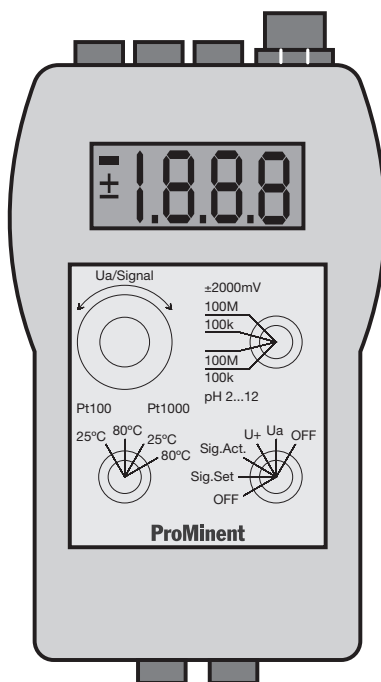


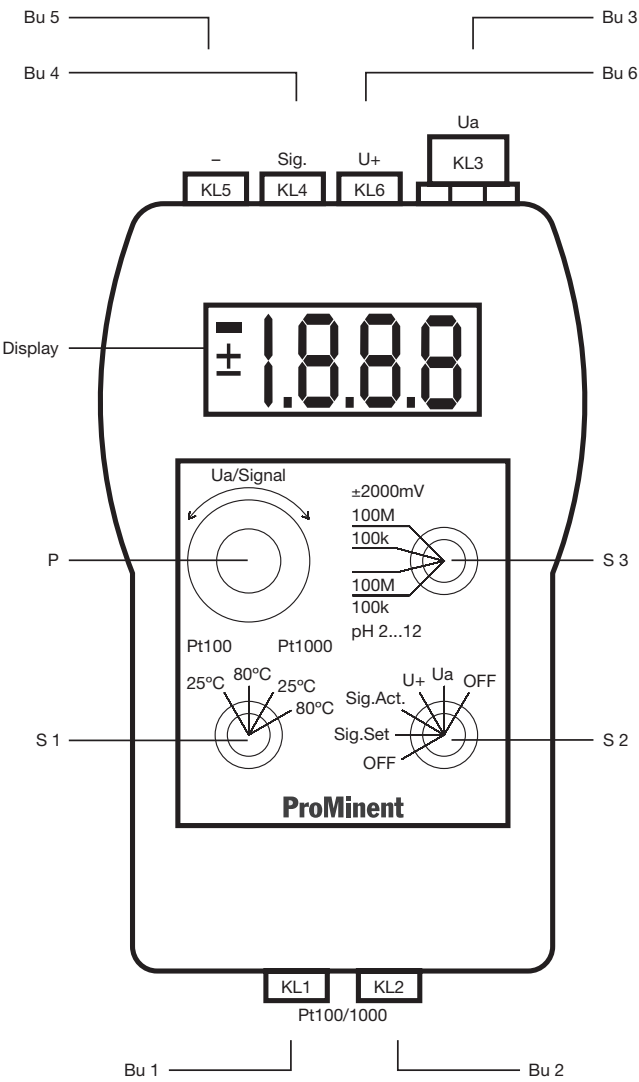
Brief Operating Instructions

ProMinent® Simulator



pk_5_108

1 Unit overview



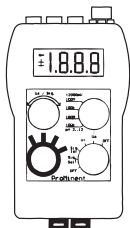
The ProMinent® Simulator simulates measuring signals for DULCOMETER® equipment.

2 Functional Description

The rotary knobs on the simulator have the following functions:

Switch S1:	Selects the temperature sensor (Pt 100 or Pt 1000) and a temperature (25 °C or 80 °C)
Switch S2:	Selects and switches on and off the measuring range that appears in the display
Switch S3:	Selects the simulated probe (Redox or pH) and the output resistance (100 k Ω or 100 M Ω)
Potentiometer P:	Adjusts the voltage signal (Redox or pH) and the mA signal: The two signal types change simultaneously when P is adjusted!
Arranging the sockets:	
Bu 1, Bu 2:	Temperature sensor signal (Pt 100 or Pt 1000)
Bu 3 (SN6):	Probe signal (Redox or pH)
Bu 4, Bu 5:	mA signal
Bu 5, Bu 6:	Connection for external voltage U+ (for voltage loop)

3 Controls

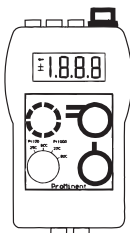


To simulate Pt 100/Pt 1000

Connect controller to Bu 1 and Bu 2,
use S1 to select the required simulation.

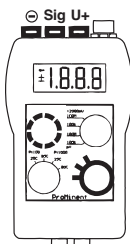
NOTE

Unit does not have to be switched on for this simulation.



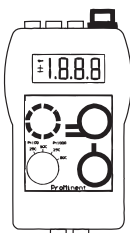
To simulate Redox probe

Connect controller to Bu 3,
Set S2 to "Ua",
Set S3 to "100 k" under " ± 2000 mV",
Use P to set the required (Redox) voltage –
Value appears in the display.
Note voltage value on controller; Set S3 to "100 M" –
The voltage value on the controller must not change!



Simulate mA signal

Connect controller to Bu 4, Bu 5 and Bu 6 (see Page 4),
Set S2 to "Sig.Set",
Use P to set mA signal – the display indicates the mA signal,
which corresponds to the P setting.
Set S2 to "Sig.Act." – the display shows the actual mA signal
in the signal cable.
Set S2 to "U+" – the display shows U+.



Simulate pH probe

Connect controller to Bu 3,
Set S2 to "Ua"
Set S3 to "100 k" over "pH 2...12"
Use P to set the required pH value – the display indicates this
value.
Note pH value on controller.
Set S3 to "100 M" – the pH value on the controller must not
change!

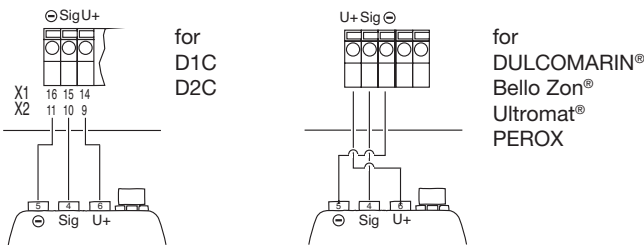
4 Technical Data

Measuring range U+:
Voltage supply:
Battery life:

5...30 V DC
9 V battery unit or charger
approx. 150 hours at 550 mA
capacity

NOTE
Switch off the unit after use to save the battery.

Terminal connection to standard signal input (mA)



Simulation	Output	Display
Pt 100, 25 °C	109.73 Ω	-
Pt 100, 80 °C	130.89 Ω	-
Pt 1000, 25 °C	1097.3 Ω	-
Pt 1000, 80 °C	1308.9 Ω	-
±2000 mV, 100 M	±1999 mV	±1999
±2000 mV, 100 k	±1999 mV	±1999
pH 2...12, 100 M	±295 mV	12.00...2.00*
pH 2...12, 100 k	±295 mV	12.00...2.00*
Sig. Ist	0...19.99 mA	0...19.99
Sig. Soll	0...19.99 mA	0...19.99

* Slope of 59 mV/pH and zero point at 0 mV is assumed.

5 Scope of delivery

The scope of delivery of the simulator with the order number 1004042 includes the following parts:

- 1 Simulator D1C/D2C/DCM
- 1 Coaxial cable combination 2 x SN 6, 0.8 m
- 1 Connecting cable 3P, 0.5 m
- 1 Connecting cable 2P, 0.5 m
- 1 Brief operating instructions, German
- 1 Brief operating instructions, English

We reserve the right to make technical changes.

**Addresses and delivery
by the manufacturer:**

ProMinent Dosiertechnik GmbH
Im Schuhmachergewann 5-11
D-69123 Heidelberg

Phone: +49 6221 842-0

Fax: +49 6221 842-419

info@prominent.com

www.prominent.com