ADAM

Adam Equipment

GK / GBK / GFK SCALE

(P.N. 3056610542, Revision C2, July 2013)

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 manual that uses less paper and ink to describe the main functions of your new Adam indicator/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.

CONTENT

1.0 SETTING UP AND TURNING ON THE SCALES 3
2.0 OPERATION 3
2.1 ZEROING 3
2.2 TARING 3
2.3 PARTS COUNTING 4
2.4 CHECK-WEIGHING 5
2.5 PERCENT WEIGHING 6
2.6 ANIMAL (Dynamic) WEIGHING 7
2.7 ACCUMULATED TOTAL 8
3.0 RS-232 SPECIFICATION 9
4.0 CALIBRATION 10
4.1 CALIBRATION COUNTER FOR APPROVED SCALES 10
5.0 SPECIFICATIONS 11
6.0 ERROR MESSAGES 16
7.0 MENU STRUCTURE 17
8.0 WARRANTY INFORMATION 18

1.0 SETTING UP AND TURNING ON THE SCALES

GK indicator: It must be connected to a load cell platform and calibrated as necessary to match the platform and user requirements.

GBK/GFK scales: There is a pillar which must be attached to the base frame first using the 4 bolts supplied. The pillar is secured to the bracket using 2 sets of screws. Then place the platform in the base. Level the scale by adjusting the four feet. Attach the indicator module to the pillar by sliding it over the bracket with the flanges engaged in the groves on the base. Attach the cable from the base to the connector on the rear of the indicator. Attach the power to the indicator.

After completion of setting up, press the **[On/Off]** key on the rear of the indicator. The software revision number will be displayed followed by a self-test showing all digits before the zero is displayed along with the unit of weight that was selected last.

NOTE: The GK and GBK/GFK can be operated from the rechargeable battery. With a single load cell and backlight disabled the life is approximately 70 hours before needing to be recharged. The battery should be charged for 12 hours for full capacity.

2.0 OPERATION

2.1 ZEROING

You can press the **[Zero]** key at any time to set the zero point from which all other weighing and counting is measured. The scales have an automatic re-zeroing function to account for minor drifting or accumulation of material on a connected platform. However you may need to press **[Zero]** to re-zero the indicator if small amount of weight is still shown when the platform is empty.

2.2 TARING

To determine a weight of sample which is using a container, you need to tare the empty container. GK/GBK/GFK scales supply two methods of tare: manual tare and preset tare.

Manual Tare

Zero the indicator by pressing **[Zero]**. The zero indicator will be on. Place a container on the pan.

Press **[Tare]** when the reading is stable. The weight that was displayed is stored as the tare value, leaving zero on the display. The stable and Net indicator will be on.

As a sample is added only the weight of the product will be shown. The indicator could be tared a second time if another type of product was added to the first one.

Press **[Tare]** or **[Zero]** to remove the tare value and display zero. The **Net** indicator will disappear.

Preset Tare

When the indicator or scale is at zero with no weight on the platform it is possible to enter a preset tare. First zeroing the scale, enter a value using the numeric keys. Press **[Tare]** to tare the indicator. The value that was entered is stored as the tare value and it is subtracted from the display, leaving a negative number on the display.

To change the weighing unit press the **[Unit]** key. The only alternative weighing unit is pounds. OIML Approved models, GK-M, GBK-M, GFK-M do not allow pounds units

NOTE: This function is not available in GK-M, GBK-M, GFK-M models.

2.3 PARTS COUNTING

The scale can be used to count parts based on the average weight of a sample weighed. If a container is to be used, place this container on the platform before entering parts counting and press **[Tare]**. Press **[Cnt]** to enter the Parts Counting mode.

The display will show the last sample size used. For example, **"10 Pcs"**. To change the sample size, you can press **[CE]** to clear the last values and then enter the value 20 using the numeric keypad.

Place the right number of parts on the platform. Then press **[Cnt]** to determine an average piece weight. After the sample has been weighed the scale will count any other parts added by applying the average piece weight to the weight of the parts to be counted.

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.

To count a different sample quantity, press the **[Count]** key. And operate as above. To return to weighing, press **[Unit]** when **"XX pcs"** is displayed.

NOTE: If the parts are too light to measure accurately, the count may become faulty. It is suggested that the samples to be weighed should each weigh more than the resolution of the indicator**.**

2.4 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.

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).

The limits can be locked by the manager (see the menu structure section) .A Limit Password must be used to change the limits or recall other limits from memory.

Setting up the limits

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

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.

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. During parts counting and percent weighing, the limits are set in the same way as above. The limits are displayed in pcs or %.

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 check-weighing to operate.

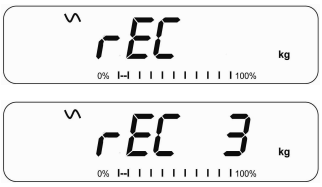
Limits storing and recalling

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 and bar graph. During Check weighing the current limits can be stored or 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 between **"StOrE"** and **"rECALL"**.

If you want to store the limits, when **"StOrE"** is displayed press the **[Tare]** key. The display shows **"St ".** Enter a number corresponding to the desired memory location (0 to 9). **"St X"** will be displayed for 2 seconds indicating the location X where the current limits, weighing units and settings for the beeper and bar graph are stored. The indicator will continue to work with the current settings as active.

If you wish to recall any of the pre-stored limits, press **[Tare]** when **"rECALL"** is displayed. The display shows **"rEC"**. Enter the number corresponding to the desired memory location (0 to 9) to be recalled. **"rEC X"** will be displayed for 2 seconds indicating the values stored in the location "X" is being recalled. The indicator will change to the recalled limits, weighing units and settings for the beeper and bar graph.



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.

2.5 PERCENT WEIGHING

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

Steps:

If using a reference weight (or object) as your 100% reference, add the weight to the platform. Press **[Func]**. The first option is **"FUnC 1"**, press the **[Func]** key 3 more times to display **"FUnC 4"**

Press the **[Tare]** key. **"F4 PCt"** will be displayed. Press **[Tare]** again to enter percent weighing. The scale will set the sample mass on the platform as 100% reference weight.

NOTE: If there is no reference weight on the pan and percent weighing function is entered, pressing **[Tare]** again will return the indicator to normal weighing.

Remove the sample weight. Then any other weight placed on the platform will be displayed as a percentage of the original sample.

Users can also input the reference weight using the keypad. Make sure the platform is empty and when **"F4 PCT"** is displayed, enter the weight to be used for the 100% reference, then press **[Tare]** to accept the reference weight. The display will show "0.00 %".

If the indicator shows **"X X . X X %"**, which is the last weight used as a reference, press **[CE]** to clear and use the numeric keypad to enter a new value. Press **[Tare]** to accept the new reference weight.

Press **[Unit]** to return to normal weighing.

NOTE: The weight entered must be greater than 50 scale divisions.

The display may jump by large numbers unexpectedly if small weights are used to set as 100% reference. The indicator checks if the weight is too small and will show **Error 7**.

2.6 ANIMAL (DYNAMIC) WEIGHING

Steps:

Press **[Func]**. The first option is **"FUnC 1",** press the **[Func]** key 3 more times to display **"Func 4"**.

Press the **[Tare]** key. **"F4 PCt"** will be displayed. Press the **[Func]** key to advance to the second function, **"F4 AnL"**, Animal weighing. And Press **[Tare]** to enter.

To use the Animal Weighing function it is necessary to set the amount of filtering. More active animals will require a higher level of filtering to give a stable result. The display will show **"Filt x"** where x is a value from 1 to 5. To increment the value shown press the **[Func]** key then press the **[Tare]** key to accept it.

The display will flash **"Ani "** 2 times then show the current weight, 0.00. The scale is now ready to weigh. Place containers or blankets onto the platform and press the **[Tare]** key to zero the display. Place the animal to be weighed on the platform.

When a stable reading is found, the display will show and lock this value, The display will show the **"Hold"** symbol .Remove the animal, the display will hold the weight value.

Press the **[Unit]** key to unlock the display. The display will flash **"Ani"** twice, and be ready for the next animal.

Press **[zero]** key to return to normal weighing.

2.7 ACCUMULATED TOTAL

The indicator can be set to accumulate when a weight is added to the platform automatically or manually by pressing **[Print]**. 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.

Steps :

Remove the weight and press **[Print]** 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 indicator is at zero, place a second weight on the platform. When stable, press **[Print]** 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 **[Print]** key when the indicator is at zero. The display will show the total number of accumulation **"ACC xx"** and the total weight before returning to zero.

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

Automatic Accumulation

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

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 **[Print]** key to view the values- first the accumulation number **"ACC x"** and then the total will be shown.

3.0 RS-232 SPECIFICATION

The GK indicator and GBK/GFK scale are both supplied with bi-directional RS-232 interface as standard. The indicator when connected to a printer or computer outputs the weight with the selected weighing unit through the RS-232 interface.

Default Specifications:

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

Connector:

9 pin d-sub miniature socket
Pin 3 Output
Pin 2 Input
Pin 5 Signal Ground

4.0 CALIBRATION

The scale can be calibrated using kilogram weights or using pounds weights,(for OIML models, pound is disabled) depending on the weighing unit selected at the time of calibration.

Steps:

To start the calibration, turn the scale off and switch on again and then press **[Tare]** during the self-test. Enter code number 0000 and press **[Tare]**. This will take you directly to the calibration section or you can get into the calibration section through the Indicator Settings ("FUnC 3"- see menu structure).

The display will show **"UnLoAd"**

Remove all weight from the platform and then press the **[Tare]** key when the display is stable. After the Zero point is set, the display will show **"Ld xx"**. Place the suggested calibration mass on the platform. It is best to use a weight close to the full capacity of the indicator.

If the mass is different from the displayed value, enter the value of the mass in whole numbers. The kg or the lb symbol will be on to show the active unit. Press the **[Tare]** key when the stable indicator is on.

When complete, it will display **"PASS"** and then either display **"S8 CAL"** (if entered the calibration section through the Scale Settings) or return to normal weighing (if entered directly). Remove the calibration mass.

If an error message **"FAIL H"** or **"FAIL L"** is shown, re-check the calibration and repeat. If the error cannot be corrected contact your supplier.

4.1 CALIBRATION COUNTER FOR APPROVED SCALES

The approved (GK-M, GBK-M, GK-M Models) scales have the ability to control access to the calibration or metrology parameters using a passcode to limit access. The requirements for doing this stipulate the code should be apparent and recorded in a suitable location on the scale.

At power on, the display will show the current software revision number followed by the message of the Calibration Count **"CALCnt"** then a number i.e. "123". The number is from the counter memory. Then the Parameter Counter message of **"PArCnt"** and probably a different number. The counters cannot be reset to 0, they will increment until the display can no longer hold the values. (1 to 999999). The scale will then continue to do the display test and go to normal weighing.

If during the time the counting displays are shown, the user presses the **[Tare]** key, the user will be given a message to enter the passcode necessary to calibrate the scale, "P - - - - " Enter the code "P0000" to Enter calibration or "P1000" to enter the parameters, followed by pressing the **[Tare]** key.
The Calibration access will allow user calibration and the parameter code will allow access to the following parameters.

5.0 SPECIFICATIONS

GK Indicator

INPUT SECTION	
Load Cells	Up to 4 , 350 ohm load cells Minimum 87 ohms, maximum 1120 ohms
Connection	6 wires 2 excitation, 2 sense, 2 signal
Excitation	5Vdc
Sensitivity	0.15uv/d (GK-M, 1.5uv/e)
Linearity	0.01% FS
Zero Range	0- 10mv
Signal range	0-40mv
ADC Sensitivity	Approximately 0.02 µv/ADC count
DIGITAL SECTION	
Maximum Range	Typically 1kg – 30000kg
Divisions	Up to 30,000, (GK –M, 3000 or less)
Weigh units	g, Kg , Lb, ounces, pounds:ounces (GK-M, kg only)
Stabilisation Time	2 Seconds typical
Operating Temperature	-10°C - 40°C 14°F - 104°F
Power supply	230 VAC 50/60 Hz 12V 800ma adaptor for USA versions
Battery	Internal rechargeable battery
Calibration	Automatic External
Display	6 digits LCD digital displays with capacity tracker and symbols for units
Indicator Housing	ABS Plastic
Overall Dimensions (wxdxh)	260 x 170 x 115mm 10.2” x 6.7” x 4.5”
Net Weight	1.8 kg / 4 lb
Applications	Weighing and check weighing
Functions	Weighing, Check Weighing, Parts counting, check-counting, , Animal Weighing, Accumulating memory,
Interface	RS-232 bi-directional interface English, German, French, Spanish selectable text

Note: For approved indicators the input specifications is limited to 1.5 µv per division and the number of divisions is limited to 3000d. Kilograms only.

GFK Models

Model #	GFK 75 / GFK 165a	GFK 150 / GFK 330a	GFK 300 / GFK 660a	GFK 600 / GFK 1320a	GFK 75H / GFK165aH	GFK 150H / GFK330aH
Maximum Capacity	75kg / 165lb	150kg / 330lb	300kg / 660lb	600kg / 1320lb	75kg / 165lb	150kg / 330lb
Readability	5g / 0.01lb	10g / 0.02lb	20g / 0.05lb	50g / 0.1lb	1g / 0.002lb	2g / 0.005lb
Repeatability (Std Dev)	5g / 0.01lb	10g / 0.02lb	20g / 0.05lb	50g / 0.1lb	2g / 0.004lb	4g / 0.01lb
Linearity ±	10g / 0.02lb	20g / 0.04lb	40g / 0.1lb	100g / 0.2lb	3g / 0.006lb	6g / 0.015lb
Units of Measure	Kilograms and pounds, grams for GFK75/165a only, XXXa also to have pounds, Ounces, & Pound/Ounces					
Stabilization Time	2-3 Secs					
Operating Temperature	-10°C to +40°C / +14°F to +104°F					
Power Supply	230VAC 50/60Hz. in Europe, Asia and South Africa. 12vDC 800mA UL/CSA adapter for USA					
Calibration	External					
Calibration Mass	User Selectable					
Display	Backlit Green display 20mm with capacity tracker					
Balance Housing	Cast aluminum base, Pantone cool grey painted base, stainless steel grade 304 Top pan, ABS Cool grey indicator housing					
Pan Size	400mm x 500mm x 65mm/ 15.7" x 19.7" x 2.6"	400mm x 500mm x 65mm/ 15.7" x 19.7" x 2.6"	400mm x 500mm x 65mm/ 15.7" x 19.7" x 2.6"	600mm x 800mm x 65mm/ 23.6" x 31.5" x 2.6"	400mm x 500mm x 65mm/ 15.7" x 19.7" x 2.6"	400mm x 500mm x 65mm/ 15.7" x 19.7" x 2.6"
Overal Dimensions (w x d x h)	400mm x 620mm x 860mm / 15.7" x 24.4" x 33.9"	400mm x 620mm x 860mm / 15.7" x 24.4" x 33.9"	400mm x 620mm x 860mm / 15.7" x 24.4" x 33.9"	600 mm x 940 mm x 900 mm 23.6" x 37" x 35.4"	400mm x 620mm x 860mm / 15.7" x 24.4" x 33.9"	400mm x 620mm x 860mm / 15.7" x 24.4" x 33.9"
Net Weight	12.5kg / 27.6 Lb	12.5kg / 27.6 Lb	12.5kg / 27.6 Lb	25.5 kg / 56.2 Lb	12.5kg / 27.6 Lb	12.5kg / 27.6 Lb
Features	Weighing/Counting/Checkweighing with LED lights/Percentage/Hold function/RS232					

GBK Models

Model #	GBK 8 / GBK 16a	GBK 16/ GBK 35a	GBK 32 / GBK 70a	GBK 60 / GBK 130a	GBK 120 / GBK 260a
Maximum Capacity	8kg/16lb	16kg/35lb	32kg/70lb	60kg/130lb	120kg/260lb
Readability	0.1g/0.0002lb	0.5g/0.001lb	1g/0.002lb	2g/0.005lb	5g/0.01lb
Repeatability (Std Dev)	0.1g/0.0002lb	0.5g/0.001lb	1g/0.002lb	2g/0.005lb	5g/0.01lb
Linearity ±	0.2g/0.0004lb	1g/0.002lb	2g/0.004lb	4g/0.01lb	10g/0.02lb
Units of Measure	Kilograms and pounds, grams for all except GFK120/260a only, XXXa also to have pounds, Ounces, & Pound/Ounces				
Stabilization Time	2-3 Secs				
Operating Temperature	-10°C to +40°C / +14°F to +104°F				
Power Supply	230VAC 50/60Hz. in Europe, Asia and South Africa. 12vDC 800mA UL/CSA adapter for USA				
Calibration	External				
Calibration Mass	User Selectable				
Display	Backlit Green display 20mm with capacity tracker				
Balance Housing	Cast aluminum base, Pantone cool grey painted base, stainless steel grade 304 Top pan, ABS Cool grey indicator housing				
Pan Size	300mm x 400mm x 50mm / 11.8” x 15.7” x 2”				
Overal Dimensions (w x d x h)	300mmx 520mm x 660mm / 11.8” x 20.5” x 26”				
Net Weight	7.6kg / 16.8 Lb				
Features	Weighing/Counting/Checkweighing with LED lights/Percentage/Hold function/RS232				

GFK-M Models

Model #	GFK 60M	GFK 150M	GFK 300M
Maximum Capacity	60kg	150kg	300kg
Readability	0.02kg	0.05kg	0.1kg
Units of Measure	Kilograms only		
Stabilization Time	2-3 Secs		
Operating Temperature	-10°C to +40°C / +14°F to +104°F		
Power Supply	230VAC 50/60Hz.		
Calibration	External		
Calibration Mass	User Selectable		
Display	Backlit Green display 25mm with capacity tracker		
Balance Housing	Cast Aluminum base, Pantone cool grey painted base, stainless steel grade 304 Top pan, ABS Cool grey indicator housing		
Pan Size	400mm x 500mm 15.7” x 19.7”		
Overal Dimensions (w x d x h)	400 mm x 620 mm x 860 mm 15.7” x 24.4” x 33.9”		
Net Weight	12.5kg / 27.6 Lb		
Features	Weighing/Counting/Checkweighing with LED lights/Percentage/Hold function/RS232		

GBK-M Models

Model #	GBK 6M	GBK 15M	GBK 30M	GBK 60M	GBK 150M
Maximum Capacity	6kg	15kg	30kg	60kg	150kg
Readability	0.002kg	0.005kg	0.01kg	0.02kg	0.05kg
Units of Measure	Kilograms only				
Stabilization Time	2-3 Secs				
Operating Temperature	-10°C to +40°C / +14°F to +104°F				
Power Supply	230VAC 50/60Hz.				
Calibration	External				
Calibration Mass	User Selectable				
Display	Backlit Green display 25mm with capacity tracker				
Balance Housing	Cast Aluminum base, Pantone cool grey painted base, stainless steel grade 304 Top pan, ABS Cool grey indicator housing				
Pan Size	300mm x 400mm x 50mm / 11.8” x 15.5” x 2”				
Overal Dimensions (w x d x h)	300mmx 520mm x 660mm / 11.8” x 20.5” x 26”				
Net Weight	7.6kg / 16.8 Lb				
Features	Weighing/Counting/Checkweighing with LED lights/Percentage/Hold function/RS232				

6.0 ERROR MESSAGES

During the initial power-on testing or during operation, the indicator 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. If the error message is still shown then contact your dealer for support.

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 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 platform when turning the indicator on. Excessive weight on the platform when zeroing the indicator. Platform is not installed. Improper calibration of the indicator. Damaged load cell. Damaged Electronics.
Err 6	A/D count is not correct when turning the indicator on.	Load cell is damaged. Electronics is damaged.
Err 7	Percent input error	Percent function is entered with no reference mass on the platform.
Err 8	High limit input error	Low limit is set first, then the high limit is set lower than the low limit and high limit not equal to zero.
Err 9	Low limit input error	High limit is set first, then the low limit is set higher than the high limit and low limit not equal to zero.
FAIL H or **FAIL L**	Calibration error	Improper calibration (should be within +10% of the factory calibration). The old calibration data will be retained until the calibration process is complete.

7.0 MENU STRUCTURE

PARAMETER LAYOUT for GK / GBK / GFK SCALES

Press the **[Func]** key to enter Functions mode.

Key functions while in this section
[Tare] enter a parameter or accept the changes
[Func] move to next parameter or option
[Zero] return to previous parameter or return to weighing

FUNC 1 Check weighing parameters	
F1 LLk Limit Lock	**oFF**
	PSt (pre-set)
F2 Led LED display	**bAr** (Bar type)
	Spot (spot type)
	SPEA (whole segment)
F3 bEP Beeper Control	**bP oFF**
	bP Int (Inside Limits)
	bP otL (Outside Limits)
F4 CPS Check weighing password	Enter using numeric method
F5 NCk Negative Check weighing	**On**
	Off

FUNC 2 RS-232 Parameters	
C1 on Enable RS-232	**Prt on** **Prt oFF**
C2 bd Baud Rate	**600** **To 19200**
C3 Prm Printing Mode	**mA StA** (Manual Stable) mA AnY (Manual Any) Au StA (Auto Stable) Au End (Auto End) **Ct StA** (continuous Stable) **Ct AnY**(Continuous Any)
C4 Aon Enable Accumulation	**on** **oFF**
C5 Ln Language for printing	**English** **French** **German** **Spanish**
C6 Uid User ID	Enter using numeric keys
C7 Sid Scale ID	Enter using numeric keys
C8 LAb	LAb On Lab Off

FUNC 3 Scale Parameters	
S1 Un Units enable	**kg** **lb**
S2 bL Backlight	**EL oFF** **EL on** **EL AU** (Auto)
S3 AoF Set Auto off time (min.)	**SLP 0** **SLP 1** **SLP 5** **SLP 10**
S4 dt Set time and date	Set as described in manual
S5 dIS Display mode	**All** **StAb** (only when stable)
S6 Fi Set Filter	**SLoW** **nor** (normal) **FASt**
S7 SPS Scale password	Enter using numeric keys
S8 CAL	Perform calibration

FUNC 4 Scale Parameters	
F4 Pct Percent Weighing	Enter 100% reference weight
F4 Ani Animal weighing	**FLt 1** Filter setting To **FLt 5**

8.0 WARRANTY INFORMATION

Adam Equipment offers Limited Warranty (Parts and Labour) for 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 depending on the severity of the problem. However, any freight involved in sending the faulty units or parts to the service centre will 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.

ADAM
Adam Equipment
ADAM EQUIPMENT, Maidstone Road, Kingston
Milton Keynes, MK10 0BD, U.K.
Tel: (01908) 274545 Fax: (01908) 641339
Intl Tel: -44 1908 -274545 Intl Fax: -44 1908 641339
E-Mail Address: info@Adamequipment.co.uk

CE

Declaration of Conformity / Verklaring van overeenstemming / Konformitätserklärung / Dichiarazione di Conformità / Déclaration de Conformité / Declaración de Conformidad

The non-automatic weighing instrument / Het niet –automatische weegwerktuig / Die nicht- automatischen Wägeapparate / Strumento per pesatura non automatico / L'instrument de pesage à fonctionnement non automatique / Imstrumento para pesaje non automatico

III

Manufacturer :	Adam Equipment Co..	Hersteller :	Adam Equipment Co.	Fabricant :	Adam Equipment Co.
Type:	GK..M / GBK..M / GFK..M	Typ:	GK..M / GBK..M / GFK..M	Type:	GK..M / GBK..M / GFK..M
No of the EC type-approval certificate:	UK2860 GB1320	Nr. der EG-Bauartzulassung:	UK2860 GB1320	N° du certificate d'approbation CE de type:	UK2860 GB1320
Corresponds to the production model described in the EC type-approval certificate and to the requirements of the Council Directive 2009/23/EC as amended and to the requirements of the following EC Directives:		Entspricht dem in der Bescheinigung über die Bauartzulassung beschriebenen Baumuster, sowie den Anforderungen der EG-Richtlinie 2009/23/EC in der jeweils geltenden Fassung und den Anforderungen folgender EG-Richtlinien:		Correspond au modèle décrit dans le certificat d'approbation CE de type, aux exigences de la directive 2009/23/EC modifiée et aux exigences des directives CE suivantes:	
2006/95/EC	Electrical equipment for use within certain voltage limits (Low Voltage Directive)	2006/95/EC	Elektrische Betriebsmittel zur Verwendung innerhalb bestimmter Spannungsgrenzen (Niederspannungsrichtlinie)	2006/95/EC	Matériel électrique pour utilisation dans des limites de tension définies (Directive Basse Tension)
2004/108/EC	Electromagnetic compatibility	2004/108/EC	Elektromagnetische Verträglichkeit	2004/108/EC	Compatibilité électromagnétique
This declaration is only valid when accompanied by a Certificate of Conformity issued by a Notified Body.		Diese Erklärung gilt nur in Verbindung mit einer Konformitätsbescheinigung einer benannten Stelle		Cette déclaration est seulement valide quand elle est accompagnée par une Attestation de Conformité délivrée par un Organisme Notifié.	

Fabrikant :	Adam Equipment Co.	Produttore	Adam Equipment Co.	Fabricante	Adam Equipment Co.
Type:	GK..M / GBK..M / GFK..M	Modello:	GK..M / GBK..M / GFK..M	Tipo:	GK..M / GBK..M / GFK..M
Nummer van de Verklarling van EG-typegoedkeuring	UK2860 GB1320	N. di certificato di approvazione di tipo CE	UK2860 GB1320	Numaro del certificado de aprobacion de tipo CE:	UK2860 GB1320
Conform met het model beschreven in de verklaring van EG-typegoedkeuring en met de voorschriften van EG richtlijn 2009/23/EC zoals gewijzigd en met de volgende EG richtlijnen:		Conforme al modello di produzione descritto nel certificato di approvazione de tipo CE e secondo le richieste CE direttivo 2009/23/EC come modificato e secondo le rechieste della seguente directive CE		Conforme al modello di producion descrito nel certificado di aprobacion del tipo CE e segun los requisitos del CE diretiva 2009/23/EC como modificato e segun los requisitos della siguiente diretive CE	
2006/95/EC	Laagspanning richtlijn	2006/95/EC	Strumenti elettrici per uso entro certi limiti di voltaggio (Directivo di voltaggio basso)	2006/95/EC	Instrumentos electricos para uso dentro cierti limites del voltaje (Diretivo di voltaje bajo)
2004/108/EC	EMC richtlijn	2004/108/EC	Compatibilita electromagnetico	2004/108/EC	Compatibilidad electromagnetico
Deze verklaring is alleen geldig samen met een certificaat van overeenstemming afgegeven door een bevoegde instantie.		Questa dichiarazione e valida solamente se accompagniato da un certificato di conformita relaciato da un ente riconosciuto.		Esta declaracion es valida solamente si accompagniato a un certificado da conformidad emitida par un organismo notificado.	

Signature / Unterschrift / Signature / Handtekening / Firma / Firma	J.S. Cumbach	Date / Datum / Date / Datum / Date / Fache	22 July 2011

CE

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:

Restriction of the use of certain hazardous substances in electrical and electronic equipment 2011/65/EC (RoSH)

Electro Magnetic Compatibility Directive 2004/108/EC

Low Voltage Directive 2006/95/EC

Adam Equipment Co.
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

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 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 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

Adam Equipment reserves the right to make changes to the technology, features, specifications and design of the equipment without notice.

All information contained within this publication is to the best of our knowledge timely, complete and accurate when issued. However, we are not responsible for misinterpretations which may result from the reading of this material.

The latest version of this publication can be found on our Website.

www.adamequipment.com