Counting Scale LBC

User guide

LBC

www.liden-weighing.se

Contents

1.0 OVERVIEW

VW series counting scale is an intellectualized instrument offering all the weighing and counting features required by industrial warehousing and production application. It consists of a microprocessor, featuring stable and accurate counting, AC/DC power supply, LCD display, low power consumption, and simple robust construction for factory floor durability.

2.0 SAFETY NOTICE

It is important that Virtual Measurements & Control's equipment is installed and operated n such a way that all applicable safety requirements are met. It is your responsibility as a user to ensure that you identify the relevant standards and comply with them. Failure to do so may result in damages to equipment and personal injury. In particular, you should review the 'Precaution and safeguard' instructions as indicated in section 12.0 of this user guide carefully before installing or operating the equipment.

Under no circumstances will the supplier of the equipment be liable for any incidental, consequential or special damages of any kind whatsoever, including but not limited to lost profits arising from or in any way associated with the use of the equipment or this user guide.

3.0 MAIN FEATURES

- Beep function to indicate shortage of sample
- Automatic zero tracing- abnormal zero digit alarm; overloading alarm;
- Automatic shut-down in preset time;
- Print out port: weight printing function available;
- Large 12mm LCD display;
- Signal indicators;
- Stable indicator;
- Backlight function;
- AC/DC adapter

4.0 ACCURACY

The scale overall weighing accuracy is specified at ± 1 displayed graduation (d).

- Linearity ± 1d
- Repeatability ± 1d
- Hysteresis ± 2d

6.0 KEY PAD FUNCTION:

1. **M1-M10** key: Memory key button
2. **Numerical (0-9)** key: For setting numeric data for sample number, sample weight or limit number checking
3. **Decimal point (.)** key: For setting the decimal position of sample
4. **PCS/SET** key: For setting the counted sample numbers on the platter into scale memory.
5. **QTY/SET** key: For alternation of changing normal counting and quantity check operation.
6. **TARE/CHQ** key: For deducting the current tare and display net weight.
7. **ZERO/ MENU** key: For zero setting of the scale.
8. **M+**: Press this button to compute the total count data and the data can be accumulated up to 99 counts
9. **MC**: For calling off the memorized data.
10. **TOTAL**: Press this button to toggle between normal counting function and memory data recalling.
11. **WT/SET**: Press this button to key in the pre-determined unit weight into the scale memory for normal operation.
12. **ENT key**: For cancelation of numeric setting data or reset the scale data.

7.0: PRE-INSTALLATION CHECKS:

1. Place the scale on a horizontally straight top. Check the bubble alignment to ensure the bubble is at the centre position within the center circle. Otherwise, adjust the scale support until the bubble is aligned. Refer to the below picture.

Correct

Incorrect

2. Do not place any metal objects near the weighing scale as the static electrical charges can influence the reading.

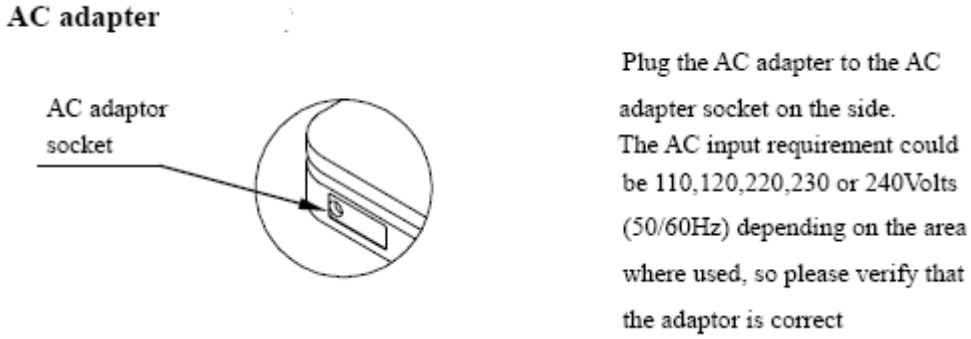
3. Please calibrate the scale before first use.

8.0 INSTALLATION INSTRUCTION

1. Ensure the power supply are as per below specification;

a) Range of signal input of the transducer: 0-20mV
b) Power supply: (1) 6V/4.5AH
(2) 10~12VDC/500MA output

2. Connecting the AC adapter



9.0 OPERATION INSTRUCTION:

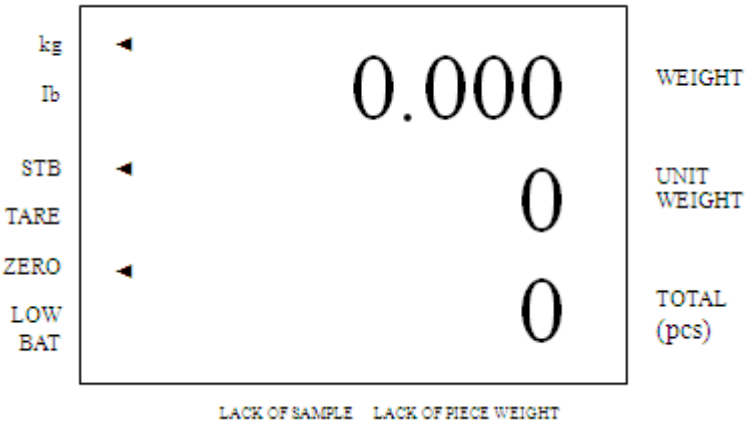
9.1 : To perform counting function for unknown samples weight

a) Turn on the power switch located at the right side of the scale. Allow the scale to warm up for 1 min before placing any item for weighing.
b) Before perform weighing, ensure the scale display '0' reading. If scale display is not '0', perform the following;

ZERO weigh
Press [ZERO] button to zero scale.
*Note: The ZERO key can only zero any weight which is ±3% of the maximum capacity.

TARE weight

Press [TARE] button to tare off the item weight placed on the scale. Once the scale display shows the following, it is ready for usage.



c) Perform a manual count on the number of samples and place the samples on the weighing platter.
d) Once the '◀' indicator points at STB, the reading shown on the scale display is the weight of the samples.
e) While the item is still on the weighing pan, press the numerical (0-9) key to insert the number of samples.
f) Press the [PCS/SET] button and the scale will show the average weight of individual sample at the 'UNIT WEIGHT' row and the number of samples will be shown at the 'TOTAL (pcs)' row.
g) Place more samples on the weighing platter and the scales will display the total number of samples at the 'TOTAL (pcs)' row.
h) Press the [ENT] button to reset the scale to perform the next counting function for other samples.

9.2 : To perform counting function for known weight samples

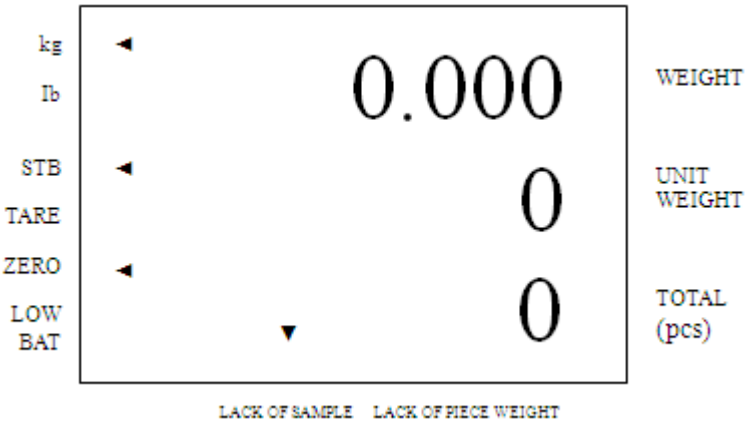
a) Press the numerical (0-9) key to insert the unit weight for sample and press [WT/SET] to confirm the weight.
b) Put the samples on the weighing platter, the scales will display the total number of samples at the 'TOTAL (pcs)' row.
c) Press the [ENT] button to reset the scale to perform the next counting function for other samples.

10.0 ALARM FUNCTION

In order to avoid any counting error, this scale has been incorporated with the alarm function setting to inform operator when there is counting error in case of lack of sample number or lack of sample weight. In addition, user can also set the upper limit and lower limit for sample count to indicate whether the total piece count quantity has reached the desired quantity.

10.1 Lack of sample alarm

This alarm function will be activated when the total weight of sample is below the limit value for accurate counting to perform.

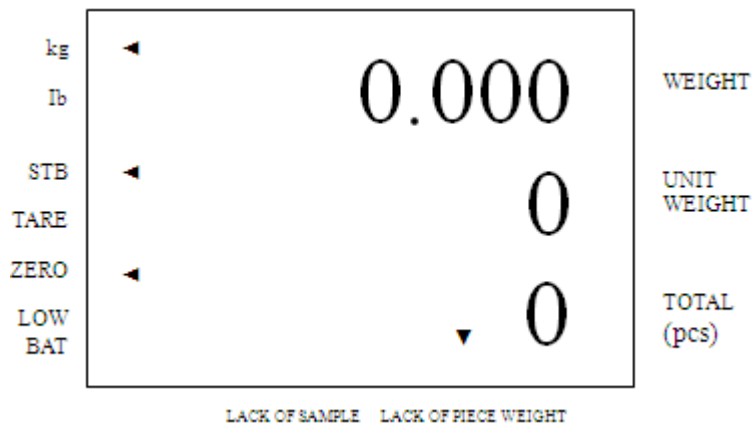


In order to rectify this error message, follow these steps;

a) Place more sample on the weighing platter.
b) Press the numerical (0-9) key to insert the new number of samples on the weighing platter and press [WT/SET] to confirm the weight.
c) Repeat step (a) and (b) until the 'lack of sample' sign disappear.

10.2 : Lack of piece weight alarm

This alarm function will be activated when the average unit weight or set weight is insufficient for accurate counting operation.



In order to rectify this error message, follow these steps;

a) Place more sample on the weighing platter.
b) Press the numerical (0-9) key to insert the new number of samples on the weighing platter and press [WT/SET] to confirm the weight.
c) Repeat step (a) and (b) until the 'lack of sample' sign disappear.

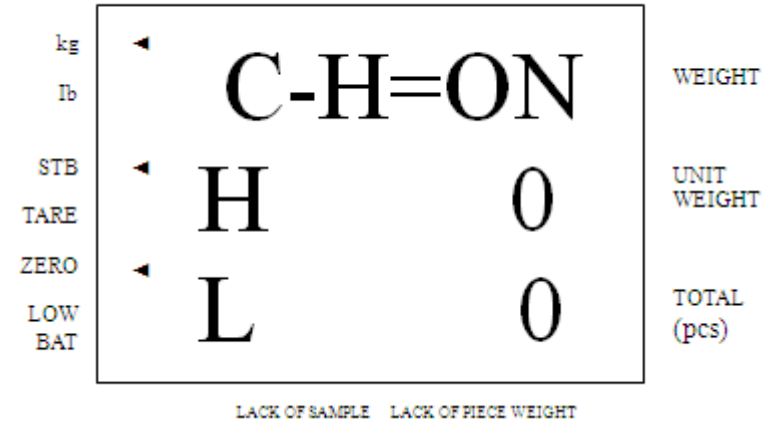
10.3 : Upper and lower limit alarm

This function is designed for packing purpose. For example, if the operator wishes to perform a sample count of 1000 pieces for every package, he can activate the alarm function of the scale when the sample count falls below or exceed the preset limits.

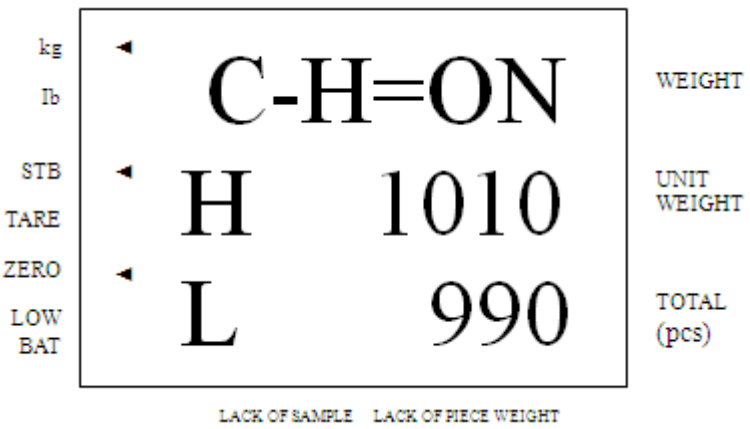
a) Press [QTY/SET] button and to enter into the quantity alarm menu.

b) Press [ZERO/MENU] button to toggle between the alarm 'On' or 'Off' function, where scale displays "CH=On" when the quantity alarm is activate and "CH=OFF" when quantity alarm is deactivated.

c) When the scale displays will show as per below diagram with a blinking '0', set the upper limit (H) of sample count to 1010 and the lower limit (L) of sample count to 990.



d) The scale displays will show as per below diagram, press [TARE/CHG] to confirm the setting and exit the quantity alarm menu.



e) Place 1000 pieces of samples on the weighing platter; press [PCS/SET] to save the unit weight.

f) The scales is now ready to perform counting function and the alarm will activate when the sample count which exceeds the upper or lower limit.

11.0 MEMORY FUNCTION

11.1 : To save the unit weight

a) Press the numerical key (0-9) to input the unit weight of the sample.
b) Select one of the memory from M1 to M9 button to save the input data. The scale Will show '*EnE*' on the third line of the scale display.
c) Press [WT/SET] to confirm the unit weight, the scale display will show '------'and return to '*0*'. The unit weight setting has been saved.

11.2 : To retrieve the saved unit weight input

a) Press [ENT] button to reset the scale.
b) Select the memory key to retrieve the saved data input.
c) Place some samples on the weighing platter, the total number of pieces is shown on the scale display.
d) Press [ENT] button to reset the scale

11.3 : To delete the Memory Input

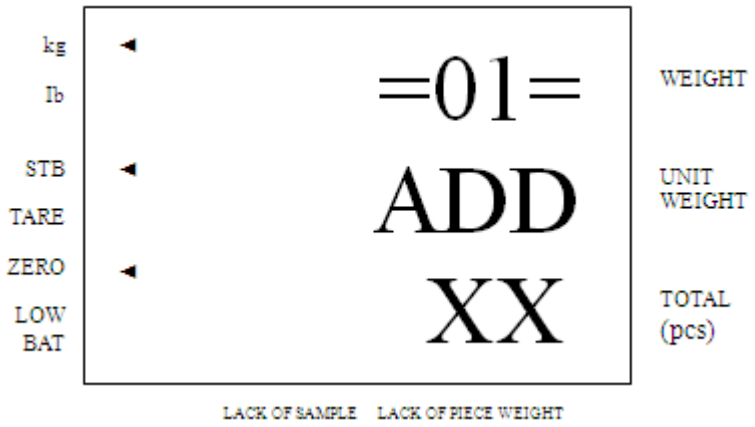
a) Press the numerical key (0) to input the unit weight as zero value.
b) Select the memory button to over-ride the previously memory input.
c) Press [WT/SET] to confirm the new setting, the scale display will show '------'and return to '*0*'. The previous memory input has been deleted.

12.0 TOTAL SAMPLE FUNCTION

12.1 : To perform sample accumulation count

a) Perform the counting function then press [M+] to add the samples

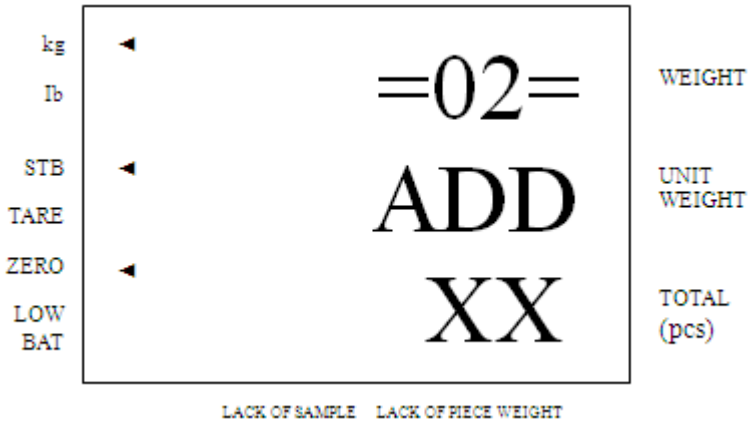
b) Scales display will show as per the below diagram, where total pieces of samples is displayed on the third line. Press [ENT] to exit the screen



c) Perform counting functions for more samples

d) Press [M+] button to add the samples

e) Scale display will show as per the below diagram, press [ENT] to exit the screen



f) A total of 99 sample accumulation count is allowed.

12.2 : To clear the total weight

a) Press [TOTAL] button to show the total pieces of the samples

b) Press [MC] button and followed by [ENT] button to clear the unit data.