

THE SACK FILLING & ROBOT PALLETISING COMPANY LTD

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Electronic Display Unit Reference Manual



**THE SACK FILLING &
ROBOT PALLETISING
COMPANY**
LIMITED



ELECTRONIC DISPLAY UNIT



MODE

PRINT

SEMI
AUTO
TARE

SET
ZERO

TEST



CHECK WEIGHING PROCEDURE AND WEIGHT ADJUSTMENTS

This unit has been set to meet factory test requirements.

Should any adjustments need to be carried out to the scale mechanism or the electronic weight display unit, it is the users responsibility to ensure that accurate weightments are obtained and that the machine is used for the purpose it was designed and supplied for.

It is important to check weigh all filled bags to ensure that the machine is weighing correctly.

If the bags weigh more or less than they should, then some simple adjustments must be made.

Check that the correct specification ([CodE]) is being used, and that the correct target weight has been entered into [tArg]. (Refer to section E).

Check that the top-up time is correct (top-up time should be set to the minimum amount of time or longer which is stated on the serial number plate on the machine). If the top-up time is incorrect, adjust the value of [drlbL] (refer to section E).

Now check weigh some more bags. If the weight is still wrong adjust the [InFt] value on the electronic weight display unit. Decrease this value for more weight or increase it for less. (Refer to section 4).

If the weight is still wrong the scale may need re-calibrating.

To determine this, stop all equipment and ensure that the inside of the clamp is clean and the scale has been zeroed.

Ensure that there is no produce in the machine.

Place a known weight in the weigh bin (ie 25g weight)

The weight will then be shown on the weight display unit.

If this figure is incorrect the machine may need re-calibrating, call our service department for more details.

Should you require any assistance please contact us at:-

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ELECTRONIC WEIGHT DISPLAY UNIT

Self Test.

When switched on the weight display unit will perform a self test routine which will last for approximately 10 seconds, after which the display will show a live weight or zero reading.

If the electrical supply is disconnected from the machine whilst there is a bag on the clamp, the display may not show a live weight or zero when the supply is re-established. This may cause a different message to appear on the display which can be cleared by pressing the SET ZERO function key.

The unit has a maximum capacity of 50kg, a minimum load of 5kg, a scale interval of 0.02kg, unit must not be operated outside of these values.

Display.

The weight of the bag contents are continuously displayed on the weight display. Error messages may also be indicated on the display. The display area is also used, when setting up the machine, to show various weighing related parameters entered for use during the operation of the machine.

Function Keys.

The required target weight together with bulk and dribble fill weight values for the feed system are entered by the operator using a menu system operated by the function keys.

The weight display unit has 5 function keys as detailed below:

- o **MODE** - enables access to menu structure.
- o **PRINT** - principal function disabled in this application. Secondary, **ENTER** function when in menu structure.
- o **SEMI AUTO TARE** - places system in **NET** weighing mode. Secondary, returns unit to live weight display when in menu structure.
- o **SET ZERO** - Provided that the system is within +/-2% of the original calibrated scale zero enables **GROSS** weighing mode and resets scale weight value to zero. Secondary, downwards movement function through menu structure.
- o **TEST** - causes the display to indicate 10 times the normal scale resolution (i.e. if e = 0.02kg display will show resolution to 2gr). Secondary, upwards movement function through menu structure.





ELECTRONIC WEIGHT DISPLAY UNIT (cont.)

CALIBRATING IAN FELLOWS LUCI CPI

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

ACCESSING CALIBRATION MODE

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

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

1. "DISP" – Display format. This dictates the number of decimal places and increments the LUCI will display during weighing. For example 0.1kg, 0.5kg or 1kg display accuracy. Set this using the arrow keys. Press "ENTER" to set.
2. "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 weightment size. Set using the arrow keys and press "ENTER" to save. If recalibrating this does not need to be changed.
3. "FILT" – Filter Band. Set to either 02 or 03. This dictates the amount of dampening or spike suppression during weighing. Press "ENTER" to save. If recalibrating this does not need to be changed.
4. "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. If recalibrating this does not need to be changed.
5. "FREZ" – Freeze – Do not change unless advised to by a SFRPCengineer.
6. "DEAD" – Dead load offset. Set the Dead load using method below:
 - a. Ensure that the scale is hanging free.
 - b. If hooks, straps, sacks etc will be required to hang the CALAt weight on the scale place these on to the scale 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.





7. "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- this does not need to be a round number, an object of any know mass can be used. Set using the arrow keys and press "ENTER" to save.
8. "CAL" – Span Calibrate. This acts much like the Dead load acquisition. Use 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 LUCI 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 LUCI manual for a guide to calibration errors.
9. "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. Under most circumstances this step is NOT recommended.
 - c. Once satisfied press "ENTER"
10. 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.





ELECTRONIC WEIGHT DISPLAY UNIT (cont.)

MODIFYING /ADDING CODES ON LUCID 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 two times until the display reads "bAtCH_"
5. Press Mode, "Strt 0" or "Strt 1" will be displayed
6. Press the "▼" once, "CodE" and a number will be displayed.
7. This is the active code, press "Mode" and use the "▲" and "▼" keys to select the required code. Press "enter", "CodE" and the number entered will be displayed
8. Press the "▼" once. "tArg" will be displayed. To set a new target weight, follow the procedure below. If not go to Step 9.
 - a. Press "Mode"
 - b. Set the required value using the arrow keys
 - c. Press enter. "tArg" will be displayed.
9. Press the "▼" once. "drbl" will be displayed. If a new top-up/dribble weight is required follow the procedure below. If not go to Step 10.
 - a. Press "Mode"
 - b. Set the required value using the arrow keys, this value cannot be larger than the value set in "tArg"
 - c. Press enter. "drbl" will be displayed.
10. Press the "▼" once. "SPt 1" will be displayed. This value represents the weight the scale has to reach after discharging before the LUCI restarts and weighing can begin again. If the LUCID has problems restarting then this maybe set too low. To change this, follow the procedure below. If not go to Step 11.
 - a. Press "Mode"
 - b. Set the required value using the arrow keys, this value cannot be larger than the value set in "drbl"
 - c. Press enter. "SPt 1" will be displayed.
11. Press the "▼" once. "InFt" will be displayed. This value compensates for the amount of product left "inflight" and un-weighed after the LUCID reaches target and the machine stops filling leading to overweight bags. This needs to be adjusted by trial and error to obtain an accurate weighment. If the bag is overweight "InFt" is too low and conversely if the bag is underweight "InFt" is too high. To change this, follow the procedure below. If not go to Step 12.





ELECTRONIC WEIGHT DISPLAY UNIT (cont.)

CHANGING THE ACTIVE CODE

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. Enter either password.
4. Press the "▲" key until the display reads "bAtCH__"
5. Press Mode, "Strt 0" or "Strt 1" will be displayed
6. Press the "▼" once, "CodE" and a number will be displayed.
7. This is the active code, press "Mode" and use the "▲" and "▼" keys to select the required code. Press "enter", "CodE" and the number entered will be displayed.
8. Press "enter" several times until the weight display is shown.

USEFUL SETTINGS

"oFIL" – Overfill. Accessed through the "bAtCH__" menu. This setting allows for the correction of constantly under filled bags. The value of this setting is the amount over the target weight that needs to be reached before the bag is discharged.

"ZSEt" – Auto Set Zero. Accessed through the "ConFlg_" menu. This will automatically zero the display if it remains within a tolerance of zero (10% of "Top" weight, positive or negative) for 5 seconds. This is either set to 1 for Auto Set Zero On or 0 for Auto Set Zero Off.

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