DD-KC1

Digital Weight Indicator

Operations Manual (V1611)



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1. Introduction

The Anyload DD-KC1 digital weight indicator is a general purpose indicator that provides high accuracy and reliability with multiple functions such as auto shut off, auto calibration, auto zero tracking and stability indication. Its features include simplicity of operation, quick measurement, high precision and stability. It is easy to switch units to kilograms, pounds and counting function as well.

This manual provides the user's guide in using the product, safety, installation, features and technical specifications, calibration procedures, configurations and other technical related in using this indicator.

2. Safety Recommendations

When using this weighing equipment the following recommendations shall be observed for safety:

The weighing machine may only be used with the power adapter supplied exclusively for use with the weighing machine.

Before inserting the power adapter, the user must ensure that the operating voltage stated on the power adapter agrees with the mains voltage.

If not, please contact Customer Service at the address above.

If the power adapter or its cable is damaged, the weighing machine must immediately be disconnected from the electricity supply (pull out the power adapter).

The weighing machine may only be operated from mains electricity supply with a power adapter which is in perfect condition.

If there should be any reason to believe that it is no longer possible to operate the weighing machine without danger, the weighing machine is to be immediately unplugged from the electricity supply (pull out power adapter) and secured against inadvertent operation.

3. Structure and Installation



4. Packing List

① Indicator 1 piece
② AC Adapter 1 piece
③ Manual 1 copy
④Guarantee Statement 1 copy

5. Buttons and Functions

Key	Button	Function	Menu Function	Serial port order code
	Power Button	Turn on/off	Null	O
	Unit Button	Switch the unit	Go Down on menu or parameters	U
	Hold Button	Hold / Print function	Go Up on menu or parameters	H
	Enter Button	Tare	Enter menu or confirm the change of parameters	T

6. Operation

6.1 Turn on and off

Adapter: Insert the plug of AC Adapter into the power supply hub which is on the left of the Display Indicator, and insert the AC Adapter into AC socket.

Battery： Open the battery cover which is on the right of the Display Indicator, load 4 x AAA alkaline cells into the cell box (note the polarity) and then close the battery cover.

Empty the platform, press button once, it will show all the characters then the Maximum Capacity and **Division**. After the screen displays “0”, you can begin to measure the object.

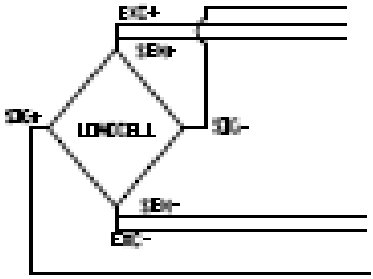
When power-on, press button to turn off the scale.

6.2 Connecting the Load Cell

The connection of the four wire load cell and the indicator ：

Connect +EXC with the red wire of the indicator’s cable.
Connect –EXC with the black wire of the indicator’s cable.
Connect +SIG with the green wire of the indicator’s cable.
Connect –SIG with the white wire of the indicator’s cable.
The indicator provides driving voltage through +EXC wire and –EXC wire. +SIG wire and –SIG wire will transmit the change of signal voltage to the indicator.
*To avoid short circuit, please make sure the welding parts of all the wires covered by the heat shrinking tube

Connection of the Load Cell and Indicator:



Load cell output sensitivity:

1 ~ 2m V / V

6.3 Weighing

When power-on, with nothing on the platform, press Enter button once, the instrument will then display " **0** ". Place an object on the platform. After the "**kg**", "**lb**" or "**pcs**" character stops flashing, which means that the data is stable, you can begin to read it.

6.4 Calibration Methods

6.4.1 Random Single-point Calibration

a) At weighing mode, press and hold Hold button until the window displays"------";
b) Press Unit or Hold button to enter calibration mode;
c) Press Enter button to make sure enter the calibration mode;
d) After entering the calibration mode, the window will display"Load"and"0.0kg" alternately，which means that the weight"0.0kg"should be loaded on the platform；
e) After making sure that there is nothing on the platform, press Enter button to confirm so that the scale begins"0.0kg"calibration. In the process of "0.0kg"calibration, "0.0kg" will flicker rapidly on the display window；keep the platform calm, stable, and without other interference factors which will

influence the weighing performance. If the weighing remains stable for longer than 2s, the scale will finish "0.0kg"calibration automatically, it will then begin the next calibration point; otherwise, "0.0kg" will keep flickering to wait for the scale to stabilize.

f) Suppose that the next calibration point should be"xx.xkg"， the window will display "Load"and"xx.xkg" alternately，which means that the weight"xx.xkg"（WEIGHT）should be loaded on the platform. If you have to change this weight, you can press Unit or Hold button to enter the modify menu; then press Unit button to change the flashing position and press Hold button to make the flashing position's number plus 1, and press Enter button to make sure the modification is finished;

g) After making sure the weight on the platform is “xx.xkg”, press  button to confirm so that the scale begins the “xx.xkg”calibration. In the process of“xx.xkg” calibration, “xx.xkg” flickers rapidly on the display window；keep the platform calm, stable, and without other interference factors which will influence the weighing performance. If the weighing remains stable for more than 2s, the scale will finish “xx.xkg”calibration and save the calibrated parameters, then will return to the weighing mode; otherwise, “xx.xkg”will keep flickering until the scale stable

6.4.2 Standard Two Point Weight Calibration

a) At weighing mode, press and hold  button until the window displays“------”；

b) Press  or  button cycle the display until the window displays“Line”；

c) Press  button to begin calibration procedure；

d) After the scale begins to calibrate, the window will display“Load”and“0.0kg” alternately；

e) After you confirm that there is nothing on the platform, press  button to confirm and begin the zero calibration when the window displays“0.0kg”. In the process of zero calibration, “0.0kg”flickers rapidly on the display window；please keep the platform calm, stable, and without other interference factors which will influence the weighing performance. If the weighing keeps stable exceeding 2s, the scale will finish zero calibration automatically, and then it will

begin the next calibration point, otherwise, “0.0kg” will keep flickering to wait for the stable weighing

f) Repeat the step d) and step e) above, calibrate the half capacity range point and the Full capacity range point orderly, save the calibrated parameters automatically and return to the weighing mode.

6.5 Switching the Unit

Press the  button to switch the unit of measurement, **kg** --- **lb**--- **pcs**--- **kg.**

6.6 Keeping Function “Hold”

Once the 

key is pressed:

6.6.1 The CPU will send the weight data into RS232 socket.

6.6.2 The weight will remain on the display for 120 seconds after the item has been removed from the scale so the weight can easily be read.

a) Place the item on the scale platform.

b) Wait for the stable weights to be displayed.

c) Press the 

key. The “►” hold indicators will turn-on.

d) Remove the item from the scale platform. The item’s weight reading will remain on the display for 120 seconds.

e) Quit to hold function: Once an item is weighed and the hold function is enabled; when you want to quit to hold function, press 

the key again to cancel the “►” hold indicator and return the scale to weight value

6.7 Print output function

Press and hold the 

for 2 seconds, then the buzzer will sound, and the weight data will output to the computer or the serial printer.

6.8 Counting Sample

a. During counting mode, remove unrelated objects on the platform, then press 
button to revert to zero;

b. Press 

button to switch the unit into “**PCS**”, and the window will display “**ADD10**”.

c. “**ADD10**” means that 10 objects to be weighed should be added onto the platform. Attention: The weight of each sample should be higher than the scale’s minimum **division** value; otherwise, the window will display wrong cue “no”.

d. If you want to change the sampling quantity, please press the 

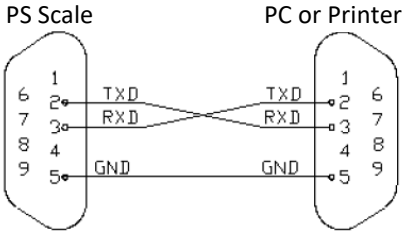
button to change the quantity; if you do not need to sample again, press the 

button to cancel the sampling, and the scale will adopt last sampling value to count ;

e. After you confirm the quantity of objects on the platform and the data displayed on the LCD are the same, short press  to confirm, and then begin to sample and count;
f. During the process of sampling and counting, the screen will display the sampling data by rapidly flickering; keep the platform calm, stable, and without other interference factors which will influence the weighing performance. If the weighing stays stable longer than 2s, the sampling and counting will be automatically finished, the parameter will be saved automatically and the scale will return to counting mode; if not, the screen will keep flickering the data and waiting for the stability of measuring.

6.9 Serial Port Printout

a. Connect the serial port with the scale according to the drawing below. Baud Rate=9600， without parity digit, sent stop bit 1 (The serial connection diagram is omitted);



b. Open the serial communication software, for example, “HyperTerminal” in windows. Select the connected portal number “COM” and set the baud rate as 9600bps, the parity bit as “NONE”, the data bit as “8Bit”, and the stop bit as “1Bit”.
c. You can select the serial output modes according to your own needs. The output modes include 3 types: output by pressing  button, automatic output after the weight keeps stable, and continuous output. You can set though the “out” in “Parameter setting”.

d. Output Data Form: 8 bytes data bit + 3 bytes unit code + 2 bytes ending code. The above-mentioned characters are all ASCII codes, and the unit can be kg, lb or pcs.
e. The serial ports order can be f0und in Chapter 2 “button function”.

Example of Output Data

Display	Data Bit								Unit Code			Ending Code	
	1	2	3	4	5	6	7	8	9	10	11	12	13
123.45kg	Blank	Blank	1	2	3	.	4	5	k	g	Blank	CR	LF
-123.45lb	Blank	-	1	2	3	.	4	5	l	b	Blank	CR	LF
123.0pcs	Blank	Blank	Blank	1	2	3	.	0	p	c	s	CR	LF

6.10 When the scale is on, press and hold  key until the display "0FF" or "ON", then release. That means open or close the function of animal weighing. When the action symbol which is above the units symbol flashes, that means the current mode is animal mode. in this state, once the weighing is locked, it will automatically remain locked weighs for about 10 seconds

7. Parameters Settings

7.1 Factory Settings

1. Turn off the scale, then hold the three buttons:  ,  and  at the same time until the screen displays “------”；

2. Press  or  button to go through the menu；

3. Press  button to enter the display menu.；

4. After entering the display menu, Press  or  key to select parameters ； Press  button to verify the parameters and return to the menu;

5. After all the parameters are set, go to **“-End-”** in the menu, short press  button to save and exit to weighing or counting mode

Menu	Meaning of Menu	Selective Parameter
1. dP	Decimal Point Setting	0/0.0/**0.00**/0.000/0.0000
2. CAP	Capacity setting	3000,**6000**,7500,8000,10000,12000, 15000,20000,30000,50000,60000 75000,80000,100000,120000,150000 ,200000,300000
3. InC	Division setting	d=1/**2**/5
-End-	Save and Exit	

7.1 User Settings

a) When the scale is off, please press Unit button together with the ⏻ button to turn on the scale. Do not release the Unit button until the screen displays "-----";

b) Press the Unit or Hold button to switch the menu;

c) Press the Enter button to enter the display menu;

d) After entering the display menu, press the Unit or Hold button to select the parameter;

e) Press the Enter button to confirm the parameter, and return to the menu;

f) After all the parameters have been set, switch the menu to "-End-", and press the Enter button to finish the setting and save the parameters, then return to the weighing or counting mode.

Parameters Table:

Menu	Meaning of Menu	Selectable Parameter	Meaning of Parameter
1. codE	Check the internal code	null	Check the internal code for debugging by manufacturer.
2. ASt	Zero tracking range	0.5/1/2/3d	Set automatic zero tracking range.
3. out	Printout method	kEy/Auto/Conti	kEy: printout while press the key, Auto: printout automatically, Conti: printout continuously
4. LEd	Backlight control method	OFF/Auto/on	OFF: backlight is turned off, Auto: backlight is automatic, On: backlight is turned on.
5. OFF	Automatic shutdown control	no/3/510/15/30/60 min	no: no automatic shutdown; 3~60min: if there is not any action of weighing objects or pressing buttons, the instrument will automatically turn off.
6. -LL-	Set Lower limit alarm	xxxx (lower limit value)	If the lower limit value is set to"0", the lower limit alarm

			function is canceled.
7. -HH-	Set upper limit alarm	xxxx（upper limit value）	If the upper limit value is set to“0”, the upper limit alarm function is canceled.
-End-	Finish measuring and save the parameters	null	

8. Cue Codes

Display Code	Meaning of Code	Solution
no	1. The calibration weight value is not loaded according to the display when calibrating. 2. The quantity of objects is not loaded according to the quantity of sampling.	1. Load the weight value according to the show value. 2. Load the quantity according to the show value.
dc.L	The batteries are brownout.	1. Use new batteries. 2. Use power adapter.
Err-0	The calibration data is lost 2. The load cell or main board maybe damaged.	Re-calibrate. 2. Change the Loadcell or main board.
Err-1	1. The weight is over the max capacity. 2. Lost the calibration data. 3. The load cell or main board maybe damaged.	1. Remove the objects on the platform. 2. Re-calibrate. 3. Change the loadcell or main board.
--L--	Lower limit alarm	1. cancel lower limit alarm
--H--	Upper limit alarm	1. cancel upper limit alarm

9. Troubleshooting

Cause	Reason	Solution
No display	The power plug is not inserted in the right place. The batteries are expired.	Insert the plug in right place. Use the new batteries.
Low-voltage indication	The batteries power is low.	Use the new batteries.
Error in weighing data-reading	The scale didn't back to zero before using. The scale is not calibrated.	Do not put objects on the platform, press  button, and then begin to weight. Re-calibrate.
False calibration	The calibration weight is not precise.	Use the precise calibration weight.

10. Specifications

Model	DD-KC1
Capacity x Readability	3000e
Parts counting	Standard
Repeatability (std.dev)	0.03%
Linearity	0.03%
T range	To capacity by subtraction
Over range capacity	Capacity + 9d
Stabilization time	2sec
Sensitivity drift (%)	0.01
Operation temperature	10～40 C
Operation Humidity	≤85%
Power requirements	110 or 220V 50/60Hz AC adapter (included); Or 4 AAA batteries