KENWOOD

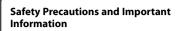
GPS NAVIGATION SYSTEM

DNX5120 DNX512EX

GPS NAVIGATION INSTRUCTION MANUAL

Kenwood Corporation

Contents



Getting Started	9
First Time Setup	9

Find It and Go!	10
Finding a Restaurant	10
Following Your Route	11

Where To?	12
Finding an Address	12
Finding a Place Using the Map	12
Understanding the Information Page	13
Finding Recently Found Places	13
Finding Places in a Different Area	13
Narrowing Your Search	13

My Locations	14
Saving Places You Find	14
Saving Your Current Location	14
Setting a Home Location	14
Finding Saved Places	15
Editing Saved Places	15
Deleting a Saved Place	15

The Map and Other Tools	16
Viewing the Map Page	16
Trip Computer	16
Turn List	17
GPS Info Page	17

Creating and Editing Routes	18
Creating a New Saved Route	18
Editing a Saved Route	18
Adding an Intermediate Destination Point to Your Route	18
Saving the Active Route	18
Navigating a Saved Route	18
Recalculating the Route	18
Deleting All Saved Routes	19
Stopping Your Route	19
Adding a Detour to a Route	19
Adding Avoidances	19

Using the Logs	20
Adjusting the Track Log	20
Using the Mileage Logs	20

Traffic Information	21
Connecting the Traffic Module	21
Viewing Traffic Events	21
Avoiding Traffic	21
Traffic Symbols	22
Changing the Traffic Settings	22
Adding a Traffic Receiver Subscription	22

Changing the Settings	24
Changing the General Settings	24
Changing the Map Settings	25
Changing the Navigation Settings	26
Adjusting the Traffic Settings	26
Viewing Information (About)	26
Restoring the Settings	26

Appendix	27
Using the Remote Control	27
Updating the Software	27
Updating the Map Data	27
Clearing All User Data	27
Custom POIs (Points of Interest)	27

Icons used in this manual



Important precautions are described to prevent injuries etc.



Special instructions, supplementary explanations, limitations, and reference pages are described.

Safety Precautions and Important Information

Read this information carefully before starting to operate the Kenwood Car Navigation System and follow the instructions in this manual. Neither Kenwood nor Garmin shall be liable for problems or accidents resulting from failure to observe the instructions in this manual.

AWARNINGS

To prevent injury or fire, take the following precautions:

- To prevent a short circuit, never put or leave any metallic objects (such as coins or metal tools) inside the unit
- Do not watch or fix your eyes on the unit's display when you are driving for any extended period.
- Mounting and wiring this product requires skills and experience. For safety's sake, leave the mounting and wiring work to professionals.

Failure to avoid the following potentially hazardous situations could result in an accident or collision resulting in death or serious injury.

When navigating, carefully compare information displayed on the navigation system to all available navigation sources, including information from street signs, visual sightings, and maps. For safety, always resolve any discrepancies or questions before continuing navigation.

Always operate the vehicle in a safe manner. Do not become distracted by the navigation system while driving, and always be fully aware of all driving conditions. Minimize the amount of time spent viewing the screen of the navigation system while driving, and use voice prompts when possible. Do not enter destinations, change settings, or access any functions requiring prolonged use of the navigation system controls while driving. Stop your vehicle in a safe and legal manner before attempting such operations.

Keep the system volume at a low enough level to be able to hear outside noises while driving. If you can no longer hear outside noises, you may be unable to react adequately to the traffic situation. This may cause accidents.

The navigation system will not display the correct current position of the vehicle the first time it is used after purchase, or if the vehicle battery is disconnected. GPS satellite signals will soon be received, however, and the correct position will be displayed.

Be careful of the ambient temperature. Using the navigation system at extreme temperatures can lead to malfunction or damage. Also note that the unit can be damaged by strong vibration, by metal objects, or by water getting inside the unit.

ACAUTIONS

Failure to avoid the following potentially hazardous situations may result in injury or property damage.

The navigation system is designed to provide you with route suggestions. It does not reflect road closures or road conditions, traffic congestion, weather conditions, or other factors that may affect safety or timing while driving.

Use the navigation system only as a navigational aid. Do not attempt to use the navigation system for any purpose requiring precise measurement of direction, distance, location, or topography.

The Global Positioning System (GPS) is operated by the United States government, which is solely responsible for its accuracy and maintenance. The government system is subject to changes that could affect the accuracy and performance of all GPS equipment, including the navigation system. Although the navigation system is a precision navigation device, any navigation device can be misused or misinterpreted and, therefore, become unsafe.

IMPORTANT INFORMATION

Vehicle Battery Preservation

This navigation system can be used when the ignition key is turned to ON or ACC. To preserve the battery, however, it should be used with the engine running whenever possible. Using the navigation system for a long time with the engine switched off can cause the battery to run down.

Map Data Information

One of the goals of Garmin is to provide customers with the most complete and accurate cartography that is available to us at a reasonable cost. We use a combination of governmental and private data sources, which we identify in product literature and copyright messages displayed to the consumer. Virtually all data sources contain inaccurate or incomplete data to some extent. In some countries, complete and accurate map information is either not available or is prohibitively expensive.

Software License Agreement

BY USING THE DNX5120/DNX512EX YOU AGREE TO BE BOUND BY THE TERMS AND CONDITIONS OF THE FOLLOWING SOFTWARE LICENSE AGREEMENT. PLEASE READ THIS AGREEMENT CAREFULLY

Garmin grants you a limited license to use the software embedded in this device (the "Software") in binary executable form in the normal operation of the product. Title, ownership rights, and intellectual property rights in and to the Software remain in Garmin.

You acknowledge that the Software is the property of Garmin and is protected under the United States of America copyright laws and international copyright treaties. You further acknowledge that the structure, organization, and code of the Software are valuable trade secrets of Garmin and that the Software in source code form remains a valuable trade secret of Garmin, You agree not to decompile, disassemble, modify, reverse assemble, reverse engineer, or reduce to human readable form the Software or any part thereof or create any derivative works based on the Software. You agree not to export or re-export the Software to any country in violation of the export control laws of the United States of America

NAVTEQ® End-user License Agreement

The software embedded in your Garmin product (the "Software") is owned by Garmin Ltd. or its subsidiaries ("Garmin"). The third-party map data embedded in or accompanying your Garmin product (the "Data") is owned by NAVTEQ North America LLC and is licensed to Garmin. Both the Software and Data are protected under copyright laws and international copyright treaties. The Software and Data are licensed, not sold. The Software and Data are provided under the following license and are subject to the following terms and conditions which are agreed to by End User ("you" or "your"), on the one hand, and Garmin and its licensors (including their licensors and suppliers) and affiliated companies on the other hand.

IMPORTANT: CAREFULLY READ THIS LICENSE BEFORE USING THIS PRODUCT. INSTALLING, COPYING, OR OTHERWISE USING THIS PRODUCT INDICATES YOUR ACKNOWLEDGMENT THAT YOU HAVE READ THIS LICENSE AND AGREE TO ITS TERMS, IF YOU DO NOT AGREE, RETURN THE COMPLETE PRODUCT WITHIN 10 DAYS OF THE DATE YOU ACQUIRED IT (IF PURCHASED NEW) FOR A FULL REFUND TO ONE OF THE FOLLOWING: (1) THE DEALER FROM WHICH YOU PURCHASED THIS PRODUCT; (2) Garmin INTERNATIONAL, INC. CUSTOMER SERVICE, 1200 EAST 151st STREET, OLATHE, KS 66062, USA; (3) Garmin

(EUROPE) LTD., LIBERTY HOUSE, HOUNSDOWN BUSINESS PARK, SOUTHAMPTON, SO40 9RB, UNITED KINGDOM: OR (4) Garmin CORPORATION CUSTOMER SERVICE, No. 68, JANGSHU 2nd ROAD, SHIJR, TAIPEI COUNTY, TAIWAN,

License Terms And Conditions

Garmin ("we" or "us") provides you with storage media containing the computer Software (the "Software") and the embedded or accompanying digital map Data, including any "online" or electronic documentation and printed materials (together called the "Product" for purposes of this License Agreement), and grants you a limited, non-exclusive license to use the Product in accordance with the terms of this Agreement. You agree to use this Data together with the Garmin product for solely personal, or if applicable, for use in your business' internal operations, and not for service bureau, time-sharing. resale or other similar purposes. Accordingly, but subject to the restrictions set forth in the following paragraphs, you may copy this Data only as necessary for your use to (i) view it, and (ii) save it, provided that you do not remove any copyright notices that appear and do not modify the Software or Data in any way. You agree not to otherwise reproduce, copy, modify, decompile, disassemble, reverse engineer or create derivative works of any portion of the Product, and may not transfer or distribute it in any form. for any purpose, except to the extent permitted by mandatory laws.

Restrictions. Except where you have been specifically licensed to do so by Garmin, and without limiting the preceding paragraph, you may not use this Data with any products, systems, or applications installed or otherwise connected to or in communication with vehicles, and which are capable of dispatch, fleet management or similar applications where the Data is used by a central control center in dispatching a fleet of vehicles. In addition, you are prohibited from renting or leasing the Data or the Garmin products containing the Data to any other person or third party. Only those rental car companies that are specifically authorized by Garmin in writing to rent Garmin products containing the Data to their rental customers are permitted to rent out such products.

No Warranty. This Product (including the Data) is provided to you "as is," and you agree to use it at your own risk. Garmin and its licensors (and their licensors and suppliers) make no guarantees, representations or warranties of any kind, express or implied, arising by law or otherwise, including but not limited to, content, quality, accuracy, completeness, effectiveness, reliability, merchantability, fitness for

a particular purpose, usefulness, use or results to be obtained from the Product, or that the Data or server will be uninterrupted or error-free.

Disclaimer of Warranty. Garmin AND ITS LICENSORS (INCLUDING THEIR LICENSORS AND SUPPLIERS) DISCLAIM ANY WARRANTIES, EXPRESS OR IMPLIED, OF QUALITY, PERFORMANCE, MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NONINFRINGEMENT. NO ORAL OR WRITTEN ADVICE OR INFORMATION PROVIDED BY Garmin OR ITS SUPPLIERS AND LICENSORS SHALL CREATE A WARRANTY, AND YOU ARE NOT ENTITLED TO RELY ON ANY SUCH ADVICE OR INFORMATION. THIS DISCLAIMER OF WARRANTIES IS AN ESSENTIAL CONDITION OF THIS AGREEMENT. Some States, Territories and Countries do not allow certain warranty exclusions, so to that extent the above exclusion may not apply to you.

Disclaimer of Liability. Garmin AND ITS LICENSORS (INCLUDING THEIR LICENSORS AND SUPPLIERS) SHALL NOT BE LIABLE TO YOU: IN RESPECT OF ANY CLAIM, DEMAND OR ACTION, IRRESPECTIVE OF THE NATURE OF THE CAUSE OF THE CLAIM, DEMAND OR ACTION ALLEGING ANY LOSS, INJURY OR DAMAGES. DIRECT OR INDIRECT, WHICH MAY RESULT FROM THE USE OR POSSESSION OF THE INFORMATION: OR FOR ANY LOSS OF PROFIT, REVENUE, CONTRACTS OR SAVINGS, OR ANY OTHER DIRECT, INDIRECT, INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF YOUR USE OF OR INABILITY TO USE THIS INFORMATION, ANY DEFECT IN THE DATA OR INFORMATION, OR THE BREACH OF THESE TERMS OR CONDITIONS, WHETHER IN AN ACTION IN CONTRACT OR TORT OR BASED ON A WARRANTY. EVEN IF Garmin OR ITS LICENSORS HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. Garmin'S AND ITS LICENSORS'TOTAL AGGREGATE LIABILITY WITH RESPECT TO ITS OBLIGATIONS UNDER THIS AGREEMENT OR OTHERWISE WITH RESPECT TO THE Garmin PRODUCT OR THE DATA SHALL NOT EXCEED \$1.00. Some States, Territories and Countries do not allow certain liability exclusions or damages limitations, so to that extent the above may not apply to you.

Disclaimer of Endorsement. Reference to any products, services, processes, hypertext links to third parties or other Data by trade name, trademark, manufacturer, supplier or otherwise does not necessarily constitute or imply its endorsement, sponsorship or recommendation by Garmin or its licensors. Product and service information are the sole responsibility of each individual vendor. The NAVTEQ® name and logo, the NAVTEQ and NAVTEQ ON BOARD® trademarks and logos, and other trademarks and trade names owned by NAVTEQ North America LLC may not be used in any commercial manner without the prior written

consent of NAVTEO.

Export Control. You agree not to export from anywhere any part of the Data provided to you or any direct product thereof except in compliance with, and with all licenses and approvals required under, applicable export laws, rules and regulations.

Indemnity. You agree to indemnify, defend and hold Garmin and its licensors (including their respective licensors, suppliers, assignees, subsidiaries, affiliated companies, and the respective officers, directors, employees, shareholders, agents and representatives of each of them) free and harmless from and against any liability, loss, injury (including injuries resulting in death), demand, action, cost, expense, or claim of any kind or character, including but not limited to attorney's fees, arising out of or in connection with any use or possession by you of the Product (including the Data).

Entire Agreement. These terms and conditions constitute the entire agreement between Garmin (and its licensors, including their licensors and suppliers) and you pertaining to the subject matter hereof, and supersedes in their entirety any and all written or oral agreements previously existing between us with respect to such subject matter.

Governing Law.

(a) For European Union NAVTEQ Data

The above terms and conditions shall be governed by the laws of the Netherlands, without giving effect to (i) its conflict of laws provisions, or (ii) the United Nations Convention for Contracts for the International Sale of Goods, which is explicitly excluded. You agree to submit to the jurisdiction of the Netherlands for any and all disputes, claims and actions arising from or in connection with the Data provided to you hereunder.

(b) For North American NAVTEQ Data and other non-European Union NAVTEQ Data

The above terms and conditions shall be governed by the laws of Illinois, without giving effect to (i) its conflict of laws provisions, or (ii) the United Nations Convention for Contracts for the International Sale of Goods, which is explicitly excluded. You agree to submit to the jurisdiction of Illinois for any and all disputes, claims and actions arising from or in connection with the Data provided to you hereunder. Government End Users. If End User is an agency, department, or other entity of the United States Government, or funded in whole or in part by the U.S. Government, then use, duplication, reproduction, release, modification, disclosure or transfer of the Product and accompanying documentation is subject to restrictions as set forth in DFARS 252.227-7014(a)(1) (JUN 1995) (DOD commercial computer software definition), DFARS 27.7202-1 (DOD policy

on commercial computer software), FAR 52,227-19 (JUN 1987) (commercial computer software clause for civilian agencies), DFARS 252.227-7015 (NOV 1995) (DOD technical data - commercial items clause): FAR 52.227-14 Alternates I. II. and III (JUN 1987) (civilian agency technical data and noncommercial computer software clause); and/or FAR 12.211 and FAR 12.212 (commercial item acquisitions), as applicable. In case of conflict between any of the FAR and DFARS provisions listed herein and this License. the construction that provides greater limitations on the Government's rights shall control. The contractor/ manufacturer is Garmin International, Inc., 1200 East 151st Street, Olathe, KS 66062, USA and NAVTEO® North America LLC, 222 Merchandise Mart Plaza, Suite 900, Chicago, Illinois 60654.

DMTI Spatial, Inc. End User License Agreement

The software embedded in your Garmin product is owned by Garmin Ltd. or its subsidiaries ("Garmin"). The third-party postal code data (the "Licensed Product") embedded in or accompanying your Garmin product is owned by DMTI Spatial, Inc. and is licensed to Garmin. Both the software and Licensed Product are protected under copyright laws and international copyright treaties.

THIS is a legal Agreement between you, the end user, and DMTI Spatial, Inc. BY LOADING THE PRODUCT(S) WITH THIS AGREEMENT YOU ARE AGREEING TO BE BOUND BY THE TERMS OF THIS AGREEMENT. IF YOU DO NOT AGREE TO THE TERMS OF THIS AGREEMENT, PROMPTLY (within 7 days of purchase) RETURN THE PRODUCTS AND ANY ACCOMPANYING ITEMS (including written materials) TO Garmin INTERNATIONAL, INC. CUSTOMER SERVICE, 1200 EAST 151ST STREET, OLATHE, KANSAS 66062, FOR A REFUND.

DMTI Spatial hereby grants to you a non-exclusive, non-transferable license to use the data contained on the media in this package (the "Licensed Product") solely for personal non-commercial use or internal use in your business, on a single computer, Pocket PC, or Palm device in conjunction with Garmin software, and with compatible Garmin products that you personally own. Your use of the data is subject to the following terms and conditions:

You acknowledge that the Licensed Product(s) belong to DMTI Spatial and its third party supplier, and that the Licensed Product(s) are copyrighted. Unauthorized copying of the Licensed Product(s), is expressly forbidden and you may be held legally responsible for copyright infringement which is caused or encouraged by your failure to abide by the

terms of this agreement. You may make one archival copy of the Licensed Product(s), solely for your own use, subject to the following restrictions: (1) The archival copy must be treated in the same way as the original copy; (2) No copy may be used while any other copy is in use. If you make an archival copy of the Licensed Product(s), you must include on it the copyright notice that is on the original media. You may not replicate the Licensed Product(s) are the licensed Product(s) are the licensed Product(s) are licensed Product

distribute or sublicense the Licensed Product(s) or otherwise transfer the Licensed Product(s) to any third party, use the Licensed Product for commercial purposes except for internal use in your business, decompile, disassemble, reverse-engineer the Licensed Product(s), or use the Licensed Product to create any derived product for any of these prohibited purposes. You may not place the Licensed Product(s) on the Internet without a prior written agreement with DMTI Spatial.

In no event shall DMTI Spatial or its third party supplier(s) be liable to you or your organization for any indirect damages including any lost profits, lost savings, interruption of business, loss of business opportunities or other incidental or consequential damages, arising out of your possession, use of, or inability to use the Licensed Product(s), even if DMTI Spatial, its third party supplier(s), or any authorized dealer, has been advised of the possibility of the damages, or for any claim by any other party. In no event shall DMTI Spatial have any liability for damage in excess of the license fee paid for the Licensed Product(s).

You shall indemnify and hold DMTI Spatial, its third party supplier(s) and their officers, employees and agents, harmless from and against any claim, demand or action, irrespective of the nature of the claim, demand or action, alleging loss, costs, damages, expenses, or injury (including injury from death) resulting from your authorized or unauthorized, use, possession, modification, or alteration of the Licensed Product(s).

THE LICENSED PRODUCT(S) AND THE ASSOCIATED WRITTEN MATERIALS IN CONNECTION THEREWITH ARE PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, ARISING BY LAW OR OTHERWISE, INCLUDING BUT NOT LIMITED TO WARRANTIES OF EFFECTIVENESS, COMPLETENESS, ACCURACY, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE LICENSED PRODUCT(S) IS WITH YOU, THE END USER. NO ORAL OR WRITTEN ADVICE GIVEN BY DMTI SPATIAL OR ITS DEALERS, DISTRIBUTORS, AGENTS OR EMPLOYEES CREATES A WARRANTY OR IN NAY WAY INCREASES DMTI SPATIAL'S LIABILITY AND YOU MAY NOT RELY ON ANY SUCH INFORMATION OR ADVICE.

Safety Precautions and Important Information

No statement or recommendation made or assistance given by DMTI Spatial or by its representatives or employees shall constitute a waiver by DMTI Spatial or any of the provisions herein. Nor does or will DMTI Spatial warrant any services it may provide in connection with the use of the Licensed product(s), to include any assistance, training, or other consultation with you.

This license is effective until terminated. This license will terminate automatically without notice from DMTI Spatial if you fail to comply with any provision of this License Agreement. Upon termination, you shall destroy or return the Licensed Product(s) including any written materials and all copies of the Licensed Product(s) and any written materials in connection therewith have been destroyed or returned to DMTI Spatial.

This Agreement shall be governed by the laws of the Province of Ontario.

©2007 DMTI Spatial Inc. (except for data licensed from third parties).

DMTI Spatial is an authorized user and distributor of selected Statistics Canada Computer files under Licensing Agreement 6230.

© Copyright, HER MAJESTY THE QUEEN IN RIGHT OF CANADA, as represented by the Minister of Industry, Statistics Canada 1996.

Digital Topographic Data produced under license from Her Majesty the Queen in Right of Canada, with permission of Natural Resources Canada.

Getting Started

The first time you use your Kenwood Navigation System, you need to set up your system.

First Time Setup

These are the steps that you need to complete to set up the system. These steps normally have to be performed only once.

- · Select a language.
- Select your current time zone.
- Select whether you want your system to auto-adjust for daylight saving time.
- Select your preferred units of measure (statute or metric).



Find It and Gol

Follow the instructions on the next two pages to find a place and go to it!



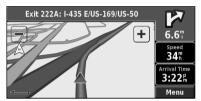
5 Touch a place. Near Here Harus Steak Sushi Plate 4.4" NE Izumi Japanese Steak & Sushi 4.6™ NE Thai Place Restaurant 5.7" NE Ichiban Sushi 6.5[™] NE Back Spell Near... 6 Touch Go To. Thai Place Restaurant 11838 Quivira Rd Overland Park, KS 66210 913-451-8421 Advanced Go To

4 Touch a food category.

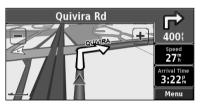


Following Your Route

Follow the route to your destination using the map. As you travel, the navigation system guides you to your destination with voice prompts, arrows, and directions along the top of the map. If you depart from the original route, the navigation system recalculates the route and provides new route instructions.



Your route is marked with a highlighted line. The default line color is green.



Follow the arrows.



A checkered flag marks your destination.

For more information about using the map and the other tools, see pages 16-17.

Where To?

The Where To? menu provides several categories to help you quickly find your destination. Use the Where To? menu to perform a simple search.

Finding an Address

1 From the Menu page, touch Where To? > Address.



Select a state. Touch Search All Cities or select a city.



3 Enter the address number and touch Done.



4 Enter the street name and touch Done.



5 Select the street. Select the city, if necessary.



6 Select the address, if necessary. Touch Go To.



Finding a Place Using the Map

- 1 From the Menu page, touch ₩ View Map. You can also touch Where to? > Browse Map. Touch anywhere on the map to recenter the map on that location.
- 2 Touch any object on the map. Touch Review.



Next page ►

3 Touch Go To or Advanced.



- Touch the + and icons to zoom in and out.
- Touch an object on the map. The map recenters on that location, and an arrow appears, pointing at the object you selected.
- Touch **Review** to open the information page for the location: for more information, see the following section.
- Touch **Save As Favorite** to save the location selected by the pointer to your Favorites.
- Touch **Back** to return to the previous screen.

Understanding the Information Page

When you find a location, select it in the search results list to open the information page for the item.



Information Page

Touch Go To to create and follow a route to this location.

Touch **Advanced** to view other options for this location:

- Insert in Current Route—add this point as the next stop in your route.
- Add As Favorite—add this location to your Favorites. For more information, see page 14.
- Find Near Point—find a location near this point.
- Browse Map—view this location on the map.

Finding Recently Found Places

The last 50 places you have found are stored in Recent Finds

- Touch Where To? > Recent Finds.
- 2 Select an item from the search results list.

Touch **Category** to display recent finds from a certain category, such as Food, Hotel....

Finding Places in a Different Area

You can search for locations in a different area. such as a different city or near your destination.

- 1 From the search results list, touch Near....
- 2 Select one of the search options.

Narrowing Your Search

To narrow your search, you can spell part of the name of the location you are searching for.

- 1 From the search results list, touch Spell.
- 2 Enter part of the name and touch Done.

My Locations

You can save all of your favorite places in My Locations. You can also save your home location in My Locations.

Saving Places You Find

After you have found a place you want to save, select it from the results list.

1 Touch Advanced.



2 Touch Add As Favorite.



Saving Your Current Location

From the Menu page, touch Wa View Map.

1 Touch anywhere on the map.



2 Touch Save As Favorite.



Setting a Home Location

You can set a Home Location for the place you return to most often. From the Menu page, touch Where To?.

- 1 Touch Go Home.
- 2 Select an option.
- 3 Touch Save Home.

After you set your Home Location, touch Where To? and then touch Go Home.

Finding Saved Places

From the Menu page, touch Where To?.

- 1 Touch My Locations.
- 2 Touch Favorites.
- 3 Touch a saved place.

Editing Saved Places

From the Menu page, touch **Tools** > **My Data** > **Favorites**

- 1 Touch Edit/Review Favorites.
- 2 Touch the item you want to edit.
- 3 Touch Edit.
- 4 Touch the item you want to edit.
- · Name—enter a new name for the location using the onscreen keyboard.
- Location—edit the location of the place. You can use the map or enter new coordinates using the keyboard.
- **Elevation**—enter the elevation of the saved place.
- Category—assign this place to a category. Touch to view the categories.
- **Symbol**—select a symbol that is shown on the map for this location.

Deleting a Saved Place

From the Menu page, touch Tools > My Data > Favorites

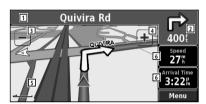
- 1 Touch Delete Favorites.
- 2 Touch By Selection.
- · By Selection—touch each location and delete it individually.
- · By Category—select one category to delete all of the locations assigned to that category.
- Delete All—removes all saved places from your Favorites.
- 3 Touch a saved location.
- 4 Touch Delete.

The Map and Other Tools

This section provides details about the Map Page, the Trip Computer, the Turn List, and the GPS Info Page.

Viewing the Map Page

From the Menu page, touch **View Map** to open the map. Touch an area of the map to see additional information, as shown below. The position icon shows your current location.



Map Page while Navigating a Route

- 1 While navigating a route, touch the text bar to open the Turn List. See the next page.
- 2 Distance to the next turn.
- 3 Touch to zoom out.
- 4 Touch + to zoom in.
- 5 Touch the map to view and browse a 2-D map.
- 6 Touch the **Speed** or **Arrival Time** data field to open the Trip Computer.



 A speed limit icon may appear as you travel on major roadways. This icon displays the current speed limit of the roadway.

Trip Computer

The Trip Computer indicates your current speed and provides helpful statistics about your trip.

To view the Trip Computer, select **Speed** or **Arrival** on the map. Or, from the Menu page, touch **Tools** > **Trip Computer**.



- 1 Current direction of travel
- 2 Current speed
- 3 Distance to your final destination
- 4 Total distance traveled (odometer)
- 5 Touch **Reset Trip** to reset all information on the Trip Computer.
- 6 To reset the Maximum Speed, touch **Reset**Max.

Turn List

The Turn List displays a list of turn-by-turn instructions for your entire route, as well as arrival information

While navigating a route, touch the text bar on the map page to open the Turn List. Or, from the Menu page, touch **Tools** > **Turn List**.



- 1 Direction of this turn
- 2 Distance to this turn
- 3 Turn directions
- Touch View All to see all the turns on the route. Touch and to scroll through the list.
- Touch a turn to see the turn on a map (the Next Turn page).



Next Turn Page

• Touch and to scroll through all the turns on the route. Touch + and - to zoom in and out of the turn on the map.

GPS Info Page

From the Menu page, touch the signal strength bars in the upper left corner to view the GPS Info page. Or, from the Menu page, touch **Tools** > **GPS** Info.



- 1 Sky view
- 2 Satellite signal-strength bars

The sky view shows the satellites you are receiving. The satellite signal-strength bars indicate the strength of each satellite you are receiving. A solid bar indicates the GPS satellite is ready for use.

GPS Settings

From the Menu page, touch **Settings** > **General** > **GPS**. You can also access the GPS Settings by touching the GPS Settings button on the GPS Info page.

- Simulator Mode—touch Off to turn the GPS receiver
- Set Position—set your position, if Use Indoors is enabled. Select your location on the map and touch OK.
- WAAS/EGNOS—disable and enable WAAS/EGNOS. WAAS and EGNOS are systems of satellites and ground stations that provide GPS signal corrections, giving you even better position accuracy. To learn about WAAS and EGNOS, visit www.garmin.com/aboutGPS/waas.html.

Creating and Editing Routes

This section describes how to create and customize your routes.

Creating a New Saved Route

From the Menu page, touch **Tools** > **My Data** > Routes.

- 1 Touch Create New Saved Route.
- 2 Select an option and touch Next. Select the starting point.
- 3 Select an option and touch Next. Select the ending point.
- 4 To add a stop, touch Yes, then touch Next. Select the point.
- 5 Select your sorting and route calculation preferences and touch Next.
- 6 Touch Finish.

Editing a Saved Route

From the Menu page, touch **Tools** > **My Data** > Routes.

- Touch Edit/Review Routes.
- 2 Touch the route to edit.
- 3 Touch Edit.
- 4 Touch the item to edit.
- · Rename—enter a new name for the route using the on-screen keyboard.
- · Edit/Review Points—add, arrange, remove, reorder, and review points in the route. For more information, see the following section.
- Change Preference—change your calculation preference to Faster Time, Shorter Distance, or Off Road.
- Delete Route—delete this route.

Adding an Intermediate Destination **Point to Your Route**

You can add intermediate destination points (stops) to your route as you create it. You can also add points to your route when you edit the route, as described below. Follow the steps in the previous section to begin editing the route.

- Touch Edit/Review Points.
- 2 Touch Add.
- 3 Touch where you want to add the point.
- 4 Touch a method and then select the point.
- 5 Add points as necessary. Touch Done when finished.
- Auto Arrange—arranges the points to provide the shortest route.
- · Remove—touch the point you want to remove and then touch Remove.
- Re-Order—touch the point to move and touch Move Up or Move Down. Touch Done when finished.
- Review—allows you to view the information page for any point along the route. For details on the information page, see page 13.

Saving the Active Route

From the Menu page, touch **Tools** > **My Data** > Routes > Save Active Route.

Navigating a Saved Route

From the Menu page, touch **Tools** > **My Data** > Routes > Navigate Saved Route. Touch the route you want to navigate.

Recalculating the Route

From the Menu page, touch **Tools** > **My Data** > **Routes > Recalculate Route.**

Deleting All Saved Routes

From the Menu page, touch **Tools** > **Mv Data** > Routes > > Delete All Saved Routes.

Stopping Your Route

From the Menu page, touch **Stop**. Then touch

Adding a Detour to a Route

If you need to take a detour from your current route, open the Menu page and touch **Detour**.

- 1/2 mile, 2 miles, or 5 miles—select the distance for the detour. For example, if a road sign indicates that the street is closed for the next 2 miles, touch 2 miles in the list. The navigation system recalculates your route for the next 2 miles.
- Detour by Road(s) In Route—select roads on your route to avoid. For example, if the highway ramp is closed, select the ramp in the list of roads. The navigation system recalculates your route to avoid that ramp.
- Detour by Traffic Event on Route—if you are using an FM Traffic Receiver, you can detour around traffic events.
- Remove All Detours—touch to remove any detours you have entered for the route.

Adding Avoidances

From the Menu page, touch **Settings** > Navigation > > Avoidance Setup. Select the road type to avoid. Touch to view more road types to avoid.

Creating Custom Avoids

You can enter specific areas and roads to avoid on your routes. From the Avoidance Setup menu, touch two times and then touch **Custom** Avoids.

1 Touch Add New Avoid Area or Add New Avoid Road.



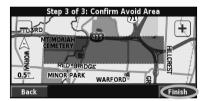
2 Touch the first corner and touch Next.



Touch the second corner and touch Next.



4 Touch Finish.



Using the Logs

As you travel, the navigator creates a bread-crumb trail (track log) of your movement.

Adjusting the Track Log

From the Menu page, touch **Tools** > **My Data** > **Track Log**.

- Recording—turn the track log recorder on and off.
- Percentage Full—displays the current percentage capacity of the track log. To clear the track log, touch Percentage Full > Yes > OK.
- Map Display—displays the current track log on the map. Select a zoom setting at which the track log is shown. Touch OK. Your track log is displayed as a narrow dotted line on the map.

Using the Mileage Logs

You can keep four different mileage logs of your travels. From the Menu page, touch **Tools** > **My Data** > **Mileage Log**.

1 Touch a log to edit it.



2 Select an item to edit.



- · Name—enter a new name.
- **Distance**—reset the mileage log.
- Active—make this log active or inactive.

Traffic Information

Using an optional FM Traffic Receiver, the navigation system can receive and use traffic information.

When a traffic message is received, you can see the event on the map and change your route to avoid the traffic incident.

For more information about the FM Traffic Receiver, visit the Garmin Web site at www.garmin.com/traffic. For participating FM subscription providers and covered cities, refer to www.garmin.com/fmtraffic.



 This section uses "Traffic Module" to describe the external device that receives traffic information. The FM Traffic Receiver (such as the GTM 10) can be used.

Connecting the Traffic Module

Make sure the traffic module is connected to the DNX5120/DNX512EX. Refer to the installation quide for more information.

Viewing Traffic Events

From the Menu page, touch **Tools** > **Traffic Info**. Select an item in the Traffic Events list to view the details. Touch Near... to view traffic at a different location.



Traffic Events List

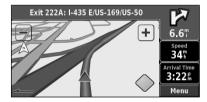
- 1 Traffic symbol
- 2 Color code
- 3 Traffic source (FM Traffic) and signal strength

Avoiding Traffic

The map page displays a when there is a traffic event of medium severity or high severity on your current route or on the road you are driving. When you are following a route, touch to avoid the traffic.

1 From the map, touch

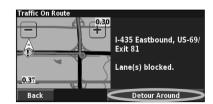




2 Touch an item to avoid.



3 Touch Detour Around.



Severity Color Codes

The bars to the left of the traffic symbols indicate the severity of the traffic incident:

= Low severity (green)—traffic is still flowing.

= Medium severity (yellow)—traffic is somewhat congested.

= High severity (red)—traffic is heavily congested or stopped.

North American Symbols Road Condition Road Construction Road Closed Congestion Accident Incident Information

Changing the Traffic Settings

From the Menu page, touch **Settings** > **Traffic**.

- Subscriptions—view your traffic subscriptions. If you have an FM Traffic Receiver connected, touch FM Traffic Subscriptions to view your subscriptions. Touch the subscription to display the expiration date. To add a subscription, touch Add Subscription. See the following section for information about adding an FM Traffic subscription.
- **Symbols Style**—change the symbols used to indicate the type of traffic event.
- Audio Notification—turn the audio notification on or off when a traffic event occurs on the road you are traveling or on the route you are navigating.
- Avoid Traffic—select Yes to avoid traffic events when generating a route.

Adding a Traffic Receiver Subscription

To add a traffic subscription, touch **Settings** > **About** > **FM Traffic Receiver** and write down your FM Traffic Receiver's unit ID. Go to www.garmin.com/fmtraffic to purchase a traffic subscription and get a 25-character traffic subscription code.

1 Touch Settings.



2 Touch Traffic.



3 Touch Subscriptions.



4 Touch Add Subscription.



Next page ►

5 Touch Next.



6 Enter the code and touch Next.



7 Touch OK.

Changing the Settings

This section describes how to customize the settings of your GPS navigation system.

Changing the General Settings

From the Menu page, touch **Settings** > 🖳 General.



GPS

From the Menu page, touch **Settings** > **General** > **GPS**. See page 17.

Changing the Language

From the Menu page, touch **Settings** > **General** > Language.

 Voice Language—change the language for all voice prompts and messages. Touch the voice you want to use and touch OK.

Two different types of voice languages are available: textto-speech and pre-recorded.

Languages noted with a person's name and (TTS) are text-to-speech (TTS) voices: for example, American English-Jill (TTS) is a text-to-speech voice. The text-tospeech voices "read" and "speak" the same words that are displayed on the screen. The voices have an extensive vocabulary, and they pronounce the street names as you approach turns.

Languages without a person's name are pre-recorded voices, which have a limited vocabulary and do not speak names of locations or streets.



- If you change the Voice Language, you must restart the unit to complete this change.
- Text Language—change the on-screen text to the selected language. Changing the text language does not change the language of map data or user-entered data.
- · Speech Rate—select the rate at which prompts are spoken.

Customizing the Keyboard Settings

From the Menu page, touch **Settings** > **General** > Keyboard.

- Input Type—select English Only keyboard, or select Western European to use diacritical characters.
- Entry Type—select ABCDEF keyboard, or select OWERTY.

Customizing the Audio Settings

From the Menu page, touch **Settings** > **General** > Audio.

- Guidance—turn on the vocal guidance prompts. Select **Speak Key Only** to hear the voice prompts only when you press the **VOICE** key on the remote control.
- · Attention Tone—turn the attention tone that is sounded before voice prompts on or off.
- Touch Screen Tone—turn the tone that is sounded. each time you touch the screen on or off.
- **Keypress Tone**—turn the tone that is sounded each time you press a button on the remote on or off.

Customizing Proximity Alerts

From the Menu page, touch **Settings** > **General** > **Proximity Alerts** to adjust the notifications for custom POIs you have loaded. See page 28.

Changing Your Time Settings

From the Menu page, touch **Settings** > **General** > Time.

- · Time Zone—select your time zone.
- Time Format—select 12- or 24-hour time format.
- **Daylight Saving**—select Auto, Yes, or No. The Auto setting automatically adjusts the time for daylight saving based on your time zone.

Selecting Units

From the Menu page, touch **Settings** > **General** > Units. Change units of measure to Statute. Metric, or Custom. Custom allows you to specify Statute or Metric for each unit (distance, elevation, and so on).

Turning Safe Mode Off and On

From the Menu page, touch **Settings** > **General** > Safe Mode. Turn the Safe Mode on or off. Safe Mode disables all navigation system functions that require significant operator attention and could become a distraction while driving. When it is turned on, Safe Mode operates when the vehicle parking brake is disengaged.

Changing the Map Settings

From the Menu page, touch **Settings** > Map.

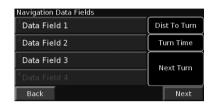


- Map Detail—adjust the amount of detail shown on the map. Displaying more detail causes the map to redraw
- · Orientation—change the perspective of the map.

Orientation	Description
2D North Up	Display the map in 2 dimensions (2–D) with North at the top.
2D Track Up	Display the map in 2 dimensions (2–D) with your direction of travel at the top of the screen.
3D Track Up	Display the map in 3 dimensions (3-D), with your direction of travel at the top of the screen. This is the default map view.

- · Color Mode—select Day for a bright background. Select Night for a black background. Select Auto to automatically switch between the two.
- · Auto Zoom—disable or enable automatic zooming on the map for optimal viewing. You can also specify a maximum Auto Zoom distance, from 120 feet to 300 miles
- Route Color—select the color of the route line.
- **Dim Roads**—dim roads that are not on your route. You can customize this setting to Never or While Routing.

- Map Data Fields—customize the width and the contents of the data fields displayed on the map page. Normal is the default setting.
- 1. From the Menu page, touch Settings > Map > Nap Data Fields.
- 2. Touch Wide or Thin. Then touch Next.



- 3. Touch the navigation data field you want to customize.
- 4. Select the type of data field.
- 5. Select how the data field appears.
- 6. Touch OK. Repeat for each navigation data field.
- 7. Touch Next to customize the nonnavigating data fields.
- 8. Touch Finish to return to the Map Settings menu.
- Text Size—adjust the display size of text for each item
- Zoom Level Detail—works in conjunction with Map Detail to customize which map items appear at various zoom levels. For each map item, you can select Off, Auto, or a maximum zoom distance, from 120 feet to 800 miles.



- Displaying more detail increases the time it takes the map to refresh.
- Detail Maps—enable and disable the preloaded detailed maps.
- Setup POI Display—set whether the preloaded map Points of Interest (POIs) are displayed on the map. You can also filter which types of POIs are displayed, such as lodging and attractions. This does not affect custom POIs.
- Vehicle Select—select the vehicle icon that is displayed while navigating a route.

Changing the Navigation Settings

From the Menu page, touch **Settings** > Navigation.



- · Vehicle—specify your vehicle type.
- · Preference—select a preference for route calculations.

Preference	Description
Faster Time	Routes calculated with this setting are faster to drive but may be longer in distance.
Shorter Distance	Routes calculated with this setting are shorter in distance but may take more time to drive.
Off Road	Creates a direct-line route from your current location to your destination. This may be useful when you are traveling outside of detailed map coverage areas, or where no roads exist.

- · Ask Preference—select whether the navigation system asks for your preference each time it calculates a route.
- Next Turn Pop-up—select when the Next Turn page appears while navigating a route.

Preference	Description
0n	The Next Turn page is displayed for every turn.
Auto	The Next Turn page is only displayed when you are not in the Map page, because you are already tracking your turns.
Off	The system does not switch to the Next Turn page for each turn.



Next Turn Page

- Off-Route Recalculation—set the way the navigation system responds when off the route. You can silence the "off-route, recalculating" message here.
- · Continuous Auto Routing—enable or disable the Continuous Auto Routing feature. This feature allows the navigation system to continually search for a better route to your destination. Continuous Auto Routing may be useful if a traffic accident occurs or there are timerestricted turns on the current route. A (a) is displayed on the map when a better route than the one you are currently taking is available. Touch the (a) to take the better route.
- Avoidance Setup—see page 19.

Adjusting the Traffic Settings

See page 22.

Viewing Information (About)

From the Menu page, touch Settings >



- · Software—the software version, audio version, unit ID, and registration code for the unit are listed. The SiRF version being used in the GPS is also shown.
- **Detail Maps**—view information about the preloaded detailed maps.
- FM Traffic Receiver—If you have an FM Traffic Receiver, you can view the FM Traffic Receiver unit ID.
- **Copyright Info**—view the copyright information relevant to the unit configuration.

Restoring the Settings

To restore the navigation system to its original settings, open the Menu page and touch Settings

> Restore Defaults > Yes.

Appendix

This appendix provides additional information about your navigation system, such as how to update the software and map data.

Using the Remote Control

You can use a standard Kenwood system remote control with the navigation system.

Updating the Software

To update the navigation system software, you must have a CD or DVD writer, writable CD or DVD media, and an Internet connection.

To update the navigation software:

- 1 Go to www.garmin.com/Kenwood. For the DNX5120/DNX512EX, select Software Updates > Download.
- 2 Read and accept the terms of the Software License Agreement.
- 3 Follow the instructions on the Web site to complete the installation of the updated software.

Updating the Map Data

The navigation system will provide periodic notification at startup when the preloaded maps are considered out of date. You can purchase a DVD of updated map data from Garmin, or ask your Kenwood dealer or Kenwood service center for details.

To update the map data:

- Go to www.garmin.com/Kenwood. For the DNX5120/DNX512EX, select Order Map Updates, and then follow the Web site checkout procedure.
- 2 After you receive your new map data DVD, follow the instructions provided with the DVD to install the new map data in your unit.

Clearing All User Data

You can clear all user data, including all favorite places, routes, custom POIs, tracks, mileage logs, and your home location, at one time.

ACAUTION

You cannot recover your user data after it is deleted.

- Touch Tools > My Data > Clear All.
- 2 Touch Yes. The navigation system restarts.

Custom POIs (Points of Interest)

You can manually load custom points of interest (POI) databases, available from various companies on the Internet. Some custom POI databases contain alert information for points such as safety cameras and school zones. The navigation system can notify you when you approach one of these points.

ACAUTION

Garmin is not responsible for the consequences of using a custom POI database, or for the accuracy of the safety camera or other custom POI database.

To load custom POIs into the unit:

- 1 Download a POI database file from the Internet.
- 2 Using POI Loader, create the POI.gpi file from the database file. POI Loader is available at www.garmin.com/products /poiloader. Refer to the POI Loader Help file for more information; click Help to open the Help file.
- 3 Save the POI.gpi file to your hard drive.

Next page ►

- 4 Create a "Garmin" folder on your CD or DVD. For example, if drive letter D is assigned to your CD or DVD drive, create a "D:\Garmin" folder.
- 5 Copy the POI.gpi file to the Garmin folder vou just created on your CD or DVD (for example, "D:\Garmin\POI.gpi").
- 6 Insert the CD or DVD into the DNX5120/ DNX512EX. A message displays on the screen, prompting you to copy the custom POIs to your navigation system. Select Yes. If you select No, custom POIs will not work.



· Each time you load custom POIs to the navigation system, any other custom POIs already saved in the system will be overwritten.

Finding Custom POIs

To view a list of the custom POIs loaded in your navigation system, touch Where To? > Extras > **Custom POIs.**

Adjusting the Proximity Alerts

To turn the proximity alerts for custom POIs on or off, open the Menu page and touch Settings > **General > Proximity Alerts.**



- · Audio Notification—turn the alerts that sound as you approach a custom POI on or off.
- · Visual Notification—turn the pop-up alerts that appear as you approach a custom POI on or off.
- · Continuous Notification—select which alerts (which types of POIs) you will be continually notified of.

Deleting All Custom POIs

To delete all custom POIs from your navigation system, touch Tools > My Data > Custom POIs > Delete All. Touch Yes to confirm.

For the latest free software updates (excluding map data) throughout the life of your Garmin products, visit the Garmin Web site at www.garmin.com/Kenwood.



© 2008 Garmin Ltd. or its subsidiaries

Garmin International, Inc. 1200 East 151st Street, Olathe, Kansas 66062, USA

Garmin (Europe) Ltd. Liberty House, Hounsdown Business Park, Southampton, Hampshire, SO40 9RB, UK

Garmin Corporation
No. 68, Jangshu 2nd Road, Shijr, Taipei County, Taiwan

www.garmin.com

Part Number 190-00901-00 Rev. A

Garmin® is a registered trademark of Garmin Ltd. or its subsidiaries and may not be used without the express permission of Garmin. NAVTEQ® is a trademark of NAVTEQ Inc. or its affiliates and is registered in one or more countries, including the U.S. All other company names and trademarks mentioned or referenced in this documentation are the properties of their respective owners. All rights reserved. SiRF, SiRFstar and the SiRF logo are registered trademarks of SiRF Technology, Inc. SiRFstarIII, and SiRF Powered are trademarks of SiRF Technology.



