Ergometer 2012 - Brake control documentation

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1 Brake control settings

The following section describe the different settings for the rgometer brake control.

1.1 Control Rate

With the control rate the user can adjust the time the ergo needs to react to a change in target power. The control rate can be changes in 10 steps from slow to fast

- fast: ergometer adjusts almost instantaniously

- slow: ergometer smoothly changes the resistance within 5sec to reach the target power
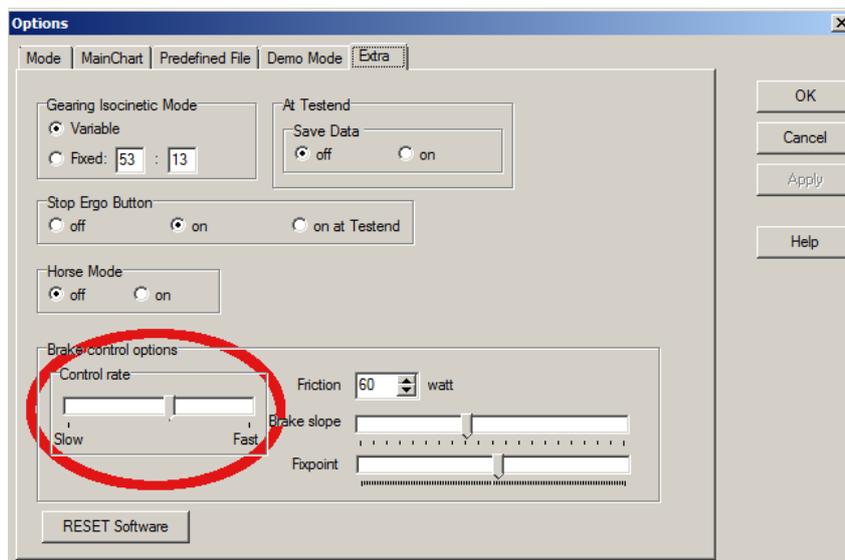

Figure 1.1: Control Rate

1.2 Brake base values

The brake base values are used to internally transform a given target power into a corresponding response of the eddy current brake. Please change these values very carfully. Entering invalid values can lead to a non working ergometer

- Friction: Please enter here the base friction of the ergometer at a speed of 30km/h.

- Slope: Need only to be changed if the ergometer over-/ or undershoots the target power. If it overshoots drag the slider to the left, if it undershoots drag it to the right Overshoot means when there is a positive change the resistance exceeds the target power and when there is a negative change the resistance is below the target power.

- Fixpoint: If the resistance is either always higher or always lower than the target power, regardless if the change in resistance is positive or negative, the Fixpoint need to be changed.
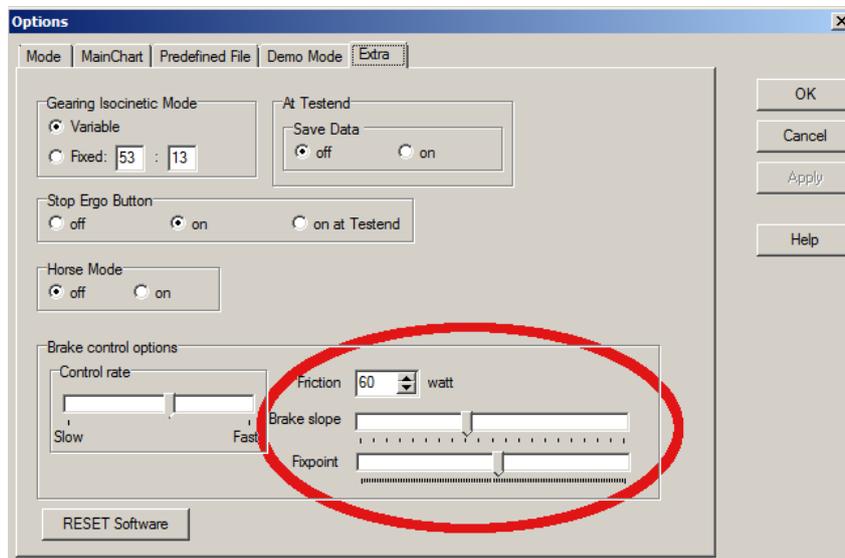

Figure 1.2: Base values