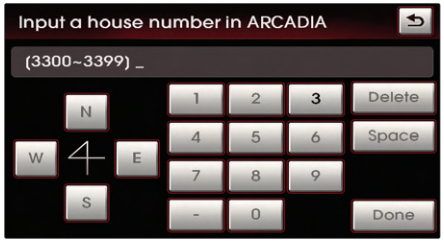
⑨ Input the Street name and press the List button to complete.

If the number of matches with the input is less than 4 results, then the street list screen will be displayed automatically.

⑩ Select the desired street from the list and the corresponding position will be displayed on the map.

⑪ This screen will be displayed if the House number had not been inputted during step ⑧ and more than 2 House number ranges exist.

Select the desired House number range.



⑫ This screen will be displayed if the House number had not been inputted during step ⑧ and only one House number range exists.

Select the house number range and Press the Done button to complete.

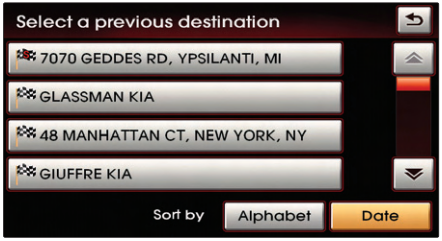
The corresponding position will be displayed on the map.

Voice Command

1. Press the key on the steering wheel remote controller.
2. After the beep sound, say a command.
   "Find address"
   [Find address], page 4-19.

■ Searching a Previous Destination

1. Press the DEST key.
2. Press the Previous Dest button.



3. Select the desired previous destination. The corresponding position will be displayed on the map.

Voice Command

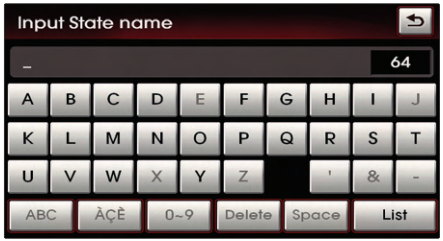
1. Press the key on the steering wheel remote controller.
2. After the beep sound, say a command.
   "Previous destination"
   [Previous destination], page 4-24.
   "Previous start point"
   [Previous start point], page 4-25.

■ Searching an Intersection

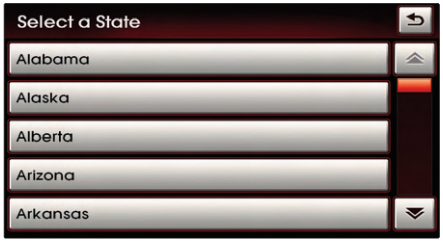
There are two ways to set the destination through intersection search-(a) by street, (b) by city.

1. Press the DEST key.
2. Press the Intersection button.

3. Press the State button to change the state.



4. Input the state name and press the List button. If the number of matches with the input is less than 4 results, then the state list screen will be displayed automatically.
   If the number of matches is only one result, then the state will automatically be changed without having to manually select the state.



5. Select the desired state from the list to change the state.

(a) by street

6 Press the Street button.

7 Input the name of the 1st street and press the List button.

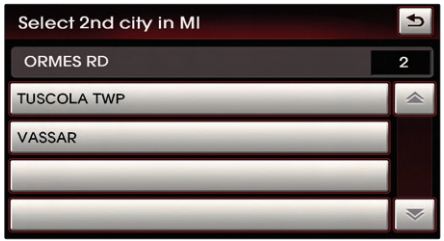
If the number of matches with the input is less than 4 results, then the street list screen will be displayed automatically.

8 Select the desired 1st street from the list.

9 Input the name of the 2nd street and press the List button.

If the number of matches with the input is less than 4 results, then the street list screen will be displayed automatically.

10 Select the desired 2nd street menu from the list. The corresponding position will be displayed on the map.



11 If the selected 2nd street is within more than 2 cities, then the city list screen will be displayed.

Select the desired city menu from the list. The corresponding position will be displayed on the map.

(b) by city

6 Press the City button.

7 Input the city name and press the List button.

If the number of matches with the input is less than 4 results, then the city list screen will be displayed automatically.

8 Select the desired city name.

9 Input the name of the 1st street and press the List button.

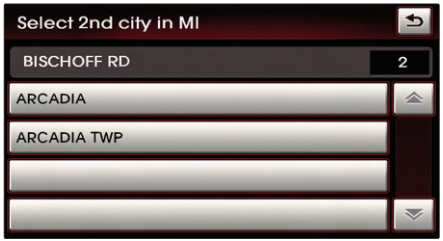
If the number of matches with the input is less than 4 results, then the street list screen will be displayed automatically.

10 Select the desired 1st street menu from the list.

11 Input the name of the 2nd street and press the List button.

If the number of matches with the input is less than 4 results, then the street list screen will be displayed automatically.

12 Select the desired 2nd street menu from the list.
The corresponding position will be displayed on the map.



13 If the selected 2nd street is within more than 2 cities, then the city list screen will be displayed.
Select the desired city menu from the list.
The corresponding position will be displayed on the map.

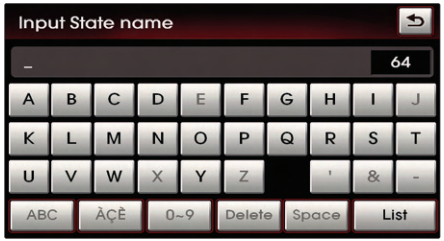
■ Searching a POI

There are 3 ways to set the destination through POI search - (a) by category, (b) by name, (c) by phone number.

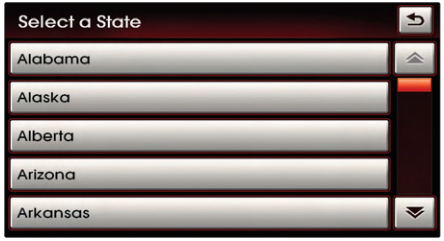
1 Press the DEST key.

2 Press the POI Search button.

3 Press the State button.



4 Input the state name and press the List button. If the number of matches with the input is less than 4 results, then the state list screen will be displayed automatically. If there is only one matching result, then the state will automatically be changed without having to manually select the state.



5 Select the desired state from the list to change the state.

(a) By category

Searches for facilities nearby the current position or from the city center.

6 Press the Category button.

7 Press the Near current position button to search for facilities nearby the current position, or press the Near city center button to search for facilities in the near city center.

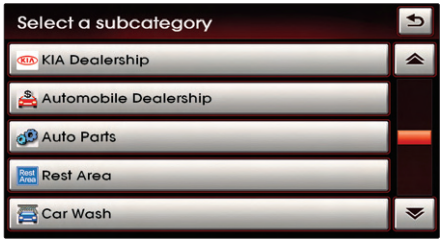
(a-1) Near current position

Searches for facilities within a 30 mi (45km) radius of the current position.

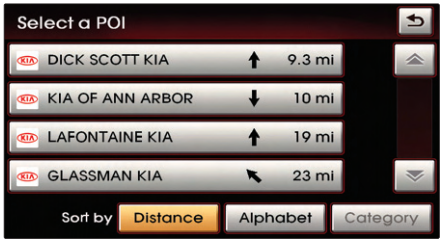
8 Press the desired main category menu.

Voice Command

1. Press the key on the steering wheel remote controller.
2. After the beep sound, say a command.
   "Find nearest POI"
   [Find nearest POI], page 4-20.



9 Press the desired sub category menu.



10 Select the desired menu button.
The corresponding position will be displayed on the map.