KERN EOB Platform Floor Scales Instruction Manual

Contents

KERN EOB Platform Floor Scales

Specifications

Model	KERN EOB	KERN EOE
Trademark	KERN (Type)	KERN (Type)
Readability (d)	10 g – 50 g	5 g – 50 g
Weighing range (max)	35 kg – 300 kg	15 kg – 150 kg

Product Usage Instructions

1. **Setup**
   Place the platform/floor scale on a flat and stable surface. Ensure it is connected to a power source within the specified voltage range.
2. **Calibration**
   Before use, calibrate the scale using the recommended adjustment weight provided in the manual. Follow the calibration instructions carefully.
3. **Weighing**
   Place the item to be weighed on the center of the scale's platform. Wait for the stabilization time to ensure an accurate reading.
4. **Power Management**
   The scale has an auto-off feature to conserve battery life. Make sure to turn off the scale when not in use to prolong the battery operation period.
5. **Unit Conversion**
   You can switch between different weighing units as needed. Refer to the manual for instructions on changing the weighing units.

Technical data

Models KERN EOB

KERN (Type)	EOB 10K-3B	EOB 30K-2B	EOB 60K-2B	EOB 60K-2LB
Trademark	EOB 15K5	EOB 35K10	EOB 60K20	EOB 60K20L
Readability (d)	5 g	10 g	20 g	20 g
Weighing range (max)	15 kg	35 kg	60 kg	60 kg
Reproducibility	5 g	10 g	20 g	20 g
Linearity	± 10 g	± 20 g	± 40 g	± 40 g
Recommended adjustment weight, not added (class)	10 kg (M2)	20 kg (M2)	40 kg (M2)	40 kg (M2)
Stabilization time (typical)	3 sec.			
Warm-up time	10 min			
Input Voltage	220 V- 240 V, AC 50 Hz			
Power pack secondary voltage	9V, 100 mA			
Battery	4 x 1.5 V AA (= 6 V)			
Battery operation period	60 h			
Auto-Off	3 min			
Weighing Units	kg, lb, pcs			
Ambient temperature	+ 5°C …+ 35°C			
Humidity of air	max. 80 % (not condensing)			
Display unit (B x D x H) mm	235 x 114 x 51			
Cable length display unit	180 cm	180 cm	180 cm	270 cm
Weighing surface mm	300 x 300			550 x 550
Weight kg (net)	4.2			13.5

KERN (Type)	**EOB** **100K-2B**	**EOB** **100K-2LB**	**EOB** **100K-2XLB**
Trademark	EOB 150K50	EOB 150K-50L	EOB 150K50XL
Readability (d)	50 g	50 g	50 g
Weighing range (max)	150 kg	150 kg	150 kg
Reproducibility	50 g	50 g	50 g
Linearity	± 100 g	± 100 g	± 100 g
Recommended adjustment weig ht, not added (class)	100 kg (M2)	100 kg (M2)	100 kg (M2)
Stabilization time (typical)	3 sec.		
Warm-up time	10 min		
Input Voltage	220 V- 240 V, AC 50 Hz		
Power pack secondary voltage	9V, 100 mA		
Battery	4 x 1.5 V AA (= 6 V)		
Battery operation period	60 h		
Auto-Off	3 min		
Weighing Units	kg, lb, pcs		
Ambient temperature	+ 5°C …+ 35°C		
Humidity of air	max. 80 % (not condensing)		
Display unit (B x D x H) mm	235 x 114 x 51		
Cable length display unit	180 cm	270 cm	270 cm
Weighing surface mm	300 x 300	550 x 550	950 x 500
Weight kg (net)	4.2	13.5	19.5

KERN (Type)	**EOB** **300K-1B**	**EOB** **300K-1LB**	**EOB** **300K-1XLB**
Trademark	EOB 300K100	EOB 300K100L	EOB 300K100XL
Readability (d)	100 g	100 g	100 g
Weighing range (max)	300 kg	300 kg	300 kg
Reproducibility	100 g	100 g	100 g
Linearity	± 200 g	± 200 g	± 200 g
Recommended adjustment weig ht, not added (class)	300 kg (M2)	300 kg (M2)	300 kg (M2)
Stabilization time (typical)	3 sec.		
Warm-up time	10 min.		
Input Voltage	220 V- 240 V, AC 50 Hz		
Power pack secondary voltage	9V, 100 mA		
Battery (optional)	4 x 1.5 V AA (= 6 V)		
Battery operation period	220 h		
Auto-Off	3 min		
Weighing Units	kg, lb, pcs		
Ambient temperature	+ 10°C …+ 35°C		
Humidity of air	max. 80 % (not condensing)		
Display unit (B x D x H) mm	235 x 114 x 51		
Cable length display unit	180 cm	270 cm	270 cm
Weighing surface mm	300 x 300	550 x 550	945 x 505
Weight kg (net)	4.2	13.5	19.5

Models KERN EOE

KERN (Type)	EOE 10K-3B	EOE 30K-2B	EOE 60K-2B	EOE 60K-2L B	EOE 100K-2 B
Trademark	EOE 10K-3	EOE 30K-2	EOE 60K-2	EOE 60K-2L	EOE 100K-2
Readability (d)	5 g	10 g	20 g	20 g	50 g
Weighing range (max)	15 kg	35 kg	60 kg	60 kg	150 kg
Reproducibility	5 g	10 g	20 g	20 g	50 g
Linearity	± 10 g	± 20 g	± 40 g	± 40 g	± 100 g
Recommended adjustment weig ht, not added (class)	10 kg (M3)	20 kg (M2)	40 kg (M2)	40 kg (M2)	100 kg (M2)
Stabilization time (typical)	2.5 sec.				
Warm-up time	10 min.				
Input Voltage	220 V- 240 V, AC 50 Hz				
Power pack secondary voltage	9V, 100 mA				
Battery (optional)	4 x 1.5 V AA (= 6 V)				
Battery operation period	100 h				
Auto-Off	3 min				
Weighing Units	kg, lb, pcs				
Ambient temperature	+ 5°C …+ 35°C				
Humidity of air	max. 80 % (not condensing)				
Display unit (B x D x H) mm	235 x 114 x 51				
Cable length display unit	180 cm			270 cm	180 cm
Weighing surface mm	300 x 300			550 x 550	315 x 305
Weight kg (net)	3.8	3.8	3.8	13	3.8

KERN (Type)	EOE 100K-2 LB	EOE 100K-2XLB	EOE 300K-1 B	EOE 300K-1 LB	EOE 300K-1XLB
Trademark	EOE 150K50L	EOE 150K50XL	EOE 300K100	EOE 300K100L	EOE 300K100XL
Readability (d)	50 g	50 g	100 g	100 g	100 g
Weighing range (max)	150 kg	150 kg	300 kg	300 kg	300 kg
Reproducibility	50 g	50 g	100 g	100 g	100 g
Linearity	± 100 g	± 100 g	± 200 g	± 200 g	± 200 g
Recommended adjustment weight, not added (class)	100 kg (M3)	100 kg (M2)	300 kg (M2)	300 kg (M2)	300 kg (M2)
Stabilization time (typical)	3 sec.				
Warm-up time	10 min.				
Input Voltage	220 V- 240 V, AC 50 Hz				
Power pack secondary voltage	9V, 100 mA				
Battery (optional)	4 x 1.5 V AA (= 6 V)				
Battery operation period	100 h				
Auto-Off	3 min				
Weighing Units	kg, lb, pcs				
Ambient temperature	+ 5°C …+ 35°C				
Humidity of air	max. 80 % (not condensing)				
Display unit (B x D x H) mm	235 x 114 x 51				
Cable length display unit	270 cm		180 cm	270 cm	
Weighing surface mm	505 x 505	950 x 500	300 x 300	550 x 550	950 x 500
Weight kg (net)	13,0	18.0	3.8	13.0	18.0

Models KERN EOS

KERN (Type)	EOS 100K-2BXL	EOS 300K-1BXL
Trademark	EOS 150K50XL	EOS 150K50XL
Readability (d)	50 g	100 g
Weighing range (max)	150 kg	300 kg
Reproducibility	50 g	100 g
Linearity	± 100 g	± 200 g
Recommended adjustment weig ht, not added (class)	100 kg (M2)	300 kg (M2)
Stabilization time (typical)	3 sec.	
Warm-up time	10 min.	
Input Voltage	220 V- 240 V, AC 50 Hz	
Power pack secondary voltage	9V, 100 mA	
Battery (optional)	4 x 1.5 V AA (= 6 V)	
Battery operation period	220 h	
Auto-Off	3 min	
Weighing Units	kg, lb, pcs	
Ambient temperature	+ 10°C …+ 35°C	
Humidity of air	max. 80 % (not condensing)	
Display unit (B x D x H) mm	235 x 114 x 51	
Cable length display unit	270 cm	
Weighing surface mm	900 x 550	900 x 550
Weight kg (net)	17.0	17.0

Appliance overview

Models EOB
Weighing pan, stainless steel

Models EOE
Weighing pan varnished steel

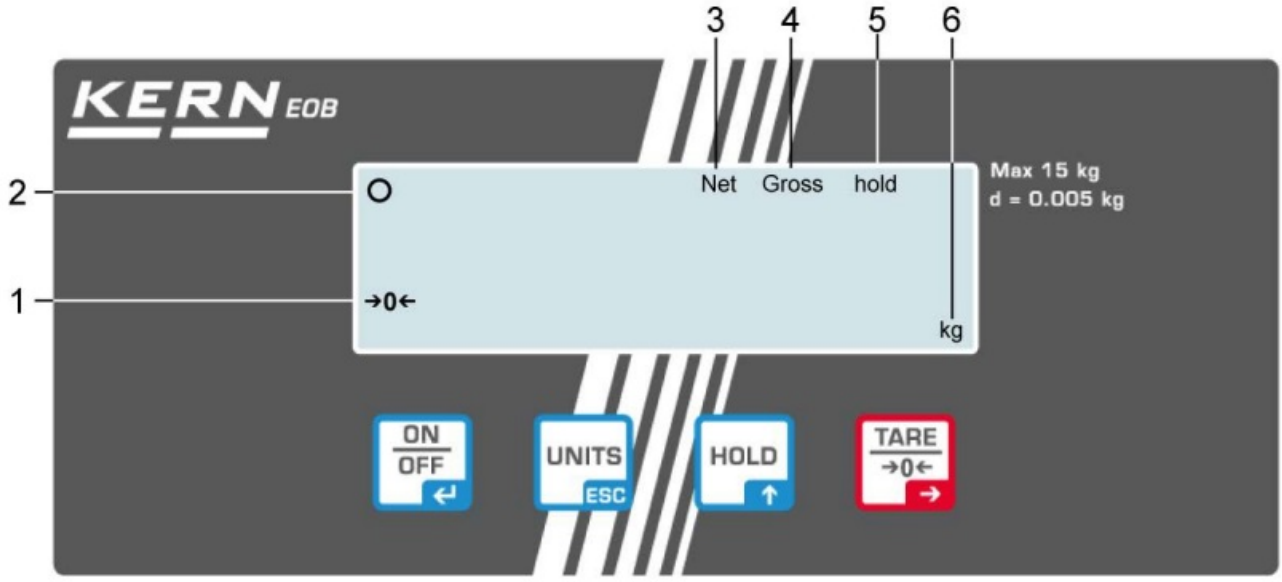
Models EOS

- Weighing pan, stainless steel
- Anti-slip rubber mat

Comfortable transport due to 2 rollers and 1 grab handle

Overview of display

Example EOB:



№	Description
1	Balance zero display: Should the balance not display exactly zero despite empty scale pan, press the **TARE** button. The balance will be set to zero after a short standby time.
2	Stability display: If the display shows the stability display **[0]** the balance is in a stable status. If the status is instable the [0] display disappears.
3	Stored tare value, see chap. 8.3 „Taring“
4	Gross weight display: If the gross weight [Gross] appears in the display, the gross weight of the object and weighing container are displayed.
5	Hold/animal weighing function active, see chap. 8.4
6	Weighing unit **[kg ⇆ lb]**

Keyboard overview

Button	Function
	Turn on/off balance
	Hold/ animal weighing function
	Tare balance
	Switch-over weighing unit Back to weighing mode, or to menu

Basic Information (General)

1. **Proper use**
   The balance you purchased is intended to determine the weighing value of material to be weighed. It is intended to be used as a “non-automatic balance”, i.e. the material to be weighed is manually and carefully placed in the center of the weighing pan. As soon as a stable weighing value is reached the weighing value can be read.
2. **Improper Use**
   - Do not use balance for dynamic add-on weighing procedures, if small amounts of goods to be weighed are removed or added. The “stability compensation“ installed in the balance may result in displaying an incorrect measuring value! (Example: Slowly draining fluids from a container on the balance.)

- Do not leave permanent load on the weighing pan. This may damage the measuring system.
- Impacts and overloading exceeding the stated maximum load (max) of the balance, minus a possibly existing tare load, must be strictly avoided. Balance may be damaged by this.
- 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.

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 or damage by media, liquids, natural wear and tear
   - The appliance is improperly set up or incorrectly electrically connected
   - The measuring system is overloaded

4. **Monitoring of Test Resources**

   In the framework of quality assurance the measuring-related properties of the balance and, if applicable, the testing weight, must be checked regularly. The responsible user must define a suitable interval as well as type and scope of this test. Information is available on KERN's home page (**www.kern-sohn.com**) with regard to the monitoring of balance test substances and the test weights required for this. In KERN's accredited DKD calibration laboratory test weights and balances may be calibrated (return to the national standard) quickly and at a moderate cost.

Basic Safety Precautions

1. **Pay attention to the instructions in the Operation Manual**

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

2. **Personnel training**

   The appliance may only be operated and maintained by trained personnel.

Transport and storage

1. **Testing upon acceptance**

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

2. **Packaging/return transport**

   - Keep all parts of the original packaging for a possibly required return.
   - Only use original packaging for returning.
   - Prior to dispatch disconnect all cables and remove loose/mobile parts.
   - Reattach possibly supplied transport securing devices.
   - Secure all parts such as the glass wind screen, the weighing pan, the power unit etc. against shifting and damage.

Unpacking, Setup and Commissioning

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 disconnected appliance for ca. 2 hours at room temperature.
- Avoid static charge of goods to be weighed or weighing container.

If electro-magnetic fields or static charge occur, or if the power supply is unstable major deviations on the display (incorrect weighing results) are possible. In that case, the location must be changed.

Unpacking and placing

- Open package, take out the appliance and accessories. Verify that there has been no damage and that all packing items are present.
- The balance must be installed in a way that the weighing pan is exactly in horizontal position.
- Mount the display unit in a way that facilitates operation and where it is easy to see.

Scope of delivery / serial accessories

- Platform and display unit, see chap. 2
- Mains adapter
- 4 x adjustable feet
- Wall fixture (with fixing screws)
- Operating manual

Mains connection

- Select a country-specific power plug and insert it in the power unit.
- Check, whether the voltage acceptance on the scales is set correctly. Do not connect the scales to the power grid unless the information on the scales (sticker) matches the local mains voltage.
- Only use KERN original mains adapter. Using other makes requires consent by KERN.

Important:

- Before starting your weighing balance, check the mains cable for damage.
- Ensure that the power unit does not come into contact with liquids.
- Ensure access to power plug at all times.

Battery operation

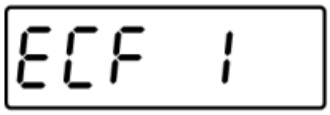
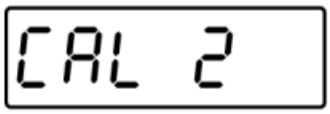
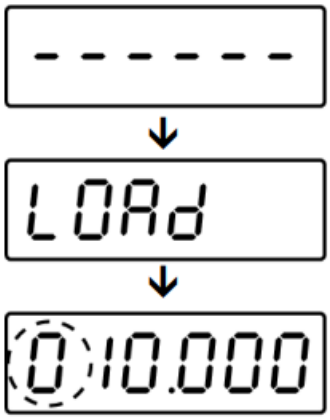
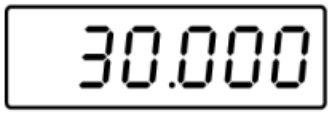
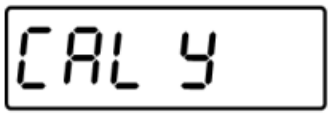
- On the rear side of the display unit remove the battery cover and connect 4 x 1.5V mignon cells. Reinsert the battery cover.
- In order to save the battery, the balance switches automatically off after 3 minutes without weighing. Additional switch-off times can be set in the menu (function “A.OFF”).
- If the batteries are depleted, the battery symbol  is displayed. Switch off balance and replace batteries at once.
- 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.

Initial Commissioning

- In order to obtain exact results with the electronic balances, your balance must have reached the operating temperature (see warming up time chap. During this warming-up time the balance must be connected to the power supply (mains, accumulator or battery).
- The accuracy of the balance depends on the local acceleration of gravity.
- Strictly observe hints in chapter Adjustment.

Adjustment

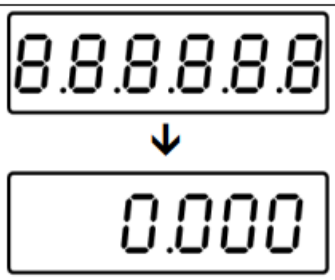
As the acceleration value due to gravity is not the same at every location on earth, each balance must be coordinated – in compliance with the underlying physical weighing principle – to the existing acceleration due to gravity at its place of location (only if the balance has not already been adjusted 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 balance periodically in weighing operation. Observe stable environmental conditions. A warming up time (see chapter 1) is required for stabilization.

Press TARE →0← and HOLD at the same time in weighing mode. [ECF 1] is displayed.	
(The adjustment process can be exited at any time with UNITS ESC. The balance returns then to weighing mode.)	
Confirm display of [ECF 1] with ON OFF. [CAL Z] is displayed.	
Acknowledge with ON OFF. [--------] followed by [LOAd] will be displayed briefly. Then the display to input the recommended adjustment weight is displayed (see chap. 1 "Technical data") The left digit flashes. Enter the value of the adjustment weight as follows: Switch to the next digit to the right with TARE →0←. Increase number with HOLD. Confirm the value entered with ON OFF.	 (example)
The specified adjustment weight is displayed flashing.	 (example)
Place the adjustment weight centrically on the weighing pan and confirm with ON OFF. "CAL Y" will flash briefly and a signalling tone will sound. Adjustment will be performed. Then the balance returns automatically into the weighing mode.	

An error message will be displayed in the event of an adjustment error or incorrect adjustment weight. Remove the adjustment weight and repeat the adjustment process.
Keep the adjustment weight close to the balance. Daily control of the weighing exactness is recommended for quality-relevant applications.

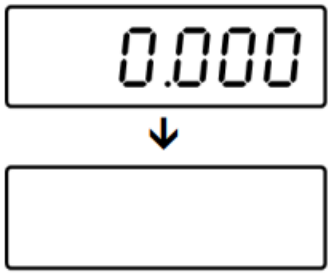
Operation

Start-up

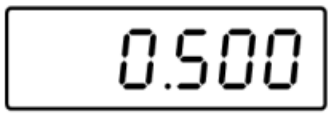
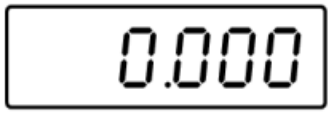
Start balance by pressing ON/OFF. The balance will carry out a self-test As soon as the weight display appears, the balance is ready for weighing.	

Should the balance not display exactly zero despite empty weighing pan, press the TARE →0← button. The balance will be set to zero after a short standby time.

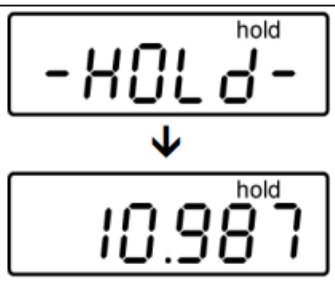
Switching Off

Switch off balance with ON/OFF, the display will go off.	

Taring

Place an empty weighing container, the weight of the weighing container will be displayed.	
Press TARE →0←, the zero display appears. The indicator [NET] is displayed. The tare weight is saved until it is deleted.	
Weigh the material, the net weight will be indicated. The taring process can be repeated any number of times, e.g. when adding several components for a mixture (adding). The limit is reached when the whole weighing range is exhausted. After removing the weighing container, the weight of the weighing container appears as negative display. The tare weight is saved until it is deleted.	
Delete tare value: Unload the balance and press TARE →0←, zero display will appear.	

Hold function (animal weighing function)
The balance has an integrated animal weighing function (mean value calculation). Using this function it is possible to weigh domestic or small animals exactly (min. load 1% of the max. one), although they do not stand quiet on the weighing pan.

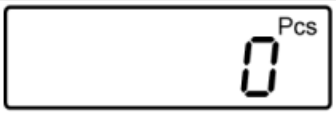
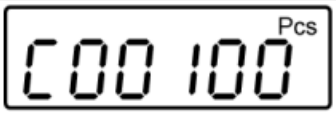
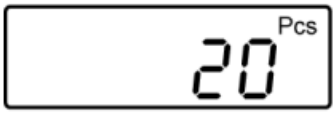
Place weighing goods and press HOLD. The display will be blinking [-HOLD] and the indicator [hold] will be displayed. During this time the balance takes up several measured values and displays then the calculated mean value. This value will be displayed until you press HOLD again. The indicator [hold] turns off, the balance will return to the normal weighing mode. By pressing HOLD again, this function can be repeated any number of times.	 (example)

There is no average value calculation in the event of too much movement (heavy display oscillation).

Determination of the number of pieces
Before it is possible to determine the number of pieces by means of the scales, it is necessary to specify the average piece weight (unit weight), the so-called reference value. In order to do it, one shall place the specific

number of pieces being counted up. By means of the scales, the total mass shall be determined which then will be divided by the number of pieces (the so-called reference pieces). Afterwards, based on the calculated average piece weight, counting up shall be carried out.

The greater the number of reference pieces, the higher the accuracy of counting up.

In the weighing module, by means of UNITS/ESC button, set „Pcs” unit. The scales is now in the module allowing to determine the number of pieces.	
Keep pushing HOLD button until the display shows „C00000”. The value after the comma blinks. The number of reference pieces may be entered in the way described below: • HOLD: Increasing the numerical value • TARE →0←: Moving on to the next value after comma • ON/OFF: Confirmation of the entered number of reference pieces	
Enter the number of reference pieces in the way described above. Here, for example 100 pieces. Digit "1" blinks.	 (example)
Place the pieces to be counted up on the scales and confirm by means of pushing ON/OFF button. The number of pieces shall be displayed.	

Menu

Navigation in the menu

- Press TARE →0← and ON/OFF at the same time in weighing mode. [UF 1] is displayed.
- Press HOLD as often as necessary until the required function is displayed.
- Confirm selected function by ON/OFF. The current setting will be displayed. Select the desired parameter with HOLD TARE →0←. Return to menu by UNITS/ESC.

- Press 

to exit the menu. The balance returns automatically into weighing mode.

Menu overview

UF-1	-1630 (example)	**Internal value** not documented
UF-2	AoFF 10 *	**Auto-Off** Automatic shutdown function Can be set between 1-99 minutes
UF-3		**Display background illumination** Adjustable:
	Lit on	Background lighting on
	Lit oFF	Background lighting off
	Lit A *	Backlight automatically off
UF-4		**Hold function (animal weighing function)** Adjustable:
	Hd 20d	Average value is calculated for unstable weighing conditions from approx. 20 d
	Hd 5d	Average value is calculated for unstable weighing conditions from approx. 5 d
	Hd 10d *	Average value is calculated for unstable weighing conditions from approx. 10 d
UF-5	2P 0 ↓ 2P 5	**Auto Zero** Adjustable:
		ZP 0 * — Auto Zero: Off
		ZP 1 — • 0.5 d/s
		ZP 2 — • 1 d/s
		ZP 3 — • 2 d/s
		ZP 4 — • 3 d/s
		ZP 5 — • 5 d/s
UF-6	9.79450 *	**G-value (value of the local gravitational acceleration)** Adjustable

Factory settings are marked by *.

Servicing, maintenance, disposal

- **Cleaning**
  - Before cleaning, disconnect the appliance from the operating voltage.
  - Please do not use aggressive cleaning agents (solvents or similar agents), but a cloth dampened with mild soap suds. Take care that the device is not penetrated by fluids and polish it with a dry soft cloth.
  - Loose residue sample/powder can be removed carefully with a brush or manual vacuum cleaner.
  - Spilled weighing goods must be removed immediately.
- **Servicing, maintenance**
  - The appliance may only be opened by trained service technicians who are authorized by KERN.
  - Before opening, disconnect from power supply.
- **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.

Error messages, troubleshooting guide

Error message	Function
hhhhhh	Overload
LLLLLL	Minimum weight under min. value

In case of an error in the program process, briefly turn off the balance and disconnect from power supply. The weighing process must then be restarted from the beginning.

Help:

Fault	Possible cause
The displayed weight does not glow.	· The balance is not switched on.
	· The mains supply connection has been interrupted (mains cable not plugged in/faulty).
	· Power supply interrupted.
The displayed weight is permanently changing	· Draught/air movement
	· Table/floor vibrations
	· The weighing pan is in contact with foreign matter. · Electromagnetic fields / static charging (choose differ ent location/switch off interfering device if possible)
The weighing value is obviously wrong	· The display of the balance is not at zero
	· Adjustment is no longer correct.
	· The balance is on an uneven surface.
	· Great fluctuations in temperature. · Electromagnetic fields / static charging (choose a diff erent location/switch off the interfering device if possible)

Should other error messages occur, switch balance off and then on again. If the error message remains inform the manufacturer

Declaration of conformity
The current EC/EU Conformity declaration can be found online in: **www.kern-sohn.com/ce**

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FAQ

Q: How do I change the weighing units on the scale?
A: To change the weighing units, press the designated button on the display unit. Refer to the user manual for specific instructions based on your model.

Q: What should I do if the scale is not stabilizing correctly?
A: Ensure that the scale is placed on a stable surface and that there are no external factors affecting its accuracy. Recalibrate if needed following the instructions provided.

Documents / Resources

	KERN EOB Platform Floor Scales [pdf] Instruction Manual EOB_B, EOE_B, EOS_B, EOB Platform Floor Scales, EOB, Platform Floor Scales, Floor Scales, Scales

References

- Your Name as Your Email | Hover Realnames
- User Manual