



# Leadtek LR 9553% series Wireless Bluetooth GPS User Manual







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# Hardware Description





- 1 Power supply connector
- 2. Bluetooth power LED indicator.

#### Power Off

The LED light is off.

#### Power On

The LED light flashes and awaits for connection.

#### Blue power LED

It indicates that the GPS is currently in use.

3 Descriptions



#### Recharge Status

A red LED light is shown while GPS is in recharge status.

After recharging is completed the LED light is turned off.

#### Shortage of Power supply

A flashing red LED light indicates a shortage of power supply.

#### **GPS** Positioning status

During GPS positioning a flashing green LED light is shown.

- \* When there is a shortage of power supply during GPS positioning, both red and green LED light will flash.
- 4. Power On/Off
  On (1) Off

## **Battery/Power Recharge**

Please recharge the lithium battery before use.

Connect the battery charger to the GPS power supply connector.

For details on LED indicators during recharge status, please refer to sections on Hardware description.

#### Note:

The USB power cable that comes with this product can be used to connect to PC for recharge purposes, with the exception of Leadtek BT GPS 9553 which includes a non- standard USB cable, that will interfere with the normal GPS functionality during recharge status. Use a car or travel recharge kit instead.

## **Safety Instructions**

Thank you for your purchase of Leadtek's Mini Bluetooth GPS 9553 products. This manual provides a detailed guidance on Leadtek's GPS products. Please read through the following instructions carefully. Be aware that any violation of rules can cause possible danger or offend against the law.

Be aware on appropriate traffic safety

For safety reasons please do not operate the product while driving.

Switch off the product while boarding the plane

In order to avoid interrupting the on board communication system, please switch off the product before boarding the plane. Please adhere to the rule accordingly.

Switch off the product whenever it's necessary

Please follow the switch-off instructions strictly.

Proper use of products

Please follow the correct procedure when using the product.

Accessories

Please use the original accessory to avoid damage to the products.

Proper service and maintenance

Please note that unauthorized service to the product will forfeit the product warranty.

Connections with other equipments.

For connections with other equipments please consult the relevant instruction booklet.

Avoid connection between incompatible products.

When starting the car please do not connect the GPS power cable to the lighter on the car since strong voltage might cause damage to the products.

## **Features**

Latest SiRF StarIII chipset

12 channels "All-in-View" tracking and "SiRFxtrac" high sensitivity software

Effective distance must be within 10m of 2DRMS

Cold/Warm/Hot Start Time: 45/38/1 seconds(in open spaces)

Re-connection Time: 0.1 second

Standard NMEA-0183 output

Supports Trickle Power power-saving mode

Dual power LED indicates the power status of Mini Bluetooth GPS

On/Off switches

Size: 61.4(L) x 42.4(W) x 25.4(H) mm

# **Package Contents**

Make sure your package contains the following:

Mini Bluetooth GPS 9553 Receiver

User's guide x 1

CD-ROM x 1 (see Note 1)

USB - Mini USB connector x 1

Voltage converter (USB port) x1

Car Charger (USB port) x1

#### <Note 1>

Inside the CD-ROM includes the "CE Navigator" for GPS receiver evaluation, product manual and various Leadtek GPS application software.

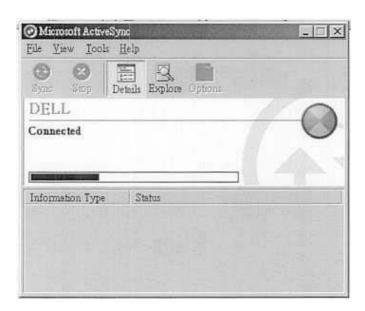
#### <Note 2>

This USB cable can only be used for power charging purpose. It cannot be used for data transfer or as connectors.

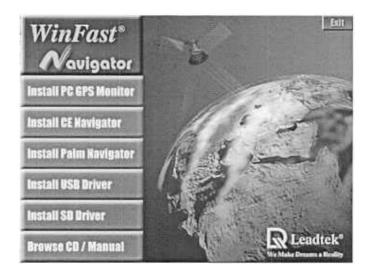
# **Installing Navigator Software for Pocket PC**

#### Note:

Microsoft ActiveSync has to be installed and running on your computer when you want to install Navigator.

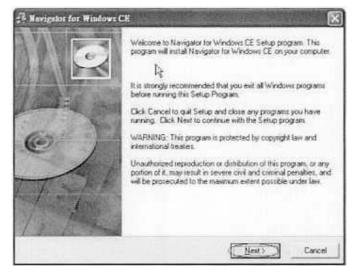


Insert the software CD-ROM in your CD-ROM drive. The setup window should appear as shown in the figure. If the setup window does not appear automatically, run install.exe on the CD. Click "Install CE Navigator" to initialize the installation.

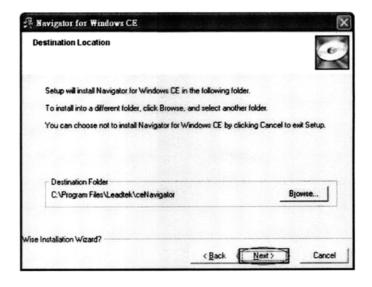


#### Step 2

The setup program dialog box appears. Click "Next".

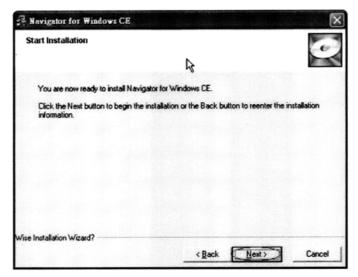


The dialog box for choosing the installation Destination Location appears. It gives the default destination folder location. If you wish to change the folder location, browse for a different location. If not, click "Next".



#### Step 4

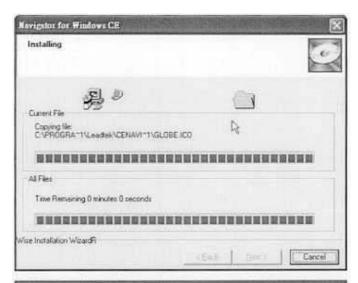
Now you have completed the setup for the installation. Click "Next" to start installing the Navigator.

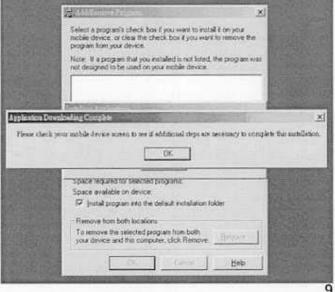


Installation is in progress.

### Step 6

When the installation is completed, a dialog box tells you to check your mobile device screen to see if additional steps are necessary to complete this installation. Click "OK".





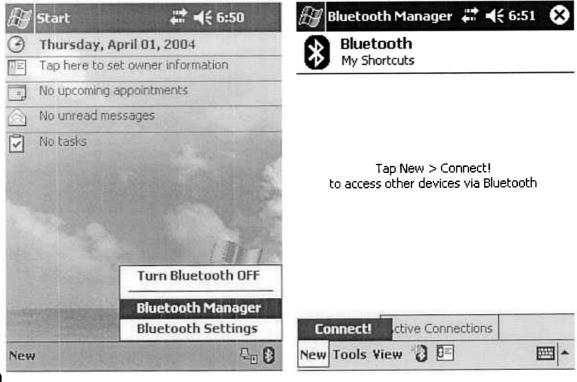
## Hardware installation

After switching on Mini Bluetooth GPS 9553 receiver, please follow steps below for installation instructions:

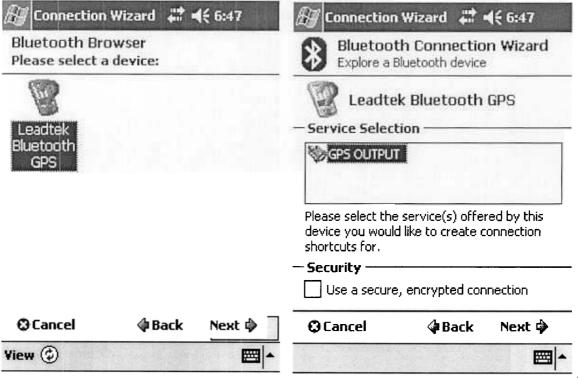
#### Step1

Create a GPS 9553 shortcut.

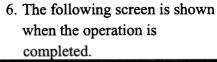
- 1. Double-click the Bluetooth icon on the right bottom corner and select "Bluetooth Manager".
- 2. Click "New" on the bottom left corner.



- 3. Click "Leadtek Bluetooth GPS" icon.
- 4. Select "GPS OUTPUT" service and then click "Next".



5. Click "Finish" to complete the operation.







#### **Bluetooth Connection Wizard** Explore a Bluetooth device



#### Leadtek Bluetooth GPS

### Shortcuts created

Connection shortcut(s) for the service(s) you selected were successfully created.

#### To connect:

From the Bluetooth Manager "My Connections" screen, double-tap the connection. Or tap-and-hold the connection icon and select 'Connect' from the menu.

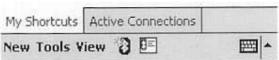




Leadtek Bluetooth GPS: GPS ...

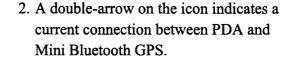




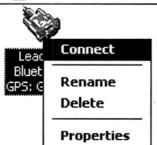


GPS bluetooth connection.

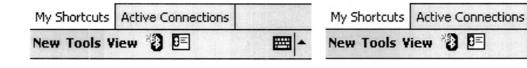
1. Click "Leadtek Bluetooth GPS: GPS Output" icon and choose "Connect".











## **Testing Leadtek GPS 9553**

#### Step 1

Before testing Leadtek GPS 9553, please finish the installation of "Navigator" software on your Pocket PC.

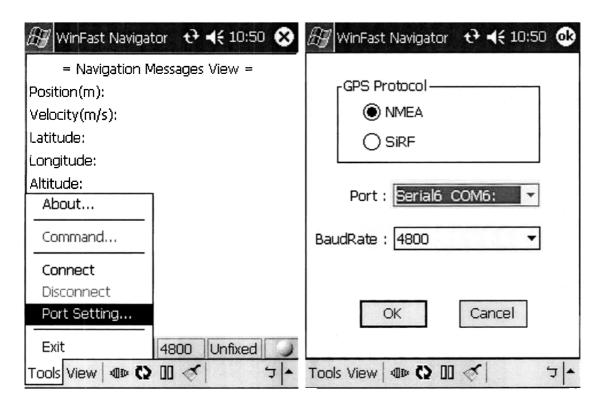
#### Step 2

Testing steps are as below. Please do it step by step.

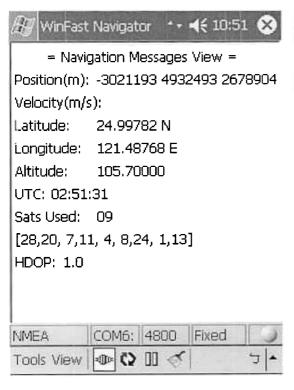
1. Select "Navigator". 2. Start the Navigator and then click "Tools". WinFast Navigator 🚓 ┥€ 1:13 0 0 9 2004 = Navigation Messages View = (A Today information Position(m): iPAQ Wireless ents Velocity(m/s): (3) ActiveSync - Calendar Latitude: Contacts Longitude: A Inbox Altitude: (A) Internet Explorer UTC: May Navigator Sats Used: Notes ✓ Tasks HDOP: Windows Media Programs → Settings Disconnect | COM1: | 4800 | Unfixed **Find** Tools) View 🐠 🗘 🔢 🍼 📳 ₽ 0 ( Help

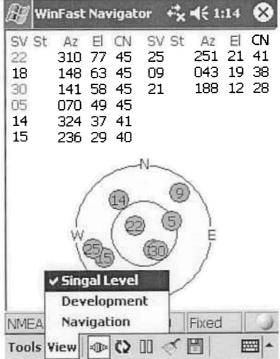
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- 3. Click "Port Setting".
- 4. Choose a serial port in the PDA for the GPS. In most PDAs it should be COM6, click "OK" to begin GPS positioning.



- 5. The latitude longitude and position fix status will be shown on screen.
- 6. Click "View" then select "Signal Level", and you will see the satellites and CN ratio list. When GPS reception condition support 2D or 3D navigation, the satellite icons will appear green. Meanwhile, the device's LED light on the GPS will flash and appear green too.





7. Click "View" and then select "Development", and the NMEA output messages from Leadtek GPS 9553 will be displayed on the screen.



\*PS: After using the navigator software, please remember to disconnect (click "Tool" -> Disconnect) or exit to release the COM PORT so it can be used by other navigation software.

## Appendix A. Limited Warranty

Leadtek warrants to the original purchaser of this product that it shall be free of defects resulting from workmanship or components for a period of one (1) year from the date of sale. Defects covered by this warranty shall be corrected either by repair or, at Leadtek's discretion by replacement. In the event of replacement, the replacement unit will be warranted for the remainder of the original one (1) year period or thirty (30) days, whichever is longer. There are no other oral or written warranties, expressed or implied, including but not limited to those of merchantability or fitness for a particular purpose.

This Limited Warranty is non-transferable and does not apply if the product has been damaged by negligence, accident, abuse, misuse, modification, misapplication, shipment to the manufacturer or service by someone other than the Leadtek transportation charges to Leadtek are not covered by this limited warranty. To be eligible for warranty service, a defective product must be sent to and received by Leadtek within fifteen (15) months of the date of sale and be accompanied with proof of purchase. Leadtek does not warrant that this product will meet your requirements; it is your sole responsibility to determine the suitability of this product for your purposes. Leadtek does not warrant the compatibility of this product with your computer or related peripherals, software.

Leadtek's sole obligation and liability under this warranty is limited to the repair or replacement of a defective product. The manufacturer shall not; in any event, be liable to the purchaser or any third party for any incidental or consequential damages or liability in tort relating to this product or resulting from its use or possession.

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### Appendix B. Cautions

### **CAUTIONS**

The GPS system is operated by the government of the United States, which is solely responsible for its accuracy and maintenance. Although the GPS 15H & 15L Products are precision electronic Navigation AID (NAVAID), any NAVAID can be misused or misinterpreted, and therefore become unsafe. Use these products at your own risk. To reduce the risk, carefully review, and all aspects of these Technical Specifications before using the GPS 15H & 15L. When in actual use, carefully compare indications from the GPS to all available navigation sources including the information from other NAVAIDs, visual sightings, chart, etc. For safety, always resolve any discrepancies before continuing navigation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. 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, the user is encouraged to try to correct the interference by one or more of the following measures:

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

#### **RF Exposure Statement:**

- 1. This Transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.
- 2. Any changes or modifications (including the antennas) made to this device that are not expressly approved by the manufacturer may void the user's authority to operate the equipment.

ITE is subdivided into two categories denoted class A ITE and class B ITE.

# Class A ITE ( E

Class A ITE is a category of all other ITE which satisfies the Class A ITE limits but not the Class B ITE limits. Such equipment should not be restricted in its sale but the following warning shall be included in the instructions for use:

#### Warning

This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

#### **Class B ITE**

Class B ITE is a category of apparatus which satisfies the Class B ITE disturbance limits. Class B ITE is intended primarily for use in the domestic environment and may include:

- equipment with no fixed place of use; for example, portable equipment powered by built-in batteries;
- telecommunication terminal equipment powered by a telecommunication network;
- personal computers and auxiliary connected equipment.

## **DGT Short Range Devices Application document**

DGT short range type approval documentation

4 copies of product catalogue and color photos larger than 4x6 inches 1 copy of user manual with instructions and technical specs (Must be stamped with the Manufacturer's seal.)

1 copy of block diagram

1 copy of circuit diagram

A copy of the licensing permit for the operation of controlled telecommunications equipment

authorization letter (power of attorney)

(Must be stamped with the Manufacturer's seal.)

Application forms are to be completed in Chinese. (Must be stamped with the Manufacturer's seal.)



# Appendix C. GPS FAQ

- Q: Why does the GPS positioning fail, even though the satellite signal appears to be normal on my PDA?
- A: The reason might be that the GPS has not been used for a while, and the GPS needs to be reset. You may follow the steps below to reset for positioning with "Cold Start" under "Navigator" application utility.
  - 1. Tools→ Port Setting→ set the "Com Port" and "baud rate" to 4800→ click "OK".
  - 2. Tools→ Command→ select "Cold Start"→ click "OK".
- Q: Why does the position of the car drift around on the map even when my PDA is properly positioned?
- A: This might be caused by unstable satellite signal and weak signal resulting from locating in heavily blocked areas, which affect the positioning of the car onto the map.
- Q: Why are there no sign of signal transmission in my map utility program and positioning fails even though my GPS is connected?
- A: This might be caused by incorrect COM Port setting. Most of the PDA map utility programs search for GPS device, and the GPS device is not found in this case. It is suggested that you set the COM Port settings manually instead.

- Q: Why is the GPS device not found by the PDA map utility program after positioning is completed by the "Navigator"?
- A: "Navigator" is an application utility that users can use to test for GPS. After using "Navigator", you have to disconnect the GPS device in order to release the COM Port before proceeding with the positioning by your PDA map utility program. Otherwise, the COM Port will still be occupied by Navigator, and the PDA map utility program will not find the GPS device.
- Q: Why can't I get the positioning to work with my GPS at home or areas by the windows?
- A: GPS is really used for outdoor positioning navigation, and the satellite signal is difficult to be received at home. Especially, it takes a while to get the positioning to work for the very first time. Therefore, positioning must be done outdoors where satellite signal can be received.
- Q: Why can't I install "Navigator" application utility on my PDA?
- A: "Navigator" application utility can be installed directly on most of the PDAs. For those PDA models that have installation problems, you can search for a file called "Navigator.ARM.CAB" among the installation files. Copy this file to any folder on your PDA, and install "Navigator" application utility by clicking on the file directly.
- Q: Under what circumstances do I have to perform "Cold Start"?
- A: If the positioning usage time is longer than two weeks or the location of positioning is greater than 500 km away from the previous location of positioning, then you will need to perform "Cold Start".

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