

Virtual Reality

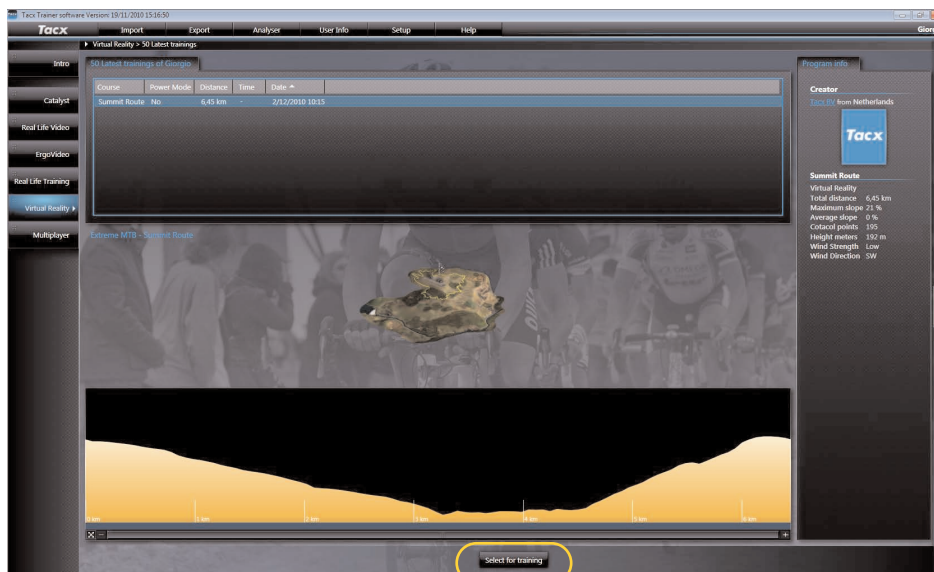
Having fun is the main goal in the Virtual Reality terrains. You can ride freely (with the VR steering frame) or inside a pre-programmed course. The following five terrains are included:

- Atlantis** road terrain for road cyclists and mountain bikers through dunes, along pastures and villages
- Callisto** mountainous terrain for mountain bikers and road cyclists featuring many turns and short climbs
- Extreme mountainbike** an adventurous terrain, demanding the utmost from your steering
- Olympus** mountainous terrain with tough climbs for road cyclists
- Velodrome** a cycling track with real competitions, day and night

Choosing a VR terrain

The last 50 training rides

This button is the fastest way to start a training session. A list of choices featuring the last 50 training rides by the selected user will appear. At one time you have ridden these training rides (possibly with opponents) and you can now repeat one. In the screen there is a map of the terrain with all of the roads. The course is indicated in yellow, a flag indicates the starting point. To the right you will find information regarding the program. Make your choice and press the button **Select for training** in order to start.



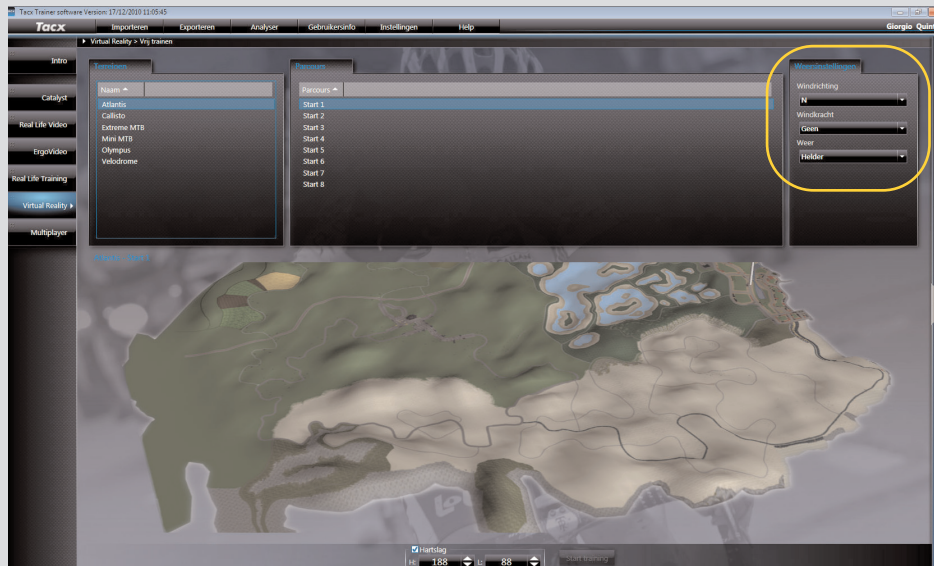
Select a route

In this screen you can choose the VR terrain to the left. After making your choice the partial courses that belong to this terrain will appear. The rest of the information is identical to that under The last 50 training rides. Make your choice and press the button **Select for training** when you wish to start.



Free training

Free training is possible only if the VR steering frame is hooked up. You are then free to choose the route you are taking across the terrains. Choose the terrain you wish to ride in on the left and determine the starting point in the list of choices next to that.



Weather settings

You can set the weather on the right side. You can choose from 8 different **Wind directions**. Under **Wind strength** you can choose from: None, Low, Medium and High. As for the **Weather** you can choose from Clear, Cloudy, Mist, Rain or Dynamic. Under Dynamic the weather will constantly change while you are riding. Under Rain the rider will slip in sharp turns. Under Velodrome there is no starting point, nor are there weather settings. In the tick box to the right you can choose to ride at night or in the day time.

Remove

You can remove the courses and corresponding scores. Removing the scores separately can be done through the button **View scores**. Choose from the list and press **Remove**. When you confirm the task in the warning field the program's score will have been deleted.

Start training

Before the start of your training you can select opponents and set your heart rate and weather settings for your training session.



This is the screen you will see before the start; it has a map of the terrain with the selected route marked in yellow. Underneath the map you will see the altitude profile with the weather settings to the right. At the bottom you will find information on the program. On the right side you can set your opponents, next to the button **Start training** you'll see the tick box for Heart rate with corresponding limits.

Heart rate

The tick box indicates if heart rate is switched **On** or **Off**. When **On** has been selected you can set the upper and lower limits of your heart rate with the arrow keys and mouse.

Opponents

An opponent is an adversary who has already ridden the same program. That could be you, or a score you have downloaded through BikeNet. You can select a maximum number of 5 opponents in this screen. All of the possible opponents are listed with their average speed and time. They will only participate in the race if you have selected them through the tick box. Using the button **Duplicate** you can copy the opponent. Rename the opponent; adjust his speed (faster or slower).

Opponent 1, the rider with the fastest time always wears the yellow jersey. Opponent 2, the second best rider sports a red jersey. Opponent 3 wears blue. Opponent 4 green and opponent 5 is dressed in purple. The user always rides in the jersey he/she choose for his/her user profile. You will find the opponents' colours back in the histograms showing all rider positions during the session.

Virtual opponents

These are computer-controlled opponents. You do not know what they are up to all of their actions are going to surprise you. They will be riding near you. You can enter an indicative average speed for the virtual opponent beforehand.

Functions during the training session

Start training

After pressing **Start training**, the loading bar appears and you will enter the virtual world where all the VR riders are on the starting line. Then the Count down appears. When it has reached 0, you can start riding. Watch out: this is the starting sign for the opponents, so they will start. When there is a false start, the Count down will start again.

Pausing during the training session

If you wish to stop training before crossing the finish line, a pop-up Pause will appear on your screen. This pop-up will indicate the time paused and current heart rate. All rider data will be frozen during the break. When you start riding again, the computer will continue to calculate based on these data.

Finish

You complete the program and a pop-up appears with your time and your opponents' times. Choose **Save**. If you wish to do so you can look at the scores later in the Analyser.

Stopping early

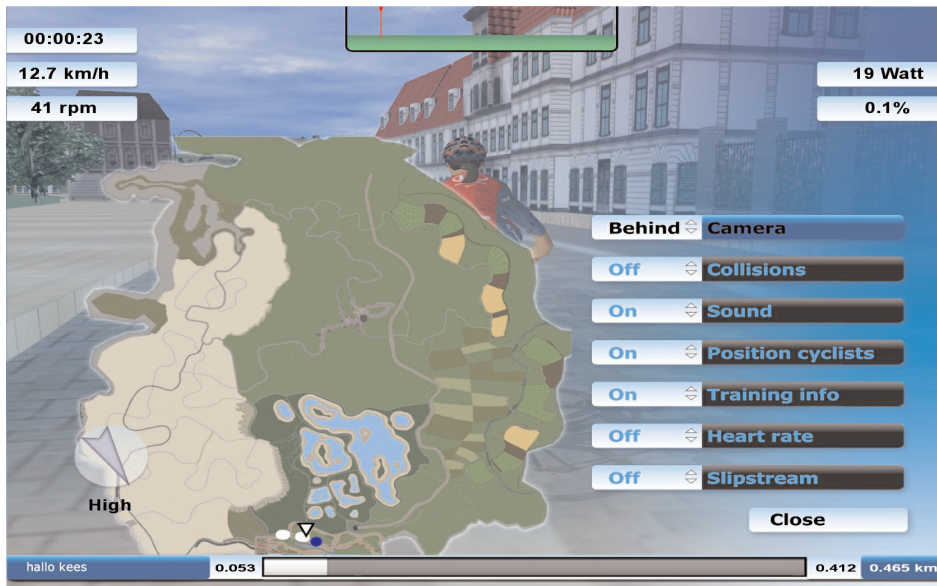
Stopping when you are not yet at the finish is done with the button **Cancel** (VR interface) or **arrow left** (Bushido/Vortex computer). A field appears asking you if you wish to save the part you have completed. If you do, the computer will automatically make a course from the stretch you last passed the finish line (there are 6 to 9 finish lines in every terrain). Rename the program and choose **Save**. If you wish to do so you can look at the scores later in the Analyser.

Divergence

When you diverge more than 75 meters off the course a pop-up with a warning will appear on your screen, asking you if you wish to return to the original course. If you confirm you will be put back onto the course, if you ignore it the program will shift to Free training and the opponents will expire.

Functions and screens during the training session

With the **Enter** button (VR interface) or **arrow right** (Bushido/Vortex computer) you can summon extra functions. A pop-up will appear in which you can set the settings of the screen in question with **arrow up** and **arrow down**. At the same time you see the buttons you will also see a terrain map. The road covered is colour marked and the opponents' positions are indicated as well. The overlap field disappears when no buttons was pressed for a few seconds. The settings that can be modified while you are riding are: camera angle, collisions, sound, rider positions, training info, guide, heart rate and slipstream (switching off the visual display of the wind coming off the rider in front of you).



Slipstream

The wind blows across the terrain from 1 direction. When you are riding behind a rider, or a group of riders, you are sheltered from the wind and as a consequence your power output will be slightly lower. If you are not riding in the best position behind this rider (or group) your advantage is smaller. This depends on the direction the wind is blowing from. Because you can also have a tail wind or head wind. The direction of the wind and its force are randomly started up for each new ride.

Modifying camera angle

Using **Arrow up** you can browse through the camera angles. You can, for instance, get an overview to see your opponents' positions during the race by looking over your shoulder for 2 seconds by pressing the **Arrow down** key once.

Setting sensitivity of the VR steering frame

When, with a small movement of the steering frame, the VR rider moves significantly on the screen you should diminish the sensitivity. After pressing the **+** and **-** buttons on your keyboard the setting (60-180) appears at the left hand top corner in yellow letters.

Training data during your session

In the left hand top part of the screen you will see the stopwatch (h:m:s), speed (km/h, mi/h), and pedalling frequency (rpm). In the centre top part of the screen there's an altitude profile with your position line. And to the right you can see power output (watt), incline in % and, if switched on, heart rate (hbm). At the bottom left a picture of a round compass (top view) indicating the direction the wind is coming from in relation to your current cycling position. On the right the road covered (km/mi).



Histogram rider positions

At the bottom of the window you can also read your opponents' progress in the program and position. To the left of the histogram you will see the names of the rider and the opponent, as well as the Distance/Time already covered. To the right of the histogram you will see the distance still left to cover and total distance. There are three different possibilities.



Training without an opponent

An empty bar will appear at the bottom of the screen, and this bar will slowly fill up from left to right.



Training with one single opponent

Two bars filling up appear. The upper bar (white) represents the user. The lower bar (yellow) represents the opponent. This visual representation gives you an impression of how you are performing with regard to your opponent. The difference in meters between the riders is given to the right, behind the opponent's bar. When the user is leading this number is green, when he is behind it will be red.



Training with 2, 3, 4 or 5 opponents

The riders are shown in coloured boxes. The box of the rider in the lead is all the way to the right. During the ride you can immediately see how these positions change. The difference in meters between the opponents with regard to the user is also visible in the coloured boxes.

Free training

During the workout the training data is visible at the top of the screen; at the right bottom you can see the covered distance. Under Free training you have the possibility to make a new course. Every time you pass a finish line you can stop by pressing the button **Cancel** (VR interface) or **arrow left** (Bushido/Vortex computer). A field appears asking you if you wish to save the course and score. If you do, name the course and choose **Save**.