Finedrive User's Guide

8, 2005

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1. Introduction

1.1. What is in the Box?

The Navigation System box includes the following items:

1 Finedrive Navigation System

2 12 V DC Adapter for charging in the car.

3 CD ROM 3 including:

- Navigation application(Desktop application).
- User's Guide.
- U.S. and Canada map data.

1.2. System Requirements

Desktop or Laptop PC system requirements include:

Microsoft® Windows 98, ME, 2000 Professional, or XP operating system.

266 MHZ Intel Pentium® II microprocessor with MMX™ or equivalent.

64 MB RAM.

80 MB available hard drive space.

CD ROM drive.

1.3. Selecting and Downloading a Map by Region

On the Map Loader window,

1. Connect Finedrive to your computer using USB cable.

2. Close all other applications running on the Desktop.

3. Open Map Installer.

4. Click on each state to download to your Finedrive, or click on the check box next to each state name.

5. Select Finedrive Memory or SD from the Target Location pop up box.

6. Click on the **Generate Map** button.

7. Insert the appropriate disk in the CD drive, when prompted.

8. Click on the **OK** button after the map is downloaded onto your Hawkeye.

9. Remove the disk from the CD drive.

1.4. Downloading Additional Maps

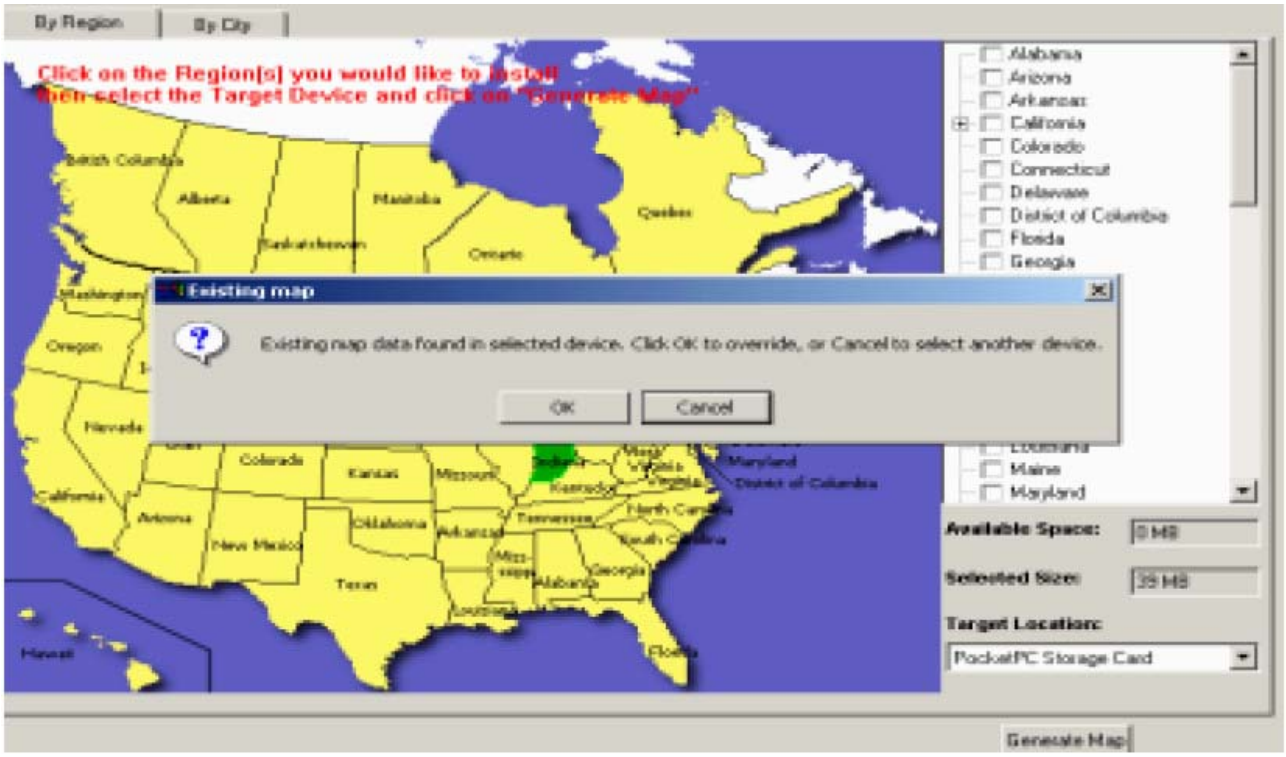
The Navigation System easily lets you change map information stored on your Finedrive or removable SD card.

CAUTION: If you install additional maps, Navigation System warns that any existing map information is erased from the storage location. This is to prevent the maps from occupying a considerable amount of storage space. If you need to store a number of maps, you can use different removable SD cards.

To access the map installer after Navigation System is installed on your Desktop and Finedrive, do the following:

1. Connect the Finedrive to your Desktop.

2. Double click the Navigation system icon on your Desktop screen. The Map Loader screen is displayed.



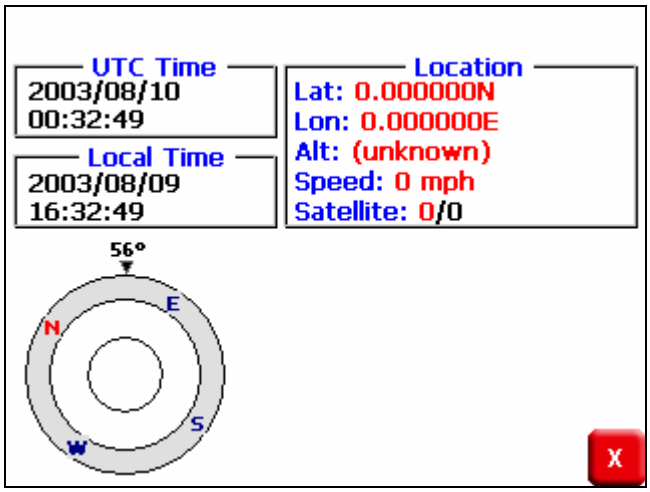
3. Click on each state to download, or click the check box next to each state name

4. Select the storage location (i.e., Finedrive Main Memory or SD Card) from the Target Location pop up box on the Map loader screen.

5. Click on the **Generate Map** button.

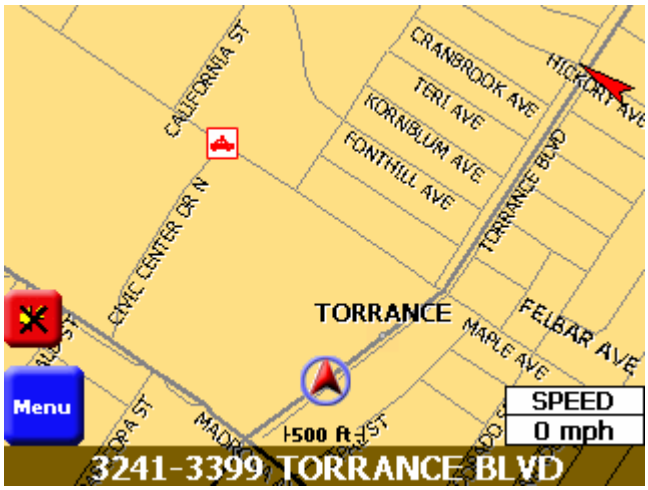
2. Checking GPS

When you first use Finedrive, it can take from five to fifteen minutes to receive a satellite signal. Thereafter, it should take approximately 90 seconds to receive signals. The GPS Info screen displays.



3. Getting Acquainted with Navigation System

When you start Navigation System, the downloaded map displays in Map View. This provides an expanded view of the map area around the vehicle location. If you have a GPS signal, the map defaults to the current location.

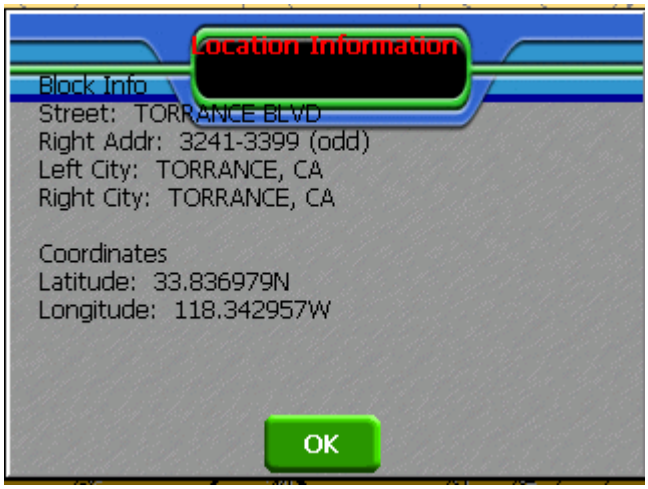


If you do not have a GPS signal, the map defaults to the last location. The vehicle icon displays as a green, yellow, or red arrow on the map. The color indicates the number of available satellites. At the bottom of the map is the vehicle location.

To see detailed information, for the vehicle location, do one of the following:

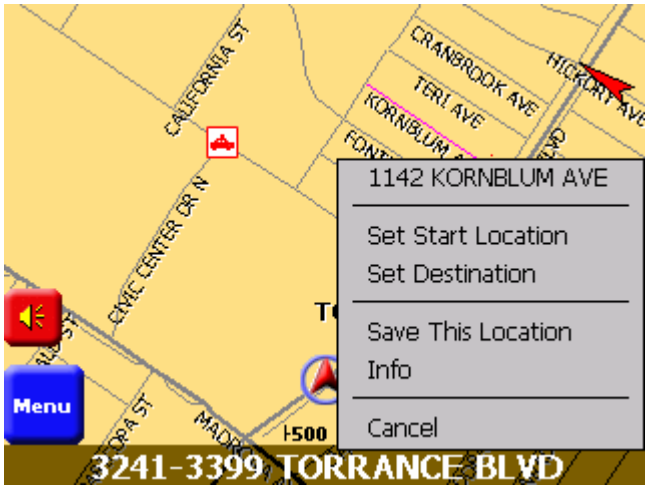
- Tap on the location description at the bottom of the map.

- Tap on the map location and select Info from the Pop Up menu.



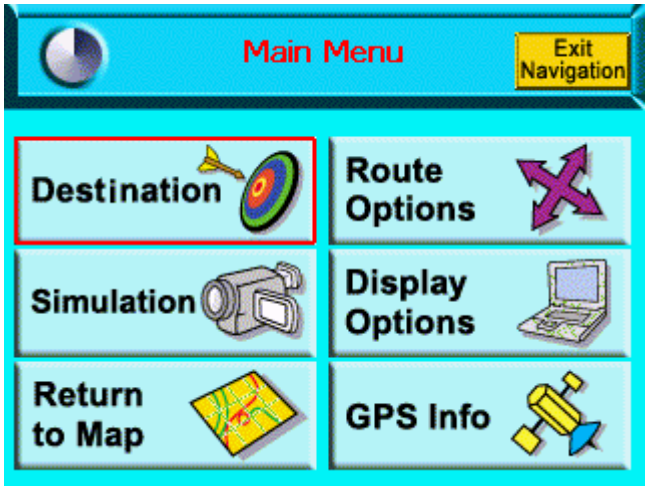
3.1. Moving Around the Map

You can tap the pointer on the map and drag it in the direction you want it to move: up down, right or left. When you remove the pointer from the map, it centers in on the selected location. This lets you have considerable control over your viewing area.



3.2. Using Menus

3.2.1. Main Menu



Options	Description
Destinations	Sets the destination by address, intersection, points of interest, favorite locations, or recent locations.
Map View	Displays an expanded view of the map area around the vehicle location.
Display Opts	Sets the map orientation, screen color on the Finedrive, automatic or manual guidance, and the display of POI icons.
GPS Info	Displays GPS status information.
Route Options	Manages your route calculation preferences.

3.3. Setting Options

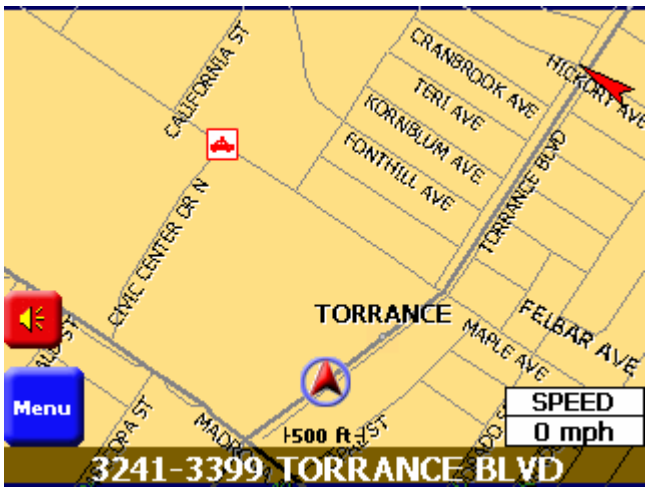
Through Navigation System, you can set the following preferences:

- Map Display View.
- Voice Guidance
- Routing Options.
- Safety Options

3.3.1. Map View

1. To display the map in Map View, tap the Menu button > Map View icon. The Map View

screen displays.



2. From the Display Options screen select a map orientation, as follows:

- Heading Up to automatically orient the map in the direction of vehicle travel.
- North Up to maintain the map in a North/South position.

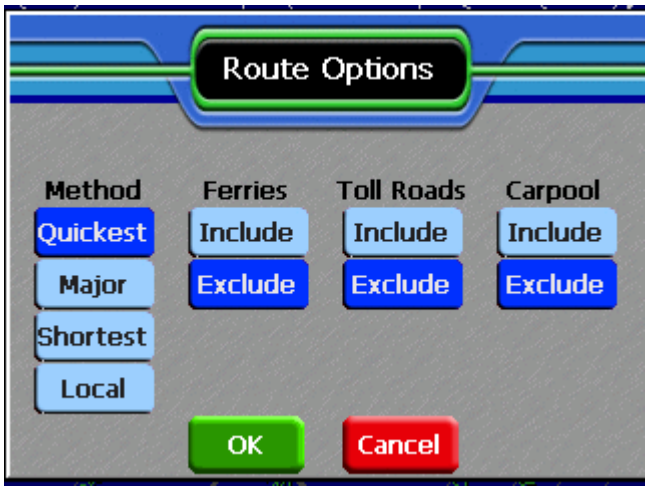
3.3.2. Map View Modes

3.3.3. Guidance View

To display the map in Guidance View, tap the View menu > Guidance option. The

Guidance screen displays.

3.3.4. Setting Route Options



route methods:

- Quickest Route to calculate a route with minimum travel time.
- Shortest Route to calculate a route with minimum travel distance.

type of roads:

- Major to include major roads, such as highways.
- Local for local streets.

reduced turns:

- Enable to calculate routes that reduce the number of required turns.
- Disable to turn off this feature.

toll roads option:

- Include to include toll roads in the route.
- Exclude to omit toll roads from the route.

carpool lanes:

- Include to include carpool lanes in the route.
- Exclude to omit carpool lanes from the route.

4. Using The Navigation System

The calculated route for a destination displays in blue on the map. If you miss a turn in the route, Navigation System recalculates the route and briefly displays “Recalculating Route” on the map display.

4.1. Entering a Start Location

The Navigation System defaults to the current location as the starting point for route calculation, as specified by the GPS signal. You can enter a start location if you are not connected to a GPS receiver, do not have a GPS signal, or want another point of origin.

To enter a start location, do one of the following:

- Tap and hold the pointer on the map location. A pop up menu with the selected address displays. Tap the Set Start Location option on the pop up menu.
- Tap the Menu button > Destinations icon. Enter the destination information. For more information, refer to the Entering a Destination section.

4.2. Entering a Destination

To enter a destination, do one of the following:

- Tap the Menu button > Destinations icon.
- Tap and hold the pointer on the map location. When a dialog box with the location address displays, tap the Set Destination option.

The Set Destination screen with options displays.

4.2.1. Setting a Destination by Address

1. Tap Address on the Set Destination screen. The Select Input Method screen displays.

2. Select an Input Method as follows:

- Tap Street First to enter a street address, including the house number.
- Tap City First to enter the city name and street address, including the house number.

When you enter a street or city, dialog boxes similar to the following display:

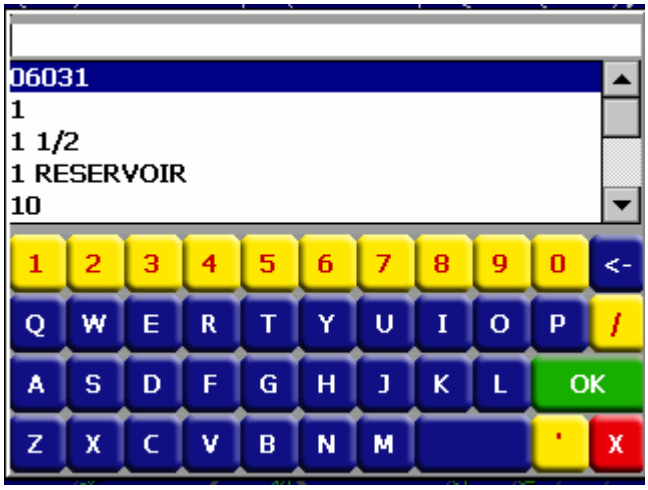
At the top of the screen is a list of valid entries (cities, streets, or house numbers). When you enter an address, do not enter the street type, such as Ave or St.

3. Select an entry, as follows:

- Scroll through the list by using the scroll keys at the right of the list.
- Tap in characters using the keypad at the bottom of the screen.

4. Tap on the OK button after each entry.

5. To select an entry, tap on it in the Select Address List.



6. Tap on one of the following buttons at the bottom of the screen:

- Nav to calculate the route and center in on the map location.
- Fav to add this location to your list of favorite locations.
- Map to set this location as the starting route point for your destination.

4.2.2. Setting a Destination by Intersection

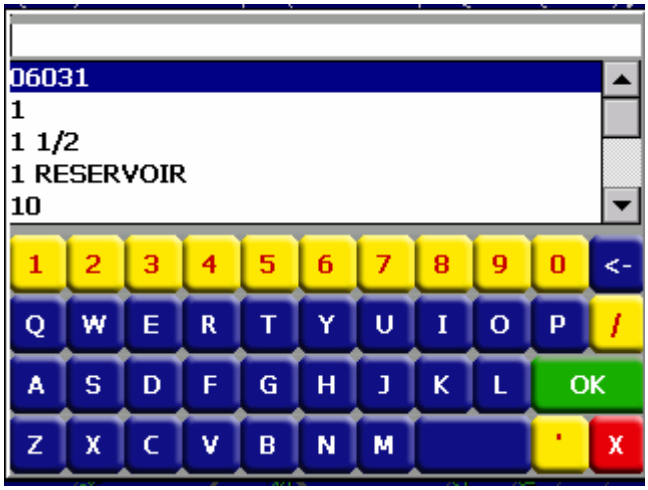
1. Tap Intersection on the Set Destination screen. The Select Input Method screen displays.

2. Select an Input Method as follows:

- Tap Street First to enter the names of two intersecting streets.
- Tap City First to enter the city name and two intersecting streets.

When entering an address, do not enter the street type, such as ave or st.

When you enter a street or city, dialog boxes similar to the following display:



For an intersection, there are two address dialog boxes for the two intersecting streets.

3. To select an entry, do one of the following:

- Scroll through the list using the scroll keys at the right of the list.
- Tap in the characters using the keypad at the bottom of the screen.

4. Tap on the OK button after each entry .

As you tap in characters, the system updates and displays the Select Address List.

5. To select an entry, tap on it in the Select Address List.

6. Tap on one of the following buttons at the bottom of the screen:

- Nav to calculate the route and center in on the map location.
- Fav to add this location to your list of favorite locations.
- Map to set this location as the starting route point for your destination.

4.2.3. Setting a Destination by Point of Interest

The map database contains over one million points of interest (POIs) within the U.S. and Canada. POIS are divided into categories and represented by icons on the map.

To select a POI:

1. Tap Points of Interest on the Set Destination screen. The Select Input Method screen displays.

2. Tap on a Points of Interest category.

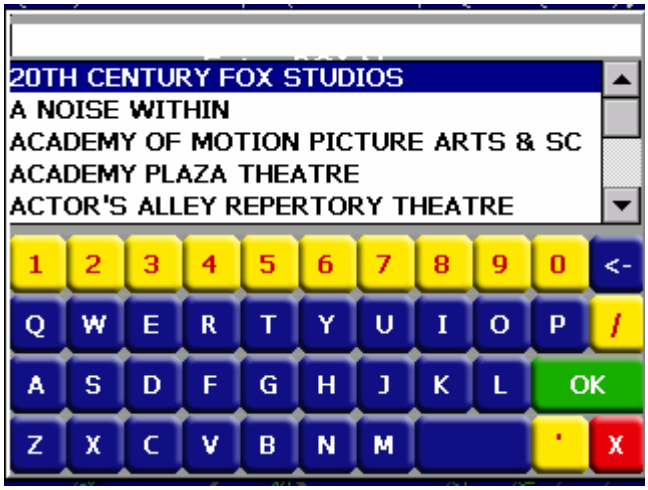
3. Tap on the OK button.

4. Do one of the following:

- Select a POI alphabetically, within a 25 mile radius. For more information, refer to the Selecting a POI Alphabetically section.
- Select a POI by distance, within a 25 mile radius. For more information refer to the Selecting a POI By Distance section.
- Select a POI By City.For more information, refer to the Selecting a POI By City section.

4.2.4. Selecting a POI Alphabetically

1. Tap Alphabetically on the Points of Interest Options screen. The Enter POI Name screen displays.



2. Select an entry, as follows:

- Scroll through the list by using the scroll keys at the right of the list.
- Tap in characters using the keypad on the screen.

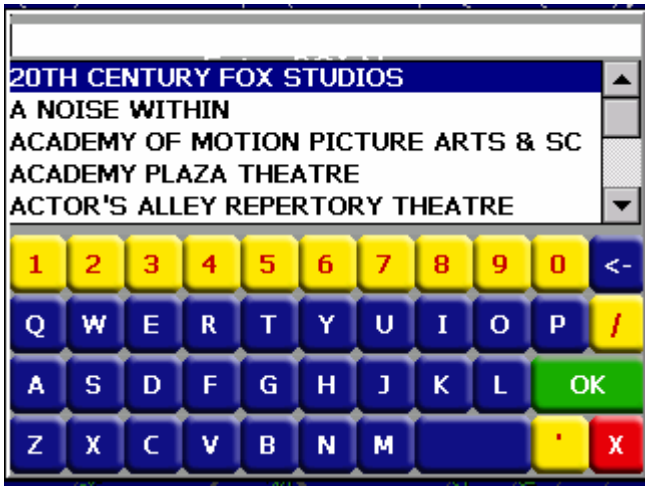
3. Tap on the OK button. The POI Select screen displays.

4. Tap on one of the following buttons at the bottom of the screen:

- Nav to calculate the route and center in on the map location.
- Fav to add this location to your list of favorite locations.
- Map to set this location as the starting route point for your destination.

4.2.5. Selecting a POI By Distance

1. Tap By Distance on the Points of Interest Options screen. A POI List with the points of interest within a 25 mile radius displays.



Select an entry by scrolling through the list and tapping on it.

2. Tap on one of the following buttons at the bottom of the screen:

- Nav to calculate the route and center in on the map location.
- Fav to add this location to your list of favorite locations.
- Map to set this location as the starting route point for your destination.

4.2.6. Selecting a POI By City

1. Tap By City on the Points of Interest Options screen. The Enter City Name screen displays.

2. Select a city, as follows:

- Scroll through the list using the scroll keys at the right of the list.

- Tap in characters using the keypad at the bottom of the screen.

3. Tap on the OK button. The Enter POI Name screen displays.

4. Select a POI as follows:

- Scroll through the list by using the scroll keys at the right of the list.
- Tap in characters using the keypad at the bottom of the screen.

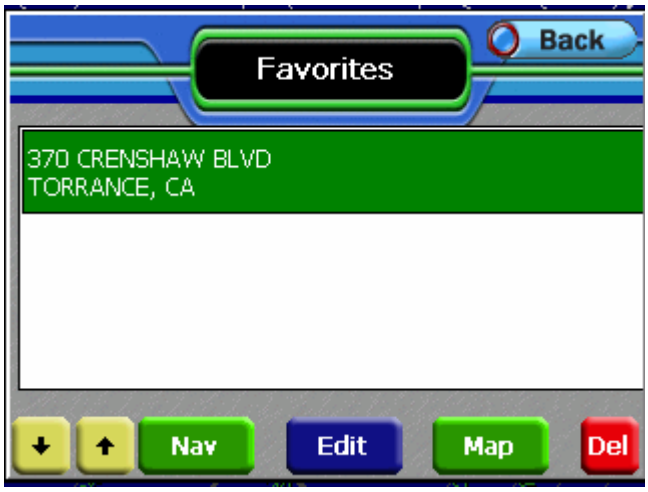
5. Tap on the OK button. The POI Select screen displays.

6. Tap on one of the following buttons at the bottom of the screen:

- Nav to calculate the route and center in on the map location.
- Fav to add this location to your list of favorite locations.
- Map to set this location as the starting route point for your destination.

4.2.7. Setting a Destination From the Favorites Location List

1. Tap Favorites on the Set Destination screen. The Favorite Destination screen displays.



This screen lists all locations that you saved as favorites. You can use the up and down arrows at the bottom of the screen to move through the list.

You can also tap on the map location and tap Save This Location from the pop up menu.

2. Tap on one of the following buttons at the bottom of the screen:

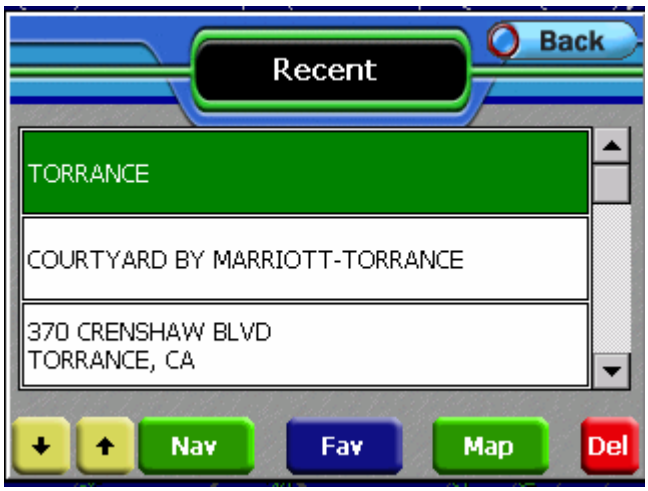
- Nav to calculate the route and center in on the map location.

- Map to set this location as the starting route point for your destination.

To change information for a favorite location, tap the Edit button. Or, tap the Del button to remove a location from your Favorite Destinations list.

4.2.8. Setting a Destination from the Recent Destinations List

1. Tap Recent on the Set destinations screen. The Recent Destinations screen displays.



This screen lists all of your recent destinations. You can use the up and down arrows at the bottom of the screen to move through the list.

2. Tap on one of the following buttons at the bottom of the screen:

- Nav to calculate the route and center in on the map location.
- Map to set this location as the starting route point for your destination.

To change information for a recent location, tap the Edit button. Or, tap the Del button to remove a location from your Recent Destinations list.

4.2.9. Managing the Destination and Route

After you enter a destination, Navigation System calculates the route. To manage your destination and route, do one of the following:

- Tap on the Menu button > Destinations icon.
- Tap File > Destinations. The Destination Options screen displays.

Tap on one of the following buttons:

- Detour to enter roads to avoid along the route. For more information, refer to the Entering Detours section.
- Stopover to enter places to stop along the route. For more information, refer to the Entering Stopovers section.
- Clear Dest to clear the current destination and enter a new destination. For more information, refer to the Clearing a Destination section.
- New to clear the current destination and enter a new destination. For more information, refer to the Entering a Destination section.
- Back to display the map view.

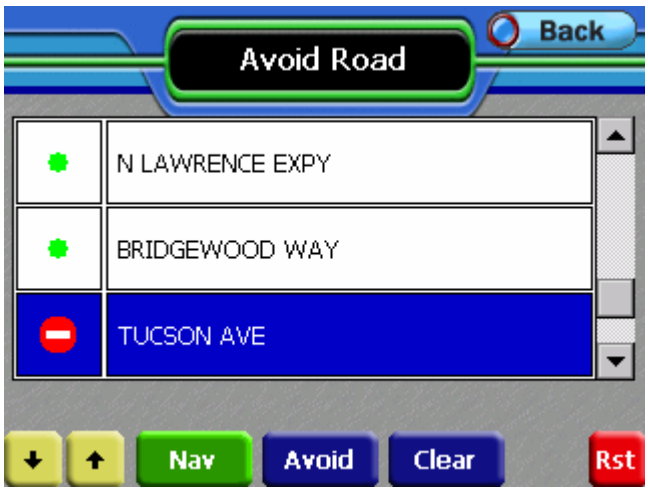
4.2.10. Entering a Detour

After your route is calculated, you can enter a section to avoid on the route. Navigation System

recalculates the route to exclude the detour area.

A warning displays if there is no detour for the current route.

1. Tap the Detour button at the bottom of the screen. The Avoid Roads list displays.



2. Tap the road to avoid.

3. Tap on the Avd button.

A red x displays in the column to the left of the selected road.

4. Repeat steps 1-3 for each road to avoid.

5. Tap on the Nav button to recalculate the route.

To cancel a selection, tap on it and tap the Clr button.To cancel all selections, tap the Rst button.

4.2.11. Entering Stopovers

A stopover is an intermediate location on your route. This feature guides you to the intermediate

location and then continues to the destination.

To enter a stopover:

1. Tap the Stopover Button on the Destination Options screen. The Set Stopover screen displays.

You can also tap on the map location and tap Set Stopover from the pop up menu.

2. Tap on a Stopover Category.

3. Enter the Stopover information.

Refer to the Entering a Destination section for the steps to enter information for a specific category.

4.2.12. Clearing a Selected Destination

To cancel a selected destination, do one of the following:

1. Tap on the Menu button > Destinations option.

2. Tap on the Clear Dest button on the Destination Options screen.

The screen displays in Map View mode.

4.3. Navigating the Vehicle

After you have entered a destination and selected the Nav option, Navigation System quickly calculates a route based on your preferences and guides you to your destination. The guidance includes:

- A map that automatically scrolls as the vehicle moves.

- Voice instructions for each maneuver.
- A list of route instructions.

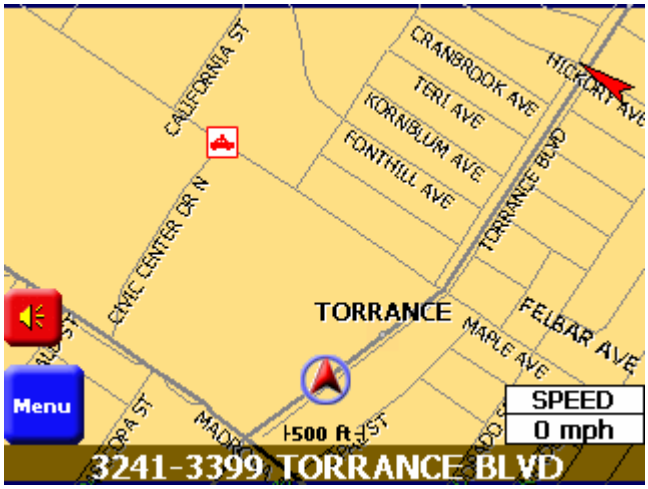
Map View is the default for guidance. Depending on the preferences you select, the view automatically

changes to Guidance View as you approach a maneuver.

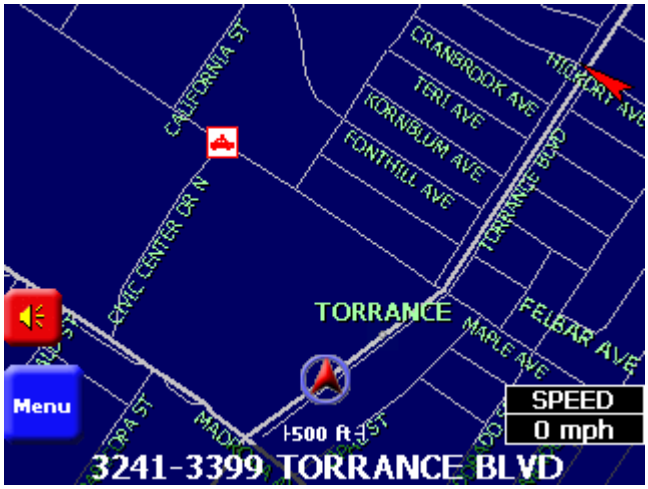
4.3.1. Using Day vs. Night Display

The Navigation System can display the map or guidance view in one of the following modes:

- Day Mode to set the screen color for daylight driving conditions.



- Night Mode to set the screen color for nighttime driving conditions.



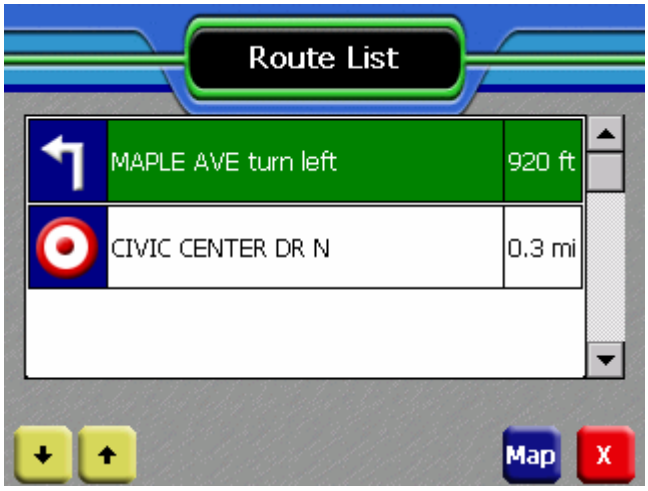
If you have a GPS signal, Navigation System automatically switches between views at the

appropriate time of day.

You can set your preferences through the Color Scheme option on the Display Options menu.

4.3.2. Viewing the Route List

You can view the route instructions for your destination at anytime. To view route instructions, tap the View menu > Route List. The Route List displays.



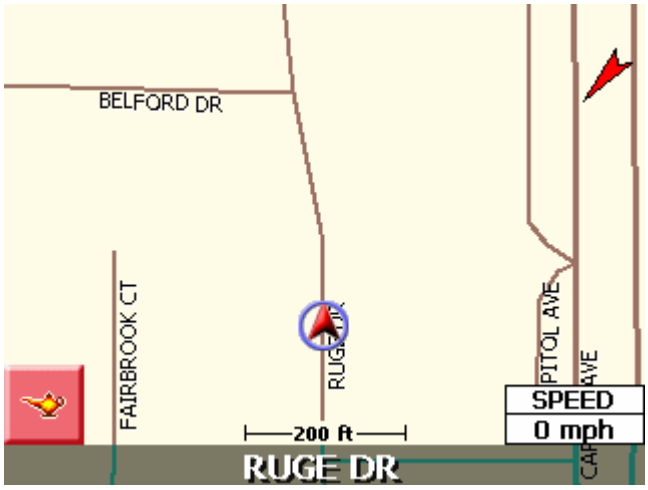
You can return to Map View by tapping on the red x at the bottom of the screen. You can also center on a specific section of the map by scrolling through the list, tapping on the location, and tapping on the map. The map displays in map panning mode.

5. HomeScreen

5.1. Top Menu

5.1.1. Navigation

If you want to execute navigation program, Press Navigation button.



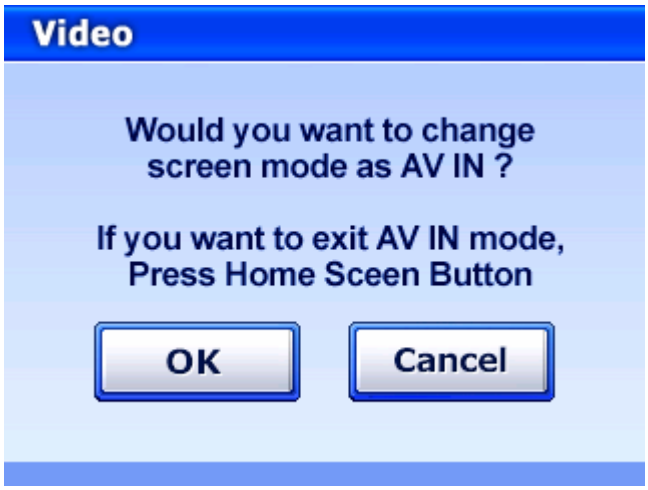
5.1.2. MP3 Player

If you want to execute MP3 Player, Press MP3 Player button.

5.1.3. External Video

Finedrive has AV-in port for external video.

If you want to go back to menu, press HomeScreen button

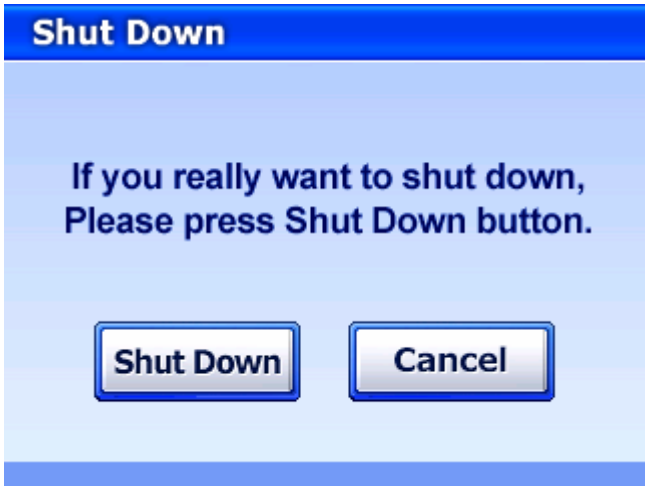


5.1.4. Setup

Setup menu lists Volume/Backlight, GPS Reset, Touch Calibration, Language Select and Exit Setup.

5.1.5. Shut Down

If you want to power off the unit, Press Shut Down button and confirm it.

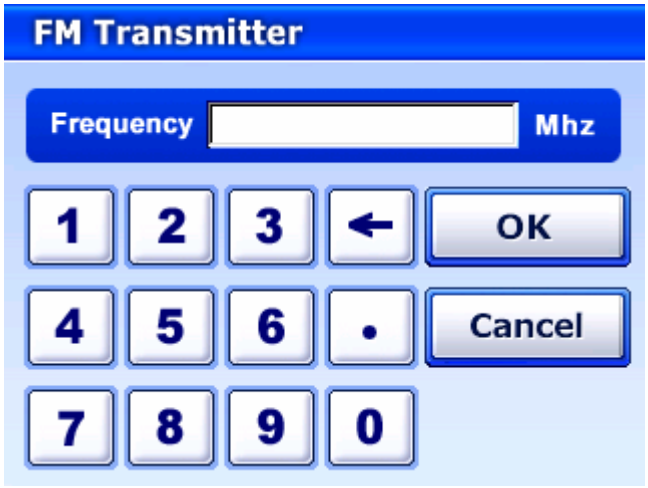


5.2. Setup

5.2.1. Volume / Backlight

This menu provides volume and backlight control, and user can change audio out mode, Speaker or FM Transmitter mode.

In FM Transmitter mode, user can enter a prefer FM frequency.



The unit has a frequency range of 88.5 Mhz to 107.5 Mhz.

5.2.2. GPS Reset

If the unit can't fix current car position, it needs to reset GPS. To reset GPS, press GPS Reset button and confirm it.

5.2.3. Touch Calibration

5.2.4. Exit

Press exit button to return Top menu.

6. Specifications

6.1. System Specifications

6.1.1. Finedrive Specification

OS : Microsoft® Windows CE.NET 4.2.

CPU : Samsung ARM9-200MHz

Main Memory : 64 MB

NAND Flash : 128MB(available 80 MB for MAP DB in 128MB MAND Flash)

SD card for external storage.

FMT Frequency range : 88.5MHz ~ 107.5MHz

GPS : Frequency L1, 1575.42 MHz

Channels 8

Sensitivity -140 dBm

Acquisition Rate

- Hot start 8 sec., average (with ephemeris and almanac valid)
- Warm start 38 sec., average (with almanac but not ephemeris)
- Cold start 45 sec., average (neither almanac nor ephemeris)
- Reacquisition 0.1 sec., average (interruption recovery time)

Input : Touch Screen and Remote Control

Display : 4" Color TFT LCD / 320X240 / 65535 Color

Sound : 44KSPS/16bit Codec, 2W(4Ohm) Speaker

PC Interface : USB 1 Client (USB 1.1. Compatible)

Power : DC12V/300mA (Working DC voltage range : 10~16V)

Physical Characteristics

- without antenna (W)131mm x (D)29.8 mm x (H)89.5mm
- with antenna (W)131mm x (D)68.3mm x (H)92.7mm

Temperature

- Operating -10° ~ 60°C
- Storage -20° ~ 70°C
- Humidity Up to 90% non-condensing

NOTE:

THE MANUFACTURER IS NOT RESPONSIBLE FOR ANY RADIO OR TV INTERFERENCE CAUSED BY UNAUTHORIZED MODIFICATIONS TO THIS EQUIPMENT. SUCH MODIFICATIONS COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.