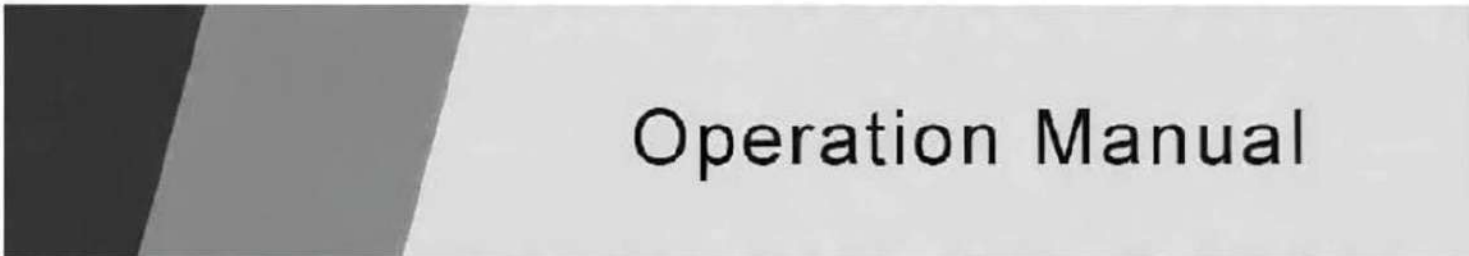


T-Scale



Operation Manual

NTW-M
Weighing Indicator

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1. INTRODUCTION

The BW/BWS/VW/CW/NTW/NSW series of weighing indicator provides an accurate, fast and versatile series of general purpose weighing scale with check-weighing functions.

All units include automatic zero tracking, audible alarm for pre-set weights, and an accumulation facility that allows the individual weights to be stored and recalled as an accumulated total.

2. KEY DESCRIPTIONS

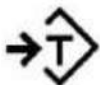
ON/ OFF or 

Turn on or off the power.

Zero or 

Set the zero point for all subsequent weighing. Display shows zero.

A secondary function of "Enter" key when setting parameters or other functions.

Tare or 

Tares the scale. Stores the current weight in memory as a tare value, subtracts the tare value from the weight and shows the results.

A secondary function incrementing the active digit when setting a value for parameters or other functions.

Press **Zero** and **Tare** key together in normal weighing mode will turn on/off animal scale function.(when enter/escape animal scale mode, you will hear beeper on twice)

MR or 

Memory recall key, show total accumulate weight in memory.

In setting mode, this key used to move active digits right.

Hold **MR** key to enter parts counting mode.

M+ or 

Accumulate key, store current weight in memory.

In setting mode, this key used to move active digits left.

Press **M+** and **MR** key for MC (memory clear)

Print or 

To print the results to a PC or printer using the RS-232 interface.

Press **Print** during selfchecking will enter setting mode.

G/N or **G / N**

weighing unit shift.

Secondary function (ESC) , is to return to normal operation when the scale is in a parameter setting mode.

Hold **G/N** key for weighing unit shift.

Press **G/N** and **Print** key together for setting check Weighing limit.

3. BASIC OPERATION

3.1 Zeroing The Display

You can press the **ZERO** key at any time to set the zero point from which all other weighing and counting is measured, within 4% of power up zero. This will usually only be necessary when the platform is empty. When the zero point is obtained the display will show the indicator for zero.

The scale has an automatic rezeroing function to account for minor drifting or accumulation of material on the platform. However you may need to press the **ZERO** key to rezero the scale if small amounts of weight are shown when the platform is empty.

3.2 Taring

Zero the scale by pressing the **ZERO** key if necessary. The zero indicator will be on.

Place a container on the platform, a value for its weight will be displayed.

Press the **TARE** key to tare the scale. The weight that was displayed is stored as the tare value and that value is subtracted from the display, leaving zero on the display. The "NET" indicator will be on. As product is added only the weight of the product will be shown. The scale could be tared a second time if another type of product was to be added to the first one. Again only the weight that is added after taring will be displayed.

When the container is removed a negative value will be shown. If the scale was tared just before removing the container this value is the gross weight of the container plus all product that was removed. The zero indicator will also be on because the platform is back to the same condition it was when the **ZERO** key was last pressed.

3.3 Weighing a sample

To determine the weight of a sample first tare the empty container then place the sample in the container. the display will show the weight and the units of weight currently in use.

4. CHECK-WEIGHING

4.1 About check-weighing

Check-weighing is a procedure to cause an alarm to sound when the weight on the scale meets or exceeds values stored in memory. The memory holds values for a high limit and a low limit.

Check mode OK:

When check range, the display will show OK and the beeper will sound when the weight is between the limits.

Check mode NG:

When check range, the display will show OK and the beeper will sound when the weight is out of the limits.

4.2 Set limits

Press **G/N** and **PRINT** key together, it will display "SEt H", use **TARE**

key to select "SEt H" or "SEt L", press **ZERO** key to enter, use **M+** and **MR** key to move active digit, use **TARE** key to change value, use **Print** key to clear value. After you enter the value, press **ZERO** key to sure, press **G/N** key to escape.

4.3 Set check weighing mode

Press **G/N** and **print** key together, it will display "SEt H", use **TARE** key to select *bEEP*, press **ZERO** key to enter, press **TARE** key to select *OK* (check mode OK), *NG* (check mode NG), *no* (no beep), press **ZERO** key to sure, press **G/N** key to escape.

4.4 NOTE

Checkweighing function only available when weight more than 20d.

To disable the Check-Weighing function enter zero into both limits by pressing the **PRINT** key when the current limits are shown then pressing **ZERO** to store the zero values.

5. ACCUMULATED TOTAL

5.1 Note

The scale can be set to accumulate manually by pressing the **M+** key. See the PARAMETERS Section for details of selecting the method using function "P2 CoN".

Please note before every accumulate operate, scale need return to zero, and only press **M+** key when stable, when weight less than 20d, accumulate operate will be invalid.

5.2 Accumulate operate

The weight displayed will be stored in memory when the **M+** key is pressed and the weight is stable.

The display will show "ACC I" and then the total in memory for 2 seconds before returning to normal. (after do accumulate operate, "M+" indicator will turn on) If the optional RS-232 interface is installed the weight will be output to a printer or PC.

Remove the weight, allowing the scale to return to zero and put a second weight on. Press the **M+** key, the display will show "ACC 2" and then the new total.

Continue until all weights have been added.

5.3 memory recall

To view the totals in memory press **MR** key.

5.4 memory clear

To clear the memory, just press **M+** and **MR** together

5.5 automatically accumulate

Press Print key during selfchecking, enter setting mode, press Tare key until display show $P2\bar{C}0\bar{n}$, press **ZERO** key to enter, press **TARE** key to select " $\bar{n}odE$ ", press **ZERO** key to sure, display will show current RS-232 mode, press TARE key to select $RU\bar{L}0$. After you set, AUTO indicator on.

Press weight on platform, after stable, you will hear beep on twice, you can add or remote weight now, scale will beep on again after stable, at last, remove all weight on platform, the last weight value will store in memory

6. PARTS COUNTING

Hold **MR** key 2 seconds to enter parts counting mode, display show " $P\ \bar{I}\bar{Q}$ ", press **TARE** key to select sample quantity (10/20/50/100/200), put the sample goods on platform (the quantity same as shown on display), press **ZERO** key to sure, display will show "-----", then show current quantity. Sampling finished.

After sampling, add goods on the platform, display will show it's quantity.

In counting mode, you can pres **MR** key to normal weighing mode.

7. ANIMAL SCALES

Let the animal on the platform, after some second, if reading data change not a lot, reading data will be locked.

In reading data lock mode, if you add/remove big weight, display will still update and lock new reading data.

You can through the parameter to enter/escape animal weighing mode.

8. KEYBOARD LOCK

You can use keyboard lock when this function enable (see detail setting process in technical manual), after keyboard haven't use for 10 minutes, keyboard will be lock, after enter lock status, if you press any key, display will show "L-LCK".

If you want to escape lock mode and return work mode, hold **PRINT** , **MR** , **ZERO** key 2 seconds, display will show "ULLCK", return normal mode.

9. BATTERY OPERATION

The weighing indicator can be operated from the battery if desired. The battery life is approximately 70 hours.

When the battery needs charging a symbol on the weight display will turn on. The battery should be charged when the symbol is on. The scale will still operate for about 1 hours after which it will automatically switch off to protect the battery.

To charge the battery simply plug into the mains power. The scale does not need to be turned on.

The battery should be charged for 12 hours for full capacity.

Just under the display is an LED to indicate the status of battery charging. When the scale is plugged into the mains power the internal

battery will be charged. If the LED is green the battery has a full charge. If it is Red the battery is nearly discharged.

As the battery is used it may fail to hold a full charge. If the battery life becomes unacceptable then contact your distributor.

10. USER SETTING

10.1 set backlight

Hold **ZERO** key 3 second, display will show "SEt bL ", press **ZERO** key to enter backlight setting, press **TARE** key to change backlight mode (bL on: always on, bL AU: auto backlight, backlight will on when press any key or add load on scale, bL OFF: backlight always off), press **ZERO** key to sure, press **G/N** key to escape.

10.2 set auto power off

Hold **ZERO** key 3 second, display will show "SEt bL ", press **TARE** key, display show "SEt OFF", press **ZERO** key to enter auto power off setting, press **TARE** key to change auto power off time (oF on: always on, oF 5: auto power off after standby 5 minutes, oF 15: auto power off after standby 15 minutes), press **ZERO** key to sure, press **G/N** key to escape.

11. CALIBRATION

Press **PRINT** key during the self checking. Press **M+**, **G/N** and **TARE** to enter, Press **TARE** until display will be show **P 3 CAL**, then you should press calibration switch. Press **ZERO** key to confirm and press **TARE** to select **CAL**, press **ZERO** key to confirm, Press **TARE** key to enter calibration, remove all the weight from the platform. Press **ZERO** key to confirm. Display will be show the calibration weight. Place the calibration weight on the platform, When indicator get stable, press **ZERO** key to confirm. Display will come to normal weighing mode.