



WASHDOWN SCALE **NSS**

User Manual



v.201811

Value Each Gram

Before Use

1.1 Safety precautions



WARNING!

- ▲ Do not use NSS weighing scale in hazardous area! Do not use it within areas classified as hazardous division 1/2 or zone 0/1/2/21/22 because of combustible or explosive atmospheres.
- ▲ Never immerse it in corrosive chemical liquid.
- ▲ Static sensitive device, it must be handled only by qualified technicians. Improper handling may damage the circuit card and the device, which is not covered by the warranty.



DANGER!

Electric shock hazard!

- ▲ Always unplug the adaptor before performing any service work on the scale!



Disposal

In conformance with the European Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE), this device may not be disposed of in domestic waste. This also applies to countries outside the EU as per their specific regulations.

Please dispose of this product in accordance with local regulations at the collecting point specified for electrical and electronic equipment.

If you have any questions, please contact the responsible authority or the distributor from which you purchased this indicator.

Should this scale be passed on to other parties (for private or professional use), the content of this regulation must also be related.

The scale has a rechargeable internal battery. The battery contains heavy metals. Please observe the local regulations on the disposal of environmentally hazardous materials.

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1. Technical Specifications

| | |
|-----------------------|---------------------------------|
| Model | NSS |
| Enclosure Type | SUS304 |
| Product Dimension | 330 x 290 x 110mm |
| Shipping Weight | 4.8kg |
| Accuracy | Class III |
| Display Resolution | 1/6,000 |
| Capacity | 3 6 15 30kg |
| Division | 0.5g 1.0g 2.0g 5.0g |
| Units | Kg, g , lb, etc. |
| Display | LED or LCD |
| Power | 100-240V – 12V1Ah AC/DC adaptor |
| Battery | 6V4Ah |
| Protection | IP67 |
| Operating Temperature | -10°C~40°C |
| Storage Temperature | -25°C~55°C |
| Relative humidity | 85%Rh non-condensing |

2. Model Identification

| | | | | | |
|----------------|------------|-----------|-----------|----------|----------|
| Model: | <u>NSS</u> | <u>-E</u> | <u>UK</u> | <u>0</u> | <u>0</u> |
| Corresponding: | A | B | C | D | E |

A = Main model name

B = Display type: -E: LED
 -C: LCD

C = Plug type, examples:

| |
|------------------------|
| AU = Australia Type |
| CN = China Type |
| EU = Europe Type |
| US = USA Type |
| SA = South Africa Type |
| UK = UK Type |

D = Standard or customized: -0: Standard
 -1: Customized

E = pending, no function

3. Packing List

After the scale received, please open the box carefully and check the following items included:

- Scale x 1
- Power adaptor x 1
- Manual x 1

4. Load Cell

| PCB | Load Cell |
|-------------|--------------|
| +E..... | Excitation + |
| +S..... | Signal + |
| SHIELD..... | Shield |
| -S | Signal – |
| -E..... | Excitation – |

5. Keyboard



- On** - Switch on the scale
- Zero** - Zero the scale, when the weight less than +2%F.S.
- Tare** - Tare function, to deduct the weight of a container
Move the digit to right during program set



- Off** - Keep pressing the key for 3 seconds to switch off the scale



- Function** - Access to the functions of scale
Increase the digit during program setting
Enter the calibration by keeping this key for 3 seconds



- Unit** - Change the weight unit
Exit from the program setting

In the below contents, use key [ON] [OFF] [FN] [UNIT] represent as above buttons.

6. Applications

6.1 Weighing

Switch on the scale and wait self-checking finish, if the scale display 0, now it's ready for weighing; if the scale doesn't display 0, press [ON] key to zero the scale.

Put the commodity on the pan of the scale, it will show the weight.

6.2 Checkweigh

The user can configure the over and under limit of the weight placed on the pan, refer to **UF-2** parameters setting, if the weight under the limit, it will turn on the Hi LED light (*for LCD version, the backlight change to be in yellow-green color*), if the weight over the limit, it will turn on the Lo LED light (*for LCD version, the backlight change to be in magenta color*), and if the weight within the range, it will turn on the OK LED light (*for LCD version, the color change to be in green*).

6.3 Multi-range & Multi-interval

The standard version with only one range and division, but the scale can be set as multi-range or multi-interval, refer to LF-2 parameters setting.

If it set to be multi-range or multi-interval, it will work as below:

Multi-interval: 0 – 50%F.S. with the interval as it selected (A), 50%-100%F.S. with the next interval (B), when the weight decrease, it will change from B to A when the range change from above 50%F.S. to less 50%F.S.

Multi-range: 0 – 50%F.S. with the interval as it selected (A), 50%-100%F.S. with the next interval (B), if the weight decrease from above 50%F.S., it will use interval B until the scale is empty.

7. Parameters Configuration

To access the configuration of the parameters, the scale must be in zero condition, and press the [FN] key to enter and press it again to select the setting from UF-1 to UF-9 (LCD version till UF-8), press [UNIT] key to quit.

7.1 UF-1 Internal Counting (A/D)

When UF-1 selected, press [ON] key to enter it will display the A/D counting (*example: 2704565*), Press [ON] again, it will display the battery voltage, press [ON] key again to exit this mode.

7.2 UF-2 Checkweigh Setting

When UF-2 selected, press [ON] key to enter, the display will show the message **000.00L** (the under limit), use the key [ON] and [FN] to move the cursor and select the number needed, when all number input, press [ON] key to confirm and the display will show the message 000.00h (the over limit), use the key [ON] and [FN] to move the cursor and select the number needed, and when all input, press [ON] key to confirm, the display will show the beeping setting:

| | | | |
|----------------|----------|---|----------|
| Display: | <u>0</u> | <u>0</u> | <u>0</u> |
| Corresponding: | A | B | C |
| A | = | 0: Beep and no need to wait stabilization of the weight | |
| | = | 1: The weight must be stable and then the beep can work | |
| B | = | 0: Always 0 | |
| C | = | 0: Always deactivate | |
| | | 1: Beep during range of OK (between Lo and Hi) | |
| | | 2: Beep when it's out of limit (>Hi value or <Lo value) | |

Press [ON] key to move the cursor and key [FN] to select the right number and then press [ON] to confirm.

7.3 UF-3 Auto Switch Off

Press key [ON] to enter this menu and press [ON] again to move the cursor and press key [FN] to set the right number and then press [ON] to confirm.

| | | |
|---------|---|--|
| AoFF 00 | = | Deactivate |
| AoFF 01 | = | The time to power off, 01 = 1 minute, it will switch off after no use for 1 minute, you can set it from 1 to 99 minutes. |

7.4 UF-4 Standby Mode (LED version)

Press key [ON] to enter this menu and use [FN] + [ON] key to select the right number and then press [ON] to confirm.

| | | |
|--------------------|---|--|
| dSP | = | 00: Deactivate |
| dSP | = | 01: Standby after 1 second no use of the scale |
| dSP | = | 02: Standby after 2 seconds no use of the scale |
| ... | | |
| dSP | = | 99: Standby after 99 seconds no use of the scale |
| * default set = 10 | | |

Backlight Set (LCD version)

Press key [ON] to enter this menu and press [ON] again to move the cursor and press key [FN] to select the right mode and then press [ON] to confirm.

| | | |
|-----|---|--------------------------|
| A | = | Automatic |
| ON | = | Illumination activated |
| OFF | = | Illumination deactivated |

7.5 UF-5 Hold (LED version)

Response Speed (LCD version)

Press key [ON] to enter this menu and press [ON] again to move the cursor and press key [FN] to select the right model and then press [ON] to confirm.

| | | |
|---------|---|------------------|
| Model 1 | = | Normal (default) |
| Model 2 | = | Fast |
| Model 3 | = | Slow |

7.6 UF-6 Hold (LED version)

Auto Zero Track (LCD version)

Press key [ON] to enter this menu and press [ON] again to move the cursor and press key [FN] to select the right number and then press [ON] to confirm.

Example: *This function for the minimum read on the display, if the scale with division = 1g and UF-6 set with 5 divisions, the scale will not show before the weight more than 5g (1x5), it will start to display from next division – 6g.*

7.7 UF-7 Response Speed (LED version)

Press key [ON] to enter this menu and press [ON] again to move the cursor and press key [FN] to select the right model and then press [ON] to confirm.

| | | |
|---------|---|------------------|
| SPEED 1 | = | Normal (default) |
| SPEED 2 | = | Fast |
| SPEED 3 | = | Slow |

Gravity (LCD version)

Press key [ON] to enter this menu and view the current gravity, and press key [FN] and [ON] to set the new gravity if you want, and then press [ON] to confirm.

7.8 UF-8 Auto Zero Track (LED version)

Press key [ON] to enter this menu and press [ON] again to move the cursor and press key [FN] to select the right number and then press [ON] to confirm.

RS232 (LCD version, pending, no function)

7.9 UF-9 Gravity (LED version)

Press key **[ON]** to enter this menu and view the current gravity, and press key **[FN]** and **[ON]** to set the new gravity if you want, and then press **[ON]** to confirm.

8 User Calibration

When the scale in normal weighing mode, the user can press **[FN]** to enter and select ECF setting from ECF-1 to ECF-3

8.6 ECF-1 Calibration of Zero and weight

Press **[ON]** key, it will show CAL Z

Press **[ON]** key to confirm the zero calibration (keep nothing on the scale)

Press **[ON]** key to move the cursor and press **[FN]** key to input the weight value.

Place the weight on the pan of the scale and press **[ON]** to confirm calibration.

8.7 ECF-2 Calibration of Zero

Press **[ON]** key, it will show CAL Z

Press **[ON]** key to confirm the zero calibration (keep nothing on the scale)

8.8 ECF-3 Calibration of weight

Press **[FN]** key, it will show value for calibration

Press **[ON]** key to move the cursor and press **[FN]** key to modify the weight value if it needs to be modified, and then place the weight on the pan of the scale, press **[ON]** to confirm.

The warranty period is one year starting with delivery of the scale and it covers all manufacturing and materials defects, during this period, we will be in charge of the repairing of the scale and parts replacement free (battery not covered). The warranty does not include the damages caused by overload or wrong use, also it does not cover the transportation cost.



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