

## **Detailed Calibration Information**

The SmartPower equipped rollers can be connected and used with popular training apps without a power meter or calibration. The system is factory calibrated for any rider as long as they enter their weight into the system and inflate their tires to 100psi. Variances in actual vs target wattage will not generally be more than 20watts.

For higher wattage accuracy, the SmartPower is designed to integrate power meter data to monitor and adjust power levels during ERG workouts. For the best possible accuracy and ERG response time, the system relies on initial calibration. Therefore it is suggested that if you have a power meter, use it to set your initial calibration (RRS).

## Basics of RRS calibration:

Calibration measures the rolling resistance of your bike on the rollers. Things like weight, tire pressure and temperature will impact the actual rolling resistance. Accurate calibration requires a power meter, but it can also be adjusted manually if desired. Both methods use the IR companion app to access the calibration settings.

## Manual RRS adjustment:

Connect the rollers to the IR app then go to the factory settings page and click on RRS. You can change the setting in .1 increments until you get the desired feel. The factory default is 1.0

## Auto calibration using a power meter:

Connect the rollers to the IR app, then connect the power meter in the app (the power meter must be awake to connect). Look for the solid blue light on the rollers indicating the power meter is connected.

Go to the factory settings page and set Auto RR scaling to YES. Take note of the current RRS value for comparison or in case you need to reset it. Now go to the ride page of the app and set the resistance preset to 20%. The auto calibration is only active at 0-20% resistance settings. There will be a yellow light on the rollers indicating minimum resistance.

Get on the bike and ride at a smooth and steady pace for 1-2 minutes. This will give the system plenty of time to find a stable power and update the RRS value. When you stop riding, the new value will be written to the rollers.

NOTE: The new RRS value may not appear right away on the settings page. In some cases you may have to disconnect the app from the rollers then re-connect to display the new RRS value.

After you have finished with calibration, set the auto RR scaling to NO to prevent unintended calibration cycles.

After this initial calibration, you can leave the PM connected to the rollers for active power matching, or bypass the rollers and connect the PM directly to your preferred cycling app.

BE AWARE THAT THE ROLLERS WILL AUTOMATICALLY CONNECT TO YOUR POWER METER IN FUTURE SESSIONS, UNLESS IT IS DISABLED IN THE IR APP.

CONNECTING YOUR POWER METER TO YOUR PREFERRED CYCLING APP AT THE SAME TIME CAN RESULT IN CONTROL CONFLICTS.

If you do experience erratic wattage behavior when using a 3<sup>rd</sup> party app with a power meter as the power source, disconnect the power meter from the rollers.