

i-sys Coin Weighing Scale PCB Calibration and configuration details

To configure the machine, connect the power supply, now press Tare key and with the Tare key pressed power on the machine (switch at the bottom of the machine).

It shows

P	0	0	0	0	0.
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Using INC & SHIFT key enter your password & press enter key

It shows

P	A	R	A		
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press Now press enter key to go to parameters (PARA) settings or Increment (INC) key to change to (CAL) Calibration settings.

To configure PARA press enter key when it displays "PARA".

L	0	0	0	0	0.
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To set load limit use INC key and shift & enter the maximum value & then press ENTER key.

Ex: for 30kgs

L	0	0	0	3	0.
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Press enter key

Next parameter is Formulae which is used to set formula for Kg-litre conversion.

To set formulae press INC key and shift it by pressing SHIFT key

F	0	0	0	0	0.
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Ex: for oil the weight is 970grams for 1litre, the value for 1Kg oil in litres is $(1000/970= 1.03092)$ the formulae to enter is 1031.

F	0	1	0	3	1.
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Press enter key

The next is Coin collected number. This is used only when you use the coin weighing option in PSEL function. i.e. When PSEL---3.

C	0	0	0	0	0.
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You can reset this value to "00000" if you want.

The next option is PSEL (Parameter selection)

P	S	E	L		0.
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In this there are three modes.

PSEL 0— for Piece count ; PSEL 1— for Set-point 1 and Set-point 2; PSEL 2— for Litre;
 PSEL 3--- for Coin weighing.

LC1 is for least count 1 and LC2 for least count 2 (the rest 50% of the load is accounted by LC2)

L	C	1			0.
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LC1 0—increment of resolution in steps of 1 count accuracy

LC1 1—increment in steps of 2 counts.

LC1 2—increment in steps of 5 counts.

LC1 3—increment in steps of 10 counts.

AT0 - is for auto-zero. You can enter values 0 to 9. Small drift in weight seen in the least significant digit is zeroed for values less than or equal to AT0 value we have entered. For most purpose set it to a value of 5.

Press Inc key to change the value

A	t	0			5.
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D0 - is Dummy-zero. Enter the value 1 to invoke dummy-zero. It works in range 2 and shifts the display left side to place a dummy zero.

To select press Inc key

D	0				0.
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Unit 0-4. It is used to select unit value like milligram to kilo-newton.

Unit 0-(milligram); 1-(gram); 2-(kilogram[KG]); 3-(newton); 4-(kilo-newton). This is used only for serial output (UART) application.

U	n	I	t		0.
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Press enter key to exit Para mode.

To enter into calibration mode press Increment key.

C	A	L			
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Will appear.

Now press Enter.

Next "rAnGEx" will appear. It selects the decimal point position.

RANGE 0-4(range selection)

R	A	N	G	E	0.
R	A	N	G	E	1.
R	A	N	G	E	2.
R	A	N	G	E	3.
R	A	N	G	E	4.

Displayed output

-	0.	0	0	0	0
-	0	0.	0	0	0
-1	0	0	0.	0	0
-	0	0	0	0.	0
-	0	0	0	0	0

Use the Increment key to change the range value.
Select and press enter.

Then it shows No-Load count value.

	X	X	X	X	X
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Now press the Enter key to accept the No-load count value.
Next it will display "LOAD" briefly as below.

L	O	A	D		
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And then it will again display the No-load count value.
Now you need to place a known-load on the pan.
It will now show the known-load count value.

	Y	Y	Y	Y	Y
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Press the Enter key to accept the known-load count value.
The display will now display the span value (known-load count value – no-load count value) for a brief period.
And then it will display

	0	0.	0	0	0
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The decimal point position will depend on your range value selected earlier.
Using the Increment & Shift key enter the known-weight you had kept on the pan just now to calibrate. Example...

	0	2.	0	0	0
--	---	----	---	---	---

Enter the value for the known weight and press enter key.
Now the LED will blink & it will now show "CAL" again.

Your machine is calibrated.

You can now switch OFF your machine & switch it ON again & your machine is ready to use.

If you wish to reset the coin collected counter to zero you have to press increment key when the machine displays "CAL". Continuously pressing increment key, you will see that the display keeps jumping from "PARA" function to "CAL" & then "COIn".

When it displays "COIn" press enter key. It will ask you for a password. Enter the right password (not the same as PIN password). Confirm your unique password by calling us. Enter the password given to you. It will next display number of coin collected which can be reset by you by pressing the shift key & or increment key. Reset the counter & press enter key. The led will blink & again display "COIn". You can now switch OFF the machine & switch it ON. Your coin collected counter will be reset & you will be able to see the value of the counter briefly whenever you switch on machine. With every coin collected the counter increments & stores in permanent memory.

To see the litre conversion value press Inc key. It will briefly display "litre" & then starts displaying in litre. (to set in litre option select PSEL = 2 in Para). To get back to normal weighing press INC button again. It will briefly display "HG" & then start displaying in normal mode.

To go to piece count press Tare key and shift key simultaneously, then keep weight(x number of items) press enter key. Next enter the number of pieces & press enter. Press the INC button to display in piece count. You should calibrate & also select PSEL =0 before using this function.

If the coin weighing configuration is chosen(PSEL = 3), pressing the INC button when the main program is running i.e. when it displays "SEE yOUr UUEIGHT" will make the program to jump to normal weighing mode after briefly displaying "HG". To return to the scrolling display, again press the INC button. It will briefly display "COIn" & return to scrolling display. Pressing the SHIFT button will display the number of coins collected.

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