

Swift SWZ SERIES

(with EC type Approval)

Software rev: V 1.00 & above



Easy Reference:

Model name of the balance:	
Serial number of the unit:	
Software revision number (Displayed when power is first turned on):	
Date of Purchase and Address:	
Name and address of the supplier:	

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P.N. 3.02.6.6.13677, Rev. B, August 2018

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WARNING:



Please read carefully following instructions for installation and use before starting your work with a new balance. Failure to use the balance in accordance with the advice in the user manual could mean that the product gives incorrect readings

1.0 INTRODUCTION

The **Swift (SWZ)** series of digital price-computing scales are EC Type approved for computing price by weight.

1.1 FEATURES

- Stainless steel weighing platform
- Level indicator with adjustable levelling feet
- Colour coded, sealed keypad
- Large 3 x 6 digits backlit liquid crystal displays (LCD)
- Displays for **Weight**, **Unit Price** and **Total Price** (or Price to Pay)
- Displays on both front and back panels (Optional user display on pillar)
- Price per 100g and per kilogram (Not applicable for South Africa and Far East)
- Auto-sleep function
- Auto clear function
- Real Time Clock (RTC) and date
- RS-232 bi-directional interface
- Battery operated for portability
- 90 hours battery life when fully charged
- Up to 103 Prices (PLU) stored for easy access



1.2 SPECIFICATIONS

	SWZ 3D	SWZ 6D	SWZ 15D	SWZ 30D	SWZ 3DP*	SWZ 6DP*	SWZ 15DP*	SWZ 30DP*	SWZ 40D*	SWZ 40P*
Maximum Capacity	3 kg	6 kg	15 kg	30 kg	3 kg	6 kg	15 kg	30 kg	40kg	40kg
Readability	1 g	2 g	5 g	10 g	1 g	2 g	5 g	10 g	20g	20g
Tare	-3 kg	-6 kg	-15 kg	-30 kg	-3 kg	-6 kg	-15 kg	-30 kg	-40 kg	-40 kg
Pan size	300 x 210 mm									
Operating Temperature	-10°C to 40°C									
Battery life	90 hours typical. Battery Life is less when the backlight is used.									
Power	Mains power supply to an internal transformer									
Interface	RS-232 bi-directional interface English, German, French, Spanish selectable text									
Date/Time	Real Time Clock (RTC), To print date and time information (Dates in year/month/day, day/month/year or month/day/year formats- Battery backed)									
Display	3 x 6 digits backlit LCD displays									
Housing	ABS Plastic with Stainless Steel Pan									
Overall Dimensions	315 x 355 x 110 mm					315 x 355 x 535 mm				
Net Weight	4.3 kg					4.7 kg				



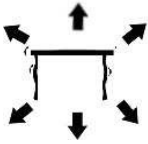
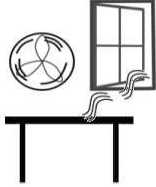
	SWZ 6Da	SWZ 15Da	SWZ 30Da	SWZ 60Da	SWZ 6DPa	SWZ 15DPa*	SWZ 30DPa*	SWZ 60DPa*
Maximum Capacity	3 kg	6 kg	15 kg	30 kg	3 kg	6 kg	15 kg	30 kg
Readability	1 g	2 g	5 g	10 g	1 g	2 g	5 g	10 g
Tare	-3 kg	-6 kg	-15 kg	-30 kg	-3 kg	-6 kg	-15 kg	-30 kg
Pan size	225 x 275 mm							
Operating Temperature	-10°C to 40°C							
Battery life	90 hours typical. Battery Life is less when the backlight is used.							
Power	Mains power supply to an internal transformer							
Interface	RS-232 bi-directional interface English, German, French, Spanish selectable text							
Date/Time	Real Time Clock (RTC), To print date and time information (Dates in year/month/day, day/month/year or month/day/year formats- Battery backed)							
Display	3 x 6 digits backlit LCD displays							
Housing	ABS Plastic with Stainless Steel Pan							
Overall Dimensions	315 x 355 x 110 mm				315 x 355 x 535 mm			
Net Weight	4.3 kg				4.7 kg			

***NOTE:** SWZ-P models have the Pillar Display.

2.0 INSTALLATION

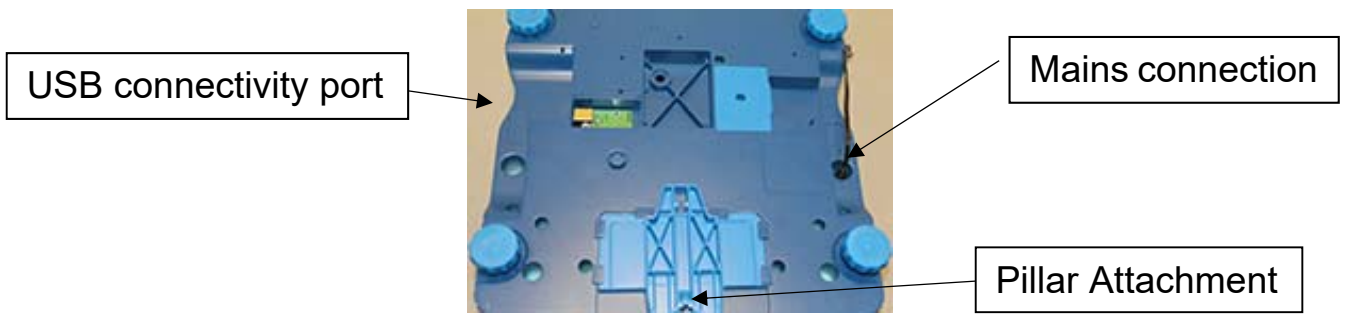
2.1 LOCATING THE SCALES

The scales should not be placed in a location that will reduce the accuracy:

	<ul style="list-style-type: none">• Avoid extremes of temperature. Do not place in direct sunlight or near air conditioning vents.
	<ul style="list-style-type: none">• Avoid unsuitable tables. The table or floor must be rigid and not vibrate.• Avoid unstable power sources. Do not use near large users of electricity such as welding equipment or large motors. Do not place near vibrating machinery.
	<ul style="list-style-type: none">• Avoid high humidity that might cause condensation. Avoid direct contact with water. Do not spray or immerse the scales in water.• Avoid air movement such as from fans or opening doors. Do not place near open windows or air-conditioning vents.
	<ul style="list-style-type: none">• Keep the scales clean. Do not stack material on the scales when they are not in use.

2.2 SETTING UP THE SCALES

- 1) Place the stainless steel platform (supplied separately) into the receptacles on the top cover.
- 2) Do not press with excessive force as that could damage the load cell inside.
- 3) If an optional scoop has been supplied, place it on top of the platform.
- 4) If an optional display on Pillar is supplied, install the pillar into the socket at the rear of the scale by carefully pushing the cable inside the pillar rod. Use 2x M4 screws to secure.
- 5) Level the scale by adjusting the four feet until the spirit level bubble is in the centre of the level and the scale is supported by all four feet.
- 6) Turn the power ON by pressing the power button on the keypad.
- 7) The unit will display the software revision number in the **Weight** window and count down to zero while performing a self-test.
- 8) When ready all three displays will show zero.



2.3 DISPLAY WINDOWS



The window for the **Weight** has arrows to indicate when the scale is at zero or if the scale is displaying a net weight (if a tare value has been entered). It also indicates when the scale is stable.

The window for the **Unit Price** has arrows to show when the Auto Clear function is active and if the unit price is per 100g or per kilogram

NOTE: Unit price per 100g or per kg is not available in South Africa or the Far East. The window for the **Price to Pay** displays the number of items on the scale.

The above display panel is also available with French, German, Spanish, Dutch and Italian text or with symbols for Weight, Unit Weight and Count PCS.

2.4 BATTERY CHARGING

The battery icon can be found in the weighing display on the top left-hand side of the display. To charge the battery, simply switch the main power ON. The scale need not be turned on.

The battery can operate for up to 90 hours when fully charged or less if the backlight is on. The battery should be charged for 12 hours for full capacity.

If the battery icon is empty, the scale will still operate for about 15 minutes after which it will automatically switch off to protect the battery from getting damaged.

If the battery has not been used properly or it is used for a number of years it may eventually fail to hold a full charge. If the battery life becomes unacceptable then contact your distributor or Adam Equipment.

3.0 KEY DESCRIPTIONS



[0-9]

Numeric entry keys to set the unit price.

[00]

Numeric entry key to enter double zero values e.g. press [2] and [00] to show 2.00 on the display

[CE]

Clears an erroneous entry or return to normal operation.

[PLU+]

Stores or recalls a PLU value from one of the stored 99 PLU values.

[Tare] or

key

Sets the scale to display zero weight when an empty container is placed on the platform or removed again.

[CH]

The change key displays the total price to pay by subtracting unit weight from the unit price value.

[Total]

The total key provides the total price to pay by multiplying unit weight by the unit price value.

[MR]

The memory key shows the 2 most frequently used Weight, Unit Price and Price to Pay values.

[Setup]

Brings up the setup menu for changing date, time, power etc

[Zero] or

key

It sets the zero when the platform is empty and no tare value is entered.

[Auto Clear]

Allows the user to automatically reset the unit price to zero, when the weight is removed.

[Kg 100g]

It selects the unit price per kilogram or per 100g.

Note: This key is not available for South Africa and Far East models

[Print M+]

It sends the results of the current displays to the RS-232 interface.

4.0 OPERATION

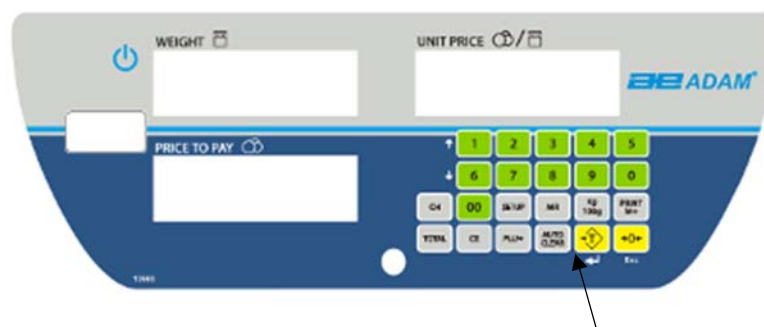
4.1 ZEROING THE DISPLAY

Steps:

- 1) You can press the **[Zero]/→0←Esc** key when no tare is entered to set the zero point from which all other weighing is measured.
- 2) When the zero point is obtained the **Weight** window will show an arrow next to the Zero legend marked under the **Weight** window.
- 3) The scale has an automatic re-zeroing function to account for minor drifting or accumulation of material on the platform. However you may need to press **[Zero]/→0←Esc** if weight is displayed whilst the platform is empty.

4.2 TARING

Taring is used to eliminate the weight of a container so that only the net weight is displayed.



Steps:

- 1) Zero the scale by pressing **[Zero]/→0←Esc** if necessary. The zero indicator will be on.
- 2) Place an empty container on the platform. The weight of the container will be displayed.
- 3) Press **[Tare]** ↵ to zero the scale. The displayed weight is then stored as the tare value and that value is subtracted from the display, leaving zero on the display. The **Net** indicator will now show. As product is added only the weight of the product will be shown.
- 4) When the product and container are removed the weight window will show a negative value. To use a different container, remove this negative tare value by pressing **[Tare]** ↵ once more.

4.3 DETERMINING VALUE OF A PRODUCT BY WEIGHT

To determine the cost of a product sold by weight, it is necessary to enter the cost per kilogram or per 100g using the numeric keys or one of the pre-set PLU values.

The **Weight** window will show the net weight, the **Unit Price** window will show the price per kilogram or per 100g as selected by the **[kg 100g]** key. The **Total Price** window will show the computed value for the total price.

Example:

	Display will show		
	Weight (in kg)	Unit Price	Total Price
Place a container on the scale and Press [Tare]	0.000	0.00	0.00
Place the items on the platform	1.300	0.00	0.00
Key in the unit price	1.300	5.00	6.50

Press the **[kg 100g]** key to change the calculation to a price based on the cost per 100g or the cost per kilogram.

If a different unit price is required either press **[CE]** to reset the unit price to 0.00 or simply enter a new unit price.

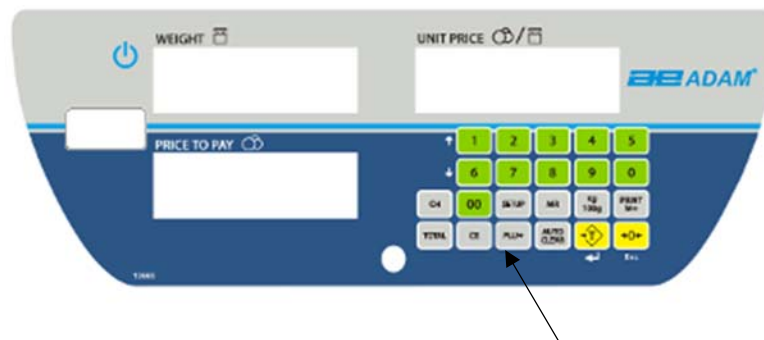
NOTE: For South Africa and Far East, unit weight per 100g or per kg is not available.

4.4 USING A STORED PLU VALUE FOR UNIT PRICE

Product Look-Up (PLU) numbers are used to store information about the most commonly used items. Using SWZ, the PLU values can be stored as either cost per kilogram or cost per 100g. During the weighing operation, the user can recall the cost per kilogram or per 100g of a particular item very easily using the PLU values.

The individual PLU values should be entered against specific items before the weighing process starts so that the desired PLU's can be recalled during the weighing process.

The user can store and recall up to 99 PLU values (PLU00 to PLU99) using the **[PLU+]** key.



To recall one of these PLU values the following procedure applies:

- 1) To recall a PLU value, press **[PLU+]**. The display will show “store” or “recall” – press digits [1] or [6] to change the selection.
- 2) Once selected, “PoS 00” ” ” will appear in the Price to Pay display. Enter a number (00 to 99) to save the value against the number selected.
- 3) Once complete, the value can be recalled by selecting “recall” using the previous steps and entering the saved PLU number.

For example:

Press **[PLU+]**.

Press **[1]** and then **[4]** immediately.

Display will show “LOAD” “PoS 14” ” ” and then the PLU value for PLU 14 will be displayed.

If the item is loaded on the pan, the **Total Price** window will show the total cost. If nothing is loaded, only the PLU value saved for the location will be displayed in the **Unit Price** window and the **Total Price** window will display “0,00 ”.

4.5 ENTERING VALUES FOR THE PLUs

To store values for the **[PLU+]** key into the memory follow the procedure:

- 1) Enter the unit price value using the keypad, selecting either price/kg or price/100g if needed.
- 2) Press and hold down the key **[PLU+]** for more than 3 seconds till a beep is heard, then release the key. It will show “Store”
- 3) Press the [tare] key to show “PoS 00” ” ” on the price to pay display.

- 4) Enter any number (00 up to 99) for saving the unit price in the desired position. For example, press **[1]** and **[4]** for the position 14. It will show “PLU” “14” “SAVEd ” before returning to weighing.
- 5) To change the earlier saved value against a particular PLU, simply repeat the process.

4.6 AUTO CLEAR KEY

The **[Auto Clear]** key will enable the Auto Clear function.

When this function is active the scale will automatically clear (set the unit price to zero) when the last item to be weighed has been removed from the scale.

When the Auto Clear is active the Auto Clear indicator (arrow) on the LCD will be ON.

Pressing **[Auto Clear]** will turn off the function and the indicator will disappear. Pressing it will turn the function to on again.

4.7 PRICE PER KILOGRAM AND PER 100 GRAM- [Kg 100g] KEY

Pressing the **[kg 100g]** key will change the scale from using a price per kilogram to price per 100g. This will show on the display:



This information is also saved for the PLU values that are stored in the memory.

NOTE: This is not applicable for SWZ for South Africa and Far East.

4.8 AUTO SLEEP FUNCTION

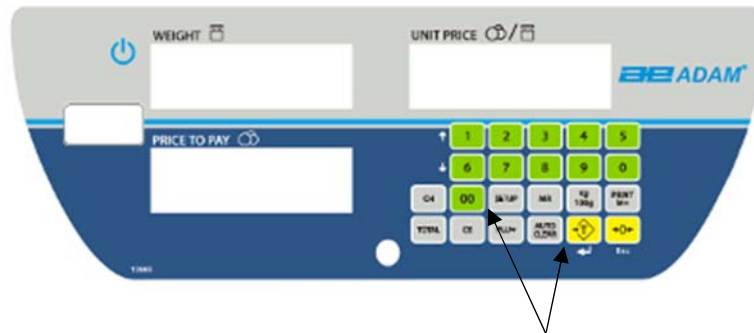
If there has been no movement on the keypad or when the scale is not used for some time (as pre-set by the user under this function) it automatically switches off. To set this parameter:

- 1) Press **[PST]** key and scroll through the setup menu using the **[1]** or **[6]** digits until you come to “Power”
- 2) Pressing the **[Tare]** ↵ key will cause the price to pay display to show a variety of numbers including 2, 5 10 and 15 or “off”.
- 3) Press the **[Tare]** ↵ key to set the amount of time until this function activates or to turn this off.

4.9 BACKLIGHT OPERATION

The backlight may be enabled or disabled by the user. If the backlight is disabled the battery life will be maximised, when in operation the battery life will depend on usage.

To set the backlight:



- Press the **[Setup]** key to bring up the setup menu, then use the digits **[1]** or **[6]** to scroll through until **“BK”** is displayed.
- Press the **[tare]** key to select.
- The price to pay display will provide options for **“on”**, **“off”** or **“auto”**. Press the **[Tare]** key to select the preferred mode.

Backlight operation

When the backlight is set to automatic control it will only turn on when the scale is being used, when there is weight on the platform or when a key is pressed.

It will turn off automatically after a few seconds when the weight is zero or after a while, the last key was pressed.

4.10 RS-232 INTERFACE

SWZ scales include a bi-directional RS-232 interface. The scale can be controlled by sending commands from a PC when connected via an RS-232 cable. See section 4.10.1.

Specifications:

RS-232 output of weighing data

ASCII code

Adjustable Baud rate, 600, 1200, 2400, 4800 , 9600 and 19200 baud
--

8 data bits No Parity

Connector:

9 pin D-subminiature socket

Pin 3 Output

Pin 2 Input

Pin 5 Signal Ground

4.10.1 Input commands format

The scale can be controlled with the following commands. The commands must be sent in upper case letters.

T<cr><lf>	Tares the scale to display the net weight. This is the same as pressing [Tare] key.
Z<cr><lf>	Sets the zero point for all subsequent weighing. The display shows zero.
P<cr><lf>	Prints the results to a PC or printer using the RS-232 interface.

4.10.2 RS-232 Setup

The RS-232 interface uses parameters set by the user for language, currency symbol, baud rate, date format and label format of the printout.

Press and hold the **[Print]** key for 4 seconds to access the parameters. Press **[Print]** to scroll through the options and **[Tare]** ↵ to confirm the change and then advance to the next parameter.

When a parameter is entered by pressing **[Tare]** ↵ , the displays will guide you through the parameter selected and the options available. The parameters and their function are:

Displays			Options	Functions
Weight	Unit Price	Total Price		
Port	on		on or oFF	Enable or disable the RS-232 interface.
4800	bPS		600, 1200, 2400, 4800, 9600 or 19200	Set baud rate.
LABEL	1		1, 2 or 3	Select label format to print.
CoUntr	Y E	EnGLiSH	EnGLiSH, FrEnCH, GERMAN or SPAniSH	Select Language to be printed.
StErLi	nG		EUroPE, dOLLAr, StErLinG	Select currency- Euro, Dollar or Pounds Sterling

LABEL FORMATS:

(NOTE: All lines are terminated with a <cr><lf>)

Label 1 (English with £ shown):

2017/08/31 13:01:56
UNIT PRICE NET TOTAL

£ 1.20/100g 0.200kg £ 2.40

Label 2 (Spanish with \$ shown):

FECHA 2017/04/08 HORA 04:00:30
PRECIO
UNIT. \$ 10.99/100g
NETO 0.200kg
TOTAL \$ 21.98

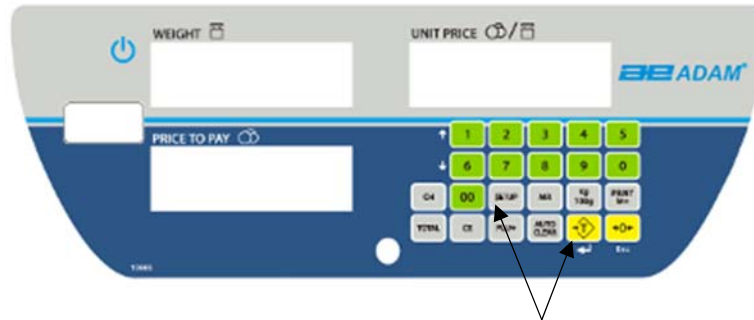
Label 3 (Weight only):

+ 0.200kg

4.11 REAL TIME CLOCK SETUP

The Real Time Clock (RTC) is used for the RS-232 output only. The Date and Time can be set as required within the setup menu (**[Setup]** key). The scale will keep the clock running even when the power is off.

Setting up the clock



- 1) Press the **[Setup]** key to bring up the setup menu.
- 2) Using the digits **[1]** and **[6]**, scroll through until you see “Time” in the display. Press the **[Tare]** ↵ key.
- 3) The display below will show the current time set in the format 00:00:00.
- 4) Use the keypad to enter the correct time in in hours, minutes and seconds (24 hour format) and press the **[Tare]** ↵ key to confirm.

Date

To change the date, follow the same process as above, selecting “date” from the setup menu. Here you will be presented with several formats:

“Y-m-d” year, month, day “m-d-Y”
month, day, year
“d-m-Y” day, month, year

- 1) Press the **[Tare]** ↵ key to accept the chosen format and then enter the date in this format.
- 2) Press the **[Tare]** ↵ key to accept the date.

An error code will be shown if the time (Err 1) or the date (Err 2) is not the permissible values. For example, 34th day of a month is an invalid entry.

5.0 ERROR CODES

During the initial power-on testing or during operation, the scale may show an error code in which case consult the table below. If the error persists, contact your dealer for further support.

ERROR	DESCRIPTION	POSSIBLE CAUSES
Err 1	Time input error.	Tried to set an illegal time, i.e. 26 hours
Err 2	Date input error	Tried to set an illegal date, i.e. 36 th day
Err 4	Initial Zero is greater than allowed (typically 4% of the maximum capacity) when power is turned on or when [Zero] is pressed,	Weight is on the pan when turning the scale on. Excessive weight on the pan when zeroing scale. Improper calibration of the scale. Damaged load cell. Damaged Electronics.
Err 6	A/D count is not correct when turning the scale on.	Platform is not installed. Load cell is damaged. Electronics is damaged.

6.0 CALIBRATION

The SWZ scales are sealed to prevent unauthorised calibration.

Contact Adam Equipment or your supplier for more details.

WARNING: CALIBRATION OF THE SCALES MAY MAKE IT ILLEGAL TO USE THE SCALES FOR SALES OF GOODS. CONTACT YOUR TRADING STANDARDS OFFICE FOR FURTHER ASSISTANCE.

7.0 REPLACEMENT PARTS AND ACCESSORIES

If you need to order any spare parts and accessories, contact your supplier or Adam Equipment. A partial list of such items is as follows-

- Main Power cord
- In use cover
- Replacement Battery
- Stainless Steel Pan

WARRANTY STATEMENT

Adam Equipment offers Limited Warranty (Parts and Labour) for any components that fail due to defects in materials or workmanship. Warranty starts from the date of delivery.

During the warranty period, should any repairs be necessary, the purchaser must inform its supplier or Adam Equipment Company. The company or its authorised Technician reserves the right to repair or replace the components at any of its workshops at no additional cost, depending on the severity of the problems. However, any freight involved in sending the faulty units or parts to the Service Centre should be borne by the purchaser.

The warranty will cease to operate if the equipment is not returned in the original packaging and with correct documentation for a claim to be processed. All claims are at the sole discretion of Adam Equipment.

This warranty does not cover equipment where defects or poor performance is due to misuse, accidental damage, exposure to radioactive or corrosive materials, negligence, faulty installation, unauthorised modifications or attempted repair, or failure to observe the requirements and recommendations as given in this User Manual.

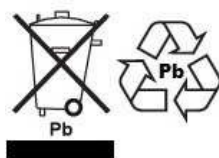
This product may include a rechargeable battery that is designed to be removed and replaced by the user. Adam Equipment warrants that it will provide a replacement battery if the battery manifests a defect in materials or workmanship during the initial period of use of the product in which the battery is installed.

As with all batteries, the maximum capacity of any battery included in the product will decrease with time or use, and battery cycle life will vary depending on product model, configuration, features, use, and power management settings. A decrease in maximum battery capacity or battery cycle life is not a defect in materials or workmanship, and is not covered by this Limited Warranty.

Repairs carried out under the warranty do not extend the warranty period. Components removed during warranty repairs become company property.

The statutory rights of the purchaser are not affected by this warranty. The terms of this warranty is governed by the UK law. For complete details on Warranty Information, see the terms and conditions of sale available on our web-site.

WEEE 2012/19/EU



This device may not be disposed of in domestic waste. This also applies to countries outside the EU, per their specific requirements. Disposal of batteries (if fitted) must conform to local laws and restrictions. Cet appareil ne peut être éliminé avec les déchets ménagers. L'élimination de la batterie doit être effectuée conformément aux lois et restrictions locales.

Dieses Gerät nicht mit dem Hausmüll entsorgt.

Dispositivo no puede ser desechado junto con los residuos domésticos Dispositivo non può essere smaltito nei rifiuti domestici.

FCC / IC CLASS A DIGITAL DEVICE EMC VERIFICATION STATEMENT

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC rules and Canadian ICES-003/NMB-003 regulation. 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.

CALIFORNIA PROPOSITION 65 - MANDATORY STATEMENT

WARNING: This product includes a sealed lead-acid battery which contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.



Adam Equipment products have been tested with, and are always supplied with mains power adaptors which meet all legal requirements for the intended country or region of operation, including electrical safety, interference and energy efficiency. As we often update adaptor products to meet changing legislation it is not possible to refer to the exact model in this manual. Please contact us if you need specifications or safety information for your particular item. Do not attempt to connect or use an adaptor not supplied by us.

ADAM EQUIPMENT is an ISO 9001:2008 certified global company with more than 45 years' experience in the production and sale of electronic weighing equipment.

Adam products are predominantly designed for the Laboratory, Educational, Health and Fitness, Retail and Industrial Segments. The product range can be described as follows:

- Analytical and Precision Laboratory Balances
- Compact and Portable Balances
- High Capacity Balances
- Moisture analysers / balances
- Mechanical Scales
- Counting Scales
- Digital Weighing/Check-weighing Scales
- High performance Platform Scales
- Crane scales
- Mechanical and Digital Electronic Health and Fitness Scales
- Retail Scales for Price computing

For a complete listing of all Adam products visit our website at

www.adamequipment.com

<p>Adam Equipment Co. Ltd. Maidstone Road, Kingston Milton Keynes MK10 0BD UK Phone:+44 (0)1908 274545 Fax: +44 (0)1908 641339 e-mail: sales@adamequipment.co.uk</p>	<p>Adam Equipment Inc. 1, Fox Hollow Rd. 06478 USA Phone: +1 203 790 4774 Fax: +1 203 792 3406 e-mail: sales@adamequipment.com</p>	<p>AE Adam GmbH Instenkamp 4 D-24242 Felde Germany Phone +49 (0)4340 40300 0 Fax: +49 (0)4340 40300 20 e-mail: vertrieb@aeadam.de</p>
<p>Adam Equipment S.A. (Pty) Ltd. 7 Megawatt Road, Spartan EXT 22 Kempton Park, Johannesburg, Republic of South Africa Phone +27 (0)11 974 9745 Fax: +27 (0)11 392 2587 e-mail: sales@adamequipment.co.za</p>	<p>Adam Equipment (S.E. ASIA) PTY Ltd 70 Miguel Road Bibra Lake Perth WA 6163 Western Australia Phone: +61 (0) 8 6461 6236 Fax +61 (0) 8 9456 4462 e-mail: sales@adamequipment.com.au</p>	<p>Adam Equipment (Wuhan) Co. Ltd. A Building East Jianhua Private Industrial Park Zhuanyang Avenue Wuhan Economic & Technological Development Zone 430056 Wuhan P.R.China Phone: + 86 (27) 59420391 Fax + 86 (27) 59420388 e-mail: info@adamequipment.com.cn</p>

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