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Operating instructions Temperature Calibrating set

KERN DLB_A01N

Version 1.0

01/2015

GB



DLB_A01N-BA-e-1510



KERN DLB_A01N

Version 1.0 01/2015

Operating manual

Temperature Calibrating set

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1 Preparation

We recommend sometimes to check the temperature value of the models DLB 160-3A and DLT 100-3N using the optional temperature calibrating set DLB-A01N. Before you do this, allow the device to cool down for at least 3 hours after the last heating phase.

⇒ Install the temperature-calibration set acc. to illustration.



⇒ Switch-on the drying unit on the rear side.

⇒ Close heating cover.



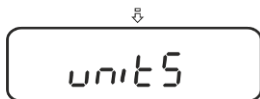
For further information on how to operate the moisture meter please refer to the operating instructions enclosed with each model.

2 Calibrate / adjust temperature value

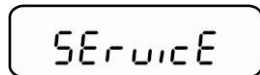
2.1 DLB 160-3A

Invoke service function:

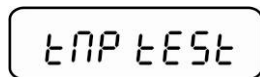
- ⇒ In weighing mode press the **MENU** button and keep it pressed until the acoustic signal gets mute. Release the button and the menu item “units” will appear.



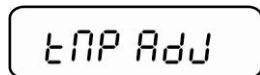
- ⇒ Press repeatedly the **MENU** button until „Service“ will be displayed.



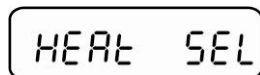
- ⇒ Confirm by pressing the **PRINT** button. Select the required settings by pressing the **MENU** button



Calibration of temperature, see chap. 2.2.1



Adjustment of temperature, see chap. 2.2.2

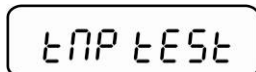


Settings of lamp

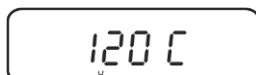
2.1.1 Calibration of temperature value

During temperature calibration only a check is carried out, i.e. no values are changed.

- ⇒ Invoke service function „Tmp test“, see chap. 2.1



- ⇒ Confirm by pressing the **PRINT** button. The current setting will be displayed. Use the navigation buttons **↓** **↑** to select the temperature during the check, available 35- 160°C, e.g. 120°C.
- ⇒ Confirm using the **PRINT** button, the appliance heats up to the set temperature.



- ⇒ After approx. 15 minutes compare the test temperature with the displayed temperature of the DLB-A01N. If the two values do not match, we recommend a temperature adjustment, see chap. 2.1.2
- ⇒ Use the **ON/OFF** button to finish the calibration.
- ⇒ Use the **ON/OFF** button to return into weighing mode.

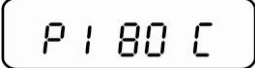
2.1.2 Adjustment of temperature value

The temperature is measured at two selectable points and it is possible to correct it there.

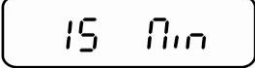
- ⇒ Invoke service function „Tmp Adj“, see chap. 2.1

A rectangular LCD display with a black border showing the text "tNP Adj" in a monospaced font.

- ⇒ Confirm by pressing the **PRINT** button. The current setting for the first temperature point is displayed. Or leave it on factory setting 80°C or select a desired temperature with the help of the navigation buttons ↓ ↑ (available 50-130°C).

A rectangular LCD display with a black border showing the text "P1 80 C" in a monospaced font.

- ⇒ Confirm with the **PRINT** button, the first heat-up phase is started. The remaining time is displayed.

A rectangular LCD display with a black border showing the text "15 min" in a monospaced font.

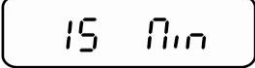
- ⇒ Temperature calibration for the first point takes 15 min. Compare the temperature displayed on the DLB-A01N with that of the moisture analyzer. If the two values do not match, correct them using the navigation buttons ↓ ↑ and confirm with the **PRINT** button

A rectangular LCD display with a black border showing the text "t1 80 C" in a monospaced font.

- ⇒ The current setting for the second temperature point is displayed. Or leave it on factory setting 150°C or select the desired temperature with the help of the navigation buttons ↓ ↑. The second temperature point has to be at least 30°C over the first one, max. 160°C.

A rectangular LCD display with a black border showing the text "P2 150 C" in a monospaced font.

- ⇒ Confirm with the **PRINT** button, the second heat-up phase is started. The remaining time is displayed.

A rectangular LCD display with a black border showing the text "15 min" in a monospaced font.

- ⇒ Temperature calibration for the second point takes 15 min. Compare the temperature displayed on the DLB-A01N with that of the moisture analyzer. If the two values do not match, correct with the help of the navigation buttons ↓ ↑.

A rectangular LCD display with a black border showing the text "t2 150 C" in a monospaced font.

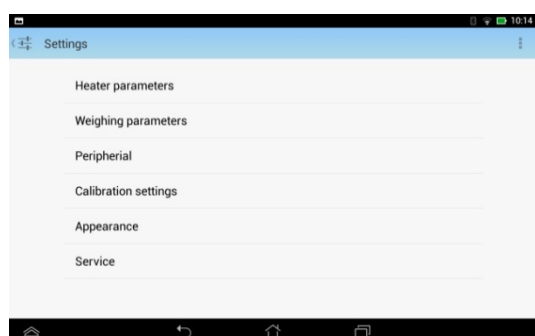
- ⇒ Confirm by pressing the **PRINT** button. The adjustment is completed, the appliance returns into the menu. Use the **ON/OFF** button to return into weighing mode.

2.2 DLT 100-3N

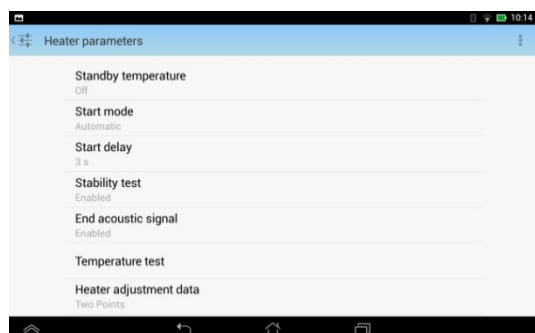
2.2.1 Calibration of temperature value



- ⇒ Tap top right corner of control button.
- ⇒ To call the setup menu, tap the **<Settings>** button and the selection list will appear.

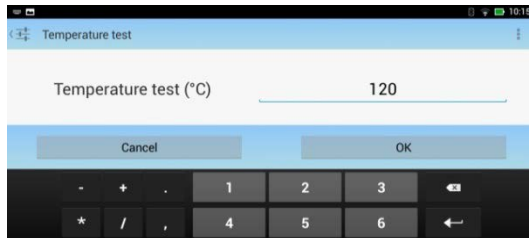


- ⇒ Tap on **< Heater parameters >**, the selection list will be displayed.



- ⇒ Tap **<Temperature Test>**.

This function is only used for a temperature check, i.e. no values are changed.



Tap **<Temperature Test>**. The numeric input window will be displayed. Enter test temperature e.g. 120°C (selectable 35-160°C) and take over with **<OK>**.



Tap control button  .



This starts the test which will be running for approx. 15 minutes.

The time remaining active and the current temperature are permanently displayed.



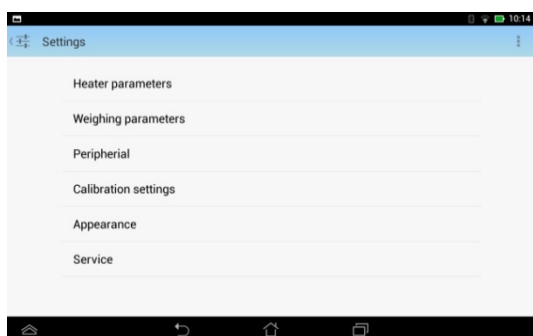
After test end compare the test temperature with the displayed temperature of DLB-A01N. If the two values do not match, we recommend a temperature adjustment, see chap. 2.2.2

2.2.2 Adjustment of temperature value

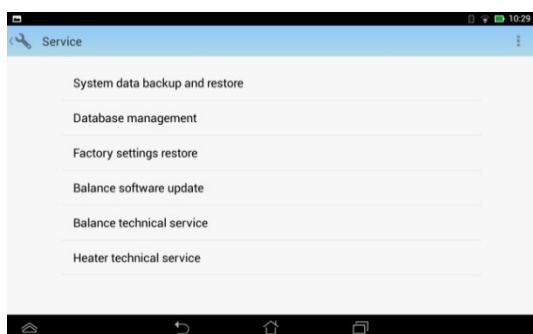


⇒ Tap top right corner of control button.

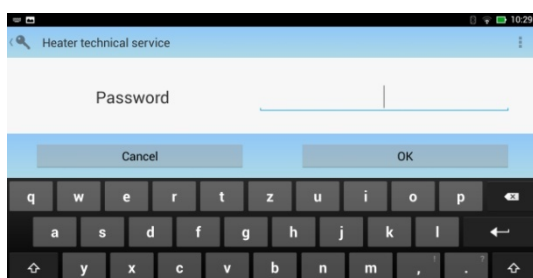
⇒ To call the setup menu, tap the **<Settings>** button and the menu will appear.



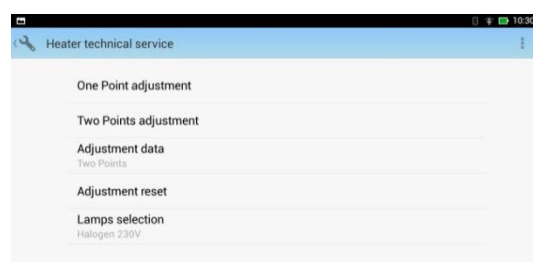
⇒ Tap **< Service >**



⇒ Tap **< Heater technical service >**



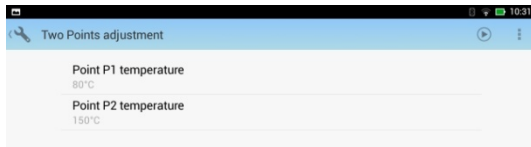
⇒ Enter password 1122 and confirm by **<OK>**.



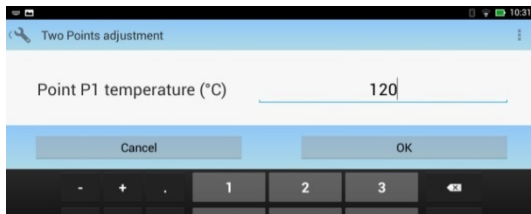
⇒ Select one-point adjustment or two-point adjustment.

The example below describes a two-point adjustment.

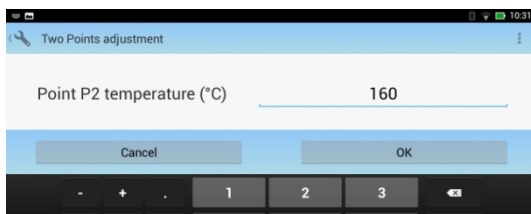
One-point adjustment is carried out in the same way. Adjustment will end after the first temperature point.



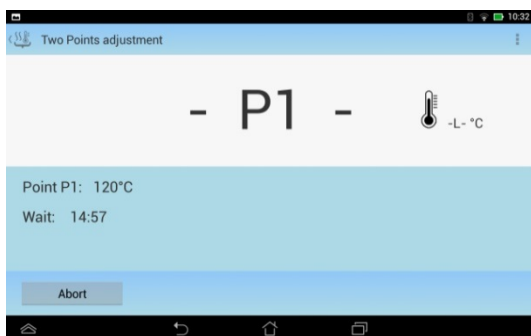
⇒ After selection of **<two-point adjustment>** the currently set test temperatures are displayed.



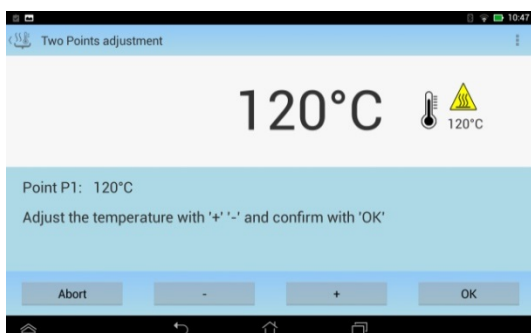
⇒ To change, tap point P1 / P2 and enter the desired test temperature, confirm with **<OK>**.



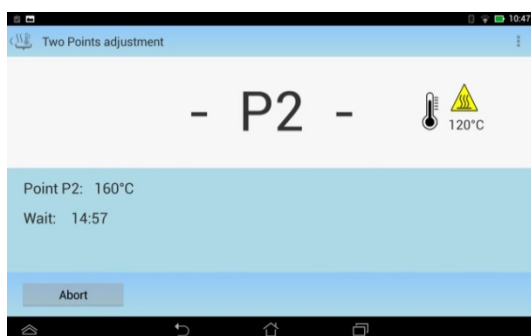
⇒ Tap control button , adjustment will start.



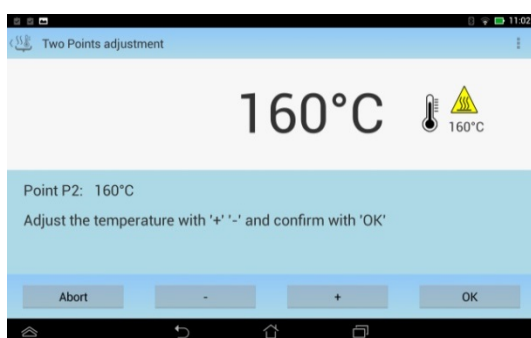
⇒ Now the instrument heats up to target temperature 1 to determine the default temperature. The time remaining active and the current temperature are permanently displayed.



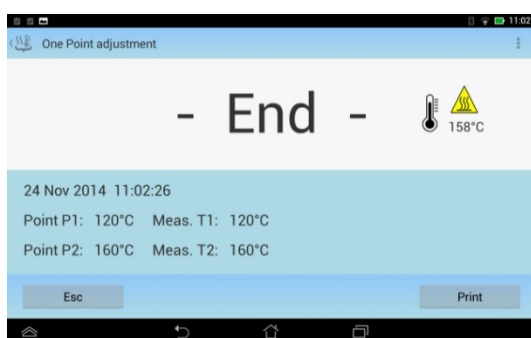
⇒ After 15 minutes the temperature adjustment for target temperature 1 has finished. Compare the test temperature with the displayed temperature of the DLB-A01N. If the two values do not match, correct by pressing the control buttons   and confirm by pressing **<OK>**.



Now the instrument heats up to target temperature 2 to determine the default temperature.



After 15 minutes the temperature adjustment for target temperature 2 has finished. Compare the test temperature with the displayed temperature of the DLB-A01N. If the two values do not match, correct by pressing the control buttons **-** **+** and confirm by pressing **<OK>**.



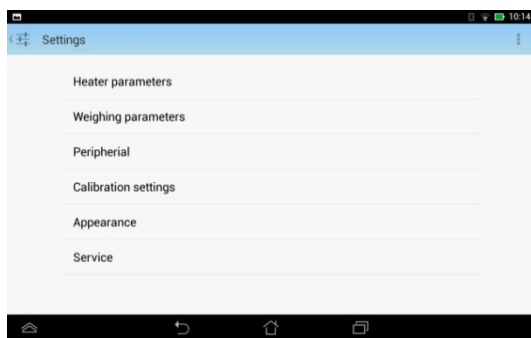
Tap **<Print>**, a protocol printout is created when using an optional printer.

Back to menu, tap **<Esc>**.

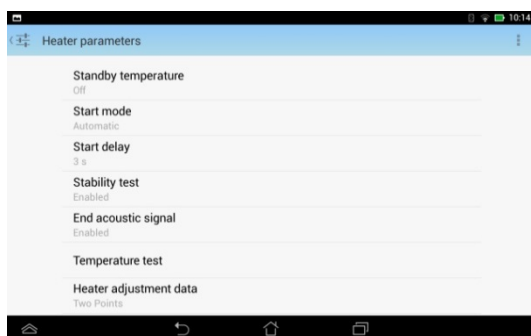
2.2.3 View / print out adjustment protocol



- ⇒ Tap top right corner  of control button.
- ⇒ To call the setup menu, tap the **<Settings>** button and the menu will appear.



- ⇒ Tap on **< Heater parameters >**, the selection list will be displayed.



- ⇒ Tap **<Heater adjustment data>**.



The adjustment protocol will be displayed.
Tap **<Print>**, a protocol printout is created when using an optional printer.