



Geko™ 201

Personal Navigator®

owner's
manual
and
reference
guide

© Copyright 2003
Garmin Ltd. or its subsidiaries
All Rights Reserved

Garmin International, Inc.
1200 East 151st Street, Olathe, Kansas 66062 U.S.A.
Tel. 913/397.8200
Fax 913/397.8282

Garmin (Europe) Ltd.
Unit 5, The Quadrangle, Abbey Park Industrial Estate, Romsey, SO51 9DL, U.K.
Tel. 44/1794.519944
Fax 44/1794.519222

Garmin Corporation
No. 68, Jangshu 2nd Road, Shijr, Taipei County, Taiwan
Tel. 886/2.2642.9199
Fax 886/2.2642.9099

Except as expressly provided herein, no part of this manual may be reproduced, copied, transmitted, disseminated, downloaded or stored in any storage medium, for any purpose without the express prior written consent of Garmin. Garmin hereby grants permission to download a single copy of this manual and of any revision to this manual onto a hard drive or other electronic storage medium to be viewed and to print one copy of this manual or of any revision hereto, provided that such electronic or printed copy of this manual or revision must contain the complete text of this copyright notice and provided further that any unauthorized commercial distribution of this manual or any revision hereto is strictly prohibited.

Information in this document is subject to change without notice. Garmin reserves the right to change or improve its products and to make changes in the content without obligation to notify any person or organization of such changes or improvements.

Web Site address: www.garmin.com

Garmin®, TracBack®, and Personal Navigator® are registered trademarks and Geko™, PanTrack™ and MapSource™ are trademarks of Garmin Ltd. or its subsidiaries and may not be used without the express permission of Garmin.

January 2003

Part Number 190-00297-01 Rev. A

Printed in Taiwan

Let the Fun Begin

fun (*noun*):

1. A source of enjoyment, amusement, or pleasure.
2. Enjoyment; amusement: have fun at the party.
3. Playful, often noisy, activity.

We don't know about the *noise*, but fun and simplicity is what the Geko 201 is all about. To get the most out of your new Geko 201, take the time to read through this Owner's Manual to understand the operating features of the unit. This manual has been designed to provide all that you need to know to operate your Geko 201.

Geko 201 Registration

Help us better support you by completing your on-line registration today!

Connect to our Web Site (www.garmin.com) and look for the Product Registration link on the home page. Your unit's serial number is in the battery compartment.

Thanks for choosing the Garmin Geko 201. If you have any questions or comments regarding the use of the Geko 201 you can visit our Web Site or contact our Customer Service Department M-F, 8:00-5:00 CST (except holidays) at 1-800-800-1020.

Introduction

On Your Mark . . .



Table of Contents

Introduction

Registration	i
Table of Contents	ii
Warnings and Cautions	iii
FCC Compliance Statement	iv
Software License Agreement	iv
Installing the Batteries	v
Buttons.....	vi

Satellite Pages

Page Basics	2
Options	3

Map Page

Page Basics	4
Options	5

Navigation Page

Page Basics	7
Options	8

Trip Computer Page

Page Basics	9
Options	10

Main Menu Page

Page Basics and Options	11
Mark	11
Waypoints.....	13
Tracks	16
Routes.....	19
Games.....	22
Setup	24
Setup Page Options	
Time.....	24
Display.....	26
Units.....	27
Interface	30
System	32

Appendices

Appendix A: Specifications	34-36
Appendix B: Accessories.....	35
Appendix C: Wiring Diagram	36

Index

Index	37-39
-------------	-------

Warranty

Warranty	40
----------------	----

WARNING: If you choose to use the Geko 201 in a vehicle, it is the sole responsibility of the owner/operator of the Geko 201 to secure the GPS unit so that it will not cause damage or personal injury in the event of an accident. Do not mount the Geko 201 over airbag panels or in a place where the driver or passengers are likely to have an impact with it in an accident or collision.

WARNING: If you choose to use the Geko 201 in a vehicle, it is the sole responsibility of the operator of the vehicle to operate the vehicle in a safe manner, maintain full surveillance of all driving conditions at all times, and never become distracted by the Geko 201 to the exclusion of safe operating practices. It is unsafe to operate the Geko 201 while you are driving. Failure by the operator of a vehicle equipped with an Geko 201 to pay full attention to operating the vehicle and road conditions while the vehicle is in motion could result in an accident or collision with property damage and personal injury.

WARNING: This product, its packaging, and its components contain chemicals known to the State of California to cause cancer, birth defects, or reproductive harm. This Notice is being provided in accordance with California's Proposition 65. If you have any questions or would like additional information, please refer to our web site at www.garmin.com/prop65.

CAUTION: The Global Positioning System (GPS) is operated by the government of the United States, which is solely responsible for its accuracy and maintenance. The system is subject to changes which could affect the accuracy and performance of all GPS equipment. Although the Geko 201 is a precision electronic NAVigation AID (NAVAID), any NAVAID can be misused or misinterpreted and, therefore, become unsafe.

CAUTION: Electronics are protected if submerged, but the battery compartment may get wet. Make sure the batteries and the compartment are dry before using.

Warnings and Cautions

CAUTION: 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.

Introduction

FCC Compliance Statement

The Geko 201 complies with Part 15 of the FCC interference limits for Class B digital devices FOR HOME OR OFFICE USE. These limits are designed to provide reasonable protection against harmful interference in a residential installation, and are more stringent than “outdoor” requirements.

Operation of this device is subject to the following conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment generates, uses and can radiate radio frequency energy and, if not used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by reorienting or relocating the receiving antenna.

The Geko 201 does not contain any user-serviceable parts. Repairs should be made only by an authorized Garmin service center. Unauthorized repairs can void your warranty and your authority to operate this device under Part 15 regulations.

BY USING THE Geko 201, 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.

Software License Agreement

Installing the Batteries

The Geko 201 operates on two AAA batteries (not included), installed in the back of the unit. To install the batteries, remove the battery cover by inserting a coin in the bottom slot. Twist the coin to lift the cover up and pull away. Insert the batteries, observing proper polarity. Attach the battery cover by inserting the tab end into the back slot at an angle, laying it flat, and then pushing it forward until the clip catches. Alkaline batteries should last as long as 12 hours. Rechargeable Alkaline, NiMH, NiCad or Lithium batteries may be used, but cannot be charged while in the unit.

External power and data connector (under rubber tab)



Battery Compartment



Installing Batteries



Battery usage icon shows an estimate of battery life left. Four squares with the battery outline indicates a full battery.



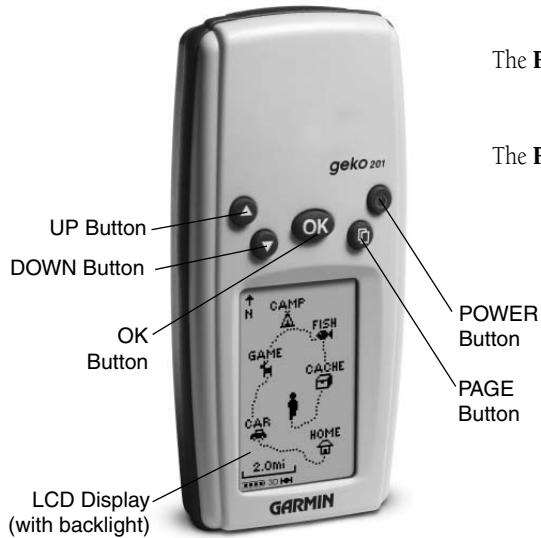
Four squares alone indicates the use of an external power source.



NOTE: If you intend to store your Geko 201 for an extended period of time, remove the batteries. Follow the battery manufacturer's instructions for the proper care and handling of the batteries.

Introduction

Geko 201 Buttons



The **UP/DOWN** Buttons:

- Press to highlight options on pages and menus
- Press to adjust display contrast on the Satellite Page
- Press to Zoom out (**UP**) and in (**DOWN**) on the Map Page
- Press to cycle through the data fields on the Navigation Page

The **OK** Button:

- Press to confirm data entry or menu selection
- Press and hold to Mark your current position and access the Mark Waypoint Page

The **POWER** Button:

- Press and hold to turn the unit on and off
- Press and release (with the unit on) to turn the backlight on and off

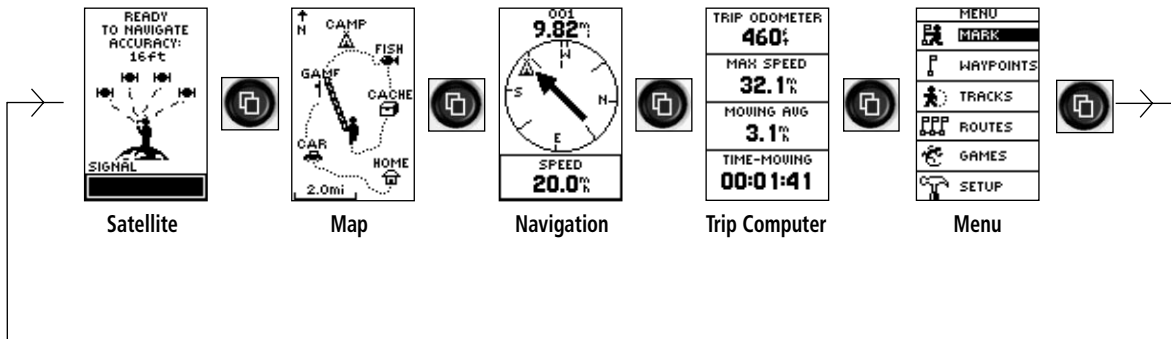
The **PAGE** Button:

- Press to switch between the Main Pages
- Press to 'undo' for the most recent action

Main Pages

All of the information needed to operate the Geko 201 is found on five main 'pages' (or display screens). These pages are the Satellite, Map, Navigation, Trip Computer, and Menu.

Press the **PAGE** Button to switch between pages.

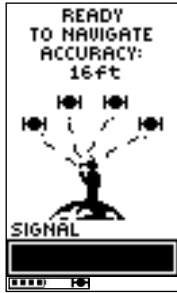


Main Pages

Main Pages Basics

Satellite Pages

Page Basics



A "READY TO NAVIGATE" message must display before you can begin using your Geko 201 to navigate.

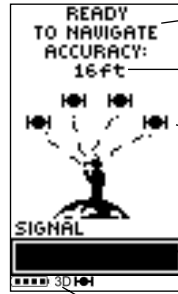


About Geko

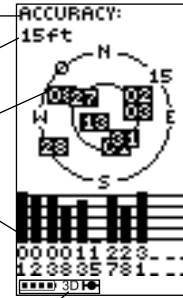


NOTE: When you use the Geko 201 for the first time, allow time for it to track satellites by leaving the Geko 201 outside with a clear view of the sky for 15-30 minutes.

Normal Skyview



Advanced Skyview



The '3D' displays when receiving signals from four or more satellites.

The Satellite Page shows the Geko 201 gathering all the necessary satellite information in order to work. There are two display options on the Satellite Page, Normal Skyview and Advanced Skyview. Normal Skyview shows you (in animation), the satellites, satellite signal strength, and the Geko 201's estimated location accuracy.

To activate the Advanced Skyview page, press the **OK** Button on the Satellite Page, select 'Advanced Skyview' and press the **OK** Button again. This page displays the numbered satellites the Geko 201 is using, their proximity to your current position, and their individual strengths. The outer circle of the display represents the horizon and the center represents the sky directly overhead to help you determine the location of the satellites.

When you see the "READY TO NAVIGATE" message on the Satellite Page, the Geko 201 has found your location and you are ready to go!

To see the software version that the Geko 201 is currently using, press the **OK** Button on the Satellite Page and select 'About Geko'. (A PC-compatible computer and Power/Data cable, not included, are required to update the software.)

Backlighting

If lighting conditions make it hard for you to see the screen, you can turn on the backlight. Press and release the **POWER** Button from any screen to turn on the backlight. The backlight is timed to stay on for 30 seconds to save battery power.

To adjust the backlight's timeout setting:

1. Press the **UP** or **DOWN** Button while on the Menu Page to highlight 'SETUP' and press the **OK** Button to display the Setup Page.
2. Press the **UP** or **DOWN** Button to highlight 'DISPLAY' and press the **OK** Button twice to display the Light Timeout options.
3. Press the **UP** or **DOWN** Button to highlight the length of time and then press the **OK** Button to return to the Display Page.

Contrast

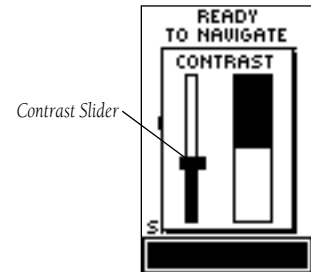
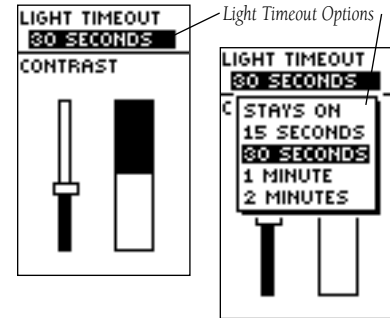
The screen contrast is quickly adjustable from the Satellite Page. You can also adjust the contrast from the Setup Page of the System Menu Page (See Page 26).

To adjust the contrast from the Satellite Page:

1. Press the **UP** or **DOWN** Button while on the Satellite Page to display the Contrast Window.
2. Press the **UP** or **DOWN** Button to move the contrast slider. Continue to press the **UP** Button to make the screen darker or press the **DOWN** Button to make the screen lighter.
3. Press the **OK** Button to return to the Satellite Page.

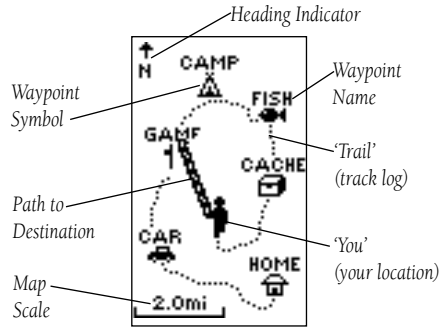
Satellite Pages

Options



Page Basics

When on the Map Page, the **UP** and **DOWN** Buttons are used to adjust the map scale from 50 feet to 800 miles.



The Map Page shows where you are (the animated figure) and provides a picture of where you are going. As you travel (the animated figure 'walks') and leaves a 'trail' (track log). Waypoint names and symbols are also shown on the map.

To help you better visualize the 'real world', the Geko 201 automatically rotates the map as you move, so that waypoints that are ahead of you are always displayed in front of the animated figure. The Heading Indicator shows the direction you are heading.

To make sure you can see your entire route, you can change the map scale (from 50 feet to 800 miles) by pressing and holding the **UP** Button to view a larger area, and the **DOWN** Button for viewing a smaller area.

The Options on the Map Page allow you to customize the page in several ways although not all options are visible all the time. The following options are always available:

- **Clear Track Log:** Allows you to clear the track log and immediately start a new one.
- **Measure Distance:** Allows you to choose two way (the default for one is your current position) and then select a second waypoint. The distance, estimated time needed to reach that point, and your current estimated speed is calculated automatically.
- **Map Setup:** Allows you to adjust the map settings including:

Orient Map (Ahead or Northward): When 'AHEAD' is selected, the top of the map is oriented in the direction you are currently moving. When 'NORTHWARD' is selected, the map is always oriented to the North.

Auto Zoom (On or Off): When 'AUTO ZOOM' is turned on, the map automatically adjusts its scale to display your entire navigating route until you manually change the zoom level. When it's turned off, you must press the **UP** or **DOWN** Button to select the appropriate map scale.

Waypoints (Show or Hide): Allows you to view the map with or without waypoints.

Goto Line (Bearing or Course): Determines whether the display pointer shows your current bearing or the direction to the next waypoint.

Options that do not display until you have a track log or are actively navigating include:

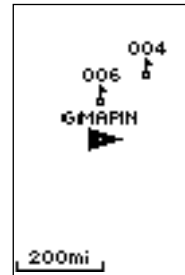
- **Pan Track Log:** Allows you to move the pointer to any point along the track and then start a TRACBACK, a GOTO, MARK a waypoint, or ZOOM In or Out.
- **Stop Navigation:** 'STOP NAVIGATION' stops any active navigation (navigation means there is a destination waypoint).

Options



Selecting 'PAN TRACK LOG' from the Map Page options allows you to move the pointer to any point on the track log and then create a Waypoint or navigate to it.

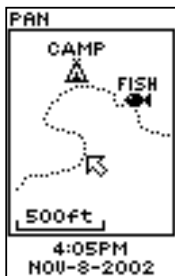
When you select 'Orient Map Northward' the figure icon is replaced by a 'direction' triangle. The tip of the triangle tells you the general direction in which you are moving.



Options



'CLEAR' the track log before starting a new trip.



PanTrack™ mode

Using the Track Log

The Geko 201 draws an electronic breadcrumb trail or 'track log' on the Map Page as you travel. The track log starts recording as soon as the Geko 201 gets a location fix.

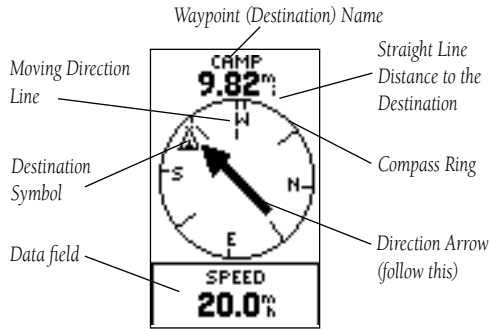
To make use of the track log, select the 'PAN TRACK LOG' option to show a pointer which moves along the track log when you press the **UP** or **DOWN** Button. Press the **OK** Button to see the four choices 'TRACBACK', 'GOTO', 'MARK' and 'ZOOM'.

'TracBack' will guide you to where you started by following the track log that you left behind, allowing you to return along a traveled path without marking any waypoints. For the best results, clear the track log before you start traveling because when the track log is full, the new track points will overwrite the oldest track points.

'Goto' guides you from your current location to the waypoint selected while 'Mark' creates a new waypoint for later use. 'Mark' is explained in detail beginning on Page 11. 'Zoom' adjusts the level of viewable map detail.

To clear the track log:

1. From the Map Page, press the **OK** Button to display the Map Page Options menu.
2. Press the **UP** or **DOWN** Button to highlight 'CLEAR TRACK LOG' and press the **OK** Button.
3. At the message "DO YOU REALLY WANT TO CLEAR THE TRACK LOG?", use the **DOWN** Button to highlight 'YES' and press the **OK** Button to clear the track log and return to the Map Page.



The Navigation Page guides you to a destination. When you're moving with no particular destination in mind, the Navigation Page displays a subset of information. When you're moving towards a specific destination, however, the Navigation Page displays additional information in the data fields, such as the name of the location, the distance and time to go, and displays a direction arrow in the compass ring. To navigate, simply follow the arrow.

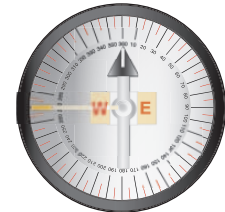
Navigation Page Options

The Navigation Page option 'STOP NAVIGATION' only displays when you press the OK Button while actively navigating to a Waypoint.

The list of data fields is on the next page.

Page Basics

On the Navigation Page, the **UP** and **DOWN** Buttons are used to cycle through different trip data.



The Geko 201 is not a true magnetic compass! You must be moving in order for it to track your movement.



NOTE: The direction arrow, destination symbol, bearing information, Time To Go, Arrival Time and Final Distance only display when you have started a Goto or a TracBack.

Options

The Navigation Page allows you to display 10 types of different data, such as 'Elevation', 'Speed', etc.



Data Field Options

By pressing the **UP** or **DOWN** Button, you can cycle through the Data fields at the bottom of the Navigation Page:

- **Elevation**—the measurement of height above mean sea level.
- **Heading**—the direction you are traveling.
- **Location**—shows your current location coordinates, UTM, latitude and longitude, etc.
- **Speed**—tells you how fast you are going.
- **Time/Date**—the current time and date based on your Time Zone settings.
- **Trip Odometer**—the total distance you've gone since the last reset.

The following fields display only when navigating:

- **Arrival Time**—the time of your arrival, based on your current speed and distance left.
- **Bearing**—the compass direction from your current location to your destination.
- **Final Distance**—the route distance left from your current location to your destination.
- **Time To Go**—the estimated time at your current speed to reach your destination.

TRIP ODOMETER 460$\frac{1}{2}$
MAX SPEED 32.1%
MOVING AVG 3.1%
TIME-MOVING 00:01:41

Four data fields of your choosing display on the Trip Computer Page. The default fields are shown but by selecting the 'CHANGE FIELDS' option you can make your selections from the list of 31 items.

To change the fields:

1. From the Trip Computer Page, press the OK Button to display the Page Options menu.
2. Press the UP or DOWN Button to highlight 'CHANGE FIELDS' and press the OK Button.
3. Press the UP or DOWN Button to highlight one of the four fields to change and press the OK Button to display the data field options.
4. Press the UP or DOWN Button to scroll through the list, highlight an option and press the OK Button to accept that option.
5. Repeat Steps 3 and 4 as necessary, then press the PAGE Button to return to the Trip Computer Page.

The complete list of options, including those that display figures only when you are actively navigating, are listed on Page 10.

Page Basics



TRIP ODOMETER 0.69$\frac{m}{h}$
MOVING AVG 1.5%
HEADING
HEADING LAT/LON LOCATION MAX SPEED

Options

- Elevation—the measurement of height above mean sea level.
- Heading—the direction you are traveling.
- Lat/Lon—the current GPS position.
- Location—shows your current latitude and longitude.
- Max Speed—the maximum speed traveled since last reset.
- Moving Avg—(Moving Average) the average speed while the unit is moving.
- Odometer—a running tally of distance traveled, based upon the distance between second-by-second position readings.
- Over'l Spd—(Overall Speed) the averaged speed since your last reset, including stopped and moving time.
- Speed—shows how fast you are going.
- Sunrise—the time at which the sun rises on this day at the specified location.
- Sunset—the time at which the sun sets on this day at the specified location.
- Time of Day—the current time for the selected time zone.
- Time-Moving—the time elapsed while the unit is moving since the last trip reset.
- Time-Stop—the time elapsed while the unit is not moving since the last trip reset.
- Time-Total—the total time you have traveled since the last trip reset.
- Trip Odometer—the total distance you've gone since the last reset.
- Vert Speed—(Vertical Speed) the rate of altitude gain/loss over time.

The following fields display figures only when navigating:

- Bearing—the compass direction from your location to your destination.
- Course—the direction from your starting location to a destination.
- Final Dest—(Final Destination) the last waypoint on your route.
- Final Distance—the distance from your current location to your destination.
- Final ETA—the estimated time you will arrive at your destination.
- Final ETE—the estimated total time left until you reach your destination.
- Next Dest—(Next Destination) the next waypoint on your route.
- Next Dist—(Next Distance) the distance between your current location and the next waypoint.
- Next ETA—the estimated time you will arrive at the next waypoint.
- Next ETE—the estimated total time left until you reach the next waypoint.
- Off Course—the distance you are off a desired course in either direction, left or right.
- To Course—the compass direction you must go to get back to the original course.
- Turn—the angle difference (in degrees) from the bearing to your destination and your current line of travel. 'L' means turn Left, 'R' means turn Right.
- VMG—(Velocity Made Good) the speed you are closing in on a destination along a desired course. Also referred to as the 'vector velocity' to your destination.



The Menu Page gives you access to the Geko 201's essential features. With the Menu Page you can create (Mark) and select waypoints, select, save or change Tracks and Routes, choose from the four Games, and access the system Setup features.

MARK Page

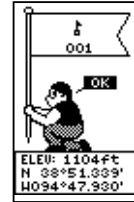
The MARK Page marks your current location as a waypoint. You can then change the waypoint symbol, name, elevation and location (latitude and longitude). The ability to enter a known location, then saving it as a Waypoint, works well for the popular Geocaching activity.

To change the position data:

1. From the MENU Page press the **UP** or **DOWN** Button to highlight 'MARK' then press the **OK** Button to display the MARK WAYPOINT Page.
2. Press the **UP** or **DOWN** Button and highlight the 'POSITION DATA' field and press the **OK** Button to display the EDIT LOCATION Page.

(Continued on Page 12)

Page Basics and Options



NOTE: To mark your current location as a waypoint, the Geko 201 must be 'READY TO NAVIGATE'.

Options



The Mark Waypoint Page allows you to change the symbol for the waypoint.

The EDIT LOCATION Page displays on-screen instructions explaining how to edit the waypoint location.



(Continued from previous page)

3. Scroll through the position coordinate places using the **UP** or **DOWN** Button (**UP** Button to move right to left, **DOWN** Button to move left to right). When you reach the position place you want to change, press the **OK** Button.
Use the **UP** or **DOWN** Button to scroll through the choices and highlight one. Press the **OK** Button and the position place changes. Repeat to finish making changes.
4. Press the **UP** or **DOWN** Button to highlight the 'OK' field and press the **OK** Button to return to the MARK WAYPOINT Page.
5. Press the **UP** or **DOWN** Button to highlight the 'OK' field and press the **OK** Button to store your location's position coordinates in memory.

To change the elevation:

1. From the MENU Page press the **UP** or **DOWN** Button to highlight 'MARK'. Press the **OK** Button to display the MARK Page.
2. Press the **UP** or **DOWN** Button to highlight the 'ELEV' field and press the **OK** Button to display the ENTER CORRECT ELEVATION Page.
3. Use the **UP** or **DOWN** Button to highlight the desired digit and press the **OK** Button to display a selection window. Press the **UP** or **DOWN** Button to highlight a new number and press the **OK** Button. Repeat to finish making changes.
4. Press the **UP** or **DOWN** Button to highlight the 'OK' field and press the **OK** Button to display the MARK WAYPOINT Page with the corrected elevation.

The WAYPOINTS Page organizes all of your waypoints (alphabetically) for easy selection by name or by proximity (nearest), or, if you choose, allows you to delete all waypoints.

To select a waypoint:

1. From the MENU Page press the **UP** or **DOWN** Button to highlight 'WAYPOINTS', then press the **OK** Button.
2. Select 'LIST ALL' and press the **OK** Button to see an alphabetical listing of all Waypoints.
3. Press the **UP** or **DOWN** Button to highlight the alphabetical tab containing the desired waypoint, then press the **OK** Button to display waypoints for that tab.
4. Press the **UP** or **DOWN** Button to highlight the waypoint on the list and press the **OK** Button to display the REVIEW WAYPOINT Page.

To view the NEAREST waypoints page:

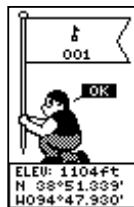
1. From the MENU Page press the **UP** or **DOWN** Button to highlight 'WAYPOINTS', then press the **OK** Button.
2. Select 'NEAREST' and press the **OK** Button to see a listing of the nine closest waypoints by name and distance from your location.
3. Press the **UP** or **DOWN** Button to highlight the waypoint and press the **OK** Button to display the REVIEW WAYPOINT Page.

To delete all waypoints:

1. From the MENU Page press the **UP** or **DOWN** Button to highlight 'WAYPOINTS', then press the **OK** Button.
2. Select 'DELETE ALL' and press the **OK** Button. A confirmation message box displays asking if you really want to delete all waypoints. Press the **UP** or **DOWN** Button to highlight the correct choice and press the **OK** Button to complete the action.

Menu Page

Waypoints



NOTE: Press and hold the **OK** Button on any Page to display the **MARK WAYPOINT** Page and mark your current location.

NEAREST WAYPOINTS	
001 NH	162ft
FISH NE	700ft
CAR S	1.7mi
GAME S	2.5mi
RIDGE SW	10.5mi

The nine closest waypoints appear in a list showing their name and distance from your location (the slider at the side of the page indicates that there are additional waypoints.)

Waypoints



You can start a Goto from the REVIEW WAYPOINT Page.

The REVIEW WAYPOINT Page allows you to delete a waypoint.



Review Waypoint Page

The Review Waypoint Page allows you to change the waypoint symbol, name, elevation and location (just as on the Mark Waypoint Page). You can also delete the waypoint, display the waypoint on the Map Page, start a Goto and Project the waypoint.

To delete a waypoint:

1. From the REVIEW WAYPOINT Page, press the **UP** or **DOWN** Button to highlight 'DELETE'.
2. Press the **OK** Button.

A confirmation message box displays asking if you really want to delete the waypoint. If you do, press the **UP** or **DOWN** Button to highlight 'YES' and press **OK**.

If you do not want to delete the waypoint, press the **UP** or **DOWN** Button to highlight 'NO' and press the **OK** Button.

To start a Goto:

1. From the REVIEW WAYPOINT Page, press the **UP** or **DOWN** Button to highlight 'GOTO'.
2. Press the **OK** Button to activate the 'Goto' with the selected waypoint as the destination.

To view the selected waypoint on the Map Page:

1. From the REVIEW WAYPOINT Page, press the **UP** or **DOWN** Button to highlight 'MAP'.
2. Press the **OK** Button to display the waypoint on a map with bearing and distance. You can use the **UP** or **DOWN** Button to zoom in and out on the map.
3. Press the **PAGE** Button to return to the REVIEW WAYPOINT Page.

The Geko 201's Project waypoint feature can create a waypoint at a specified distance and bearing using either your current position or an existing waypoint as reference.

To Project a waypoint:

1. To project from where you are, Mark your current position as explained on Page 11 and then select this "nearest" waypoint from the Waypoints list. Press the **OK** Button to display the REVIEW WAYPOINT Page.

Or, To project from an existing waypoint within your route, select a waypoint from the list and press the **OK** Button to display the REVIEW WAYPOINT Page.

2. Use the **UP** or **DOWN** Button to highlight the 'PROJECT' field and press the **OK** Button to display the PROJECT WAYPOINT Page which shows the numeric name assigned to the new waypoint and with the distance field highlighted.
3. Press the **OK** Button to display the EDIT NUMBER Page.
4. Press the **DOWN** Button to move to the next number in the field. Select the digit you wish to change and press the **OK** Button to display the drop-down number list.
5. Press the **UP** or **DOWN** Button to highlight the correct number and press the **OK** Button. When all numbers are entered correctly, highlight 'OK' and press the **OK** Button.
6. Use the **DOWN** Button to highlight the bearing field and press the **OK** Button to display the EDIT ANGLE Page.
7. Press the **DOWN** Button to highlight the next number in the field. Select the digit you wish to change and press the **OK** Button to display the drop-down number list.
8. Use the **UP** or **DOWN** Button to highlight the correct number and press the **OK** Button. When all numbers are entered correctly, highlight 'OK' and press the **OK** Button.
9. When all changes (including name, symbol and elevation) have been made, highlight 'OK' and press the **OK** Button to save the waypoint changes.
10. Highlight 'GOTO' and press the **OK** Button to begin direct navigation to the waypoint.

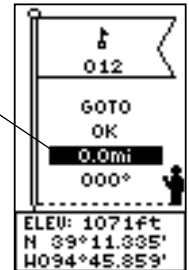
Menu Page

Waypoints



The 'PROJECT
WAYPOINT' option

The 'EDIT NUMBER' field



Tracks



As discussed on Page 6, the Geko 201 draws an electronic breadcrumb trail or ‘track log’ on the Map Page as you travel. The track log starts recording as soon as the Geko 201 gets a location fix. If you want to keep a record of a certain track log before deleting it, go ahead and save it. You can save a total of 10 tracks in the Geko 201. Saved tracks can be used for navigation later. After a track log is saved, the saved track will have a beginning (BEGIN) and ending (END) point. This simply shows the “when/where” of the starting and ending points of the saved track.

When you are ready to return to where you started, the Geko 201 will take you back by following the track log that you left behind. ‘TracBack’ allows you to return along a traveled path without marking any waypoints. If you want to keep a record of a certain track log or use the ‘TracBack’ feature, it is recommended that you clear the track log before you start traveling.

The percentage of memory used by the current track log is displayed at the top of the page. After the track log is ‘CLEARED’, it will show zero percent. When the display shows 99%, the most recent track points will start overwriting the earliest track points. Thus, in order to avoid losing any track points, you should save the track log before it reaches 99% of memory usage.

To clear the current track log:

1. From the ‘MENU’ Page, press the **UP** or **DOWN** Button to highlight ‘TRACKS’ and press the **OK** Button to display the ‘TRACK LOG’ Page.
2. Highlight ‘CLEAR’ and press the **OK** Button to display the confirmation window asking ‘DO YOU REALLY WANT TO CLEAR THE TRACK LOG?’
3. Use the **UP** or **DOWN** Button to highlight ‘YES’ and press the **OK** Button to clear the current track log.

To save a track for navigation later:

1. From the 'MENU' Page, press the **UP** or **DOWN** Button to highlight 'TRACKS' and then press the **OK** Button to display the 'TRACK LOG' Page.
2. Press the **UP** or **DOWN** Button to highlight 'SAVE' and press the **OK** Button to display the track log.
3. Press the **UP** or **DOWN** Button to pick a 'begin' point and press the **OK** Button to save that point.
4. Press the **UP** or **DOWN** Button to pick an 'end' point and press the **OK** Button to save that point and display the saved track.

The track is now saved and is in the 'SAVED TRACKS' list on the 'TRACK LOG' Page.

5. From this page, press the **UP** or **DOWN** Button to highlight:
 - The saved track name and then press the **OK** Button to rename the saved track.
 - 'DELETE' and then press the **OK** Button to delete this track.
 - 'NAVIGATE' and then press the **OK** Button to begin navigation from either point.

To rename a saved track log:

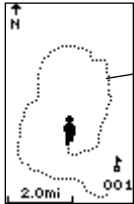
1. From the 'MENU' Page, highlight 'TRACKS' and press the **OK** Button to display the 'TRACK LOG' Page.
2. Press the **UP** or **DOWN** Button to highlight a saved track and press the **OK** Button to display the track on a map.
3. Press the **UP** or **DOWN** Button (as needed) to highlight the default name at the top of the map and then press the **OK** Button to display the 'EDIT TRACK NAME' Page.
4. On the 'EDIT TRACK NAME' Page, pressing the **DOWN** Button will move the highlight to the next place in the name field. When the desired place is highlighted, press the **OK** Button to activate the drop-down alphanumeric list.

(Continued on Page 18)

Tracks

NOTE: Saving a Track Log does not remove those points from the active memory.

Tracks



Track on Map Page

(Continued from Page 17)

5. Press the **UP** or **DOWN** Button, to highlight the correct character and press the **OK** Button to accept that character.
6. Continue until the name is entered correctly, then highlight 'OK' at the bottom of the screen and press the **OK** Button to save the new name.

To delete a saved track:

1. From the 'TRACK LOG' Page, press the **UP** or **DOWN** Button to highlight the track that you want to delete from the 'SAVED TRACKS' list and press the **OK** Button to display the saved track.
2. Press the **UP** or **DOWN** Button to highlight 'DELETE' and press the **OK** Button to display a confirmation window asking you if you really want to delete the saved track.
3. Press the **UP** or **DOWN** Button to highlight 'YES' and press the **OK** Button to complete the process.

If you change your mind, press the **UP** or **DOWN** Button to highlight 'NO' and press the **OK** Button to keep the tracks in memory or press **PAGE** to exit at any time.

To start TracBack navigation:

1. On the 'TRACK LOG' Page, press the **UP** or **DOWN** Button and highlight the saved track from the 'SAVED TRACKS' that you want to travel. Press the **OK** Button to display the track.
2. Press the **UP** or **DOWN** Button to highlight 'TRACBACK' and press the **OK** Button.

The direction window asks you if you want the destination to be at the beginning of the track or the end of the track. Press the **UP** or **DOWN** Button and highlight the desired destination point. The 'POINTER' Page displays to guide you to the destination you selected.

The Geko 201 allows you to navigate using one of three methods: Goto, TracBack and Route. The Goto method of navigation was briefly discussed on page 6 and TracBack is discussed on page 18.

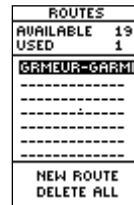
A route is at least two waypoints that describe the path you are going to travel. The route feature is very convenient because it allows the Geko 201 to guide you from the first waypoint in the route, to each successive waypoint until you reach your final destination. The route feature and the Goto feature are comparable in that they both guide you to destination waypoints.

However, the route feature is more powerful because it is more automatic. When you reach one waypoint, the Geko 201 automatically guides you to the next waypoint on the route without needing to touch any button. When you use the 'Goto' feature you have to stop and select the next waypoint before you start moving. When you plan a trip, you can select waypoints from a waypoint list and put them into the Geko 201's memory. At least two waypoints (up to a maximum of 125) are linked together to form a route.

When you start your trip, you activate the route feature and the receiver points the way you should travel to get from the first waypoint to the second. You can then use the pointer page to give you steering guidance.

Menu Page

Routes



"Navigation" Page's pointer becomes a "bent pointer" as you approach a waypoint within the route. Turn in the direction of the pointer arrow to continue the route.



Routes



"FOLLOW" choice list

There are two ways to create a route:

- Use existing waypoints that reside in the Geko 201. Follow the instructions below to insert a waypoint into a route.
- Plan a 'ROUTE' in Garmin MapSource™ on your PC, and upload the 'ROUTE' to the Geko 201. See your Garmin Dealer for more information about MapSource (MapSource is an optional accessory, and is not included with the Geko 201).

In either case, you can navigate to a destination using 'ROUTE' if a route has more than two waypoints. A single waypoint route is only a normal waypoint, not a route, so the on-screen 'FOLLOW' Button cannot be selected if there is only one waypoint in the route. When you select the 'FOLLOW' Button, a list with two items is displayed letting you choose where to go. The list always shows the FIRST (BEGIN) and the LAST (END) waypoint in the route. The Geko 201 guides you following each waypoint in the route.

There are two ways to insert a waypoint into a route. One way is to insert the waypoint before an existing waypoint in a route. The other way is to insert the waypoint at the end of the waypoint list in a route.

To insert a waypoint into a route:

1. From the 'MENU' Page, press the **UP** or **DOWN** Button to highlight 'ROUTES' and press the **OK** Button to display the 'ROUTES' Page.
2. Press the **OK** Button to create a 'New Route'. If there is no information in the route area, press the **OK** Button to display the 'ADD WAYPOINT TO ROUTE' Page.
3. Press the **UP** or **DOWN** Button to highlight the waypoint of your choice and press the **OK** Button to place the waypoint in the first field on the 'ROUTES' Page.
4. Repeat Step 3 until all of the waypoints you want are entered into the route list and then press the **PAGE** button to get back to the page of your choice.

To activate a route:

1. From the 'MENU' Page, press the **UP** or **DOWN** Button to highlight 'ROUTES' and press the **OK** Button to display the 'ROUTES' Page.
2. Press the **UP** or **DOWN** Button to highlight 'FOLLOW' and press the **OK** Button to display the choices from the first (beginning) waypoint and the last (end) waypoint.
3. Press the **UP** or **DOWN** Button to highlight the desired waypoint and then press the **OK** Button to display the 'NAVIGATION' Page for guidance to the destination waypoint.

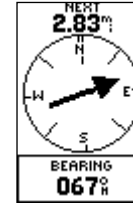
To remove a waypoint from the 'ROUTES' list:

1. From the 'MENU' Page, press the **UP** or **DOWN** Button to highlight 'ROUTES' and press the **OK** Button to display the 'ROUTES' Page.
2. Press the **UP** or **DOWN** Button to highlight the route that includes the waypoint you want to remove and press the **OK** Button to display the route's waypoints.
3. Press the **UP** or **DOWN** Button to highlight the waypoint and press the **OK** Button to display the 'INSERT/REMOVE' window.
4. Press the **UP** or **DOWN** Button to highlight 'REMOVE' and press the **OK** Button to remove the waypoint from the list.

To clear all route waypoints:

1. From the 'MENU' Page, press the **UP** or **DOWN** Button to highlight 'ROUTES' and press the **OK** Button to display the 'ROUTES' Page.
2. Press the **UP** or **DOWN** Button to highlight 'DELETE ALL' and press the **OK** Button to display the confirmation window asking you if you really want to clear all of the route waypoints. If you do, press the **UP** or **DOWN** Button to highlight 'YES' and press the **OK** Button to complete the process.

If you change your mind, press the **UP** or **DOWN** Button to highlight 'NO' and press the **OK** Button to keep the waypoints in the route list.

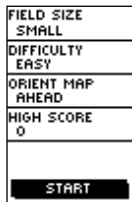
Routes

"Navigation" Page's pointer aimed at the "NEXT" waypoint in the route, 2.83 miles away.

Games



Geko Smak Instructions



Setup Choices for Geko Smak



Move to the Gekos and press the OK button to "smak" and earn points

The Geko 201 offers four games with you, the user, as the key participant. The Games Page shows the listing, which includes: Geko Smak, Memory Race, Nibbons and Virtua Maze. Highlight the appropriate game and then press the **OK** Button to play. Brief instructions display when you start each game.



WARNING: Do not attempt to play these games while driving a motor vehicle or in an area of heavy traffic.

Geko Smak

Geko Smak features you as the triangular-shaped player. In measured rhythm Gekos will appear on the screen. Before the Geko disappears, move toward the Geko and press the **OK** Button to smack the Geko. If you get the Geko, an '!' displays above the hammer; otherwise just a hammer displays momentarily.

Field size choices are small, medium, and large with small fields being roughly 20 yards by 30 yards and large fields being 60 yards by 90 yards (about the size of an American football field).

The difficulty levels, Easy, Normal, and Hard, determine how often Gekos appear on the screen. The pace of the game quickens and point values vary as the difficulty levels increase.

Memory Race

To win the Memory Race, remember which square has which symbol then clear the board by matching all of the two symbol sets together. Travel to each square, highlight "Open" at the bottom of the screen and press the **OK** Button to view the symbol. Adjust the size of the square for easier viewing.

Play Memory Race by yourself or challenge others to see who can clear the board first. Press the **PAGE** Button to quit at any time.

To adjust the Grid or Square Size in custom mode:

1. Highlight the 'Grid Size' or 'Square Size' field and press the **OK** Button.
2. Choose the desired size and press the **OK** Button.
3. Highlight 'Start' and press the **OK** Button to begin the game.

Nibbons

In this game, you must walk around the board collecting the numbers as they appear. Through time, your "tail" will grow. You may travel anywhere on the screen but you can not walk into your tail, or you will lose a life.

Virtua Maze

This game creates a virtual maze on the screen. You are placed at a central position in the maze and must explore the maze collecting flags. The lower right corner of the game screen tells you how many flags remain. The lower left corner is a timer telling how much time has passed so far.

Difficulty level determines how much of the maze you see at a time. Seeing less of the maze makes exploring much more difficult.

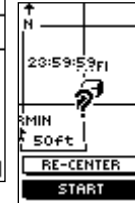


HINT: Pressing the **OK** Button and selecting "Cheat On" will enable a "cheat mode." Enabling this cheat mode penalizes your timer by five minutes and count seconds by 10 instead of 1. Turn the cheat mode off pressing the **OK** Button.

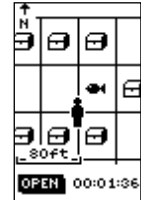
Games



Memory Race instructions



Ready to start Memory Race



Can you remember?



Nibbons Playing Field



Don't get lost in the Virtua Maze!

Setup



The Setup Page allows you to customize the Geko 201. On the Setup Page you can change coordinate systems, map datums, and distance units. You can also change the time format, north reference, operating mode, display contrast, and back light timeout setting.

Time Page

The Time Page allows you to select a 12 hour or 24 hour time format, enter the proper time zone, and choose Daylight Savings Time. When you select 12 hour time formatting, the clock will read like a standard clock with 12 hour AM and 12 hour PM cycles. The 24 hour option sets the Geko 201 to display a 24 hour cycle (Military Time).

To change the time format:

1. From the MENU Page press the **UP** or **DOWN** Button to highlight 'TIME' and press the **OK** Button to display the TIME Page.
2. Press the **UP** or **DOWN** Button to highlight the 'TIME FORMAT' field and press the **OK** Button.
3. Press the **UP** or **DOWN** Button to highlight 12 or 24 hour and press the **OK** Button.
4. Press the **PAGE** Button to return to the page of your choice.

Time Zone

The time zone can be set to any one of the pre-programmed zones or by selecting 'OTHER' and then entering the UTC Time Offset value in the UTC offset field.

To change the time zone:

1. From the MENU Page press the **UP** or **DOWN** Button to highlight 'TIME' and press the **OK** Button to display the TIME Page.
2. Press the **UP** or **DOWN** Button and highlight the 'TIME ZONE' field and press the **OK** Button.

3. Press the **UP** or **DOWN** Button to scroll through the selections and press the **OK** Button when you have found the correct Time Zone.
4. Press the **PAGE** Button to return to the page of your choice.

Daylight Savings Time

Daylight savings time can be set to 'Automatic' (using the built-in almanac to automatically change the clock settings when daylight savings goes into or out of effect). You can choose 'Yes' to manually add daylight savings or 'No' to remain on standard time.

To change the daylight saving field:

1. Press the **PAGE** Button and switch to the MENU Page. Press the **UP** or **DOWN** Button to highlight 'TIME' and press the **OK** Button to display the TIME Page.
2. Press the **UP** or **DOWN** Button to highlight the 'DAYLIGHT SAVING' field and press the **OK** Button.
3. Press the **UP** or **DOWN** Button, highlight 'AUTO', 'YES', or 'NO' and press **OK**. Press the **PAGE** Button to return to the page of your choice.



NOTE: If you select 'Other' for the Time Zone choice, you must enter the UTC offset for your location and the Daylight Savings time options are not available.

Time

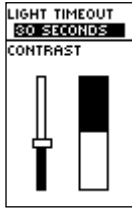
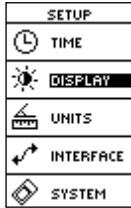
TIME FORMAT	12 HOUR
TIME ZONE	US CENTRAL
UTC OFFSET	-06:00
DAYLIGHT SAVING	AUTO
09:04:53am 20-DEC-02	

Choose a 12 hour or 24 hour time format.

TIME FORMAT	12 HOUR
TIME ZONE	US CENTRAL
UTC OFFSET	-06:00
DAYLIGHT SAVING	AUTO
YES NO AUTO	20PM -- --02

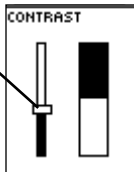
The Daylight Savings time options.

Display



The Light Timeout options allow you to set the backlight to stay on all the time, but watch the battery power!

Use the Display Contrast Slider to adjust the setting.



Light Timeout

The 'LIGHT TIMEOUT' option allows you to set the display backlight timeout (STAYS ON, 15 or 30 seconds, and 1 or 2 minutes).

To change the light timeout:

1. From the SETUP Page press the **UP** or **DOWN** Button to highlight 'DISPLAY'. Press the **OK** Button to display the DISPLAY Page.
2. Press the **UP** or **DOWN** Button and highlight the 'LIGHT TIMEOUT' field and press the **OK** Button.
3. Press the **UP** or **DOWN** Button and highlight your selection and press the **OK** Button.
4. Press the **PAGE** Button to return to the SETUP Page.

Contrast

The 'CONTRAST' option allows you to adjust the display contrast.

To adjust the Display contrast:

1. From the SETUP Page press the **UP** or **DOWN** Button to highlight 'DISPLAY'. Press the **OK** Button to display the DISPLAY Page.
2. Press the **UP** or **DOWN** Button to highlight the 'CONTRAST' Slider and press the **OK** Button.
3. Press the **UP** or **DOWN** Button to adjust the contrast.
4. Press the **PAGE** Button twice to return to the SETUP Page.

Using the Geko 201 with a paper map increases the navigation capabilities of each. To use a map in conjunction with the Geko 201, you must select the position format, map datum, map units, and north reference to match the map. The Geko 201 supports both the UTM/UPS and latitude/longitude grids, which define position location for the entire globe.

Position Format

The default position format (and the one most commonly used) for the Geko 201 is latitude and longitude in degrees and minutes (hddd° mm.mmm'). Choose from 11 other position formats or choose the 'User' position format to approximate custom-designed grids. For more information on map datum and grids we recommend you visit the National Imagery and Mapping Agency at <http://www.nima.mil>.

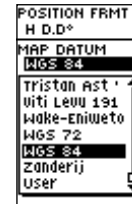
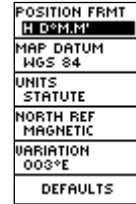
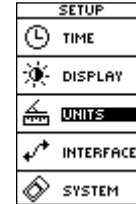
To change the Position Format (grid):

1. From the UNITS Page press the **UP** or **DOWN** Button to highlight the 'POSITION FRMT' field and press the **OK** Button.
2. Press the **UP** or **DOWN** Button to highlight the desired format and press the **OK** Button.
3. Press the **PAGE** Button to return to the MENU Page.

Map Datums

A map datum is a reference model of the Earth's shape. Every map uses a map datum which is usually listed in the title block of the map. The default datum in the Geko 201 is WGS 84 (World Geodetic Survey, 1984). You should only change the datum if you are using maps or charts that specify a different datum. Choose the 'User' datum if using a map with custom-designed grids. Using this setting requires an advanced knowledge of map datums.

Units



The default datum is WGS 84 although Data Entry Pages exist for the User Grid Position Format and the User Map Datum Setup.

Units

POSITION FRMT H D°M.M'
MAP DATUM WGS 84
UNITS STATUTE
NAUTICAL
STATUTE
METRIC
003°E
DEFAULTS

You can select statute, nautical, or metric units of measurement from the UNITS Page.

POSITION FRMT H D°M.M'
MAP DATUM WGS 84
UNITS STATUTE
NORTH REF MAGNETIC
VARIATION 003°E
DEFAULTS

The 'DEFAULTS' setting resets the Geko 201 units to all of its factory settings.

To change the Map Datum:

1. From the MENU Page press the **UP** or **DOWN** Button to highlight 'UNITS'. Press the **OK** Button to display the UNITS Page.
2. Press the **UP** or **DOWN** Button to highlight the 'MAP DATUM' field and press the **OK** Button.
3. Press the **UP** or **DOWN** Button to highlight the desired datum and press the **OK** Button.
4. Press the **PAGE** Button to return to the MENU Page.

Units of Measure

The Geko 201 allows you to select statute (the default setting), nautical, or metric units of measure for all speed and distance readouts.

To change the Units of Measure:

1. From the MENU Page press the **UP** or **DOWN** Button to highlight the 'UNITS' field and then press the **OK** Button to display the UNITS Page.
2. Press the **UP** or **DOWN** Button to highlight 'UNITS' field and press the **OK** Button.
3. Press the **UP** or **DOWN** Button to highlight the specific unit and press the **OK** Button.
4. Press the **PAGE** Button to return to the MENU Page.

North Reference

'Reference' refers to the orientation of a map's grid. Map makers try to align the vertical lines on a map with **True North**. True North is the direction from any location on the earth's surface to the 'north pole'. Maps are typically referenced to True North. Because a compass points to Magnetic North, not True North, maps indicate the difference between True and Magnetic North with a measurement called 'declination'. The amount of declina-

tion changes as you move around the earth. **Magnetic North** is the direction in which a compass needle points.

The Geko 201 bearings will correspond to the compass if the Geko 201 is set to magnetic north. Due to errors introduced when map makers flatten the earth's sphere onto paper, not all of the grid lines drawn on the map point exactly to the north pole, so the north indicated by the grid lines is called '**Grid North**'. The difference, however, is usually small enough that 'Grid' north can be considered the same as True North for traveling on land. If necessary, manually correct for the difference between Grid North and True North. If you select 'User' for North Reference, the 'VARIATION' field is highlighted for you to edit the declination.

To change the North Reference:

1. From the MENU Page press the **UP** or **DOWN** Button to highlight 'UNITS' and then press the **OK** Button to display the UNITS Page.
2. Press the **UP** or **DOWN** Button to highlight the 'NORTH REF' field and press the **OK** Button.
3. Press the **UP** or **DOWN** Button to highlight your selection and then press the **OK** Button.
4. Press the **PAGE** Button to return to the MENU Page.

When you select the 'DEFAULTS' field and press the **OK** Button to return the UNITS Page to the factory settings.

Setup Page






Units

POSITION FRMT H D°M.M'
MAP DATUM WGS 84
UNITS STATUTE
NORTH REF MAGNETIC
VARIATION 003°E
DEFAULTS

'MAGNETIC' north is the default north reference setting.

POSITION FRMT H D°M.M'
M : TRUE
U : MAGNETIC
U : GRID
N : USER
MAGNETIC
VARIATION 003°E
DEFAULTS

Interface

SETUP	
	TIME
	DISPLAY
	UNITS
	INTERFACE
	SYSTEM

The Interface Page allows you to connect and use devices such as computers and differential GPS (DGPS) beacon receivers to the Geko 201.

Input/Output Settings

The 'Interface' Settings Page allows you to use your Geko 201 with external NMEA devices, DGPS beacon receivers, a personal computer, etc. You can choose from seven different input/output serial data formats, or none at all. Below is a description of each format:

- **GARMIN DGPS** - allows DGPS input using a Garmin beacon receiver and a standard RTCM SC-104 format and DGPS tuning.
- **NMEA OUT** - supports the output of standard NMEA 0183 version 3.0 data.
- **RTCM IN** - allows DGPS input using a standard RTCM SC-104 format without any output capabilities.
- **RTCM/TEXT**- allows DGPS input using a standard RTCM SC-104 format and simple ASCII text output of location and velocity information.
- **NONE** - provides no interfacing capabilities.

If 'GARMIN DGPS' or 'RTCM In/NMEA Out' format is selected, additional fields are provided to control a Garmin differential beacon receiver (e.g. GBR 21 & GBR 23) directly from your unit. Tuning is automatic with 'Scan' or you can enter the beacon frequency and bit rate when you select 'User' from the Beacon list to manually tune the receiver. Refer to the beacon receiver instructions.

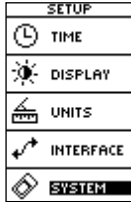
To select an I/O Format:

1. From the 'SETUP' Page, press the **UP** or **DOWN** Button to highlight the 'INTERFACE' field and press the **OK** Button to display the INTERFACE Page.
2. Press the **OK** Button on the 'I/O FORMAT' field to display the format options.
3. Press the **UP** or **DOWN** Button to highlight the desired format, the press the **OK** Button.
4. Press the **PAGE** Button to return to the SETUP Page.

Interface

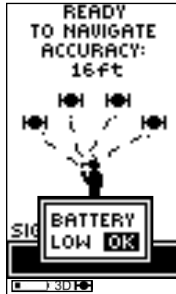
Setup Page

System



The SYSTEM Page allows you to change the GPS Mode, the Language, battery type and owner information.

A 'BATTERY LOW' message displays at the bottom of every page when there are approximately ten minutes of battery life left (when using alkaline batteries).



The System Page allows you to choose from four modes of operation (Normal, WAAS, Battery Save, Demo), change the language display, choose a battery type, include owner information, and view the software version on your unit.

GPS Mode

The GPS receiver is always 'ON' when it's in 'NORMAL' mode. The normal mode is more responsive to sudden turns or change of speed/acceleration.

When the Geko 201 is in 'BATTERY SAVE' mode, the GPS receiver turns on and off alternatively to conserve power and the WAAS function is turned off. The battery type choice also can affect battery life; choose between 'ALKALINE' and 'NIMH' depending upon the type you are using.

The 'DEMO' mode is designed for dealers to show the features and functions of the Geko 201 to potential customers inside a closed building where satellite reception is not possible. There is no navigation possible in 'DEMO' mode. If you select the 'DEMO' mode, a window displays at the bottom of the screen asking you to verify that you want to turn the GPS off (the unit will stop tracking satellites, but not power off).

To change the GPS mode:

1. From the MENU Page press the **UP** or **DOWN** Button to highlight the 'SYSTEM' field. Press the **OK** Button to display the SYSTEM Page.
2. Press the **UP** or **DOWN** Button to highlight 'GPS MODE' field and press the **OK** Button.
3. Press the **UP** or **DOWN** Button to highlight your selection and press the **OK** Button.
4. Press the **PAGE** Button to return to the SYSTEM Page.

Language

The Geko 201 offers 16 different languages in which to view the information.

To change the language:

1. From the MENU Page press the **UP** or **DOWN** Button to highlight the 'SYSTEM' field. Press the **OK** Button to display the SYSTEM Page.
2. Press the **UP** or **DOWN** Button to highlight 'LANGUAGE' field and press the **OK** Button.
3. Press the **UP** or **DOWN** Button to highlight your selection and press the **OK** Button.
4. Press the **PAGE** Button to return to the SYSTEM Page.

Owner Info

The Geko 201 can display information about the owner during the power-up sequence. You can press the Page Button to display the Satellite Page, or after 20 seconds the page automatically changes. Follow the steps listed to edit the information.

To change the owner information:

1. From the MENU Page press the **UP** or **DOWN** Button to highlight the 'SYSTEM' field. Press the **OK** Button to display the SYSTEM Page.
2. Press the **UP** or **DOWN** Button to highlight 'OWNER INFO' field and press the **OK** Button.
3. Press the **UP** or **DOWN** Button to move from one character to the next. To change that character, press the **OK** Button.
4. Press the **UP** or **DOWN** Button to highlight the desired character and then press the **OK** Button to accept it.
5. Repeat steps 3 and 4 until your message is complete.
6. Press the **PAGE** Button to return to the SYSTEM Page.

Setup Page

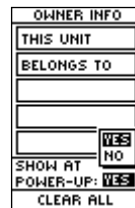
System



The Geko 201 offers a choice of 16 display languages.



Edit the Owner Information from the System Page, then select Yes to display the information everytime the unit is powered on.



Specifications

Physical

Case:	Fully-gasketed, high-impact plastic alloy, waterproof to IPX7 standards (waterproof to 1 meter for 30 minutes)
Size:	1.9"W x 3.9"H x .96"D (48.3 x 99.1 x 24.4 mm)
Weight:	Approx. 3.1 ounces (96g) w/batteries
Temperature Range:	5° to 158°F (-15° to 70°C) ³ (operating)

Performance

Receiver:	Differential-ready, 12 parallel channel
Acquisition time:	Approx. 15 seconds (warm start) Approx. 45 seconds (cold start) Approx. 5 minutes (First Time/AutoLocate™)
Update Rate:	1/second, continuous
GPS Accuracy:	<15 meters (49 ft) RMS ¹
DGPS (USCG) Accuracy:	1-5 meters (3-15 ft) with DGPS corrections ²
DGPS (WAAS) Accuracy:	3 meters (10ft) 95% typical with DGPS corrections
Velocity Accuracy:	0.1 knot RMS steady state
Dynamics:	Performs to specifications to 6 g's
Interfaces:	NMEA 0183, RTCM SC-104 (for DGPS corrections) and RS-232 for PC interface
Antenna:	Built-In

Power

Input:	Two 1.5-volt AAA batteries ³
Battery Life:	Up to 12 hours in Battery Save mode (with alkaline batteries) ⁴

Specifications subject to change without notice.

¹Subject to accuracy degradation to 100m 2DRMS under the U.S. DoD-imposed Selective Availability program.

²With optional Garmin Differential Beacon Receiver Input (such as Garmin GBR 21 or 23).

³The temperature rating for the Geko 201 may exceed the usable range of some batteries. Alkaline batteries can rupture at high temperatures. External power can only be applied using the Garmin Auto Power Adapter or PC Interface Cable with Auto Power Adapter. These cables contain a 12 Vdc to 3 Vdc voltage regulator. Modifications or other applications void the product warranty.

⁴Alkaline batteries lose a significant amount of their capacity as temperature decreases. Use Lithium batteries when operating the Geko 201 in below-freezing conditions. Extensive use of screen backlighting significantly reduces battery life. Different brands of batteries vary in performance.

Standard Accessories

Owner's Manual and Reference Guide
Quick Start Guide

Optional Accessories

Belt Clip

Attaches to the back of the unit for convenient carrying.

Bicycle Mounting Kit

Allows the Geko 201 to be mounted on bicycle handle bars.

Carrying Case

Protects the Geko 201 when not in use.

Lanyard

Attaches to the back of the unit for convenient carrying.

Marine Mounting Kit

Allows the Geko 201 to be mounted on any flat surface.

Power/Data Cable

Provides power from an automobile cigarette lighter and allows for serial data transfer from a PC.

Suction Cup Mounting Kit

Allows the Geko 201 to be mounted on a windshield.

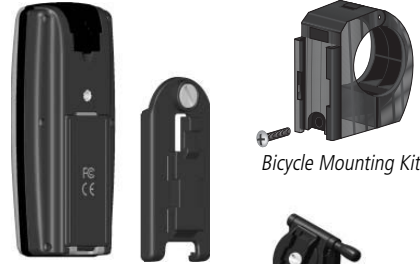
Training Video, NTSC

Vehicle Mounting Kit

Allows the Geko 201 to be mounted on the dashboard.

Appendix B

Accessories



Bicycle Mounting Kit

Back attachment screws into the Geko 201 for use with any mounting kit.



Vehicle Mounting Kit



Suction Cup Mounting Kit



Marine Mounting Kit

Wiring Diagram

Interface formats are selected from the SETUP Page. The input/output lines on your Geko 201 are RS-232 compatible, allowing an interface to a wide range of external devices, including PCs, differential beacon receivers, marine autopilots and/or a second GPS receiver.

The NMEA 0183 version 3.0 interface format is supported by the Geko 201 and enables the unit to drive up to three NMEA devices.

NMEA 0183 Version 3.0 Approved Sentences:

GPGGA, GPGLL, GPGSA, GPGSV, GPRMB, GPRMC, GPRTE, GPVTG, GPWPL, GPBOD

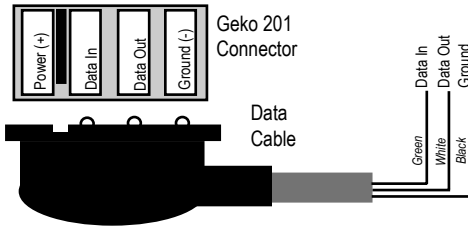
Garmin Proprietary Sentences:

PGRME (estimated error), PGRMM (map datum), PGRMZ (altitude), PSLIB (beacon receiver control)

DGPS (Differential GPS) corrections are accepted in RTCM SC-104 version 2.0 format through the 'Data In' line. The Garmin GBR 21 is the recommended beacon receiver for use with the Garmin. Other beacon receivers with the correct RTCM format may be used, but may not correctly display status or allow tuning control from the GPS unit.

The Geko 201 may be hard-wired to a serial connector using the Data Cable. Refer to the wiring diagram and the Geko unit data connection (illustrated at right).

The optional PC Interface Cable allows you to connect your Geko 201 to a computer's serial port.



A

- Accessories 35
- Advanced Skyview 2
- Arrival Time 8, 10
- Auto Zoom On/Off 5
- Average
 - Moving 10
 - Speed 8

B

- Backlight 3, 26
- Batteries 32, 34, v
- Battery Save Mode 32
- Battery usage icon v
- Beacon Receiver Setup 30
- Bearing 8, 10
- Buttons
 - DOWN vi
 - OK vi
 - PAGE vi
 - POWER vi
 - UP vi

C

- Cautions iii
- Change
 - Data Fields 8
 - Daylight Savings 25
 - Time format 24
 - Time Zone 24

- Clear Track Log 5–6
- Contrast 3
- Contrast Setup 26
- Course 10

D

- Data Fields
 - Arrival Time 10
 - Average Speed 8
 - Bearing 8, 10
 - Changing 8
 - Date 8
 - Elevation 8
 - Final Distance 10
 - Heading 8
 - Location 8, 10
 - Max Speed 8, 10
 - Speed 8
 - Time 8
 - Time To Go 8, 10
 - Trip Odometer 8, 10
 - Trip Time 10
- Data Field Options 8
- Date/Time 8
- Daylight Savings Time 25
- Delete all Waypoints 13
- Delete a Waypoint 14
- Destination
 - Final 10
 - Next 10

- Display Page 26
- Distance
 - Final 10
 - Next 10
- DOWN Button vi

E

- Edit Location 12
- Elevation 8
- ETA
 - Final 10
 - Next 10
- ETE
 - Next 10

F

- FCC Compliance Statement iv
- Final
 - ETA 10
 - ETE 10
- Final Destination 10
- Final Distance 8, 10

G

- Games
 - Geko Smak 22
 - Memory Race 22
 - Nibbons 23
 - Virtua Maze 23
- Games Page 22–23
- GARMIN 30
- GARMIN DGPS 30
- Geko Smak 22
- Global Positioning System ii
- GOTO 6, 14
- Goto Line 5
- GPS Mode 32

H

- Heading 8, 10

I

- Input Settings 30
- Installing Batteries v
- Interface Page 30, 31

L

- LAT/LON 10

- Light Timeout 26
- Location 8, 10

M

- Main Pages 1
 - Map Page 4
 - Menu Page 11
 - Navigation Page 7
 - Satellite Page 2
 - Trip Computer Page 9
- Map Datums 27–28
- Map Page 4
- Map Setup 5
- Mark Location 11
- Mark Page 11–12
- Max Speed 8, 10
- Measure Distance 5
- Memory Race 22
- Menu Page 11
- Moving
 - Average 10
 - Time 10
- Moving Average 10

N

- Navigation Page 7–8
 - Options 7
- Nearest waypoints 13
- Next
 - Destination 10

- Distance 10
- ETA 10
- ETE 10
- Nibbons 23
- NMEA 34
- NMEA OUT 30
- NONE 30
- North Reference 28

O

- Odometer
 - Trip 8, 10
- Off Course 10
- OK Button vi
- Orient Map 5
- Output Settings 30
- Overall Speed 10
- Owner Information 33

P

- PAGE Button vi
- PanTrack 6
- Pan Track Log 5
- Position Format 27
- POWER Button vi
- Projecting a Waypoint 15

R

- Registration i
- Review Waypoint Page 14

Routes Page 19
RTCM/NMEA 30
RTCM/TEXT 30
RTCM IN 30

S

Satellite Page 2
Select a Waypoint 13
Settings
 Input 30
 Output 30
Setup Page 24
Skyview, Advanced 2
Software License Agreement iv
Specifications 34
Speed 8, 10
 Maximum 10
 Overall 10
 Vertical 10
Stopped
 Time 10
Stop Navigation 5
Sunrise 10
Sunset 10
System Page 32, 33
 Battery Type 32
 GPS Mode 32
 Languages 33
 Owner Info 33

T

TEXT OUT 30
Time
 Moving 10
 Of Day 10
 Stopped 10
 Total 10
Time/Date 8
Time Page 24–25
Time To Go 8, 10
Time Zone 24
Total Time 10
To Course 10
Tracks Page 16
Track Logs 6
Trip Computer Page 9
Trip Odometer 8, 10
Trip Time 10
Turn 10

U

Units of Measure 28
Units Page 27
UP Button vi
UTC offset field 24

V

Velocity Made Good 10
Vertical Speed 10
View Nearest waypoints 13

Index

View the Selected Waypoint 14
Virtua Maze 23

W

WAAS 2
Warnings iii
Waypoints Page 13–15
Waypoints Show/Hide 5

Warranty

Limited Warranty

This Garmin product is warranted to be free from defects in materials or workmanship for one year from the date of purchase. Within this period, Garmin will at its sole option, repair or replace any components that fail in normal use. Such repairs or replacement will be made at no charge to the customer for parts or labor, provided that the customer shall be responsible for any transportation cost. This warranty does not cover failures due to abuse, misuse, accident or unauthorized alteration or repairs.

THE WARRANTIES AND REMEDIES CONTAINED HEREIN ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES EXPRESS OR IMPLIED OR STATUTORY, INCLUDING ANY LIABILITY ARISING UNDER ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, STATUTORY OR OTHERWISE. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, WHICH MAY VARY FROM STATE TO STATE.

IN NO EVENT SHALL GARMIN BE LIABLE FOR ANY INCIDENTAL, SPECIAL, INDIRECT OR CONSEQUENTIAL DAMAGES, WHETHER RESULTING FROM THE USE, MISUSE, OR INABILITY TO USE THIS PRODUCT OR FROM DEFECTS IN THE PRODUCT. Some states do not allow the exclusion of incidental or consequential damages, so the above limitations may not apply to you.

Garmin retains the exclusive right to repair or replace the unit or software or offer a full refund of the purchase price at its sole discretion. SUCH REMEDY SHALL BE YOUR SOLE AND EXCLUSIVE REMEDY FOR ANY BREACH OF WARRANTY.

To obtain warranty service, contact your local Garmin authorized dealer. Or

Limited Warranty

call Garmin Customer Service at one of the numbers shown below, for shipping instructions and an RMA tracking number. The unit should be securely packed with the tracking number clearly written on the outside of the package. The unit should then be sent, freight charges prepaid, to any Garmin warranty service station. A copy of the original sales receipt is required as the proof of purchase for warranty repairs.

Products sold through online auctions are not eligible for rebates or other special offers from Garmin. Online auction confirmations are not accepted for warranty verification. To obtain warranty service, an original or copy of the sales receipt from the original retailer is required. Garmin will not replace missing components from any package purchased through an online auction.

Garmin International, Inc.

1200 East 151st Street

Olathe, Kansas 66062, U.S.A.

Phone: 913/397.8200

FAX: 913/397.0836

Garmin (Europe) Ltd.

Unit 4, The Quadrangle, Abbey Park Industrial Estate

Romsey, SO51 9DL, U.K.

Phone: 44/1794.519944

FAX: 44/1794.519222

**For the latest free software updates throughout the life
of your Garmin products, visit the Garmin web site at
www.garmin.com.**



© Copyright 2003 Garmin Ltd. or its subsidiaries

Garmin International, Inc.
1200 East 151st Street, Olathe, Kansas 66062, U.S.A.

Garmin (Europe) Ltd.
Unit 5, The Quadrangle, Abbey Park Industrial Estate, Romsey, SO51 9DL, U.K.

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

www.garmin.com

Part Number 190-00297-01 Rev. B