



## VISION A-181

### (GB) Operating Instructions



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## Presentation

Congratulations with your purchase of this new ALFANO device « **VISION** ». The **VISION** device is the perfect intermediary between systems to acquire loaded data and the Personal Computer (PC). In fact, in the world of competition in which time is precious, it is crucial to quickly analyze recovered data. In other words, using a Personal Computer often proves to be inhibiting and tedious.

The **VISION** is a small portable device with a large handheld bright display and which, by means of its infrared communication ports (no wiring) recovers data originating from new data acquisition systems, PRO+, PRO+v2, AStrO, AStrOv2, AStrO4T, AStrO4T\_formula, AStrOv2\_formula. The **VISION** features 4 memory zones whereby each zone can contain data of a data acquisition system with its serial number identifying it and **analyzes its data in a fast, detailed and precise manner**.

The **VISION** device also allows the following:

- to measure and register the temperatures of tires, asphalt and other by means of a specifically designed sensor (A481), before the race (OUT), after the race (IN) and to reflect the difference between (OUT) and (IN).
- to manually memorize the pneumatic pressure before the race (OUT), after the race (IN) and to reflect the difference between (OUT) and (IN).
- to manually time up to 4 vehicles with the split times.
- to send these data, by means of its communication port « RS232 », to a portable thermal printer « SEIKO DPU-3445-20 ».
- to send these data, through the interface IR-USB « A-421 », towards a Personal Computer (PC) for a more in-depth analysis with the program « VisualDATA ».

The **VISION** is a fully functional tool that offers unquestionable advantages to engineers, assistants, mechanics and pilots.

**ALFANO**, it is the guarantee of service of impeccable quality and a reputation internationally recognized by the professionals of motorized sports. We listen to our clients: our desire is to satisfy you! Do not hesitate to contact one of our after-sales services or customer service for any questions or technical problems you may have.

## Copyright

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**Patent E.P. 0632350:** "Chronograph system provided on competition machines or similar devices allowing the user to display instantly and precisely an overview of his accomplished performances". All rights reserved.

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## Foreword

This notice contains pictograms illustrated below which are used to attract your attention to important information.



= Double the attention to safety pictures or to not risk damaging the device.



= Supplementary information and useful advice to use the chronometer in total safety.



= Trick to use the chronometer better and even faster!

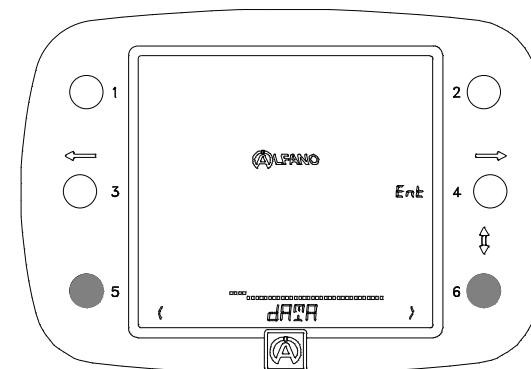
More than **125 drawings**, illustrations, pictures accompany this operation manual in order to facilitate its understanding.



This notice is part of the serial equipment of the device. Carefully read its content and save this notice in a safe place to consult it in the future.

## Commissioning

**Turning on your VISION:** simultaneously hold the buttons 5 and 6 pressed down for two seconds. By releasing the buttons, the VISION device turns on and positions itself to the menu « DATA ».



**Manual turning off:** Press button 5 and 6 for 1 second in the main menu, the Vision device will switch to the position « POWER OFF » and press then button 4 « OFF ».

**Automatic turning off:** The chronometer automatically shuts off after the device has not been used for 10 minutes.

**Detection of weak batteries:** When the batteries are weak, the VISION will detect it and the message « CHANGE BATTERY » appears. Anticipate this so the batteries can be replaced as fast as possible. Press button 4 « OFF » to shut off the VISION device and switch the batteries afterwards.

-- CHANGE BATTERY --

**Replace batteries:** The VISION device is designed to be supplied by two classical batteries: format AA, Code IEC « R6 » of one and a half volt.

Prior to replacing the batteries, verify that the VISION device is turned off, remove the lid of the battery compartment, remove the old batteries and place two new batteries by verifying that the symbols "+" et "-" correspond with those engraved in the exterior of the case. Place the lid back, make sure that the fastening screws are not tightened too much. You could damage the case.

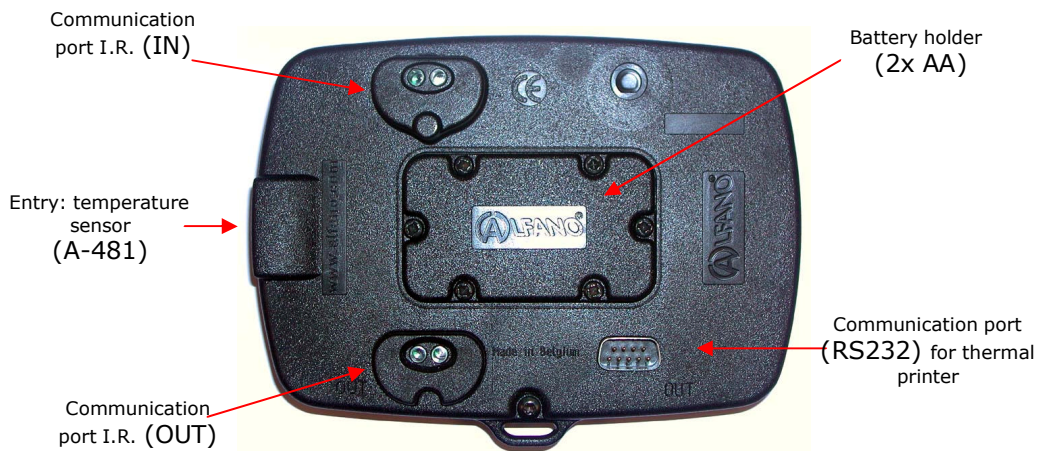


**Important:** It is imperative to use quality batteries manufactured by large brand to avoid these from leaking in the device. In fact, the acid of the battery could provoke considerable and irreversible damage. Frequently verify the physical state of your batteries. It is advised to remove the batteries prior to any prolonged non-use of your VISION device. Never leave batteries discharge in your device.

**A breakdown provoked as a result of the battery's acid cancels the warranty.**

The old batteries must be disposed in conformity with the rules in effect.

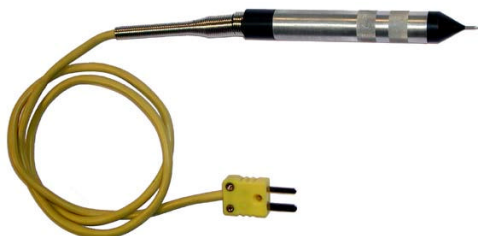
## Back face VISION



## Accessories

A-481, Tire and asphalt temperature sensor

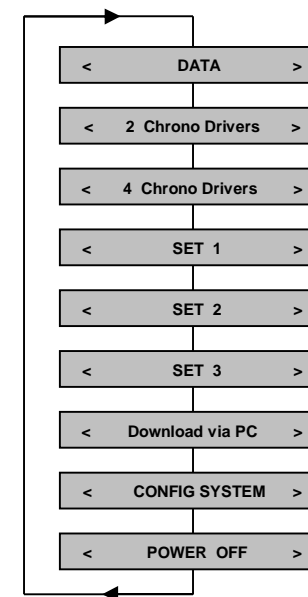
A487, Sacoche de rangement



Thermal printer SEIKO « DPU-3445-20 »  
Paper size: 110mm



## "MAIN" menu



### DATA

- Recover the data of 4 devices of the new generation .
- In-depth analysis of these data .
- Send the data to a thermal printer
- Send the data to the PC or to another VISION device.

### 2 Chrono Drivers

- Manual chronometer up to 2 competitors at one hundredth of a second for a total of 99 laps each, with a maximum of 9 split times for each competitor.

### 4 Chrono Drivers

- Manual chronometer up to 4 competitors at one hundredth of a second for a total of 99 laps each, with a maximum of 6 split times for the 4<sup>th</sup> competitor.

### Set1, Set2, Set3 Karting/Car

#### KARTING

- 3 identical menus that individually allow you to measure and register a temperature for each tire + 2 auxiliary temperatures (Asphalt, external T°, etc...) on 2 channels : « OUT » before the race and « IN » after the race. Furthermore, the possibility of manually registering 1 pressure for every tire on 2 channels: « OUT » before the race and « IN » after the

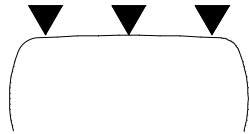
race. And finally to reflect the differences of temperature and pressure between the channel « OUT » and the channel « IN ».

OR

**CAR**

- o Ditto « Set1, Set2, Set3 KARTING », but with the possibility of memorizing 3 temperatures for every tire instead of 1,

**Exterior- Center - Interior**



The choice between the menus « KARTING » and « CAR » can be configured in the menu « CONFIG SYSTEM ».

**Config System**

- o Configuring different parameters

**Power Off**

- o Manually turning off the VISION device

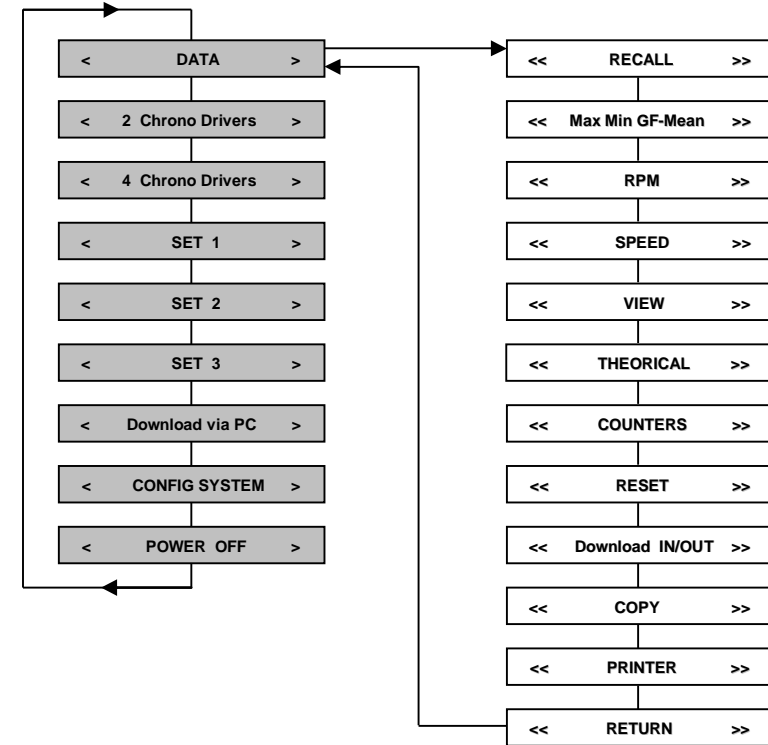
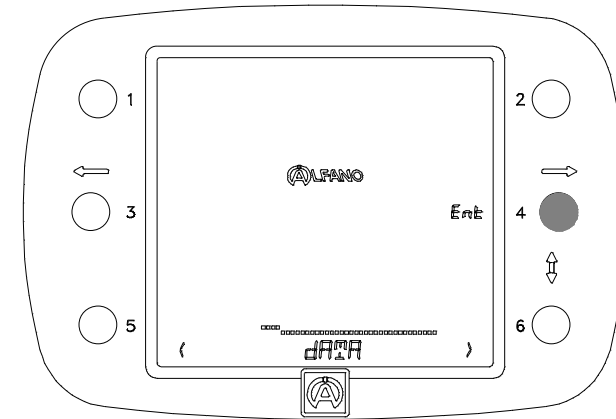
**How to browse the menus and submenus:**  
 - Button 6 allows moving in the direction of the hands of a watch.  
 - Button 5 allows moving in the opposite direction.

**How do you know if you are in the main menu:**  
 The menus will be accompanied by one arrow to the left and one arrow to the right.

**How do you know if you are in a submenu:**  
 The submenus will be accompanied by 2 arrows to the left and 2 arrows to the right.

As soon as you turn on your VISION device, the system is in the mode :

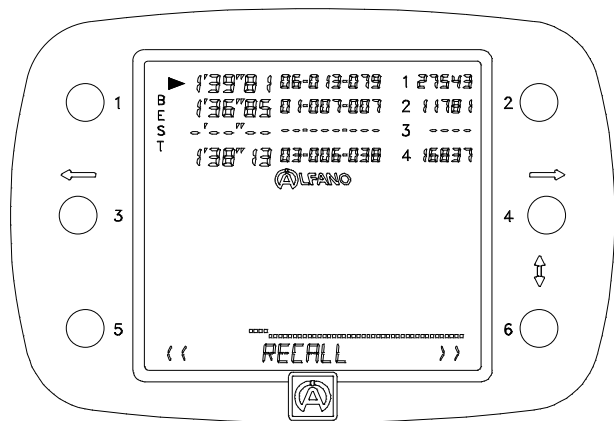
< DATA >



Starting from the « DATA » mode, press once on button 4 « ENT », the VISION device will be in the mode:

<< RECALL >>

The menu « RECALL » allows you to visualize all laps of each channel. The VISION device features 4 channels and each channel can import all registered information of a data acquisition system.



Example displayed above: we notice that the channels 1, 2, 4 possess imported information while channel 3 is empty. You will see the following on channel 1 :

▶ 1'39''81 | 06-0 13-079 | 1 27543

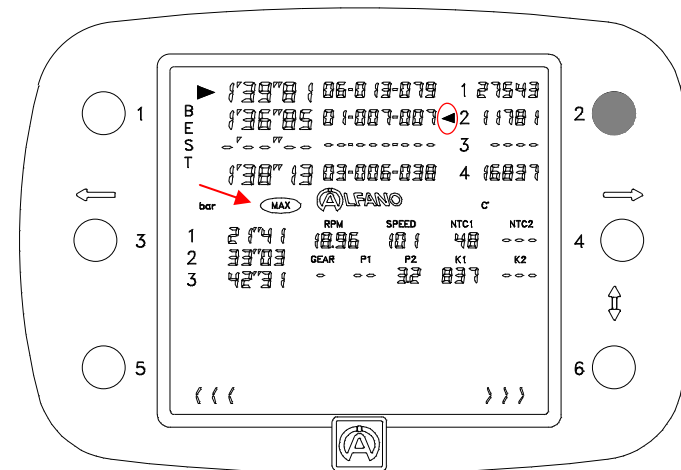
The digits « 1'39''81 » represent the time of the lap 079<sup>th</sup> effectuated at the 06<sup>th</sup> exit which is the 013<sup>th</sup> lap of this exit. To the right of these, 5 digits « 27543 », these digits allow you to identify the data acquisition system, represented by its serial number which is unique for each device. The arrow to the left directed towards the time of the lap appears in front of the best time of the channel and the digit « 1 » circled in red represents the number of the channel.

To visualize the content of each channel:

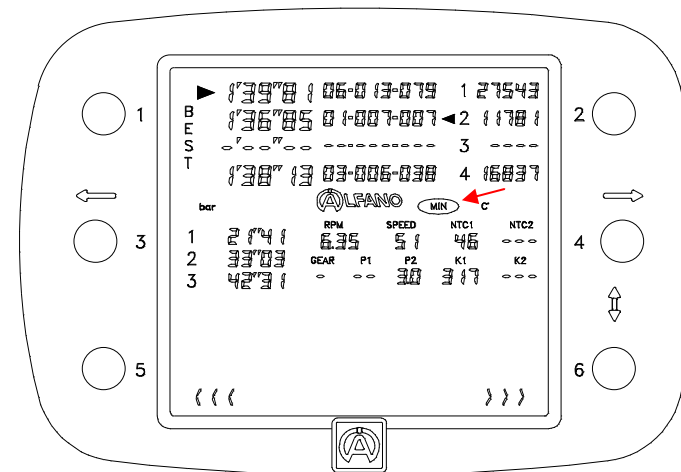
Press button,

- 1, for channel 1,
- 2, for channel 2,
- 3, for channel 3,
- 4, for channel 4,

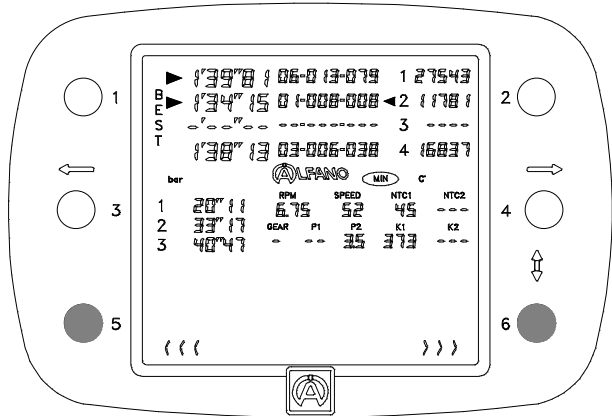
Example displayed above: press button 2 to visualize the content of channel 2, a small arrow will be displayed to the right to indicate the selection for you and the data concerning this lap will be displayed below the logo ALFANO.



You see the 3 split times of this lap as well as the maximums and minimums: RPM, velocity, temperatures and pressures automatically alternating every 2 seconds, see red arrows.



To visualize the following lap, activate button 6.



To return to the previous lap, activate button 5.

To visualize the data of another channel, activate the button of the desired channel, in this case « 1 » or « 4 » on the image above. Example: if you select channel 4, you will see an arrow move from channel 2 towards channel 4. In fact, one single channel can be selected for review.

You will notice that once you leave a selected channel, the visited last lap is displayed. This will allow you to compare the data of one channel with another one by simply hopping channels with their respective buttons. Example: chose a lap in channel 2 and a lap in channel 4 and then hop channels with buttons 2 and 4 to compare the intermediary times (split times) as well as the maximums and minimums: RPM, velocities, temperatures and pressures of these two laps.

In order to leave and navigate to other menus, press the button of the selected channel. It will be unselected (the arrow disappears). Consequently, if no channel is selected, you can go to the other menus by means of the buttons 5 and 6.

**Please take note:** the menu « RECALL », is directly linked to the menus,

- « MAX MIN GF-MEAN »
- « RPM »
- « SPEED »
- « VIEW »

In fact, these 4 abovementioned menus constitute the continuity of the menu « RECALL » since they are more in-depth data analysis menus pertaining to the laps that remain displayed in the menu « RECALL ».

**The procedure explained above shows how to:**

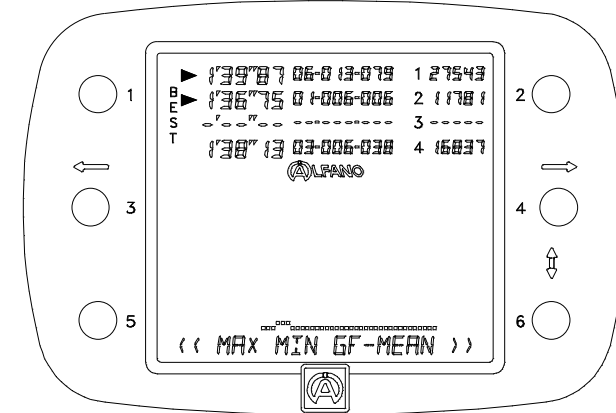
- Select a channel
- Switch channel
- Leave and navigate to other menus

**THIS PROCESS IS THE SAME FOR THE DATA SUBMENUS**

Starting from the menu « RECALL », press once on button 6, the VISION device goes to:

<< MAX MIN GF-MEAN >>

This menu will allow you to visualize the maximums and minimums: RPM, velocity, temperatures and pressures for the complete lap just like in « RECALL » but also the maximums and minimums for every split time of this lap. In addition, if the G-forces have been registered, the VISION device will calculate the average G-forces for you for the complete lap and for its split times.

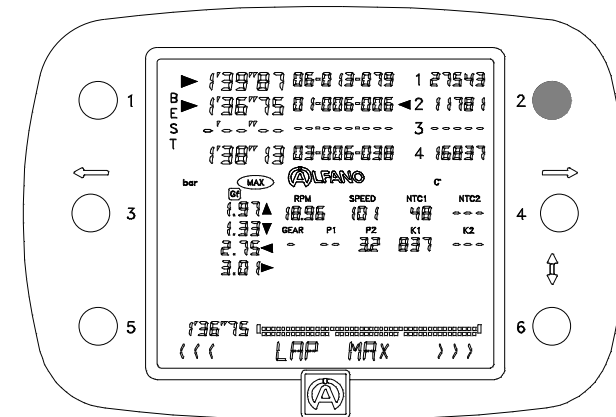


Example displayed below: press button 2 to visualize the content of channel 2 and the data concerning this lap which will be displayed underneath the logo ALFANO.

The VISION device displays the data « LAP MAX », in other words:

- the maximums: RPM, velocity, temperatures and pressures
- the averages: longitudinal and lateral G-force

For the **complete lap**,



Subsequently, press button 6 once and

the VISION device displays the data « LAP MIN », in other words:

- the minimums: RPM, velocity, temperatures and pressures.
- the averages: longitudinal and lateral G-force,

For the **complete lap**,

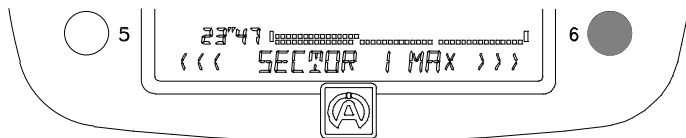


The next time you press button 6 once,

the VISION device will display the data « SECTOR 1 MAX », in other words:

- the maximums: RPM, velocity, temperatures and pressures
- the averages: longitudinal and lateral G-force

For the **1<sup>st</sup> split time**,

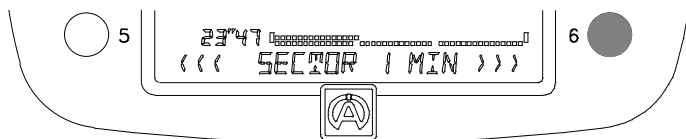


The next time you press button 6 once,

the VISION device will display the data « SECTOR 1 MIN », in other words:

- the minimums: RPM, velocity, temperatures and pressures
- the averages: longitudinal and lateral G-force

For the **1<sup>st</sup> split time**,



And so forth, the VISION device displays the data of other split times.

To turn back the clock, activate button 5.

To visualize the data of another channel, activate the button of the desired channel, in this case on the illustration above, 1 or 4 just like for the menu « RECALL ». Example: if you select channel 4, you will see the arrow move from channel 2 to channel 4. In fact, one single channel can be selected for review.

You will notice that when you leave the selected channel, the last window of this channel will remain memorized so that you can find it back during the next visit. This will allow you to compare the data from an exact location of one channel with another one by simply hopping channels with their respective buttons as in the mode « RECALL ».

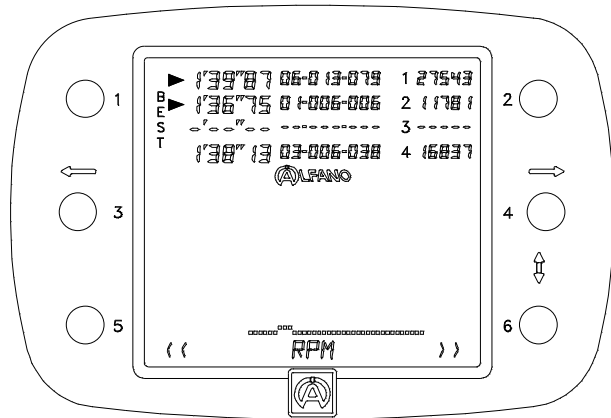
To leave this menu, press the button of the selected channel; this operation will unselect this channel (the arrow disappears). Consequently, if no channel is selected, you can go to other menus by means of buttons 5 and 6.

If you wish to analyze the data pertaining to another lap, you will need to return to the menu « RECALL » to choose the lap.

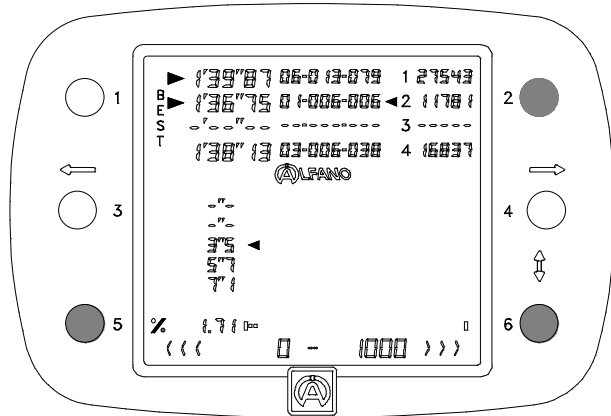
In the « RECALL » mode, pressing button 6 twice will put the VISION device in the mode :

<< RPM >>

This menu will allow you to visualize the engine performance time for the displayed lap of each channel by range of 250, 500 or 1,000 rev./minute with a precision at one 10<sup>th</sup> of a second, as well as the value in percentage. The choice of these different ranges can be configured in the menu « CONFIG SYSTEM ».



Example below: just like in the « RECALL » mode, press button 2 to visualize the content of channel 2 and the data concerning this lap will be displayed underneath the logo ALFANO.



For this example, the VISION is configured by range of 1,000 rev./minute.

First of all,

The VISION device shows the engine performance time for the lap by means of the small arrow, within the range of **0 to 1,000** rev./minute:

- **3''5** seconds out of 1'36''75 and this is the equivalent of **1.71%**.

Press button 6 once,

The VISION device shows the engine performance time for the lap by means of the small arrow, within the range of **1,000 to 2,000** rev./minute:

- **5''7** out of 1'36''75 and this is the equivalent of **2.78%**.

And so forth, the VISION device calculates and displays the engine performance time for the following ranges.

To return to the previous ranges, activate button 5.

To visualize the data of another channel, activate the button of the desired channel, in this case, on the illustration above, 1 or 4 as for the menu « RECALL ». Example: if you select channel 4, you will see the arrow move from channel 2 to channel 4. In fact, one single channel can be selected for review.

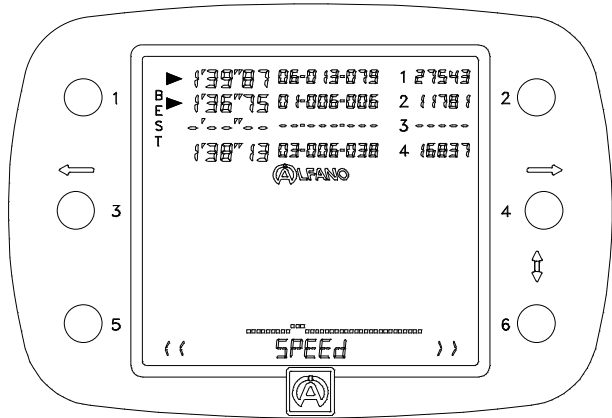
To leave this menu, press the button of the selected channel quitter; this operation will unselect this channel (the arrow disappears). Consequently, if no channel is selected, you can move to the other menus by means of buttons 5 and 6.

If you wish to analyze the data pertaining to another lap, you must return to the menu « RECALL » to select it.

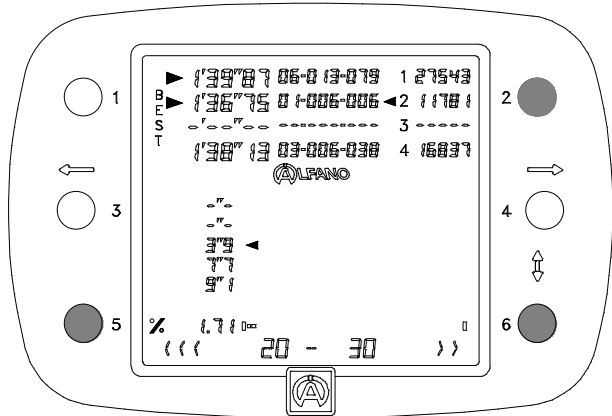
In the « RECALL » mode, pressing button 6 three times will put the VISION device in the mode:

<< SPEED >>

This menu will allow you to visualize the time of the speed maintained by range of « 5 / 10 / 20 Km/h » or « 5 / 10 / 20 mpl » with a precision of one 10<sup>th</sup> of a second, as well as the value in percentage for the displayed lap of each channel. The choice between the different ranges can be configured in the menu « CONFIG SYSTEM ».



Example below: just like in the « RECALL » mode, press button 2 to visualize the content of channel 2 and the data concerning this lap will be displayed underneath the logo ALFANO.



For this example, the VISION device will be configured by range of 10 Km/h or 10 mpl.

Firstly,

The VISION device shows by means of the small arrow the time of the speed maintained within the range of **20 to 30** km/h or mpl, for the lap:

- **3''9** seconds out of 1'36''75 and this is the equivalent of **1.71%**.

Press button 6 once,

The VISION device shows by means of the small arrow the time of the speed maintained within the range of **30 to 40** km/h or mpl, for the lap:

- **7''7** seconds out of 1'36''75 and this is the equivalent of **2.78%**.

And so forth, the VISION device calculates and displays the time of the velocity for the following ranges.

To return to the previous ranges, activate button 5.

To visualize the data of another channel, activate the button of the desired channel, in this case on the illustration above, 1 or 4 just like for the menu « RECALL ». Example: if you choose channel 4, you will see the arrow move from channel 2 to channel 4. In fact, one single channel can be selected for review.

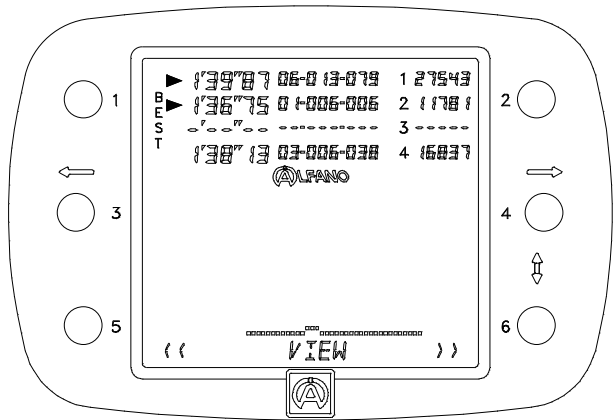
To leave this menu, press the button of the selected channel; this operation will unselect this channel (the arrow disappears). Consequently, if no channel is selected, you can go to the other menus by means of buttons 5 and 6.

If you wish to analyze the data pertaining to another lap, you must return to the menu « RECALL » to select it.

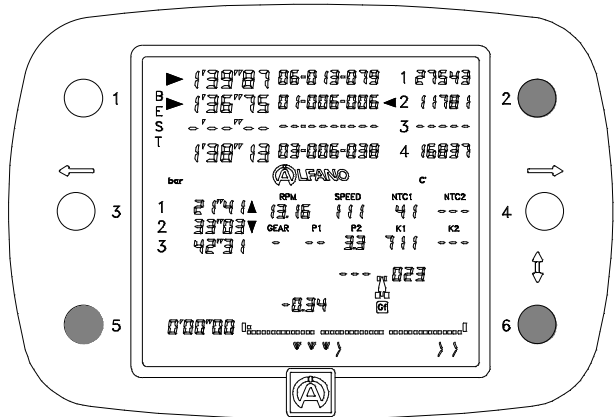
In the « RECALL » mode, pressing button 6 four times will put the VISION device in the mode:

<< VIEW >>

The menu « VIEW » allows you to preview a complete lap in detail. In fact, the VISION device is capable of looking through a registered lap from start till end, fractioned in one tenth of a second (0.1 Sec). Example: if the time of the lap is 1'39"87 seconds, you will be able to preview 998 screens that represent the complete crossing of the lap. You can see the following in real-time for each of these screens: the RPM, temperatures, velocity, pressures, lateral and longitudinal accelerations, transmission connection as well as the arrows that represent the lateral and longitudinal accelerations (G-force). These arrows allow you to see the vehicle turn to the right, turn to the left, accelerate and slow down.



Example below: just like in the « RECALL » mode, press button 2 to visualize the content of channel 2 and the data concerning this lap will be displayed underneath the logo ALFANO.



As soon as you enter the « VIEW » mode by default, the VISION device will focus on the start of the lap and you will observe that all displayed data relate to the start of the lap (you are on the first magnetic field).



The illustration above represents the circuit and vehicle.

- The two rectangles to the left and to the right represent the start and end of the circuit, in other words, the start-end magnetic field.
- The little dot in the top left corner represents the vehicle.
- The dots missing from the line composed of little dots at the bottom represent the other magnetic fields that determine the split times of the lap (in case the circuit has any).

To cover this lap from start till end, activate button 6.  
To cover this lap in the opposite direction, activate button 5.

You will also notice on the circuits featuring several magnetic fields that the VISION device is capable of positioning itself with precision on each magnetic field during the crossing of the circuit. This is to detail all information relating to this exact location.

While running the lap you can also see 1 arrow pointing upwards or 1 arrow pointing downwards next to the RPM, which signifies an increase or decrease of the engine speed.

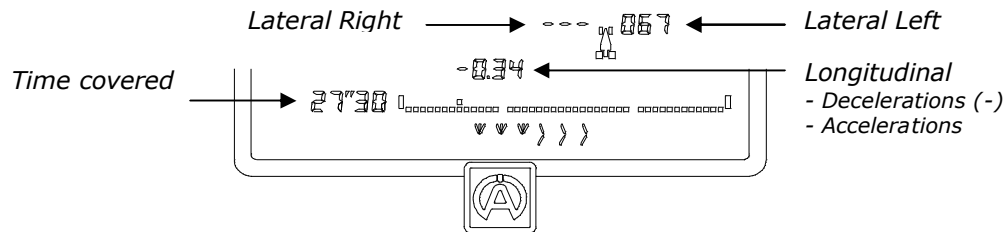


In the event that this lap has G-force data, other arrows will appear at the bottom of the display in the center of the text line. These arrows symbolize the direction that the vehicle takes in real-time.



- The 4 arrows directed to the left and the 4 arrows directed to the right represent the lateral accelerations, (the vehicle veers to the left or to the right), the number of arrows displayed represents the intensity of the lateral acceleration.
- The 3 arrows directed to the front and the 3 arrows directed to the back represent the longitudinal accelerations, (the vehicle accelerates or slows down).

These accelerations are also interpreted in numerical data.



To visualize the data of another channel, activate the button of the desired channel, in this case on the illustration above, 1 or 4 as for the menu « RECALL ». Example: if you select channel 4, you will see the arrow move from channel 2 to channel 4. In fact, one single channel can be selected for review.

You will notice that while you leave the selected channel, the last window of this channel will remain memorized so as to find it back during the next visit. This will allow you to compare the data at a precise location of the circuit of a channel with another by simply hopping channels with their respective buttons as in the « RECALL » mode.

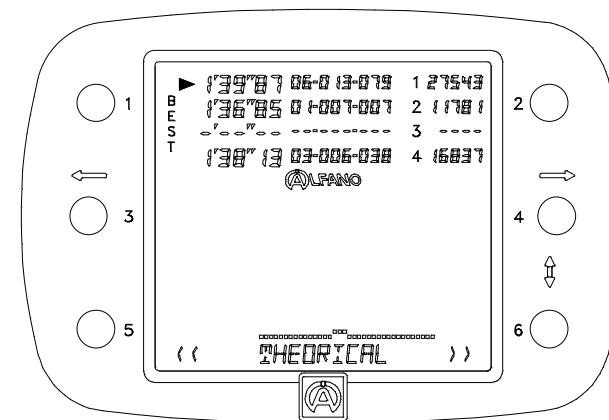
To leave this menu, press the button of selected channel; this operation will unselect this channel (the arrow disappears). Consequently, if no channel is selected, you can go to the other menus by means of buttons 5 and 6.

If you wish to analyze the data pertaining to another lap, you must return to the menu « RECALL » to select it.

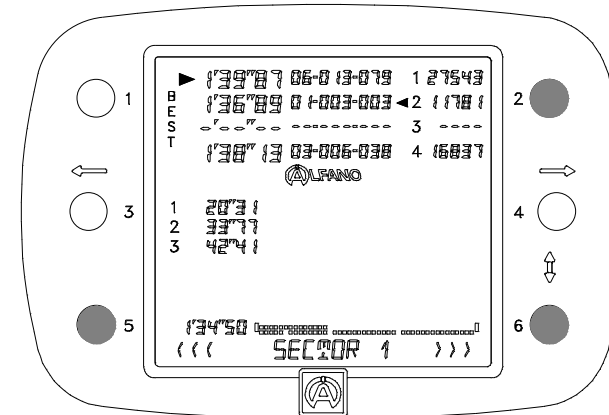
In the « RECALL » mode, pressing button 6 five times will put the VISION device in the mode:

<< THEORETICAL >>

This menu is exclusively accessible if the circuit is fragmented in several split times. If this is the case, this menu will allow you to display the best split times for each channel to compose the shortest lap time. This is called the theoretical lap.



Example below: just like the « RECALL » mode, press button 2 to visualize the content of channel 2 and the data concerning this lap will be displayed underneath the logo ALFANO.



The best split times retrieved on the entire lap of channel 2 appear at the bottom right of the logo ALFANO.

- 20"31, = the best split time 1,
- 33"77, = the best split time 2,
- 42"41, = the best split time 3,

And the sum of these 3 splits times equals :

- 1'34"50 ; this time is the theoretical lap displayed at the bottom left of the illustration of the circuit (bars composed of little dots).

Firstly,

- Channel 2 is automatically positioned on the lap retrieved from the best first split time. « SECTOR 1 »

Press button 6 once,

- Channel 2 is automatically positioned on the lap retrieved from the best first split time 2. « SECTOR 2 »

Press button 6 once more,

- Channel 2 is automatically positioned on the lap retrieved from the best split time 3. « SECTOR 3 »

To return to the previous split times, activate button 5.

To visualize the data of another channel, activate the button of the desired channel, in this case on the illustration above, 1 or 4 as for the menu « RECALL ». Example: if you select channel 4, you will see the arrow move from channel 2 to channel 4. In fact, one single channel can be selected for review.

To leave this menu, press the button of the selected channel; this operation will unselect this channel (the arrow disappears). Consequently, if no channel is selected, you can go to the other menus by means of buttons 5 and 6.

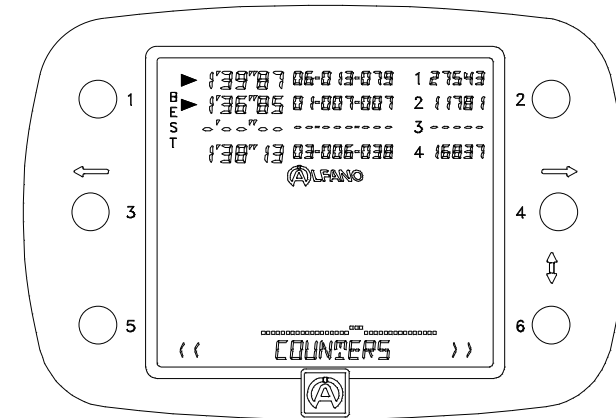
**i** You can choose the lap in the beginning of the menu « THEORETICAL » just like in the menu « RECALL », to be analyze in the menus:

- MAX MIN GF-MEAN
- RPM
- SPEED
- VIEW

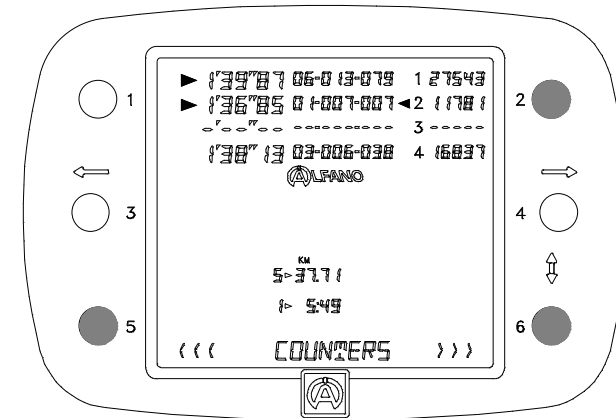
In the « RECALL » mode, pressing button 6 six times will put the VISION device in the mode:

<< COUNTERS >>

This menu allows displaying the time and distance counters belonging to the data acquisition system. Namely 2 or 4 distance counters and 2 or 4 time counters (see the manual of the data acquisition system).



Example below: just as in the « RECALL » mode, press button 2 to visualize the content of channel 2 and the counters will be displayed underneath the logo ALFANO.



Firstly, the VISION device displays the counters N° 1 and N° 5. Subsequently, the VISION device displays the following counters every time button 6 is pressed ,

- N° 2 and N° 6
- N° 3 and N° 7
- N° 4 and N° 8

To return to the previous counters, activate button 5.

To visualize the data of another channel, activate the button of the desired channel, in this case on the illustration above, 1 or 4 as for the menu « RECALL ». Example: if you select channel 4, you will see the arrow move from channel 2 to channel 4. In fact, one single channel can be selected for review.

To leave this menu, press the button of the selected channel; this operation will unselect this channel (the arrow disappears). Consequently, if no channel is selected, you can go to the other menus by means of buttons 5 and 6.

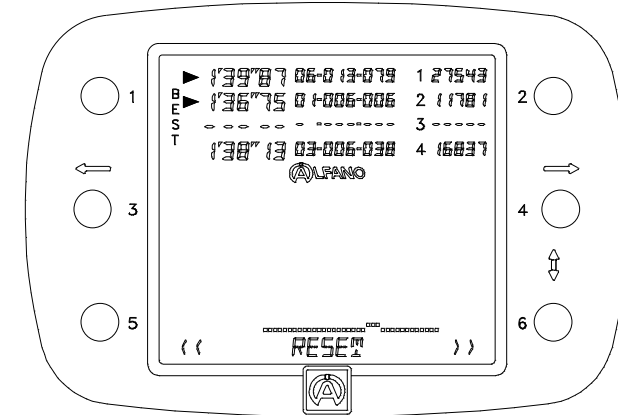


For a full explanation of the counters pertaining to the data acquisition system, see their operating manual.

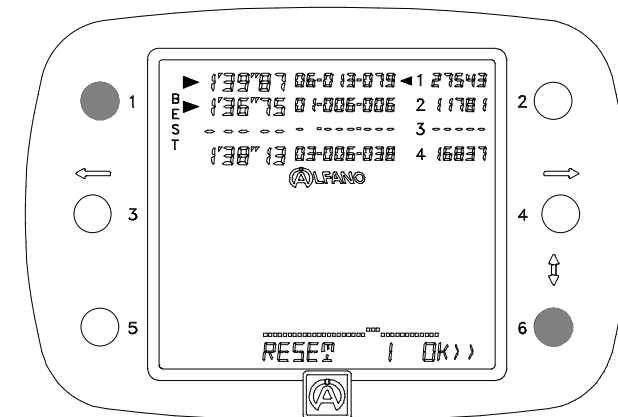
In the « RECALL » mode, pressing button 6 seven times will put the VISION device in the mode:

<< RESET >>

This menu allows erasing data from the channel.



Press the button of the desired channel. A small arrow indicates your selection.



Press button 6 once to execute the erasing process of the memory.

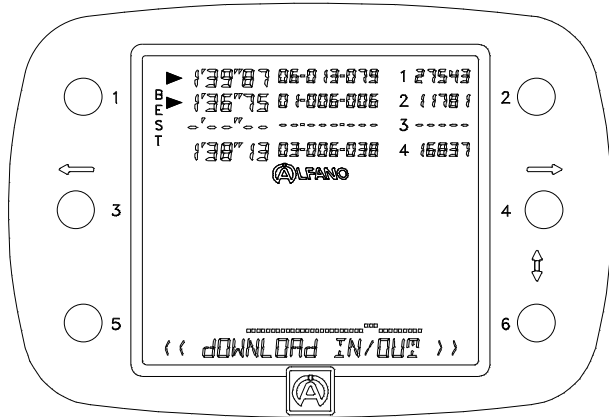
Subsequently, small lines will replace the old data to signal that the memory is empty and also ready to receive new data like channel 3, see example above.

On the other hand, if you wish to leave this menu before the execution of the « RESET », press the button of the selected channel; this operation will unselect this channel (the arrow disappears). Consequently, if no channel is selected, you can go to the other menus by means of buttons 5 and 6.

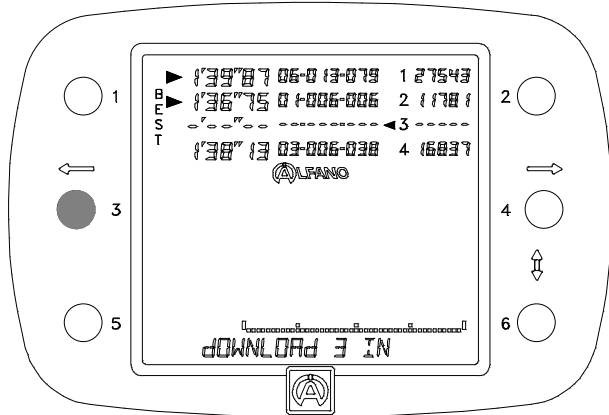
In the « RECALL » mode, pressing button 6 eight times will put the VISION device in the mode:

<< DOWNLOAD IN/OUT >>

This menu allows importing data originating from data acquisition systems, PRO+, PRO+v2, AStrO, AStrOv2, AStrO4T, AStrO4T\_formula, AStrOv2\_formula and exporting these data to a Personal Computer (PC) or to another VISION device still.



If you wish to import data, it is imperative that the channel is empty. Small lines must be displayed; as on the example below.

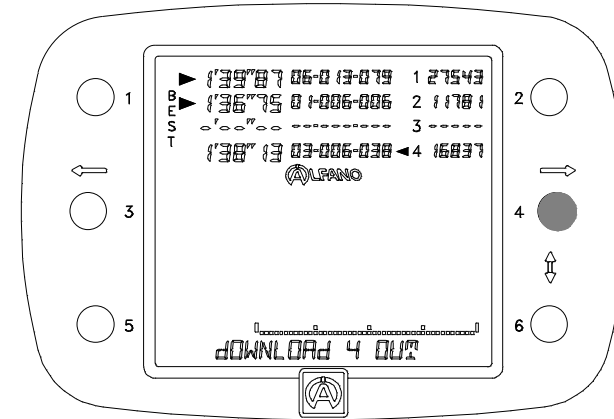


After having selected channel 3, « DOWNLOAD 3 IN » will be displayed. In order to realize the transfer, anchor the VISION device by making use of its port « IN », to the data acquisition system.



- After each import « DOWNLOAD IN », the VISION device will display the last lap by default.
- See the operating manual of the data acquisition system to configure it to the transfer of data « DOWNLOAD ».

On the other hand, if you wish to export the data from a channel, it is a given that the channel possesses recorded data; as on the example below (channel 1, 2 and 4).



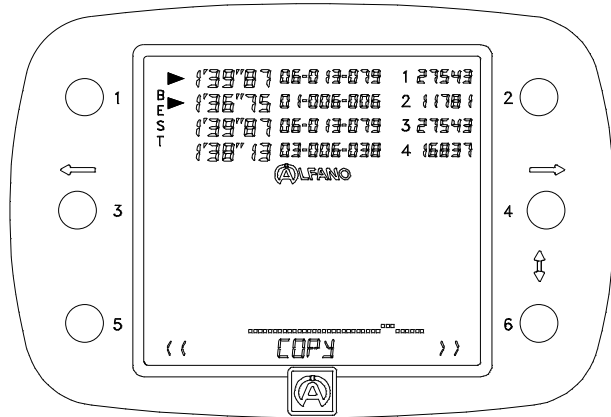
Example above: after having selected channel 4, « DOWNLOAD 4 OUT » will be displayed. Subsequently, anchor the interface USB-IR (A-421) in the communication port « OUT » to the back of the VISION device (see page 7), to send the data to the PC.

On the other hand, if you wish to leave this menu before the execution of the « DOWNLOAD », press the button of the selected channel; this operation will unselect this channel (the arrow disappears). Consequently, if no channel is selected, you can go to the other menus by means of buttons 5 and 6.

In the « RECALL » mode, pressing button 6 nine times will put the VISION device in the mode:

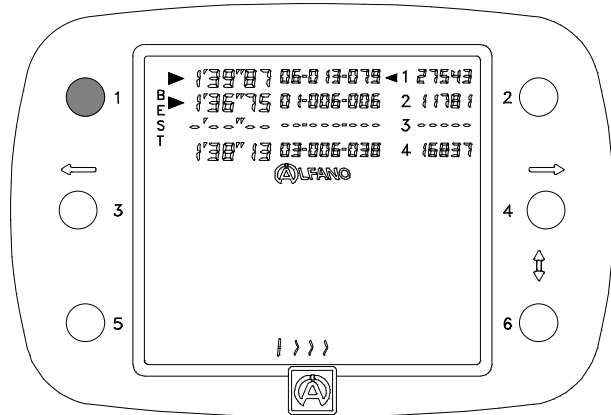
<< COPY >>

This menu allows copying the data of a channel and pasting them in another empty channel. In fact, it is often useful to compare the data originating from the same ALFANO.

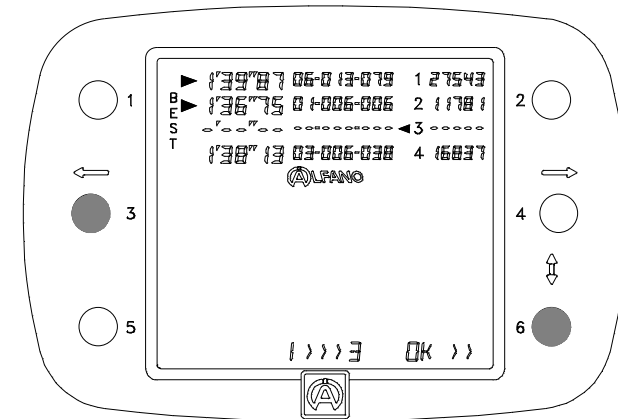


At first, you choose either an empty channel or a channel with recorded data.

Example displayed below: pressing button 1 once will display a small arrow to signal the selection of channel 1 and the number 1 is shown at the bottom on the line of text.



Subsequently by deduction, you must choose an empty channel; in this case here channel 3, the small arrow moves towards channel 3 to signal the selection of channel 3 and the number 3 is displayed on the line of text.



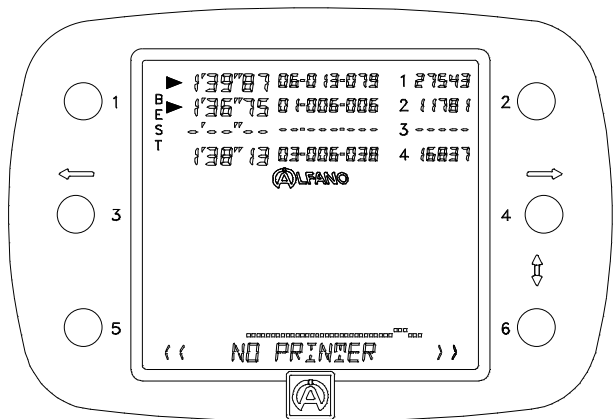
Press button 6 OK to execute the copy and past function.

On the other hand, if you wish to leave this menu before the execution of « COPY », press the button of the selected channel; this operation will unselect this channel (the arrow disappears). Consequently, if no channel is selected, you can go to the other menus by means of buttons 5 and 6.

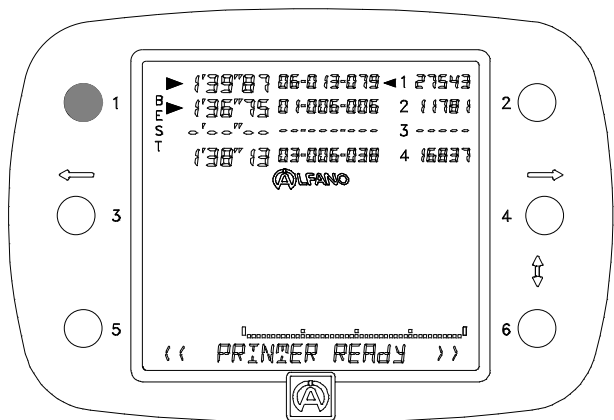
In the « RECALL » mode, pressing button 6 ten times will put the VISION device in the mode:

<< PRINTER >>

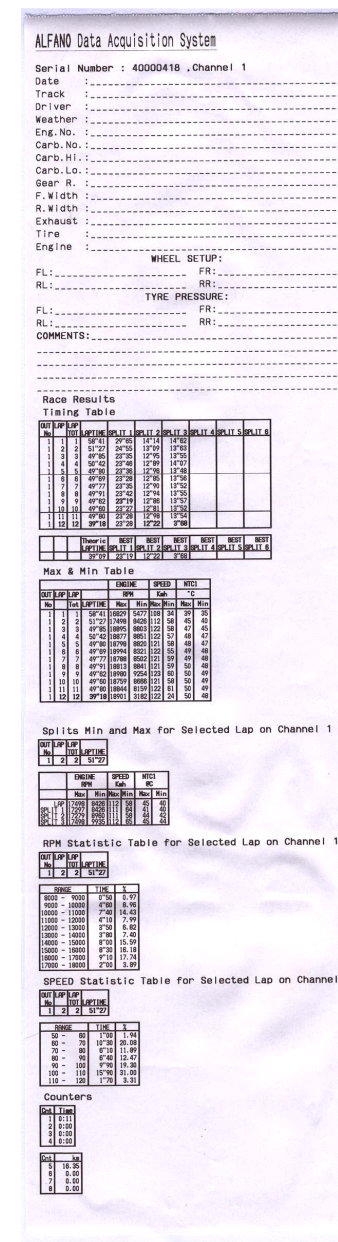
This menu allows printing the recorded data to a thermal printer.



First of all, connect the thermal printer SEIKO DPU-3445-20 by means of its communication port RS232 and turn on the printer. The phrase « PRINTER READY » must be displayed in the line of text of the VISION device. This means that the printer has been recognized. Afterwards, press the button of the desired channel to launch the printing process.



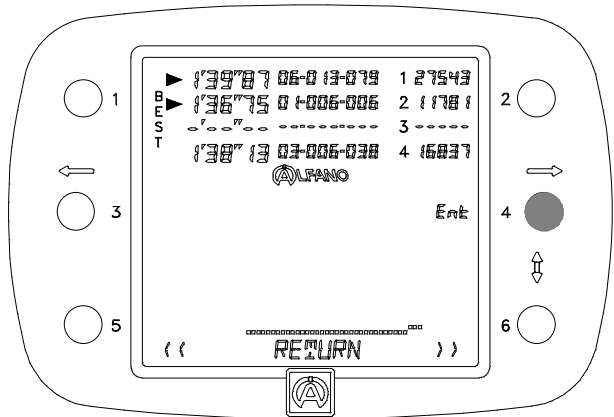
Example of printing obtained. (Paper size 110mm)



In the « RECALL » mode, pressing button 6 eleven times will put the VISION device in the mode:

<< RETURN >>

This menu allows leaving the menu « DATA » and returning to the main menu.



Press button 4 « ENT »

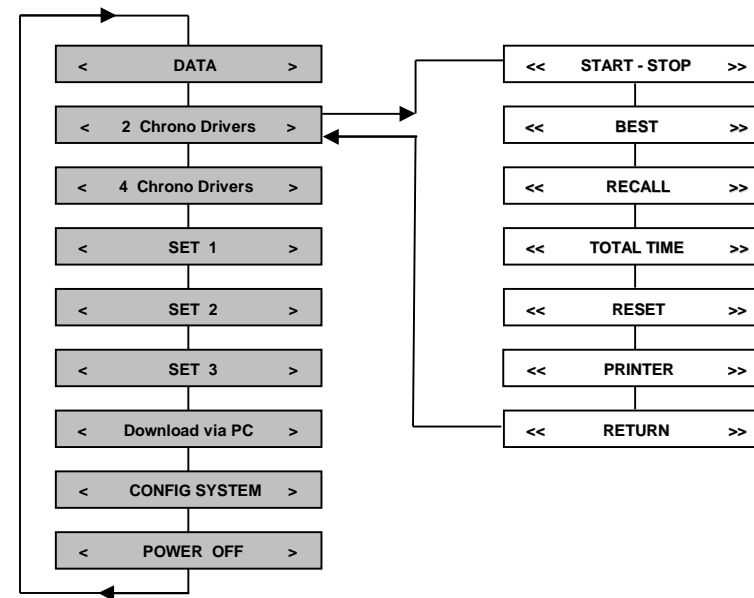
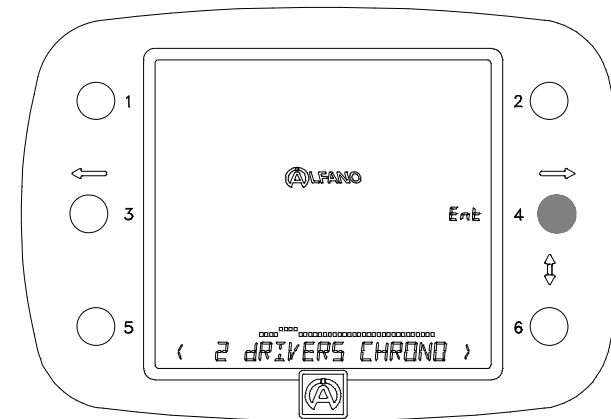
From whatever other menu you have the possibility of moving directly to the menu « RETURN ».

It suffices to be positioned at the start of any menu of « DATA » and to press button 5 or 6 for more than one second for the VISION device to go automatically to the menu « RETURN »

In the « DATA » mode, pressing button 6 once will put the VISION device in the mode :

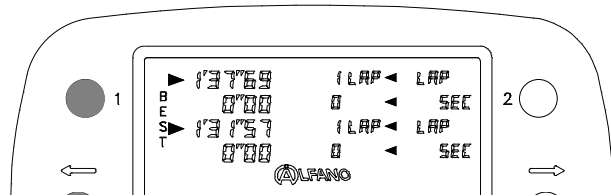
< 2 CHRONO DRIVERS >

This menu allows manually timing up to 2 competitors at one hundredth of a second for a total of 99 laps with a maximum of 9 split times for each competitor .





Note: to attract your attention to the best time accomplished, an arrow appears before this time to the left near the icon BEST.

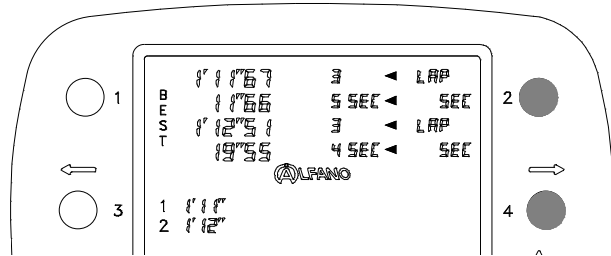


To capture the split times:

While the chronometers are in START mode, activate button

2 to capture the split times of chronometer 1,  
4 to capture the split times of chronometer 2.

The VISION device displays the split time below its respective chronometer on the line « SEC ».



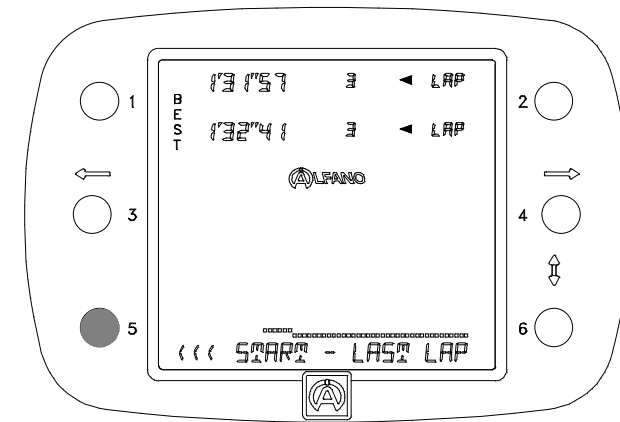
As soon as you start capturing the split times, the scrolling counter of the chronometer will be replaced by the total time of the split times. In fact, with every captured split time, the VISION device adds these up and displays the total at this location. See above.

You can capture up to 9 split times for every lap. From the first split time to the second to last split time (maximum 8), press button « 2, 4 » afterwards to capture the last split time and close the time of the lap, press button « 1, 3 ».

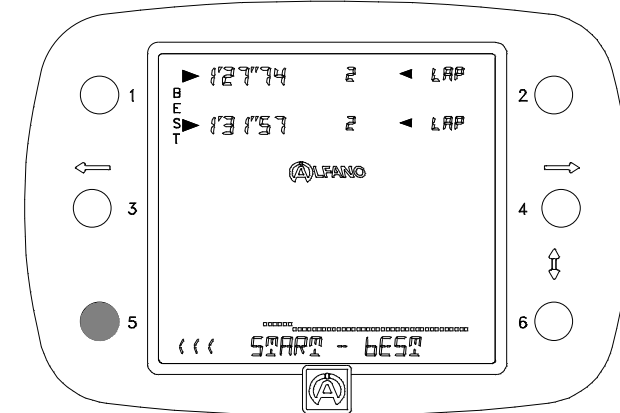
During the timekeeping, the VISION device gives you the possibility of showing you the following for every chronometer,

- The last time accomplished « LAST LAP »
- The best time « BEST »
- The total time accomplished « TOTAL TIME »

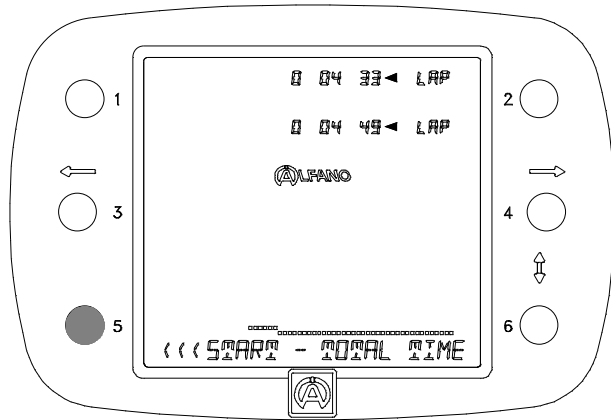
In fact, the VISION device will allow you while capturing the times to display the last time accomplished « LAST LAP » by simply pressing button 5 for every competitor for about 23seconds. See below.



If the same button is pressed another time before 3 seconds have expired, the VISION device will display the best time « BEST » for every competitor for about 3 seconds. See below.



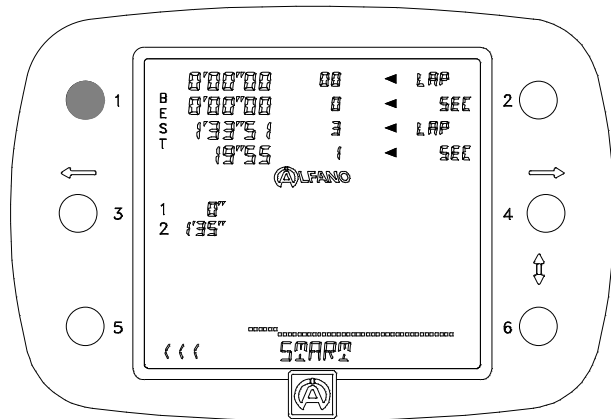
If the same button is pressed yet another time before the 2 seconds have expired, the VISION device will display the total time accomplished « TOTAL TIME » for every competitor for about 3 seconds. See below.



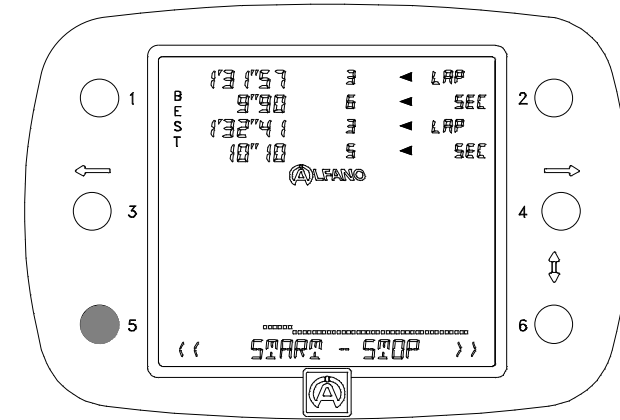
In order to return to the chronometer display faster, press button 5 successively until the chronometer display « START » appears.

The VISION device gives you the possibility of performing the reset function during the timekeeping:

While the times are captured, you wish to stop and perform the reset among one of the chronometers to replace for example a competitor by another. It suffices to press the button of the desired chronometer for 1 second. Example below - chronometer 1.



To stop all the chronometers « START-STOP »:

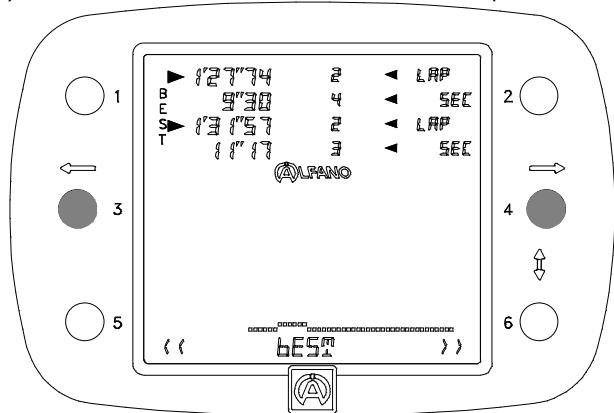


Press button 5 for 1 second, « STOP » reappears next to « START ».

In the « START-STOP » mode, pressing button 6 once will put the VISION device in the mode « BEST »

<< BEST >>

This menu allows you to view the best time « BEST » with its split times.



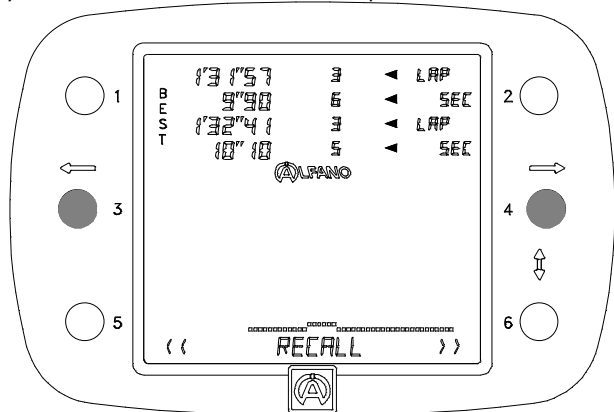
- o Button 3 allows for covering the data by reversing.
- o Button 4 allows for covering the data by moving forward.

2 chronometers at the same time.

In the « START-STOP » mode, pressing button 6 twice will put the VISION device in the « RECALL » mode

<< RECALL >>

This menu allows you to view all the times and its split times.



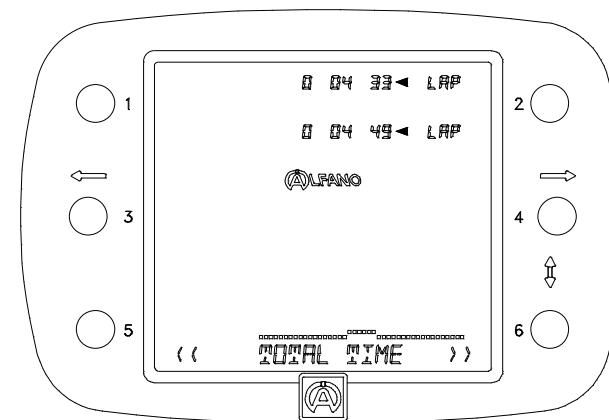
- o Button 3 allows for covering the data by reversing.
- o Button 4 allows for covering the data by moving forward.

2 chronometers at the same time.

In the « START-STOP » mode, pressing button 6 three times will put the VISION device in the « RESET » mode

<< TOTAL TIME >>

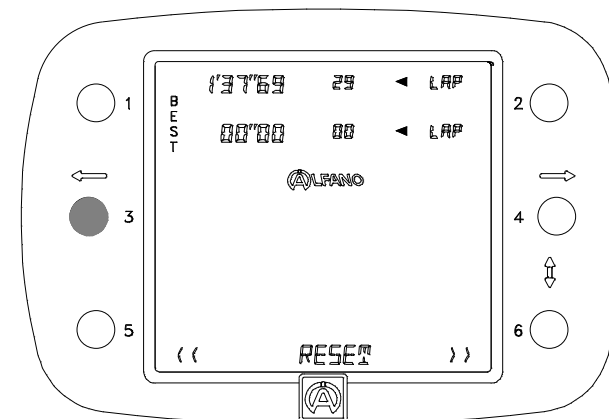
This menu allows you to view the total time of each chronometer.



In the « START-STOP » mode, pressing button 6 four times will put the VISION device in the « RESET » mode

<< RESET >>

This menu allows you to erase the chronometers individually.

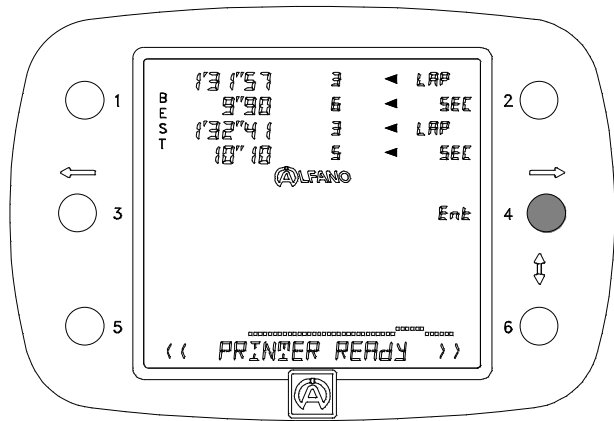


To execute the erasing process, press the button of the desired chronometer. Example above, this operation has been performed on chronometer 2.

In the « START-STOP » mode, pressing button 6 four times will put the VISION device in the « PRINTER » mode

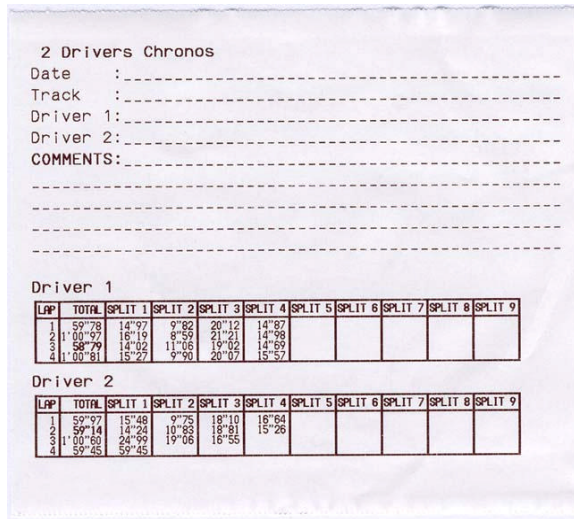
<< PRINTER >>

This menu allows you to print the recorded data to a thermal printer .



Firstly, connect the thermal printer SEIKO DPU-3445-20 by means of its communication port RS232 and turn on the printer. The phrase « PRINTER READY » must be displayed in the text line of the VISION device. This means that the printer has been recognized. Subsequently, press button 4 « ENT » to launch the printing process.

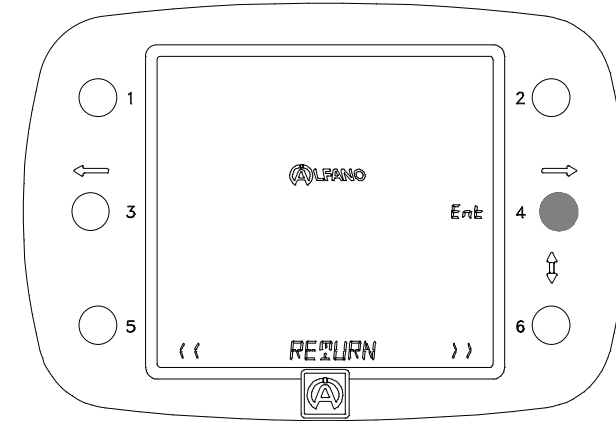
Example of printing obtained. (Paper size 110mm)



In the « START-STOP » mode, pressing button 6 five times will put the VISION device in the « RETURN » mode

<< RETURN >>

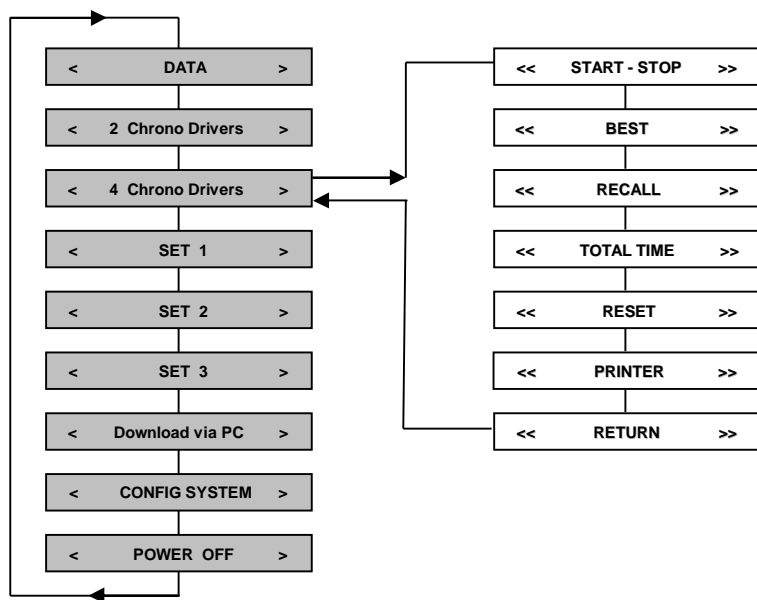
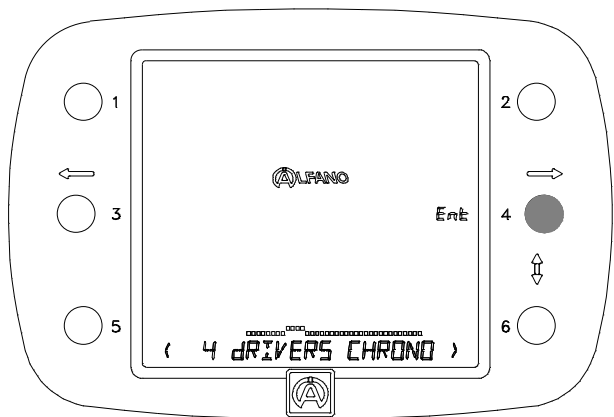
This menu allows you to leave the menu « 2 CHRONO DRIVERS » to return to the main menu.



Press button 4 « ENT ».

In the « DATA » mode, pressing button 6 twice will put the VISION device in the mode:  
**< 4 CHRONO DRIVERS >**

This menu allows you to manually time up to 4 competitors at one hundredth of a second for a total of 99 laps with a maximum of 6 split times for the 4<sup>th</sup> competitor.



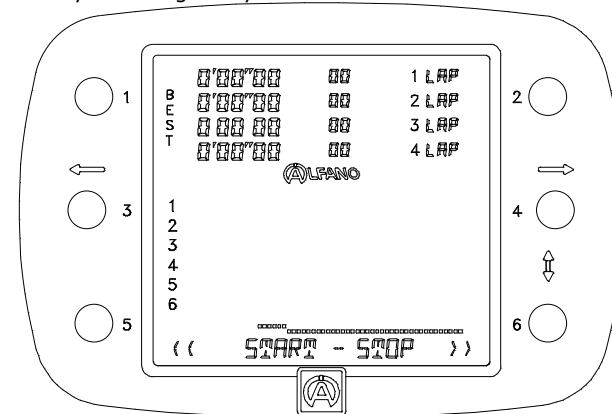
In the « 4 CHRONO DRIVERS » mode, pressing button 4 once « ENT » will put the VISION device in the mode:  
**<< START - STOP >>**

This menu allows:

- starting up the chronometers and capturing the times (laps & split times),

During the START mode:

- displaying the last times for every chronometer,
- displaying the best times for every chronometer,
- displaying the total time for every chronometer,
- and individually resetting every chronometer.

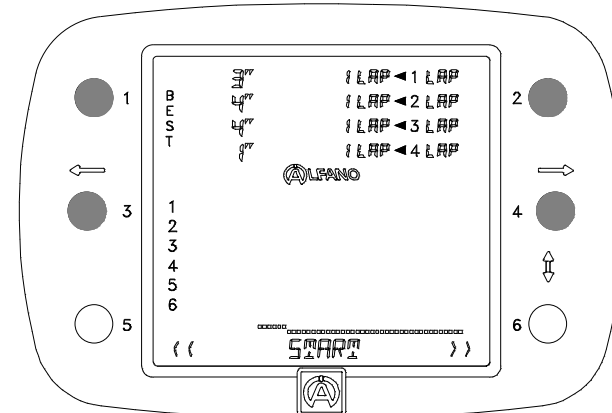


To start up the chronometers:

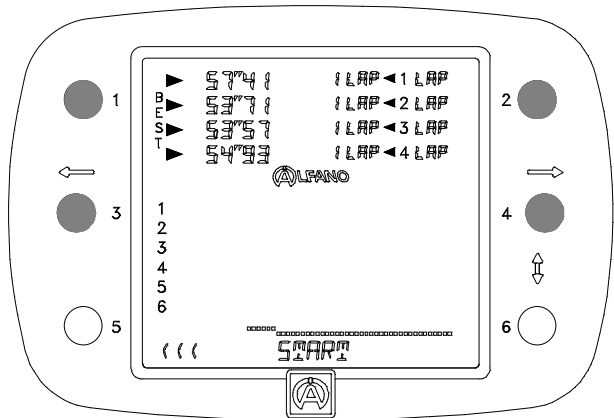
Press button

- 1 to activate chronometer 1,
- 2 to activate chronometer 2,
- 3 to activate chronometer 3,
- 4 to activate chronometer 4.

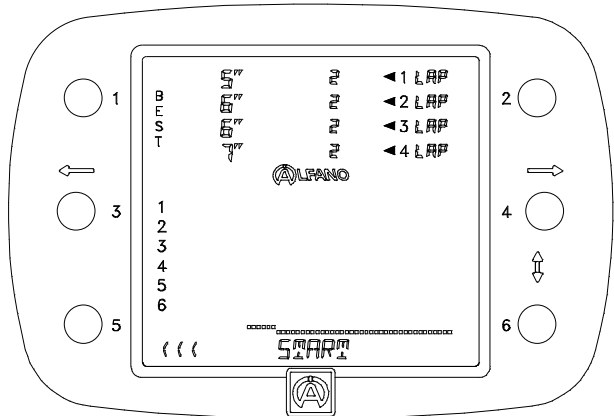
the text « STOP » disappears and « START » remains displayed and the chronometers start counting the time in seconds.



Press the buttons « 1, 2, 3 and 4 » again to capture and display the time of the last lap. This time will be displayed at one hundredth of a second for a duration of 5 seconds. Example below.

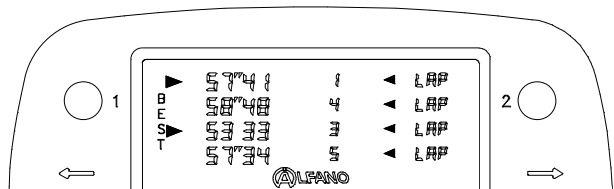


Subsequently, the lap time will be replaced by the scrolling chrono of the following lap. See illustration below.



In order to capture and display the times of the following laps, continue this process by repeating the operation on the same buttons.

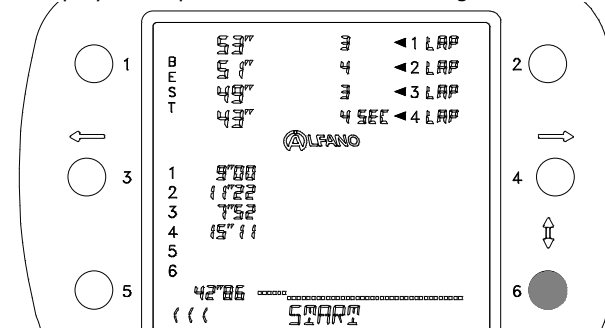
Note: to attract your attention to the best time accomplished, an arrow appears before this time to the left near the icon BEST.



To capture the split times of chronometer « 4 » :

While chronometer « 4 » is in the « START » mode, activate button « 6 ».

The VISION device displays the split times underneath the logo ALFANO on the left.



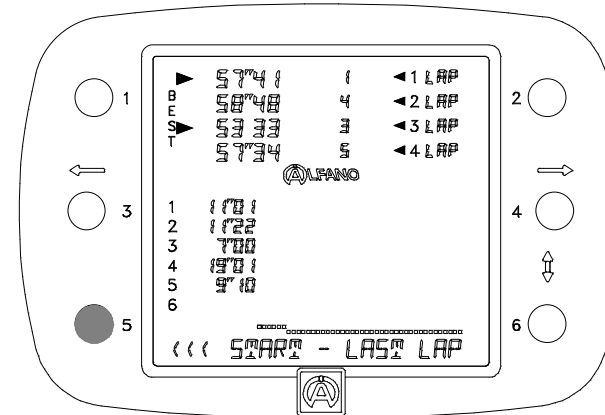
Additionally, with every captured split time, the VISION device adds these up and displays the total at the bottom left of the screen. Example above (42"86).

You can capture up to 6 split times for every lap. From the first split time to the second to last split time (maximum 5), press button « 6 » afterwards to capture the last split time and close the lap time, press button « 4 ».

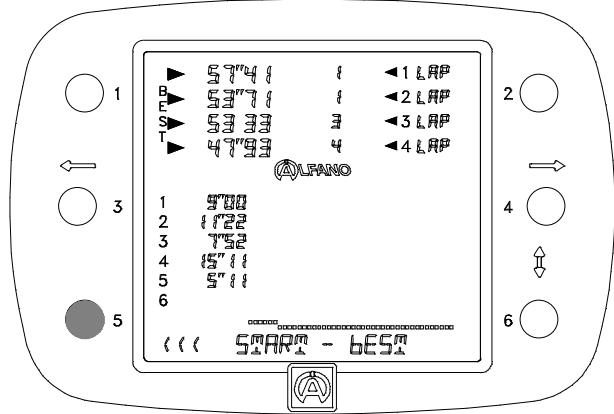
During the timekeeping, the VISION device gives you the possibility to show you the following for every competitor,

- The last time accomplished « LAST LAP »
- The best time « BEST »
- The total time accomplished « TOTAL TIME »

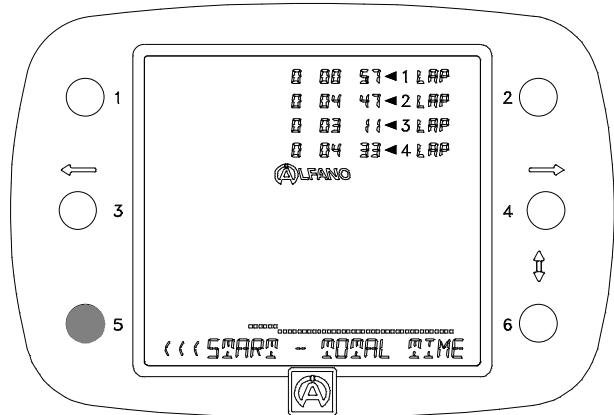
In fact, the VISION device will allow you, while the times are captured, to display the last time accomplished « LAST LAP » by simply pressing button 5 for every competitor for about 2 seconds. See below.



If the same button is pressed again before the 2 seconds expire, the VISION device displays the best time « BEST » for every competitor for another 2 seconds. See below.



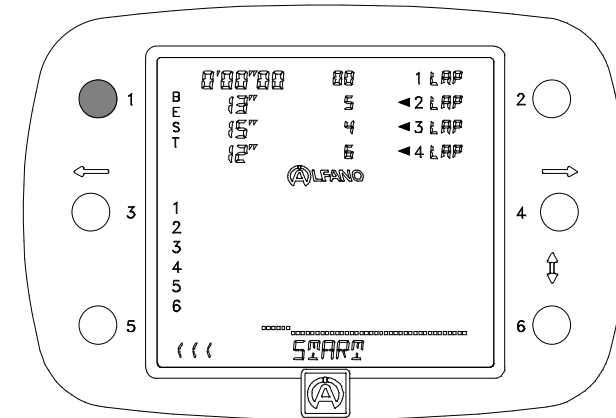
If the same button is pressed yet another time before the 2 seconds expire, the VISION displays the total time accomplished « TOTAL TIME » for every competitor for another 2 seconds. See below.



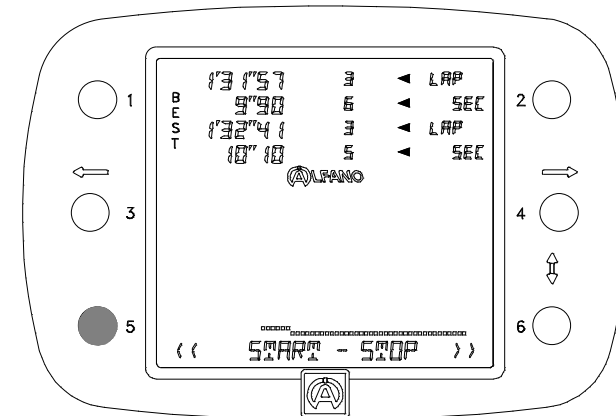
To return to the chronometer display faster, press button 5 successively until the chronometer display « START » appears.

The VISION device gives you the possibility of performing the reset function during the timekeeping:

While the times are captured, you wish to stop and perform the reset among one of the chronometers to replace for example a competitor by another. It suffices to press the button of the desired chronometer for 1 second. Example below - chronometer 1.



To stop all the chronometers « START-STOP » :

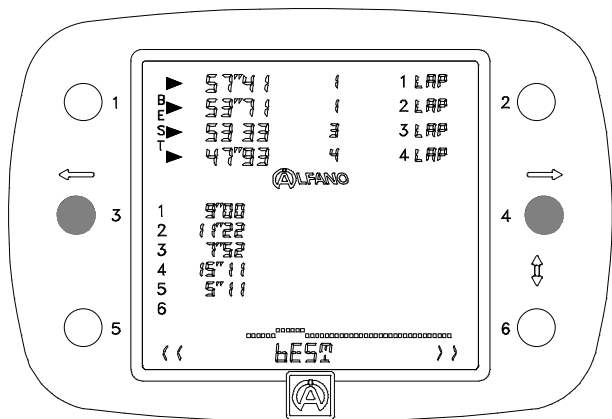


Press button 5 for 1 second, « STOP » reappears next to « START ».

In the « START-STOP » mode, pressing button 6 once will put the VISION device in the « BEST » mode

<< BEST >>

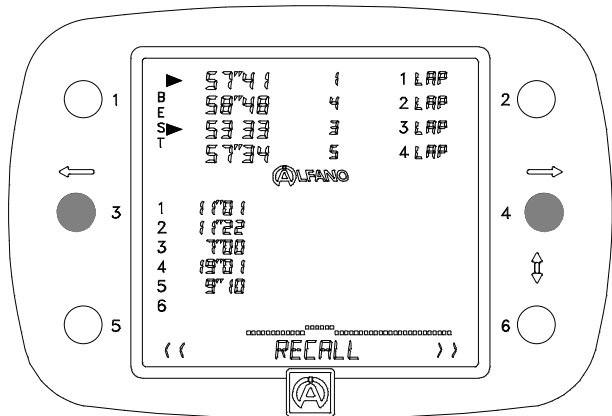
This menu allows you to view the best times « BEST » with the split times of the 4<sup>th</sup> competitor.



In the « START-STOP » mode, pressing button 6 twice will put the VISION device in the « RECALL » mode

<< RECALL >>

This menu allows you to view all the times.



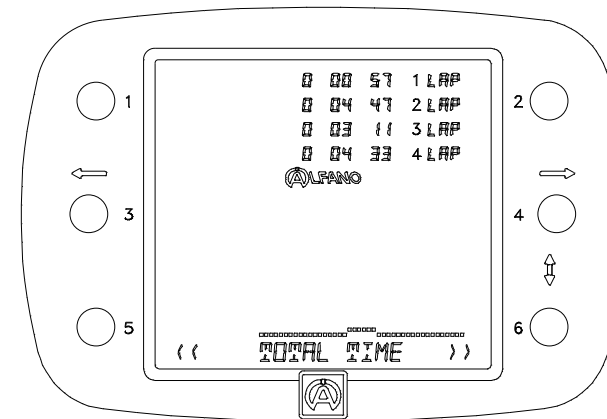
- o Button 3 allows for covering the data by reversing.
- o Button 4 allows for covering the data by moving forward.

4 chronometers at the same time.

In the « START-STOP » mode, pressing button 6 three times will put the VISION device in the « RESET » mode

<< TOTAL TIME >>

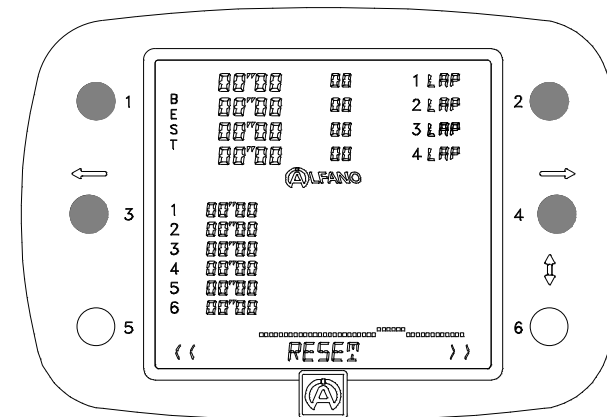
This menu allows you to view the total time of every chronometer .



In the « START-STOP » mode, pressing button 6 four times will put the VISION device in the « RESET » mode

<< RESET >>

This menu allows you to erase the chronometers individually.

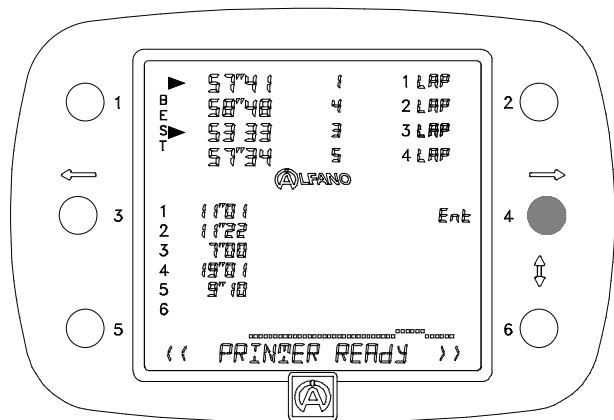


To execute the erasing process, press the button of the desired chronometer . Example above, this operation has been performed on the 4 chronometers .

In the « START-STOP » mode, pressing button 6 four times will put the VISION device in the « PRINTER » mode

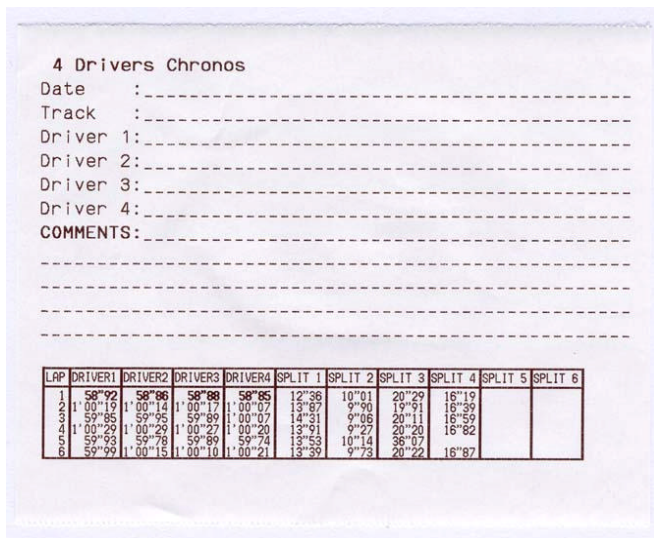
<< PRINTER >>

This menu allows you to print the recorded data to a thermal printer.



First of all, connect the thermal printer SEIKO DPU-3445-20 (A-483) by means of its communication port RS232 and turn on the printer. The phrase « PRINTER READY » must appear on the text line of the VISION device. This means that the printer has been recognized. Afterwards, press button 4 « ENT » to launch the printing process.

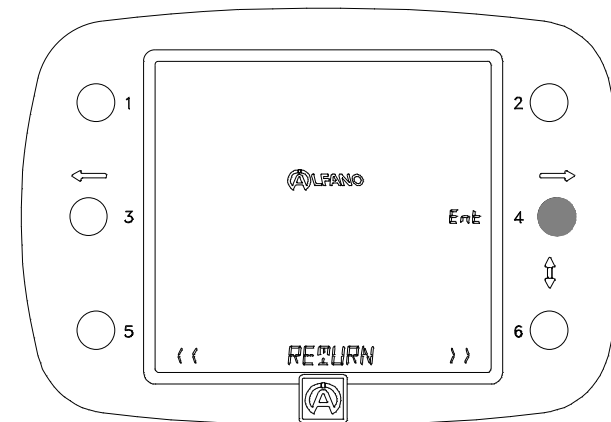
Example of printing obtained. (Paper size 110mm)



In the « START-STOP » mode, pressing button 6 five times will put the VISION device in the « RETURN » mode

<< RETURN >>

This menu allows you to leave the menu « 4 CHRONO DRIVERS » and return to the main menu.



Press button 4 « ENT ».

In the « DATA » mode  
 - pressing button 6 three, four or five times will put the VISION device in the Set1, Set2 or Set3 mode

< Set KARTING >

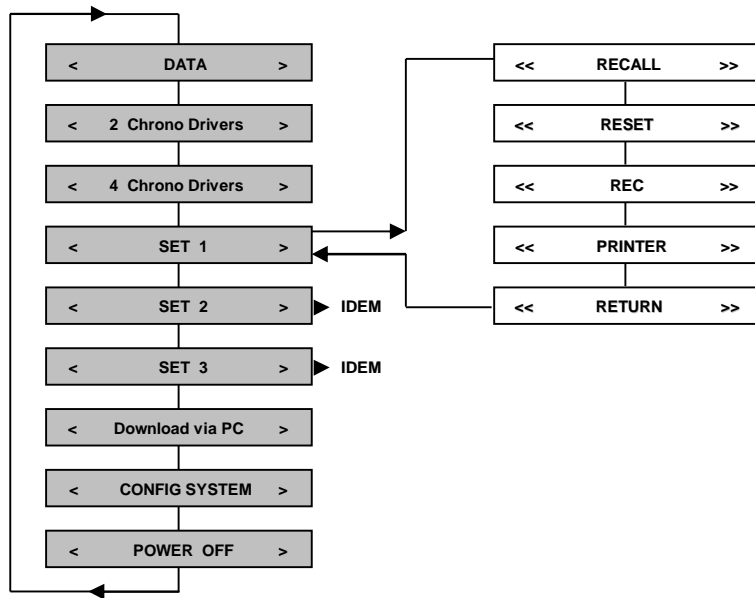
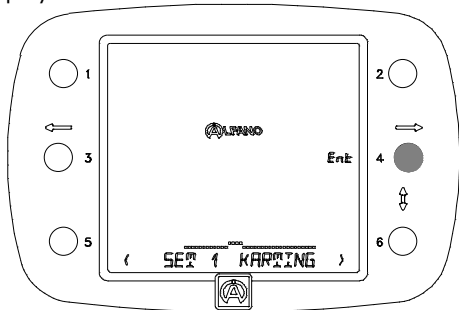
These 3 menus are identical. Each menu allows you to measure and record a temperature for every tire + 2 auxiliary temperatures (asphalt, external T°, etc...) on 2 channels,

Channel 1: OUT - T° Before the race  
 Channel 2: IN - T° After the race

And the possibility of manually recording a pressure for every tire on 2 channels ,

Channel 3: OUT - P Before the race  
 Channel 4: IN - P After the race

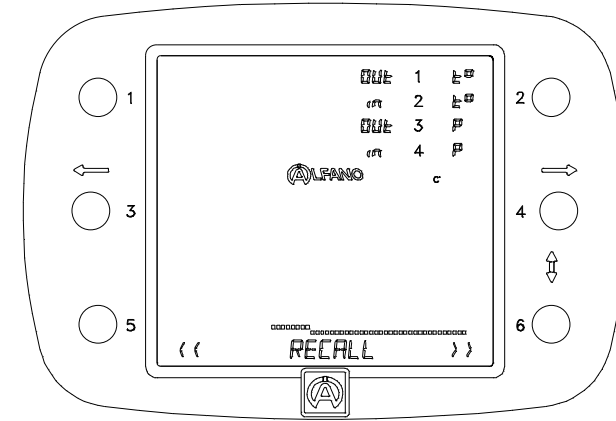
Finally, the differences of temperatures and pressure between the channel « OUT » and the channel « IN » will be displayed.



In the menu « Set KARTING », pressing button 4 once « ENT », will put the VISION device in the « RECALL » mode.

<< RECALL >>

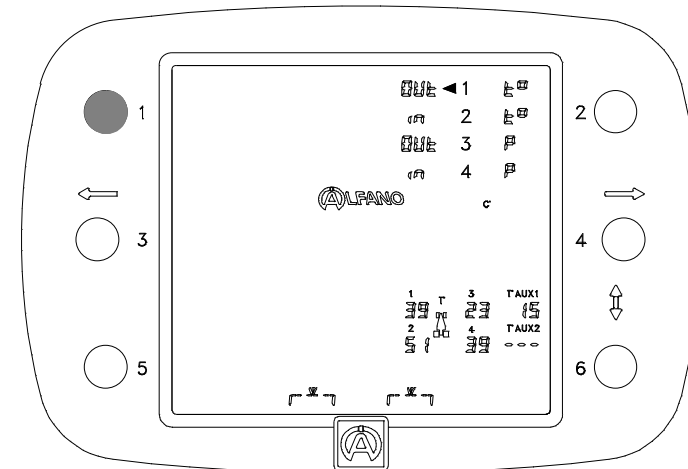
This menu allows displaying the memorized data.



- o Press button 1 to visualize channel 1
- o Press button 2 to visualize channel 2
- o Press button 3 to visualize channel 3
- o Press button 4 to visualize channel 4

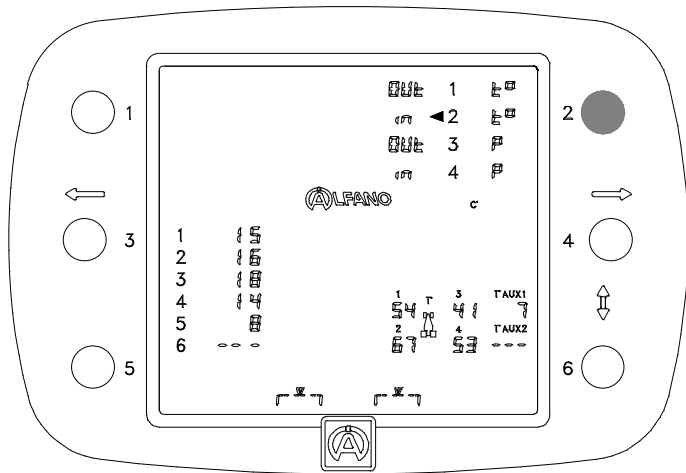
Channel 1 selected: the VISION device displayed underneath the logo ALFANO,

4 recorded tire temperatures + 2 recorded auxiliary temperatures BEFORE the race « OUT ».



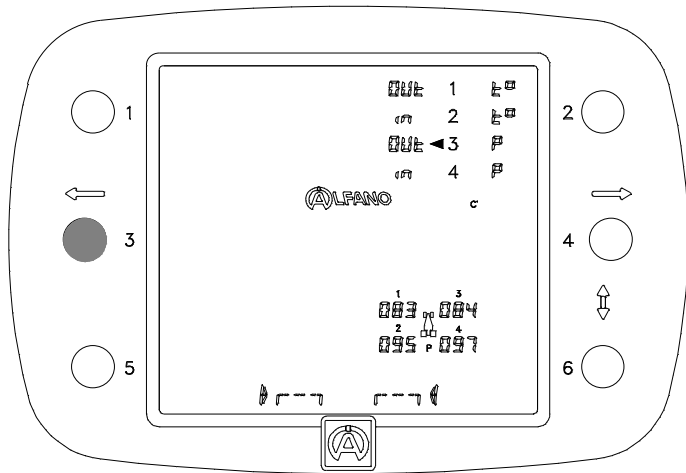
Channel 2 selected: the VISION device displays

4 recorded tire temperatures + 2 recorded auxiliary temperatures AFTER the race « IN » + the difference of temperatures between channel 1 « OUT » and channel 2 « IN », displayed on the left of the screen.



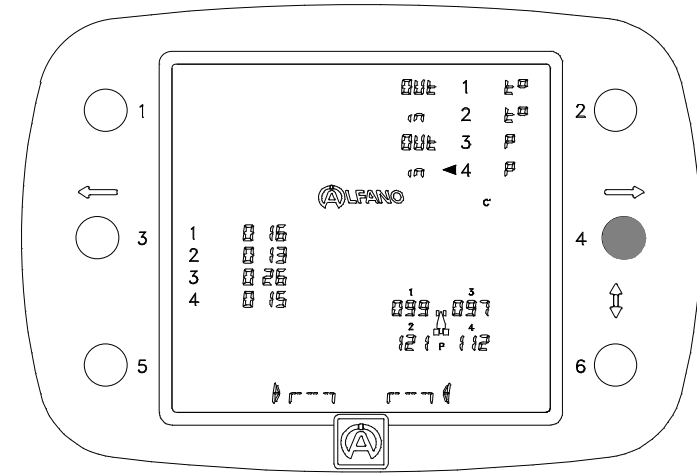
Channel 3 selected: the VISION device displays

4 recorded tire pressures BEFORE the race « OUT »



Channel 4 selected: the VISION device displays

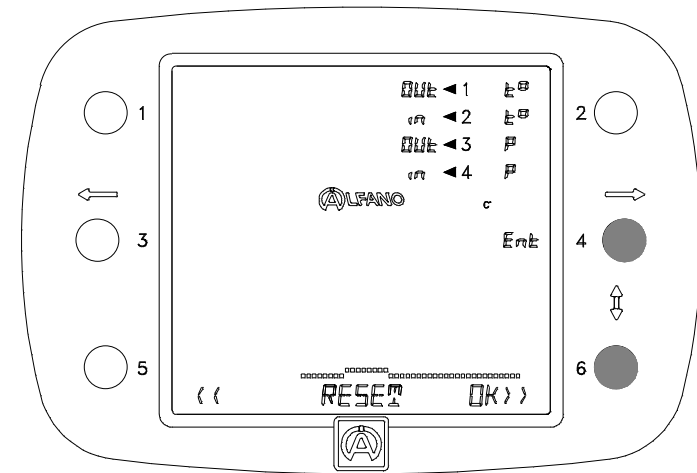
4 recorded tire pressures AFTER the race « OUT » + the difference of pressures between channel 3 « OUT » and channel 4 « IN », displayed on the left side of the screen.



In the « RECALL » mode, pressing button 6 once will put the VISION device in the « RESET » mode

<< RESET >>

This menu allows you to erase the recorded data on the 4 channels.

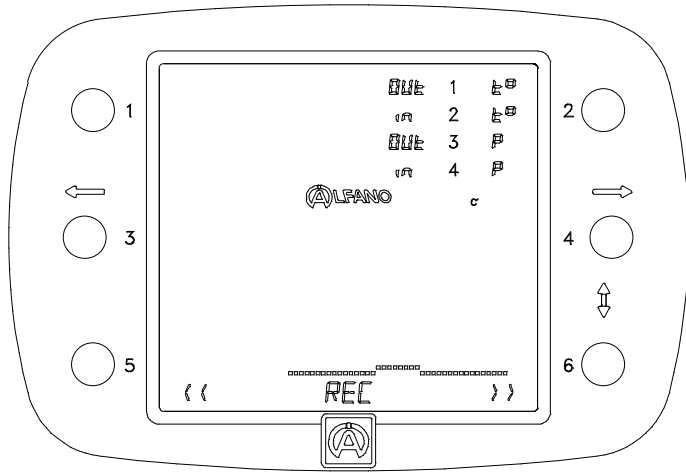


Press button 4 « ENT » to select the 4 channels. Afterwards, press button 6 « OK ».

In the « RECALL » mode, pressing button 6 twice will put the VISION device in the « REC » mode

<< REC >>

This menu allows you to record new data .

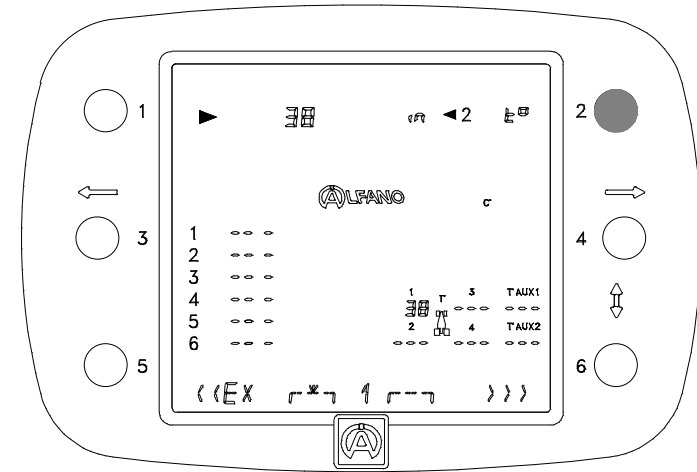


#### To record TEMPERATURES.

Example: in order to record the temperatures of tires and auxiliary temperatures AFTER the race, press button 2 which would correspond to the desired channel « IN - T° ».

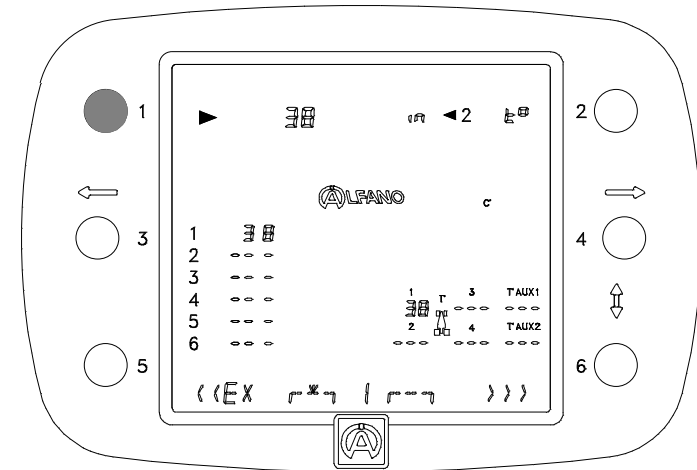
- Either this channel contains recorded data. In this case you can modify these data .
- Either this channel is empty, data have been erased. The « RESET » function will give you the chance to record new data .

A « RESET » has been performed in the example below .



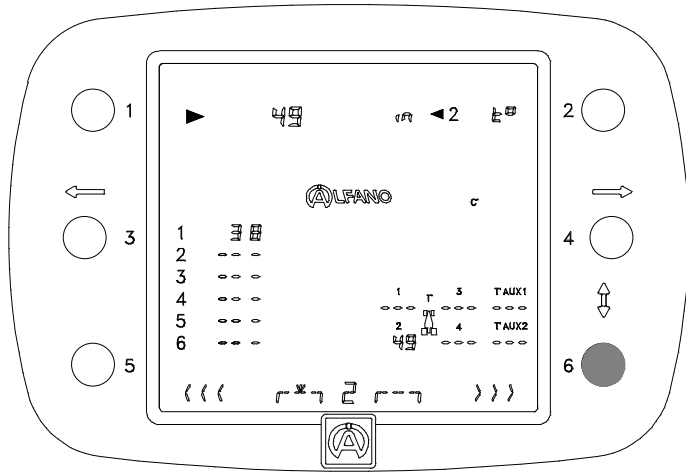
On the illustration above, on the left side of the screen, you will notice « 38° ». This value represents the temperature in real-time that the counter A-481 measures. You will also see that this value is retrieved on the left side of the vehicle on tire n°1 underneath the logo ALFANO.

In order to commence the recording process, prick this counter onto tire n°1 of the vehicle and wait until the temperature is stabilized. Subsequently, press button 1 to confirm the capture.

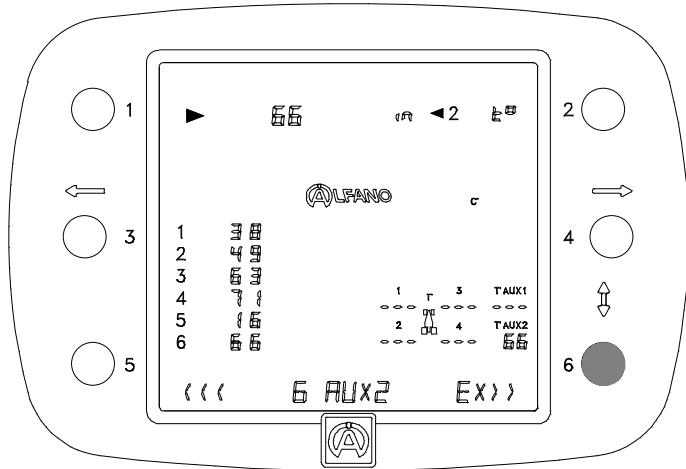


On the illustration above, the value of the first capture will be displayed on line 1 on the left side underneath the logo ALFANO.

Subsequently, you will automatically notice that the temperature moves from tire n°1 to tire n°2. Example displayed below.



It suffices to follow the cycle from 1 to 6, the 4 first cycles are dedicated to the tire shown on the left and right side of the vehicle and the 2 following cycles for the 2 auxiliary temperatures.



You have the possibility of restarting a capture. In fact, if a false or bad maneuver has been made, it is possible to turn back the clock by means of button 5 and to redo the capture as explained above. The opposite is possible too if you wish to jump one or several cycles, activate button 6.

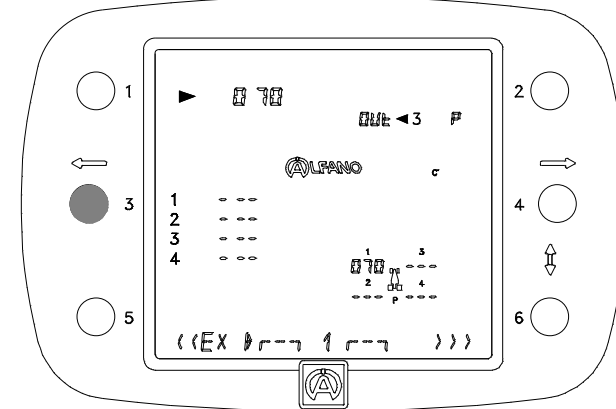
After the 6<sup>th</sup> cycle, « EX » is displayed on the right side. Press button 6 to leave the menu .

### To record the PRESSURES

Example: to record the pressures of tires BEFORE the race, press button 3 which corresponds to the desired channel « IN - P ».

- Either this channel contains recorded data, in this case, you can modify these data .
- Either this channel is empty. Data have been erased. The function « RESET » will allow you to record new data.

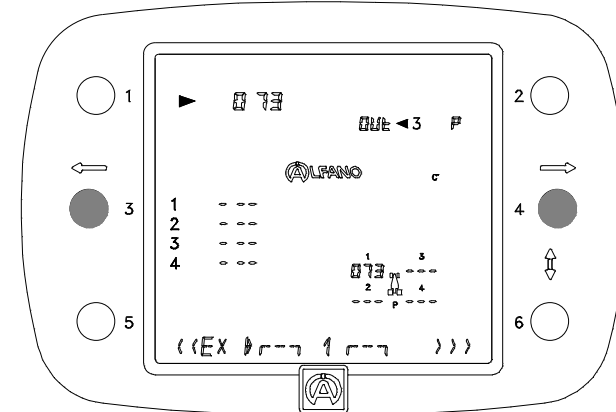
A « RESET » has been performed in the example below .



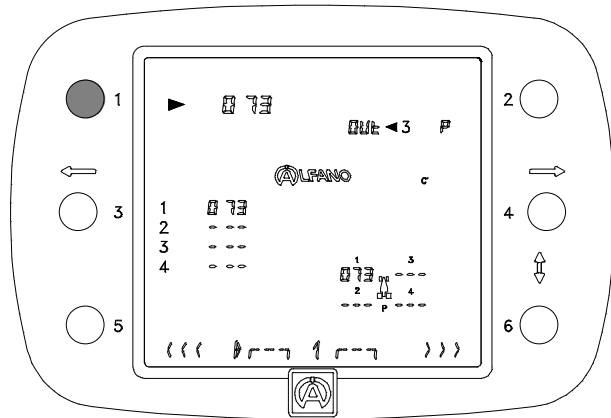
On the image above, on the left side of the screen, you notice « 070 » (0.70 bar) this value represents a pressure. This value can be configured by default in the menu « DEFAULT PRESS » in « CONFIG SYSTEM ». You will also see that this value is retrieved on the left side of the vehicle on tire n°1.

You can modify this pressure value by default by means of

- Button 3 to diminish it
- Button 4 to increase it.

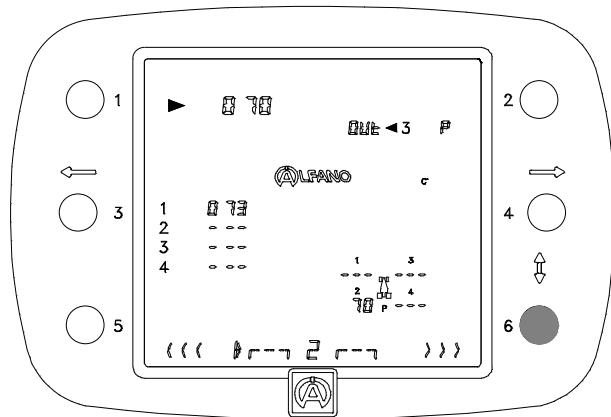


Once the correct value has been introduced, press button 1 to record this value for tire n°1. Example displayed below.



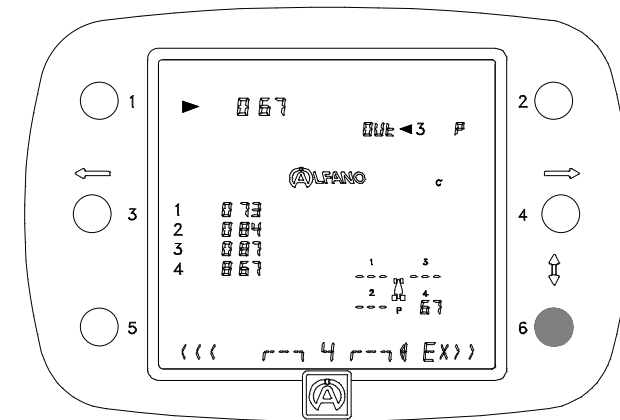
The confirmed value will be displayed on line 1 on the left side underneath the logo ALFANO.

Subsequently, you will automatically notice that the pressure moves from tire n°1 to tire n°2. Exampled displayed below.



It suffices to following the cycles from 1 to 4 for the 4 tires .

You have the possibility of restarting a capture. In fact, if a false or bad maneuver has been made, it is possible to turn back the clock by means of button 5 and to redo the capture as explained above. The opposite is possible too if you wish to jump one or several cycles, activate button 6.



After the 4<sup>th</sup> cycle, « EX » is displayed on the right side. Press button 6 to leave the menu.

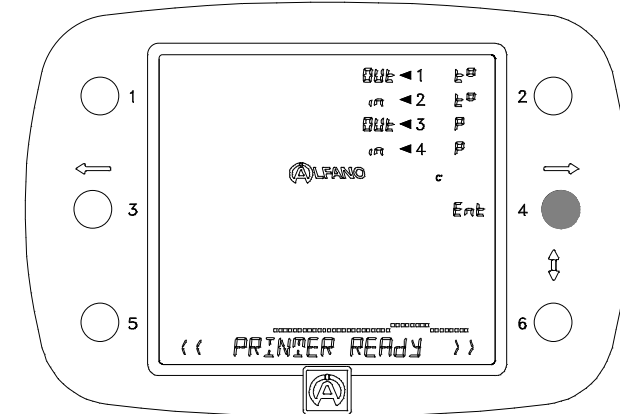


For a faster introduction of the pressure values, you can configure the pressure value of your choice in the menu « DEFAULT PRESS » in « CONFIG SYSTEM », which will become the pressure value by default.

In the « RECALL » mode, pressing button 6 three times will put the VISION device in the « PRINTER » mode

<< PRINTER >>

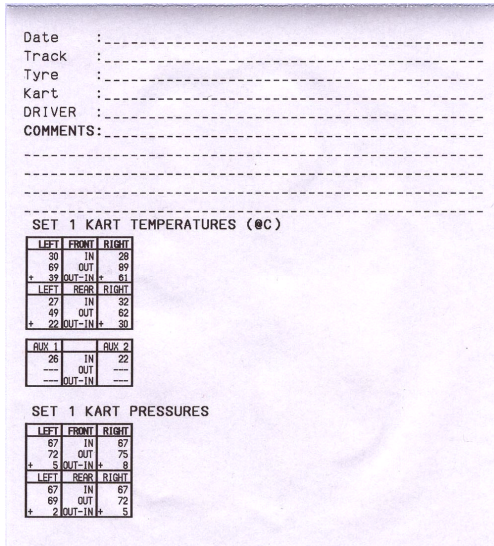
This menu allows you to print the data of the 4 channels to a thermal printer .



First of all, connect the thermal printer SEIKO DPU-3445-20 (A-483) by means of its communication port RS232 and turn on the printer. The phrase « PRINTER READY » must be displayed in the text line of the VISION device. This means that the printer has been recognized. Afterwards, press button 4 « ENT » to launch the printing process.

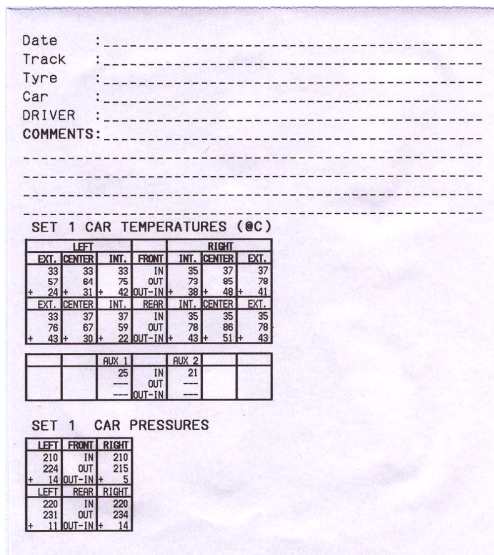
Example of printing obtained. (Paper size 110mm)

Set Karting



Example of printing obtained. (Paper size 110mm)

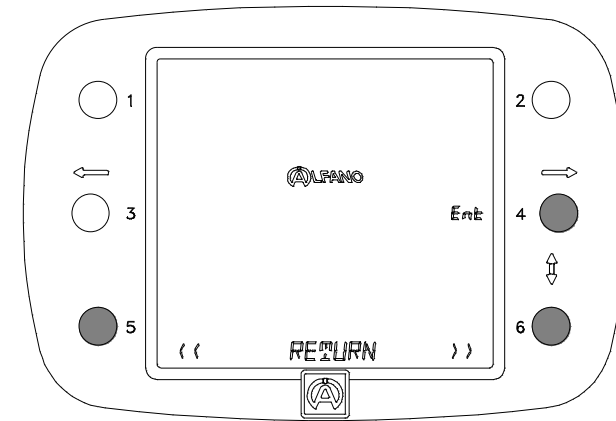
Set Car



In the « RECALL » mode, pressing button 6 four times will put the VISION device in the « RETURN » mode

<< RETURN >>

This menu allows you to leave the menu « Set » and to return to the main menu.

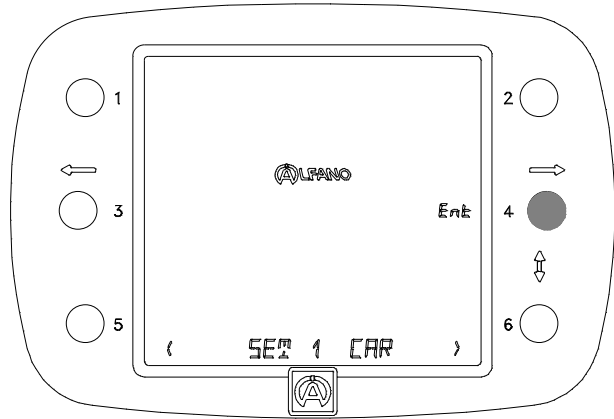


Press button 4 « ENT ».

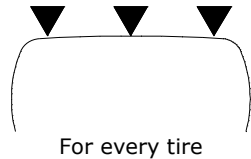
In the « DATA » mode  
 - pressing button 6 three, four or five times will put the VISION device in the Set1, Set2 or Set3 mode

< Set CAR >

These 3 menus are almost identical to the menu « Set1, Set2, Set3 KARTING ». The difference lies within the tire temperatures. In fact, these 3 menus « Set1, Set2, Set3 CAR » will allow you to record three temperatures for every tire instead of one.



Exterior - Center - Interior



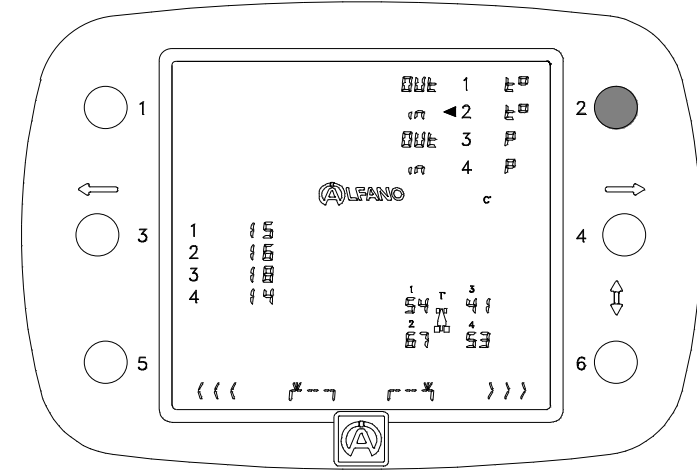
In the menu « CONFIG SYSTEM », you can choose

- either to use the menus « Set1, Set2, Set3 KARTING »
- or to use the menus « Set1, Set2, Set3 CAR »

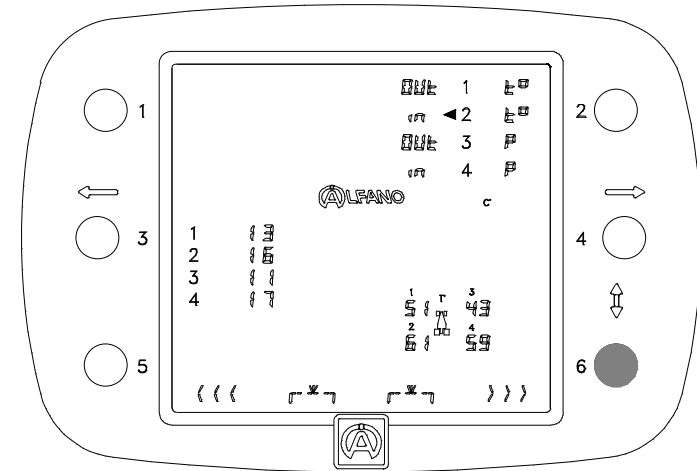
Given the resemblance of the structure of these menus, we will only detail the differences between the sections « Set KARTING » et « Set CAR »

<< RECALL >>

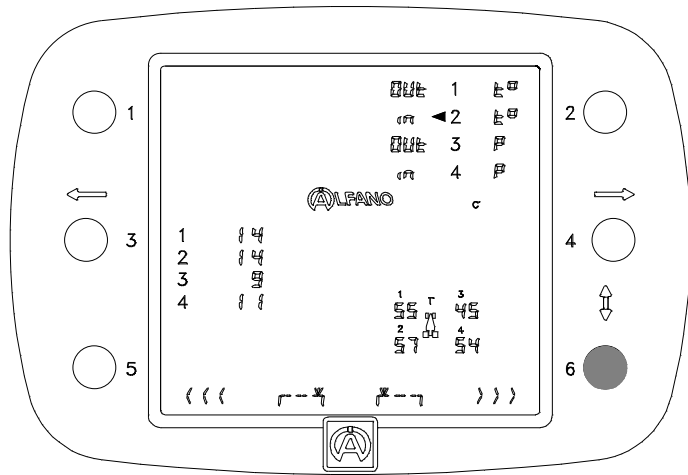
At the time at which the pneumatic temperatures are reread, the VISION device starts to focus on the external portion of the tires. At the bottom of the screen you will notice a small illustration retrieving the superior form of 2 tires and the position of the counter on the tire. See example below.



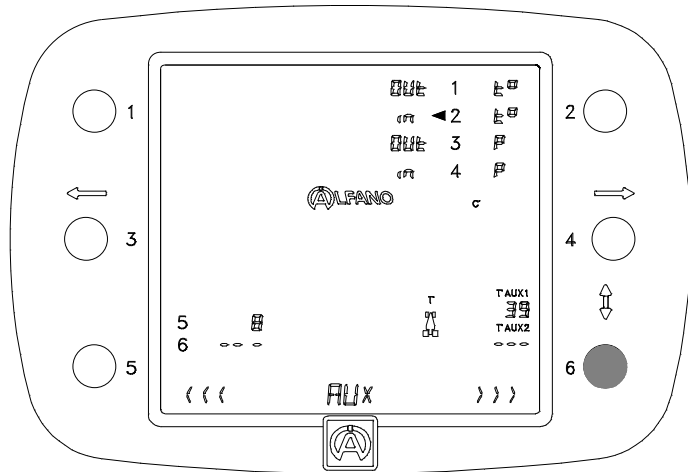
Press button 6 to read the temperatures relating to the center of the tires. See example below.



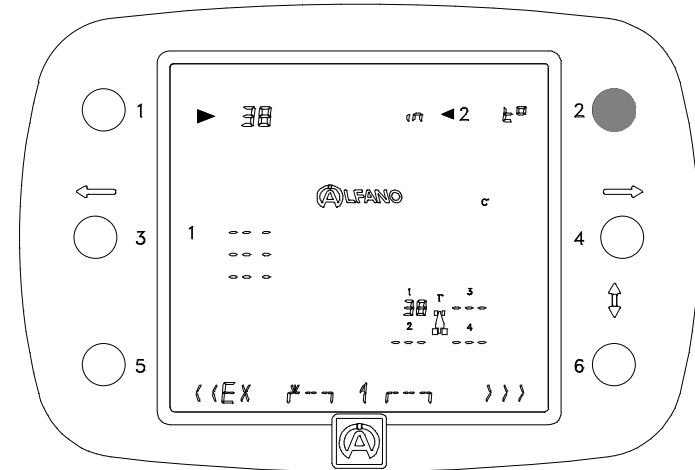
Press button 6 once again to read the temperatures relating to the interiors of tires .  
See example below .



Press button 6 one more time to read the 2 auxiliary temperatures. Example below .

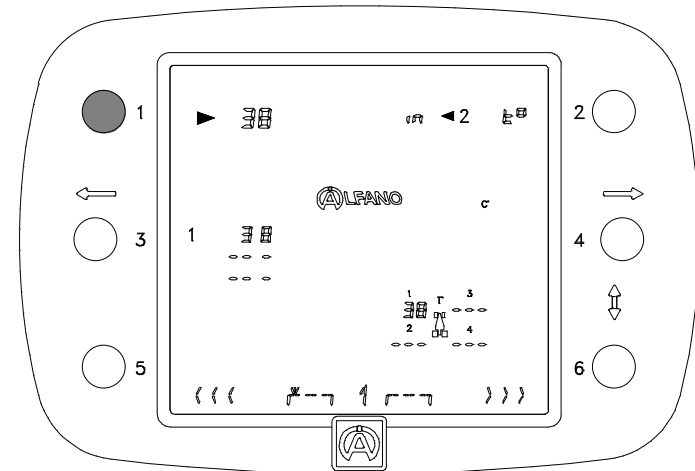


The VISION device starts to focus at the external portion of tire n°1. At the bottom of the screen you will notice the position at which the counter must be on the image of the tire .  
See example below .

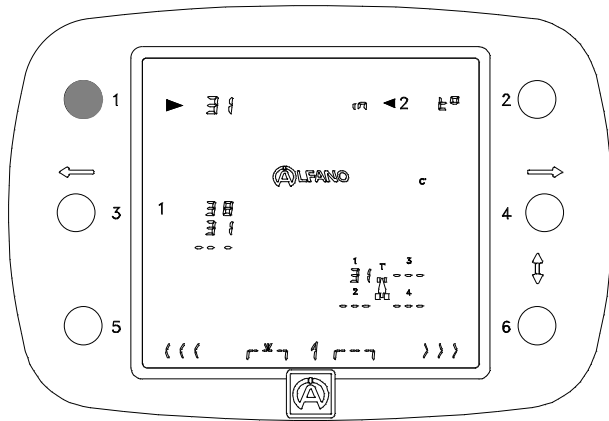


While the 3 temperatures relating to the first tire are captured, the information will be displayed on the left side underneath the logo ALFANO (see the 3 examples below)

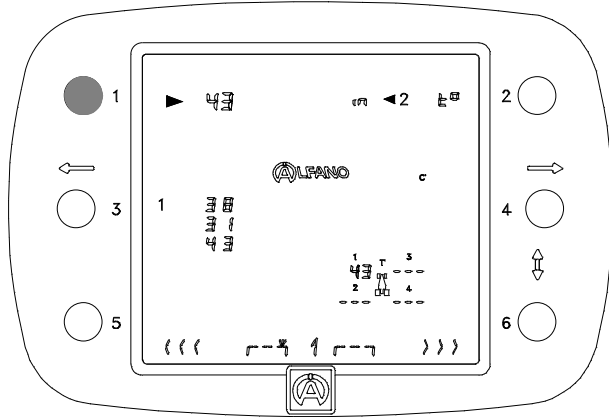
1<sup>st</sup> capture realized on the exterior of tire 1 « 38° »,



2<sup>nd</sup> capture realized in the center of tire 1 « 31° »,



3<sup>rd</sup> capture realized on the interior of the tire « 43° »,



During the following captures referring to tire n°2, the 3 temperatures memorized on the left side underneath the logo ALFANO and belong to tire n°1 will give up their place to the recording of tire n°2. And so forth, up to the 4<sup>th</sup> tire.

You have the possibility of restarting a capture. In fact, if a false or bad maneuver has been made, it is possible to turn back the clock by means of button 5 and to redo the capture as explained above. The opposite is possible too if you wish to jump one or several cycles, activate button 6.

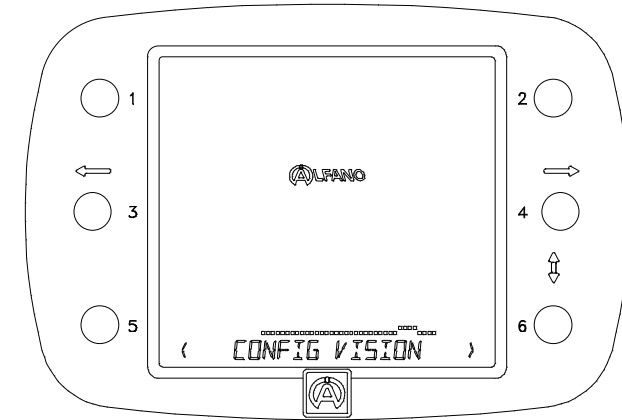
In the menu « CONFIG SYSTEM », you can choose

- to either use the menus « Set1, Set2, Set3 KARTING »
- or to use the menus « Set1, Set2, Set3 CAR »

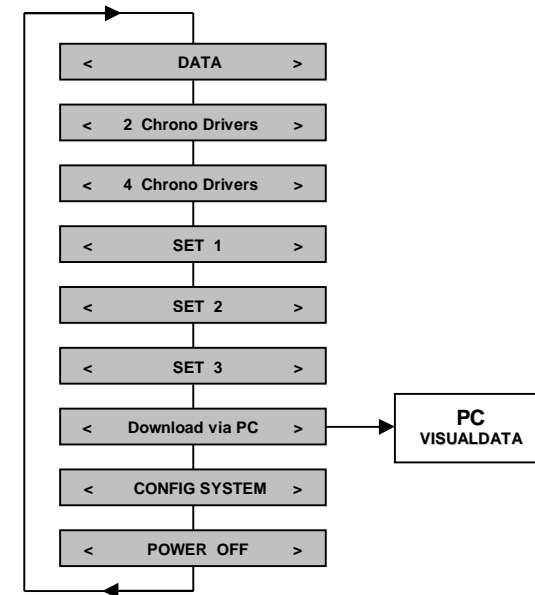
In the « DATA » mode, pressing button 6 six times will put the VISION device in the mode :

< VISION >> PC >

This menu allows you, across the software VISUALDATA, to transfer all data within the VISION device to the Personal Computer PC.



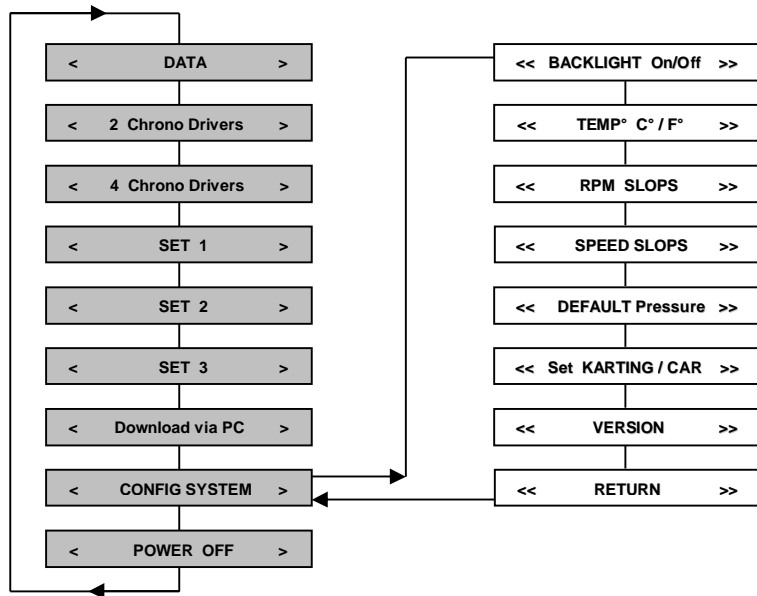
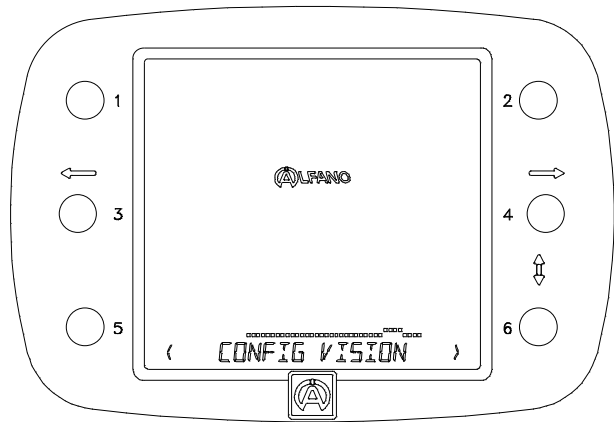
The transfer command is given at the level of the software VISUALDATA



In the « DATA » mode, pressing button 6 7 times will put the VISION device in the mode :

< CONFIG SYSTEM >

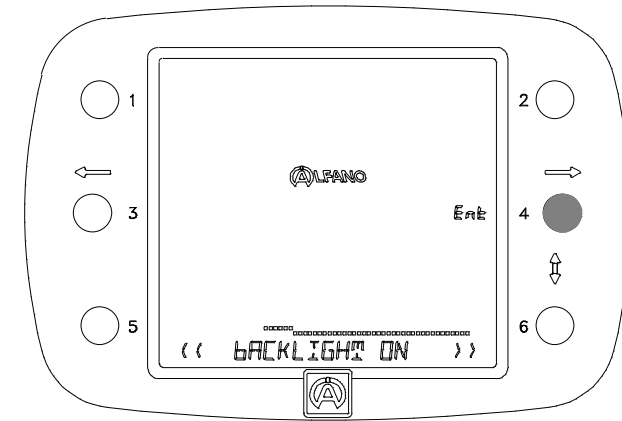
This menu allows you to configure various parameters



In the « CONFIG SYSTEM » mode, pressing button 4 once « ENT » will put the VISION device in the mode:

<< BACKLIGHT : ON-OFF >>

This menu allows you to activate the lighting of the screen.

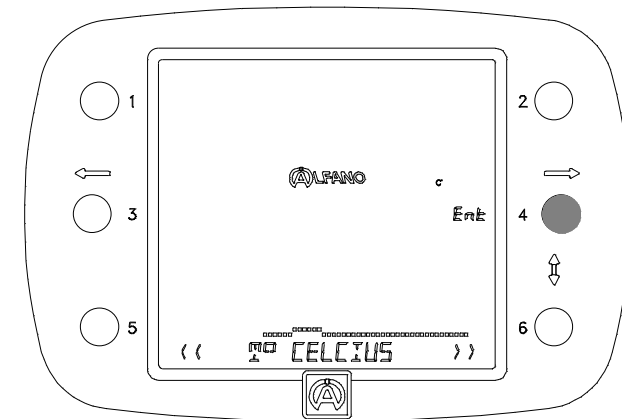


Activate the button « ENT » to realize your choice.

In the « Backlight ON-OFF » mode, pressing button 6 once will put the VISION device in the mode:

<< TEMPERATURE : F° - C° >>

This menu allows displaying « Set Karting or Set Car », the temperature in Celsius or Fahrenheit in the menu.

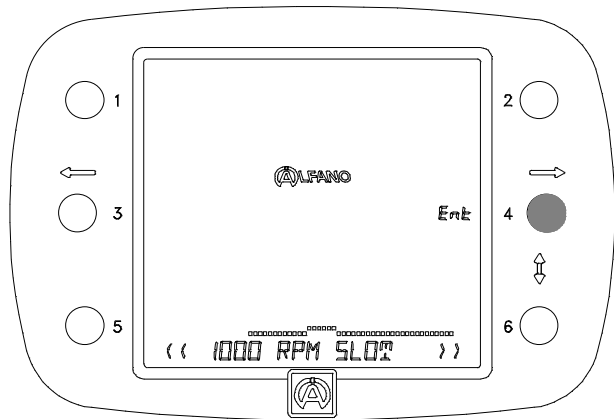


Activate the button « ENT » to realize your choice.

In the « Backlight ON-OFF » mode, pressing button 6 twice that will put the VISION device in the mode:

<< RPM : SLOTS >>

This menu allows you to select the desired coefficient to calculate the blocks RPM in the menu « RPM » « DATA » (1000, 500 and 250)

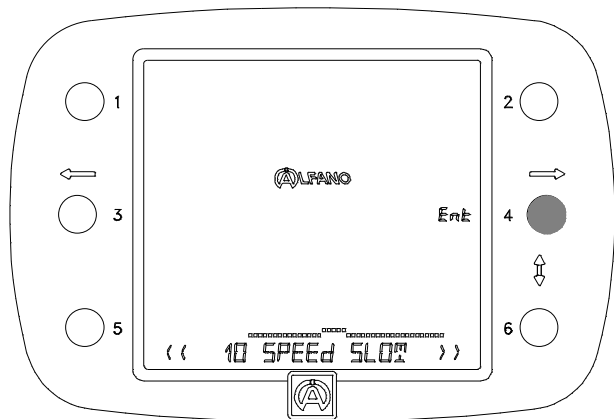


Activate the button « ENT » to realize your choice.

In the « Backlight ON-OFF » mode, pressing button 6 three times will put the VISION device in the mode:

<< SPEED : SLOTS >>

This menu allows you to select the desired coefficient to calculate the blocks « Velocity » in the menu « SPEED » « DATA » (5, 10 and 20).

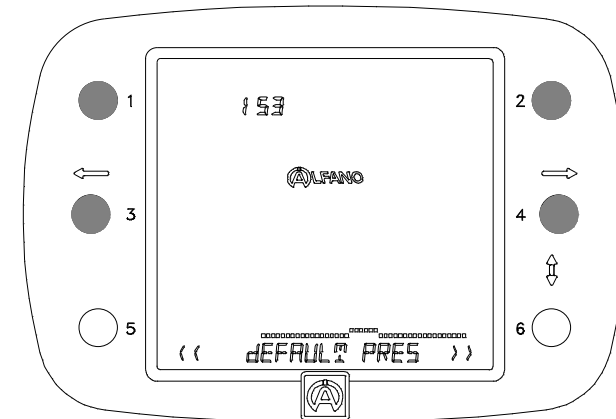


Activate the button « ENT » to realize your choice.

In the « Backlight ON-OFF » mode, pressing button 6 four times will put the VISION device in the mode:

<< DEFAULT :: PRESSURE >>

This menu allows you to configure a pressure by default used in the menu « Set Karting - Car »

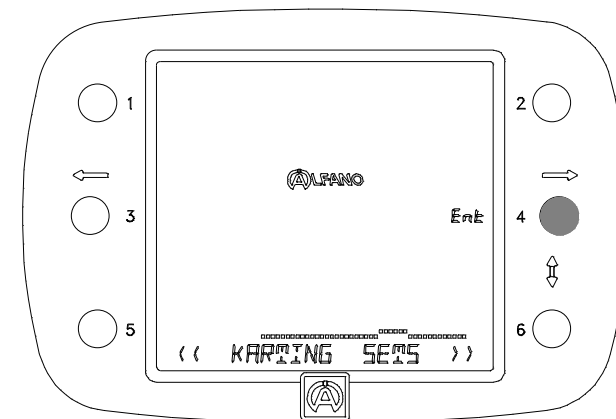


Activate button 3 to diminish the value by 1 unit  
 Activate button 4 to increase the value by 1 unit.  
 Activate button 1 to diminish the value by 10 units  
 Activate button 2 to increase the value by 10 units.

In the « Backlight ON-OFF » mode, pressing button 6 five times will put the VISION device in the mode:

<< SET : KARTING / CAR >>

This menu allows you to choose between « Set Karting » or « Set Car ».

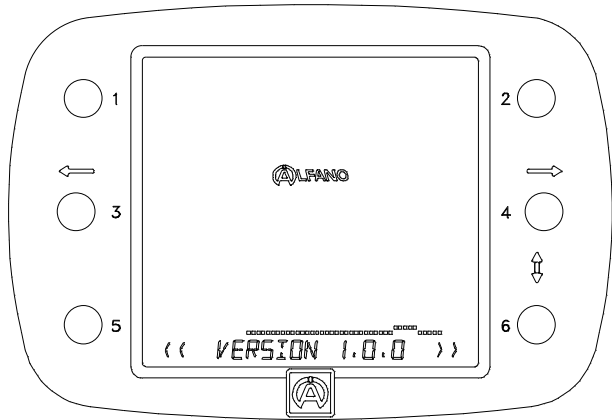


Activate the button « ENT » to realize your choice.

In the « Backlight ON-OFF » mode, pressing button 6 six times will put the VISION device in the mode:

<< VERSION >>

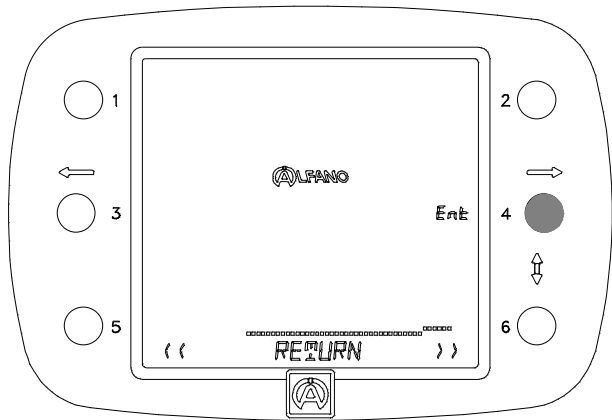
This allows you to view the version of your VISION device



In the « Backlight ON-OFF » mode, pressing button 6 seven times will put the VISION device in the mode:

<< RETURN >>

This menu allows you to leave the menu « Set » and to return to the main menu.

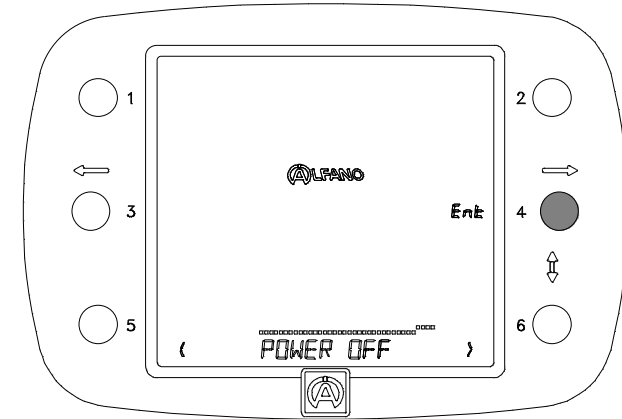


Press button 4 « ENT ».

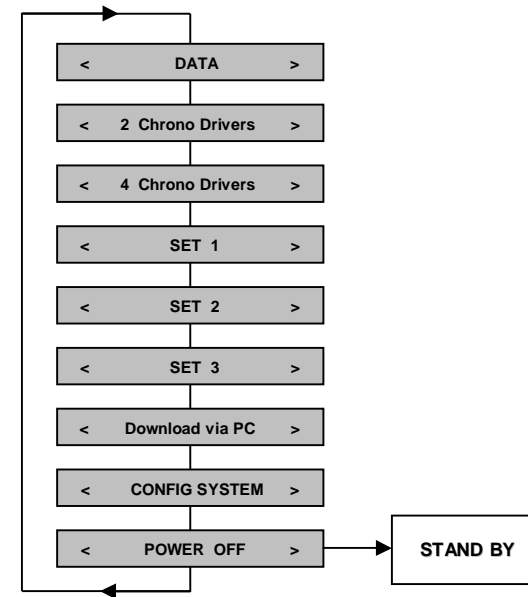
In the « DATA » mode, pressing button 6 eight times will put the VISION device in the mode:

< POWER OFF >

This menu allows you to turn off the VISION device.



Press button 4 « ENT ».



## Warranty conditions

All our devices have been subjected to thorough inspections in the factory and are covered by a warranty of 24 months against manufacturing errors. The warranty takes effect as of the date of purchase. The date of purchase is the date indicated on the invoice/receipt that was delivered at the time of the purchase by the retailer. The manufacturer is committed to freely repair and replace the pieces containing manufacturing errors during the period of the warranty. The defects that cannot be attributed to the material or manufacturing will be examined by one of our customer services or by our central office, and are also invoiced in function of the results. The warranty does not apply when opening the device, accidental damage as a result of negligence or inapplicable use, in case of an incorrect, erroneous installation not in accordance with the indications that are demonstrated in the manual, and in case of independent phenomena of the use and functioning standards of the device. The warranty is cancelled in case of repairs or manipulation applied by unapproved third parties. The intervention under the warranty does not entitle to replacement of the device or the extension of the warranty. The intervention under the warranty and implemented by one of our centers of the customer service or by our office. In the latter case, this piece must be sent to us free of freight from our company, in other words, the transport fees are at the expense of the user. The manufacturer denies all responsibility in case of damage inflicted upon people or goods as a result of a bad installation or incorrect use of the device.

## Product modifications

**Alfano S.A.** applies a continuous development method. Consequently, **Alfano S.A.** reserves itself the right to make changes and improvements to any product described in this document without any prior notice.

## Damages and liability

While the products are used under the single leadership and responsibility of the Client, the latter will support the damage that the products can undergo or cause. No damages are provided for deprivation of enjoyment. ALFANO cannot be held responsible for the direct or indirect consequences of their exploitation or of their unusability. The obligations of ALFANO are obligations in kind and not in result.

## Disposal

The disposal of the machine must take place with respect for the environment .  
The chronometer and its accessories contain a lot of plastic pieces .  
If the chronometer or one of its accessories does not function, these must be treated in accordance with the legislation of the country. Everything, including the old batteries must be disposed of according to the regulations in effect in your country .

## **ALFANO S.A.**

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**[www.alfano.com](http://www.alfano.com)**