

# VN1 INDICATOR

## USER MANUAL



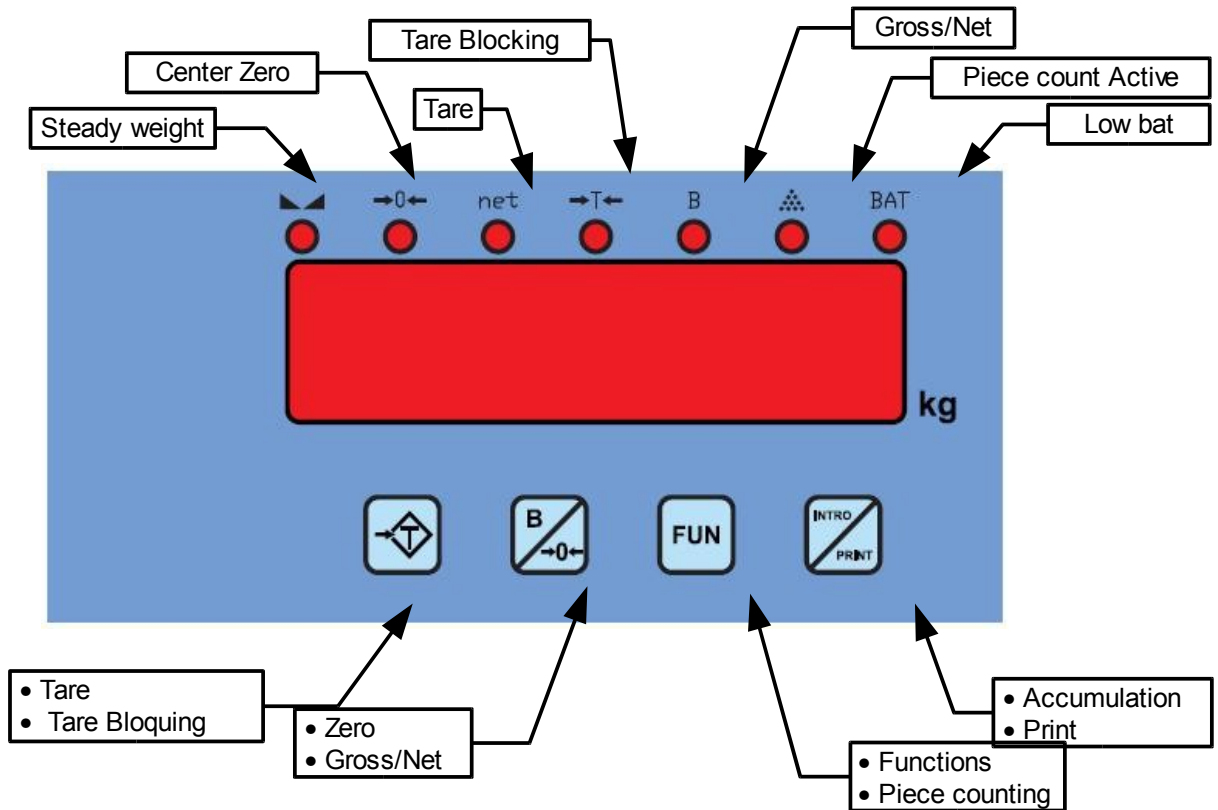
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# 1.EQUIPMENT DESCRIPTION

The V-N1 is prepared to work as weight-tare and truck weight.



## 2. START UP

1. We connect the equipment to power supply.
2. We connect the load cell to equipment.
3. We connect the printer or the PC.
4. We will commute the power supply switch (rear).
5. All the segments will be turned on and then the equipment scrolls next message **=V-N1= 2010 -Peso-Tara-Piezas.**
6. Next the equipment makes an internal zero and displays **0**, with the led of Center zero and steady weight turned on.

## 3. WORKING WITH TARES

This equipment can work with temporal tares, blocking tares and manual tares.

When the equipment has a tare, we can display the gross and net weights by the **B** key. The Gross/Net LED is turned on when the gross weight is displayed. To display the NET weight, press again the **B** key.

### 3.1 TEMPORAL TARE

To carry out a tare, press **<T>** and the weight on the platform will be a tare. The equipment will display **0** and the **net** Led will be turn on.

We can place another weight on the platform without remove the previous weight and press **<T>** key again to make a new tare and display **0** again. We can repeat this process as often as we want.

When we remove all the weight on the platform the tare disappears and the equipment displays **0** again and the **Net** led turns off.

### 3.2 TARE BLOQUING

To block a tare we must press twice the **<T>** key with a weight on the platform. It displays **0**, and when the tare is blocked the **→T←** led turns on.

To unblock the tare we must press **<T>** key when **0**. is displayed.

### 3.3. MANUAL TARE

We must press **FUN+<T>** at the same time to introduce a manual tare. It displays the last manual tare memorised.

- With **B** key we select the digit to be modified. This digit is displayed with the decimal point turned on.
- With **<T>** key we increases the value of selected digit.
- With **FUN+INTRO** keys, we erase the actual value.
- With **INTRO** key me memorise the value.

## 4. ACCUMULATION AND TOTAL WEIGHT

To accumulate a weight we must press the **INTRO** key. Were more than the minimum weighting (20 divisions metrological or 5 divisions non metrological).

When accumulate, the equipment sends a new string to the ticket (if printer is selected) or the weight is serial transmitted (if PC is selected) with the selected protocol format.

For a new accumulation is necessary to zero weight cross or tare a weight on the platform.

When all the accumulations are made, we must press the **FUN+INTRO** keys at the same time and the equipment ates the total weight and displays it by one intermittent message with the number of weightings and the total net weight.

We must press the **INTRO** key to return to normal weight.

## 5. PIECES COUNTING

To select the pieces counting you must press the **FUN** key for 3 seconds.

Then, you place on the platform a known number of pieces and you must introduce this number by the next keys:

- **<T>** to increase one by one unit.
- **B** to decrease one by one unit.
- **FUN** to increase to the next table number (10, 20, 50, 100, 250, 500 and 1000).
- **INTRO** to memorise the displayed value. Then the equipment calculates the weight of one unit and displays the number of pieces. So the equipment converts directly the weight on the platform in pieces (if the weight is 0, the equipment displays an error message and returns to weight mode automatically).

When the equipment is in counter mode, the led **▲** turns on, and also the decimal point of the last digit.

In pieces counting mode the equipment can accumulate, print a ticket and totalize like the normal weight mode.

To exit to this mode you must press the **FUN** key for 3 seconds.

## 6. FUNCTIONS MENU

To access this menu you must press **FUN+B** at the same time. The options displayed are:

CODE	
SUBTOTAL	
AUTOACCUMULATE	
NUMBER OF ACCUMULATIONS	
CLOCK	
WEIGHT FIXATION	
HIGH RESOLUTION	
TICKET	
REPETITION OF TICKET	
MIN. WEIGHT OF LOSSES	*
PERCENTAGE OF LOSSES	*
MEAN	ACTIVE
	MINIMUM WEIGHT
	MAXIMUM WEIGHT
	TIME
	ESC
BATTERY	
EXIT	

\* This sub menu only is displayed if the losses are activated in the programming menu.

### 6.1 CODE

This function allows introducing a code that is printed on the ticket.

To introduce a new code we use the next keys: **<T>** key to increase de selected digit, **B** key to change to next digit, **FUN+B** at the same time, to erase the code, **INTRO** key to exit without memorise and **FUN+INTRO** keys at the same time to memorise the displayed code.

### 6.2 SUBTOTAL

With this function we can see the number of weighings that we have accumulated and the total weight until now.

To see the sub-total you must press the **INTRO** key when the display shows **Subtot**. Next the equipment displays the number of accumulations and the total net weight until this moment.

### 6.3 AUTO ACCUMULATION

When active, the equipment accumulates the weight automatically, every time it reaches a stability (after the zero crossing). If a printer is plugged, a line is printed.

## **6.4 NUMBER OF ACCUMULATIONS**

If zero and the auto accumulation is active, the equipment performs auto accumulations automatically up to 100. If the auto accumulation is active and we memorize a non zero value, this will be a number of auto accumulations automatically, before to totalize automatically.

## **6.5 CLOCK**

If exist the clock calendar option, we can adjust here the date and the hour.

The process is as follows:

1. You enter the option by the **INTRO** key.
2. It displays the hour with the format Hour:Minute:Second.
3. With the **FUN+<T>** keys you can select the digit to be modified.
4. With the **<T>** key you can increase and the **B**,key you can decrease the value.
5. With the **FUN+INTRO** keys you can memorise the real value.
6. With the **FUN+B**.keys you change to date.
7. The date has the format Day:Month:Year.
8. We will use the same process as the hour adjust.
9. Finally we memorise with the **FUN+INTRO** keys. To exit without memorise, press simply the **INTRO** key.

## **6.6 WEIGHT FIXATION**

When active, the battery led turns on.

With the weight fixation, the equipment displays and fixes the maximum force applied on the platform.

With the **INTRO** key you accumulate this weight and resets the display.

## **6.7 HIGH RESOLUTION**

If active, the weight is displayed with a one more decimal digit (ten times resolution). The **BAT** led turns on.

To exit this mode you must press any key.

## **6.8 TICKET**

You can introduce a ticket number that is printed (if non zero) at the head of the ticket and it is automatically increased when the ticket is closed.

## **6.9 TICKET REPETITION**

When active, you can repeat the ticket after you make the total weight.

When the last line of total weightings and total weight is printed, you can repeat the total ticket another time pressing the **FUN+INTRO** keys. To begin another ticket you must to press the **INTRO** key.

## **6.10 MÍNIMUM WEIGHT OF LOSSES**

You can memorise the minimum weight to actuate the losses.

To memorise you must use the next keys:

- **<T>**: To increase the value of the selected digit.
- **B**: to change the selected digit, that is displayed whit the decimal point turned on.
- **INTRO**: To exit without memorise the value
- **FUN+INTRO**: To memorise the new value and exit

## **6.11 PERCENTAGE OF LOSSES**

The percentage is memorised with one decimal.

To memorise you must use the next keys:

- **<T>**: To increase the value of the selected digit.
- **B**: to change the selected digit, that is displayed whit the decimal point turned on.
- **INTRO**: To exit without memorise the value.
- **FUN+INTRO**: To memorise the new value and exit

## **6.12 MEAN**

Enable the option to make the mean of weight on the platform. This is used when the weight is never stable like the animal moving.

### **6.12.1 MINIMUM WEIGHT**

Minimum weight to consider in the mean. In the case of animal weighing it is recommended to use about 20% to 30% less of estimated weight.

### **6.12.2 MAXIMUM WEIGHT**

Maximum weight to consider in the mean. In the case of animal weighing it is recommended to use about 20 % yo 30% higher of the estimated weight.

### **6.12.3 TIME**

Maximum time in seconds to end the mean without stability. If zero is memorised, the equipment wait the stability of weight.

### **6.12.4 ESC**

Exit to this sub menu.

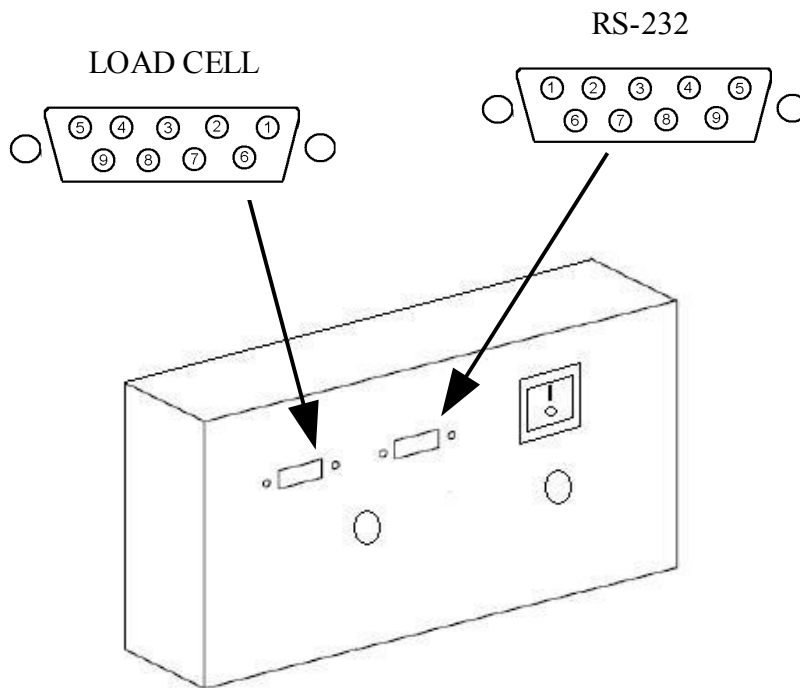
## **6.13 BATTERY**

Shows the battery voltage in Vdc. The value must be over the 8.5 for a normal working mode.

## **6.14 EXIT**

Returns to normal weight

## 7. CONNEXIONS SYSTEM



Load cell System connexion with sense (6 wires):

PIN	CONNECT TO
1	LOAD CELL NEGATIVE SUPPLY
2	LOAD CELL NEGATIVE OUTPUT
3	N.C.
4	LOAD CELL POSITIVE OUTPUT
5	LOAD CELL POSITIVE SUPPLY
6	NEGATIVE SENSE
7	N.C.
8	N.C.
9	POSITIVE SENSE
HOUSING	SHIELD

Load cell system connexion without sense (4 wires):

PIN	CONECTAR A
1	LOAD CELL NEGATIVE SUPPLY (Black)
2	LOAD CELL NEGATIVE OUTPUT (White)
3	N.C.
4	LOAD CELL POSITIVE OUTPUT (Green)
5	LOAD CELL POSITIVE SUPPLY (Red)
6	CONNECT TO PIN 1
7	N.C.
8	N.C.
9	CONNECT TO PIN 5
HOUSING	SHIELD



RS-232 CONNEXIONS:

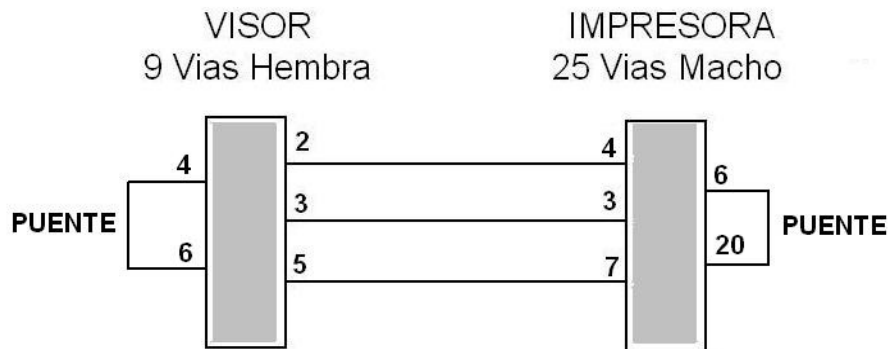
PIN	SEÑAL
1	N.C.
2	RXD (RS232)
3	TXD (RS232)
4	N.C.
5	GND (RS232)

## 8. PRINTER CONNEXIONS

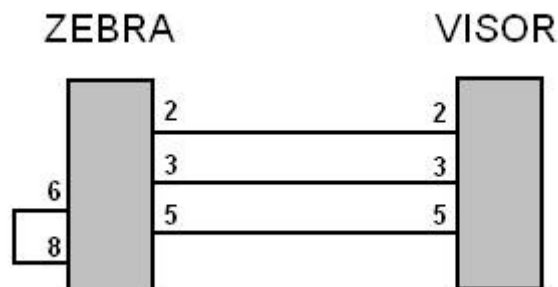
### 8.1 LX-300



### 8.2 SRP-275



### 8.3 TLP-2844



## 9. TIQUET

Head first line			
Head second line			
Head third line			
Date: 03/02/08		Hour: 09:15:42	
WEIGHING N.	CODE	TARE kg	NET kg
1	32006	0.200	1.450
2		0.375	0.860
3	5003	0.000	2.160
TOTAL WEIGHINGS		TOTAL kg	
3		3.895	



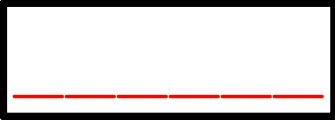
## ATTACHED: ANIMAL WEIGHING

### EXAMPLE:











Suppose that you must weight animals over **500 kg** up to **1000 kg**.

1. Access to **MEAN** in the **FUNCTIONS MENU**.
2. Activate the option **ACTIVE** (select -yes-).
3. Introduce the minimum weight (**Min. W**) **300 kg**
4. Introduce the maximum weight (**Max. W**) **1200 kg**
5. Introduce the time (Time) **10**
6. Manuel process:
  1. Press the **B** key to make a zero.
  2. Place the animal on the platform.
  3. Press the **INTRO** key and the equipment displays **MARCHA**.
  4. Wait the selected time (or the stability) as the mobility of the animal, or press the **INTRO** key again to complete the weight process.
  5. The displays shows the weight of the animal.
  6. Press finally the **INTRO** key to return to normal mode and remove the animal.
  7. You can repeat the steps 6.2 to 6.6 for all the animals.

## TROUBLESHOOTING

	<p>The load cell is not well connected or the cable is damaged.</p>
<p>In the start-up the equipment beeps continuously.</p>	<p>A key is broken.</p>
<p>The equipment doesn't starts</p>	<ol style="list-style-type: none"> <li>1. Check power and the fuses.</li> <li>2. Unplug the load cell and the serial connector to check a crossed wire.</li> </ol>
	<p>It exist an error in the memory of the equipment and it remains locked.</p>
	<p>When you use the metrological parameters, if the initial weight is over the 8% of the weight range the displays shows a dashed line. If this weight is positive you see an upper dashed line. If negative you see an under dashed line.</p>

## SUMMARY

	<ol style="list-style-type: none"> <li>1. If pressed once, it makes a tare</li> <li>2. If pressed twice the tare is locked.</li> <li>3. If a tare exist and the display show 0. if you press once, you unlock a tare.</li> </ol>
	<ol style="list-style-type: none"> <li>1. It Makes a zero of the platform.</li> <li>2. If there as a tare. It displays a gross weight</li> </ol>
	<ol style="list-style-type: none"> <li>1. It accumulates and prints a line of text with a number of weight, tare and net weight on the ticket.</li> </ol>
	<ol style="list-style-type: none"> <li>1. Pressing for 3 seconds Enters or leaves the pieces counting.</li> </ol>
 	<ol style="list-style-type: none"> <li>1. It enters in manual tare.</li> </ol>
 	<ol style="list-style-type: none"> <li>1. It enters in functions menu.</li> </ol>
 	<ol style="list-style-type: none"> <li>1. It make the total of the accumulated weightings, prints the last line of ticket and shows the number of weightings and the total net weight.</li> </ol>