Determining your FTP and Zones

Threshold Test

-This is how we determine your FTP
-Once we know your FTP we can calculate your power training zones
-The test is quite simple
-20 or 30 min test where you ride as hard as you can for the duration
-NOTE: this is not the same intensity as you can hold for 1 min
-In the winter I have my athletes complete the test on a trainer
-In the spring we will move outside to test on the road
-Yes there will be a difference in FTP between in and outside

Map to Triathlon Bike Power

Determining your FTP

Threshold Test

-Warmup for 15 – 20 mins of easy Zone 1-2 spinning
-Then do a pretest just below your FTP for 4 mins
-Ride easy for 4-5 mins and then ride hard for 30 mins
-The average power (AP) for the 30 mins is ~FTP

Map to Triathlon Bike Power

Determining your FTP

Hunter Allen's FTP Test

-Warmup 15 min in zone 2
-3 x 1 min Fast pedal drill @100+rpm with 1 min easy spin in between
-Then 20 min time trial by yourself (no partners and not in a race)
-your effort should be sustainable for the 20 mins
-the AP for the 20 mins, less 5% is ~FTP
-example if your AP for the 20 min was 250 W,
then your FTP is 250 x 0.95 = 238 W

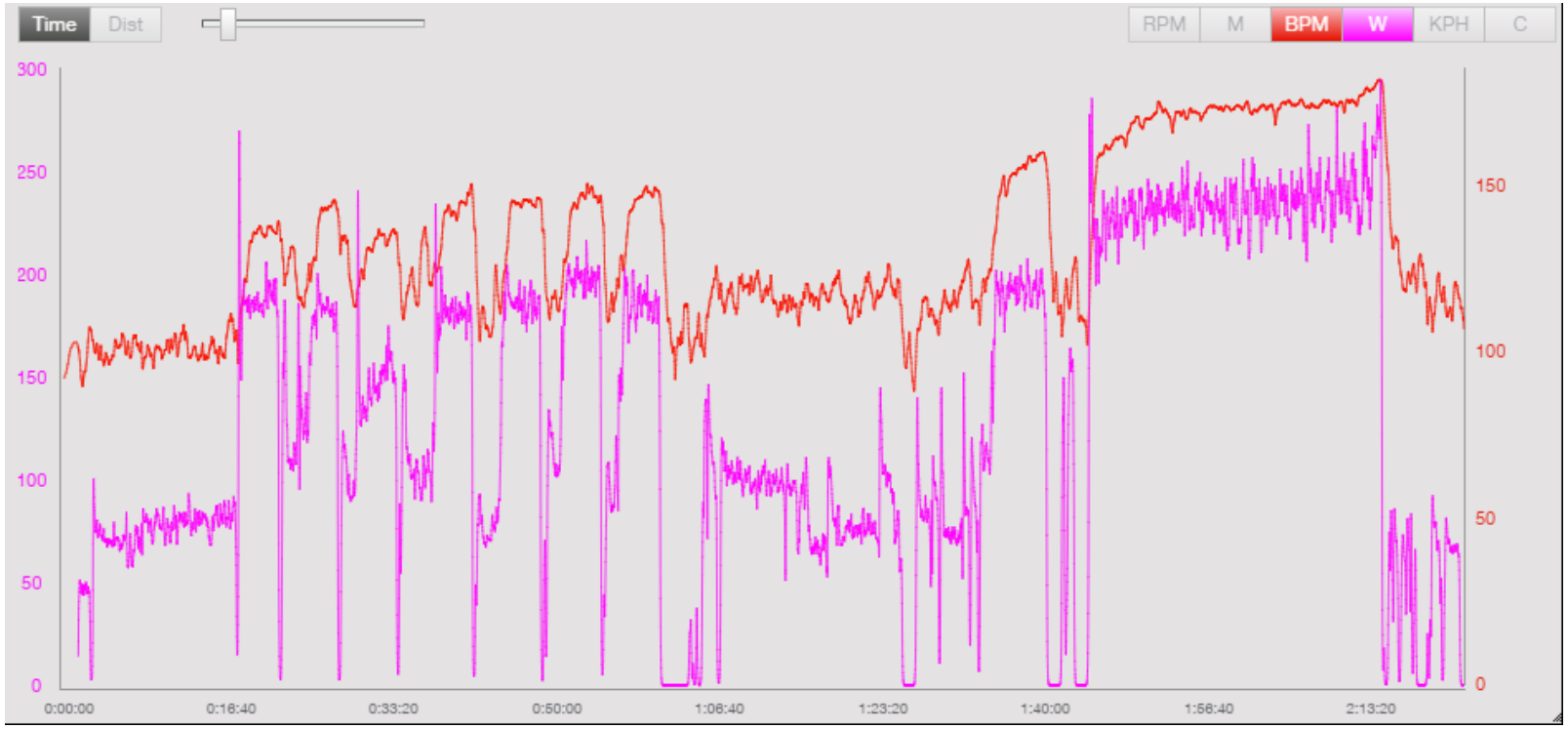
Map to Triathlon Bike Power

Determining your FTP

Threshold Test

-When we do this in class I usually do the pretest as a song and we ride hard or Just slightly under FTP effort for the duration of the song. Most songs are 3 – 5 mins.

Here is an example of the result from the test



Peak 30 Power = 235
Peak 30 HR = 172

Map to Triathlon Bike Power

Determining your Power Zones

Threshold Test

-Please be very safe when performing this test outside
-Pick a flat route and one with limited vehicles and stop lights
-Do not stare at your power during this test and this may sway your result
-Sometimes I will only have time and HR available to view on my computer so that I am forced to look at the power values after the test.
-Use the first 2 mins to gradually build your effort up to threshold power, you will find that by repeating this test over and over you will become much better at pacing

Map to Triathlon Bike Power

Determining your Power Zones

Now what?

Now that we have determined your FTP value we now can calculate your power zones

What do the zones look like?

Determining your Power Zones

Zone #	Name	Average Power (of threshold)	Average HR (of threshold)	Perceived Effort
1	Active Recovery	<55%	<68%	Light
2	Endurance (LSD)	56-75%	69 -83%	Moderate
3	Tempo	76-90%	84-94%	Moderate- somewhat strong
4	Threshold	91-105%	95-105%	Somewhat Strong - Strong
5	V02Max	106-120%	106-120%	Very Strong

Table is based on Coggan power zones

Map to Triathlon Bike Power

Determining your Power Zones

Now what?

Let's use Training Peaks to calculate your zones

Use myself as an example

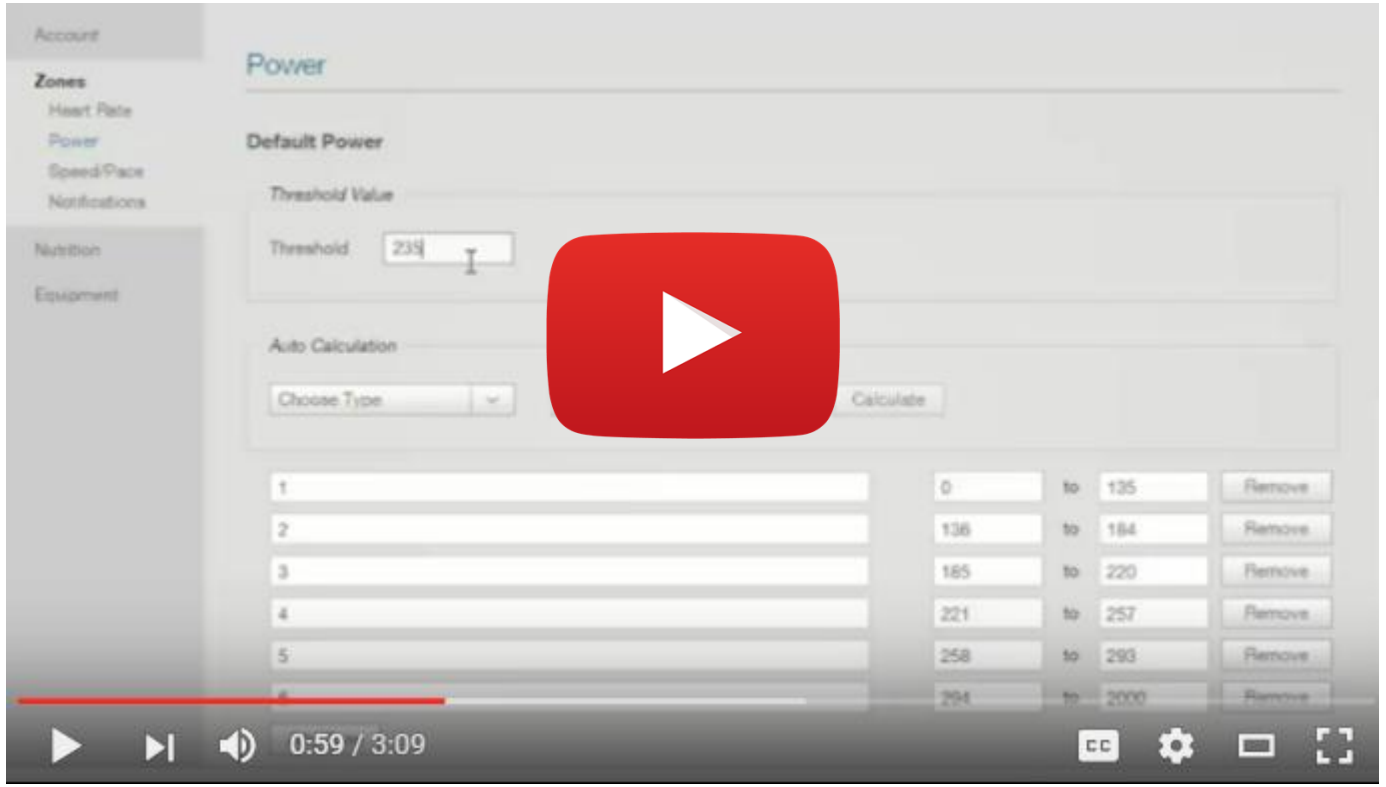
FTP = 235 W

ATHR = 172 HR

Map to Triathlon Bike Power

Determining your Power Zones

Video



https://www.youtube.com/watch?v=730GMKFzSMw

Map to Triathlon Bike Power

Determining your Power Zones

Zone #	Name	Average Power (of threshold)	Average HR (of threshold)	Perceived Effort	IF Value
1	Active Recovery	<55%	<68%	Light	<0.75
2	Endurance (LSD)	56-75%	69 -83%	Moderate	0.75-0.85
3	Tempo	76-90%	84-94%	Moderate- somewhat strong	0.85-0.95
4	Threshold	91-105%	95-105%	Somewhat Strong - Strong	0.95 – 1.05
5	V02Max	106-120%	106-120%	Very Strong	>1.05

If you want to calculate your zones by hand

Example zone 1 calculation 0.55 x 235 = 129W

Example zone 2 calculation 0.56 x 235 = 132 so zone 2 range is (132 – 176W)

0.75 x 235 = 176

Map to Triathlon Bike Power