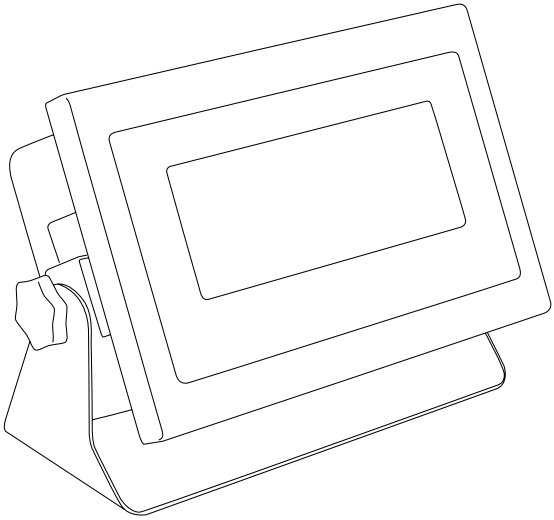
SERIES

K4i



EN

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OPERATION MANUAL

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ENGLISH

IMPORTANT

It´s very important to read carefully this operation manual before unpacking and installing the balance.

This indicator can be used for applications described (1) in paragraph A of article 3 of Order dated December 22nd 1994. In which case, its internal features are limited in some respects, detailed in this manual.

To use the indicator in those applications, the indicator must be requested **VERIFIED**, with appropriate seals and legal framework, including the letter **M** on green background and the year of the first Verification. This verification increases the selling price of the balance.

If the balance is used for the above applications, it will require a periodic checking in your Community or Country, in Spain this checking is biannual. For that, you will need to contact with your Department of Industry of your Community or Country and request the list of Laboratories enabled to do it.

To determinate the mass of a good for the following purposes

- Trade transactions.
- Calculation of rates, tariffs, taxes, fines, renumerations, allowances and other similar purposes.
- Application of Standard or regulations, as well as the realization of judicial expertise.
- Weighing patients for the purpose of control, diagnosis and treatment.
- Determination of price or total amount of sales to the public and preparing prepackaged.

REQUIREMENTS FOR AN OPTIMAL INSTALLATION

To obtain maximum performance and the best results, we recommend installing the balance according to the following requirements:

1. Install the balance on a flat surface.
2. Place it on a stable base free of vibrations.
3. Do not expose it to direct sunlight.
4. Do not submit it to atmospheres with corrosive gases.
5. Keep it in environment free of dust or dirt.
6. Operating temperature between 0º and 40º C.
7. Use it in environments with humidity less than 95% HR.
8. Keep it away equipments that produce any magnetic or acoustic interferences.
9. Calibrate it in its definitive location. Check the balance periodically with an optional calibration weight (except models with EC Verification).

KEYBOARD DESCRIPTION

Press this key to turn on or turn off the balance.

Function 1.T o correct possible deviations of zero. Pressing this key the reading display's remains at zero.
Function 2. Enter key when setting parameters or other functions.

Function 1. Press this key to subtract the weight of a container and get the net weight of the product.

Function 2. To increase the active digit when setting a value for parameters or other functions.

Function 3. Press and keys together in normal weighing mode to active or desactive the animal scale function (when enter or escape from animal scale mode you will hear a beep twice).

Function 1. Memory recall key, show total accumulate weight in memory.

Function 2. To move active digits to the right in setting mode.

Function 3. Hold this key to enter into parts counting mode.

Function 1. Accumulate key, store current weight in memory.

Function 2. In setting mode, this key is used to move active digits to the left.

Function 3. Press and keys together for MC (memory clear).

Function 1. To print the results to a PC or printer using the RS-232 interface.

Function 2. Press this key during selfchecking to enter into setting mode.

Function 1. Hold this key to change the unit weight.

Function 2. To return to normal weighing when the scale is in a parameter setting mode.

Function 3. Press and keys together to setting check weighing limit.

BASIC OPERATION

Zeroing the display

You can press the key at any time to set the zero point from which all other weighing and counting is measured, within 4% of power up zero. This will usually only be necessary when the platform is empty.

When the zero point is obtained the display will show the indicator for zero.

The scale has an automatic rezeroing function to account for minor drifting or accumulation of material on the platform. However you may need to press key to rezero the scale if small amounts of weight are shown when the platform is empty.

Tare

1. Zero the scale by pressing the key if is necessary, the zero indicator will be on.

2. Place a container on the platform, its weight will be displayed on the display.

3. Press the key to tare the container, its weight will be stored as the tare value and that value is subtracted from the display, leaving zero on the display. The **"NET"** indicator will be on.

As product is added only the weight of the product will be shown. The scale could be tared a second time if another type of product was to be added to the first one. Again only the weight that is added after taring will be displayed.

When the container is removed, a negative value will be displayed. If the scale was tared just before removing the container, this value is the gross

weight of the container plus all product that was removed. The zero indicator will also be on because the platform is back to the same condition it was when key was last pressed.

Weighing a sample

To determine the weight of a product, first tare the empty container and then place the product in the container, the display will show the weight of weight currently in use.

Check-weighing function

Check-weighing is a procedure to cause an alarm when the weight on the platform meets or exceeds values stored in memory. The memory holds values for a high and low limits.

Check mode OK

When check range, the display will show **“OK”** and the beeper will sound when the weight is between the limits.

Check mode NG

When check range, the display will show **“NG”** and the beeper will sound when the weight is out of the limits.

Set Limits

1. Press the N/G and ⊙ keys together, it will display **“SET H”**.
2. Use ⇔T key to select **“SET H”** or **“SET L”**.
3. Press →0← key to enter.
4. Use M+ and MR keys to move the active digit.
5. Use ⇔T key to change the value.
6. Press ⊙ key to clear value.
7. After you enter the value, press the →0← key to confirm and N/G to escape.

Set check weighing mode

1. Press N/G and ⊙ keys together, it will display **“SET H”**.
2. Press ⇔T key to select beep.
3. Press →0← key to enter.
4. Use ⇔T key to select:
   ok. (check mode OK).
   ng. (check model NG).
   no. (no beep).
5. Press →0← key to confirm and N/G to escape.

Note: Checkweighing function only available when weight more than 20d. To disable the Checkweighing function enter zero into both limits by pressing the ⊙ key when the current limits are shown then press →0← key to store the zero values.

Accumulated total

The scale can be set to accumulate manually by pressing the (M+) key. See the Parameters Section for details of selecting the method using function **"P1 com"**.

Please note before every accumulate operate, scale need return to zero and only press (M+) key when stable, when weight less than 20d, accumulate operate will be invalid.

Accumulate operation

The weight displayed will be stored in memory when the (M+) key is pressed and the weight is stable.

The display will show **"ACC 1"** and then the total in memory for 2 seconds before returning to normal weighing status. (after do accumulate operate, **"M+"** indicator will turn on). If the optional RS-232 interface is installed the weight will be output to a printer or PC.

Remove the weight, allowing the scale to return to zero and put a second weight on.

Press the (M+) key, the display will show **"ACC 2"** and then the new total.

Continue until all weights have been added.

Memory recall

To view the totals in memory, press the (MR) key.

Memory clear

To clear the memory, just press M+ and MR keys together.

Automatically accumulate

1. Press key during selfchecking, enter setting mode, press key until display shows **“P1 COM”**.
2. Press key to enter.
3. Press key to select **“mode”**.
4. Press key to confirm, display will show current RS-232 mode.
5. Press key to select **“Auto”**.
6. The indicator **AUTO** will light on.

Put the weight on platform, after stable, you will hear a beep twice, you can add or remove weight now, scale will beep on again after stable, at last, remove all weight from platform, the last weight value will be stored in memory.

Parts counting function

1. Hold MR key to enter parts counting mode.
2. Display will show **“P 10”**.
3. Press the key to select sample quantity (10/20/50/100/200).
4. Put the sample on the platform (the quantity the same as shown on display).

5. Press key to confirm.

6. Display will show **"------"**, then show current quantity. Sampling finished.

7. After sampling, add goods on the platform, display will show it´s quantity.

8. To return to normal weighing, press the key.

Animal weighing mode

Let the animal on the platform, after some seconds, if reading data change not a lot, you can hear a beep sound and reading data will be locked.

In reading data lock mode, if you add/remove big weight, display will still update and lock new reading data.

You can press and keys together to enter / escape animal weighing mode.

Keyboard lock

You can use keyboard lock when this function enable (see detail setting process in technical manual), after keyboard haven´t use for 10 minutes, keyboard will be lock, after enter lock status, if you press any key, display will show **"K-LCK"**.

If you want to escape from lock mode and return to normal weighing mode, hold , and keys for 2 seconds, display will show **"ULCK"** and return to normal mode.

Battery operation

The weighing indicator can be operated from the battery if desired. The battery life is approximately 70 hours.

When the battery needs charging, a symbol on the weight display will turn on. The battery should be recharged when the symbol is on. The scale will still operate for about 1 hour after which it will automatically swich off to protect the battery.

To charge the battery simply plug into the mains power. The scale does not need to be turned on.

The battery should be charged for 12 hours for full capacity.

Just under the display is an LED to indicate the status of battery charging. When the scale is plugged into the mains power the internal battery will be charged. If the LED is green the battery has a full charge. If it is red the battery is nearly discharged.

As the battery is used it may fail to hold a full charge. If the battery like becomes unacceptable then contact your distributor.

USER SETTING

Set backlight

1. Hold key for 3 seconds, display will show **"setbl"**.
2. Press key to enter backlight parameter.
3. Press key to change backlight mode:

   BL ON. Always on.

   BL AU. Autobacklight, backlight will on when press any key

or add load on scale.

BLOFF. Backlight always off.

4. Press →0← key to confirm.
5. Press N/G key to escape.

Auto-power off

1. Hold →0← key for 3 seconds, display will show **"setbl"**.
2. Press ↔T key, display shows **"setoff"**.
3. Press →0← key to enter auto power off setting.
4. Press ↔T key to change auto-power off time:

   of ON. Always on.

   of 5. Autopower off after standby 5 minutes.

   of 15. Autopower off after standby 15 minutes.
5. Press →0← key to confirm.
6. Press N/G key to escape.

CALIBRATION OF VERIFIED BALANCES

The verified models are protected against manipulation, including the modification of initial calibration, when the balance was verified.

If there is a substantial difference between the displayed value and the real one, you should contact with the Department of Industry of your Community or Country for an authorized repairer.

Only the authorized repairer can open the balance, break the seals and replace them, with the registration number of Metrological Control, including the year of repair.

You should also consult your authorized repairer or competent authority if other document is required such as a Book of register of repairs as it depends on the Autonomous Community or Country.

Once the balance is sealed, you must request the implementation of a periodic verification.

CALIBRATION OF NON VERIFIED BALANCES

1. Turn on the scale, press key during the self checking.
2. Display will be show **"pn "**.
3. Press , and to enter, display will be show **"po chk"**.
4. Press key until display will be show **"p2 mod"**.
5. Press key to confirm and press key to select **"sigr / dual 1 / dual 2"**.
6. Press key to confirm and press key to select **"cal"**.
7. Press key to confirm.

Calibration procedure

1. Press key to enter calibration, display will be show **"unld"**.
2. Remove all the weight from the platform.

3. When indicator gets stable, press key to confirm.

4. Display will show the last calibration weight. If you want to change it, press and keys to change the active digits and press key to increment the value.

5. When the calibration value is correct, press key to confirm.

6. Display will show **“load”**.

7. Place the calibration weight on the platform.

8. When indicator gets stable, press to confirm.

9. Display will come to normal weighing mode and calibration has been completed.

GUARANTEE

This balance is guaranteed for one year from the delivery date. The guarantee covers any fabrication defect of the material.

During this period, **GRAM PRECISION, SL,** covers manpower and spare parts costs necessary for the reparation of the scale.

This guarantee does not cover the failures caused by an inappropriate use or overload.

The guarantee does not cover the freight cost (transport) necessary to repair the scale.

NOTAS

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