

# Navigator<sup>™</sup> Series Balances Instruction Manual

Balanzas serie Navigator<sup>TM</sup> Manual de instrucciones

Balances de la série Navigator<sup>TM</sup>
Manuel d'instructions

Bedienungsanleitung für die Waagen der Navigator<sup>™</sup>-Serie

Bilance Serie Navigator<sup>TM</sup> Manuale per l'utente

#### 1. INTRODUCTION

This manual contains installation, operation and maintenance instructions for the Navigator<sup>™</sup> Series. Please read the manual completely before using the balance.

## 1.1 Definition of Signal Warnings and Symbols

**WARNING** For a hazardous situation with medium risk, possibly resulting in

injuries or death if not avoided.

**CAUTION** For a hazardous situation with low risk, resulting in damage to the

device or the property or in loss of data, or injuries if not avoided.

**Attention** For important information about the product **Note** For useful information about the product

General hazard

Electrical shock hazard



## 1.2 Safety Precautions



**CAUTION:** Read all safety warnings before installing, making connections, or servicing this equipment. Failure to comply with these warnings could result in personal injury and/or property damage. Retain all instructions for future reference.

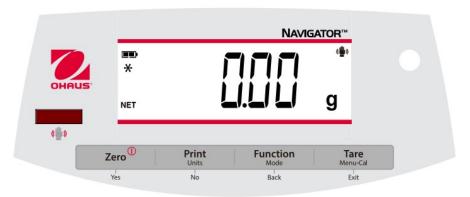
- Verify that the AC adapter's input voltage range and plug type are compatible with the local AC mains power supply.
- Position the instrument such that the AC adapter can be easily disconnected from the wall socket.
- Position the power cord so that it does not pose a potential obstacle or tripping hazard.
- Operate the equipment only under ambient conditions specified in these instructions.
- The equipment is for indoor use only.
- Do not operate the equipment in hazardous or explosive environments.
- Only use the equipment in dry locations.
- Only use approved accessories and peripherals.
- Disconnect the equipment from the power supply when cleaning.
- Service should only be performed by authorized personnel.

#### 1.3 Intended Use

Use the instrument exclusively for weighing as described in the operating instructions. Any other type of use and operation beyond the limits of technical specifications without written consent from OHAUS, is considered as not intended. This instrument complies with current industry standards and the recognized safety regulations; however, it can constitute a hazard in use. If the instrument is not used according to these operating instructions, the intended protection of the instrument may be compromised and OHAUS assumes no liability.

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#### 1.4 Controls



Button	Functions		
Zero	Short Press (when on): Sets display to zero		
0	(when off): Turns balance on		
	Long Press (when on): Turns the balance off		
Yes	Short Press (in Menu): Selects/accepts displayed setting		
Print	Short Press: See Interface Manual for operation description.		
Units	Long Press: Toggles through active units		
No	Short Press (in Menu): Toggles through available settings		
Function	Short Press: Selects function setting		
Mode	Long Press: Selects active Mode		
Back	Short Press (in Menu): returns to previous settings		
Tare	Short Press: Enter / clear a Tare value		
Menu-Cal	Long Press: Enters User Menu		
Exit	Short Press (in Menu): Quickly exit User Menu		
IR Sensor *	IR Sensors can be programmed to act as a "touchless" button. See the		
	User Menu section 4.3 for the available settings.		

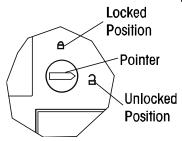
The IR Sensors can be activated by a hand or other object that is placed about 12mm (½ inch) above the sensor location. The sensor activation distance will vary based on the reflective nature of the object. If unwanted activations occur due to unique situations the sensor can be turned off.

<sup>\*</sup>Availability of IR Sensor is dependent on model and region.

## 2. INSTALLATION

## 2.1 Transportation Lock

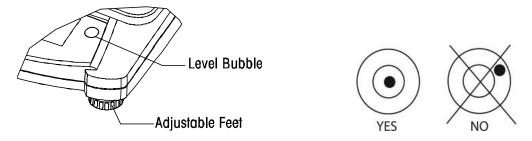
The Transportation Lock is located under the balance. Rotate the pointer to the unlocked position.



#### 2.2 Location

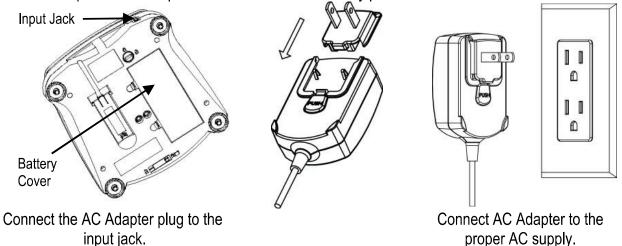
Use the balance on a firm, steady surface. Avoid locations with excessive air current, vibrations, heat sources, or rapid temperature changes.

Adjust the leveling feet so the bubble is centered in the circle.



#### 2.3 Power

The AC Adapter is used to power the balance when battery power is not needed.



#### **Battery installation** (without optional internal battery):

Remove battery cover and install 4 batteries using the polarity indications as shown in the compartment.

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#### Optional rechargeable battery\*

Balances with the optional rechargeable battery will need to be charged for 12 hours before the balance can be operated on battery power for the first time. The battery is protected from overcharging so the balance can remain connected to the AC power. When the battery is fully charged the battery indicator on the display will stop blinking.

To remove the rechargeable battery option and install C cell batteries, reference the Recharging Battery Option instruction manual for step by step instructions as well as disposal instructions.



**CAUTION:** Risk of explosion can occur if the rechargeable battery is replaced with the wrong type or if it is not properly connected.

#### Note:

After power on, it is recommended to warm up the balance for at least 5 minutes before using it. \*Availability of IR Sensor is dependent on model and region.

#### 2.4 Initial Calibration

When the balance is first installed it should be calibrated to ensure accurate results.

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

#### 3. OPERATION

All modes except for weighing must be activated in the User Menu before they are available, see Section 4.

## 3.1 Weigh Mode

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

## 3.2 Parts Counting Mode

This mode counts large numbers of items based on the weight of a reference count.

- 1. Place an empty container on the pan and press **Tare**.
- 2. Press and hold **Mode** until [**Count**] (Count) is displayed. [**CLr.RPU**] (Clear Average Piece Weight) will then display.
- 3. Press **No** to use the stored APW. Proceed to step 6.
- 4. Press **Yes** to establish an APW. The balance will then display the stored sample size, i.e. [Public Press No or Back to toggle the choices (5, 10, 20, 50 or 100).
- 5. Put the indicated number of pieces on the pan then press **Yes** to calculate the APW. The display shows the piece count. Note: Press **Function** to view the current APW.
- 6. Add additional pieces until the desired count is reached.
- 7. To clear the stored APW press and hold **Mode** until [**Count**] is displayed. Press **Yes** when [**CLr.RPU**] is displayed.

#### 3.3 Percent Mode

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

- 1. Place an empty container on the pan and press **Tare**.
- 2. Press and hold **Mode** until [**PErcal**] is displayed. [**ELr.ref**] (clear reference) will then display.
- 3. Press **No** to use the stored reference weight and proceed to step 6.
- 4. Press **Yes** to establish a new reference. Balance will now display [Put.rEF].
- 5. Add the desired reference material to the container. Press **Yes** to store the reference weight. The display shows 100%.
  - Note: Press **Function** to view the current reference weight,
- 6. Replace the reference material with the sample material. The display shows the percentage of the sample compared to reference weight.
- 7. To clear the stored reference press and hold **Mode** until [**PErcat**] is displayed. Press **Yes** when [**CLr.rEF**] is displayed.

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#### 3.4 Checkweigh Mode

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

1. Press and hold **Mode** until [**CHECF**] (Check) is displayed. [**CLr.rEF**] (clear references) will then display.

- 2. Press **No** to use the stored reference weight limits and proceed to step 5. Note: Press **Function** to view the low and high reference weight limits.
- 3. Press **Yes** to establish new reference values. The balance will then display [**SEŁ. Lo**]. 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 [**DDD.DDD** 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, [**SEŁ. H**] will be displayed.
- 4. Repeat the same procedure to accept or edit the "high" value.
- 5. Place sample material on the Pan. The "Accept" indicator will now show that the sample weight is within the acceptable range.
- 6. To clear the stored reference values press and hold **Mode** until [**EHEEF**] is displayed. Press **Yes** when [**ELF.FEF**] is displayed.

## 4. SETTINGS

The User Menu allows the customizing of balance settings.

Note: Additional Sub-Menus may be available if Interface Options are installed. See Interface User Manual for the additional setting information.

## 4.1 Menu Navigation

#### **User Menu:**

Sub-Menus:	.C.a.l.	.S.e.t.u.p.*	.M.o.d.e.	.U.n.i.t.*	.E.n.d.
	Span	b.light	Count	g	
	Lin	A-OFF	Percnt	kg	
Menu Items:		IR**	Check		
		Filter			
		AZT			
		Stab			
		Stab.C			
	End	End	End	End	

<sup>\*</sup> Note: Available settings vary by models and regions

Press and hold Menu until [PTERU] (Menu) is displayed. When released the first sub-menu [.E.A.L.] (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.

<sup>\*\*</sup>Availability of IR Sensor is dependent on model and region.

#### 4.2 Cal Sub-Menu

• Span [**SPAN**] (yes, no) - Initiates a span calibration procedure (zero and span). A span calibration is important when initially setting up the balance.

• Lin [L in] (yes, no) - Initiates a linearity calibration procedure (zero, mid-point and span).

## 4.3 Setup Sub-Menu

Back Light [b.L '9ht] (on,off,Auto)-When Back light is set to "on" the balance will always "on".
 When Back light is set to "Auto" the balance will turn on when a button is pressed or the display weight changes.

- Auto Off [**A-DFF**] (on, **off**) When Auto Off is set to "on" the balance will turn off automatically after 5 minutes of inactivity. Auto off is used to save battery power.
- IR Sensor [ Ir.Func] (Off, Tare, Function, Print, Zero, **Display**) These settings determine the role of the IR Sensor. "Zero", "Print", "Function" or "Tare" allows the IR sensor to act the same as the related button. "Display" activates the display if Display-Auto is set. "Off" disables the sensor.\*

• Filter [F LLEr] (L1,L2,L3,L4) – set the amount of signal filtering

	L1>L4
Stability	Less——— > Greater
Stabilization time	Faster——— >Slower

- Auto Zero Tracking[F2Ł] (OFF,0.5d,1d,3d,5d,8d,10d) Set the automatic zero tracking functionality. The display will maintain zero until a change of "0.5d,1d,3d,5d,8d,10d" divisions per second has been exceeded.
- Stable [**5LRb**] (0.5d,**1d**,2d,5d) Set the amount of the reading can vary while the stability symbol remains on.
- Stable Compensation [**5LRb**.**C**] (on, off) Set the automatic stable tracking functionality. Set it "off" for dosing or filling application.

Note: Bold always represents factory default Value

#### 4.4 Mode Menu

This sub-menu activates modes so they will be available for use with the Mode button. Weigh mode is always active.

- Parts Count [Lount] (on, off) Set on for the mode to be active.
- Percent [PErcat] (on, off) Set on for the mode to be active.
- Check Weigh [EHEEF] (on, off) Set on for the mode to be active.

#### 4.5 Units Menu

This sub-menu activates 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 and modes vary by model and local regulations.

<sup>\*</sup>Availability of IR Sensor is dependent on model and region.

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## 4.6 Sealing access to balance settings

You can use the Menu Lock switch to limit changes to the user menu. The switch in type approved models may set some balance settings as required by the approval agency. The switch may be secured using paper seals, wire seals or plastic ties.

