

# Scout<sup>®</sup> Series Balances - SPX Instruction Manual



## 1. INTRODUCTION

This manual contains installation, operation and maintenance instructions for the Scout SPX Series Balances. Please read the manual completely before using the balance.

# 1.1 Definition of Signal Warnings and Symbols

Safety notes are marked with signal words and warning symbols. These show safety issues and warnings. Ignoring the safety notes may lead to personal injury, damage to the instrument, malfunctions and false results.

#### **Signal Words**

**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

#### **Warning Symbols**



**Attention Symbol** 



**Electric 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 local AC power supply is within the input voltage range printed on the AC adapter's data label.
- Only connect the AC adapter to a compatible grounded electrical outlet.
- Do not position the scale such that it is difficult to disconnect the AC adapter from the power receptacle.
- Make sure that the power cord does not pose a potential obstacle or tripping hazard.
- This equipment is intended for indoor use and should only be operated in dry locations.
- Operate the equipment only under ambient conditions specified in the user instructions.
- Do not operate the equipment in hazardous or unstable environments.
- Do not drop loads on the pan.
- Only use approved accessories and peripherals.
- Disconnect power from the equipment before cleaning or servicing.
- Service should only be performed by authorized personnel.

# 2. INSTALLATION

# 2.1 Installing Components

Refer to the illustrations and instructions below to identify and assemble your Scout balance with its components. All components must be assembled before using the balance.

#### 2.1.1 Releasing the transportation Lock

Release the red Transportation Lock on subplatform of the balance by turning the red pointer 90° counter-clockwise.

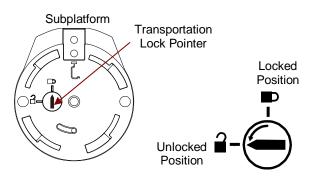


Figure 2-1. Transportation Lock

### 2.1.2 Installing the Weighing Pan

Balances with a rectangular pan are placed into the sub-platform as shown and rotated counter-clockwise until it locks. Round pans are placed straight down on sub-platform.

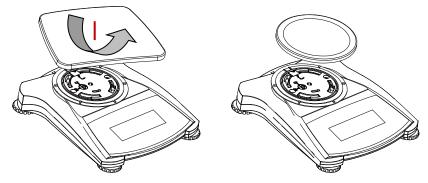


Figure 2-2. Pan Installation

#### 2.1.3 Security Slot

A security slot is provided at the rear of the balance allowing the balance to be secured by an optional cable and lock accessory.

## 2.2 Selecting the Location

For best performance, the Scout SPX balance should be used in a clean, stable environment. Do not use the balance in environments with excessive drafts, with rapid temperature changes, near magnetic fields or near equipment that generates magnetic fields, or vibrations.

# 2.3 Leveling the Balance

The Scout has an illuminated level indicator as a reminder that the balance should be leveled for accurate weighing. There is a level bubble in a small round window on the front of the balance. To level the balance, adjust the feet at each corner until the bubble is centered in the circle.

Be sure the equipment is level each time its location is changed.

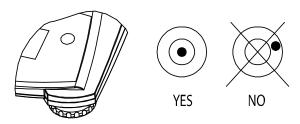


Figure 2-3. Level indicator

## 2.4 Connecting Power

#### **AC Adapter Installation**

AC power is used to power the scale when battery power is not needed. First, connect the AC Adapter (supplied) to the AC Adapter Input Jack at the rear of the balance then connect the AC plug to an electrical outlet.

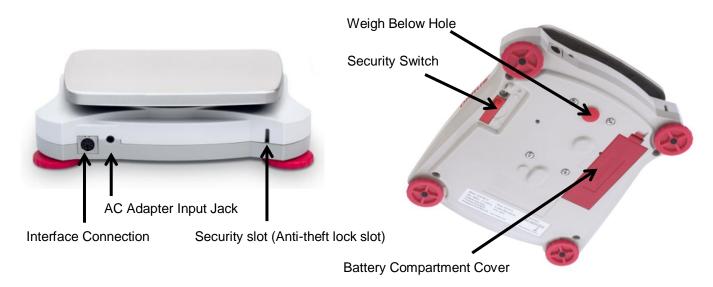


Figure 2-4. Rear and bottom view of balance

#### **Battery Installation**

Install the four "AA" batteries with polarity as shown in the battery compartment.

When the Balance is first installed, and when it is moved to another location, it must be calibrated to ensure accurate weighing results. Have the appropriate calibration masses available before beginning calibration. Refer to the Calibration Section for masses and calibration procedure.

# 3. OPERATION

# 3.1 Controls

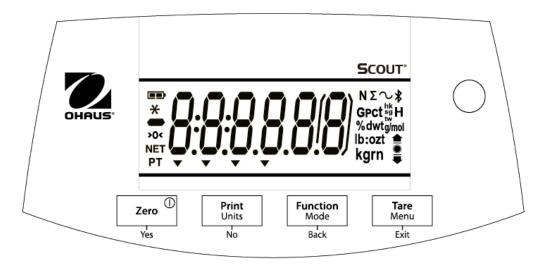


Figure 3-1. Scout Control Panel

TABLE 3-1. Button Functions

	_	1. Dattorri ariottorio		
Button	Zero (Tyes	Print Units No	Function Mode Back	Tare Menu I Exit
Primary Function	Zero/On	Print	Function	Tare
(Short Press)	Turns the balance on  If balance is On, sets Zero	Sends the current value to the selected COM ports if AUTOPRINT is set to Off.	Initiates an application mode.	Enter/clear a tare value.
Secondary Function	Zero/Off	Units	Mode	Menu
(Long Press)	Turns the balance Off.	Changes the weighing unit.	Allows changing the application mode.	Enter the User menu.
Menu Function	Yes	No	Back	Exit
(Short Press)	Accepts the current setting on the display.	Advances to the next menu or menu item. Rejects the current setting on the display and advances to the next available setting.	Moves Back to previous menu item.	Exits the User menu. Aborts the calibration in progress.

**Notes:** <sup>1</sup> Short Press: Press less than 1 second.

<sup>&</sup>lt;sup>2</sup> Long Press: Press and hold for more than 2 seconds.

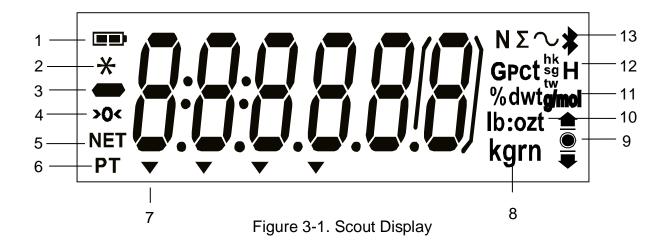


TABLE 3-2. Display Symbols\*

Item	Description	Item	Description
1	Battery charge symbol	8	Kilogram, grain symbols
2	Stable weight symbol	9	Check Weighing symbols
3	Negative symbol	10	Pound, Ounce, Pound:Ounce symbols
4	Center of Zero symbol	11	Percent, dwt, g/mol symbols
5	NET symbol	12	Gravity, Pieces, t hk, t sg, t tw, Hold symbols
6	Preset Tare, Tare symbols	13	Newton, Totalization, Dynamic, Bluetooth symbols
7	Pointer symbols		

Note: \* Some symbols might not be available depending on different models.

# 3.2 Turning Balance On/Off

To turn the balance on, press and hold the **On/Zero Off** button for 1 second. The balance performs a display test, momentarily displays the software version, and then enters the active weighing mode.

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

#### **Initial Calibration**

When the balance is operated for the first time, a span calibration is recommended to ensure accurate weighing results. Before performing the calibration, be sure to have the appropriate calibration weights. Ensure that the Security switch is set to unlocked position.

Press and hold Menu until [ [ Menu ) is displayed. When the button is released, the display will show [ C.R.L ]. Press **Yes** to accept. [ SPAN] will then be shown. Press **Yes** to begin the span calibration.

[--[--] will be displayed while zero reading is stored. Next, the display shows the calibration weight value (press **No** to toggle value). Place the specified calibration mass on the pan. [--[--] will be displayed while the reading is stored. The display will show [donE] if the calibration was successful. The balance returns to the previous application mode and is ready for use.

# 3.3 Weighing Mode

This mode is the factory default setting.

- 1.If needed, press and hold **Mode** until [มปะ เมิห] (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.

## 3.4 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 [[ount] (Count) is displayed. [[Lr.Pbd] (Clear Average Piece Weight, APW) will then display.

If no APW exists, the balance will display [Put. 10], proceed to step 5.

- 3. Press No to use the stored APW. Proceed to step 7.
- 4. Press Yes to establish an APW.
- 5. The balance will then display the stored sample size, i.e. [Put 10]. Press No or Back to toggle the choices (5, 10, 20, 50 or 100).
- 6. Put the indicated number of pieces on the pan then press **Yes** to calculate the APW. The display shows the piece count.
- 7. Add additional pieces until the desired count is reached.
- 8. To clear the stored APW press and hold **Mode** until [เอนกะ] is displayed. Press **Yes** when [เเลาคน] is displayed.

Note: Press Function to view the current APW.

## 3.5 Percent Mode

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

- 1. If required place an empty container on the pan and press **Tare**.
- 2. Press and hold **Mode** until [**PErcnt**] is displayed. [**CLr.rEF**] (clear reference) will then display. If no reference weight exists, the balance will display [**Put.rEF**], proceed to step 5.
- 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 pan or container. Press **Yes** to store the reference weight. The display shows 100%.
- 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 [**PErcot**] is displayed. Press **Yes** when [**ELr.ref**] is displayed.

Note: Press **Function** to view the current reference weight.

#### 3.6 Check Mode

Use this mode to compare the Weight to a target weight range. The balance supports positive, negative and zero check weighing.

#### 3.6.1 Check Weighing

Use this mode to compare the weight of items to a target weight range.

1. Press and hold **Mode** until [[HE[+] (Check) is displayed. [[Lr.ref] (clear check limits) will then display.

- 2. Press **No** to use the stored check limits and proceed to step 5.
- 3. Press **Yes** to establish new check limits. The balance will then display [**5EŁ**. **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 [**500.000** 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, [**5EŁ**. **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**.
- 6. Place sample material on the pan or in the container. If the sample weight is under the target weight range, the under icon ▼ will light.

If the sample is within the target weight range, the accept symbol 
will light. If the sample is over the target weight range, over icon 
will light.

Note: Press Function to view the low and high check limits.

#### **Positive Check**

Positive check is used to determine when the material added to the balance is within the target range. In this case the UNDER and OVER limits must be positive values. (The OVER limit must be greater than the UNDER limit.)

Add material to the balance until it is within the ACCEPT ( ) range.

#### **Negative Check**

Negative check is used to determine when the material removed from the balance is within the target range. In this case the UNDER and OVER limits are both negative values.

(The UNDER limit must be greater than the OVER limit.)

Place the item to be weighed on the balance and press TARE.

Remove a portion of the item until it is within the ACCEPT range.

#### **Zero Check**

Zero check is used when comparing subsequent samples to an initial reference sample. In this case, the UNDER limit must be a negative value and the OVER limit must be a positive value. Place the reference item on the balance and press **TARE**. Remove the reference sample and place the item to be compared on the balance to determine if it is within the ACCEPT range.

#### 3.7 Totalization Mode

This mode allows the user to store a series of weight measurements. Totalize mode has been initiated when the symbol " $\sum$ " is displayed and the current unit is displayed.

**Notes:** Only positive numbers are totalized.

- 1. Press and hold **Mode** until [**LoLRL**] (Totalization) is displayed. [**CLr.LoL**] will then be displayed.
- Press Yes or No key to clear the current totalized data or not. When a weight is added to the scale the value is displayed.
- 3. If required, place an empty container on the pan and press **Tare**. Add the first item, its weight is displayed. Press **Function** to store the weight, the " $\sum$ " symbol will flash and the display will show the total weight.
- 4. Press **Tare** (or remove the weight in previous operation) and add the next item. The scale will display its weight. Press **Function** to store its weight. The " $\sum$ " symbol will

flash and the new total weight will be displayed.

- 5. Repeat step 4 for all of the items to be accumulated.
- 6. To clear the stored total press and hold **Mode** until [**LotAL**] is displayed. When [**LLr. Lot**] is displayed, press **Yes**.

#### 3.8 Hold Mode

There are two modes for the display hold:

- Peak Hold: allows the user to capture and store the highest stable weight value (>=5d).
- Display Hold (default): allows the user to capture and store the first stable weight value (>=5d).

#### Start

If no weight value is held on the display, press **Function** key to begin. The [ready] (Ready) will be displayed until a weight is added on the pan.

When the stable value is being held on the display, the Hold icon (**H**) will blink and the displayed weight will not change.

#### Reset

If the pan is empty and a weight value was held on the display, a single short press of the **Function** key will clear the held value and show the new weight on the pan.

- 1. Press and hold **Mode** until [Hold] is displayed.
- 2. If required, place an empty container on the pan and press **Tare**. Zero value will then display.
- 3. Press Function key to begin. The [ready] (Ready) will be displayed.
- 4. Place samples to be weighed on the pan.
- 5. The stable value will be held on the display, the Hold icon (**H**) will blink.

# 4. MENU 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

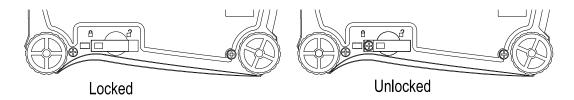
#### **User Menu:**

<u>Sub-Menus</u>	<u>C.a.I</u>	<u>S.e.t.u.p</u>	<u>M.o.d.e</u>	<u>U.n.i.t</u>	<u>E.n.d</u>
User Menu	Span	Reset	Reset	Reset	
Items:	Lin	Yes/No	Yes/No	g	
		Filter	Weighing	kg	
Tare Long press -		Low/Med/High	On/Off	ct	
Menu Enter menu		AZT	Counting	N	
Exit		0.5/1/3/Off	On/Off	OZ	
		StableRange	Percent	ozt	
OI - 1		0.5/1/2//5	On/Off	dwt	
Yes Accept		Backlight	Check	lb	
Accept		Off/On/Auto	On/Off	lb:oz	
		Auto Tare	Totalize	grn	
		Off/On/On-acc	On/Off	hkt*	
No/Back Short press –		Auto Off	Hold	sgt*	
Go to Next/Prev.		Off/1/5/10	Disp/Peak/Off	twt*	
menu				t*	
				tola/tical	
Exit Short press –					
	End	End	End	End	

#### Notes:

When the Security Switch is in locked position, the Calibration function is hidden, Units are locked to the current setting.

## Security switch:



### 4.2 Calibration Menu

Enter this menu to perform calibrations.

Span: Perform
Linearity: Perform
End Calibration: Exit menu

#### Span [SPAN]

Initiates a span calibration procedure (zero and span)

#### Lin [L 47]

Initiates a linearity calibration procedure (zero, mid-point and span).

#### End Cal [End]

Advance to the next menu or return to the top of the current menu.

<sup>\*</sup> Only available in certain regions.

# 4.3 Setup Menu

Enter this menu to set balance parameters.

Reset: no, yes Filter: Low, Med, High Auto Zero Tracking: off, **0.5d**, 1d, 3d Stable: 0.5d, 1d, 2d, 5d Backlight: off, on, auto Auto Tare: off, on, on-acc Auto Off: off. 1. 5. 10 End Setup: Exit menu

Note: Bold always represents factory default value

#### Reset [rE5Et]

Reset the Setup menu to factory defaults.

NO = not reset YES = reset

#### Filter [F ILLEr]

Set the amount of signal filtering.

LOW = less stability, faster stabilization time MED = normal stability, stabilization time

HI = greater stability, slower stabilization time

#### AZT [A2E]

Set the automatic zero tracking functionality.

OFF = disabled

0.5d = the display will maintain zero until a change of 0.5 divisions per second has

been exceeded.

1d = the display will maintain zero until a change of 1 divisions per second has been

exceeded.

3d = the display will maintain zero until a change of 3 divisions per second has been

exceeded.

#### Stable Range [5tfble]

Set the amount the reading can vary while the stability symbol remains on.

0.5d = 0.5 balance division
1d = 1 balance division
2d = 2 balance division
5d = 5 balance division

#### Back Light [L 15HL]

Sets backlight functionality.

OFF = always off ON = always on

AUTO = turns on when a button is pressed or the displayed weight changes.

Note: When connected with power pack, the backlight is always on.

#### Auto Tare [A.ŁArE]

Set the automatic tare functionality.

OFF = Automatic Tare is disabled

ON = the first stable gross weight is tared

ON-ACC = stable gross loads within the accept limits are tared (in Check weighing mode)

#### Auto off [R.DFF]

Set the automatic shut off functionality.

OFF = disabled

= powers off after 1 minute of no activity
 = powers off after 5 minutes of no activity
 = powers off after 10 minutes of no activity

#### End Setup [End]

Advance to the next menu or return to the top of the current menu.

#### 4.4 Mode Menu

This menu activates modes so they will be available for use with the Mode button.

Reset: no, yes
Weigh: off, on
Count: off, on
Percent: off, on
Check: off, on
Totalize: off, on

Hold: **Disp**, Peak, Off End Mode: Exit menu

#### Reset [rE5EL]

Reset the Mode menu to factory defaults.

NO = not reset YES = reset

#### Weigh [เปE เนิห]

Set the status.

OFF = disabled ON = enabled

#### Count [EDUNE]

Set the status.

OFF = disabled ON = enabled

## Percent [PE-ENL]

Set the status.

OFF = disabled ON = enabled

#### Check [[HE[+]

Set the sub-mode

OFF = disabled ON = enabled

#### Totalize [LoLAL]

Set the sub-mode

OFF = disabled ON = enabled

#### Hold [Hold]

Set the sub-mode.

OFF = disabled

Peak Hold = allows the user to capture and store the highest stable weight value

(>=5d).

Display Hold = allows the user to capture and store the first stable weight value (>=5d).

When the stable value is being held on the display, the "Hold" icon will blink and the displayed weight will not change.

Advance to the next menu or return to the top of the current menu.

#### End Mode [End]

#### 4.5 Unit Menu

This 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 vary by model and local regulations.

g:	off, <b>on</b>
kg:	off, <b>on</b>
ct:	off, <b>on</b>
N:	off, <b>on</b>
oz:	off, <b>on</b>
ozt:	off, <b>on</b>
dwt:	off, <b>on</b>
lb:	off, <b>on</b>
lb:oz:	off, <b>on</b>
grn:	off, <b>on</b>
hkt:	off, on
sgt:	off, on
twt:	<b>off</b> , on
t:	off, tola, tical
End Unit:	Exit menu

## 4.6 Additional Features

#### **Weigh Below Hook**

The Scout Balance is equipped with a weigh below hook for weighing below the balance. The weigh below hook is located at the reverse side of the battery cover as shown below. To use this feature, remove the red protective cover underneath for the weigh below opening.



**Attention:** Before turning the balance over, remove the Pan and Pan Support (if present), and turn the transportation lock to "locked" position to prevent damage.

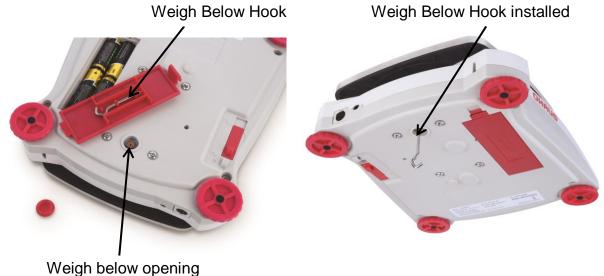


Figure 4-2. Weigh below

The balance can be supported using lab jacks or any other convenient method. Ensure the balance is level and secure and that the transportation lock has been released. Power on the balance, then use a string or wire to attach items to be weighed.

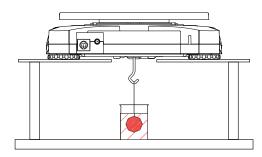


Figure 4-3. Weigh below application

#### **Connecting the Interface**

Use an optional interface connectivity kit to connect the balance either to a computer or a printer.

Below Interface kit accessories are available: RS232, USB Host, USB Device, Ethernet, Bluetooth®\*.

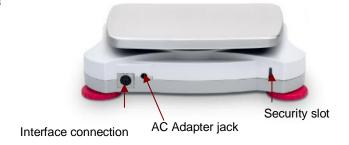


Figure 4-4. Rear of the balance

\* Interface kits may vary according to local regulations
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SIG, Inc. and any use of such marks by OHAUS is under license.

## 5. MAINTENANCE

# 5.1 Cleaning



**WARNING:** Electric Shock Hazard. Disconnect the equipment from the power supply before cleaning. Electric Shock Hazard.

The housing may be cleaned with a cloth dampened with a mild detergent if necessary.

**Attention:** Do not use solvents, chemicals, alcohol, ammonia or abrasives to clean the housing or control panel.

# 5.2 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
Cannot turn on	No power to balance
Poor accuracy	Improper calibration; Unstable environment
Cannot calibrate	Security switch in locked position
Err 8.1	Weight exceeds power on zero range.
Err 8.2	Weight below power on zero range.
Err 8.3	Over load (weight exceeds rated capacity)
Err 8.4	Under load (pan removed)
Err 8.5	Tare out of range
Err 8.5	Displayed value exceeds 999999 (possible in Totalization mode)
Err 8.7	Unknown internal weight position
55.5	Parts counting or percentage error – sample weight <1d. Balance shows
rEF.Err	error then exits parts counting or goes to [[Lr.APu].
Lo.rEF	Percent Reference weight or APW is too low for accurate results
CAL E	Fail to do calibration.
USb.Err	Cannot find menu or app file in U-disk.

#### 5.3 Service Information

If the troubleshooting section does not resolve or describe your problem, contact your authorized OHAUS service agent. For service assistance or technical support in the United States call toll-free 1-800-672-7722 ext. 7852 between 8:00 AM and 5:00 PM EST. An OHAUS product service specialist will be available to provide assistance. Outside the USA, please visit our web site, **www.ohaus.com** to locate the OHAUS office nearest you.

#### **5.4 Accessories**

TABLE 5-2. ACCESSORIES

DESCRIPTION	Item Number
RS232 kit	30268982
USB Host kit	30268983
USB Device Kit	30268984
Bluetooth Kit*	30268985
Ethernet Kit	30268986
Stacking Kit, x6	30268987

DESCRIPTION	Item Number
Stacking Kit, x1	30268988
Specific Gravity kit	30269020
Auxiliary Display Kit	30269019
Carrying Case	30269021
In-Use Cover	30269022
Printers and Cables	Contact OHAUS

Note: \* Bluetooth kit is only available in certain regions according to the local regulations.

# 6. TECHNICAL DATA

The technical data is valid under the following ambient conditions:

Indoor use only

Operating temperature: +10 °C to +40 °C

Relative humidity: 10% to 80% at 31°C, decreasing linearly to 50% at 40°C, non-condensing

Altitude: Up to 2000 m

Power: AC power adaptor input 100-240V 50/60 Hz and output 5 V DC 1 A, or 4 AA batteries

Pollution degree: 2 Installation category: II

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

# 6.1 Specifications

#### TABLE 6-1. SPECIFICATIONS

MODEL	SPX123	SPX223	SPX222	SPX422	SPX622	SPX1202	SPX2202	
Capacity xReadability	120 x 0.001g	220 x 0.001g	220 x 0.01g	420 x 0.01g	620 x 0.01g	1200 x 0.01g	2200 x 0.01g	
Repeatability (std. dev.)	0.0	002 g		0.01 g		0.0	0.02 g	
Linearity	0.0	003 g	0.0	1 g	0.02 g	0.0	)3 g	
Linearity Calibration Mass	50, 100 g	100, 200 g	100, 200 g	100, 200 g	200, 400 g	300, 600 g	500 g, 1 kg	
Span Calibration Mass*	100 g	200 g	200 g	200 g	300 g	1000 g	2000 g	
Tare Range			Fu	I Capacity by s	ubtraction			
Weighing Units**	g, kg,	ct, N, oz, ozt, dw	t, lb, lb:oz, grn,	Tael (HongKong	g), Tael (Singap	ore), Tael (Taiwan)	, tola, tical,	
Stabilization Time	1.	5 s		1 s		1.5	5 s	
Display			LC	with white LEI	D backlight			
Keyboard				4 mechanical b	outtons			
Application Modes		Weighing	g, Counting, Pe	cent, Check W	eigh, Totalizatio	on, Display Hold		
Battery Operating Time (at 20°C)	80	hours	120 hours		8	0 hours		
Construction		ABS plastic housing with 304 stainless steel (SST) pan						
Pan Dimensions	93 mm / 3.7 inch 120 mm / 4.7 inch 170 x 140 mm /		/ 6.7 x 5.5 inch					
Shipping Dimensions	300 x 250 x 129mm / 11.8 x 9.8 x 5.1 in 300 x 250 x 86 mm / 11.8 x 9.8 x 3.4 in							
Net Weight (kg)	1.0							
Gross Weight (kg)	1.5							

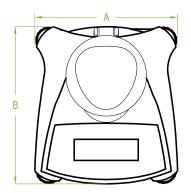
#### TABLE 6-2. SPECIFICATIONS cont.

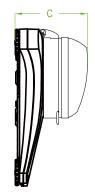
MODEL	SPX421	SPX621	SPX2201	SPX6201	SPX8200	
Capacity x Readability	420 x 0.1 g	620 x 0.1 g	2200 x 0.1 g	6200 x 0.1 g	8200 x 1 g	
Repeatability (std. dev.)		0.	1 g		1 g	
Linearity		0.1 g		0.2 g	1 g	
Linearity Calibration Mass	200, 400g	300, 600g	1kg, 2kg	3kg, 5kg	4kg, 8kg	
Span Calibration Mass*	200 g	300 g	2000 g	5000 g	8000 g	
Tare Range		Fu	II Capacity by subtract	tion		
Weighing Units**	g, kg, ct, N, oz, o	zt, dwt, lb, lb:oz, grn,	Tael (HongKong), Tae	l (Singapore), Tael (Taix	wan), tola, tical	
Stabilization Time		1 s				
Display		LCD with white LED backlight				
Keyboard		4 mechanical buttons				
Application Modes	We	Weighing, Counting, Percent, Check Weigh, Totalization, Display Hold				
Battery Operating Time (at 20°C)	120 hours 80 hours 120 hou			120 hours		
Construction	ABS plastic housing with 304 stainless steel (SST) pan					
Pan Dimensions	120 mm / 4.7 inch 170 x 140 mm / 6.7 x 5.5 inch					
Shipping Dimensions	300 x 250 x 129mm / 11.8 x 9.8 x 5.1 in					
Net Weight (kg)	1.0					
Gross Weight (kg)	1.5					

Note: \* Calibration weights are included with models up to 620g capacity.

<sup>\*\*</sup>Available Weighing Units and Application Modes vary by local regulations.

# 6.2 Drawings





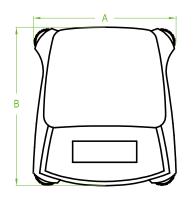




Figure 6.1 Dimensions

Model	Α	В	С
with draftshield	202 mm / 8.0 in.	222 mm / 8.7 in.	103 mm / 4.1 in.
w/o draftshield	202 mm / 8.0 in.	224 mm / 8.8 in.	54 mm / 2.1 in.

# 6.3 Compliance

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

Mark	Standard
CE	EN 61010-1, EN 61326-1 Refer to the declaration of conformity online at www.ohaus.com/ce.
Z	This product complies with the EU Directive 2002/96/EC (WEEE). Please dispose of this product in accordance with local regulations at the collecting point specified for electrical and electronic equipment. For disposal instructions in Europe, refer to www.ohaus.com/weee.
	AS/NZS 61000.6.1, AS/NZS 61000.6.3
C US	CAN/CSA-C22.2 No. 61010-1, UL Std. No. 61010-1





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.

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 www.ohaus.com/weee.

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 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.

#### **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 Veritus 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.

#### 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.



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