

# WBT-100

## USER'S MANUAL



We thank you for purchasing Wintec WBT-100. Based on innovative idea and wireless technology, Wintecronics Ltd has always been developing various products to meet customers' affection. We wish you could give attention to new product information from us. Your comment and suggestion are always welcome by us.

## Approved certificates



## This manual is applicable for

**WBT-100**

## Safety notes

- This product is intended for providing knowledge of location to consumers for reference use. Personal judgment may be required depending on actual situation.
- If installed on the transportation device, driver must not operate this while driving.
- For safety sake, use of this device is only under standard condition.
- Only use battery from original manufacturer, avoid placing under high temperature environment.

## CONTENTS

■ Features/Production Illustration	2
■ Buttons VS LED indicator	3
■ Operation Guide	4 - 7
■ Accessories packed with/How to replace battery and do charging	8
■ CE Warning/FCC Caution	9

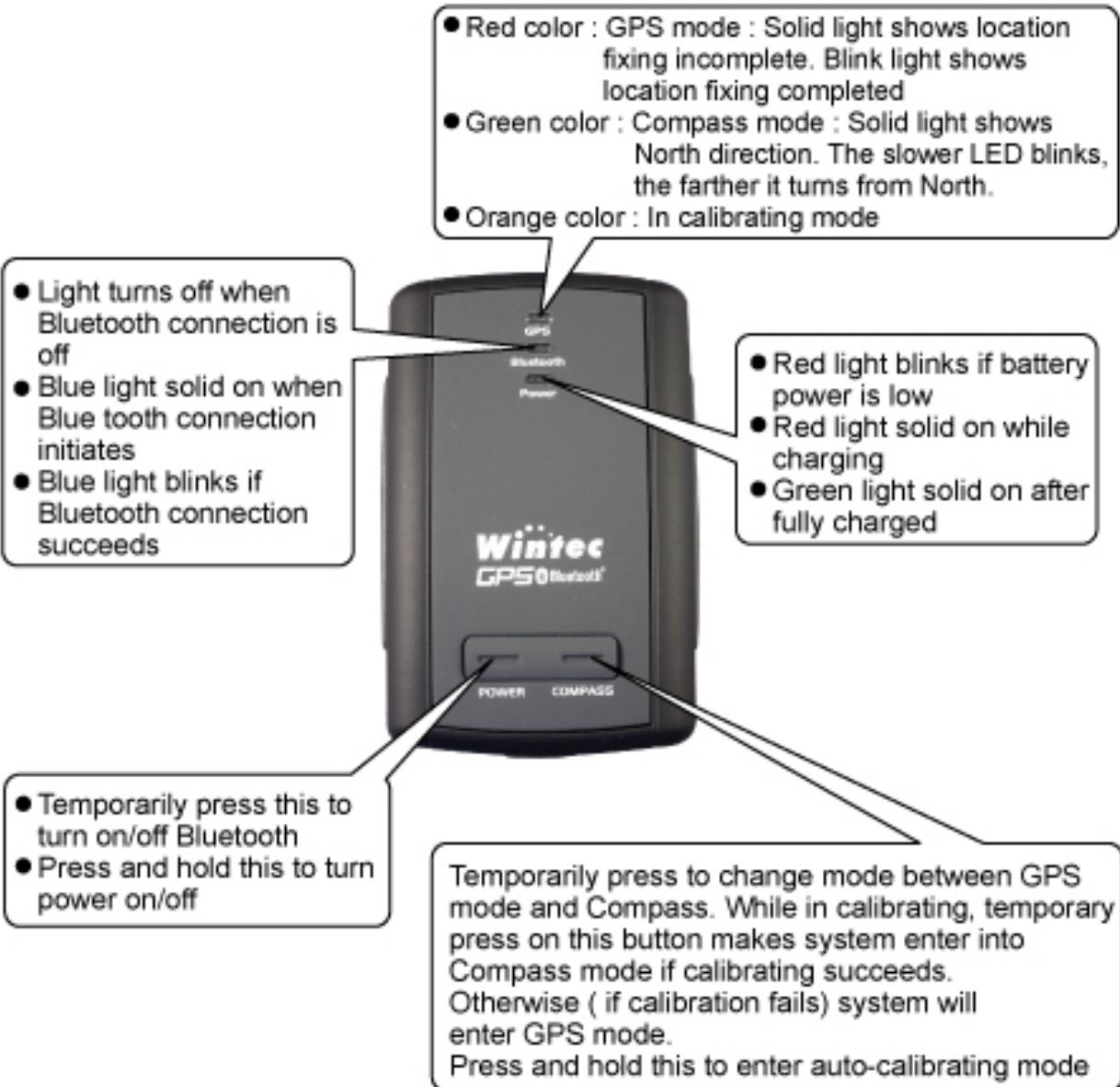
## Features

- Super lightweight design
- Self-contained digital compass capable of auto-calibrating
- Compass feature to search North
- Location point auto-selectable
- Auto-logging to track journey
- Programmable interval time of auto-log
- Firmware upgradeable
- Interfaces with SPP and USB
- GPS programmable tool

## Production Illustration



## Buttons VS LED indicator



## OPERATION GUIDE

**Power ON :** The device is powered after 1.5 sec from the time battery is inserted or press and hold power button. The GPS and Bluetooth LED lamp will turn on.

**Power OFF :** While power ON, press and hold power button for about 1.5 sec, power turns off and LED lamp gets off.

### 1 ◊ Bluetooth ON/OFF

- \* While power ON, temporary press on power button can turn bluetooth ON. Temporary press of this same button again can turn the blue tooth OFF.
- \* To save battery life, it is recommended to turn Bluetooth OFF when it just needs to work solely for the auto-logging.
- \* After Bluetooth is ON, if there is no Bluetooth connection within 5 min Bluetooth will automatically turn itself OFF. To turn Bluetooth ON again, temporarily press power button.

### 2 ◊ Auto-log

After the device is powered and if location fixing succeeds, it starts to log data automatically into its memory.

With the software provided, auto-log interval can be programmed 1~3600 sec. (factory default is set for the 5 sec interval. i.e. system will log data each 5 sec). Device can record up to 12680 data for the whole 17.6 hour duration on the journey if the factory default is not changed.

Note: Interval time " 0" disables data-log features.

Data data-log goes on in a rotational mode. When the memory is full with data, the newest datum will replace the oldest one to keep latest data optimally to its full capacity.

Data and logging features are kept permanent even Bluetooth is off.

- \* When the data-log interval is set to "0", Bluetooth will automatically turn off 10 min afterwards. But if the interval is set to non-zero, data-logging will go on without shutting power.

\* To read logged data, refer to the software application guide.

### **3 Mode change ( operation by Compass button)**

When device is powered, press temporarily on compass button to change mode between GPS and Compass.

Press Compass button temporarily. If GPS lamp turns red, it currently is in GPS mode. ( If GPS lamp turns solid on, GPS fixing fails. But if this lamp blinks, GPS fixing succeeds.)

Press Compass button temporarily. If GPS lamp turns green, it currently is in Compass mode.

### **4 Compass mode**

While in compass mode, horizontally rotate this device slowly in one circle and observe GPS lamp.

The lamp blinks faster when its direction is closer to the North direction. The exact North direction is oriented if its lamp lights solid on.

### **5 Calibrating**

Calibration is needed each time before use.

1. Press and hold the Compass button for 3 sec till its GPS lamp turns orange.  
The device currently is in calibrating mode.
2. Horizontally rotate this device slowly at least for 1~ 2 circles
3. Temporary press on Compass button. Calibrating is done if the lamp turns green.  
If the lamp turns red, calibrating fails. Repeat steps from 1 to 3.

※ Electronic compass is susceptible to interference by external magnet field. It is necessary to calibrate it before use each time. It must be held horizontally when carried by hands.

※ The compass might jitter due to external magnetic interference.

※ If used on vehicle, the compass must be mounted at a fixed position. Then drive the vehicle circularly one time for the proper calibrating.

Calibration of compass done manually inside the vehicle is not recommended because this way of calibration might cause error.

## **6 Connecting to PDA or Note book computer**

After the device is powered, for the first time Bluetooth connection must be established between our WT-100 and other devices ( PDA or note book). Consult the Bluetooth connection guide of other devices first.

To use with PDA, follow the procedures below.

1. From the PDA main menu, open Bluetooth Manager select NEW / Explore a Bluetooth device. Afterward PDA will find out WBT-100's service and select SPP Slave to add to bluetooth device. At the end of sourcing, all the Bluetooth devices are displayed. Select WBT-100.

Note : **A** : GPS must be powered on.

**B** : PDA and GPS must be within 10 meter range for ensured communication.

2. Depending on PDA brands, some require PIN code to enable communication. Key in 0000. Generally, if communication between GPS and PDA succeeds, PDA will display Bluetooth connection icon blinking.
3. Activating of navigation software: After communication between PDA and GPS succeeds, navigation software can be activated. Then program the GPS settings and select the correct COM PORT. ( Refer to navigation operation guide and select GPS data rate at 9600).

Note: During the initial use, if GPS fixing is difficult due to weak GPS signal, try to stay at the open area for a moment.

## **7 Low battery warning**

When battery power gets low, the power LED lamp will start blinking. Under this condition if recharging is not done within 30 sec, GPS will stop working. This is to avoid depleting power completely.

## **8 ◀ Resetting**

In the case you find the device performs abnormally due to improper manipulation, reset it by disrupting its power supply. In this situation, take off its battery and then re-insert it. Device will restore to its original settings (personal settings will not be lost). For a moment after resetting, GPS will warm start and therefore GPS fixing takes a few seconds before performing normally.

## **9 ◀ Refer to the software installation and operation guide in CD disk enclosed in product package.**

## **10 ◀ Trouble-shooting**

1. Bluetooth connection between GPS receiver and PDA requires PIN code. Enter 0000 as PIN code.
2. When power is On, Blue tooth requires 5 sec for self-test each time before connection.
3. As Blue tooth communication may receive interferences by environment, the communication range might often be shorter. This is normal phenomena.
4. Avoid GPS fixing of more than 2 devices in near proximity.
5. Electronic compass is highly sensitive to magnetism. Calibrating is required ahead of use. Avoid using in the magnetic field that might come from cellular phone, speaker and ferrous metal.
6. If USB is selected for connection with computer, use enclosed CD Rom to install USB driver onto computer and choose COM PORT correctly.
7. PDA can get down abnormally if communication between PDA and GPS is disrupted abnormally.

Bluetooth disconnection between GPS receiver and PDA can be done by means of WBT100 or PDA's software command according to normal procedures below.

- (A) Press temporarily the power button of WBT100 to disable bluetooth and cease bluetooth connection while their connection is on.
- (B) Get access to the PDA's Bluetooth Manager and execute Bluetooth disconnection command or close the Bluetooth application.

## Accessories packed with



Tool disc



USB cable

## How to replace battery and do charging

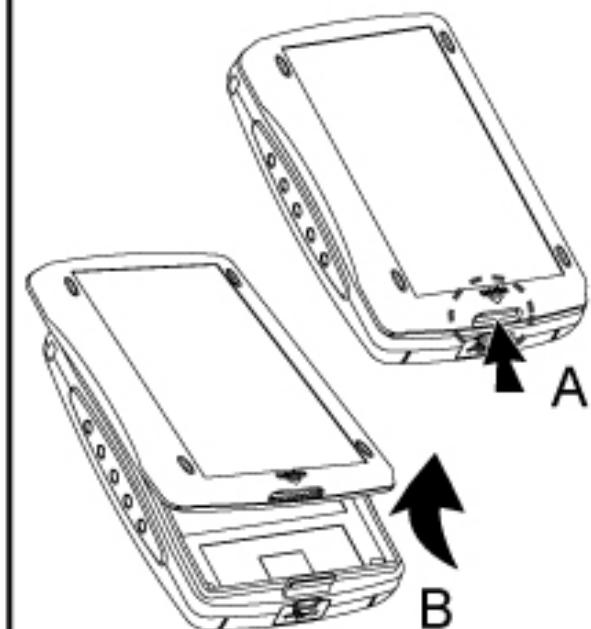
### Battery replacement

Keep an extra spare battery in case of any time need. Replace battery as below.

**(A)**. Take off the battery cover

**(B)**. Place the battery in battery Slot , assuring the text-side to face upwards.

\* Note: Some batteries might not be charged. Find original supplier for replacement battery.



### How to charge battery



\* Connect the USB connector head to the USB port of the computer ( or ) to power adapter. Connect the mini-USB to the WBT-100's connector jack as in illustration above. The power LED will turn red during charging. The power LED will turn orange when fully charged.

## **CE Warning**

### **Regulatory statement (R&TTE / WLAN IEEE 802.11b & 802.11g)**

European standard dictate maximum radiated transmit power of 100mW EIRP and frequency range 2.400-2.4835GHz : In France, the equipment must be restricted to the 2.454-2.4835GHz frequency range and must be restricted to indoor use.

### **CE Declaration of Conformity**

For the following equipment: **Notebook with WLAN module**

## **FCC Caution**

1. The device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions:
  - (1) This device may not cause harmful interference.
  - (2) This device must accept any interference received, including interference that may cause undesired operation.
2. This Transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.
3. Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user authority to operate the equipment.