

KERN[®] **KERN & Sohn GmbH**

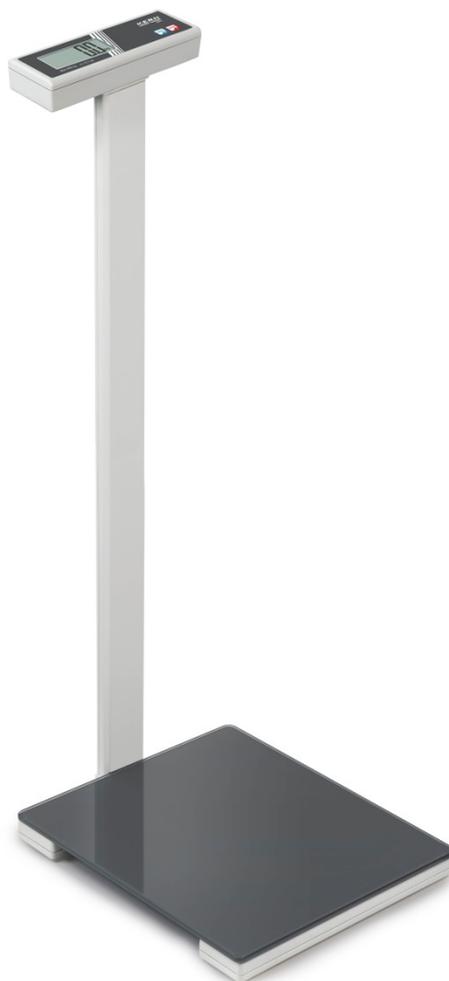
Ziegelei 1
D-72336 Balingen
E-Mail: info@kern-sohn.com

Phone: +49-[0]7433- 9933-0
Fax: +49-[0]7433-9933-149
Internet: www.kern-sohn.com

KERN **Operation manual**
eco **Personal scales**

KERN MPL

Version 1.0
2017-09
GB



MPL-BA-e-1710



KERN MPL

Version 1.0 2017-09

Operation manual for personal scales

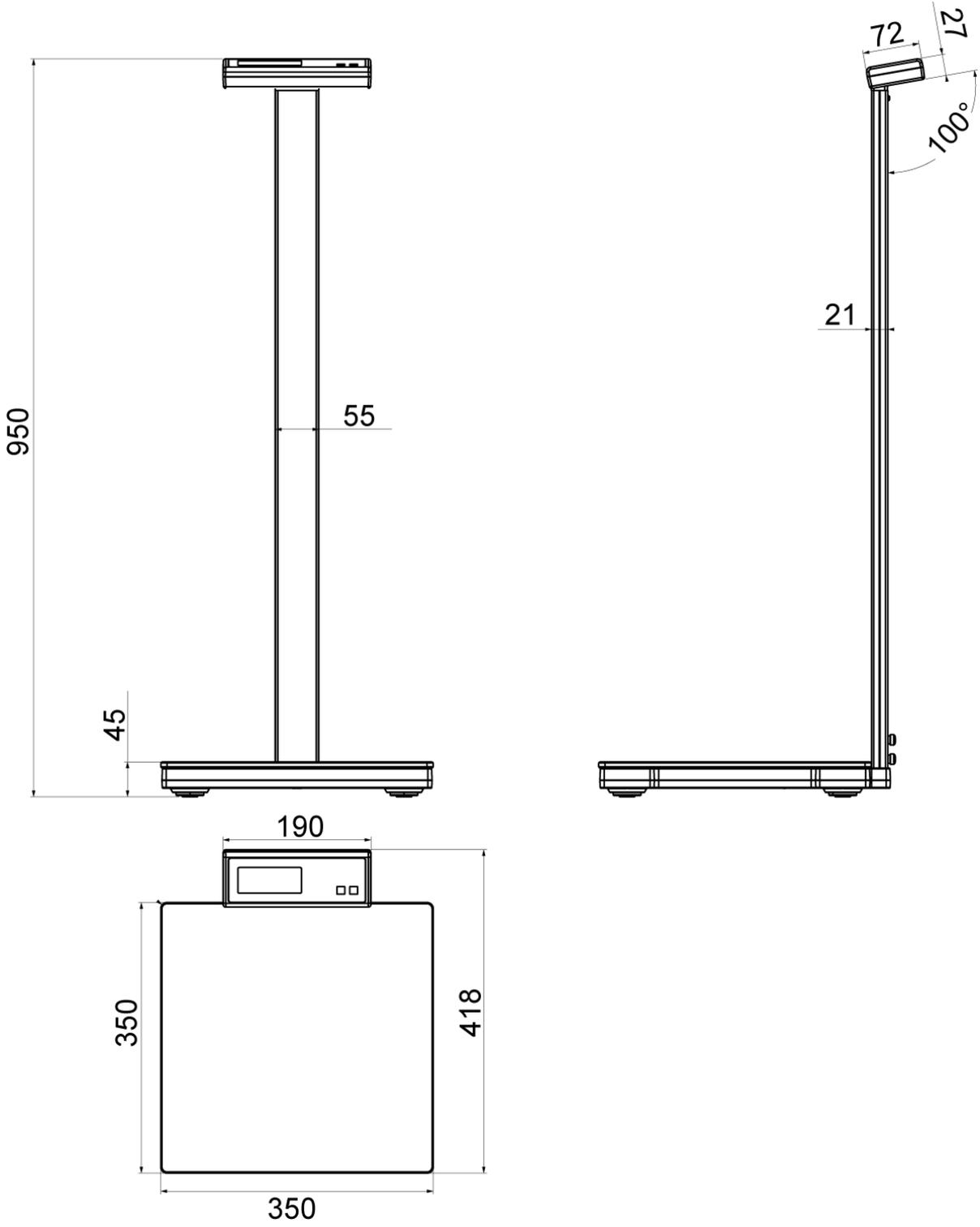
Contents

1	Technical data	3
1.1	Dimensions	4
2	Declaration of conformity	5
3	Appliance overview	6
3.1	Keyboard overview	7
3.2	Overview of display	7
4	Basic Information (General)	8
4.1	Proper use	8
4.2	Improper Use	8
4.3	Warranty	8
5	Basic Safety Precautions	9
5.1	Pay attention to the instructions in the Operation Manual	9
6	Transport and storage	9
6.1	Testing upon acceptance	9
6.2	Packaging	9
7	Unpacking, Setup and Commissioning	10
7.1	Installation Site, Location of Use	10
7.2	Unpacking	11
7.3	Battery operation	11
8	Adjustment	12
9	Using the balance	13
9.1	Weighing	13
9.2	Taring	14
9.3	Weighing units switch-over	14
9.4	BMI function	15
10	Servicing, maintenance, disposal	16
10.1	Cleaning	16
10.2	Servicing, maintenance	16
10.3	Disposal	16
11	Error messages	16
12	Instant help	16

1 Technical data

KERN	MPL 200K-1P
Readability (d)	0.1 kg
Weighing range (max)	250 kg
Reproducibility	0.1 kg
Linearity	1 kg
Weighing Units	kg, lb
Recommended adjustment weight, (not added, class)	250 kg (M1)
Stabilization time	2 sec.
Operating temperature	10° C + 40° C
Humidity of air	max. 80 % (not condensing)
Battery	4 x 1.5 V AA Operating time: 100 h
Display Digit height [mm]	28
Dimensions (W x D x H) mm	350 x 418 x 950
Weighing surface	350 x 350
Weight kg (net)	3.8

1.1 Dimensions



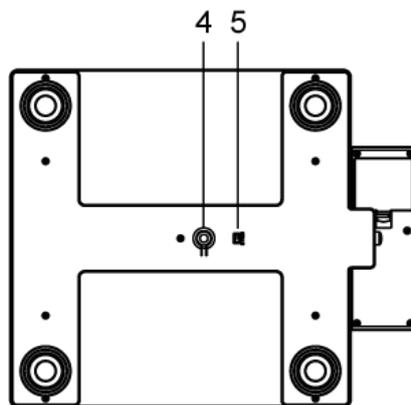
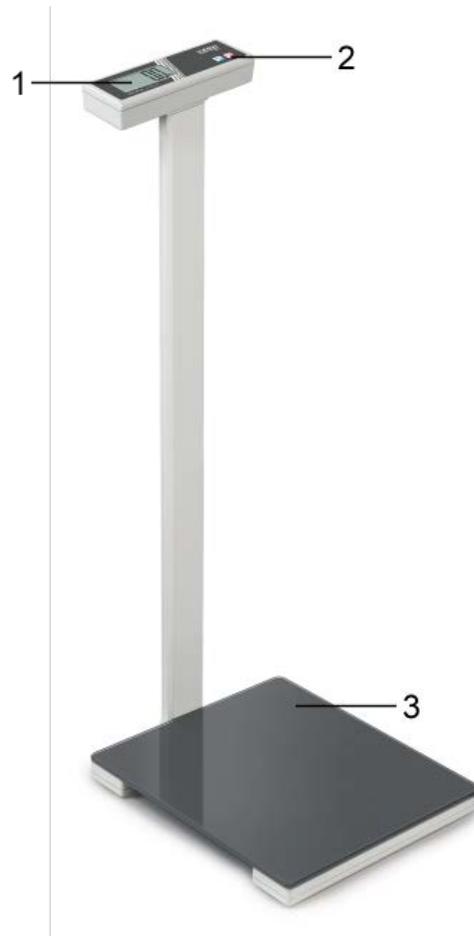
English

2 Declaration of conformity

The current EC/EU Conformity declaration can be found online in:

www.kern-sohn.com/ce

3 Appliance overview



1	Display
2	Buttons
3	Weighing pan
Bottom of the balance	
4	Adjustment button
5	Weighing unit switching kg↔lb

3.1 Keyboard overview



	<ul style="list-style-type: none"> • Call up BMI function • Confirm entry in menu
	<ul style="list-style-type: none"> • Taring • Scroll forward in menu

3.2 Overview of display



kg	Kilogram
HOLD	Hold function
	Battery symbol
BMI	Body Mass Index
cm	Centimetre

4 Basic Information (General)

4.1 Proper use

This balance is used to calculate the weight of people in the private sphere. Utilisation of this balance in the medical field is not permissible. The weighing process requires that the person stands on the weighing plate in a way that provides even weight distribution over the entire weighing plate. As soon as a stable weighing value is reached the weighing value can be read.

4.2 Improper Use

Do not leave permanent load on the weighing pan. This may damage the measuring system.

Take care to avoid impacts and overloading of balance above the specified maximum load (max) under all circumstances. This could cause damage to the balance.

Never operate balance in explosive environment. The serial version is not explosion protected.

The structure of the balance may not be modified. This may lead to incorrect weighing results, safety-related faults and destruction of the balance.

The balance may only be used according to the described conditions. Other areas of use must be released by KERN in writing.

4.3 Warranty

Warranty claims shall be voided in case

- Our conditions in the operation manual are ignored
- The appliance is used outside the described uses
- The appliance is modified or opened
- Mechanical damage and damage caused by media, liquids
- Natural wear and tear
- The appliance is improperly installed or incorrectly electrically connected
- The measuring system is overloaded
- Dropping the balance

5 Basic Safety Precautions

5.1 Pay attention to the instructions in the Operation Manual

Attention:

Stepping on the edge of the weighing plate may cause tilting of balance or fall of person.



⇒ Carefully read this operation manual before setup and commissioning, even if you are already familiar with KERN balances.

6 Transport and storage

6.1 Testing upon acceptance

When receiving the appliance, please check packaging immediately, and the appliance itself when unpacking for possible visible damage.

6.2 Packaging

Keep all parts of the original packaging in case you need to return the appliance. Only use original packaging for returning.

7 Unpacking, Setup and Commissioning

7.1 Installation Site, Location of Use

The balances are designed in a way that reliable weighing results are achieved in common conditions of use.

You will work accurately and fast, if you select the right location for your balance.

Therefore, observe the following for the installation site:

- Place the balance on a firm, level surface;
- Avoid extreme heat as well as temperature fluctuation caused by installing next to a radiator or in the direct sunlight;

- Protect the balance against direct draughts due to open windows and doors;
- Avoid jarring during weighing;
- Protect the balance against high humidity, vapours and dust;
- Do not expose the device to extreme dampness for longer periods of time. Non-permitted condensation (condensation of air humidity on the appliance) may occur if a cold appliance is taken to a considerably warmer environment. In this case, acclimatize the appliance for ca. 2 hours at room temperature.
- Avoid static charge of the balance and of the person to be weighed.
- Avoid contact with water.

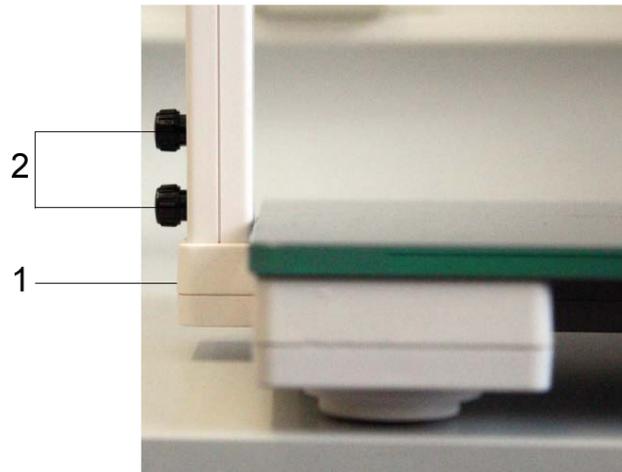
The occurrence of electric fields or electrostatic charge may result in major display deviations (incorrect weighing results). In that case, the location must be changed.

7.2 Unpacking

The delivery volume contains the balance, the operating manual and two screws for assembly. As well as 4 batteries 1.5 V AA.

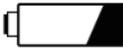
Assembly:

- ⇒ Place weighing plate on a stable, even surface
- ⇒ Insert tripod in the tripod holder (1) and fix it using the two screws (2) (see fig.)



7.3 Battery operation

The battery compartment is located at the rear side of the display unit. Open the battery compartment and insert the four batteries according to fig..

The symbol  on the display indicates a low battery. Replace batteries as quickly as possible with a new set.

If the balance is not used for a longer time, take out the batteries and store them separately. Leaking battery liquid could damage the balance.

8 Adjustment

As the acceleration value due to gravity is not the same at every location on earth, each display unit with connected weighing plate must be coordinated - in compliance with the underlying physical weighing principle - to the existing acceleration due to gravity at its place of location (only if the weighing system has not already been adjusted to the location in the factory). This adjustment process must be carried out for the first commissioning, after each change of location as well as in case of fluctuating environment temperature. To receive accurate measuring values it is also recommended to adjust the display unit periodically in weighing operation.

Keep adjustment weight ready. Incline the balance to a side.	
Press the adjustment button at the lower side of the balance and keep it pressed. During this time touch the weighing plate. "CAL" appears on the display.	
Place the balance again in a vertical position. Press the weighing plate firmly until "0" appears flashing in the display. Unload weighing plate. The required adjustment weight is shown.	 (example)
Place adjustment weight on the weighing plate. "CAL.F" appears on the display.	
Take away adjustment weight. Adjustment now has finished.	

Should be displayed another message than "CAL.F", remove the adjustment weight and repeat the process.

9 Using the balance

- ⇒ Step on the scales with bare feet. Try standing as still and upright as possible.
- ⇒ The weight of a person will be shown after a few seconds.
- ⇒ When the scales are not in use, they will switch off automatically after a few seconds.



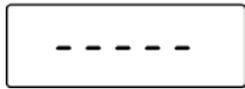
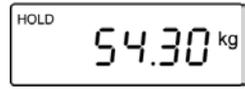
The typical weight of a person will vary over the day, and equally from one day to the next. Minor weight variations are considered normal.

9.1 Weighing

The weighing scale offers two operating modes:

- Weighing with "Step-on" (stepping on the weighing plate)
- Weighing with "Tap-on" (tapping on the weighing plate)

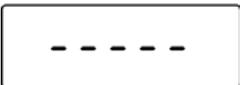
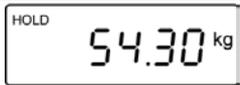
Weighing with "Step on"

Step on the weighing plate After the self test "-----" will appear flashing briefly. The weighing value will be determined.	
After that "Step off" appears. Leave the weighing plate.	
After that the weighing value appears automatically and will be "frozen". The „HOLD“ symbol appears.	 <p>(example)</p>

To leave either

- ⇒ step again on the weighing plate, or
- ⇒ press any key, or
- ⇒ wait for Auto-Off

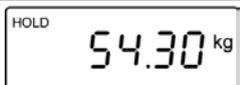
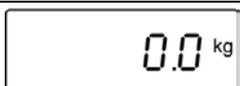
Weighing with "Tap on"

Tap on weighing plate briefly. After the self test appears the zero display.	
Step on scale. "-----" will be briefly displayed flashing.	
After that the weighing value is displayed automatically. The „HOLD“ symbol appears flashing. The weighing value will be frozen for a short time. Afterwards the scales will turn off automatically.	 (example)

To leave either

- ⇒ step again on the weighing plate, or
- ⇒ press any key, or
- ⇒ wait for Auto-Off

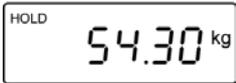
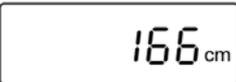
9.2 Taring

When the weight of the object is displayed, leave the weighing plate and press  .	
"-----" will be briefly displayed flashing	
Next the zero display appears.	

9.3 Weighing units switch-over

When the balance is switched off, shift the switch on the lower side to the right/ or to the left. The weighing unit changes between kg↔lb.

9.4 BMI function

When the weight is displayed, press  .	 (example)
The most recently entered body height will be shown in cm.	 (example)
Press  and keep pressed. The value of the body height increases. Press  until the respective body height is displayed, then release  .	 (example)
Press  . The calculated BMI value of the person will be displayed.	 (example)

Classification of BMI values: (same values for female and male)

Age	Low	Average	High
< 24	< 19	19 - 24	> 24
25 - 34	< 20	20 - 25	> 25
35 - 44	< 21	21 - 26	> 26
45 - 54	< 22	22 - 27	> 27
55 - 64	< 23	23 - 28	> 28
> 64	< 24	24 - 29	> 29

10 Servicing, maintenance, disposal

10.1 Cleaning

Do not use aggressive cleaning agents (solvents or similar) but only a damp cloth with mild soapsuds, or household cleaner. Ensure that no liquid gets inside the unit and rub with a soft, dry cloth.

Loose dirt can be removed carefully with a brush or hand-held vacuum cleaner.

Balance must not be tilted or rotated for cleaning, as damage may occur.

Remove dirt immediately.

10.2 Servicing, maintenance

The appliance may only be opened by trained service technicians who are authorized by KERN.

10.3 Disposal

Disposal of packaging and appliance must be carried out by operator according to valid national or regional law of the location where the appliance is used.

11 Error messages

“Err“ on the display indicates that the weighing range has been exceeded. Please take the weight off the scales.

12 Instant help

Fault

Possible cause

The displayed weight is permanently changing

- Draught/air movement
- Table/floor vibrations
- Weighing plate has contact with other objects
- Electromagnetic fields / static charging (choose different location/switch off interfering device if possible)

The weighing result is obviously incorrect

- The display of the balance is not at zero
- Great fluctuations in temperature.
- Electromagnetic fields / static charging (choose different location/switch off interfering device if possible)

If the error message remains, inform manufacturer.