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Chapter 1 Main specification

1，model： Weighing indicator

2. Accuracy： GradeⅢ, n=3000

3. Sample Rate： 10 times/second

4. Load cell sensitivity： 1.2～3mV / V

5. Scale interval： 1/2/5/10/20/50 for option

6. display： LED digital，7 status indications (BSC12 is indicated by a LED lamp, no distinction is made hereunder, and the status indicator is indicated by ▼)

7. Communication interface (optional)： RS232C；Serial transmission rate 9600/19200 optional

8. Power supply： Maintenance-free lead-acid batteries DC4V/4AH

9. transporting temperature： 0～40℃

10. Operating temperature： -25～55℃

11. humidity： ≤85%RH

Instrument features：

1. High-precision A/D conversion, readability up to 1/300000;

2. Special software technology enhances the system's resistance to vibration；

3. Digital filter speed, amplitude and stable time can be set；

4. Optional RS232 communication port, serial transmission rate optional, communication options；

Chapter 2 Key function

1.【＃】: POST press this button to enter the calibration mode。

2.【FUNC】：Keep pressing this button for 5 seconds more in weighing mode, it will come into operator setting mode; less than 5 seconds, it will come into counting mode.

3.【＊】：In the counting mode, press this key to enter the sample number input mode.

4.【TARE】：Press this button to tare in weighing mode.

5.【ZERO】： Press this button to zero in weighing mode.

6.【ACCUM】： Press this button for sample taking in counting mode.

Chapter 3 Calibration

Press [#] key for a long time during the initialization process until the stroke self-test ends, the instrument will enter the calibration state and display [d X]. Follow the steps below to perform step-by-step operation.

1、Gradient settings：

Display [d X] Press [Tare] key to select 1, 2, 5, 10, 20, 50, press [#] key to confirm and enter the setting of the next parameter. Press the [Tare] button to automatically step through the circle display.

Display [d X] Display [d 1] Display [d 2] Display [d 5] Display [d 10]Display [d 20]Display [d 50]

Display【d 1 】For example, when displaying【d 5】, press【#】key, the division value is set to 5, and it automatically enters the decimal point setting mode.

2、Decimal point setting：

Display【P X】Press【Tare】key to select 0, 1, 2, 3 decimal places, press【#】key to confirm, and automatically enter the setting of the next parameter. Press the [Tare] button to automatically step through the circle display.

Display [P 0] Display [P 0.0] Display [P 0.00] Display [P 0.000] Display [P 0.0000] Display

Display【P 0】For example, when displaying【P 0.000】, press【#】key, the decimal point is set to 0.000, and the maximum capacity setting mode is automatically entered.

3、Maximum capacity setting：

Display【FULL】Press【Tare】key to enter the digital input state.
Display【0 0 0 0 0 0】Press【Tare】key, mark the symbol ▼ to move to the right to select the digit input position, press the [Zero] key to automatically increment the corresponding bit, until the desired digit appears, and then press【 In addition, press the key designator ▼ to move to the right and select the digit input position. Press the [Zero] key to increment the corresponding step by one. Until the maximum value of the scale appears, press the [#] key to confirm and the next parameter will be set automatically.
For example, display【0 2 5 0 0 0】Press【#】to confirm and automatically enter zero calibration mode.

4、Zero calibration：

Display [nOLOAD] Nothing on the weighing platform, wait until the stability indicator ▼ appears, press the【#】key, the zero calibration is completed, and the span calibration mode is entered.

5、Full-scale calibration：

Display [AdLOAD] Place a weight on the weighing platform and press the [Tare] key to enter the input state.
Display【0 0 0 0 0 0 】Press【Tare】key, mark the symbol ▼ to move to the right and select the digit input position, press the [Zero] key to automatically increment the corresponding digit, until the desired digit appears, and then press【 In addition, press the key designation key ▼ to move to the right and select the digital input position. Press the [Zero] key to automatically increment the corresponding bit by one, until the displayed digit and the weight are equal. When the stability indicator ▼ appears, press [[]] key to confirm, end the calibration mode. Display【 End 】

Chapter 4 operation

4.1 **power on and auto zero-setting**

4.1.1. The indicator will perform “999999-000000” to self-checking when turning on. Then it will enter weighing mode.
4.1.2. When power on, if loading weight on the scale deviates from the zero point, but still within zero set range, the indicator will set zero automatically; If the setting is outside the range of zero setting, the instrument will alarm “Err 3”, indicating that the range is beyond the zero setting. At this time, the weight on the platform must be removed or the zero or re-calibration and setting of the scale should be adjusted.

4.2. Manual zero setting (Semi-automatic)

4.2.1. In weighing mode, when there is some error when unloaded, press [Zero] to make the indicator to be zero.
4.2.2. If the displayed value deviates from zero point, but still within zero-range, pressing [Zero] key is available. Otherwise, [Zero] key is invalid. (In this status, please recalibrate or reset zero parameters).
4.2.3. Only when stable annunciator is on, zero operation can be available.

4.3. Tare function

When Indicator at weighing status, and displaying positive weight stable, press [Tare] key, indicator will deduct the displayed weight value as tare weight. Then indicator displays net weight as “0”, and Tare sign annunciator is on.

4.4. Counting function

In the weighing display state, press [FUNC] to enter the counting state, display count, put a certain number of weights, after stabilization, press [*] key to display C00000, press [Tare] key to correspond to small triangle movement selection Bit, press the [Zero] key, the corresponding bit of the small triangle plus one increment, enter the number of samples, press the [*] key to enter the counting mode, and the corresponding counting mode lights up in a small triangle. Press the [FUNC] key to return to the weighing mode. After entering the counting mode, it will display count, press [*] key twice to directly enter the counting mode, and the indicator will perform calculation and display according to the last sampling result.

4.5 · Accumulating function

In the weighing mode, press【*】key, the meter accumulates the current weight, press【* 】key again to return to the weighing mode; in the zero mode, press【* 】key to display the current accumulated value; in the accumulated mode , Press the [FUNC] key to clear it. Note: Before each accumulation, the weighing platform must be returned to zero! Otherwise, the next cumulative operation cannot be performed.

4.6 · Display battery voltage

In the weighing mode, press【#】key, the indicator displays the current power and returns to the weighing mode.

4.7 · User’ s function setting

In the weighing state, press the [FUNC] key for more than 5 seconds to enter the user setting mode. There are 12 parameter settings for P1~P12 in the user setting mode. Press the [Tare] key to change the value and press the [*] key. Select the next parameter. The parameters are described as follows:

4.7.1、P1 x kg Lb change

x=1: kg display

x=2: Lb display

4.7.2.P2 x Serial transmission rate setting

x=1: 9600

x=2: 4800

4.7.3.P3 x RS232 Net/Gross weight output option

x=1: Net weight output

x=2: Gross weight output

x=3: tare weight output

4.7.4 P4 x RS232 output mode option

x=1: No transmission

x=2: Continuous transmission

x=3: Continuous transmission when stable

x=4:Continuous transmission External display

method one、P4=2：Continuous transmission

The transmitted data is weighing (gross, net or tare, as determined by the P4 parameter).

Gross weight format： ww000.000kg or ww000.000lb

Net weight format： wn000.000kg or wn000.000lb

Tare weight format： wt000.000kg or wt000.000lb

Note: The above decimal point position is determined according to the decimal point position setting of the indicator.

method two、P4=3： Continuous transmission when stable

The transmitted data is weighing (gross, net or tare, as determined by the P4 parameter).

Gross weight format： ww000.000kg or ww000.000lb

Net weight format： wn000.000kg or wn000.000lb

Tare weight format： wt000.000kg or wt000.000lb

Note: The above decimal point position is determined according to the decimal point position setting of the indicator.

method three、P4=4： Continuous transmission

Data format: = <Weight data (with decimal point)> All data is ASCII.

Note: = data format header, ASCII code.

<Weight data (with decimal point)> : Six-digit signed weight data including decimal point, ASCII code.

The weight data is the lowest, the high and the sign are at the end. The negative sign bit is sent as "-" and the positive sign bit is sent as 0.

The current indicator shows a weight of **-500.00**kg，The serial output data is：**= 00.005-.**

The current indicator shows a weight of **500.00**kg，The serial output data is：**= 00.0050.**

4.7.5、P5 x Power saving function setting

x=1: No this function

x=2: power saving

4.7.6、P6 x Zero-tracking scope

x=0: No this function

x=1: 0.1e ~ x=9: 0.9e

4.7.7、P7 x Zero scope upon starting

x=1: 100%FS

x=2: No this function

4.7.8、P8 x Weighing anti-jitter

x=0: No this function

x=1: 0.1e ~ x=9: 0.9e

4.7.9、P9 x return Zero

x=0: No this function

x=1: 1e~ x=9: 9e

4.7.10、P10 x Digital filtering intensity

x=1: 1e~ x=9: 9e

4.7.11、P11 x Backlight setting

x=1: Automatic backlight x=2:Keep lighting x=3:No backlight

4.7.12、P12 x weighing method

x=1: standard x=2:living x=3:locked

Live scale and lock function only apply to 6000 or less accuracy

Chapter 8 Information tips

1. Err 3 means：The zero position is out of the setting range at power on. (The weight on the weighing platform should be kept at zero when starting up)
2. Err 9 means：Accumulated conditions are not met.

3. Err10 means：overload.

4. b-Err means：Insufficient battery voltage. (Please charge as soon as possible)

1、P1 x kg Lb change

x=1: kg display

x=2: Lb display

2、**P2 x Serial transmission rate setting**

x=1: 9600

x=2: 4800

3、P3 x RS232 Net/Gross weight output option

x=1: Net weight output

x=2: Gross weight output

x=3: tare weight output

4、P4 x RS232 output mode option

x=1: No transmission

x=2: Continuous transmission

x=3: Continuous transmission when stable

x=4:Continuous transmission External display

method one、P4=2：Continuous transmission

The transmitted data is weighing (gross, net or tare, as determined by the P4 parameter).

Gross weight format： ww000.000kg or ww000.000lb

Net weight format： wn000.000kg or wn000.000lb

Tare weight format： wt000.000kg or wt000.000lb

Note: The above decimal point position is determined according to the decimal point position setting of the indicator.

method two、P4=3： Continuous transmission when stable

The transmitted data is weighing (gross, net or tare, as determined by the P4 parameter).

Gross weight format： ww000.000kg or ww000.000lb

Net weight format： wn000.000kg or wn000.000lb

Tare weight format： wt000.000kg or wt000.000lb

Note: The above decimal point position is determined according to the decimal point position setting of the indicator.

method three、P4=4： Continuous transmission

Data format: = <Weight data (with decimal point)> All data is ASCII.

Note: = data format header, ASCII code.

<Weight data (with decimal point)> : Six-digit signed weight data including decimal point, ASCII code.

The weight data is the lowest, the high and the sign are at the end. The negative sign bit is sent as "-" and the positive sign bit is sent as 0.

The current indicator shows a weight of **-500.00**kg，The serial output data is：**= 00.005-.**

The current indicator shows a weight of **500.00**kg，The serial output data is：**= 00.0050.**

5、P5 x Power saving function setting

x=1: No this function

x=2: power saving

6、P6 x Zero-tracking scope

x=0: No this function

x=1: 0.1e ~ x=9: 0.9e

7、P7 x Zero scope upon starting

x=1: 100%FS

x=2: No this function

8、P8 x Weighing anti-jitter

x=0: No this function

x=1: 0.1e ~ x=9: 0.9e

9、P9 x return Zero

x=0: No this function

x=1: 1e~ x=9: 9e

10、P10 x Digital filtering intensity

x=1: 1e~ x=9: 9e

11、P11 x Backlight setting

x=1: Automatic backlight x=2:Keep lighting x=3:No backlight

12、P12 x weighing method

x=1: standard x=2:living x=3:locked