

set up and go!

## **Garmin Mobile**™ 10

GPS receiver with Bluetooth® wireless technology



#### © 2006 Garmin Ltd. or its subsidiaries

Garmin International, Inc. 1200 East 151st Street, Olathe, Kansas 66062, U.S.A. Tel. 913/397.8200 or 800/800.1020 Fax 913/397.8282

Garmin (Europe) Ltd. Unit 5, The Quadrangle, Abbey Park Industrial Estate, Romsey, SO51 9DL, U.K. Tel. 44/0870.8501241 Fax 44/0870.8501251

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

All rights reserved. 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 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 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. Visit the Garmin Web site (www.garmin.com) for current updates and supplemental information concerning the use and operation of this and other Garmin products.

Garmin<sup>®</sup>, MapSource<sup>®</sup>, and StreetPilot<sup>®</sup> are registered trademarks and c510<sup>™</sup> and Garmin Lock<sup>™</sup> are trademarks of Garmin Ltd. or its subsidiaries and may not be used without the express permission of Garmin.

SIRF, SIRFstar and the SIRF logo are registered trademarks of SIRF Technology, Inc. SIRFstarIII and SIRF Powered are trademarks of SiRF Technology, Inc.



Windows® is a registered trademark of Microsoft Corporation in the United States and/or other countries.





Part Number 190-00XXX-00 Rev. A

Printed in Taiwan



## Contents of Your Garmin Mobile™ 10 Package

If you ordered from Garmin's Web Configurator, the contents of your package may not match the contents listed below. In this case, compare your order confirmation to the packing list.

**GPS 10x** GPS receiver with Bluetooth® wireless technology

Belt clip that makes your GPS 10x completely portable

**DVD-ROM** with Garmin Mobile XT navigation software.

**Yellow Sheet** that contains your unit's serial number, registration number for registering on Garmin's Web site, and unlock code for future reference.



**NOTE:** The term mobile device is used in this guide. Mobile device refers to the electronic device with Bluetooth<sup>®</sup> wireless technology that you will be using for navigation. A mobile device can be a laptop or notebook computer, or a Windows or Palm handheld personal digital assistant (PDA).

#### Install the GPS 10x in a Vehicle

To communicate using Bluetooth® wireless technology, the GPS 10x must be within approximately 30 feet (10.5 meters) of the PDA/computer.

To receive satellite signals, place the GPS 10x where it has a clear view of the sky. The non-skid surface on the GPS 10x allows you to place it on your dashboard in the selected location.

## Charge the GPS 10x

The GPS 10x receiver contains an internal battery that must be charged before use. Charging requires approximately 3 hours. A fully charged battery lasts approximately 12 hours.

Plug in the charger and turn on the car to charge. You can operate the GPS 10x while you are charging it.

The LED on the front of the GPS 10x flashes yellow-green, indicating charging is in progress. When fully charged the LED displays as steady yellow-green. When recharging is required, the LED displays as flashing orange.









Using the enclosed DVD-ROM, install Garmin navigation software onto your computer. Refer to the product package for minimum computer requirements. Install software before establishing a Bluetooth connection with a mobile device.

Refer to the DVD-ROM Setup Guide for complete information about installing software.

- Insert the DVD-ROM into your computer's DVD-ROM drive.
- 2. Follow the on-screen instructions to install the proper software for your needs:
  - XX for Windows Mobile devices
  - XX for Palm OS devices
  - nRoute for laptop or notebook computers
- 3. Complete the software installation.

If you are using this computer for your navigation device, you are ready to start navigation. If you are using a PDA (Palm or Windows Mobile), refer the XXX.

#### Turn On the GPS 10x Receiver

Press the **Power** button on the top of the 10x to turn it on. A flashing blue LED indicates that the 10x is operational.

#### **LED Status**

- Rapid Flashing Blue: power on, Bluetooth on.
- Slow Flashing Blue: Bluetooth link to another device established
- Flashing Yellow Green: charging in progress
- Solid Yellow Green: battery is charged
- Flashing Orange: low battery
- Solid Orange: faulty battery









#### Pair the GPS 10x

Before you can use the GPS 10x for navigation, it is necessary to establish a connection between the GPS 10x receiver and your mobile device that has Bluetooth wireless technology. Your mobile device and GPS 10x must be turned on and be within 10 meters of each other to establish a wireless connection.

When you first establish the connection, it is called pairing. After you pair the devices, they can automatically connect when they are within 10 meters of each other.

The mobile device must have factory-installed Bluetooth wireless technology or a Bluetooth wireless technology adapter. The GPS 10x communicates with one Bluetooth device at a time.

Refer to your mobile device's documentation or Bluetooth adapter's documentation for specific instructions about pairing.

#### To pair your GPS 10x with your mobile device:

1. Press the **Power** button to turn on the GPS 10x.

- Enable the Bluetooth component. This might be in a menu called Settings, Bluetooth, Connections, or Hands-free.
- 2. Initiate a search for Bluetooth devices. This might be located in a menu called Bluetooth, Connections, or Hands-free.
- 3. Select the GPS 10x from the list of devices.
- 4. Enter the GPS 10x's Bluetooth PIN (1234) into your mobile device.
- 5. Open the Garmin navigation software program (Garmin Mobile XT or nRoute).
- 6. Answer Yes if prompted to turn Bluetooth on.

Any time that the link between your mobile device and the GPS 10x is broken for fifteen minutes, the GPS 10x turns off to conserve power.

#### **Authorize**

Set your mobile device to automatically connect when within 30 meters of the GPS 10x.

#### **Navigate**

Open the Garmin navigation software on your mobile device







## **Technical Specifications**

Physical size: 1.77" W x 0.75" H x 3.46" D (45 x 19 x  $\,$ 

88 cm)

Weight: 2.8 ounces (80 g)

Case: Rugged, but not waterproof

Temperature range:

Operating: 32°F to 140°F (-10°C to 60°C)

Charging: 32°F to 140°F (5°C to 45°C)

Storing: 32°F to 140°F (-40°C to 90°C)

**Power Supply**: Rechargeable Lithium-ion, 12 V DC Adapter/Charging Cable. Auto Power On when connected to a switched external power source

Battery life: up to 12 hours depending on usage

Charge time: Approximately 4 hours

Power input: 12 VDC

Usage: 15 W max. @ 13.8 VDC

Wireless Interface: Bluetooth wireless technology

(Class 2)

**Interface Protocol**: NMEA 0183, sent. GGA/GSA/GSV/GLL/RMC/VTG, and Garmin proprietary

#### **GPS Performance Specifications**

Receiver: WAAS enabled, 12 parallel channel

**Acquisition times\***:

Warm: <1 sec Cold: <38 sec

Factory Reset: <45 sec

\*On average for a stationary receiver with a clear view

of the sky

Update rate: 1/sec, continuous

GPS accuracy:

Position: <10 meters, typical Velocity: 0.05 meter/sec RMS

GPS (WAAS) accuracy:

Position: <5 meters, typical Velocity: 0.05 meter/sec RMS

For a complete list of specifications, see www.garmin.com/products/XXX/spec.html.









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

When installing the unit in a vehicle, place the unit securely so that it does not interfere with vehicle operating controls or obstruct the driver's view of the road (see diagram).

Do not mount where — driver's field of vision is blocked.



Do not mount in front of an airbag field of deployment.

When navigating, carefully compare information displayed on the unit 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 unit while driving, and always be fully aware of all driving conditions. Minimise the amount of time spent viewing the screen of the unit while driving and use voice prompts when possible. Do not input destinations, change settings, or access any functions requiring prolonged use of the unit's controls while driving. Pull over in a safe and legal manner before attempting such operations.

The unit contains a non-user-replaceable, rechargeable lithium-ion battery. The battery may present a risk of fire or chemical burn if mistreated.

- Do not remove from the unit, heat unit above 140°F (60°C), or incinerate.
- Dispose of unit properly. Contact your local waste disposal department for information on properly disposing of lithium-ion batteries.

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.











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

The unit 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 unit only as a navigational aid. Do not attempt to use the unit for any purpose requiring precise measurement of direction, distance, location, or topography. This product should not be used to determine ground proximity for aircraft navigation.

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

## Important Information

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 degree. This is particularly true outside the United States, where complete and accurate digital data is either not available or prohibitively expensive.

NOTICE TO DRIVERS IN CALIFORNIA AND MINNESOTA: State law prohibits drivers in California and Minnesota from using suction mounts on their windshields while operating motor vehicles. Refer to page 22 for instructions on using the included mounting disk with the suction cup mount. Garmin does not take any responsibility for any fines, penalties, or damages that may be incurred as a result of disregarding this notice. (See California Vehicle Code Section 26708(a); Minnesota Statutes 2005, Section 169.71.)







#### **Product Registration**

Help us better support you by completing our online registration today! Connect to our Web site at www.garmin.com/registration/.

Use this area to record the serial number (8-digit number located on the back of the c510) in case your c510 needs service. Keep the original sales receipt, or a photocopy, in a safe place.

Serial Number:		

#### **Contact Garmin**

Contact Garmin if you have any questions while using your c510. In the U.S.A. contact Garmin Product Support by phone: 913/397.8200 or 800/800.1020, Monday–Friday, 8 AM–5 PM Central Time; or go to www.garmin.com/support/, and click **Product Support**.

In Europe, contact Garmin (Europe) Ltd. at 44/0870.8501241.

## **Software License Agreement**

BY USING THE c510, 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.







### **FCC Compliance**

The unit 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 more 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 installed and 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, you are encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- · Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult an experienced radio/TV technician for help.



**NOTE:** The Garmin c510 has no user-serviceable parts. Repairs should only be made by an authorised Garmin service center.



**NOTE:** Unauthorized repairs or modifications could result in permanent damage to the equipment, and void your warranty and your authority to operated this device under Part 15 regulations.



**NOTE:** The c510 is fastened shut with screws. Any attempt to open the case to change or modify the unit in any way voids your warranty and may result in permanent damage to the equipment.

**NOTICE**: This Category II radiocommunication device complies with Industry Canada Standard RSS-310.

#### **Declaration of Conformity**

Hereby, Garmin declares that this StreetPilot c-series product is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

To view the full Declaration of Conformity, see the Garmin Web site for your Garmin product: www.garmin.com/products/XXX/. Click

Manuals, and then select the Declaration of Conformity.









#### **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 authorised dealer or call Garmin Product Support 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.

Garmin International, Inc. Tel. 913/397.8200 Fax. 913/397.8282

Garmin (Europe) Ltd. Tel. 44/0870.8501241 Fax 44/0870.8501251

Online Auction Purchases: 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.

International Purchases: A separate warranty is provided by international distributors for units purchased outside the United States. This warranty is provided by the local in-country distributor and this distributor provides local service for your unit. Distributor warranties are only valid in the area of intended distribution. Units purchased in the United States or Canada must be returned to the Garmin service center in the United Kingdom, the United States, Canada, or Taiwan for service.







# 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.



© 2006 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 2<sup>nd</sup> Road, Shijr, Taipei County, Taiwan

www.garmin.com

Part Number 190-00XXX-XX Rev. A

