

#### **SAFETY AND LEGAL NOTICES**

Rayming will not accept any responsibility whatsoever for accidents resulting from failure to observe common sense precautions. Your personal judgement, traffic regulations and common sense must always take precedence.

#### **WARNING: Make sure that the GPS unit and antenna are secure and do not interfere with driving.**

It is your responsibility as the vehicle operator to securely place the GPS unit and antenna so that they will not interfere with driving and will not prevent operations of any safety device (such as the Airbag) in your vehicle. Do not mount the devices in a place where the driver or passengers may receive injury during vehicle operation or collision. For your safety, take care to route all cables away from shifters, pedals, accessory controls and mechanisms.

#### **WARNING: Drive safely and use common sense.**

The vehicle operator's personal judgment, traffic regulations, and common sense must always take precedence over instructions provided by TripNav or any mapping software used. It is your responsibility as the vehicle operator to drive safely, observe all traffic rules and above all use your own personal judgment while driving. If you feel that a route suggested by the navigation software instructs you to perform an unsafe or illegal maneuver, places you in an unsafe situation, or routes you into an area which you consider unsafe, do not follow the instructions.

#### **WARNING: Keep your eyes on the road.**

It is your responsibility as the vehicle operator to keep your eyes on the road and be an alert driver at all times, ESPECIALLY when the vehicle is moving. The vehicle's operator should not be distracted by the navigation equipment or software being used. Should there be a distraction with the ability to drive responsibly, please turn off the device. Should you want to look at the display, park the car safely, while following all traffic regulations before looking at the display.

**WARNING: To reduce the risk of fire or shock hazard, do not expose this product to rain or moisture. Do not remove covers or open housings, as there are no user serviceable parts inside. Refer servicing to qualified personnel only.**

#### **LIMITED ONE-YEAR WARRANTY**

This product hardware is warranted by Rayming Corporation against manufacturing defects in material and workmanship under normal use for (1) year from the date of purchase from authorized dealers. Except as provided herein, Rayming Corporation makes no express warranties or implied warranties, including those of merchantability and fitness for a particular purpose, are limited in duration to the duration of the written limited warranties contained herein. Exception as provided herein, Rayming Corporation shall have no liability or responsibility to customer or any other person, or entity with respect to any loss liability, loss or damage caused from direct or indirect use, or performance of the product, or arising out of any breach of this warranty, including but not limited to any damages resulting from inconvenience, loss of time, data, revenue or profit, or any indirect, special, incidental or consequential damages, even if Rayming has been advised of the possibility of such damages.

Some states do not allow limitations on how long an implied warranty lasts or the exclusion of incidental or consequential damages, so the above limitations or exclusions may not apply to you. In the event of a product defect during the first 30-days of the warranty period, return product and the sales receipt as proof of purchase to place of original purchase. For defects discovered after 30-days from date of purchase, you must contact Rayming Corporation's Technical support for a Return Merchandise Authorization (RMA) number for return to manufacturer. Rayming Corporation will, at its option, unless otherwise provided by law: (a) correct the defect by product repair without charge for parts and labor; (b) replace the product with one of the same or similar design; or (c) refund the purchase price. All replaced parts and products, and products on which a refund is made, become the property of Rayming Corporation. New or reconditioned parts may be used in the performance of warranty service.

Repaired or replaced parts and products are warranted for the remainder of the original warranty period. You will be charged for repair or replacement of the product made after the expiration of the warranty period. This warranty does not cover: (a) damage or failure caused by or attributable to acts of God, abuse, accident, misuse, improper or abnormal usage, failure to follow the instructions, improper installation or maintenance, alteration, lightning or other incidence of excess voltage or current; (b) any repairs other than those provided by Rayming Corporation; (c) consumables such as fuses or batteries; (d) cosmetic damage; (e) transportation, shipping or insurance costs; (f) costs of product removal, installation, setup service adjustment or reinstallation. This warranty gives you specific legal rights, and you may also have other rights, which may vary from state to state. Additional products bundled in this package which have not been manufactured by Rayming Corporation, will hold separate warranties as expressed by the individual manufacturer of the product(s). Product specifications, functions and features are subject to change without notice.

An expanded version of the User's Guide has been included on enclosed TN-200 Driver CD-ROM, or can be downloaded from our website at [www.rayming.com](http://www.rayming.com).

# TripNav™

## TN-200 USB GPS RECEIVER

### Quick Start User's Guide v1.3

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1305 John Reed Court, City of Industry, CA91745  
[www.rayming.com](http://www.rayming.com)

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Made in Taiwan

## WELCOME

Thank you for your purchase of TripNav USB GPS receiver. With the TripNav GPS Receiver and your own personal mapping or navigation software (works with most any NMEA compliant software available in the market today), you can do real-time vehicle navigation, get driving directions and plot positions of your travel route.

## PACKAGE CONTENTS

- TripNav TN-200 GPS Receiver w/USB cable
- CD-ROM with Quick Reference Guide and User's Manual\*

*\*Driver and manuals can be downloaded at: [www.rayming.com/downloads.htm](http://www.rayming.com/downloads.htm)*



## TN-200 SYSTEM REQUIREMENTS

The TripNav GPS requires a Windows or Macintosh laptop computer, with a CD-ROM\*, USB port, and NMEA compatible mapping or navigation software. The 3<sup>rd</sup> party mapping or navigation software will have its own system requirements, so please check with the software vendor for their specific requirement details.

*\*CD-ROM drive is required for USB driver installation, or it can be downloaded from the Internet at: [www.rayming.com/downloads.htm](http://www.rayming.com/downloads.htm)*

## GETTING STARTED

There are three easy steps to start using your TripNav USB GPS Receiver:

- Install the USB driver and onto your laptop PC from the included CD-ROM (TN200.EXE) or download the driver file from our web-site at: [www.rayming.com/downloads.htm](http://www.rayming.com/downloads.htm).
- Install your own NMEA compliant personal street mapping or navigation software and configure the software's COM port setting to accept the GPS.
- Plug-in the GPS receiver into your laptop.

*NOTE: Before using your TripNav for navigation (especially for the first time), the GPS must obtain a local GPS fix (coordinates) of your current position. This can take up to several minutes. See: "Initializing Your GPS Receiver," which is the last paragraph in the "Installing the USB driver into your laptop" of the User's Guide on the CD-ROM.*

### 1. INSTALL THE USB DRIVER FROM THE CD-ROM

Insert the CD-ROM into your drive and select the "TN200.EXE" file to copy files to your local hard drive. Please consult the TN-200 User's Guide, which has been copied into the C:\TRIPNAV2 directory for detailed installation procedures on specific operating systems (O/S), which may not match with steps as outlined in this Quick-Start User's Guide.

Plug-in TripNav to the USB port of your laptop, and the "Add New Hardware Wizard" should appear. When prompted, select "Have Disk" and set a path to the C:\TRIPNAV2 directory. Continue with the installation process and it will automatically select the correct USB driver for your O/S.

To see the COM port number assigned to your GPS receiver, open "Control Panel," click on "System," select "Device Manager" and look for the heading "Port (COM & LPT)."

Maximize it by clicking on the "+" sign. You should see "USB to Serial Port" assigned to a COM port. (generally COM3, but this varies from PC to PC). Select the "USB to Serial Port" and right-click your mouse for a menu. Select "Properties" and then select "Port Settings." Set the values there to:

Baud rate:	4800
Data bit:	8
Parity:	None
Stop bit:	1
Flow control:	None

### 2. INSTALL MAPS OR NAVIGATION SOFTWARE

After the installation of the USB Driver is complete, you can now install, or configure your mapping software to accept the GPS data to be received. Since most all maps and charts on the market today require a serial receiving device to obtain the GPS data, the included TN-200 driver creates a Virtual COM Port (VCP), turning the USB port into a serial data gateway.

## VCP = Virtual COM Port

TripNav provides a standard NMEA data format for mapping software to use and convert to coordinates and should work well with most all NMEA compliant software on the market today. For questions regarding whether your software is NMEA compliant or not, please consult with your software's instruction manual or vendor's technical support.

**WARNING:** This GPS Device contains a built-in magnet which should not come into close proximity of any item which could be sensitive to magnetic fields such as floppy disks, audio tapes and compasses.

### 3. CONFIGURE MAP SOFTWARE TO READ GPS DATA

Within your mapping software installed, you will most likely be required to manually configure the selection of a COM port, which was assigned to the TripNav GPS receiver by your PC in order to properly pass data from the GPS receiver to the mapping program. Consult your mapping software's manual on how to configure the COM port selection. Upon completion of the COM port configuration, go to an open area outdoors where there is a clear view to the sky. If everything has been setup correctly, TripNav should start receiving data and communicating with your software.

The LED on TripNav indicates the GPS status:

**LED OFF:** GPS receiver is off (no power)

**LED FLASHING:** No fix, searching for GPS signals.

**LED ON (solid):** Position fix, GPS signals are being received.

## CONTACT US

Please send an e-mail with your questions or comments to the Technical Support, which are monitored for prompt replies.

## TECHNICAL SUPPORT (Hardware)

[support@rayming.com](mailto:support@rayming.com)

T: 626.961.6273

Rayming Corporation  
1305 John Reed Court  
City of Industry, CA 91745

[www.rayming.com](http://www.rayming.com)

**PLEASE READ ALL SAFETY NOTICES ON REVERSE SIDE BEFORE USING THE TN-200 GPS RECEIVER**