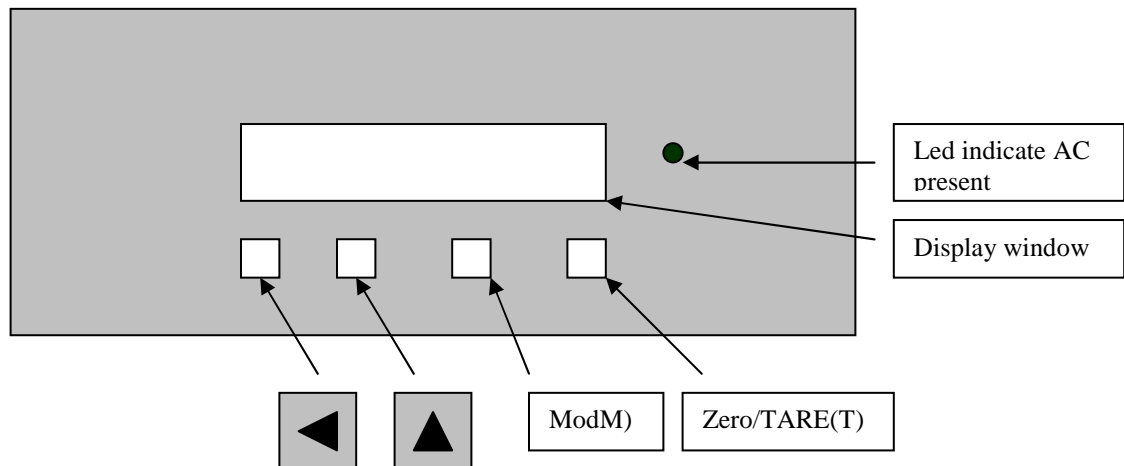


## INSTALLATION:

- Install the indicator in the Panel.
- Make the power cord connected with the 3 pin electric socket
- Switch ON the power switch.
- **As the devices are temp sensitive please give an ½ hr warm up time to indicator with load cell connected to it.**

Display will show you initial segment checking and will come to weighing mode. You can apply force; the display will show you the weight.

## FRONT PANEL :



There are Five Front ended Keys on the 96 x 96 Panel

## R SIDE ARROW UP ARROW MODE TARE

SWITCHES : Each Switch has got multipurpose functions.



**TARE/ENTER:** This is used to Tare the reading and also used as Enter during programming. It can also works as ON/OFF switch to turn of the display (Sleep mode), by pressing two times, the display will be off and again pressing one more time the display will be on.



**MODE:** This is used for programming and setting various parameters like ALERT, CALIBRATION, COUNT etc.



**UP ARROW:** This used for entering data (Numbers 0-9) and selecting different programming mode.



**SIDE ARROW:** This is used to shift numbers from right to left and selecting different programming mode.

## CALIBRATION & CHECK WEIGHING:

1. While Powering ON, Hold **MODE** (M) Switch and then power ON.
2. You will get '**ALERT**' on display.
3. Press **TARE** switch, display will show you numeric value.
4. Now you can set the CHECK WEIGHING value using Side arrow and Up arrow switches if required. (If the weight on Pan is more Than set value than Buzzer sounds to indicate it)
5. Now Press **TARE/ENTER** switch, the display will show you **CAL-?**

The CHECK WEIGHING value is set now, if you want to CALIBRATE the machine press **TARE/ENTER** switch again (otherwise switch OFF the machine and Power ON again for normal operation).

6. Display will show you **CAL-O** and after few seconds Display will show you **LOAD** automatically.
7. Now keep standard Weights on the Pan/Platform (20% to 40% of full load).
8. Press **TARE/ENTER** switch, display will show you numeric value.  
Now enter the value of weight using Side arrow and Up arrow switches, which you kept, on Pan/Platform required.
9. Now Press **TARE/ENTER** switch, Display will show **CAL F** and **UNLOAD** after some time. (Avoid touching the Pan during this time)
10. Remove weight from the Pan and Press **TARE/ENTER** switch again. Now machine is calibrated and ready to use.

## FILLING MODE:

This facility is used for filling or packing purpose, the Buzzer will sounds on set Value to Value + 1% to indicate completion of filling.

1. Make sure that machine is ON and in weighing mode.
2. Press both arrow Switches( UP arrow and Side arrow switch) Simontenuously, Display will show you numeric value. Now enter the weight which you want to set using Side arrow and Up arrow switches.
3. Now Press **TARE/ENTER** switch, Display will blink for some time and after that Works in filling mode. For returning back to normal weighing mode, Switch OFF machine and than switch ON again.

## AUTO POWER OFF:

The machine will be in sleep mode (Auto power off) whenever there is no change in weight on Pan for 5-8 Minutes. During this mode the display will be in off position to save power.

Whenever you keep weight on Pan, it will be back in normal mode automatically and shows the weight or press **TARE/ENTER** switch once for normal mode or press Up arrow switch and than **TARE/ENTER** .

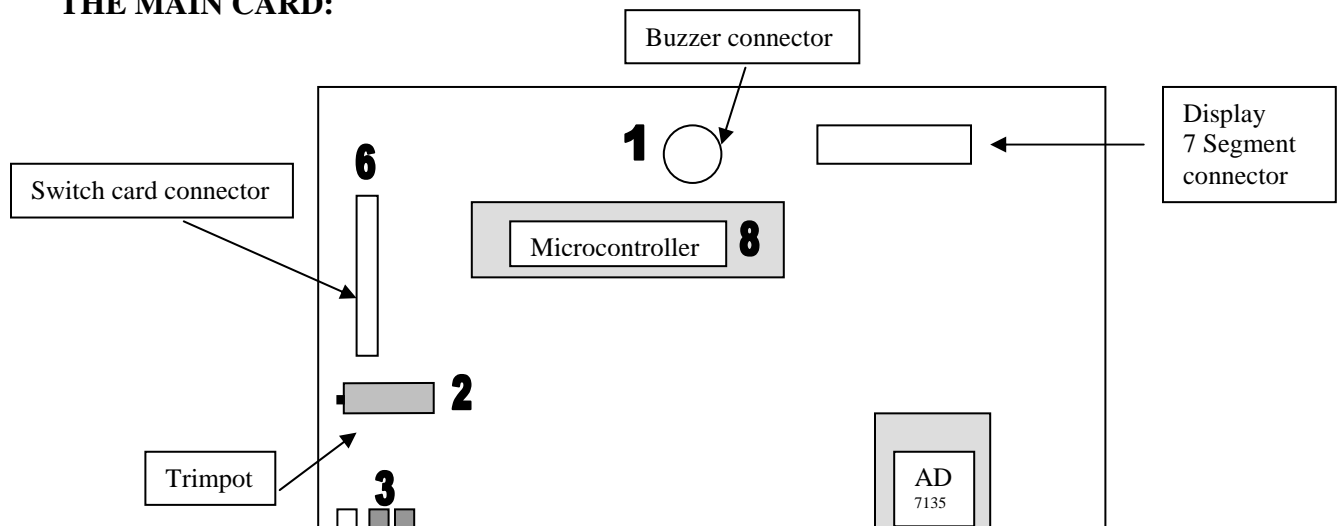
### MEMORY FUNCTION:




This is an optional function and available on request.

- 1.PRESS **M+** OR **M-** TO FEED VALUE
- 2.PRESS **MR (<)** FOR RETURNING BACK TO NORMAL WEIGHING MODE
- 3.FOR MEMORY RECALL PRESS **MR (<)**
- 4.FOR MEMORY ERASE PRESS **M-**
- 5.FOR GOING BACK TO WEIGHING MODE PRESS **M+**

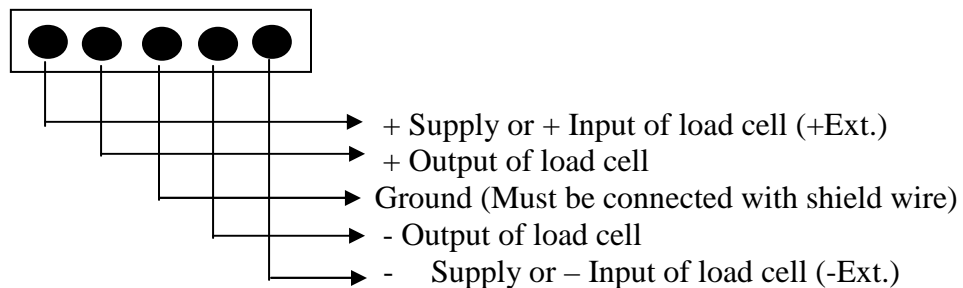
## USER MANUAL AND WIRING DETAILS OF WEIGHING SCALE KIT

### THE MAIN CARD:

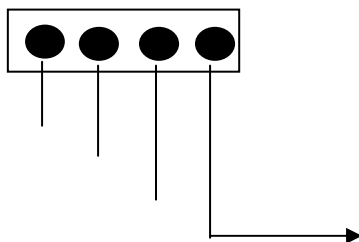


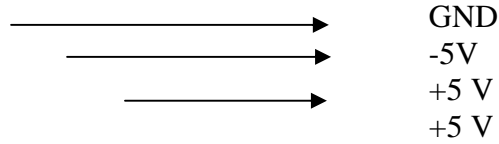
- 1 This is for connecting buzzer; polarity is as shown in figure. 
- 2 The trimpot is for adjusting analog i/p of AD or for setting the internal counts on Zero weight.
  - a) By rotating it clockwise count reduces. 
  - b) By rotating it anti clockwise count increases. 
- 3 These two resistances are for adjusting Gain of amplifier.
  - a) Resistances should be MFR with 1% tolerance
  - b) Both resistance should be of same value & batch
  - c) Increase resistance value to increase Gain  
 Like for 30Kg Scale we uses 40 Kg loadcell then resistance value ~ 150K  
 Like for 30Kg Scale we uses 30 Kg loadcell then resistance value ~ 120K
  - Default value of resistance is 150 K

- 4 This is for connecting loadcell. Connect loadcell as shown in figure.



- 5 This is the power supply connector.





- 6 This is switch connector
- 7 This is AD IC (7135).
- 8 This is Microcontroller AT89C52 must be inserted as required for different models.

**ASSEMBLING PROCEDURE:**

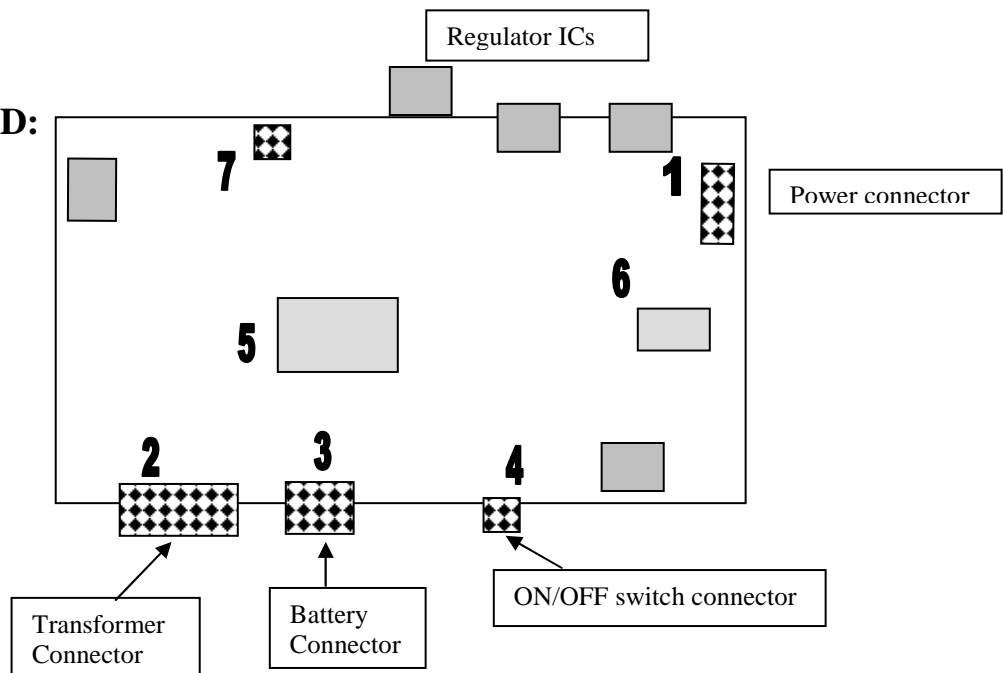
Assemble the weighing scale as per procedure given below step by step.

- 1 First of all connect all connectors (power, switch & load cell).
- 2 Now press **TARE/ENTER** & **MODE** Switch Simontenuously and power ON machine.
- 3 The displays will shows the internal counts of machine.
- 4 Now rotate the trimpot and set the internal counts between -19000 to -18000 with zero weight on pan/platter (The pan/platter must be placed properly).
- 5 Now the machine is ready to use, switch it off and calibrate as per user manual.

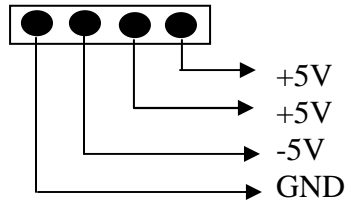
**CAUTIONS :**

- 1 **Always connect charged battery.**

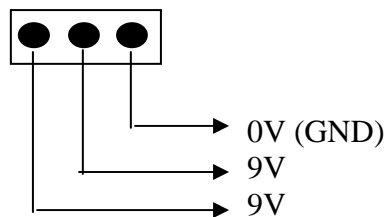
**POWER CARD:**



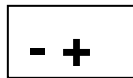
- 1 This connector is for main card power supply.



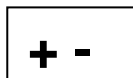
- 2 This connector is for transformer. Transformer spec. 9-0-9 V and 1.5 Amp.



- 3 This connector is for Battery. Battery spec. 6V/4Ah



- 4 This connector is for connecting ON/OFF switch.  
5 This is ferrite transformer.  
6 This one is control IC.  
7 This one is for connecting LED to indicate charging



#### ASSEMBLING PROCEDURE:

Assemble the weighing scale as per procedure given below step by step.

- 1 First of all connect all connectors (power, switch & load cell).
- 2 Now press **TARE/ENTER** & **MODE** Switch Simontenuously and power ON machine.
- 3 The displays will shows the internal counts of machine.

#### **Gain adjustment**

1. Increase the value of both resistance to increase the gain.
2. Value of both resistances should be same.

3. Resistances should be in 1% tolerance (MFR)

Adjust the gain as high as possible, for example if you want to make a 10 Kg machine then on placing 1Kg, the difference between internal counts =  $37000/10 = 3700$ .

For a 30Kg machine placing 1Kg, the difference =  $37000/30 = 1233$ .

- 4 Now rotate the trimpot and set the internal counts between  $-19000$  to  $-18000$  with zero weight on pan/platform (The pan/platter must be placed properly).
- 5 Now the machine is ready to use, switch it off and calibrate as per user manual.