



PRO III EVO

Manual (EN)

Firmware V4.2.5



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PROIII EVO

Introduction	4
The front of the PRO III EVO	4
The rear of the PRO III EVO	4
Modules compatible with PROIII-EVO	5
Features PROIII-EVO, GPS2 & GPS4	6
PRO III EVO	6
PRO III EVO with module GPS2	7
PRO III EVO with module GPS4	7
Installation	8
Power supply	9
Batteries	9
Power on, backlight on and off the ALFANO	10
Window "HOME"	11
The symbols most used	11
Shortcuts	12
Beginning of a timing session and use the ALFANO running	13
Setup	
Power off	14
Bluetooth	14
Circuit	14
Date/hour	15
Driver	15
Temperatures	15
Speed	16
RPM	17
Gear	17-18
G-Force	19
Led	19
Display : contrast, LED lighting, time off, backlight	19
Peak	20
GPS check	20
Activation / deactivation GPS	20
Counters engine	21
Frequency of sampling	21
Graphic settings	21
Unit	21
Language	22
Parameters by default	22
Update	22

<u>Circuit</u>		
	Select a circuit	23
	Management Circuits	23-24
	Information	24
	A) Create a Track Magnetic/Infrared	25
	B) Create a Track GPS	26-27
	C Create a Track Mag/IR + GPS	28-29-30-31
	Import track from another ALFANO, via Bluetooth	32
<u>DATA (Menu)</u>		
	Best lap, « Absolute '&' last session»	33
	DATA (recorded data)	33
	Circuits used	33
	Data Erasing	33
<u>DATA (data)</u>		
	Best lap	34
	Teoric lap	34
	Session	35-36
	Connection/download	37-38
	Counters engine	38
	The windows of race (Layouts)	39-40-41
	Power supply, accessories + consumption table	42-43
	Memory	43
	VisualData2	44
	Update Firmware	44
<u>GPS</u>		
	Signal GPS	45
	Number of satellites	45
	Date & hour	45
	Warranty conditions	46
	Product modifications	46
	Damages e responsibilities	46
	Disposal	46

Introduction

The front of the PROIII-EVO

It consists of 11 LEDs, 4 buttons, the external dimensions are 133.5x90x76mm.



The rear of the PROIII-EVO

Input RED

1 NTC temperature or temperature K, or 2 with the hub A2190

Input BLACK

USB cable or cable Module GPS2/GPS4

Input GREEN

Magnetic sensor or infrared (time) allows you to connect a speed sensor with the hub A2191-A2192

RPM

RPM high tension



Batteries 2xAA

The PROIII EVO is supplied with a magnetic sensor ref. A1302, a RPM cable ref. A1600, two AA batteries.

- The module GPS2

Input BLACK

BUS : Connection with the PROIII-EVO



Input GREY

Connection USB

- The module GPS4

Input BLACK

BUS : Connection with the PROIII-EVO



Input GREY

Connection USB

Input BLUE

Connection speed sensor
With a cable hub 'A2191'
ability to connect 2 speed sensors

Input RED

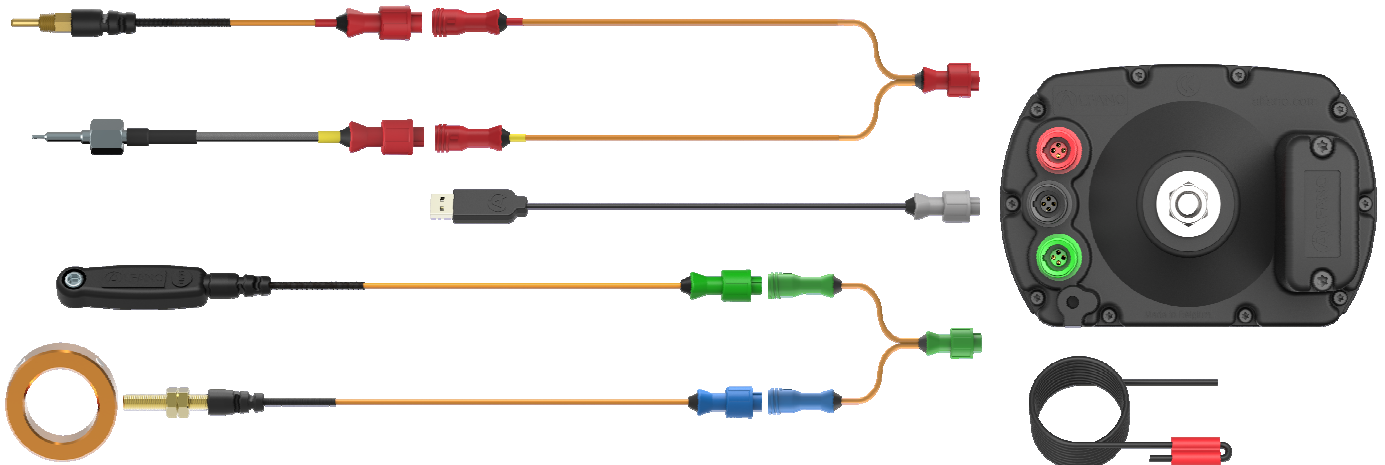
With a cable hub "A2190", the possibility of connecting two temperature sensors (NTC + K) or a temperature sensor (NTC) + a lambda sensor or valve

CHARATERISTICS PROIII EVO, GPS2 & GPS4

PRO III EVO

- Timing to the hundredth of a second
- 1 input for taking the time magnetic or infrared
- 1 connection to the engine speed (RPM)
- 1 Temperature input
- 1 second temperature supplementary entry (with the article A2190)
- 1 input speed sensor (with the article A2192 or A2193)
- Data storage up to 10Hz
- 5 meters of the engines "driving time"
- 11 possible screens of data views in the running to be chosen
- Full menu of integrated analysis in PROIII EVO (maximum, minimum, graphic, best time, best partial, etc ...)
- Complete configuration menu (Peak, three pilots, alarms, various settings, etc ...)
- Backlight
- 6 languages available integrated
- 9 LED : RPM / temperature / (or Lambda with Form GPS4)
- 2 LED alarm temperatures
- 1 input for connecting USB (Article A4220) to download data, the management of the circuits or update PROIII EVO
- Possible developments through system upgrades (new screens of data in the running, the connection to the future GSM 3G, etc ...)
- Hermetic to water projections (IP56)
- Screen (mm / pixel) : 75x45 / 160x94
- Dimensions 133.5 x 90 x 28 mm
- Weight 434gr.
- 3 power options : 2 AA batteries (included) or POWER A4004, A4005

Possible configuration :



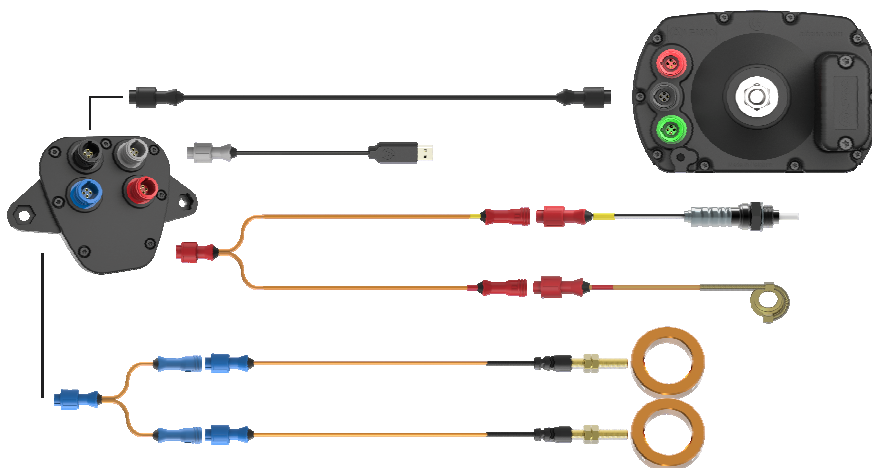
PRO III EVO with the module GPS2

- The module allows GPS2 more :
- - Speed with GPS
- - Trajectory with GPS
- - Ability to create circuits with magnetic fields, or infrared and additional partial with GPS
- - Ability to create circuits entirely with GPS
- - Bluetooth connection to download the data, manage your circuits, update the PROIII EVO
- - Bluetooth connection to share (send or receive) circuits to other drivers
- - 1 input for the USB connection (Article A4220) to download data, manage tracks or update PROIII EVO
- - Possible evolution of the product thanks to updates (Application Smartphone / Tablet compatible to download data, connection with the future GSM 3G, etc ...)

PRO III EVO with the module GPS4

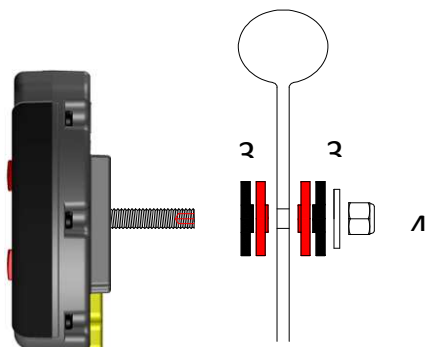
- The module allows GPS4 more :
- - Speed with GPS
- - Trajectory with GPS
- - Ability to create circuits with magnetic fields, or infrared and additional partial with GPS
- - Ability to create circuits entirely with GPS
- - Bluetooth connection to download the data, manage your circuits, update the PROIII EVO
- - Bluetooth connection to share (send or receive) circuits to other drivers
- - 1 input for the speed sensor
- - 1 second entrance to the speed sensor (A2191) (allows the analysis of understeer, oversteer, slittamento)
- - Gforce / 3-axis accelerometer integrated in the module GPS4
- - 1 input temperature
- - 1 second entrance additional temperature (with Article A2190)
- You can have a total of 4 temperatures (2 on PROIII EVO and 2 on the module GPS4)
- - 1 input for the USB connection (Article A4220) to download data, manage tracks or update PROIII EVO
- - Possible evolution of the product thanks to updates (Application Smartphone / Tablet compatible to download data, connection with the future GSM 3G, etc ...)

Configuration possible with the module GPS4 :



Installation

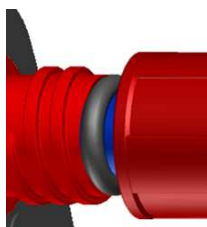
Installation of the display



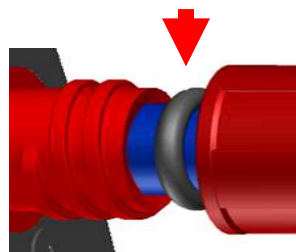
- 1) Fix the PROIII to the steering wheel by respecting the order of slices : red, black and that in metal..
- 2) Tighten the set with the autoblocking M8 metal nut.

Installation of the connectors

CORRECT



NOT CORRECT



Introduce completely the male connector into its housing, the black rubber joint has to be against the female connector before tightening the nut.

This would pull a penetration of water and a bad electric contact, because during the tightening of the nut, the black joint dislodges of its location.

Use an anti-interferences hood



Internationally recognized to reduce the electromagnetic pollution

Some systems of ignition are very aggressive. Use then a hood of candle equipped with a resistance of 5kOhm for an optimal functioning of the system, while maintaining the performances of your engine.

Strongly recommended PRECAUTION : it prevents a dysfunction, the extinction or the blocking of your ALFANO.

The screwdriver

Use a screwdriver of type Torx X20 to fix the batteries cover.



Alimentation

Il PROIII EVO is supplied with 2 batteries type AA 1,5V. On the welcome page, you can check the batteries' life. When the power becomes too weak, a message appears :



When this message displays, PROIII goes automatically off after 10 seconds.

Note : The intensity of the backlight and LED intensity decreases considerably the autonomy of the batteries.

Note :

- Remember to check the energy meter before starting a race. Consumption and the volume of the battery depends on the quality and type of batteries, which is why it is recommended to change the batteries when you see the message.
- Two other types of power supplies are available for PRO-EVO II (see power system and accessories)

Batteries

The technology applied to our new systems requires larger battery consumption; battery quality is crucial ! There are 3 major types of AA batteries on the market.

Salines : Salines are rarely used, they only have about a third of the energy of Alkaline batteries.

Alcalines : Alkaline batteries are the best option.

Ricaricabili : Very good option, but the difference of quality from a brand to another is important. A bad brand loses its energy even with no use at about 1% a day. Furthermore, these batteries have a memory effect, if you recharge a battery which is half full while in use, you will not be able to use more than half of the stored energy, and the other half will be lost.

There are good that if you do not use rechargeable batteries lose less than 12% for a year and have no memory effect. Examples of brands Recommended: **SANYO XX Eneloop** and **Uniross Hydro**, they are used by professional photographers.



IMPORTANT NOTICE



Always use batteries and brand quality.

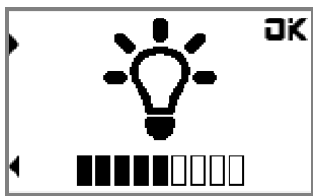
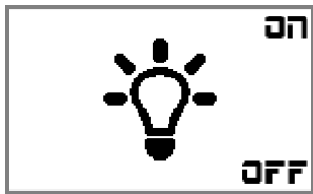
Never leave batteries in the device when not in use within 2-3 weeks to avoid the dissolution of the batteries on the electronics causing irreparable damage
You lose the warranty in case of leakage of battery acid.

Power on, backlight on and off the ALFANO

Power on : press the button 4, in the lower right.



Backlight :



Depending on the setting in the SETUP DISPLAY, the Alfano is active in several ways :

- "OFF" : the Alfano lights without backlight.
- "MAN" : the Alfano offers the backlight
or To activate : press the "ON", then adjust the light intensity.
To activate or not : press the "OFF" or do nothing for 3 seconds.
- "1-9" : The backlight automatically turns on 'ALFANO'.
Finally, Alfano is positioned on "HOME".

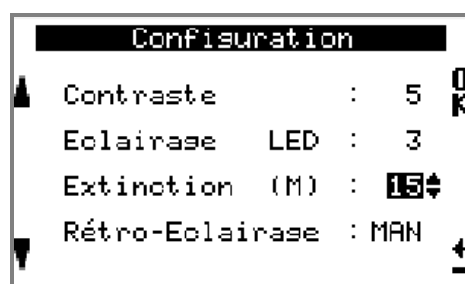
Note :

- The activation of the backlight reduces battery life by +/- 20 to 40%.
- Whatever the choice of the backlight, the backlight turns on in the navigation menu. It turns off automatically after one minute when it is set to OFF and no buttons are pressed.

Turning off manually : in "HOME" press 2 seconds the button.



Automatic shutdown : the system turns off after being inactive for a time that can be set in SETUP menu display from 1 to 30 minutes.



« Home »

The window "HOME" is the main window of the PROIII-EVO. The menu in this window allow you to access parameter settings "SETUP", the data views "DATE" to configure "CIRCUITS", select the "WINDOWS" race (layout), connections (USB & Bluetooth) and through shortcuts : direct access to the data of the last Session, activating or turning off the backlight, system shutdown.

• DATA
(Button 1)

Measurer status battery

Icon
Backlight activ

• Configuration Circuit
(Button 2)

Measurer memory available

Setup :
(Button 3)

- Parameters
- languages
- Drivers

(Button 4)

- Power on
- Choice windows race (layout)
- Connections
- Turning off
- Engine running

The symbols most used



- **Buttons 1, 3 :**
 - The arrows managed toward the left ◀ and the right ▶ allow to move from a menu to another one, in some cases, a long pressure allows a faster scrolling.
 - The arrows managed upward ▲ and downward ▼ allow to move from an option to another one, to modify numerical and alphabetical values, in certain cases, a long pressure allows a faster scrolling.
- **Button 2 « K » :**
 - Allows to confirm a state and at the same time, in certain case, to move on the following option.
- **Button 4 « ↵ » :**
 - Allows to backtrack or to go out of a menu.

The shortcuts

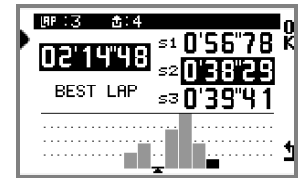
Tasti di scelta rapida consentono di passare più velocemente per andare direttamente a l'opzione desiderata.

In « HOME » :

- **1 second** pressure on button 1 = direct access to the data of the last SESSION.



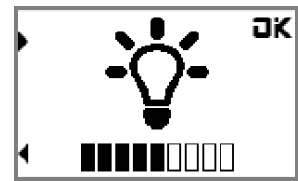
1 second



- **1 second** pressure on button 3 = activate or deactivate the backlight.



1 second



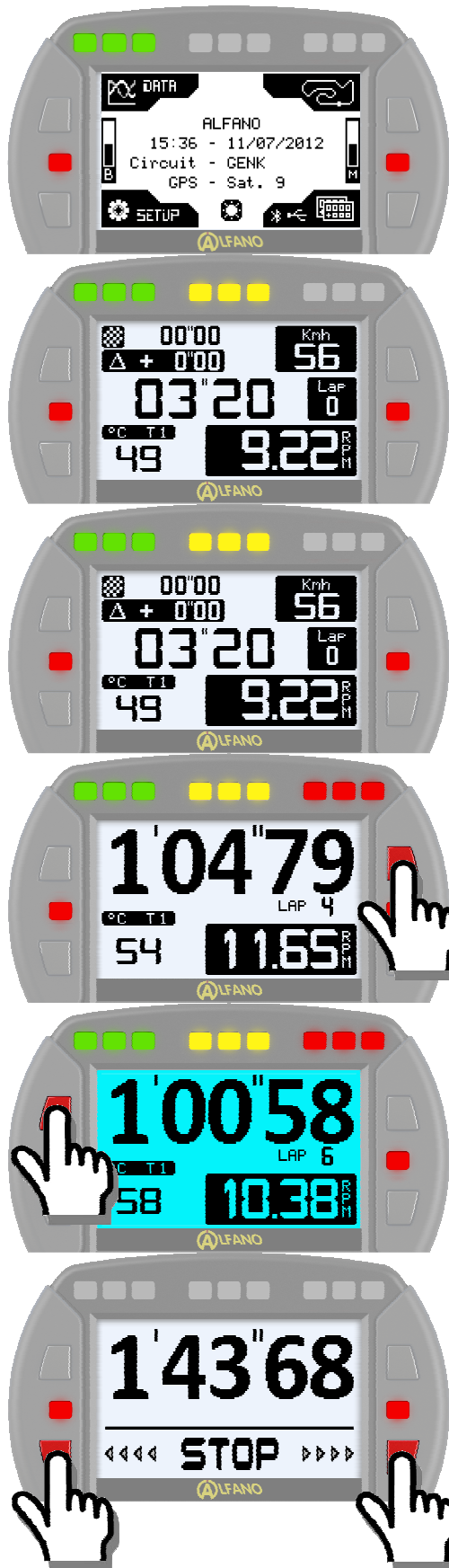
- **2 second** pressure on button 4 = extinction of the system.



2 seconds



Starting on, during the race and switching off the ALFANO



The ALFANO has to be on « HOME ».

Start the engine and run. In presence of RPM, the windows of racing « Layout » replace the «HOME» page,

From the detection of the magnetic strip, the window of the race « Layout » replaces the window « HOME», l'ALFANO starts timing and saves the data from these sensors.

With the button at the top right, you can change the window running « Layout ».

With the button on the top left, turn on or off the backlight.

Once you turn off the engine, the message STOP with the lap time :

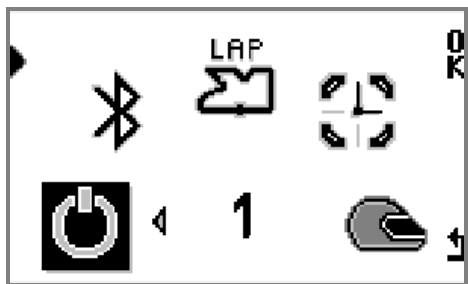
- Recording stops automatically after 5 seconds or by pressing either button down to stop timing and return on « HOME ».

SETUP

In « HOME », pressure on button 3 « **SETUP** »



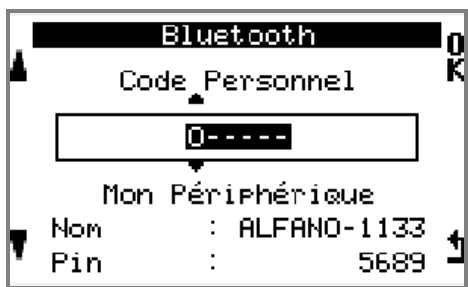
Power off



Press «**OK**», to switch off the ALFANO.



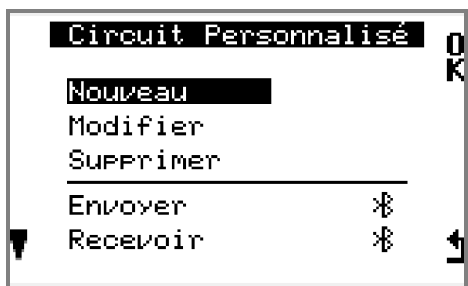
Bluetooth (only with modules GPS2 or GPS4)



Customize the personal code to protect your data during the connection (code by default « 000000 »). **The name of the peripheral and the PIN code cannot be modified, they are unique for every device. ATTENTION : this window does not activate Bluetooth.**



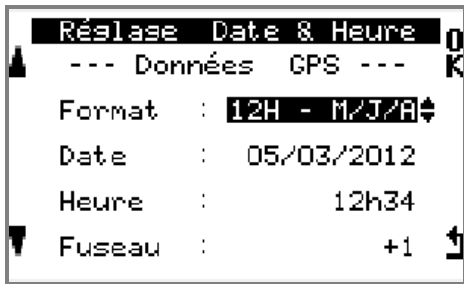
Circuit



This menu consists mainly in creating a list of « tracks » with their morphology, in magnetic or in GPS or both together. It will allow to avoid re-configuring the same track during its next use. See chapter «Tracks management», page 19



Date/hour (only with modules GPS2 or GPS4)

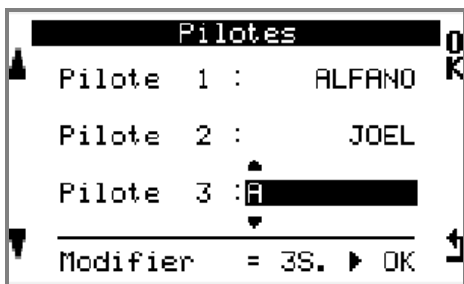


Setting:

- "the date format and time zone for the date and time are obtained from satellites GMT."



Driver



Possibility of editing up to 3 drivers' names. The chosen driver will be associated with the SESSION of timing.

To choose a driver : select him with left arrows, then press on «OK».

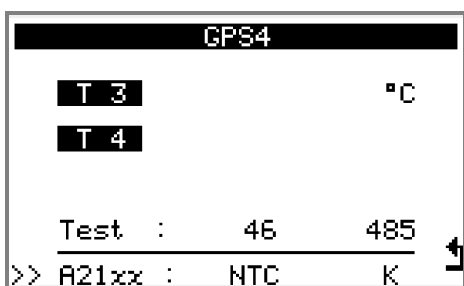
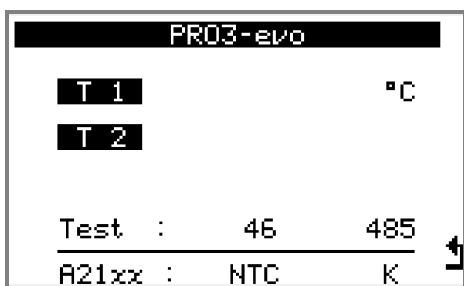
To modify the name of the driver : 3 seconds pressure on «OK» on the name to be modified.



Temperatures



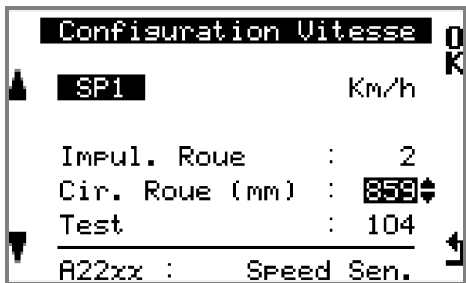
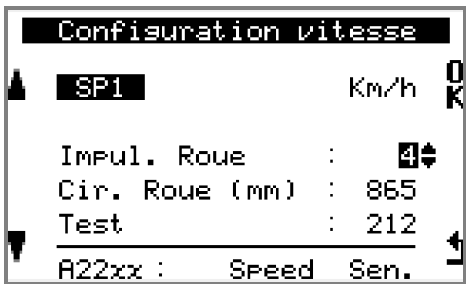
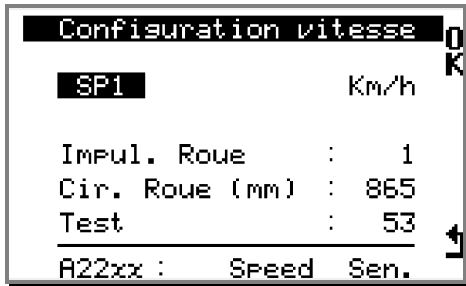
Select the control of the temperature
T1 and T2 for the PROIII EVO
T3 and T4 (only with module GPS4)



Viewing the two temperatures of module GPS4 and input select K, Lambda button 3.



Speed



Without the module GPS4, the PROIII EVO offers only a speed input.

If you connect the module GPS4, entrance on PROIII-EVO is automatically disabled, the splitter from the possibility to connect 2 speed sensors on the module GPS4.

Before you set this menu, you need to connect a speed sensor « **A2201** » and a **magnetic ring** to install sull'assele rear of the karting or **small magnets** to be fixed on the shaft of the transmission for cars or a **magnetic special** for Motorcycles. Finally, press «**OK**» to finish the configuration.

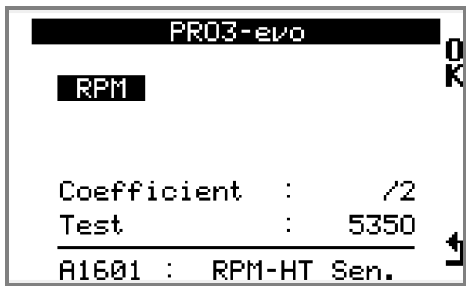
Note : the use of a ring magnets 4 is recommended to increase the accuracy of the data and the speed of display of the gear engaged.

Adjustment :

- "Pulse Wheel", the number of magnets mounted on the circumference of the ring : **1/2/3/4**, then, press «**OK**» to adjust the following parameter.
- "Wheel Circumference", the circumference of the wheel. (rear wheel of karting) then press «**OK**» to finish the configuration.
- Test : The speed can be read in real time.



RPM



Viewing and adjusting RPM High Voltage



Press «OK» to change the multiplication coefficient RPM, depends on the type of engine :

- /4
- /2
- X1
- X2
- X4

Finally press again «OK» to confirm.

Test: starting the engine RPMs are readable

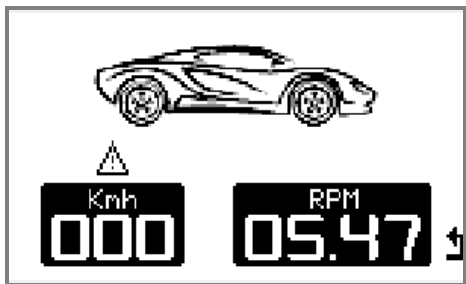


Gear

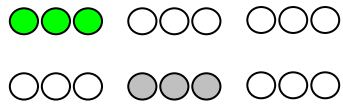
This menu allows to configure the gear engaged to be able to see it on real time during the movement of the vehicle. **ATTENTION** : It is essential before setting the gear box, to configure correctly the SPEED and the RPM because the method used to obtain the gear engaged bases itself on coefficients of multiplication between the data of the SPEED and the RPM.



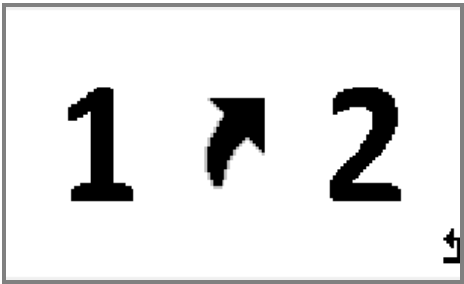
- Press on left arrows to select the number of gear the vehicle contains, then, press on « OK » to go on with configuration.



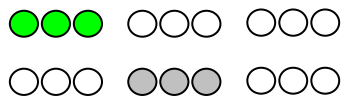
- **Engage the first gear and run.** (for the karting, this configuration can be made on the trolley). As soon as the ALFANO detects speed and RPM, this window is going to be replaced by the following one. See picture below.



- 1) The **green** LED flash during 5 seconds before setting the **gear 1**. Then,
- 2) The **white** LED replace the **green** ones. At this moment, the system calculates the coefficient of multiplication and memorizes this report in a few seconds. Then,



- 3) The **red** LED replace the **white** ones. At this moment, the ALFANO asks you to engage the next gear that will be **gear 2**. Then,



- 4) This cycle begins again until the configuration of the last **gear**. Then,



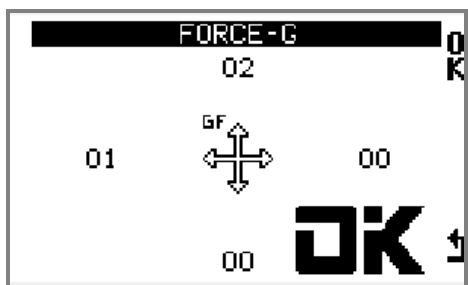
- 5) « **OK** » displays during 3 seconds. Finally,



- 6) The ALFANO shows the racing display (Layout).



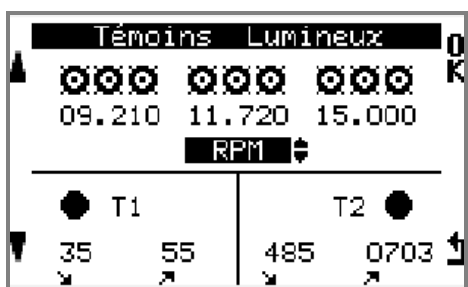
Forza-G (only with the module GPS4)



The module GPS4 is equipped with a sensor G-Force 3 Axis integrated. Important to properly install the module GPS4 to get the correct data of G-Force.



Led

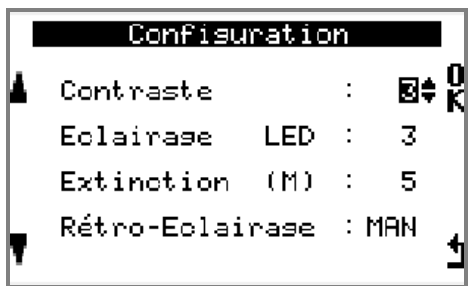


Settle thresholds :

- of the 9 leds (by group of 3), over the display for the **RPM / T1 / T2 / LAMBDA**,
 - of the 2 leds (level Low and level High), on left and on right of the display for **T1 / T2 / T3/ T4**
- Note** : they will shut down when the moderate temperature will be between these two levels. Lambda, T3, T4 are only available with the module GPS4 connected

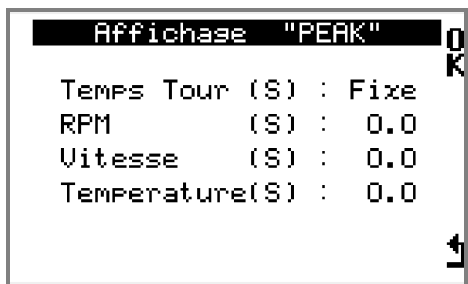


Display



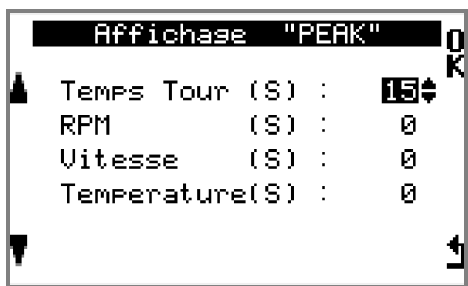
Setting :

- Screen contrast,
- LEDS brightness
- time to turn off automatically,
- Backlight :
 - « **OFF** » : backlight off on ALFANO.
 - « **MAN** » : backlight manual on ALFANO.
 - « **1-9** » : Automatic backlight on ALFANO. (Set the intensity from 1 to 9).



In race, in every detection of level change of the data between the down/up and the up/down of **RPM, SPEED, T1, TEMPERATURES**, the ALFANO allows to freeze these values in the screen during a scheduled lapse of time, this to have time to visualize them.

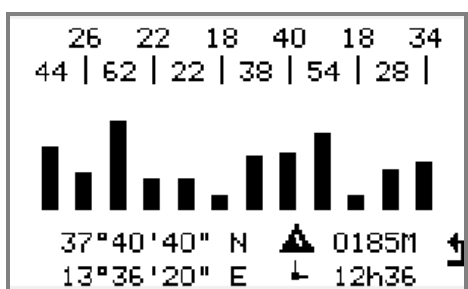
The lap time is then frozen for seconds set before displaying it again.



Setting :

- Laptime : -----> from fix to 60 sec.
- RPM : -----> from 0 to 60 sec.
- Speed : -----> from 0 to 60 sec.
- Temperatures : -----> from 0 to 60 sec.

The GPS reception (*only with modules GPS2 or GPS4*)



Check :

- the intensity of the satellites signals,
- the GPS coordinates in real time,
- the date and the hour in GMT,
- the height.

GPS « ON/OFF » (*only with modules GPS2 or GPS4*)



If the GPS is not necessary, you can turn it off, press «OK» on the icon "GPS ON", then press again on «OK» 3 seconds in the confirmation window that follows

Note : the consumption of the GPS module decreases the battery life of the +/- 40%.

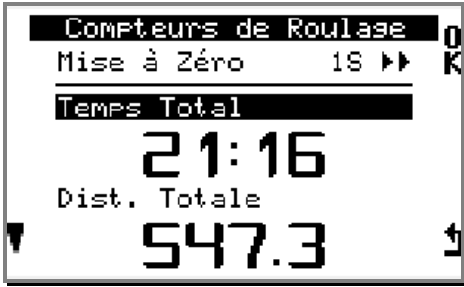


To reactivate the GPS, press «OK» on the icon "GPS OFF", then press again on «OK» 3 seconds in the confirmation window that follows.

Note : the consumption of the GPS module decreases the battery life of the +/- 40%.



Counters engine



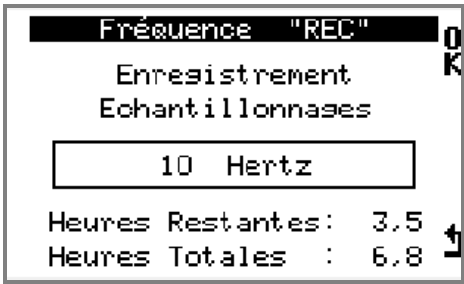
Two available meters :

- the first one accumulates the **total time**,
- the second one accumulates the **browsed distance**.

Press 1 second on « **OK** » to put back to zero the selected meter. **Note** : the latter is active in the presence of the speed.



Frequency of sampling



Setting :

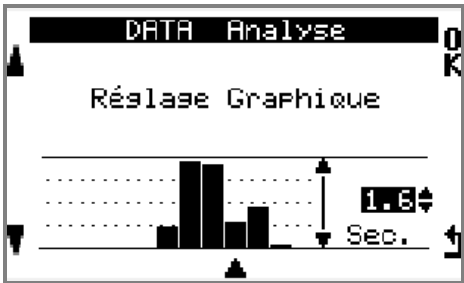
- 10 hertz -----> all 100 ms
- 5 hertz -----> all 200 ms
- 2 hertz -----> all 500 ms
- 0 hertz -----> None

This last option is useful for endurance races.

Note : observe the remaining duration and the available total time, these will depend on the chosen frequency.



Graphic setting

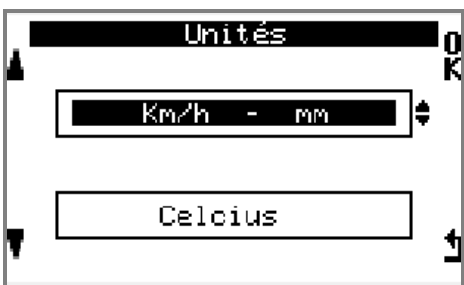


Setting :

The height of bars-graphs sized by time can be adjusted from 0.5 seconds till 10 seconds between the low level and the high level. This to observe at best the differences of time between every lap in the menu DATA.



Unit



Setting :

- **Imperial** (Mph) or **Metric** (Km/h)
- **Celsius** (°C) or **Fahrenheit** (°F)



Languages

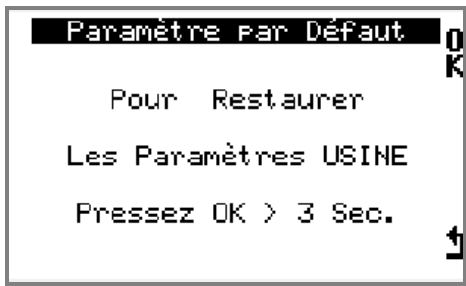


Setting :

- Français
- English
- Italiano
- Deutsch
- Espagnol
- Português



Parameters by default



To restore the parameters of factory, press 3 seconds on « OK » to launch the procedure. **Note** : this procedure does not erase tracks and recorded data.

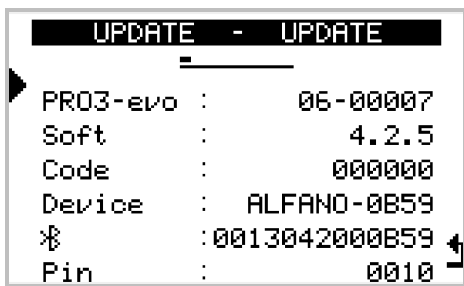


Update

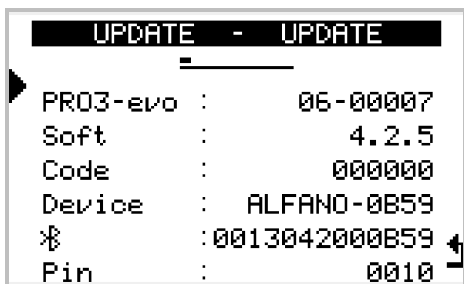


First select the type of USB connection or Bluetooth.

Note : Bluetooth is available only with modules GPS2 or GPS4



This menu allows the activation of Bluetooth or USB to perform an update. All necessary codes are displayed for synchronization to PC with Bluetooth. **WARNING** : Some PC hardly allow a Bluetooth connection, in this case, it is preferable to use the USB-Bluetooth comes with the ALFANO. (See Sections Update), or USB.



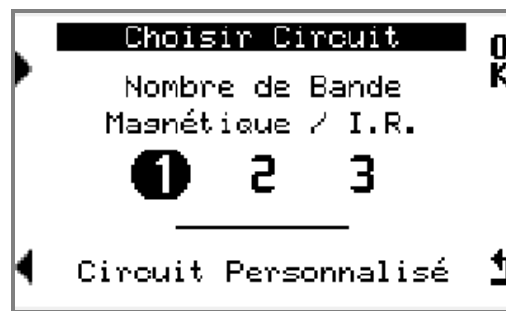
Check the serial numbers of PROIII EVO and module GPS2/GPS4. (Press the arrow ► to cycle through of numbers).

Circuit

In « HOME », press the button 2 « **CIRCUIT** »



Select a circuit



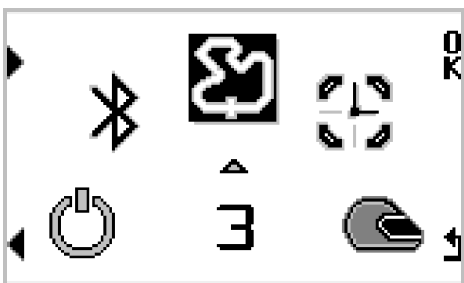
- 3 prerecorded circuits are directly accessible for simplicity.
 - o The first circuit is the default for one magnetic strip
 - o The second circuit is predefined for 2 magnetic stripes
 - o The third circuit is predefined for three magnetic stripes

These three circuits are automatically started on the first field and a dark period of a second default.

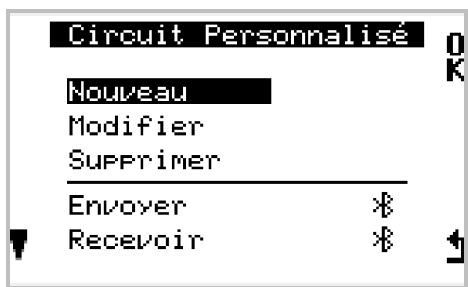
You can customize / create / manage completely circuits (name, number of camps, starting, darkness) in the Setup menu, submenu 3, and choose from a custom circuit board.

- Premere su « **OK** » per utilizzare il circuito desiderato.

Management circuits



Select the submenu 3 from the Setup menu



« **New** »

Create a new track.

« **Modify** »

Modify the name and the time of “obscurity” of an existing track.

« **Delete** »

Delete an existing track.

« **Send** » (only with modules GPS2 or GPS4 connected)

Send an existing track via Bluetooth towards another System ALFANO.

« **Receive** » (only with modules GPS2 or GPS4 connected)

Receive via Bluetooth, a circuit from another system ALFANO.

Information

For the visualization and the logical recording of the data, it is necessary, before using the ALFANO in race, to configure the morphology of the track. This menu consists in creating tracks (80 maximum) and saving them.

The different technologies of timing

The tracks in Magnetic

This is the most precise solution. The magnetic energy to activate the ALFANO is supplied by magnetic strips specially created by ALFANO company, this system is patented (E.P.0632350), most of the tracks throughout the world are equipped from 1 to 3 strips.

The tracks in Infrared

The system in Infrared to activate the ALFANO is constituted by an IR transmitter (ref. A4100) and an IR receiver (ref. A140*) with codified frequency, developed by ALFANO company. The transmitter settles down at the edge of the track and the receiver links with the ALFANO instead of the magnetic sensor.

Note : Several transmitters can settle down at the edge of the track to obtain lap’s partial times.

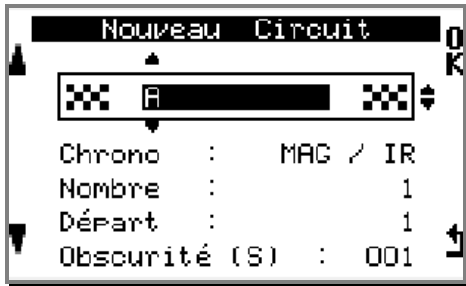
The tracks in GPS

The timing data are supplied by the GPS.

The tracks in Magnetic or Infrared + GPS

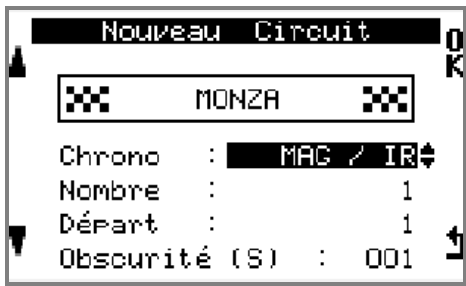
It is possible to combine two technologies to obtain additional partial times. **Note** : in this case, the magnetic strip or the infrared transmitter is the only reference for the departure and consequently, for the laps timing.

A) Creation of a track with magnetic strip or with infrared transmitter



« Name of track »

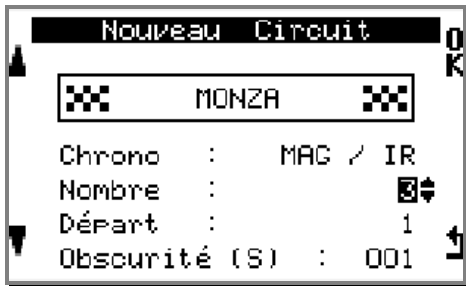
Edit the name of track (Maximum 11 characters, 26 letters of the alphabet, the figures and the space). Use left arrows to modify the character then press on «OK», you have to browse 11 compartments to end.



« Method of timing ».

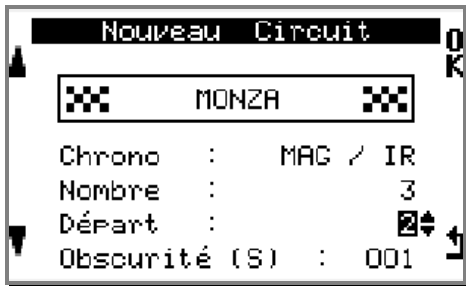
In « Chrono », choose « MAG/IR », then press on «OK».

Note : the GPS remains active to store the trajectory and speed.



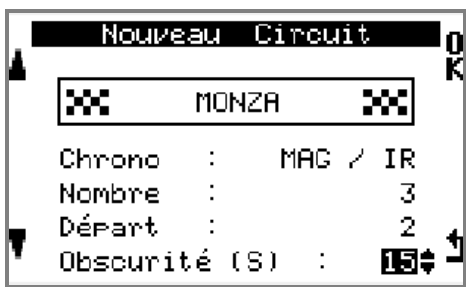
« Number of partials »

In « Number », choose the number of magnetic strips or the number of infrared transmitters installed on the track, then press on «OK».



« Partial of starting »

On « Start », choose the magnetic strip or infrared transmitter to start the stopwatch, then press «OK».



« Obscurity »

In « Obscurity », choose the time (in second) of inactivity of the magnetic sensor or the infrared receiver. After having received the impulse of the magnetic strip or the infrared transmitter, this option allows to ignore during a scheduled lapse of time, the following ones. **Note :** this time, consequently, must be lower than the time to browse the lap. Finally, press on «OK» to finalize and register the track.

IMPORTANT :

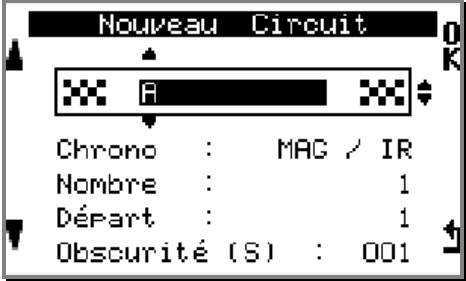

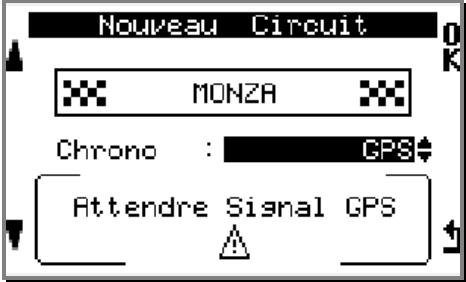

With a magnetic circuit or infrared, GPS remains active to map the trajectory and to memorize the speed. With GPS, it is thus not necessary to create a track to obtain these data.

B) Creation of a track GPS coordinates *

* (only with modules GPS2 or GPS4 connected)

IMPORTANT : the configuration of a GPS track is made at the time of its creation, that is to say after having edited the name and having chosen the GPS option, you have to drive immediately on the track to end the procedure.

Procedure to create a GPS track :

	<p>« Name of track » Edit the name of track (maximum 11 characters, 26 letters of the alphabet, the figures and the space). Use left arrows to modify the character then press on «OK», it is necessary to browse 11 compartments to end.</p>
	<p>« Method of timing » In « Chrono », choose « GPS », then press on «OK» to begin the recording of the GPS coordinates.</p>
	<p>« In case of absence of GPS signal » « Wait for GPS signal » appears, in this case, go back to « WELCOME » and wait to get the GPS signals. Note : more there are satellites present, more precise will be the GPS coordinates.</p>
	<p>« To begin the configuration of the track » You have to run to more than 20 kph because the ALFANO also has to memorize the sense of running of the vehicle while recording the GPS coordinates.</p>

It is possible to record 3 types of tracks.

1	• Start :	GPS
2	• Start :	GPS
	• Partial nr 2 :	GPS
3	• Start :	GPS
	• Partial nr 2 :	GPS
	• Partial nr 3 :	GPS

On the following example : simulation of the 3rd method



This window appears as soon as the vehicle exceeds **20 kph**.



START

Press on «GPS» at the moment wished on the track to memorize the GPS starting point.



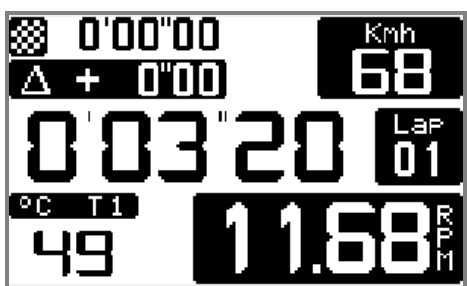
PARTIALS

Press on «GPS» at the moment wished on the track to memorize the **GPS** point of partial nr 2.



PARTIALS

Press on «GPS» at the moment wished on the track to memorize the **GPS** point of partial nr 3.



ARRIVAL

Go back on the «GPS» starting point to end the programming of the track and immediately the system starts a session.

ATTENTION :

The captures of GPS partials have to be done before going back on the GPS starting point.

C) Creazione di un circuito con Bande Magnetiche o Infrarossi + GPS *

* (only with modules GPS2 or GPS4 connected)

Note : the combination MAG/IR+GPS is possible if the track possesses one or two magnetic strips, because the GPS, in this case, will be only used to fill the number of partial(s) missing.

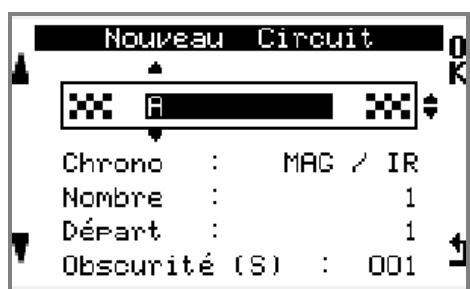
Example :

- if the track has 1 magnetic strip, the ALFANO can add 2 partials in GPS.
- if the track has 2 magnetic strips, the ALFANO can add 1 partial in GPS.

In this mode of creation MAG/IR+GPS, the programming of the **START** will be only possible on the magnetic strip or the infrared transmitter and it will be absolutely necessary to memorize at least 1 GPS point to end correctly the recording of the track. If not, the ALFANO initializes the first window to begin again the programming by browsing the following lap.

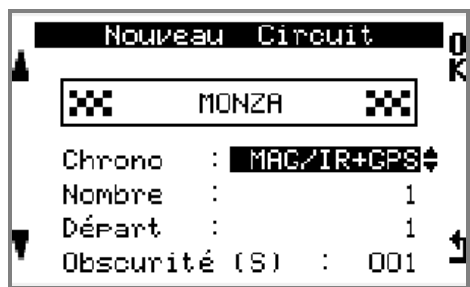
IMPORTANT : the configuration of a GPS track is made at the time of its creation, that is to say after having edited the name and having chosen the GPS option, you have to drive immediately on the track to end the procedure.

Procedure to create a track MAG/IR+GPS :



« Name of track »

Edit the name of track (maximum 11 characters, 26 letters of the alphabet, the figures and the space). Use left arrows to modify the character then press on «OK», it is necessary to browse 11 compartments to end.



« Method of timing »

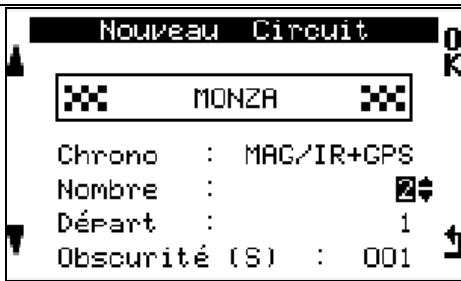
In « Chrono », choose «MAG/IR+GPS», then press on «OK».



« In case of absence of GPS signal »

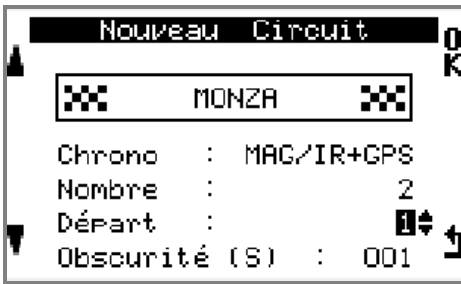
« Wait for GPS signal » appears, in this case, go back to « WELCOME » page and wait to get GPS signals.

Note : more there are satellites present, more precise will be the GPS coordinates.



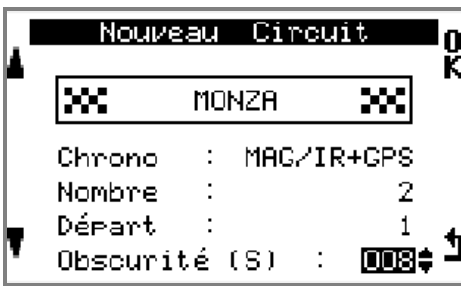
« Number of partial »

In « **Number** », choose the number of magnetic strips or of infrared transmitters installed on the track, then press on «OK».



« Partial of start »

In « **Start** », choose the magnetic strip or the infrared transmitter wished for the timing starting, then press on «OK».



« Obscurity »

In « **Obscurity** », choose the time (in second) of inactivity of the magnetic sensor or the infrared receiver. After having received the impulse of the magnetic strip or the infrared transmitter, this option allows to ignore during a scheduled lapse of time, the following ones.

Note : this time, consequently, must be lower than the time to browse the lap. Finally, press on «OK» to finalize and register the track.



« To begin the configuration of the track »

You have to run to more than **20 kph** because the ALFANO also has to memorize the sense of running of the vehicle while recording the GPS coordinates.

It is possible to record 4 types of tracks :

1	<ul style="list-style-type: none"> • Start : Mag/IR (indispensable) • Partial nr 2 : GPS
2	<ul style="list-style-type: none"> • Start : Mag/IR (indispensable) • Partial nr 2 : GPS • Partial nr 3 : GPS
3	<ul style="list-style-type: none"> • Start : Mag/IR (indispensable) • Partial nr 2 : Mag/IR • Partial nr 3 : GPS
4	<ul style="list-style-type: none"> • Start : Mag/IR (indispensable) • Partial nr 2 : GPS • Partial nr 3 : Mag/IR

In the following example : simulation of the 3rd method



This window appears as soon as the vehicle exceeds **20 kph**. The icon « **GPS** » is not active, because the ALFANO has to get first and foremost the magnetic strip.



START

Pass on the magnetic strip of the starting to launch the stopwatch. The icon « **GPS** » becomes active. At this moment, it is possible to record a partial with the **GPS**.



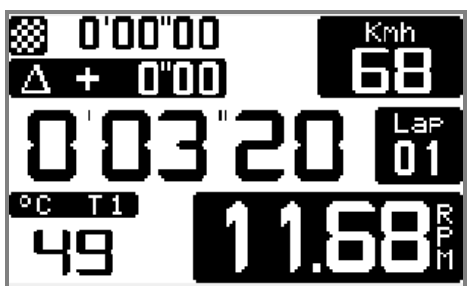
PARTIAL nr 2

Pass on the second magnetic strip to memorize the partial nr 2. "MAG" becomes grey while « **GPS** » is still active.



PARTIAL nr 3

Press on « **GPS** » at the moment wished on the track to memorize the partial nr 3, before going back on the magnetic strip of the starting, « **GPS** » becomes again not active.



ARRIVAL

Go back on the magnetic strip starting point to end the programming of the track and immediately the system starts a session.

On the following example : simulation of the 4th method



This window appears as soon as the vehicle exceeds **20 kph**. The icon « **GPS** » is not active, because the ALFANO has to get first and foremost the magnetic strip.



START

Pass on the magnetic strip of starting to launch the stopwatch. « **GPS** » becomes active, at this moment, it is possible to record a partial with the GPS.



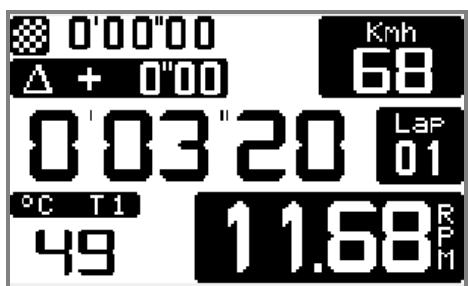
PARTIAL nr 2

Press on «**GPS**» at the moment wished on the track to memorize the point of **GPS** of the partial nr 2, before passing on the second magnetic strip. « **GPS** » becomes non active again.



PARTIAL nr 3

Pass on the second magnetic strip to memorize the partial nr 3.



ARRIVAL

Go back on the magnetic strip starting point to end the programming of the track and immediately the system starts a session.

Import tracks from another ALFANO, via Bluetooth *

* (only with modules GPS2 or GPS4 connection)

Procedure :

« ALFANO-1133 »

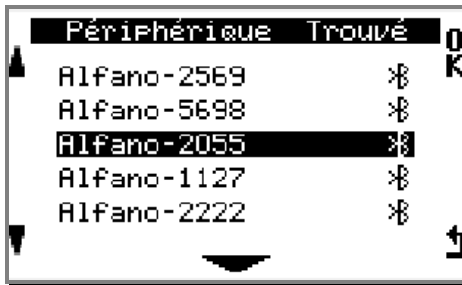
Send the track

1



Press « OK » on « Send » on the menu tracks. The ALFANO is searching for the peripheral.

3



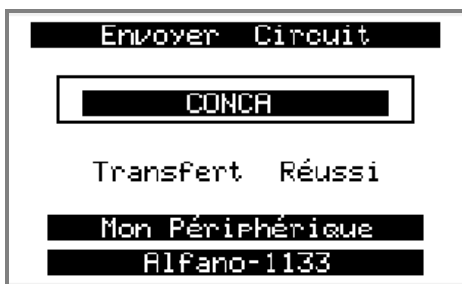
The ALFANO has found several other ALFANO, press « OK » on peripheral 2055 to ask for a connexion.

5



Choose the track among those recorded in its memory and validate with «OK».

7



Successful transfer.

« ALFANO-2055 »

Receive the track

2



Press « OK » on « Receive » on the menu tracks. The ALFANO is waiting for a connexion.

4



Press on « OK » to accept the connexion.

6



The name of the track to receive appears, press on « OK » to accept the track.

Note :

Tracks transferred between devices by Bluetooth are identified by a small icon



DATA

In « HOME », press on button 1 « DATA » :



First visualization :

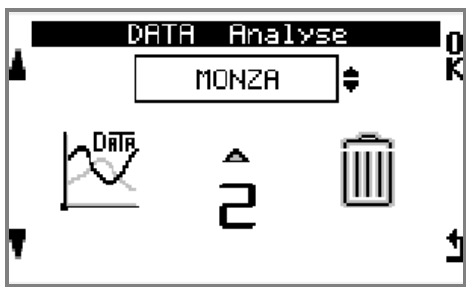
«**Overview of the times of the two BEST TURN**»

This window shows during 5 seconds, the best time **Absolute** among all sessions and the best time of the **Last SESSION**, then goes back to « HOME ». Press on «**OK**» in this window to display the menu of data analysis. See below.



Second visualization :

- Selection of a circuit to be analyzed
- Elimination of the data (see below)
- Analyze the data of a selected circuit (see below)



Erasing data

«**Total erase of the data**»

Press on «**OK**», then press again 3 seconds on «**OK**» in the window of confirmation that follows.

Press on «**↵**» to annul and return on « HOME ».



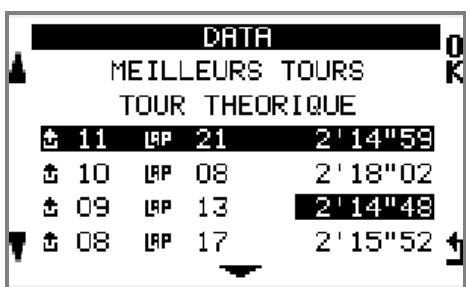
Analysis of data from an selected circuit

«**BEST LAPS**»

«**THEORETICAL LAP**»

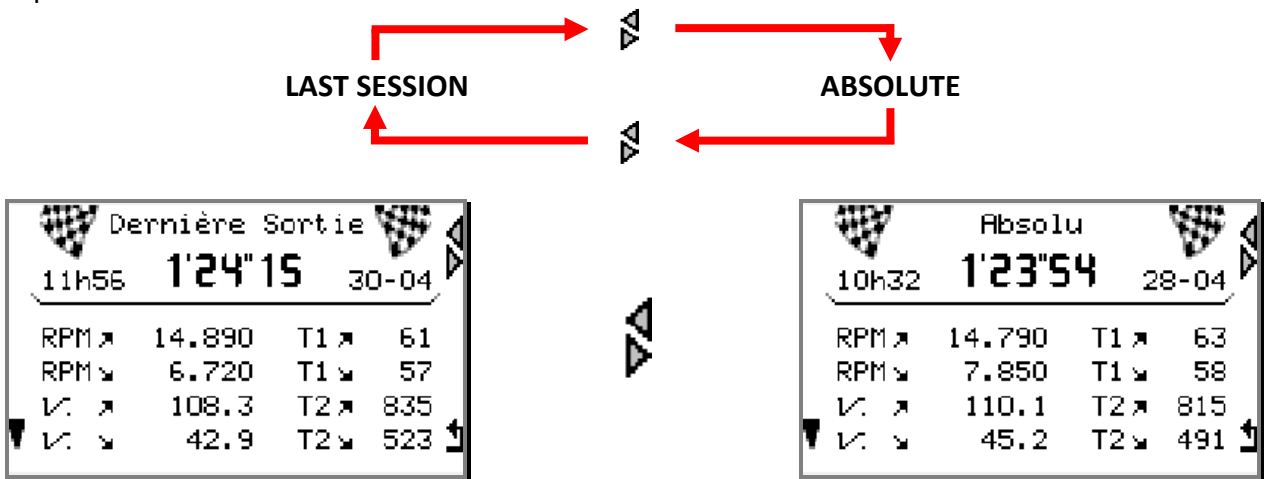
«**SESSIONS**»

- «**Best Laps**» and «**Theoretical Lap**» are calculated on all the **Sessions**.
- The «**Sessions**» are listed by date and time. The last **Session** is selected by default.



BEST LAPS (on all the sessions)

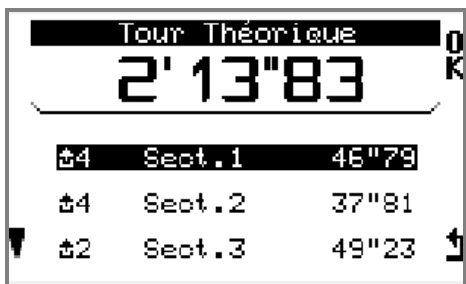
Press « OK » on « BEST LAPS », this menu consists in confronting the data of diverse sensors on the LAST SESSION best lap and the best lap of the ABSOLUTE, press on the double arrow to vary the data of these two laps.



Press the arrow ▼ to show next window, RPM ranges. This option allows to analyze the behavior of the engine through RPM ranges, that is to say the time + the conversion in percentage of this time for all the RPM ranges of 1.000 rotations/min accumulated in this lap. Press on « ▼ » to show the next RPM ranges. Press on double arrow to vary and so compare the data of these two laps. Press on « ↵ » to go back on menu DATA.

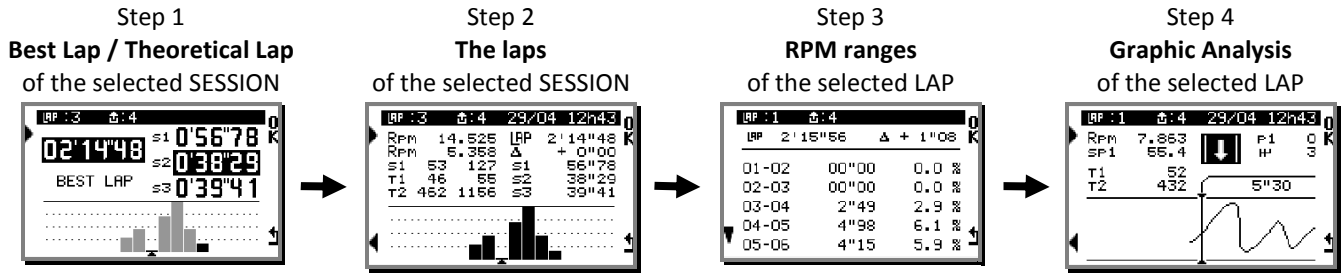
THEORETICAL LAP (on all the sessions)

Press « OK » on « THEORETICAL LAP »,

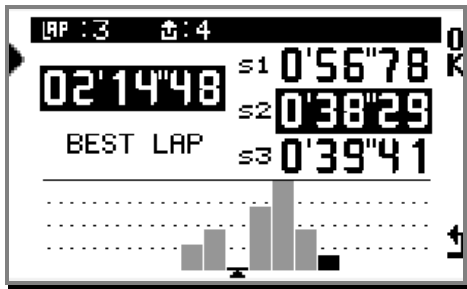


This window takes back the best partials made on all the sessions, and calculates then the theoretical time. Press on « OK » on partial wished to reach the lap belonging to it.

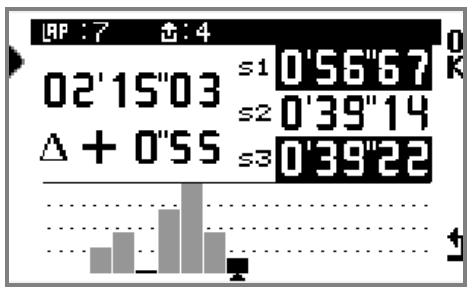
Press « OK » on the wished « SESSION ». The complete analysis of the **SESSION** is made in 4 steps :



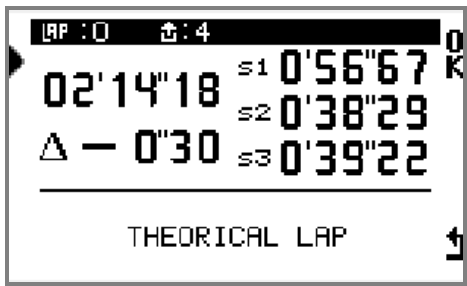
Step 1 « BEST LAP »



The best lap of the SESSION with the best partial(s) on black background.

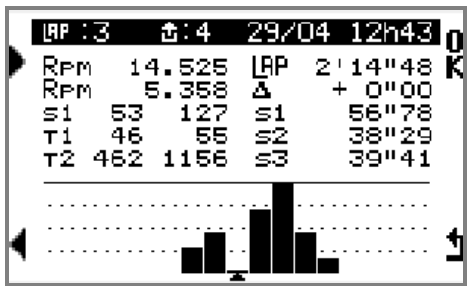


Press on « ▶ » to show the lap with the others best partials.



Press again on « ▶ » to show the theoretical lap of the SESSION « THEORETICAL LAP ». Press on « OK » to show the window « step 2 ».

Step 2 « The LAPS » of the SESSION



The cursor will automatically move to the fastest lap, bar graphs represent the speed and height indicates the time difference between each round. The time difference between the low and high bar graphs is 2 seconds. Use the arrows ◀▶ to move from a lap to the another, a long press allows a fast scrolling. Every lap is accompanied with its time and with the gap of time compared with the best lap of the session with its partial times and its Max/Min : **RPM / Speed / T1 / T2** (T3 and T4 on GPS4). Press « OK » on the desired lap to go on with the analysis in « step 3 ».

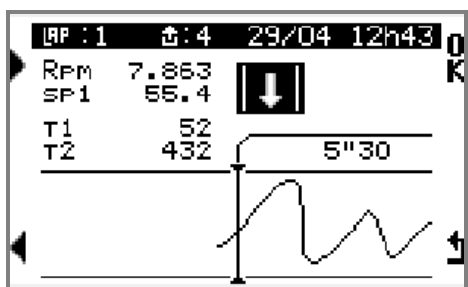
Step 3 « RPM ranges »

LAP : 1 4		
LAP 2'15"56 Δ + 1"08		
01-02	00"00	0.0 %
02-03	00"00	0.0 %
03-04	2"49	2.9 %
04-05	4"98	6.1 %
05-06	4"15	5.9 %

LAP : 1 4		
LAP 2'15"56 Δ + 1"08		
06-07	7"47	8.7 %
07-08	11"62	14.3 %
08-09	7"47	8.8 %
09-10	9"96	12.1 %
10-11	9"13	10.9 %

This option allows for the lap chosen on step 3 to analyze the behavior of the engine through RPM ranges, that is to say the time + the conversion in percentage of this time for all the RPM ranges of 1.000 rotations/min accumulated in this lap. Press on « ↓ » to show the next RPM ranges, press on « OK » to show the window « step 5 »

Step 4 « Graphic Analysis »



For an accurate analysis, this option allows to view the chosen lap on (step 2), step by step, according to the recording frequency chosen on « SETUP »: **RPM (+graphic), T°1, T°2, T°3, T°4, Speed, Gear**, etc... Use the arrows « ← » to browse the lap, a long pressure allows a fast scrolling. Press on « ↵ » and return on « HOME ».

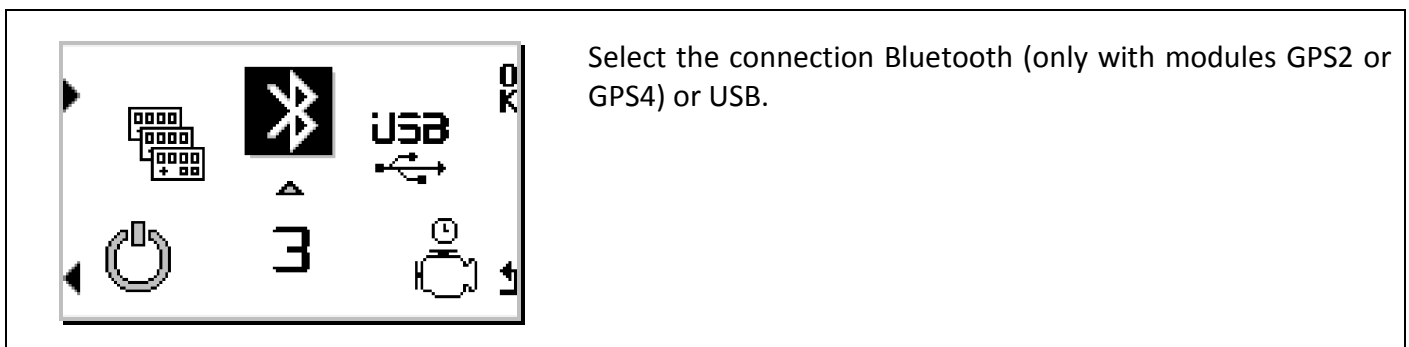
CONNECTION / DOWNLOAD

In « HOME », press on button 4 « Visualization race /connection/counters engine »



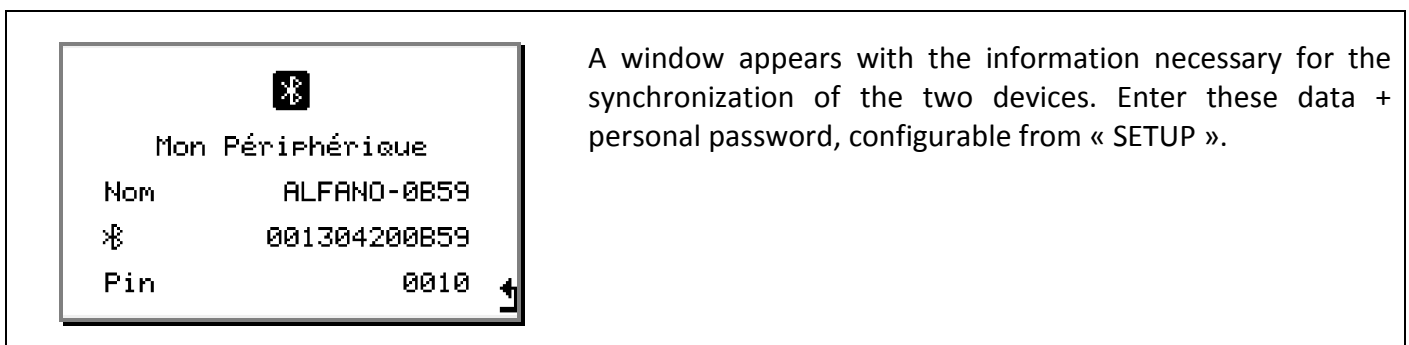
There are two ways to connect and use the software to PC :

- Bluetooth
- USB

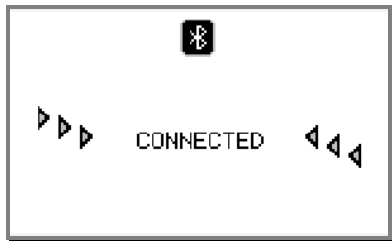


Start the analysis software « VISUALDATA2 » allows you to download data by the system ALFANO (See the instructions for use of the software), or the Track Manager to generate your circuits.

- 1-  Connection Bluetooth

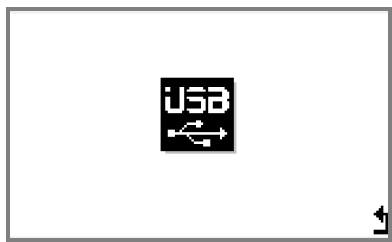


The command starts the program in Analysis.



This window confirms the connection with your PC.

2-  Connection USB



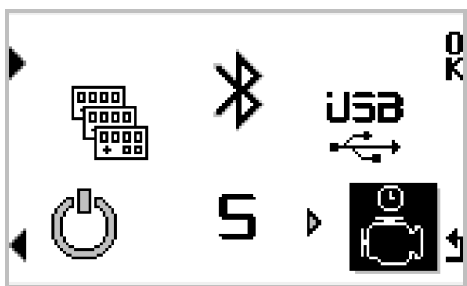
No need for data connection with the USB

Note : Use the interface transfer A4220.

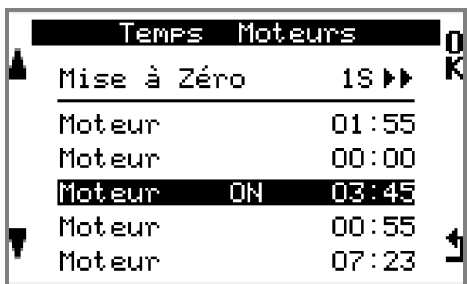


Counters engine

In « HOME », press on button 4 « **SETUP** »



Select the menu counters engine (on the menu 5)

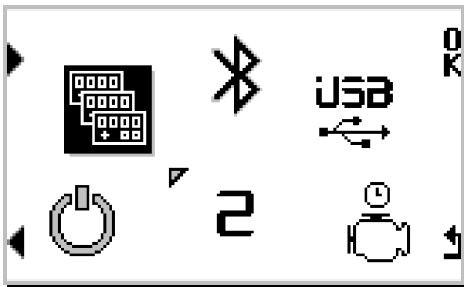


This menu shows the meters of running time of 5 engines:

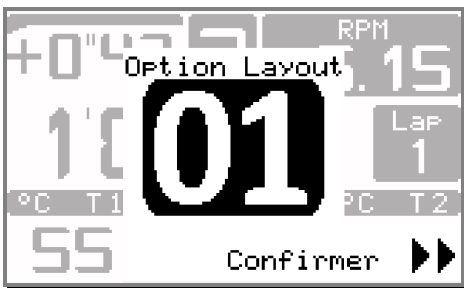
- A single engine can be active. The chosen engine will be visible on « HOME »
- Press on « **OK** » on the engine selected to activate it.
- Press 1 second on « **OK** » on the engine selected for the putting with zero.

The windows of racing « Layouts »

In « HOME », press on button 4 :

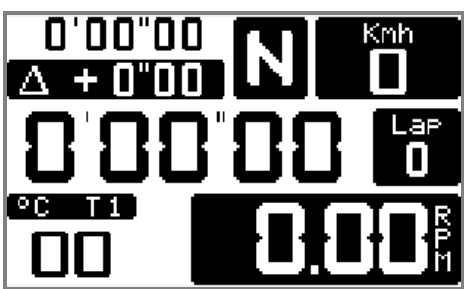


Select the menu windows racing (on the menu 2)



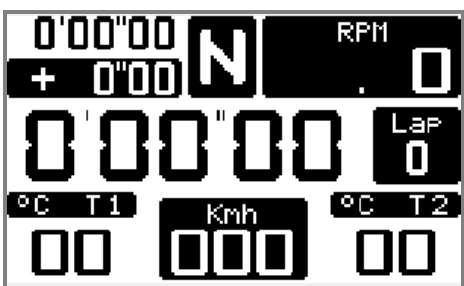
Each « Layout » has a number to make your choice easier. That number with the word « **Confirm** » appears only a few seconds, then press on button « **Confirm** » to choose it, even if the word is not displayed anymore.

The windows racing



Race « 1 »

- Best time / Lap time / Gap
- Nr of the lap
- Temperature T1
- RPM
- Speed
- Gear engaged



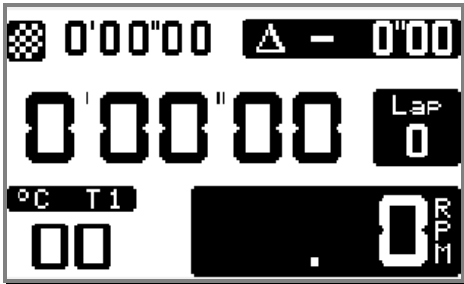
Race « 2 »

- Best time / Lap time / Gap
- Nr of the lap
- Temperature T1 / T2
- RPM
- Speed
- Gear engaged



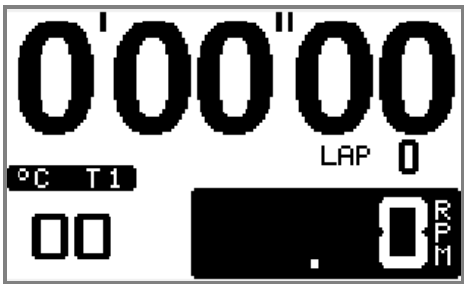
Race « 3 »

- Lap time / Partial times/ Gap
- Nr of the lap
- Temperature T1 / T2
- RPM
- Speed
- Gear engaged



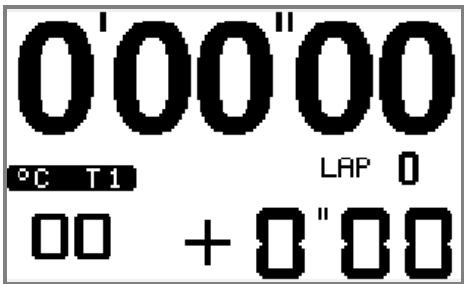
Race « 4 »

- Best time / Lap time / Gap
- Nr of the lap
- Temperature T1
- RPM



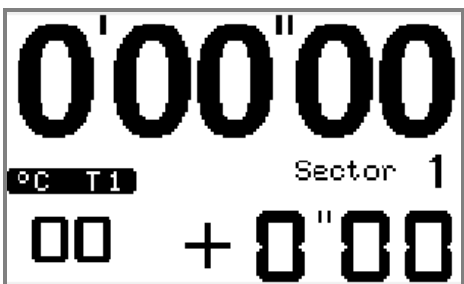
Race « 5 »

- Lap time
- Nr of lap
- Temperature T1
- RPM



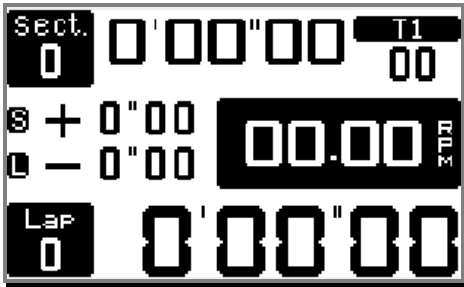
Race « 6 »

- Lap time / Gap
- Nr of lap
- Temperature T1



Race « 7 »

- Lap time / Partial times / Gap
- Nr of lap
- Temperature T1



Race « 8 »

- Lap time / Partial times/ Gap
- Nr of lap / Nr of partial
- Temperature T1
- RPM



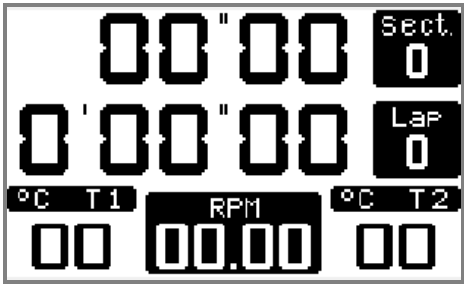
Race « 9 »

- Lap time / Engine time
- Nr of lap
- Nr of engine
- Temperature T1
- RPM



Race « 10 »

- Lap time
- Nr of lap
- Lambda



Race « 11 »

- Lap time / Partial times
- Nr of lap / Nr of partial
- Temperature T1 / T2
- RPM

Note : Temperatures are automatically displayed based on their connection. There are only two temperature indicators available on screen.

if there are more than two measured temperatures, here is the order of priority for display :

- 1) T1 (NTC PROIII EVO)
- 2) T4 (K GPS4)
- 3) T2 (K PROIII EVO)
- 4) T3 (NTC GPS4)

Note :

It will be also possible to change the layout while running on the track, with the same button.

Power Supply : options and accessories

Batteries

A4019

Alkaline PROCELL 1.5V model « AA/R6 »



A4018

Rechargeable UNIROSS, 2050 mAh Hybrio 1.2V



! Senza effetto memoria!

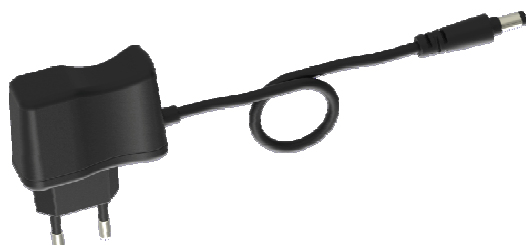
A4016

UNIROSS charger from 100 to 240V 50/60Hz



A4017

ALFANO Rechargeable Pack 8.800 mAh Li Ion 3.7V (Waterproof) 75x40x40mm
Delivered with a 100 to 240V 50/60Hz charger and a case.



Power supply

A4005 (A4013 + A4017)



A4004 (A4012 + A4001)

(optional: cigarette lighter connector) **A4011**



Table of Consumption

	Alkaline	UNIROSS	Pack ALFANO Li Ion 3.7V
PROIII-evo *	xxx	xxx	xxx
PROIII-evo	xxx	xxx	xxxx

(*)With backlight (Power 5)

Table purposes only

Memory

Also think of checking the available memory with memory space in the « HOME » page or the time remaining on the setup menu --- > REC. not to saturate the memory when you run.

You can record a maximum of 99 sessions by track.

You can record a maximum of 327 sessions on all the tracks.

You can record a maximum of 99 laps by closed track session, if you run more laps, a new session will start automatically.

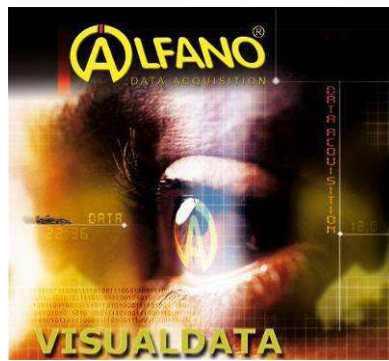
The maximum time is 15 minutes round.

Important note :

- When the memory indicator in the main menu is filled, the memory is almost full, goes into automatic mode of endurance, so records only part-time with the minimum and maximum, but not the champions.
- When the memory on the main menu is filled and flashes, the memory is full, **it is impossible to start a new session until the data have been deleted.**

VisualData2

Download our software VISUALDATA2 (Windows) available on www.alfano.com

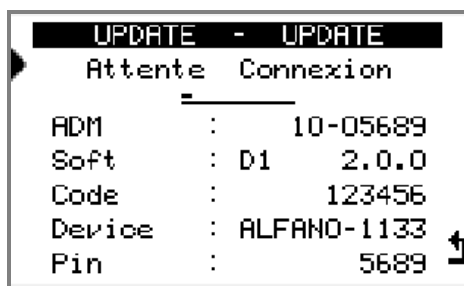


Start the “executable” from your computer and follow the instructions of the VISUALDATA2 manual of installation also available on our website www.alfano.com

Update FIRMWARE

The menu update allows you to upgrade your ALFANO. The updates allow you to correct any problems but also to improve functionality of the product. Use a PC with a Bluetooth device integrated or USB cable.

Enter the menu Update via the menu Setup.



Download the executable UPDATER and then the different files *.fwr available on our website www.alfano.com
New updates will be continuous available.

Start the “executable” from your computer and follow the instructions of the FIRMWARE installation manual also available on our site www.alfano.com

ATTENTION : During the update, do not remove the batteries

* (only with modules or GPS2 GPS4 connected)

Signal GPS

When you turn on the PROIII EVO with its module, wait for the GPS signal. The wait at the time of reception depends on several parameters :

The environment in which the GPS module is located (building, wood, clear sky, etc....)

The cold start or warm start: The GPS receiver acquires the signal faster when used regularly, in fact, the more the GPS is off, the longer the time waiting to receive the signal at the next start, this is due to downloads GPS (ephemeris etc.) when it is off for several days. This waiting time can vary from a few seconds to several minutes.

Number of Satellites

The GPS acquires the actual position from 3 satellites. With more satellites in view, there will be more accurate GPS coordinates and then a more precise timing. We recommend starting with the timing of 8 satellites received or the accuracy of the timing can not be guaranteed.

Date e hour

As indicated in the Setup menu, the satellite gives us the date and GMT time, so you need to set the time zone based on the position of the GPS module in the Setup menu / setting the time and date.

Warranty conditions

All our devices have been subject to in-depth factory tests and are covered by a 24-month warranty against manufacturing defects. The warranty comes into action from the date of purchase. The date of purchase is the date stated on the invoice/receipt given by the seller at the time of sale. The manufacturer undertakes to repair and replace free of charge any parts which have a manufacturing defect during the warranty period. Any defects which cannot be clearly attributed to the material or the manufacturer will be examined at one of our approved after-sales service centers and invoiced depending on the results. The warranty does not apply in cases of device opening, accidental damage, negligence or misuse, inappropriate or incorrect installation or failure to perform the installation in accordance with the instructions contained in the attention note and in events not associated with the rules of operation and use of the device. The warranty will become null and void in cases of repair or handling carried out by unauthorized third parties. Intervention under warranty does not entitle to the device replacement or warranty extension. Intervention under warranty is carried out at one of our approved after-sales service centers or at our head office. In the latter case, the item must reach our establishment postage paid, that is, transport costs shall be paid by the user. The manufacturer undertakes no responsibility for any damage to persons or goods caused by poor installation or incorrect use of the device.

Product modifications

Alfano applies a method of continuous development. Alfano reserves the right to make changes and improvements to any product described in this document without prior notice. No modifications or changes to the product should be done without ALFANO approval.

Damages and responsibilities

The products are used under the customer's sole discretion and risk and therefore damages suffered or caused by the products shall be the customer's responsibility. ALFANO cannot be held responsible for the direct or indirect consequences of wrong use.

Disposal

The device must be disposed with respect for the environment. The chronometer and its accessories contain many plastic parts. When the chronometer or one of its accessories no longer functions, they must be dealt in accordance to the laws of the Country where it is located. Used batteries must be disposed in accordance with the Country's environmental regulations.



IMPORTANT NOTICE

Always use batteries and brand quality.

Never leave batteries in the device when not in use within 2-3 weeks to avoid the dissolution of the batteries on the electronics causing irreparable damage.

You lose the warranty in case of leakage of battery acid.



Rue de l'Industrie, 3b – 1400 NIVELLES (BELGIUM)

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