

# QViRace

Lap counter platform form slotcar

## User Manual

version 1.0.16

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# Chapter 1: About this guide

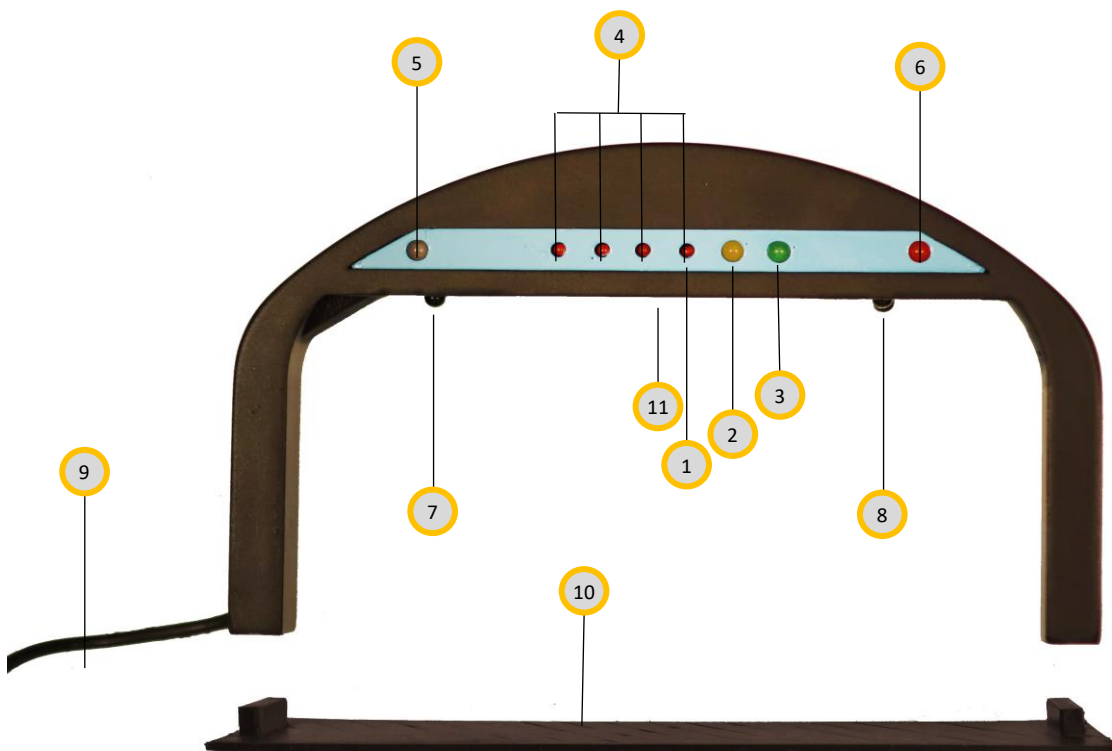
This user manual corresponds to the 1.0.16 version of QViRace platform that is included in the product box CD. This guide can also be downloaded from QViRace web page: <http://qvirace.qvit.com.ar/#downloads> QViRace Slot Car Lap Counter Platform consists of two elements: QViRace lap counter device and QViRace software. This guide considers both parts and specifies the details and operation in separated parts for a better understanding.

## Chapter 2: Device

### 2.1. Specifications

- Electronic lap counter device, with a PC, notebook or tablet connection (with x86 processor) through a USB port 2.0 (an 80 cm USB cable and a 150 cm extension cord are included in the product box).
- Compatible with 1/32 Slot-Car (Scalextric, Carrera, Ninco, or similar) with two tracks.
- The electronic lap counter device detects the passage of the car below it by an infrared sensor (even with low light), and it sends the passing signal to QViRace software.
- QViRace software processes the data and calculates all the race statistics, as it is specified in [3.6. Race](#) section of this guide.

### 2.2. Parts



- 1- Indicator light that shows the device is connected.
- 2- Indicator light that shows the race is paused or finished.
- 3- Indicator light that shows the race is on.
- 4- Starting lights indicator. They turn on in sequence when the race starts.
- 5- Indicator light of left track car passage.
- 6- Indicator light of right track car passage.
- 7- Left track infrared sensor.
- 8- Right track infrared sensor.
- 9- 2.0 USB cable.
- 10- Detachable base. (\*)
- 11- Central inferior light. It illuminates the part of the track under the device.

(\*) If you want to know how to put on/take off the detachable base, go to [2.6. Detachable base](#) from this guide.

## 2.3. Dimensions

- External dimensions: 19 cm width x 11,5 cm height x 3 cm depth.
- Internal dimensions: 17 cm width x 8 cm height x 3 cm depth (area where cars pass by).

## 2.4. Minimum requirements

- PC, notebook or tablet (with x86 processor).
- 2.0 USB port.
- 2Ghz Dual core processor or superior.
- 2GB RAM memory.
- 200 MB free disk space.
- Internet connection (only required to share the race results on social networks).

**IMPORTANT:** QViRace device should be connected to a 2.0 USB. Otherwise, even though the device and QViRace software may operate, there may be some delayed in the detection of the passage of cars and the times indicated on the screen could not be the correct ones. Moreover, some passages of cars may not be detected.

If you want to know how to identify 2.0 USB ports, go to [4.1. Identify 2.0 USB port](#) from this guide.

## 2.5. Connection

- Connect the USB cable from the device to a 2.0 USB port in the PC, notebook or tablet (with x86 processor). If you want to know how to identify 2.0 USB ports, go to [4.1. Identify 2.0 USB port](#) from this guide. QViRace device should be automatically recognized by the computer. If the computer does not recognize QViRace device, go to [4.2. Drivers](#) appendix to find out how to solve this.
- Execute QViRace software and wait a few seconds until the device is recognized and configured by the software. For more information about the connection and the platform functioning, go to [3.2. Installation](#) and [3.3. Use](#) sections.

**Note:** if the distance between the place where the device has been installed and your PC is longer than 80 cm, you can use the 150 cm extension cord included in the product box or use another USB cord paying particular attention that it is a 2.0 USB.

**IMPORTANT:** If you use a 2.0 USB extension cord that is not the one provided by QVi as part of QViRace package, make sure that the USB cable is a 2.0 USB cable one. Otherwise, the device may not work properly and it can cause eventual damage.

## 2.6. Detachable base

The detachable base included in the product box should be placed and removed from the device carefully so as to avoid damages.

- **Placing the base:** the turquoise part of the base has to be fixed in the turquoise part of QViRace device while the black part of the base has to be placed in the black part.
- **Removing the base:** place one hand pressing the detachable base against a plain surface and, with the other hand, move QViRace device softly, forwards and backwards, pulling QViRace device out until it is removed.

## 2.7. Frequently asked questions

- **¿Can I use a USB extension cord?**

Yes. If you use a 2.0 USB extension cord that is not the one provided by QVit as part of QViRace package, make sure that the USB cable is a 2.0 USB cable one. Otherwise, the device may not work properly and it can cause eventual damage.

- **¿What can I do if the device generates altered data?**

If QViRace device generates altered data once the lap counter device is placed above the track and is connected to the USB port of your computer, it can be due to a reflection surface under the track. Even though the device works under a great variety of light intensity, it is advisable to avoid placing it above white or reflecting surfaces. If there is no possibility to place the device in another part of the track, you can put the detachable base (\*) under the track and that can avoid any reflection and so, false data.

(\*) If you want to know how to place/take off the detachable part, go to [2.6. Detachable base](#) section of this guide.

Another frequent cause is the direct light to the device, either from artificial or natural light. If the device is placed in such a position that it receives a direct source of light, try to move it to another part of the track or block the light so as to avoid straight incidence of brightness onto the device.

- **¿What can I do if the device doesn't detect the passage of cars?**

If QViRace device doesn't detect the passage of cars once the lap counter device is placed above the track and is connected to the USB port of your computer, it can be because the room is too dark. Even though the device works under a great variety of light intensity, it needs to receive a small range of light to function. If there is no possibility to place the device in another part of the track with more light, you can turn on the inferior central light of the device. If you want to know how to turn on the inferior light, go to [4.2. Central light](#) from this manual.

## Chapter 3: Software

### 3.1. Minimum requirements

- PC, notebook or tablet (with x86 processor).
- 2Ghz Dual core processor or superior.
- 2GB RAM memory.
- 512MB VRAM video card (DirectX 10 or superior).
- Sound card.
- 200 MB free disk space.
- Windows 7, 8, 8.1, 10.

### 3.2. Installation

In the installation CD included in the product box, you will find a folder called "Software". Execute the "*setup.exe*" file that is in this folder and follow the steps shown on the screen.

If you have downloaded the installer from QViRace web page (<http://qvirace.qvit.com.ar/#downloads>), unzip the "*qvirace\_x.x.x.rar*" file (where x.x.x denotes the numbers of the downloaded version) in a created folder. Once it is unzipped, execute the "*setup.exe*" file in the folder and follow the steps shown on the screen. When the installation is over, you can execute QViRace software from the created icon in the desktop of your PC.

### 3.3. Use

- Connect the QViRace lap counter device to the PC, notebook or tablet, by a USB cable included in the device. For more information, check [2.5. Connection](#) from the guide.
- Execute QViRace software (previously installed) from the icon created in the desktop of your PC. Wait a few seconds until the device is recognized and configured by the software.

### 3.4. Configuration

QViRace software detects the device once it is connected to the USB of the PC and then, there is an autoconfiguration without the user intervention. The software does not need any other extra configuration.

Likewise, QViRace software adapts itself to the screen dimensions of your PC, notebook or tablet. The software can also be used in external screens (with better or worse resolution) connected to the PC or notebook, by just dragging the QViRace software window up to the other chosen screen. Once QViRace software window is situated in the new chosen screen, it will autoconfigure again and it will adapt itself to the new screen dimensions.

### 3.5. Elements on-screen

The screenshot shows the QViRace software interface. At the top, there are several data fields: 'TIEMPO DE CARRERA' (00:01:10.158), 'VUELTAS' (12 / 20), and 'RECORD DE CARRERA' (00:03.520 by Fernando Alonso, vuelta 6). To the right are starting lights indicators (red, red, red, yellow, green) and buttons for 'CONTINUAR' and 'FINALIZAR'. Below this is a table of pilot statistics for two pilots: Fernando Alonso (1st) and Nico Rosberg (2nd). The table columns are POS, PILOTO, TIEMPO, VUELTA, DIFERENCIA, and MEJOR VUELTA. Below the pilot statistics are two detailed lap tables for Nico Rosberg (left) and Fernando Alonso (right), showing Vuelta, Tiempo, and Vel.prom. for laps 4 through 11. To the right of these is a 'Configuración' (Configuration) window with settings for 'Vueltas de la carrera' (20), 'Longitud de la pista (metros)' (14,50), 'Tiempo mínimo de vuelta (segundos)' (2), pilot names, and a 'Luz central' checkbox. At the bottom, there is a status bar showing 'CARRERA PAUSADA' and the QViRace logo.

- 1- Total time of the race.
- 2- Complete laps / Total laps.
- 3- Race record (time, pilot and lap number).
- 4- Starting lights indicator.
- 5- Indicator lights showing the state of the race.
- 6- Start race button / Pause race button / Resume race button.
- 7- Finish race button.
- 8- Pilots statistics data line, ordered according to the classification position of the current race:
  - Column 1:** Position
  - Column 2:** Name of the pilot
  - Column 3:** Lap time
  - Column 4:** Lap number and average lap speed
  - Column 5:** Time difference / Lap difference
  - Column 6:** Pilot best lap in the race (time and lap number)
- 9- Left-track-pilot lap details: average time and speed from each lap.
- 10- Right-track-pilot lap details: average time and speed from each lap.
- 11- Race configuration options: these configurations can only be modified if the race has not already started or if it has already finished. If the race is in *Pause* mode or the pilots are running, the options are disabled
  - Race laps:** total number of laps the race has.
  - Track length:** in this field, you can indicate the total length of the track (measured in meters); If you complete this field, the software will calculate the average speed per lap. If this field is not completed or left in 0 (cero), the speed averages will not be calculated during the race.



**Minimum lap time:** when you complete this value, QViRace software will show the expected minimum duration of time between two passage-of-cars detections to be considered as race laps. This configuration is relevant to exclude the possibility that the infrared sensor counts one more lap when the passage of cars is in low speed. This value is configured in 2 seconds by default.

**Name of pilot 1:** in this field, enter the name of pilot 1. The name of pilot 1 is related to the information that it going to be shown about the left track pilot.

**Name of pilot 2:** in this field, enter the name of pilot 2. The name of pilot 2 is related to the information that it going to be shown about the right track pilot.

**Central light:** on/off switch to turn on or off the central inferior light of the lap counter device. (\*)

**Apply button:** this button saves the configuration data that will be used for the following race.

12- Information about QViRace software version and about the device model. In order to visualize this information, click on QViRace logo and the information will be unfolded. If you want to hide the information, just click the logo again.

13- Messages visualization area: in this section, there are shown the messages of the state of the race.

(\*) The central light of QViRace device cannot be turned on/off during the race even if it is in *Pause* mode. For more information, you can read [4.3. Central light](#) of this guide.

## 3.6. Race

- Click "Start" button to start the race.  
The starting lights of the lap counter device will turn on in sequence, synchronized with the starting lights of QViRace software and their corresponding audible signals.
  - The race starts after the 4 red lights of the starting lights turn off and the green light turns on (together with a longer audible signal). Then, the passage of cars will start to be detected.
  - Once the race has started, and every time a car passes through the device, it will be a light signal in the lap counter device and an audible signal in QViRace software. A new complete lap will be counted for a pilot every time his car goes through the device. Meanwhile, the software will be collecting data and showing all the race average information on the screen.
  - Lap indicators: Every time a pilot completes a new lap, all the information related to that pilot is updated and shown on screen. The pilot that is winning the competition always appears on the top of the "Data line".
  - The time of each current pilot lap is shown in different colours:
    - If the time of the current lap is better than the previous lap time, the current lap time is shown in green for a few seconds.
    - If the time of the current lap is worse than the previous lap time, the current lap time is shown in red for a few seconds.
  - Pilot record lap: when a pilot makes his own best lap in the current race, it will be indicated as follows:
    - By an audible indicator making 2 consecutive "bips".
    - The software updates the pilot record data in the last column of the "Data line", in violet color.
  - Record lap of the race: when a pilot makes the best lap of the race, it will be indicated as follows:
    - By an audible indicator making 3 consecutive "bips".
    - The software updates the race record lap indicator on the top of the screen, in violet color.
  - You can pause the race any time you want by clicking the "Pause" button, and then you can resume it again by clicking the "Resume" button. If the race is in *Pause* mode, there will be a visual indicator on the QViRace software and a yellow light in the lap counter device.
- Note:** the race will turn to *Pause* mode automatically if the lap counter device is accidentally or intentionally unplugged from the USB port. If you reconnect the lap counter device to the USB port of the PC, you can

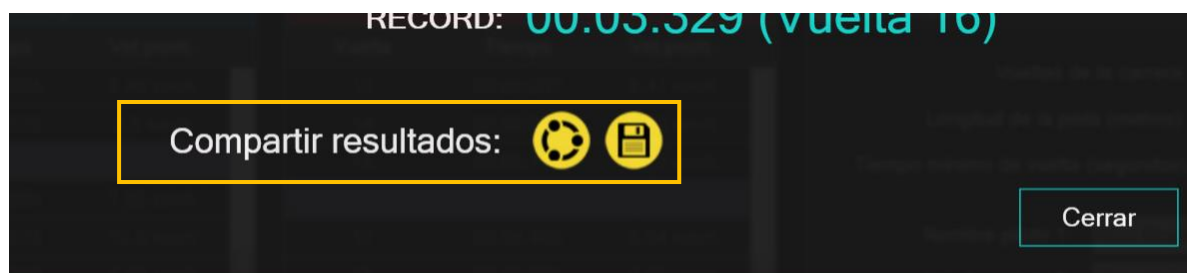
click the "Resume" button and the race will continue from the same point it was before the lap counter device has been unplugged.

- A message will be shown on the screen (in the message visualization area) when one lap is missing to end the race.
- The race finishes when one of the pilots completes the total number of laps configured for the race. When the race finishes, it will be indicated as follows:
  - ✓ Indicator lights in the lap counter device: the green, yellow and central red lights will turn on. The "passage of car" light will be intermittently on, on the winner side.
  - ✓ Audible signal: there will be an audible signal in QViRace software.
  - ✓ There will be a results square in QViRace software with some of the winner data. The race results can be shared on social networks or saved in the PC as it is mentioned in [3.7. Share or Save the results](#) section of this guide.
- All the final results and race statistics data will be shown on the screen up to the race is not finished manually, as it can be seen in the below image. In order to finish the race manually, click on the "Close" button from the results window and then click in the "Finish" button. After that, the race configuration can be changed (if it necessary) and a new race can begin.



### 3.7. Save or share the results

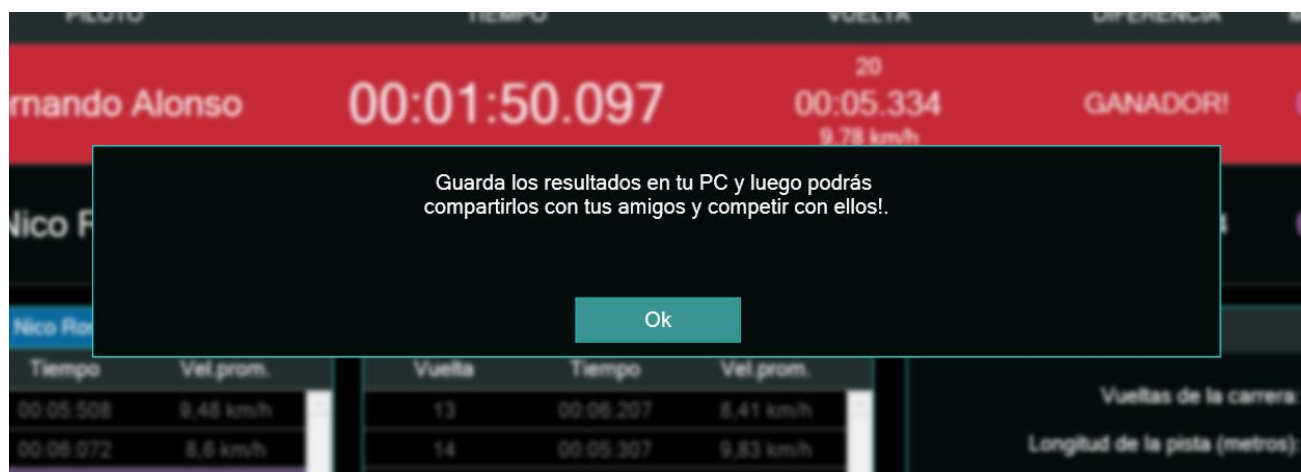
Once the race has finished, you can save or share the results by clicking in the corresponding button. As it is shown in the below images, those buttons can be seen in the "Finished race" window or, once this window is closed, in the left bottom part of the main screen.



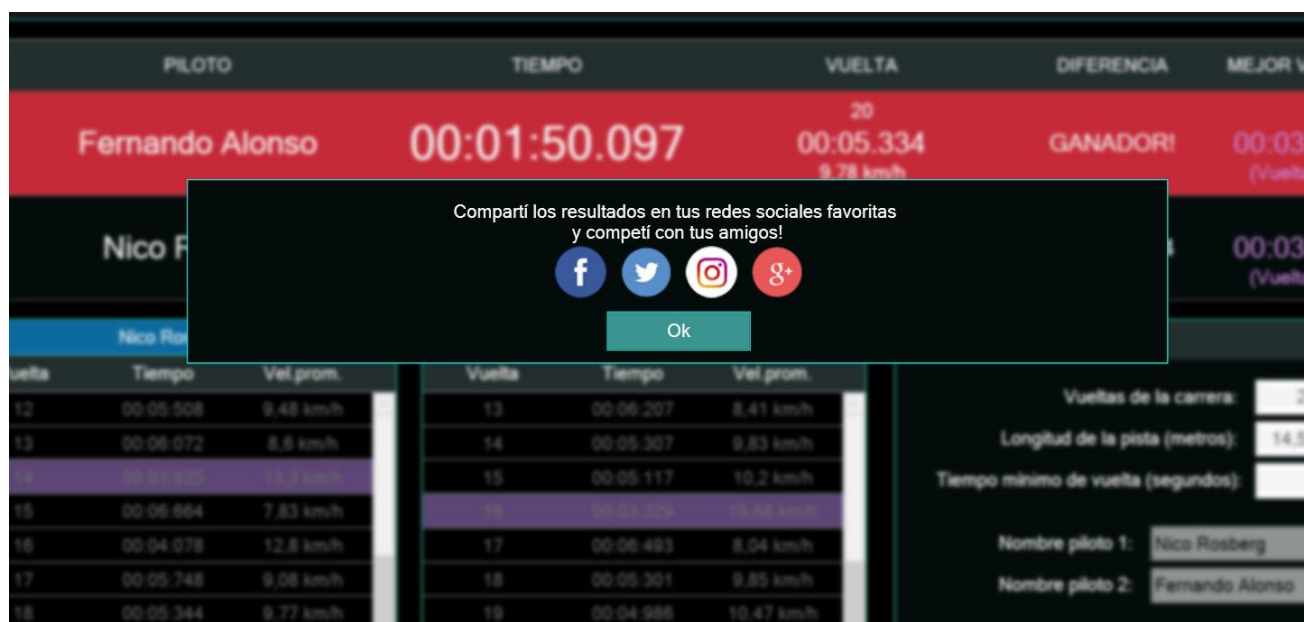
15	00:06:664	7,83 km/h	16	00:05:329	12,8 km/h
16	00:04:078	12,8 km/h	17	00:06:000	9,08 km/h
17	00:05:748	9,08 km/h	18	00:05:344	9,77 km/h
18	00:05:344	9,77 km/h	19	00:04:953	10,54 km/h
19	00:04:953	10,54 km/h	20	00:05:334	9,78 km/h

[Share icon] [Save icon] **CARRERA**

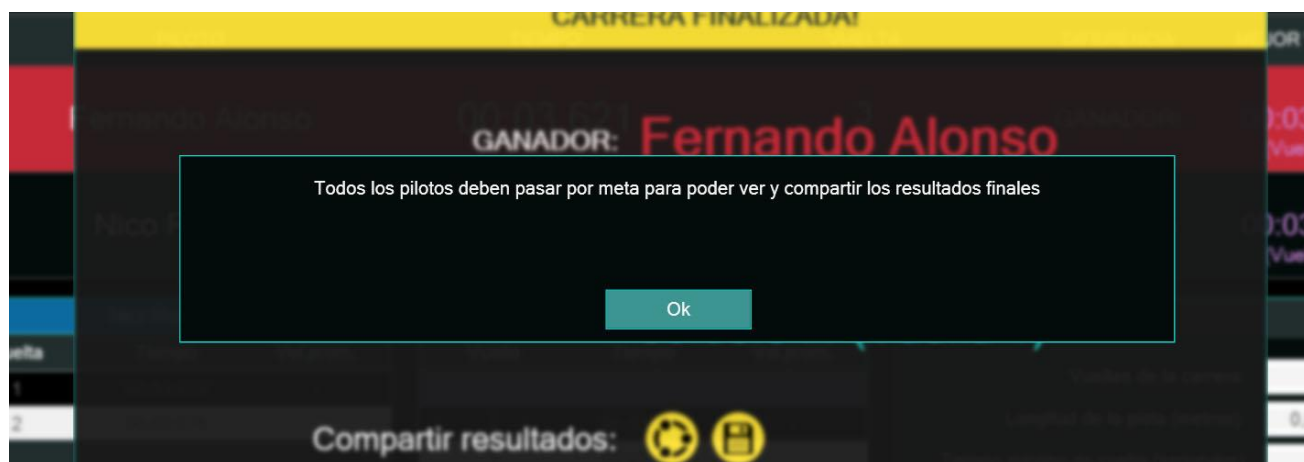
**To save the results in the PC,** click in the corresponding button shown in the above image. QViRace software will show a window where you have to choose the name and path of the file in which the data is going to be saved.



**To share the results** in your favourite social networks, click in the corresponding button shown in the above image. QViRace software will open your web **browser** and upload the necessary data to be able to share the race results.



**Note:** it is necessary that all the pilots pass across the finish line in order to be able to save and share the results. If you want to save and share the results and the second pilot has not passed the finish line yet, QViRace software will show a message as follows:



You can click on "OK" button and wait until the second pilot finishes the race. Once the second pilot passes the finish line, you can try again to save and share the results.

## 3.8. Frequently asked questions

- **¿Why can't I hear QViRace software audible signals?**

If you cannot hear the audible signals (during the start, during the passage of cars and at the end of the race) when the software is on, try to change the Operating System predetermined audio device. If you do not know how to change the predetermined audio device or if you consider there may be another kind of problem related to the audio device, you can examine that visiting your Operating System support page [Fix sound problems](#)

- **¿What happens if QViRace device is accidentally unplugged during a race?**

If the lap counter device is accidentally unplugged, you can connect it again to any USB port from your PC. QViRace software will be in *Pause* mode until the device is connected again. Once it is connected, the environment will be configured again automatically and you can restart the race from the same point it was before the lap counter device has been unplugged.

- **¿Do I need internet connection to use QViRace?**

The lap counter device and QViRace software run perfectly without internet connection. Internet connection is only necessary if you want to share the race results. If you try to share the race results without internet connection, QViRace software will show you on the screen that you cannot complete your request and it will allow you to save the results in the PC to share them later.

## Chapter 4: Appendixes

### 4.1. Identify 2.0 USB port

There are two ways to identify a 2.0 USB port:

**Visually:** the plastic tongue in the USB port is blue.

**From the options in your Operating System:**

- Click with the right button of the mouse on the Start Windows button and choose "Devices administrator" from the pull-down menu.
- In the open window, move down and double click in "Universal serial bus controller".
- Those devices within the list that show the label "Enhanced host" or "High-speed" are 2.0 USB ports.

### 4.2. Central light

QViRace device has a central light that can be on or off to vary the illumination on the detecting car zone. Taking into account the nature of the device and the way it detects the passage of cars by an infrared light, the option to turn on/switch off the central light is disabled, even when the race is in *Pause* mode. The central light can only be turned on/switched off before the race starts or when the race has finished. To know more about race options, go to [3.6. Race](#) section.

### 4.3. Drivers

QViRace device is a "plug and play" device, that means that it only needs to be connected to the PC by the USB. The PC recognizes the device and it can be used without the user intervention. However, as there are countless hardware/software/configuration combinations, there is a possibility that the device is not recognized by the PC.

In that case, the drivers should be installed manually. In the CD included in the product box, you will find a folder called "Drivers" and, in that folder, there is a file called "setup.exe". Execute that file and follow the indicated steps on the screen to install the drivers.

Once the driver installation is over, execute the QViRace software as it is mentioned in section [3.3. Use](#) in this manual.

# Chapter 5: Warranty

## Limited warranty

This product is warranted against manufacturing defects for (1) year from the original purchase date.

In the event that a valid proof of purchase is not available, the limited warranty period will be determined from the date of manufacture.

The date of manufacture is in the box of the product, for which reason for this guarantee to become effective, the device must be presented with all its packaging and original parts at the time of presentation.

QVit's sole obligation in the event of such defects during this period is to repair or replace the defective part or product with a similar part or product at QVit's sole discretion. Except in cases of replacement, the sale or other handling of this product is made without warranty, condition or other liability, even if the defect or loss due to negligence or other failure occurred. This warranty does not cover, nor does any other, any damage resulting from the use, accident, or normal wear and tear of the device.

QVit is not responsible for any accident, injury, death, loss or other claim related to the use of this product or resulting therefrom. Under no circumstances will QVit be liable for indirect or consequential damages related to the use of this product or any of its parts, or resulting therefrom.

## The manufacturer's warranty contained in this document is NOT applicable in the following cases

- if the device has not been used for the intended function and environment;
- if there is a failure or defect as a result of the presence of any third-party product, software or component, whether with or without authorization;
- if there is a failure or defect as a result of installation or verification procedures, improper use, negligence, unauthorized repair, modification, accident or other external causes;
- nor if any other circumstances that QVit considers to be evidence of breach of this Agreement by you.

QVIRACE LAP COUNTER DEVICE IS SEALED ON ALL ITS PARTS (EXCEPT THE DETACHABLE BASE), THEREFORE, ANY OPENING RAGE AUTOMATICALLY DISCLAIMS THIS WARRANTY).

## The manufacturer's warranty contained in this document does NOT include

- normal wear and tear (eg. alteration of color and / or material in the exposed parts of the device);
- any damage to any part of the device derived from abnormal / abusive use, lack of care, negligence, accidents (knocks, crushing, falls, etc.), incorrect use of the device and failure to follow the instructions for use provided in this manual (Including annexes);
- indirect or consequential damages of any kind arising from, for example, the use, non-operation, defects or inaccuracy of the values read by the device.

## The manufacturer's warranty, contained in this document

- is independent of the guarantee that can be granted by the seller, in respect of which the seller will be solely responsible.
- does not affect the rights of the buyer against the seller or any rights which the buyer may have against the seller in accordance with the applicable national law.

## Limitations of warranty and liability

Except as expressly provided herein, QVit disclaims all warranties, express or implied, including, but not limited to, the implied warranties of merchantability, fitness for a particular purpose, non-infringement, transaction and trade agreement. The duration of all express and implied warranties is limited to the limited warranty period.

This agreement reflects all the assumptions of QVit's responsibility and the only way of satisfaction to which you can appeal for breach of this agreement. In no event, shall QVit, its suppliers or affiliates be liable for any indirect, incidental or special damages, for any economic, data or file losses.

Even if QVit had been advised of the possibility of such damages and irrespective of the insufficient character of any of the limited channels of satisfaction. In no case, will QVit's liability exceed the amount paid for the product. These limitations and exclusions will be applied to the maximum extent permitted by current legislation.