

## Calibrating Ian Fellows Lucid 6000 and LUCI CPI

Before proceeding with calibration ensure the scale hangs free and there are no obstructions that could impede weighing.

### Accessing Calibration Mode (Lucid 6000)

When satisfied the scale will function mechanically, open the LUCID enclosure and locate the CAL switch on the PCB, this is positioned near the top of the PCB to the left of the terminal block. This button will be required later.

1. Power up the LUCID.
2. Wait for the LUCID to boot up then press and hold the 'MODE' button.
3. Press the "▲" key three times until the display reads "CALbn\_"
4. Press Mode.
5. "PUSHbUt" will be displayed. Press the CAL switch located earlier on the PCB.

### Accessing Calibration Mode (LUCI CPI)

1. Power up the LUCI CPI.
2. Wait for the LUCI CPI to boot up then press and hold the 'MODE' button.
3. "PASS" will be displayed. The default full access (Access 2) password is "900" to enter this press "◀,◀,▼". Access 1 password is "001" by default, this is entered by keying "▲". Press enter.
4. Press the "▲" key three times until the display reads "CALbn\_"
5. Press Mode

## Calibration Procedure (Both Lucid 6000 and LUCI CPI)

NOTE: Entering values requires the "◀" to be pressed to proceed to the next digit.

"DISP" – Display format. This dictates the number of decimal places and increments the LUCID will display during weighing. For example 0.1kg, 0.5kg, 1kg accuracy. Set this using the arrow keys. Press "ENTER" to set.

1. "TOP" - Maximum Capacity. This dictates when the unit goes into fault for overweight and the calibration weight required (CALAt). Set this to 10-25% above the largest weighment size. Set using the arrow keys and press "ENTER" to save.
2. "FILT" – Filter Band. Set to either 02 or 03. This dictates the amount of dampening or spike suppression during weighing. Press "ENTER" to save.
3. "FAST" – Fast Track. Set to 1. Modifies the method that the weighing filter is applied. Inactive during batch weighing (SETd 01). Press "ENTER" to save.
4. "DEAD" – Dead load offset. Set the Dead load using method below:
  - a. Ensure that the scale is hanging free.
  - b. If hooks etc will be required to hang the CALAt weight on the scale place these on now.
  - c. Press "MODE", the unit will display the approximate millivolt output from the load cell. Millivolt is signified by three horizontal bars on the left of the display.
  - d. Ensure the scale platform is stable.

- e. Press "ENTER" to begin Dead load acquisition.
  - f. If this is completed successfully "CALAt" will be displayed. If not "DEAD ???" will display, this usually occurs due to excessive motion on the scale during acquisition.
5. "CALAt" – This is the amount of weight you are using to calibrate the scale. This must be between 12.5% and 100% of the "TOP" value. At least 50% is desirable. Set using the arrow keys and press "ENTER" to save.
6. "CAL" – Span Calibrate. This acts much like the Dead load acquisition. Used the following method.
  - a. Place weight equal to that entered in "CALAt" on to the scale.
  - b. Ensure the scale remains free hanging and is only in contact with the load cell.
  - c. Press "MODE", the LUCID will display the approximate millivolt output from the load cell. Millivolt is signified by three horizontal bars on the left of the display.
  - d. Press "ENTER" to begin Span acquisition.
  - e. If this is completed successfully "TEST" will be displayed. If not consult page 59 of the LUCID manual for a guide to calibration errors.
7. "TEST" - Displays an unrounded output and allows for fine trimming of the Span linearity. Press "MODE" and if the displayed weight is satisfactory press "ENTER" and continue to step 9. If not use the following fine trim method. While in "TEST" a "T" will be displayed on the left of the display.
  - a. Enter trim mode by pressing the "◀" key. "T." will be displayed on the left hand side of the display.
  - b. The Span then can be adjusted with the "▲" and "▼" keys. NOTE: This will change the Span permanently even if the calibration sequence is aborted.
  - c. Once satisfied press "ENTER"
8. Once "ENTER" is pressed after "TEST" or Trim mode is completed "SURE" will be displayed. Pressing "ENTER" again will complete the calibration, "STORED" will be displayed and the unit will return to the main menu. Access 2 security level gained by pressing the CAL switch or entering the password will be lost at this point to keep this access level press "SEMI AUTO TARE" instead. Accesses 2 will time out after around 4 minutes.