

Understanding Schwinn MPower Console

Watts

- Watts is a measure of energy expenditure – put simply: in any given physical activity, the harder your effort, the more watts you are producing
- The MPower console Watts measurement is a ‘predicted’ measurement, created by measuring the resistance being applied to the wheel and the revolutions of the wheel, and calculating how much energy (Wattage) is required to move it at that speed
 - Resistance is calculated by measuring the angle of the magnetic brake, the further down the brake is, the more resistance is being applied
 - Revolutions of the wheel are counted by the Speed sensor
- IMPORTANT NOTE: amount of resistance is a much bigger factor in wattage output than how fast the wheel is spinning (RPMs)
 - With no resistance, it takes VERY little effort to turn the wheel quite fast, resulting in wattage measures no greater than about 20 with no resistance applied to the wheel
 - With high resistance, it takes significant effort to turn the wheel at even a slow speed, resulting in high wattage measurements even at very low RPMs

Speed/Distance

- Speed and distance are calculated directly from watts -- for a given wattage number, the console will **always** display the same speed and increment the same distance
- Speed is calculated as the approximate speed that would be generated by the following circumstances:
 - Typical road bike in a mid-gear, flat road, no wind, average-sized rider
- The higher the wattage generated by a rider, the greater the speed and distance will be
- This is done for motivation: the harder you work, the ‘faster’ and ‘farther’ you will go!
 - If you ride for one hour and total 20 miles one day, and ride for one hour and total 21 miles the next day, you know that you worked harder