

USER MANUAL

ANALYTICAL SCALE WITH TOUCHSCREEN

PCE-ABT 220



ENGLISH



User manuals in various languages (français, italiano, español, português, nederlands, türk, polski) can be found via our product search on:
www.pce-instruments.com

INTRODUCTION

Thank you for choosing the PCE-ABT 220 analytical balance.

This user manual contains information on installation, accessories, troubleshooting, customer service, general maintenance, etc.

It also describes various possible applications.

Please read the user manual carefully before starting operation. If you have any questions about the balance, please contact us.

PCE scales are ideal for weighing in laboratories and for general use. The scales can also be used for some advanced weighing functions.

Features:

- » Stainless steel weighing plate
- » LCD display with backlight
- » RS232 interface
- » Adapter included
- » Windshield included
- » Height-adjustable supports, spirit level
- » Internal self-calibration
- » Selectable weight units, g, oz, ct, mg
- » Memory for total time
- » Weighing function
- » Counting function
- » Weighing under the scale

SPECIFICATIONS

Range	0 ... 220g
Resolution	0,1mg
Repeatability	0,2mg
Linearity	0,5mg
Response time	≤ 4 sec
Dimensions of weighing plate	ø80mm
Interface	RS-232
Dimensions	340 x 215 x 350mm
Operating temperature	+10°C ... 40°C
Power supply	Output voltage 5 VDC, 600 mA via power supply unit as standard (input voltage 220 V)
Net weight	8,5 kg

CALIBRATION OF THE SCALE

Press the CAL button and the display will show: CAL XXX.XXXX, and the scale will begin internal calibration. You can also select manual calibration using a standard weight, and the instructions will guide you through the next steps.



LOCATION OF THE SCALE

- » Do not place the scale in a location where accuracy may be affected
- » Avoid extreme temperatures . Do not expose the device to direct sunlight or place it near an air conditioner
- » Avoid unsuitable tables . The table or floor must be firm and free of vibrations.
- » Avoid unstable power sources. Do not use the scale near devices with high power consumption, such as welding equipment or large motors.
- » Do not place the scale near vibrating machines.
- » Avoid high humidity, as this can lead to condensation.
- » Avoid direct contact with water. Do not spray water on the scale or immerse it in water.
- » Avoid air movement caused by fans or open doors, for example. Do not place the device near open windows, fans, or air conditioners.
- » Keep the scale clean. Do not place anything on the scale when it is not in use.

CONFIGURATION OF THE SCALE

Installing the scale

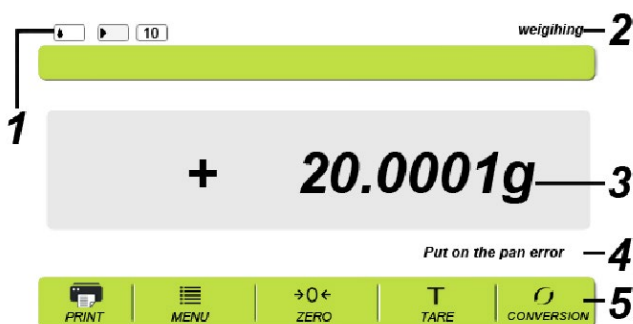
- » Place the scale on a firm, vibration-free surface.
- » Open the windshield and carefully insert the stainless steel weighing plate.
- » Level the scale using the adjustable feet and the spirit level.
- » Connect the scale to the power supply.
- » To improve performance, allow the scale to warm up for approx. 30 to 60 minutes and calibrate it before use.

Level the scale

Once you have moved the scale into the correct position, level it using the adjustable feet and the spirit level. To do this, turn the adjustable feet on the back of the scale until the bubble in the spirit level is in the center.

OPERATING CONFIGURATION

- 1 - Status symbol
- 2 - Function
- 3 - Weight specifications
- 4 - Notes
- 5 - Control buttons



SENSITIVITY CONFIGURATION



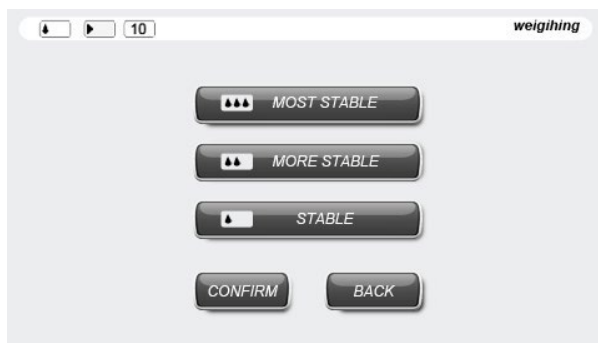
- Low Sensitivity



- Normal Sensitivity



- Max. Sensitivity



SPEED SETTING



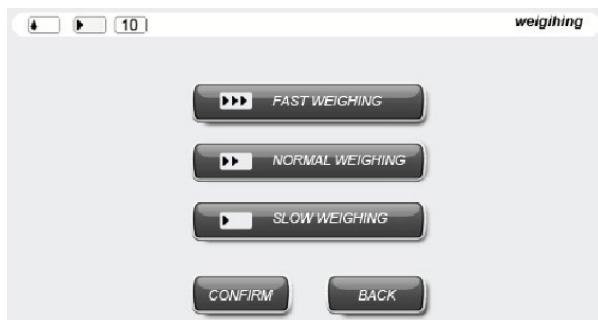
- Low speed



- Normal speed



- Higher speed

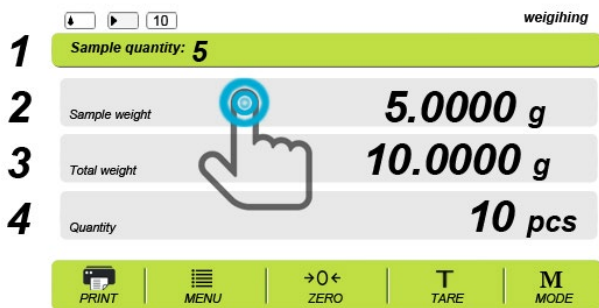


CONFIGURATION OF THE WEIGHING UNIT

In weighing mode, press "CONVERSION" to select the unit.
There are 4 units to choose from: g/ct/oz/mg.

Piece counting function

The scale has a piece counting function. Have products with the same weight and a minimum weight of ≥ 0.5 mg ready.



1 - Select the amount of sample to be placed on the weighing plate.

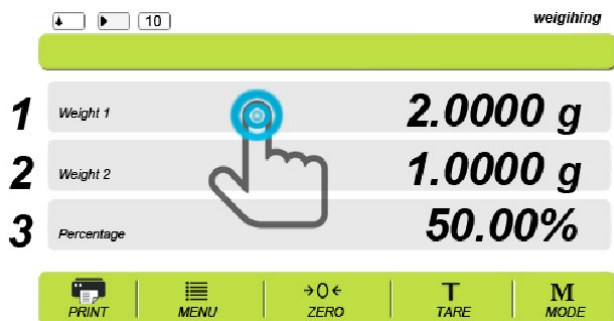
2 - Select the weight you want to weigh. The weight of the sample is displayed under "Sample weight". Once the weight has stabilized, tap it again and the result will be displayed and saved.

3 - Tap here to obtain the total weight. Tap again to check. Carefully remove the scale from the packaging and lift it out of the box.
The packaging contains everything you need to start weighing.

4 - The quantity is shown on the display.

Percentage function

Check the percentage weight function:



1 - Select 100% of the weight you want to place on the scale.

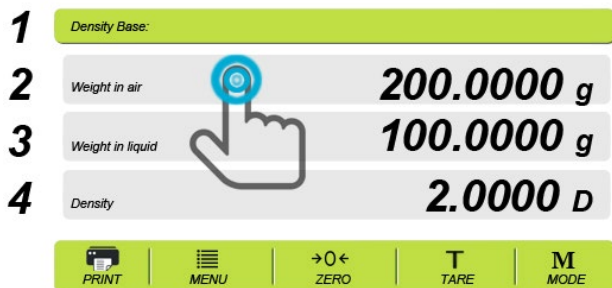
2 - Tap the value you want to weigh. The weight will be displayed. Once the weight has stabilized, tap it again. The result will be verified and saved.

3 - Tap here to weigh the total weight, then tap again to check the weight.

4 - The percentage will be displayed here.

Density function

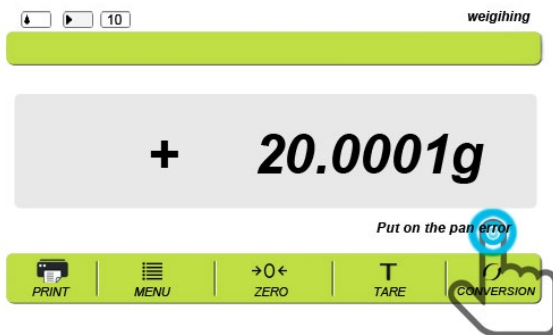
Works in the same way as the piece count function, except that you tap "Air weight" and "Weight in air" and then "Weigh in liquid," and the result is shown on the display.



TROUBLESHOOTING

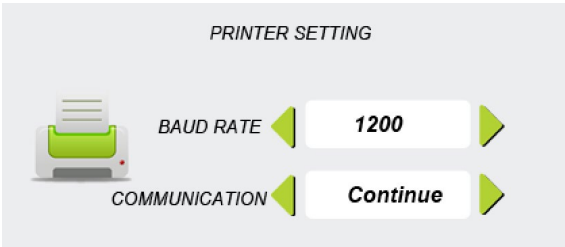
If problems arise, you can identify them and find a solution.

ERROR	CAUSE	SOLUTION
No screen	Not connected to the power supply; Fuse defective; Damage to the power transformer,	Connect the power cord. Replace the fuse. Replace the power transformer. Contact the manufacturer.
Weight unstable	Poor working conditions; The windshield is open; There is an object between the table and the scale; Unstable power supply;	Maintain stable ambient conditions, close doors and windows; Close wind deflector; Remove object; Connect to stable power supply;
The weight specifications are incorrect	The scale is not calibrated. Do not calibrate it before weighing.	Calibration; Calibrate as soon as possible



DATA OUTPUT

1	Model or a decimal point
2	A space or a decimal point
3	A space or *
4	+ or - or a decimal point
5	Data
6	Data or decimal point
7	Data or decimal point
8	Data or decimal point
9	Data or decimal point
10	Data or decimal point
11	Data or decimal point
12	Data
13	Unit 1
14	Unit 2
15	Unit 3
16	Enter
17	Cover



You can select the baud rate and type of communication according to the different printers or the connection to the PC.

DISPOSAL

For the disposal of batteries in the EU, the (EU) 2023/1542 directive of the European Parliament applies. Due to the contained pollutants, batteries must not be disposed of as household waste. They must be given to collection points designed for that purpose. In order to comply with the EU directive 2012/19/EU we take our devices back. We either re-use them or give them to a recycling company which disposes of the devices in line with law. For countries outside the EU, batteries and devices should be disposed of in accordance with your local waste regulations. If you have any questions, please contact PCE Instruments.

PCE INSTRUMENTS CONTACT INFORMATION

Germany

PCE Deutschland GmbH
Im Langel 26
D-59872 Meschede
Deutschland
Tel.: +49 (0) 2903 976 99 0
Fax: +49 (0) 2903 976 99 29
info@pce-instruments.com
www.pce-instruments.com/deutsch

France

PCE Instruments France EURL
2, rue Georges Kuhnmmunch
67250 Soultz-sous-Forêts
France
Tel.: +33 (0) 972 35 37 17
Fax: +33 (0) 972 35 37 18
info@pce-france.fr
www.pce-instruments.com/french

Spain

PCE Ibérica S.L.
Calle Mula, 8
02500 Tobarra (Albacete)
España
Tel. : +34 967 543 548
info@pce-iberica.es
www.pce-instruments.com/espanol

United Kingdom

PCE Instruments UK Ltd
Trafford House
Chester Rd, Old Trafford
Manchester M32 0RS
United Kingdom
Tel: +44 (0) 161 464902 0
Fax: +44 (0) 161 464902 9
info@pce-instruments.co.uk
www.pce-instruments.com/english

Italy

PCE Italia s.r.l.
Via Pesciatina 878 / B-Interno 6
55010 Loc. Gragnano
Capannori (Lucca)
Italia
Telefono: +39 0583 975 114
Fax: +39 0583 974 824
info@pce-italia.it
www.pce-instruments.com/italiano

Turkey

PCE Teknik Cihazları Ltd.Şti.
Halkalı Merkez Mah.
Pehlivan Sok. No.6/C
34303 Küçükçekmece - İstanbul
Türkiye
Tel: 0212 471 11 47
Faks: 0212 705 53 93
info@pce-cihazlari.com.tr
www.pce-instruments.com/turkish

The Netherlands

PCE Brookhuis B.V.
Twentepoort West 17
7609 RD Almelo
Nederland
Telefoon: +31 (0)53 737 01 92
info@pcebenelux.nl
www.pce-instruments.com/dutch

United States of America

PCE Americas Inc.
1201 Jupiter Park Drive, Suite 8
Jupiter / Palm Beach
33458 FL
USA
Tel: +1 (561) 320-9162
Fax: +1 (561) 320-9176
info@pce-americas.com
www.pce-instruments.com/us

Denmark

PCE Instruments Denmark ApS
Birk Centerpark 40
7400 Herning
Denmark
Tel.: +45 70 30 53 08
kontakt@pce-instruments.com
www.pce-instruments.com/dansk

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