TACX TRAINER SOFTWARE
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MANUAL

Chapters

1. Before staring

Welcome to the Tacx Trainer Software manual. Our advice is to read the complete manual, but for a quick start it is very imported to follow the below points.

Use account
It is important to make a correct user account. All routes, exchange of files are connected to your account. Follow the instructions during the installation and start-up of the software. If you already have an account (made via the Fortius Multiplayer), then choose the option: DOWNLOAD USER

Tire pressure
We advise that you use a training tire from Tacx (T1390 race of T1395 MTB). Make sure that the pressure is around 7-8 bar (105 PSI) and that the roller is tight against the tire. Make sure that the tire sits against the roller without any pressure. Then entirely turn the block knob 3,5 full turns. This is the correct set-up

Calibration
Go to SETUP and to BRAKE CALIBRATION. This is necessary for the correct power output.

Software updates
The latest software or firmware needs to be downloaded via the ONLINE UPDATE (MAIN SCREEN). This service is only possible when you are connected to the internet. If you are not connected to the internet, then there is the possibility to download the software from www.tacx.com -> service and sales.

Download Google Earth
It is necessary to separate download the Google Earth application. This can be done from the software or via the website: http://code.google.com/intl/nl/apis/earth/

Security settings – license code
From version 2.0 the Tacx Trainer software has a specific copy protection. During the first startup procedure you are asked to fill in this code. Attached you see an example of this code
                           DF8VI-7aUC6-4DI81-AWMzy-8Mq7Q-384Ca
This code is on the inside of the installation DVD. It can only be used on 1 PC.
Below an example of the login account. Fill in all the relevant information. Make sure you are connected to the internet.

If you do not have internet, it is possible to active the product by e-mail. Select the option and copy the information to a PC with e-mail possibilities. After 24 hours you received an activation code.

The Tacx Trainer software can run 10 days without an activation code (as a demo).

If you have any problem with the licence please contact support@tacx.nl. The license is only valid for 1 pc.

2. Create useraccount / Download useraccount

When the software starts up for the first time, a user-account needs to be created.
 If you already have an account (via the Fortius Multiplayer software), choose then for the option DOWNLOAD USER. The standard password is 123456

When you have an account, then it is possible to log in to the website www.tacxvr.com. On this website you can

1. Download routes from BikeNet
2. Check the Multiplayer rides
3. Received updates and news
4. Download jerseys

    And many more

Create an account

1. Select USER INFO in the main menu
2. Select NEW
3. Fill in all relevant info

Click Edit to change Picture, Bike and Team.

Fill in the password two times. This password is the same that you use for www.tacx.com -> interactive.

When you select "make your ID public on tacxvr.com" then other players are able to see your information on the website.

Save your settings. There is an automatic synchronisation with the website.

With the above buttons it is possible to turn the picture, mirror it, or zoom in / or out.

With the selection buttons your are able to select what other riders can see from your profile (on the website).

The weight of the rider is excluding the bike. This needs to be added.

The e-mail address is mandatory field and connects your USB interface to your account

The time zone is an important feature. If you want to participate to the Multiplayer rides, then you can use the agenda function on the www.tacxvr.com.


After saving the account, select the user as SET AS DEFAULT.

Download user
1. Select USER INFO in de menubalk
2. Selecteer DOWNLOAD USER
3. fill in your email address and password (standard this is 123456 when you have registered via the Fortius software Multiplayer option).
4. The user is visible now
5. Now select user and click on SET AS DEFAULT.

3. Main menu

This is the main menu of the Tacx Trainer software. Selections can be made from different trainings (Catalyst, Ergo Video, Real Life Video, Real Life Training, Virtual Reality and Multiplayer) and it gives access to the setup of the software.
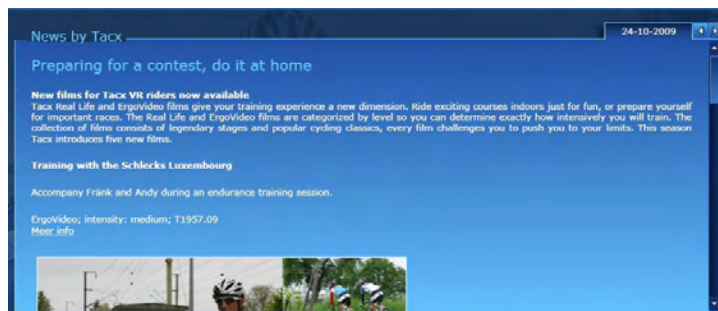
News by Tacx

This is the latest news. Stay tuned on the latest products, service reports, updates. Permanent internet connection is required

Connected Device

Display of your connected device.

Display of correct functionality
You should see a picture of your USB controller and the motorbrake. If this is the case then the USB (and drivers) are correctly installed)

Display when connection absent
There is no connection. Problem with the drivers or the hardware. Please check our FAQ on the website www.tacx.com

T1932	T1904	T1982	T1942	T1902

Display of interfaces

Display of brake units

T1941	T1901	T1981

Remark: the T1902 is not OS 64 Bit compatible. You need the T1932 or the T1904 for that.


Software updates

Displays the current version of the software are what updates are available. When there are new updates, the DOWNLOAD button will appear. It is possible that you have to repeat this process until you have the latest software.

You need the original installation disc to run the update. Place your DVD in the DVD player and **cancel** the option – remove TTS software from the PC. Now select DOWNLOAD. Follow the instructions and search for the DVD driver and select it (example D)

If there are any problems on the update, please check our FAQ at www.tacx.com

The main menu
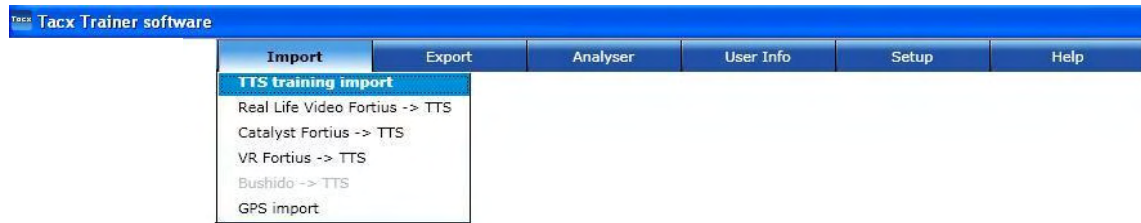
Download a route from BikeNet and place this on your hard disk (example C). Then select the TTS training import and search the file on your hard disk location. If you have done 2 downloads (the route file and the score file), the system will recognize the difference. You do need to import both, otherwise you will not have an opponent.
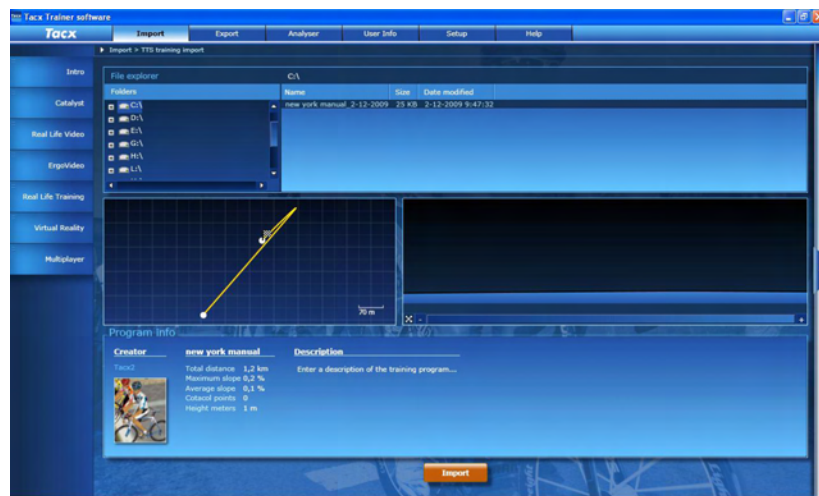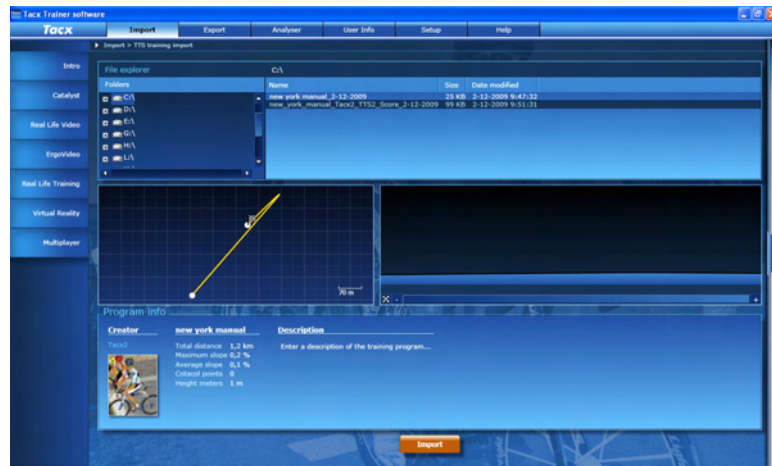

Select **TBD** and select **IMPORT**. The message below will appear. The training has been added to the Real Life Training section.

Score list
As mentioned, you also need to import the score list to have access to opponents. See below.

Real Life Video Fortius -> TTS

With the option Real Life Video Fortius -> TTS you can import videos before item nr T1956.30 from the Fortius Software. These video's can only be installed on the Fortius Software but thanks to this option, they can also be imported into the TTS software.
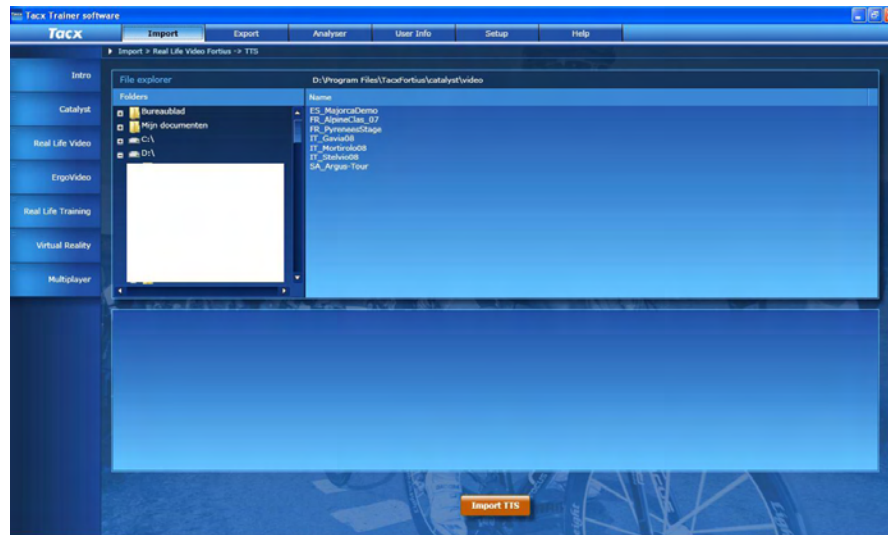
When you select this import, the system will automatically search in the correct directory where the videos are installed. In this example you will see 3 videos. Select one video and click on **Import TTS**
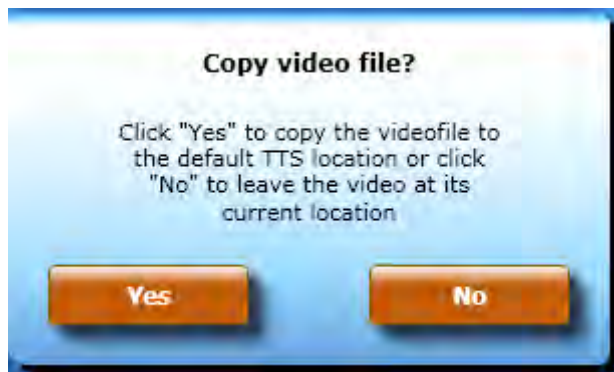
If you select **YES**, then it means that the video will be copied to the TTS directory. This means that it will be on your hard disk twice. If you decide to uninstall the Fortius software and remove the videos then you need to select **YES**.

If you leave the Fortius as it is, then select **NO**. The video will stay on its location. Remember that if you want to import a video that was NOT installed on your hard disk that you need to put the DVD in the DVD player. Else it will not be possible to import.

The old file will be removed from the list after the import. It is now successfully imported in the Real Life Video section. Imports are without GPS information! Only videos from T1956.30 come with GPS information.

Catalyst Fortius -> TTS
Same functionality as the **Real Life Video Fortius -> TTS,** except that there is no option for the video import. The file will appear in the Catalyst section.
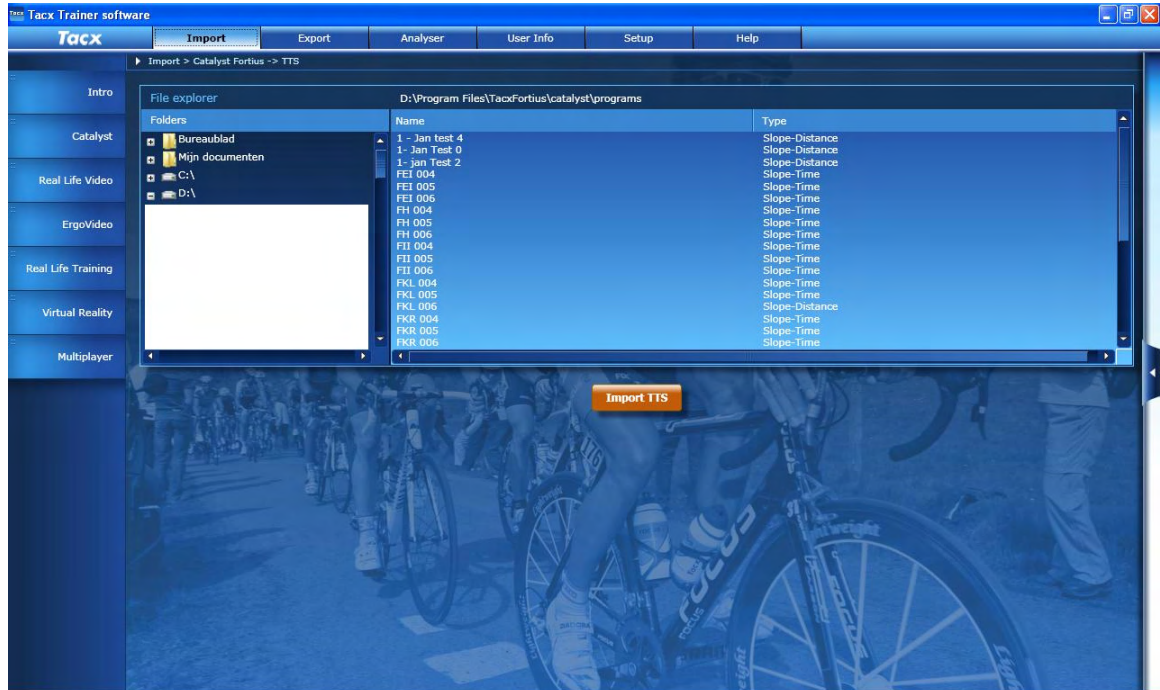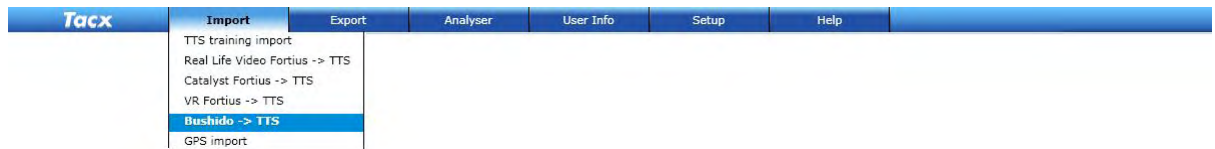
Bushido -> TTS

It is possible to import files from the Bushido to the Tacx Trainer software. You can then analyse the score in the Analyser. First connect the Bushido with the Tacx Trainer software via Settings – Bushido (see chapter Bushido). The connection is done automatically and you can see what is available for import. Select a route and push **Bushido-TTS**

GPS import
Import different GPS data in the Tacx Trainer Software.

The following options can be selected from the GPS dropdown

Standard GPX: Most common extension. Many programs can be exported to a gpx. file
Google Earth KML: Possibility to read Google Earth files. These files do not always have
                       elevation information in them (height profile).
Garmin TCX / CRS: Import of Garmin files

Select the route, click on IMPORT and the file will be present in Real Life Training.

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TTS -> bestand op PC

If you wish to create a back-up for a Route or Score, you can export this file to any directory

Select **Export** from the task bar. Select **VIEW SCORES** and then **Export** and the score (and/or opponent) will be exported. If you wish to import something later, you should always make sure you import the route first and then the score file. Both need to be updated.
The button **To BikeNet** will be explained in the BikeNet chapter. This is one of Tacx's web sites (www.tacxvr.com) where files from other users can be downloaded.

TTS -> Bushido

You can transfer all of the files present in the Tacx Trainer software to your Bushido computer. This can be Real Life Video, Ergo Video or Real Life Training. The export will transfer the altitude profile. The Bushido cannot handle more than 16 characters, so sometimes you will have to change the name of the route. The principle is similar to that for exporting towards your PC. You can only export when Bushido is connected.

Tacx Trainer software						
Tacx	Import	Export	Analyser	User Info	Setup	Help

Global settings
Training setup
VR Settings
Brake calibration
Steering calibration
Scalefactor
Google Earth Setup
Bushido

General setting

Allows you to determine language settings, display of distance, countdown and graphic display.

Training settings

Training settings can be adjusted during cycling. Handlebars, info boxes, display of position and zooming possibilities

Brake Calibration

It is important to do this before the start of each training session. Calibration of the brake will ensure an identical value for wattage for every training. The calibration will calculate losses due to circumstance and automatically corrects for these in the software. Make sure the tire is always inflated to 7 or 8 bar and that the wheel has been tightened securely against the roller by turning the black knob three times. The value for the Bushido should be situated between 10 and 15. For the Fortius/i-Magic this would between be -3 and +3. When the value is too high, inflate the tire to a higher pressure (7-8 bar), or press the roller tighter against the tire.

Calibrate handlebar
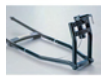
The handlebars are used to look right/left inside the Real Life Video, or steer in the Virtual Reality (only version 2.0). In order to avoid divergence the handlebars, you will always need to be calibrated. In the end the white arrow should end up in the centre. If this does not happen, please contact Tacx, use the web site contact info to do so

Scale factor

This is used to correct the displayed power in the Tacx Trainer software when this value is different from that of an external power meter. Adjustable from 80 to 120. It does not adjust the brake's power, only the displayed power. When selecting 80 it means that the **power display** in the TTS has been reduced to 80% (100 watt becomes 80 Watt)

Google Earth Settings

Adjusts Google Earth's display. This has to do mainly with the 3D settings of Google Earth. When PC specifications are low, it is possible that turning off 3D objects will help the software run more smoothly

Bushido

Connecting the Bushido
This option should be executed first by Bushido users in order to connect the Bushido to the Tacx Trainer software. When the Bushido is connected, it is NOT possible to use the trainer as an Ergo trainer (stand a-lone). You will have to disconnect the Bushido first. Before you can establish the connection you need to insert the ANT USB stick in the PC. Then follow the installation instructions. After this
1. Make sure the USB ANT stick is inserted in the PC and that the driver has been installed correctly
2. Push the Bushido's OK button (it will come out of stand by)
3. Now click on search in the Tacx Trainer software. The PC will now start looking for the Bushido. Once found you can attribute the Bushido a name.
4. Then UPDATE the Firmware to the latest version (in you main screen).

When closing the software the Bushido will be automatically disconnected.

Installed videos		Outline of all the installed and imported videos, with corresponding article numbers.
Online FAQ		If there are any problems or uncertainties concerning specific options please consult the online Q&A first. These FAQs will be updated regularly and if problems arise you will be notified through this option.
Online help		Manual for the Tacx Trainer software. When new functions are available this will be adjusted in Online Help.
Tacx on the web		Go to the website www.tacxvr.com. Go to the Bikenet – Multiplayer part of the website and download new routes, participate in competitions etc.
Disclaimer		
Show License-info (v2)		Gives an outline of the licenses that are activated

4. Catalyst

Open/use Catalyst
Select Catalyst from the menu bar.
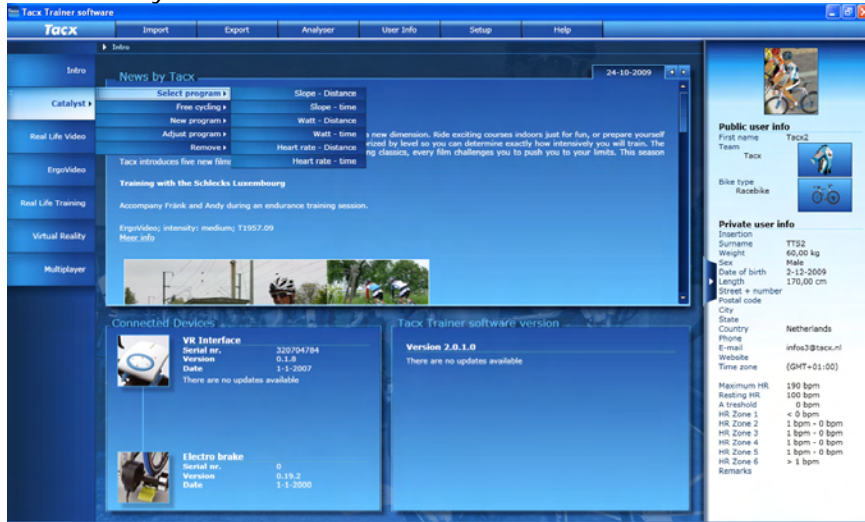
Select program:
This is where you can chose from existing rides which have been made or imported. Such as:

Slope – Distance:
This is a program where the resistance changes over a specific distance by means of the percentage of the incline. Slope – Distance also offers the possibility to create and import opponents.
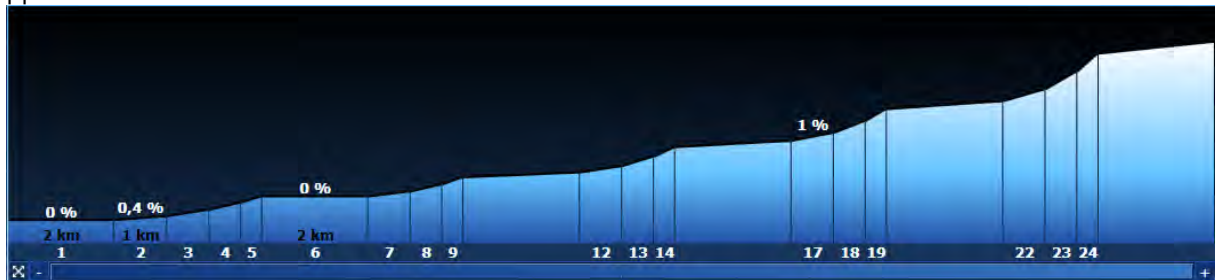
Slope – Time
This is a program where the percentage of the incline for a specific amount of time will give you a resistance.
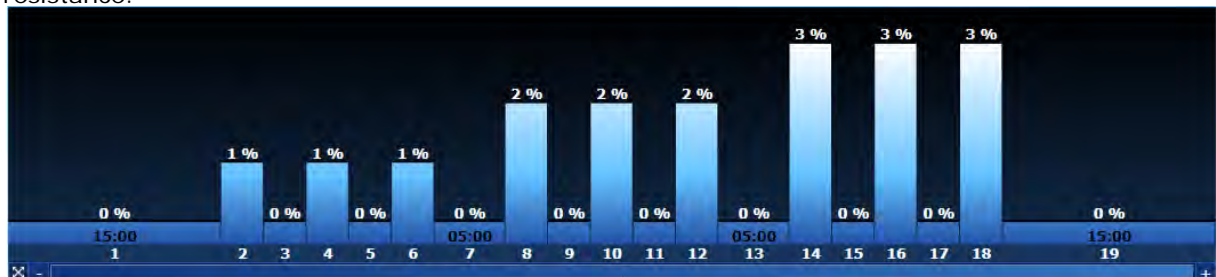
Watt – Distance
This is a program where a specific wattage for a certain distance will give you a resistance.
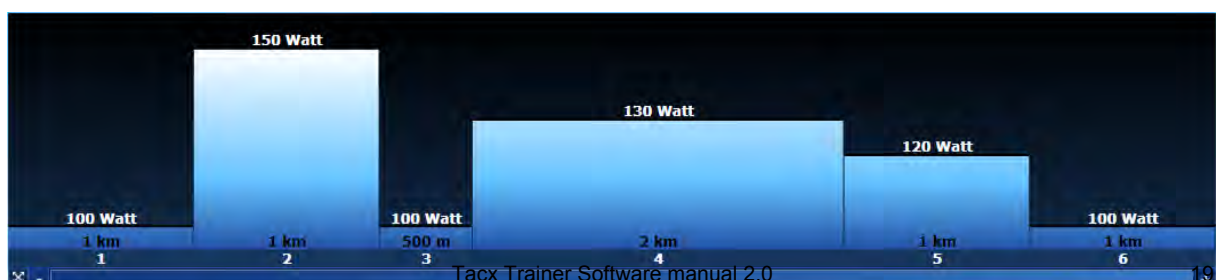
Watt – Time

This is a program where a specific wattage for a certain amount of time will give you a resistance.
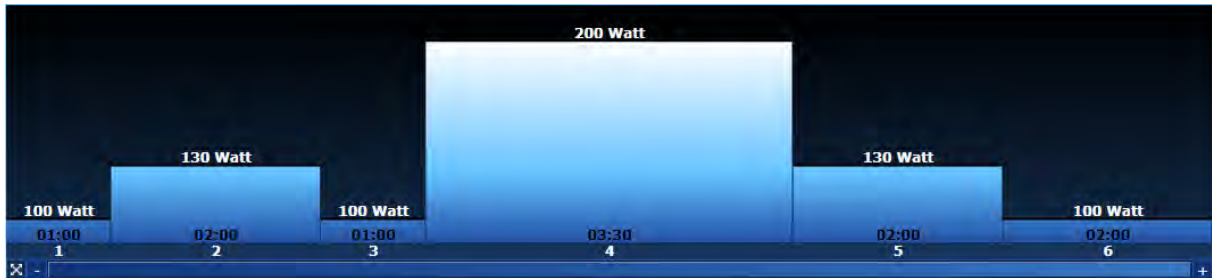
Heart rate – Distance

This is a program where an average heart rate for a certain distance will give you a resistance.

Heart rate – Time

This is a program where an average heart rate for a certain amount of time will give you a resistance.
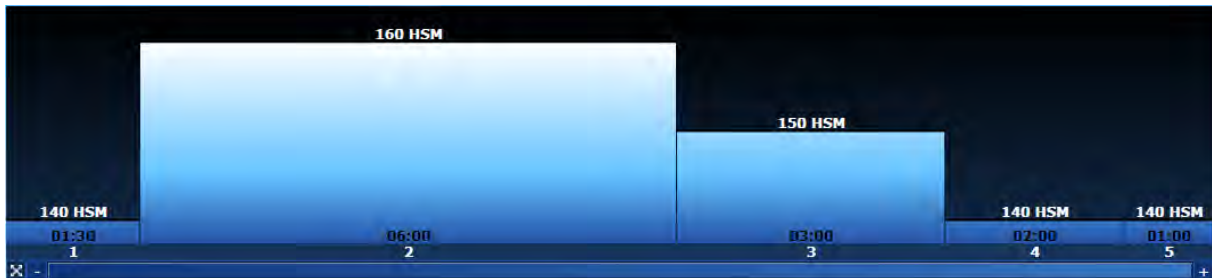
Free – Training:

Here you can train freely in all of the programs. It is possible to adjust values manually during the program.

So if you want more resistance during a **Slope – Distance** training, you can modify this by increasing the value for de slope while you are cycling.

Resistance will automatically adjust when you go outside a determined zone. During a Wattage training for instance. If you set it for 250 watt and start riding faster, the resistance will be automatically lowered. The principle is the same for heart rate. When the system is set for 150 B/M and your current heart rate is at 130, the resistance will be automatically increased. When your heart rate reaches 150 the resistance is adjusted so that your heart rate will remain around 150. The zone has a margin of +10 and -10.

New program:
It is possible to generate a ride/training within each of the programs.

For instance in **Slope – Distance**
If you click on new program slope –distance you will see the following screen.
There are two ways to adjust slope and distance.
1. Click on one of the two white spheres in the yellow field. These will allow you to adjust slope and distance of the training part (by moving your mouse up and down or from left to right).
2. You can also do this manually by clicking on the arrows at the top right hand corner of the screen
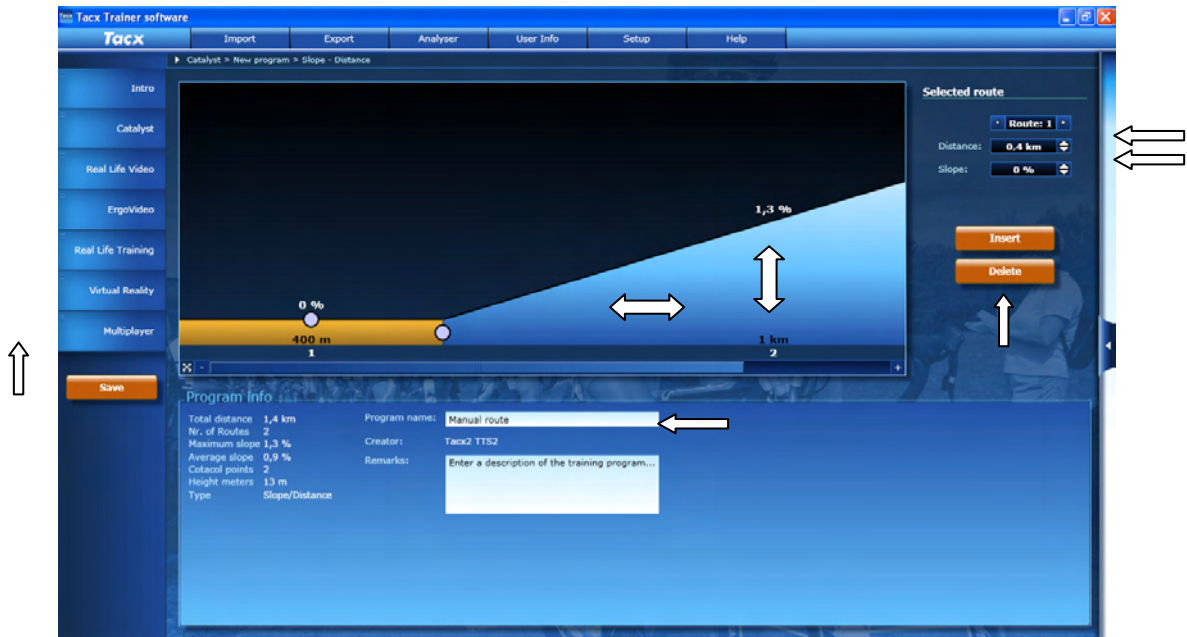
Once height and distance are adjusted you can add a new route. Click on **Add**. A new field will appear.
You can repeat these steps in order to create a complete route. Name the program and click on **Save**.
The new route is now visible under:
Catalyst * Select Program * Slope – Distance

Adjust Program:
All of the Catalyst programs may be adjusted.
Select a program and press **Adjust Program.** Select the part of the route that you want to adjust until it is high-lit in yellow. Now you may adjust slope and distance. (Re)name the route and save.
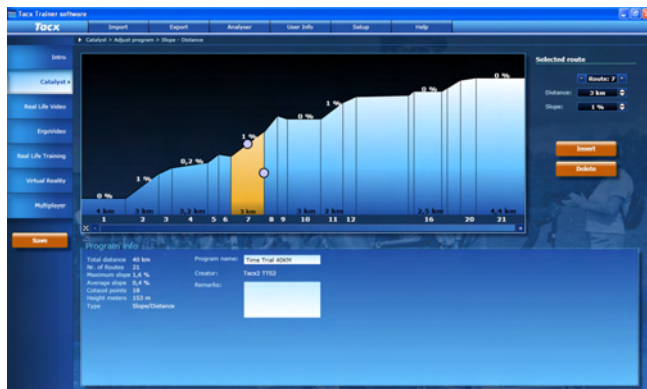
5. Real Life Video

Open/use Real Life Video:
Real Life Video is training similar to one under Slope – Distance in Catalyst, only now it comes with a video and an indication of location in Google Earth.
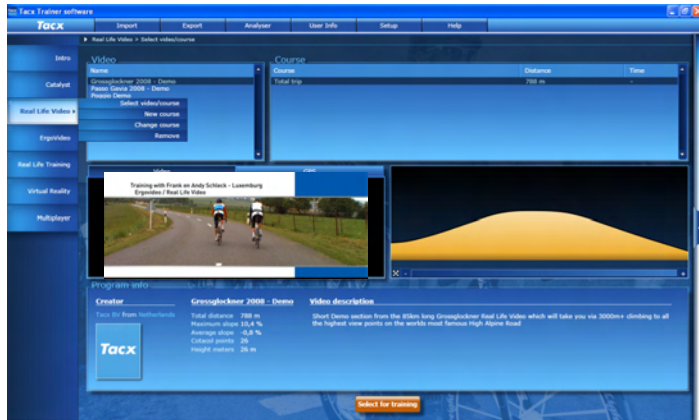
Select the videos that were installed or imported from the Fortius software.

Select video/course
Select the <u>video</u> and the <u>course</u> in this video you wish to ride.
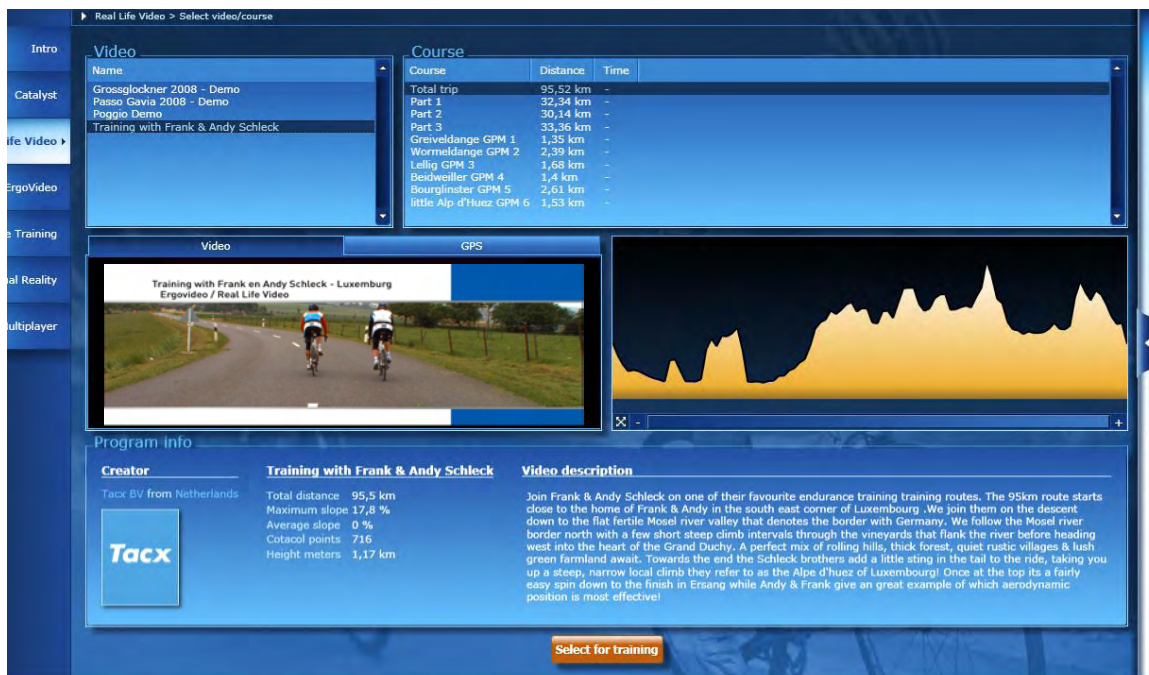
Then chose: **Select for training** en press the **Start** button.

It is possible to create a course, by selecting part of the route. Do not forget to rename this route and to save it by clicking on **CREATE**

Chose a course. The software now shows two lines that can be shifted in order to make a partial route (if for instance you only want to ride a climb or the last bit of the course). Shift the two white bars as shown in the picture below.
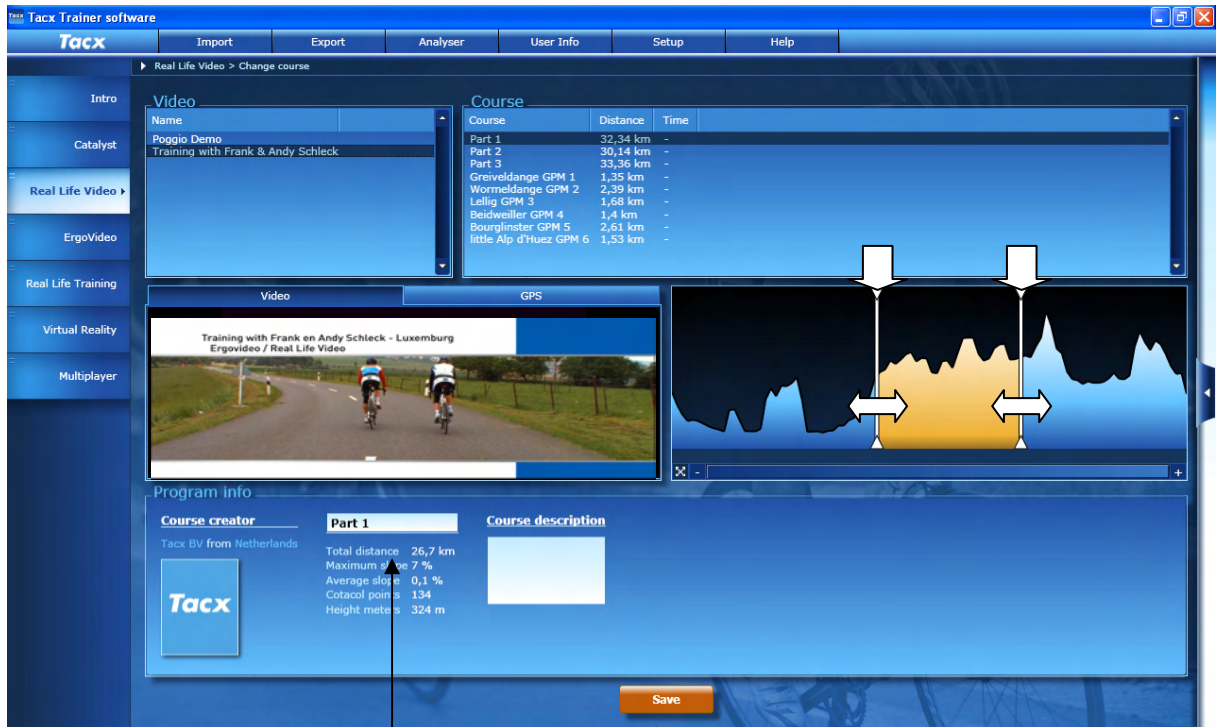
After setting the course you must give it a name. Then select **Save**

This works exactly as under **New Course**, but here it is possible to readjust the new course and save it again.
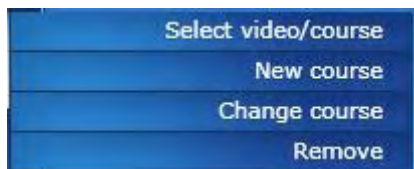
This is where existing videos or generated routes and scores may be deleted.

6. Real Life Training and Editor

Real Life Training are GPS rides that are reproduced in Google Earth and a 3D environment. All of the differences in altitude / resistances are automatically linked to the brake's functioning

                              Select Real Life Training

Select the option: Select ROUTE.
This is an outline of imported GPS rides. Select a route and press:

The screen below will appear. If all of the cables are correctly connected, the orange Start button will appear. When the connection is not correct, this button will be grey.
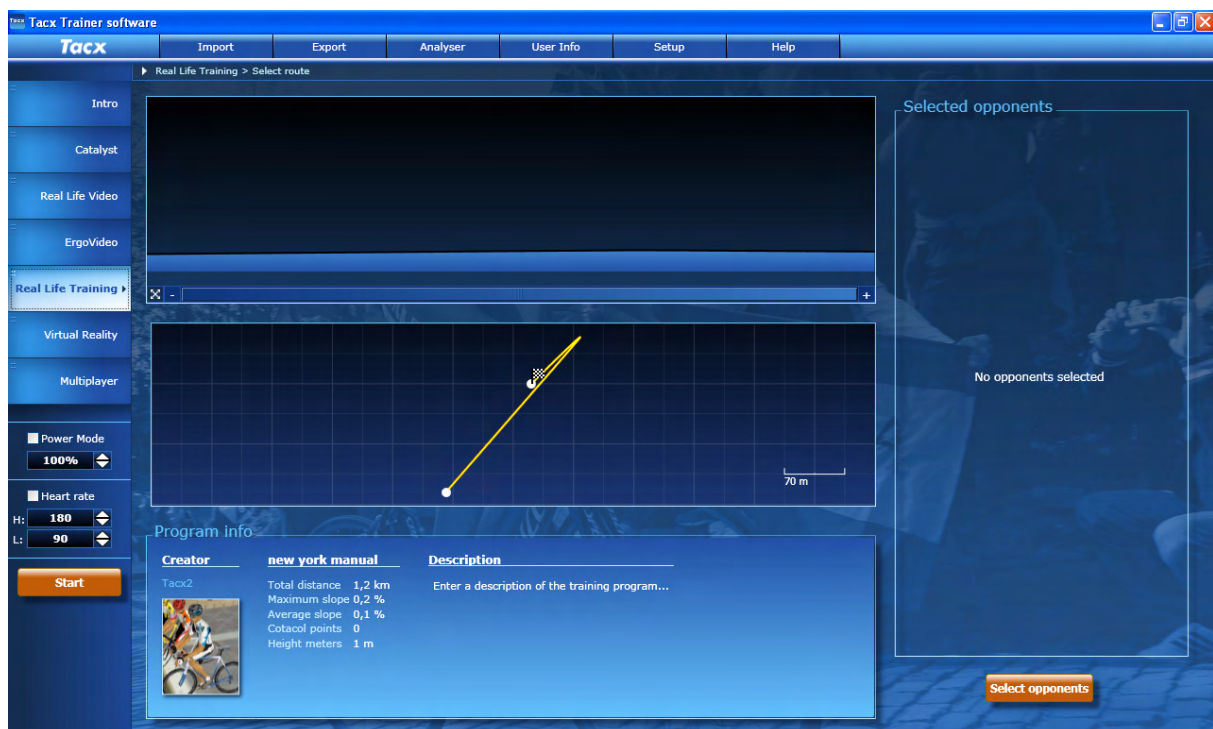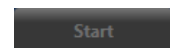
This is also the place where opponents can be selected. In order to do this you must have completed the course yourself and saved the score. You can also use scores from other riders as an opponent. These routes and opponents can be downloaded from BikeNet.

Check under chapter 9 Settings before the start, for more information concerning Powermode and Heart rate settings.

6.1 GPS Editor (from version 2.0)

Starting from version v2.0 it is possible to create your own routes through Real Life Training - GPS Editor.

Modifying a GPS route
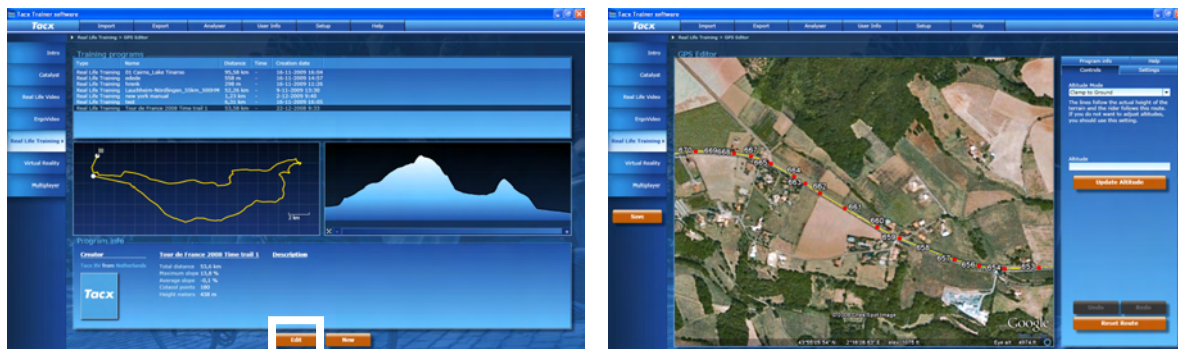
Select a route and press MODIFY. Thanks to the GE application you will now see how the route has been made up with all sorts of different numbers. These are the GPS route points and we are now ready to change them. Select a number (changes into a green field) and drag this to a different location. By left clicking twice, it is possible to create an extra route part. By pressing SAVE the modified route is saved

In order to show extra information when you are modifying the route, do so via SETTINGS. It will be possible to show roads, 3D buildings in Google Earth, or show functions for zooming in and out.
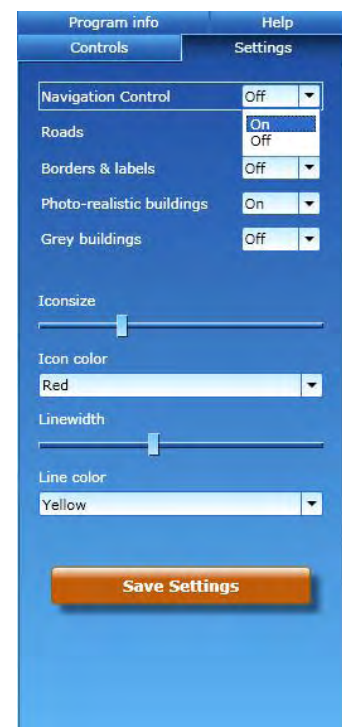
GPS new

Select NEW if you want to create a GPS yourself

The picture below indicates a location somewhere in the world. It is easier to first turn on the NAVIGATION CONTROLS via SETTINGS.
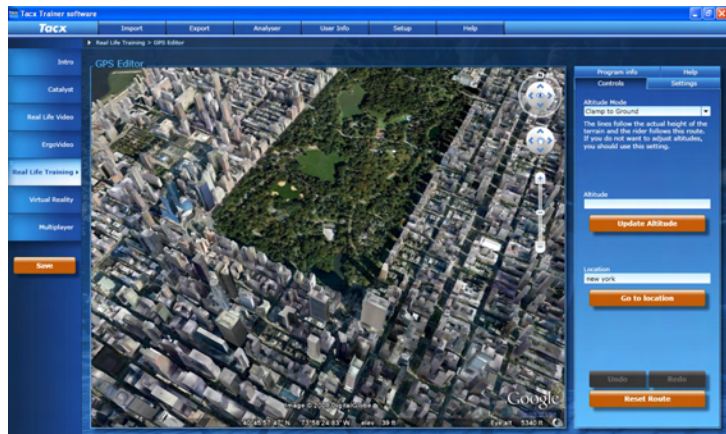
Now go to LOCATION and select a town. This may be any town anywhere in the world. But postcodes will not do, only the names of towns

We are, for example, at in New York USA. When you chose a location and left double click it with your mouse, a start location 0 will appear. Now if you go to a different location and again left double click it with your mouse you will create a location point 1 that is connected with location point 0. Proceeding like this allows you to compose your own personal route. The altitude profiles are automatically included. When you are ready you can enter a name under PROGRAM INFO and save the program.
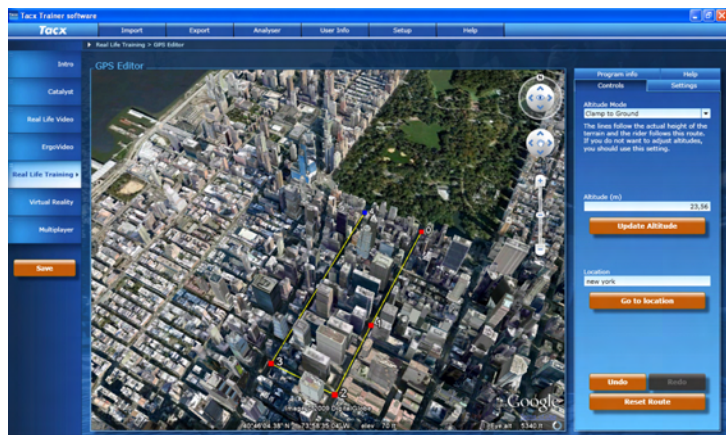
Once the route has been saved the start field will show the altitude profile and average slope values. The route's profile will also be visible. Your route is now finished.
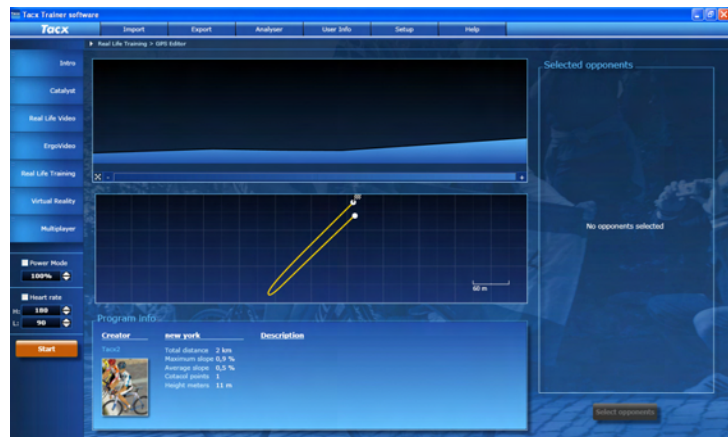
7. Analyser

Analyser allows you to analyse all of the routes you have ridden.

You can add comments to training rides and indicate the temperature under user info.

All averages for distance, speed, power output and heart rates are also shown. In the specific case of the heart rate the zone that you were cycling in is shown. Select **Analyse.**

Zoom function
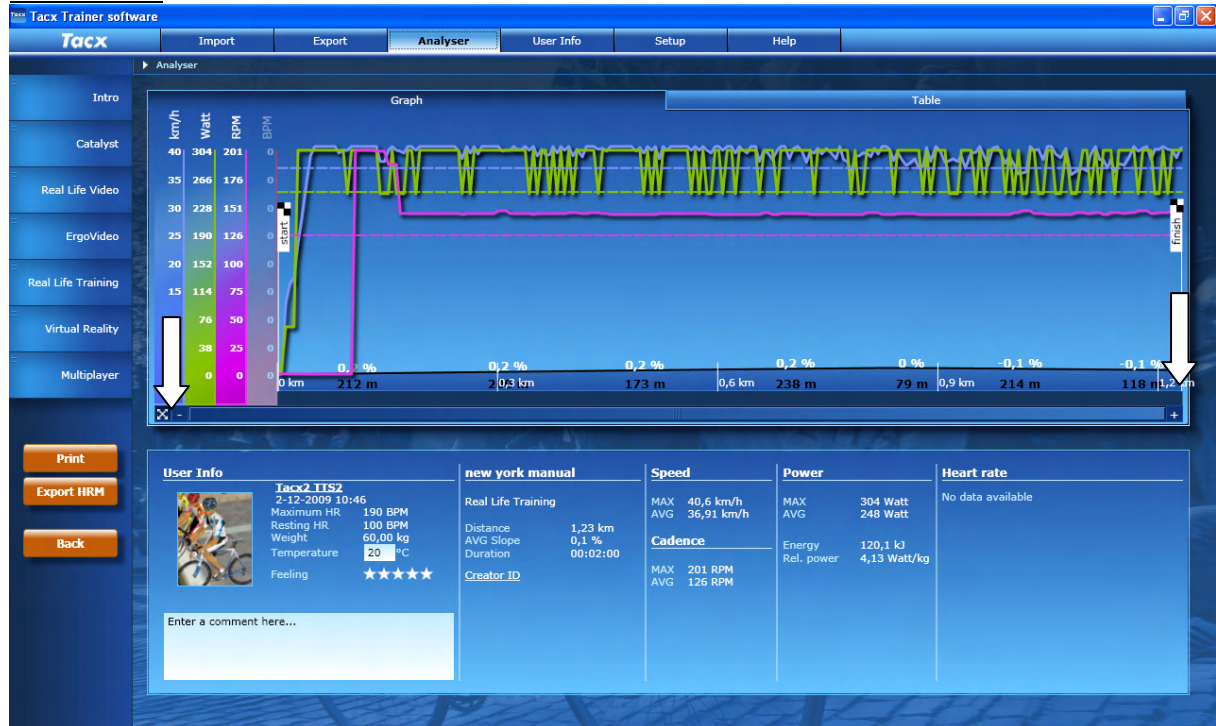
Now you will see the graphs. By using the – and + key you can zoom in on the analysis report (see white arrows).
When you right click with your mouse button the following menu will appear.

By using the tick marks you can activate or deactivate the option, making the overview clearer to read.

With the   **Export HRM**   button you are able to export to Polar files.

Table
When you chose **Table** you will receive a per 30 second overview (standard setting) of the ride.

You also have the possibility of reproducing a per second overview. See button above CLIPBOARD.

Under Clipboard it is possible to export. Click on clipboard and then open Excel for instance. Next you press paste and the table will be copied.

Under Print you can print data directly with your printer.

8. BikeNet

In 2009 Tacx put a new website online. This website is linked to the Tacx Trainer Software. The website can be found at www.tacxvr.com. This website contains a lot of extras, also for Fortius Software.

Select MULTIPLAYER - BIKENET

This will take you to the next main field. You need to use the same user name and password under log in data as you supplied when filling out the user data for the Tacx Trainer software. It is the same account for software and user.
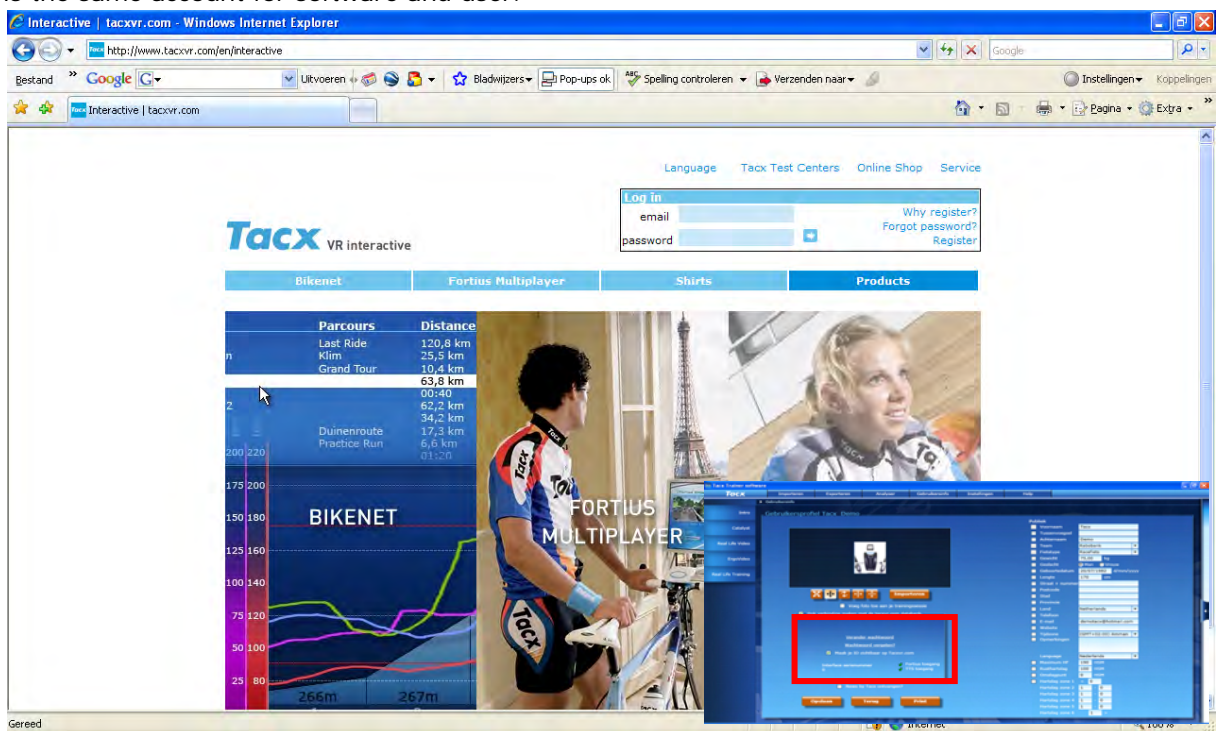
After entering the password you need to select the BikeNet chapter.
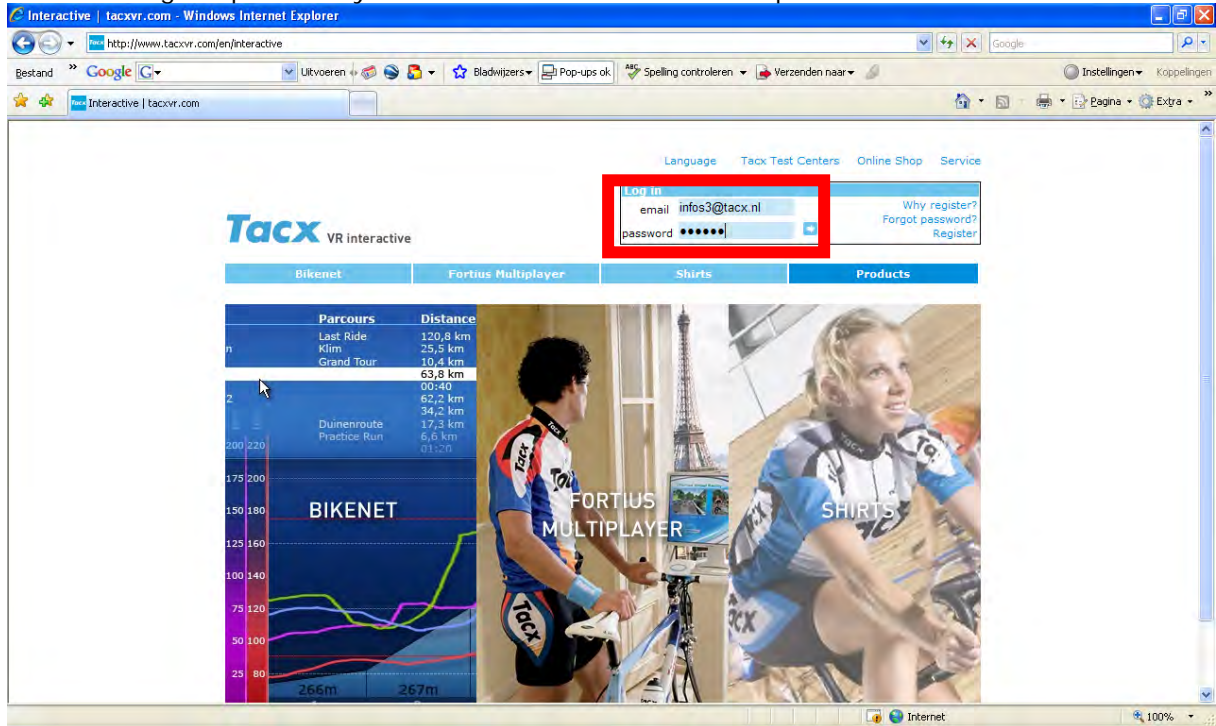
BikeNet is made up of a couple of elements and was designed to share files with all Tacx users. A competitive element was also added, the Tacx Challenge. This will be activated by the end of 2009. When you want to download other users' routes you need to select **TTS COURSES.** This will take you to the following overview
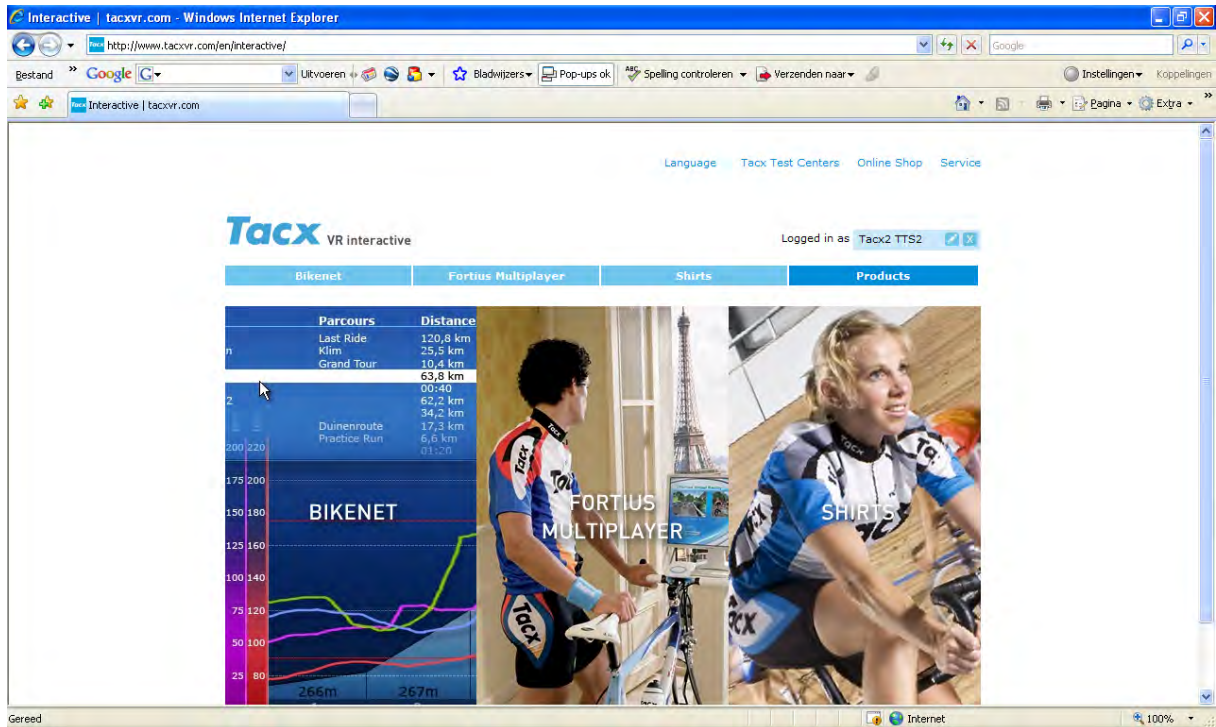
Under this part you can download a great variety of routes. Here a description of the training, the route's length and the nature of the training are announced up front.

There is a possibility to make a selection between Catalyst, Ergo Video, Real Life Training and Real Life Video. Select the box with a left click of your mouse in order to activate or deactivate the selection. Click on "?" for more information.

Training		Parcours	Type	Afstand/Tijd	Datum ▼	Maker	Info	Download
London Route			RLT	3.976 km	20-07-2009	Tacx Demo		(1)
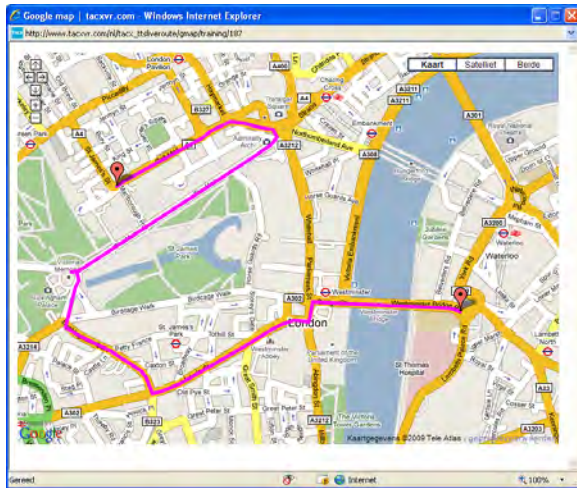
Map
Is a map giving you an impression of the route in real life.
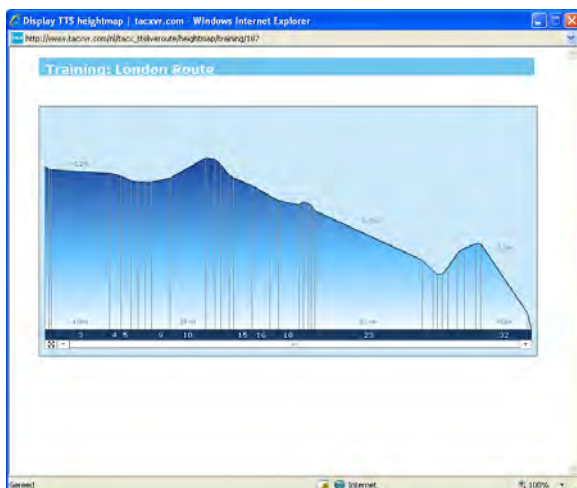
Altitude Profile
Gives you an impression of the selected route's altitude profile.

Opponents
Allows you to select opponents. When you have ridden the route you can upload your SCORE to BikeNet. Your SCORE will appear in this overview. You can download a number of SCORES from other users and ride in the Tacx Trainer software at the same time. Import the route (select the green button) and then import all scores. You can then find your adversaries under **Opponents**

In the chapter Import -> **TTS Import Training** it is explained how you should import the route so that you can ride it in the Tacx Trainer Software.

When you have created a route and wish to share it with other users on BikeNet, you can upload it.

UPLOADING TO BIKENET
When you have created and also ridden a route (riding the route is mandatory) you can upload this information to BikeNet. This is how you do it
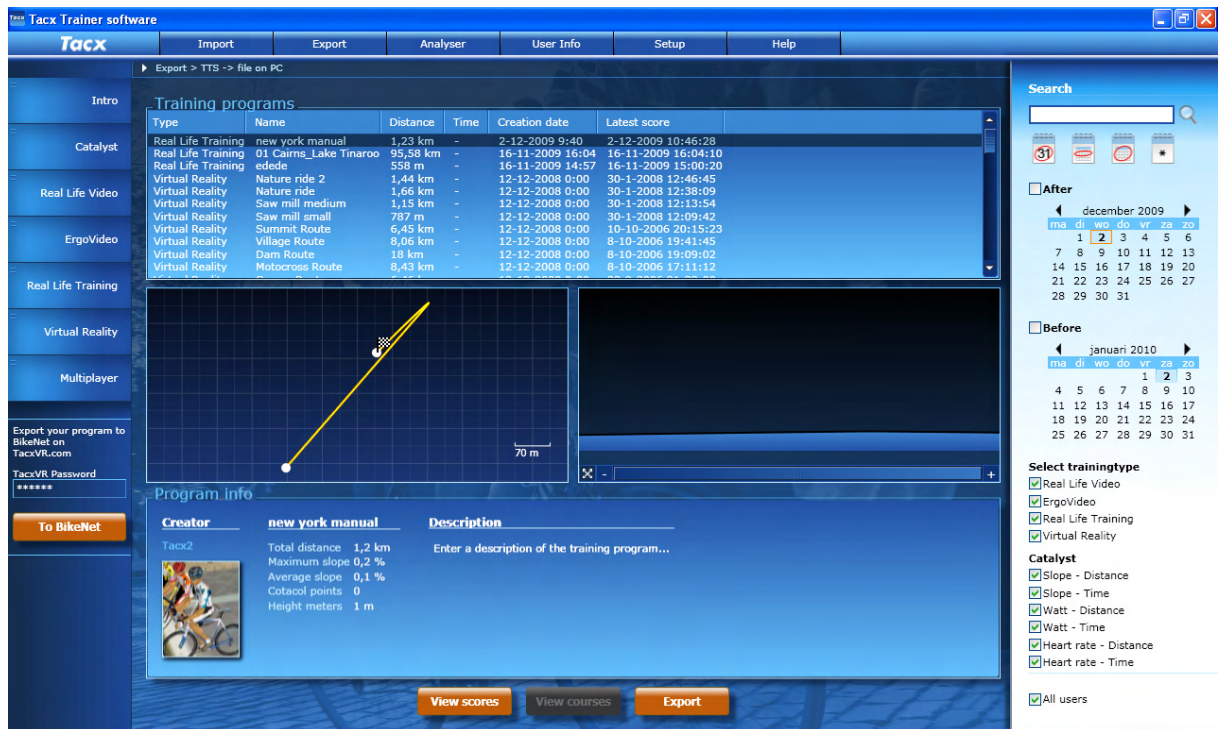
Go to the TAB **EXPORT**
It is important that you are the **CREATOR** of the route. It is not possible to upload routes from other people to BikeNet, only scores can then be uploaded.
You first select the route that you wish to upload. Then you fill in your standard password, the one you also use to log in on www.tacxvr.com or under your personal user profile, under **TacxVR password**.

Then press button

You will see the following report

Now select

This will take you to the next field. Here you will see your score. Repeat the procedure used under Route.

You are obliged to send a Score file to BikeNet. If you fail to do so the Route will not appear on BikeNet.

9. Settings before the start

In this chapter we will discuss a number of settings during cycling.

- Opponents
- Powermode
- Heart rate settings

Opponents

An opponent is an adversary you can use in the following programs.

Catalyst -> Slope Distance
Real Life Video
Real Life Training
The maximum number of opponents is 19.
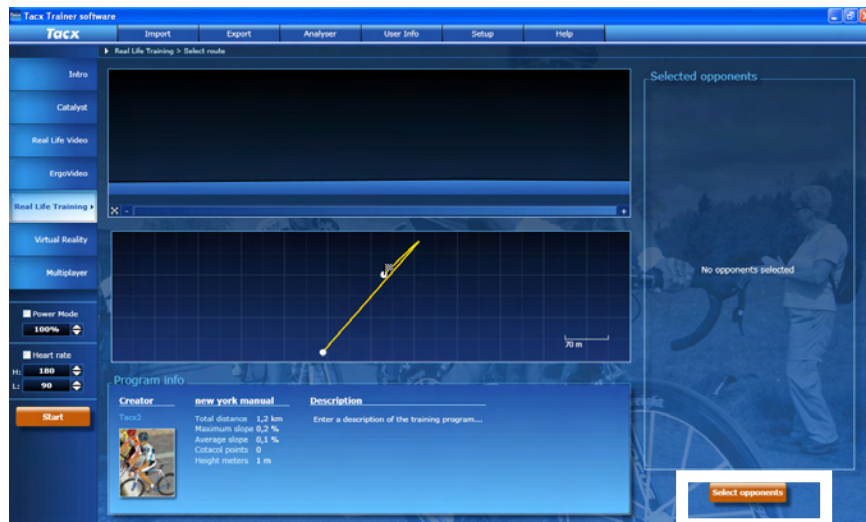
In order to select an opponent you will have to have ridden the route yourself and saved the score first. You may also use the scores of other users as your opponent.
These routes and opponents can be downloaded from the Tacx website www.tacxvr.com ->
BikeNet. Check the BikeNet chapter to learn how it's done

Selecting Opponents:

If you pressed the following screen will appear.

Here is the New York route with Tacx as your opponent (meaning this is a route you rode yourself).
You can see that the ride was covered with an average speed of 36,9 km/u.
By pressing the **-** or **+** sign you can create more opponents. When you select the box and adjust the speed, a new opponent will appear.
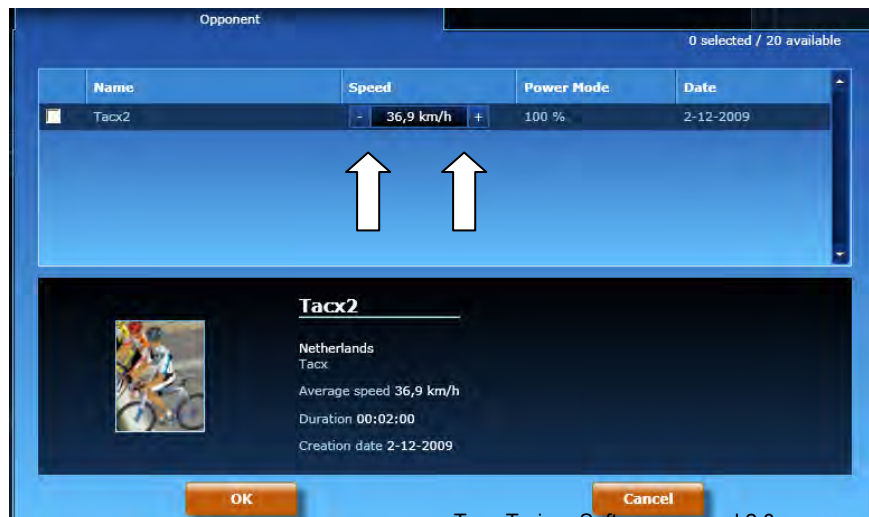
You may select 19 opponents like this.
Every Slope/Distance route is made up of different routes. Once you have created enough opponents, select OK

The selected opponents will appear on the right side of the screen.
If you would press the START button now, the ride would start out with 4 opponents. Other adjustments are possible too.
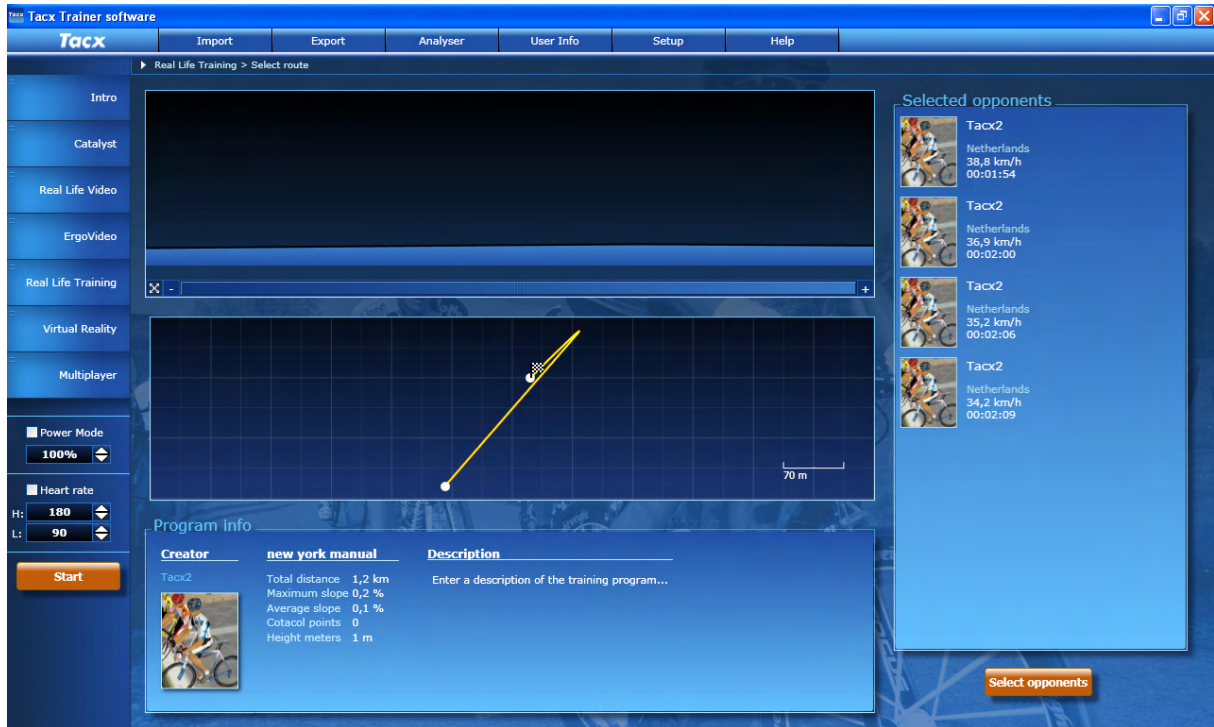
Power Mode

Powermode is an adjustment of the route's actual power. Thus you can increase or diminish the power by 80% for example.
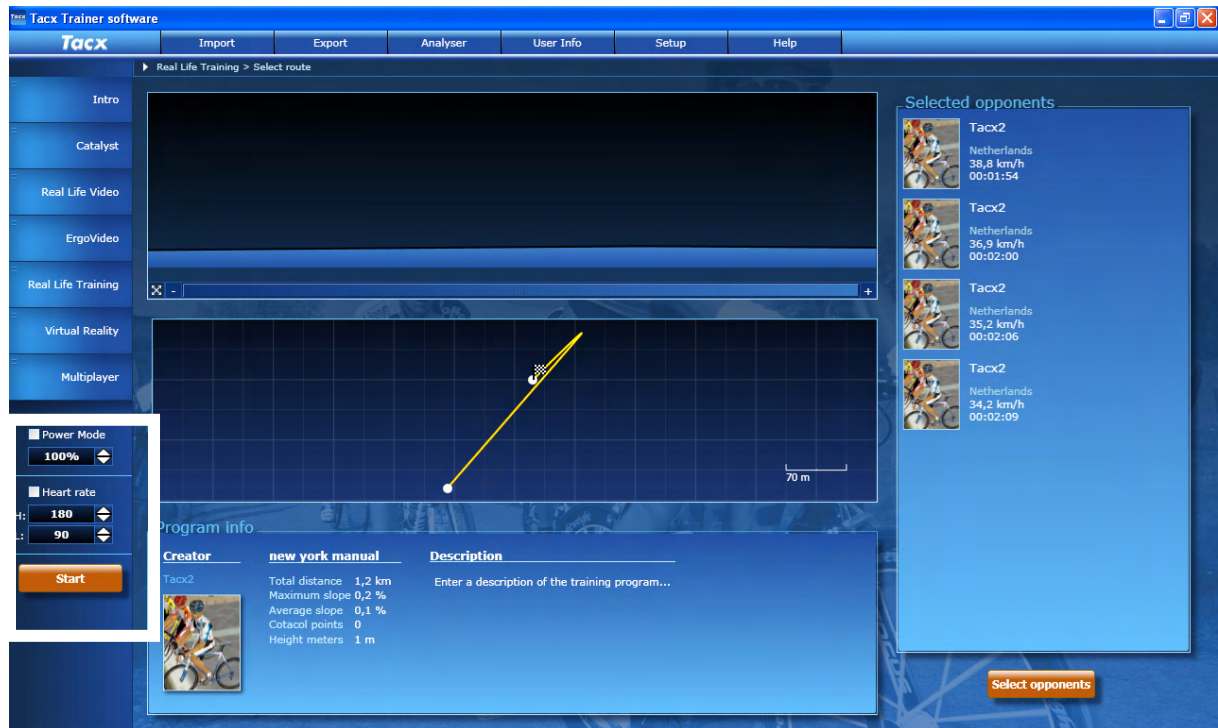
When you adjust the Power Mode this way, you can use the route/score that you rode as your opponent. It is also possible to adjust Power Mode during the route, but then it is not possible to use this one as your opponent for the next ride.

Heart rate

By ticking the heart rate box, the heart rate limits will be recorded. When you are riding you will see if you are in the correct zone and you will receive a warning when you leave the zone. This is discussed in the chapter: During cycling

10. During the ride

When an element, Catalyst, Real Life video, Ergovideo or Real Life Training has been selected, the menu works the same for all of the parts. The display may differ from one part to the other. With the UP or DOWN button you will get the different displays. We will give you more information on the available fields under **Catalyst**.

Catalyst
The display for Catalyst may differ, depending on the chosen route, but it works exactly the same way. Underneath you can see an impression of a Slope – Distance route.
The UP or DOWN key on your USB interface gives an outline of the different fields.

It is possible to zoom in on the graphs or modify camera positions; this is further explained in this chapter.
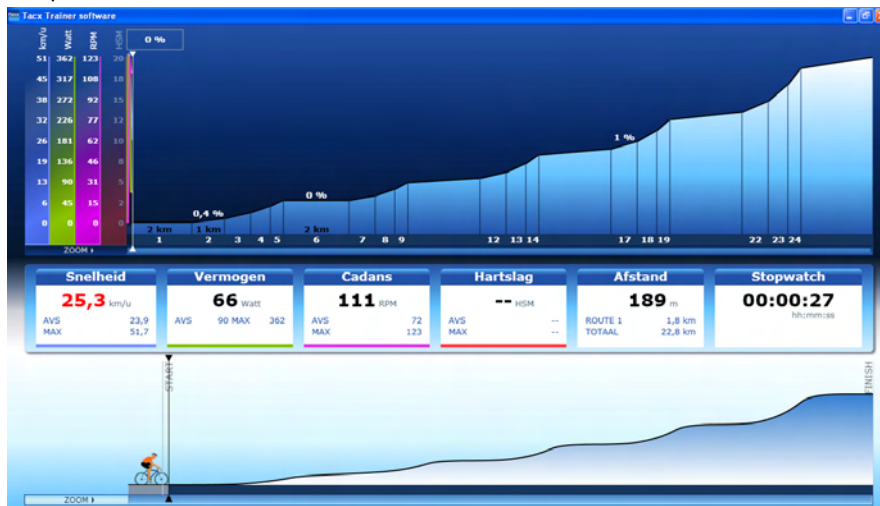
Graph

Position bar

Catalyst 3D

Combined

Catalyst - Free training

There is a dedicated outline for free training. This is because there is the possibility of adjusting the settings for slope / wattage / heart rate while you are riding by pressing the UP or DOWN button. The graph has a time delay, so any changes will show a bit later. In this impression the HF is on. By pressing ENTER a menu screen appears, where you can turn a number of settings on or off. This will be discussed further in this chapter.

Heart rate training

The resistance is adjusted depending on the set heart rate. Is your heart rate lower, the resistance will automatically increase, so that you need to pedal harder which will make your heart rate go up. In the diagram on the right you can see if you are within the set heart rate zone. When the heart rate is shown in red, this means that the underlined program has a different heart rate. Then the resistance is adjusted.

Display of the partial route

Display total distance

Set HR zone, in the zone
Resistance under the program

Set HR zone, upper limit
Resistance is then lowered

Real Life Video / Ergo Video

In Real Life Video the following displays are possible. When a steering device is connected you have the possibility to look to the right or left while you are riding in the video.

You can also obtain the displays hereunder by pressing arrow UP or DOWN.

Video – Position bar - Graph

Video – information

Full Video screen

Video - Position bar
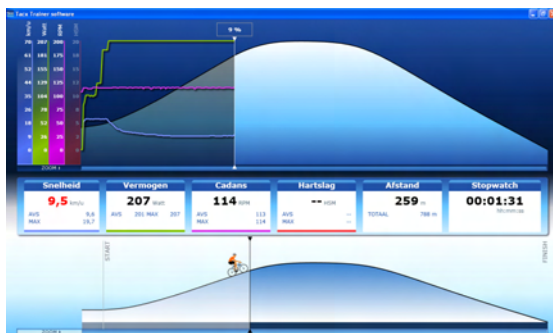
Grafiek - Position bar

Video – Google Earth - Position bar

Full Google Earth

Full Google Earth camera 3

Real Life Training

The difference between Real Life Training and Real Life Video is that the video display has been replaced by a 3D display, just like in the Catalyst program.

Information bar

Speed	Power	Cadence	Heart rate	Distance	Stopwatch
21,4 km/h	**64** Watt	**78** RPM	**118** BPM	**54** m	**00:00:18** hh:mm:ss
AVG 13,0 MAX 21,4	AVG 46 MAX 64	AVG 76 MAX 78	AVG 13 MAX 118	REMAIN 1,2 km TOTAL 1,2 km	ETA 11:44

Speed   With i-Magic and the Bushido trainer speed can become red.
Red speed indicates that it is not the real speed. It is a compensation for the braking force. That is because the braking force is not strong enough to get the real resistance. This is compensated in the speed. With a Fortius this will not happen like that.

Power   Power may be displayed differently when you have set the Power Mode. In the display above this is not the case. This picture will show when the Power Mode has been set.

Power
81 Watt(100%)
64 Watt(79%)
AVG 54 MAX 64

Cadence   Cadence is the number of times the bottom bracket turns per minute (as measured with the cadence sensor). When it reads 0, check if the magnet is touching the sensor, otherwise the trainer (with Fortius) will shake.
A Bushido does not have a hardware cadence sensor, it is measured in the brake.

Heart rate   Display of heart rate, if you are using a heart rate transmitter belt (not supplied). All analogue heart rate transmitter belts can be used, and most coded belts as well. With Bushido you can also use an ANT heart rate transmitter belt

Distance   Total distance and remaining distance are displayed here.

Possibilities during the ride

You may change different settings during the ride. By pressing **ENTER** a menu will appear, you can operate it via the USB interface
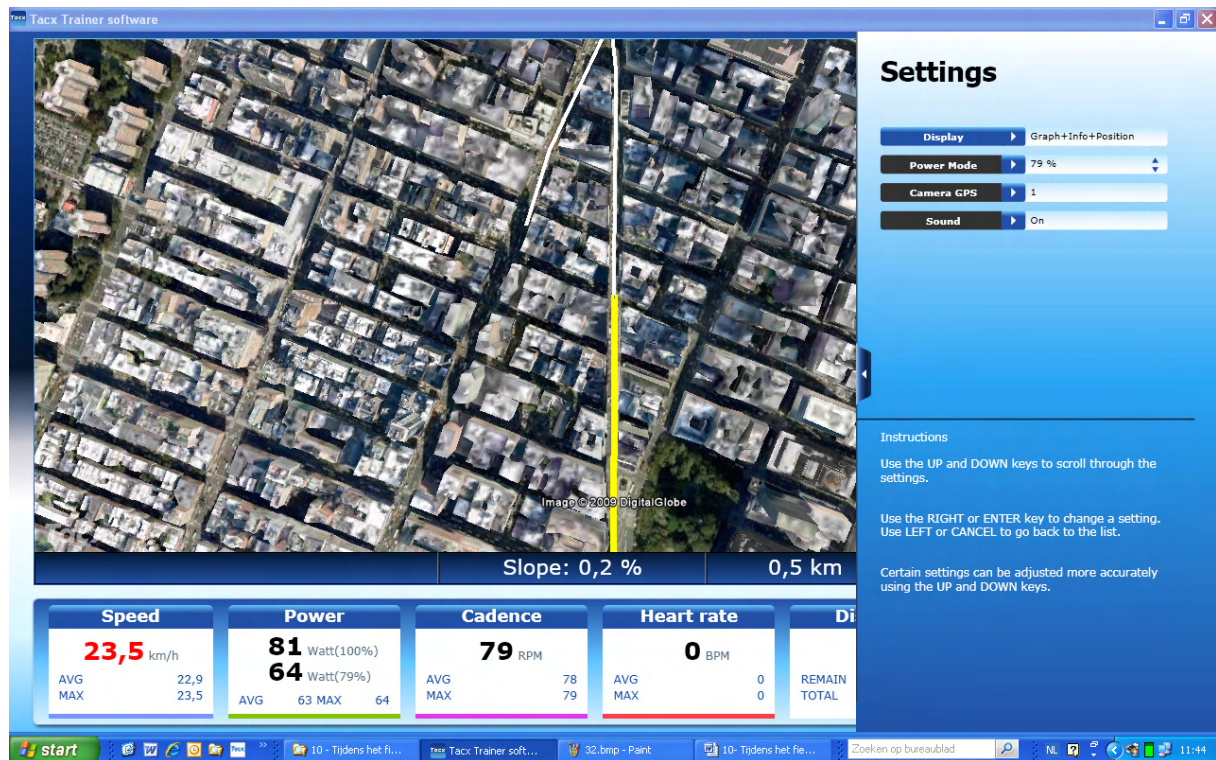
The following functions are possible

Power Mode: You can increase or decrease power during the ride. The lower the %, the easier the ride becomes.
As already described in chapter 9, it is also possible to adjust the Power Mode DURING the ride. In that case however, it is NOT possible to use your score as an opponent.

GPS Camera: There are 5 different positions for the Google Earth display.
1: top view zoom
2: zoom rear view rider 3D
3: rear view rider 3D
4: pivoting view
5: top view

Sound: Turns sound on or off.

Cat3D Camera   There are 5 different positions for the Cat3D function

Position bar   The position bar has 5 zoom levels.

Zoom graph   The zoom graph has 5 zoom levels.

Saving

You may save the data at the end of the route. You can also save the course prematurely. Then the part that has already been covered is saved. There is a recording every second that you can read out in the Analyser.

11. Virtual Reality (from version 2.0)

Before we start out with Virtual Reality it is important to enter the correct settings. This is because Virtual Reality uses a lot of processing power from the graphic card. First go to SETTINGS and then to VR Settings. Select the options that are needed (this is also where you can turn your steering device on or off). Do not forget to CALIBRATE your STEERING DEVICE under Settings first.
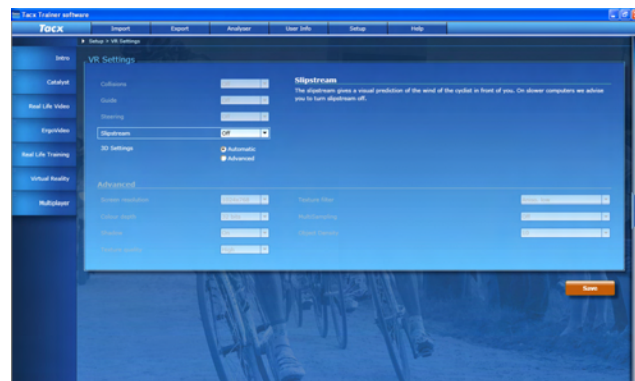
Virtual Reality is a 3D animation in which we have tried to include all aspects of the real world in our software. Virtual Reality also allows you to ride freely when a steering device has been connected.
The Tacx Trainer Software offers 6 worlds to chose from (these are supplied with the software). Select a TERRAIN first and a route next (in Course).
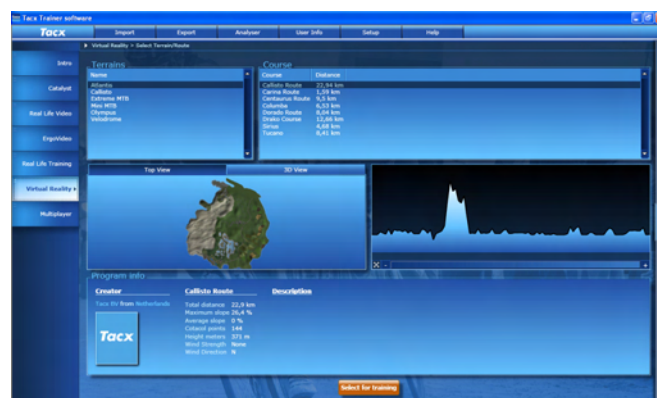
After the route has been created you can chose the direction of the wind or change the weather for instance. You can also select opponents.

During the ride

During the ride you will have a number of
options. By pressing ENTER an option
screen and a total map of the cycling
world will appear.

When opponents have been selected an
overview with the distances between the
riders will appear at the bottom of the
screen. The white bar represents your
position.

Other options / settings

+ and – keys on your keyboard modify the sensitivity of the steering

Slipstream
When you are riding behind an opponent (slipstream) resistance will diminish. This can offer an
advantage in time/wattage of around 10%. Slipstream is always on. You can visually turn it on or
off (see option menu). Blue and red colours on the screen show that you are riding behind
someone.

Free cycling
When the steering device is connected you may ride a free route in the Virtual World. You also
have the possibility to create your own route.
When the steering device (article T1905) is connected the option FREE CYCLING will appear in
Virtual Reality

Your own Route
In order to create a route you must always cross a finishing line (or start line) once. This is
represented by a white line across the road (see photo on this page) with a FINISH flag. Worlds
have several FINISHING points, allowing you to create different routes. A route will always lead
from start to finish. When you continued on after crossing the finish line, the route that was
covered after the finish line will not be included in the new route. You will be able however to
read this information out in the Analyser.

12. Multiplayer (from version 2.0)

By using the Internet or a local network it is possible to ride against each other

Internet Racing:
Start Server. When you want to start a route yourself, you need to first adjust the port settings in your router and Firewall. The basic rule is:

1. Open your Router first. Access is different for many routers. Open Internet Explorer and go to www.portforward.com to find out which address you will need to gain access, standard address is 192.168.1.1
2. Go to internet options and select port forward
3. Always open 2 successive ports (e.g. 5000 and 5001) in TCP and UDP. Open the ports separate (so not from to option). For each port one rule.
4. To learn the IP address, go to search function and fill in CMD. Then key in ipconfig. The IP address is now visible. Vista users should take the IPv4 address.
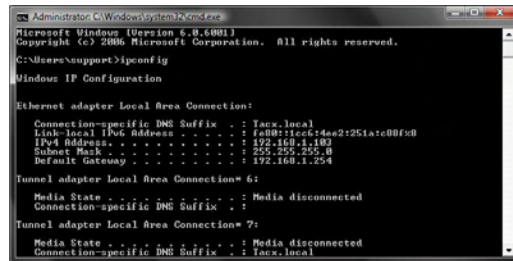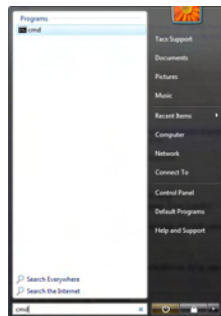
5. Fill in the same ports for the Firewall. Use the port **5000** in your Tacx Trainer software.
6. You can find an extensive manual at www.tacx.com- Sales&Service – Product manuals – VR Trainers – Multiplayer settings

Once the settings have been entered it becomes possible to set up a Multiplayer account with all of the routes.

LAN Racing
LAN racing is used when you set up 6 trainers next to each other and link these between themselves. This requires the once-only purchase of a Multiplayer license (see Ordering).

In case of LAN racing the port number is always 7328 (invariable number). The only thing that needs to be done in LAN is the attribution of an IP address to the PC. For an extensive manual check: www.tacx.com- Sales&Service – Product manuals – VR Trainers – Multiplayer settings

Ordering

All Fortius Multiplayer (T1930) trainers are equipped with a 1 year license for Webracing and a LAN license. When it expires you can order an extension. It is also possible to order these for the Fortius, i-Magic and Bushido trainers. You will be automatically guided to Tacx's order site. BE SURE TO ALWAYS CONNECT THE USB / COMPUTER BOX.

Multiplayer Information Screen
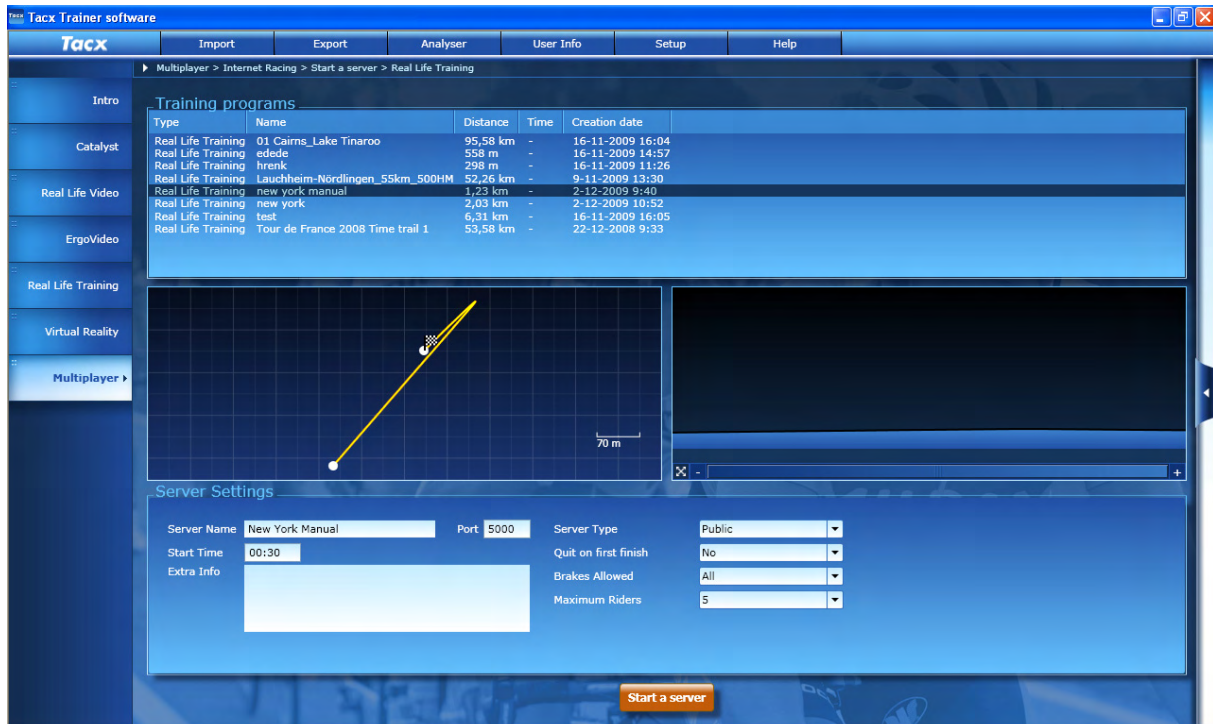
Server Name: Enter a name the other riders will be able to see when you are trying to connect to a server

Start Time: Is the time a server is OPEN. This is the amount of time that users have to join the server. It is also possible for the host to start the server whenever he wants.

Extra info: Extra Info. This information is also visible to the other participants. You can say for instance if the ride is hard.

Server Type: Public: Accessible to all
Private: You can set a password that you then share with your friends. The server will only be accessible with the password

Dedicated Server : Use this option if you do not wish to participate in the ride but use it as a server

Stop after : 1st finish When the first rider has finished everyone will end up in the finish screen

Brake type: It is possible to grant access to Fortius users only for instance . the reason behind this, is that the brakes don't work the same with the different trainers. Depending on your trainer you have the following options
All
Fortius
i-Magic
Bushido

Maximum number of riders: The maximum number of riders for

|	
Catalyst	6
Real Life Video	6
Real Life Training	6
Virtual Reality	6

Joining a Server - Cycling

You do not need route settings to join a server. Only the Firewall can block this.
In the Multiplayer manual there is an explanation for this.

When a rider has created a server it
looks like this. Now he has to wait
until someone else joins.
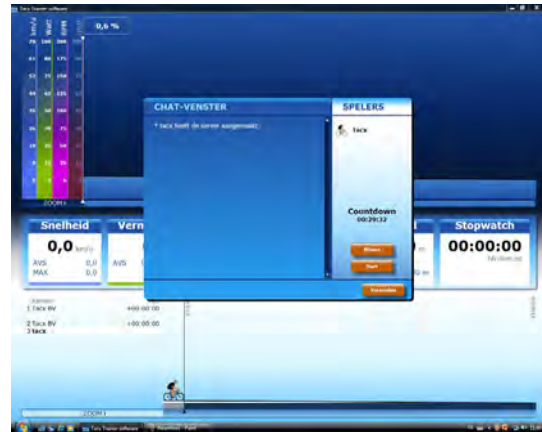
The person joining will see the
following screen. The route is visible
and when he selects it and presses
PARTICIPATE, he or she will be
automatically linked to the ride. There
is a basic rule however. The person
joining needs to have the server's
Real Life Video, or else the video
screen will remain black. He can still
ride the route without the video.
A Real Life Training is automatically
downloaded while you are logging on
to the server.
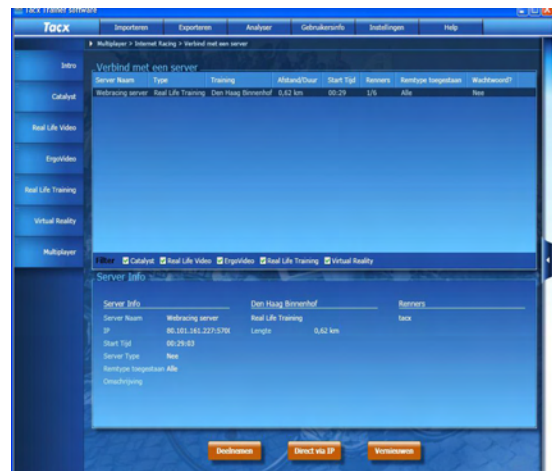
Once the rider has been added
you can chat via your
keyboards. The person who
started the server can now
press START to let the race
begin

13. Bushido

With the Bushido Upgrade pack, article T1990, you can link the Bushido trainer (T1980) to the Tacx Trainer Software. You need to execute a number of important points to get the Bushido to work with the Tacx Trainer Software correctly.

When the installation is completed you should plug the USB stick in your PC (or during installation when asked for this). Now when you start up the PC there will be a report asking you if you want to use the Bushido option in the Tacx Trainer Software. Select Yes.

Now go through the following steps.

Once everything is correctly installed the following report will appear. The software should automatically find the Bushido head unit.
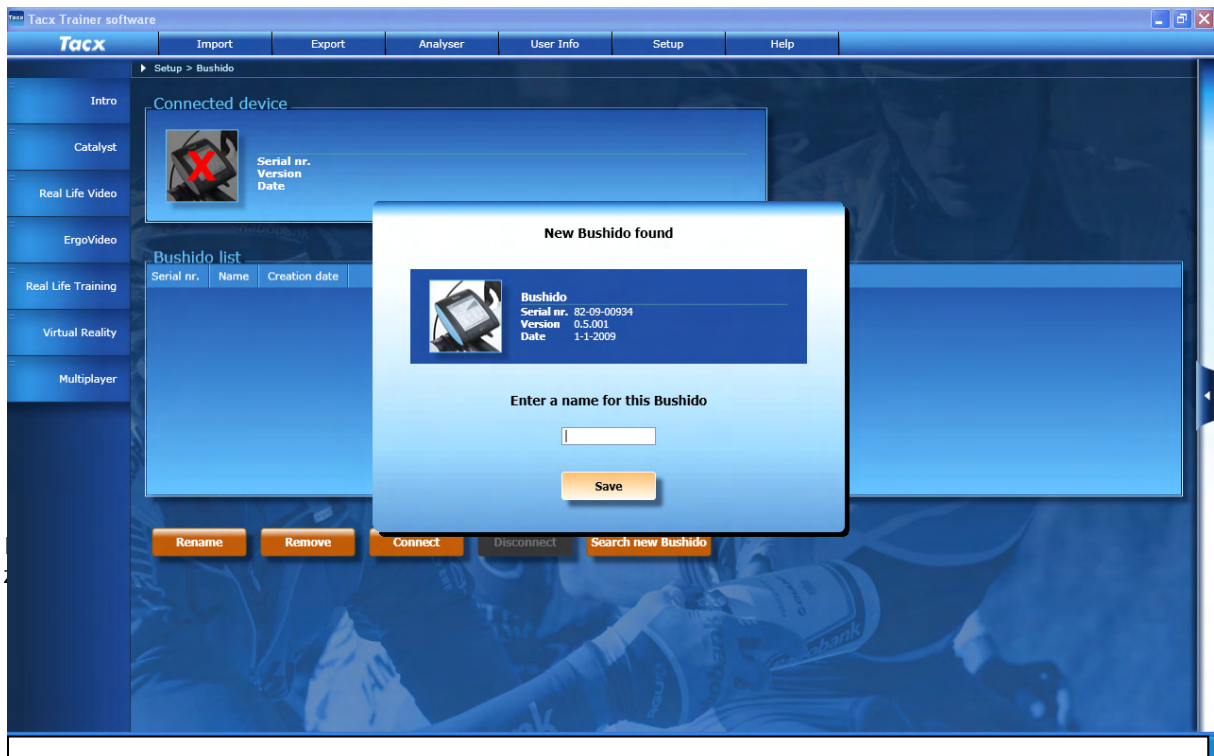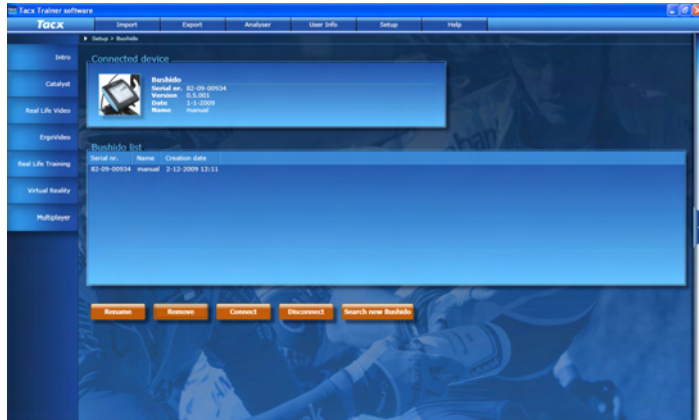
Now the Bushido is connected to the software. In this menu you have the possibility of disconnecting the Bushido, so that you can train with the handlebar mounted computer alone. Once you have closed the Tacx Trainer Software the Bushido will be automatically disconnected.

Now for the last step

Go to INTRO
You will see that the DOWNLOAD button is lit. Click on the DOWNLOAD button

The latest version will now be installed. Follow the instructions on the screen. When you are updating it is best to put the Bushido computer NEXT TO or in Front off the USB stick so as to avoid interference during the upload process.

Now restart the software. An update for the brake may be available. Click on download again. You must be cycling DURING the up dating of the brake

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Bushido in comparison to the other Tacx Trainers

1. Due to the fact that there is no electricity present it will take about 5 seconds before a link between the Bushido and the software is established. So it will take a few moments before you can start cycling. The data during cycling will be stored though; it is therefore possible that the image jumps a bit at the time of the start

2. With the import / export function you may export all of the routes to the Bushido so you can ride them without the computer. As the Bushido can only process a limited number of characters you may have to modify the name.

3. Calibration may only be done in disconnected mode (STAND-ALONE mode). This value will be used in the Tacx Trainer software. does not take care of this.

4. When something goes wrong while you are updating the firmware, a program is available that can help you finish the update. You can find it at C:\program files\Tacx\TacxTrainerSoftware(2)\updater\ then select: TacxUpdate.exe

Make sure you put the box next to the USB stick.