

HOW TO USE AMBIT3'S RUNNING PERFORMANCE LEVEL



Suunto Ambit3's new running performance level is a combined measurement of your physical fitness and your running efficiency. To run faster – or longer with the same effort – you should improve both of them. Running performance level can guide your training during a single exercise and also in the long run.

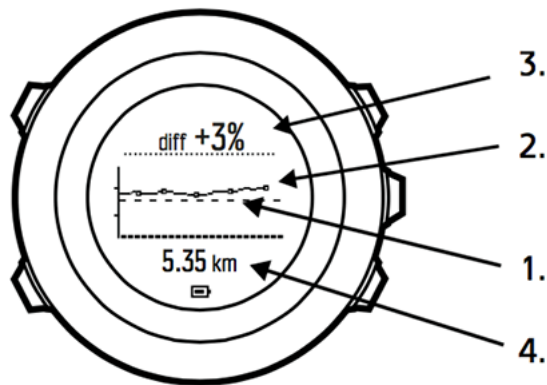
During a single run the running performance level has two benefits: Following the real-time difference indicator provides detailed, granular information on your daily performance and fatigue during the run. Endurance runners can use this information to learn how much fatigue seems manageable during long intensive runs. During races, this information helps you pace yourself properly.

After each run your Running performance level will be updated and you can track progress. If you are new to running or just haven't been out for a while, your running performance may be quite low at first. But as your physical fitness and running technique improve, you should see a corresponding increase in running performance.

DURING A RUN

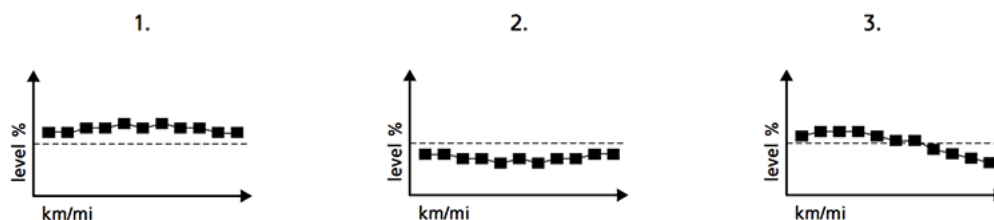
Your Suunto Ambit3 compares your run with your current running performance level and provides real-time running performance feedback during your run. The real-time feedback is available as a graph display in Ambit3's default Running sport mode. You can add this graph to any sport mode that uses the running activity type. The real-time difference (see below) can also be used as a data field in your custom running sport modes.

During your run, the graph display shows your four data points, as illustrated below.



1. **Baseline:** This is your current performance level that is calibrated to compensate for external variables such as terrain and to wait for your heart rate to stabilize. This calibration is done during the first minutes of your run.
2. **Real-time level:** this is your real-time running performance level for the current run displayed per kilometer/mile.
3. **Real-time difference:** this shows you the real-time difference between the calibrated running performance baseline and your real-time running performance level for the current run.
4. **Distance:** total distance for the current recording. The graph shows the last six kilometers (~4 miles).

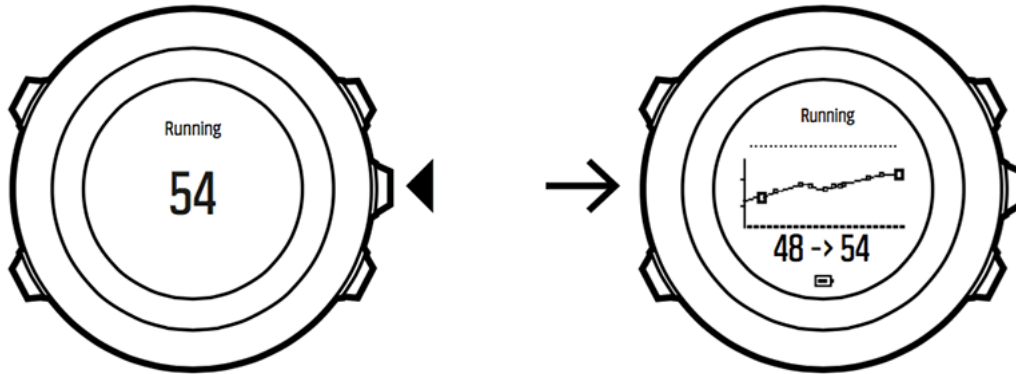
Illustrated below are three samples of Running performance levels during runs. In the first graph (1), performance is good. In the second (2), performance is bad and may indicate over training, illness, or just generally bad conditions. In the third graph (3), you see a typical long distance run where performance level drops steadily later in the run, indicate onset of fatigue.



AFTER A RUN

In the log summary at the end of your run, you get a new running performance level that is based on your last four to eight runs.

In addition, you can see your 30-day trend by pushing [Next]. The trend graph can also be viewed in Ambit3's activity monitoring display after the first run is recorded.



Running performance around 20 is considered very low and above 60 to 70 very high. Average Running performance level for 40 to 50 year old males is around 35–40 and for females 30–35.

Over a 4–20 week period, you may see an increase in running performance level up to 20%. If your Running performance level is already good, it is difficult to improve further. In this situation, running performance level is better used as an endurance indicator.

RUNNING PERFORMANCE AND VO2MAX

Running performance level uses an estimation of your VO2max, a global standard for aerobic fitness and endurance performance. VO2max indicates your body's maximal capability to transport and utilize oxygen (ml/kg/min).

VO2max is affected by the condition of your heart, lungs, circulatory system, and the ability of your muscles to utilize oxygen in energy production. VO2max is the most important single denominator of endurance performance of an athlete.

At optimum running efficiency, your Running performance level corresponds to your real VO2max (ml/kg/min).

MEN

Age (year)	Very poor	Poor	Fair	Average	Good	Very good	Excellent
20-24	<32	32-37	38-43	44-50	51-56	57-62	>62
25-29	<31	31-35	36-42	43-48	49-53	54-59	>59
30-34	<29	29-34	35-40	41-45	46-51	52-56	>56
35-39	<28	28-32	33-38	39-43	44-48	49-54	>54
40-44	<26	26-31	32-35	36-41	42-46	47-51	>51
45-49	<25	25-29	30-34	35-39	40-43	44-48	>48
50-54	<24	24-27	28-32	33-36	37-41	42-46	>46
55-59	<22	22-26	27-30	31-34	35-39	40-43	>43
60-65	<21	21-24	25-28	29-32	33-36	37-40	>40

WOMEN

Age (year)	Very poor	Poor	Fair	Average	Good	Very good	Excellent
20-24	<27	27-31	32-36	37-41	42-46	47-51	>51
25-29	<26	26-30	31-35	36-40	41-44	45-49	>49
30-34	<25	25-29	30-33	34-37	38-42	43-46	>46
35-39	<24	24-27	28-31	32-35	36-40	41-44	>44
40-44	<22	22-25	26-29	30-33	34-37	38-41	>41
45-49	<21	21-23	24-27	28-31	32-35	36-38	>38
50-54	<19	19-22	23-25	26-29	30-32	33-36	>36
55-59	<18	18-20	21-23	24-27	28-30	31-33	>33
60-65	<16	16-18	19-21	22-24	25-27	28-30	>30

(Shvartz E, Reibold RC: Aerobic fitness norms for males and females aged 6 to 75 years: a review. Aviat Space Environ Med; 61:3-11, 1990.)

Read more about the feature in Firstbeat's scientific white paper:
[Automated Fitness Level \(VO2max\) Estimation with Heart Rate and Speed Data](#)