



**CRW SERIES**  
CRANE SCALES  
(P.N. 6085, Revision A2, December 2004)

Software revision: V 1.06



## 1.0 INTRODUCTION

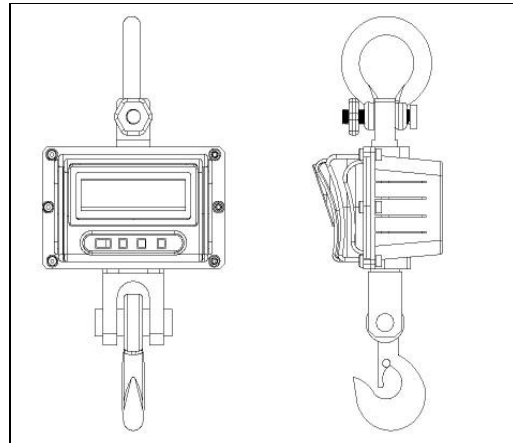
### 1.1 INTRODUCTION

CRW Series offers heavy-duty scales used to weigh very large masses. The main features include-

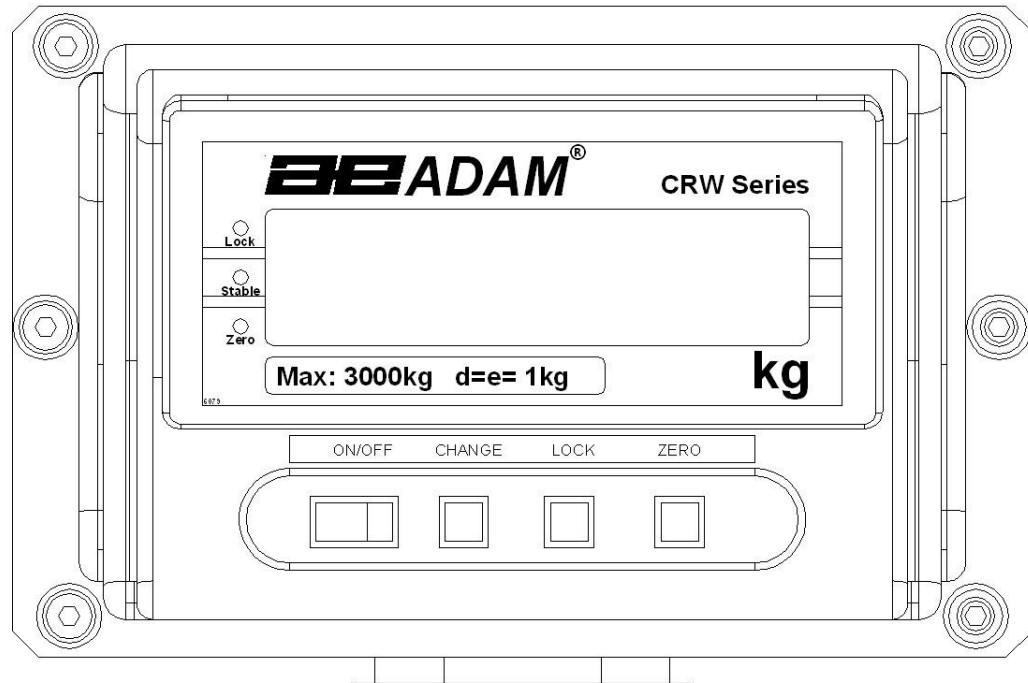
- Large LED display (30.5 mm)
- Rechargeable battery operated
- Selectable reading resolution
- Charger auto-off
- Battery protection
- Standard Remote Control Handset

### 1.2 TECHNICAL SPECIFICATIONS

Model No.	Max. Capacity	Over-load Capacity	Scale Division	Net weight
CRW-1	1000kg	1500kg	0.5kg	15.5 kg
CRW-3	3000kg	4500kg	1kg	15.5 kg
CRW-5	5000kg	7500kg	2kg	24.0 kg
CRW-7.5	7500kg	11250kg	2kg	37.6 kg
CRW-10	10000kg	15000kg	5kg	37.6 kg



### 1.3 KEY DESCRIPTION



<b>[ON/OFF]</b>	Power switch- use this key to turn on and turn off the scale.
<b>[CHANGE]</b>	Division change key- use this key to change division. When in setting mode, use this key to change parameter.
<b>[LOCK]</b>	Reading lock key- use this key to lock reading. When in setting mode, use this key to escape setting. In calibrate mode, use this key to change the decimal point.
<b>[ZERO]</b>	Re-zero key- use this key to return zero reading. When in setting mode, use this key to store the setting.

### 1.4 DISPLAY

<b>LOCK</b>	Lock indicator- when this indicator is on, scale is reading data in lock mode. Press the <b>[LOCK]</b> key to return to normal weighing mode.
<b>STABLE</b>	Stable indicator- this indicator means the current data is stable and you can read the data. When in calibrate mode, make sure to proceed only when this indicator is on.
<b>ZERO</b>	Zero indicator- this indicates the scale is in zero point.

## 2.0 OPERATION

### 2.1 SAFETY INSTRUCTIONS

Read this manual carefully before you operate the Crane Scale.

- Unpack the Crane Scale carefully from the packing using suitable lifting equipment as the weight of the Scale can be over the limit for manual handling, particularly for the higher capacity model.
- Attach it to your Hoist or equivalent existing equipment securely 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 safe operation. It is recommended to fasten the hook on the ground level and then to lift the scale to the desired height rather than lifting the scale to the fastening hook.
- Do regular visual inspection for any damage or wearing out of parts. Particularly the split pins at the end and the inner wall of the hook and all joints should be checked regularly. If any damage or wearing out has taken place, replace the parts at the earliest.
- 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 as mentioned in section 1.2.
- Clean and protect your scale after use.

## 2.2 BATTERY OPERATION

When battery goes low, the reading will keep on flickering. It is the time to charge the battery with the special charger. If the scale is being used without proper charging, the display will flicker and after 30 minutes the display will show “*LD\_BR*”. If you still don't charge the battery, the scale would be shut down automatically after 5 seconds of warning, in order to protect the battery. Charge the battery immediately.

If you do not use the crane scale for a long time, you may need to charge the battery every three months.

## 2.3 CHARGING BATTERY

Use the special charger to charge battery, using other type of charger may cause harm to the battery.

Please ensure your AC power meets the required rating of power.

The LED on charger will turn on when battery is being charged and it will be flickering when battery is fully charged.

After the full charging, the AC adapter will automatically switch over to the low current charge process, so that it is not necessary to disconnect the AC adapter immediately.

## 2.4 BASIC OPERATIONS

Power on and off- Press **[ON/OFF]** key to on and off the scale.

Zero the scale- When there is no item on the scale but the reading is not zero, press the **[ZERO]** key to re-zero the reading.

Reading lock- When reading is not stable, you can use the **[LOCK]** key to lock the reading, so that you can read easily. After you finish reading, press **[LOCK]** again to return to normal weighing mode.

Change division- You can use the **[CHANGE]** key to change division, All scales have been set for the middle division in the factory.

Overload Warning- Please do not add any item that exceeds the maximum capacity of the scale. When the display shows “*--OL-*”, remove the item to avoid damage to the load cell.

## 2.5 AUTO SLEEP

The crane scales have automatic sleep function. You can disable this function, see section 4.0. When the scale weighs a sample below the minimum capacity (20d) for more than the set time, it will automatically enter the sleep mode. Only the last point will turn on at LED. Once you press any key or add more weight on the hook, it will return to normal weighing mode again. Please pull out the antenna before operating the remote controller.

## 2.6 REMOTE CONTROLLER

The crane scales are supplied with remote control. You will find 4 keys on the remote controller.

Key A: use as **[ZERO]** key

Key B: use as **[CHANGE]** key

Key C: use as **[LOCK]** key

## 3.0 CALIBRATION

- Turn off the power if you are using the scale.
- Then turn on the power, press **[ZERO]** and **[CHANGE]** key at the same time during self-checking.
- Display shows “**P1--**”, asking for entering the password.
- Input password, use **[LOCK]** key to move the active digit, **[CHANGE]** key to increment a digit. Press the **[ZERO]** key to confirm the password. The default password is “**000**”.
- Display will show “**F0 ic**”, press **[CHANGE]** key until display shows “**F8 CL**”.
- Press **[ZERO]** key to enter calibration, display shows “**ULoad**”.
- Empty the hook, after **STABLE** indicator on, press **[ZERO]** key to confirm, after few seconds, zero calibration is now complete.
- After zero calibration, display shows a value of mass for span calibration. You can change this weight by using the **[LOCK]** key to move the active digit and **[CHANGE]** key to increment a digit. After entering the value of the calibration mass, press the **[ZERO]** key to confirm. When display shows “**LOAd**”, add the calibrate mass on the hook after stable indicator on. Press the **[ZERO]** key again, wait for few seconds, span calibration is now complete.

## 4.0 PARAMETER

### 4.1 Enter setting mode

Turn off the power of the scale and then turn the power on again.

Press the **[ZERO]** and **[CHANGE]** key at the same time during self-checking. Display shows “**P1---**”, asking for the password. Input the password using the **[LOCK]** key to move the active digit and the **[CHANGE]** key to increment a digit. Press **[ZERO]** to confirm. The default password is “**000**”, Display shows “**F0 ic**”, indicating the scale has entered the setting mode. Press the **[CHANGE]** key to shift the parameter items, use **[ZERO]** key to confirm and the **[LOCK]** key to escape from setting the current item.

### 4.2 PARAMETER SETTING TABLE

FUNCTION	DESCRIPTION	DEFAULT
<b>F0 ic</b>	Sets division <b>0</b> : high resolution <b>1</b> : standard resolution <b>2</b> : low resolution	<b>1</b>
<b>F1 AZ</b>	Sets zero tracking range <b>AZN 0: 0.5d, AZN1: 1d</b> <b>AZN2: 2d, AZN3: 4d</b>	<b>AZN 1</b>
<b>F2 bt</b>	Sets baud rate (RS-232 is an optional function) <b>600</b> : 600bps, <b>1200</b> : 1200bps <b>2400</b> :2400bps, <b>4800</b> : 4800bps <b>9600</b> : 9600bps	<b>600</b>

<b>F3 sp</b>	Sets ADC speed <b>S1</b> : 7.5 times/second <b>S2</b> : 15 times/second <b>S3</b> : 30 times/second <b>S4</b> : 60 times/second	<b>S 1</b>
<b>F4 ip</b>	Shows internal counts. Press <b>[LOCK]</b> to escape from this parameter.	
<b>F5 ut</b>	Sets weighing unit <b>UNT 0</b> : kg, <b>UNT 1</b> : <b>UNT 2</b> :	<b>0</b>
<b>F6 sl</b>	Sets auto sleep mode <b>SLP 0</b> : no auto sleep <b>SLP 1</b> : auto sleep after scale empty for 5 minutes <b>SLP 2</b> : auto sleep after scale empty for 10 minutes <b>SLP 3</b> : auto sleep after scale empty for 20 minutes <b>SLP 4</b> : auto sleep after scale empty for 30 minutes	<b>Slp 1</b>
<b>F7 ci</b>	Sets parameter setting password <b>P1---</b>	<b>000</b>
<b>F8 cl</b>	Calibration <b>Uload</b> →(calibration mass)→ <b>load</b> →(complete) For details see SECTION 3.	

## 5.0 ERROR CODES

ERROR CODES	DESCRIPTION	SUGGESTIONS
-- ol -	Over range	Remove the weight from the scale.  If the problem persists contact your dealer or Adam Equipment for assistance.
<b>Err 4</b>	Zero Setting Error	The scale was outside the normal auto-zero setting range (4% of capacity),  Check the hook is empty or  Calibrate zero point again.
<b>Err 6</b>	A/D out of range	The values from the A/D converter are outside the normal range.  Remove weight from the scale if overloaded.  The load cell or the electronics may be faulty.  If the problem persists, contact your dealer or Adam Equipment for assistance.
<b>Lo bA</b>	Battery low	Charge the battery immediately.



### **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 89/336/EEC

Low Voltage Directive 73/23/EEC

Adam Equipment Co. Ltd.  
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Denbigh East Estate  
Milton Keynes, MK1 1SW  
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.

**ADAM EQUIPMENT** is an ISO 9001:2000 certified global organisation with more than 30 years experience in the production and sale of electronic weighing equipments. Products are sold through a world wide distributor network -supported from our company locations in the UK, USA and SOUTH AFRICA. The company and their distributors offer a full range of Technical Services such as on site and workshop repair, preventative maintenance and calibration facilities.

**ADAM's** products are predominantly designed for the Laboratory, Educational, Medical and Industrial Segments. The product range can be classified as follows:

- Analytical and Precision Laboratory Balances
- Top Loading Scales for Educational establishments
- Counting Scales for Industrial and Warehouse applications
- Digital Weighing/Check-weighing Scales
- High performance Platform Scales with extensive software features including parts counting, percent weighing etc.
- Digital Electronic Scales for Medical use
- Retail Scales for price computing

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