READALL WITH THIS PRODUCT.

DO NOT SMOKER WHILE HANDLING POWDER OR PRIMER.

ALWAYS WEAR SAFETY GLASSES. YOU ASSUME UNNECESSARY RISK WHEN RELOADING.

DETERMINE THE RECOMMENDED DATA. WE HIGHLY RECOMMEND THE USE OF THE SPEER.

LOADING DATA

GENERAL

SAFETY
FOR SERVICING OR CONTACT PRODUCT SERVICE.

6. IF POWDER SHOULD ENTER THE UNIT, DO NOT USE THE SCALE, SEND
RESEMBLY AVALABLE ANTI-STATIC SPRAY.

5. IF STATIC BUILD-UP ON SCALE IS NOTICED, Wipe SCALE WITH ANY
NOT INSTALL BATTERY IN POWDER AREA.

4. SET-UP SCALE PRIOR TO INTRODUCING POWDERS INTO THE AREA. DO
STORAGE: REMOVE THE BATTERY TO PREVENT LEAKING.

3. UNPLUG THE AC ADAPTOR WHEN NOT IN USE. FOR LONG TERM
THEIR ACCURACY.

2. ACCURACY OF CALIBRATION WEIGHTS IS CRITICAL TO THE ACCURACY
OF THE SCALE. WEIGETS SHOULD BE KePT CLEAN AND STORED IN A
DAY PLACE. IF WEIGETS ARE DROPPED, DAMAGED IN ANY WAY, DIRTY
OR CORRODED, THEY SHOULD BE REPLACED OR SERVICED TO VERIFY
THEIR ACCURACY.

1. USE ONLY THE CALIBRATION WEIGHTS SUPPLIED WITH THE SCALE.

PRECAUTIONS

NICAN
THIS SCALE SHOULD BE SERVICED ONLY BY A TRAINED, QUALIFIED TECH.
CALIBRATION ACCURACY.
CHANGES IN SCALE LOCATION OR LEVEL CONDITION WILL AFFECT
TEMPERATURE IS DIFFERENT.
USE WHEN TAKEN FROM ONE LOCATION TO ANOTHER WHERE THE
SCALES SHOULD BE ALLOWED TO STABILIZE FOR ONE HOUR PRIOR TO
CHANGES IN TEMPERATURE WILL AFFECT CALIBRATION ACCURACY.
FAILURES TO OCCUR THAT MAY CAUSE AN INACCURATE READING.
ELECTRONIC SCALES ARE RELIABLE DEVICES BUT IT IS POSSIBLE FOR
SERIOUS PERSONAL INJURY.
WARNING
Nicht den Geräten kann eine Beeinflussung des Anzeigegeräts Verursachen. Der Empfänger eines Funkgeräts im unmittelbaren Umkreis des Geräts befindet sich nicht im Funkwellenbereich.

Dieses Gerät erfüllt den Anforderungen nach 72/318/EWG und ist funkenstabil für elektromagnetische Strahlung geeignet. Es erfüllt die Richtlinie 89/336/EWG für die Normen: EN 301 489-1 und EN 301 489-17.

For its intended purpose.

This device corresponds to Requirements stipulated in 73/23/EEC and 93/68/EEC and Regulations.

Unauthorized changes or modifications to this equipment are not permitted.

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus as set out in the interference-causing equipment standard entitled "Digital Apparatus", ICES-003 of the Department of Communications.

Consult the dealer or an experienced radio/TV technician for help.

Connected the equipment into an outlet on a circuit different from that to which the receiver is connected.

Increase the separation between the equipment and the receiver.

Reorient or relocate the receiving antenna.

If this digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus as set out in the interference-causing equipment standard entitled "Digital Apparatus", ICES-003 of the Department of Communications, it is not subject to C klass B of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates 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 the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

This equipment has been tested and found to comply with 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.
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</table>
DO NOT install the scale:

- Rough handling, dropping or picking it up by the platform support will affect accuracy.
- Changes in scale location or temperature will affect calibration accuracy.
- Permissible change is greater than a few degrees.
- Allowable change is greater than a few grams.
- The range master is shipped with the following components:
  - Power adapter
  - Scale pan
  - Stainless steel platform
  - Instruction manual
  - Strain gauge calibration weights
  - AC adapter

UNPACKING

1. Carefully unpack the scale. Verify that all items are on hand. Save the packing.
2. Remove the cardboard insert from under the platform support.

DESCRIPTION

The range master is a precision weighing instrument designed to provide years of reliable service. Features include front panel controls, simplified menu, auto shutoff, and cleaning instructions. It can be operated by a 9 Volt battery or with the AC adapter supplied.
To turn the scale OFF, press and hold Mode/Off until the display indicates OFF, then release.

**Turning the Scale OFF**

- Grains Indicator
- Stability Indicator
- Grams Indicator
- Low Battery Indicator
- Power Reserve

Allow 5 minutes warm-up time. All segments will appear briefly followed by a software revision number and then 00.0. Press Zero/On. All segments will appear briefly followed by a software revision number and then 00.0. Press Zero/On.

**Turning the Scale ON**

**Operation**

**Platform Installation**

NEVER pick up the scale by the platform support. Place the platform over the platform support as shown in the illustration.

Connect the AC adapter at the rear of the scale. For portable operation, install a 9 V battery in the battery compartment as shown in the illustration. Battery (Not Supplied)

AC Adapter Power Input Jack
is calibrated.

3. When the weight on the platform is displayed with the stability indicator, the scale
is zeroed.

1. Press the two 50 gram calibration weights on the platform and momentarily press the
zero/or button.
2. Place the two 50 gram calibration weights on the platform and momentarily press
the zero/or button. Press the zero/or button until the weight is displayed. Then release
the zero/or button, the weight on the scale is zero and the weighing mode is selected.

- If the weight is displayed, do not disturb the scale while

- If the weight is not displayed, followed by 100, press and hold the zero/or button until the weight is displayed. Then release the zero/or button.

Make sure the scale pan is removed from the platform before calibration. Allow 5 minutes

CALIBRATION

If may be necessary to rezero the display between weightings.

1. With an empty scale pan on the platform, press the zero/or button to zero the display.
2. As powder is added to the scale pan, the net weight is displayed. The scale pan

- Weight remaining in scale’s memory until the zero/or button is pressed again.

- If the weight is not displayed, followed by 100, press the zero/or button until the weight is displayed. Then release the zero/or button.

Tare

The stability indicator * appears when the reading is stable.

3. Place material to be weighed on the platform and read the weight on the display.

2. If it is necessary to rezero the display, momentarily press the zero/or button.

Make certain that the correct measuring unit is selected. 9 grams or 9 grams.

Mode/Off

1. If both units are on, select the desired weighing unit by momentarily pressing

The scale is shipped from the factory ready to weigh in grams. If grams is desired, see

CALIBRATION PROCEDURE IF REQURED.

IMPORTANT! VERIFY CALIBRATION ACCURACY PRIOR TO USE.
6. Change to another menu item or exit as described above.

5. To select the displayed setting, press Rezero/On. The display will again indicate

4. To change the displayed setting, press Mode/Off.

3. To select the displayed setting, press Rezero/On. The display will show the

2. To change the displayed setting, press Mode/Off.

1. When the scale displays On or Off, press Rezero/On to display the grams indicator

Use Mode/Off to scroll to units.

Activating units:

4. Change to another menu item or exit as described above.

indicate A OFF.

3. To select the displayed setting, press Rezero/On. The display will again indicate

2. To change the displayed setting, press Mode/Off.

1. When the scale displays A OFF, press Rezero/On to view the current setting

When Auto Shunt is activated, the scale will shut off after three minutes of non-use.

Use Mode/Off to scroll to A OFF.

Auto shut-off:

END - Exit menu and store settings.
LIN - Performs linearity calibration.
UNITS - (g) or grams (g). Set either to on or off.
A OFF - Set to on or off.

MENU

Press Mode/Off until E OFF is displayed, then press Rezero/On.

2. Repeatedly press Mode/Off to display the desired menu item to be used or to exit.

Use Mode/Off to change status.
Use Rezero/On to see status.
Use Mode/Off to scroll through the menu items.
Release if the first menu item A OFF will be displayed.

1. When the scale is off, press and hold Rezero/On until MENU is displayed, then

units and linearity calibration.

The user menu permits you to activate the Auto Shut-off feature, available weighting
Error Codes

Error: 0 - Incorrect instrument, may need recalibration. The scale may need recalibration, particularly linearity calibration. deactivate.

Error: 1 - Sample being weighed exceeds the capacity of the scale. If an error occurs when the scale becomes calibrated, the scale must be serviced. recalculate.

Error: 2 - The error persists after recalibration. The scale is not the scale. recalibrate the scale.

Error: 3 - The platform of the scale could also display ERT. recalibrate the scale.

Error: 4 - Incorrect instrument, may need recalibration. The scale may need recalibration, particularly linearity calibration.

Error: 5 - The error persists after recalibration. The scale is not the scale. recalibrate the scale.

Error: 6 - The error persists after recalibration. The scale is not the scale. recalibrate the scale.

Care and Maintenance

Before any changes you have made, the scale automatically clears the menu and

1. Where the screen is displayed with the stability indicator, the scale is calibrated.

2. When the weight is displayed on the platform for a total of 100 grams and

3. Add the second 50 gram weight on the platform.

4. When the weight is displayed on the platform and momentarily press

   a cloth dampened with a mild detergent may be used. Keep calibration weights in a safe
   place. Unplug the AC adapter when not in use. For long term storage, remove the
   battery.

5. Do not disturb the scale while - - is displayed.

6. Use Mode/Off to scroll to Lin.

7. Before re-placing the serviced to verify their accuracy, the scale should

   be removed from the calibration range. The procedure resets the scale's weighing range and calibration zero
   weight.

   Linearity calibration may be required if error 1 is displayed. The scale's zero calibration has
   been modified or serviced.
<table>
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<tr>
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<th><strong>Probable Cause</strong></th>
<th><strong>Remedy</strong></th>
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<td>Unable to display weighing unit</td>
<td>Weighing unit not activated in particular menu</td>
<td>Use Units menu to set desired unit ON (see menu).</td>
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<tr>
<td>Incorrect calibration procedure</td>
<td>Scale out of calibration</td>
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<tr>
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<tr>
<td>Scale won't store set</td>
<td>Selection was not used</td>
<td>To exit menu, select exit menu. You must use END to exit menu.</td>
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</table>

- Selections made in menu.
PARTS AND ACCESSORIES

If you require replacement parts or service assistance, please call Ohaus Corporation Toll-Free at (800) 226-0659. An Ohaus Product Service Specialist will be available to help you.

PART No.

Part No.

Instruction Manual
50 gram Calibration Weight
Platform Scale Pan
240 V ac UK Plug
220 V ac Euro Plug
100/120 V ac US Plug

AC Adapters:
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<td>3.7/1.5</td>
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<tr>
<td>Net Weight (lb/kg)</td>
<td>1.5/0.7</td>
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<tr>
<td>Platform Size</td>
<td>4&quot; dia.</td>
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<td>Over Range Capacity</td>
<td>103%</td>
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<tr>
<td>Tare Range</td>
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<tr>
<td>Linearity</td>
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</tr>
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<td>Repeatability (std. dev.)</td>
<td>10.1</td>
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<tr>
<td>Readability</td>
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<tr>
<td>Capacity</td>
<td></td>
</tr>
<tr>
<td>0g</td>
<td>100</td>
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<tr>
<td>15g</td>
<td></td>
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<tr>
<td>45g</td>
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9 grams
This warranty does not apply if the scale has been damaged by accident or misuse, exposed to radioactive or corrosive materials, has foreign material penetrating to the inside of the scale, or as a result of normal wear and tear. Provided that the scale is returned (shipping charges prepaid) in good condition, Ohaus Corporation will repair or replace any component(s) that proves to be defective at no charge, at its option, for one (1) year from the date of purchase.