Adam Equipment

ABK/AFK SERIES
USER MANUAL

Software revision 1.25

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 product. A complete version is available at www.adamequipment.com. Thank you for your support of Adam Equipment.

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. 3116611621 - Revision A2, August 2017

1.0 INTRODUCTION

- The **ABK/AFK** series provide accurate, fast and versatile general purpose type weighing scales with parts counting, percentage weighing and check-weighing functions.

- The **ABK/AFK** has LED's next to the display to indicate when a weight is below the low limit, in between the limits or above the high limit. These can work in conjunction with an audible alarm for check weighing as well as the display showing LO, OK and HI.

- The **ABK/AFK** is supplied with a RS-232 bi-directional interface and real time clock (RTC).

- The **ABK/AFK** has a sealed keypad with colour coded membrane switches, a large easy to read liquid crystal display (LCD) and a green backlight.

- Included functions are automatic zero tracking, semi-automatic tare and an accumulation facility that allows the weight to be stored and recalled as an accumulated total.

2.0 SPECIFICATIONS

Model #	ABK 8 ABK 16a	ABK 16 ABK 35a	ABK 32 ABK 70a	ABK 60 ABK 130a	ABK 120 ABK 260a
Maximum Capacity	8000g/16lb	16kg/35lb	32kg/70lb	60kg/130lb	120kg/260lb
Readability	0.2g/0.0005lb	0.5g/0.001lb	1g/0.002lb	2g/0.005lb	5g/0.01lb
Resolution	1:40000	1:32000	1:32000	1:30000	1:24000
Repeatability (Std Dev)	0.2g/0.0005lb	0.5g/0.001lb	1g/0.002lb	2g/0.005lb	5g/0.01lb
Linearity ±	0.4g/0.001lb	1g/0.002lb	2g/0.004lb	4g/0.01lb	10g/0.02lb
Pan size w x d	300 mm x 400mm				
Units of Measure	g / Kg / Lb / Lb:oz / Newtons/Ounces				
Stabilization Time	2-3 Secs				
Operating Temperature	-10°C to +40°C / +32°F to +104°F				
Power Supply	+ 6v 4.5Ah battery 12vDC 800mA External adaptor				
Calibration	External				
Calibration Mass	User Selectable				
Display	Backlit Green display 40mm high digits with capacity tracker				
Draft Shield (w x d x h)	Not Applicable				
Balance Housing	304 Stainless steel housing IP66 rated				
Overall Dimensions (w x d x h)	300mm x 520mm x 610mm/ 11.8in x 20.5in x 24in (approx)				
Net Weight	7.9kg / 17.4Lb (approx)				

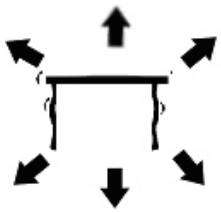
Model #	AFK 75 AFK 165a	AFK 150 AFK 330a	AFK 300 AFK 660a	AFK 600 AFK 1320a
Maximum Capacity	75kg/165lb	150kg/330lb	300kg/660lb	600kg/1320lb
Readability	5g/0.01lb	10g/0.02lb	20g/0.05lb	50g/0.1lb
Resolution	1:15000	1:15000	1:15000	1:12000
Repeatability (Std Dev)	5g/0.01lb	10g/0.02lb	20g/0.05lb	50g/0.1lb
Linearity ±	10g/0.02lb	20g/0.04lb	40g/0.1lb	100g/0.2lb
Pan size w x d	400mm x 500mm			
Units of Measure	g / Kg / Lb / Lb:oz / Newtons/Ounces			
Stabilization Time	2-3 Secs			
Operating Temperature	-10°C to +40°C / +32°F to +104°F			
Power Supply	+ 6v 4.5Ah battery 12vDC 800mA External adaptor			
Calibration	External			
Calibration Mass	User Selectable			
Display	Backlit Green display 40mm high digits with capacity tracker			
Draft Shield (w x d x h)	Not Applicable			
Balance Housing	304 Stainless steel housing IP66 rated			
Overall Dimensions (w x d x h)	400mmx 620mm x 790mm/ 15.7in x 24.4in x 31 in (approx)			600mm x 940mm x 830mm 23.6in x 37in x 32.7in (approx)
Net Weight	12.8kg/28.2lb (approx)			24.3kg/ 53.6lb (approx)

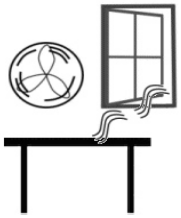
3.0 INSTALLATION

3.1 UNPACKING

The **ABK/AFK** scales have already been adjusted to work with a platform and have been configured for this application. The platform and indicator have been calibrated as a pair and must be used together.

3.2 LOCATING





- The scales should not be placed in a location that will reduce the accuracy.
- Avoid extremes of temperature. Do not place in direct sunlight or near air conditioning vents.
- Avoid unsuitable tables. The table or floor must be rigid and not vibrate.
- Do not place near vibrating machinery.
- Avoid unstable power sources. Do not use near large users of electricity such as welding equipment or large motors.
- Avoid operating in areas of high static or weighing items which generate a lot of static such as plastics or powders. This will affect measurements and may damage electronics. Use grounding mats or bonding straps to reduce potential.
- Avoid high humidity that might cause condensation. Avoid direct contact with water. Do not spray or immerse the scales in water.
- Avoid air movement such as from fans or opening doors. Do not place near open windows or air-conditioning vents.
- Keep the scales clean. Do not stack material on the scales when they are not in use.

3.3 SETTING UP THE SCALES

- Remove the base, pillar bracket and pillar from the packing. Turn the base upside down, then carefully pull the load cell cable through the pillar bracket and using the 4 screws secure the pillar bracket to the base. (fig.1) Place the cover plate and secure it with the 2 side screws. Then screw the 4 feet on the base and add the small foot to the base of the pillar bracket for extra stability. (fig. 2)

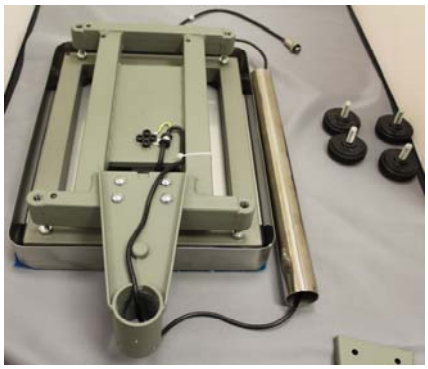
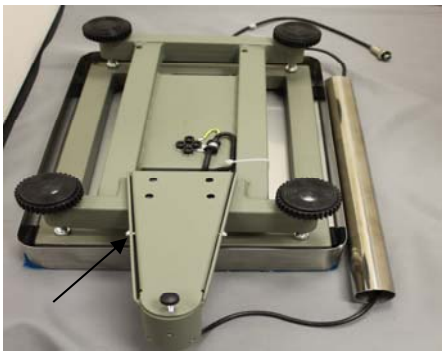
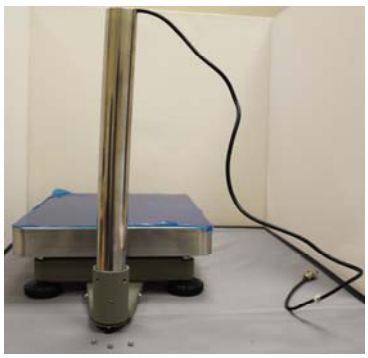
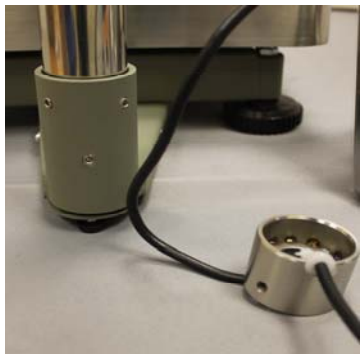
fig. 1 

fig. 2 

- Turn over the base and fit the load cell cable through the pillar. Locate the pillar into the lower pillar bracket using the 3 grub screws, secure the pillar in place. (fig. 3)

- Slide the connector through the circular stainless steel collar. Fit the rubber gland into the hole. (fig. 4) Fit the spare cable back in the pillar and fit the collar on top of the pillar. (fig.5)

. 



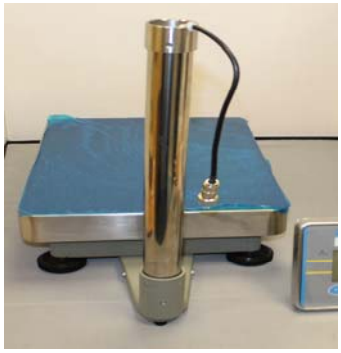


fig. 3 fig 4 fig. 5

- Remove the bracket from the indicator and secure the collar to the bracket using the 4 long screws provided with the star washers.(fig. 6-7)

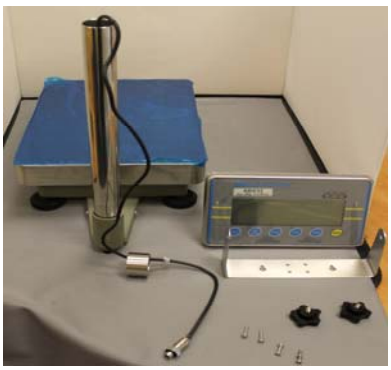


fig. 6

fig. 7

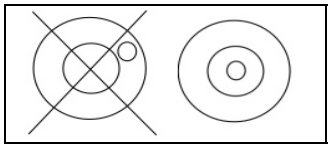
fig. 8

- Secure with the grub screw facing the rear of the pillar. (fig. 8)
- Reattach the indicator to the bracket. Remove the plastic cover and connect the cable connector. (fig. 9 and 10)

fig 9

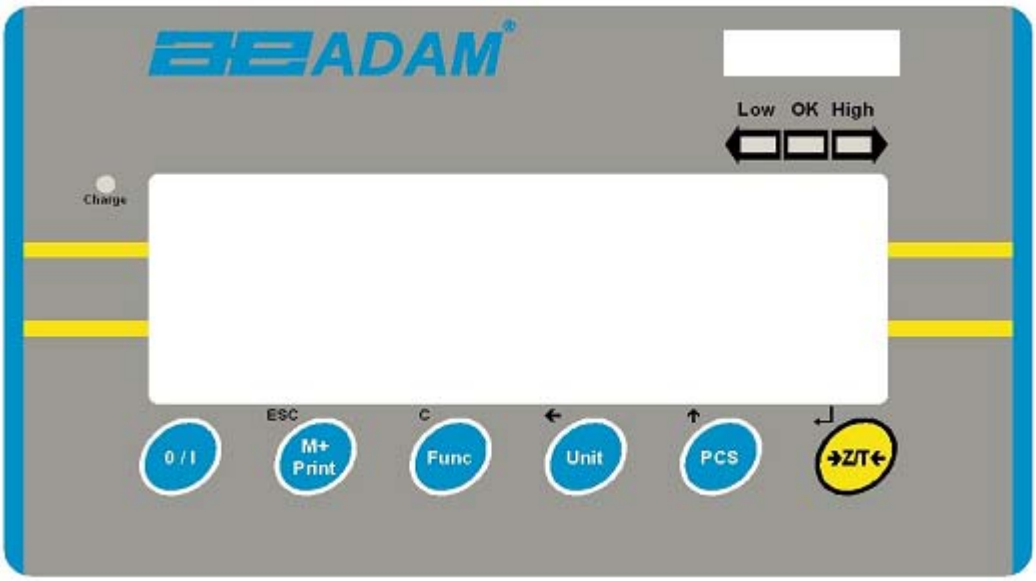
fig. 10

- Adjust the viewing angle of the Indicator to the ideal position and tighten the 2 x locking handles.
- Level the scale by adjusting the five feet on the ABK or the four feet on the AFK. If the scale rocks re-adjust the feet.



- Attach the power to the indicator and press the **[O/I]** key. 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 last used.

4.0 KEY DESCRIPTIONS

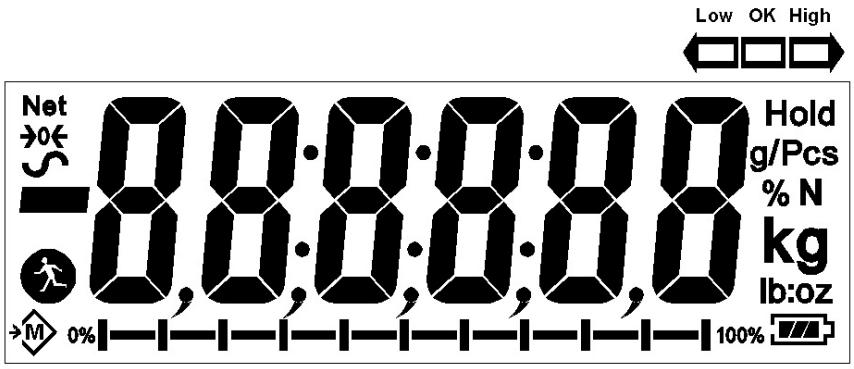


[>Z/T<] ↵	Used to reset the display to zero. Tares the scale. Used to deduct and store the weight currently on the scale if it is not required as part of the final weighing result. A secondary function, ↵ is of an "Enter" key used when setting up a value for the Parameters.
[PCS] ↑	Selects parts counting. Used to set the sample quantities while parts counting. A secondary function ↑ is of incrementing the active digit when setting a value for Parameters.
[Unit] ←	Selects the weighing unit to be displayed from those which are enabled. See parameter S1 in section 7.4 in the full manual. A secondary function, ← is to move the active/flashing digit to the left when setting values for Parameters.

[Func] C	Selects the Function parameters of the scale. A secondary function (C) is to act as a clear key when clearing an accumulated total.
[M+/ Print] ESC	Sends the results to a PC or a Printer using the RS-232 interface. It also adds the value to the accumulation memory if the accumulation function is not automatic. A secondary function (**ESC**) is to return to normal operation when the scale is in a Parameter setting mode.
[O/I]	To switch the Indicator on or off. The ABK/AFK will store the weighing unit and the check weighing values currently in use if power is powered off. These will be re called when the Indicator is next powered on

5.0 DISPLAYS

The LCD display will show a value as well as the unit currently being used. In addition the LED's above the display will show when a weight is below, inside or above the check-weighing limits.

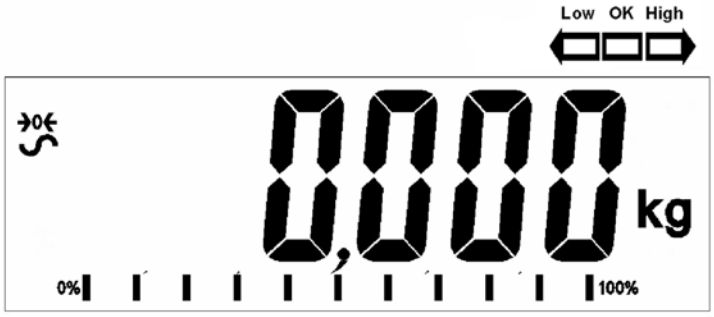


Other symbols will show when a weight has been tared (NET), the scale is at zero and stable, if a value has been stored in memory, or when the animal weighing function has been enabled. A battery symbol will show the state of charge of the internal battery.

6.0 OPERATION

6.1 ZEROING THE DISPLAY

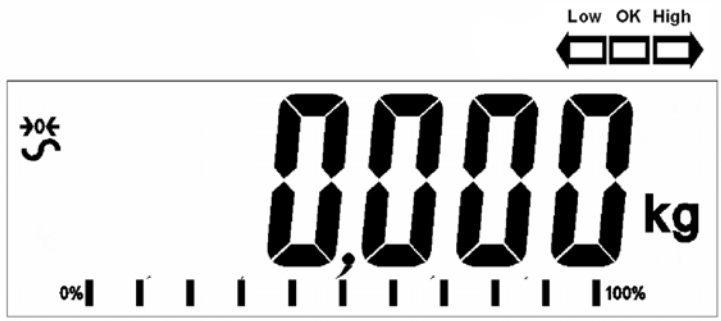
- You can press the **[>Z/T<]**↵ key at any time to set the display to zero. This will usually be when the platform is empty. When the zero point is obtained the display will show an indicator for zero.



- 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 the **[>Z/T<]**↵ key to re zero the scale if small amounts of weight are shown when the platform is empty.

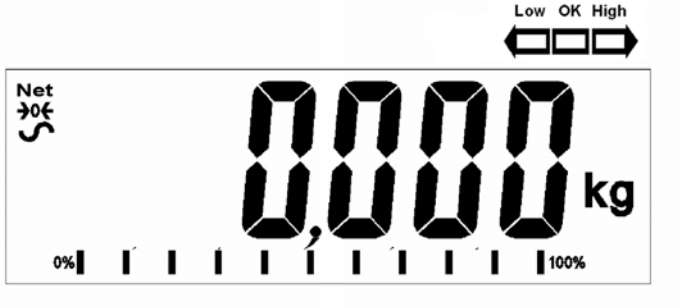
6.2 TARING

- Zero the scale by pressing the **[>Z/T<]**↵ key if necessary. The "**ZERO"** indicator will be ON.



- Place a container on the platform and a value for its weight will be displayed.

- Press the **[>Z/T<]**↵ key to tare the scale. The weight is deducted and stored as the tare value leaving zero on the display. The "**NET"** indicator will be ON and as a product is added only the net 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.

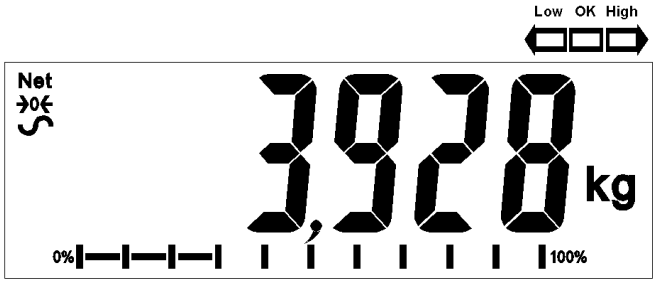


- When the container is removed a negative value will be shown. If the scale was tared just before removing the container this value is the gross weight which includes the container and the entire product it contains. The "**ZERO"** indicator will be on to indicate that the platform is back to the same condition as it was when zero was last set.

- To delete a Tare value, press **[>Z/T<]**↵ when the pan is empty.

6.3 WEIGHING A SAMPLE

To determine the weight of a sample, first tare the empty container if it is to be used and then place the sample in the container. The display will show the net weight of the sample and the unit of weight currently in use.



6.4 PARTS COUNTING

If parts counting is enabled, See section 7.4 in the full manual, it is possible to count parts using a sample of the parts to determine an average piece weight.

- If using an empty container, place the container on the top pan and press **[>Z/T<]**↵ to zero the display. Press the **[Pcs]**↑ key to enter parts counting mode.

- The scale will show "P 10". Change the sample size to the desired quantity by pressing the **[Pcs]**↑ key. It will cycle through the options: 10, 20, 50, 100, 200 and back to 10.

- Place the nominated sample size into the container and press **[>Z/T<]**↵. The sample number should match the sample amount options available for parts counting, i.e., 10, 20, 50, 100 or 200 pieces.

- The display will now show the amount of parts in the container, and as more parts are added the display will increase to show the number of parts in the container at that time. (Pcs).

Pressing the **[Unit]**← key will display the net weight (pcs and kg), pressing it a second time will display the unit weight (g/pcs), and the third time will display the count again (pcs).

- Press the **[Pcs]**↑ key to return to normal weighing. Press the **[Pcs]**↑ key again to start counting a different sample.

6.5 CHECK-WEIGHING

Check-weighing is a procedure where the LED's come on (and if enabled, an alarm to sound) when the weight on the scale meets values stored in memory. The memory holds the last values for a high and a low limit when the power is turned off. The user can set either one limit or both, see the full version of the user manual for details of the check weighing function.

6.6 ACCUMULATED TOTAL

- The scale can be set to accumulate manually by pressing the **[M+/Print]Esc** key, or automatically when a weight is removed from the scale. See the Section 7.3 of the full manual for details.

6.7 PERCENTAGE WEIGHING

The scale can be set to perform percentage weighing. See Section 7.2 of the full version of the user manual for complete details.

6.8 ANIMAL (DYNAMIC) WEIGHING

The scale can be set to animal (dynamic) weighing for weighing any items that are unstable or may move. See Section 7.4 of the full version of the user manual for complete details.

7.0 USER PARAMETERS

Pressing the **[Func]C** key during normal operation allows the user to access the parameters for customizing the scale. The parameters are split into 4 groups-

1. Check weighing parameters,
2. Percentage and Animal Weighing Functions
3. RS-232 parameters
4. Scale parameters

- When **[Func]C** is pressed the display will first show “FunC 1” for Check weighing parameters.

- Press either the **[Func]C** key or the **[Pcs]↑** to advance through the groups “FunC 1”, “FunC 2” , “FunC 3” and “FunC 4”. Press **[>Z/T<]↵** to enter the desired group of parameters.

- When in one of the sections press **[M+/Print]Esc** to return to the group “FunC 1”. If you press **[M+/Print]Esc** again, the scale will exit the User Parameter section and return to normal weighing.
    - ***CHECK WEIGHING PARAMETERS***

7.1 CHECK WEIGHING PARAMETERS

- Press **[Z/T]** to enter the group.

- Use the **[Unit/←]** key and **[Pcs/↑]** key to set the values or just the **[Pcs/⍰]** key to select the options.

- Press **[Z/T]** to confirm the change and then advance to the next parameter by pressing the **[Pcs/↑]** key.

This group of parameters-

- Set low and high limits for check-weighing
- Enables or disables the check weighing alarm
- Enables or disables the negative check weighing

Parameter	Description	Options	Default setting
F1 Lo	Set Low limit.	Use the **[Unit/←]** key and **[Pcs/↑]** key to set the values of the lower limit. When set press the **[Z/T]** key to store the value and go to **F2 Hi**	**000000**
F2 Hi	Set High limit.	Use the **[Unit/←]** key and **[Pcs/↑]** key to set the values of the high limit. When set press the **[Z/T]** key to store the value and go to **F3 bEP**	**0000000**
F3 bEP	This parameter sets the Beeper to off or on. If set to on, the beeper can further be set to sound when the weighing result is within or outside the check-weighing limits.	bP oFF - Off bP inL - Within limits bP otL - Outside limits (>20d)	**bP inL**
F4 nCK	This parameter enables negative check weighing function with ability to do negative tare.	on oFF	**on**

7.2. PERCENT WEIGHING AND ANIMAL WEIGHING

See section 6.7 and 6.8 for details of these special weighing modes.

- Press **[Z/T]** to enter a parameter. Use the **[Unit/←]** key and **[Pcs/↑]** key to set the values or just the **[Pcs/↑]** key to select the options.

- Press **[Z/T]** to confirm the change and then advance to the next parameter by pressing the **[Pcs/↑]** key.

- Press **[Print/M+/Esc]** to return to the group "FUnC 2". If you press **[Print/M+/Esc]** again, the scale will exit the User Parameter section and return to weighing.

Parameter	Description	Options	Default setting
P1 PCt	This parameter allows the user to enter the Percent weighing Function. See Section 6.7.	None	Enabled always
P2 AnL	Enter the Animal Weighing mode of operation, See section 6.8	Set the filter value.	Enabled Always

7.3. RS-232 PARAMETERS

- Press **[Z/T]** to enter a parameter. Use the **[Unit/←]** key and **[Pcs/↑]** key to set the values or just the **[Pcs/↑]** key to select the options.

- Press **[Z/T]** to confirm the change and then advance to the next parameter by pressing the **[Pcs/]** key.

- Press **[Print/M+/Esc]** to return to **[Pcs/↑]** the group "FUnC 3". If you press **[Print/M+/Esc]** again, the scale will exit the User Parameter section and return to weighing.

This group of parameters can be set by the user for setting the RS-232 active or not, baud rate, printing mode, accumulation mode, RS-232 language, and user or scale ID numbers.

Parameter	Description	Options	Default Values or setting
C1 on	Enable or disable the RS-232 interface	**Prt on** **Prt oFF**	**Prt on**
C2 bd	Baud Rate	**600** **1200** **2400** **4800** **9600** **19200**	**9600**
C3 PrM	Printing Mode- Manual, Continuous or Automatic	mAn**,** **Cont (**not on EC approved scales) **AUto**	**mAn**
C4 Aon	Enable or disable the Accumulation	**AC on** **AC oFF**	**AC on**
C5 Ln	Select Language	**EnGLi** (English) **FrEnCH** (French) **GErmAn** (German) **SPAn** (Spanish)	**EnGLi**
C6 UId	Set User ID	To be entered manually	**000000**
C7 Sid	Set Scale ID	To be entered manually	**000000**

Scale will perform the following, depending on the Accumulation and Print Settings:

ACCUMULATION SETTINGS → / PRINT SETTINGS ↓	**AC on**	**AC Off**
AUto	Accumulate and print automatically	Print automatically, Do not accumulate
mAn	Accumulate and Print only when **[Print/M+/Esc]** key pressed. If **[Print/M+/Esc]** is pressed a second time only print the weight.	Print when **[Print/M+/Esc]** key is pressed, Do not accumulate.
Cont Not available on approved scales	Print continuously. Accumulate when **[Print/M+/Esc]** key is pressed	Print continuously. Do not accumulate.

7.4. SCALE PARAMETERS

- Press **[Z/T]** to view the list of parameters.
- Press **[Z/T]** to enter a parameter. Use the **[Unit/←]** key and **[Pcs/↑]** key to set the values or just the **[Pcs/↑]** key to select the options.

- Press **[Z/T]** to confirm the change and then advance to the next parameter by pressing the **[Pcs/↑]** key.
- Press **[Print/M+/Esc]** to return to the group "FUnC 4". If you press **[Print/M+/Esc]** again, the scale will exit the User Parameter section and return to normal weighing.

This group of parameters is used to control the operation of the scale.

Parameter	Description	Options	Default setting
S1 Un	Enable or disable weighing units, will not allow to disable all units, at least one has to be enabled. Parts counting can be enabled/disabled	**Kg** **Grams** **lb** **oz** **lb:oz** **N (Newtons)** **PCS**	**Kg**
S2 bL	Backlight set to always on, always off or automatic on whenever a weight is placed or a key is pressed	**EL oFF** **EL on** **EL AU**	**EL AU**
S3 AoF	Auto Off- Disable or set time increment to turn off scale	**SLP 0** **SLP 1** **SLP 5** **SLP 10**	**SLP 0**
S4 dt	Set Time and Date format and settings. Format for date can be changed when the display shows mmddyy, ddmmyy or yymmdd by pressing the **[Pcs/↑]** key, then enter the date.	Enter the time manually. Enter the date format and then the numeric value manually.	**00:00:00** **mm:dd:yy**
S5 diS	Display all weights or only when stable	**ALL** **StAb**	**ALL**
S6 Fi	Filter setting to slow, normal or fast	**SLow** **nor** **FASt**	**nor**
S7 SPS	Password	Enter new pass word twice,, controls access to Func 1 to Func 4	**Not active**
S8 CAL	Calibration	Calibrate the scale. See Section 11.0	-

8.0 BATTERY OPERATION

- The scales can be operated from the battery if desired. The battery life can be up to 70 hours depending on the load cells and how the backlight is used.

- A battery symbol is shown on the display which indicates the current charge of the battery, 3 bars means fully charged. When just the outline of the battery and no bars are visible the battery needs to be re charged.

- To charge the battery, simply plug the adaptor into the mains power, and also into the input connector on the rear of the Indicator marked DC 12V. The scale does not need to be turned on.

- The battery should be charged for 12 hours to reach full capacity.

- Near the display is an LED to indicate the status of battery charging. When the scale is plugged into the mains power the internal battery will be charged. If the LED is green the battery has a full charge. If it is red the battery is nearly discharged and yellow indicates the battery is being charged.

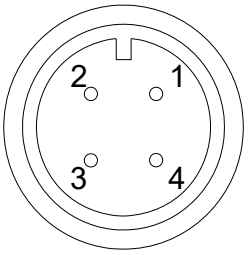
9.0 RS-232 INTERFACE

The ABK/AFK is supplied with a bi-directional RS-232 interface as standard. The scale when connected to a printer or computer outputs the weight with the selected weighing unit through the RS-232 interface.

Specifications:

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

The RS-232 serial interface is a plug as figure 2 shows:



1: Pin GND, Signal Ground
2: Pin RXD, Received Data
3: Pin TXD, Transmitted Data

As viewed from the back of the indicator

The scale can be set to print text in English, French, German or Spanish. See the RS-232 parameters section of the full user manual for details.

The data format and examples of printouts are shown in the full version of the user manual.

9.1 INPUT COMMANDS FORMAT

The scale can be controlled with the following commands. 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 **[>Z/T<]**↵.
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.

10.0 RELAY INTERFACE

The indicator is supplied with drivers to control external relays. The drivers could be used to control a number of different relays depending upon the users needs. The relay drivers are isolated outputs requiring the use of an external power supply and the relay option kit.

11.0 CALIBRATION

The scale can be calibrated using the following procedure. To enter this procedure it is necessary to use Func 4 which is accessible using the **[Func]C** key as described in section 7.4 in the full manual, or by using the passcode access as described in section 12.0.

The scales calibrate using either metric or pound weights depending on the weighing unit being used before calibration. The display will show either "kg" or "lb" to identify the weights expected.

PROCEDURE

- Enter the calibration section using Func 4, C8 CAL or using the passcode as described in section 12.0.
- The display will show "unLoAd".
- Remove any weight from platform and when the stable symbol is on press **[>Z/T<]**↵.
- The display will show "Ld" then “0000XX” which shows the last calibration weight used. Place this calibration weight on the scale and press the **[>Z/T<]**↵ key. If the weight you put on the scale does not match the value displayed, press the **[Func]C** key to clear the vale then use the **[Unit]**← key and **[Pcs]**↑ key to set the correct value. When it is correct press **[>Z/T<]**↵.
- If the calibration is acceptable the scale will run a self-test during which the calibration weight should be removed. If an error message “FAiL L” is shown try calibration again as a disturbance may have prevented a successful calibration.

After calibration the scale should be checked to verify the calibration is correct. If necessary repeat the calibration making sure that the scale is stable before accepting any weight.

12.0 SERVICE PARAMETERS

The scales will allow entry to the parameters if the **[Tare]** key is pressed during the power on cycle. The passcodes work as explained earlier.
In this case the display will show the passcode request screen, " P - - - - " . To continue enter a passcode as described below.

Entering passcode 0000 will allow calibration as shown in section 11.

Entering 1000 will allow access to a limited set of parameters described in section 12.1.

12.1 USING THE SERVICE PARAMETERS

Press the **[>Z/T<]**↵.key during the display countdown when turning on,

When "Pn" is displayed, enter the number 1000 using the **[Unit]**← and **[Pcs]**↑ keys and then press **[>Z/T<]**↵.

The display will show the first parameter called "F4 Int".

To select another parameter press the **[Pcs]**↑ key which will advance through the parameters available. Full details are in the full version of the user manual.

13.0 ERROR CODES

ERROR CODES	DESCRIPTION	SUGGESTIONS
- -oL - -	Over-range	Remove weight from the scale. If the problem persists contact your dealer or Adam Equipment for assistance.
Err 1	Time Setting Error	Enter time using correct format and reasonable values. Format: hh:mm:ss
Err 2	Date Setting Error	Enter date using correct format and reasonable values. Format: yy:mm:dd
Err 4	Zero Setting Error	The scale was outside the normal zero setting range either when it was turned on, or when the **[Zero]** key was pressed. Remove weight from the scale and try re-zeroing again. Use the **[>Z/T<]**↵. key to set the display to zero value. If the problem persists contact your dealer or Adam Equipment for assistance.
Err 6	A/D out of range	The values from the A/D converter are outside the normal range. Remove the weight from the scale if overloaded. Make sure the pan is fitted correctly. Indicates the load cell or the electronics may be faulty. If the problem persists contact your dealer or Adam Equipment for assistance.
Err 9	Check weigh limits error	Shown if the low limit is set higher than the current high limit. Reset High limit or change the low limit.
FAIL	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. If the problem persists contact your dealer or Adam Equipment for assistance.

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.

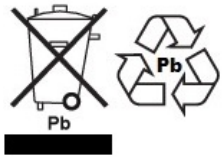
This product may include a rechargeable battery that is designed to be removed and replaced by the user. Adam Equipment warrants that it will provide a replacement battery if the battery manifests a defect in materials or workmanship during the initial period of use of the product in which the battery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

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 9001:2015 certified global company with more than 50 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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