

# Compact Scales

Software Revision V1.25 & above

**Easy Reference:**

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

# 1.0 CONTENTS

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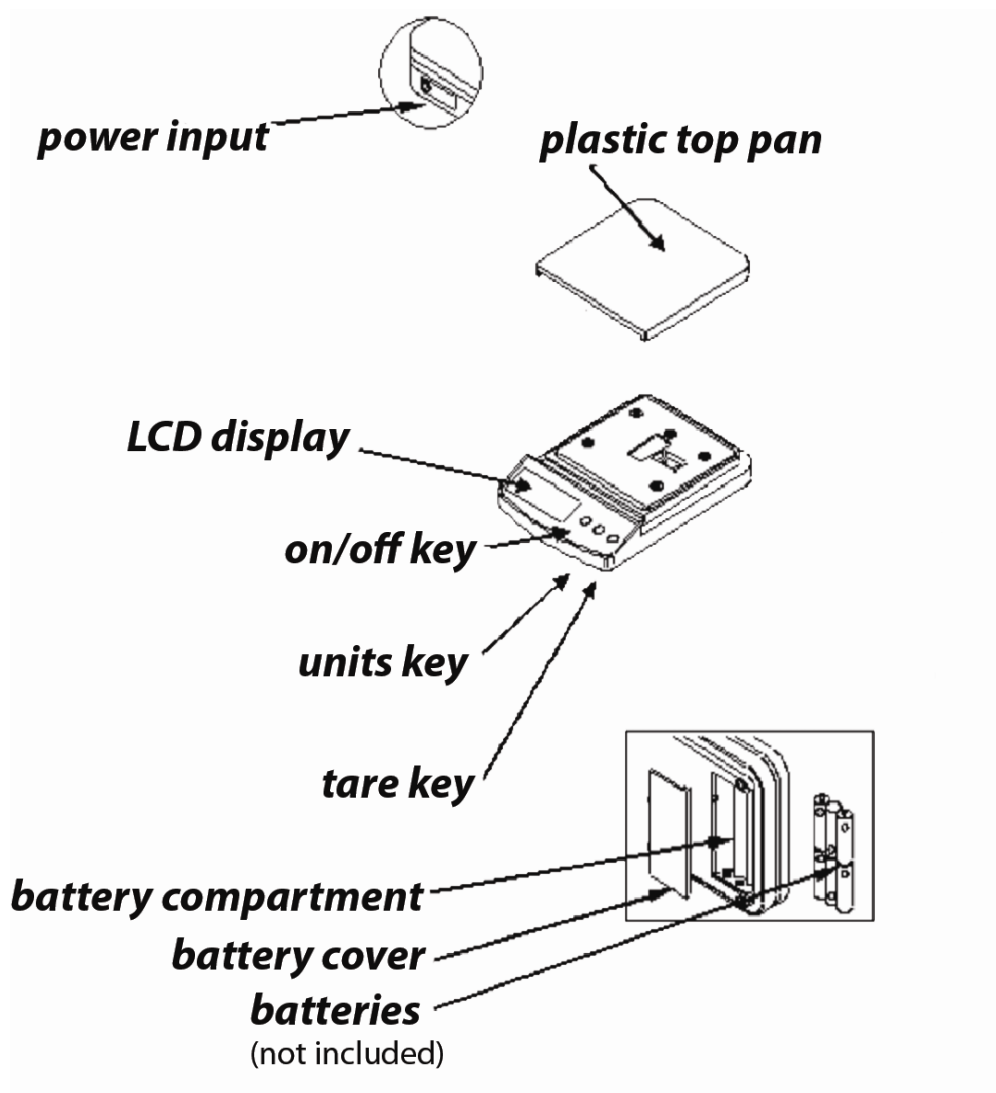
## 2.0 INTRODUCTION

This scale is equipped with DC adapter, calibration through the keypad, low-battery indicator, and overload indicator. With optional battery operation, splash-proof keypad, and sturdy plastic construction throughout, the scale will deliver reliable readings both indoors and out.

## 3.0 SET UP

### 3.1 UNPACKING AND SETTING UP YOUR SCALE

- 1) Remove the top pan, scale and adaptor from the packaging. Take care not to apply pressure to the top of the scale.
- 2) Connect the power adaptor to the socket on the back of the scale.

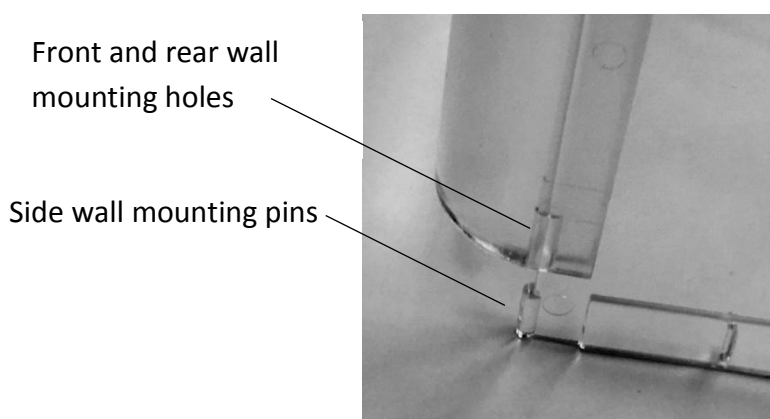


#### **Installing Batteries:**

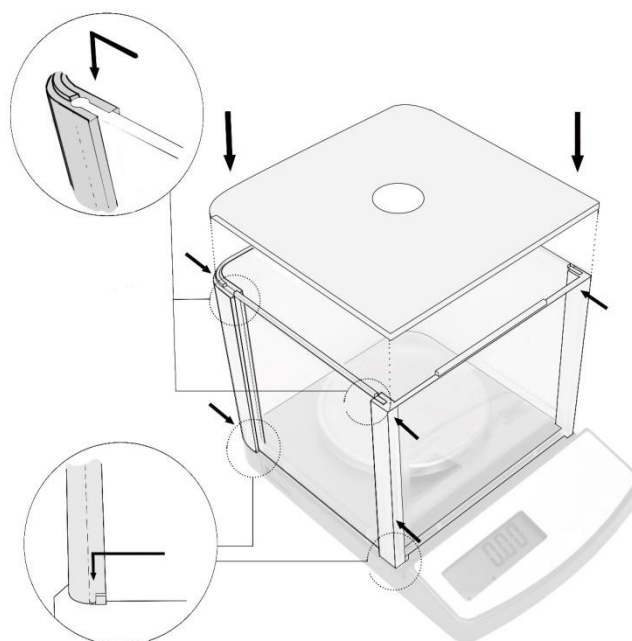
Remove the battery compartment cover and insert six batteries (R6P/LR6 /AA size) into the battery compartment taking care that the polarities plus and minus are observed.

### Breeze Shield Assembly (300g x 0.01g model)

1. Arrange side walls, rear wall and front wall flat on a surface for assembly. Side walls have protruding pins on the ends, and rear and front walls have holes to receive the pins.
2. Line up the rear wall against the side walls so that the mounting holes are near the pins.



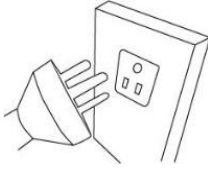
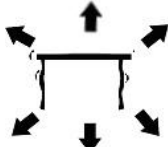
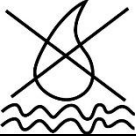





3. With the corners aligned, GENTLY press the back wall onto the side pins. DO NOT attempt to slide the back wall from the top down.
4. Follow the same procedure to mount the front wall onto the sides.
5. Place the top cover on top.



### 3.2 LOCATING AND PROTECTING YOUR SCALE

In order to keep your scale functioning at its best we suggest that you do the following:

	<p>Avoid extremes of temperature. Do not place in direct sunlight or near air conditioning vents.</p>
	<p>Make sure the scale is located on a strong table and free from vibration.</p>
	<p>Avoid unstable power sources. Do not use near large users of electricity such as welding equipment or large motors. Do not mix batteries and use only the factory approved power adapter supplied with the machine. Do not use batteries and the DC adapter at the same time.</p>
	<p>Keep free from vibration. Do not place near heavy or vibrating machinery.</p>
	<p>Avoid high humidity that might cause condensation. Keep away from direct contact with water. Do not spray or immerse the scales in water.</p>
	<p>Do not place near open windows, air-conditioning vents or fans that may cause a draft and unstable readings.</p>
	<p>Keep the scales clean. Do not stack material on the scale / balance when it is not in use.</p>
	<p>Avoid operating in high static areas, or weighing high static materials, such as plastics or powders, as this may damage electronics and affect measurements. Use grounding mats or bonding straps to reduce potential</p>

## 4.0 BASIC OPERATION

### 4.1 TURNING ON THE SCALE

Plug in the unit using the DC adapter or use batteries. Do not use battery power and the DC adapter at the same time.

- 1) To turn on press the **[on/off]** key once and release. All of the segments on the display will light up, then the display shows zero >0<
- 2) The scale is ready to be used.
- 3) To turn the scale off after use press the **[on/off]** key again. There is an auto power-off function that will automatically turn the unit off after 4 min of inactivity or no change in the weight reading.

### 4.2 ZEROING / TARE

You can press the **[Tare]** key to set a new zero point and show the zero reading if the weight reading is less than 4% of the total of the maximum capacity of the scale. This may be necessary if the weight is not reading zero with nothing on the platform. The zero indicators will light up: >0<.

If you are using a container to weigh then you can place this on the platform and press the **[Tare]** key, providing the container weight is more than 4% of the maximum capacity of the scale, the display will show zero and tare indicator will light up. You can then weigh your object in the container. Taring weight subtracts from the total scale capacity.

**Note:** When the container is removed a negative value will be shown. If the scale was tared just before removing the container, this value is the gross weight of the container plus all products which were removed.

### 4.3 WEIGHING

To determine the weight of a sample, first tare an empty container (if used), then place the sample in the container. The display will show the weight and the unit of weight currently in use.

## 5.0 FUNCTIONS

### 5.1 AUTO POWER OFF

The auto power off helps conserve. The scale will automatically turn off after 4 minutes of inactive use or no change in the displayed weight.

## 6.0 CALIBRATION

Before calibrating the scale it is best to turn on the unit for about 1 minute to let the components warm up.

- 1) Press **[on/off]** key to turn the power on, if it is not already.
- 2) Press and hold the **[Unit]** key, until “CAL” is displayed
- 3) Remove any weight from the pan.
- 4) Press the **[Unit]** key, the display will flash “CAL” then will show the cal mass required. If the cal mass is not displayed then the machine is not stable or is not within a zero range. Turn off the unit and try zeroing the display before trying another calibration.
- 5) Place the appropriate calibration mass on the scale:

Model	Calibration Mass
201	200g
302	200g
601	500g
1201	1200g
2000	2000g
2001	2000g
5000	5000g

- 6) After the stable reading the display will show “PASS” then revert to the weighing mode. If the calibration does not pass the display will show “FAIL” and shut off.
- 7) The calibration is now finished. If the calibration is correct, the display will show the weight value.


**NOTE:** If the calibration fails, retry. If it continues to fail then there may be damage to the mechanics or an issue with the power. If you do not follow the procedures in a timely manner the machine will automatically switch off and the calibration will not be accepted.



## 7.0 TROUBLE SHOOTING

### 7.1 ERROR MESSAGES

If an error message is shown, repeat the step that caused the message. If the error message is still shown then contact your dealer for support.

ERROR CODE	DESCRIPTION	POSSIBLE CAUSES
O-Ld	Overload	Remove weight from the pan. Make sure the machine is reading zero before weighing. Do not over load the pan. If the problem recurs calibrate. Possible damage to the internal weighing cell.
OUt2	Out of Zero reading	Make sure the pan is fitted correctly. Make sure nothing is touching the pan when turning on the unit. Calibrate the machine. Possible damage to the internal weighing cell.
UnSt	Unstable	Make sure the balance is on a flat surface and away from vibration. Possible damage to the internal weighing cell.
LO or 	Low Battery indicator	Change the batteries or use on the power adapter.
ErrE	E-Prom error	Software error turn off and restart. Contact Adam Equipment or your dealer for further assistance.
	No Power when turning on	Change the batteries or use on the power adapter.

## 8.0 SPECIFICATIONS

Model	302	201	601	1201	2000	2001	5000
Maximum Capacity	300g	200g	600g	1200g	2000g	2000g	5000g
Readability	0.01g	0.1g	0.1g	0.1g	1g	0.1g	2g
Repeatability (Std Dev)	0.02g	0.2g	0.2g	0.2g	2g	0.2g	4g
Linearity ±	0.03g	0.3g	0.3g	0.3g	3g	0.3g	6g
Units of Measure	g / lb /oz						
Stabilisation Time	2 seconds						
Operating Temperature	0°C to 40°C 32°F to 104°F						
Power Supply	12VDC 500 mA adapter or 6 x AA batteries						
Calibration	Push button calibration using external mass						
Calibration Mass	200g	200g	500g	1200g	2000g	2000g	5000g
Display	5 digit LCD display 15mm high						
Balance Housing	ABS Plastic						
Pan Size	100mm <sup>φ</sup> x 7mm	145 x 145mm/5.8" x 5.8"					
Overall Dimensions (w x d x h)	145 x 210 x 40mm/5.8" x 8.3" x 1.6"						
Gross Weight	1kg, 2.2lb						
Features	Low battery, Stable and Zero indications						

\*Breeze shield measures (w x d x h) 145mmW x 148mmD x 120mmH/5.71" x 5.82" 4.72"

## 9.0 WARRANTY INFORMATION

The manufacturer 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 warrant period, should any repairs be necessary, the purchaser must inform its. The company or its authorized 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 the manufacturer.

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, unauthorized 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. The manufacturer 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 models, configuration, features, use, and power management settings. A decrease in maximum battery capacity or battery cycle life is not a defect in material 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 the 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 website.

**WEEE 2012/19/EU**

Any Electrical or Electronic Equipment (EEE) component or assembly of parts intended to be incorporated into EEE devices as defined by European Directive 2012/19/EU must be recycled or disposed of using techniques that do not introduce hazardous substances harmful to our health or the environment as listed in Directive 2011/65/EC or amending legislation. Battery disposal must be performed according to local laws and restrictions.

**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.



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.