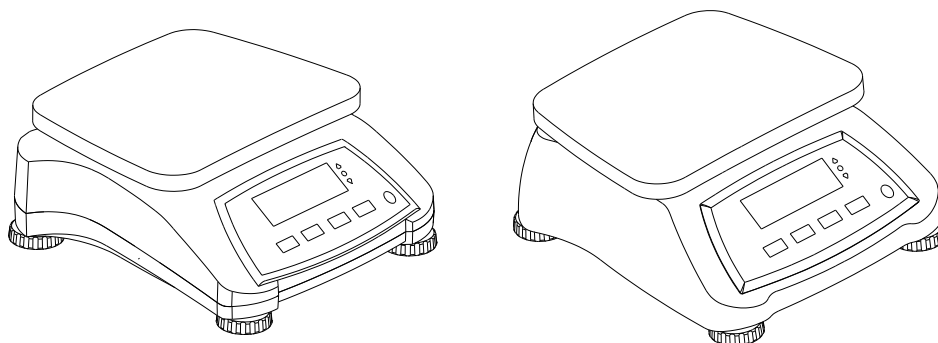




## Valor™ 4000W Series Instruction Manual





# 1. INTRODUCTION

This manual contains installation, operation and maintenance instructions for the Valor™ 4000W Series. Please read the manual completely before using the scale.

## 1.1 Safety Precautions

Please follow these safety precautions:

- Verify that the AC Adapter input voltage matches the local AC power supply.
- Do not drop loads on the platform.
- Do not place the scale upside down on the platform.
- Disconnect the scale from power supply when cleaning.
- Operate the scale only under ambient conditions specified in these instructions.
- Service should be performed only by authorized personnel.
- Only use weights within the scale's capacity as specified in these instructions.
- Do not operate the scale in hostile environments.
- Do not carry the scale by the pan or sub-platform. Use the handholds on the side of the scale housing.

# 2. INSTALLATION

## 2.1 Package Contents

- |                       |                        |                  |
|-----------------------|------------------------|------------------|
| • Scale               | • Power Adapter & Plug | • Warranty Card  |
| • Stainless Steel Pan | • Instruction Manual   | • Capacity Label |

## 2.2 Installing Components

Place the stainless steel pan onto the weighing platform before turning the scale on.

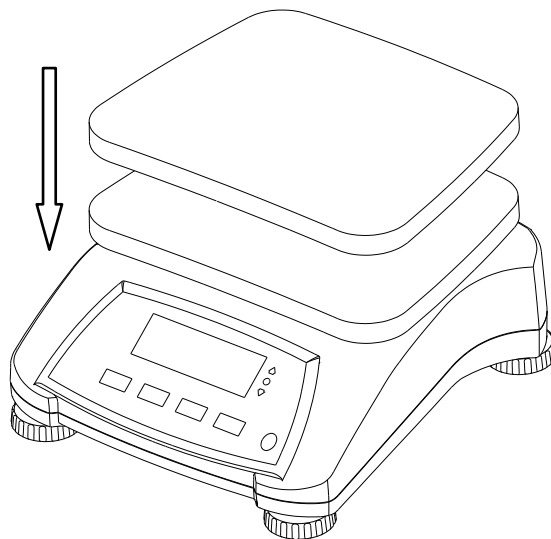


Figure 2-1. Install the Stainless Steel Pan onto the weighing platform

## 2.3 Selecting the Location

Use the scale on a clean, firm and flat surface. Avoid locations with excessive air current, vibrations, heat sources, or rapid temperature changes.

## 2.4 Leveling the Equipment

Adjust the leveling feet so the bubble is centered in the circle. Be sure the equipment is level each time its location is changed.

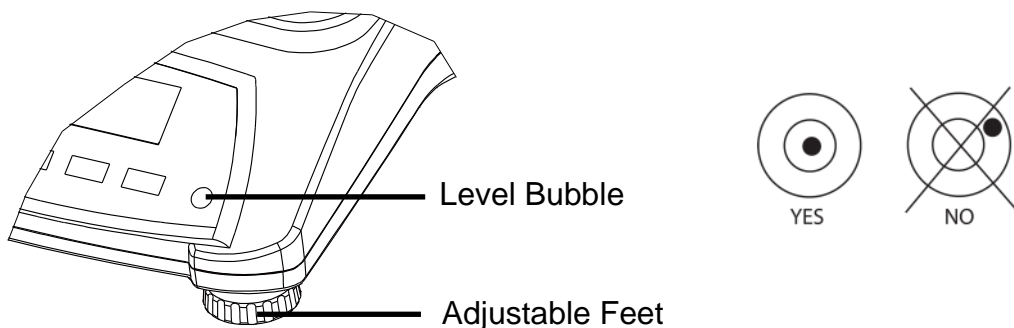


Figure 2-2. Level Indicator

## 2.5 Power

The AC Adapter is used to power the scale when battery power is not needed. First connect the AC Adapter plug to the scale input jack located at the bottom of the scale according to the description below.

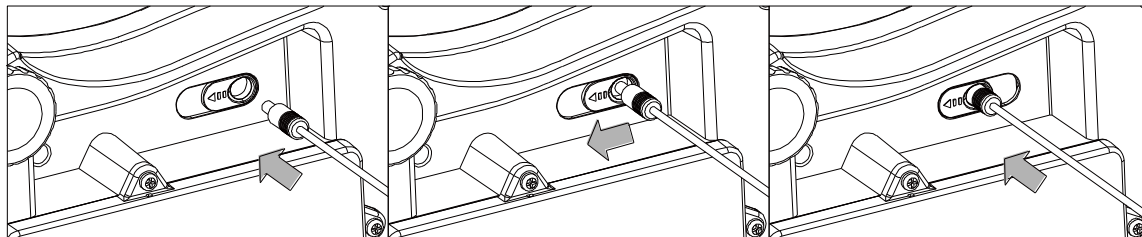


Figure 2-3. Slide to plug in

Then connect the AC adapter to the proper AC supply.

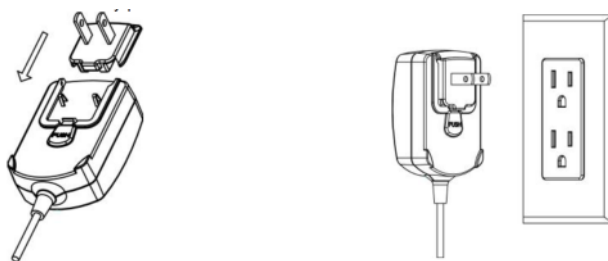


Figure 2-4. Connecting the AC adapter to AC supply




**Caution:** The scale can only be used in a dry environment when powered by the AC adapter.

### 2.5.1 Battery Power:

The scale can be used on AC power immediately. Allow the battery to charge for 12 hours before using the scale on battery power. The scale will automatically switch to battery operation if there is a power failure or the power cord is removed. With AC power, the scale is constantly charging, so the battery charge indicator (see item 11 in table 3-2) will remain lit. The scale can be operated during charging, and the battery is protected against overcharging. For maximum operating time, the battery should be charged at room temperature.

During battery operation, the battery symbol indicates the battery charging status. When charging, the symbol will blink slowly and when fully charged the symbol will stop blinking.

**TABLE 2-1**

Symbol	Charge Level
	Battery in use: Symbol displayed

#### Notes:

When battery symbol blinks fast, approximately 30 minutes working time is left.

When [Lo.BAt] is displayed, the scale will shut off.

Charging the scale must be performed in a dry environment.



**CAUTION:** Battery is to be replaced only by an authorized OHAUS service dealer. Risk of explosion can occur if the rechargeable battery is replaced with the wrong type or if it is not properly connected. Dispose of the lead acid battery according to local laws and regulations.

## 3. OPERATION

### 3.1 Controls

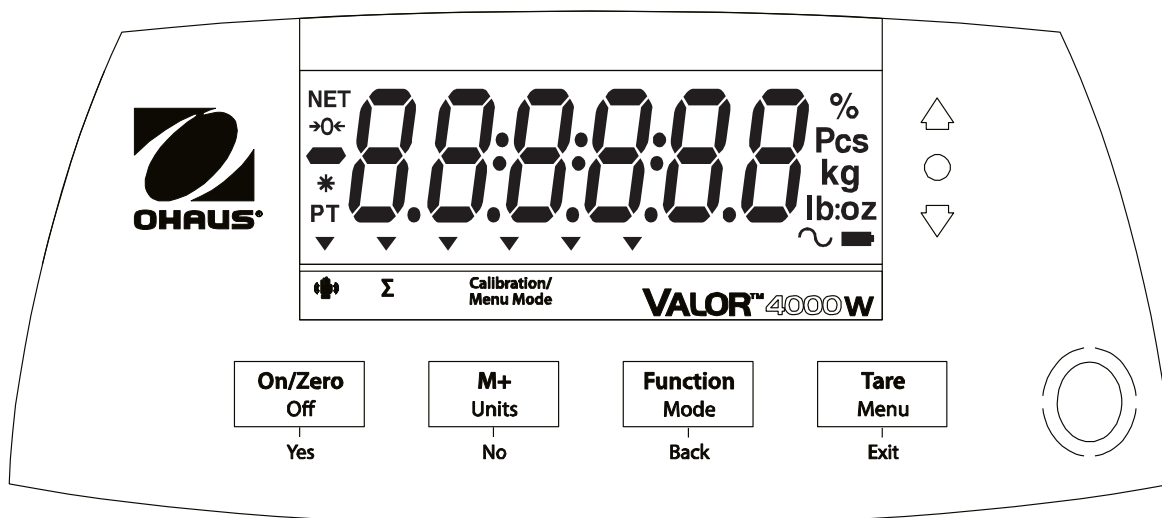



Figure 3-1. Front Control Panel Valor 4000W with display

TABLE 3-1

Button	Functions
<b>On/Zero</b> Off Yes	Short Press <sup>1</sup> (when on): Sets display to zero Short Press (when off): Turns scale on Long Press <sup>2</sup> (when on): Turns the scale off Short Press (in Menu): Selects / accepts displayed setting
<b>M+</b> Units No	Short Press: Accumulates the weight or displays the accumulated information at 0 load. Long Press: Toggles through active Units Short Press (in Menu): Toggles through available settings
<b>Function</b> Mode Back	Short Press: Initiates an application mode specific response Long Press: Selects active Mode Short Press (in Menu): returns to previous settings
<b>Tare</b> Menu Exit	Short Press: Enter / clear a Tare value Long Press: Enters User Menu Short Press (in Menu): Quickly exit User Menu
	IR Sensor <sup>3</sup> can be programmed to act as “touchless” button. See the User Menu section 4.3 for the available settings.

**Notes:**

<sup>1</sup> Short Press: Press less than 2.5 seconds.

<sup>2</sup> Long Press: Press and hold for more than 2.5 seconds.

<sup>3</sup> The IR sensor can be activated by a hand or other object that is placed at a specified height (see section 4.3) from the sensor. The sensor activation distance will vary based on the reflective nature of the object. If unwanted activations occur due to unique situations the sensor can be turned off.

## Display

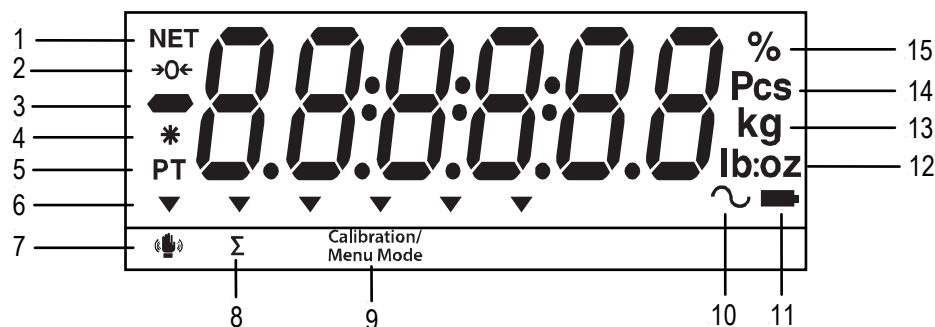


Figure 3-2. Valor 4000W Display

TABLE 3-2 Display Symbols

Item	Description	Item	Description
1	NET symbol	9	Calibration / Menu Mode symbol
2	Center of Zero symbol	10	Dynamic symbol*
3	Negative symbol	11	Battery charge symbol
4	Stable weight symbol	12	Pound, Ounce, Pound:Ounce symbol
5	Preset Tare symbol*	13	Gram, Kilogram symbols
6	Pointer symbols	14	Pieces symbol*
7	IR Sensor symbol	15	Percent symbol
8	Accumulation symbol		

**Note:** \* Not Used

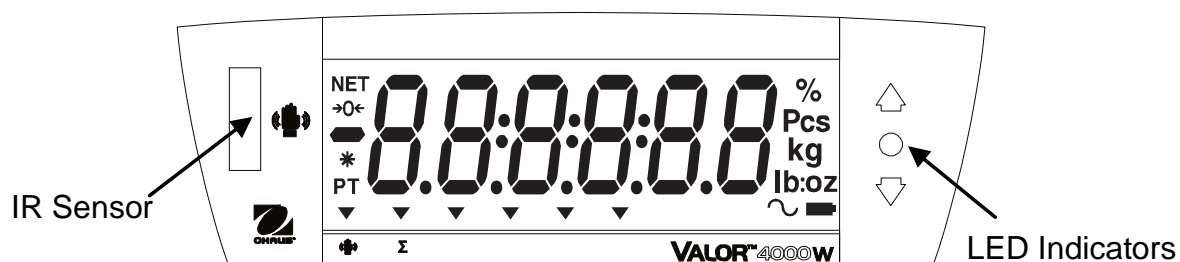


Figure 3-3. Valor 4000W Rear display.

The colored LED indicators on the right side of the control panels are used in Checkweigh mode (section 3.6) and will light up according to the following rules:

- △ (Red) Loads > Upper limit
- (Green) Loads ≥ Lower limit and ≤ Upper limit
- ▽ (Yellow) Loads < Lower limit

### 3.2 Turning Scale On/Off

To turn the scale on, press the **On/Zero Off** button. The scale performs a display test, momentarily displays the software version, and then enters the active weighing mode.

To turn the scale off, press and hold the **On/Zero Off** button until OFF is displayed.

### 3.3 Initial Calibration

When the scale is first installed it should be calibrated to ensure accurate results. Before performing the calibration, be sure to have the appropriate calibration weights as listed in table 3-3.

Press and hold **Menu** until [MENU] (Menu) is displayed. When the button is released, the display will display [C.A.L]. Press **Yes** to accept, [SPAN] will then be shown. Press **Yes** again to begin the span calibration. [- - -] blinks while zero reading is stored. Next, the display shows the calibration weight value. Place the specified calibration mass on the pan and press **Yes**. [- - -] blinks while the reading is stored. The scale returns to the previous application mode and is ready for use.

The message [Err 3.0 CAL] will be displayed if these calibration steps were not followed or if the wrong weight was used.

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

**TABLE 3-3**

Required Span Calibration Mass (sold separately)			
Max	Mass <sup>1</sup>	Max	Mass <sup>1</sup>
1500g	1.5kg / 3lb	6000g	6kg / 15lb
3000g	3kg / 6lb	15000g	15kg / 30lb

Note: <sup>1</sup> Pound masses are used when calibrating in the lb unit.

### 3.4 Weigh Mode

1. Press and hold **Mode** until [WEIGH] (Weigh) is displayed.
2. If required, place an empty container on the pan and press **Tare**.
3. Add sample to the pan or container. The display shows the weight of the sample.



### 3.5 Percent Mode

This mode measures the weight of a sample as a percentage of a reference weight.

1. Press and hold **Mode** until [PErCENT] is displayed. [CLEAR] (clear reference) will then display.  
**Notes:** Press **Function** to view the current reference weight.  
 If there is no reference data stored, [SET] is displayed. Press **Yes** to set reference data.
2. Press **No** to use the stored reference weight and proceed to step 6.
3. If required, place an empty container on the pan and press **Tare**. Press **Yes** to establish a new reference. Scale will now display [PUL].
4. Add the desired reference material to the container. Press **Yes** to store the reference weight. The display shows 100%.
5. Remove the reference material. If required, place an empty container on the pan and press **Tare**.
6. Add the sample material. The display shows the percentage of the sample compared to reference weight.
7. To clear the stored reference data press and hold **Mode** until [PErCENT] is displayed. Press **Yes** when [CLEAR] is displayed.

### 3.6 Checkweigh Mode

This mode sets low and high weight limits for portion control processes.

1. Press and hold **Mode** until [CHECK] (Check) is displayed. [CLEAR] (clear references) will then display.  
**Notes:** Press **Function** to view the low and high reference weight limits.  
 If there is no reference data stored, [SET] is displayed. Press **Yes** to set reference data.
2. Press **No** to use the stored reference weight limits and proceed to step 5.
3. Press **Yes** to establish new reference values. The scale will then display [SET. LG]. Press **Yes** to view the “Low” limit value. Press **Yes** to accept or **No** to edit the “Low” limit value. The stored value then displays with the first digit highlighted [000.000 kg]. Repeatedly press **No** until the desired number appears. Press **Yes** to accept and highlight the next digit. Repeat until all the digits are correct. Press **Yes** to accept the “low” limit value, [SET. H] will be displayed.
4. Repeat the same procedure to accept or edit the “high” value.
5. If required, place an empty container on the pan and press **Tare**. Place sample material on the pan or in the container. If the sample weight is under the target weight range, the yellow LED will light. If the sample is within the target weight range, the green LED will light. If the sample is over the target weight range, the red LED will light.
6. To clear the stored reference values press and hold **Mode** until [CHECK] is displayed. Press **Yes** when [CLEAR] is displayed.

### 3.7 Accumulation

Accumulation works together with each application mode. This function allows the user to store the total of a series of weight measurements.

1. Press the **M+** key to add the weight to the accumulation data. The  $\Sigma$  icon will keep flashing until the weight is removed.  
**Note:** When Accumulate is set to AUTO in the setup menu, it is not necessary to press the **M+** key.
2. When the pan is cleared, press the **M+** key to display the statistical information of the accumulation data.
3. To clear the accumulation data press the **Tare** key when the display is showing the statistical information of the accumulation data. The display shows [CLR.ACC]. Press the **Yes** key to clear the stored data and return to current mode.

#### Notes:

Only stable weights are stored to accumulation total.

To prevent the same load from being added to the total multiple times, the load on the pan must be returned to 0 before the next load can be added.

When Legal for Trade is OFF, the display must return to 0 gross, 0 net or a negative net value; when Legal for Trade is ON, the display must return to 0 gross.

Otherwise, the  $\Sigma$  icon will continue flashing.

Gross loads and net loads cannot be added to the same total. If the first load is a gross weight, future loads must also be gross weights. If the first load is a net weight, future loads must also be net weights.

The max of accumulation times is 9999.

Changing the mode will clear the accumulation data.

#### Accumulation Example:

In weighing mode; sub menu **ACCUM** setting, select **PARAM**:

If required, place an empty container on the pan and press **Tare**.

Step i. Put the weight (0.04 kg) on the pan and press **M+** key. The  $\Sigma$  icon indicator will keep flashing until the weight is removed.

Step ii. Remove the weight from the pan. Put another weight (0.03 kg) and press **M+** key:

Step iii. Remove the weight from the pan:

Step iv. Press **M+** key to display the statistical information:

Step v. If required, follow step 3 above to clear the accumulation data.

PARAM

\* 0.040 kg

\* 0.030 kg

\* 0.000 kg

n 2  
 TOTAL  
 0.070 kg  
 n n  
 0.030 kg  
 PARAM  
 0.040 kg

## 4. MENU SETTINGS

The User Menu allows the customizing of scale settings.

### 4.1 Menu Navigation

User Menu:

<i>Menu:</i>	<i>C.A.L</i>	<i>S.E.t.U.P</i>	<i>r.E.A.d</i>	<i>M.O.d.E</i>	<i>U.n.i.t</i>	<i>L.O.C.k</i>	<i>E.n.d</i>
<i>Menu Items:</i>	<i>Span Lin GEO End</i>	<i>Reset Pwr.Un A.Tare Ir.Func Ir.Adj Accum End</i>	<i>Reset Stable Filter AZT Light Sleep A.Off End</i>	<i>Reset Percnt Check End</i>	<i>kg g oz lb lb:oz End</i>	<i>Reset L.Cal L.Setup L.Read L.Mode L.Unit End</i>	

#### Notes:

Some Units/Modes may not be available in all models.

When LEGAL FOR TRADE is set to ON (see section 4.9), the menu settings are affected.

#### To Enter the Menu Mode

Press and hold **Menu** until [MENU] (Menu) is displayed. When released the first sub-menu [CAL] (Cal) will be shown.

Press **Yes** to enter the displayed sub-menu or press **No** to advance to the next.

Selecting a sub-menu will display the first menu item. Press **Yes** to view the menu item setting or press **No** to move to the next menu item. When viewing the setting, press **Yes** to accept the setting, or press **No** to change the setting. When [End] is displayed, press **Yes** to return to the sub-menu selections or **No** to return to the first item in the current menu. **Bold** indicates factory default setting.

**Note:** The Calibration / Menu Mode indicator is displayed when in the Menu Mode.

### 4.2 Cal Menu

Enter this menu to perform calibrations.

- **Span [SPAN]** (yes, no)  
Initiates a span calibration procedure (zero and span).
- **Lin [LIN]** (yes, no)  
Initiates a linearity calibration procedure (zero, mid-point and span).
- **GEO [GEO]**  
Geographical Adjustment Factor (GEO) is used to adjust the calibration based on the current location. Settings from 0 to 31 are available with 12 being the default. Refer to table 4-1 to determine the GEO factor that corresponds to your location.
- **End Cal [End]**  
Advance to the next menu or return to the top of the current menu.

### 4.3 Setup Menu

Enter this menu to set scale parameters.

- **Reset** [**rESEt**] (no, yes)  
Reset the Setup menu to factory defaults.
- **Power on unit** [**PLUJr.UN**] (auto, kg, g, lb, oz, lb:oz)  
Set the unit of measure displayed at startup
- **Auto Tare** [**A.tArE**] (off, on, on-acc)  
Set the automatic tare functionality. If “on” is selected the first stable gross weight is tared. If “on-acc” is selected, stable gross loads within the accept limits are tared (in Checkweigh mode)
- **IR Function** [**Ir.FUNf**] (off, tare)  
Set the IR sensor functionality.
- **IR Adj** [**Ir.AdJ**] (hi, low)  
Set the detecting level for the IR sensor.  
(For reference: Hi: ~ 100 mm / 4 inches; Low: ~ 50mm / 2 inches)
- **Accumulation** [**ACCUMn**] (off, auto, manu)  
Set the accumulation functionality.
- **End Setup** [**End**]  
Advance to the next menu or return to the top of the current menu.

### 4.4 Read Menu

Enter this menu to set user preferences.

- **Reset** [**rESEt**] (no, yes)  
Reset the Read menu to factory defaults.
- **Stable Range** [**StAbLE**] (0.5, 1, 2, 5)  
Set the amount the reading can vary while the stability symbol remains on.
- **Filter** [**F ILtEr**] (low, medium, high)  
Set the amount of signal filtering.
- **Auto-Zero Tracking** [**AZt**] (off, 0.5, 1, 3)  
Set the automatic zero tracking functionality.
- **Light** [**L IGHt**] (hi, med, low)  
Sets backlight functionality.
- **Sleep** [**SLEEP**] (off, on)  
Set the display shut off time.
- **Auto off** [**A.OFF**] (off, 1, 5, 10)  
Set the automatic shut off functionality.
- **End Readout** [**End**]  
Advance to the next menu or return to the top of the current menu.

## 4.5 Mode Menu

Enter this menu to activate modes so they will be available for use with the Mode button. Weigh mode is always active by default.

- **Reset** [↵E5E6] (no, yes)  
Reset the Mode menu to factory defaults.
- **Percent** [PE↵7A] (off, on)  
Set the status.
- **Check** [CHEE↵] (off, on)  
Set the sub-mode.
- **End Mode** [End]  
Advance to the next menu or return to the top of the current menu.

## 4.6 Unit Menu

Enter this menu to activate units so they will be accessible with the **Units** button. The units in the menu must be turned “on” to be active.

**Note:** Available units vary by model and local regulations.

## 4.7 Lock Menu

The Lock Menu is a software controlled option which can lock Menu settings to prevent tampering.

- **Reset** [↵E5E6] (no, yes)  
Reset the Lock menu to factory defaults.
- **Lock Cal** [L.LAL] (off, on)  
Set the status.
- **Lock Setup** [L.5EEUP] (off, on)  
Set the status.
- **Lock Read** [L.↵EAd] (off, on)  
Set the status.
- **Lock Mode** [L.770dE] (off, on)  
Set the status.
- **Lock Unit** [L.UNIT] (off, on)  
Set the status.
- **End Lock** [End]  
Advance to the next menu or return to the top of the current menu.

## 4.8 End Menu

Press ‘Yes’ to advance to the Calibration menu. Press ‘No’ to exit the menu and return to the current application mode.

TABLE 4-1. GEO CODES

		Elevation in meters										
		0	325	650	975	1300	1625	1950	2275	2600	2925	3250
		325	650	975	1300	1625	1950	2275	2600	2925	3250	3575
		Elevation in feet										
		0	1060	2130	3200	4260	5330	6400	7460	8530	9600	10660
		1060	2130	3200	4260	5330	6400	7460	8530	9600	10660	11730
Latitude		GEO value										
0°00'	5°46'	5	4	4	3	3	2	2	1	1	0	0
5°46'	9°52'	5	5	4	4	3	3	2	2	1	1	0
9°52'	12°44'	6	5	5	4	4	3	3	2	2	1	1
12°44'	15°06'	6	6	5	5	4	4	3	3	2	2	1
15°06'	17°10'	7	6	6	5	5	4	4	3	3	2	2
17°10'	19°02'	7	7	6	6	5	5	4	4	3	3	2
19°02'	20°45'	8	7	7	6	6	5	5	4	4	3	3
20°45'	22°22'	8	8	7	7	6	6	5	5	4	4	3
22°22'	23°54'	9	8	8	7	7	6	6	5	5	4	4
23°54'	25°21'	9	9	8	8	7	7	6	6	5	5	4
25°21'	26°45'	10	9	9	8	8	7	7	6	6	5	5
26°45'	28°06'	10	10	9	9	8	8	7	7	6	6	5
28°06'	29°25'	11	10	10	9	9	8	8	7	7	6	6
29°25'	30°41'	11	11	10	10	9	9	8	8	7	7	6
30°41'	31°56'	12	11	11	10	10	9	9	8	8	7	7
31°56'	33°09'	12	12	11	11	10	10	9	9	8	8	7
33°09'	34°21'	13	12	12	11	11	10	10	9	9	8	8
34°21'	35°31'	13	13	12	12	11	11	10	10	9	9	8
35°31'	36°41'	14	13	13	12	12	11	11	10	10	9	9
36°41'	37°50'	14	14	13	13	12	12	11	11	10	10	9
37°50'	38°58'	15	14	14	13	13	12	12	11	11	10	10
38°58'	40°05'	15	15	14	14	13	13	12	12	11	11	10
40°05'	41°12'	16	15	15	14	14	13	13	12	12	11	11
41°12'	42°19'	16	16	15	15	14	14	13	13	12	12	11
42°19'	43°26'	17	16	16	15	15	14	14	13	13	12	12
43°26'	44°32'	17	17	16	16	15	15	14	14	13	13	12
44°32'	45°38'	18	17	17	16	16	15	15	14	14	13	13
45°38'	46°45'	18	18	17	17	16	16	15	15	14	14	13
46°45'	47°51'	19	18	18	17	17	16	16	15	15	14	14
47°51'	48°58'	19	19	18	18	17	17	16	16	15	15	14
48°58'	50°06'	20	19	19	18	18	17	17	16	16	15	15
50°06'	51°13'	20	20	19	19	18	18	17	17	16	16	15
51°13'	52°22'	21	20	20	19	19	18	18	17	17	16	16
52°22'	53°31'	21	21	20	20	19	19	18	18	17	17	16
53°31'	54°41'	22	21	21	20	20	19	19	18	18	17	17
54°41'	55°52'	22	22	21	21	20	20	19	19	18	18	17
55°52'	57°04'	23	22	22	21	21	20	20	19	19	18	18
57°04'	58°17'	23	23	22	22	21	21	20	20	19	19	18
58°17'	59°32'	24	23	23	22	22	21	21	20	20	19	19
59°32'	60°49'	24	24	23	23	22	22	21	21	20	20	19
60°49'	62°00'	25	24	24	23	23	22	22	21	21	20	20
62°00'	63°30'	25	25	24	24	23	23	22	22	21	21	20
63°30'	64°55'	26	25	25	24	24	23	23	22	22	21	21
64°55'	66°24'	26	26	25	25	24	24	23	23	22	22	21
66°24'	67°57'	27	26	26	25	25	24	24	23	23	22	22
67°57'	69°35'	27	27	26	26	25	25	24	24	23	23	22
69°35'	71°21'	28	27	27	26	26	25	25	24	24	23	23
71°21'	73°16'	28	28	27	27	26	26	25	25	24	24	23
73°16'	75°24'	29	28	28	27	27	26	26	25	25	24	24
75°24'	77°52'	29	29	28	28	27	27	26	26	25	25	24
77°52'	80°56'	30	29	29	28	28	27	27	26	26	25	25
80°56'	85°45'	30	30	29	29	28	28	27	27	26	26	25
85°45'	90°00'	31	30	30	29	29	28	28	27	27	26	26

## 4.9 Legal For Trade

When the scale is used in trade or a legally controlled application it must be set up, verified and sealed in accordance with local weights and measures regulations. It is the responsibility of the purchaser to ensure that all pertinent legal requirements are met.

### 4.9.1 Capacity Label

A label showing the capacity and readability of the scale must be installed near each display. If the Capacity Labels were installed prior to delivery, no further action is needed. If the Capacity Labels were not installed, they have been placed in the packaging material. Affix the labels above the displays as shown in Figure 4-1.

**Note:** The Capacity Labels will be destroyed upon removal, so only attempt to install them once.

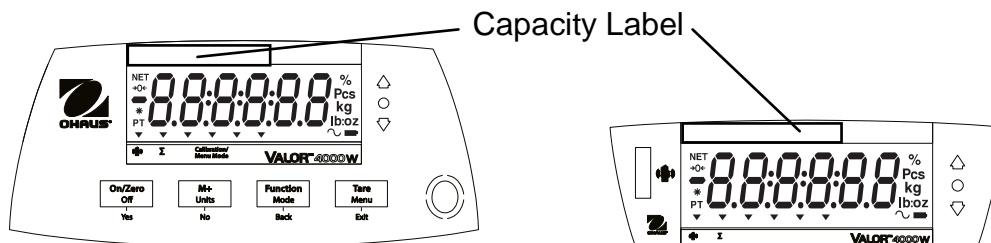


Figure 4-1. Front and rear display capacity label locations

### 4.9.2 Settings

Before verification and sealing, perform the following steps:

1. Set Legal For Trade to OFF.
2. Verify that the menu settings meet the local weights and measures regulations.
3. Perform a calibration as explained in Section 3.3.
4. Set Legal For Trade to ON.

To change the scale's Legal For Trade (LFT) setting, follow this procedure:



**Caution:** When accessing the bottom of the scale, avoid placing the scale upside down on the pan or sub-platform. Place the scale on its side.

1. Turn the scale **OFF**.
2. Remove the Security Cover under the scale to access the two pins located in a slot (see figure 4-2). Short these pins (a slotted screwdriver may be used), while powering the scale **ON**. The scale will perform the start-up procedure, and then the display will show the current status [LFT OFF] (LFT OFF, unlocked) or [LFT ON] (LFT ON, locked); press the 'No' key to change this setting, or press the 'Yes' key to confirm it.

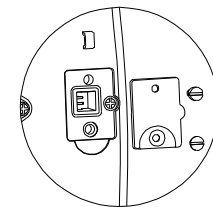


Figure 4-2. LFT pins.

**Note:** When Legal For Trade is set to On, the menu settings are affected as follows:  
Calibration (**C.A.L**) menu is not accessible

IR Function, Filter and Unit menus are locked at the current settings.

Stable Range setting is locked at 1d

Auto-Zero Tracking setting is locked at 0.5d

3. Replace the Security Cover.

### 4.9.3 Verification and Sealing

The local weights and measures official or authorized service agent must perform the verification procedure.

#### 4.9.3.1 Physical Seals

For jurisdictions that use the physical sealing method, the local weights and measures official or authorized service agent must apply a security seal to prevent tampering with the settings. Refer to the illustrations below for sealing methods.

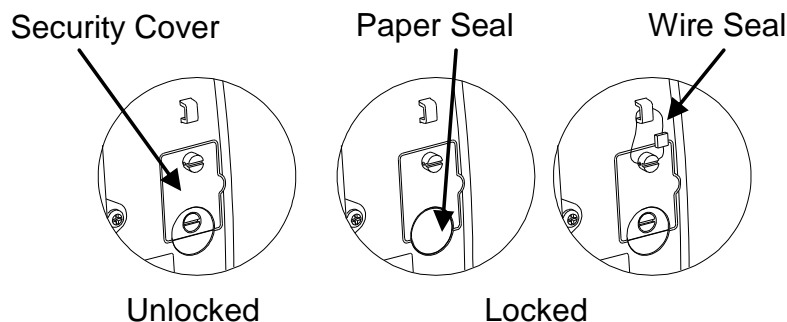


Figure 4-3. Sealing

#### 4.9.3.2 Audit Trail Seal (USA and Canada only)

For jurisdictions that use the audit trail sealing method, the local weights and measures official or authorized service agent must record the current configuration and calibration event counter values at the time of sealing. These values will be compared to values found during a future inspection.

**Note:** A change to an event counter value is equivalent to breaking a physical seal.

The audit trail uses two event counters to record changes to configuration and calibration settings.

- The configuration event counter (CFG) will index by 1 under the following conditions:
  - When the LFT setting is changed from ON to OFF.
  - When exiting the menu if one or more of the following menu settings are changed: Stable Range, Auto Zero Tracking (AZT), Filter, IR Function and Units (kg, g, oz, lb or lb:oz).
- The calibration event counter (CAL) will index by 1 when exiting the menu if a Span Calibration or GEO setting change is made.

**Note:** The counter only indexes once, even if several settings are changed.

The event counters can be viewed by pressing and holding the MENU button. While the button is held, the display will show MENU followed by Audit.

MENU

Release the button when Audit is displayed to view the audit trail information.

Audit



The audit trail information is displayed in the format CFGxxx and CALxxx.

CFG000

CAL000

The scale then returns to normal operation.

0.000 kg

## 5. MAINTENANCE

### 5.1 Cleaning

The housing may be cleaned with a cloth dampened with a mild detergent if necessary. Do not use solvents, chemicals, alcohol, ammonia or abrasives to clean the housing or control panels.

### 5.2 Cleaning the Plastic Pan

#### 5.2.1 Uninstalling and cleaning the plastic pan

Please follow the steps below to clean the plastic pan:

1. Remove the stainless steel pan
2. Remove the four thumb screws holding the battery cover.
3. Unplug the two battery clips and remove the battery.
4. Using a Phillips screwdriver, remove the two screws located at the bottom of the battery compartment.
5. Remove the plastic pan.
6. Clean the plastic pan.

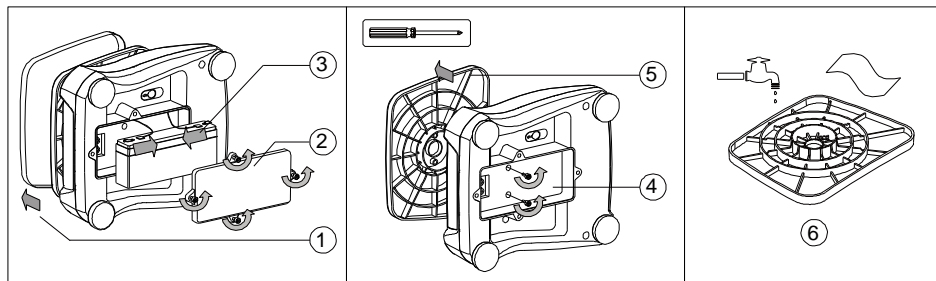


Figure 5-1. Pan cleaning

#### 5.2.2 Reinstalling the pan after cleaning

Please follow the steps below to reinstall the plastic pan (see also the steps in figure 5-1, in reversed order):

1. Using a Phillips screwdriver, attach the plastic pan to the housing with the two screws.
2. Place the battery in the battery compartment and attach the two battery clips. Attach the red wire to the positive (red) battery terminal and the black wire to the negative (black) battery terminal.
3. Attach the battery cover with the four thumb screws.
4. Place the scale upright and install the stainless steel pan.



**Caution:** Risk of explosion can occur if the battery is not properly connected.

## 5.3 Troubleshooting

The following table lists common problems and possible causes and remedies. If the problem persists, contact OHAUS or your authorized dealer.

**TABLE 5-1**

Symptom	Possible Cause	Remedy
Cannot turn on	No power to scale Battery discharged	Verify connections, power source and battery charge status.
Poor accuracy	Improper calibration Unstable environment	Perform calibration Move scale to suitable location
Cannot calibrate	Unstable environment Incorrect calibration weight	Move the scale to suitable location Use correct calibration weight
Cannot access mode	Mode not enabled	Enter menu and enable mode
Cannot access unit	Unit not enabled	Enter menu and enable unit
LD REF	Reference weight is too low	Increase reference weight.
Err 3.0 CAL	Incorrect calibration weight	See table 3-3 for correct weights
Err 8.1 "LOAD"	Power on zero range exceeded	Clear pan
Err 8.2 "LOAD"	Power on zero under range	Install pan
Err 8.3 "LOAD"	Overload	Load exceeds scale maximum capacity
Err 8.4 "LOAD"	Under load	Reading below min. range - Re-install pan.
Err 8.5 "TARE"	Tare out of range	Tare value exceeds maximum.
Err 9 DATA	Internal data error.	Contact an authorized service agent
Err 13 EEPROM	Fail to write EEPROM.	Contact an authorized service agent
Err 53 CHECKSUM	Invalid checksum data	Contact an authorized service agent
Lo.BAT	Battery is discharged	Connect the power and charge the battery
NO.ACC	Gross and net weights cannot be accumulated together	Accumulate only gross or net weights.
Battery fails to charge fully	Battery is defective	Have battery replaced by OHAUS authorized service dealer.

## 5.4 Service Information

If the troubleshooting section does not resolve or describe your problem, contact your authorized OHAUS service agent. Please visit our web site, [www.ohaus.com](http://www.ohaus.com) to locate the OHAUS office nearest you. An OHAUS product service specialist will be available to provide assistance.

## 6. TECHNICAL DATA

The technical data is valid under the following ambient conditions:

Indoor use only

Operating temperature: -10°C (14°F) to 40°C (104°F)

Relative humidity: 10% to 90% relative humidity, non-condensing

Altitude: Up to 2000 m

Power: AC Adapter (supplied) - 12 VDC 0.84 A output, internal rechargeable sealed lead-acid battery

Mains supply voltage fluctuations: up to ±10% of the nominal voltage

Installation Category: II

Pollution Degree: 2

## 6.1 Specifications

TABLE 6-1

MODEL	V41PWE1501T V41XWE1501T	V41PWE3T V41XWE3T	V41PWE6T V41XWE6T	V41PWE15T V41XWE15T
Capacity x Readability (Max x d non-approved)	1.5 kg x 0.0002 kg 1500 g x 0.2 g 3 lb x 0.0005 lb 48 oz x 0.01 oz	3 kg x 0.0005 kg 3000 g x 0.5 g 6 lb x 0.001 lb 96 oz x 0.02 oz	6 kg x 0.001 kg 6000 g x 1 g 15 lb x 0.002 lb 240 oz x 0.05 oz	15 kg x 0.002 kg 15000 g x 2 g 30 lb x 0.005 lb 480 oz x 0.1 oz
Maximum Displayed Resolution	7500	6000	6000	7500
Capacity X Readability (Max x e approved)	1.5 kg x 0.0005 kg 1500 g x 0.5 g 3 lb x 0.001 lb 48 oz x 0.02 oz	3 kg x 0.001 kg 3000 g x 1 g 6 lb x 0.002 lb 96 oz x 0.05 oz	6 kg x 0.002 kg 6000 g x 2 g 15 lb x 0.005 lb 240 oz x 0.1 oz	15 kg x 0.005 kg 15000 g x 5 g 30 lb x 0.01 lb 480 oz x 0.2 oz
Approved Resolution	3000	3000	3000	3000
Repeatability	0.0005 kg	0.001 kg	0.002 kg	0.005 kg
Linearity	±0.0005kg	±0.001kg	±0.002kg	±0.005kg
Weighing Units*	Non-Approved models: g, kg, lb, oz, lb:oz EC and OIML Approved models: g, kg Measurement Canada and NTEP Approved models: g, kg, lb, oz			
Tare Range	To capacity by subtraction			
Stabilization Time	≤ 0.5 seconds			
Safe Overload Protection	150 % of scale capacity			
Weight Display	2 x Red LED (front and rear) 6-digit 7-segment, 20.5 mm / 0.8 in characters			
Keyboard	Four buttons			
Application Modes	Weighing, Percent, Check Weighing (each with Accumulate function)			
Battery Operating Time (at 20°C)	Typically 50 hours with 12-hour full charge			
Construction	V41PW: ABS housing with 304 Stainless Steel Platform V41XW: ABS bottom housing with 304 stainless steel top housing and platform			
Ingress Protection	IPX8			
Pan Dimensions	190 x 242 mm / 7.5 x 9.5 in			
Approval Class	III			
Net Weight	V41PW: 3.0 kg / 6.6 lb; V41XW: 3.9 kg / 8.6 lb			
Shipping Weight	V41PW: 4.0 kg / 8.8 lb; V41XW: 4.9 kg / 10.8 lb			
Shipping Dimensions	410 x 370 x 220 mm / 16.1 x 14.6 x 8.7 in			

**Note:** Turn off lb:oz unit with LFT ON

## 6.2 Drawings and Dimensions

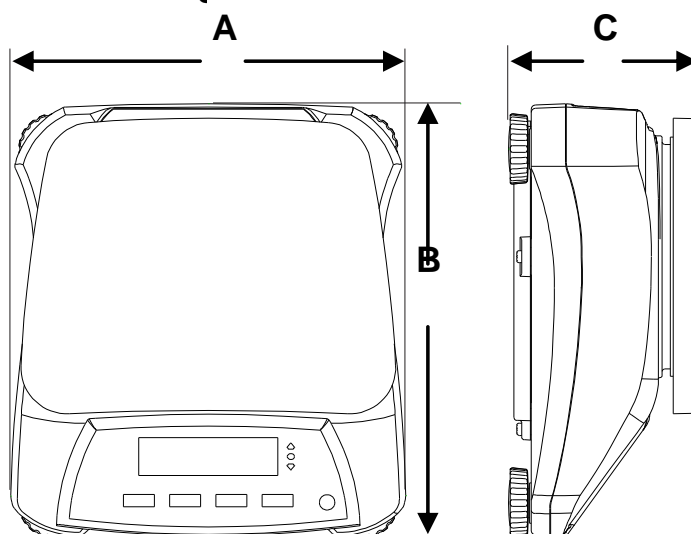







TABLE 6-2

	V41PW
A	256 mm / 10.1 in.
B	280 mm / 11.0 in.
C	121 mm / 4.8 in.
	V41XW
A	256 mm / 10.1 in.
B	288 mm / 11.3 in.
C	124 mm / 4.9 in.

Figure 6-1. Dimensions

## 6.3 Compliance

Compliance to the following standards is indicated by the corresponding mark on the product.

Mark	Standard
	This product conforms to the EMC Directive 2004/108/EC, the Low Voltage Directive 2006/95/EC and the Non-Automatic Weighing Instrument Directive 2009/23/EC. The Declaration of Conformity is available online at <a href="http://europe.ohaus.com/europe/en/home/support/compliance.aspx">europe.ohaus.com/europe/en/home/support/compliance.aspx</a> .
	AS/NZS CISPR 11
	CAN/CSA-C22.2 No. 61010-1-12 UL Std. No. 61010-1 (3 <sup>rd</sup> edition)
	NSF/ANSI 169–2009
	NSF/ANSI/3-A 14159-1-2010

### Important notice for verified weighing instruments



Weighing Instruments verified at the place of manufacture bear one of the preceding marks on the packing label and the green 'M' (metrology) sticker on the descriptive data plate. They may be put into service immediately.



Weighing Instruments to be verified in two stages have no green 'M' (metrology) on the descriptive data plate and bear one of the preceding identification marks on the packing label. The second stage of the initial verification must be carried out by an authorized and certified service organization established within the European Community or by the National Notified Body.

The first stage of the initial verification has been carried out at the manufacturers work. It comprises all tests according to the adopted European standard EN 45501:1992, paragraph 8.2.2.

If national regulations limit the validity period of the verification, the user of the weighing instrument must strictly observe the re-verification period and inform the respective weights and measures authorities.

**Disposal**



In conformance with the European Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE) this device may not be disposed of in domestic waste. This also applies to countries outside the EU, per their specific requirements.

The Batteries Directive 2006/66/EC introduces new requirements from September 2008 on removability of batteries from waste equipment in EU Member States. To comply with this Directive, this device has been designed for safe removal of the batteries at end-of-life by a waste treatment facility.

Please dispose of this product in accordance with local regulations at the collecting point specified for electrical and electronic equipment. If you have any questions, please contact the responsible authority or the distributor from which you purchased this device.

Should this device be passed on to other parties (for private or professional use), the content of this regulation must also be related.

Disposal instructions in Europe are available online at [europe.ohaus.com/europe/en/home/support/weee.aspx](http://europe.ohaus.com/europe/en/home/support/weee.aspx).

Thank you for your contribution to environmental protection.

**FCC 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 when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.

Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

**Industry Canada Note**

This Class B digital apparatus complies with Canadian ICES-003.

**ISO 9001 Registration**

In 1994, OHAUS Corporation, USA, was awarded a certificate of registration to ISO 9001 by Bureau Veritas Quality International (BVQI), confirming that the OHAUS quality management system is compliant with the ISO 9001 standard's requirements. On June 21, 2012, OHAUS Corporation, USA, was re-registered to the ISO 9001:2008 standard.

**Product Registration**

Protect your investment. Register your product with your local OHAUS dealer or online at [www.ohaus.com](http://www.ohaus.com).

### **Limited Warranty**

OHAUS products are warranted against defects in materials and workmanship from the date of delivery through the duration of the warranty period. 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. 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.

As warranty legislation differs from state to state and country to country, please contact OHAUS or your local OHAUS dealer for further details.