

NAV100 Operation Manual

The Jensen NAV100 is a vehicle-navigation aid device designed to assist you in arriving at your selected destinations. When using the Jensen NAV100, these safety rules must be followed to prevent accidents that can result in injury or death to yourself or others:

When driving, the need to view the display is minimal. Voice prompts will guide you to your destinations. The driver should operate the device only when the vehicle is stopped. Only a vehicle passenger should operate the device while the vehicle is moving.

It is your responsibility to comply with all traffic laws.

While every attempt is made to ensure that the database is accurate, roadways, points of interest, and business and service locations may change over time.

The device does not include, analyze, process, consider, or reflect any of the following:

- 1. Legal restrictions (such as vehicular type, weight, height, width, load and speed restrictions);
- 2. Road slope or grade; bridge height, width, weight, or other limits;
- 3. Population density;
- 4. Neighbourhood quality or safety;
- 5. Availability or proximity of law enforcement, emergency rescue, medical, or other assistance;
- 6. Construction work zones or hazards;
- 7. Road or lane closures:
- 8. Road, traffic, or traffic facilities' safety or condition;
- 9. Weather conditions;
- 10. Pavement characteristics or conditions;
- 11. Special events;
- 12. Traffic congestion.

It is your responsibility to disregard any unsafe, hazardous, or illegal route suggestions.

Laws in some states prohibit wearing stereo headphones while operating a motor vehicle. Please contact your state's Department of Motor Vehicles for information.

Table of Contents

1.	INTRODUCTION TO THE JENSEN NAV100		
	1.1	GPS Based Navigation	4
	1.2	Installation of the Jensen NAV100	4
	1.3	Data Storage and Access	4
2.	NAV	NAVIGATION MAIN MENU	
3.	BASIC DEVICE OPERATIONS		
	3.1	Touch Screen	7
	3.2	User Input	7
	3.3	Basic Functional Buttons	15
4.	SET-	-UP	16
5.	LOCATIONS		
	5.1	Enter the Locations Screen	32
	5.2	Home, Business, and Address Book	42
6.	DESTINATIONS		
	6.1	Set Destinations	43
	6.2	Enter the Destinations Screen	43
	6.3	Destinations Buttons	44
	6.4	New Destination	46
7.	ROUTE CALCULATION AND GUIDANCE		63
	7.1	Start Route	63
	7.2	Route Guidance	64
	7.3	Route Functions	65
	7.4	Other Route Functions	67
8.	MAI	P	68
9.	GO I	HOME71	
10.	REMOTE CONTROL OPERATIONS		72
	10.5	Remote Control Buttons	72
	10.6	Using the Remote Control	73
11.	APPENDIX – POI CATEGORY LIST		74

1. Introduction to the NAV100

The NAV100 is a GPS-based device which utilizes the digital map data to guide you from location A to location B efficiently based on the criteria you set.

1.1 GPS Based Navigation

A Global Navigation Satellite System (GNSS) consists of a set of satellites that transmit high-frequency radio signals containing time, direction, and distance data that can be picked up by a receiver, allowing users to pinpoint their precise locations anywhere around the globe. Navigation Satellite Receivers (GPS devices) use this transmitted information to calculate an exact location on the earth. Every point on Earth can be identified by latitude and longitude. The receiver uses the information sent by at least three satellites and determines the coordinates of the receiving device.

By comparing the time the signals were transmitted from the satellites and the time they were recorded, the receiver calculates how far away each satellite is. The distance of the receiver from three or more satellites reflects its position on the surface of the planet. Using these distance measurements, the receiver might also be able to calculate speed, bearing, trip time, distance to destination, altitude, etc. The GPS position may be displayed as a point on a digital map (at least three satellites' signals must be received) and as the GPS device moves the corresponding trace is displayed as well.

Please keep in mind that although the radio signals of navigation satellites will pass through clouds, glass, plastic, and other lightweight materials, satellite-navigation receivers will not work underground or in some enclosed spaces.

1.2 Installation of the NAV100 software

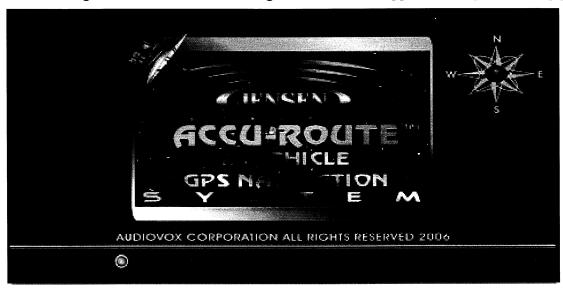
The NAV100 application software has been pre-installed. You will need to install the digital map data of your selected travel area onto the data storage media (SD card) in order to use the device. Please refer to the Installation Guide for details.

1.3 Data Storage and Access

The device stores the digital road map and other files for the navigation application in its SD (Secure Digital) card. The digital map data covers the entire continental North America region (US and Canada), excluding Hawaii and Puerto Rico, and is stored in the 2GB SD card. You can perform route calculation between any two points within this map coverage.

2. Navigation Main Menu

After turning on the device, the following welcome screen appears during the start-up process:



In a few seconds, the "Main Menu" is displayed:



The Main Menu contains six buttons:

Set-Up: Set-up of application parameters customizable by users. These parameters may affect the routing results and user experience.

Route: Calculate navigation route based on the destinations entered.

Locations: Manage address book of frequently used destinations.

Destinations: Set up one or more destinations used for route calculation.

Map: View Map and operations.

Go Home: Based on the current GPS position, automatically calculate the route back home and start the navigation.

3. Basic Device Operations

3.1 Touch Screen (VM9511TS / VM9021TS)

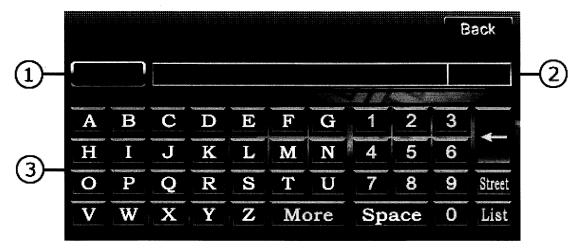
Gently press the icons or text displayed on the screen to perform functions provided by the device.

Warning: Avoid using excessive pressure on the touch screen to prevent damage.

3.2 User Input

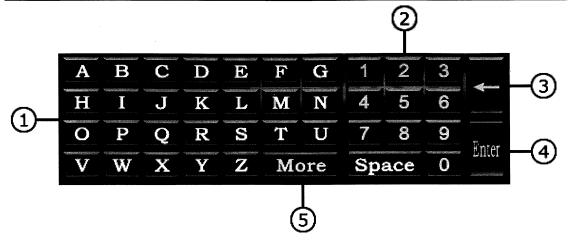
3.2.1 Input Dialog Box

The following input dialog box is provided for entering text such as city names, street names, or street numbers:



Interface Items:

- 1. Name of requested Input Field data such as City, Address, and Street
- 2. Input Field
- 3. Keyboard



Keyboard Items:

- 1. Letters
- 2. Numbers
- 3. Back key
- 4. Enter key
- 5. More key: Press to invoke the special character menu:

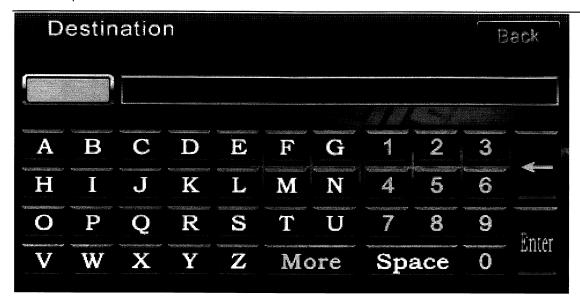


3.2.2 Text Input

Press the letters on the character keyboard to enter text.

3.2.3 Number Input

Press the numbers on the number keypad to enter numbers in the input field:



3.2.4 Prompt Input

The Prompt Input mechanism allows you to quickly and accurately enter and select a text string. You will be using this method when entering city name, street name, and POIs.

Example of Prompt Input – City Name

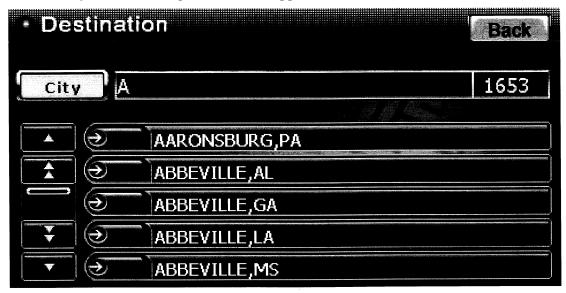
The following example illustrates how Prompt Input works with City name selection.



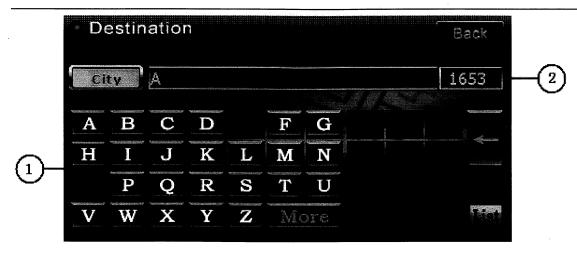
To enter a City name, press 'A' and then press the List button, located in the lower-right corner.



A list of city names starting with 'A' will appear:

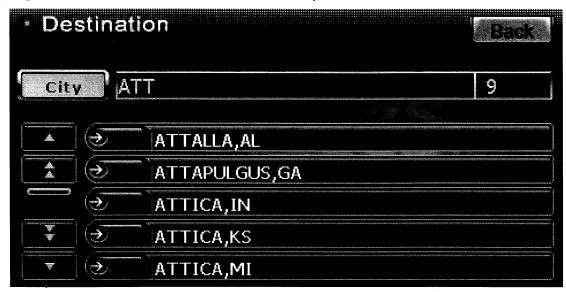


When a particular letter is pressed, such as 'A', the system will automatically highlight any possible letters that can follow 'A'. For example, after 'A' is pressed, some letters are highlighted, and some are grayed out. 'H' is highlighted for subsequent selection, while 'O' is grayed out because there is no city in the current map area beginning with "Ao".



The number next to the input field on the right (1653) indicates there are 1653 city names in the current map area that start with the letter 'A'. When this number is less than 10, the system will automatically display all available names in a list for your selection.

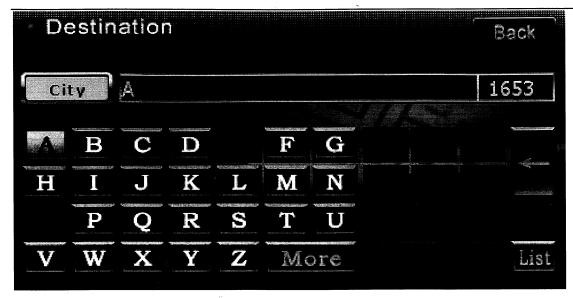
For example, after 'ATT' has been entered, the number indicates there are only 9 city names that begin with the letters 'ATT', so all available city names are listed:



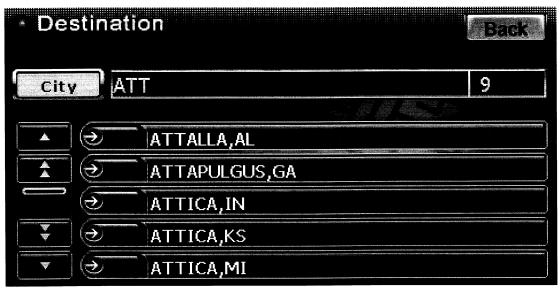
Example of Prompt Input – Street Address

The following example shows the steps required when using Prompt Input to enter the following Street Address: 5010 LUM RD, ATTICA, MI.

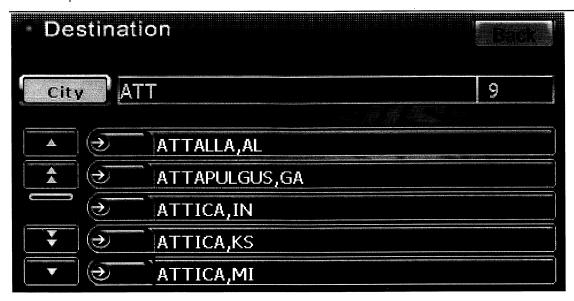
- 1. Input the City Name 'ATTICA'.
- 2. Press 'A' on the keyboard. The system will search the available next letters and highlight them. The number '1653' indicates there are 1653 cities beginning with the letter 'A':



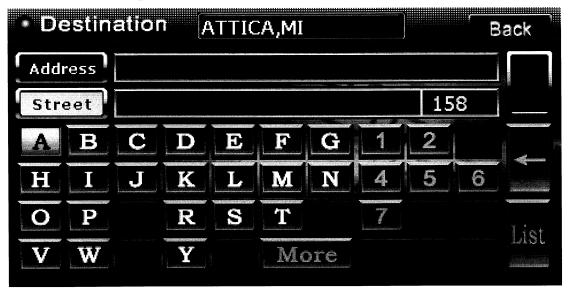
- 3. Press the second letter, 'T' (already highlighted).
- 4. Press 'T' again. The number indicates there are only 9 available cities with the first three letters 'ATT', and the full list of choices is displayed:



5. Locate 'ATTICA, MI' in the list, and then press the button in front of the name to select it.

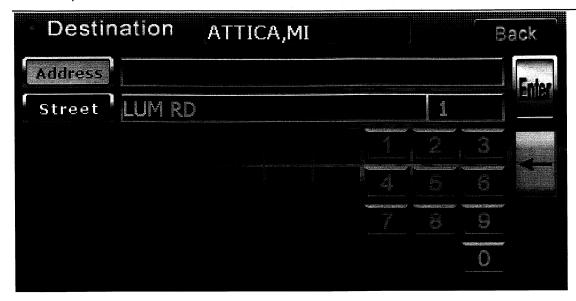


Now that the city name has been selected, the system will display the next screen for street name and street number input:



As the above menu shows, the city name "ATTICA, MI" is displayed on the Destination menu bar. If you need to change the selected city, press the ATTICA, MI bar to return to the city selection menu.

Enter 'LUM RD' in the input field, using the same method explained in the previous step.



Enter '5010' in the House No. input field.



destination list.

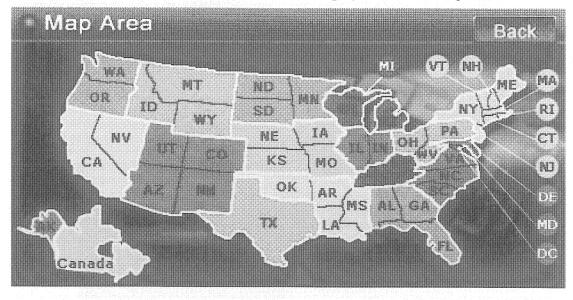
When done, press the button to save the result. The full address will be added to the



3.3 Basic Functional Buttons

Back : Press the Back button to return the previous screen.

By Area : Press the Sylvarea button to display the current map data area.

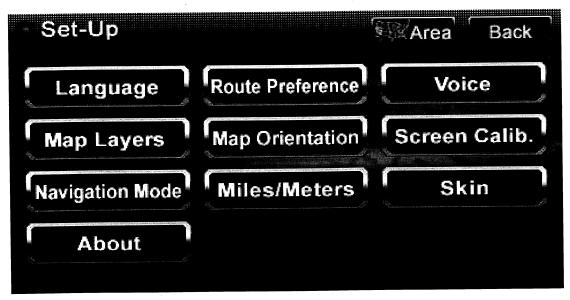


4. Set-Up

When using the NAV100 for the first time, it is recommended that you customize the system parameter settings. These settings can be used to tune the system and to provide desirable route results and a pleasant user experience.

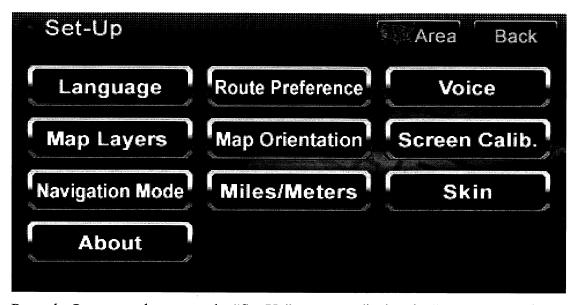
After the device is tuned on, press the **Set-Up** button on the "Main Menu" to enter the system settings screen:



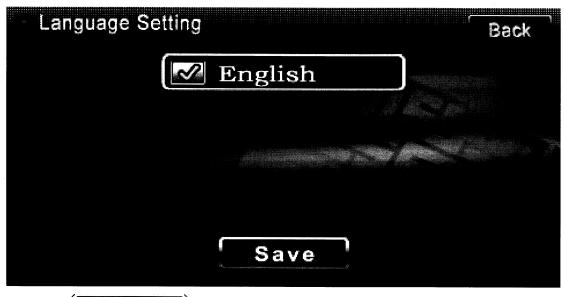


The "Set-Up" menu allows you change settings for 10 categories: Language, Route Preference, Voice, Map Layers, Map Orientation, Screen Calib., Navigation Mode, Miles/Meters, About, and Skin.

4.3.1 Language

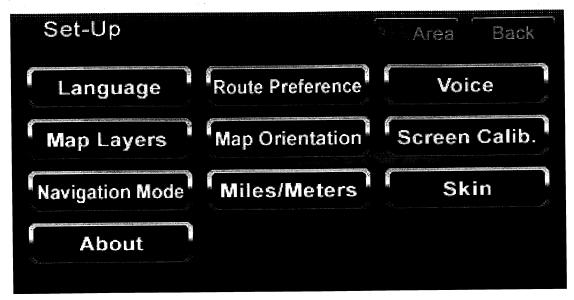


Press the **Language** button on the "Set-Up" screen to display the "Language Setting" screen: The NAV100 provides English as the only language.

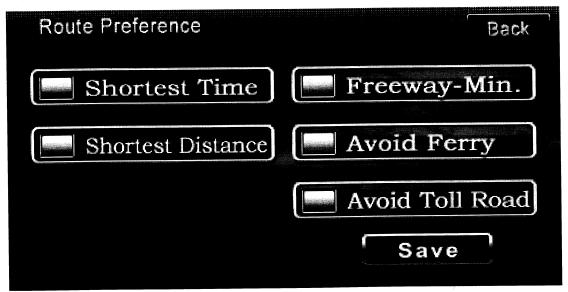


Press the Save button to save the settings and return to the "Set-Up" screen.

4.3.2 Route Preference



Press the Route Preference button to customize how the system will calculate the route.



There are five on/off choices to determine the mode of route calculation: Shortest Time, Shortest Distance, Min Freeway, Avoid Ferry, and Avoid Toll Road. The default setting is "Shortest Time" only.

Shortest Time: Arrive at destination with the shortest driving time;

Shortest Distance: Arrive at destination with the shortest driving distance;

Freeway- Min: Minimize the use of freeway to arrive at destination;

Avoid Ferry: Avoid using Ferry when possible;

Avoid Toll Road: Avoid using Toll Road during the trip;

You can check multiple preferences, such as Min Freeway, Shortest Distance, and Avoid Toll

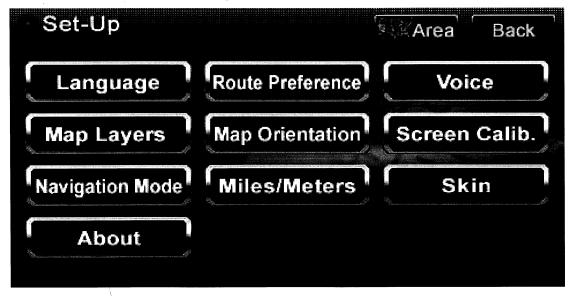
Road, by pressing (checking) the blue button before the text:



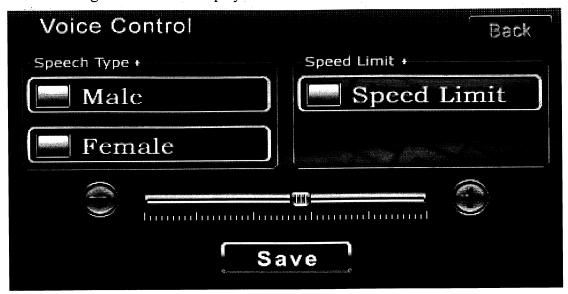
Press the Save button to save the settings and return to the "Set-Up" screen.

4.3.3 Voice Control

To access Voice Control settings, press the Voice Control button on the Set-Up screen.



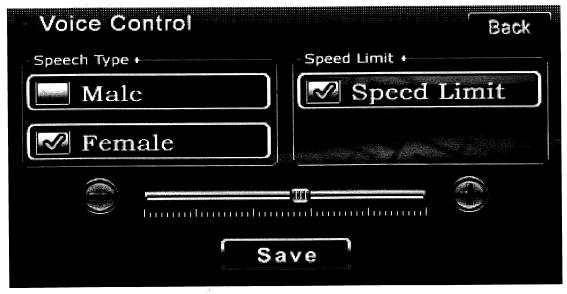
The following screen will be displayed:



Speech Type: You can select the type of voice guidance, Male or Female, by checking the blue button before the text. Only one voice can be used during navigation. The default setting is Female.

Speed Limit: When this option is checked, the system detects when you may be speeding and will invoke a voice prompt, "Please drive within the speed limit", to alert you to slow down.

You can make selections in both the Speech Type and Speed Limit fields, as indicated below:

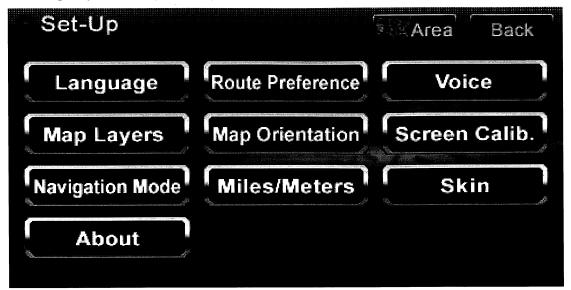


Voice: The (-) and (+) volume control buttons allow you to adjust the volume of the voice prompt. Press (+) to increase the volume or (-) to reduce the volume.

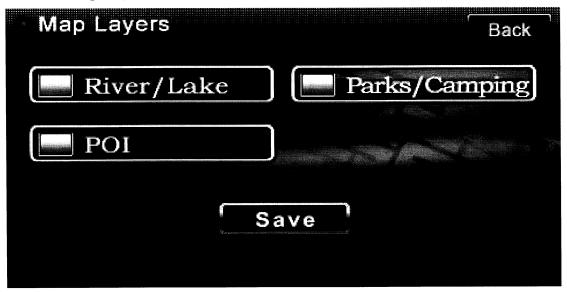
Press Save to save the settings and return to the "Set-Up" screen.

4.3.4 Map Layers

The Map Layers setting allows you to control the map data content to be displayed on the map.



Press the Map Layers button on "Set-Up" screen to view the "Map Layers" screen:



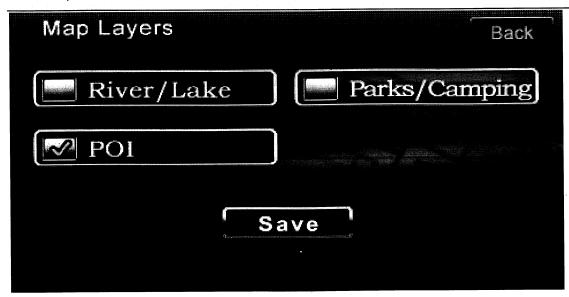
Here you can toggle the display status of three types of map data content:

River/Lake: Display water bodies such as rivers and lakes;

Park/Camping: Display recreational areas such as parks and camp sites;

POI: Display Point Of Interest locations.

For example, if you would like to display POIs, press the blue button before the text and a check mark will appear:

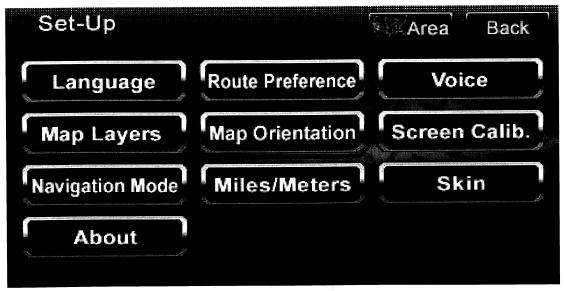


Press Save to save the settings and return to the "Set-Up" screen.

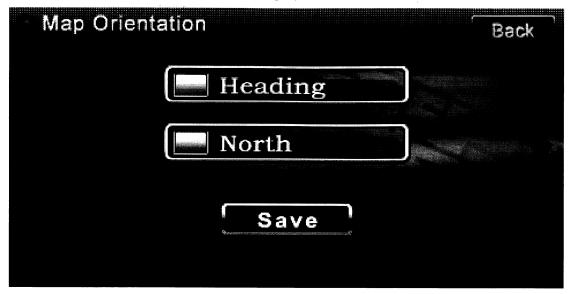
Note: For best performance, turn off any map layers you do not need during navigation.

4.3.5 Map Orientation

Press Map Orientation on the "Set-Up" screen:



The "Map Orientation" screen will be displayed:

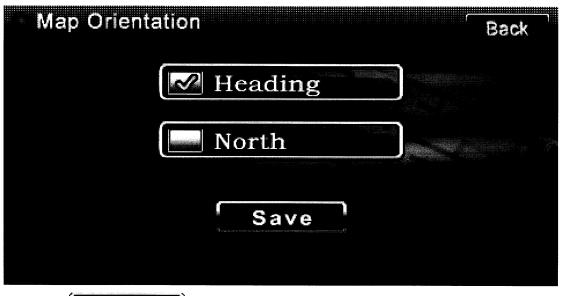


There are two modes of map display: Heading and North.

Heading: This mode will display the map with the vehicle direction always pointing up. The map will rotate and move accordingly during navigation while the red arrow representing the vehicle stays up and still.

North: This mode will display the map with North always pointing upward. The map will not rotate during navigation. The red arrow representing the vehicle will rotate and move according to the vehicle location on the map.

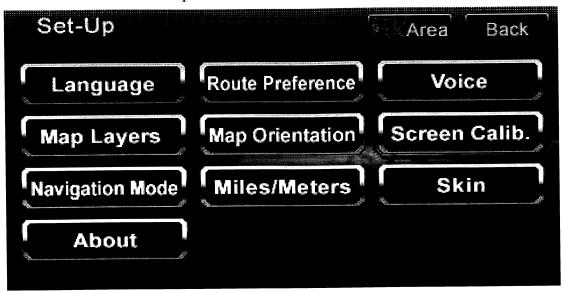
To select a particular map orientation mode, just press the blue button in front of the choice:



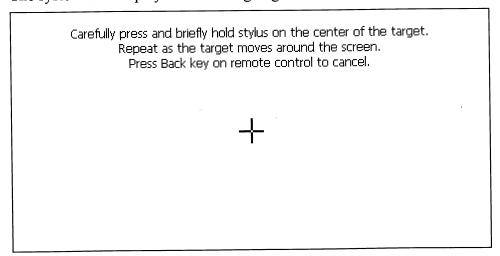
Press the Save button to save the settings and return to the "Set-Up" screen.

4.3.6 Screen Calibration

"Screen Calib." is a special function provided to calibrate the Touch Screen accuracy and performance. Although the touch screen has been pre-calibrated at the factory, it may be necessary at times to re-calibrate the touch screen. To enter calibration mode, press the **Screen Calib**. button on the "Set-Up" screen.



The system will display the following alignment screen:



Use a pen tip or similar object to point to the center of the sign

The system will prompt 5 positions: center, upper-left, lower-left, lower-right, and upper-right. Repeat the process until five positions are pushed.

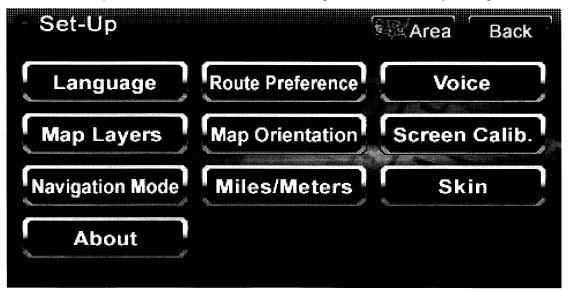
After all five positions have been entered, the system will display a final screen.

New calibration settings have been measured. Press anywhere on screen to accept the new setting Press the Back key on remote control to keep the old settings.

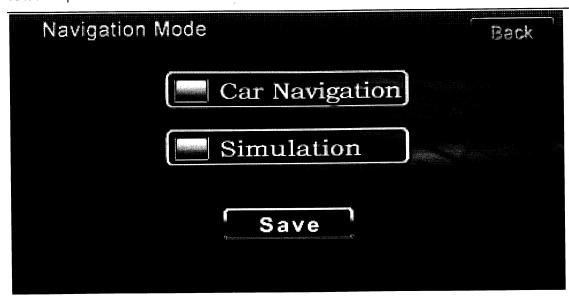
Press anywhere on the screen to save the setting, or use the **Back** key on the supplied Navigation remote control to cancel the setting. The system will automatically return to the "Set-Up" screen.

4.3.7 Navigation Mode

Press the Navigation Mode button on the "Set-Up" screen to modify Navigation Mode settings.



Navigation Mode provides two modes of settings: Car Navigation and Simulation.



Car Navigation: The device will perform actual navigation guidance based on the GPS signals received.

Simulation: The device will calculate the route based on a user entered destination, but not actually perform navigation guidance based on GPS signals. This setting is mostly used for preview or for checking various routes and turns.

The default setting is Car Navigation.

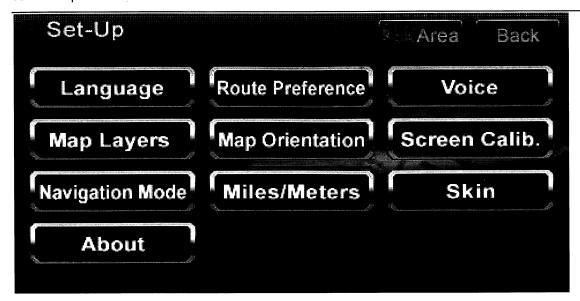
To start Simulation Mode, press (check) the blue button in front of Simulation.



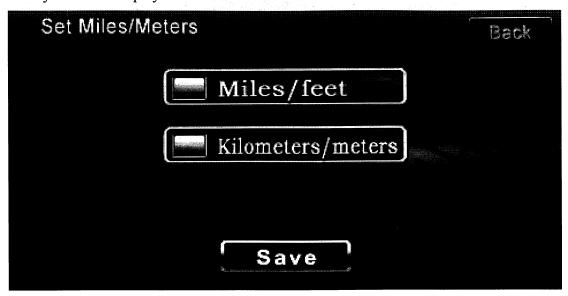
Press the button to save the settings and return to the "Set-Up" screen.

4.3.8 Miles/Meters

Press the Miles/Meters button on the "Set-Up" menu to set the map unit.

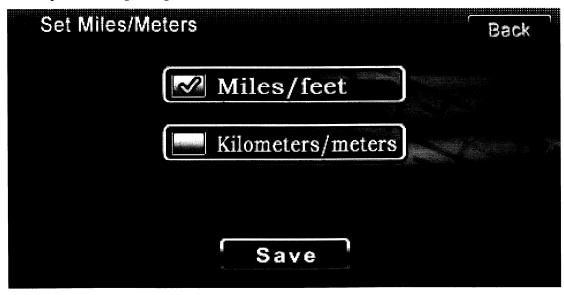


The system will display the "Set Miles/Meters" screen.



Two map units are provided: American (in Miles/Feet) or Metric (in Kilometers/Meters).

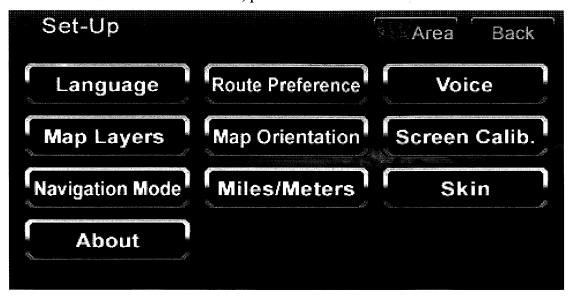
By checking the appropriate box, all distance and speed units will be displayed accordingly on the map and during navigation, either in Miles/Feet or in Kilometers/Meters.



Press the Save button to save the settings and return to the "Set-Up" screen.

4.3.9 Skin

The user has the option to select a preferred Skin type (overall appearance) for the graphic user interface. To view the "Skins" menu, press the **Skin** button.



The "Skins" screen will be displayed as follows:

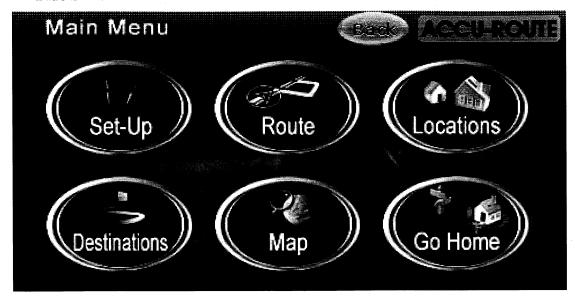


- 1. Select the previous skin style.
- 2. Save the currently selected skin as the user interface style. When finished, press the **Back** button to return to the "Main Menu."
- 3. Select the next skin style.

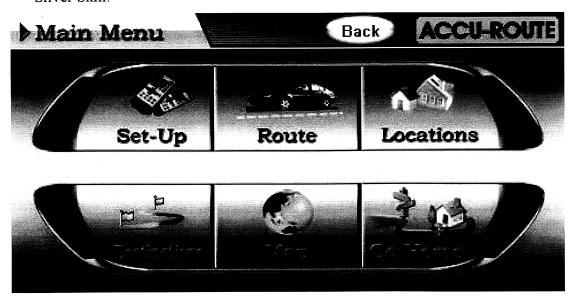
- 4. Skin Style
- 5. Skin Name

The NAV100 provides two skins for your selection

Blue Skin:

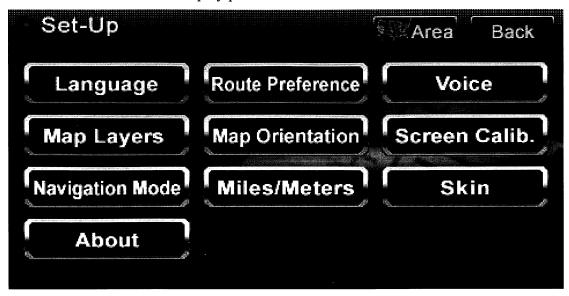


Silver Skin:



4.3.10 About

Press the **About** button to display product version information.



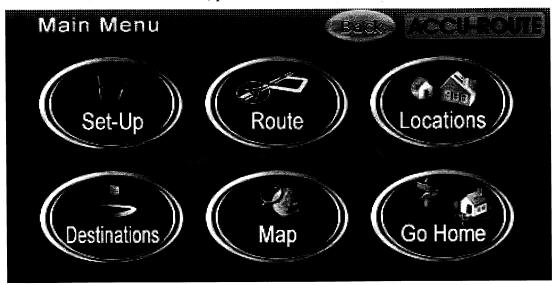


Press the **Back** button to return to the "Set-Up" screen.

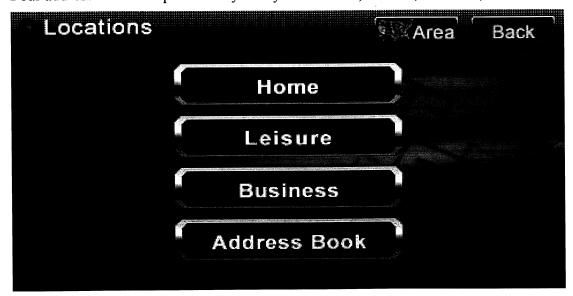
5. Locations

5.1 Enter the Locations Screen

To enter the "Locations" screen, press the Locations button on the "Main Menu."

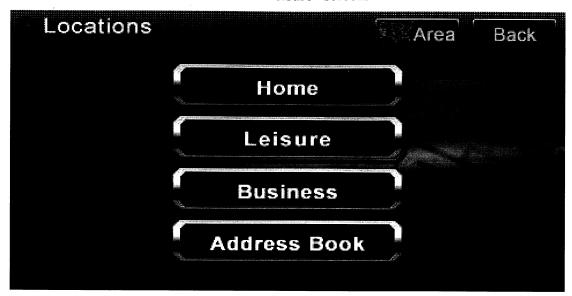


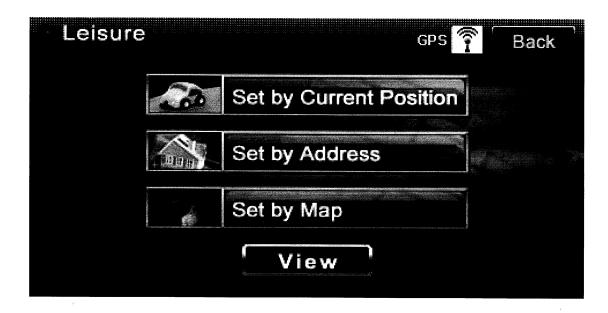
Four address books are provided by the system. Home, Leisure, Business, and Address Book.



5.1.1 Leisure

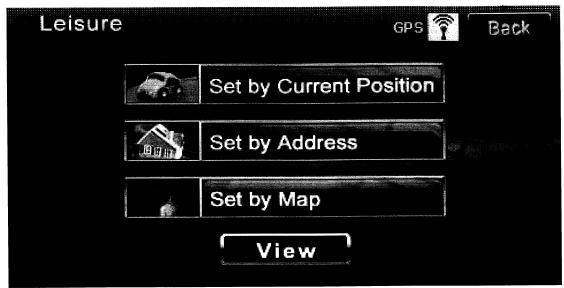
Press the Leisure button to access the "Leisure" screen:



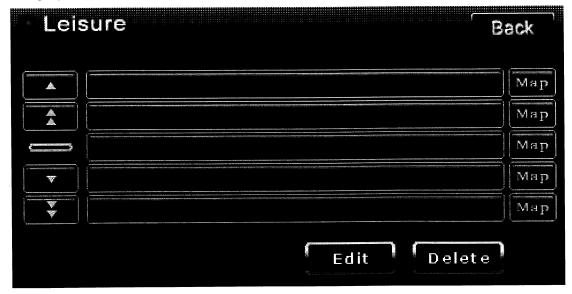


View

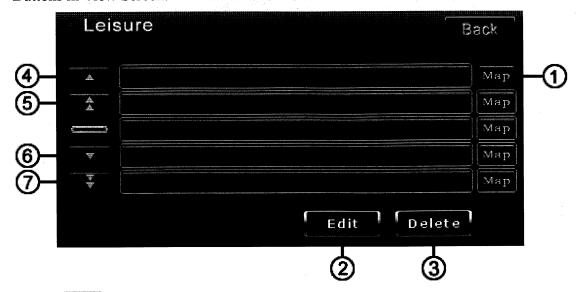
At the bottom of "Leisure" screen, there is a "View" button.



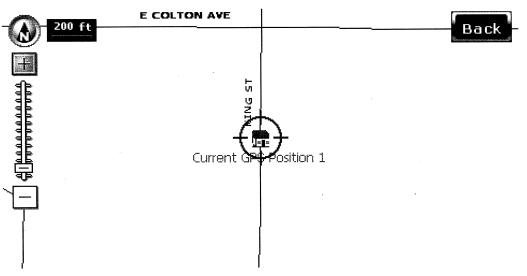
Press the category: button to view the list of locations saved under the Leisure



Buttons in View Screen:

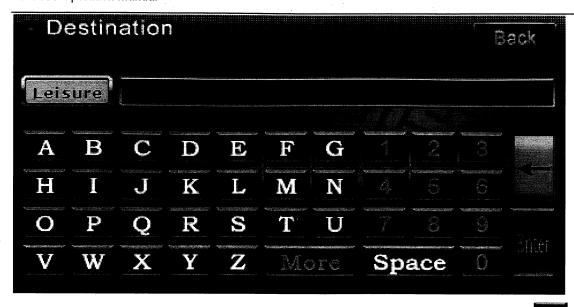


1. Map: To the right of each item in the list is a **Map** button. This button allows you to view the actual location of this item on the map:



The "icon indicates the position of the location on the map.

2. At the bottom of "Leisure" screen, there is an **Edit** button. Press the Leisure location you want to edit and then press the **Edit** button to edit the name of the location.



Use the keyboard to enter the name of the location. When finished, press the save and return to the "Leisure" screen.



- 3. Press the Leisure location item you want to delete (the item will be highlighted), and then press the **Delete** button. This will delete this item from the Leisure location list.
- 4. Scroll to the preceding item in the location list.
- 5. Scroll to the preceding page of the location list.
- 6. Scroll to the following page of the location list.
- 7. Scroll to the following item in the location list.

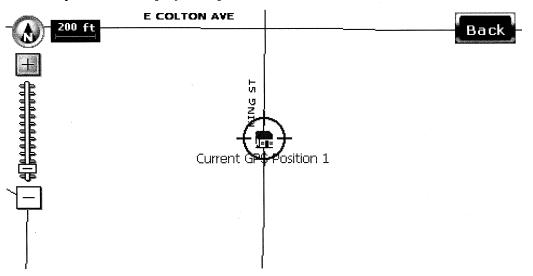
Set by Current Position

This function allows you to save the current GPS location in the location list.

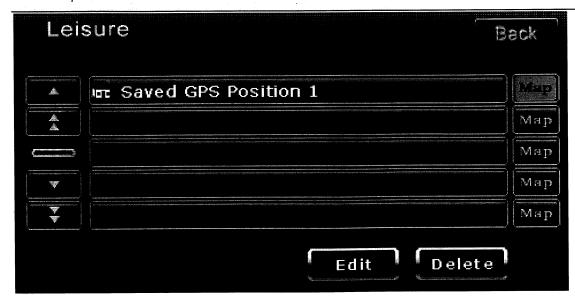
1. Press the **Set by Current Position** button on the "Leisure" screen:



The system will display a map with the current GPS location marked:

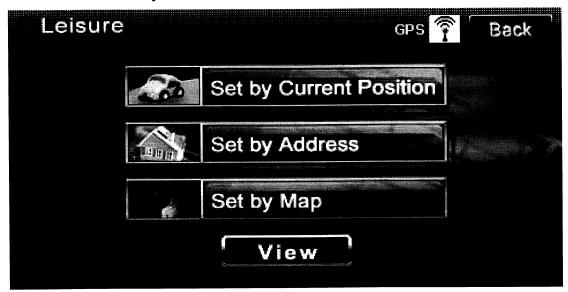


Press the Back button on the "Map" screen to return to the Leisure location list screen. The current GPS location has been saved as "Saved GPS Location."

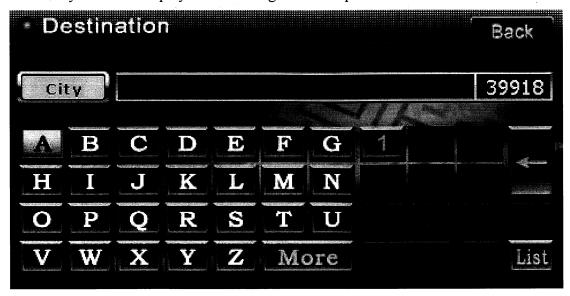


Set by Address

1. Press the **Set by Address** button on the "Leisure" screen.



The system will display the following address input screen:



You will need to enter city name first. The Prompt Input mechanism (refer to section 3.2.4 Prompt Input) is provided here for quick input.

After the city name is entered, the system will prompt you to enter the street name and street address.



As shown above, the city name selected is displayed on the menu bar. If you need change the city, press the ATTICA,MI bar to return to the City menu.

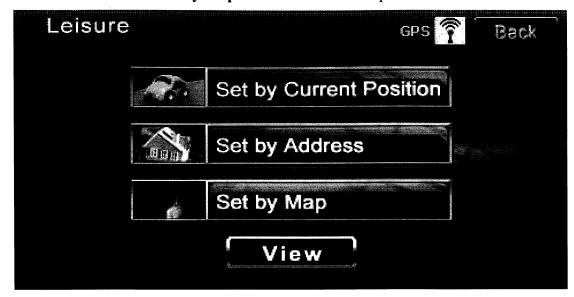
Enter the street name and street number.

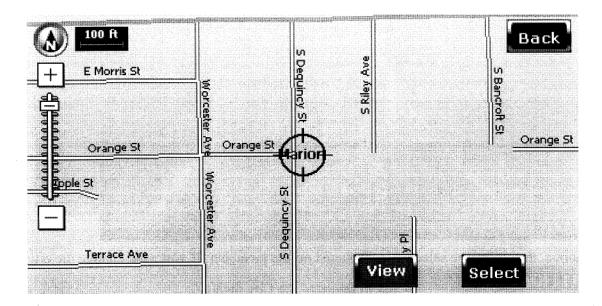
When finished, press the button. The system will attempt to perform GeoCoding (finding the map location based on the address entered). If the address entered can not be matched to the

map, the system will prompt "Address not found." If the address is successfully matched to the map, the system will return to the "Leisure" screen, and the address entered will be displayed in the Leisure location list.

Set by Map

This method allows you to directly point a location on the map and save the position in the location list. Press the **Set by Map** button to view the map screen:





Map Buttons:

Each press of the View button will rotate through the locations in the Leisure location list, and display the location on the map.

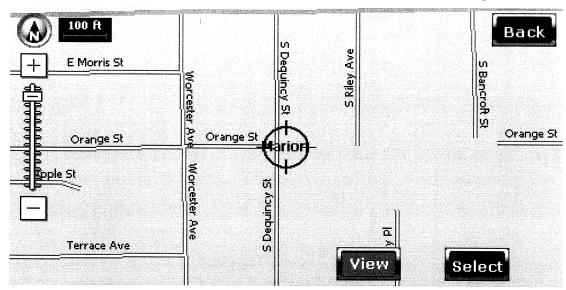
Select: Save the current map cursor location to the Leisure location list.

Manual Selection of Map Location:

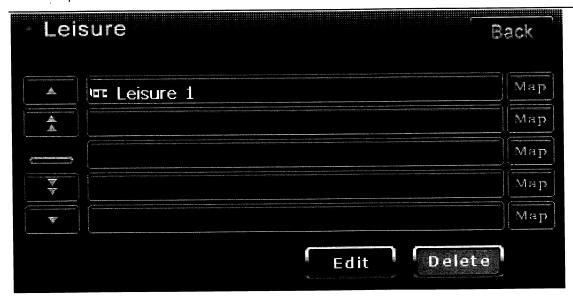
1. Enter map screen;

Touch the map to move the cursor to the location you touched;

Use the or button on the map to zoom in or out to view the map area.



Press the **Select** button to save the current map cursor location to the location list. Press the **Back** button to return to the "Leisure" screen. The map location will be displayed in the location list.



5.2 Home, Business, and Address Book

The operation of Home, Business, and Address Book are exactly the same as Leisure. These are different folders to manage saved locations.

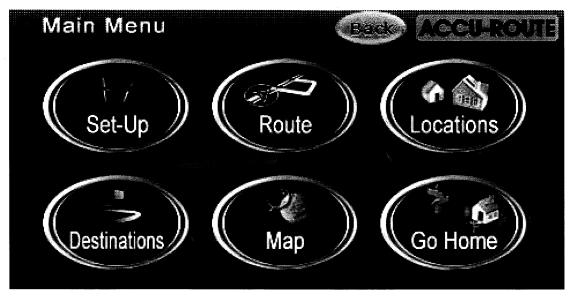
6. Destinations

6.1 Set Destinations

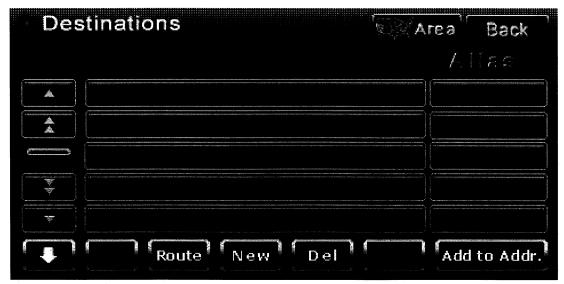
Correct setup of destinations is the first step for successful navigation. In this section, you will learn how to set up one or more destinations.

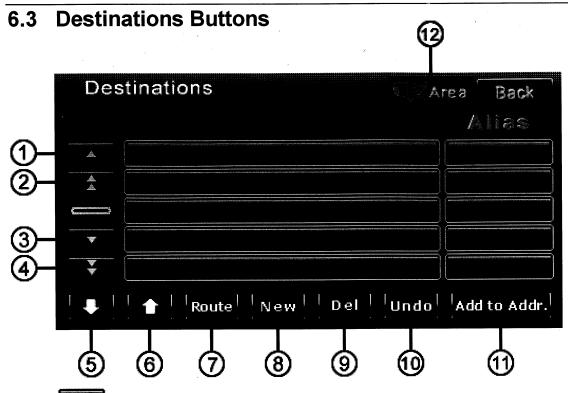
6.2 Enter the Destinations Screen

Press the **Destinations** button on the "Main Menu" screen.



The system will display the following "Destinations" screen:

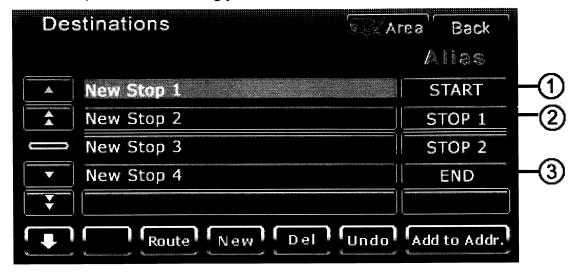




- 1. Scroll to the preceding item in the destination list.
- 2. Scroll to the next item in the destination list.
- 3. Scroll to the preceding page of the destination list.
- 4. Scroll to the next page of the destination list.
- 5. Move the currently selected destination item after the next one.
- 6. Move the currently selected destination item before the preceding one.
- 7. Route: When destinations are set, press to start the navigation directly.
- 8. New: Add a new destination.
- 9. Delete the currently selected destination.
- 10. Restore to the previous status (before the last operation).
- 11. Add to Addr. : Add the currently selected destination to the Address Book.
- 12. View the current map data area (refer to section 错误!未找到引用源。错误! 未找到引用源。).

6.3.1 Destination List

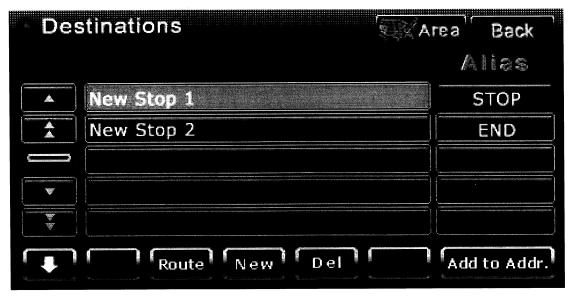
The Destination List contains one or more destinations for route calculation. Under the Simulation Mode (refer to section 4.3.7 Navigation Mode), you need to set a minimum two destinations. The system will use the first one as the route starting point. Under Car Navigation Mode, only one destination is required. The system will use the current vehicle location (GPS coordinates) as the route starting point.



When multiple destinations are entered, the system will calculate the route to travel through these destinations in the order specified in the destination list.

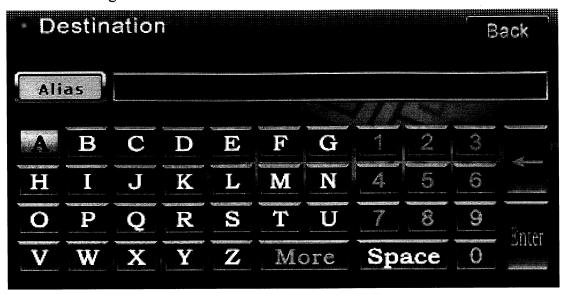
6.3.2 Alias

To help you remember the destinations entered, an Alias function is provided to assign an alias to each destination.



1. Press the button to the right of the destination item and the system will display the

following: screen:

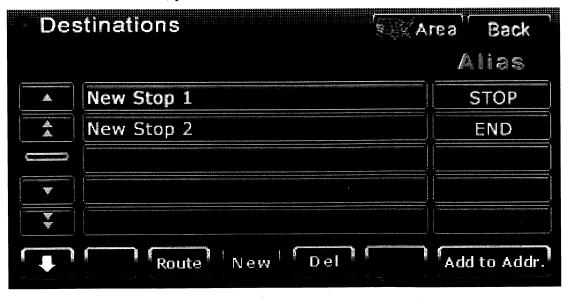


Enter the alias text in the alias input field (refer to section 3.2.2 Text Input for instructions).

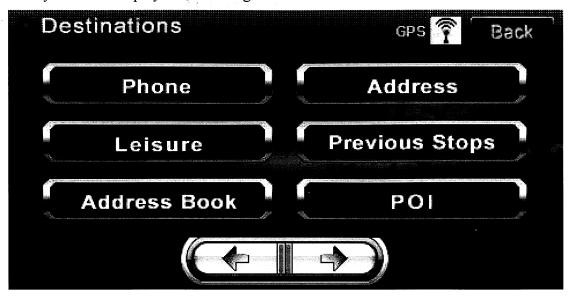
When finished, press the button to save the alias and return to the "Destinations" screen.

6.4 New Destination

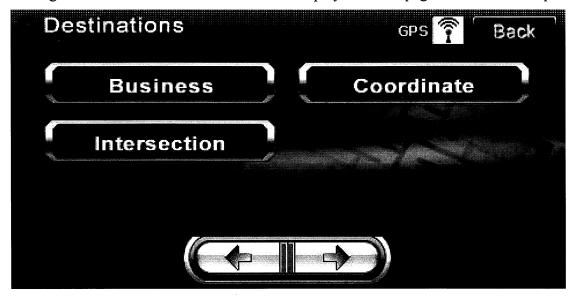
To add a new destination, press the button on the "Destinations" menu:



The system will display the following screen:



The right arrow at the bottom of screen will display a second page of destination input methods.

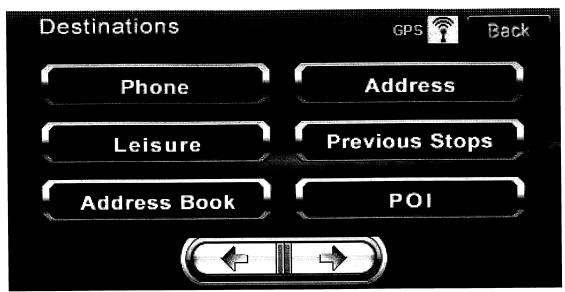


The system provides a total of 9 methods of adding new destinations: Phone, Coordinate, Address, Leisure, Business, Address Book, POI, Previous Stops, and Intersection.

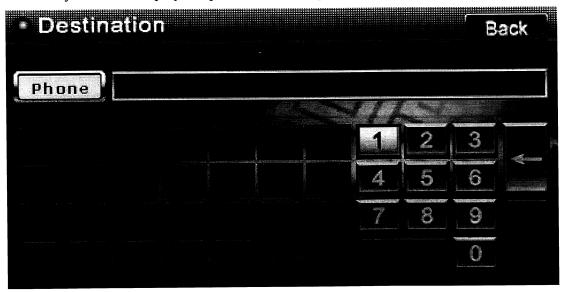
6.4.1 Use Telephone Number to Add Destination

If you know the telephone number of a particular place, you can use it to find the destination.

1. Press the **Phone** button on the "Destinations" screen:



The system will display the phone number input screen:



Enter the telephone number in the input field. Enter Area Code first, then the 7 digit phone number. NOTE: You do not need to enter 1. For example, just enter 909 123 4567. Refer to section 3.2.3 Number Input for number input instructions.

When finished, press the

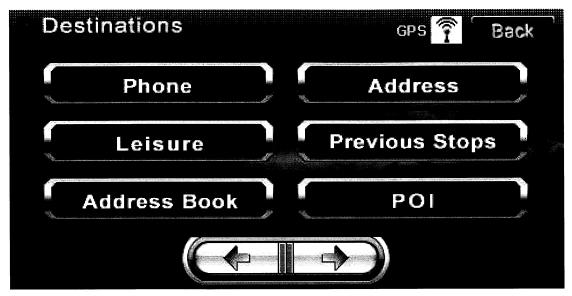
button. The system will search the database to find a match of

the telephone number. If no record is found the following message will appear: "Phone number entered is not found". If a successful match is found, the system will return automatically to the "Destinations" screen with the phone address listed.

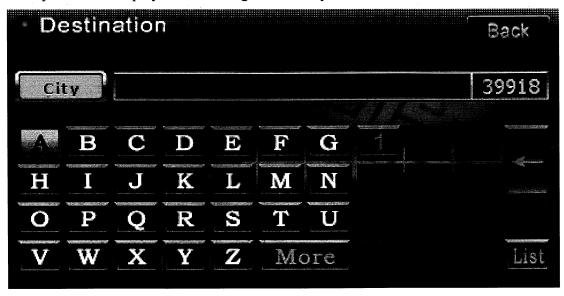
6.4.2 Use Address to Add Destination

If you know the address of your destination, you can use the "Address" function to enter the destination.

1. Press the **Address** button on the "Destinations" screen:

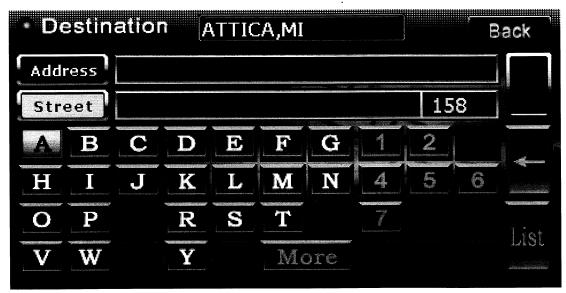


The system will display the following screen for you to enter the destination address.



Enter the City name first. Refer to section 3.2.4 for Prompt Input of city names.

After the City name is entered, the system will display the following screen for you to enter the street name:



If you need to change the city, press the city name bar to return to the previous city name input menu.

Enter the street name (Address) and Street number after the City name. The Prompt Input mechanism is also used here. Refer to section 3.2.4 for instructions.

When finished, press the button to save the destination address. The system will attempt to perform Geocoding (finding the map location based on the address entered). If the address

entered can not be matched to the map, the system will prompt "Address not found." If the address is successfully matched to the map, system will return to the "Destinations" screen, and the address entered will be displayed in the destination list.

6.4.3 Use Leisure Address Book to Add Destination

You can select a location item in the "Leisure" address book as your destination:

1. Press the **Leisure** button on the "Destinations" screen:



The system will display the list of locations saved in the Leisure address book:



Find the location item and press to select it. (You can also view the map location of the item by Pressing the button to the right of the item.)

Press the button in front of the destination to add it to the destination list.

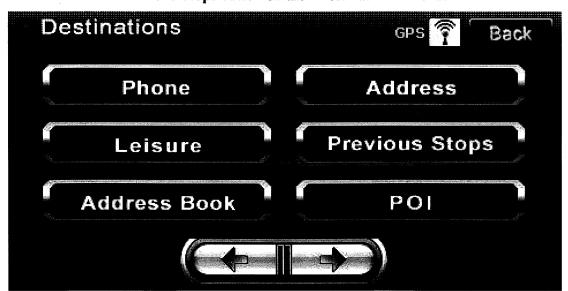


The system will return to the "Destinations" screen. The location you selected from the Leisure location list will be displayed in the destination list.

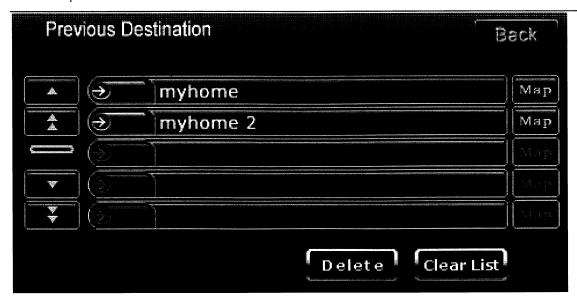
6.4.4 Use Previous Stops to Add Destination

You can use this method to use a previously used destination as your current destination.

1. Press the **Previous Stops** button on the "Destinations" menu.

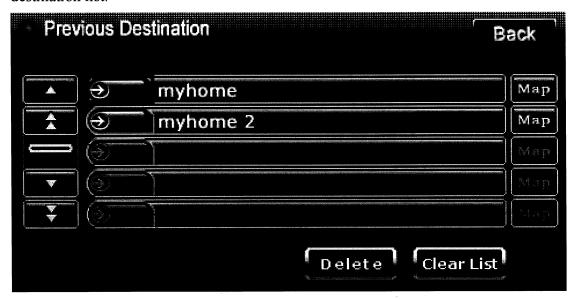


The system will display a list of previous destinations:



Locate the destination and press to select it. (Press the name to display the location on the map).

Press the button in front of the destination name to add the selected item to the destination list.

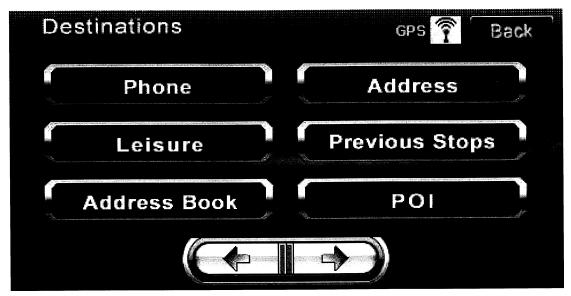


The system will return to the "Destinations" screen.

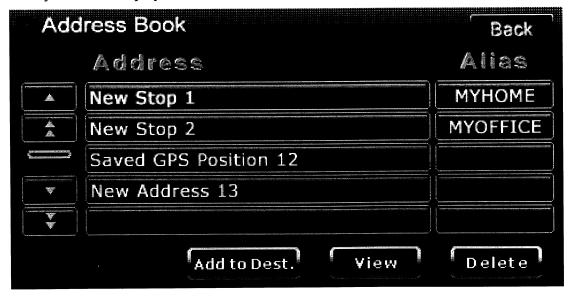
6.4.5 Use Address Book to Add Destination

If you have saved a location in your Address Book, you can use it as the destination.

1. Press the Address Book button on the "Destinations" screen.



The system will display the addresses saved in the Address List:



Find the item in the address list and press to select it.

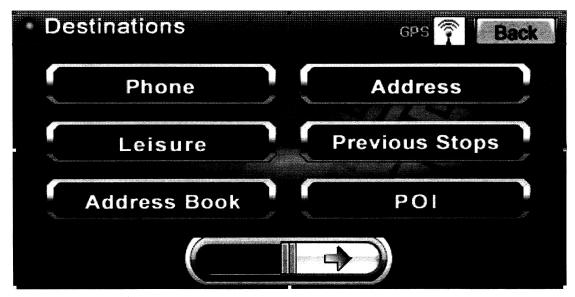
Press the Dest. button at the bottom of the screen and the item will be added to the Destinations List:



6.4.6 Use POI to Add Destination

If your destination happens to be a point of interest, for example, a restaurant or a gas station, you can use this method to find and set the destination directly.

1. Press the **POI** button.



The system will start the City input menu.

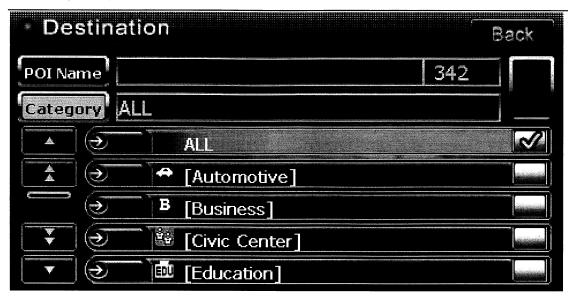


Refer to section 3.2.4 for help on how to input a city name. The City name "REDMOND, WA" is selected in the following example:



The city name just input is displayed on the menu bar. Pressing on the city name bar will return to the previous city name menu for re-selection.

You can press the Category button to display the POI Category list.



For a complete list of the POI categories, please refer to Appendix "POI Category List".

You can select one or multiple categories by pressing the blue button. The selected category will have the box check marked. You can select all categories by checking the blue button to the right of the "All" category.

Press the POI Name button to open the POI Name input menu. Refer to Section 3.2.4. Prompt Input mechanism is applied here for quick matching of the POI name.

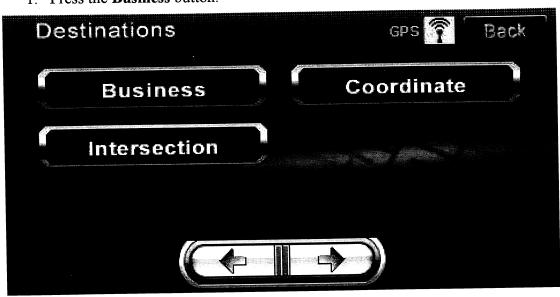
After the POI name is matched and entered, press the button. The system will return to "Destinations" menu. You will find that the POI you just selected is already on the destination list.

Enter

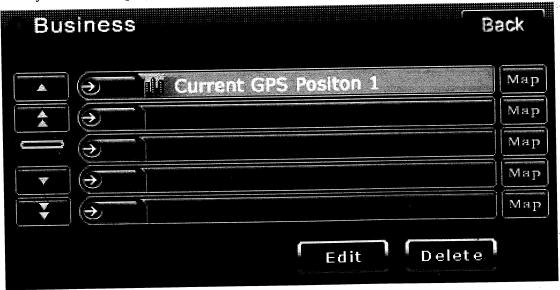
6.4.7 Use Business Address Book to Add Destination

You can also select a location item in the "Business" address book as your destination.

1. Press the Business button.

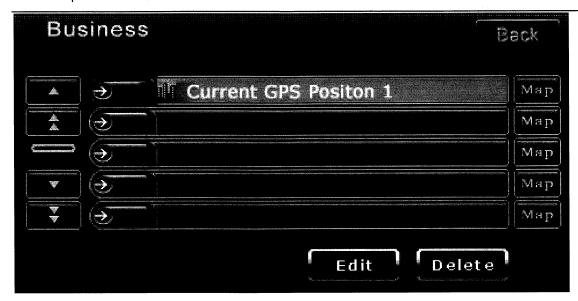


The system will display the "Business" address book:



Find the location item and press to select it. (You can also view the map location of the item by pressing the **Map** button to the right of the item.)

Press the button in front of the destination to add it to the Destinations list:

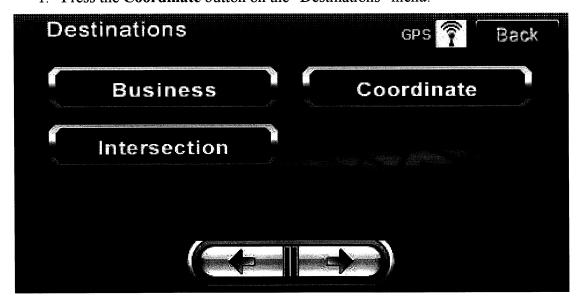


The system will return to the "Destinations" screen. The location you have selected from the Business location list will be displayed in the destination list.

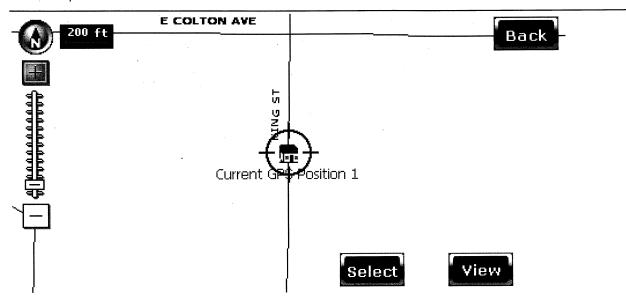
6.4.8 Use Map Coordinates to Add Destination

If you know the exact location of your destination on the map, you can manually add the destination on the map:

1. Press the Coordinate button on the "Destinations" menu.



The system will display a map. Use the (+) or (-) buttons to change the zoom level of the map.



Touch the position on the map that indicates the position you want to navigate to. A cursor will appear at the position you pressed. You can also use **View** button to view previously selected locations. Continue pressing **View** to go through the previous locations one at time.

When finished, press the **Select** button to save the destination. The system will automatically return to the "Destinations" screen. The location entered will be stored in the Destinations list.

6.4.9 Use Intersection to Add Destination

If you do not know the exact street address, but you know the intersecting street, you can use this method to enter the destination:

1. Press the Intersection button on the "Destinations" screen.

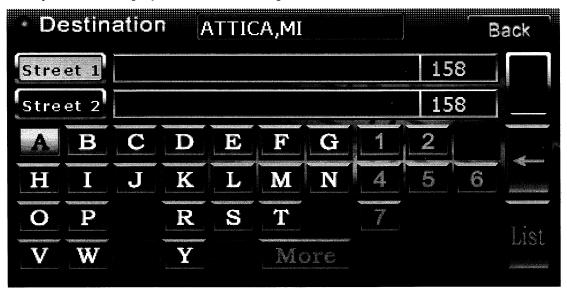


The system will display the following screen for you to enter cross street names.



Enter the City name. Refer to section 3.2.4 for instructions.

The system will display the street name input screen.



The selected city name is displayed on the menu bar. Pressing the city name bar will take you back to the city name input screen for re-selection

Press the Street 1 button and enter the first street name.

Press the Street 2 button and enter the second street name.

Press the button and the system will attempt to locate the cross street. If the streets entered are not found or not intersecting, the system will display "Address not found". If the

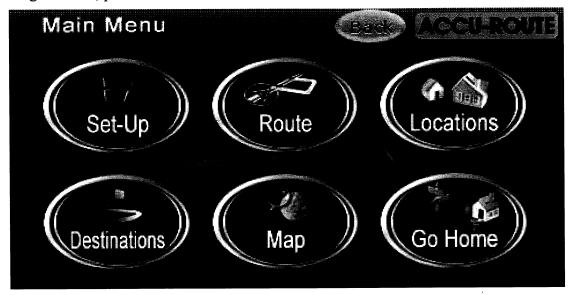
cross street is successfully found, the system will return to "Destinations" screen automatically, with the intersection location listed.

7. Route Calculation and Guidance

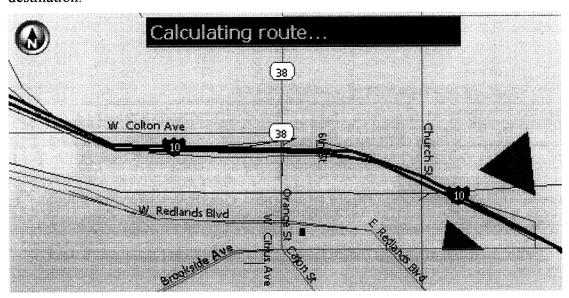
When destinations are set, you can start route calculation and let the navigation device guide you during driving.

7.1 Start Route

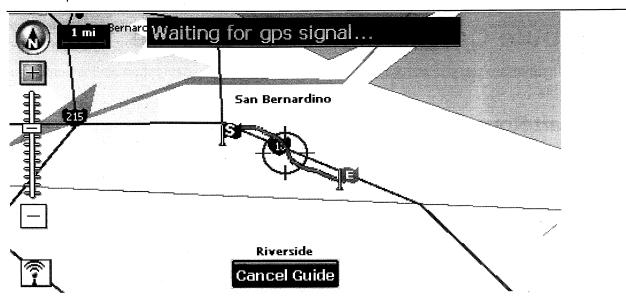
To get started, press the Route button on the "Main Menu" screen.



The system will load map data and calculate the route from the current location to the destination.

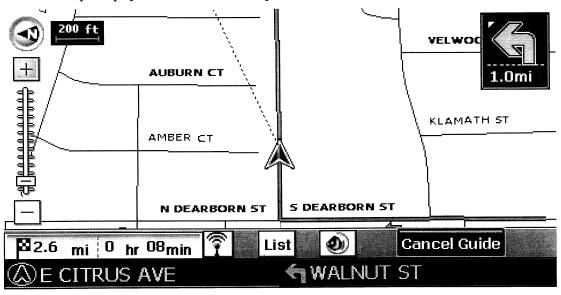


When route calculation is completed, the entire route will be displayed on the map first.



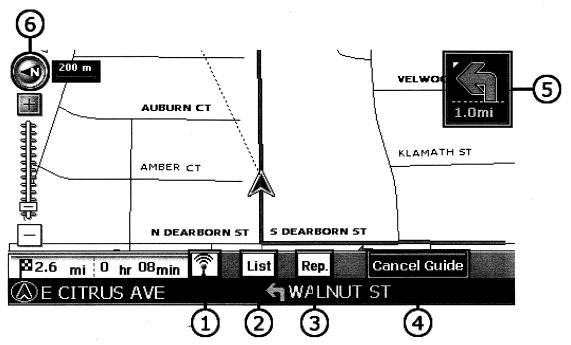
7.2 Route Guidance

When the route is successfully calculated, the system will start to display the current location of vehicle and prompt you for the next turn point:

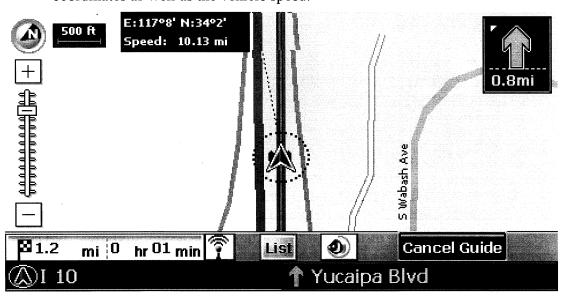


During route guidance, a number of operations are provided. Please obey safety rules during driving.

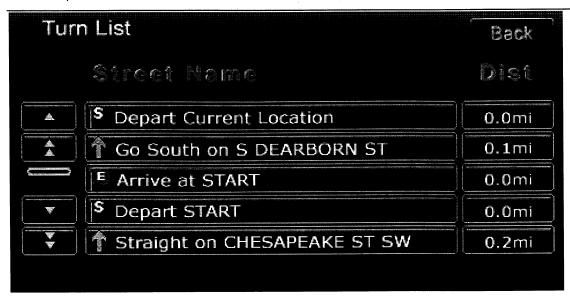
7.3 Route Functions



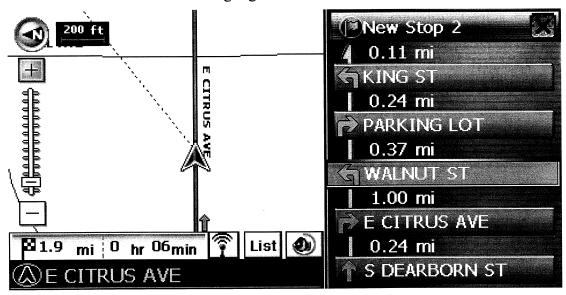
1. Display current GPS Signal Strength: This icon will turn green when the device receives signals from at least 3 satellites. When less or no signal is received, the icon will change to Press the icon to display the current GPS longitude and latitude coordinates as well as the vehicle speed.



2. List: Press to list the full Turn List of street names leading to the destination:



- 3. Press to repeat the last voice guidance message.
- 4. Cancel Guide: Press to cancel the route guidance and return to map display mode.
- 5. **Turn**: Press the turn icon to display the previous and next turns with distance information. The next immediate turn is highlighted:



Under the street name, you can see the distance to the next turn. Type of turn (left, right, or U turn) is indicated to the left of the street name.

The Immediate next turn road is highlighted. The current road is the one below the highlighted road.

You can press the cancel button () or any area inside the Turn screen to close the Turn screen.

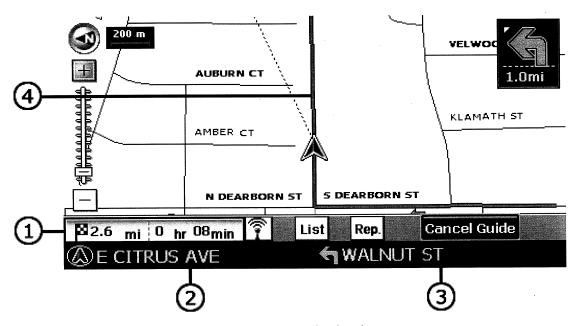
North Arrow

The north arrow shows the current northern direction. Pressing it will toggle the map display between North Up or Heading Up modes.

North Up mode: The north arrow always points upward. The vehicle arrow will rotate and move on the map.

Heading Up mode: The vehicle arrow will always point upward and stays in the center of the map. The north arrow will rotate pointing to the true northern direction. The map will rotate and move as the vehicle direction and position changes.

7.4 Other Route Functions



- 1. Shows the distance and time to the next destination.
- 2. Shows the current road your vehicle is on.
- 3. Shows the next turn road.
- 4. Shows the section of the recommended driving route.

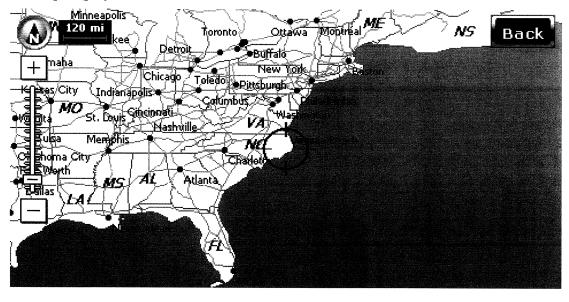
8. Map

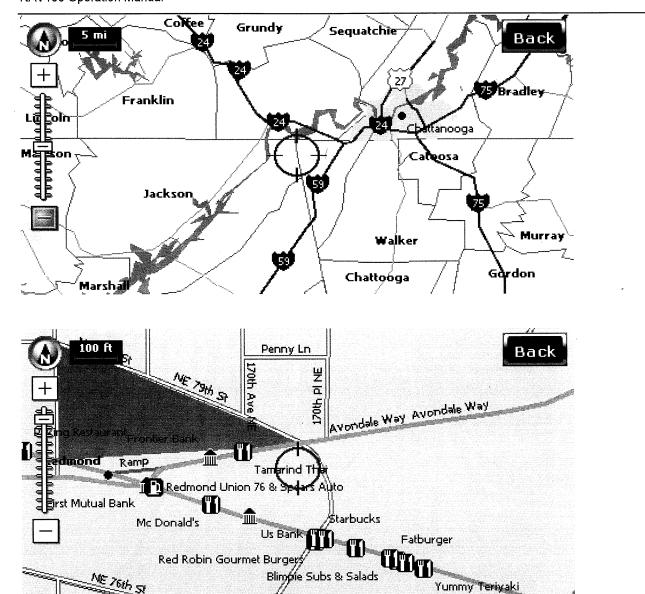
The Map function is designed for you to view the map area. Based on the Map Layers preference setting, the map display will show different geographic features in addition to the street network, including rivers, lakes, parks, POIs, etc.

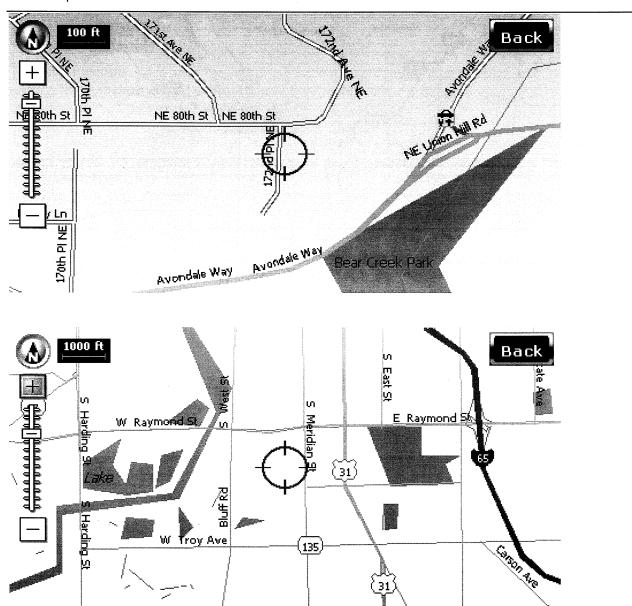
To enter the Map, press the Map button on the "Main Menu" screen.



The system will display the map area. You can use zoom in or zoom out to change the extent of map display area, or touch anywhere on the map display to pan. The following are examples of the map display:







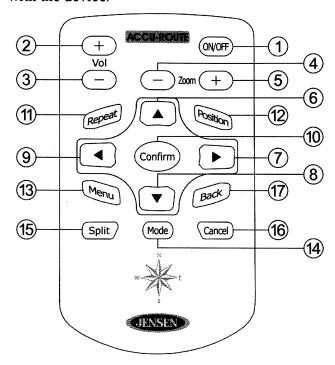
9. Go Home

If you need to return home from your current location, the system provides a quick navigation "Go Home" interface on the Main Menu. The system will detect the current GPS location, calculate the route from the current location to the home location (stored in Home address book), and automatically start the navigation guidance.



10. Remote Control Operations

The NAV100 supports remote control of the navigation system. A remote control unit is supplied with the device.



10.5 Remote Control Buttons

- 1. Power on/off
- 2. Volume Up
- 3. Volume Down
- 4. Map Zoom In
- 5. Map Zoom Out
- 6. Move Up
- 7. Move Right
- 8. Move Down
- 9. Move Left
- 10. Enter/Confirm

Repeat last voice guidance message

Display the current vehicle location

Return to the Main Menu

Toggle between Map Mode and Function Mode. Under Map Mode, the four arrow buttons are

used for map panning. Under Function Mode, the four arrow button are used to select function buttons.

Display Turn List during Navigation

Exit

Return

10.6 Using the Remote Control

Use the **Up**, **Down**, **Left**, or **Right** buttons to move the screen selection to the desired location. When a particular button is selected, it will be highlighted:



• Selected:



• Unselected:

Press the **Enter/Confirm** button to perform the selected action, as if you had pressed the button on the screen.

11. Appendix – POI Category List

The following table is the complete list of POI categories and display icons:

Code	Theme	Category	Short Name	Modified
	Automotive		Automotive	Ġ
1	Automotive	Automobile Club	BreakDown	2
2	Automotive	Parking	CarPark_OP	D
3	Automotive	Car Parts	CarParts_ACC	©
4	Automotive	Car Rental	CarRent_FA	ä
5	Automotive	Repair Service	CarRepairFa	A
6	Automotive	Car Dealer/Repair	CarDealer	æ
7	Automotive	Car Wash	CarWash	6
8	Automotive	Gas Station	GasStat	
10 Jack 14	Business		Business	E
9	Business	Bank	Bank	
10	Business	Service Business	Company	В
11	Business	ATM	Cash_ATM	8716
12	Business	Convention/Exhibition center	Convention	86 Y
13	Business	Currency Exchange	Exchange	\$€
14	Business	Manufacturing Business	IndHarborArea	
	Civic Center		Settle	Ė≟
15	Civic Center		SettleCent	6
3 4 2 3	Education	The state of the s	Education	EDU
16	Education	University/College	HighEduSchl2	
17	Education	School	School	<u>đ</u>
18	Education	Nursery/Pre-School	NurserySchl	ð
19	Education	Elementary School	EleSchl	4
20	Education	Middle School	MidSchl	
21	Education	High School	HighSchl	a
	Emergency		Emergency	6

22	Emergency	Pharmacy	Pharmacy	. 8
23	Emergency	General Practitioner	GeneralPrttr	25
24	Emergency	Specialist	Doctor	_0
25	Emergency	Dental surgeon/Dentist	DoctDent	
26	Emergency	Veternarian	DoctVeter	72
27	Emergency	Emergency Medical Service	EmerMediServ	91]
28	Emergency	Fire Station	FirtPost	
29	Emergency	Hospital	Hospital	
30	Emergency	Police Station/Municipal	PoliceStat	3 5)
27	Entertainment ·		Entertain	挺
31	Entertainment	Art Gallery	ArtGallery	∱
32	Entertainment	Arcade	Arcade	
33	Entertainment	Casino	Casino	
34	Entertainment	Movie/Cinema	Cinema	E
35	Entertainment	Museum	Museum	Ø
36	Entertainment	Night Life/Discotheque	NightLift	
37	Entertainment	Stage	Stage	
38	Entertainment	Winery	Winery	
182	Food&drink	Statement of the state of the s	Fooddrink	<u>7</u> 2
39	Food&drink	Fast food	FastFood	
40	Food&drink	Bar	Bar	<u> </u>
41	Food&drink	Ice Cream	IceCream	8
42	Food&drink	Pizzeria	Pizzeria	2
43	Food&drink	Restaurant	Restaurant	
	Government		Government	*
44	Government	Court House	CourtHouse	生
45	Government	Embassy	Embassy	m
46	Government	Government Office	GoverOffice	M
47	Government	Prisons	Prison	
	Lodging	2 (1975) 1 (Lodging	•
48	Lodging	Camping	Camping	Ă

49	Lodging	Guest House	GuestHouse	
50	Lodging	Hotel	Hotel	* P
51	Lodging	Recreational Camp	RecrtCamp	45
52	Lodging	Youth Hostel	YouthHostel	<u>*∰</u> ∀HA
	Others		Others	0
53	Others	Travel agency	TravAgency	1110
54	Others	Cemetery	Cemetery	† †
55	Others	Others	Others1	<u> </u>
	Recreation		Recreation	4
56	Recreation	Amusement Park	AmusePark	
57	Recreation	Beach	Beach	4
58	Recreation	Fairground	Fairground	G
59	Recreation	National Park	NationPark	(<u>*</u>)_
60	Recreation	National Forest	NationForest	241
61	Recreation	State Park	StatePark	6,3
62	Recreation	Park	Park	14
63	Recreation	Zoo/Aquarium	Zoo	
64	Recreation	Stadium/Arena	Stadium_Arena	0
65	Recreation	Outdoor Sport	ThemOutSport	
66	Recreation	Bowling Alley	SptBowling	PP.
67	Recreation	Golf Course	SptGolf	£
68	Recreation	Ice Rink	SptIce	æ
69	Recreation	Sports Center	SptHall	2
70	Recreation	Swimming Pool	SptSwim	<u></u>
71	Recreation	Tennis Court	SptTennic	
72	Recreation	Marina	SptMarina	4
73	Recreation	Squash court	SptSqcrt	~
74	Recreation	Billiard Parlor/Pool Hall	SptBilliard	
75	Recreation	Others	SptOthers	SPT
76	Recreation	Hiking Ground	SptHiking	200
77	Recreation	Ski resort	SptSki	李

NAV100 Operation Manual

78	Recreation	Fitness Club	SptFitness	Ŋ	
	Public Services		Services	罿	
7 9	Public Services	Library	Library	[2]	
80	Public Services	Post office	PostOffice		
81	Public Services	Tourist Information	TourInfoOff		
	Service Shops		Shops	146	
82	Service Shops	Shopping Centre	Centre	98	
83	Service Shops	Service Shop	Service		
84	Service Shops	Specialty Store	Shop	<u> </u>	
85	Service Shops	Grocery	ShopFood	2	
	Tourist Attraction		Sights	#A	
86	Tourist Attraction	Building	Building	85	
87	Tourist Attraction	Monument	Monument	1	
88	Tourist Attraction	Mountain	MountainPeak	A	
89	Tourist Attraction	Other Tourist Attractions	Observatory	Ä	
90	Tourist Attraction	Church	Worship	企	
	Traffic related		Traffic		
91	Traffic related	Border Post/ Frontier Crossing	BorderPost		
92	Traffic related	Mountain Pass	MountainPass		
93	Traffic related	Rest area	RestArea	575	
roden a	Travel		Transport	0 22	
94	Travel	Airline Access	Airline	<u>₹</u> ^	
95	Travel	Airport	Airport	<u> </u>	
96	Travel	Ferry Terminal	FerryTermi	₩	
97	Travel	Railway Station	RailStation		

Updating the VM9511TS / VM9021TS Firmware and Operation Addendum

Note: If power is interrupted during the firmware update the unit may become non-operational. In this case, the unit will have to be sent to our repair facility to be repaired. It is recommended to have the head unit (Receiver) installed in the vehicle **before** the firmware updates begin. In this manner, the risk of losing power will be reduced compared to a bench "set-up" with possible faulty power connections.

** After the navigation route has been setup and navigation has begun, you can return to the Main Menu Source screen and select a source to listen to while the navigation system continues to navigate. To return to navigation mode briefly to check route information, remaining time, etc press the **INFO** button on the remote control or the **DISPLAY** button (VM9511TS only) on the front panel.

The firmware updates for the VM9511TS and VM9021TS will enhance performance and communication with the NAV100 GPS navigation system.

Determining which firmware to use:

- There are two different hardware versions (Camera Mirror Image version and Non-Camera Mirror Image version) of the VM9021TS and VM9511TS. Early production units of each model *did not* include a "Camera Mirror" function for the reverse back-up camera. This can be confirmed by going into the System Setup, General Setup, then above the CLOCK set function there will be either OSD Language or Camera In.
- 2. If the VM9511TS or VM9021TS has OSD Language in the General Setup Menu, then you will need to use the update labeled NCM_NAV (NCM = No Camera Mirror). If the VM9511TS or VM9021TS has "Camera Mirror" in the General Setup Menu, then you will need to use the update labeled CM_NAV (CM = Camera Mirror).
- 3. Please note that there are updates for each head unit model: VM9021TS and VM9511TS and they *are not* interchangeable.
 - **Note** jLink refers to the media module supplied with the VM9511TS and VM9021TS. The media module *must be installed and connected* in order to be updated.

The updates must be performed in the following order:

- 1. jLink (media module)
- 2. MCU
- 3. MPEG

Adjust the angle of the screen so you can see it clearly. Load the firmware update disc and after a few moments a menu will pop up and look like the following example (each time the update disc is inserted CANCEL is selected by default):

Updating the VM9511TS / VM9021TS Firmware and Operation Addendum

FIRMWARE UPGRADE Erase and Program Do Not Power Off

CANCEL MCU MPEG jLink

CANCEL will be highlighted **Teal** by default. Use the remote control "track next / previous" keys (the blue-gray keys in the center of the remote) or the joystick to select **jLink**.

FIRMWARE UPGRADE Erase and Program Do Not Power Off

CANCEL MCU MPEG jLink

Once **Link** is highlighted push the **PLAY** button on the remote control. The screen will turn blue and the update will begin. During the update the menu will display the percentage complete (i.e. -30%). When the update is 100% complete, the message "Restart Head Unit" will appear on the screen. Press the EJECT button to eject the disc, and then reinsert the disc. After pressing the eject button it will take about 15 seconds for the disc to eject. Occasionally, it may be necessary to press the eject button a second time.

After loading the firmware update disc the menu will reappear and look like the following example:

> FIRMWARE UPGRADE Erase and Program Do Not Power Off

CANCEL MCU MPEG jLink

CANCEL will be highlighted **Teal** by default. Use the remote control "track next / previous" keys (the blue-gray keys in the center of the remote) or the joystick to select **MCU**

FIRMWARE UPGRADE Erase and Program Do Not Power Off

CANCEL MCU MPEG jLink

Updating the VM9511TS / VM9021TS Firmware and Operation Addendum

Once MCU is highlighted push the **PLAY** button on the remote control. The screen will turn blue and the update will begin. During this update a "ticking sound" will be emitted from the unit as the MCU is updated. This is normal. After approximately 2 minutes the graphics will return to the screen and the disc will reload. Next, select **MPEG**:

FIRMWARE UPGRADE Erase and Program Do Not Power Off

CANCEL MCU MPEG jLink

CANCEL will be highlighted Teal by default. Use the remote control "track next / previous" keys (the blue-gray keys in the center of the remote) to select MPEG. Once MPEG is highlighted push the PLAY button on the remote control. The screen will turn blue and the update will begin. No "ticking" sound or percentage (%) will be indicated during the MPEG update. After approximately 2~3 minutes the multi-color graphics will return to the screen and the word STOP will be displayed in the upper left-hand corner of the screen indicating that the MPEG update is complete.

Eject the disc (wait 15 seconds for disc to eject)

Firmware updates are now complete.

NAV100 Software Installation Guide (Backup Map Data)

Note: The SD card supplied with the NAV100 is *preloaded* with map data. Installation of the map data *is not necessary* unless the SD card data has been deleted, altered or corrupted.

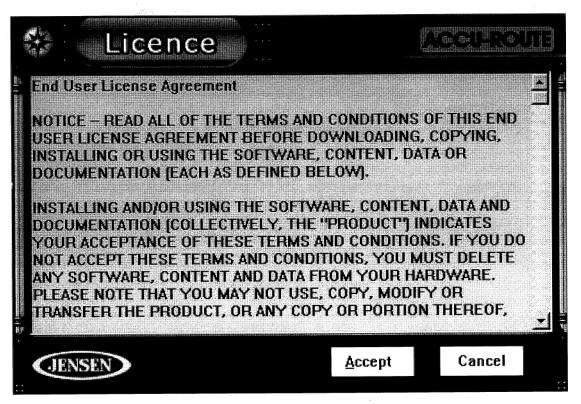
System Requirements

Before you start, verify that your computer environment meets the following requirements:

- 1. Your computer has one of the following windows operating systems: Windows 98, Windows ME, Windows 2000, or Windows XP;
- 2. Your computer has a working DVD-ROM or DVD R/W drive;
- 3. You have one DVD labeled "Accu-Route Navigation Map Software";
- 4. You have a 2G SD card (included with NAV100);
- 5. You have a SD Card Reader (not included) that you can insert your SD card into, and connect it to your computer through a USB cable.

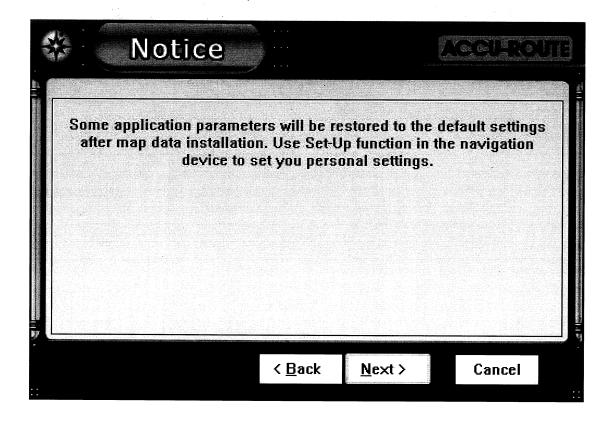
Installation Steps

- 1. Insert the SD Card into the SD Card Reader (should already be connected to your computer via USB cable).
- 2. Insert the DVD labeled "Accu-Route Navigation Map Software" into the DVD drive. The installation program on the DVD Set-Up disk will automatically start and the following window will be displayed on your computer:

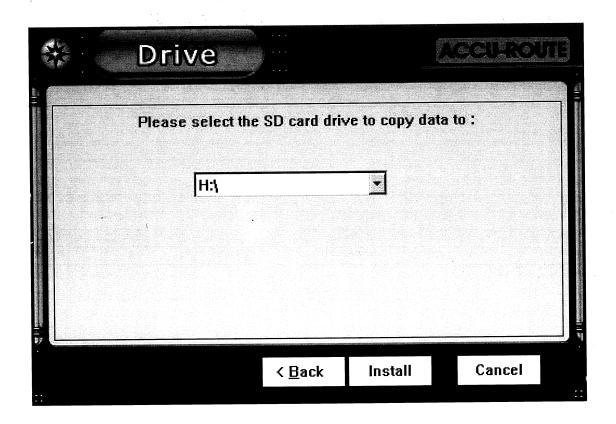


NOTE: If you do not see the above window coming up after you insert the Navigation Map Software disc into your DVD drive, you can start the installation manually by clicking <DVD drive>:/NVInstall.exe, where <DVD drive> is the DVD drive letter on your computer.

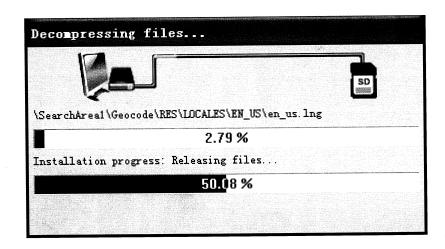
3. Click "Accept" to accept the license agreement and continue the installation. If you click "Cancel", installation process will terminate, nothing will be installed to your SD card. After you click "Accept", the following notice window will be displayed:



- When you re-install the map data next time, installation will automatically install the default software settings. If you want to save the content of the SD card before installation, click "Cancel" at this step and reinstall after you have backed up your content.
- If this is your first time installation, just click "Next>" to continue.
- To view the previous installation page, click the "<Back" button.
- 4. Select the SD card drive and start installation. The last step of the installation is to tell the system which drive contains the SD card.
 - Make sure you select the correct SD card drive from the following list, and click "Install". For example, the SD card drive in the following window is drive "H:\".
 - Please note that the drive letter may be different on your computer.



- Click "<Back" to return to previous installation page, or "Cancel" to terminate the installation.
- If you are not sure of the SD drive letter, you can browse "My Computer" to view available disc drives. Make sure your SD card is securely inserted into your SD Card Reader, and that the card reader is securely connected to your computer via USB port.



• When installation is complete, the following message will be displayed:



5. Click "Ok". Your installation is successfully completed!



Register online at: WWW.AUDIOVOX.COM

Click On Product Registration and Fill Out the Brief Questionnaire

PRODUCT REGISTRATION

Thank you for purchasing an Audiovox product. We pride ourselves on the quality and reliability of all our electronic products but if you ever need service or have a question, our customer service staff stands ready to help. Contact us at www.audiovox.com

PRODUCT PROTECTION:

In case of an insurance loss such as fire, flood or theft, your registration will serve as proof of purchase.

PURCHASE REGISTRATION:

Registering On-Line will allow us to contact you in the unlikely event a safety notification is required under the Federal Consumer Safety Act.

12-Month Limited Warranty

USA and Canada

Who is covered?

AUDIOVOX ELECTRONICS CORPORATION (the Company) extends this warranty to the original retail purchaser of products purchased through an authorized Audiovox retailer in the U.S.A. or Canada. This warranty is not transferable or assignable.

What is covered?

The Company warrants that should this product or any part thereof, under normal use and conditions, be proven defective in material or workmanship within 12 months from the date of original purchase, such defect(s) will be repaired or replaced with a new or reconditioned product (at the Company's option) without charge for parts and repair labor.

What is not covered?

This Warranty does not cover the following:

- Elimination of car static or motor noise
- Correction of antenna problems
- Costs incurred for installation, removal, or reinstallation of the product
- Consequential damage to compact discs, USB devices, digital media cards, speakers and other accessories or property
- Damage to vehicle electrical systems. Alteration, improper installation, mishandling, misuse, neglect, accident, blown fuse, battery leakage, theft or improper storage. Exposure to moisture, humidity, excessive temperature or extreme environmental conditions. External natural forces, including without limitation, fire, flood, earthquake, sand or storm
- Products subjected to removal or defacement of the factory serial number/bar code label(s) or markings
- Service performed by an unauthorized person, company or association.
- Any product which has been adjusted altered or modified without Jensen's consent.
- Any product not distributed by Jensen within the United States or Canada.
- Defects in cosmetic, decorative or non-operative structural parts such as framing
- Damage incurred during shipping (claims must be addressed to the carrier)
- Incidental damages related to transporting the product to a service center, including loss of personal time, transportation costs, and loss of use of product

Limitations

THE EXTENT OF THE COMPANY'S LIABILITY UNDER THIS WARRANTY IS LIMITED TO THE REPAIR OR REPLACEMENT PROVIDED ABOVE AND, IN NO EVENT, SHALL THE COMPANY'S LIABILITY EXCEED THE PURCHASE PRICE PAID BY PURCHASER FOR THE PRODUCT.

This Warranty is in lieu of all other express warranties or liabilities. ANY IMPLIED WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY, SHALL BE LIMITED TO THE DURATION OF THIS WRITTEN WARRANTY. ANY ACTION FOR BREACH OF ANY WARRANTY HEREUNDER INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY MUST BE BROUGHT WITHIN A PERIOD OF 12 MONTHS FROM DATE OF ORIGINAL PURCHASE. IN NO CASE SHALL THE COMPANY BE LIABLE FOR ANY CONSEQUENTIAL OR INCIDENTAL DAMAGES FOR BREACH OF THIS OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, WHATSOEVER. No person or representative is authorized to assume for the Company any liability other than expressed herein in connection with the sale of this product.

Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damage so the above limitations or exclusions may not apply to you. This Warranty gives you specific legal rights and you may also have other rights which vary from state to state.

Obtaining Warranty Service

To obtain repair or replacement within the terms of this Warranty, contact 1-800-323-4815 for location of warranty station serving your area.