

# Cruiser Count (CCT) SERIES

Software rev: V 1.00 & 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:	

**CONTENTS**  
**P.N. 3.02.6.6.14037, Revision D3, November 2018**

1.0 INTRODUCTION .....	4
2.0 SPECIFICATIONS .....	5
2.1 COMMON SPECIFICATIONS.....	7
3.0 INSTALLATION.....	8
3.1 LOCATING THE SCALE .....	8
3.2 INSTALLATION OF CCT SCALES .....	9
4.0 KEY DESCRIPTIONS.....	10
5.0 DISPLAYS.....	11
5.1 UNIT WEIGHT DISPLAY .....	12
5.2 COUNT DISPLAY.....	12
6.0 OPERATION .....	13
6.1 ZEROING THE DISPLAY.....	13
6.2 TARING .....	14
6.3 PARTS COUNTING .....	14
6.3.1 Setting Unit Weight .....	15
A. Weighing a sample to determine the Unit Weight.....	15
B. Entering a known Unit Weight .....	15
6.3.2 Counting more parts .....	16
6.3.3 Automatic part weight updates .....	16
6.3.4 Checkweighing.....	16
6.3.5 Manually Accumulated Totals.....	17
6.3.6 Automatic Accumulated Totals .....	18
7.0 CALIBRATION.....	18
8.0 RS-232 INTERFACE .....	19
8.1 INPUT COMMANDS FORMAT .....	23
8.2 RS-232 SETUP .....	23
8.3 USB SETUP .....	24
9.0 CLOCK, SLEEP, AUTO OFF FUNCTIONS.....	25
9.1 REAL TIME CLOCK SETUP .....	25
9.2 AUTO SLEEP FUNCTION.....	26
9.3 BACKLIGHT FOR LCD .....	26
9.4 BATTERY.....	27
10.0 ERROR CODES .....	28
11.0 REPLACEMENT PARTS AND ACCESSORIES .....	29
12.0 SERVICE INFORMATION .....	29
WARRANTY INFORMATION .....	30

## 1.0 INTRODUCTION

- The Cruiser Count (**CCT**) series provides accurate, fast and versatile counting scales.
- There are 3 types of scale within the **CCT** series:
  1. **CCT**: Standard models
  2. **CCT-M**: Trade approved models
  3. **CCT-UH**: High resolution models
- Cruiser counting scales can weigh in pound, gram and kilogram weighing units. NOTE: some units are excluded from certain regions due to restrictions and laws that govern those regions.
- The scales have stainless steel weighing platforms on an ABS base assembly.
- All scales are supplied with a RS-232 bi-directional interface and real time clock (RTC).
- The scales have a sealed keypad with colour coded membrane switches and there are 3 large, easy to read liquid crystal type displays (LCD). The LCD's are supplied with a backlight.
- The scales include automatic zero tracking, audible alarm for pre-set counts, automatic tare, pre-set tare, an accumulation facility that allows the count to be stored and recalled as an accumulated total.



## 2.0 SPECIFICATIONS

<b>CCT SERIES</b>					
<b>Model #</b>	<b>CCT 4</b>	<b>CCT 8</b>	<b>CCT 16</b>	<b>CCT 32</b>	<b>CCT 48</b>
Maximum Capacity	4000 g	8000 g	16kg	32 kg	48 kg
Readability	0.1 g	0.2 g	0.0005 kg	0.001 kg	0.002 kg
Tare Range	-4000 g	-8000 g	-16 kg	-32 kg	-48 kg
Repeatability (Std Dev)	0.1 g	0.2 g	0.0005 kg	0.001 kg	0.002 kg
Linearity ±	0.2 g	0.4 g	0.001 kg	0.002 kg	0.004 kg
Units of Measure	g		kg		

### CCT-M SERIES

#### Model: CCT 4M

<b>UNITS OF MEASURE</b>	<b>MAXIMUM CAPACITY</b>	<b>TARE RANGE</b>	<b>READABILITY</b>	<b>REPEATIBILITY</b>	<b>LINEARITY</b>
Grams	4000 g	- 4000 g	1 g	1 g	0.2 g
Pounds	8lb	-8 lb	0.002 lb	0.002 lb	0.004 lb

#### Model: CCT 8M

<b>UNITS OF MEASURE</b>	<b>MAXIMUM CAPACITY</b>	<b>TARE RANGE</b>	<b>READABILITY</b>	<b>REPEATIBILITY</b>	<b>LINEARITY</b>
Grams	8000 g	-8000 g	2 g	2 g	0.4 g
Pounds	16 lb	-16 lb	0.005 lb	0.005 lb	0.001 lb

#### Model: CCT 20M

<b>UNITS OF MEASURE</b>	<b>MAXIMUM CAPACITY</b>	<b>TARE RANGE</b>	<b>READABILITY</b>	<b>REPEATIBILITY</b>	<b>LINEARITY</b>
Kilograms	20 kg	- 20 kg	0.005 kg	0.005 kg	0.002 kg
Pounds	44 lb	- 44 lb	0.01 lb	0.01 lb	0.004 lb

**Model: CCT 40M**

UNITS OF MEASURE	MAXIMUM CAPACITY	TARE RANGE	READABILITY	REPEATIBILITY	LINEARITY
Kilograms	40 kg	- 40 kg	0.01 kg	0.01 kg	0.004 kg
Pounds	88 lb	- 88 lb	0.02 lb	0.02 lb	0.01 lb

**CCT-UH SERIES****Model: CCT 8UH**

UNITS OF MEASURE	MAXIMUM CAPACITY	TARE RANGE	READABILITY	REPEATIBILITY	LINEARITY
Grams	8000 g	- 8000 g	0.05g	0.05 g	0.4 g
Pounds	16 lb	- 16 lb	0.0001 lb	0.0001 lb	0.001 lb

**Model: CCT 16UH**

UNITS OF MEASURE	MAXIMUM CAPACITY	TARE RANGE	READABILITY	REPEATIBILITY	LINEARITY
Kilograms	16 kg	-16 kg	0.0001 kg	0.0001 kg	0.002 kg
Pounds	35 lb	- 35 lb	0.0002 lb	0.0002 lb	0.004 lb

**Model: CCT 32UH**

UNITS OF MEASURE	MAXIMUM CAPACITY	TARE RANGE	READABILITY	REPEATIBILITY	LINEARITY
Kilograms	32 kg	- 32 kg	0.0002 kg	0.0002 kg	0.004 kg
Pounds	88 lb	- 88 lb	0.0005 lb	0.0005 lb	0.01 lb

**Model: CCT 48UH**



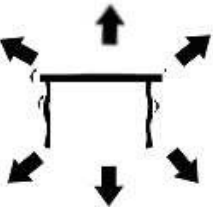
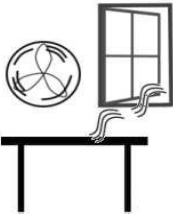
UNITS OF MEASURE	MAXIMUM CAPACITY	TARE RANGE	READABILITY	REPEATIBILITY	LINEARITY
Grams	48 kg	- 48 kg	0.5 g	0.5g	0.2 g
Pounds	100lb	-100 lb	0.001 lb	0.001 lb	0.004 lb

## 2.1 COMMON SPECIFICATIONS

Stabilisation Time	2 Seconds typical
Operating Temperature	-10°C - 40°C 14°F - 104°F
Power supply	230 VAC 50/60 Hz 120 VAC available
Battery	Internal rechargeable battery (~90 hours operation)
Calibration	Automatic External
Display	3 x 6 digits LCD digital displays
Balance Housing	ABS Plastic, Stainless Steel platform
Pan Size	210 x 300mm 8.3" x 11.8"
Overall Dimensions (wxdxh)	315 x 355 x 110mm 12.4" x 14" x 4.3"
Net Weight	4.4 kg / 9.7 lb
Applications	Counting Scales
Functions	Parts counting, checkweighing, accumulating memory, pre-set count with alarm
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)

## 3.0 INSTALLATION

### 3.1 LOCATING THE SCALE

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



### 3.2 INSTALLATION OF CCT SCALES

- The **CCT** Series come with a stainless steel platform packed separately.
- Place the platform in the locating holes on the top cover.
- **Do not** press with excessive force as this could damage the load cell inside.
- Level the scale by adjusting the four feet. The scale should be adjusted such that the bubble in the spirit level is in the centre of the level and the scale is supported by all four feet.
- Turn the power ON using the switch located on the left of the weight display.
- The scale will show the current software revision number in the “**Weight**” display window, for example V3.06.
- Next a self-test is performed. At the end of the self-test, it will display “0” in all three displays, if the zero condition has been achieved.

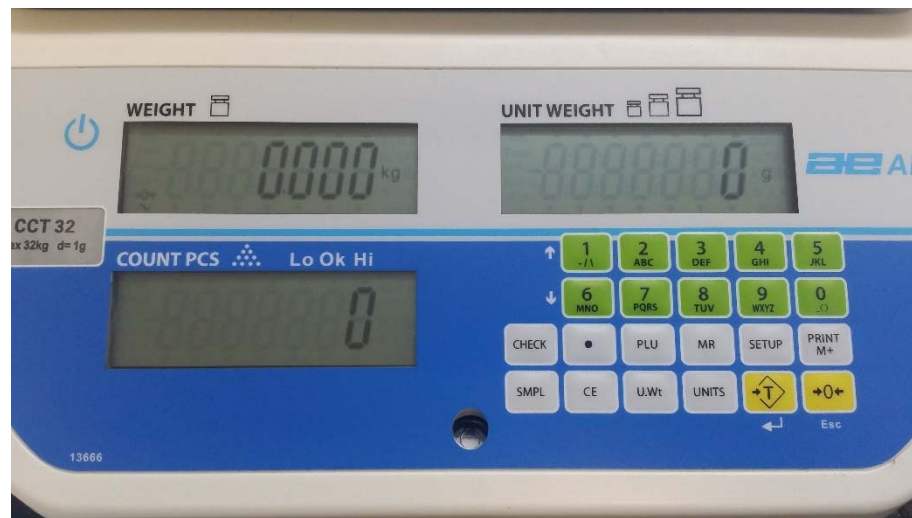


## 4.0 KEY DESCRIPTIONS



Keys	Functions
[0-9]	Numeric entry keys, used to manually enter a value for tare weights, unit weight, and sample size.
[CE]	Used to clear the unit weight or an erroneous entry.
[Print M+]	Add the current count to the accumulator. Up to 99 values or full capacity of the weight display can be added. Also prints the displayed values when Auto print is switched off.
[MR]	To recall the accumulated memory.
[SETUP]	Used for setting the time and for other setup operations
[SMPL]	Used to input the number of items in a sample.
[U.Wt]	Used to enter the weight of a sample manually.
[Tare]	Tares the scale. Stores the current weight in memory as a tare value, subtracts the tare value from the weight and shows the results. This is the net weight. Entering a value using the keypad will store that as the tare value.
[→0←]	Sets the zero point for all subsequent weighing to show zero.
[PLU]	Used to access any stored PLU weight values
[UNITS]	Used for selecting the weighing unit
[CHECK]	Used to set the Low and High limits for checkweighing
[.]	Places a decimal point on the unit weight value display

## 5.0 DISPLAYS



The scales have three digital display windows. These are “**Weight**”, “**Unit Weight**” and “**Count pcs**”.


It has 6-digit display to indicate the weight on the scale.


Arrows above symbols will indicate the following:






Charge State Indicator,  as above

Net Weight Display, “**Net**” as above

Stability indicator, “**Stable**” or symbol  as above

Zero indicator, “**Zero**” or symbol  as above

## 5.1 UNIT WEIGHT DISPLAY

- This display will show the unit weight of a sample. This value is either input by the user or computed by the scale. The unit of measurement may be set to grams or pounds depending on region.
- The arrow indicator will be seen below the  symbol as above, when there is insufficient number of samples to accurately determine the count.
- When the unit weight is not large enough to determine an accurate count, the arrow indicator will be seen below "U. Weight" or  symbol as above.
- In both cases the scale continues to operate and the indications are to alert the user for a potential problem.
- If a pre-set count has been stored the "Preset" or  symbol as above, will have an arrow above.

## 5.2 COUNT DISPLAY

- This display will show the number of items on the scale or the value of the accumulated count. See the next section on OPERATION.
- The arrow indicator will be seen above "Memory" when a value has been entered into the memory.

## 6.0 OPERATION

### SETTING THE WEIGHING UNIT: lb or kg

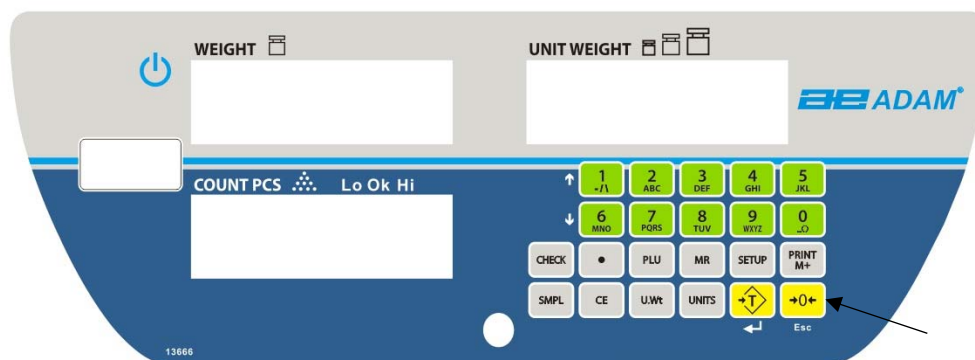
The scale will turn on displaying the last weighing unit selected, either kilograms or pounds. To change the weighing unit press the [Units] key.

To change the weighing unit press the [SETUP] key and use the [1] or [6] keys to scroll through the menu until 'units' appears on the display. Press [Tare]  $\square$  to select.

In the 'count pcs' display the current weighing [word deleted] will be displayed (kg,g or lb) with either 'on' or 'off'. Pressing [Tare]  $\square$  cycles through the weighing units available. Use the [1] and [6] keys to change between On/Off and use the [Tare]  $\square$  button to select.

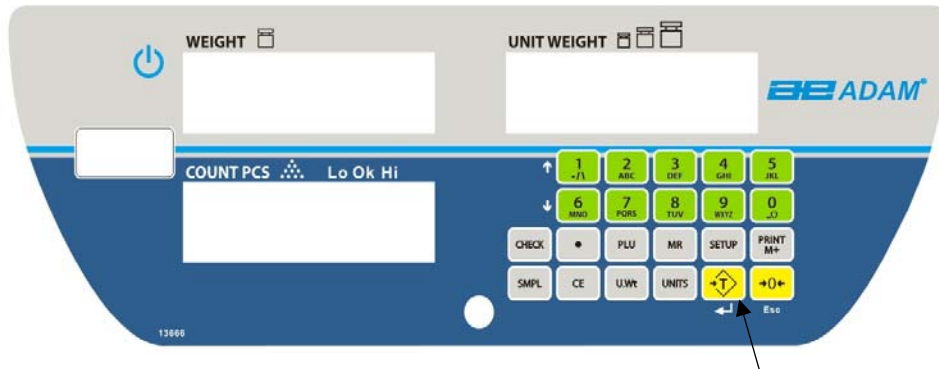
If necessary press the [CE] key to clear the unit weight before changing.

### 6.1 ZEROING THE DISPLAY



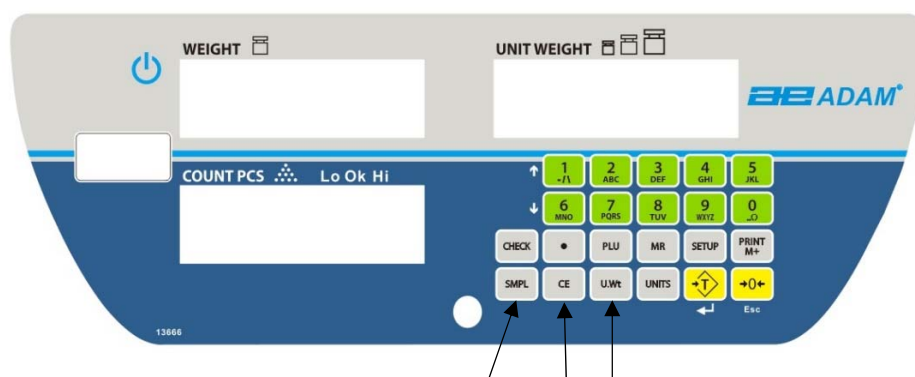
- You can press the [**→0←**] key at any time to set the zero point from which all other weighing and counting is measured. This will usually be necessary only when the platform is empty. When the zero point is obtained the “**Weight**” display will show the indicator for zero.
- The scale has an automatic re-zeroing function to account for minor drifting or accumulation of material on the platform. However you may need to press [**→0←**] to re-zero the scale if small amounts of weight are still shown when the platform is empty.

## 6.2 TARING



- Zero the scale by pressing the **[→0←]** key if necessary. The indicator “→0←” will be ON.
- Place a container on the platform and its weight will be displayed.
- Press **[Tare]** ↓ to tare the scale. The weight that was displayed is stored as the tare value which is subtracted from the display, leaving zero on the display. The indicator “Net” will be ON.
- As a product is added only the weight of the product will be shown. The scale could be tared a second time if another type of product was to be added to the first one. Again only the weight that is added after taring will be displayed.
- 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 and any products removed. The indicator above “→0←” will also be ON because the platform is back to the same condition as it was when the **[→0←]** key was pressed last.
- If all product is removed leaving only the container on the platform, the indicator “→0←” will also be on as the platform is back to the same condition as it was when the **[→0←]** key was pressed last.

## 6.3 PARTS COUNTING



### 6.3.1 Setting Unit Weight

In order to do parts counting it is necessary to know the average weight of the items to be counted. This can be done by weighing a known number of the items and letting the scale determine the average unit weight or by manually inputting a known unit weight using the keypad.

#### A. Weighing a sample to determine the Unit Weight

To determine the average weight of the items to be counted, you will need to place a known quantity of the items on the scale and key in the number of items being weighed. The scale will then divide the total weight by the number of items and display the average unit weight. Press **[CE]** anytime to clear the unit weight.

- Zero the scale by pressing the **[→0←]** key if necessary. If a container is to be used, place the container on the scale and tare by pressing **[Tare]** ↵ as discussed earlier.
- Place a known quantity of items on the scale. After the weight display is stable, enter the quantity of items using the numeric keys and then press the **[Smpl]** key.
- The number of units will be displayed on the **"Count"** display and the computed average weight will be shown on the **"Unit Weight"** display.
- As more items are added to the scale, the weight and the quantity will increase.
- If a quantity which is smaller than the sample is placed on the scale, then the scale will automatically enhance the Unit Weight by re-calculating it. To lock the Unit Weight and avoid resampling, press **[U. Wt./Units]**.
- If the scale is not stable, the calculation will not be completed. If the weight is below zero, the **"Count"** display will show negative count.

#### B. Entering a known Unit Weight

- If the unit weight is already known then it is possible to enter that value using the keypad.
- Enter the value of the unit weight in grams, using the numeric keys followed by pressing the **[U. Wt./Units]** key. The **"Unit Weight"** display will show the value as it was entered.
- The sample is then added to the scale and the weight will be displayed as well as the quantity, based on the unit weight.

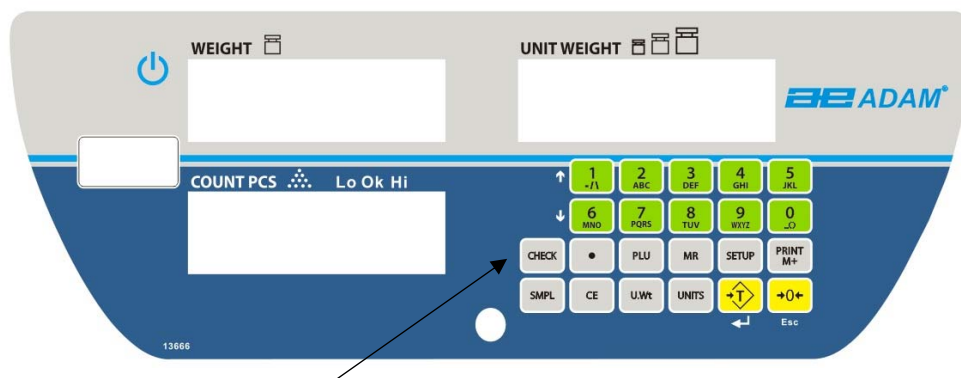
### 6.3.2 Counting more parts

- After the unit weight has been determined or entered, it is possible to use the scale for parts counting. The scale can be tared to account for the container weight mentioned in section 6.2.
- After the scale is tared the items to be counted are added and the "**Count**" display will show the number of items, computed using the total weight and the unit weight.
- It is possible to increase the accuracy of the unit weight at any time during the counting process by entering the count displayed and then pressing the **[Smpl]** key. You must be certain that the quantity displayed matches the quantity on the scale before pressing the key. The unit weight can be adjusted based upon a larger sample quantity. This will give greater accuracy when counting larger sample sizes.

### 6.3.3 Automatic part weight updates

- At the time of computing the unit weight (see section 6.3.1A), the scale will automatically update the unit weight when a sample less than the sample already on the platform is added. A beep will be heard when the value is updated. It is wise to check the quantity is correct when the unit weight has been updated automatically.
- This feature is turned off as soon as the number of items added exceeds the count used as a sample.

### 6.3.4 Checkweighing

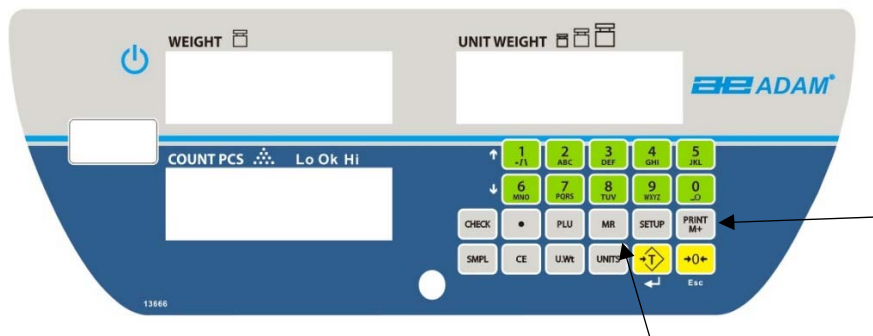


- Checkweighing is a procedure to cause an alarm to sound when the number of items counted on the scale meets or exceeds a number stored in the memory by using the **[check]** key.
- Pressing the **[Check]** key will bring up "Lo" in the weight display, enter a numeric value using the numbers on the keypad and pressing the **[Tare]** ↵ enter button to confirm.



- Once the “Lo” value is set, you will be prompted to set the “Hi” value, confirm this by following the same procedure as for the “Lo” value.
- Placing an object on the scale will now bring up an arrow indicator pointing to “Lo, Mid or Hi” value on the display.
- To clear the value from the memory and thereby turn off the checkweighing feature, enter the value "0" and press **[Tare]**↵.

### 6.3.5 Manually Accumulated Totals



- The values (weight and count) shown on the display can be added to the values in the memory by pressing the **[M+]** key. The "Weight" display will show the total weight, the "Count" display will show the total accumulated count and the "Unit Weight" display shows the number of times, the items have been added to the memory for accumulation. The values will be displayed for 2 seconds before returning to normal.
- The scale must return to zero or a negative number, before another sample can be added to the memory.
- More products can then be added and the **[M+]** key to be pressed again. This can continue for up to 99 entries or until the capacity of the “Weight” display is exceeded.
- To observe the total stored value, press the **[MR]** key. The total will be displayed for 2 seconds.
- To clear the memory- first press **[MR]** to recall the totals from memory and then press the **[CE]** key to clear all values from the memory.

### 6.3.6 Automatic Accumulated Totals

- The scale can be set to automatically accumulate totals when a weight is placed on the scale. This eliminates the need to press the **[M+]** key to store values into the memory. However the **[M+]** key is still active and can be pressed to store the values immediately. In this case the values will not be stored when the scale returns to zero.
- See the Section 9.0 on RS-232 Interface for details on how to enable Automatic Accumulation.

## 7.0 CALIBRATION

The CCT scales are calibrated using metric or pound weights depending on the region and unit in use before 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 “**Count**” display will show “**P**” requesting for the passcode number.
- The fixed passcode is “**1000**”
- Press the **[Tare]** ↵ key
- The “**Weight**” display will show “**u-CAL**”
- Press the **[Tare]** ↵ key and the “**weight**” display will show “**no load**” 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 “**Count**” 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 “**Weight**” display will now show “**Load**”.
- Place the calibration weight on the platform and allow the scale to stabilize 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.

### Suggested Calibration weights for CCT Series:

CCT 4	CCT 8	CCT 16	CCT 32	CCT 48
2 kg / 5 lb	4 kg / 10 lb	10 kg / 30 lb	20 kg / 50 lb	30 kg / 100 lb

- After calibration, the scale should be checked whether the calibration and linearity is correct. If necessary, repeat calibration.

**NOTE:** In certain regions, **CCT** scales will have the lb or kg indicator on, to show the unit of the weight requested. If the scale was in pounds before starting the calibration, the weights requested will be in pound values or if the scale was weighing in kilograms then metric weights will be requested.

## 8.0 RS-232 INTERFACE

The CCT Series are supplied with a USB and RS-232 bi-directional interface. The scale when connected to a printer or computer through the RS-232 interface, outputs the weight, unit weight and count.

### 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

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. This format is described below.

### Data Format-Normal Output:

Date	12/09/2006
Time	14:56:27
Scale ID	xxx
User ID	xxx
Net Wt.	0.100kg
Tare Wt.	0.000kg
Gross Wt	0.100kg
Total Wt.	0.100kg
Unit Wt.	3.04670g
Pieces	10 pcs
<lf><cr> Includes 2 line feeds with carriage return	
<lf><cr>	

### Data Format with Accumulation On:

Date	7/06/2018
Time	14:56:27
Scale ID	xxx
User ID	xxx
Net Wt.	0.100kg
Tare Wt.	0.000kg
Gross Wt	0.100kg
Total Wt.	0.100kg
Unit Wt.	3.04670g
Pieces	10 pcs
<lf><cr> Includes 2 line feeds with carriage return	
<lf><cr>	
Date	7/06/2018
Time	14:56:27
Scale ID	xxx
User ID	xxx
Net Wt.	0.100kg
Tare Wt.	0.000kg
Gross Wt	0.100kg
Total Wt.	0.100kg
Unit Wt.	3.04670g
Pieces	10 pcs
<lf><cr> Includes 2 line feeds with carriage return	
<lf><cr>	
Date	12/09/2006
Time	14:56:27
No.	2
Total Pieces	66pcs

Pressing the **[MR]** key will not send the totals to the RS-232 when the continuous print is turned on. The continuous print will only be for weight and display data that is current.

**Data Format with Accumulation Off, with Hi/Lo set:**

Date	7/06/2018
Time	14:56:27
Scale ID	xxx
User ID	xxx
Net Wt.	0.97kg
Tare Wt.	0.000kg
Gross Wt	0.97kg
Unit Wt.	3.04670g
Pieces	32 pcs
High Limit	50PCS
Low Limit	20PCS
Accept	
IN	
Date	7/06/2018
Time	14:56:27
Scale ID	xxx
User ID	xxx
Net Wt.	0.100kg
Tare Wt.	0.000kg
Gross Wt	0.100kg
Unit Wt.	3.04670g
Pieces	10 pcs
High limit	50PCS
Low limit	20PCS
BELOW THE LIMIT	
LO	
Date	12/09/2006
Time	14:56:27
Scale ID	xxx
User ID	xxx
Net Wt.	0.100kg
Tare Wt.	0.000kg
Gross Wt	0.100kg
Unit Wt.	3.04670g
Pieces	175 pcs
High limit	50PCS
Low limit	20PCS
ABOVE THE LIMIT	
HI	

**Data Format Print 1 Copy, Accumulation Off:**

Date	08/6/2018	
Time	12:17:24	
Scale.ID	xxxx	
User ID	xxxx	
Net Wt.	0.054kg	
Tare Wt.	0.000kg	
Gross Wt.	0.054kg	
Unit Wt.	3.04670g	
Pieces	18PCS	
PC –		
ST, GS,	0.052kg,	17
ST,GS,-	0.014kg,-	4
ST,GS,-	0.013kg,-	4
ST,GS,-	0.013kg,-	4
ST,GS,-	0.013kg,-	4
ST,GS,-	0.013kg,-	4
ST,GS,-	0.013kg,-	4
ST,GS,-	0.014kg,-	4
ST,GS,	0.013kg	
ST,GS,	0.013kg	ADAM
ST,GS,	0.014kg	
70		
ST,GS,-	0.014kg,-	4, 3.046
70		
ST,GS,-	0.014kg,-	4, 3.046
70		
ST,GS,-	0.014kg,-	4, 3.046
70		
ST,GS,-	0.014kg,-	4, 3.046
70		UNIT

In other languages the format is the same but the text will be in the language selected.

Description	ENGLISH	FRENCH	GERMAN	SPANISH
Print gross weight	Gross Wt	Pds Brut	Brut-Gew	Pso Brut
Net weight	Net Wt.	Pds Net	Net-Gew	Pso Net
Tare weight	Tare Wt.	Pds Tare	Tare-Gew	Pso Tare
Weight per unit counted	Unit Wt.	Pds unit	Gew/Einh	Pso/Unid
Number of items counted	Pcs	Pcs	Stck.	Piezas
Number of weighings added to subtotals	No.	Nb.	Anzhl	Num.
Total weight and count printed	Total	Total	Gesamt	Total
Print date	Date	Date	Datum	Fecha
Print time	Time	Heure	Zeit	Hora

## 8.1 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.

<b>T&lt;cr&gt;&lt;lf&gt;</b>	Tares the scale to display the net weight. This is the same as pressing <b>[Tare]</b> ↵ key.
<b>Z&lt;cr&gt;&lt;lf&gt;</b>	Sets the zero point for all subsequent weighing. The display shows zero.
<b>P&lt;cr&gt;&lt;lf&gt;</b>	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 CCT series, the <b>[Print]</b> key will either print the current items being counted or the results of the accumulation memory if <b>[M+]</b> is pressed first.
<b>R&lt;cr&gt;&lt;lf&gt;</b>	Recall and Print- Same as if first the <b>[MR]</b> key and then the <b>[Print]</b> key is pressed. Will display the current accumulated memory and print the total results.
<b>C&lt;cr&gt;&lt;lf&gt;</b>	Same as pressing <b>[MR]</b> first and then the <b>[CE]</b> key to erase the current memory.

## 8.2 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.

**Count:** For selecting the output type.

**1.0:** For setting the count rate per second.

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.

### 8.3 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.

**Count:** For selecting the output type.

**1.0:** For setting the count rate per second.

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

**4800:** For setting the baud rate.



## 9.0 CLOCK, SLEEP, AUTO OFF FUNCTIONS

### 9.1 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, 34<sup>th</sup> 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.

## 9.2 AUTO SLEEP FUNCTION

This function may be enabled or disabled by the user. If enabled, 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:

- Press the **[SETUP]** key to bring up the settings menu. Use keys **[1]** or **[6]** to scroll through the menu until 'power' appears in the display. Press **[Tare]** ↵ to confirm.
- The 'count pcs' display will show the current setting. Use the keys **[1]** or **[6]** to scroll through the options below:

“OFF” Auto sleep mode disabled

“1” Auto sleep after 1 minute

“2” Auto sleep after 2 minutes

“5” Auto sleep after 5 minutes

“10” Auto sleep after 10 minutes

“15” Auto sleep after 15 minutes

- Press **[Tare]** ↵ to set the value. The scale returns to zero.

## 9.3 BACKLIGHT FOR LCD

- The backlight of the LCD can be set to be- 1. ON at all the time, 2. ON only when a weight is placed on the scale or 3. Turned off.
- To set the backlight press the **[SETUP]** key to bring up the setup menu.
- Use the **[1]** or **[6]** digit keys to scroll through the setup menu until 'BK' appears on the display. Press **[Tare]** ↵ to select.
- 'Auto' will appear in the 'count pcs' display. Use keys **[1]** and **[6]** to scroll through the options below:

“on”	Sets the backlight to be on at all times.
“Auto”	Sets the backlight to operate automatically when a weight is placed on the scale or a key is pressed.
“OFF”	Sets the backlight to be off.

- Press the **[Tare]** ↵ key to store the value or press the **[→0←]** key to escape from this setting and return to weighing.

## 9.4 BATTERY

- The scales can be operated from the battery, if desired. The battery life is approximately 90 hours.
- The charge state indicator displays three stages.
- To charge the battery, simply plug the scale into the mains and switch the mains power ON. The scale does not need to be turned on.
- The battery should be charged for at least 12 hours for full capacity.
- 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 supplier.

## 10.0 ERROR CODES

During the initial power-on testing or during operation, the scale may show an error message. The meaning of the error messages is described below.

If an error message is shown, repeat the step that caused the message, turning the balance on, carry out the calibration or other functions. If the error message is still shown contact your dealer for further support.

ERROR CODE	DESCRIPTION	POSSIBLE CAUSES
Err 1	Time input error.	Tried to set an illegal time, i.e. 26hours
Err 2	Date input error	Tried to set an illegal date, i.e. 36 <sup>th</sup> day
Tl.zl	Stability error	Zero at power on not stable
Err 4	Initial Zero is greater than allowed (typically 4% of the maximum capacity) when power is turned on or when the <b>[Zero]</b> key is pressed,	Weight is on the pan when turning the scale on. Excessive weight on the pan when zeroing the scale. Improper calibration of the scale. Damaged load cell. Damaged Electronics.
Err 5	Zeroing error	Repower the scale to set zero
Err 6	A/D count is not correct when turning the scale on.	Platform is not installed. Damaged Load cell. Damaged Electronics.
Err 7	Stability error	Can't wait until stable
Err 9	Calibration error	The user calibration is outside allowed tolerances for zero
Err 10	Calibration error	The user calibration is outside allowed tolerances for calibration
Err 18	PLU error	Current weight unit is inconsistent with PLU unit, can't read PLU
Err 19	Incorrect weight limits set	Weight lower limit is bigger than upper limit
Err 20	PLU 140	PLU storage/ reading is more than 140
Err ADC	ADC chip error	System can't find ADC chip
--OL--	Overload error	Weight over range
--LO--	Underweight error	-20 division from zero it is not allowed

## 11.0 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:

- Mains power cord
- Replacement Battery
- Stainless Steel Pan
- In-use Cover
- Printer, etc.

## 12.0 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. In order to provide further 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 printout in your record for ready reference.)

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

**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 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.**

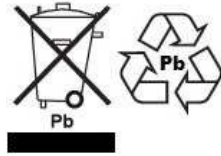
**The warranty will cease to operate if the equipment is not returned in the original packaging and with correct documentation for a claim to be processed. All claims are at the sole discretion of Adam Equipment.**

**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 website.**

## 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 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](http://www.adamequipment.com)

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