Ohaus Corporation
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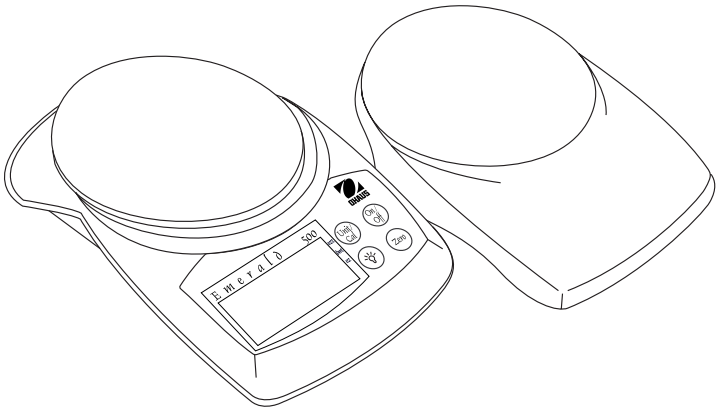


Ohaus Emerald Hand-Held Jewelry Scales
-OPERATING MANUAL-

- Emerald scales only differ in weighing units and capacity. Unless otherwise specified, the content of this manual applies to all models.
- For best results, use the scale in the specified optimum operating temperature.
- 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 hand-held scale.
- Calibration weights are not provided with the scale.

Battery Installation

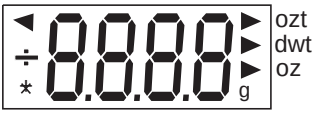
Two AAA size alkaline batteries are provided.

CAUTION: Keep the protective cover in place while installing batteries.

- Remove the battery cover on the bottom of the scale and place the two "AAA" size alkaline batteries into the compartment as indicated.
- Do not use excessive force or press the weighing pan.
- Re-insert the battery cover.

General Product Features

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



- **Unit Indication**: On the right side of the display, a right facing arrow will appear indicating the weighing mode in which the scale is operating.
- **Stable Reading Indication**: On the display, a star indicator will appear in the lower left corner of the display when a stable reading has been reached.
- **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.
- **Zero Function**: Values can progressively be added to a sample. By pressing the **Zero** button, the scale display returns to zero. After adding additional mass, press **Zero** to zero the scale again. Additional mass may be added up to the capacity of the scale.
- **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 tared value can be cancelled by pressing **Zero**.
- **Auto Shut-Off**: To extend battery life, the scale will automatically turn off after approximately 2 to 4 minutes if no active weighing is occurring.
- **EL Back Light**: The display has an Electronic Luminescence (EL) back light source, which is activated by pressing the Light Bulb button. The back light will automatically turn off after 10 seconds.
- **Lo Battery**: The display will show Lo when the batteries are weak and need replacement.

Four Button Keypad

- **On/Off** : Pressing this button turns on the scale. Pressing and holding this button turns the scale off.

- **Zero**: Pressing this button operates the zero feature when the scale is on.

- **Unit/Cal**: Press this button briefly to change the weighing unit. The following weight units may be selected: grams (g), ounces (oz), pennyweight (dwt), or troy ounces (oz t). Press and holding this button begins the calibration process.

- Light Button: **Pressing this button turns on the EL back light on for 10 seconds.**

Calibration

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

- Pressing and holding the **Unit/Cal** button starts the calibration process. The display should show CAL.

- The calibration process can be aborted by turning the scale off.

- Press the **On/Off** button to capture 0. The display shows -C- while the scale stores the the zero load signal.

- The display will show C xxx where xxx is the calibration weight in grams.

- Place the appropriate calibration weight on the platform.

- Press the **On/Off** button.

- The display shows -C- while the scale stores the calibration point signal.

- After span capture, the display returns to the normal weighing mode.

- The message AL E then E will appear if the calibration steps are not followed or the wrong weight was used.

Accessories Supplied

- Two AAA size alkakine batteries.
- Plastic molded protective cover.

Optional Accessories

Calibration Mass:

100g for JE 120	51015-16
200g for JE 250	51025-16
300g for JE 500	51035-16

Specifications

	JE120	JE250	JE500
Capacity x Readability	120.0 X 0.1g 4.232 x .002oz 3.858 x 002ozt 77.15 x 0.05 dwt	250 X 0.1g 8.815 x .005oz 8.035 x .005ozt 160.7 x 0.1 dwt	500 X 0.1g 17.63 x .01oz 16.07 x 0.01oz t 321 x .1 dwt
Linearity	±0.1g	±0.2g	
Weighing units	g, oz, dwt, oz t		
Zero range	to capacity by subtraction		
Calibration	User calibration		
Stabilization time	3 seconds		
Maximum overload	150% of capacity		
Overload indication	[E]		
Underload indication	Negative value		
Auto shut-off	2 - 4 minutes no activity		
Optimum operating temperature	64° to 77° F / 18° to 25° C		
Weigh pan size L x W (in/cm)	3.25 x 3/8.3 x 7.6		
Power requirements	2-AAA alkaline batteries		
Dimensions L x W x H (in/cm)	5.35 x 3.25 x 0.8 / 13.6 x 8.3 x 2.0		
Net Weight (lb/kg)	0.34/0.16		

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Declaration of Conformity We, Ohaus Corporation, declare under our sole responsibility that the balance models listed below marked with "CE" are in conformity with the directives and standards mentioned.

Scale model (s) Emerald Hand-Held Jewelry Scales

Marked with: **EC Directive** (Including applicable amendments)		**Standard**
CE	**89/336/EC** Electromagnetic compatibility	**EN61326:1997 + A1:1998** Electrical Equipment for Measurement, Control and Laboratory Use - EMC requirements Immunity - Performance Criterion B Emissions - Class B

ISO 9001 Registration for Ohaus Corporation. Ohaus Corporation, USA, was examined and evaluated in 1994 by the Bureau Veritas Quality International (BVQI) and was awarded ISO 9001 registration. This certifies that Ohaus Corporation, USA, has a quality system that conforms with the international standards for quality management and quality assurance (ISO 9000 series). Repeat audits are carried out by BVQI at intervals to check that the quality system is operated in the proper manner.

Last two digits of the year which the CE marking was affixed: 02

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Ohaus Corporation, Pine Brook, NJ USA

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

-- Reorient or relocate the receiving antenna.
-- Increase the separation between the equipment and receiver.
-- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
-- Consult the dealer or an experienced radio/TV technician for help.

LIMITED WARRANTY

Ohaus compact 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 prove to be defective at no charge, provided that the product is returned, freight prepaid, to Ohaus.

This 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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