



User's Manual Rev 1.10.2 - 2007/07/19

# RoadMaster

GPS based road books Reader/Recorder



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## 2 New functions of the Version 1.10.2 firmware

The current version 1.10.2 of the RoadMaster manual applies to the firmware version 1.10.x; Prior editions of the firmware do not offer the same functionalities. If the firmware of your RoadMaster is not the latest, update it without delay following the instructions of §18 Updates. Comparing to the previous revision of the manual (1.8.4), the new functionalities are:

## **Navigation**:

- The speed traps files for France, Belgium, Spain, The Netherlands and Portugal is available to the users of the « basic » version (free of charge) on www.alertegps.com. A single « .nvo » file contains all the speed traps information for these countries. See § 11 Operation of control points monitoring.
- If only one speed traps monitoring file is present in the RoadMaster memory, this file is automatically selected by the monitoring function.
- Possibility to immediately visualise and use a recorded track. Programming of tracks on the RoadMaster itself without transfer to RoadTracer Pro. See § 13.1.3 Playing a road book in the dot-arrow mode.
- Once « off track », one can rejoin the track at any point and RoadMaster will systematically re-connect the track (except way point 1)
- Possibility to navigate a road book between « beacons ». The road book is made of the sole WP positions.

#### Display:

- Possibility to configure a « COMPAS 4X4 » displaying the information in degrees instead of the traditional arrow. See § 13.1.4 Playing a road book in compass mode
- Each line of the road books list is preceded by an icon « dot/arrow », « arrow », « tape » or « beacons». See § 13.1 Navigate / Pilot a road book
- Possibility to draw de dot-arrows by means of dotted lines (requires RoadTracer Proversion V1.2.x or later). See § 3.2 Dot-Arrow
- Improved reactivity of the sniffing arrow. See § 3.4 Sniffer arrow
- During navigation, possibility to display various information screens by means of a simple button pressure. See § 13.1.2 Revolving information screens
- Vehicle instantaneous speed is displayed in the speed trap warning screen. See § 11
   Operation of control points monitoring
- When navigating a dot-arrow road book, the keyboard ◀► keys allow the visualisation of the preceding or following waypoints.
- Through the Paramerters menu, the COMPAS, TRIP and TOWNS screens can be selected ON and OFF in the revolving display sequence.
- Automatic fall-back to the navigation display (dot-arrow or compas) as soon as one approaches to less than 500m of a waypoint.
- Sorting of the road books is not sensitive to upper or lower case.
- Indication of travelled km in the « info corner »;



## **Usage and Sharing of files:**

- Extension of the RoadMaster connectivity to an external USB mass memory. See § 12 PC connection.
- Recording of waypoint or POI through a long pressure of the « ☑ » button. By this way, a WP or POI (depending on the fact that you are in recording mode or not) may be recorded at any time, irrespective of the screen currently displayed. See § 15.1.2 Logging Waypoint while recording or § 15.1.4 Recording of a POI.

## Internal management:

- Improved external lighting management automating the lighting upon specific events (button pressure, speed trap detection, compass navigation).
- More precise battery capacity management and increased autonomy beyond 30 hours.
   See § 6.1 Battery loading.
- New Reset procedure. See § 6.7 General Reset
- Removal of the total shutdown function (no more purpose)
- Possibility to upgrade the GPS receiver micro-code upon update availability. See § 8 GPS receiving system
- Improved recording quality (clearer trace, better GPS points filtering, removal of points showing lack of precision). Requires updating the GPS receiver micro-code to version 1.16 or later. See § 18.1 Firmware upgrade procedure
- Improved TripMaster precision including under difficult circumstances (e.g. in 4X4 when travelling is regularly slow and uneven as well as when GPS receiving is poor).
- Improved average speed display, reacting more quickly upon major vehicle speed changes.
- Recorded POI's are automatically placed in the « userpoi ».
- When entering the mode « Go to», if no file is present in the RoadMaster, a «TRIPY.NVO» is automatically created. It contains the address of the TRIPY offices.
- Like for the road book dot-arrow navigation, the compas navigation will remain active after powering off/on of the Tripy RoadMaster.



#### 3 Definitions

#### 3.1 Beacon

Equivalent of the waypoint in a compass mode itinerary (without routing nor « dot-arrow » symbolism). In this instance, the beacons only carry the information of position as well as direction and distance to the next beacon.

Beacons and waypoints may be mixed in an itinerary containing both routed and non-routed sections.

#### 3.2 Dot-Arrow

The « dot-arrow» system also called « Tulip System » symbolises the crossroads or direction changes by means of lines representing the roads and their orientation compared to the vehicle direction. The "dot" symbolises the vehicle entering the crossroad and the "arrow" the exit direction to follow. The other ways are eventually represented for referencing. The use of the « dot-arrow » symbols allows not to cross the ways not to use (common way of doing in off-road driving). This symbolism presents the advantage of being simple, clear, easily readable and quickly integrated by a pilot having little time to allot to it.

## 3.3 Compas

Tool to navigate in straight line. It gives the direction to follow as well as the straight line distance. The compass becomes active in several functions of the RoadMaster: to guide you when you have, accidentally or not, moved away from a road book itinerary; to navigate in straight line towards a point without the help of the dot-arrow symbolism; or to reach a specific location (town or Point Of Interest such as your house, office, nearest gas station, or any recorded point).

#### 3.4 Sniffer arrow

A little short distance helping compass. When navigating under the dot-arrow symbolism, this little arrow appears in the upper left corner of the screen indicating the direction of the track a short distance ahead of you. This distance varies between 100m and 350m according to your speed. See detailed description in § 13.3 « Sniffer » arrow.

#### 3.5 Off-road

Out of the recognised roads system. By extension, the navigation outside of the known digital road maps. Not to be confused with off-route.

#### 3.6 Off-route or off-track

Navigating out of the programmed route, trace or itinerary. Not to be confused with off-road.

#### 3.7 Point Of Interest (POI)

Point of interest not specifically linked to a road book or track. Either from the RoadTracer Pro software or directly from the RoadMaster, the user can mark geographical locations for later use.

#### 3.8 road book

File containing the various waypoints or beacons to guide the pilot along an itinerary. It is saved in the RoadMaster and/or in a Personal Computer.



### 3.9 Track

A track is a succession of coordinates representing the itinerary that the system has recorded and should reproduce. When you read an electronic road book, you actually play the track back. The track is used to verify that you do not move away from the initial path. When you create a road book by actually recording it on site, you are allowed to generate the waypoints or beacons at all directions changes.

### 3.10 Trip Master

The TripMasters allow you to meter several partial distances independently from the overall distance monitoring. Beyond this information, one can see the travelling time, the stopped time as well as the average speed. The TripMasters are used as well for creating or reading a road book.

## 3.11 WayPoint (WP in short)

In the traditional GPS computing the itinerary between points A and B the waypoints are via points where the user can force the itinerary through. In our terminology, there is a waypoint at least at every direction change. At each point corresponds a dot-arrow symbol featured with the distance information to reach the next point. When creating an electronic road book by recording it, the user points a waypoint at the entry of each direction change. At each of these points will correspond a point to edit in the RoadTracer Pro software to generate the dot-arrow symbolism. Correct pointing of the waypoints is the trademark of a good road tracer. Under some circumstances he/she will make use of sketches to capture the true configuration of the point and reconstruct it in the waypoint editor.

Waypoints and beacons may be mixed in an itinerary containing both routed and non-routed sections.



## 4 Description des produits Tripy

## 4.1 Concept

Tripy is a unique concept fulfilling three complementary motivations :

#### **CREATE or AQUIRE**

- the freedom to elaborate your own road books

#### APPRECIATE or EXPERIMENT

- riding original roads in a pleasant and safe way

#### SHARE

- itineraries and other information within a community of users.

To meet these motivations, TRIPY s.a. has developed three products and service :

The **Road Tracer** software: a multifunction PC software with supporting mapping system allowing the creation, modification and management of your own road books

**Road Master:** a sturdy and efficient electronic road book specially designed for bike riders and motor sports in general. Its operation is based on the GPS technology.

A catalog of road books compiled from a selection of quality road books produced by TRIPY or their users. They could be downloaded free of charge from the website <a href="www.tripy.xx">www.tripy.xx</a> (xx = eu, be, lu, fr, nl, de, co.uk)

In order to allow the execution of these functions in the easiest and friendliest fashion, the TRIPY technology was opened to the following multiple arrangements:

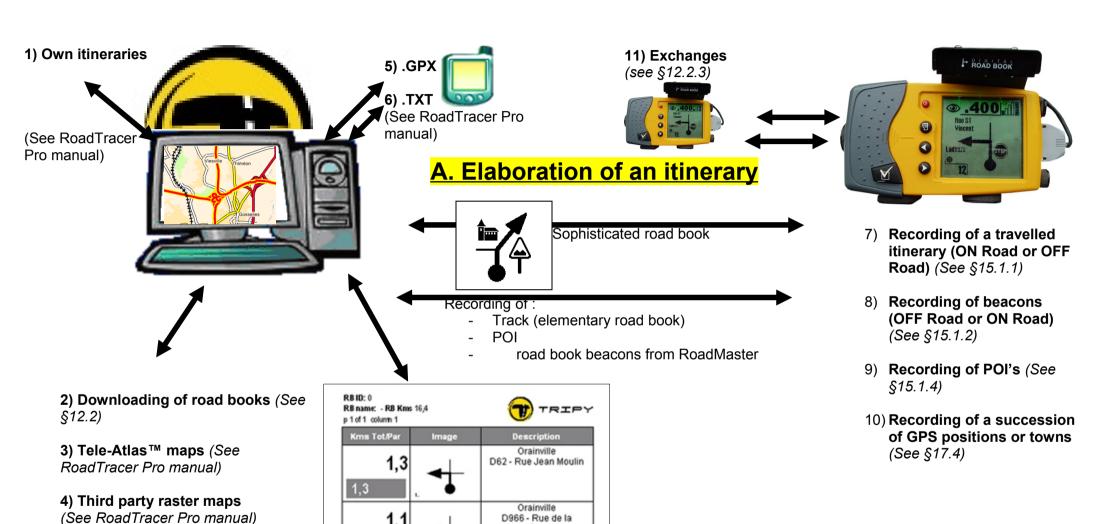


## 4.1.1 Various possibilities to elaborate an itinerary :

See diagram A in parallel with this description.

- 1) Creating your own itineraries by means of the Road Tracer Pro software
- 2) Downloading existing road books from the website www.tripy.eu or any other site offering itineraries under the Tripy format (file extension « .trb »)
- 3) Using the Tele-Atlas™ maps for on-road routing.
- 4) Using topographic maps for OFF-road tracing.
- 5) Import GPX data from third party devices
- 6) Import text files referencing.
- 7) Recording in the RoadMaster of a travelled road and automatic generation of an elementary road book (ON-Road)
- 8) Recording in the RoadMaster of a succession of beacons where to transit (OFF-Road) during compass navigation
- 9) Recording of Point Of Interest (POI's) eventually out of the itinerary but deserving a detour.
- 10) Recording of a succession specific GPS coordinates or towns from the on board library.





Libération

Orainville

D20 - Rue Armand Guéry

Printing of road book (See RoadTracer Pro manual)

2,4

2.9

0,5



## 4.1.2 Various means to ride an itinerary:

#### 4.1.2.1 Dot-arrows road book:

Read the following comments in parallel with diagram B.

- A) Reach the starting point of a road book or POI in compass mode (POI = town, gas stations, own POI)
- B) Follow a road book in dot-arrows mode
- C) Follow a road book in compass mode
- D) Follow a road book in the special 4x4 compas mode
- E) Display itinerary data: time, speed, a.s.o...
- F) Display intermediate totalisers: km, driving time
- G) Display and/or aim to towns further down the itinerary

#### 4.1.2.2 Beacon road book:

Read the following comments in parallel with diagram C.

- a) Follow a beacon road book
- b) Display itinerary data: time, speed, a.s.o...
- c) Display intermediate totalisers: km, driving time
- d) Display and/or aim to towns further down the itinerary
- e) Display simplified dot-arrows with track angles at each beacon

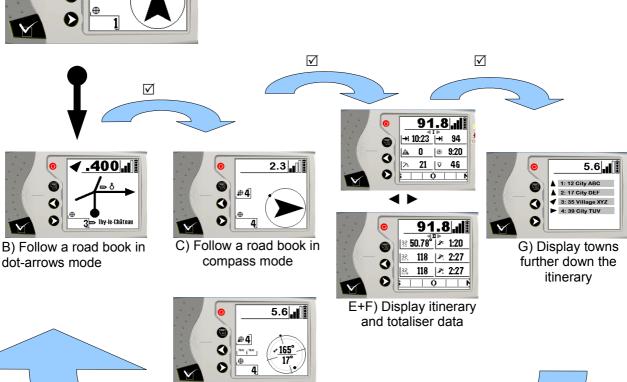




# **B. Ride an itinerary (dot-arrows road book)**

A) Reach the starting point of a road book or POI in compass mode

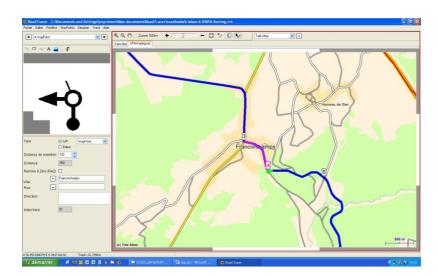




D) Follow a road book in the special 4x4 compas

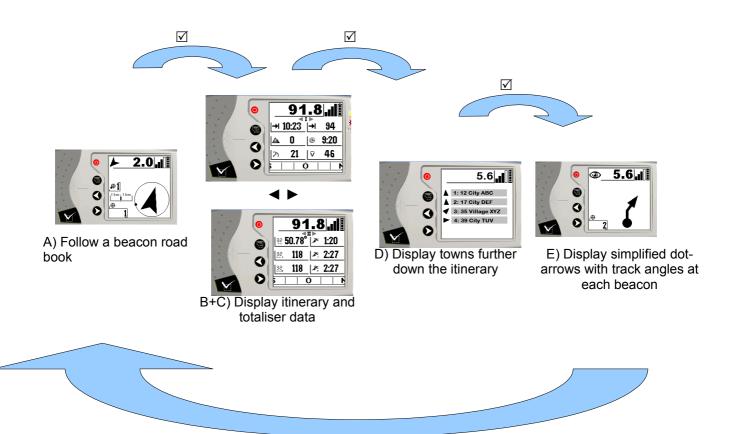
mode

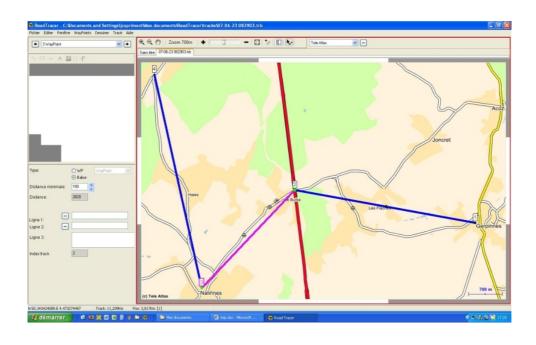
**©Tripy** 





# C. Ride an itinerary (compass mode)







#### 4.2 RoadMaster main functions

#### 4 main functions

- road books **Reader** (displays existing road book files in dot-arrows or compass modes)
- Tracks **Recorder** (records your own itineraries)
- **Tripmaster** and dashboard (summarising position, distances and time informations)
- Beacon Navigator towards programmed points of interest (towns, closest gas stations, your home, your work place, ...)
- Speed traps Warning

## 4.3 Road Tracer software main functions

N°	Function	Basic	Pro
1	Download road book (RB) from Internet	Х	Х
2	Transfer track (*.ttr) or RB (*.trb) file from your RoadMaster	Х	Х
3	Display track (*.ttr) or RB (*.trb) on the map (*)	Basic map (*)	Detailed map
4	Print road book paper copy	X	X
5	Load RB file in your RoadMaster	X	Χ
6	Load a RB file in a friend's RoadMasterCharger	X	X
7	Update the firmware of your RoadMaster	X	X
8	Add/Remove Way Points (WP), Add/Remove segments of track	X (limited **)	Х
9	Manually create the dot-arrows sequence from a library of symbols	X (limited **)	Х
10	Print the itinerary map	X (limited *)	Х
11	Design your own itinerary on the map with automatic routing between selected points	-	Х
12	Design your own itinerary from beacon to beacon	-	X
13	Import, install, use « raster » map files (e.g. Tripy TOPO Map Belgium)	-	X
14	Automatically design the dot-arrows symbols sequence	-	X
15	Define the RB or map paper output lay-out	-	X

<sup>(\*)</sup> Basic map covering only major roads and towns

<sup>(\*\*)</sup> Itinerary modification (changes, addings, ....) are possible yet uneasy without the detailed map



## 4.4 Road Master identification and marking

Your RoadMaster is equipped with an identification sticker on its back. This sticker is in synthetic material and waterproof. It carries the product references as well as its serial number. Copy of this sticker is shown on the packaging. It is important to keep this sticker intact to retain the product warranty rights.

The serial number is structured in three alphanumerical groups as in the following example: 1A2-34B-5C (example only)

To have warranty rights, the equipment should be presented with a readable non damaged sticker.



## 4.5 Liste of item codes, accessories, prices

See websites www.tripy.xx (xx= eu, fr, be, lu, nl, de, co.uk) to know the latest item codes and prices.

## 4.6 Optional lighting ref 6106

The Tripy RoadMaster external lighting (ref. 6106) is an assembly of a connector, a vertical holder a light emitting diode (LED) and a reflector.

**Precautions when inserting and extracting:** Take good care not to force it when inserting/removing in order to prevent connector breakage

### Standard operation

The factory setting of your Tripy RoadMaster is such that the lighting set on « automatic ». It means that when following a road book, the LED will light 500m before a waypoint until 30 seconds after the crossing. In compass mode, the LED is continuously lit. It also lights when the speed trap monitoring function becomes active. At any time along the itinerary, a short



pressure on the ON/OFF button switches the light ON for 30 seconds.

You may toggle from the automatic mode to the manual mode through the configuration menu / parameters / tick off the « Light ON » box. See § 10.6.5 External lighting setting . Once this box selected, the lighting will start with a short pressure on the ON/OFF button and will stop with a same command. In this mode, the state ON or OFF of the light will not change unless you press the ON/OFF button.

## Impact of lighting on the autonomy

A fully loaded Tripy RoadMaster (after 20 hours of loading) shows an autonomy of 30 hours without lighting. With the lighting continuously ON the autonomy is reduced to 20 hours. In automatic mode, the impact of the lighting is insignificant.

#### Diode lifespan

Contrarily to light bulbs, light emitting diodes offer a very long life span greater than than 10.000 hours of operation.



## 4.7 Optional hardened craddle ref 6109

The shockproof craddle si aimed at receiving the RoadMaster. This cradle is designed to withstand the harshest requirements in terms of shocks, vibrations as encountered under intensive use or rally, a.s.o. It offers a row of lights operating similarly to the standard lighting described above. I is supplied with a power cord to the vehicle mains. This cable holds a waterproof connector.







## **5 Tripy Documentation**

The Tripy documentation includes the following:

Level	Title	Content
1	Quick Start Manual (hardware & software)	<ul> <li>Description of the unit main functions and their use</li> <li>Software basic functions tutorial: file transfer, map positioning, road book creation on the map, display of recorded track on the map, track to road book transformation</li> </ul>
2	User's Manual (RoadMaster hardware)  This document available on paper or electronically in *.pdf format	<ul> <li>Comprehensive description of the unit function and interfaces.</li> <li>Power supply, storage</li> <li>Menus, configuration</li> <li>Common tasks</li> </ul>
3	Road Tracer HELP Integrated help function of the PC software	<ul><li>Functions description</li><li>Operating modes</li></ul>
4	Vade Mecum of the road book designer	<ul> <li>Hints and good practices for the design of quality road books</li> </ul>

Regularly ensure that you have the latest version of the various documents by visiting our website  $\underline{http://www.tripy.xx}$  (xx = eu, fr, be, lu, nl, de, co.uk).

Note: After an update downloading operation (RoadTracer Pro Menu/Help), the last version of the Quick Start Manual is automatically downloaded and available in the « Help » function of RoadTracer Pro.



## 6 Starting up

## 6.1 Battery loading

Before any use, it is recommended to conduct a full loading. To do so, connect the loader for at least one night (20 hours preferably). Your RoadMaster will remain ON for the whole duration of the loading (it is not possible to switch it OFF). The loading ends automatically after 20 hours whatever was the load level prior to starting the loading. To perform a correct and complete loading, make sure that the "Vehicle power" option is NOT selected in the Menu/Configuration/Battery. During the loading, the battery gauge indicator fills in repeatedly from bottom to top. At the end of the loading, the flicker stops and the unit automatically switches OFF. After ensuring that your unit is sufficiently loaded, you may start it with the ON/OFF button.

RoadMasters manufactured after 31/05/2006 (rev B) are equipped with an integrated battery pack offering more than 30 hours autonomy after full loading. Units produced before that date having not been repaired or retrofitted are equipped with 4 standard AA batteries of 2300 mAh. The battery pack was adopted for its better resistance to vibrations. Do not miss to call our support service <a href="mailto:support@tripy.be">support@tripy.be</a> if you encounter such problem with a unit produced before 31/05/2006 (Check for rev A on the product identification sticker).

The battery and loading system allow you to reload the RoadMaster without damage even if the battery is not completely discharged. Do no hesitate to reload the RoadMaster before any use, even if its load is not significantly depleted. This way, you will leave insured of the optimal autonomy. The battery should be replaced only if shows some loading defect (after several years). In case of battery failure, it is highly recommended to have it replaced by an authorised vendor who will use original manufacturer components. The battery is reloaded by means of the supplied loader or by connecting it to the electrical mains of the vehicle (mains connection cable supplied as an option). To check the battery load level, look at the battery gauge on the top right corner of the screen.

**WARNING:** It is highly recommended NOT to open the battery compartment side cover. The side cover is significant in maintaining the unit watertight. If the batteries of your RoadMaster show a significant capacity depletion, return it to dealer who will transfer it to Tripy for after sale service.

Open the battery compartment only upon imperative circumstances.

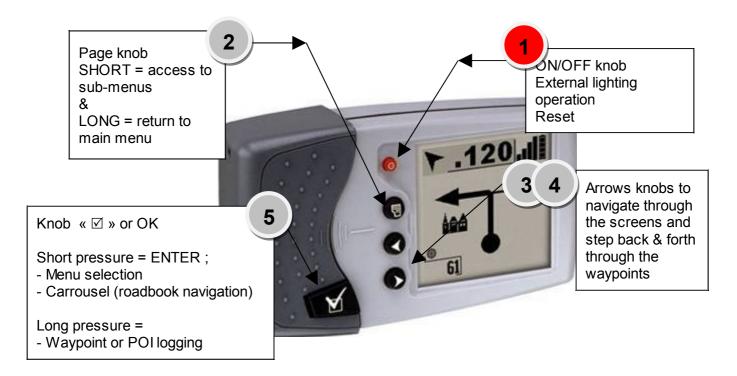
#### 6.2 Use of RoadMaster connected to the vehicle electrical mains

The battery should always remain in its compartment, even if you consider connecting RoadMaster to external electrical mains (vehicle power supply for example).

This connection requires the cable ref. 6104. This connection cable is fitted with a watertight fuse holder and a fast fuse of 500 mA. The red wire is to be connected to the positive contact (+), the black wire to the negative (-). Make sure that the connection is properly done, preferable with screwless terminals. Make sure that no wire pulling nor undesirable contacts may accidentally happen (e.g. when reclosing the saddle on the electrical compartment, ...). The use of the vehicle electrical mains requires a special setting in the RoadMaster Menu/Configuration/Battery (See § 10.4 Batteries).



#### 6.3 RoadMaster knobs functions



#### 1 = ON/OFF knob

Main function: setting the device ON/OFF. Secundary function: switching ON/OFF the external lighting.

**2 = contextual menus knob**, activates the contextual menu when one has selected a main menu. This knob opens then a menu specific to the function RoadMaster is currently in. Once the menu open, another pressure on the menu knob allows the closing of the contextual menu.

In the contextual menu is always a line for « Main Menu » (the last menu entry). You can move down to it by means of the arrows knobs and then select it with the «  $\boxtimes$  » knob to return to the main menu.



A long pressure (2 seconds) of that knob allows you to come back straight to the main menu.

**3 and 4 = navigation knobs**, Arrows knobs to move through the various screens within a specific operating mode.

For example, in the TripMaster mode, the arrows knobs allow you to move from the Trip1 screen to the Trip2, Trip3 or Trip Overview.

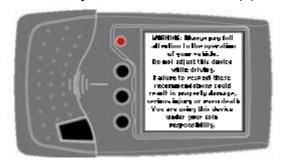
In dot-arrow navigation mode, these two knobs allow you to visualise the preceding or next note. In compass navigation mode, they allow you to visualise the preceding or next waypoint, a.s.o...

5 =«  $\square$  » **knob (enter)**, selection knob. A long pressure (1 seconde) logs a waypoint if the device is in recording mode or a POI outside of the recording mode.



#### 6.4 ON / OFF

Press briefly the red ON/OFF knob (1).



RoadMaster displays a disclaimer message. You may accelerate the transition by pressing the « ☑ » knob (5).

RoadMaster displays then the satellite searching screen (see following chapters). If you are located inside a building or, for any other reason wish to skip this screen, press the « ☑ » knob (5) once more. You have then access to the various menus

explained throughout this manual.

The switching ON is done by a short pressure on the ON/OFF knob (1). When the ON/OFF knob released, the device starts displaying information on its display; it is then operating. RoadMaster will start only if the battery charge is sufficient.

Switching OFF takes place after a long pressure (approx. 2 seconds) on the ON/OFF knob (1). Keep the ON/OFF knob depressed until the display is empty; RoadMaster enters then in an idle mode. When RoadMaster is switched OFF this way, it performs all necessary save functions before switching OFF.

#### **IMPORTANT:**

If RoadMaster is busy recording a track, the transition to idle pauses the recording, but the recording mode is memorised such that it twill automatically restart the recording upon the next switching ON.

Similarly, if in the road book or beacon guiding mode, it will restart the guiding where it stopped it when switched OFF.

When switched OFF (actually idle), RoadMaster uses little power; the natural battery discharge, added to this low consumption leads to the complete battery discharge after several weeks (starting from a fully loaded battery).

## 6.5 Stop condition in case of battery replacement

Reminder: The replacement of the battery pack must exclusively be performed by the Tripy technical service.

If the RoadMaster is currently guiding at the time of the battery extraction, it will be necessary to select the road book again after restarting the device. Similarly, if the device was recording, the record will be lost.

## 6.6 Switching OFF on battery low condition

When the battery is well loaded, the battery indicator shows 4 squares. As the device is used and the battery discharges, squares disappear one by one. As the last square disappears, the battery indicator starts flashing, indicating that RoadMaster is soon going to switch OFF by lack of supply. That's what is called switching OFF upon battery low condition.

In this instance, RoadMaster goes automatically to idle mode as if one had pressed the ON/OFF knob (1); the only difference is that, if RoadMaster was busy recording a track, that forced switching OFF will be preceded by the closing of the record making it available for later



PC access. When the battery will be reloaded, the recording will not resume, but the record will not be lost. If one wishes to continue the recording, one should start the recording once again after battery re-loading. If RoadMaster is busy guiding, one will have to re-select the road book or POI to resume the guiding.

#### 6.7 General Reset

The General Reset operation should only be used in an hypothetical device malfunction situation (e.g., if the device remains locked in a state where commands are not operating any more). In most cases, it will allow to resume normal operation.

The general reset is performed by executing the following sequence:

- Make sure that RoadMaster is switched ON
- press the ON/OFF knob (1) and maintain it depressed
- once RoadMaster switched OFF, keep maintaining the ON/OFF knob (1) depressed, and press the « ☑ » knob
- keep the two knobs depressed until RoadMaster switches ON again (approx. 10 seconds)

On versions prior to V1.8.4, the sole pressure on the ON/OFF knob for about 10 seconds was sufficient to force a general reset.

If RoadMaster is busy recording a track, <u>all previously recorded data of that track will be</u> <u>lost by the reset</u> and the recording mode will be stopped. If RoadMaster is busy guiding at the time of the reset, it will be necessary to select the road book once again after re-start. After a general reset, satellite tracking and locking may take up to 15 minutes.



## 7 Mounting RoadMaster on your bike



RoadMaster is fitted on the back with two M4 inserts showing a maximum thread of 6 mm (0,234 inch). These inserts are placed 48,6mm (1,912 inches) apart, corresponding to the between axis distance of the RAM-Mount base reference 6074.

You may either assemble your own adapting plate to place between these inserts, either use the standard RAM-Mount accessories

we recommend in the price list on our website <a href="www.tripy.xx">www.tripy.xx</a> (xx = fr, be, nl, de, co.uk).

!!

If you do not use the screws delivered with the RAM-Mount kits, make sure their insertion length after tightening does not exceed 6 mm (0,234 inch), otherwise the casing shall be severely damaged and watertightness compromised.

RAM-Mount base with screws on the RoadMaster side (ref 6074)



## A few examples of recommended parts (RAM Mount):

6001	No	RAM-B-201B	ENG: Standard socket arm length B ~8cm- FR: Bras articulé standard longueur B ~8cm - NL: Standard gewrichts-arm lengte B ~8cm
6002	*	RAM -B-201U-A	ENG: Special socket arm - short - length A ~5cm- FR: Bras articulé spécial - court - longueur A ~5cm - NL: Speciaal gewrichts-arm - kort - lengte A ~5cm
6003	P	RAM-B-201U-C	ENG: Special socket arm - long - length C ~14cm - FR: Bras articulé spécial - long - longueur C ~14cm - NL: Speciaal gewrichts arm - lang - lengte C ~14cm
6004	9	RAM-B-231Z	ENG: RAM-ball Motorcycle side - normal handlebar U-mount - FR: Boule RAM côté moto - collier en U pour guidon normal - NL. RAM kogél motor kant, U-collier voor normale stuur



## See below a few examples of mounting:

## Honda Goldwing 1500 (6001 + 6074)



BMW K1200S (6074 + 6002 + 6009)



BMW R1100S (6001 + 6009)



BMW F 650 CS (6001 + 6004)



BMW R1200RT (6001+ 6008)



HD XL1200 Sportser (6001 + 6004)



Honda XR200 (6001 + 6004)



BMW R1200GS (6001+ 6004)



BMW K1200 LT (6001 + 6071 succion cap)



BMW R1200ST (6001 + 6008)









#### 8 **GPS** receiving system

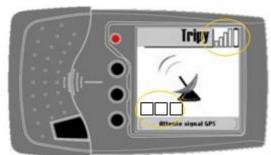
### 8.1 Operation of the RoadMaster integrated GPS

The RoadMaster integrated GPS receiver can receive and use the signals from up to 12 GPS satellites, calculate the position, speed direction date and time.

As soon as RoadMaster is started, the GPS receiving system searches for satellites. To be able to provide valid positioning, RoadMaster shall find signals from at least three usable satellites. The necessary time to capture satellites signals (fixing) depends on several factors such as prior GPS information in the device's memory. This GPS memory is saved by a small internal energy source that retains the information for 30 to 60 minutes, should the main battery be removed (or totally depleted).

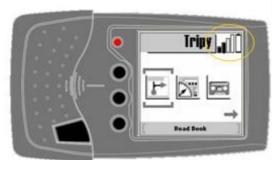
When RoadMaster does not have any prior GPS data, or they are not relevant any more, it will take longer to capture satellite signals (cold start). In this instance, one will have to let the device, sometime up to 15 minutes, in an open space such that it will be able to record all necessary data in its memory.

## 8.2 Satellites searching screen



After starting RoadMaster, the GPS receiving system starts looking for satellites signals. During this time, the signal quality meter remains empty (white) and the screen displays a turning satellite dish icon (see picture). At the bottom of the screen, small squares appear as RoadMaster sees more satellites. This allows the visualisation of its search.

As soon as GPS signals are correctly received, RoadMaster screen changes automatically to the Main menu (see picture below); If you wish not to wait until the satellites are recognised, you may skip the waiting and reach the Main menu directly by pressing the « 🗹 » knob (5). Even if you have skipped the search screen to the Main menu before that RoadMaster has found its satellites, the search continues anyway.



In all operating modes, the GPS reception quality indicator (see picture) displays the symbolic representation of the reception level.

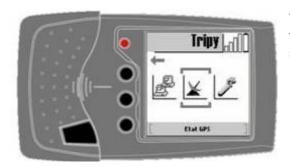
As soon as the smallest indicator stripe is validated (black) RoadMaster is able to to read or record a road book. It takes two to three valid stripes to determine precisely the altitude. When RoadMaster does not receive GPS signals, the reception quality

indicators remain empty (white) and flicker. In this situation, Tripy RoadMaster is not capable to quide you.



Summary: After powering up RoadMaster and as soon as no GPS reception quality indicator is black, wait in an open sky place without travelling. If RoadMaster holds recent GPS data in its memory, it will quickly be in an operating mode (typically 10 to 90 seconds after power-up). If you travel during the satellite searching operation, RoadMaster may take more time to find them (up to 15 minutes).

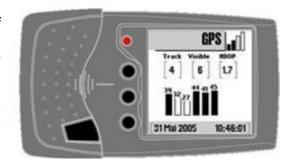
#### 8.3 Detailed GPS screens



When you select the GPS icon (satellite dish icon) from the Main menu, you may visualise two different screens:

The first screen (page 1) visualise the number of visible satellites, the number of used satellites (« tracked ») as well as the HDOP level. The lower the HDOP level, the better is the precision.

This screen also shows the visible satellites as white stripes and tracked satellites as black stripes. The number indicated above each stripe gives an indication of that satellite reception level.



The higher the number (the higher is the stripe), the better is the satellite reception. It is not necessary to focus on these technical information. As long as the GPS reception level indication in the top corner shows at least one black stripe, your RoadMaster is operational.



The second screen (page 2) gives the following information:

- Longitude & latitude positions Expressed in degrees, minutes and hundredth of minutes
- Instantaneous speed This speed is filtered and does not therefore react instantaneously to your speed variations;

It is otherwise very accurate at stabilised speed.

Expressed in meters; It is followed by a «! » sign if it is not accurate (when the reception level is lower than 2 stripes).

#### The compass

Shows the followed direction. This indication is precise only when you travel at a speed higher then 10 km/h.



## 8.4 Reception quality

The GPS signal quality broadcast from a satellite constellation is variable by nature. It may happen that signals be temporarily depleted even in an open area. That signal depletion may be originating but not necessarily, from meteorogical conditions. Some temporary reception depletion are originating in high altitude situations independent from meteorogical conditions.

Reception quality may also be affected by other electronic devices emission, magnetic or electrical fields, or any other types of natural emitters located in the vicinity of your GPS receiver. Some GPS receivers cannot synchronise their signal when they are placed too close to a radio emitter/receiver (police or taxi). Some bad reception instances have been reported when RoadMaster is placed immediately next to a video camera or other GPS navigation device.

Beyond these rather exceptional and unpredictable circumstances the GPS signal reception is always altered by physical obstacles such as walls, buildings, dense vegetation or metal screen windshields. GPS reception inside a building (under a roof) is therefore practically not possible.

Unfavorable conditions are such as:

- Densely built areas with high rise buildings closing the sky and increasing signal reflections
- Mountain gorges, passes, narrow driveways where the sky view is limited
- Under dense foliage
- Very adverse weather conditions (mist, heavy rain, a.s.o..)

Combination of several factors increase the deterioration of signal reception. Even when the GPS reception quality indicator displays a single stripe, RoadMaster operates correctly. When the reception indicator does not show any black stripe and flickers, RoadMaster is not in a position to know your position.

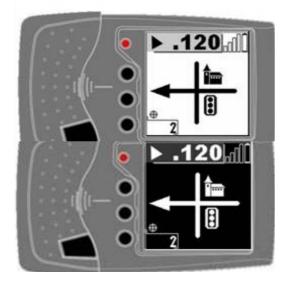
The GPS receiver integrated in RoadMaster offers high quality and excellent sensitivity. In normal driving conditions, even where reception may be affected (mountain, woods, a.s.o...), it is therefore uncommon to loose the signal. If signal reception is interrupted, it usually does not last more than a few seconds and should not impede guiding.

## 8.5 Operation under loss of GPS signal

When the GPS signal cannot be tracked, the GPS signal reception indicator flickers and does not show any black stripe any more. Under these circumstances RoadMaster does not know the vehicle position and will react to the best of its interpretation of the circumstances. In this instance, RoadMaster's reaction vary according to the selected operating mode. Various cases are described here below.



## 8.5.1 During navigation (compass or road book)

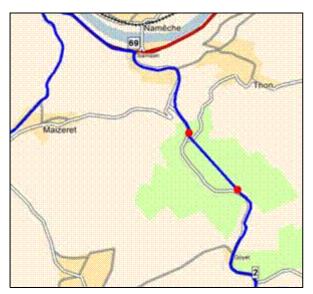


RoadMaster cannot update the distance to the next waypoint (the symbol remains however displayed on the screen) neither update the sniffer arrow nor the compass to the point to reach.

Therefore, when the signal is lost for more than 10 seconds, RoadMaster warns the user by alternating the screen display between normal/reverse. This screen flashing remains as long as the satellite reception is not returned to normal. The distance to destination information is not updated. As soon as the GPS signal reception is recovered (even for a second), RoadMaster will once again display the normal screen with correct sniffer or compass arrows and distance to destination.

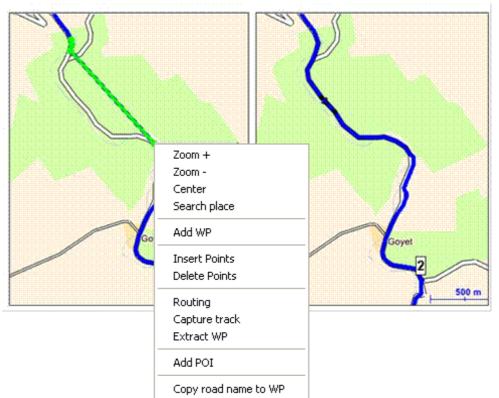
## 8.5.2 During recording of a track

During signal loss, Tripy RoadMaster stops memorising the GPS points. As soon as the GPS signal is once again received RoadMaster resume positions recording. The track on the map will be a straight line between the points preceding and following the GPS signal loss. Thanks to the RoadTracer software, it is easy to reconstruct the track where signal was lost.



Actual example of satellite loss in recording mode in a narrow and wooden dale. Signal loss for an approximative distance of 1 km.





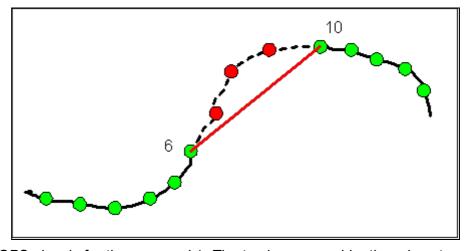
Correcting the track in RoadTracer by slecting the track segment and using the capture function « Capture track».

## 8.5.3 Displaying the TripMaster

In TripMaster, the total distance is the cumulated distance between GPS positions. When the GPS receiver receives a valid signal, it records a new point every second. Once the signal

lost, it memorises the last valid point and will totalise the distance to the next valid point received. The system could, in this instance, generate some slight error considering that it computed has straight line between two points.

In this example, one considers that three theoretical points have

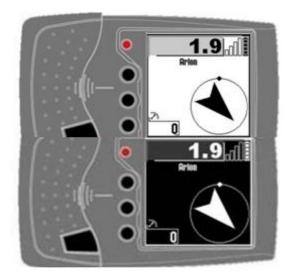


been missed (no more GPS signals for three seconds). The track measured by the odometer is the one in red between point 6 and 10 instead of the actual trajectory in black.



## 8.5.4 During "Go To" navigation

(towns, home, office, gas stations, point of interest)



RoadMaster cannot update the compass direction nor the distance to the next waypoint.

Therefore, when the signal is lost for more than 10 RoadMaster warns the seconds. user display alternating the screen between normal/reverse. This screen flashing remains as long as the satellite reception is not returned to normal. The distance to destination information is not updated. As soon as the GPS signal reception is recovered (even for a second), RoadMaster will once again display the normal screen with correct sniffer or compass arrows and distance to destination.

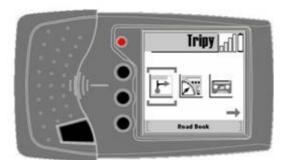
### 8.5.5 Displaying the GPS information

See also paragraph 8.3 Detailed GPS screens. During GPS signal loss, the information displayed on the first GPS screen (page 1) summarising the number of satellites and the HDOP displays the current reception situation. In case of signal loss, that screen clearly displays that no satellite is tracked, even if some of them are yet visible.

On the other hand, the data of page 2 are not anymore updated and retain the last valid data. If you ask to display this screen after powering up RoadMaster when it has not yet tracked satellites no data will be displayed.



#### 9 Main menu



The Main menu is the one from wich you choose the operating mode(s). It is the menu RoadMaster displays after having skipped the satellite search screen (except if you were in road book navigation before switching off). Return to the Main menu is done by selecting « Main menu» in one of the submenus selected with (2).

Navigate through the Main menu icons by means of the ◀▶ (3) and (4) navigating knobs.

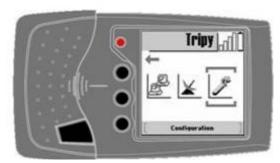
The Main menu shows 7 icons in the following order:



These various icons correspond to functions explained later in this manual in the logical order of a first use (and not in the order of a more common use).



### 10 Configuring your RoadMaster



Before using your device, it is recommended to configure it according to your personal preferences.

The available sub-menus are:

#### 10.1 Contrast

Setting the screen contrats

RoadMaster screen contrast is factory preset. You may adjust it here according to your preferences and circumstances. Tuning of the contrast is done by means of the ◀▶ (3) and (4) navigation knobs.

Note: the LCD screen contrast is sensitive to temperature variations. In order to keep a constant contrast, RoadMaster is equipped of an automatic internal temperature compensation. It may be necessary to adapt the contrast upon extreme temperatures (reduce the contrast for temperatures higher than 30°C, increase the contrast for temperatures lower than 15°C).

If you start the device in temperature conditions very different from its last operation, the automatic contrast compensation takes a few seconds after power-up. You may have to adjust the contrast manually if the automatic compensation is not sufficient.

#### 10.2 Time zone

Adjust the displayed time according to the GMT time received from the GPS system. The time zone adjustment is done by means of the ◀▶ (3) and (4) navigation knobs. RoadMaster gets a very precise time reference from the satellites. This reference is in GMT reference and does not manage summer daylight saving time. To adjust the GMT time in local time, one should introduce here the shift from GMT by means of the ◀▶ (3) and (4) navigation knobs.

For the Paris, Copenhague, Barcelone time zone the adjustment is GMT +1 in winter time GMT +2 in summer time

## 10.3 Language

Choose between English, French, Dutch Spanish or German, Language change is possible using the ◀▶ (3) and (4) navigation knobs.



#### 10.4 Batteries

Tick off this option to adapt the battery management when RoadMaster is connected to the vehicle electrical system. In this mode the automatic loading is conditioned upon the crossing of a minimal voltage level.

Attention, if the <Vehicle power> is marked, loading by means of the external loader is not efficient and the device will not offer its optimal capacity. The option <Vehicle power> should ONLY be marked IF you have permanently connected RoadMaster to the vehicle battery (using power cord Ref. 6104).

When selected, this option will be taken into account and acknowledged by showing a "power plug" symbol instead of the battery symbol on the RoadMaster screen.



If the vehicle battery happens to default or if you have selected this option without effectively connecting the RoadMaster to the vehicle battery, the « power plug » symbol will flicker.

#### 10.5 Control points monitoring



This menu gives access to the control points management (either danger zones or speed traps). Through this menu you can activate the monitoring based on a file listing the strategic points to monitor. Perform this through the sub-menu <Select file>. As soon as one speed trap monitoring file is present in the RoadMaster, it is selected and its name shows up as the first input in the parameters sub-menu ("alertegps" in this example). If the RoadMaster memory holds several files of this type,

the user can select the file to monitor by selecting OK on that menu entry. He then has access to the list of speed traps available in memory. As soon as a file is activated, an « eye » shaped icon is added to the RoadMaster upper screen section. When this icon is present, the monitoring function is activated based on that file.

To prevent the detection, the menu entry "Do not warn" must be selected (or remove all monitoring files using the Communication function of RoadTracer).

See § 11 Operation of control points monitoring for a detailed description of the monitoring function.

If the monitoring function is active and you start a recording, the « eye » shaped icon flickers during the whole recording time indicating an active recording while currently monitoring.

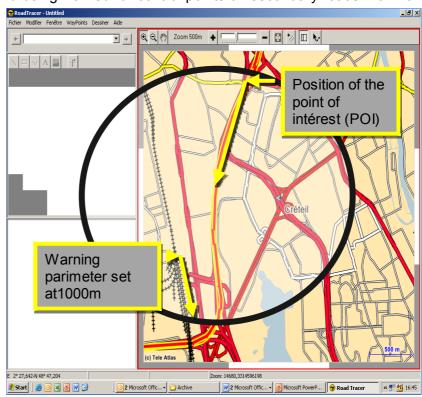


In the same menu one can configure the perimetric distance at which one wants to be warned. One may choose between 1000, 500 and 300m. This distance is a perimeter. The larger this distance, the more likely to get a warning for unnecessary detections (i.e. driving on a highway and being warned for control points on secondary roads within the

monitorina perimeter). Note that the warnings given irrespective of travelling the direction (the detection is based on the sole GPS position without consideration the driving for direction). To know about the more control points monitoring see § 11 Operation of control

This RoadTracer map extract on the side shows the impact of a 1000m monitoring perimeter in an urban area (Créteil)

points monitoring.



## 10.6 Parameters

More advanced options such as:

#### 10.6.1 Reset of TripMaster n°1

#### Tick off o « ✓ » = OK Reset Trip 1

Ticked off by default

If this option is ticked off, the TripMaster 1 is reset through a pressure on the « ☑ » knob (5). This provides an easy and quick access to the TripMaster 1 reset. This is a useful function keep monitoring the intermediate distance when navigating on the base of a paper road book.

If RoadMaster is recording, a waypoint is logged at every long pressure of the « 🗹 » knob (5). The device will conduct the two operations together: recording of the waypoint AND reseting the Trip 1.

#### 10.6.2 Compression of recorded points

#### Tick off o Compress records

Selected by default.

It affects the recording mode. If this option is ticked off, RoadMaster only records the necessary position to retrace the route you have run (and avoids memorising unnecessary points). This option optimises the recording memory usage. We recommend to ALWAYS keep this option active to maximise the storage of run



kilometres. If this option is not ticked off, RoadMaster records 1 GPS point every second, and so, even if it is not necessary (e.g. when waiting at a red light).

### 10.6.3 Automatic power off

#### Tick off o Auto Power off

Selected by default.

If this option is selected, RoadMaster goes automatically idle after 10 minutes of inactivity. Inactivity means: no manipulation of knobs and no GPS position change (either GPS signal reception is fine but the vehicle is not moving, either there is no valid GPS signal reception and it considers no travelling is taking place). Upon restart, RoadMaster resume the function(s) that was/were operational prior to automatically going to idle (playing a RB and/or recording).

#### 10.6.4 External button « ☑ » at the steer

#### Tick off o External button

By default not selected.

This option must be selected to use an external button at the steer duplicating the  $( \square )$  knob (5) function. When this option is selected, the  $( \square )$  knob (5) of the RoadMaster remains active such that one can use any of the two.

## 10.6.5 External lighting setting

## **Select o Lighting ON**

By default not selected.

This option allows the manual operation of the lighting instead of the automatic operation. Before illustrating the manual mode, here is the description of the automatic mode: in automatic mode, the external lighting switches ON 500m before a direction change and switches OFF 30 seconds after crossing that point. It switches ON permanently when you leave the itinerary or navigate in the compass mode (to a town, gas station or POI ...) or when the monitoring function (speed traps) becomes active.

In the manual mode, the lighting is permanently ON upon a pressure on the ON/OFF knob (1) and switches OFF upon a short pressure of that same knob.

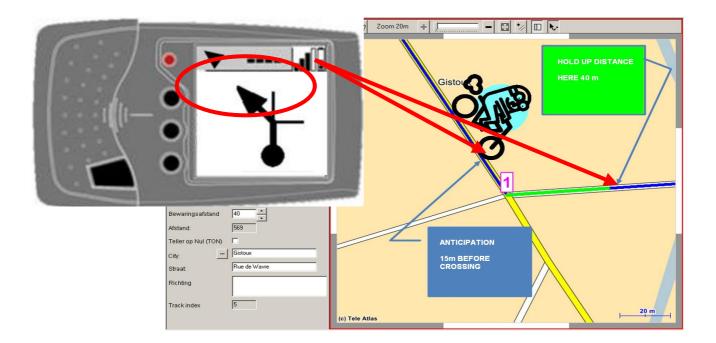


# 10.6.6 Anticipation of the zero distance

## Tick off o Anticipation ON

By default not selected

This option allows the anticipation of the distance to the next waypoint by 15m. This setting may be useful for people wishing to anticipate their attention approaching a waypoint. This anticipation may be useful, specifically when riding at a high pace.



In the above example, if the anticipation option is not marked, RoadMaster will display the zero distance (« --- ») when the vehicle will reach the position of the waypoint 1. On the other hand, if the anticipation option is marked, RoadMaster will display the zero distance (« --- ») 15 metres sooner (as if the waypoint 1 was placed 15 metres ahead of the crossing).



#### 10.7 Information

Under this menu entry, one finds:

- The address of our website www.tripy.xx (xx = eu, fr, be, lu, nl, de, co.uk)
- The RoadMaster firmware version number and release date. This version number is made of 3 positions identifying the various modification levels.

Important: Tripy RoadMaster is a continuously evolving product. Our team of engineers aims at permanently improving your RoadMaster functions. It is therefore recommended to maintain your device by loading the latest firmware version and benefit of the latest enhancements. In order to obtain the latest firmware revision, visit www.tripy.xx (xx = eu, fr, be, lu, nl, de, co.uk) and see the downloads function.

To transfer the firmware latest version see paragraph 18.1 Updates

- The GPS microcode version
- o The device serial number. This number is stored in the memory and corresponds to the one on the device's sticker.

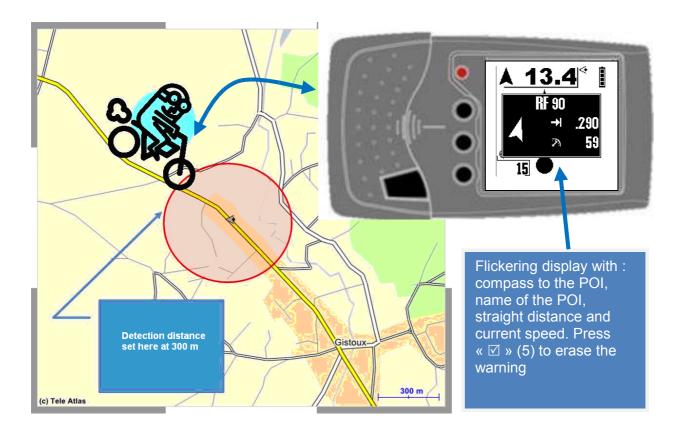
# 11 Operation of control points monitoring

At the time of printing this manual, the use of control point monitoring (e.g. traffic lights crossing or speed traps) is legal in Belgium and France (as well for the holding of the device or files as for their use). In other countries, refer to the local legislation. Users are requested to get information about and comply with the local legislation. In all cases, Tripy cannot be held accountable for the illegal use of the control points monitoring function.

The operation principle is as follows:

- 1) To this date, the speed trap files for France, Belgium, The Netherlands, Spain, Portugal, Sweden, Great-Britain is available for free in its "basic" version on www.alertegps.com. A single «.nvo » file contains all the speed traps of these countries. Our control point files are not compatible with other GPS systems and can therefore only be used by the Tripy system. Since these files are continuously evolving according to available information, we invite you to regularly update it through the <u>www.alertegps.com</u> website.
- 2) Users of RoadTracer Pro may also edit their own speed traps files and/or modify existing ones.
- 3) Once downloaded, the control points files can be used by the RoadTracer Pro software (to show these points on the map) as well as the RoadMaster.
- 4) To load them in your RoadMaster, you have to transfer them by means of the communication interface (see § 12 PC connection)
- 5) Activation of the monitoring function based on a given file is done through the Configuration / Watch out (see § 10.5 Control points monitoring). monitoring file is loaded, it will automatically be selected by RoadMaster.
- 6) Once activated, the monitoring is operating in all RoadMaster operating modes.
- 7) When you enter in the predefined monitoring perimeter of a system known control point, RoadMaster opens a large warning window indicating the data about this specific control point. In the instance of a speed trap, maximum allowed speed, current vehicle speed as well as remaining straight distance and direction to the point will be displayed. The warning diameter is user defined in the configuration (1000, 500 or 300m see § 10.5 Control points monitoring, )





**Important remark**: Tripy invite you to follow the local speed regulations at the place where you travel. The monitoring function is aiming at increasing your awareness at places where you may be distracted. Tripy cannot provide any warranty about the relevance and updates of the control points. These files are resulting from a compilation of official data and data from other private sources.

You may therefore be surprised in three different ways:

- You have been warned but there is no control point at the indicated location. Either you have entered the perimeter of a control point on an adjacent lane, either it is a location of a regular mobile control point. These locations are occasionally indicated through radio broadcasts.
- 2) There is a control point you have not been warned for. Either you have temporarily lost the satellite signals, either that control point was recently installed and it is not yet added to the list. In Belgium, the control points official list depending on the regional ministries is regularly updated. On the other hand, the town managed control points are not systematically communicated to the public. These control points are more and more frequent and their compilation is progressively performed by groups of private people sharing this information with the public. The <a href="www.alertegps.com">www.alertegps.com</a> files are regularly updated, but there is always a time delay between the effective installation, the validity checking of the control points and the distribution of the information to the public.

If you have identified an undocumented control point, you may write an e-mail to <a href="mailto:contact\_us@tripy.be">contact\_us@tripy.be</a> with the type of control point (traffic lights or speed), the maximum speed allowed, its exact location in text and GPS coordinates in the MDS format (degrees, minutes, seconds) or better, by communicating a Tripy POI file (\*.nvo).



3) There is a mobile control point for which you have not been warned. Either you have temporarily lost the satellite signals, either that control point is placed by the authorities at an until now not documented location. Undocumented or hidden control points will remain and RoadMaster warning function will not handle them.

If you have identified a regularly used control point, you may write an e-mail to <a href="mailto:contact\_us@tripy.be">contact\_us@tripy.be</a> with the type of control point (traffic lights or speed), the maximum speed allowed, its exact location in text and GPS coordinates in the MDS format (degrees, minutes, seconds) or better, by communicating a Tripy POI file (\*.nvo).



#### 12 PC connection

The connection between your RoadMaster and your PC is necessary to:

- Transfer the tracks you have recorded to transform them into road books
- Load road books into the device (although this is not the only possibility to conduct that operation, see § 13 road book menu)
- Load the Points Of Interest (POI) files, in particular the gas stations files
- Update the firmware.

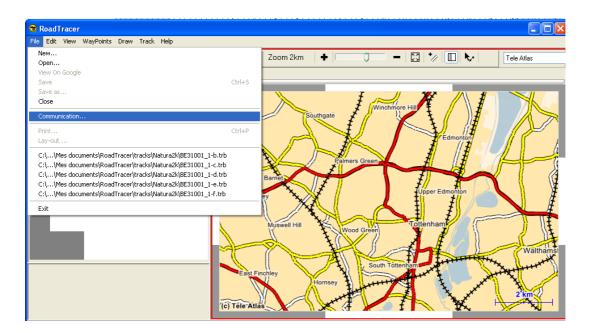
**WARNING**: The RoadTracer software should be installed **PRIOR** to connecting RoadMaster to the PC.

Connect your RoadMaster through the USB port of your PC. Start the RoadTracer software and start the RoadMaster.

On the RoadMaster, select the Communication icon and press the  $\langle \square \rangle$  (5) knob; RoadMaster is then awaiting connection. In that state, the screen main part is empty and the message  $\langle Detecting \ USB \rangle$  is displayed at the bottom. Nothing will happen until the device is accessed by your PC using RoadTracer.







From the RoadTracer Menu, select <File>, <Communication>

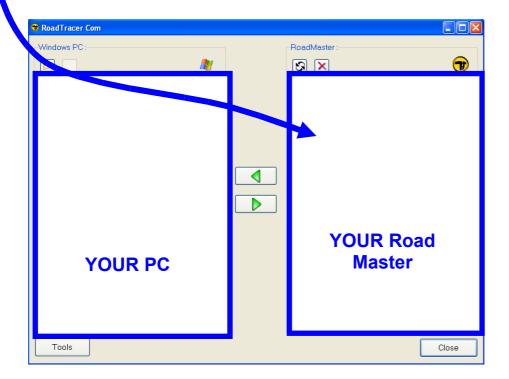


The communication window shows up with, to the left, the content of the PC directory, and to the right, the content of the RoadMaster.

To refresh the list of the files contained in the RoadMaster, press the refresh button (this function is automatically performed when one enters the communication function)

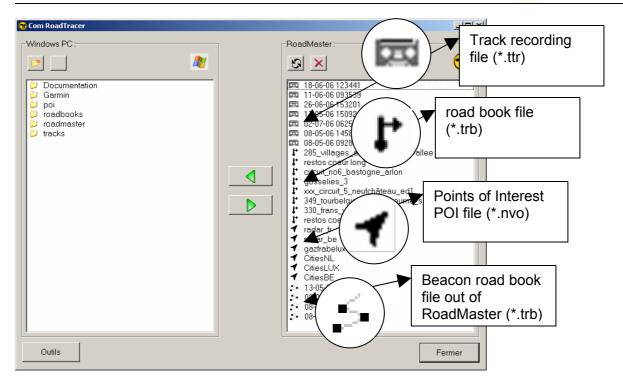


If the right window remains empty after a refresh operation, it means that you have no file in your RoadMaster (no road book \*.trb, neither recording \*.ttr, neither point of interest \*.nvo ).



**Important remark**: The communication interface is used solely to transfer files, and not to open them in RoadTracer. To open files, the path is <File>, <Open> (See also the Hands-on Manual).





List of the different files in the RoadMaster.

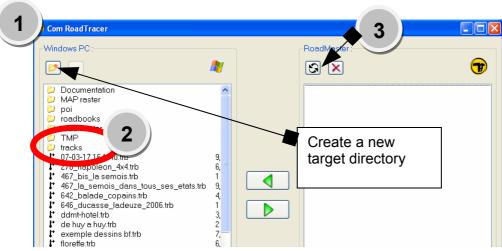
Apart from their « recording tape » icon the track recording files are characterised by the file name made of the date and time of the beginning of the recording (the time takes into account the time zone set in the RoadMaster configuration – in other words, if the configuration setting is not correct, the time stamp in the recording name will be wrong). The file name of a beacon road book compiled on the RoadMaster is also composed of the date and time at which the road book was created.



# 12.1 Copy a track recording to your PC

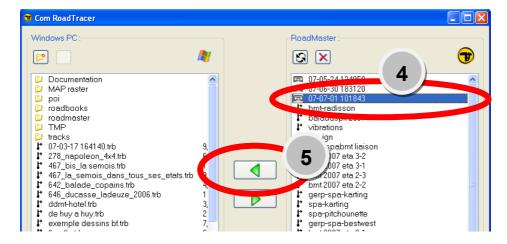
Connect your RoadMaster to your PC by means of the USB cable.

- 1) Start RoadTracer and select <File>, <Communication> from the main menu.
- 2) In the left column (displaying the content of your PC hard disk), select the target directory where you would like to copy the record (create a new directory if necessary).
- 3) If necessary, press the « refresh » button to update the right column displaying the RoadMaster memory content.



« tracks » directory.

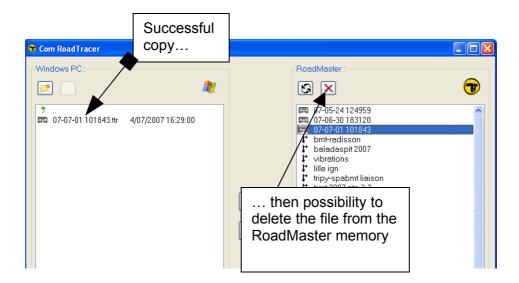
4) In the right hand side column (content of the RoadMaster memory), select the record file to transfer. The record files are identified by the « tape » icon and their name structure.





You may follow the process by means of the advancement bar graph on the PC as well as on the RoadMaster.

If you press « Refresh » in RoadTracer, you shall see that the transferred files are still present on the RoadMaster side: it's normal, as the process actually makes a copy of the files to prevent any data loss upon an eventual transfer incident. You may voluntarily suppress the file when you are confident that the transfer to the PC has been completed.





## 12.2 Copy a road book to your RoadMaster

Connect RoadMaster to your PC by means of the USB cable.

## 12.2.1 road book originating from www.tripy.eu

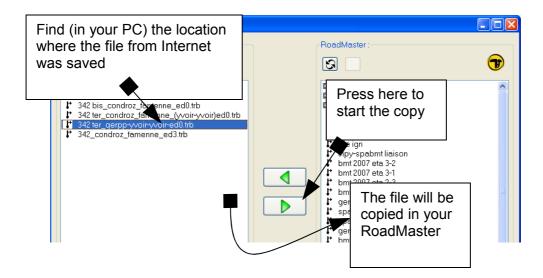
Connect to the Internet on the <a href="www.tripy.eu">www.tripy.eu</a> website. In the left hand side menus, select <Road books>, <Road books to download>. When you have selected a road book, press the download icon.



#### Download icon

Your browser offers you to save the file to a known location on your PC hard disk. Place the road book in the directory (or sub-directory of): « My Documents\RoadTracer\road books »

When the Internet download is complete, start RoadTracer, if not already done, check the connection between PC and RoadMaster, start RoadMaster and set it in Communication mode. Set RoadTracer in the communication mode through the menu <File>, <Communication>. Press the <Refresh> button to check that the communication with the RoadMaster is operational.



Locate and select the road book file in the left hand side column (PC side) then press the rightward arrow to start the copy from the PC to the RoadMaster.

The road book copy process can be monitored by means of advancement bar graphs showing up on the PC and on the RoadMaster.

At the end of the process, the copied file shows up in the list of files on the RoadMaster. The copied file still remains on the PC since the process actually makes a copy. For the road book files, we recommend to keep them on your PC even after copying them into your RoadMaster.



# 12.2.2 road book you have designed

The part about copying the file into your RoadMaster is the same as for a file coming from the Internet. This instance is simpler insofar as you recover your own road book where you have saved it after edition (see Hands-On manual or RoadTracer help).

## 12.2.3 road book coming from another RoadMaster

To load a road book from another RoadMaster, two distinct methods exist: the easiest is by transferring from RoadMaster to RoadMaster by means of a crossed cable ref. 6108. This operation is done through the menu <road book> and is described in the next paragraph.

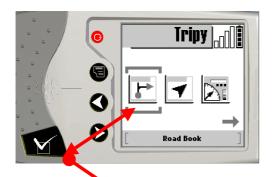
Without a crossed cable ref. 6108 the procedure necessarily requires your PC.

In a first instance, connect your friend's device by means of the USB cable. Set it in the communication mode, start RoadTracer and open the communication interface through <File>, <Communication>. Copy the road book file of your friend in an ad-hoc directory on your PC following the same procedure as when copying a recorded track as in § 12.1 Copy a track recording to your PC.

Swap the RoadMaster of your friend with yours and after setting it in communication mode, copy your friend's file from your PC to your own device (same end of procedure as the one described at § 12.2.1 road book originating from www.tripy.eu).



## 13 road book menu



Road Book 🖺

When you press the « ☑ » knob (5) while <road book> icon is selected in the main menu, you reach the list of road books loaded in the RoadMaster memory (as long as there is a file in it, otherwise, no list is displayed). The list of road books is not sensitive to upper or lower case characters. Each road book is tagged with an icon: «dot-arrow», «compass», «tape» or «beacon points». It indicates the type of file.

you First

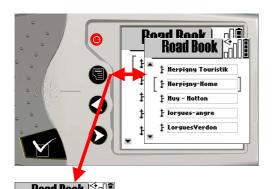
m Effacer

To read the ‡ Herpigny-Home the « ☑ » reception. ‡ LorguesVerdon for

have to select the road book you wish to use.

road book and navigate, one can directly do so by pressing knob (5). Remember that this function requires satellite signal Another mode to visualise a road book inside a building exists demonstration or test purpose.

To access all the road book functions while in the list of road books, press the contextual menu knob (2). A menu shows up and offers all the available functions (further described below):



Back track possibility to reverse the road book in a simplified form showing the sole transition changes at waypoints. Very useful to return to a starting point.

**Show** possibility to display the dot-arrow symbols without actually navigating them (possible without satellite reception).

**Send** to send a selected road book file to another RoadMaster (by means of the crossed cable ref. 6108).

**Delete** to remove the selected road book file. After selecting this function in the contextual menu, a confirmation window shows up. If you confirm the deletion, the file will permanently be deleted from the RoadMaster memory. It may not be recovered.

Pilot means start the navigation in order to ride a road book (identical to pressing the « ✓ » knob (5) from the list of road books, without going through the contextual menu). When a road book is played in navigation mode, the contextual menu E knob (2) allows access to other advanced functions, including compass navigation explained further below.

Main menu to return to the main menu. In all contextual menus, the last option of the list is always to return to the main menu.

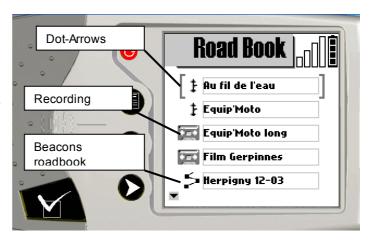


# 13.1 Navigate / Pilot a road book

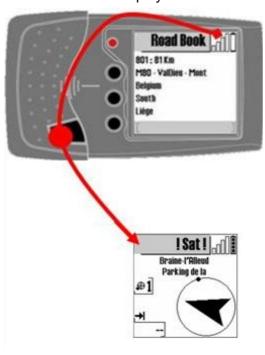
The directory of road books in the RoadMaster shows with an incon the type of recording:

User may start navigating a road book either at the starting point or from a distance of it (e.g. from your home).

As previously said, launching a road book navigation requires prior sufficient satellite connection (at least one reception indicator darkened at the top of the screen).



To launch the navigation of the road book selected in the list press the « 🗹 » knob (5). Your RoadMaster first displays a screen summarizing the road book main properties: total distance,



name, country, region, sub-region (note that this page is opened even if there is no satellite signal). Press the « ✓ » knob (5) once more to effectively start the navigation. If you have no satellite signal at this time, RoadMaster displays !Sat! and the screen flashes in the compass mode.

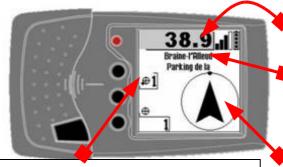
For everything about the quality of satellite connection see § 8 GPS receiving system.

## 13.1.1 Launching of road book away from the starting point

If you launch the playing of a road book from a remote distance from the starting point, RoadMaster gives you the compass bearing (direction and distance) to the starting point (or any other point of the road book you may choose by means of the ◀▶ knobs (3)(4)). This function may be useful for example when connecting between itineraries, or more commonly to connect to the exact starting point when approaching it.

Note: if you point to another than the first point, and you come across the road book route RoadMaster will display the dot-arrow symbol of the closest waypoint on the itinerary. If you point to the first waypoint, you will first have to reach it to visualise the first dot-arrow symbol.





Straight distance to the indicated waypoint

Location information (town & street) of the indicated waypoint, for as long as the road book editor has completed corresponding fields in RoadTracer

Waypoint number towards which you wish to navigate. For the starting point this number is 1 but you may choose any other waypoint of the road book by means of the ◀▶ navigation knobs (3) and (4)

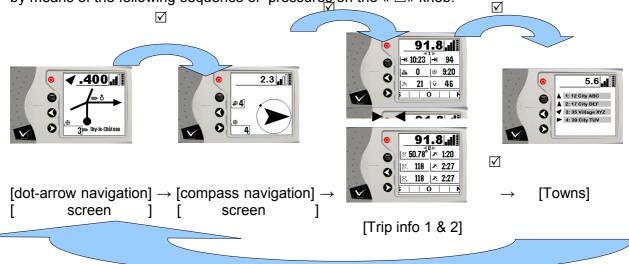
At the centre, the big arrow indicates the straight distance bearing to follow to reach the indicated waypoint, surrounded with a circle where the dot indicates the North

Reaching less than 100 metres from the starting point, RoadMaster displays the dot-arrow symbol of the waypoint 1 (the road book editor shall explicit how and in which direction the route should begin).

#### 13.1.2 Revolving information screens

A road book may be visualised in several ways according to its type (on/off road), the information it contains (dot-arrows or compass bearings) or else depending on the interest of the driver (intermediate time and km, town names, ...)

To allow this extended display in the easiest way, these various visualisations may be toggled by means of the following sequence of pressures on the « ☑» knob:



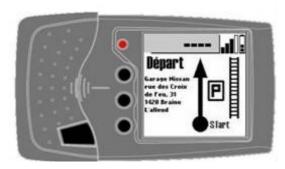
When displaying the Trip information or Towns, RoadMaster automatically comes back to the dot-arrow or compass display upon reaching 500m or less from a waypoint.

#### Parameters:

Through the « Parametres » menu ( knob (2) + option « parameters »), it is possible to allow or not the display of the « Compass » « Trip » and « List of towns».



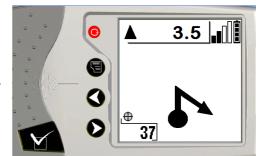
## 13.1.3 Playing a road book in the dot-arrow mode



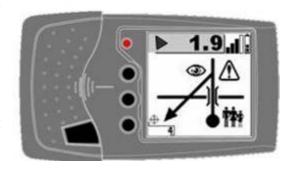
When launching a road book at the starting point, the first waypoint description shows up immediately after the properties display (as long as you have satellite connection and are within a close radius to the starting point).

When leaving the starting point for a few tens of metres, the scrolling of the various waypoint displays will happen automatically as you progress.

NOTE: road books produced by recording are obviously limited in content to the position and direction changes information at the user defined waypoints. They may however be enhanced by means of the RoadTracer Pro software.



When riding to the next waypoint, (direction change symbolised at the screen), the distance displayed on the top of the screen indicates the remaining distance to reach that point. Progressing towards that point, that distance decreases down to 20 metres after which it shows « ---- » meaning you have reached the point where the direction change should take place. Follow then the instructions at the screen; the dot shows "where you are"and the arrow "where you should go".



Note to competition or rally riders: When navigating, you may at any time temporarily pre-view the next waypoint(s) to anticipate the next direction changes. Use the navigation ◀▶ knobs (3 & 4) to do so. You may so pre-view and memorise the next transitions before returning back to the normal navigation mode. This mode is similar to the manual pre-view mode described in § 13.2 Manual visualisation of a road book except that the displayed kilometres in the title line is here the cumulated distance between the current vehicle position and the selected waypoint (and not the partial distance from waypoint to waypoint as in the manual pre-view). After exploring the next waypoints, and if you do not press any other knob, the RoadMaster automatically comes back to displaying the current waypoint.

The waypoint display remains displayed with the zero distance (« ---- ») during the whole transition through the waypoint. This is called the « hold up » distance. Note that this holding up does not have any impact on the precision of the relative distances between waypoints neither on the absolute road book distance.

**Holdup distance:** for a simple road crossing, this distance is defined by RoadTracer to a default value (typ. 40 m, or any other user defined setting) following the entry into the waypoint. During this holding up, you will not yet see the next waypoint displayed (\*). The user may change the default hold up distance in the parameters of the RoadTracer software. For more complex transitions, the software will automatically adapt the hold up distance to ensure a proper covering of the whole transition.

Additionally to the RoadTracer settings, and since release 1.8.0 of the RoadMaster firmware, it is possible to introduce a 15m anticipation parameter within the device itself. This to make

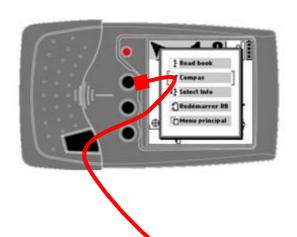


sure that riding at higher speeds, one would not miss the transition. This anticipation factor is described in the § 10.6.6 Anticipation of the zero distance.

(\*) Note: Do not expect the display of the next waypoint before actually having exited the current road crossing or transition. The device awaits the detection of a new GPS position outside of the transition eventually extended of the hold-up distance to display the next waypoint.

Continue driving your route when exiting a waypoint until the next waypoint shows up. If you have taken the wrong direction, the compass display will take over to bring you back to the correct track.

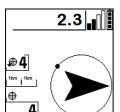
## 13.1.4 Playing a road book in compass mode



Any road book loaded into your RoadMaster may be played in the compass mode. The switching to the compass mode may happen after launching the road book (see above) by pressing the « ☑ » knob (5) once more. In this mode, you are guided from waypoint to waypoint by compass. It means that as soon as you have passed a given waypoint,



RoadMaster shows you the bearing (direction and straight distance) to the next waypoint. This mode is mostly aimed to being used in geographical locations where bearing navigation is

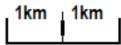


useful (e.g. desert). It is possible to toggle from one mode to the other one when playing a road book. In the instances where only compass navigation is meaningful, the road book editor will not have designed the dot-arrow symbols (called « Beacons» in this instance). In this instance, dot-arrow navigation is not possible as they have not been created.

As long as you remain on the track, the waypoint sequence is displayed in the middle of the screen (target waypoint). You may jump waypoints by

means of the ◀▶ navigation knobs (3) & (4). The number of the target waypoint will change. On the other hand, if you have jumped waypoints and yet decided to visualise the number of the current waypoint in the info corner, the displayed waypoint number is the actual next one and not the targeted one.

An indication of the deviation from the ideal straight line is displayed. The transition to the next beacon is happening as soon as the current one is « touched » (with a "touched" distance adjustable beacon per beacon).





The « 4x4 Compass» may also be selected (press (2) + parameters) to display the bearing in degrees instead of an arrow.



## 13.1.5 Display trip info1 and trip info2

# Trip info1:

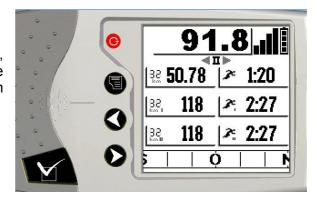
- Estimated time to destination,
- distance to destination,
- altitude,
- current time,
- instantaneous speed,
- average speed



The information « Estimated time to destination» and « distance to destination » are updated even if one leaves the roabook itinerary. After 1 500 metres driven outisde the itinerary, these information become meaningless and are not displayed anymore.

# Trip info2:

For each of the three intermediate counters, the driven kilometres and driven time (excluding stopped time) are displayed on this screen.



Toggle between the two screens by means of the ◀▶navigation knobs (3) & (4).



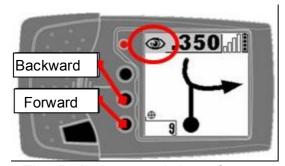
## 13.1.6 Display and selection of towns

This screen gathers the list of towns the road book is bringing you through. For each town of the list, a small arrow indicates the direction and a kilometres indication the distance to it (along the road book itinerary).

By means of the **◄►** navigation knobs (3) & (4), you can point to one of these towns of the list and ride to it in compass mode



#### 13.2 Manual visualisation of a road book



It is possible to manually display the sequence of waypoint symbols. Access the visualisation mode through the <road book> menu, and choose the road book to visualise from the list and select <Show> in the contextual menu.

This mode was initially (v 1.6.1) designed to display the sequence of symbols without adequate satellite connection (e.g. demonstration inside a building).

The display was persisting a few seconds before returning to the automatic navigation mode (requiring adequate satellite connection). This temporary behaviour remains and is available when activating the navigation arrows  $\blacktriangleleft \triangleright (3 \& 4)$  while navigating.

Since version 1.8.0, another manual display mode exists. It can be used to supersede the automatic display upon satellite connection failure (de-rated navigation). This mode allows the rider to continue navigating, keeping an eye on his intermediate distances by means of his bike counter (and not with the TripMaster function anymore that is also dependent on the satellite connection). In this instance, the distance to the next waypoint does not decreases in the screen title bar. The pilot has to manage it himself. Upon reaching the displayed waypoint, the pilot presses the «  $\boxtimes$  » knob (5) to display the next waypoint and so on.

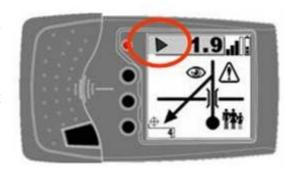
To avoid confusion with the normal navigation mode, the displayed waypoints show up with an « eye » • symbol in the top left part of the screen.

WARNING: the manual display function does not allow in any case the jumping of waypoints. To bypass a number of waypoints while yet on the itinerary, the satellite connection must be operational and one should switch to the compass mode as described in § 13.1.4 Playing a road book in compass mode. Voluntarily bypassing a waypoint in the compass mode while remaining on the programmed itinerary is not possible. It becomes possible as soon as one has left it by means of the off-route compass as in § 13.4 What happens if you leave the programmed route?.

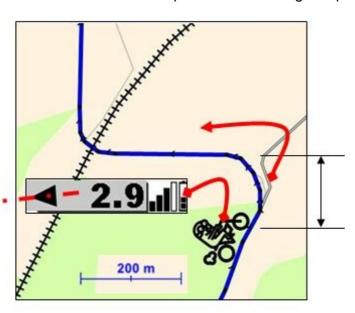


## 13.3 « Sniffer » arrow

In the road book navigation mode (dot-arrow or compass) and as long as you are on the programmed itinerary, a small black arrow is displayed at the top left corner of the screen. This arrow is an additional help to the navigation. It detects the direction of the track ahead of you and helps in guiding you when road transitions may be doubtful.



In the next example, when approaching the crossing, the sniffer arrow anticipates the direction of the track ahead. The sniffing distance depending on the speed, the anticipation will vary between 100 m at low speed and 350 m higher speeds.



The picture here next, shows a typical road situation where the sniffer arrow brings additional information. In this instance the road book editor did not deem necessary to place a waypoint at the coming road split. It is indeed expected to stay on the main road.

Anticipation between 100 & 350 m according to travelling speed

#### 13.4 What happens if you leave the programmed route?

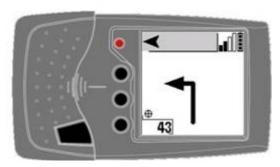
As soon as you leave the programmed route by more than 100m, the display changes from the dot-arrow (or compass) display to off-route compass display. In this mode, the sniffer arrow does not show up anymore as it does not have a track to anticipate anymore. By default, the screen indication brings you back to the missed waypoint. But if this waypoint cannot be reached or is not interesting, you may jump to another waypoint by means of the ◀▶ navigation knobs (3 & 4).

See practical example: a village is closed for a fair, you have to follow bypass indications and the next waypoint indicated RoadMaster is the town church square. You



know that you will not be able to reach it and you jump to the next waypoint (or further) if necessary. The screen gives you then the direction to follow and distance to reach the selected point.





At the moment you reach the programmed track, RoadMaster displays for a few seconds a so called « connecting arrow » before resuming the normal road book display (RoadMaster always resumes by displaying the dot-arrow symbol after a connection).

<here next, an example of « connection arrow » as</pre> it'd show up in the prior example when re-connecting at waypoint 42

One can also rejoin the track at any point between waypoints and RoadMaster will systematically re-connect to the track.

NOTE: If you navigate to the StartPoint (waypoint 1), you'll have to « touch » it to properly start the navigation.

# 13.5 Send a road book to another RoadMaster

To transfer a road book from a RoadMaster to another one, you need to use the crossed cable ref. 6108 (this cable is not supplied in standard with the RoadMaster but is available as an option). Connect the two Tripy RoadMasters by means of that cable and set the receiving unit in the communication mode.

On the sending unit, choose « road book » in the main menu; In the list of road books, select the one you wish to send; Press the menu ≣knob (2) and choose the « send» function. An advancement indicator keeps you informed of the copying.

## Step 1

RoadMaster « Sender »: <Menu>, <road book>, <Send>

RoadMaster « Receiver » : <Menu>. <Communication>,





#### Step 2

Transfer progress displayed on both units at the same time.

Step 3

At the end of the process, « GetDir » and « CMD : Finish » messages appear at the screen of the receiving RoadMaster. The copied file will show in the list of road books. The original copied file remains in the « sending » RoadMaster: it is normal as only a copy is made.





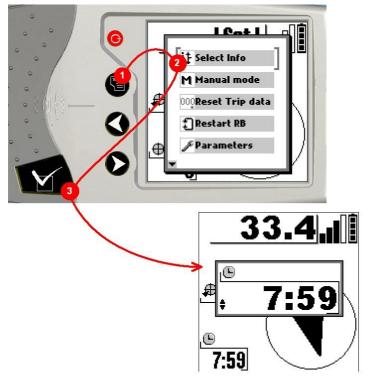
#### 13.6 Delete a road book

The "delete" command allows you to suppress from the RoadMaster memory the road books you do not need anymore. You can retain them on your PC where we recommend baking them up.

To delete a road book, select « road book » in the main menu; In the list of road books, select the one you want to remove; Press the menu 🖹 knob (2) and select the « delete» function. Delete confirmation is requested to avoid manipulation errors. After having validated this confirmation, the file is definitely removed from the RoadMaster memory.

#### 14 Corner info

In the dot-arrow and compass display modes (and only in these modes), the bottom left part of the screen is dedicated to displaying specific information you may choose and toggle at any time during navigation.



The 7 possible information are described in the following paragraphs. Some of these information are only available in the road book playing mode (dot-arrow or compass).

# How to toggle from one information to another one while navigating?

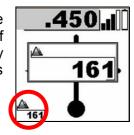
- 1) press the contextual menu knob (2) to activate the submenu
- 2) choose the <Select Info> option
- 3) press the « ☑ » knob activating a pop-up window, WARNING! this pop-up window remains for 30 seconds, time during which you may toggle to another information by means of the **◄** ► navigation knobs (3 & 4).

After a few seconds or a pressure on the « 🗹 » knob (5), the display returns to normal and the info corner displays the last selected information.



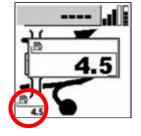
#### 14.1 Altitude

Altitude in meters is displayed with a mountain like icon. The altitude precision is more affected than position or speed by the number of satellites actually tracked. Altitude information becomes particularly inaccurate when the number of tracked satellites is lower than 6. In this instance, the displayed number is indicated with a exclamation mark (!). The altitude information is available in all the navigation modes.



#### 14.2 Gas stations on the track

To display the remaining distance to the next gas station on the itinerary, the road book editor should have created the specific gas stations points of interest with the RoadTracer editor. In such instance, you find under the "gas pump" icon the distance to the pump. If no gas station was defined along the itinerary, RoadTracer will display ---- (dashes).

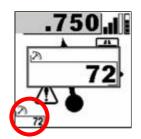


Warning: this function does not look for the closest gas stations in a radius based on the current coordinates (e.g. from the files gasfrabelux.nvo). For this function see § 17 Heading for.

The information about the gas stations along the track is not available in the off-route compass navigation mode.

# 14.3 Speed

Indication of the instantaneous speed. This indication is updated every second. The reading is therefore does not follow fast variations. On the other hand, it gives an excellent value at stabilised speeds. It allows you, for example, to calibrate your motorcycle counter. The speed information is available in all navigation modes.



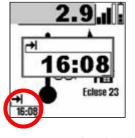
#### 14.4 Current time

Displays the GPS time corrected with the time zone information you have programmed in the configuration parameters (see § 10.2 Time zone). The information is available in all navigation modes.



#### 14.5 Estimated arrival time

It displays the expected arrival time according to the last ten minutes average speed. The estimated arrival time information is available after having driven for at least ten minutes to give the average speed. The computation does not take into account potential future stops along the way. On the other hand the expected arrival time is automatically recalculated by adding eventual stopped times (and not by integrating these stopped times into the average).



The estimated arrival time information is not available in the off-route compass navigation mode.



# 14.6 Remaining track distance

Displays the distance remaining to travel on the track.

The remaining track distance information is not available in the off-route compass navigation mode.

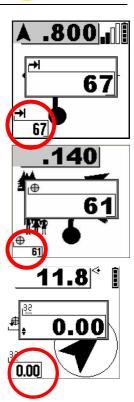
# 14.7 Waypoint number

Displays the number of the waypoint currently aimed at. Useful to follow the sequence of waypoints and/or relate that information to a map (provided you have printed it).

The waypoint number information is not available in the off-route compass navigation mode.

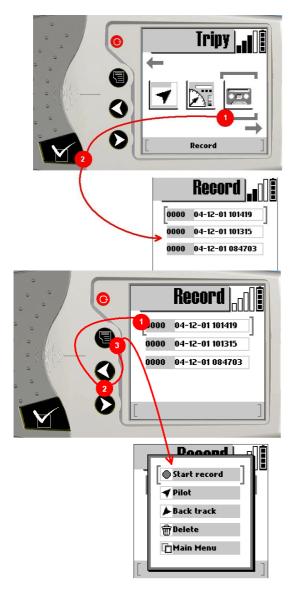
## 14.8 Travelled distance

Displays the travelled distance since the beginning of the road book.





#### 15 Record menu



Indication that the device is recording, a flashing letter R shows up in the screen title bar. This flashing remains whatever mode the device is thereafter

©Tripy

set into (RB playing, TripMaster, GPS, etc). This indication is replaced by control points monitoring is activated.

When you press the « ☑ » knob (5) after selecting the <Record> in the main menu, you obtain the list of recorded tracks currently in the memory of your If no track is present in the RoadMaster. RoadMaster memory the list is empty and a message « Press menu to start a recording» is displayed in the centre of the screen.

The list of displayed tracks is sorted by track number. A track is recorded with a unique number made of the date and time of the recording start. The time is the one of the RoadMaster, as configured in the parameters <configuration> <time zone> (see § 10.2 Time zone).

# 15.1.1 Start a recording

To start a recording, one should be in the « Record » window accessed as here above.

Press the contextual menu | knob (2) to open the sub-menu. In this menu select <Start record> and press the  $\langle \square \rangle$  knob (5). From there on, RoadMaster records and generates a waypoint (see definition at § 3.11 WayPoint (WP in short)) at every long pressure on the « » knob (5). Warning: make sure you have adequate satellite connection before starting a recording (wait for correct device synchronising). Indeed, RoadMaster allows to start a recording prior to synchronising, but the recorded GPS coordinates are then useless.





Free 1836k / 14128 km

1 Dec 2004

During recording, the <Record> screen indicates:

- 1. The file name (number based on date and time of the start)
- 2. Number of recorded GPS points
- 3. Free memory in kB and in recorded km
- 4. The last logged waypoint number

10:12:27



You may leave this screen to use other RoadMaster functions without intervening in the correct recording operation (and get back to the the recording function at any time to check on the advancement).

Recording goes on in the same file as long as it is not deliberately stopped (except in case of low battery when the file is effectively closed before shutting down). It means that you can switch the device OFF (actually « idle ») for the lunch pause and simply re-start it at the time you resume your trip: from that time the recording will resume in the same file at the point it was stopped. This resumption is also displayed by the letter **R** (or eye symbol) flashing in the title bar.

WARNING: if you forget to stop the recording between two distinct road books, they will be concatenated within a single file which is not desired.

## 15.1.2 Logging Waypoint while recording

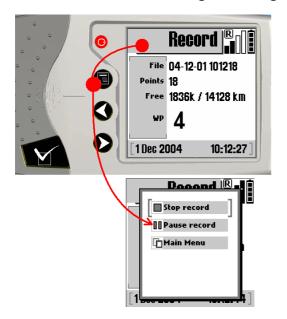
The logging of a waypoint (or POI if outside recording mode) is performed by a long pressure ( $\pm$  1 second) on the «  $\square$  » knob (5). A WP (or POI) may be logged at any time, whatever screen configuration you are into.

Systematic logging of a waypoint at every direction change **is not necessary** while recording during normal road navigation. RoadTracer has, indeed, an automatic function of waypoint extraction and corresponding dot-arrow symbol edition and your track will be directly usable without manual waypoint logging during scouting.

During off-road, on the other hand, the manually logged waypoints while recording are the only tags you have to edit your road book. In this specific instance, and depending on the level of road book precision you want to reach, it may be useful to write down notes during the scouting.



## 15.1.3 Pause during recording

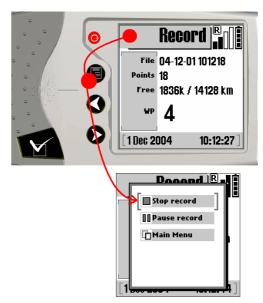


The easiest way to pause a recording is by switching the device in idle mode by pressing the ON/OFF knob (1). As soon as it will restart, the device will resume recording at the point you have switched it off

One can also, from the « Record » window, press the contextual menu knob (2), select the <pause record> sub-menu and press the « 🗹 » knob (5). From then on, the device will stop recording but all functions remain available. In this instance, you may resume the recording by selecting <resume record> in the contextual menu, and the same record will be continued.

## Ending the recording

From the <Record> window, press the contextual menu  $\blacksquare$  knob (2), select <Stop record> from the sub-menu and press the «  $\boxdot$  » knob (5). The device stops recording and closes the current file. The end of the recording mode is confirmed by the disappearance of the **R** letter in the title bar.



#### 15.1.4 Recording of a POI

Apart from the track recording, you may at any time and whatever the screen displayed, record a POI. You should simply perform a long pressure (± 1 second) on the « 🗹 » knob (5) and this position will be recorded.

The recorded point will be in the « userpoi » file. This file is automatically created when you save your first POI (or when former "userpoi" file has been deleted). The name of the POI is structured as a sequence number (within the « userpoi » file) followed by the dd-mm-hh :minutes (eg : « 4 : 29-12 19 :23 »)

It is possible to characterise each POI in RoadTracer Pro with a name, location and symbol.





## 16 Trip master







Pressing the « ☑ » knob (5) after selecting the <trip master > icon in the main menu, brings you to the Trip Master 1, the first independent counter of three.

The 3 Trip Masters are completely independent and can be manually set or reset down along the way.

To toggle Trip Masters, use the ◀▶ navigation knobs (3) and (4) or the « ☑ » knob (5).

The 3 Trip Masters display identical layout and provide the following:

- Driven distance since the last reset (in km and tens of metres)
- Driving time (moving vehicle and Tripy Road Master ON)
- Stopped time (vehicle stopped and Tripy Road Master ON or OFF)
- Average speed during driven time

The distance setting and reset functions are available by pressing the contextual menu \( \begin{aligned} \text{knob} \text{ (2)} \end{aligned} \)

Adjust the distance (more or less) by selecting the <Set trip> function and use the ◀▶ navigation knobs (3) and (4). A simple pressure and immediate release increments the counter by 10 meters. The longer the pressure, the faster the incrementation speed.

The reset of the counter is done by confirming the <Reset Trip data> selection. It is not possible to recover the values after a confirmed reset.

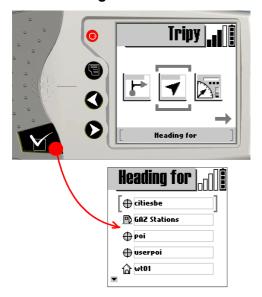


After the serie of 3 trip counters, you have the possibility to display a summary screen with the following information:

- km of trip masters 1 and 2
- Current speed
- Altitude
- Bearing of the driving when speed is higher than 10km/h.



#### 17 Heading for



The mode « Heading for » is where you will find the files with towns, gas stations, your home and/or office as well as all points of interest you may have created and towards which you can travel to.

If no .nvo file is present under « Heading for» in the RoadMaster when pressing the «  $\boxtimes$  » knob (5), a « TRIPY.NVO » file is automatically created. It contains the position of the Tripy headquarters

# 17.1 Heading for gas stations or any other POI

The « gas xxxxxx » GPS point files allow the compass navigation towards the closest gas stations. These files are labelled as follows :

- « gasbenelux.nvo »: stations in Belgium, The Netherlands, Luxemburg,
- « gasfrabelux.nvo » : stations in France, Belgium, Luxemburg,
- « gasfrbenelux.nvo »: stations in France, Belgium, The Netherlands, Luxemburg.

When you open one of the gas stations files, RoadMaster shows the gas stations in ascending order of distance from where you are. A little arrow also indicates the direction where to head for to reach them (from your travelling direction at speed > 3 km/h).

The list of gas stations as provided by the gas companies may not be up to date. Some points of distribution may have been suppressed, others added.

If other points of interest files are present, it is also possible to use them as destination.

## 17.2 Heading for a town

New files containing the GPS location of towns (down to the smallest village) are available for most European countries. These lists, once loaded in your RoadMaster, will allow you to head for any of these towns by means of the compass.

These files are labelled:

- « belgium.nvo » : for towns in Belgium,
- « luxembourg.nvo » : for towns in Luxemburg,
- « nederland.nvo » : for towns in The Netherlands,
- « france.nvo » : for towns in France.
- etc

Depending on the desired geographical coverage, you may load RoadMaster with the relevant files. The loading procedure is similar to the loading of a road book : see file communication under § 12 PC connection



To head for a town, you should first select « Heading for » in the main menu.



The list of POI's (points of interest) currently in the RoadMaster is displayed. From that list you find each country name files. Select the file corresponding to your choice (e.g. « Belgium » to navigate towards a Belgian town).

A keyboard is then displayed on the screen:



This keyboard will allow you to quickly find the name of the town you are looking for by introducing the first letters of its name. Use the RoadMaster navigation ◀▶ knobs (3) & (4) to move the cursor on the desired letter, and press the  $\langle \square \rangle$  knob (5) to validate the letter.

The keyboard is made of the latin alphabet 26 letters and functions on the bottom line. RoadMaster contextual menu 🖹 knob (2) allow to move the cursor from the alphabetical section to the function section.

The three available functions are:



- Symbol « ☑ » : validation to close the search,
- Symbol « ⋈ » : cancellation reverse to previous screen,
- Symbol « ► »: delete suppress the last introduced letter.

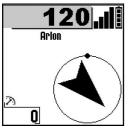
After introducing the letters of the town name one by one, press the contextual menu 🖹 knob (2) that will position the cursor on the validation symbol « ☑ » (in the functions section). Press then the « ☑ » knob (5) to validate.



Tripy RoadMaster leaves the keyboard and displays the complete list of towns sorted in alphabetical order, starting with, at the top of the screen, the town you have selected at the previous step.



The navigation ◀► knobs (3) & (4) allow you to move the cursor through this list and select the desired town by means of the « ☑ » knob (5). RoadMaster displays then the « COMPASS » screen guiding you to that town.



Inside the circle, a black arrow displays the straight line direction (bearing) to the selected town. That is what we call the compass. The black dot on the circle shows the North. The displayed distance on the first line, is the straight line distance between your current position and the town towards which you navigate.

In the example here, the North is ahead of you and the selected town (Arlon) is 120 km, at 45° behind you to the right.

From the compass navigation screen, the contextual menu | knob (2) will allow reverting to the keyboard screen. Another pressure on the contextual menu knob (2) will move the cursor in the functions section on the « \( \subseteq \) » symbol. A pressure on the right arrow moves the cursor on the « ⋈ » cancellation symbol. The « ⋈ » knob (5) allows to confirm and revert to the screen showing the list of POI (points of interest) files.



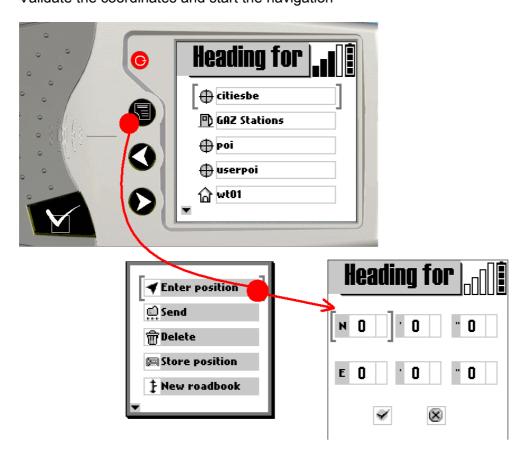


When you enter in the « Heading for » function and select a town locations file, the last chosen town is showing up at the screen. By pressing directly the contextual menu  $\sqsubseteq$  knob (2) (to reach the functions section) then «  $\boxtimes$  », you will navigate towards that town.

On the screen listing the points of interest, the contextual menu \( \begin{aligned} \ext{knob} \) (2) allows reverting to the main menu.

# 17.3 Heading towards a GPS position

To head towards a given GPS position (longitude/latitude), from the list of towns and points of interest under the « Heading for » function, select the contextual menu knob (2) and choose « Enter position » to insert the coordinates of the destination. Validate the coordinates and start the navigation

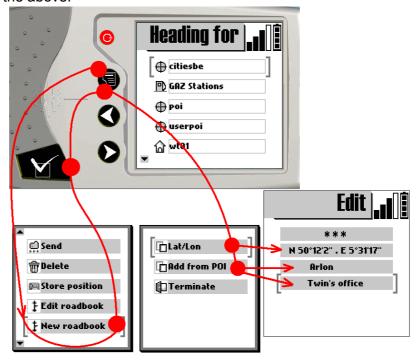




#### 17.4 Manual selection of beacons

It is possible to edit a beacons road book in RoadMaster by introducing a list of:

- GPS coordinates (long/lat)
- POI's (towns or personnal)
- or combination of the above.



Once the road book so edited, it can be displayed and modified under the function « Heading for » and can also be readily played in compass mode.

This function allows the edition of road books without having a PC available. A traditional 1/200000 roadmap will be enough to find the towns along the itinerary. This road book will be stored with the same name codification as a recorded track and will be available from the list of tracks and other POI's.

## 17.5 Immediate use of a recorded track

It is possible to play a recorded track without the RoadTracer Pro software. Once the recording ended, it is readily available in the list of road books and can be play forward or backwards (to track back).

The labelling of the road book is according to the following template:

- as from version 1.2.10: « YYMMDD HHMMSS » (e.g. « 07-03-26 091823).

- In versions prior to 1.2.10: DDMMYY HHMMSS. (e.g. « 26-03-07 091823)

In this mode, for each waypoint logged during the recording, RoadMaster draws a simplified dot-arrow representing as close as possible the direction to follow. This mode can be used on roads, but is especially interesting upon off-road navigation.





# 17.6 Record the GPS coordinates of your current position

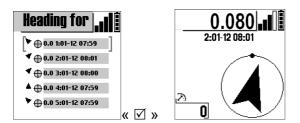
Under the « Heading for » menu, a new point of the contextual menu allows the recording of the current position to navigate towards it at a later stage (e.g. record the position of your house).

To record a point, select first the function « Heading for » in the main menu. Press then the contextual menu  $\sqsubseteq$  knob (2) and select « Store position ». If you do not have satellite connection where you are, RoadMaster will not allow to save the position (as it does not know it!). If you have satellite connection, your current position is stored as a POI in the « userpoi » file and labelled with the date (DD-MM) and the recording time.



As an alternative, as a shortcut, a long pressure on the « ☑ » knob records a new POI.

This POI can now be used as a target for compass navigation. To navigate towards such recorded position select it from the list of POI files and press the «  $\square$  » knob. See how the distance to the point changes from «- - -« to some value as you move away from that point.



By means of the communication module of RoadTracer (version 1.0.0.133 or later), you can also recover these position files on the PC and eventually give them a more appropriate name prior to sending them back into RoadMaster. These recorded points can then be managed on your PC as list of points to be displayed on the RoadTracer map.



## 18 Updates

Tripy RoadMaster and RoadTracer are continuously evolving products. It could then be that the products have already evolved since your purchase. We highly recommend that you regularly update your RoadMaster firmware (see procedure below). And similarly for the RoadTracer Pro software.

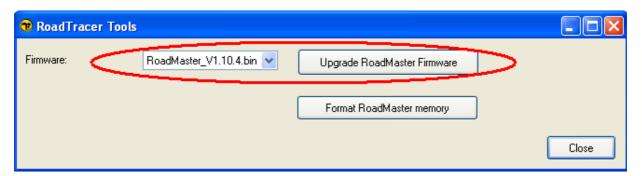
## 18.1 Firmware upgrade procedure

#### Requirements:

- PC with internet connection
- Installed RoadTracer
- Firmware upgrade file RoadMaster\_Vx.x.x.bin correctly downloaded from our website <u>www.tripy.eu</u> and saved in your C:\Program Files\Tripy\Road Tracer\Road Master\ directory
- Tripy RoadMaster connected to the PC by means of the USB cable, and connection tested with RoadTracer (<File>, <Communication> and select the refresh button ensure proper communication).

#### Procedure

Starting from the <Tools> button of the RoadTracer Communication menu (<File>,
 <Communication> ), select the desired version in the firmware field, and select
 <Upgrade RoadMaster Firmware>



- The process immediately starts with an advancement bar graphs on the PC side and the RoadMaster screens fills with blurred pixels (not to worry)
- Your RoadMaster automatically restarts at the end of the procedure

#### Upon failure

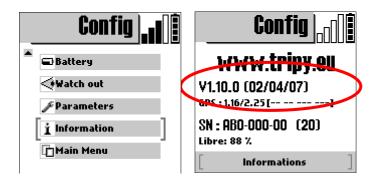
 Check the file path description in the second line of the RoadTracer communication <Tools>.

#### 18.2 Procedure to upgrade the GPS micro-code

#### 18.2.1 Check the version of the RoadMaster firmware

Check the Tripy RoadMaster firmware by displaying the « Information » page from the « Configuration » menu.





The first line displays the RoadMaster firmware: « V 1.10.0 » in the above exemple. If your version is prior to 1.10.X, you must first start by updating the RoadMaster firmware prior to updating the GPS micro-code. To perform the RoadMaster firmware upgrade see § 18.1 Firmware upgrade procedure.

#### 18.2.2 Check the version of the GPS receiver micro-code

Verify if it is necessary to upgrade the GPS receiver micro-code by displaying the « Information » page of the « Configuration » menu.



The second line displays the GPS receiver micro-code version: « GPS : 1.16 » in the above exemple.

If your version is prior to 1.16, you should upgrade to the latest version.

# 18.2.3 Upgrading the GPS micro-code

# 18.2.3.1 Downloading of the upgrade file

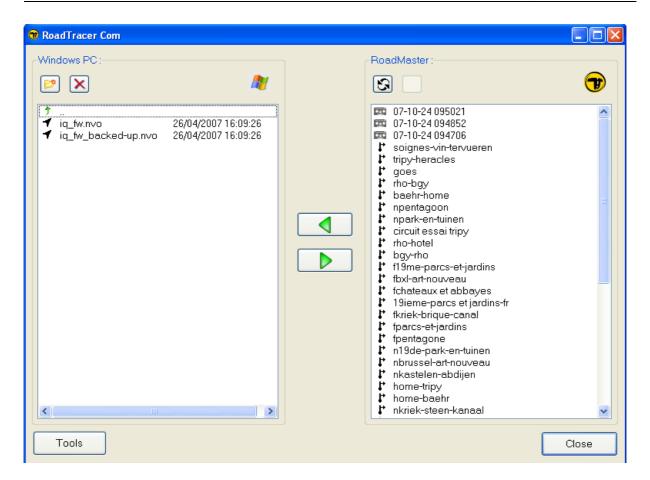
On the « Download » page of the <a href="www.tripy.eu">www.tripy.eu</a> website (« Support & contacts » - « Download») you shall find the « Microcode for Tripy RoadMaster GPS». In this section, click on the GPS Micro-code link to start downloading a file called « iq\_fw.nvo ».

Download this file and place it in the « \My documents\RoadTracer\roadmaster\ » directory.

#### 18.2.3.2 Micro-code upgrade

# 18.2.3.2.1 Transfer of the micro-code file to RoadMaster





WARNING: make sure RoadMaster have enough battery capacity to run 5 minutes This file is large and the transfer to RoadMaster takes approximately three minutes. At the end of the transfer, leave the communication mode by pressing the menu knob.

#### 18.2.3.3 Activate the micro-code upgrade procedure

After transferring the micro-code, enter the « Information» page of the « Configuration » menu: the upgrade procedure starts automatically. A pop-up window is displayed and a



« Configuration » - « Information »

« Information »

Upgrade procedure

Refrain from any manipulation during the upgrade procedure. The procedure may take more or less time depending on the type of upgrade. When the procedure will end, RoadMaster switches OFF and automatically re-starts.

After the upgrade, the RoadMaster GPS has lost its constellation information. You will have to expose RoadMaster for several minutes to the satellites (open sky) in order to recover correct GPS signal reception.



## 18.2.4 Upgrade confirmation

Check if the RoadMaster GPS micro-code is correctly updated by displaying the « Information» page of the « Configuration » menu.





The second row should display the GPS micro-code version as 1.16.

If your version is prior to 1.16, it means that the upgrade did not happen correctly. In this instance, resume the procedure.

# 19 Managing protected road books

Version 1.8.0 of the firmware handles protected road books. This function allows event and tour organisers as well as road book designers to protect their road books and prevent their illicit copying/distribution. Please contact our support department if you wish more details regarding this function (<a href="mailto:support@tripy.be">support@tripy.be</a>).



# 20 2 years manufacturer's warranty

#### Term 1: Purpose and duration

Tripy manufacturer's warranty protects the user against nonconformities or malfunctioning detected on the product within 2 years from its purchase. As soon as the buyer notices a product nonconformity or malfunction, he should inform his reseller without

#### Term 2: Scope of application

Tripy manufacturer's warranty is applicable in Europe and covers all Tripy products excluding the following accessories: external lighting, 12V cables, external knob, batteries.

#### Term 3: Registration and application

The warranty becomes effective from the date of purchase. Upon warranty claim, it is the buyer's responsibility to prove the date of

purchase by means of an invoice or ticket showing the reseller's name, the date of purchase and device serial number. Without evident proof of purchase, a warranty claim cannot be handled.



#### **Term 4: Conditions**

Tripy manufaturer's warranty covers parts and work to conduct the repair. Shipping of the defective product to the point of sale, as well as its recovery from that same point are the responsibility of the buyer. Shipping costs from the reseller to Tripy S.A. Belgium are covered by the reseller. Eventual transfer of this cost to the buyer is the reseller's responsibility. Shipping costs from Tripy S.A. to the reseller are covered by Tripy S.A. The warranty is applicable if the products are used according to the user quide. Tripy manufacturer's warranty is not

- applicable in the following circumstances: - Products having been opened, tempered and/or having been repaired outside of a manufacturer's authorised shop.
- Products showing obvious signs of shocks or resulting from other abnormal deteriorations such as: bad storage, bad maintenance, or extended exposure to external agents such as oxydants or aggressive substances.
- Products damaged by a bad usage or bad installation (RAM Mount accessories are exclusively recommended by Tripy). See prices list.
- Products showing abnormal keyboard wear.
- Products with a broken connector pin.
- Products showing a casing failure or watertightness failure following the usage of inappropriate screws.
- Products with broken LCD display.

NOTE: For a failure happening within 14 days following the purchase, the product may be exchanged against a new product. It is the reseller's responsibility to return the defective product to Tripy S.A. at his cost in its original packaging including all accessories and a copy of the sales invoice. Only under these conditions, will the product be exchanged by Tripy S.A.

#### Term 5: Return procedure

The return of a defective product takes place through the intermediary of the reseller. For the areas without reseller, a return request shall be asked for by e-mail to <a href="mailto:support@tripy.be">support@tripy.be</a>. The Tripy reseller fills in a document called « INTERVENTION ORDER» summarising the buyers'details as well as a short description of the defect (compulsory) and

the circumstances when it appeared. The intervention order may be downloaded from the website <a href="https://www.tripy.eu">www.tripy.eu</a>. The warranty claim is only valid if the product's proof of purchase is joined to the intervention order. The defective product shall preferably be returned in its original packaging or alternatively in another packaging ensuring proper similar product protection.

#### 21 1 year crash warranty

#### Term 1: Purpose and duration

The anti-crash warranty offers to replace at a flat cost a RoadMaster that would have been destroyed in a fall or an accident. This warranty is applicable for one year following the purchase.

#### Term 2: Scope of application

The anti-crash warranty is applicable throughout Europe. It only covers the RoadMaster.

#### Term 3: Registration and application

Same as Manufacturer's warranty.

#### **Term 4: Conditions**

Same as Manufacturer's warranty.

Special conditions for the crash warranty:

- Only applicable to the first owner (registered)
- Product damaged upon a fall or accident (product to be returned to us)
- Accompany the product with a Service return form and a copy of the proof of purchase with reseller's stamp

#### Term 5: Return procedure

Same as Manufacturer's warranty.