



Cobra
NAV ONE



OPERATING INSTRUCTIONS FOR
MOBILE NAVIGATION SYSTEMS:

NAV ONE 2000
NAV ONE 3000

Printed in the Philippines
Part No. 480-101-P

Nothing comes close to a Cobra®

English

Our thanks to you, About GPS navigation and About the Cobra NAV ONE system

A1

Our thanks to you

Thank you for purchasing a Cobra NAV ONE mobile navigation system. Properly used and maintained, this Cobra NAV ONE product will provide many years of reliable service.

About GPS navigation

The Global Positioning System consists of land-based control stations and a constellation of satellites circling the earth that send continuous, coded radio signals containing time and position information. GPS receivers, such as the one built into the NAV ONE, use those signals to determine their position on the earth (latitude and longitude).

For more information on the Global Positioning System, see Appendix C. However, the NAV ONE's built-in features and uncomplicated interface allows navigating without much concern for GPS details.

NOTE

Cobra recommends reading at least the *Important safety information* and all of *Part II — Getting Started* in this manual before using the unit.

About the Cobra NAV ONE system

The NAV ONE unit is a specialized, portable navigation system for use in vehicles. It provides turn-by-turn route guidance by combining: a Global Positioning System (GPS) receiver to detect position; a detailed map of the 48 contiguous United States, Hawaii and major metropolitan areas in Canada (see note); a unique microcomputer that stores and processes map and route information; a gyro to detect heading independently of the GPS signal (NAV ONE 3000 only), all in a remarkably compact and stylish package.

The NAV ONE can help navigate from point A to point B using a single destination mode or from point A to points B, C, D, etc., in turn using trip planner mode.

The NAV ONE 2000 detects heading information only from GPS data about a moving vehicle's direction of travel. The most recent heading will be retained when the GPS signal is lost or the vehicle is stopped.

The Cobra-developed microcomputer built into NAV ONE uses GPS information to locate its position on the map contained in its memory. As the unit moves with a vehicle, the computer is able to track its changing position and heading relative to the

map and provides comprehensive information about present location, heading and trip.

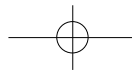
The gyro is a non-magnetic turn-rate sensor that provides directional information during brief losses of GPS signal (as would happen when passing through a tunnel) and maintains the correct heading information at the bottom of the LCD of the NAV ONE 3000.

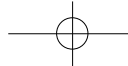
This NAV ONE is not for hiking, marine navigation or other non-vehicular applications. Other fine Cobra products are available for those uses. Please visit our website www.cobra.com to see our complete product line.

NOTE

NAV ONE 3000 makes the entire map with street level details and database available. NAV ONE 2000 includes one available region with street level detail and database as well as Route USA, a nationwide major road network. Additional regions can be purchased as accessories. (See the separate *NAV ONE 2000 Regional Maps* booklet.) In addition to the detailed regional map(s), Route USA provides information on those roads needed to navigate among the 500 most populous cities in the United States.

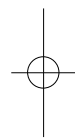
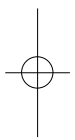
Trim Line for short fold






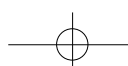
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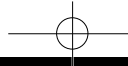
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Part I — Introduction

Nothing comes close to a Cobra® 





Features to make travel easier, FCC compliance and Important safety information

Features to make travel easier

Select destinations in any convenient way:

- Address
- Intersection
- Point of interest
- Previous destination
- Address book location
- Trip planner

Trip data provides details:

- Two odometers
- Current speed
- Maximum speed
- Moving average speed
- Average speed
- Drive time
- Stopped time
- Total trip time
- ETA — Estimated time to arrival
- Compass heading
- Clock

FCC compliance

Built-in gyro

Allows the NAV ONE 3000 to maintain heading information during losses of GPS signal.

On-screen and voice directions

For turn-by-turn navigation from origin to destination.

Cobra NAV ONE exclusive iA.S.A.P.

GPS receiver technology gives the quickest acquisition time of any portable GPS receiver for rapid position updates as well as the strongest GPS signal in urban, canyon and dense foliage terrains.

Self-contained with built-in map. No need to juggle memory cards or constantly download computer data.

The NAV ONE 3000 includes all available details of the contiguous 48 United States, Hawaii and major metropolitan areas in Canada for navigation throughout the area.

The NAV ONE 2000 includes Route USA, a nationwide major road network, and details of one region free with purchase. Additional regions are available as accessories.

Large points-of-interest database

Allows destination selection without specific addresses.

Portable system

Can be moved from vehicle to vehicle or used to program trip plans at home or office using a 120V optional Cobra indoor adapter.

Large, backlit color LCD

With day, night and auto modes for easy viewing.

Connector for optional external antenna

Allows use in heavily shielded vehicles and those with metallic coated or integrally heated windshields.

Infrared port

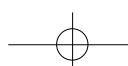
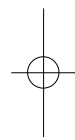
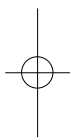
For cordless address data transfer to the NAV ONE 3000 from compatible PDA's.

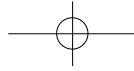
Simple, intuitive controls

For quick and easy operation.

USB 2.0 port

To allow software and map updates via PC downloads.





Important safety information

Before installing and using the Cobra NAV ONE system, please read these general precautions and warnings. Also read all of *Part II — Getting Started* in this manual to learn the basics of installing and operating the system. It is strongly recommended to read this entire manual to be familiar with the system's features, and know how to operate it.

Warning symbols and statements

Please pay special attention to the WARNING symbols and statements in this manual.

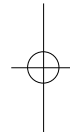
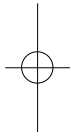


WARNING
Statements identify conditions that could result in personal injury or loss of life.

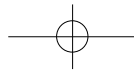


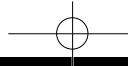
WARNINGS

- **DO NOT** think this NAV ONE is a substitute for personal judgment. The route suggestions should never supersede any local traffic regulation or personal judgment and/or knowledge of safe driving practices. Before making any maneuvers suggested by the NAV ONE system (for example, a U-turn or a left turn), verify that the maneuver can be legally and safely completed. Do not follow route suggestions if they suggest an unsafe or illegal maneuver, would place the vehicle in an unsafe situation or would route the vehicle into an area that could be unsafe.
- **DO NOT** program this NAV ONE while driving. Only a passenger should operate controls or program the unit while the vehicle is in motion. The driver should not program the system unless the vehicle is parked in a safe location.
- **ONLY** glance at the screen when necessary and safe to do so. Listen to the computer voice guidance. If prolonged viewing is necessary, pull off the road to a safe location.
- **DO NOT** use this NAV ONE system to locate emergency services (such as police, fire stations, hospitals and clinics). The database may not include all emergency service providers. Use best judgment and ask for directions in these situations.
- **DO NOT** position the unit in a location that obstructs the driver's view of the road, instruments or controls to operate the vehicle.
- **DO NOT** drive the vehicle unless the unit is securely attached to the windshield with the supplied bracket and suction cup or is fastened by other reliable means to keep it from becoming a projectile hazard inside the vehicle in the event of a violent maneuver or collision.
- **DO NOT** mount the unit over airbag panels or within airbag expansion spaces. The force of an expanding airbag can thrust objects in its path toward the driver or passengers with injurious result.
- **DO** position the unit so the screen can be viewed with just a quick glance.
- **DO** set the volume at a level that will allow the hearing of outside traffic and emergency services.



Part I — Introduction





Important safety information and Included in this package

Caution symbols ➔

Please pay special attention to the CAUTION symbols and statements in this manual.

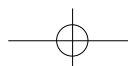
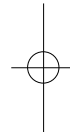
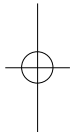


CAUTION
Statements identify conditions that could cause damage to the system or other equipment.



CAUTIONS

- The user is responsible for operating this product wisely. This NAV ONE system is intended for use only as a navigational aid and should not be relied upon to the exclusion of other information. Be aware of conditions around the vehicle and compare them to the information provided by the NAV ONE system.
- The Global Positioning System is provided and operated by the U.S. government, which is solely responsible for its accuracy and maintenance. The system is subject to changes, which could affect the accuracy and performance of this NAV ONE system.
- This NAV ONE is not waterproof. Do not allow liquids to splash on it nor expose it to rain during operation or transfer from vehicle to vehicle.
- Do not disassemble or modify the unit as this may lead to damage. If a problem occurs, stop using the system immediately and contact a Cobra dealer. Changes or modifications to the unit may void its compliance with FCC rules and make it illegal to use.
- The NAV ONE system's map database provides information on suggested routes without regard to factors that may affect the user's driving experience or the time required to arrive at the desired destination. For example, the system does not reflect road detours, closures or construction, some road characteristics (e.g., road surface, slope or grade, weight or height restrictions, etc.), temporary traffic congestion, weather conditions and similar factors. Use personal judgment or the NAV ONE system's detour mode to develop an alternate route if necessary.
- The gyro in the SKY NAV 3000 will operate properly only if the unit is in a vertical position. This means that the unit should not be tilted front-to-back or side-to-side. With the unit in the vertical position, it can be rotated in the horizontal plane to any convenient viewing angle.
- Do not remove the unit from the windshield or quick release bracket while the unit is turned on. The NAV ONE contains a hard drive, which spins at high speed while the unit is turned on. Handling the unit while the drive is spinning could damage it. When the unit is off, the hard drive is parked in a more secure condition.
- Dismount the unit when parked. This will not only minimize the chance of theft but will also reduce the unit's exposure to heat and strong sunlight which can shorten the life of the internal components.
- Do read the *Important safety information* section under *Part I* and all of the sections under *Part II — Getting Started* of this manual before using this NAV ONE system.



Included in this package ➔ All of the following items should be in the package with the NAV ONE system.

IN THIS MANUAL
The unit shown is not necessarily the one purchased. Images shown in this manual are for illustration purposes only.



NAV ONE system unit



Mounting bracket with quick release and suction cup



12 volt fused power cord



NAV ONE 2000
Regional Maps booklet
(only included with the
NAV ONE 2000 model)

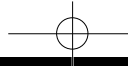


Quick reference card



This operating instructions
manual for Mobile Navigation
Systems

Part I — Introduction



How to use this manual and System overview

How to use this manual

This manual contains four principal parts with information about the NAV ONE:

- **The introduction**

- **Getting started**

Including system overview, installation, options and how-to information.

- **Operating the system**

Including destination selection and programming, route guidance, off route events and trail mode sections.

- **Helpful information**

Including appendices, maintenance and service, user license and warranty, index, accessories and order form.

The NAV ONE system is designed to be intuitive in its operation. Therefore, much of the information in this manual can be read on an “as needed” basis — to learn how to perform a new function, to check on details of a function or to refresh one’s knowledge of a function.

However, it is important to read the *Important safety information* and all of *Part II — Getting Started* before first using the system. Without that information, the user may be placed in a dangerous situation or may damage the unit before having any practical use from it.

Naturally, reading this manual from cover to cover will enable the user to learn as much as possible about this NAV ONE system.

Introduction

This material introduces the NAV ONE system as well as its controls, features and safety information. Cobra believes the entire introduction will be of interest and helpful. But, it is essential to read the *Important safety information* section to provide for personal safety and to prevent damage to the unit through unfamiliarity with its operation.

Getting Started

This entire part also contains essential information.

These sections provide instructions on unit installation, start-up and setting preferences. By setting preferences, the user can customize some of the ways information is presented.

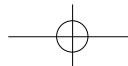
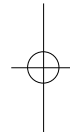
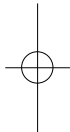
Two sections are especially important — the *System functions and their icons* section as well as the *Text and list entries* section. They describe actions the user will need to know how to perform whenever operating the system. All of the system operation sections presuppose knowledge of these actions and this information is not repeated in those sections.

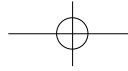
Operating the System

System operation represents the bulk of this manual. All of the operating processes are outlined in the following *System overview* section. They are all described in *Part III — Operating the System*.

Helpful Information

Supplemental information about the NAV ONE, its system, navigation, maintenance, troubleshooting, product service, warranty and available accessories follows the functional parts of this manual.





System overview ··· ➔ Read this section in connection with the *System logic* section on page A2.

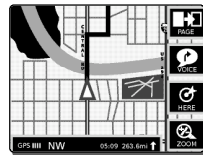
Select destination, route selection limits and calculation ····· ➔ **Each trip begins with a destination in mind and the NAV ONE system provides a variety of ways to choose the next destination. Users can specify:**

- A specific street address or an intersection of two streets by spelling out the information or choosing from lists.
- A point of interest, such as a park, restaurant or shopping mall, from extensive lists built into the system.
- Any of the last nine destinations entered in the system.
- Any of up to 100 locations that can be saved in the address book. These locations can be entered directly or, on the NAV ONE 3000, by beaming to the infrared port from a PDA.
- Multiple destinations in sequence that are saved as a named trip. Users can save up to five trips with up to ten destinations per trip.

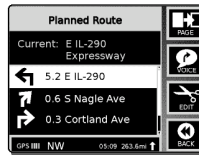
After selecting a destination, the NAV ONE system lets the user set parameters as to how it is to develop the route between the current location and the desired destination. Users can choose the shortest distance or the shortest time and can specify whether or not to avoid freeways and toll roads. After the route parameters are set, the NAV ONE system will calculate a route. These choices and processes are described further in the *Destination selection and programming* sections.

Navigate to destination ······· ➔ **Once the route calculation is complete, the NAV ONE system is ready to provide guidance to the destination. This can be wholly visual on the LCD or visual and voice with the voice providing specific instructions all along the route. The guidance routines include:**

☞ Map screen with the route highlighted in light green on the LCD.



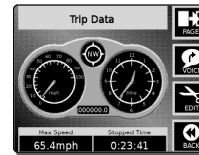
☞ Planned Route with a step-by-step list of each maneuver.



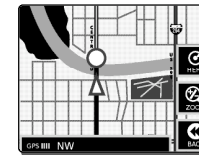
☞ Guide screen that provides a view of each maneuver.



☞ Trip Data that includes mileage, speed, time, estimated time to arrival, location and heading.



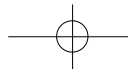
☞ Arrival announcement

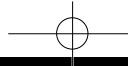


These are described in the *Route guidance* sections.

Part II — Getting Started

Nothing comes close to a Cobra® 7



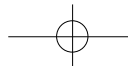
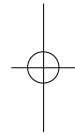
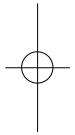


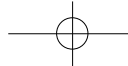
System overview and System functions and their icons

- Off route events** ➔ If the driver misses a turn or otherwise deviates from the route developed by the NAV ONE system, the system will prompt the driver to return to the route or will recalculate the route from the current location. Similarly, if the driver encounters a road closure, traffic jam or other obstacle along the calculated route, the NAV ONE system can be used to detour around it. The vehicle can even be stopped along the way and the NAV ONE turned off. When it is turned back on, the system will calculate a route to the original destination from that point. These are described in the *Off route events* section.

- Trip data** ➔ At any time during navigation, the user can observe a screen showing data for the trip, such as elapsed time and distance.
The *Trip data* section provides full details.

- Trail mode** ➔ Trail mode acts like dropping bread crumbs. It allows the user to find the way back from a destination or to repeat an off road trip. In this mode, the NAV ONE system tracks the vehicle's actual movement from the starting point. Along the way, users can enter and name waypoints or landmarks, then name and save the trail with all its data. The system can store up to 30 trails with up to 50 user-named waypoints per trail.
This is described in the *Trail mode* section.





System functions and their icons

The NAV ONE system software automatically determines which functions will be needed during each process and shows appropriate icons for those functions on the right of the LCD — just to the left of the function buttons.

A listing of all functions available on the system along with their icons and definitions is included in *Appendix A*.

Pressing the function button next to an active icon will activate that function and the system will proceed to the menu or screen associated with that function.

For example, the Main menu has icons for the functions: map, trail, here and options.

To move from the Main menu to the Map screen, press the MAP function button as shown at right.

Some function choices that are displayed together must be either/or, such as spell and list. In those cases, the unavailable function icon will be gray rather than at full contrast as shown at right.

NOTE

Pressing the icon on the LCD will not invoke the function. Be sure to press only the function button.

Icon Function Button



Main Menu

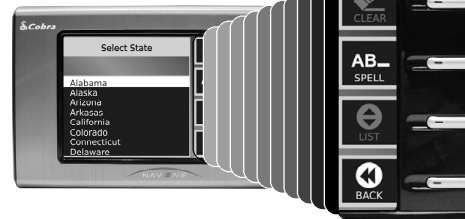


Map Screen



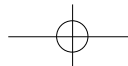
Press and release the MAP function button to view the Map screen.

Unavailable Function Icon



When in list mode, the LIST function is NOT available. The SPELL function is available to toggle from list to spell mode.

Part II — Getting Started



Installation

Installation..... ➔



CAUTION

Some vehicles have windshields with metallic coatings or integral heating systems that will block the satellite signals even though the unit "sees" the sky through the glass. In those vehicles, it will be necessary to mount the accessory external antenna outside the vehicle and connect it to the unit. See the *Accessories and order form* section on page 102 for ordering information.

The NAV ONE requires very little installation beyond the need to put it at a convenient location and to secure it in place. The only connection required is between the unit's power socket and the vehicle's 12 volt power socket.

When locating and securing the NAV ONE in the vehicle, keep in mind the warnings and cautions on pages 2 – 3 to allow using the NAV ONE safely while driving the vehicle:

- Put the unit where it is visible at a glance and the voice instructions can be heard.
- Do not put the unit where it will obstruct the driver's view of the road or interfere with use of vehicle instruments and controls.
- Do not put the unit over airbag panels or within airbag expansion spaces.
- Attach the unit to the vehicle so that it does not become a projectile hazard in a collision.
- Position the unit vertically to allow the gyro in the NAV ONE 3000 to operate properly.

Do not let the mount block the view of the sky.



Put the unit where it is visible at a glance.

Two important considerations in positioning the unit are:

- A. Its ability to "see" the sky. Signals from the GPS constellation of satellites are weak and cannot penetrate the solid portions of the vehicle's structure. The top of the unit contains the GPS antenna and needs maximum exposure to the sky through the windshield. This will allow the unit to receive signals from as many satellites as possible in various vehicle headings.



Alternative mounting recommended for high-pitched windshields.

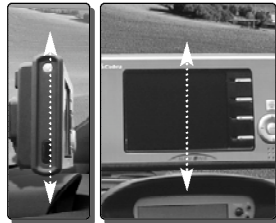


Let the NAV ONE "see" the sky.

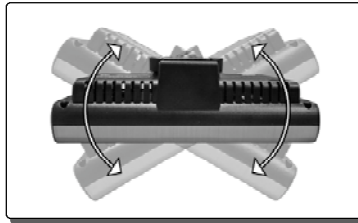


WARNING
If the unit is not securely attached to the vehicle, it can become a projectile hazard to the vehicle's occupants during a violent maneuver or a collision. The unit can cause serious injury under the influence of forces resulting from such accelerations or decelerations.

B. The gyro in the NAV ONE 3000 will operate properly only if the unit is in a near-vertical position. This means that the unit should not be tilted front-to-back or side-to-side. With the unit in the vertical position, it can be rotated in the horizontal plane to any convenient viewing angle.



The unit should be as close to vertical as possible and not tilted front-to-back or side-to-side.



View From the Top

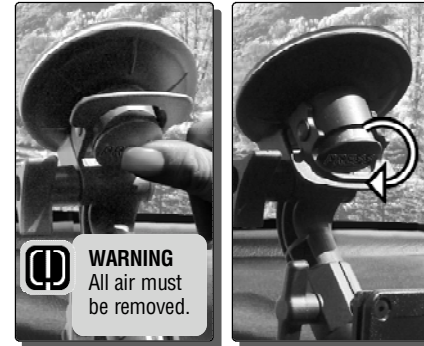
Secure and connect the NAV ONE



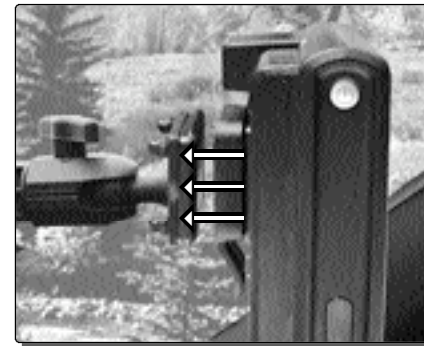
To secure and connect the NAV ONE:

1. Select a suitable location where the unit can be mounted vertically and clean the mounting area.
2. Separate the suction cup and mounting bracket assembly from the unit.
3. FIRMLY press the suction cup against the windshield by applying pressure to the central PRESS button. Be sure the button is pressed all the way in to make sure ALL the air is out of the suction cup.
4. While maintaining FIRM pressure on the button, pull the lock lever up or down over the button.
5. Test suction cup adhesion by pulling on the bracket. THE ASSEMBLY SHOULD NOT WIGGLE. If it does, unlock the lever and repeat steps 3 and 4.
6. Attach the unit to the mounting bracket by means of the quick release feature.
7. Plug the power cord into the unit and the vehicle's 12 volt power socket.

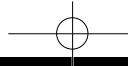
Part II — Getting Started



Attach the mounting bracket to the windshield.



Attach the unit to the mounting bracket.



Installation

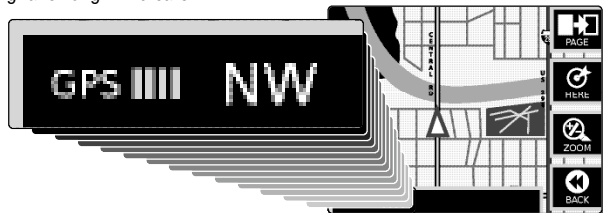
Alternative securement

➔ **Alternative securement of the NAV ONE:**

If it is not practical to mount the unit to the windshield with the supplied suction cup and bracket, the user can develop an alternative mounting using the 1/4-20 threaded socket — compatible with most camera mounting equipment — in the bottom of the unit. The supplied bracket may be removed or left attached when an alternative mounting arrangement is employed. Additional mounting bracket options, that may be more suited to your vehicle, are available at www.cobra.com.

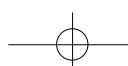
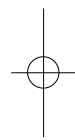
Check for GPS signal

➔ After installation is complete and the vehicle is in an open area, turn on the unit. The GPS signal strength indicator at the lower left corner of the LCD should show four green bars to confirm the antenna is “seeing” the sky properly. If the bars are fewer than four and are either yellow or red, the unit may need to be repositioned. See page 65 in the *Route guidance* section for more information on the GPS signal strength indicator.



Start-up time

➔ When the GPS Navigation System is new (or has been idle for more than seven days or has moved more than 500 miles while off), it can take up to five minutes for the system to lock onto the GPS satellites. After such a start-up, the system should be left turned on for at least 20 minutes to download GPS satellite data. Having updated satellite data will allow much faster satellite acquisition and lock — typically less than a minute — when the unit is turned on again.



Removing the NAV ONE ➤ The NAV ONE should temporarily be removed when parking the vehicle to prevent theft or heat damage. It may also be removed to transfer the entire unit to a different vehicle or to use it at home or in the office to program a trip plan using the optional Cobra indoor adapter.

Temporary removal ➤ **To temporarily remove the NAV ONE from a vehicle:**

1. Unplug the power cord from the vehicle's 12 volt power socket.
2. Pull the QUICK RELEASE lever on the back of the unit and remove the unit to store it in a protected location or to use indoors. The suction cup portion of the bracket can be left attached to the windshield for quick reinstallation of the unit.

Transferring the NAV ONE ➤ **To transfer the NAV ONE to a different vehicle:**

1. Unplug the power cord from the vehicle's 12 volt power socket.
2. Rotate the lock lever off the PRESS button, then pull the tab to release the suction cup.
3. Move the unit to the other vehicle and install it as described on page 10.

Using the GPS unit at home or in the office ➤ **To use the NAV ONE at home or in the office to program a trip plan:**

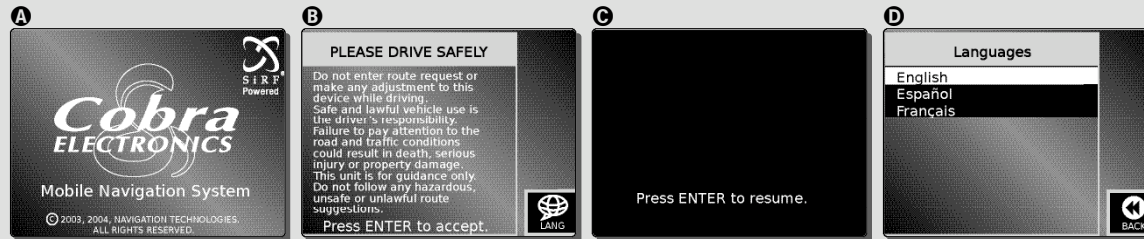
1. Connect the unit to an electrical outlet using an optional Cobra indoor adapter developed especially for use with the NAV ONE. See the *Accessories and order form* section on page 102 for information on ordering a Cobra adapter.
2. Turn the unit on and program the desired trip as described in the *Trip planner* section.



The suction cup portion of the bracket can be left attached to the windshield for quick reinstallation.



Part II — Getting Started


Start-up




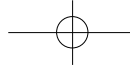
Starting the unit

Once the NAV ONE is installed, learning how to use the system can begin.

While working through the routines in this manual and trying them out on the NAV ONE, keep in mind that a wrong button press will not break anything. The user can always press the BACK function to return to a prior step or can escape to the  Main menu  by pressing MENU — regardless of where the user is in the system software.

NAV ONE 3000 . . .  The NAV ONE 3000 model includes details of the entire area — no regional unlocking is required.

NAV ONE 2000 . . .  The NAV ONE 2000 model includes Route USA, which provides map information needed for intercity navigation among the 500 most populous cities in the total coverage area. This model also includes details of one region free with the purchase of the unit. If access to more than one region is desired, see the *Accessories and order form* section near the back cover of that booklet for ordering information. Before the NAV ONE 2000 can be used as described in the following portions of this manual, the included free region must be selected and unlocked. See the separate *NAV ONE 2000 Regional Maps* booklet for instructions on choosing and unlocking a region.



Turning the system on and off

When connected to a power source, the system needs to be turned on to operate and can remain on for as long as it is in use. After a period of inactivity, the system will either enter sleep mode (see below) or turn itself off using SmartPower (see page 21) to avoid draining the vehicle battery.

Turn the system on

When the system is off:
1. Press and hold the POWER button on the left side of the unit until the function buttons are illuminated.

The system will turn on and the Cobra screen will appear on the LCD. The Cobra screen will be visible briefly, then change to the PLEASE DRIVE SAFELY screen. This safety reminder appears following each start-up and must be acknowledged before proceeding.

Turn the system off

When the system is on:
1. Press the POWER button on the left side of the unit.
The system will retain information to be recalled when it is turned on again.

Display saver and sleep mode

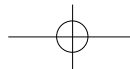
The Display Saver screen conserves power and the life of the LCD whenever the system is in sleep mode. Sleep mode is activated automatically if the user takes no action at the PLEASE DRIVE SAFELY screen for ten seconds after it appears. This occurs only at the PLEASE DRIVE SAFELY screen and is different from a SmartPower shutdown. (See page 21 for information on SmartPower.)

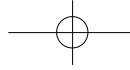
NOTE



If the unit is plugged into a socket controlled by the ignition switch, turning off the ignition will also turn off the system. When restarting, the POWER button needs to be pressed to turn the system on again.

NOTE

Sleep mode functions when SmartPower is turned on or off.













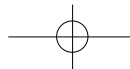
- Exit sleep mode** ➔ **While the  Display Saver screen  is shown:**
1. Press any button to return to the  PLEASE DRIVE SAFELY screen .

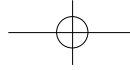
16

- Adjust display visibility** ➔ If the LCD is hard to read, its brightness and contrast can be adjusted to suit ambient conditions.
1. Press the LCD Brightness Control and LCD Contrast Control + and – buttons on the right side of the unit until the best viewing condition is achieved.

- PLEASE DRIVE SAFELY screen choices** ... ➔ **At the  PLEASE DRIVE SAFELY screen , the user will have two choices:**
- Select a language for the system to use.
 - Acknowledge the safety reminder, then start or resume a navigation process.

- Select a language** ➔ **At the  PLEASE DRIVE SAFELY screen .**
1. Press the LANGUAGE function button to proceed to the  Languages menu .
 2. Scroll ▲ or ▼ to the desired language and press ENTER.
- The language will be selected and the system will return to the  PLEASE DRIVE SAFELY screen .





Acknowledge the safety reminder ➔

The gateway to navigation.



Acknowledging the safety reminder enables the system to proceed to the navigation functions for which it was purchased. The menu that will appear after this screen depends upon what was in progress when the system was last turned off — whether:

- The most recent trip was completed — no navigation was in progress.
- A trip was interrupted before reaching the destination — navigation was in progress.

No navigation was in progress ➔



Starts a new process.

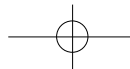
At the  PLEASE DRIVE SAFELY screen .

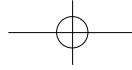
1. Press ENTER to proceed to the  Main menu .

This menu is the starting point, the entry to all of the capabilities, features and functions of the NAV ONE system. Users can start a new navigation process by choosing one of the five listed options for selecting a destination or can use the four functions represented by the icons at the right of the LCD.

NOTE

This  Main menu  will also be displayed when MENU is pressed at any time that no navigation is in progress.



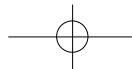
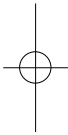


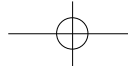
Destination ➔ The following sections of the manual describe how to use each of the five destination selection options on the ☰ Main menu ☰:

- Address/intersection — see page 32.
- Address book — see page 46.
- Point of interest — see page 38.
- Trip planner — see page 52.
- Previous destination — see page 36.

Available functions ➔ The following functions are immediately available from the ☰ Main menu ☰:

- **Map function:**
Displays the current location on a map — see *Map screen as reference resource* on page 70.
- **Trail function:**
Records a trail traveled on or off the road — see *Trail mode* section which starts at page 82.
- **Here function:**
Displays the current location in words and figures — see *Here function* on page 68.
- **Option function:**
Lets the user set operating preferences — see *Setting operating preferences* section which starts at page 20.





Navigation was in progress

Continue the route or start over.

- At the **PLEASE DRIVE SAFELY** screen:
1. Press ENTER to proceed to the **Continue route guidance** menu.

This menu provides the option to either:

- Continue navigating the suspended route.
- Discontinue navigating the suspended route.

Continue on the suspended route

- At the **Continue route guidance** menu:
1. Scroll ▲ or ▼ to [Continue] and press ENTER.
 2. At the **Select Route Criteria** menu, either accept the previous settings or change them to suit and press ENTER or the GO function button.
 3. At the **Map** screen, continue the prior navigation from the point of interruption.

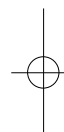
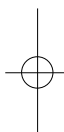
Discontinue on the suspended route

- At the **Continue route guidance** menu:
1. Scroll ▲ or ▼ to [Discontinue] and press ENTER.
 2. At the **Main** menu, start a new process of destination selection or function use as described at *No navigation was in progress* on page 19.

NOTE

Pressing MENU at any time that navigation is in progress brings up the **Main** menu. This is the same as the **Main** menu except that the trail function is replaced by the voice function. At this **Main** menu, users can:

- Force a voice prompt using the VOICE function button — see *Navigation voice prompt* on page 69.
- Return to navigating the current route using the MAP function button — see *Navigation at map screen* on page 71.
- Discontinue the current navigation and start a new one by choosing one of the five select destination methods — see *Destination selection options* on page 18.



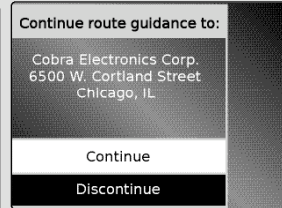
Main menu



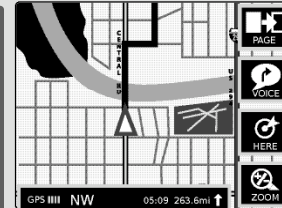
See note on this page



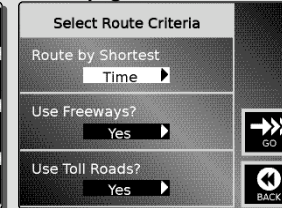
Continue route guidance to:



Map screen



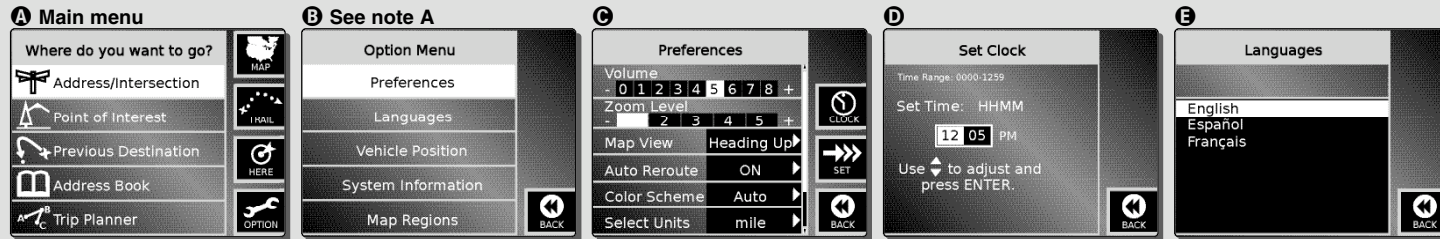
Select Route Criteria



Part II — Getting Started



Setting operating preferences



NOTE A
The [Map Regions] line will only appear on the NAV ONE 2000.

Setting operating preferences

The NAV ONE system allows users to choose from several settings in the software that control how the LCD appears and how information is presented.

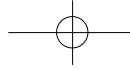
Enter the options menu



- At the **Main menu** **A**:
- Press the **OPTION** function button to proceed to the **Option Menu** **B** where there are five choices:
 - Preferences
 - Languages
 - Vehicle Position
 - System Information
 - Map Regions — applies to NAV ONE 2000 only

Preference choices

- The preferences that the user can change are:
- Volume — sets the volume level from softest at 1 to loudest at 8 (0 is off – no sound).
 - Zoom level — limits the map to the immediate vicinity at 1 and shows the widest area at 5.
 - Map view — allows either current heading or north to be always at the top of the map.
 - Auto reroute — when on, causes the system to automatically recalculate the route to the desired destination if the driver strays from the route originally developed.
 - Color scheme — allows the user to default the system to either day or night mode or to allow the system to automatically switch between day or night mode in response to the light sensor.









NOTE
Cobra recommends that the system be used for a while with the default settings; then users may return to this section to make changes. (See *Appendix A* for the complete list of defaults and choices.)





- Units — provides a choice of English or metric values.
 - SmartPower — when SmartPower is off, the system operates until it is turned off with the POWER button. When SmartPower is on, it shuts down the system in response to a combination of all three conditions:
 - No vehicle motion or satellite lock for 10 minutes
 - No button presses for 10 minutes
 - Engine not running as indicated by supply voltage.
 - Key click — provides a choice of beep to confirm button press or silent operation.
- Set clock is a function. It is available only at the the  Preferences menu  (see clock icon).

Set preferences 

At the  Option menu :



1. Scroll  or  to [Preferences] and press ENTER.
2. At the  Preferences menu , scroll  or  to the option to be changed.
3. Press the  or  button to change the option to the desired value.
4. Repeat steps 2 and 3 for as many options as are to be changed, then press ENTER or the SET function button.

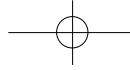
The changes will be accepted and the system will return to the  Main menu .

NOTE

With SmartPower off and the unit plugged into a power socket that does not turn off with the ignition, NAV ONE system operation at full power can drain the vehicle's battery if parked for a long time, such as at an airport lot. Cobra recommends this feature be left at the factory setting of on.

NOTE

If the desired option cannot be seen:
1. Scroll  or  until it comes on the screen.



Language choices

➔ If the system language was not changed to the user's preference during the start up sequence, it can be changed at the **Languages menu** **3** at any time.

22

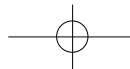
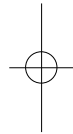
Select language

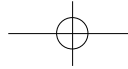
English, French and Spanish are available.

- ➔ **At the Option menu 3:**
1. Scroll **▲** or **▼** to [Languages] and press ENTER.
 2. At the **Languages menu 3**, scroll **▲** or **▼** to the desired language and press ENTER. The language will be selected and the system will return to the **Main menu 4**.

Vehicle position

➔ This option allows the user to set current location when using trip planner. A point other than the present location can be designated as the origin for the system to use in route development. For instance, if the user is at home and wants to develop a route from the user's office to a customer's location, the user can select this option to tell the system to start from the user's office rather than from home, where the user is at the time. After selecting a new current location, all route instructions will be calculated from it until the user either selects another current location or drives a vehicle with the system turned on and receiving GPS signals. After moving a short distance, the system will override the current location the user set and revert to the location determined by the GPS data.











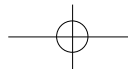
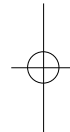
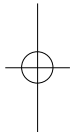


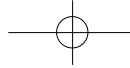
Set current location



At the  Option menu :

1. Scroll  or  to [Vehicle Position] and press ENTER.
2. At the  Set Vehicle Position menu , press ENTER.
3. At the  Select Origin menu , scroll  or  to one of the four methods of selecting the current location and press ENTER.
4. At the menu corresponding to the method chosen, proceed with the programming sequence for that choice as described in each of the corresponding route selection sections:
 - Address/intersection — see page 32.
 - Point of interest — see page 38.
 - Previous destination — see page 36.
 - Address book — see page 46.





System information

The System Information screen allows a check of software and database versions that are installed on the system. Users cannot change this screen.

View system information

- At the Option menu :
1. Scroll or to [System Information] and press ENTER.
 2. At the System Information screen , press ENTER after viewing the screen. The system will return to the Main menu .

Map regions

NAV ONE 2000 only.

The NAV ONE 2000 requires each map region to be unlocked before the detail is available to be used for navigation. If additional regions (beyond the first region included when the system is purchased) are purchased as accessories, they can be unlocked from the Option menu . Further information is available on page A1 and page 14 of the *Start-up* section.

Unlock additional region(s)

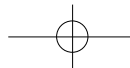
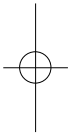
NAV ONE 2000 only.

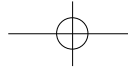
- At the Option menu :
1. Scroll or [Map Regions] and press ENTER.
 2. At the Map Regions menu , see the *NAV ONE 2000 Regional Maps* booklet for detailed instructions on further steps needed to unlock the region(s).

NOTE



At the Map screen, the zoom function can change the map scale as a help to position the vehicle icon. (For more information, see *Zoom function* on page 67.)





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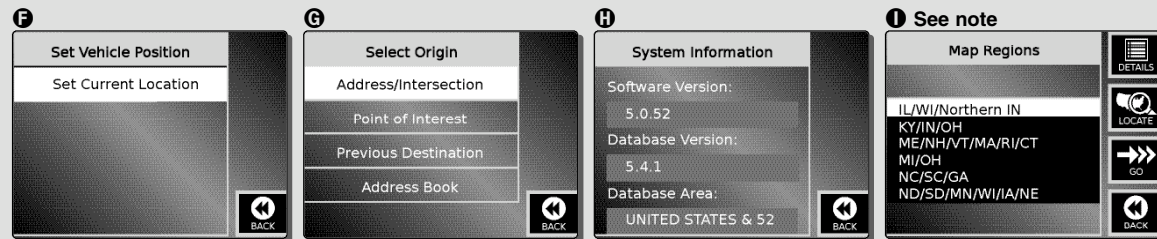
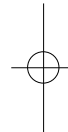
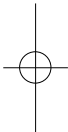




Time data ➔ The NAV ONE receives highly accurate time information from the GPS satellites. However, the satellites operate exclusively on Universal Coordinated Time (also known as Greenwich mean time or Zulu time). Therefore, the minutes will be accurate, but the hour may not match the local time zone. It also will not automatically change between standard and daylight saving times. This can be adjusted using the clock function. The local time can only be adjusted in whole hours. In those few areas where local time differs from Universal Coordinated Time by a fraction of an hour, an exact local time cannot be entered.

Set dock time ➔ **At the  Preferences menu **:


1. Press the CLOCK function button to proceed to the  Set Clock menu .
2. Change to the correct hour for the current local time using the  or  buttons and press ENTER or the SET function button.

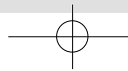
The hour will be accepted and the system will return to the  Preferences menu .



NOTE
This  Map Regions  menu will only appear on the NAV ONE 2000.

Part II — Getting Started

Nothing comes close to a Cobra®  25



Text and list entries (list and spell modes)

A

B

C Scroll feature in spell mode

Scroll ▲ or ▼ to move through the endless loop of characters in both directions.

See the chart below for list order and characters available.

If the entry is entirely numeric, such as a zip code, the shorter numeric list will be presented.

NOTE
Non-English characters, such as ñ and ç, will be available as needed.

1 List order and characters available

Alphanumeric

0	1	2	3	4	5	6	7	8	9	
	A	B	C	D	E	F	G	H	I	
	J	K	L	M	N	O	P	Q	R	S
	T	U	V	W	X	Y	Z	\$	&	'
	,	-	.	/	[]	:			

Numeric

	0	1	2	3	4
	5	6	7	8	9

The "blank" character shown in these diagrams is the space character. When scrolling ▲ or ▼ the characters will move in an endless loop.

Text and list entries (list and spell modes)

When using the NAV ONE system, it is often necessary to enter information or select it from lists in the NAV ONE database. Because these methods are so widely invoked, it is important to become familiar with using the list and spell modes early on.

Data selection and entry is accomplished by using either:

- List mode — enables the user to select entries from data lists in the system database. The system always defaults to list mode and provides the appropriate data list in context of the operation in progress.
- Spell mode — enables the user to spell out information using characters built into the system. These character lists are shown in illustration 1.

Both methods are usually available and the preferred one can be chosen by use of the LIST and SPELL function buttons. The benefits of the two modes can be combined by toggling (switching) between them.

The four cursor keys are the means of maneuver through lists and the spelling process. A practical example of using the list, spell and combined modes begins on page 30.

List mode ➔ The ▲ or ▼ buttons scroll through list items one-by-one.

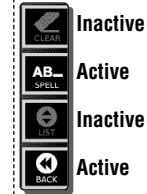
▪ For example, at the ☒ Select Street Name menu 2, press ▼ four times to move from “Applegate Ave” to “Byron St.” Pressing ▲ would move to streets with numbered names, such as 5th Avenue, then to those at the end of the alphabet.

The ◀ and ▶ buttons jump the list to the next alphabetic group.

▪ For example, at the ☒ Select Street Name menu 2, press ▶ to jump to “Blackstone Blvd.” Another ▶ press jumps to “Cornell Ave” and so on. The ◀ button will jump backward in the alphabet. The five most recent selections grouped at the beginning of the list acts as a single alphabetic group in response to the ◀ and ▶ buttons.

Quick recall of recent list entries ➔ The first time a list is invoked, it will appear on the screen in alphabetic order, as at the ☒ Select Street Name menu 2. As entries are selected from lists, the system will recall the five most recent entries selected from each list and automatically put them at the top of those lists. The rest of each list will follow the most recent five in alphabetic order, as at ☒ Select Street Name menu 3. This makes recent choices handy to reuse.

NOTE



When in either list or spell mode (list mode is illustrated here), the function icon for the alternate mode will be active (dark) and the function icon for the current mode will be inactive (gray).



Spell mode..... ➔

The ▲ or ▼ buttons scroll through the alphanumeric and numeric loops. The ▼ button scrolls toward the end of the alphabet — from A to B to C. The ▲ button scrolls toward the beginning of the alphabet — from C to B to A. In either case, scrolling will “wrap” around the loop, such as from 8 to 9 to 0 to (space) to 1 to 2 when scrolling ▼ the numeric loop.

The ◀ and ▶ buttons move across the menu line where information is being spelled. After a character is selected in the first position, the ▶ button accepts the selection and moves the cursor to the next position to the right where the next character can be selected by scrolling ▲ or ▼ as shown in the progression of ☞ Select Street Name menus ①, ②, ③ and ④.

Editing entries ➔

Each press of the ◀ button clears one character and moves one space to the left, such as to the ☞ Select Street Name menu ② from ☞ Select Street Name menu ③ or ④. The CLEAR function button clears the entire entry back to the starting point, such as to the ☞ Select Street Name menu ① from the ☞ Select Street Name menu ④.

NOTE

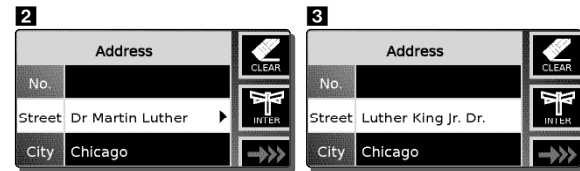
The first character defaults to the first available character (usually A) as shown in the ☞ Select Street Name menu ①. When a different letter is chosen, as in the ☞ Select Street Name menu ②, the list (although inactive in spell mode) shifts to the corresponding alphabetic section.

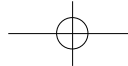
In the second and subsequent character positions, the cursor box defaults to the first available character using smart spelling (see page 29). If that is the space character, to separate words for instance, press the ▶ button to accept the space and move another position to the right. Otherwise, scroll ▲ or ▼ to the character desired at that position.

Smart spelling ➔ As spelling progresses, the system uses Smart Spelling to show only letters for which a corresponding name exists in the database. For example, pressing ▶ at the ☰ Select Street Name menu Ⓛ, would show [MAB], skipping the characters preceding B because [Mable] is the first street in the database for Lincolnshire that starts with MA in the first two character positions. Pressing ▼ from there would show [MAI], since there are no streets in Lincolnshire that have any of the letters between B and I in the third character position following MA. This makes it easier and faster to use spell mode as the system progresses through an entry. In most cases, it will not be necessary to spell the entire name; only enough letters need be entered to identify a unique entry.

Long text entries ➔ When text entries are longer than the space available in the highlighted bar, they can be viewed by scrolling ◀ or ▶. The initial view will show the beginning of the entry with an arrowhead indicator as in ☰ Address menu 2. Scrolling ▶ will move to the end of the entry as in ☰ Address menu 3. Scrolling ◀ will return to the beginning of the entry.

➔ **NOTE**
Whether by selection from a list or by spelling, the only destination choices that can be made are those that exist in the NAV ONE system database. The Smart Spelling feature skips all nonexistent entries in addition to increasing the ease and speed of using spell mode.





Entry example ... ➔ This example uses [Main St] as the desired entry and [Lincolnshire, Illinois] as having already been chosen for the city and state — shown in the **Address menu** **A**. The same methods apply to any data entry field.

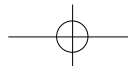
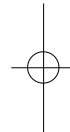
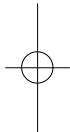
Entry methods ➔ **At the Address menu A:**

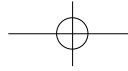
1. Scroll ▲ or ▼ to [Street] and press ENTER.
2. At the **Select Street Name menu** **B**, three options are available to choose "Main St":

List entry ➔ ■ Use list mode exclusively either by scrolling ▲ or ▼ all the way to the entry; or by pressing ◀ or ▶ often enough to reach the "M" portion of the list, then scrolling ▲ or ▼ a few entries.

Spell entry ➔ ■ Use spell mode exclusively by pressing the SPELL function button to proceed to the **Select Street Name menu** **D**. Continue the spelling process in **Select Street Name menus** **E** to **F** until the whole entry is spelled out at **Select Street Name menu** **G**.

List and spell entry ➔ ■ Use the faster combination of list and spell modes at the **Select Street Name menu** **B**:
1. Press the SPELL function button to proceed to the **Select Street Name menu** **D**.
2. Scroll ▲ or ▼ to [M] in the first character space, then press the LIST function button.
3. At the **Select Street Name menu** **4**, scroll ▼ to [Main St].



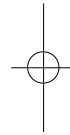
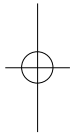


At the completion of any of the three methods, press ENTER. The system will return to the Address menu **5**, which now shows [Main St] below the highlighted number bar.

Very large cities Some very large cities are subdivided or consist of multiple counties or boroughs. In those cases, addresses can be accessed either using the city name or the subdivision name. For example, a street in the borough of Queens, NY will be found under both that listing and under New York, NY.

5

Address		
No.		
Street	Main St	
City	Lincolnshire	
State	Illinois	
Zip	60069	



D

Select Street Name

A

- Applegate Ave
- Arial Dr
- Blackstone Blvd
- Brickyard Ct
- Byron St
- Cornell Ave
- Cypress Pkwy
- Dearlove Blvd

AB
SPELL

E

Select Street Name

M

- Mable Ave
- Maiden Ave
- Main St
- Meadow Blvd
- Medina Rd
- Naples Pkwy
- North Ave
- Princeton Dr

AB
SPELL

F

Select Street Name

M**A**

- Mable Ave
- Maiden Ave
- Main St
- Meadow Blvd
- Medina Rd
- Naples Pkwy
- North Ave
- Princeton Dr

AB
SPELL

G

Select Street Name

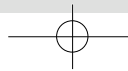
MAI**N**

- Main St
- Meadow Blvd
- Medina Rd
- Naples Pkwy
- North Ave
- Princeton Dr
- Rand Ct
- Rand Rd

AB
SPELL

Part II — Getting Started

Nothing comes close to a Cobra® **31**



Address/intersection and Previous destination

32



Destination selection

Once a destination is selected, the last step of each process proceeds to the Select Route Criteria menu **1**. See that section for further information.

Address/intersection

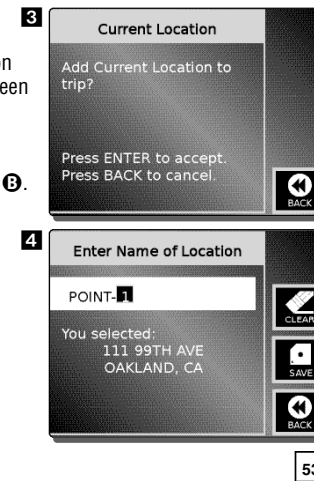
The NAV ONE system allows selection of any street address or intersection in its database as a destination.

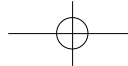
When selecting an address or intersection, the best and quickest starting point is the zip code for the desired destination. By entering the zip code as the first element of the address, the NAV ONE system will zoom in and look at that area only. It will always return an associated state and city. If two or more cities share the same zip code, one of them will appear in the city bar.

If the zip code is not known, the state in which the destination is located must be the first address element to be entered. This will similarly allow the system to zoom in on a segment of its database for efficient processing of additional address elements. In this section, as in all other destination selection methods, the NAV ONE system will seek information only in the most recently selected state.

3. At the **☞** Mondays Trip screen **ⓓ**, press the ADD function button to proceed to the **☞** Add Destination to Trip menu **ⓔ**.
4. Scroll **▲** or **▼** to one of the five methods of selecting a destination and press ENTER to proceed to the menu corresponding to the method chosen.
5. Proceed with the programming sequence for that choice as described in each of the corresponding destination selection sections or with the procedure below if Current Location is chosen.
 - Address/intersection — see page 32.
 - Point of interest — see page 38.
 - Previous destination — see page 36.
 - Address book — see page 46.
 - **☞** Current Location screen **ⓓ**:
 1. Press ENTER to confirm selection of the current location as a destination and proceed to the **☞** Enter Name of Location menu **ⓔ**.
 2. Accept the default name shown or edit it to a preferable one using spell mode.

NOTE
 Pressing ENTER instead of the ADD function button at the add destination screen (**☞** Mondays Trip **ⓓ**) will save the trip name as an empty trip and return to the **☞** Trip Planner menu **ⓓ**.



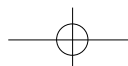
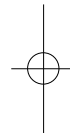
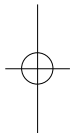
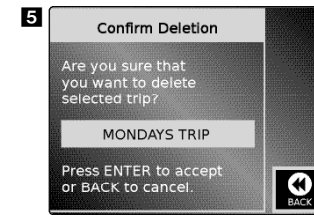


6. After selecting the destination, press ENTER to return to the Mondays Trip screen .
7. Repeat steps 3 to 6 as often as necessary to add up to nine more destinations to the trip, returning each time to the Mondays Trip screen .
8. After entering the last trip destination, press the SAVE function button at the Mondays Trip screen .

The trip will be saved to memory and the system will return to the Trip Planner menu .

Delete a trip **At the Trip Planner menu** :









1. Scroll or to the name of the trip to be deleted and press the EDIT function button.
2. At the Mondays Trip menu , scroll or to [Edit Name] and press the DELETE function button.
3. At the Confirm Deletion screen , press ENTER.
The deletion will be accepted and the system will return to the Trip Planner menu .






Modify a trip ➔ **A saved trip can be modified in four ways:**

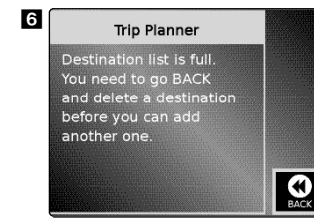
- Change the trip name.
- Change the name of a destination.
- Add a destination.
- Delete a destination.

Change a trip name ➔ **At the  Trip Planner menu **:

1. Scroll  or  to the name of the trip to be modified and press the EDIT function button.
2. At the  Mondays Trip menu , scroll  or  to [Edit Name] and press ENTER.
3. At the  Enter Name of Trip menu , edit the trip name using spell mode and press ENTER or the SAVE function button.

The name change will be saved and the system will return to the  Mondays Trip menu .

NOTE
If the trip's destination list is full, pressing ADD will bring up  Trip Planner screen  with notice that it is full.



Change a destination name

At the **☰ Trip Planner menu** **ⓑ**:

1. Scroll ▲ or ▼ to the name of the trip with the destination to be modified and press the EDIT function button.
2. At the **☰ Mondays Trip menu** **ⓑ**, scroll ▲ or ▼ to [Edit Destination] and press ENTER.
3. At the **☰ Mondays Trip menu** **ⓑ**, scroll ▲ or ▼ to the desired destination, then press the EDIT function button.
4. At the **☰ Enter Name of Location menu** **7**, edit the destination name using spell mode and press ENTER or the SAVE function button.

The change will be saved and the system will return to the **☰ Mondays Trip menu** **ⓑ**.

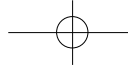
Add a destination to a trip

At the **☰ Trip Planner menu** **ⓑ**:

1. Scroll ▲ or ▼ to the name of the trip to be modified and press the EDIT function button.
2. At **☰ Mondays Trip menu** **ⓑ**, scroll ▲ or ▼ to [Edit Destination] and press ENTER.
3. At the **☰ Mondays Trip menu** **ⓑ**, press the ADD function button to proceed to the **☰ Add Destination to Trip menu** **ⓑ**.
4. Proceed with steps 4 through 8 of the *Add a new trip to memory process* on page 52.

The added destination(s) will be saved and the system will return to the **☰ Mondays Trip menu** **ⓑ**.





Delete a destination from a trip

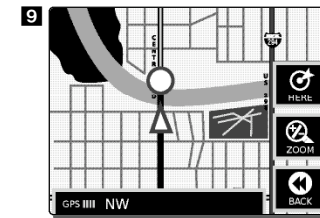
- ➔ **At the Trip Planner menu :**
1. Scroll or to the name of the trip to be modified and press the EDIT function button.
 2. At Mondays Trip menu , scroll or to [Edit Destination] and press ENTER.
 3. At the Mondays Trip menu , scroll or to the destination to be deleted and press the EDIT function button.
 4. At the Enter Name of Location menu **7**, press the DELETE function button to proceed to the Confirm Deletion screen **8** and press ENTER.
- The destination will be deleted and the system will return to the Mondays Trip menu .

Map view of trip ➔

- In addition to seeing the list of destinations for a trip at the Mondays Trip menu , the first destination can be seen graphically on the Map screen **9**.







View a trip on the map



- ➔ **At the Trip Planner menu :**
1. Scroll or to the name of the trip to be viewed and press the VIEW function button to proceed to the Map screen **9**.



Select and navigate a trip

At the  Trip Planner menu :

1. Scroll  or  to the trip to be navigated and press ENTER.
2. At the , scroll  or  to the first destination desired on the trip list and press ENTER or the GO function button. (This may be any destination on the list.)
3. At the , choose desired values for the criteria and press ENTER or the GO function button to proceed to the route calculation process.
4. When route calculation is completed, navigate to the first destination using the procedures described in the *Route guidance* section.

As each destination is reached, the system brings up the  Destination Reached menu  where the user can either:

- Continue to another destination on the trip.
- Discontinue the trip.

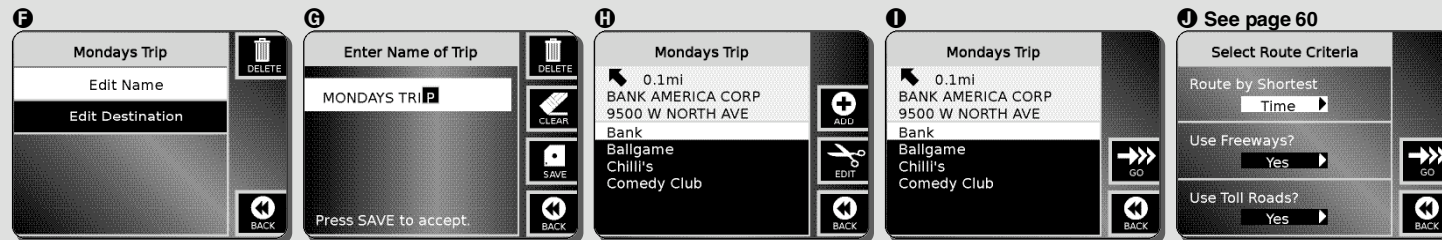


Continue to ➔ **At the Destination Reached menu 10:**
another destination

1. Scroll ▲ or ▼ to [Continue to Next] and press ENTER.
2. At the Mondays Trip menu 11, scroll ▲ or ▼ to the next desired destination on the trip list and press ENTER or the GO function button. (This may be any later destination on the list.)
3. At the Select Route Criteria menu 12, choose desired values for the criteria and press ENTER or the GO function button to proceed to the route calculation process.
4. When route calculation is completed, navigate to the next destination using the procedures described in the *Route guidance* section.

Finish or ➔ **Trip navigation is ended from the Destination Reached menu 10:**
discontinue trip

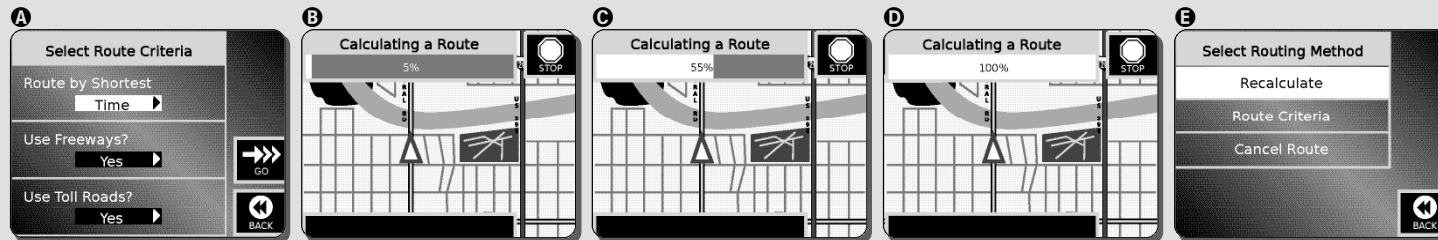
1. Scroll ▲ or ▼ to [Discontinue Trip] and press ENTER to terminate the trip and return to the Main menu 4.



Part III — Operating the System: Destination selection and programming


Route selection limits and Route calculation

60

















Before the system can provide guidance information to the selected destination, it needs to know the user's preferences and to calculate the route to be navigated from the current location.




Route selection limits (select route criteria)

The final step in all of the preceding destination selection routines has been to press ENTER or the GO function button to proceed to the  Select Route Criteria menu **A**. This menu sets limits on how the system will calculate the route from the present location to the selected destination.



3. At the menu corresponding to the method chosen, proceed with the programming sequence for that choice:

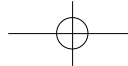
- Address/intersection —  Address menu  — see page 32.
- Point of interest —  Select POI Search Method menu  — see page 38.
- Previous destination —  Select Destination menu  — see page 36.
- Current location —  Current Location screen  — see page 23.
- Infrared —  Infrared Transfer screen  — see page 49.

4. At the  Save or Edit Name menu , accept the default name shown or edit it to a preferable one using spell mode and press ENTER or the SAVE function button. The address and name will be accepted and the system will return to the  Address Book menu .

Entry using  At the  Address menu :

1. Enter the address or intersection using the programming sequence described in the *Address/intersection* section, then press ENTER or the SAVE function button.

The address or intersection will be accepted and the system will proceed to the  Save or Edit Name menu  to complete step 4 above.



Entry using point of interest

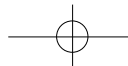
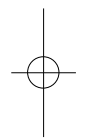
- ➔ **At the Select POI Search Method menu :**
 1. Enter the point of interest using the programming sequence described in the *Point of interest* section, then press ENTER or the SAVE function button.
The point of interest will be accepted and the system will proceed to the Save or Edit Name menu to complete step 4 on page 47.

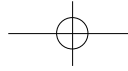
Entry using previous destination

- ➔ **At the Select Destination menu :**
 1. Scroll or to the desired destination and press ENTER or the SAVE function button.
The destination will be accepted and the system will proceed to the Save or Edit Name menu to complete step 4 on page 47.

Entry using current location

- ➔ **At the Current Location screen :**
 1. Press ENTER or the SAVE function button.
The location will be accepted and the system will proceed to the Save or Edit Name menu to complete step 4 on page 47.





Infrared ➔ The infrared port on the NAV ONE (NAV ONE 3000 only) can receive data from PDA's if they are equipped with a compatible port. To use this feature, the data item(s) to be transferred to the NAV ONE system must be selected and prepared for transmission according to the operating instructions for the sending device.

Entry using infrared ➔ Once the sending device is ready and its infrared port is aimed at the infrared port on the GPS unit, at the **Infrared Transfer screen 2**:

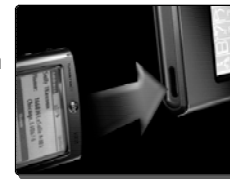
1. Activate the sending device.

The system will proceed to the **Infrared Transfer screen 3**, then to one of two possible results:

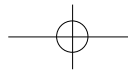
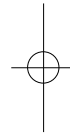
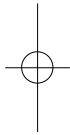
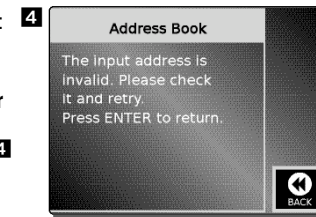
- Transfer unsuccessful
- Transfer complete

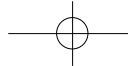
Transfer unsuccessful ➔ If the data transfer is unsuccessful, a screen such as the **Address Book screen 4** will appear with an error code explaining what went wrong with the transfer. (An address validation screen may appear briefly before the error message.) Pressing ENTER at the **Address Book screen 4** will return the system to the **Infrared Transfer screen 2** where two actions are available:

- The transfer can be repeated after the error has been corrected.
- The BACK function button can be pressed to exit the infrared transfer mode and return to the **Add to Address Book menu 6**.



PDA positioned for infrared transfer

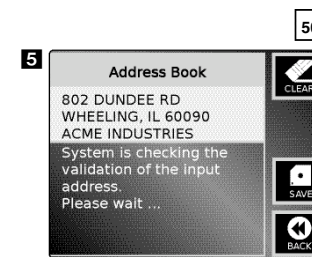
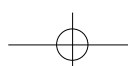
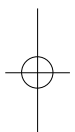


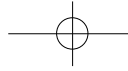


Transfer complete → If the data transfer is successful, the system will briefly display the address validation screen (→ Address Book screen 5), then return to the → Address Book menu 3.

Edit function..... → The edit function can be used to change the name of an entry or to delete an entry entirely. To change the address information associated with a destination name, it is necessary to delete the entry and re-enter the entire modified address.

Change an entry name.. → **At the → Address Book menu 3:**
1. Scroll ▲ or ▼ to the entry name that is to be edited and press the EDIT function button.
2. At the → Save or Edit Name menu 2, edit the entry name using spell mode and press ENTER or the SAVE function button.
The system will accept the change and return to the → Address Book menu 3.





Delete an entry

At the Address Book menu:

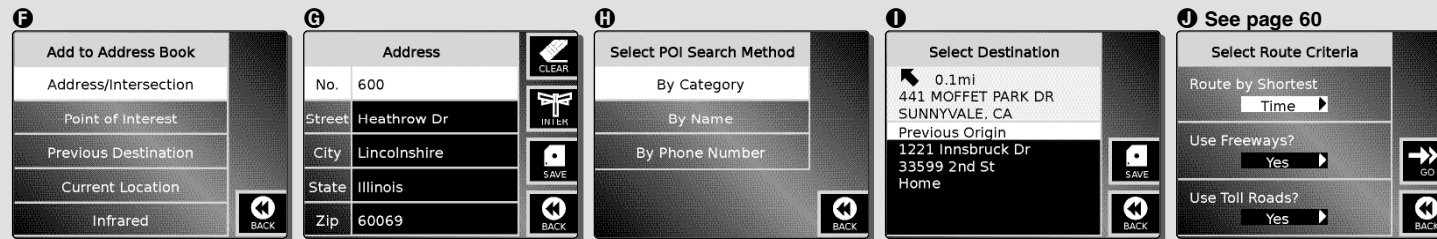
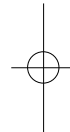
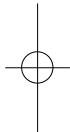
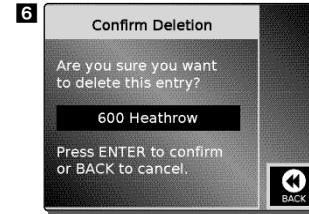
1. Scroll ▲ or ▼ to the name of the entry to be deleted and press the EDIT function button.
2. At the Save or Edit Name menu, press the DELETE function button.
3. At the Confirm Deletion screen, press ENTER.

The system will accept the deletion and return to the Address Book menu.

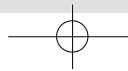
Select a destination and navigate to it

At the Address Book menu:

1. Scroll ▲ or ▼ to the name of the entry to be selected and press ENTER or the GO function button to proceed to the Select Route Criteria menu.



Part III — Operating the System: Destination selection and programming



Trip planner



Trip planner

In addition to individual destinations, the GPS Navigation System allows up to five trips to be stored with up to ten destinations to be visited in sequence on each trip. Trips stored in system memory can be repeatedly recalled and used; and trips can be added, named, edited and deleted.

Enter the ➔ trip planner

- At the Main menu **A**:
1. Scroll or to [Trip Planner] and press ENTER.
- The system will proceed to the Trip Planner menu **B** showing the list of trips stored in system memory.

Add a new trip ➔ to memory

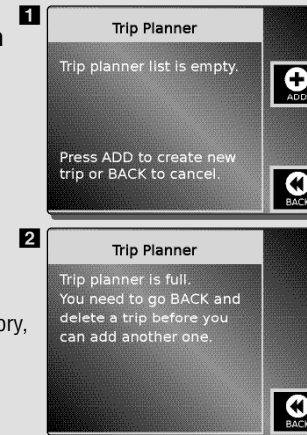
- At the Trip Planner menu or screen **B** or **1**:
1. Press the ADD function button to proceed to the Enter Name of Trip menu **C**.
 2. Accept the default name shown or edit it to a preferable one using spell mode and press ENTER or the SAVE function button.

IN THIS MANUAL

"Monday's Trip" is used as an example and shows as a title at the top of several menus and screens. In actual use of the NAV ONE, the menus and screens will be titled with the user selected trip name.

NOTE

If there are no trips stored in system memory, the Trip Planner screen **1** will appear with notice that the list is empty. Or if the trip planner is full, Trip Planner screen **2** will appear with notice that it is full.



Start destination selection by point of interest

- At the **Main menu**:
1. Scroll **▲** or **▼** to [Point of Interest] and press ENTER.

Select by category

Selects one of the categories from the NAV ONE database, then narrows the choice to one of the points in that category.

- At the **Select POI Search Method menu**:
1. Scroll **▲** or **▼** to [By Category] and press ENTER.
 2. At the **Select POI Category menu**, scroll **▲** or **▼** to the category from which a point of interest is to be chosen and press ENTER.

The category will be selected and the system will proceed to the **Select Listing Preference menu**.

The **Select Listing Preference menu** provides three ways to sort the category list and select a final destination.

- Sort by distance — see page 40.
- Sort alphabetically — see page 41.
- Within a city — see page 41.

IN THIS MANUAL

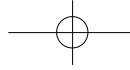
These select by category procedures use the airport category as an example. The same steps apply to any other category in the database.

NOTE

The last five categories selected will be at the top of the list, followed by the rest in alphabetic order.

NOTE

The list is sorted by distance from the current location with the closest point at the top of the list.



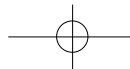
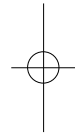
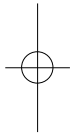
Sort by distance **At the Select Listing Preference menu** :

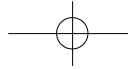
1. Scroll or to [Sort by Distance] and press ENTER.
2. At the Airport menu **1**, scroll or to the desired location and press ENTER or the GO function button to proceed to the Select Route Criteria menu **1**.

40

The figure consists of five numbered screenshots of a navigation device's menu system:

- 1**: Airport menu showing details for a location in Kenosha, WI. The menu includes options for GO and BACK.
- 2**: Airport menu with a list of airports including Aurora Municipal, Campbell, Capital, Central Illinois Regional, Chicago Midway, and Chicago O'Hare Int'l.
- 3**: POI Found screen for Aurora Municipal Airport, showing the address 43W636 US-30, Aurora, IL. It includes GO and BACK options.
- 4**: Select City menu for Illinois, listing cities such as Alabaster, Albany, Albion, Aledo, Alexander, Alexis, and Algonquin. It includes options for STATE, SPELL, LIST, and BACK.
- 5**: Airport menu showing details for a location in Naperville, IL. It includes GO and BACK options.





Sort ↻ alphabetically At the **☒ Select Listing Preference menu ①**:

1. Scroll ▲ or ▼ to [Sort Alphabetically] and press ENTER.
2. At the **☒ Airport menu ②** (an alphabetic list of locations in the state that are within the category – see *State selection* on page 38), scroll ▲ or ▼ to the desired location (see note on page 38) and press ENTER.
3. At the **☒ POI Found screen ③**, press ENTER or the GO function button to proceed to the **☒ Select Route Criteria menu ④**.







Within a city ↻ At the **☒ Select Listing Preference menu ①**:



1. Scroll ▲ or ▼ to [Within a City] and press ENTER.
2. At the **☒ Select City menu ④** (an alphabetic list of cities in the state that are within the category – see *State selection* on page 38), scroll ▲ or ▼ to the desired city (see note on page 38) and press ENTER.
3. At the **☒ Airport menu ⑤**, scroll ▲ or ▼ to the specific location desired within the city and press ENTER or the GO function button to proceed to the **☒ Select Route Criteria menu ④**.

Select by name ➔

Allows the name of the destination to be entered, then narrows the choice to one location if there are multiple locations with the same name, such as a restaurant chain.

At the  Select POI Search Method menu :

1. Scroll  or  to [By Name] and press ENTER.
2. At the  Enter First Few Letters menu , enter the first few letters — up to four — of the name using spell mode as shown in the  Enter First Few Letters menu  to create an abridged name list in system memory and press ENTER.

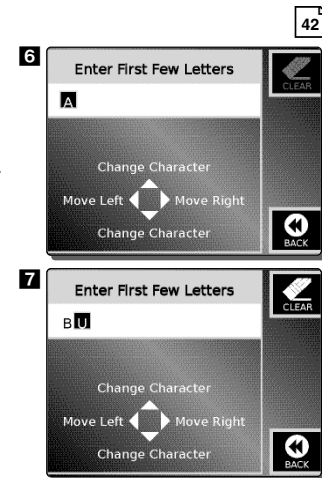
The list will be accepted and the system will proceed to the  Select Listing Preference menu .

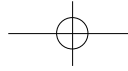
The  Select Listing Preference menu  provides three ways to sort the list and select a final destination.

- Sort by distance — see page 43.
- Sort alphabetically — see page 43.
- Within a city — see page 44.

IN THIS MANUAL

These select by name procedures use entries starting with the letters BU as examples. The same steps apply to any other letter combinations.



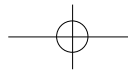
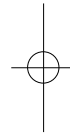
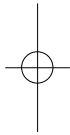
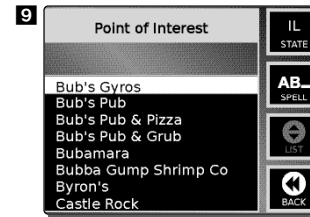


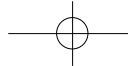
Sort by distance ➔ **At the Select Listing Preference menu ①:**

1. Scroll ▲ or ▼ to [Sort by Distance] and press ENTER.
2. At the Point of Interest menu **8** (showing the abridged list sorted by distance from the current location with the closest point at the top of the list), scroll ▲ or ▼ to the desired location and press ENTER or the GO function button to proceed to the Select Route Criteria menu **1**.

Sort alphabetically ➔ **At the Select Listing Preference menu ①:**

1. Scroll ▲ or ▼ to [Sort Alphabetically] and press ENTER.
2. At the Point of Interest menu **9** (an alphabetic list of points in the state and on the abridged list — see *State selection* on page 38), scroll ▲ or ▼ to the desired point (see note on page 38) and press ENTER.
3. At the POI Found screen **10**, press ENTER or the GO function button to proceed to the Select Route Criteria menu **1**.





Within a city ➔ **At the Select Listing Preference menu** ①:

1. Scroll ▲ or ▼ to [Within a City] and press ENTER.
2. At the Select City menu 11 (an alphabetic list of cities in the state having a location on the abridged list — see *State selection* on page 38), scroll ▲ or ▼ to the desired city (see note on page 38) and press ENTER.
3. At the Point of Interest menu 12, scroll ▲ or ▼ to the desired location and press ENTER or the GO function button to proceed to the Select Route Criteria menu ①.

Select by phone number ➔

Allows the telephone number of the destination to be entered, then narrows the choice to one location if there are multiple locations with the same telephone number, such as an 800 number for a hotel chain.

At the Select POI Search Method menu ②:

1. Scroll ▲ or ▼ to [By Phone Number] and press ENTER.
2. At the By Phone Number screen ②, enter the telephone number for the location to be found using spell mode and press ENTER.

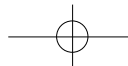
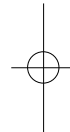
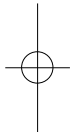
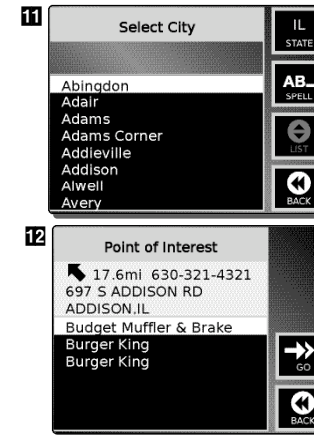
The telephone number will be accepted and the system will proceed to one of the three possible screens or menus:

- POI found
- Multiple POIs found
- POI not found

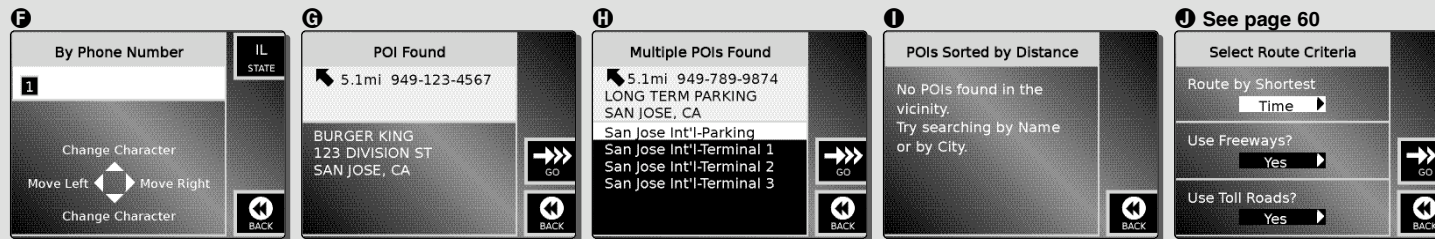
IN THIS MANUAL

These select by phone number procedures use multiple categories as examples. The same steps apply to any other category in the database.

44

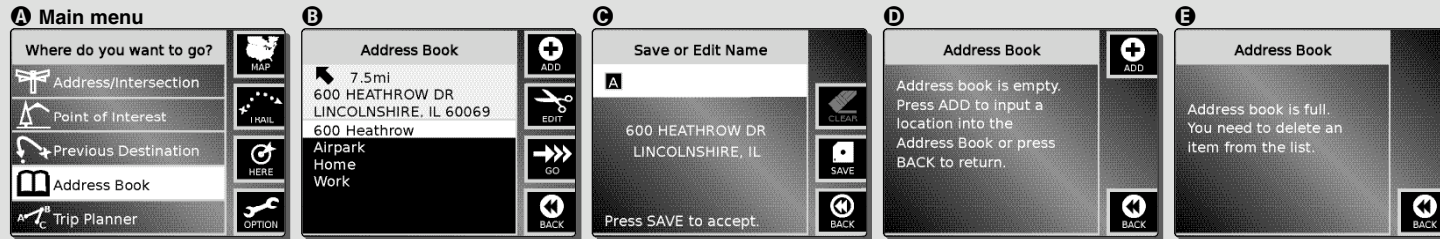


- POI found** ➔ If there is only one match for the telephone number entered, the system will proceed to the **POI Found** screen **G** which shows the name of the location with the direction, distance, address and telephone number at the top of the screen.
1. Press ENTER or the GO function button to proceed to the **Select Route Criteria** menu **J**.
- Multiple POIs found** ➔ If there are multiple points with the same telephone number, the system will proceed to the **Multiple POIs Found** menu **H** which shows an alphabetically sorted list of the points sharing the telephone number entered. The direction, distance, address and telephone number for the highlighted location are shown at the top of the screen.
1. Scroll ▲ or ▼ to the desired location and press ENTER or the GO function button to proceed to the **Select Route Criteria** menu **J**.
- POI not found** ➔ If the telephone number is not in the NAV ONE database, the system will proceed to the **POIs Sorted by Distance** screen **I** which shows a message to that effect.
1. Press ENTER or the BACK function button to return to the **Enter Phone Number** screen **F** to enter a different telephone number.



Part III — Operating the System: Destination selection and programming

Address book



Address book

This feature allows users to store up to 100 destinations of their choice for ready reference and retrieval.

Address book destination entries can be added and named, edited and deleted with the NAV ONE system resources. They can also be added from a PDA using the infrared port, then edited and deleted with the NAV ONE resources.

Enter the address book

Allows management of the address book and selection of entries for navigation.

- At the **Main menu** **A**:
1. Scroll ▲ or ▼ to [Address Book] and press ENTER.
The **Address Book** menu **B** will show the top of the entry list.

NOTE

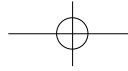
If there are no entries, the **Address Book** screen **D** will appear with notice that it is empty instead of menu **B**.

Add a destination

- At the **Address Book** menu or screen **B** or **D**:
1. Press the ADD function button to proceed to the **Add to Address Book** menu **F**.
 2. Scroll ▲ or ▼ to one of the five methods of making an entry and press ENTER.

NOTE

If the address book is full, the **Address Book** screen **E** will appear with notice that it is full instead of menu **F**.



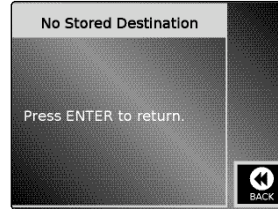
3 Main menu



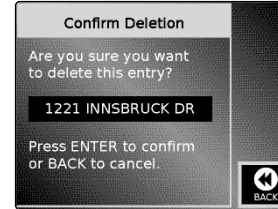
4



5

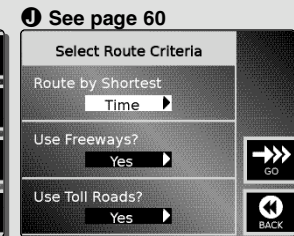
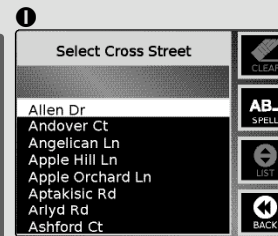


6



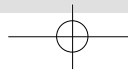
NOTE

Once a destination has been selected, the last step of each process proceeds to the Select Route Criteria menu **1**. See that section at page 60 for further information.

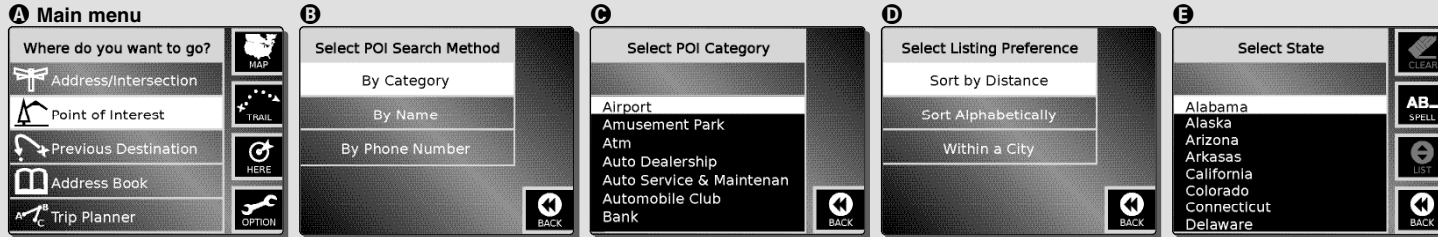


Part III — Operating the System: Destination selection and programming

Nothing comes close to a Cobra® **37**



Point of interest



Point of interest (POI)

Selecting a destination by POI allows a public place to be found without needing to know the address. The NAV ONE system database includes thousands of points of interest in over 40 categories — see *Appendix B*.

The POI mode can also be used as a means of finding the address and telephone number of any location in the database — the data is shown in the final screen of each POI selection process.

State selection

- At all applicable menus, the most recently selected state will appear in the state icon. If a desired location is in a different state:
1. Press the STATE function button to proceed to the Select State menu **E**.
 2. Scroll ▲ or ▼ to the desired state and press ENTER.
 3. The new state will be accepted and the system will return to the previous menu.

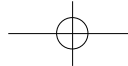
Select a point of interest

- Once the point of interest method is chosen, there are three ways to select a destination:
- By category — see page 39.
 - By name — see page 42.
 - By phone number — see page 44.

NOTE

If a desired list item is far down in the alphabet, spell mode can be used to quickly move down the list:

1. Press the SPELL function button to toggle to spell mode.
2. Enter the first few characters of the state, city or location name using spell mode.
3. Press the LIST function button to toggle back to list mode.
4. Scroll ▲ or ▼ to the desired location.



Start destination selection by address/intersection

➔ **At the Main menu** :

1. Scroll or to [Address/Intersection] and press ENTER.

The address element entry process is the same for both methods until the last step at which either the street number or the cross street is entered. After the state, city and street have been entered, at the Address menu , the INTERSECTION function button toggles the system to the Intersection menu .

Start address entry with zip code

➔ **At the Address menu** :

1. Scroll or to [Zip] and press ENTER.
2. At the Select Zip menu , enter the zip code using spell mode and press ENTER.

The zip code will be accepted and the system will return to the Address menu with the zip code, state and city filled in and the street bar highlighted. If two or more cities share the same zip code, the first alphabetic option will show in the [City] bar. If that is not the desired city:

1. Scroll or to [City] and press ENTER.
2. Scroll to the desired city on the short list and press ENTER to return to the Address menu with the street bar highlighted.

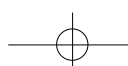
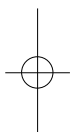
NOTE

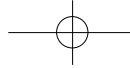
When using the address/intersection method, the clear function will clear the highlighted entry as well as any sub-fields. For instance, clearing the city field will also clear the street and number fields.

NOTE

Most steps in this process default to list mode to choose a data item. If the desired item is far down in the list, spell mode can be used to quickly move down the list.

1. Press the SPELL function button to toggle to spell mode.
2. Enter the first few characters of the state, city or street name using spell mode.
3. Press the LIST function button to toggle back to list mode.
4. Scroll or to the desired item.





Start address entry with state

At the Address menu:

1. Scroll ▲ or ▼ to [State] and press ENTER.
2. At the Select State menu, scroll ▲ or ▼ to the desired state name and press ENTER.
The state will be accepted and the system will return to the Address menu with the state filled in.

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Finish address entry

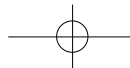
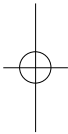
At the Address menu, with the state name filled in:

1. Scroll ▲ or ▼ to [City] and press ENTER.
2. At the Select City menu, scroll ▲ or ▼ to the desired city and press ENTER.
3. At the Address menu, scroll ▲ or ▼ to [Street] and press ENTER.
4. At the Select Street Name menu, scroll ▲ or ▼ to the desired street and press ENTER.
5. At the Address menu, press ENTER to proceed to the Enter Address Number menu or press the INTERSECTION function button, then ENTER to proceed to the Select Cross Street menu.
6. At either the Enter Address Number menu or the Select Cross Street menu, enter the street number using spell mode at the Enter Address Number menu or scroll ▲ or ▼ to the desired cross street at the Select Cross Street menu and press ENTER.

The address will be accepted and the system will return to the Address or Intersection menu or C.
The entire address or intersection will be filled in, ready to be used for navigation to that destination.

NOTE

If zip code was used to start the address entry and the city bar is filled in, skip steps 1 to 2.



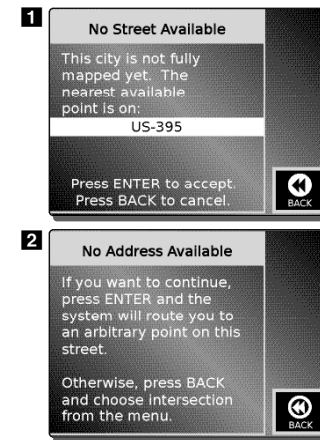
Navigate to ➔ the destination

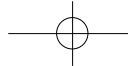
At the filled in **Address** or **Intersection** menu **B** or **C**:

1. Press the GO function button to accept the address or intersection and proceed to the **Select Route Criteria** menu **1**.

Some rural areas and small communities are not fully covered by the map and database built into the NAV ONE system. When selecting a destination in one of those areas, users may be informed that streets or street numbers are not available for that particular place by the **No Street Available** or **No Address Available** screens **1** or **2**.

In such cases, the system will offer the nearest available street or suggest using the nearest available street or a cross street instead of the number.





Previous destination

The NAV ONE system saves the most recent origin and the last nine destinations in memory for quick retrieval. The recent origin is always first on the list and a new destination entry bumps the oldest, once the list is full. A destination is saved when selected; it is not necessary to go there to add it to this list.

Select a destination from previous destinations



At the **☰** Main menu **3**:

1. Scroll **▲** or **▼** to [Previous Destination] and press ENTER.
2. At the **☰** Select Destination menu **4** (sorted with the oldest destination at the bottom of the list), scroll **▲** or **▼** to the desired destination and press ENTER or the GO function button to proceed to the **☰** Select Route Criteria menu **1**.

NOTE

If the list is empty, the **☰** No Stored Destination screen **5** will appear instead of the **☰** Select Destination menu **4**.

Delete a previous destination

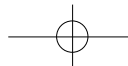
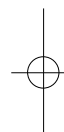
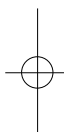


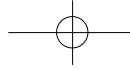
Previous destinations can be cleared from the list if so desired.

At the **☰** Select Destination menu **4**:















1. Scroll **▲** or **▼** to the destination to be deleted and press the DELETE function button.
2. At the **☰** Confirm Deletion screen **6**, press ENTER.

The deletion will be confirmed and the system will return to the **☰** Select Destination menu **4**.







Changes enroute



- ➔ At any time during a trip, the route can be changed or cancelled from the  Planned Route screen . If the system is not already displaying the  Planned Route screen , it can easily be reached during trip navigation in any of the following ways:
- At the  Map screen , press the PAGE function button.
 - At the  Guide screen , press the BACK function button.
 - At any other menu or screen:
 1. Press MENU to proceed to the  Main menu .
 2. Press the MAP function button to proceed to the  Map screen .
 3. Press the PAGE function button to proceed to the  Planned Route screen .

Detour

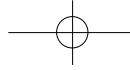
➔ In case of road construction, traffic jams or undesirable roads, the NAV ONE system can quickly calculate a detour to reach the currently selected destination.



At the Planned Route screen .

1. Press the EDIT function button to proceed to the  Select Routing Method menu .
2. Scroll ▲ or ▼ to [Detour] and press ENTER.



At the  Select Detour Criteria menu , four options are available:

- Avoid Current Road
- Avoid Next Road
- Detour Distance
- Avoid Specific Road





Avoid current road ➡ **At the  Select Detour Criteria menu **:



1. Scroll ▲ or ▼ to [Avoid Current Road] and press ENTER.



The system will recalculate the route and show the modified route on the  Map screen .

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Avoid next road ➡ **At the  Select Detour Criteria menu **:



1. Scroll ▲ or ▼ to [Avoid Next Road] and press ENTER.

The system will recalculate the route and show the modified route on the  Map screen .

Detour distance ➡ **At the  Select Detour Criteria menu **:



1. Scroll ▲ or ▼ to [Detour Distance] and press ENTER.



2. At the  Enter Detour Miles menu , decide on a maximum distance to deviate from the calculated route within the limits presented for available detour miles on the screen and enter the value in the cursor box using spell mode, then press ENTER.

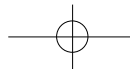
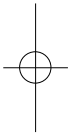
The system will recalculate the route and show the modified route on the  Map screen .

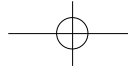
Avoid specific road ➡ **At the  Select Detour Criteria menu **:

1. Scroll ▲ or ▼ to [Avoid Specific Road] and press ENTER.

2. At the  Select Road to Avoid menu , scroll ▲ or ▼ on the list of all upcoming roads to be avoided then press ENTER.

The system will recalculate the route and show the modified route on the  Map screen .





Change route criteria

➔ Rather than use detour, it can be useful just to change the route criteria for a trip, such as when it becomes apparent that using toll roads will be an advantage.

At the *Planned Route* screen ②:

1. Press the EDIT function button to proceed to the *Select Routing Method* menu ③.
 2. Scroll ▲ or ▼ to [Route Criteria] and press ENTER.
 3. At the *Select Route Criteria* menu ④, make desired changes as described in the *Select route criteria* section and press ENTER.
- The system will recalculate the route and show the modified route on the *Map* screen ⑤.



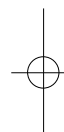
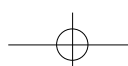
Change a trip plan

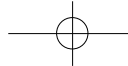
➔ This choice is active only if a multi-destination trip plan is being navigated. The trip plan can be modified at any point during navigation.

At the *Planned Route* screen ②:

1. Press the EDIT function button to proceed to the *Select Routing Method* menu ③.
2. Scroll ▲ or ▼ to [Trip Planner] and press ENTER.
3. At the *Trip Planner* menu ①, make desired changes as described in the *Trip planner* section and press ENTER.
4. At the *Select Route Criteria* menu ④, make desired changes as described in the *Select route criteria* section and press ENTER.

The system will recalculate the route and show the modified route the *Map* screen ⑤.











Cancel navigation ➔ This choice can be used to cancel the current trip and start over with the entry of a new destination. Or, it can be used to simply turn guidance off.




At the  Planned Route screen .

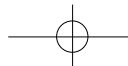
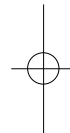
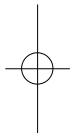
1. Press the EDIT function button to proceed to the  Select Routing Method menu .
2. Scroll ▲ or ▼ to [Cancel Route] and press ENTER.
3. At the  Confirm Cancellation screen , press ENTER.

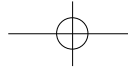
The cancellation will be confirmed and the system will proceed to the  Main menu .

Trip interruptions ➔ During a stop with the engine shut off for more than ten minutes, SmartPower will turn off the system if it was not turned off when the vehicle was parked.

NOTE

If SmartPower was turned off at the  Preference menu, this will not occur (see page 21 to turn SmartPower on and off).





Reset data ➔ The user can reset any or all of the fields at any time, either while navigating a trip or after it is finished.

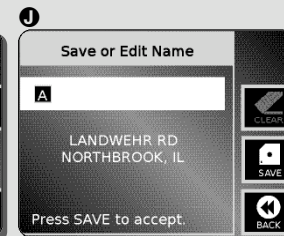
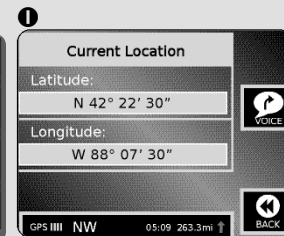
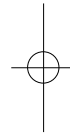
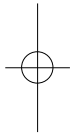
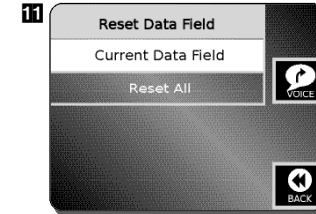
Reset one data item ➔ **At the Edit Data Field menu **10**:**

1. Scroll or to the data item to be reset and press the RESET function button.
2. At the Reset Data Field menu **11**, scroll or to [Current Data Field] and press ENTER. The reset will be confirmed and the system will return to the Edit Data Field menu **10**.

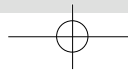
Reset all data items ➔ **At the Edit Data Field menu **10**, with any item highlighted:**

1. Press the RESET function button.
2. At the Reset Data Field menu **11**, scroll or to [Reset All] and press ENTER.
3. At the Reset All screen **12**, press ENTER.

The reset will be confirmed and the system will return to the Edit Data Field menu **10**.

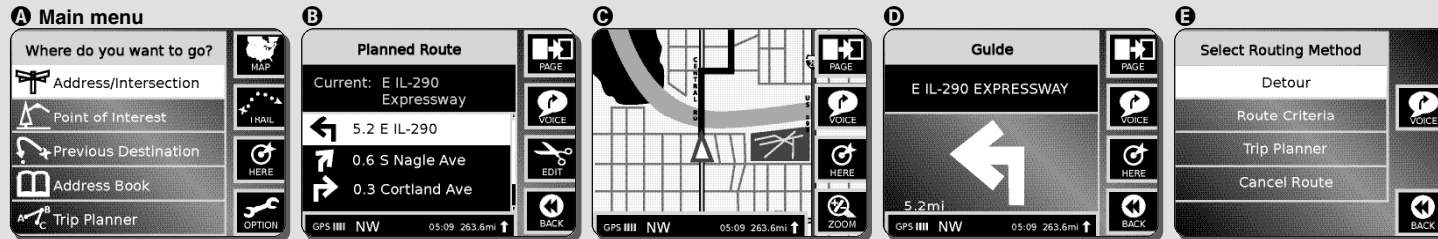


Part III — Operating the System: Route guidance



Off route events

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Off route events

During a trip, the NAV ONE system offers help if a turn is missed or a side trip is taken from a calculated route. It also allows changes to be made enroute — including detours, changing route criteria, changing trip plans and canceling navigation. Trip interruptions, such as lunch or a motel stay, are also accommodated.

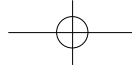
Leaving a calculated route

Within a short distance of the vehicle leaving a calculated route, the NAV ONE system will recognize the deviation and provide information to return to the route.

In the case of a missed turn or similar situation, the system will provide voice prompts, such as “Please make a legal U-turn,” to return to the calculated route while the system remains in the active navigation screen.

If a longer deviation is made and the prompts to return to the route are ignored, the system will calculate a new route to the destination — often a mini-route to intercept the original route at a later point — provided the auto reroute option is turned on (see page 91). The new route will be displayed in the active navigation screen and the voice prompts will adjust accordingly.

If auto reroute is turned off, the system will suspend guidance until the user takes some action, such as detour or cancel.



During navigation with route guidance, there are three navigation screens available. Whichever is most useful at any given time can be selected:

- Map **B** — shows the map on the LCD with the route highlighted in light green.
- Planned Route **C** — shows the currently traveled road and a list of all the maneuvers.
- Guide **D** — shows an enlarged, full-screen version of the next maneuver to be performed.

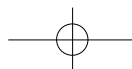
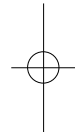
The footer on all three navigation screens will show:

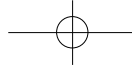
- GPS signal strength
- ETA — estimated time to arrival
- Distance to destination
- The current vehicle heading: N, NE, E, SE, S, SW, W, NW
- Direction to destination arrow

The Trip Data screen **E** provides comprehensive data about the trip in progress or the one most recently completed. It can be called up from the Guide **D** and Map **A** screens depending on whether or not a trip is active.

GPS signal strength indicator ➔

When the NAV ONE system is locked onto four or more satellites, it provides optimum performance and four green bars will show in the GPS signal indicator **1**. Three satellites provide a useable signal indicated by three yellow bars in the GPS signal indicator **2**. Two red bars in the GPS signal indicator **3** result from an insufficient GPS signal.





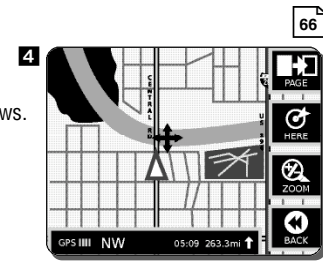
Useful tools

In addition to the three navigation and trip data screens, the NAV ONE system provides several features to allow adjustments and provide extra information:

- Pan function — allows scrolling the map and obtaining address information with the cross-arrows.
- Zoom function — zooms the map to see a larger area or more detail of a smaller area.
- Here function — provides the vehicle's current location.
- Voice function — initiates a voice prompt for navigation.
- Next maneuver — automatically provides the Guide screen as a maneuver is approached and during its execution.

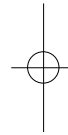
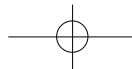
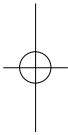
Pan function

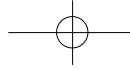
The pan function can be used in both the reference and navigation versions of the Map screens and . It allows shifting the current location away from the center of the map image as shown in Map screen . There is no icon for this function. It is activated by pressing the , , , and buttons at either map screen. The cross-arrows will appear as soon as panning is begun. When panning over the map, the street name beneath the cross-arrows will be displayed in the “system indicator” [black box at bottom of screen where the GPS signal strength and direction is displayed]. To obtain address information of that location, press the HERE function button.



NOTE
Map does not update
navigation during panning.

NOTE
As the map is scrolled, the
cross-arrows will remain at
the center of the screen.





Scroll map..... ➔ **To shift the map image at Map screen A or B:**

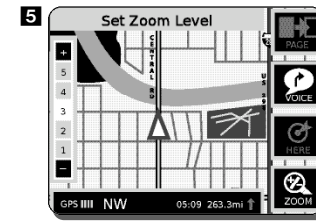
1. Press the ▲, ▼, ◀ and ▶ buttons to move the current location in the corresponding direction on the Map image. This will obscure some information at one edge and reveal additional information at the opposite one.

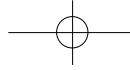
Zoom function.... ➔ The zoom function can also be used in both the reference and navigation versions of the Map screen A and B. It allows five levels of zoom ranging from a wide area (level 5) with reduced detail to a small area (level 1) with maximum available detail.

Change zoom setting... ➔ **To change the zoom setting at the Map screen A or B:**

1. Press the ZOOM function button to proceed to the Set Zoom Level menu 5.
2. Press the ▲ or ▼ button to move the highlight on the numbered zoom bar (at the left of the LCD) to the desired zoom level.

The display will show the corresponding zoom effect (5 shows widest area) and will return to the previous menu or screen three seconds after the last press of an ▲ or ▼ button.





Here function ➔ The here function provides the vehicle's current location in both the reference and navigation versions of the Map screen **A** or **B**, as well as from the Add to Address Book menu (see *Address book* section). It provides information in three forms:

- The current location as a street address (with the prior and next streets if navigating a trip).
- The current location as GPS data of latitude and longitude.
- The current location for naming and entry into the Address Book.

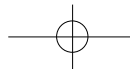
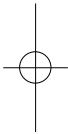


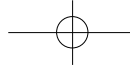
Street address ➔ **At the Map screen **A** or **B**:**




1. Press the HERE function button to proceed to the Current Location screen **H**.
The address will show on the LCD along with the prior and next trip streets.





GPS data ➔ **At the Map screen **A** or **B**:**

1. Press the HERE function button to proceed to the Current Location screen **H**.
2. Press the GPS function button to proceed to the Current Location screen **I**.
The GPS latitude and longitude will show numerically on the LCD.





Address book entry ➔ **At the  Map screen  or **:


1. Press the HERE function button to proceed to the  Current Location screen .
2. Press ENTER or the SAVE function button to proceed to the  Save or Edit Name menu .
3. Continue the process to name and enter the location in the address book as described at page 46 in the *Address book* section.

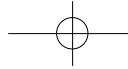
Voice function ➔ During navigation, voice prompts provide direction at each maneuver so that only a glance at the screen is needed while driving. The voice function generates an additional, interim voice report of navigation status at any time of the user's choosing while navigating a trip.

Navigation voice prompt ➔ A voice prompt of navigation status can be quickly gotten at any of the three navigation screen or the trip data screen at any time during a trip. At any of the screens:

1. Press the VOICE function button.
- The system will respond with a message such as, "In ten miles you will enter US-12 west."

NOTE

The voice function is not active unless a trip is in progress. A number of screens, such as the  Option menu on page 20 will appear with or without the voice icon depending on whether a trip is in progress. On some screens, the voice function will override another function when a trip is in progress.



Next maneuver

As a maneuver is approached, the system automatically provides voice prompts such as, "In two miles turn left." In addition, shortly before the maneuver is to be executed, the system will switch to the **Guide screen 6** to provide a visual supplement to the voice information. The screen will show the distance to the maneuver, the name of the road to be entered and a large highlighted arrow superimposed on the streets in the immediate area of the maneuver. As the vehicle progresses toward the point of maneuver, the countdown bar at the left of the LCD will shorten as shown on **Guide screens 6, 7 and 8**. When the maneuver is complete, the system will switch back to the previous navigation screen.

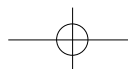
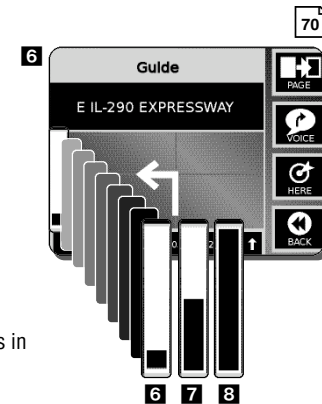
Map as reference

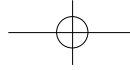
Map screen as reference resource

When navigation is not in progress, the **Map screen A** is reached from the **Main menu B**:
1. Press the MAP function button.

The LCD will show the map of the current location and surrounding area at whatever zoom level is in effect. There will not be a highlight arrow since no route is being navigated and the footer bar will show only the GPS signal status and the vehicle's heading.

At **Map screen A**, the pan, here and zoom functions will be available to increase its utility. The page function will show the **Trip Data screen C** with data for the most recently completed trip. See page 65 in this section for more information on the **Trip Data screen**.





Navigation using map screen

The Map screen is the entry point for navigation with the NAV ONE system and is reached from the Main menu , the Calculating a Route screen (see the *Route calculation* section) or the Navigation in Progress menu (see the *Start-up* section).

Navigation at map screen

The triangular vehicle icon will be at the center of the LCD, the trip route will be highlighted in light green and trip data will be shown in the footer bar on the LCD. The pan, voice, here and zoom utilities will be available and the other two navigation screens and the Trip Data screen can be reached using the page function.

As the vehicle progresses on a trip, the map will scroll under the triangular vehicle icon to show the immediate surroundings at the zoom level in effect at the time.

Navigation using planned route screen

The descriptive Planned Route screen can replace the graphic Map screen with a list of the maneuvers to be executed during the trip. It can be displayed at any time during a trip.

Navigation at planned route screen

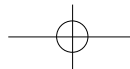
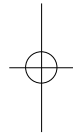
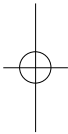
At the Map screen :

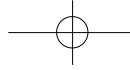
1. Press the PAGE function button to proceed to the Planned Route screen .

The currently traveled road and the next few maneuvers will be shown on the LCD. This is a continuous list from start to finish of the trip and can be scrolled at any time using the or buttons to preview or review the trip.

NOTE

This is the only navigation screen at which the edit function is available to develop a detour or change the current route.





Navigation using guide screen

The Guide screen **D** can replace the graphic Map screen **B** and the descriptive Planned Route **C** screen with enlarged detail of the next maneuver to be executed. It can be displayed at any time during a trip.

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Navigation at guide screen

At the Map screen **B**:

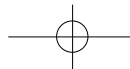
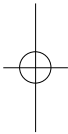
1. Press the PAGE function button to proceed to the Planned Route screen **C**.
2. Press the PAGE function button again to proceed to the Guide screen **D**.

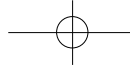
The next maneuver will be shown on the LCD and mileage from the current location will update continuously.

Trip data

The NAV ONE system keeps track of information about each trip and the Trip Data screen **E** can be viewed at any time to retrieve it for the current or most recent trip.

While at the Trip Data screen **E**, the PAGE function button will return the system directly to the Map screen **B** or **A**. The edit function allows users to select information to be displayed on the Trip Data screen and to reset data fields.





Trip data during navigation

The Trip Data screen can be displayed at any time during navigation to see information about the current trip. While trip data is displayed, navigation voice prompts and the Guide screens (see page 70) will be provided as each maneuver is approached.

At the Guide screen :

1. Press the PAGE function button to proceed to the Trip Data screen .

Trip data when not navigating a trip

The Trip Data screen can be displayed at any time navigation is not in progress to see the data for the most recently completed trip.

At the Map screen :

1. Press the PAGE function button to proceed to the Trip Data screen .

Trip data screen content

The Trip Data screen shows four data items at all times as well as two user selectable items.

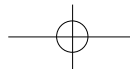
At the top of the screen is the vehicle heading. Below that are two large dials that show current speed on the left and current time on the right. Between the lower portions of the dials, the total mileage for the trip is shown.

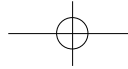
NOTE

When no trip is active, the voice function is not available from the Trip Data screen .

NOTE

The current time is shown as Universal Coordinated Time unless the user has entered the local hour offset using the set clock procedure at page 25 of the *Setting operating preferences* section.





At the bottom of the screen are two fields that can display any two data items of the user's choice.

- Average speed
- Maximum speed
- Total trip time
- Stopped time
- Drive time
- Digital clock
- Trip odometer
- Odometer
- ETA — Estimated time to arrival

Select two data items to be displayed

At the **Trip Data** screen:

1. Press the EDIT function button to proceed to the **Trip Data** menu.
2. Press the **◀** or **▶** buttons to choose one of the two fields for data item selection and press ENTER.
3. At the **Edit Data Field** menu, scroll **▲** or **▼** to the data item that is desired to appear in the selected field and press ENTER.

The choice will be confirmed and the system will return to the **Trip Data** screen.

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Select route criteria

➔ At the **Select Route Criteria** menu **A**:

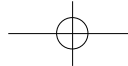
1. Scroll ▲ or ▼ to each of the three options and make a selection.
2. Press the ◀ or ▶ button to toggle each option to the desired selection.
 - Route by shortest — distance or time.
 - Use freeways? — yes or no.
 - Use toll roads? — yes or no.
3. Press ENTER or the GO function button to proceed to the **Calculating a Route** screen **B**.

NOTE

If all criteria are as desired, go straight to the **Calculating a Route** screen **B** by pressing ENTER or the GO function button.

NOTE

The **Select Route Criteria** menu **A** will open with the choices from the most recent trip selected.



Route calculation

Calculating a route

The Calculating a Route screen indicates that the NAV ONE has begun the process of developing the route to be navigated. During calculation, the indicator bar at the top of the screen will extend from left to right to show its progress and completion as shown on the Calculating a Route screens and .

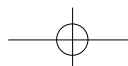
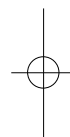
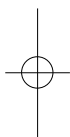
Proceed to route guidance

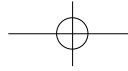
After the route has been completely developed, the system will automatically proceed from the Calculating a Route screen to the Map screen with the route highlighted by a light green line on the map. The voice prompt will say, "Please proceed to the highlighted route." The *Route guidance* section takes up from there.

Stop calculation

Route calculation can be stopped during its progress by pressing the STOP function button to proceed to the Select Routing Method menu , where three choices are available:

- Recalculate the route.
- Select different route criteria.
- Cancel route calculation.





Recalculate the route **F** When route calculation is stopped, it can be restarted from the **F** Select Routing Method menu **F**.

1. Scroll ▲ or ▼ to [Recalculate] and press ENTER to return to the **F** Calculating a Route screen **F**.

Select different route criteria **F** When route calculation is stopped, the route criteria can be changed from the **F** Select Routing Method menu **F**.

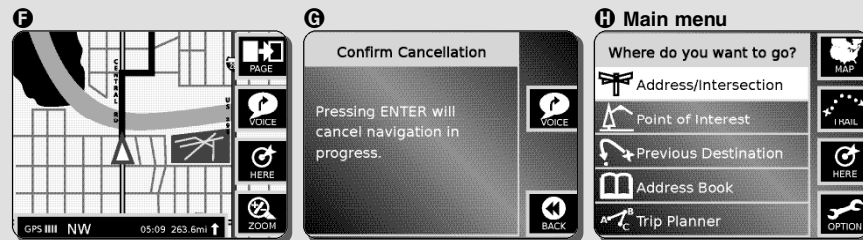
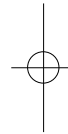
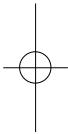
1. Scroll ▲ or ▼ to [Route Criteria] and press ENTER to return to the **F** Select Route Criteria menu **F**.

Cancel route calculation **F** When route calculation is stopped, route calculation can be cancelled entirely from the **F** Select Routing Method menu **F**.

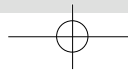
1. Scroll ▲ or ▼ to [Cancel] and press ENTER.
2. At the **F** Confirm Cancellation screen **F**, press ENTER.
The cancellation will be confirmed and the system will proceed to the **F** Main menu **F**.

NOTE

Destination information entered before route calculation was cancelled will be retained in the data fields of the **F** Main menu **F** to permit rapid changes by selective editing.

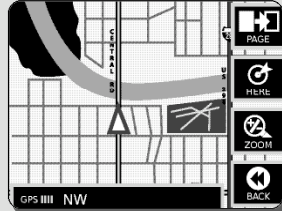


Part III — Operating the System: Destination selection and programming

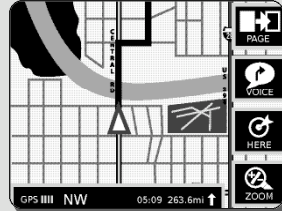


Route guidance, Navigation and Trip data

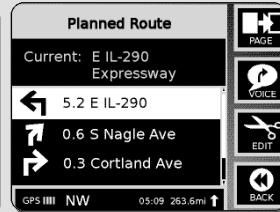
A See note A1



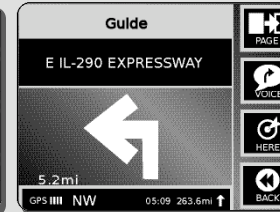
B See note A2



C



D



E




NOTE

- A1.** Map when no trip is active. Has no route highlight and no trip data in screen footer.
- A2.** Map when a trip is active. Includes route highlight and trip data in screen footer.

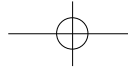
NOTE

- B1.** If MENU is pressed when no trip is active, trail mode is available and MAP function button brings up **A**.
- B2.** If MENU is pressed when a trip is active, voice function is available and map function brings up **B**.

Route guidance

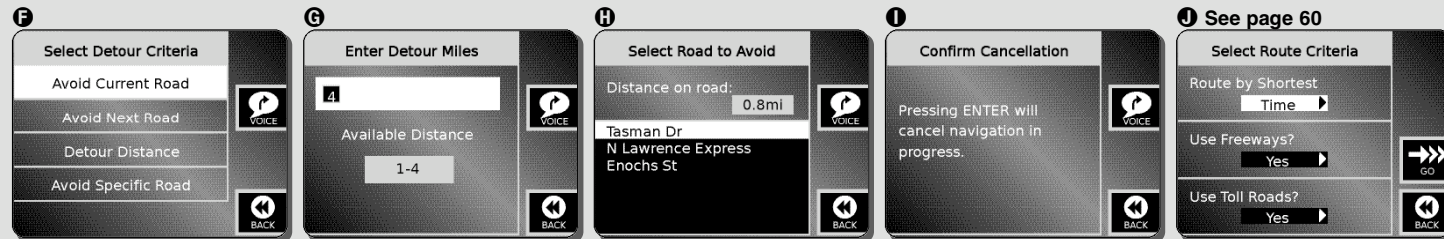
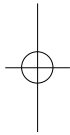
When no trip is in progress, the  Map screen **A** can be viewed as one might refer to an atlas. Or, it can be used to determine the vehicle's current location.

Once a destination is chosen and a route is calculated, the NAV ONE system is ready to provide guidance to navigate the trip from the starting voice prompt, "Please proceed to the highlighted route," until the final announcement, "Arrived at destination."

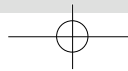


**Resume or ↻
discontinue from off**

Whether or not navigation was in progress when it was turned off, the NAV ONE system displays the start-up screens when the system is turned back on. If a trip was interrupted, the Continue route guidance menu **2** will show the destination on the LCD when ENTER is pressed at the PLEASE DRIVE SAFELY screen **3** after the system is turned back on. See the *Start-up* section for information about start-up and instructions on resuming or discontinuing a trip at the Continue route guidance menu **2**.

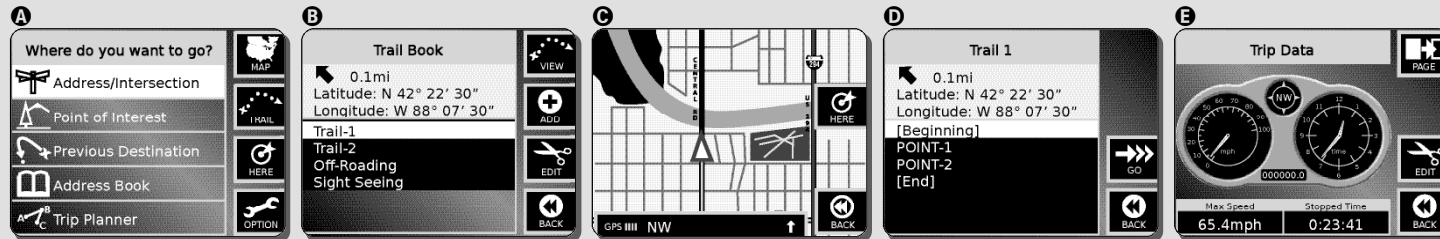


Part III - Operating the System: Off route events



Trail mode

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Trail mode

This feature can be used on or off the road to record vehicle movements. Instead of guiding the vehicle on a route calculated in advance, it captures the route actually taken. Once a trail is recorded and saved in the trail book, it can be used to retrace the route or to repeat it in the future.

As a trail is recorded, the system generates automatic points (similar to dropping bread crumbs) at turns between straight-line segments and every 60 feet on curved segments. Users can also generate and name waypoints along the way. System resources can store about 30 trails with 50 waypoints per trail. Recording long or complex trails will reduce the resources available for accepting additional trails.

Enter trail mode

At the Main menu **A**:

- Press the TRAIL function button to proceed to the Trail Book menu **B** where four options are available:
 - View an existing trail on the map
 - Navigate a trail already in the trail book
 - Add a trail to the trail book
 - Edit an existing trail

IN THIS MANUAL

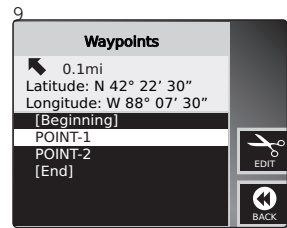
These trail procedures use Trail 1 as an example. In actual use of the NAV ONE, menus and screens will be titled with user selected names.

Change a ➔ waypoint name

At the **Trail 1** menu **J**:

1. Scroll **▲** or **▼** to [Edit Waypoint] and press ENTER.
2. At the **Waypoints** menu **9**, scroll **▲** or **▼** to the waypoint to be renamed and press the EDIT function button.
3. At the **Edit Waypoint Entry** menu **a0**, press the CLEAR function button to clear the current name.
4. Enter the name of choice using spell mode and press ENTER.

The name will be saved and the system will return to **Waypoints** menu **9**.

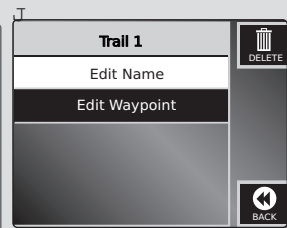
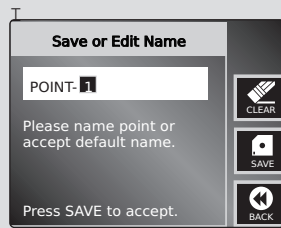
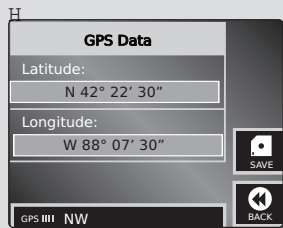
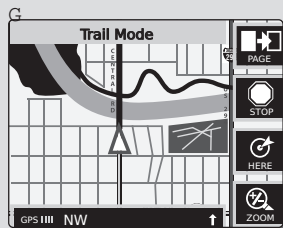
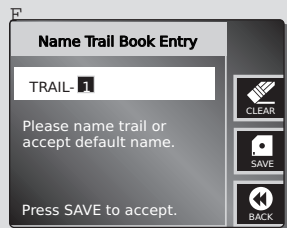
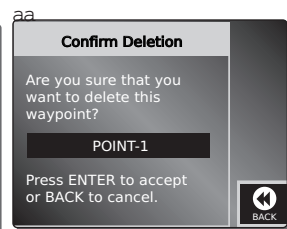
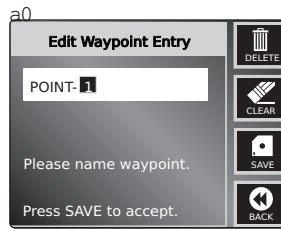


Delete a waypoint ➔

At the **Trail 1** menu **J**:

1. Scroll **▲** or **▼** to [Edit Waypoint] and press ENTER.
2. At the **Waypoints** menu **9**, scroll **▲** or **▼** to the waypoint to be deleted and press the EDIT function button.
3. At the **Edit Waypoint Entry** menu **a0**, press the DELETE function button.
4. At the **Confirm Deletion** screen **aa**, press ENTER.

The deletion will be confirmed and the system will return to the **Waypoints** menu **9**.



Appendix A — Function buttons icons and Option choices

Function button icons →

The functions available at various points during use of the NAV ONE system are represented by icons to make them easy to recognize.



Adds an address, trip plan or trail to memory.



Toggles destination selection from intersection to street address.



Returns to previous menu or screen without adding or saving data.



Clears data from the active field.




Enables user to set the hour offset from Universal Coordinated Time (UTC) on the system clock.



Removes user-entered data from memory, such as deleting an address book entry or deleting a trail from the trail book.





Provides detailed information on the coverage of a region highlighted on the  Map Regions menu. NAV ONE 2000 only.



Changes user entered data in memory, such as changing the name of an address book entry or the name of a destination on a trip.



Displays the  Select Route Criteria menu after destination selection. In trail mode, displays  Map screen for navigation.




Enables users to find which region or regions contain detailed information on a city, state or zip code. NAV ONE 2000 only.







Displays the  Map screen.



Displays the  Option menu shown at the top of page 20.



Switches navigation display from  Map to  Planned Route to  Guide to  Trip Data screens. In trail mode to  Trip Data screen only.



Resets trip data field(s) to zero.



Saves data to memory and returns to previous menu or screen, such as saving changes to the preferences (options) or saving the current location as an address book entry.



Sets the user entered hour offset from UTC in system memory.



Toggles data entry from list mode to spell mode.



Enables selection of a destination state to make searching the system database quicker.



Displays the latitude and longitude of the current location.



Displays current location as address or intersection. In trail mode, displays current location as GPS data.



Toggles destination selection from street address to intersection.



Displays the language selection menu.



Toggles data entry from spell mode to list mode.



Halts route calculation. In trail mode, defines the end of the trail being added.



Displays Trail Book menu.



Displays the Map screen with either trip route or trail points shown.



Initiates a navigation voice prompt.



Displays the map scale adjustment screen.

Option choices ➔ Preference menu

The NAV ONE system can be customized to the user's preferences. Default values are shown on the Preferences menu; available choices are shown in the table of options to the right of the menu.

NOTE

If the desired option cannot be seen:

1. Scroll ▲ or ▼ until it comes on the screen.

Preferences	Options
Volume	0 (off – no sound)
- 0 1 2 3 4 5 6 7 8 +	1 – 8 (softest to loudest)
Zoom Level	
- 1 2 3 4 5 +	1 – 5 (smallest to largest area)
Map View	Heading up or north up
Heading Up >	On or off
Auto Reroute	Auto, day or night
On >	Mile, mile/yd, km or km/m
Color Scheme	On or off
Auto >	On or off
Units	On or off
Mile >	On or off
Smart Power	
On >	
Key Click	
On >	

LCD color scheme

Map detail item	Day	Night
Airports	Light brown	Light brown
Arteries	Light gray	Light gray
Background	White	Black
Expressways	Orange	Orange
Freeways/interstates	Red	Red
Parks/golf courses/national forests	Green	Green
Railroads	Yellow	Yellow
Rivers	Blue	Blue
Route	Light green	Light green
Streets	Dark gray	Light gray
Street names	Dark gray	White
Vehicle icon	White and magenta triangle	

Appendix B — Point of interest categories

Point of interest categories ➔ The point of interest (POI) categories included in the NAV ONE system include the following:

- Airport
- Amusement Park
- ATM
- Auto Dealership
- Auto Service & Maintenance
- Automobile Club
- Bank
- Bus Station
- Business Facility
- Casino
- City Center
- City Hall
- Civic/Community Center
- Commuter Rail Station
- Convention/Exhibition Cen
- Court House
- Ferry Terminal
- Gasoline Station
- Golf Course
- Grocery Store
- Higher Education
- Historical Monument
- Hospital
- Hotel
- Library
- Marina
- Motorcycle Dealership
- Museum
- Park/Recreation Area
- Park & Ride
- Parking Garage
- Parking Lot
- Performing Arts
- Police Station
- Rental Car Agency
- Rest Area
- Restaurant
- School
- Shopping
- Ski Resort
- Sports Complex
- Tourist Attraction
- Tourist Information
- Train Station
- Winery

Appendix C — GPS system characteristics and operation

GPS basics..... ➔ The Global Positioning System (GPS) is a space-based radionavigation system. It consists of 24 satellites (which orbit the Earth at an altitude of approximately 11,000 miles) and ground stations. GPS provides users with accurate information on position, velocity and time. This is available anywhere in the world and in most weather conditions.

GPS was initiated by The United States Department of Defense in 1973 to reduce the proliferation of navigation aids. By creating a robust system that overcame the limitations of many previously existing navigation systems, GPS became attractive to a broader spectrum of users. GPS has been successful in classic applications such as aviation and marine navigation since it was first developed. Since then, it has become useful for a wide range of people because its capabilities are accessible using small, affordable equipment.

How GPS works..... ➔ The GPS satellite network transmits radio signals to earth from high earth orbit. GPS service provides users with extremely accurate positioning information anywhere on or near the surface of the earth. To accomplish this, each of the 24 satellites emits signals to receivers below. GPS determines location by computing the difference between the time that a signal is sent and the time it is received. GPS satellites carry atomic clocks that provide extremely accurate time information. The time information is placed in the codes broadcast by the satellite so that a receiver can continuously determine the time the signal was broadcast. The signal contains data that the NAV ONE system uses to compute the locations of the satellites and to make other adjustments needed for accurate positioning. The NAV ONE system uses the time difference between the time of signal reception and the broadcast time to compute the distance from the receiver to the satellite. With information about the distance to four satellites and the location of each satellite when the signal was sent, the NAV ONE system can compute its own position: latitude and longitude.

Appendix D — NAV ONE system specifications

Physical specifications



Unit dimensions

4.73" H x 7.91" W x 2.28" D
(201 mm x 120 mm x 65 mm)

Unit weight

1 lb., 8.96 oz. (710 g)

Display size

5.2" (132 mm) Diagonal

Display resolution

320 x 240 pixel
STN Color Display

Keypad

Back-lit

Power

12-volt DC vehicle
Power Adapter included

Usage 1.2A max
Fuse 3A

Antenna

Built-in Patch (Optional)
External Antenna Available)

Temperature range

Operation -15°C to +60°C (5°F to 140°F)
Storage -30°C to +80°C (-22°F to 176°F)

Map storage

Automotive-Grade Hard Disk Drive

Performance



Receiver

12 Parallel Channels for tracking up to 12 satellites

Acquisition times

Approximately
(hot) 8 sec.
(warm) 38 sec.
(cold) 45 sec.
using i.A.S.A.P Technology

Update rate

1/second, continuous

GPS accuracy

Position 10 meters, 2D RMS
Velocity 0.1 m/sec.

Dynamics

4g

Interface

USB 2.0

Maintenance and service

- Maintenance** ➔ Very little maintenance is required to keep this NAV ONE system in good operating condition.
- Keep the unit components clean by wiping with a soft cloth slightly moistened with lens cleaner or isopropyl alcohol. Do not use solvents or harsh or abrasive cleaners, which could damage the case or scratch the LCD.
 - Protect the unit from moisture and from being dropped or struck by hard objects to prevent damage. Do not apply pressure to the LCD screen.
 - Consult the Cobra web site (www.cobra.com) for the latest software and database versions and compare them to those stored in your unit to determine if updating is needed. Software and information updates are also available in DVD ROM format and can be purchased as accessories. NAV ONE needs to be connected to a computer running a Windows 98 or higher operating system with a DVD drive using a USB-2.0 cable to install the updates.

Troubleshooting ... ➔

Problem	Possible cause(s)	Solution(s)
Display does not power up.	Power switch is turned off.	Turn the unit on with the button on the left side of the unit.
	Brightness and contrast are turned completely down.	Use the controls on the right side of the unit to adjust the display until it is comfortable to view.
	Fuse in unit cigarette lighter adapter is blown.	Unscrew the adapter tip and inspect the fuse. Replace fuse if blown.
	No voltage is present at cigarette lighter or other power point.	Troubleshoot vehicle wiring. NOTE for some powerpoints, ignition key must be at RUN for the point to be energized.
GPS indicator will not turn green.	GPS antenna cannot "see" the sky.	Move vehicle to open area and make sure the GPS antenna has a clear view of the sky.
Push buttons on front of unit do not work.	Power switch is turned off.	Turn the unit on with the button on the left side of the unit.
Vehicle icon or map does not move after driving some distance.	GPS is not working properly.	Is GPS signal indicator green? If yes, go to next step. If no, go to "GPS indicator will not turn green" step.
	Geographic area is not fully mapped.	Drive to a main road. If the map shows the road, the system is working properly, but the area is not fully mapped.

Maintenance and service

Product service ... ➔ **For any questions about operating or installing this new Cobra product, or if parts are missing... Please call Cobra first! DO NOT RETURN THIS PRODUCT TO THE STORE! See Customer Assistance on the inside back cover.**

If this product should require factory service, please call Cobra first before sending the product. This will ensure the fastest turn-around time on any repair. If Cobra asks that the product be sent to its factory, it will be necessary to furnish the following to have the product serviced and returned:

1. For Warranty Repair include some form of proof-of-purchase, such as a mechanical reproduction or carbon of a sales receipt. If the original receipt is sent, it cannot be returned;
2. Send the entire product;
3. Enclose a description of what is happening with the product. Include a typed or clearly printed name and address of where the product is to be returned;
4. Pack the product securely to prevent damage in transit. If possible, use the original packing material;
5. Ship prepaid and insured by way of a traceable carrier such as United Parcel Service (UPS) or Priority Mail to avoid loss in transit to:
Cobra Factory Service
Cobra Electronics Corporation
6500 West Cortland Street
Chicago, Illinois 60707 U.S.A.
6. If the product is in warranty, upon receipt of the product, it will either be repaired or exchanged depending on the model. Please allow approximately 3 – 4 weeks before contacting Cobra for status. If the product is out of warranty, a letter will automatically be sent with information as to the repair charge or replacement charge.

For any questions, please call 773-889-3087 for assistance.

Customer assistance, Non-English manuals and Trademark acknowledgement

Customer assistance

Cobra Electronics Corporation reserves the right to change or improve information in this manual without notice. Please visit www.cobra.com for updates or questions.

- Should you encounter any problems with this product, or not understand its many features, please refer to this owner's manual. If you require further assistance after reading this manual, Cobra Electronics offers the following customer assistance services:

For assistance in the U.S.A.

- **Automated help desk** (English only) 24 hours a day, 7 days a week at 773-889-3087 (phone).
- **Customer assistance operators** (English and Spanish) 8:00 a.m. to 6:00 p.m. C.S.T. Mon. through Fri. (except holidays) at 773-889-3087 (phone).
- **Questions** (English and Spanish) Faxes can be received at 773-622-2269 (fax).
- **Technical assistance** (English only) www.cobra.com (on-line: Frequently Asked Questions).
- **Technical assistance** (English and Spanish) productinfo@cobra.com (e-mail).

For assistance outside the U.S.A.

- **Contact your local dealer**

Non-English manuals

- This NAV ONE system is equipped to communicate in the language of your choice: English, French or Spanish, (see *Language choices*, page 22).

For operating instructions in French or Spanish, please visit www.cobra.com/GPS-manuals.html.

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Cobra encourages customers to report any errors found in our electronic maps by contacting technical assistance (available in English and Spanish) at productinfo@cobra.com (e-mail), by visiting our website: www.cobra.com, or by calling customer assistance (available in English and Spanish) at 773-889-3087 between 8:00 a.m. and 6:00 p.m. C.S.T. Monday through Friday (except holidays).

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Warranty ➔ **Cobra Electronics Corporation** warrants that its Cobra NAV ONE, and the component parts thereof, will be free of defects in workmanship and materials for a period of one (1) year from the date of first consumer purchase. This warranty may be enforced by the first consumer purchaser, provided that the product is utilized within the U.S.A.

Caution: Cobra makes no warranty as to the accuracy or completeness of the map data in the NAV ONE and disclaims any and all express, implied or statutory warranties, including any implied warranty of merchantability or fitness for a particular purpose. It is the user's responsibility to use this product prudently. This product is intended to be used only as a travel aid and must not be used for any purpose requiring precise measurement of direction, distance, location or topography.

Cobra will, without charge, repair or replace, at its option, defective NAV ONE products or component parts upon delivery to the Cobra Factory Service Department, accompanied by proof of the date of first consumer purchase, such as a duplicated copy of a sales receipt. The consumer must pay any initial shipping charges required to ship the product for warranty service, but the return charges will be at Cobra's expense, if the product is repaired or replaced under warranty.

This warranty gives the consumer specific rights, and he or she may also have other rights which vary from state to state.

Exclusions: This limited warranty does not apply: 1) to any product damaged by accident; 2) in the event of misuse or abuse of the product or as a result of unauthorized alterations or repairs; 3) if the serial number has been altered, defaced or removed; 4) if the owner of the product resides outside the U.S.A.

All implied warranties, including warranties of merchantability and fitness for a particular purpose are limited in duration to the length of this warranty.

Cobra shall not be liable for any incidental, consequential or other damages; including, without limitation, damages resulting from loss of use or cost of installation.

Some states do not allow limitations on how long an implied warranty lasts and/or do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations may not apply to some consumers.

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Optional Accessories

Optional accessories

To order by phone

Call 773-889-3087

(Press 1 from the main menu)

8:00 a.m. - 6:00 p.m. Central Time

Mon. through Fri.

(except holidays)

To order by mail or fax

Call 773-889-3087 for pricing.

Please fill out order form and mail/fax directly to Cobra.

Fax: 773-622-2269

Make check or money order payable to:

Cobra Electronics Corporation

6500 West Cortland Street

Chicago, Illinois 60707 U.S.A.

Attn: Accessories Department

To order online

Please visit our website at:

www.cobra.com.

Optional mounting brackets

➔ These accessories are available for both the 3000 and 2000 models from a local Cobra dealer* or directly from Cobra*. Information on accessories specific to the 2000 model is contained in the NAV ONE 2000 Regional Maps booklet.



120V AC power supply for trip plan programming in-house



Carrying case



External antenna allows GPS signal reception in heavily shielded vehicles and those with heated or metallic coated windshields.

**The Map Update is available only by download from www.cobra.com or on DVD by telephone to Cobra's consumer response group at 773-889-3087.*

➔ Additional mounting bracket options, that may be more suited to your vehicle, are available at www.cobra.com.

Accessories Order Info

Ordering From U.S.A.

Call 773-889-3087 for pricing or visit www.cobra.com.

For Credit Card Orders

Call 773-889-3087 [Press one from the main menu] 8:00 a.m. to 6:00 p.m. Central Time, Monday through Friday.

Make Check or Money Order Payable To

Cobra Electronics, Attn: Accessories Dept.,
6500 West Cortland Street, Chicago, IL 60707 U.S.A.

To Order Online

Please visit our website: www.cobra.com

Item #	Description
MNA-UPD3000	NAV ONE 3000 map update *(For SKY NAV 2000 see <i>SKY NAV 2000 Regional Maps Booklet</i>)
MNA-120 AC	120V AC adapter
MNA-2300 AC	Carrying case
MNA-2300 EXT	External antenna
MNA-2300 USB	USB cable
MNA-2300 UPGKIT	Upgrade kit (with AC adapter and USB cable)

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Part IV — Helpful Information: Accessories Order Info

Nothing comes close to a Cobra®



The Cobra line of quality products includes:

CB Radios

microTALK® Radios

Radar/Laser Detectors

Safety Alert® Traffic Warning Systems

Handheld GPS Receivers

Mobile GPS Navigation Systems

HighGear® Accessories

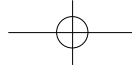
CobraMarine™ VHF Radios

Power Inverters

Accessories

For more information or to
order any of our products,
please visit our website:

www.cobra.com



Utilities ➔ While on or viewing a trail, the here and zoom functions are available on the map as described in the *Useful tools* discussion on page 66. In addition, the system treats a trail as a trip relative to the page function. With it, the Trip Data screen can be used to see trail data from the Trail Mode screen as described in the *Trip data screen* discussion on page 72.

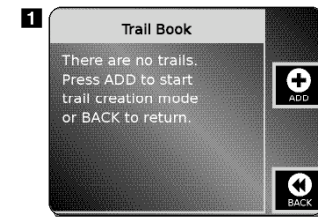
Trail and waypoint names ➔ The system will apply default names to both trails and waypoints — Trail 1, Trail 2, Trail 3 and Point 1, Point 2, Point 3 and so on. User-defined names of up to ten characters can be substituted for the default names either as the trails and waypoints are generated or at any later time. However, the system named points [Beginning] and [End] cannot be changed.

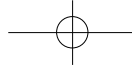
View a trail on the map ➔ **At the Trail Book menu** :

1. Scroll or to the name of the trail to be viewed and press the VIEW function button and the Map screen will show the selected trail highlighted in magenta.

NOTE

If the trail book is empty, the system will display the Trail Book screen with the option to start a trail or return to the Main menu .





Navigate an existing trail

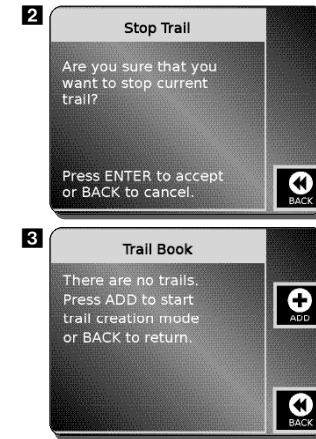
- At the **Trail Book menu**:
1. Scroll **▲** or **▼** to the name of the trail to be navigated and press ENTER.
 2. At the **Trail 1 screen** scroll **▲** or **▼** to the trail waypoint from which to start navigation and press ENTER or the GO function button.
 3. At the **Trail Mode screen**, navigate the magenta highlighted trail. The selected waypoint will be highlighted in yellow.
 4. When finished navigating the trail, press MENU or the EDIT function button. The system will return to the **Main menu**.

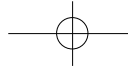
NOTE
Selecting [End] as the starting point for navigating the trail will allow retracement of the trail to the beginning.

Add a trail to the trail book

- At the **Trail Book menu** or the **Trail Book screen**:
1. Press the ADD function button to proceed to the **Name Trail Book Entry screen**. The NAV ONE will automatically enter the "Beginning" point and start recording the trail with system points (dropping bread crumbs) immediately after the ADD function button is pressed.

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Name the new trail ➔ **At the Name Trail Book Entry menu** :

- The default name can be accepted.
- A user-defined name can be entered.

Accept default name ➔ **At the Name Trail Book Entry menu** :

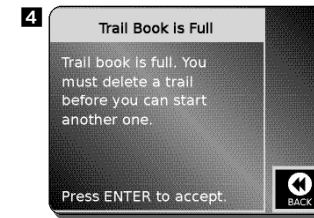
1. Press ENTER or the SAVE function button to accept the default name and proceed to the Trail Mode screen .

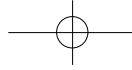
Enter a user-defined name ➔ **At the Name Trail Book Entry menu** :

1. Press the CLEAR function button to clear the default name.
2. Enter the name of choice using spell mode and press ENTER or the SAVE function button. The name will be saved and the system will proceed to the Trail Mode screen .

Drive the trail ➔ Following activation by pressing of the ADD function button, the system will record the path traversed by the vehicle and the waypoints added until the user chooses to end the trail. The Trail Mode screen will show progress on the map.

NOTE
If the trail book is already full, the system will show the Trail Book is Full screen .





Add waypoints to the trail

- ➔ **At any place on the trail, while at the Trail Mode screen ⑥:**
1. Press the HERE function button to proceed to the GPS Data screen ①.
 2. Press the SAVE function button to proceed to the Save or Edit Name menu ①.

Name the waypoint

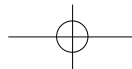
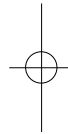
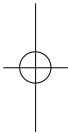
- ➔ **At the Save or Edit Name menu ①:**
- The default name can be accepted.
 - A user-defined name can be entered.

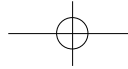
- ➔ **Accept the default name**
- ➔ **At the Save or Edit Name menu ①:**
1. Press ENTER or the SAVE function button to accept the default name and return to the Trail Mode screen ⑥.





- ➔ **Enter a user-defined name**
- ➔ **At the Save or Edit Name menu ①:**
1. Press the CLEAR function button to clear the default name.
 2. Enter the name of choice using spell mode and press ENTER or the SAVE function button.
- The name will be saved and the system will return to the Trail Mode screen ⑥.

➔ **NOTE**






An attempt to enter more than 50 waypoints will result in the Trail Memory is Full screen 5 rather than the Save or Edit Name menu ① when the SAVE function button is pressed.

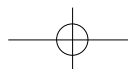










- End trail recording** ➔ **When the end of the trail is reached, while at the  Trail Mode screen **:
1. Press the STOP function button to proceed to the  Stop Trail screen **6**.
 2. Press ENTER to confirm the stop and return to the  Main menu **A**.
- The system will automatically insert the [End] point on the trail.








- Edit an existing trail or waypoint** ➔ **At the  Trail Book menu **:
1. Scroll  or  to the name of the trail to be edited and press the EDIT function button.
At the  Trail 1 screen **1** the user can:
 - Change a trail name
 - Delete a trail entirely
 - Change a waypoint name
 - Delete a waypoint from the trail




Change a trail name ➔ **At the  Trail 1 menu .**


1. Scroll  or  to [Edit Name] and press ENTER.
2. At the  Name Trail menu **7**, press the CLEAR function button to clear the current name.
3. Enter the name of choice using spell mode and press ENTER or the SAVE function button. The name will be saved and the system will return to  Trail Book menu **6**.

Delete a trail ➔ **At the  Trail 1 menu .**

1. Scroll  or  to [Edit Name] and press the DELETE function button.
2. At the  Confirm Deletion screen **8**, press ENTER.

The deletion will be confirmed and will return to the  Trail Book menu **6**.

NOTE

The DELETE function button is also available at the  Name Trail menu **7** and works to delete the trail from there as well.

