

## CALIBRATING A TWO SPEED BAMBI WITH VERSION 6.xx SOFTWARE

During the life of your SPA Dynamometer it maybe necessary to recalibrate it if for any reason such as corrupt or lost files.

The first process before calibration starts is to arrange the Dynamometer into it 1 inch stroke position.

- 1) Click on Configure, Click on system, Click on Dyno, Click on Dual Speed dyno, Enable the low speed mode and enter a gearbox factor of **10.00** when these settings are entered click apply then click ok to close the window.
- 2) Click on configure, click calibration, click recalibrate, click motor speed, a small window asks if the dyno is set to low or high speed. To carry out a full calibration you must do the calibration in both speeds. Select the appropriate speed, click ok and the dyno will calibrate its motor speed

**HIGH SPEED**



**LOW SPEED**



- 3) Return to the calibration menu and click Velocity, select the X1 gain and follow the on-screen set-up.
- 4) Return to the calibration menu and click Position, select the X4 gain and follow the on-screen set-up
- 5) Now you must turn the Pc/Manual control switch to its central position which disables the drive. While in this position you must change the stroke to 4 inches. With the stroke at 4inches turn the switch back to pc control and continue.
- 6) Return to the calibration menu and click Velocity, select X0.25 gain and follow the on-screen set-up.
- 7) Return to the calibration menu and click position, select X1 gain and follow the on-screen set-up.
- 8) Return to the calibration menu and click load cell. A window appears and asks for the mV/V sensitivity and the load cell rating. Both of these can be found on the load cell calibration sheet enclosed in the manual. The load cell rating is usually 1500Kgf. When done click ok.
- 9) Return to the calibration menu and click zero load cell.

10) You have now calibrated your dyno and all you have to do is save it. Click on configure, click calibration and click save as. It will ask if you wish to save the calibration to the dyno or save to disk. It is strongly recommended to do both.

11) Calibration is now complete and you can begin to use your dyno.