



Manual Crane balance PCE-CS 300 / 1000



Technical specifications:

Model	Weight range	Division
PCE - CS 100	0 – 100kg	0.05kg
PCE - CS 300	0 – 300kg	0.1kg
PCE - CS 1000	0 – 1000kg	0.1kg
Dimensions	See the table on page 2	
Standard	GB/T11883-2002 (electric hanging balance)	
Class	OIML class III	
Display	30 mm, LCD / 5 digit LED	
Tare	across entire range	
Type of stability	< 10 s	
Maximum weight	400% of maximum capacity (displays weight up to 100% of max. capacity) sobrecarga)	
Rechargeable battery	50 hours of operation until charge is required / 6V (5Ah)	
Charger	9V DC / 1500 mA	
Operating conditions	-10 to 40°C / < 85% r.h.	
Range of remote control	maximum 10m	
Power	2 batteries (1.5V)	

The balance is marked with the CE brand. Please respect this directive and dispose of the unit appropriately.



How to use the balance

1. Press the [ON/OFF] key to turn on the balance

The display shows all the digits as (88888) for a few seconds. Next, the display will show double the value of the balance's capacity, for the PCE-CS 1000, the display will show (2000). After this, the battery charge will be displayed as (U *.*). If the display shows [- - - -], the balance is stabilizing. Once this process has finished, the display will show [0].

2. Zero reset

Press the [-0-] key on the balance or the [ZERO] key on the remote control to reset the balance to zero.

3. Battery test

There are two possibilities to perform this function:

1. When turning the balance "on" or "off"

Press the [-T-] key on the balance and the battery charge will be displayed [U *.*].

2. A specific combination of keys

Press [MR] [F1] and the battery charge will be displayed [U *.*]. Press [MR] again to exit this mode.

4. Tare

Press the [ON/OFF] key on the balance or the [TARE] key on the remote control.

5. HOLD function to maintain a value on the display

Press the [HOLD] key on the remote control and the current value will remain "frozen" on the display. The "HOLD" symbol will appear on the display. If you wish to exit the "HOLD" function, press down the [HOLD] key until the "HOLD" symbol disappears from the display indicating the balance has returned to normal mode.

6. Low battery warning

When the battery level is low, the message [U 5,80] will appear on the display. You can continue using the balance until the message [-Lb] meaning, "Low Battery", appears on the display. Once this happens, there is only one more minute of battery power until the balance shuts off.

7. OVERLOAD warning

When the message [-OL-] appears on the display, it is a warning that the maximum capacity of the balance has been exceeded.

Note: this can cause damage to the balance. Immediately remove the object from the balance and ensure that the weight range is adhered to for the next measurement.

8. Power save mode

When the balance holds a mass for a period of time, the weight of the object will be displayed for 15 minutes. If there is no movement, the balance changes to power save mode. After 60 minutes, if there is no movement, the balance shuts off automatically.

9. Charging the battery

Turn the balance off by pressing the **[ON/OFF]** key. Plug the adaptor into the balance, then connect to 230V mains power. The battery will begin charging and the green charging light will illuminate. When the light turns red, the battery has been fully charged and you can begin using the balance again. Remember that a normal charge will take about 8 hours.

10. Problems and solutions / Error analysis

Sympto	Possible cause	Solution
The display is blank after turning on the balance	The battery isn't charged or is defective	Charge the battery
The display won't stop blinking	The battery charge is low	Charge the battery
The "Tare" function does not work	The [TARE] key is defective	Clean the balance or return it to PCE Group
The display does not show "0" after removing the weight from the balance	Did you adjust tare value? Warm-up time of the balance is too short	Adjust tare value Extend warm-up time of the balance
The remote control does not work	Low battery Out of range	Change the batteries Move closer to

Remote control

1. Adjust the display backlighting

The display on the balance can be illuminated. It can be gradually adjusted by pressing the [F1] key. The illumination values are: "bl = 0" for no illumination, "bl = 1" for minimal illumination, "bl = 5" for maximum illumination (the display illumination is preset to "bl = 2").

2. Zero reset

Press the **[-0-]** key on the balance or press the **[ZERO]** key on the remote control.

3. HOLD function to maintain a value on the display

Press the **[HOLD]** key on the remote control and the current value will remain "frozen" on the display. The "HOLD" symbol will appear on the display. If you wish to exit the "HOLD" function, press down the **[HOLD]** key until the "HOLD" symbol disappears from the display indicating the balance has returned to normal mode.

4. Tare / Tare Subtraction

Press the **[ON/OFF]** key on the balance or the **[TARE]** key on the remote control:

Press the **[MR]** key followed by the **[TARE]** key on the remote control to go to the TARE subtraction mode. Press the **[TARE]** key again to select the decimal position. Pressing the **[TARE]** key several times will change the selected decimal position. With the **[ZERO]** key, you can select the numerical value (1 – 9). Once the numerical values have been entered into the corresponding decimal positions, the TARE value can be saved by pressing the **[MR]** key.

5. Storing values

The balance has a multiple weight mode. With this function several weights can be taken successively and when finished the following details can be displayed: number of measurements taken, each individual weight measured and the sum of all weights taken. Weigh the first object and wait until the display shows (STB) indicating that the balance has stabilized. Press the **[MR]** key followed by the **[M+]** key. Now press the **[ZERO]** key. The balance will store the number of the weight measured and the actual weight, for example 001 and 254.5kg, and show the weight on the display. Remove the weight from the balance and wait until the display indicates (STB). Repeat this process with other objects. This can be done up to a maximum of 999 measurements.

6. Recovery of stored values

Press the **[MR]** key followed by the **[M+]** key. Using the **[TARE]** key you will be able to recover the weight of individual objects and the total weight (by pressing the **[TARE]** repeatedly on the remote control).

7. Clearing the memory

Press the **[CLEAR]** key and [CLr] will appear on the display. Next, press **[MR]** and the display will show [8.8.8.8.8] indicating that the memory has been cleared.

8. Changing the unit of measurement, from kg to lb, on the display

Press the **[MR]** key and [SHIFT] will appear on the display. Then press the **[HOLD]** key. If UN = 0: kg, the unit of measurement will be kg.
If UN = 1: lb, the unit of measurement will be lb.

9. Search for the duration of exceeding the maximum capacity

Press **[MR]** followed by the **[CLEAR]** key. The display will show [OL = **].

10. Battery indicator

Press **[MR]** on the keypad and [SHIFE] will appear on the display. Then press the **[F1]** key and the display will then show [U *.*]. To return to normal weighing mode, press the **[MR]** key again.

Calibration

When should the balance be calibrated?

From the first time you use the balance, it will retain its factory calibration, but it can be calibrated when you wish. In regards to DKD or ISO standards it must be recalibrated annually or as indicated. If the balance is used in an environment that contains dust, dirt, or high levels of humidity, it should be recalibrated frequently to ensure the most accurate results.

How to have the balance recalibrated

The balance should be sent to PCE Group or an accredited laboratory to be calibrated or recalibrated, as this can only be done by certified calibration centres. An annual recalibration also allows for the possibility of repairing the balance if it is damaged.

Safety

You should follow these safety tips when using the balance:

Warning	The balance comes with a maximum weight range which must be adhered, because if this limit is exceeded the internal weighing mechanism can be damaged thus causing significant damage to the balance.
Warning	Objects should not be left on the balance as this will wear out the internal weighing mechanism.
Warning	Regularly test the link fastener and the hook for damage or irregularities.
Note	If you wish to prolong battery life, the balance should be recharged at regular intervals while the balance turned off.
Warning *	Only use the charger that comes with the balance.
Warning	Never try to open the balance. Only certified technicians are licenced to perform necessary repairs, maintenance or recalibrations on these balances.

*** - Only use the AC adaptor that comes included with the balance. Other adaptors can damage the internal components of the balance.**

In this direction will find a vision of the measurement technique:
<http://www.industrial-needs.com/measuring-instruments.htm>

NOTE: "This instrument doesn't have ATEX protection, so it should not be used in potentially explosive atmospheres (powder, flammable gases)."