

HOW IT WORKS

ACTYVO.

YOU VS. ANYBODY

The world's first road cycling app to challenge anybody.



ACTYVO.
YOU VS. ANYBODY

ACTYVO AG
CH-8212
Neuhausen a. R.

contact@actyvo.app
www.actyvo.app
actyvo.cycling

ACTYVO Cycling & Challenges

There are many millions of road cyclists around the globe. Many of them want to compete with other cyclists and compare themselves with their performances. The ACTYVO Cycling & Challenges app makes this possible!

No matter where and on which route you ride, the ACTYVO platform compares the performance of the rides on different routes and altitude profiles.

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Glossary

ACTYVOLTS (AV)

Unit of the results of a ride, based on the average power over the distance ridden (similar to \varnothing watts).

ACTYPOINTS (AP)

Personal scoring of a ride, derived from ACTYVOLTS, considering the ride distance.

CHALLENGE RIDE

Ride which is completed after at least 25 km / 15.5 mi within the finish radius (5.0 km / 3.1 mi).

FREE RIDE

Ride with distance < 25 km / 15.5 mi, or outside of finish radius.

FINISH RADIUS

In order to complete a CHALLENGE RIDE correctly and thus be included in the leaderboards, the ride must be completed within the finish radius. The finish radius is 5.0 km / 3.1 mi (how the crow flies) max. distance from the starting point of the ride.

GARMIN / WAHOO CONNECT

Function of pairing/connecting the ACTYVO account with the user's Garmin or Wahoo account. With this function, rides can be automatically uploaded to the ACTYVO platform without using the ACTYVO app. The data of a ride may be synchronized from the Garmin / Wahoo directly to the ACTYVO platform.

STRAVA CONNECT

Function **for uploading** an ACTYVO ride to the user's personal Strava account.



Registration

Registration or the creation of a user account is necessary for the platform to recognize the user. When registering, a personal app LOGIN is created, with which the user logs in to the app and identifies himself. The minimum age for registering and using the ACTYVO platform is 16 years.

Registration takes place after downloading the mobile app.

The app is available in both the Apple and Google Play stores. The use of the ACTYVO platform is free of charge at least until 30.04.2026.



Distance Categories

The following distance categories are offered on the platform.

Distances in metric (km) and US miles (mi) units are identical.

KM	MI
25	15.5
36.5	22.7
(Q36.5 Distance)	
50	31.1
75	46.6
100	62.1
150	93.2

The distance categories are considered in the rankings.

A ride (over) > 150 km / 93.2 mi is also calculated and scored, if necessary included in the ranking of the highest distance category (150 km / 93.2 mi).

CHALLENGE RIDES & FREE RIDES

The rides recorded by the users of the platform are classified into two categories.

CHALLENGE RIDE

These are those rides where the specifications such as the minimum distance (25 km / 15.5 mi) have been reached AND the specified finish radius of 5.0 km / 3.1 mi has been met. See also chapter "FINISH RADIUS".

The results of the "ACTYVOLTS" (see also chapter "ACTYVOLTS") of the correctly completed CHALLENGE RIDES will be included in the rankings. Users also receive the full number of personal ACTYPOINTS for this (see also chapter "ACTYPOINTS").

FREE RIDE

Are rides that were either finished / aborted early before the minimum distance was reached or where the finish radius was not observed.

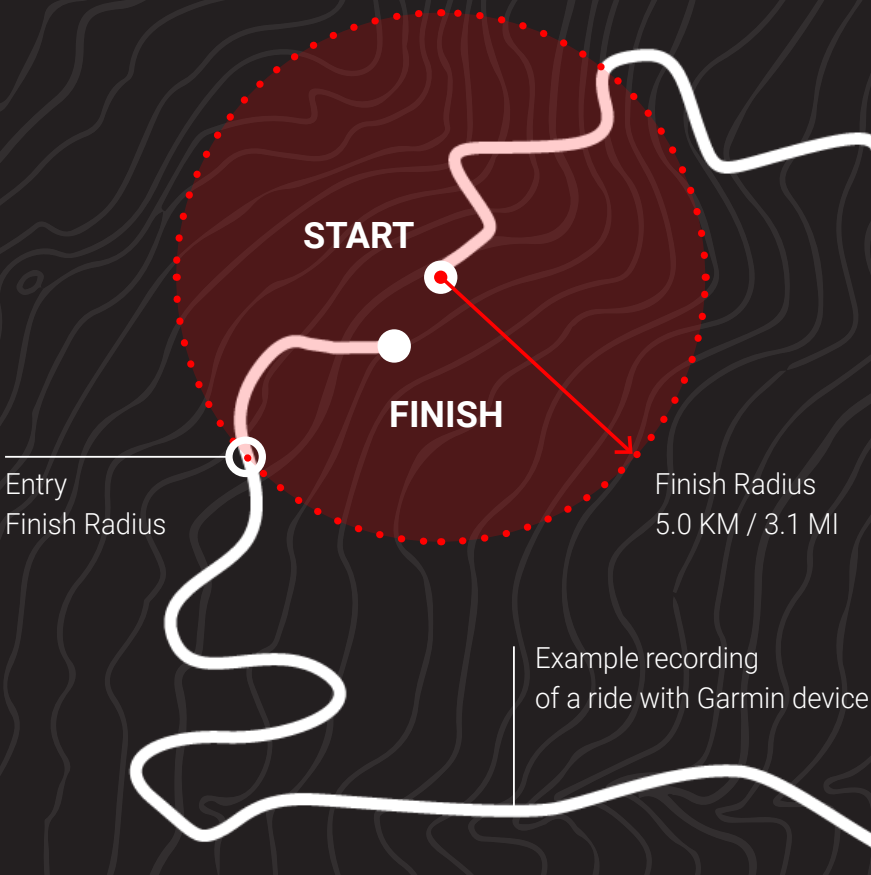
Results of the FREE RIDES do not appear in the rankings, only in the personal ACTIVITY lists of the users. The "ACTYPOINTS" scorings of the free rides are included in the personal scoring list with a 30% factor (compared to challenge rides).



⊖ FINISH RADIUS

ACTYVO wants to make users' bike rides as fairly comparable as possible. A complex algorithm is used for this purpose, which takes into account a variety of factors in the calculation of the results (ACTYVOLTS). However, this calculation doesn't take into account the influence of wind (wind direction, wind strength).

In order to largely compensate for the external conditions for a comparison, it is necessary to finish a correctly completed CHALLENGE RIDE within a radius of 5.0 km / 3.1 mi from the starting point of the ride. This ensures to some extent that the influence of the wind along the completed route is compensated.



If a ride is completed outside the finish radius, it will be counted as a FREE RIDE and will not appear in the rankings.

For rides with Garmin / Wahoo devices: if the finish radius is ridden along the route, the ride will be counted as a CHALLENGE RIDE if the min. distance of 25 km / 15.5 mi has been reached when riding through the finish radius.

Garmin Data Field

ACTYVO provides users with an "ACTYVO Dist2Start" data field in the Garmin Connect IQ Store. The data field shows the distance (as the crow flies) of the current position to the starting point of the recording on Garmin devices. The data field can be downloaded free of charge from the Garmin Connect IQ Store and thus added as a data field on the user's Garmin devices.

Garmin Connect IQ Store:

ACTYVO Dist2Start

[Download](#)



ACTYVOLTS «AV»



ACTYVOLTS «AV» are the unit for the result of the ride and stand for the average performance to be achieved that was necessary to cover the distance in the recorded time over the route profile covered.

The calculation of the AV is done using a complex algorithm that considers all factors of the rides on different route profiles. The ride distance is divided into segments, each segment is calculated individually with regard to the performance required for it, considering the altitude profile. The sum of the calculated performance of all segments, considering the total ride time, results in the AV of each ride.

ACTYPOINTS «AP»



ACTYPOINTS «AP» are the unit of the personal scoring of the users. Higher distances collect more AP, and CHALLENGE RIDES are also rewarded with higher scoring (100%) than FREE RIDES (30%).

Users who complete more rides also receive more AP in their personal stats and thus get into higher AP levels, which are reaching the next level unlocking further awards such as discounts, etc.

ACTYPOINTS can be collected by the user over a period of 12 months, rides and thus collected AP that are older than 12 months expire in the personal AP statistics (flowing 12 month rating).

New users start at level 1 – the following levels are stored in the system:

LVL	ACTYPOINTS
1	0 – 499
2	500 – 999
3	1000 – 1499
4	1500 – 2499
5	2500 – 3499
6	3500 – 4999
7	5000 – 7499
8	7500 – 9999
9	10000 – 14999
10	15000 – 19999
11	20000 – 24999
12	25000 – 29999
13	30000 – 39999
14	39999+

When reaching the next higher level, users will be notified and informed about their personal bonus via their contacts (email).

The AP statistics of the users are not published publicly. These are only visible in the personal statistics of the users in the app.



Make the whole world your own personal race track.

Recording of Rides

For registered users, there are two ways to bring their rides to the ACTYVO platform.

1. Garmin / Wahoo Connect

By means of this option, available in the app under «Profile» / «Manage Profile», the user can connect his ACTYVO account with his Garmin or Wahoo account. The cycling activities and data from Garmin or Wahoo are then synchronized directly to the ACTYVO platform.

2. ACTYVO App

Recording of the ride with the ACTYVO Cycling & Challenges app using the GPS and barometric altitude sensor of the smartphone on which the app is installed. To do this, select the Ride Button in the app and then the necessary settings must be set on the smartphone so that the ride or the recording of the ride can be started after selecting the distance. The app automatically completes the rides after reaching the selected distance and, if necessary, within the finish radius and then uploads the data to the system for calculating the results. After a few minutes, the result will appear in the ACTIVITY list or in the rankings (CHALLENGE RIDE).

Garmin / Wahoo Connect

This feature allows for the simplest way to create a registered user to a ride on the ACTYVO platform and thus compare yourself with others.

Linking and connecting the ACTYVO account with the user's Garmin or Wahoo account (in the app's user profile) to bring a ride to the ACTYVO platform without to use the ACTYVO Cycling & Challenges app for this.

For rides with a Garmin or Wahoo device, the following requirements are necessary for consideration on ACTYVO rankings:

- Recorded activity type: Cycling
- The Garmin or Wahoo device must have a barometric altitude sensor built-in.

- Minimum distance to be considered as a CHALLENGE RIDE: 25 km / 15.5 mi
- Finish the ride within the finish radius (5.0 km / 3.1 mi) to be counted as a CHALLENGE RIDE, otherwise the ride will be classified as a FREE RIDE.
- No manually uploaded rides / data are synchronized with the ACTYVO platform.



When paired with the Garmin/Wahoo accounts, the ACTYVO system retrieves the ride data directly from Garmin/Wahoo.

The ACTYVO system then checks whether the conditions for a CHALLENGE RIDE (minimum distance, finish radius) have been complied with and calculated from the distance and altitude profile data as well as the riding time the result of the ride = ACTYVOLTS.

Since no distance category is selected in advance for rides with Garmin/Wahoo devices, the ACTYVO system takes over the highest distance at which the conditions have been met during the calculation.

Example of a recorded ride with Garmin/Wahoo device:

 **DISTANCE: 107.00 KM**

The ACTYVO system starts the evaluation of the data at the end (in the example at km 107) and checks backwards at which position the finish radius has been maintained. If this was the case at km 100, the ACTYVO Ride will end at this point (at km 100) and then be charged. The ride is assigned to the distance category "100 km" and listed in the "CHALLENGE RIDE 100 km" ranking.

If this would be the case between km 75 km and 99.99 km, then the ride is assigned to the "CHALLENGE RIDE 75 km" ranking. This evaluation is continued up to km 25 km.

Users only have to record their rides with the Garmin or Wahoo devices and synchronize them with Garmin/Wahoo. All further steps up to inclusion in the rankings are then carried out automatically by the ACTYVO system.

Strava Connect

This function can also be found in the app's user profile and makes it possible to automatically upload completed rides from the ACTYVO platform to the user's personal Strava account. FYI, there is NO download or synchronization of ride data from Strava to ACTYVO possible (just upload from ACTYVO to Strava).





ACTIVITY List

In the app's activity list, all personal rides are listed individually. This list also includes the personal scoring ACTY-POINTS, which grant users new awards (discounts, etc.) when they reach the next AP levels.

Rides from the Activity List can also be shared with others via various tools on user's smartphone.

Rankings

The results of correctly completed CHALLENGE RIDES (min. distance: 25 km / 15.5 mi, finish within finish radius) are included in the ACTYVO rankings. The higher the ACTYVOLTS achieved, the better the ranking.

CHALLENGE RIDES LEADERBOARDS

The rankings of the CHALLENGE RIDES record all correctly completed rides of the users (no FREE RIDES) per distance category.

The rankings for men and women are always kept separately, as the calculations of the results cannot be compared due to the different factors (ø height, weight) for Men/Woman.

The following **filters** are offered in the rankings:

- Week / Month / Year
- Age Groups : 16 – 24 / 25 – 34 / 35 – 44 / 45 – 54 / 55 – 65 / 65+
- Friends

Friends can be selected/tagged in the leaderboards. Prerequisite for the inclusion of a friend in the personal Friends' list is that a user has already completed a CHALLENGE RIDE correctly and thus appears in the rankings.

With the **Friends filter**, you can create your own rankings of the selected Friends, even when taking into account other filters.

Invite your friends to compare themselves with you on ACTYVO if they are not already registered on ACTYVO!

Depending on the filter

- **Annual ranking:** the best ride of the year (calendar year) / User
- **Monthly ranking:** the best ride of each month / User
- **Weekly ranking:** the best ride (with the highest ACTYVOLTS) of each week / User

The Gender (M/F) filter is always set because the algorithm uses different factors for M/F when calculating performance.



CHALLENGE SERIES LEADERBOARDS

The Challenge Series is a separate classification that is created according to the following criteria.

- **Monthly ranking:** the 6 best rides of the month (from the CHALLENGE RIDE ranking) will be added per participant - if the participant has done less than 6 rides, then fewer rides will be added and taken into account - e.g. only 4 rides per month
- **Annual ranking** (calendar year): the supreme discipline of the application, the best 6 monthly rankings (from the CHALLENGE RIDE monthly ranking) are added and included in this ranking. Again, if the participant has less than 6 monthly results, fewer results are added.

The results are recorded for each distance category, as in the CHALLENGE RIDE ranking. The Friends filter is also available in these leaderboards.

Calculation & Algorithm

ACTYVOLTS are calculated using a complex but precise algorithm. All fixed and individual factors of the rides on different route and altitude profiles are taken into account. The entire route is divided into individual route segments.

The performance to be provided for the mastery of the route segment is calculated, considering the altitude profile (ascent, descent), the ride time and distance of the individual route segment.

The sum of all segments and the performance values of a ride, in consideration of the total riding time, results in ACTYVOLTS.

Fixed factors in the calculation:

- Uniform \emptyset size and weight (different for M/F, there fore also separate rankings) – M: 178 cm / 75 kg – F: 165 cm / 60 kg
- Weight bike (9.5 kg)
- \emptyset Cadence (90)
- \emptyset Temperature along track (20°C / 68 F)
- Top of handlebar or triathlon position (air resistance) depending on the track segment profile
- Narrow race tire
- Road surface medium fine

Variable factors:

- Altitude of track segment (air density, air resistance)
- Ascent / descent of the track segment

Factors not taken into account in calculation / algorithm:

- Track/route geometry (curvy / straight track segments)
- Weather factors (precipitation, visibility)
- Traffic situation along the route

The wind or wind direction is not an insignificant factor. Therefore, the finish radius has been considered in order to finish a CHALLENGE RIDE correctly. This is intended to ensure fair comparisons of the rides on different routes and profiles, no matter where in the world.

The calculation algorithm considers also max. power/performance and maximum speed values.

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