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LCIC-BAT - Quick Start

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Package's applications

The LCIC-BAT package includes the following applications.

As most details don't need explanation, only the non-obvious ones are described below.

LCIC-BAT-SET-RS485-ADDRESS

Use this app in order to select board's RS485 address.

There might be up to 64 boards, addressed 0 → 63

(represented in the combo box in hex: 00 → 3F).

Select the desired address by the combo box and click 'Save'.

LCIC-BAT-CALIBRATION

Use this app in order to calibrate your load cell.

There are 4 steps in the calibration app.

Step 1

Just shows current calibration's details, and current weight & a/d readings:

The screenshot displays the 'LCIC-BAT-CALIBRATION-V2.03, Card version LCIC-BAT-BS V011.17' application window. The interface is divided into several sections:

- Current Reading (Calibration point(s) = 1):** Shows a large digital scale reading of '0.000 kg' in green. To the right, it indicates 'Stability = 99.993 % (100% = Best Stability)' and a temperature of '24.3 °C'. Below this, an 'A / D' reading is shown as '-235' in red.
- Current Board Calibration:** A list of calibration parameters:
 - Calibration Name: LCB-200027
 - Calibration Date: September 3, 2019
 - Calibration Time: 12:50
 - Calibration Counter: 1
 - Maximum Load Cell Capacity: 40.000 kg
 - Maximum Applied Capacity: 30.000 kg
 - Display Resolution: 0.001 kg
- Communication type:** Set to 'COM22'.
- Baud Rate / RS485 address:** Set to '9600' and '00'.
- Instructions:** A prompt says 'Click 'Next' to start a new calibration procedure'.
- Progress:** 'Step 1 of 4 (Show Data)' is indicated.
- Navigation:** 'Next' and 'Exit' buttons are located at the bottom right.

Step 2

In this step you may redefine your parameters if needed, then proceed to next step:

LCIC-BAT-CALIBRATION-V2.03, Card version LCIC-BAT-BS V011.17

Parameters (Calibration point(s) = 1)

Name

Unit..... ▾

Maximum Load Cell Capacity kg

Maximum Applied Capacity kg

Display Resolution..... ▾ kg

Calibration Temperature °C

Zero correction per 10 °C kg

Calibration Table

Click 'Next' to confirm these parameters.

Step 2 of 4 (Parameters)

Step 3

In this step you define the zero level plus 1 to 10 calibration point(s).
(One calibration point is obligatory, more points are optional in order to support a non-linear load cell.)

In this example zero level plus one calibration point was used:

LCIC-BAT-CALIBRATION-V2.03, Card version LCIC-BAT-BS V011.17

Current Reading (Calibration point(s) = 1)

Stability = 99.990 %
(100% = Best Stability) 25.6 °C

A / D **1873569**

Step 3 of 4 - calibration points

Point #0 (A/D, kg)
0267412 0 Ready

Point #1 (A/D, kg)
1873546 30.000 Ready

Stability = 99.990 %
(100% = Best Stability)

Drag this window in order to see the current readings in the main window.

Maximum Applied Capacity 30.000 kg

Click 'Skip' to retain the previous weight adjustments or Click 'Next' to confirm the new weight..

Add new point Remove last point

Undo Next Skip

Hysteresis Table

'Next' to finish.
'Hysteresis Table' for Hysteresis

Click **Next** to proceed to the next step.

Step 4

LCIC-BAT-CALIBRATION-V2.03, Card version LCIC-BAT-BS V011.17

Current Reading (Calibration point(s) = 1)

Weight **29.999** kg 25.6 °C

A / D **1873487**

Parameters (Calibration point(s) = 1)

Name

Unit.....

Maximum Load Cell Capacity kg

Maximum Applied Capacity kg

Display Resolution..... kg

Calibration Temperature °C

Zero correction per 10 °C kg

Locking Management

Click 'Save to Board' to validate the new calibration, overwriting the previous one

Step 4 of 4 (Save or Quit)

In this step you decide whether to **confirm** the new calibration, or **retain** the existing one:

The 'Weight' box is **Preview**, that is, the calibration application (**not** the board!) shows what weight the board **would** generate with the current load cell output in case you confirm the new calibration.

Optional locking: In this step you have the option to **lock** the calibration – click the 'Locking Management' button:

- * After you clicked 'Save to Board' saving the new calibration, do not exit the app, so you may lock the new calibration.
- * You may use the calibration app in order to just lock an existing calibration:
Run the calibration app, go directly to step 4 by Next, Next, Skip, then click the 'Locking Management' button.

LCIC-BAT-BASIC-DISPLAY

Use this app in order to watch your board's readings.

Example:

RS485 addr.	S/N	Product ID	Wgt/Frc (kg)	Temp. (°C)	
#00	LCB-200027	LCB-200027	0.8	29.8	Save
#3F	LCB-200029	LCB-200029	0.6	28.5	Save

of load cells: 2
reading

Save All

To show a single load cell on full screen, click on load cell's address (in the 'RS485 addr.' column).

OK Retry

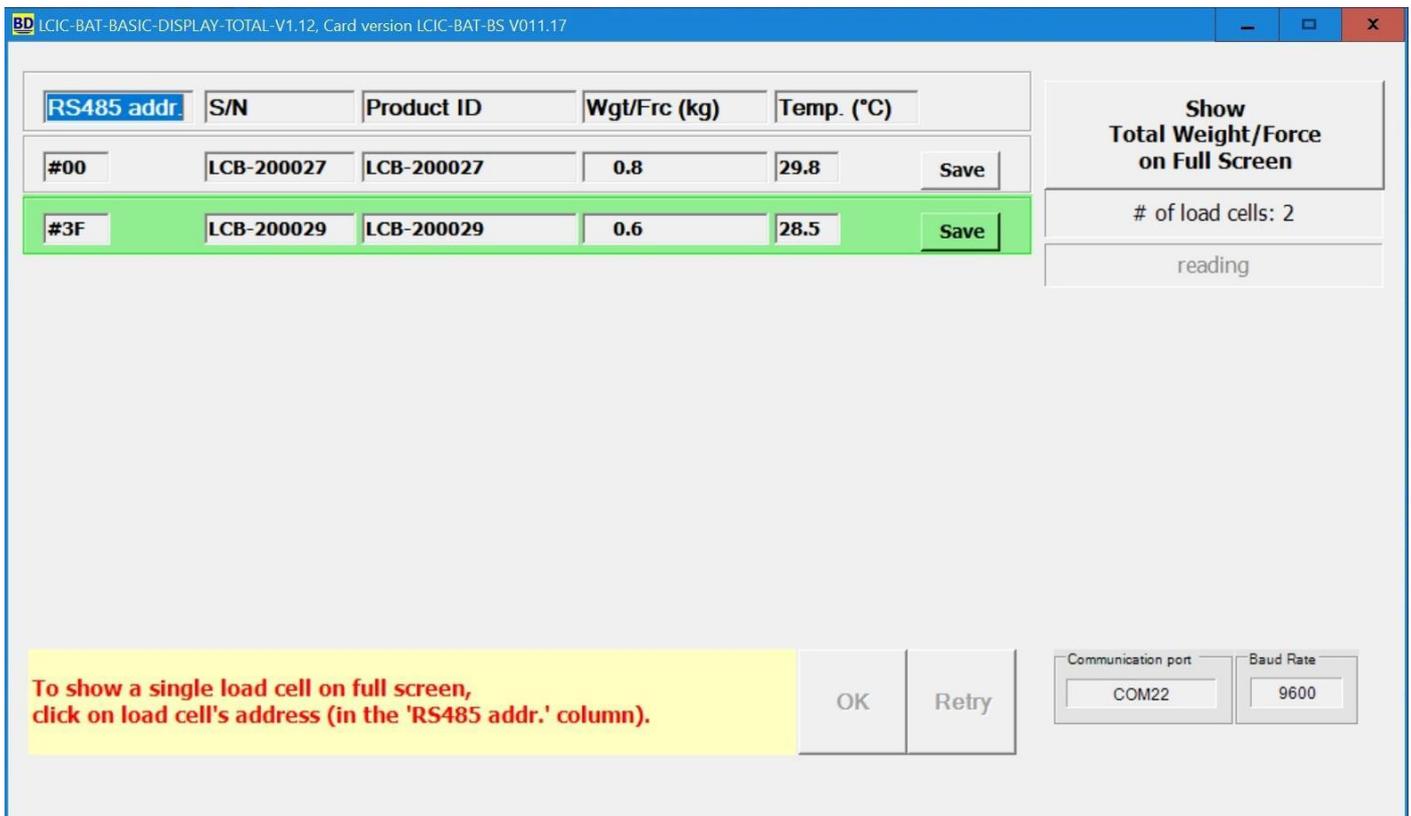
Communication port: COM22 Baud Rate: 9600

Notes:

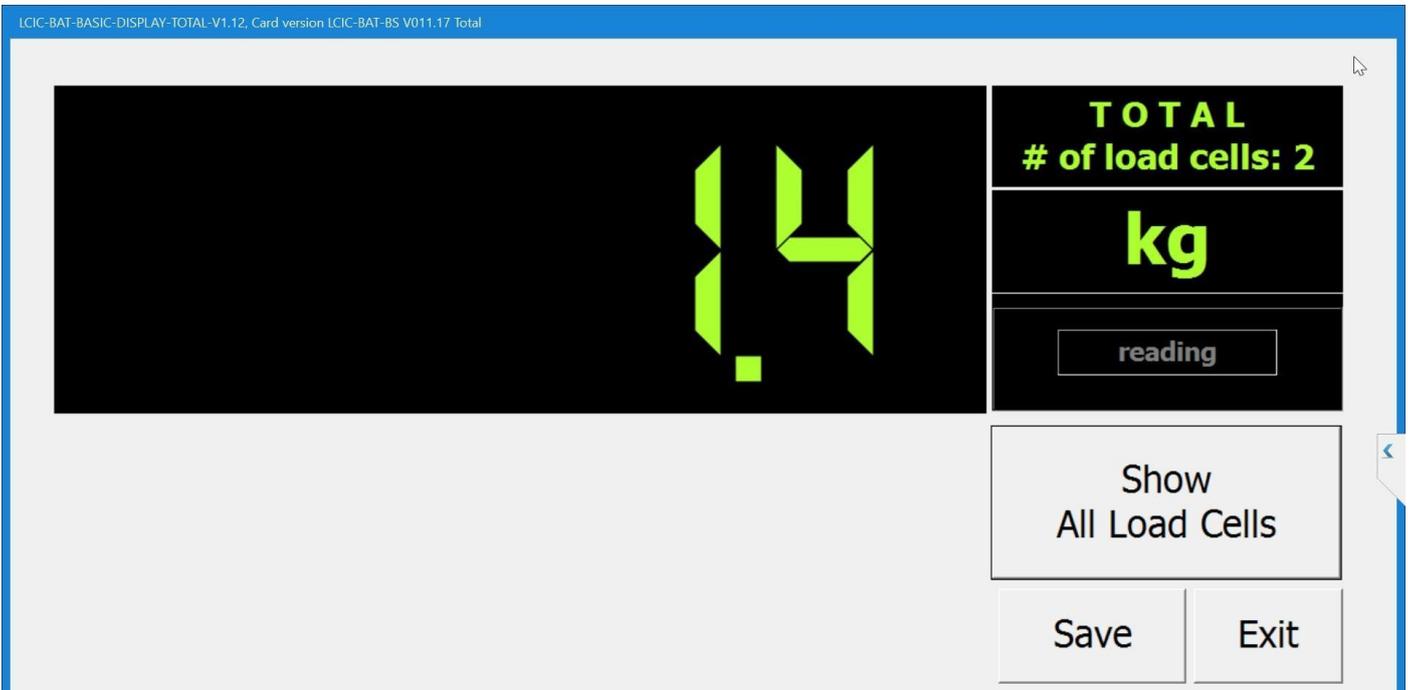
1. At any time you may get a 'snapshot' of the current weight & temperature of a specific board – just click 'Save' in the board you selected. Each 'Save' produces a small 'txt' file (in ANSI & UTF-8 encodings) and an Excel file, located in 'C:\IMS\LCIC-BAT-BASIC-DISPLAY-DATA'.
2. Use the 'Save All' button in order to get at once a 'snapshot' of all load cells.

3. There is also the LCIC-BAT-BASIC-DISPLAY-**TOTAL** application, in which you may get the **total** of all load cells connected to the same port:

Run LCIC-BAT-BASIC-DISPLAY-**TOTAL** application, getting this screen:



Click the 'Show Total Weight/Force on Full Screen' button (which appears instead of the 'Save All' button of the LCIC-BAT-BASIC-DISPLAY application) to get the 'TOTAL' screen:



- * Click 'Show All Load Cells' to return to the previous screen.
- * Click 'Save' to save a 'snapshot' of all load cells (including their total).

Data Logger Applications (option)

There are two applications for boards that support the **data logger** option:

- * LCIC-BAT-DL-SETTINGS

This app lets you set the logging definitions.

- * LCIC-BAT-DL-COLLECT

This app lets you collect the data logged in your board(s).

These applications are described in 'LCIC-BAT - Data Logger.pdf'.

LCIC-BAT V002 Connection Diagram

LCIC-BAT V002 Connection Diagram

