

Cycling Fitness Assessment: FTP & Threshold HR

Determining Cycling Fitness Thresholds

Fitness tests are conducted at the beginning of your plan and every 4–8 weeks thereafter. To establish your Functional Threshold Power (FTP) in TrainingPeaks, we suggest performing a 20min FTP test. This straightforward test provides insight into your current fitness level and helps set power-based cycling training zones.

The goal of the 20min FTP test is to estimate your maximum sustainable power output for a one-hour steady-state time trial. The advantage is that you don't need to ride hard for a full hour. The test also provides an estimate of your Threshold Heart Rate (THR) for cycling.

What You'll Need

- A bike and an indoor trainer equipped with a reliable, accurate power measurement tool (providing data in Watts).
- A good quality Heart Rate strap - we recommend the Polar H10 - this provides lab quality data
- Sports drink or gels - ensure you haven't eaten within the last 2hrs of the test.
- Performing the test indoors ensures greater consistency
- Use a fan to stay cool and minimise heat stress, which can impact your performance.

Test Procedure

Warm-Up: 15 minutes at an easy/steady pace, including 5 x 30 -second efforts at your expected test intensity. Recover 3mins - take a gel or drink on here

Main Test: Ride at the hardest pace you can maintain for 20 minutes. Measure and record your average power (in Watts) and heart rate during this time. (Ensure ERG mode is turned off.)

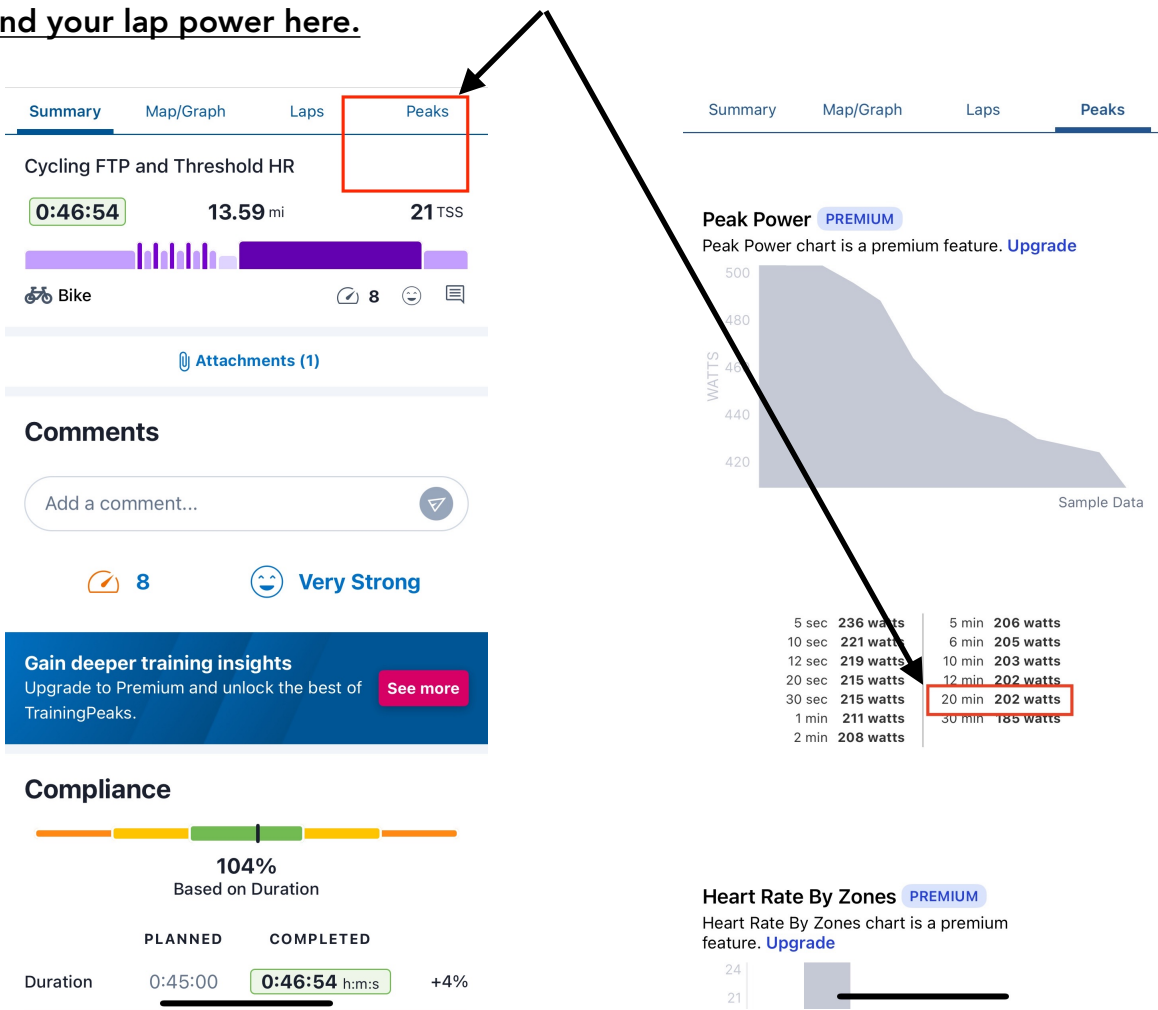
Cool-Down: 5–10 minutes of easy spinning.

Calculate Your Results

Functional Threshold Power (FTP): Your average power over the 20 minutes minus 5% is your FTP. For example, 202 Watts over 20mins would be an FTP of 192 watts. Simply round this figure up to the nearest 1.


If you are you are not sure on your 20min power figure. You can find this figure from your test, simply open the workout in the Training Peaks Mobile App, select 'Peaks', then look for the Peak 20min Watts

Find your lap power here.



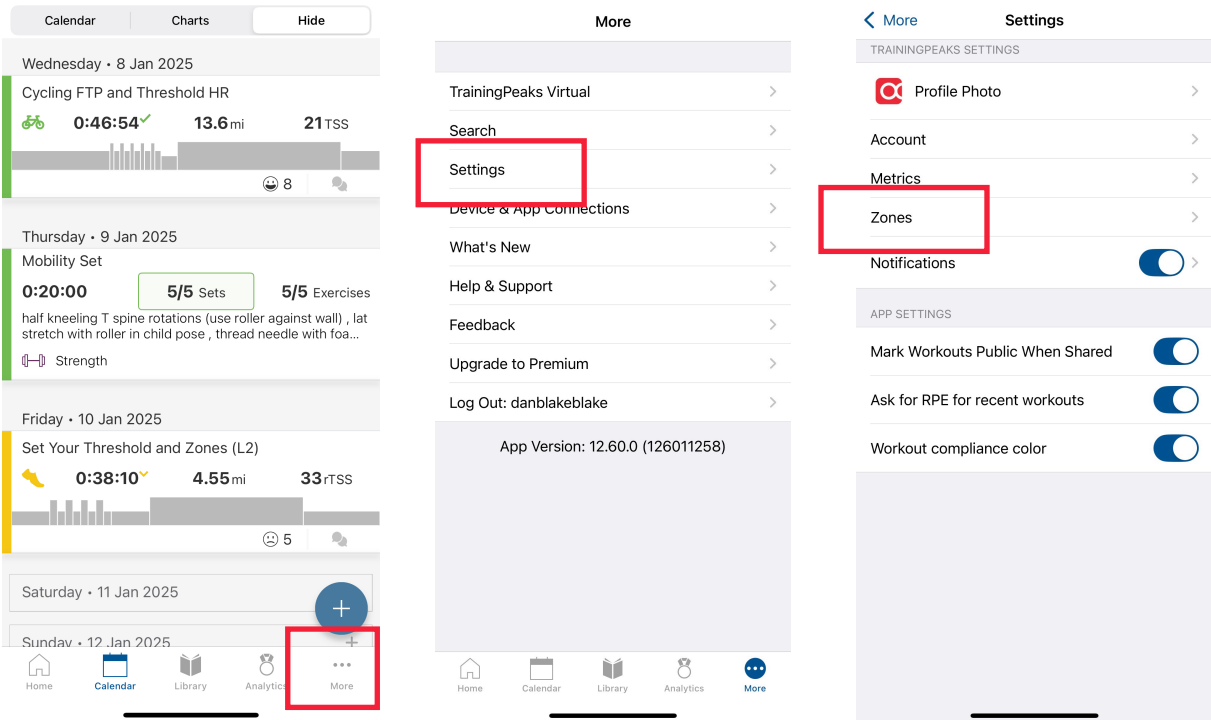
The screenshot shows the 'Peaks' tab of a cycling workout. The main summary shows a time of 0:46:54, 13.59 mi, and 21 TSS. Below this is a bar chart and a 'Comments' section. A blue banner promotes upgrading to Premium. The 'Compliance' section shows 104% completion based on duration. The 'Peak Power' section features a line graph and a table of power data for various durations. The 20-minute power value of 202 watts is highlighted with a red box. An arrow points from the 'Peaks' tab in the top navigation to this table.

Duration	Power (Watts)
5 sec	236 watts
10 sec	221 watts
12 sec	219 watts
20 sec	215 watts
30 sec	215 watts
1 min	211 watts
2 min	208 watts
5 min	206 watts
6 min	205 watts
10 min	203 watts
12 min	202 watts
20 min	202 watts
30 min	185 watts

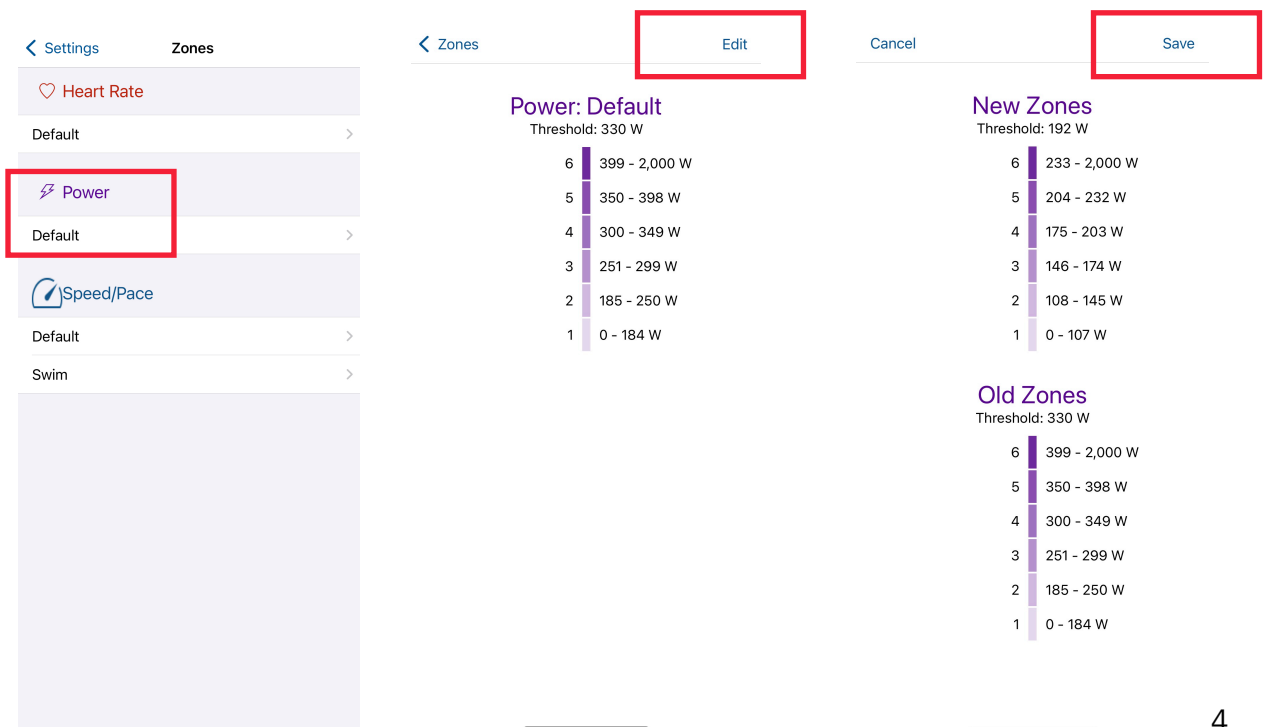
Enter this figure into your Training Peaks account on the mobile app. As per below 

Update your zones here..

1. From the 'Calendar', Select 'More', then Select 'Settings', Then 'Zones'



2. Select 'Power', then 'Edit', then Update the Threshold and Calculate 'New Zones' Finally 'Save'

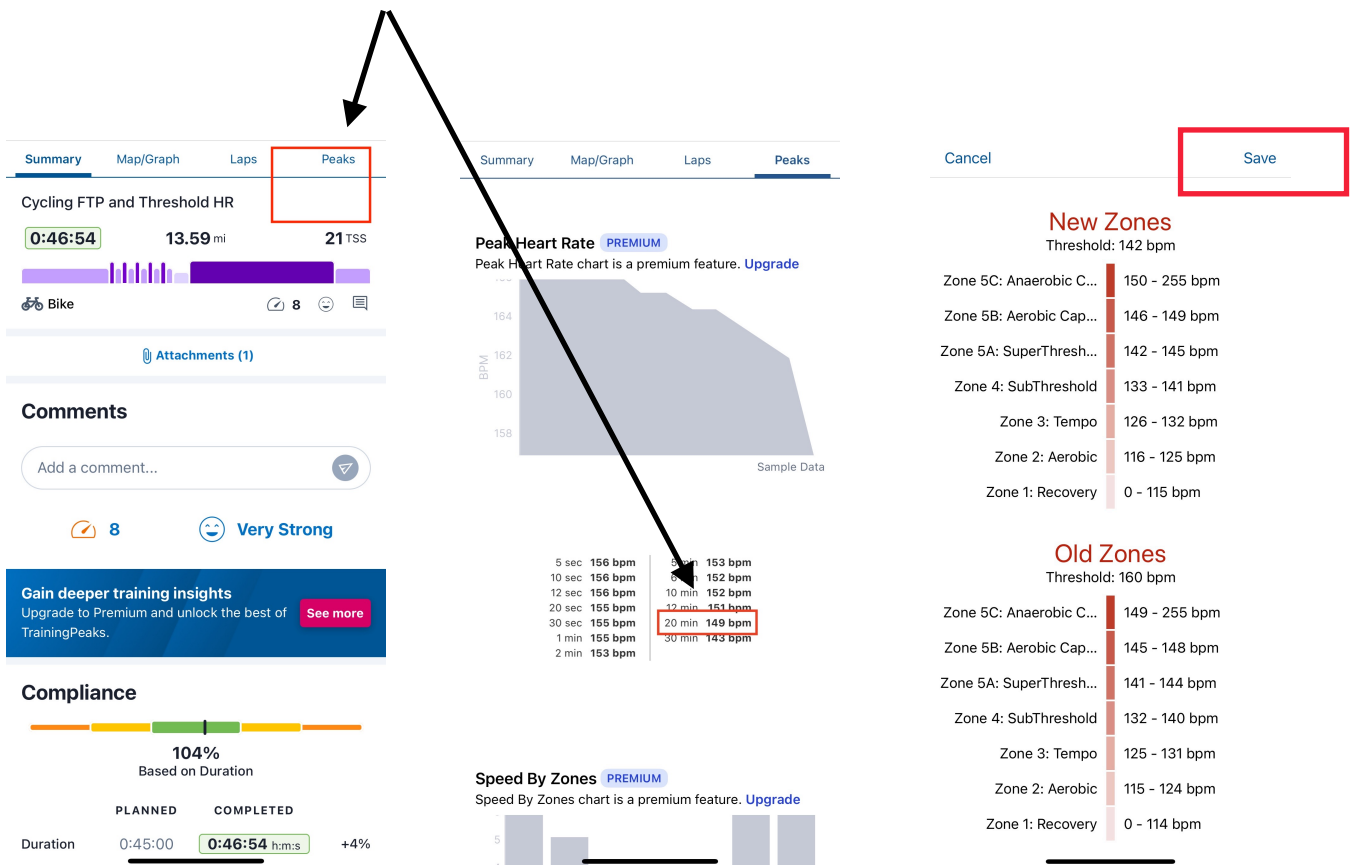


Bike Threshold Heart Rate (THR): Subtract 6 beats from your 20min average heart rate to estimate your cycling THR. This value is approximate, with a margin of ± 2 beats.

Enter this figure into your Training Peaks mobile app account. If you are not sure on your 20min HR figure. You can find this figure from your test, simply open the workout in Training Peaks, select 'Peaks', then select 'Peaks' and look for the Peak 20min HR

Find your lap heart rate here.

Following the same process as the power. Go back to your zones. Update your Bike Heart Rate to the Peak 20min Heart Rate - 6 beats.



The image illustrates the process of finding and updating heart rate zones in the Training Peaks app. It consists of several screenshots:

- Peaks Tab:** A screenshot of the 'Peaks' tab in the app, showing a red box around the 'Peaks' header.
- Heart Rate Chart:** A 'Peak Heart Rate' chart showing heart rate (BPM) over time. A red box highlights the 20-minute mark, which corresponds to a heart rate of 149 bpm.
- Heart Rate Data Table:** A table showing heart rate data for various durations. The 20-minute mark is highlighted with a red box, showing a heart rate of 149 bpm.
- New Zones Configuration:** A screenshot of the 'New Zones' configuration screen. The 'Threshold' is set to 142 bpm. The zones are listed as follows:

Zone	Heart Rate Range (bpm)
Zone 5C: Anaerobic C...	150 - 255 bpm
Zone 5B: Aerobic Cap...	146 - 149 bpm
Zone 5A: SuperThresh...	142 - 145 bpm
Zone 4: SubThreshold	133 - 141 bpm
Zone 3: Tempo	126 - 132 bpm
Zone 2: Aerobic	116 - 125 bpm
Zone 1: Recovery	0 - 115 bpm

Don't forget to update ZWIFT power or any other online platform that might not sync with Training Peaks.

Training Peaks Virtual carries your zones over.

When to Retest

FTP tests are included in training plans, with retests recommended every 8-12 weeks.