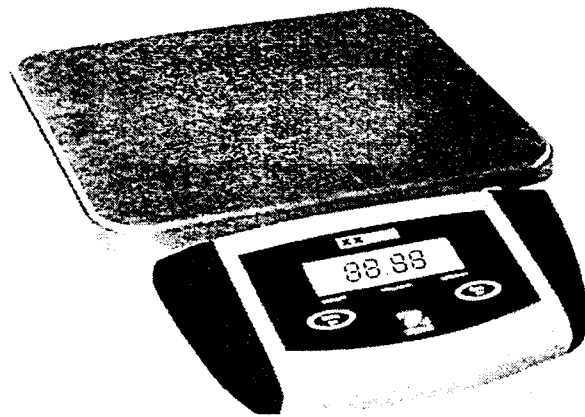




Ohaus Corporation  
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## Ohaus ES Bench Scale Series



**Models: ES6R, ES30R, ES50R, ES50L, ES100L, ES200L**

- The ES series scales only differ in weighing capacity, readability, and platform size. Unless otherwise specified, the content of this manual applies to all models.
- Calibration weights are not provided with the scale.
- For best results, use the product within the specified optimum operating temperature range.
- For best accuracy, perform your mass measurements in clean environments, free of electrostatic and magnetic fields, dust and dirt, moisture, vibration and air currents.
- Use your scale with care, gently loading items to be weighed onto the center of the pan. Avoiding rough treatment will aid in the life of your scale.

## Unpacking

ES Series Bench Scale is shipped with the following components:

- Scale Base
- Indicator
- Power Adapter
- Mounting Bracket and Screws
- This instruction manual
- Warranty Card

## Leveling Scale Platform

Model ES50L, ES100L, and ES200L are equipped with adjustable leveling feet. Adjust the four leveling feet under the platform to level it.

## Power Options

### AC Adapter Operation

- A 9 Volts output AC Adapter with center positive female plug shall be used.
- Connect the AC Adapter to the power input jack at the rear of the scale.
- Plug the AC Adapter into a properly grounded wall outlet.

### Battery Installation

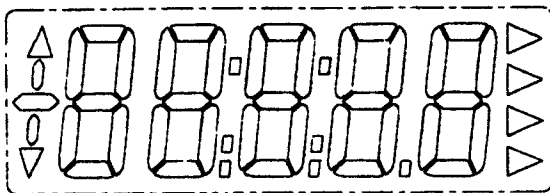
- Remove battery cover on the bottom of the indicator and place six AA size alkaline batteries into the compartment as indicated. Re-insert the battery cover.
- Batteries are not included.

### Wall / Base Mount

Wall / base mounting brackets and screws are provided.

## Operation & Product Features

- **Power Up Test:** When the scale is turned on, all display segments will appear for approximately 3 seconds before resetting to zero.



- **Stable Reading Indication:** On the display, a down facing arrow will appear in the lower left corner indicating the weight reading is stable. During weighing, the indicator disappears and will reappear once a stable reading has been reached.
- **Weight Unit Indication:** On the display, one of the four right facing arrows on the right side will appear indicating the weight unit selected, kg, lb, oz, or lb:oz.
- **Overload:** If the applied load exceeds the capacity of the scale, an “E” will appear on the display and the load should be removed immediately. The scale will return to normal operation.
- **Negative Value:** When a load is removed from the scale, any zeroed value will be displayed as a negative number. To return to normal operation, the zeroed value can be canceled by pressing “On/Off/Zero”.
- **Zero Function:** Values can progressively be added to a sample. By pressing the “On/Off/Zero” key, the scale display returns to zero. After adding additional mass, press “On/Off/Zero” to zero the scale again. Additional mass may be added up to the capacity of the scale. While removing the sample from the scale, a total gross weight of the sample will be displayed in negative value. Zero the scale again before subsequent using.
- **Low Battery Indication:** The display will show “Lo” when the batteries are weak and need to be replaced.
- **Auto Shut-Off:** To extend battery life, the scale will automatically turn off after approximately five minutes if no active weighing is occurring. This feature is active with battery operation only.

## Two Button Keypad

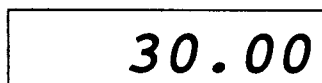
- **On/Off/Zero:** Pressing this key turns on the scale. This same key operates the zero feature when the scale is "ON". Long press of three seconds will turn the scale off.
- **Cal/Units:** Press this key briefly to change the weighing unit. The following weight units may be selected: kilogram (kg), pound (lb), ounce (oz), or pound:ounce (lb:oz).

Press and hold this key to begin the calibration procedure.

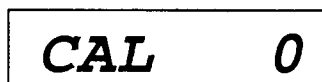
## Calibration

For best results, calibrate the scale at regular intervals. This is especially important if the scale is in use for prolonged periods.


1. Allow the scale to warm up and stabilize for two minutes before commencing the calibration procedure.
2. Press and hold the "Cal/Units" key until the calibration weight flashes on the display. This weight is the full capacity for 6,30,50 kg scales and 50% capacity for the 100 & 200 kg scales.
3. With the calibration weight value flashing, press the "On/Off/Zero" key, and the display will read "CAL O." After pausing for at least two seconds, place the correct calibration weight gently on the center of the weighing pan.
4. The display will momentarily show "CAL F" and then return to active weighing. Calibration is complete when the display correctly shows the calibration weight, and the display has stabilized.
5. Remove the calibration weight and turn the scale off. Now turn on the calibrated scale.



30.00



CAL O



CAL F

**Note:** If "CAL E" appears on the display instead of "CAL F", it indicates that a calibration error has occurred and the process should be repeated. The message "CAL E" will appear if the calibration steps are not followed in the correct order or if an incorrect calibration weight was applied.



CAL E

**Specifications**

|                               | <b>ES6R</b>  | <b>ES30R</b>   | <b>ES50R</b>   |
|-------------------------------|--|--|--|
| Capacity x Readability        | 6.000 x 0.002 kg<br>13.225 x 0.005 lb<br>211.6 x 0.1oz<br>13 lb:3 oz x 1oz | 30.00 x 0.01 kg<br>66.10 x 0.05 lb<br>1058.0 x 0.5oz<br>66 lb:2 oz x 1oz | 50.00 x 0.02 kg<br>110.20 x 0.05 lb<br>1763 x 1oz<br>110 lb:3 oz x 1oz |
| Linearity                     | ±0.002 kg  | ±0.01 kg   | ±0.02 kg   |
| Weighing units                | kg, lb, oz, lb:oz  |  |  |
| Calibration                   | Auto calibration from keypad<br>100% capacity weight required              |  |  |
| Stabilization time            | 3 seconds  |  |  |
| Maximum overload              | 150% of capacity   |  |  |
| Overload indication           | [ E ]  |  |  |
| Underload indication          | Negative value   |  |  |
| Auto shut-off                 | 5 minutes no activity (battery operating only)                             |  |  |
| Optimum operating temperature | 41°-95°F / 5°-35°C   |  |  |
| Platform size L x W (in/cm)   | 12 x 10.5 / 31 x 27  |  |  |
| Indicator size L x W x H      | 9.8" x 5.5" x 2.7" / 25cm x 14cm x 7cm                                     |  |  |
| Power requirements            | 6-AA alkaline batteries  |  |  |

|                             | <b>ES50L</b>   | <b>ES100L</b>   | <b>ES200L</b>   |
|-----------------------------|--|---|---|
| Capacity x Readability      | 50.00 x 0.02 kg<br>110.20 x 0.05 lb<br>1763 x 1 oz<br>110 lb:3 oz x 1 oz | 100.00 x 0.05 kg<br>220.4 x 0.1 lb<br>3526 x 2 oz<br>220 lb:6 oz x 2 oz | 200.00 x 0.1 kg<br>440.8 x 0.2 lb<br>7050 x 5 oz<br>(TBD) |
| Linearity                   | ±0.02 kg   | ±0.05 kg  | ±0.1 kg   |
| Weighing units              | kg, lb, oz, lb:oz  |   | kg, lb, oz  |
| Calibration                 | Auto calibration from keypad<br>100% capacity weight required            | Auto calibration from keypad<br>50% capacity weight required            |   |
| Stabilization time          | 3 seconds  |   |   |
| Maximum overload            | 150% of capacity   |   |   |
| Overload indication         | [ E ]  |   |   |
| Underload indication        | Negative value   |   |   |
| Auto shut-off               | 5 minutes no activity (battery operating only)                           |   |   |
| Optimum operating temp.     | 41°-95°F / 5°-35°C   |   |   |
| Platform size L x W (in/cm) | 20.5 x 15.7 / 52 x 40  |   |   |
| Indicator size L x W x H    | 9.8" x 5.5" x 2.7" / 25cm x 14cm x 7cm                                   |   |   |
| Power requirements          | 6-AA alkaline batteries  |   |   |

## Limited Warranty

Ohaus ES bench scales are warranted against defects in materials and workmanship for a period of 12 months from the date of delivery. During the warranty period Ohaus will repair, or at its option, replace any component(s) that proves to be defective at no charge, provided that the product is returned, freight prepaid, to Ohaus.

The warranty does not apply if the product has been damaged by accident or misuse, exposed to radioactive or corrosive materials, has foreign material penetrating to the inside of the product, or as a result of service or modification by other than Ohaus. In lieu of a properly returned warranty registration card, the warranty period shall begin on the date of shipment to the authorized dealer. No other express or implied warranty is given by Ohaus Corporation. Ohaus Corporation shall not be liable for any consequential damages.

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With offices in England, Germany, France, Spain, Switzerland, Italy, Poland, Mexico, Japan, Korea and China.

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