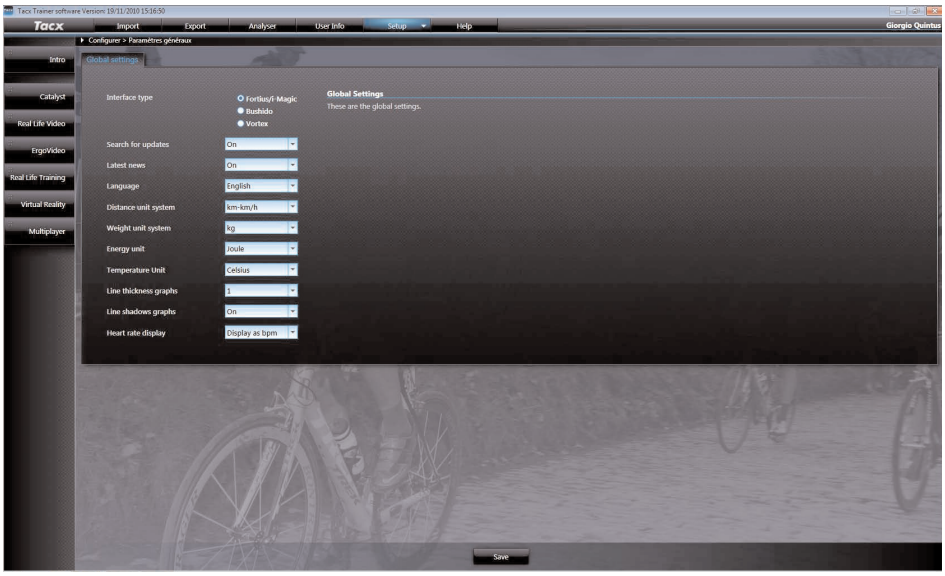
General Settings

This is where the general settings of the Tacx Trainer software can be adjusted.



Make your choice in the tick box behind the button. To t he right on the screen you will find a short description of the function. Adjusted settings are not applied until after you click **Save**.

Interface type You have already indicated the trainer type during installation. This type will be automatically continued in the software. If you wish to use a different trainer type, you need to adjust that by ticking the appropriate boxes. It goes without saying that only one trainer type may be installed at any time.

Detect Updates Will automatically look for available up-dates. The available up-dates will be shown in the intro screen (under Connected devices and Tacx Trainer software version).

News by Tacx Shows last news letter in the intro screen.

Language Changes the chosen language.

Units Changes distance, weight, energy and temperature.

Graphs Changes the thickness of the Analyser's graph lines (choose from 5 thicknesses) and during cycling in Catalyst. The shadow of the line can be turned on or off as well.

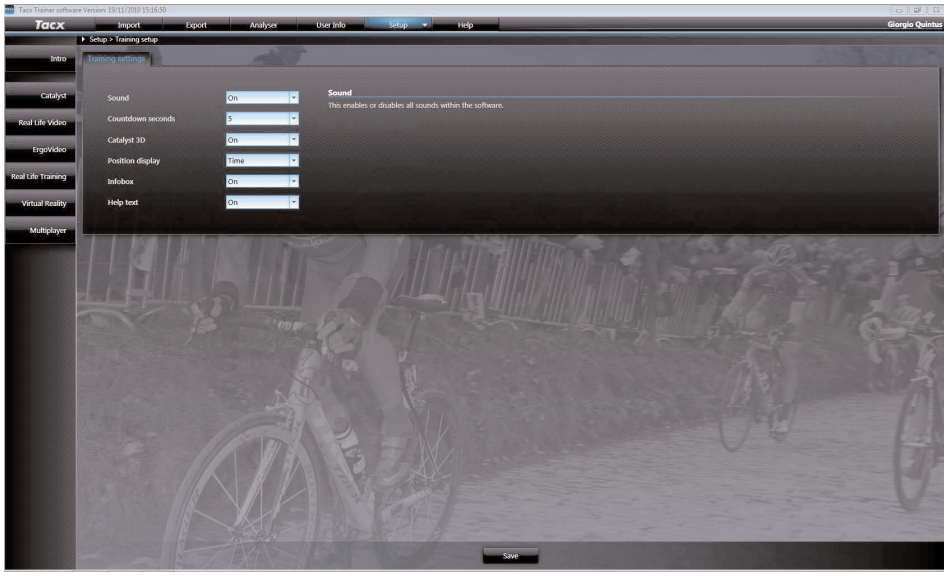
Graph Line thickness This is what you use to change the graph line thickness in positions 1 through 5. Where 1 is thinnest, and 5 thickest.

Graph shadow This is what you use to turn the graph's line shadow on or off.

Heart rate reproduced Choice between showing the real value for heart rate or the percentage with regard to your maximum heart rate as entered in your user profile. This setting will be continued throughout the Tacx Trainer software.

Training settings

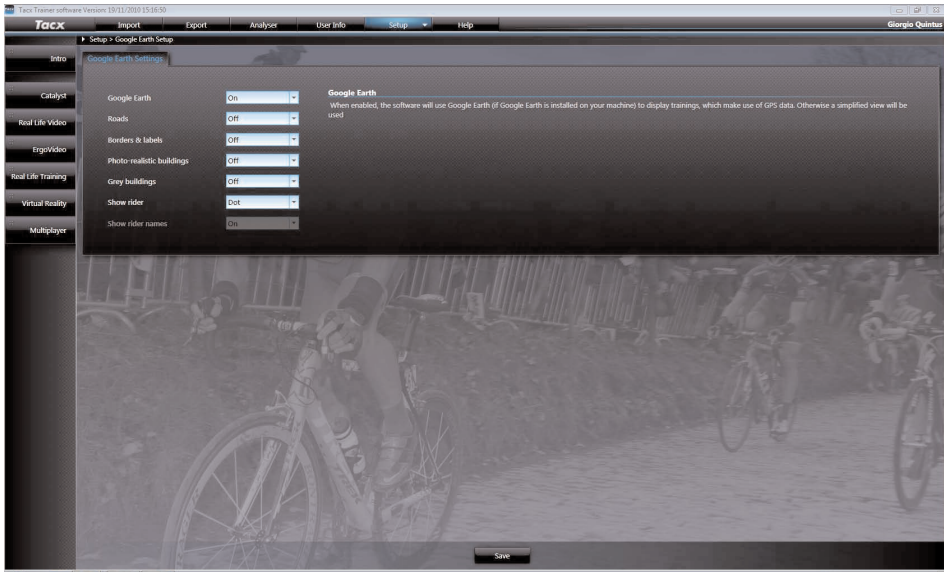
In this screen you can adjust the settings for your training.



Sound	On or off.
Countdown	Count down before the starting shot. Time can be set for 5, 10, 15 or 20 seconds.
Catalyst 3D	When you are training in incline or distance in the Catalyst, the program is converted into 3D. All riders will then be visible on a virtual road. This function does not allow you to steer.
Position indication	Position of the riders with regard to each other in time or distance.
Info box	At **On** a pop-up with additional information about what you are going to encounter on your way will appear while you are cycling. You can also make your own Info boxes when you are entering a new training program.
Help text	At **On** explanations will appear at several spots in the software.

Google Earth settings

This function only works when your computer is connected to the internet. This is where you can determine if the Tacx Trainer software will use Google Earth to reproduce training rides that utilize gps-data. If this function is disabled, a simplified version of the course will be shown.



Google Earth On or off

Roads On or off

Borders and town names On or off

Photo realistic buildings On or off

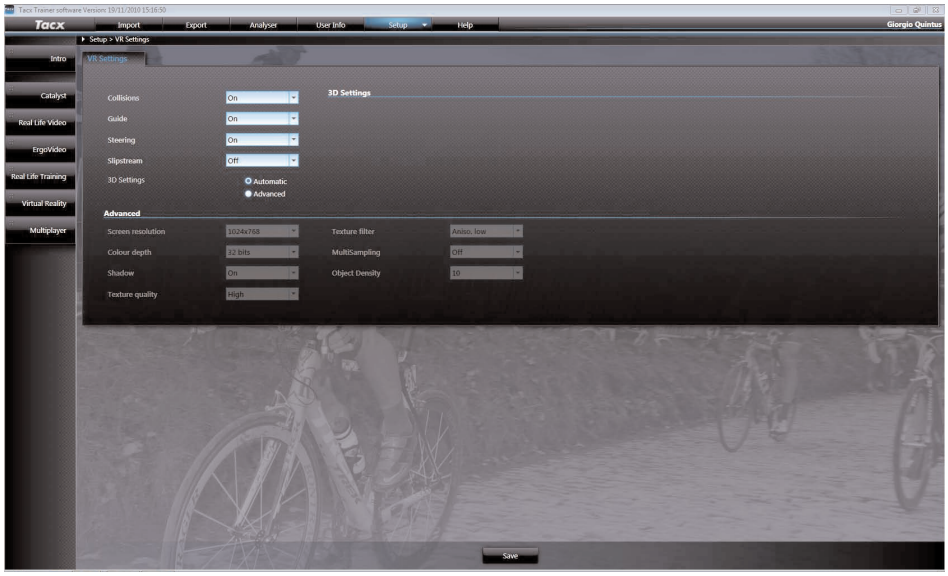
Grey buildings On or off

Show rider 3D or dot (for less advanced PC's).

Show rider names On or off

VR settings

These settings are only relevant when you ride through virtual worlds.



Collisions On or off. When you collide with an opponent or an obstacle in the terrain, you will fall when it's **On**. In order to be able to continue cycling, speed will have to be 0 km/h. At **Off** you will hit the obstacle without falling. The brake will be set to max as a warning.

Guide Choose to ride with or without a guide (on/off). The guide indicates the course to be followed.

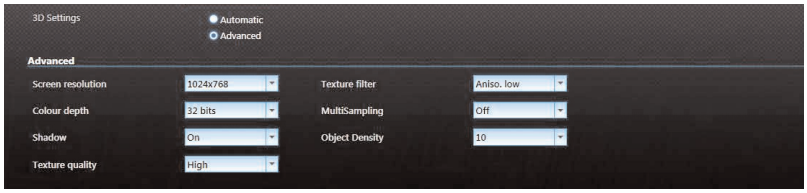
Handlebars Activates the VR Steering frame.

Slip stream Gives you a visual impression of the drag created by the rider in front of you. With slow systems it is better to turn slip stream off.

3D Settings Choice between Automatic or advanced.

3D settings - advanced

If the system does not function optimally when you are riding through the virtual worlds, you can adjust the settings under advanced.



Screen resolution Describes the number of pixels used on the screen. The higher the resolution is, the better the picture quality will be. This parameter depends on the resolutions the screen can handle.

Colour depth Colour depth describes the number of different colours that can be shown on the screen. 16 bit mode features 65.536 colours and 32 bit features 16,8 million colours. The parameter depends on the screen and selected resolution.

Shadow	**On** or **off.** If the rider's shadow is On, a distinct shadow on the road will be visible. With slow systems it is better to turn shadow off.
Texture quality	You can choose **low, medium** or **high**. Textures are the illustrations drawn on the 3D objects. The higher the texture quality is, the more realistic the world will look. Texture quality is especially visible when you get close to an object.
Texture filter	You can choose bilinear, anisotropical low or anisotropical high. The texture filter Will calculate the image points shown on the screen. **Bi-linear** uses average texture values so that they will not appear to be squarish. With **Anisotropical** the texture seems less hazy and shows more details. Anisotropical filtering (low or high) demands a lot of calculating and we only recommend this for very fast systems.
MultiSampling	You can choose on or off. When multisampling is **Off,** all objects will feature sharp and straight edges. When it is On, the objects' edges seem more fluid. The more samples there are, the more fluidity you will get. Multisampling is very demanding on your graphic card's calculating powers.
Object density	This function places some of the objects dynamically while the terrain is loading. If you experience a jittery picture while you are riding, you can lower the setting object density. Position 10 being the highest.

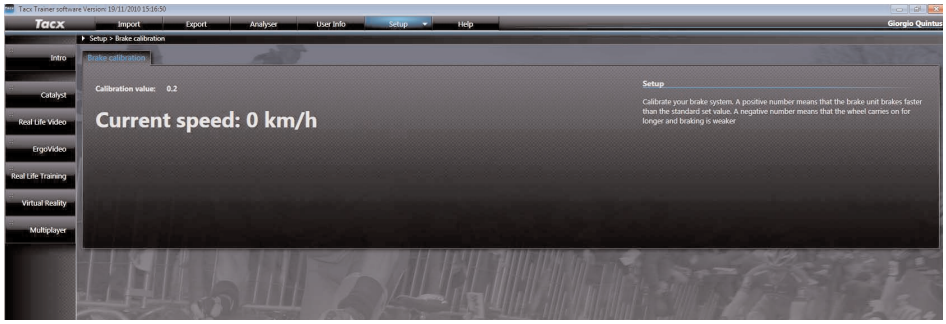
How do I determine the average frame rate?
The main goal of this function is to improve the picture in situations where the average frame rate is too low. Low frame rate leads to a jittery picture and the application will not be shown smoothly.

Press F8 on your keyboard, while you are riding through the VR terrain. You will see a yellow piece of text appear in the left hand top corner of the screen, this is a number followed by the abbreviation "fps" (Frames Per Second). When for instance you read "25 fps", it means that the picture is refreshed 25 times every second. The higher the fps is, the smoother your picture will be, as well as the calculation of rider's and opponents' positions. The fps is determined by the number of objects that are shown, meaning the fps will be higher when there are fewer opponents, houses, trees etc. in the picture.

Using the Object density setting
There are 3 pre-programmed settings which are selected when you use one of these 3 settings (low, medium, high) under 3D settings. If you use the custom setting, you will be able to manually determine this setting. Start out with the highest possible setting (10). Start the VR and ride for a couple of minutes while the frame rate is being shown. If average fps remains higher than 20, the graphic card is good enough to reproduce the maximum number of objects. If average fps is lower than 20 most of the time, you will experience a jittery picture and steering will not be smooth. In that case change the setting from 10 to 5, and ride a little bit again. You will notice that there are less trees, rocks, bushes and grass in the picture. This should lead to a higher frame rate. In order to obtain optimum reproduction you may try several settings. At setting "0" there are hardly any dynamic objects in the picture.

Brake calibration

The precision with which the output of power is reproduced depends on several factors, like the pressure of the tire against the roll, tire pressure, varying magnetic forces and differences in electrical tension. In order to guarantee correct measurement of your power output you need to calibrate the brake. We recommend you ride for at least 3 minutes, to warm up the brake, to optimise the calibrating process.



Calibration Fortius motor brake

After pressing the button **Calibrate** you will see a new screen. Click on **Start calibration** and make 1 pedal stroke to make the wheel turn; the brake will automatically calculate the correct calibration value. Do not cycle or brake while calibrating. When you're finished the calibration value will appear in the top left hand corner of the screen. This value should be comprised between 10 and 15. Click on Reset if it did not work out alright and start all over.

Calibration i-Magic electric brake

Click on **Start calibration** and start cycling at a speed of over 30 km/h until you get the message Stop cycling on your screen. When you stop, the rear wheel's deceleration is measured and the new calibration value will appear on your screen. It should be comprised between -3 and +3. Click on **Reset** if it did not work out alright and start all over.

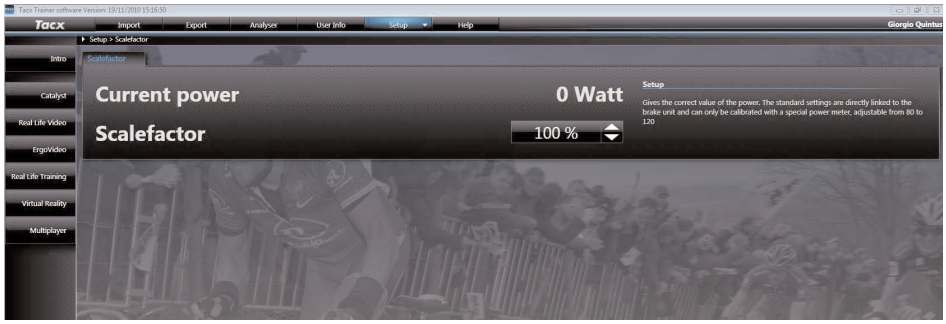
Steering calibration

You will use the VR steering frame mainly in the Virtual Reality terrains and the films for VR trainers. In order to avoid divergence it is important that you calibrate the steering frame before you start training.

Click on **Steering calibration** and follow instructions on the screen. It works correctly when the white arrow is centred. Repeat if you do not succeed right away. If you do still have problems, please contact the Tacx Service Centre through **www.tacx.com › service**

Scale factor

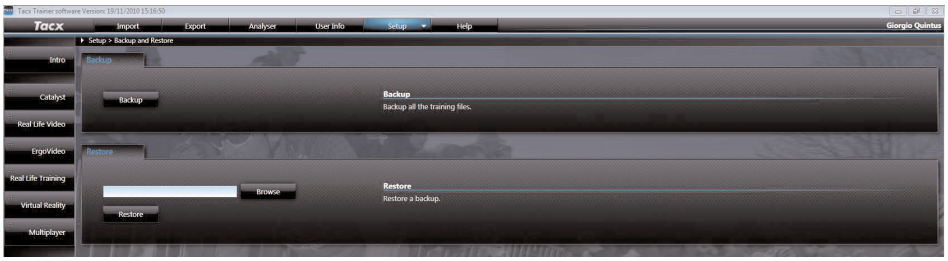
With this button you can correct the output display in the Tacx Trainer software when this value is different from that shown by an external power output meter.



When you start riding, your output in Watt, corresponding to the current scale factor, will appear at the top of your screen. If you have an external power output meter at your disposal you can compare these values. Using **Arrow up** of **Arrow down** you can adjust the scale factor to a value comprised between 80 and 120 until the output display has been equalized.

Back-up and Restore

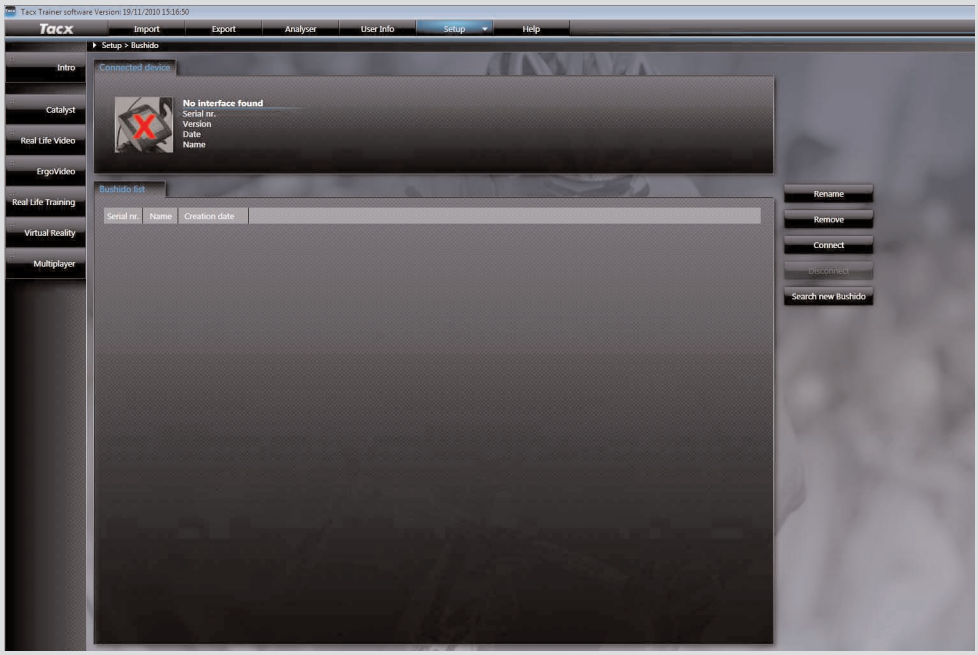
Allows you to make a copy of all your training rides and settings in the Tacx Trainer software.



Click on **Back-up**, and choose the location where you want to save the file to in your Browse screen. Using the button **Restore** puts the Back-up back in its place.

Bushido / Vortex

This button will only appear when you have selected the button Bushido or Vortex for Interface type under General Settings. With the Upgrade PC Bushido/Vortex you can link the ergotrainer wirelessly to the PC and you will be able to use the Tacx Trainer software and all of its possibilities. There are a number of important points that need to be executed to ensure correct functioning.



When used for the first time, a red cross will appear in the handlebar computer picture, under **Connected devices** on this and the intro screen. If a Bushido or Vortex has been linked before, you will see its serial number and name in the list at the bottom.

Search for new Bushido

We recommend that you connect the brake to the handlebar computer in a stand alone situation first, before you connect the Bushido or Vortex to your PC. See also the instructions in the trainer's manual. Once the handlebar computer is connected to the PC, it is no longer possible to connect it to the brake.

Place the ergotrainer near your PC, the distance between the two may not exceed 10 meters. Turn on your Bushido or Vortex handlebar computer, plug the USB-ANT stick into your PC and activate the button **Search for new Bushido** or **Vortex** that you see on the screen. A pop-up telling you New Bushido or Vortex found will appear. When using the software for the first time, the search will start automatically.

The PC has found a Bushido or Vortex. The pop-up will show relevant information. Check and see if the serial number corresponds to the number at the back of the handlebar computer. Type a name in the field and click on **Save**. This Bushido or Vortex computer will be saved onto your PC and the name you typed will feature in the list. The display of the Bushido's handlebar computer will show **PC Connection** and for the Vortex the connection symbol at the bottom of the display is lit op. From this moment on you can use the handlebar computer's keys to operate the software.

In contrast wit the VR trainers, a number of functions do not work from the Tacx Trainer software when the Bushido of Vortex is connected. These are **Calibrating the brake**, **Calibrating the steering frame** and **Setting the scale factor**. These functions can only be activated when the handlebar computer is used stand alone.

Disconnect
When you close the Tacx Trainer software, the connection will be interrupted. You use this button when you wish to disconnect the Bushido or Vortex (in order to ride stand alone) and leave the PC running. While you are disconnecting a pop-up will appear

Connect
Select the Bushido or Vortex (name and serial number) from the list. Click on **Connect** and the software will start looking for the selected ergotrainer in the room. Make sure the handlebar computer you wish to connect is turned on and that the distance between PC and trainer is not too big.

Remove Removes the selected Bushido or Vortex from the list.

Rename New name.