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\* 14 cents per minute from the  
German  
Landline, max. 42 cents per minute  
from the German mobile network.

## operation manual



## Piece counting scale PCE-PCS series

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## 1.0 Security measures

When using the scale, please always follow the safety measures listed below. Use the scale only with the AC adapter. Another adapter can destroy the scale. (AC adapter is optional)

- Do not expose the scale to direct sunlight, as this can cause discoloration and malfunctions.
- If you are not going to use the scale for a long time, please remove the battery to avoid damage from leaking battery acid.
- Do not overload the scale. This can lead to a defect.
- Please do not fill the scale with water. This can lead to damage.
- Static electricity can falsify the result. Discharge the static charge.

Use, for example, anti-static spray to counteract the effect.

## 2.0 specifications

Scale type	PCE-PCS 6	PCE-PCS 30
Weighing range	6000g	30000g
Readability	0.1 g	0.5 g
reproducibility	± 0.2 g	± 0.5 g
Minimum load	0.1 g	0.5 g
Minimum unit weight	0.1 g	0.5 g
Memory locations	99 (for total piece counting)	
Tare range	100%	
Weighing unit	Grams	
display	3 x 6-digit LCD	
calibration	Using an external test weight	
Platform size	230 mm x 310 mm	
Working temperature range	0 ... +40 ° C	
Power supply	230 V / 50 Hz (via supplied adapter) or internal battery	
casing	ABS Plastic	
interface	RS-232	
Software kit	optional accessories	
Dimensions approx.	320 x 320 x 12.5 mm	
Net weight	approx.2.8 kg	

### 3.0 button function

 to  Number buttons

 Decimal place

 If a low value is shown on the display and there is nothing on the weighing plate, press this key to set the display to 0.

 Tare function: Press this key to tare the scale onto a container.

 By pressing this button you can save the current value in the memory.

 To clear the memory, press this button.

 To clear the alarm for certain quantities, press this button

 With this button you can set a certain number of pieces, when exceeded an alarm signal should sound.

 Press this button to delete the entered values from the display.

 You can manually enter the piece weight by pressing this button.

 Piece counting button.

## 4.0 operation

### 4.01 Switch on / off

Remove all objects from the platform and switch the scale on or off using the switch on the lower right side.

### 4.02 zeroing

**Zero range:  $\pm 2\%$  of the max. Weighing range.**

If the display of the scale does not jump to "0" without loading the weighing platform, please press the "ZERO" button.

### 4.03 Tare function

Place the weight to be tared on the weighing platform and press the tare key to tare this weight. The tare function is now activated. Now take the weight down, the display now shows the weight as a negative value. Press the tare key again to exit this function.

### 4.04 piece counting

If the weight of a piece is known, you can enter it directly using the number keys



and confirm the entry by pressing the key. If the weight is not known, this can also be entered using the objects. Enter the number of objects using the number key, the number entered is shown in the Unit Weight display. Now press



the  Button, now the weight and the number are shown in the display.

### 4.05 alarm

The user has the option of specifying a number of pieces. If this number is exceeded, an alarm signal sounds. To do this, enter the number of pieces using the number keys and press



The button . To delete press the button



### 4.06 memory



Press the key  after the display has stabilized to store the current value in the internal memory. The weight display now shows the number of stores (max. 99) and the total number of all stores in the Unit Weight Display. If "OL" appears on the display, the internal memory is full and must be deleted. To clear the memory, press the button.



**Important: The balance must be unloaded after each saving process so that a new value can be saved.**

#### 4.07 Adjust settling time

If it is necessary to adjust the settling time, this can be done while doing this

Turn on the device  Press and hold the button until the current settling time appears on the display

is shown. ("Пb0" ~ "Пb6"). Пb0 is the slowest Пb6 the fastest value.

By pressing the  Button confirm the set value.

#### 4.08 Adjust division

Press the  Key and keep it pressed while switching on the balance until the current division is shown in the display. Now press the  Key around the value adjust. By pressing the  Button confirm the set value.

#### 4.09 Adjust backlight

Press the  Key and keep it pressed while switching on the balance until the balance has completed the self-test. The current setting now appears on the display.  
"AUTO" - the backlight is switched on and off automatically.  
"A" - Backlight is always on.  
"OUT" - Backlight is always off.

Now press the button to  set the value. Press the button to confirm the set value. 

#### 4.10 Adapt data output (RS232)

Press the 2 key  and keep it pressed while switching on the scale until the scale has completed the self-test. The current setting of the "Baud Rate". Choose between 2400, 4800 and 9600 by pressing the  Button. By pressing of the  Key to confirm the value. You can then choose between "ST" and "Co".

"ST" (stable) means that the data is only sent when the value on the scale has stabilized.  
"Co" (continue) causes the data to be sent permanently via the interface.

By pressing the  Key to confirm the value.

## 4.11 Calibration (external)

1. Press the  Key and keep it pressed while switching on the scale, until the scale has completed the self-test. "CAL" now appears in the display. Now press again  and "0" appears in the display.
2. Now you can use the number keys to enter the weight with which you want to calibrate. A weight of 2/3 of the path area is recommended. (PCE-PCS 6 -> 4 kg; PCE-PCS 30 -> 20 kg) The unit of entry is kilograms. Now place the appropriate weight on the scale.
3. Press the  Key to perform the calibration. The calibration is now complete.  
(The calibration is invalid if the calibration range deviates by more than 10% from the maximum weighing range.)

## 4.12 Recharge the battery

If the battery charge is low, a corresponding message appears on the display. Now switch off the scale and then charge the battery. A yellow LED lights up during the charging process. When the scale is fully charged, it lights up red. The charging process takes about 12 hours to fully charge the battery.

## 4.13 Interface protocol:

DATA FORMAT

HEAD1, HEAD2,		DATA	UNIT	CR															
1	2	3	4th	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
HEAD1 (2BYTES)										HEAD2 (2BYTES)									

OL - overload  
 NT - net weight mode  
 ST - stable  
 US - unstable

**DATA  
 (8BYTE)**

2D (HEX) = "-" (negative sign) 20 (HEX) = " "(Blank)

2E (HEX) = "." (Decimal point)

**UNIT (4  
 bytes)**

g = 20 (HEX) ; 20 (HEX); 20 (HEX) ; 67 (HEX)

kg = 20 (HEX); 20 (HEX); 6B (HEX) ; 67 (HEX)

ct = 20 (HEX); 20 (HEX); 63 (HEX) ; 74 (HEX)

ozt = 20 (HEX); 6F (HEX); 7A (HEX); 74 (HEX)

CR = OA (HEX); OD (HEX);

Transmission example

1. Ex.: Stable net + 0.168 g

HEAD,	HEAD,	DATA	UNIT	CR
ST,	NT,	+ 0.168	G	OA, OD

If you have any questions, please contact PCE Deutschland GmbH.

You can find an overview of our measurement technology here: <http://www.warensortiment.de/messtechnik.htm>

An overview of our measuring devices can be found here: <http://www.warensortiment.de/messtechnik/messgeraete.htm>

You can find an overview of our scales here: <http://www.warensortiment.de/messtechnik/messgeraete/waagen.htm>

We take back our devices to implement the ElektroG (take-back and disposal of waste electrical and electronic equipment). They are either recycled by us or disposed of by a recycling company in accordance with legal requirements.

WEEE reg.no.DE69278128



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