

User Manual

Electronic industrial scale
BL 30K

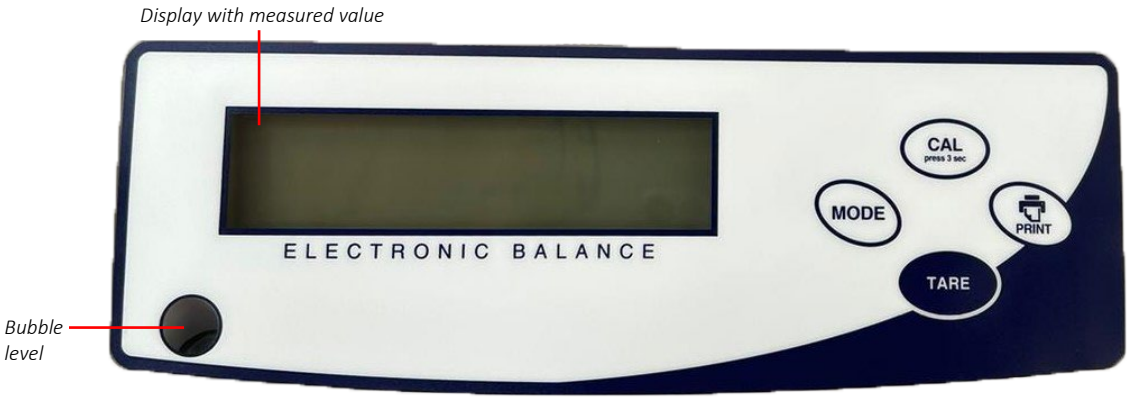
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1. Before starting

- Place the scale and, using the adjustable feet and the level bubble on the back, adjust the tilt. The scale MUST be level.
- Protect the scale from drafts, so do not install near windows or air conditioners.
- Protect the scale from vibration.
- Do not leave the scale exposed to the sun.
- Working temperature: 5°C ... 35°C (temperature change ≤ 5°C/h).
- Allowable humidity rate: 50% ... 85%.
- Installation and removal of the scale should be done with the machine switched off.
- Do not use the scale upside down.
- After switching on, wait at least 30 minutes of warm-up time before performing the first weighing.
- For service, contact your dealer or an authorized service center.

2. Keypad



	On/Off key (located on the side, below the scale)
	Press and hold for 3 seconds to start the Calibration procedure
	Select the feature
	Send the value to the printer or PC
	Tare key

3. User calibration

Each individual scale is calibrated in the laboratory by qualified technicians using certified masses.

One-point calibration procedure:
Press and hold “CAL” for 3 seconds (to enter the calibration mode). The display will show “CAL***” and “g” will flash. Place the standard weight on the weighing pan. The display will show the words “-CAL-”. The weight value will be shown. The scale will enter the weighing mode. After calibration, if you find the mass of the weight out of specification, make a new calibration.

Multi-point calibration procedure:
Press and hold “CAL” for 3 seconds (to enter the calibration mode). Press “CAL” repeatedly until “CAL L” appears in the display, you can choose a defined calibration point or you can select “CAL L” to make a linear type calibration. When “no CAL” appears in the display, it means that no weight has been placed on the weighing pan for 10 seconds during the calibration phase. The scale will automatically exit the calibration mode. If “E100” appears on the display, it means your calibration method is wrong and the original calibration data will disappear. In this case, you need to make a new calibration.

4. Weighing feature

Read the value on the screen after the black dot in the lower left corner has disappeared (this means the measurement is stable). If you overload the scale, “-----” will be shown on the display and you must remove the weight immediately, otherwise the scale (especially the load cell) may be damaged.

5. Tare feature

It is activated by pressing the “TARE” key and works only if the black dot in the lower left disappears. If present, wait for it to disappear.

Zero search and auto-tare

- Switch off the scale.
- Hold pressed the “CAL” key and at the same time switch on the scale: “-Zero-” will appear.
- Release the key and press “TARE.” “Zero*d” will appear in the display.
- Press “TARE” to change “*” from 0 to 5: “Zero0d” means the zero search function is off (maximum sensitivity); “Zero5d” means the zero search is at maximum (factory setting).
- Press “CAL” to confirm, “-tArE-” will appear on the display.
- Press “TARE”, “tArE*d” will be shown. Press “TARE” again to change “*” from 0 to 9: “tArE0d” means the auto-tare function is off; “tArE9d” means the auto-tare function is maximum (factory setting).
- The settings will be stored for the next use.

6. Unit Conversion feature

Press “MODE” for 3 seconds. Press “TARE” to confirm. “Unit*” will flash.
Press “MODE” to change the unit of measurement. Press “TARE” to confirm.

7. Piece-counting feature

Press “MODE” for 3 seconds until the display starts flashing. Press “MODE” again and select “Count”. Press “TARE” to confirm, the display will show “pcs”. Press “MODE” to change “pcs” from “10pcs” to “500pcs”. The higher the number of pcs, the higher the accuracy. Place the selected number of pcs on the scale pan and press “TARE” to confirm. “------” will be shown on the display. The settings are saved. When “no-Cou” is shown on the display, it means that the mass of samples is too low, in this case you need to choose several products together as the units to be reset.

8. Percentage feature

Press “MODE” for 3 seconds until the display starts flashing. Press “MODE” again and select “PER”. After that, press “TARE” to confirm, “100%” will appear on the display. Place the weight to which you want to match 100% on the weighing pan and press “TARE”. The weight will be matched to 100%. Remove the weight and now place another weight on it. The display will show the percentage by weight of the latter. If “no-PER” appears on the display, it means the mass is too small and you need to add more.

9. Weighing speed adjustment feature

Press “TARE” for 3 seconds, “SPEED!” will appear on the display. Release the key: it will be necessary to enter the weighing pattern. If the weighing speed will be slow, the accuracy will be higher. If “SPEED2” is chosen, the weighing speed will be higher, but the accuracy will be poor.

10. Print settings and RS232 interface parameters

Press “MODE” up to “Prt.” After that, press “TARE” to confirm. Press “MODE” to change “hAnd”, “AUto” or “Contin”. Press “TARE” to choose the mode you want: “*hAnd*” to print when the “PRT” key is pressed; “*AUto*” to print when the weight placed on the weighing pan is above 3d and the measurement is stable; “*Contin*” to print continuously.

Data transmission format
Each 10BIT is one frame of data:
BIT1, BIT2, BIT3, …, BIT8, BIT9, BIT10.
BIT1: start.
BIT2 … BIT9: bit of data.
BIT10: end.
Baud rate: 9600 bps.
All words are in ASCII code.

11. Battery

The scales mount a rechargeable battery. To recharge it, use the power cord inside the package and connect it to the input on the underside of the scale. The scale can also operate on network power. When the battery symbol appears on the screen, it means that you need to charge the battery.

12. Data sheet

Model	BL 30K
Capacity	30000 g
Resolution	1 g
Repeatability	± 1 g
Linearity	± 3 g
Minimum weighing	10 g
Calibration	External
Unit of measurement	*g – kg*
Stabilization time	≈ 5 Seconds
Working temperature	5°C … 35°C
Data transmission	RS232
Display	Backlit LCD
Plate size	255 * 190 mm stainless steel
Overall dimensions	360 * 300 * 165 mm
Net weight	2,5 kg
Power supply	220 V / 50 Hz
Features	Weighing, tare, piece-counting feature, percentage, unit conversion, weighing speed adjustment
Accessories	Power cable, steel plate, adjustable feet, leveling bubble



Electrical and electronic equipment with this symbol affixed may not be disposed of in public landfills.
In accordance with the WEEE Directive 2012/19/EU, European users of electrical and electronic equipment have the option of returning used equipment to the Distributor or Manufacturer when purchasing new equipment.
Illegal disposal of electrical and electronic equipment is punishable by administrative fine.