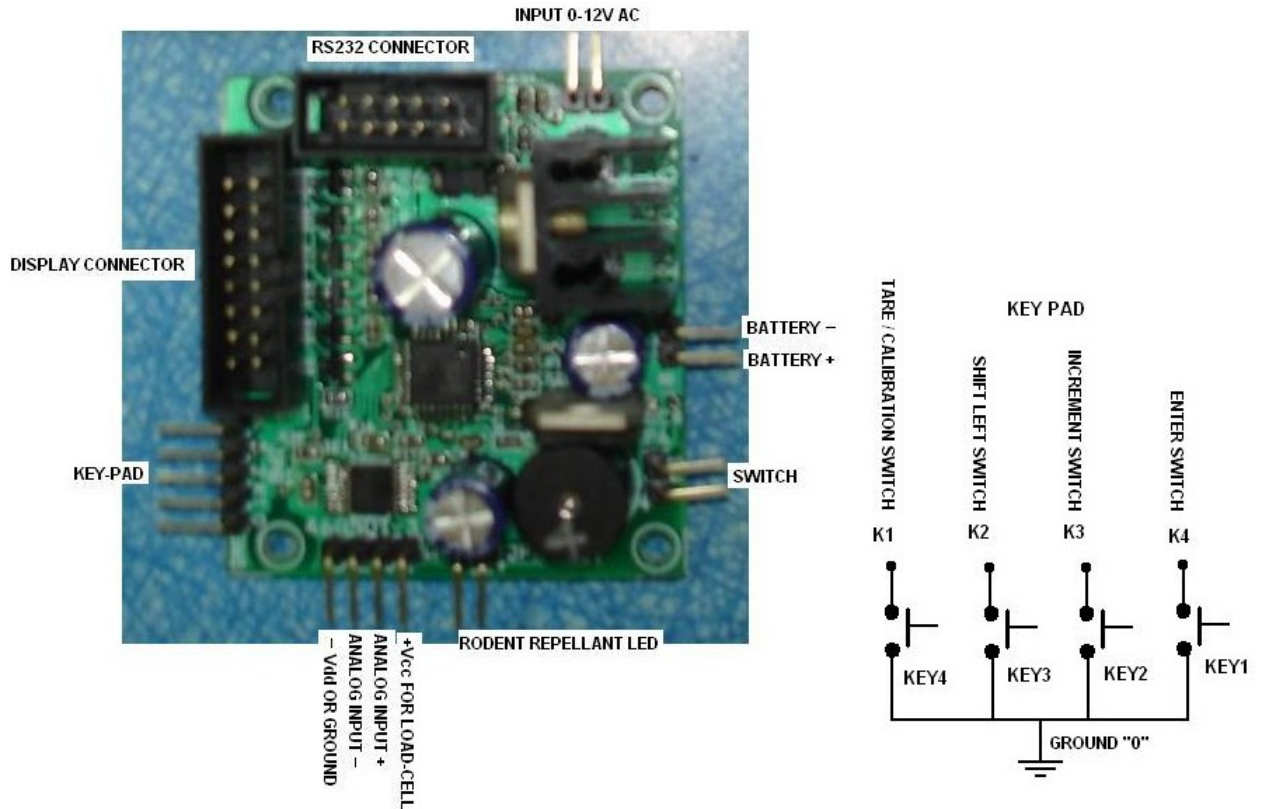# WEIGHING SCALE PCB USER MANUAL

WEIGH SCALE PCB CONNECTOR DETAILS

How to connect?

Connect a 0-12volts (1AMP) transformer to the connecter shown in the above picture.

IMPORTANT : Ensure that the polarity of the battery is correct

How to calibrate the board?

Switch on the power supply keeping the TARE/CALIBRATION button pressed.

You will first see the decimal point on the 6th 7segment blink.

Once the blinking of the LED stops & the segments displays "PIN", release the switch.

Enter your password by pressing the INCREMENT switch & the SHIFT switch.

Next press the ENTER button to validate your password then the segments will display "PARA".

To enter into parameter routine press the ENTER button when the display shows "PARA".

If you wish to go to the calibration routine first before entering the parameter values you can do so by holding the INCREMENT button pressed while the display is showing "PARA".Then it will show "CAL"

Parameter setting

The parameters are maximum-load ("L"), formula-value ("F"), parameter-select value ("PSEL"), least-count1 (LC1), least-count2 ("LC2") & auto-zero count value ("At0") and ("D0").

After selecting "PARA" press "Enter" switch

Display will show "L" for maximum load

Enter the max.load by pressing the "Increment" switch and "Shift select" switch

Example : for a 30 Kg scale enter the value 30.

Press "Enter".

Display will show "F" for formula.Formula-value is used for kg-litre conversion. You need to enter the specific-gravity of the liquid, say if the oil you wish to measure is 0.970kgs per litre, then you need to enter "L00970" in your display by pressing the "Increment" switch and "Shift select" switch.

Press "Enter".

Display will show "PSEL" (Parameter Select Value) or function select

Enter "0" for for piece counting

Enter "1" for selecting set point1 & 2

Enter "2" for selecting Kg/Litre measurement.

Press "Enter"

Display will show "LC1" (Least count 1 selection).

Enter "0" for selecting least count1 as 1 Count.

Enter "1" for selecting least count1 as 2 Count.

Enter "2" for selecting least count1 as 3 Count.

Enter "3" for selecting least count1 as 10 Count.

Press "Enter"

Display will show "LC2" (Least count 2 selection).

Enter "0" for selecting least count2 as 1 Count.

Enter "1" for selecting least count2 as 2 Count.

Enter "2" for selecting least count2 as 3 Count.

Enter "3" for selecting least count2 as 10 Count.

Press "Enter"

Display will show "Atc" (Auto Zero selection).

Enter any value between 0 to 9 as per requirement.

Press "Enter"

Display will show "D0" (Dummy zero).

Enter "0" for disabling dummy zero.

Enter "1" for enabling dummy zero.

Press "Enter"

The display shows "Para" again (this means that the parameter selection is over).

Now to "Calibrate" the scale press the "Increment Switch"

Calibration

The display now shows "Cal"

Press "Enter"

Now the display shows "Range" (Decimal Point Selection)

Enter "0" for selecting the second digit decimal point (for eg:9.9999)

Enter "1" for selecting the third digit decimal point (for eg:99.999)

Enter "2" for selecting the fourth digit decimal point (for eg:999.99)

Enter "3" for selecting the fifth digit decimal point (for eg:9999.9)

Enter "4" for canceling decimal point selection (for eg:99999)

Press "Enter"

The display shows the Pan weight in counts

Press "Enter"

Now the display shows " LOAD"

Now Keep a known "weight" for example 5Kg.The display will now show the total weight (weight of the pan and the 5kg) in counts

Press"Enter"

Now the display shows "000.000"

Enter the value of the weight. For example ,enter "5000" for 5Kg.

Press "Enter"

The display shows "Cal" (This means that calibration routine is over)

Now Press "Tare" and "Enter" to reset.

Other Displays

If the load placed is more than the maximum-load of the scale the display will show "sorry".

If the battery voltage falls below 5.1volts then the display will scroll "LOW BATTERY" along with buzzer annunciation. The display will be switched OFF if the voltage falls still further.

Piece counting (PSEL = 0)

Press the TARE switch & SHIFT switch simultaneously. The LED will blink & then display "PIECE" for a short while & then display "00000".

Place the known pieces of material in the pan & press ENTER button.

The LED will blink as acceptance of the load & the display will show "C00000".

Using the INCREMENT switch & SHIFT switch enter the number of pieces of material measured.

Press "Enter".

Press "increment" switch and the display shows "PIECE" for a short while and starts displaying in "Counts" mode.

Set Point selection (PSEL =1)

Press the TARE switch & SHIFT switch simultaneously. The LED will blink & then display "SET-1" for a short while & then display "00000".

Using the "Increment" and "shift" switch enter the value1 at which point you wish to get the first annunciation.(The decimal point will not be displayed so if you want to enter 5kgs as your first set-point in range1 setting then you need to enter "05000" & if the setting is in range2 then you need to enter "00500".)

Press "Enter"

Now the display will show "SET-2" for a while & then display "00000".

Using the INCREMENT & SHIFT buttons load the set-point 2 value.

Press "ENTER".

The LED will blink & your set-point values are loaded. Place a load greater then set-point1 value & you will hear an intermittent beep from a buzzer. Then keep a load larger than the set-point2 value & you will hear a continuous beep from the buzzer.

Kg/ Litre Conversion (PSEL = 2)

By pressing the "Increment" Button the user can toggle between Kg or Litre.