ADAM

Adam Equipment

SHS/SHSa SERIES

(P.N. 7.00.6.6.0202, Revision B November 2012)

Software version S1.1/SA1.1
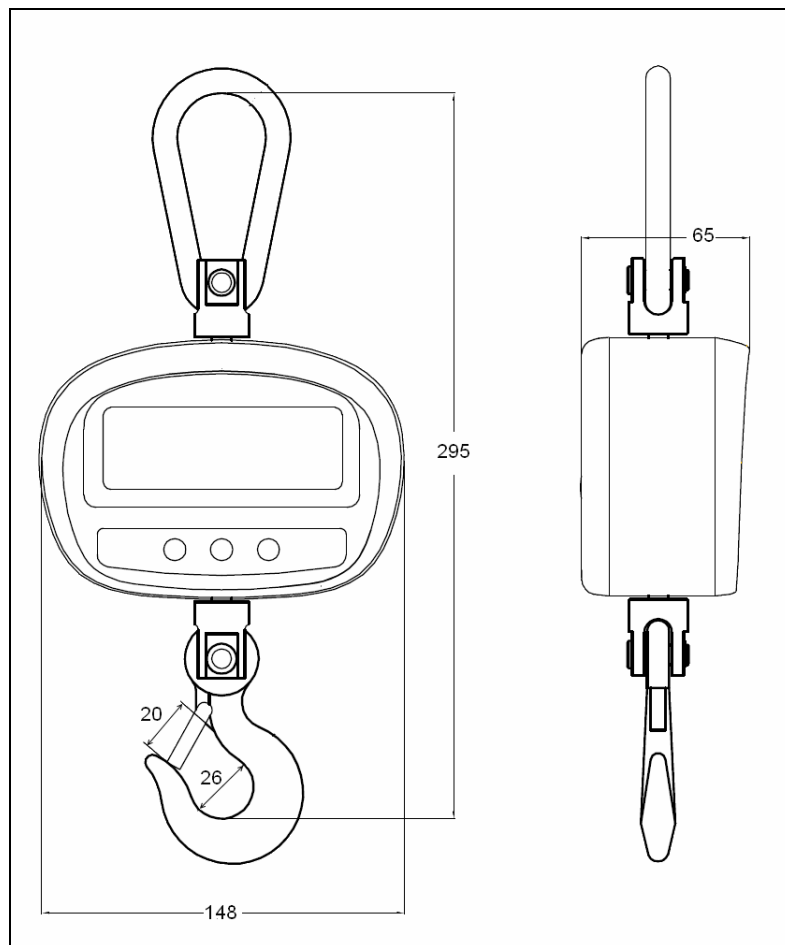
1.0   CONTENTS

2.0   INTRODUCTION

2.1   FEATURES

The SHS/SHSa Series are a range of heavy-duty lower capacity crane scales
The main features include:

- Easy Operation & Rugged construction

- 15mm bright red LED display enabling a good viewing angle.

- 360 degree rotary safety hook and support ring design

- Overload safety up to 150% of model capacity

- Selectable weighing units include kg, Lbs and Newtons (Newtons not available for "a" models)

- Standard and Peak Hold feature

- Internal lithium battery fitted as standard

- Alternative power from AA or NiMH batteries

- Auto power off after 30 minutes of non use

- 8.4Vdc 800ma battery charger

- Strong ABS plastic housing

- Infrared remote control

2.2 TECHNICAL SPECIFICATIONS

Model No	Capacity	Division	Model No	Capacity	Division
SHS 50	50kg	0.01kg	**SHS 100a**	100lb/50kg	0.02lb/0.01kg
SHS 150	150kg	0.02kg	**SHS 300a**	300lb/150kg	0.05lb/0.02kg
SHS 300	300kg	0.05kg	**SHS 600a**	600lb/300kg	0.1lb/0.05kg

2.3 SAFETY NOTICE

The limit stated below is the Ultimate Overload Limits of the scales.
Adam Equipment Co. Ltd. Its directors, owners and affiliated companies and organisations cannot be held liable for any resulting damage or injury sustained as a result of the machines being used in excess of their stated capacities or ultimate overload limits.

Model No.	SHS 50/SHS 100a	SHS 150/SHS 300a	SHS 300/SHS 600a
Max capacity	50kg/100lb	150kg/300lb	300kg/600lb
Overload capacity	100kg/200lb	300kg/600lb	450kg/900lb

NOTICE:
Do not use the scales if any parts are bent or loose or show signs of damage or wear. Refer to the user manual.

2.4   KEY AND PANEL DESCRIPTION

[ON/OFF]	The power switch is located on the rear housing. Use this key to turn the scale ON and OFF.
[Zero]	Press the [Zero] key to return the reading to zero.
[Unit]	Press the [Unit] key to change the weighing unit being displayed between Kg, Lbs and Newtons (Newtons not available for "a" models)
[Hold]	Use this key to activate standard Hold. When pressed the Hold LED will light at the top left side of the display and the reading on the display will lock and flash. Press the [Hold] key again to cancel the [Hold] function.

*When Peak hold is selected from the parameter section the press of the Hold key will activate Peak Hold. The Hold LED will flash and the display will also flash and lock showing the maximum weight registered of a single weighing process.

Press the [Hold] key again to cancel the [Hold] function. |

2.5 DISPLAY INDICATIONS WITH LED

Kg lb N	Weighing unit Indicator
	Low battery Indicator
Hold	Hold Indicator
Stab	Stable Indicator

3.0 OPERATION

3.1 SAFETY INSTRUCTIONS

Read this manual carefully before you operate the SHS Crane Scale.

- Unpack the Crane Scale carefully from the packaging.

- Attach it to your hoist or equivalent existing equipment securely at the ground level to the support ring in the upright position. Make sure that the equipment to which the scale is attached is in proper condition. The operator should be trained for its safe operation.

- Carry out regular visual inspection for any damage or wear and tear on parts. The split pins in particular at the hook and eyebolts, as well as the inner wall of the hook and all joints should be checked regularly. If any damage or wear has taken place, stop using the scale and replace the parts.

- Do all inspection and maintenance work when the scale is not in use.

- Do not expose the scale to extreme temperatures. The operating temperature range is 0° C to 40° C.

- Secure the sample to be weighed in the hook of the scale. Ensure that the sprung Safety Lever returns to its resting position which prevents the sample from slipping out of the hook.

- Do not exceed the maximum capacity of the Scale .

- Clean and protect your scale after use.

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<u>Overload Warning</u>

Please do not add any item that exceeds the maximum capacity of the scale. When the display shows "-----" remove the item to avoid damage to the load cell and scale.

3.2 BATTERY OPERATION

- The lithium battery will operate continuously for 20 hours before requiring recharging. The scale will alert you that the battery is low on charge when the Indicator LED above the battery symbol lights up.

- To charge the battery, unclip the battery cover on the rear of the scale and insert the connector into the socket as marked. Plug the charger into the mains power supply and wait until the LED on the charger shows green. The battery is now fully charged.

- Charging time for a completely discharged battery is approximately 16 hours. A full battery pack is recommended to keep the scale continuously operational.

- Only use the charger as supplied with the unit.

- The switch inside the battery cover must be in position A to make use of the lithium battery.

- If using AA or NiMH batteries the switch must be in position B

- The scale will automatically power down after 30 minutes of non use to further protect the battery.

- To replace the lithium battery pack please contact your dealer

3.3 BASIC OPERATIONS

<u>Power on and off</u>

Press the **[ON/OFF]** button to turn the scale on or off. The display on the scale will show the model capacity then countdown from 9 to 0 before displaying zero weight.

<u>Zero the scale</u>

Press the **[Zero] key** so that the display shows zero.

<u>Change the weighing Unit</u>

Press the **[Unit]** key to change the weighing unit
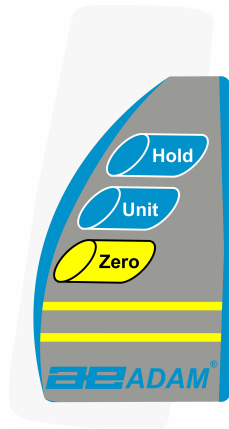
<u>Standard Hold (setting 1)</u>

When the reading may not be perfectly stable or you cannot view a reading easily you can press the **[Hold]** key to lock it. The reading will be locked and also flash at the point you press the **[Hold]** button enabling you to view it when you can. The Hold LED will also light up and once you have noted the reading a press of the **[Hold]** key will return the scale to the normal weighing mode.

<u>Peak Hold (setting 0)</u>

Peak Hold is the highest weight reading registered by the scale when a weighing takes place. Press the **[Hold]** key when the display is at zero and the Hold LED will flash which denotes Peak Hold has been activated. When weight/force is applied to the scale the display will also flash and lock the highest recorded weight of that weighing process. This value and the Hold LED will remain flashing on the display until the **[Hold]** key is pressed again at which point the scale will return to normal weighing mode displaying the current weight on the scale.

Press **[Hold]** again to perform another Peak Hold weighing at any time.

3.4   REMOTE CONTROL UNIT

The remote control works via infra red and can be used to operate the SHS from long distances. It operates using 2 x AAA batteries and these can be exchanged by unclipping a cover on the rear of the remote control unit.

3.5   USER PARAMETERS

Four USER settable parameters are available on the SHS, to access these power up the scale and whilst the display is counting down press and then release the **[Unit]** button. The display will show Bee 0. Press the **[Hold]** button to change the setting, and the **[Zero]** button to move to the next parameter.

Parameter setting table.

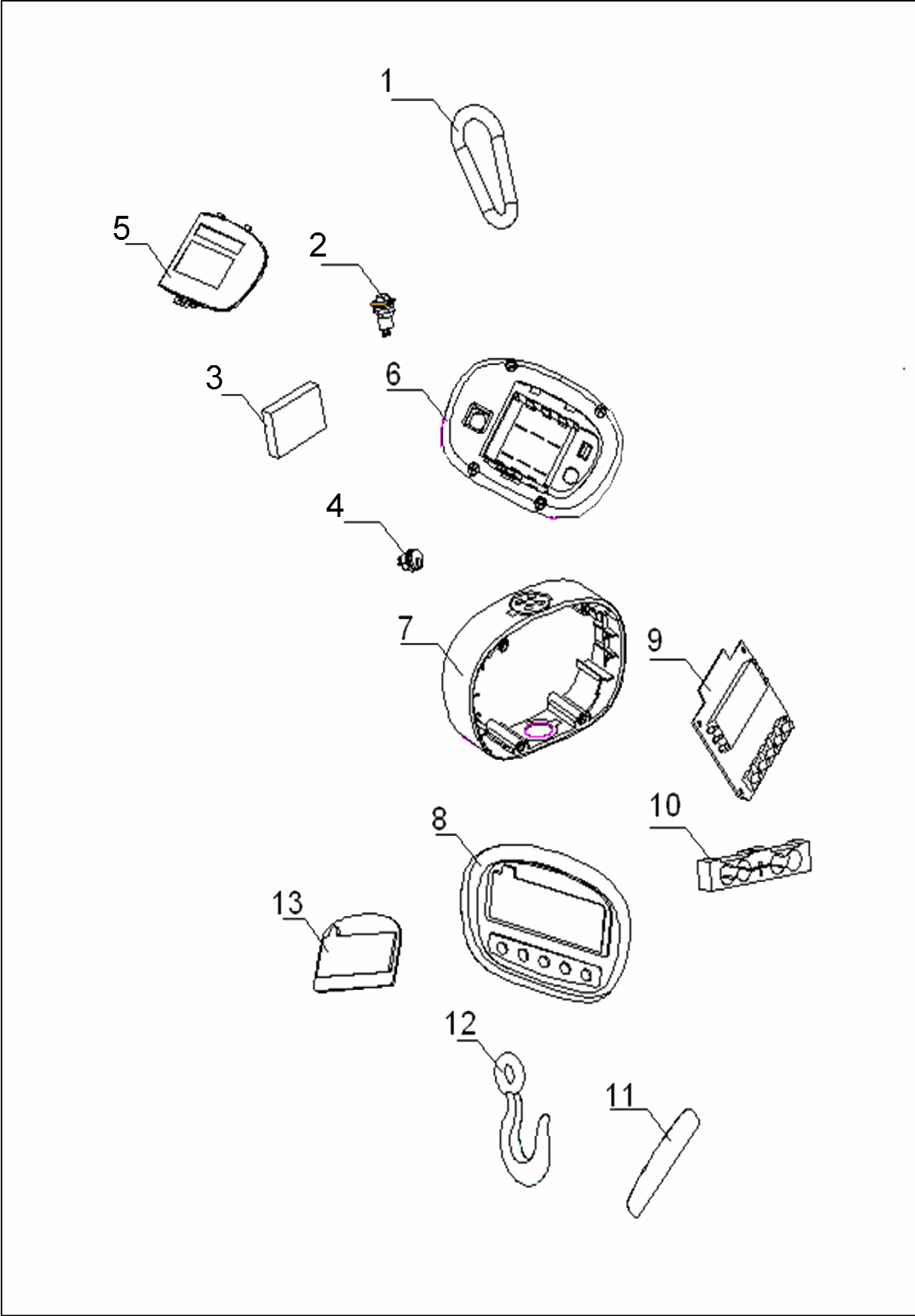| FUNCTION	DESCRIPTION	DEFAULT

вEE	Sets buzzer
	    0: Disable
	    1: Enable
		1

HOᴅ	Sets the Hold function
	    0: Peak
	    1: Standard
		1

CHт	Sets weighing unit on power up
	    0: kg
	    1: Lb's
	    2: Newtons(Newtons not available for "a" models)
		0

YES	Sets save:
	    0: not saved
	    1: save new settings
		0

4.0 CALIBRATION

- Press the **[Zero]** key and power up the scale using the on/off button.

- Release the **[Zero]** key and the display will show "SPAN". Make sure the hook is empty unless you intend to use any chains, slings etc to hold the calibration mass. Add any items such as these to the hook before continuing.

- Press the **[Zero]** button and the display will show "SET" then "00000" when the reading at zero is stable. This completes the zero calibration

- Following zero calibration the value of the mass being used to calibrate the scale should be entered. Use the **[Hold]** button to increment the right hand digit, and the **[Unit]** button to move this digit to the left. Proceed by entering a number for the next digit if required, until the value of your chosen calibration weight is displayed correctly.

- Load this mass onto the hook and when the scale is stable press the **[Zero] key**. The display shows '**HOLD**'.

- After a few seconds, the calibration is complete and the scale returns to normal weighing showing the value of the calibration mass as used.

** To calibrate in Lbs make sure that the scale is Lbs mode before commencing, to calibrate in Kg make sure the scale is in Kg mode before commencing.

5.0 PARTS LIST

SHS/SHSa

Part number	Description	Item No
7.00.1.0.0286	SHS SUPPORT RING	1
7.00.4.0.0091	SHS ON/OFF PUSHBUTTON	2
7.00.4.0.0092	SHS LITHIUM BATTERY PACK - 2 PIECES	3
7.00.4.0.0095	SHS POWER CONNECTOR SOCKET	4
7.00.4.0.0011	SHS COMPLETE HOUSING	5, 6, 7, 8
7.00.4.0.0093	SHS MAIN PCB	9
7.00.1.0.0280	SHS LOAD CELL - 50kg/100lb	10
7.00.1.0.0281	SHS LOAD CELL - 150kg/300lb	10
7.00.1.0.0282	SHS LOAD CELL - 300kg/600lb	10
7.00.5.6.0048	SHS KEYPAD PANEL	11
7.00.1.0.0283	SHS HOOK	12
7.00.5.6.0049	SHS DISPLAY PANEL - 50kg	13
7.00.5.6.0050	SHS DISPLAY PANEL - 150kg	13
7.00.5.6.0051	SHS DISPLAY PANEL - 300kg	13
7.00.2.0.0084	SHSa DISPLAY PANEL - 100lb	13
7.00.2.0.0085	SHSa DISPLAY PANEL - 300lb	13
7.00.2.0.0086	SHSa DISPLAY PANEL - 600lb	13
7.00.4.0.0094	SHS KEYBOARD PUSHBUTTON	
7.00.4.0.0112	SHS 8.4 VDC @ 800ma CHARGER UNIT USA	
7.00.4.0.0113	SHS 8.4 VDC @ 800ma CHARGER UNIT AUSTRALIA	
7.00.4.0.0114	SHS 8.4 VDC @ 800ma CHARGER UNIT SA	
7.00.4.0.0096	SHS 8.4 VDC @ 800ma UK CHARGER UNIT	
7.00.4.0.0097	SHS 8.4 VDC @ 800ma EURO CHARGER UNIT	
7.00.4.0.0099	SHS REMOTE CONTROL UNIT	
7.00.3.0.0026	SHS COMPLETE PACKAGING SET	

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WARRANTY INFORMATION

Adam Equipment offers Limited Warranty (Parts and Labour) for the components failed 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 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. Additionally rechargeable batteries (where supplied) are not covered under warranty.

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

The statutory right of the purchaser is 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.

$C\:E$

Manufacturer's Declaration of Conformity

This product has been manufactured in accordance with the harmonised European standards, following the provisions of the below stated directives:

Electro Magnetic Compatibility Directive 2004/108/EC

Low Voltage Directive 2006/95/EC

Adam Equipment Co. Ltd.
Maidstone Road, Kingston,
Milton Keynes, MK10 0BD
United Kingdom

FCC COMPLIANCE

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. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. The 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.

Shielded interconnect cables must be employed with this equipment to insure compliance with the pertinent RF emission limits governing this device.

Changes or modifications not expressly approved by Adam Equipment could void the user's authority to operate the equipment

WEEE COMPLIANCE

Sealed Lead Acid
Battery
Must be recycled
Properly

PB

Any Electrical or Electronic Equipment (EEE) component or assembly of parts intended to be incorporated into EEE devices as defined by European Directive 2002/95/EEC must be recycled or disposed using techniques that do not introduce hazardous substances harmful to our health or the environment as listed in Directive 2002/95/EC or amending legislation. Battery disposal in Landfill Sites is more regulated since July 2002 by regulation 9 of the Landfill (England and Wales) Regulations 2002 and Hazardous Waste Regulations 2005. Battery recycling has become topical and the Waste Electrical and Electronic Equipment (WEEE) Regulations are set to impose targets for recycling.

ADAM EQUIPMENT is an ISO 9001:2008 certified global company with more than 35 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 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

- Health and Fitness Scales

-Retail Scales for Price computing

For a complete listing of all Adam products visit our website at www.adamequipment.com

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