Adam Equipment

Cruiser
(CKT & CKT-M) SERIES

Adam Equipment strives to be more environmentally focused and uses recycled materials and environmentally friendly packaging where possible. As part of this initiative we have developed a short form manual that uses less paper and ink to describe the main functions of your new Adam scale. A complete version is available at www.adamequipment.com. Thank you for your support of Adam Equipment and we hope that you enjoy your new scale.

1.0 CONTENTS

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1.0 INTRODUCTION

- The Cruiser Checkweighing (CKT) series provides accurate and reliable weighing for stock control and general warehouse applications
- There are 4 models in the CKT series:

1. CKT
2. CKT-UH
3. CKT-M
4. CKTa

- Cruiser checkweighing scales can weigh in pound, gram or kilogram weighing units.
- The scales have stainless steel weighing platforms on an ABS base assembly.
- All scales are supplied with an RS-232 bi-directional interface and real time clock.
- The scales have a sealed keypad with colour coded membrane switches and a large, easy to read liquid crystal type display (LCD). with backlight.
- The scales include automatic zero tracking, LED checkweighing lights with selectable Hi/Low limits, automatic tare, pre-set tare, an accumulation facility that allows the count to be stored and recalled as an accumulated total.

2.0 SPECIFICATIONS

	CKT 4	**CKT 8H**	**CKT 8**	**CKT 16**	**CKT 32**	**CKT 48**
Kilograms						
Maximum Capacity	4 kg	8 kg	8 kg	16 kg	32 kg	48 kg
Tare Range	-4 kg	-8 kg	-8 kg	-16 kg	-32 kg	-48 kg
Readability	0.0001 kg	0.0001 kg	0.0002 kg	0.0005 kg	0.001 kg	0.002 kg
Repeatability (S.D.)	0.0001 kg	0.0001 kg	0.0002 kg	0.0005 kg	0.001 kg	0.002 kg
Linearity (±)	0.0002 kg	0.0002 kg	0.0004 kg	0.001 kg	0.002 kg	0.004 kg
Grams						
Maximum Capacity	4000 g	8000 g	8000 g	16000 g	32000 g	48000 g
Tare Range	-4000 g	-8000 g	-8000 g	-16000 g	-32000 g	-48000 g
Readability	0.1 g	0.1 g	0.2 g	0.5 g	1 g	2 g
Repeatability (S.D.)	0.1 g	0.1 g	0.2 g	0.5 g	1 g	2 g
Linearity (±)	0.2 g	0.2 g	0.4 g	1 g	2 g	4 g

CKTa Series (USA models)

	CKT 8H	CKT 16UH	CKT 32UH	CKT 48UH
Pounds				
Maximum Capacity	8 lb	16 lb	35 lb	70 lb
Tare Range	-8 lb	-9.9995 lb	-35 lb	-70 lb
Readability	0.0002 lb	0.0002 lb	0.001 lb	0.002 lb
Repeatability (S.D.)	0.0002 lb	0.0002 lb	0.001 lb	0.002 lb
Linearity (±)	0.0004 lb	0.0004 lb	0.002 lb	0.004 lb
Ounces				
Maximum Capacity	128 oz	256 oz	560 oz	1120 oz
Readability	0.005 oz	0.005 oz	0.02 oz	0.05 oz
Repeatability (S.D.)	0.005 oz	0.005 oz	0.02 oz	0.05 oz
Linearity (±)	0.01 oz	0.01 oz	0.04 oz	0.1 oz
Pounds: Ounces				
Maximum Capacity	8 lb: 0.0 oz	16 lb: 0.0 oz	35 lb: 0.0 oz	70 lb: 0.0 oz
Display shows	8:_16.00	16:_16.0	35:_16.0	70:_16.0
Readability	0.01 oz	0.1 oz	0.1 oz	0.1 oz
Repeatability (S.D.)	0.01 oz	0.1 oz	0.1 oz	0.1 oz
Linearity (±)	0.02 oz	0.2 oz	0.2 oz	0.2 oz
Kilograms				
Maximum Capacity	4 kg	8 kg	16 kg	32 kg
Readability	0.0001 kg	0.0001 kg	0.0005 kg	0.001 kg
Repeatability (S.D.)	0.0001 kg	0.0001 kg	0.0005 kg	0.001 kg
Linearity (±)	0.0002 kg	0.0002 kg	0.001 kg	0.002 kg
Grams				
Maximum Capacity	4000 g	8000 g	16000 g	32000 g
Readability	0.1 g	0.1 g	0.5 g	1 g
Repeatability (S.D.)	0.1 g	0.1 g	0.5 g	1 g
Linearity (±)	0.2 g	0.2 g	1 g	2 g

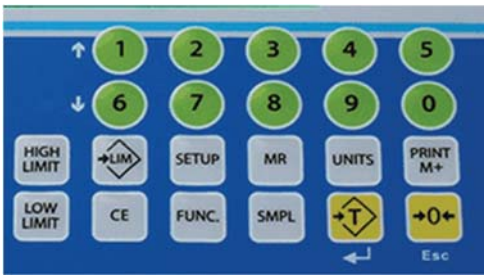
Units of measure	**CKT** Series- kg, g **CKTa** Series- kg, g, lb, oz, lb:oz
Interface	RS-232 bi-directional Interface
Stabilisation Time	2 Seconds typical
Operating Temperature	-10°C to 40°C 14°F to 104°F
Power supply	230 VAC 50/60 Hz 115 VAC available
Battery	Internal rechargeable battery (~90 hours operation)
Calibration	Automatic External
Display	6 digits LCD digital display with capacity tracker and symbols for units
Scale Housing	ABS Plastic, Stainless Steel platform
Pan Size	210 x 300 mm 8.3” x 11.8”
Overall Dimensions (wxdxh)	315 x 355 x 110 mm 12.4” x 14” x 4.3”
Net Weight	4.4 kg 9.7 lb
Applications	Weighing Scales
Functions	Weighing, Parts counting, % weighing, Check weighing, Check counting, Accumulation of weights.
Date/Time	Real Time Clock (RTC), To print date and time information- battery backed

	CKT 4M	CKT 8M	CKT 20M	CKT 40M
Grams				
Max	4000 g	8000 g	20000 g	40000 g
e =	1 g	2 g	5 g	10 g
n =	3000	3000	3000	3000
Kilograms				
Max	4 kg	8 kg	20 kg	40 kg
e =	0.001 kg	0.002 kg	0.005 kg	0.01 kg

OTHER SPECIFICATIONS

Units of measure	kg, g
Tare	Full
Interface	RS-232 bi-directional Interface
Stabilisation Time	2 Seconds typical
Operating Temperature	-10°C to 40°C / 14°F to 104°F
Power supply	230 VAC 50/60 Hz 115 VAC available
Battery	Internal rechargeable battery (~90 hours operation)
*Calibration	*Not permitted
Display	6 digits LCD digital display with capacity tracker and symbols for units
Scale Housing	ABS Plastic, Stainless Steel platform
Pan Size	210 x 300mm 8.3” x 11.8”
Overall Dimensions (wxdxh)	315 x 355 x 110 mm 12.4” x 14” x 4.3”
Net Weight	4.1 kg / 9 lb
Applications	Weighing Scales
Functions	Weighing, Parts counting, % weighing, Check weighing, Check counting, Accumulation of weights.
Date/Time	Real Time Clock (RTC), To print date and time information- battery backed **NOTE:** For use in approved applications the scales do not come with the RS-232 interface.

Key descriptions



[0-9]
Numeric entry keys to set the unit price.

[CE]
Clears an erroneous entry or return to normal operation.

[Tare] or →T key
Sets the scale to display zero weight when an empty container is placed on the platform or removed again. Also works as an **[Enter]** key

[MR]
The memory key shows the accumulation number and total weight

[SETUP]
Brings up the setup menu for changing date, time, power etc.

[Zero] or →0← key
It sets the zero when the platform is empty and no tare value is entered. Also works as an **[Esc]** key

[Print M+]
It sends the results of the current displays to the RS-232 interface.

[SMPL]
This is used to enter the number of items of a sample

[Units]
This key is used to enter the weight of a sample manually. It will also change the weighing units when other units are enabled.

[High Limit]
Used to set the 'high' limit when checkweighing

[Low Limit]
Used to set the 'low' limit when checkweighing

[Lim] It stores and recalls any of 10 preset limits

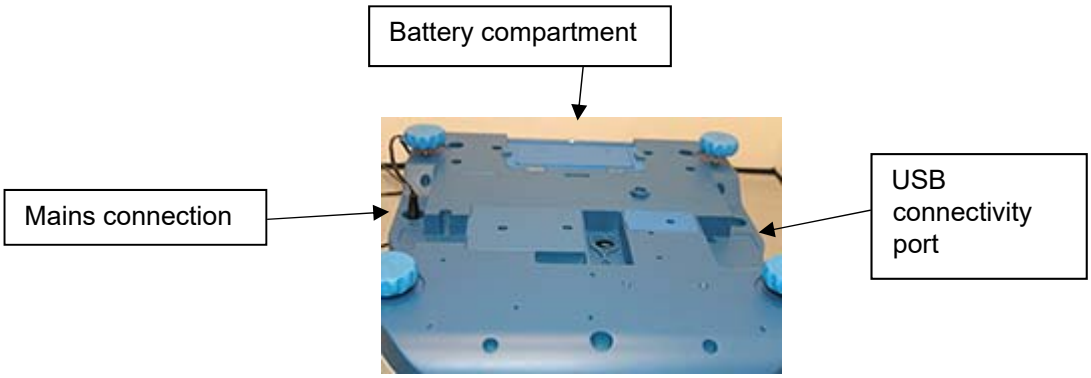
[Func]This is used to switch between weighing functions e.g parts counting, weighing or percentage weighing. Also used to select RS-232 parameters.

3.0 OPERATION

3.1 SETTING UP AND TURN ON THE SCALE

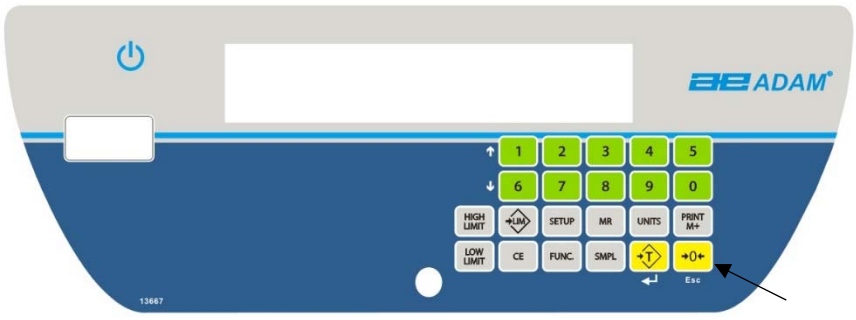
Follow this set up when using the scale for first time:

1) Place the platform in the locating holes on the top cover.
2) Level the scale by adjusting the four feet. Ensure the bubble in the spirit level is in the centre of the level and the scale is supported by all four feet.
3) Attach the power cable to the connector located on the base to the left of the scale.
4) Plug the power cable into the mains.
5) Press the power button located on scale keypad.
6) The scale will then display the software revision and run a self-test.
7) Once the self-test has been completed and a stable condition achieved, the scale will display zero weight alongside stable and zero symbol indicators.



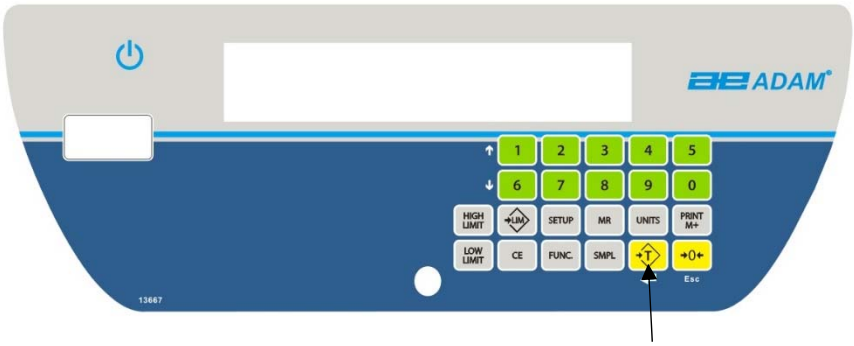
3.2 ZEROING THE DISPLAY

You can press the **[Zero]/→0←Esc** key at any time to set the zero point. When the zero point is obtained, the display will show the indicator for zero.



The scale has a re-zeroing function to account for minor drifting or accumulation of material on the platform. Press **[Zero]/→0←Esc** to re-zero the scale if small amounts of weight are still shown when the platform is empty.

3.3 TARING



Manual tare

Steps:

1) Zero the scale by pressing the **[Zero]/→0←Esc** key.
2) Place a container on the platform, a value for its weight will be displayed.
3) Press the **[Tare]** ↲ key when reading is stable. The weight displayed is then stored as the tare value.
4) The stable and **"NET"** indicator will show on the display.
5) Now when adding additional products, only the weight of the current product will be shown. The scale can be tared a second time.

Removing an object

Removing a container/ object will cause a negative value to show on the display. The zero indicator will also appear, as the weighing platform has returned back to the same condition as it was when the **[Zero]/→0←Esc** key was pressed last.

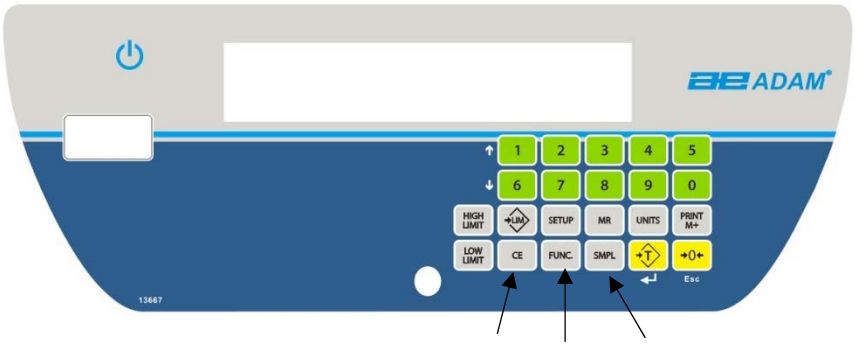
The display will automatically reset to zero if removing the object causes a negative value. If not, press **[Tare]** ↲ or **[Zero]/→0←Esc** to remove the tare value and display zero. The Net indicator will disappear.

3.4 WEIGHING

To determine the weight of a sample:

1) Zero the scale by pressing the **[Zero]/→0←Esc** key
2) Place the sample onto the weighing pan. If using a container, ensure that you tare the container before adding the sample.
3) The display will show the weight and the unit of weight currently in use.
4) To change the weighing unit press the **[Units]** key. The weighing units displayed are enabled by the user in the parameters section.

3.5 PARTS COUNTING



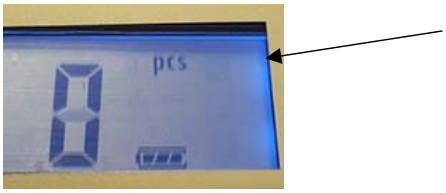
The scale can be used to count parts based on the average weight of a previously weighed sample by following these steps:

1) Zero the scale and tare the weighing container.
2) Press the **[Func]** key
3) The digits **[1]** and **[6]** can be used to scroll through the different weighing applications, press until **'count'** appears on the display.

4) Press the **[Tare]** ↲ key to activate
5) Once activated, the **'PCS'** label will appear on the top right-hand side of the display.

6) Load the parts sample to be counted by pressing the **[SMPL]** key, and by pressing the desired number on the keypad e.g. 20.

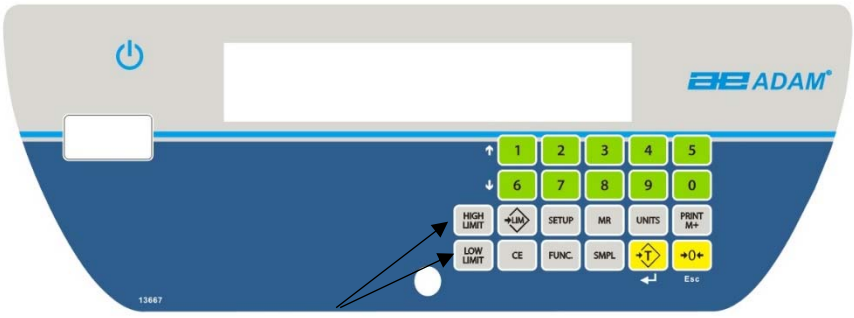
7) Press **[Tare]** ↲ to confirm the number of parts.
8) The total number of parts will appear on the display, adding or removing parts will adjust the parts count on the display accordingly by applying the average piece weight to the weight of the parts to be counted.
9) During parts counting the display can be changed to show the net weight, unit weight and number of parts by each time pressing the **[Func]** key.
10) To return to weighing, press **[Unit]** when **"0 pcs"** is displayed.



NOTE: If the parts are too light to measure accurately, the count may become faulty. To ensure accurate counting the unit weight of the item should normally be at least equal to the resolution of the scale.

3.6 CHECK WEIGHING

Check-weighing is a procedure to display an indicator or sound an alarm when the weight on the platform meets or exceeds the values stored in the memory. The memory holds values for a high limit and a low limit. Either or both the limits can be set by the user.



Checkweighing Display

The LCD display will indicate whenever the weight is within or exceeds the limits by showing **"OK"** (mass is between the limits), **"HI"**(mass is above the high limit) or **"LO"**(mass is below the low limit).

Steps:

1) In normal weighing, Press the **[Low Limit]** key. It will show the current low limit. The **"LO"** symbol will appear on the display.

2) Press the **[CE]** key to clear the old value and then enter the new low limit using the numeric keys. Then press **[Tare]** ↲ to accept the value. If you want to reset the value to zero, press **[CE]** to clear the value. The limits are displayed in the weighing unit in use. If the weighing unit is pounds: ounces, the limits are entered in pounds and decimal parts of pounds. i.e. 60.125 lb.

3) To set the high limit press **[High Limit]**, the **"HI"** symbol will be on. Set the high limit in the same way the low limit was set. Pressing the **[Tare]** key to enter the value will return the scale to weighing, with the Check-weighing function enabled.

4) To disable the check weighing function, enter zero into both the limits as described above. When the current limits are shown, press **[CE]** to clear the settings, then press **[Tare]** ↲ to store the zero values.

NOTE: The weight must be greater than 20 scale divisions for the check-weighing to operate.

Limits storing and recalling

The indicator can store up to 10 sets of high and low limits in memory along with the weighing units in use (including pcs and %) as well as settings for the beeper. Limits can be stored previously stored units can be recalled.

If you are already in the check weighing mode the display will ask if you wish to store the current limits by showing **"StorE"** or recall another set of limits by showing **"Recall"**.
The **[Lim]** key can be used to toggle **"StorE"** and **"rECALL"** view using digits 1 or 6.

Store

If you want to store the limits, when **"StOrE"** is displayed press the **[Tare]** ↲ key. The display shows the current function **"Pos"**. Enter a number corresponding to the desired memory location (0 to 9) and press **[Tare]** ↲ to accept. Once you have entered the desired "**PoS"** number, you can then store new Low and high limits manually using the numeric keypad and pressing **[Tare]** ↲ to enter.

Recall

If you wish to recall any of the pre-stored limits, press **[Tare]** ↲ when **"rECALL"** is displayed. The display shows **"Pos"**. Enter the number corresponding to the desired memory location (0 to 9) to be recalled then press **[Tare]** ↲ to accept.

NOTE: If the recalled limit is for parts counting or percent weighing, the display will show the last sample value used, ready for a new sample to be counted. If the memory location was empty the scale will return to weighing.

3.7 PERCENT WEIGHING

The scale will use a mass on the platform as the 100% reference weight or input a reference weight using the keypad:

1) Zero the scale and tare the container on the weighing pan once a stable weight is displayed. If wanting to set weight manually, ensure there is nothing on top of the weighing pan at this stage.
2) Press the **[Func]** key and scroll using digits **[1]** or **[6]** until **'percent'** appears on the display. Press the **[Tare]** ↲ key
3) Press the **[SMPL]** key. The display will now show the given weight as 100%. If no items have been placed on the scale, pressing the **[SMPL]** key will change from percentage to the pre-selected weight unit. Use the digits on the keypad to enter the desired weight value and press the **[Tare]** ↲ key.
4) Removing or adding to the weighing pan will adjust the weight according to the original weight value.
5) Press the **[Func]** key and scroll using digits **[1]** or **[6]** to select a different mode. Press **[Tare]** ↲ to confirm.

NOTE:

1) The weight entered must be greater than 50 scale divisions.
2) The display may jump by large numbers unexpectedly if small weights are used to set as 100% reference. For example, if only 23.5g is placed on a scale with 0.5g increments and is set to 100%, the display will show 100.00%. However a small change of weight will cause the display to jump to 102.13% as an increase of one scale division (0.5g) to 24.0g will be equivalent to an increase of 2.13%.

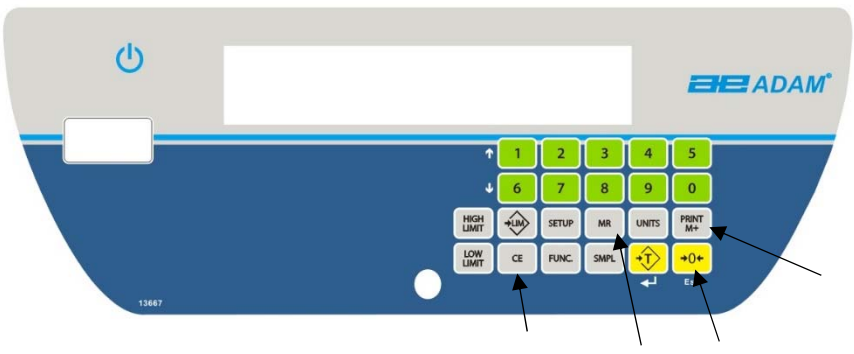
3.8 ACCUMULATED TOTALS

The scale can be set to accumulate when a weight is added to the platform automatically or manually by pressing **[MR]**. See menu structure section. The accumulation function is available only during weighing. If at any time the weighing units are changed, the accumulated data will be lost.

Manual Accumulation

When the scale is set to manual accumulation, the weight displayed will be stored in the memory when the **[Print]** key is pressed and the weight is stable.

Accumulation display:

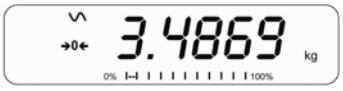


- Press **[MR]** to open the accumulation display
- Press **[Print M+]** to print
- Press **[CE]** to clear the accumulation.
- Press **[Zero]/→0←Esc** to exit.

Steps:

Add the weight and press **[Print M+]** when the display is at zero. The display will show **"ACC 1"** and then the weight in memory for 2 seconds before returning to normal. The weight can be output to a printer or PC using the RS-232 interface.

When the scale is at zero, place a second weight. When stable, press **[Print M+]** to accumulate the weight. The display will show **"ACC 2"** for 2 seconds and then show the new total.



Continue until all weights have been added. This can continue for up to 99 entries until the capacity of display is exceeded.

To view the total in memory, press the **[MR]** key when the scale is at zero. The display will show the total number of accumulation **"ACC xx"** and the total weight.

To print the total, press **[MR]** to recall and then immediately press **[Print M+]** to print the results. To erase the memory, press **[MR]** to view the total and then immediately press **[CE]** to clear the memory.

Press **[Zero]/→0←Esc** to return to weighing.

Automatic Accumulation

When the scale has been set to Automatic Accumulation the value will be stored in memory automatically.

Steps:

Place a weight on the platform. The beeper will sound when the display is stable indicating the value is accepted. Remove the weight. The display will show **"ACC 1"** and then the total in the memory before it returns to zero. Adding a 2nd weight will repeat the process.

While the weight is on the platform, press the **[MR]** key to view the values- first the accumulation number **"ACC x"** and then the total will be shown.

NOTE: The scale must return to zero or a negative number, before another sample can be added to the memory.

4.0 RS-232 INTERFACE

The CKT and CKT-M Series of scales include a bi-directional RS-232 interface. The scale when connected to a printer or computer through the RS-232 interface, outputs the weight with the selected weighing unit.

Specifications:

RS-232 output of weighing data
ASCII code
9600Baud rate(user selectable)
8 data bits
No Parity

Connector:

9 pin d-sub miniature socket
Pin 3 Output
Pin 2 Input

Pin 5 Signal Ground

The scale can be set to print text in English, French, German or Spanish.

The data will normally output in a label format if parameter Label=On.

4.1 INPUT COMMANDS FORMAT

The scale can be controlled with the following commands. The commands must be sent in upper case letters, i.e. "**T**" not "**t**". Press the Enter key of the PC after each command.

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. It also adds the value to the accumulation memory if the accumulation function is not set to automatic. In CKT series, the **[Print]** key will either print the current items being counted or the results of the accumulation memory if **[M+]** is pressed first.
R<cr><lf>	Recall and Print- Same as if first the **[MR]** key and then the **[Print]** key is pressed. Will display the current accumulated memory and print the total results.
C<cr><lf>	Same as pressing **[MR]** first and then the **[CE]** key to erase the current memory.

4.2 RS-232 SETUP

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

Press the **[SETUP]** key to access the parameters. Press **[1] or [6]** to scroll through the **'RS-232'** option and **[Tare]** ↵ to confirm.

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

The parameter and their functions are:

Print (to printer): Option for printing to a printer.
PC (continuous): For continuous printing.
Cmd (from device): For printing from a device.

Available options when selecting the **'print'** option (use the **[Tare]**↵ key to select). For each setting it is possible to scroll through the options using **[1]** or **[6]** keys and pressing the tare button to confirm.

4800: For setting the baud rate.
English: For setting the language.
AC off: Selecting the option of accumulating manually or turned off.
Manual: Selecting by output, e.g. manual.
ATP: Printer type.
Copy 1: Number of outputs.

Available options when selecting the **'PC'** option (use the **[Tare]**↵ key to select).

4800: For setting the baud rate.
Adam: For connecting to Adam DU software. Use numeric keys [1] or [6] and [Tare] ↵ to confirm either 'cbk' or 'nbl' option.

Available options when selecting the **'Cmd'** option (use the **[Tare]**↵ key to select).

4800: For setting the baud rate.

When the scale is at Zero the **[Print]** key will print weight at zero. After **[MR]** has been pressed the print key will print the accumulation memory results.

4.3 USB SETUP

The USB interface uses parameters set by the user for baud rate and output type.

Press the **[SETUP]** key to access the parameters. Press **[1] or [6]** to scroll through the options and **[Tare]** ↵ on the **'USB'** option to confirm.

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

The parameter and their functions are:

PC (continuous): For continuous printing.
Cmd (from device): For printing from a device.

Available options when selecting the **'PC'** option (use the **[Tare]**↵ key to select).

4800: For setting the baud rate.

Available options when selecting the **'Cmd'** option (use the **[Tare]**↵ key to select).

4800: For setting the baud rate.

5.0 CALIBRATION

OIML TYPE APPROVAL: For the CKT-M models, the calibration is locked either by a sealed jumper on the underside of the scale, or by a calibration count on the display. If the seal is broken or tampered with, the scale needs to be re-verified by an authorised certification body and re-sealed, before it is used legally. Contact your local metrology standards office for further assistance.

5.1 CKT CALIBRATION

You need to enter a secure menu by entering a passcode when requested.

- Press **[Tare]** ↵ once, during the initial counting of the display after the power is turned on.
- The display will show **"P"** requesting for the passcode number.
- The fixed passcode is **"1000"**
- Press the **[Tare]** ↵ key
- The display will show **"u-CAL"**
- Press the **[Tare]** ↵ key and the display will show **"noload"** to request all weight be removed from the platform.
- Press the **[Tare]** ↵ key to set the zero point
- The display will then show the calibration weight suggested in the display. If the calibration weight is different from the value shown, Press **[CE]** to clear the current value then enter the correct value as an integer value, it is not possible to have fractions of a kilogram or pound. For Example:

20kg = 

- Press **[Tare]** ↵ to accept the calibration value and the display will now show **"Load".**
- Place the calibration weight on the platform and allow the scale to stabilise as indicated by the stable indicator.
- Press **[Tare]** ↵ to Calibrate
- When calibration is done the scale will restart and return to normal weighing.
- After calibration, the scale should be checked whether the calibration is correct. If Necessary, repeat calibration.

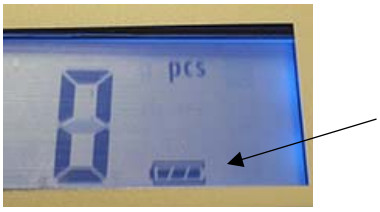
6.0 BATTERY

Battery Life

Battery life is approximately 90 hours without mains connection.

Charging

When the battery needs charging, a symbol on the display will turn on.

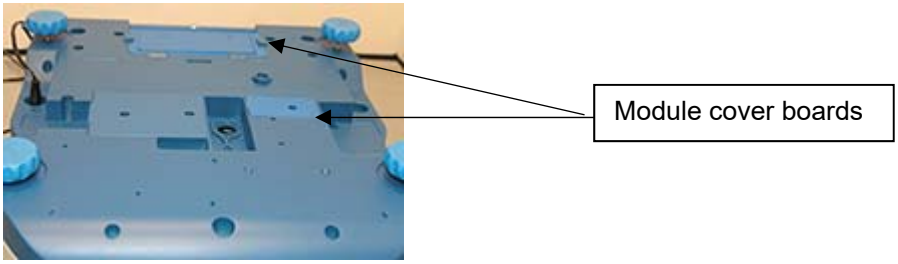


The scale will still operate for about 10 hours after which it will automatically switch off to protect the battery.

Plug into the mains power supply and charge for 12 hours for full capacity. The scale does not need to be turned on.

7.0 MODULE OPTION COVERS/ BOARDS

Module option boards are located underneath the scale with covers to protect the ports.



8.0 REAL TIME CLOCK SETUP

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

Setting up the clock:

- Press the **[SETUP]** key to bring up the settings menu. From here you can use digits **[1]** and **[6]** to scroll through the menu. Date and time are set separately.
- Once you have selected either 'date' or 'time', press the [tare] button to accept.

Setting the time:

- Press the **[Tare]** ↵ key when in the time menu to show the current time counting down after power is turned on.

"11,14,06" "16,41,35"

- Press the **[➔0🡐] or [Tare]** ↵ key to accept the values shown without change or press the **[CE]** key to change the time.
- Enter the time using the numeric keys using a 24 hour clock format, 3:41PM is "154100".
- Press the **[Tare]** key to accept the time.

Setting the date:

- Press the **[Tare]** ↵ key to show the current date format in the display.
- Press the digits **[1] or [6]** to scroll through the date formats and the **[Tare]** ↵ button to accept. Available formats are:

  "Y-m-d" year, month, day
  "m-d-Y" month, day, year
  "d-m-Y" day, month, year
- Press the **[Tare]** ↵ key to bring up the current date and the **[CE]** key to clear the current setting then enter the new values.
- 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.

Pressing the **[➔0←]** key will escape for the date and time settings with the current values unchanged. It is possible to change only the time by setting a new time, then pressing the **[➔0←]** key when the date settings are shown.

9.0 ERROR CODES

During the initial power-on testing or during operation, the scale may show an error message.

If an error message is shown please consult the table below, following the steps related to the error code on the scale display. If the error message is still shown then contact your dealer for support.

[error 18 and 20 deleted]

ERROR CODE	DESCRIPTION	POSSIBLE CAUSES
Err 1	Time input Error	Invalid time entry such as "268970" for the time format "**H-m-S**".
Err 2	Date input Error	34th day of a month is an invalid entry.
Err 3	Zero when power on and not stable.	Scale not placed on a stable surface
Err 4	Initial Zero is greater than allowed (4% of maximum capacity) when power is turned on or when the **[Zero/Enter]** key is pressed.	Weight on the pan when turning the scale on. Excessive weight on the pan when zeroing the scale. Platform is not installed. Improper calibration of the scale. Damaged load cell. Damaged Electronics.
Err 5	Press button to zero and zero when power on	Scale already zeroed with no mass on weighing pan
Err 6	Can't Tare for negative weight	Weight on weighing pan below zero
Err 7	Can't wait until stable	Scale not on stable surface Damaged load cell. Damaged Electronics.
Err 8	Percent input error	Percent function is entered with no reference mass on the pan.
Err 9	User calibrate zero but exceed factory calibration 10%	Improper calibration (should be within ±10% of the factory calibration). The old calibration data will be retained until the calibration process is complete.
Err 10	Use load calibration but exceed factory calibration 10%	Improper calibration (should be within ±10% of the factory calibration). The old calibration data will be retained until the calibration process is complete.
Err 19	Weight lower limit is larger than upper limit	High limit is set first, then the low limit is set higher than the high limit and low limit not equal to zero.

Err ADC	Can't find ADC chip	Damaged or missing ADC chip Load cell is damaged. Electronics is damaged.
---OL---	Weight over range	Weight over scale range
---Lo---	Below gross zero 20e	Weight below scale range

10.0 SERVICE INFORMATION

This manual covers the details of operation. If you have a problem with the scale that is not directly addressed by this manual then contact your supplier for assistance. The supplier will need the following information which should be kept ready:

A. Details of your company

-Name of your company:
-Contact person's name:
-Contact telephone, e-mail, fax or any other methods:

B. Details of the unit purchased

(This part of information should always be available for any future correspondence. We suggest you to fill in this form as soon as the unit is received and keep a print-out in your record for ready 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:	

C. Brief description of the problem

Include any recent history of the unit. For example:

-Has it been working since it was delivered
-Has it been in contact with water
-Damaged from a fire
-Electrical Storms in the area
- Dropped on the floor, etc.

WARRANTY INFORMATION

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.

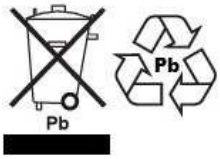
This product may include a rechargeable battery that is designed to be removed and replaced by the user. Adam Equipment warrants that it will provide a replacement battery if the battery manifests a defect in materials or workmanship during the initial period of use of the product in which the battery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

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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 40 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

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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	**Adam Equipment (S.E. ASIA) PTY Ltd** 70 Miguel Road Bibra Lake Perth WA 6163 Australia Phone: +61 (0) 8 6461 6236 Fax +61 (0) 8 9456 4462 e-mail: sales@adamequipment.com.au	**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

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