

# **XK3190-DS8**

**Digital weighing display**

# **使 用 说 明 书**

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(Version 1.00)

**Dear User:**

Before using the instrument, please read the instruction manual. Please read the instruction manual.

# XK 3 1 9 0 –DS8

## Chapter 1 Technical Parameters

**1. Model:** 2. Digital XK3190-DS8

**sensor interface, digital sensor interface:**

|                     |           |
|---------------------|-----------|
| <b>Interface</b>    | RS485     |
| <b>mode:</b>        | γ1000m    |
| <b>Transmission</b> | 9600 baud |

**distance: Transmission speed: Signal power supply:**

**DC10V, γ400mA Interface capacity: 1~16 digital sensors**

**Compatible protocol: Yaohua digital sensor communication protocol**

**Support manufacturers: AVIC, Guangce, Benyuan, Boda, Ruima, Hualanhai and other digital devices that support Yaohua protocol**

**When purchasing a matching digital sensor, please pay attention to whether it supports the Yaohua protocol.**

**3. Display:** 4. 7 -digit 1- inch ultra-bright LED display with 10 status indicators.

|                  |              |                                   |
|------------------|--------------|-----------------------------------|
| <b>Keyboard:</b> | The numeric  | 0 ~ 9                             |
|                  | key function | 24 (10 combined with number keys) |

**5. Clock:** 6. keys can display year, month, day, hour, minute, second, and automatically enter leap year and leap month; they are not affected by power failure.

**Electronic seal:** 7. Large Can detect and record the instrument opening situation.

**screen display interface, large screen display interface**

|                                       |                                                     |
|---------------------------------------|-----------------------------------------------------|
| <b>Transmission</b>                   | <b>Serial output mode, 20mA current loop signal</b> |
| <b>mode: baud rate: 600 8, serial</b> | <b>Transmission distance γ 1200 meters</b>          |

**communication interface, serial communication interface**

|                          |                                                     |
|--------------------------|-----------------------------------------------------|
| <b>Transmission mode</b> | <b>Serial port 0: RS232/RS485 Serial port</b>       |
|                          | 1: RS232                                            |
| <b>Baud rate</b>         | 600/1200/2400/4800/9600/19200/38400 <b>optional</b> |
| <b>transmission</b>      | RS232 γ30m ; RS485 γ1200m                           |

**distance 9, printing interface**

**Standard parallel output interface: DS-300, LQ300K+, KX-P1121, KX-P1131 and other wide-line printers**

**POS58, T58D and other thermal micro printers;**

**TpuP16 micro printer, LX300+ wide line printer (supports English printing only).**

|                                  |                                                                                |
|----------------------------------|--------------------------------------------------------------------------------|
| <b>Panel type micro printer:</b> | <b>γ. Dot matrix (96 dots per line), using M-150γ head. γ. Printing paper:</b> |
|                                  | <b>ordinary white paper, paper width 44.5±0.5mm, thickness 0.07mm.</b>         |

**10. Data storage 11.** It can store 1023 sets of vehicle numbers and tare weights, 255 types of cargo numbers, and 4096 sets of weighing records.

**Operating environment**

|                                                                                              |                                  |
|----------------------------------------------------------------------------------------------|----------------------------------|
| <b>AC power supply</b>                                                                       | AC 220V (-15% ~ +10%) 50Hz (±2%) |
| <b>The DC power supply is powered by an external 12V/7Ah battery</b>                         |                                  |
| <b>Operating temperature: -10γ ~ 40γ; Storage and transportation temperature: -25γ ~ 55γ</b> |                                  |
| <b>Relative humidity γ85%RH Preheating</b>                                                   |                                  |
| <b>time γ30 minutes</b>                                                                      |                                  |
| <b>Fuse 12.</b>                                                                              | 0.5A                             |

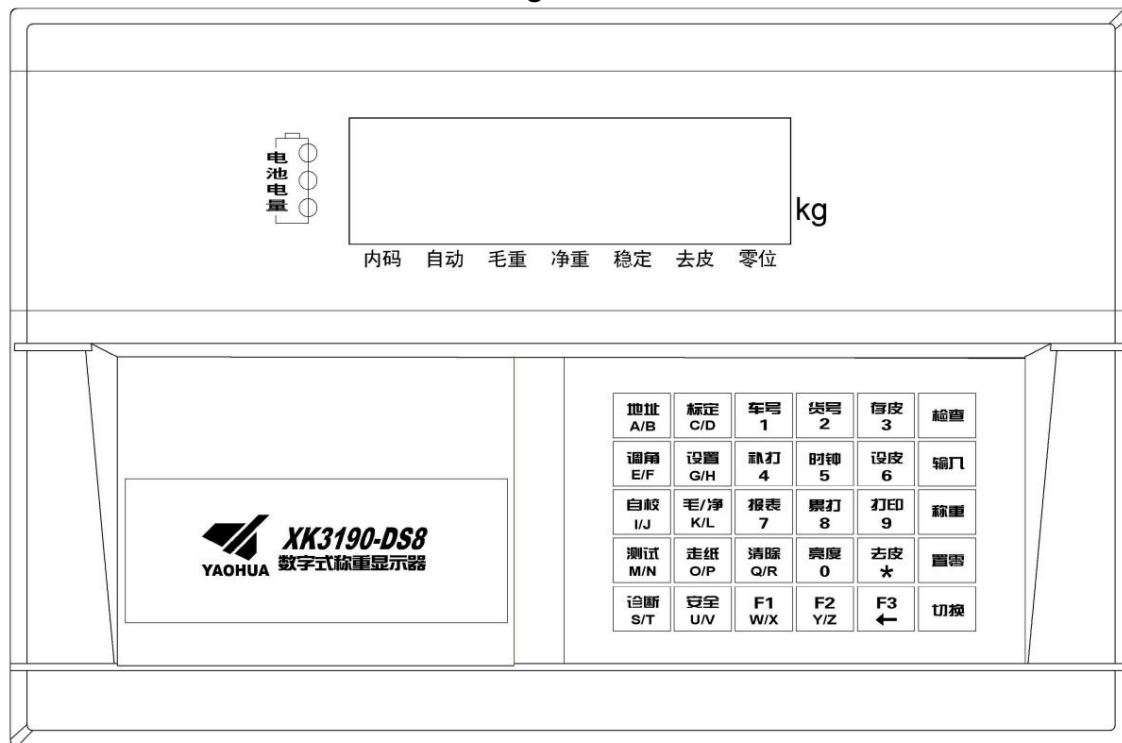
**Appearance (mm) 320×217×183 13. Weight**

**About 2.5 kg**

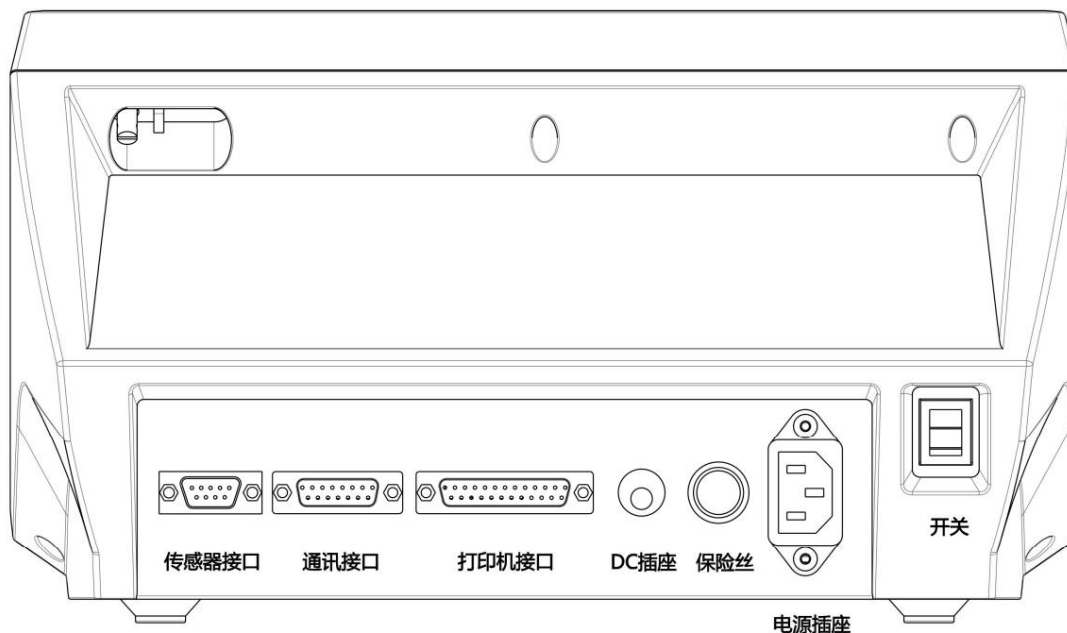
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## Chapter 2 Installation and Connection

### 1. DS8 front and rear functional diagrams:



(Figure 2-1 ) Front functional diagram



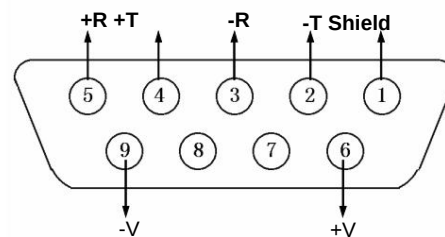
(Figure 2-2 ) Rear functional diagram

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2. Connection between digital sensor and instrument Connection between digital sensor and instrument:

XK3190-DS8 is a digital weighing display, so it can only be equipped with

Connect a digital sensor. For the connection, it is referred to as the sensor below.



(Figure 2-3) Digital sensor interface

1. The sensor is connected with a 9 -pin D- type plug. Figure 2-3 Marking

The meaning of each pin.

2. The sensor interface of XK3190-DS8 adopts full-duplex RS485 mode.

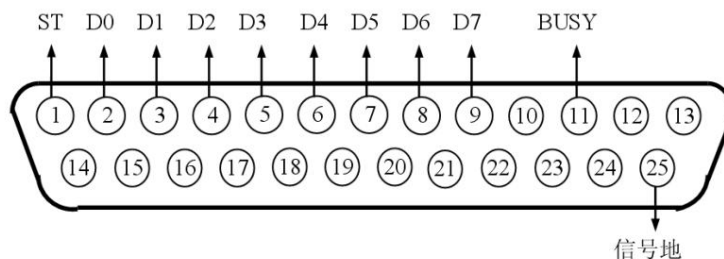
| Instrument pin definition |                                                                          | Digital sensor terminal wiring definition ... corresponding wire colors |                            |  |  |
|---------------------------|--------------------------------------------------------------------------|-------------------------------------------------------------------------|----------------------------|--|--|
| Pin Number                | definition                                                               | Wiring method                                                           | AVIC Guangce Benyuan, Boda |  |  |
| 2                         | Signal sending negative (-T) connected to signal receiving negative (-R) | Brown White White                                                       |                            |  |  |
| 4                         | Signal sending positive (+T) Signal receiving positive (+R)              | Yellow Green Green                                                      |                            |  |  |
| 3                         | Signal receiving negative (-R) connected to signal sending negative (-T) | white yellow light yellow or brown                                      |                            |  |  |
| 5                         | Signal receiving positive (+R) Signal sending positive (+T)              | Blue Blue Blue                                                          |                            |  |  |
| 6                         | Power supply positive (+V)                                               | Connect to the positive power supply (+V)                               | red red red                |  |  |
| 9                         | Negative power supply (-V)                                               | Connect to negative power supply (-V)                                   | Black Black Black          |  |  |
| 1                         | Shield                                                                   | Connect shielded wire                                                   | —                          |  |  |

Table 2-1-1 Digital sensor wiring instructions

3. Connection between printer and instrument

1. The printer interface adopts standard parallel output, and the connector adopts 25 -pin D- type plug. The definition of each pin is shown in

Figure 2-4.



(Figure 2-4) Printer interface signal

2. Printing instructions:

! The printing function must be set before it can be put into normal use.

! The output lead of the instrument printing port must be connected to the printer accurately! The output lead of the instrument printing port must be connected to the printer accurately. A dedicated printing connection line must be used.

Wrong connection will damage the meter output port or printer input port, or even the meter and printer.

! When using the printer, you must first connect the connecting power, and finally, turn on the printer power;

When you finish using the printer, you must first turn off the printer power, then, and finally remove the connecting wire.

Failure to do so may damage the instrument and printer. Please note! Please note!

! Due to the wide variety of printers, the person and the responsibility with those that are not identified in this manual for printing.

machine.

! The printer must be reliably grounded! The printer must be reliably grounded. Otherwise, it may interfere with the normal use of the instrument, or even damage the instrument and printer.

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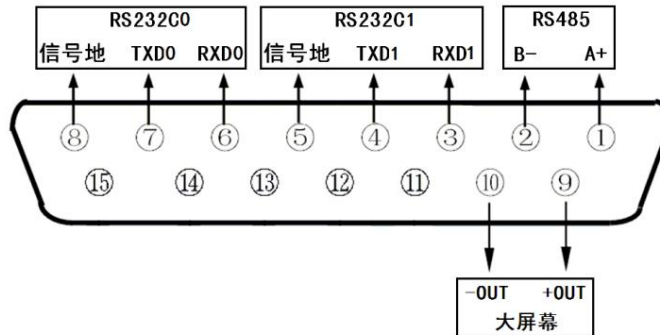
## 4. Connection and use of large screen and instrument

y! The connection between the instrument's large screen output lead and the large screen display must be accurate. If the connection is wrong, the large screen display may even be seriously damaged. It is required to use

the large screen display must be accurate. If the connection is wrong, the large screen display may even be seriously damaged. It is required to use Supporting special connection line.

1. The large screen display interface uses a 15-pin D-type plug socket ( shares a socket with the serial communication port ). The meaning of its pins is shown in

Pins 9 and 10 in Figure (2-5) .



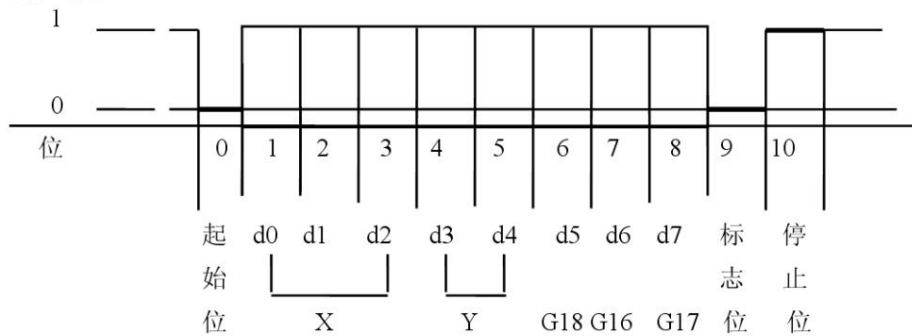
图（2—5）大屏幕及通讯接口定义（背视图）

2. The large screen signal is a current loop or RS232 signal, which is serially output in binary code with a baud rate of 600. Each frame of data

There are 11 bits: 1 start bit (0), 8 data bits (low bit first ), 1 flag bit, and 1 stop bit (1).

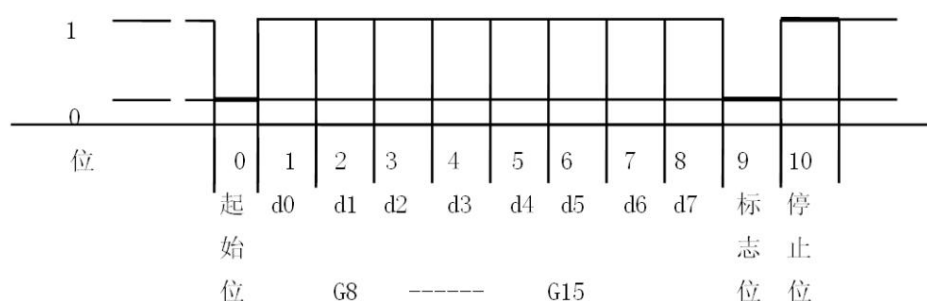
3. A group of data is sent every 100ms . Each group of data contains 3 frames of data. See Figure (2-6) for its meaning.

第一帧:



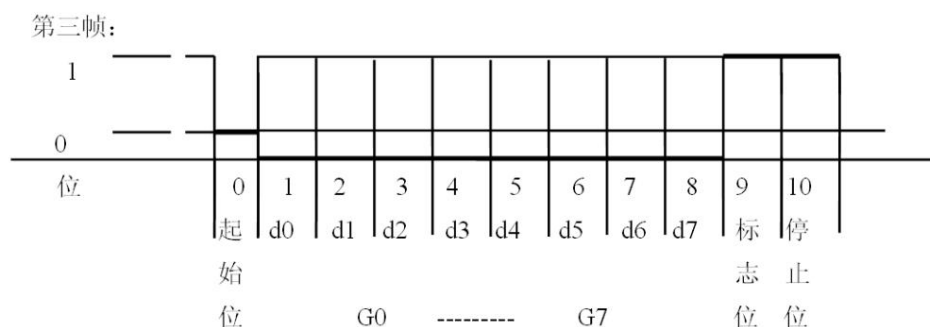
(图 2-6.1 ) 第一帧波形图

第二帧:



(图 2-6. 2) 第二帧波形图

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(图 2-6.3 ) 第三帧波形图

The first frame of data: the flag bit is 0

X: D0, D1, D2 -- decimal point position ( 0 to 4 )

Y : D3 — is the weight sign ( 1-negative, 0-positive )

D4 — Reserve

G 18yG16: weight (net weight) data Second frame

data: flag bit is 0

G15~G8: weight (net weight) data

The third frame data: the flag bit is 1

G7yG0 : weight data

G0yG18: 19 -bit binary code of weight (net weight) from low to high

## 5. Connection and use of serial communication interface and instrument

! The communication interface output lead must be connected to the computer accurately! The communication ~~connected to the lead must~~ be accurately. If the connection is wrong, the instrument output port or the computer will be damaged.

The communication input port of the machine may even seriously damage the instrument, computer and corresponding external equipment.

! Necessary computer technology and programming skills are required for computer communication! Necessary computer technology and programming skills are required for computer communication, and professional technicians must participate or guide. Professional technicians must participate or guide.

Non-professionals please do not connect at will.

XK3190-DS8 instrument has both RS232 and RS485 serial communication interfaces, which can communicate with computers.

The foot is defined as follows:

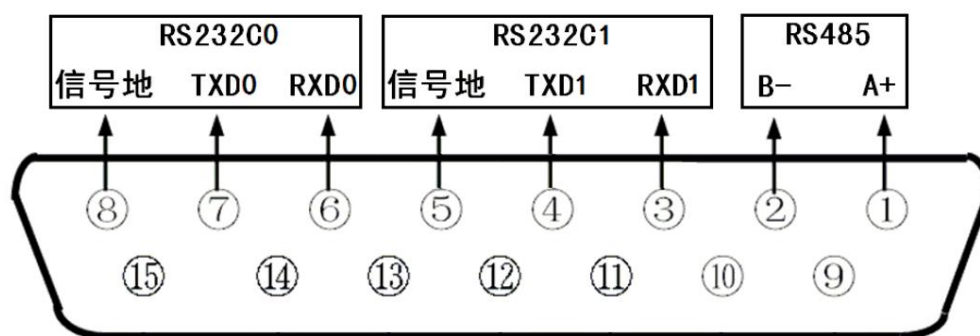


图 (2-5-2) 通讯接口定义 (背视图)

1. The communication interface uses a 15 -pin D- type plug (shared with the large screen), and its pin definition is shown in Figure 2-5-2. RS232C0 uses

Pins 6, 7, and 8, RS485 uses pins 1, 2, and 8 , which are serial port 0; RS232C1 uses pins 3, 4, and 5 , which are serial port 1.

RS232C0 and RS485 can be used simultaneously when using the serial mode, but only RS232C0 can be used when using the command mode .

Or RS485 interface.

2. All data in the continuous transmission mode and command response mode are ASCII codes. Each group of data consists of 10 bits, the first bit is

The start bit, the 10th bit is the stop bit, and the middle 8 bits are data bits. The communication methods are divided into:

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## (1). Continuous sending mode:

The data transmitted is the current weight of the instrument (gross weight or net weight). Each frame of data consists of 12 groups of data. The format is as follows:

| Byte X                  | Content and annotations          |          |
|-------------------------|----------------------------------|----------|
| 1                       | 02(XON) +                        | Start    |
| 2                       | or -                             | sign bit |
| 3                       | weighing data                    | High     |
| :                       | weighing                         | :        |
| :                       | data                             | :        |
| weighing data 8         | From                             |          |
| weighing data 9 decimal | right to left (0 to 4), the high |          |
| point 10 XOR check 11   | four bits                        |          |
| XOR check               | and the low four bits            |          |
| 12                      | 03(XOFF)                         | Finish   |

XOR = 2ÿ3ÿ...8ÿ9

## (2) Command response mode: The

instrument outputs corresponding data according to the command sent by the host computer. Every time the host computer sends a command, the instrument outputs the corresponding data.

Output a frame of data.

### a. The host computer sends instructions:

| Byte X            | Content and annotations |                                        |
|-------------------|-------------------------|----------------------------------------|
| 1                 | 02(XON)                 | Starting                               |
| 2 AÿZ             | address number          |                                        |
| 3                 | AÿD                     | Command A: Handshake                   |
|                   |                         | Command B: Read gross                  |
|                   |                         | weight Command C: Read                 |
|                   |                         | tare weight Command D: Read net weight |
| 4 XOR check 5 XOR | High four               |                                        |
| check             | bits Low four bits      |                                        |
| 6                 | 03(XOFF)                | Finish                                 |

XOR = 2ÿ3

Example of command sent by the host computer (assuming the instrument communication address is 01):

| Command category | Command meaning   | Command sent by host computer (hexadecimal) |
|------------------|-------------------|---------------------------------------------|
| A command        | handshake         | 02 41 41 30 30 03                           |
| B command        | read gross weight | 02 41 42 30 33 03                           |
| C command        | read tare weight  | 02 41 43 30 32 03                           |
| D command        | read net weight   | 02 41 44 30 35 03                           |

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## b. Instrument output content:

| Byte X        | Content and annotations                                    |                                        |
|---------------|------------------------------------------------------------|----------------------------------------|
| 1             | 02(XON)                                                    | Starting                               |
| 2 AÿZ         |                                                            | address number                         |
| 3             | AÿE                                                        | Command A: Handshake                   |
|               |                                                            | Command B: send gross                  |
|               |                                                            | weight Command C: send                 |
|               |                                                            | tare weight Command D: send net weight |
| 4             | Output corresponding data according to the command content |                                        |
| ÿ             | Output corresponding data according to the command content |                                        |
| n-1           | Output corresponding data according to the command content |                                        |
| n             | Output corresponding data according to the command content |                                        |
| n+1 XOR check | n+2 XOR                                                    | High four                              |
| check         |                                                            | bits Low four bits                     |
| n+3           | 03(XOFF)                                                   | Finish                                 |

$$XOR = 2 \text{ } \ddot{y} \text{ } 3 \text{ } \ddot{y} \text{ } \dots (n-1) \text{ } \ddot{y} \text{ } n$$

The contents of 4 to n when the instrument outputs are as follows:

| Command A without data |                                               | Each frame consists of 6 sets of data  |
|------------------------|-----------------------------------------------|----------------------------------------|
| Command B              | is gross weight, format:                      | Each frame consists of 14 sets of data |
|                        | a: Sign (+ or -)                              |                                        |
|                        | b: Gross weight value (6                      |                                        |
|                        | : digits) (from high to low)                  |                                        |
|                        | g                                             |                                        |
|                        | h: Decimal point from right to left ( 0 to 4) |                                        |
| Command C              | For tare weight, format:                      | Each frame consists of 14 sets of data |
|                        | a: Sign (+ or -)                              |                                        |
|                        | b: Tare value (6 digits)                      |                                        |
|                        | : (High to Low)                               |                                        |
|                        | g                                             |                                        |
|                        | h: Decimal point from right to left ( 0 to 4) |                                        |
| Command -D             | For net weight, format:                       | Each frame consists of 14 sets of data |
|                        | a: Sign (+ or -) Net                          |                                        |
|                        | b: weight value (6 digits)                    |                                        |
|                        | : (from high to low)                          |                                        |
|                        | g                                             |                                        |
|                        | h: Decimal point from right to left ( 0 to 4) |                                        |

**Note 1: XOR check high and low 4 bits confirmation:** If the XOR sum of high and low 4 bits is less than or equal to 9, add 30h to become ASCII code digital transmission, for example: XOR check high 4 bits are 6, add 30h , it is 36h , which is 6 in ASCII code , and send; XOR and high and low 4 bits, if greater than 9, add 37h, it becomes ASCII code letter and send, for example: Or check the high 4 bits to be B, add 37h , and the result is 42h , which is the ASCII code B , which is sent.

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## 4. Setting of instrument communication parameters:

### (1). Communication parameters

Communication parameters consist of three groups of parameters: communication address, baud rate, and communication mode.

There are two groups of communication parameters: serial port 0 and serial port 1.

### (2). Communication parameter setting steps:

| Steps |                               | show                                                         | annotation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-------|-------------------------------|--------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1     | Press [Parameter Setting]     |                                                              | in the weighing display state                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 2     | Press [9][8]<br>Press [Enter] | [ P 00 ]<br>[ P 98 ]                                         | Set password (98 or 99) 98--<br>Serial port 0 communication parameter setting<br>99--Serial port 1 communication parameter settings<br>For example: 98                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 3     | Press<br>[1] Press [Enter]    | [ ADR0 ** ]<br>[ ADR0 01 ]                                   | ADR0 is serial port 0, ADR1 is serial port 1<br>communication address<br>( 01~26 ) For example: 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 4     | Press<br>[1] Press [Enter]    | [ BT0 * ]<br>[ BT0 1 ]                                       | BT0 is serial port 0, BT1 is serial port 1<br>serial communication baud rate ( 0~6 ) respectively represents<br>Baud rate: 600, 1200, 2400,<br>4800, 9600, 19200, 38400<br>For example: 1                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 5     | Press<br>[0] Press [Enter]    | [ TF0 * ]<br>[ TF0 0 ]                                       | TF0 is serial port 0, TF1 is serial port 1 Serial<br>communication mode:<br>0--continuous transmission mode<br>(gross weight) 1--command response mode<br>2--Old D2+ continuous communication format (net weight), 8 bytes per frame<br>3--New D2+ continuous communication format (net weight), 9 bytes per frame<br>4--Old D2+ continuous communication format (gross weight), 8 bytes per frame<br>5--New D2+ continuous communication format (gross weight), 9 bytes per frame<br>6--Special continuous communication<br>format 1 7--Special continuous communication format 2<br>(See Note 2)<br>For example: 0 |
| 6     |                               | Weighing status communication parameter setting is completed |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

**Note 2: In the old D2+ continuous communication format, data is output in ASCII code, with 8 bytes per frame (including decimal point).**

The low bit is transmitted followed by the high bit, and each frame is separated by "=". The data sent is the net weight (i.e. the value displayed on the instrument) or the gross weight.

The value is 70.15, then the instrument continuously sends 51.0700=51.0700=51.0700.....

**New D2+ (300 tons) continuous communication format, data output in ASCII code, 9 bytes per frame (including decimal point).**

The data is transmitted first with low bits and then with high bits, and each frame is separated by "=". The data sent is the net weight (i.e. the value displayed on the instrument) or the gross weight.

If the current value is 70.15, the instrument will continuously send 51.07000y51.07000y51.07000.....

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## Chapter 3 Operation Methods

### 1. Power on and automatic zero reset

1. After connecting to AC power or external battery and turning on the power switch, the meter will read “9999999” to “0000000”.

Self-check, automatically enter weighing state after completion.

2. During the stroke self-check process, press any key to stop the self-check. 3. When

the instrument is turned on, if the weight on the scale deviates from the zero point but is still within the set range, the instrument will automatically reset to zero.

For details on parameter selection and setting methods, please refer to the relevant chapters of calibration.

During normal operation, the calibration switch should be turned to the position where calibration is prohibited.

### 2. Manual zero setting (semi-automatic zero setting)

1. Press the [Zero] key. When the zero setting conditions are met, the instrument can be reset to zero. The zero position symbol is lit. 2. When

the displayed value deviates from the zero point but is within the zero setting range, the [Zero] key works. Otherwise, the [Zero] key does not work and the zero setting range is

For details on parameter selection and setting methods, please refer to the relevant chapters of calibration.

3. Zeroing operation can be performed only when the stable indicator is on.

### III. Tare function operation 1. This

instrument provides three tare modes:  $\bar{y}$ . General tare:

In the weighing display

state, when the displayed weight is positive and the weighing is stable, press the [Tare] key to deduct the displayed weight value as the tare weight. At this time, the net weight displayed on the instrument is 0 and the tare symbol is on.

$\bar{y}$ . Preset tare weight: In

the weighing display state, press the [Set Tare] key, the instrument displays [P \*\*\*.\*\*\*], and the value displayed at this time is the original tare value. If you need to set a new tare value, you can use the numeric keys to enter it, and then press the [Enter] key to confirm.

$\bar{y}$ . Call up tare weight by vehicle number:

In the weighing display state, press the [Vehicle Number] key, the instrument displays [o \*\*\*\*\*], enter the correct vehicle number with the number keys, and then press the [Tare] key. The instrument will then find the tare weight value corresponding to the vehicle number from the memory and call it out for use.

2. In the weighing display state, the tare can be continuously removed. When the tare weight is zero, the tare symbol goes out; when the instrument meets the zero setting conditions,

Pressing the [Zero] key will also set the tare weight to zero and the tare symbol will go out.

### 4. Date and time settings and operations

In the weighing state, press the [Clock] key and the meter will display the current date [D \*\*.\*\*.]. Enter the correct date and press the [Enter] key to confirm. The meter will then display the current time [T \*\*.\*\*.] and automatically run. Enter the correct time and press the [Enter] key to confirm. The date and time settings are complete.

### 5. Battery use

1. When using batteries for power supply, the “battery power” indicator on the left side of the display window will indicate the current remaining battery power; all three indicators are lit, indicating sufficient power; two indicators are lit, indicating sufficient power; only one indicator is lit, indicating insufficient power. When the power is insufficient, you should consider charging the battery. If you continue to use it, the battery power will continue to decrease, and the instrument will automatically cut off the power supply to protect the battery.

2. Connect the battery to the meter, then connect it to AC power, the meter will charge the battery (it takes about 20 hours to fully charge).

The battery will charge regardless of whether the power switch is on or off. Charging is faster when the power is off, so it is recommended. 3. When using the battery for the first time, be sure to fully charge it before

using it. 4. The red plug on the battery connection line is positive (+) and is connected to the positive terminal of the battery; the black plug is negative.

(-), connected to the negative terminal of the battery.

5. Reverse polarity or short circuit of the battery may cause the DC self-recovery fuse of the instrument to trip to protect the instrument and the battery.

Battery, then connect the battery correctly and restart the machine to use it normally. 6. The battery is a consumable item and is not covered by the three guarantees.

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## 6. Data record storage operation

1. The instrument specifies that the vehicle number is 5-7 digits and the cargo number is 3 digits. A maximum of 1023 vehicle numbers and 255 cargo numbers can be stored.
2. The storage operation and printing operation of the instrument are the same. If the printer type is set to valid, each time a complete set of records is stored,  
The group of records will be printed out at the same time.

3. There are three ways to store data:

(1) First store empty trucks, then store full trucks; or first store full trucks, then store empty trucks.

Storage constitutes a complete set of records.

(2) When a full truck is weighed and the tare weight is known, one storage session constitutes a complete set of records.

(3) When the load is not the vehicle but only the load itself, a complete set of goods is always formed at one time.

Complete the record.

In order to automatically identify and distinguish the above three storage situations, XK3190-DS8 has made the following agreements:

ÿ The vehicle number must be any number that is not equal to 0. In other words, 0 cannot be used as the number of a real vehicle.

When the vehicle number is set to 0, it means that the vehicle coming to be weighed is not a vehicle carrying goods, but only a cargo.

ÿ If the tare symbol on the instrument is on, the tare weight is known, so one storage constitutes a complete record.

ÿ If the vehicle number is set to any 5-7 digits other than 0, the highest digit of the Y parameter in the print parameters is set to 0, and

If the instrument's tare symbol is not lit, two storage operations are required to form a complete record.

4. Storage operation method: (Table

3-1) Step

| Operation | Press [Print] Enter the vehicle        | Displayed in                     | explain                                                      |
|-----------|----------------------------------------|----------------------------------|--------------------------------------------------------------|
| 1         | number                                 | weighing display state [0 *****] |                                                              |
| 2         | Press [Enter] to                       | [0 03217]                        | Enter vehicle number<br>For example: 03217                   |
| 3         | enter the item number<br>Press [Enter] | [HN**]<br>[HN 35]                | enter the item number<br>For example:                        |
| 4         | Press [10]<br>Press [Enter]            | [BFL**]<br>[BFL 10]              | 35 Enter the percentage of the discount rate<br>For example: |
|           |                                        |                                  | 10 Storage ends                                              |

The data storage of the instrument can be set to use the vehicle number method or not use the vehicle number method, see the chapter on print settings.

When the vehicle number method is not used, all operations, operation steps or printed contents related to the vehicle number will no longer exist.

The data storage of the instrument can be set to use the article number method or not to use the article number method. For details, see the chapter on print settings.

ÿ! If the data is unstable or the gross weight is ÿ0 or the net weight is ÿ0, the data cannot be stored.

5. About automatic storage and printing:

- 1) For the settings of automatic storage printing, see the section on print settings.
- 2) When automatically storing and printing, there is no double storage mode.
- 3) During automatic storage, the vehicle number and cargo number stored are the ones that have been set before storage.
- 4) The automatically stored tare weight value is divided into the following three situations:

ÿ When the tare symbol of the instrument is on, the current tare value will be stored in the group of records.

ÿ When the tare symbol on the meter is off, the meter will automatically search the memory for the tare value of the vehicle number and use the tare value as the value.

The value is stored in the group record.

ÿ When the instrument tare symbol is off and there is no tare value for the vehicle number in the memory, 0 is used as the tare value.

Save the group record.

6. If the number of vehicles exceeds 1023, the instrument will display [Err 10]. In this case, you can use the method described in Section 11 of this chapter to correct the problem.

Clear a certain vehicle number or all records.

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## 7. Print settings and operations

### 1. Print settings: (Table 3-2)

| Steps | Operation Press [Set]                           | show                                              | untie release                                                                                                                                                                                                                                                                                                                                                            |
|-------|-------------------------------------------------|---------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1     | Press [9] [7]<br><b>Press</b><br><b>[Enter]</b> | [ P 00]<br>[P 97]                                 | Enter password 97                                                                                                                                                                                                                                                                                                                                                        |
| 2     | Press<br>[1] Press [Enter]                      | [AUTO *]<br>[AUTO 1]                              | Select automatic/manual printing<br><b>0-Manual 1-Auto 2-Auto (Power off and keep)</b><br><b>For example: Select 1 (Auto print)</b>                                                                                                                                                                                                                                      |
| 3     | Press<br>[4] Press [Enter]                      | Automatic indicator light<br>[TYPE *]<br>[TYPE 4] | <b>Select Printer Type</b><br><b>0 - only store, do not print</b><br>1--External micro-printer (supports English only) 2--<br>Panasonic KX-P1131 3--<br>Panasonic KX-P1121 <b>4--Epson LQ-1600K, LQ300Ky, Deshi D300</b><br><b>5--Built-in panel micro printer</b><br>6--External thermal micro printer POS58, T58D , etc.<br><b>7--Epson LX300 (English only) print</b> |
| 4     | Press [5] [0]<br><b>Press [Enter]</b>           | [HL **]<br>[HL 50]                                | <b>restriction selection</b><br>00 -- Return to zero before printing again<br>25 -- Return to below 25% and print again<br>50 -- Return to below 50% weight and print again<br>75 -- Return to below 75% to print again<br>99 -- Print again when the weight is full ,<br>e.g. 50                                                                                        |
| 5     | Press<br>[3] Press [Enter]                      | [ARR *]<br>[ARR 3]                                | <b>Select the print format</b><br>Arr = 0 -- <b>Record format</b><br>1 -- <b>Single-copy format</b><br>2 -- <b>Two-part form format</b><br>3 -- <b>Triple Form Format</b><br><b>For example:</b>                                                                                                                                                                         |
| 6     | Press [1] [0] [0]<br><b>Press [Enter]</b>       | [L****]<br>[L001.00]                              | Select 3 to set the minimum automatic printing weight for automatic printing<br><b>L must be greater than 10 divisions</b><br><b>For example:</b>                                                                                                                                                                                                                        |
| 7     | Press [0] [5]<br><b>Press [Enter]</b>           | [B**]<br>[B 05]                                   | 1.00 Paper feed line number setting<br>(0-30) <b>For example: 05</b>                                                                                                                                                                                                                                                                                                     |
| 8     | Press<br>[1] Press [Enter]                      | [ODE *]<br>[ODE 0]                                | <b>Fill-in print format selection</b><br><b>0: Do not use filled print format</b><br><b>1: Use filled print format</b><br><b>2: Use the horizontal printing format</b><br><b>3: Use custom triple fill print format one</b><br><b>4: Use custom triple fill print format 2</b><br><b>For example: When</b>                                                               |
| 9     | Press<br>[1] Press [Enter]                      | [DCT *]<br>[DCT 0]                                | selecting the 0 -fill printing format, select the discount rate<br><b>0: No discount rate is used</b><br><b>1: Use discount rate</b><br><b>For example: Select 0</b>                                                                                                                                                                                                     |

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| step | operate                                    | show                    | untie<br>release                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|------|--------------------------------------------|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 10   | Press [0] [0] [0] [1] [1] Press<br>[Enter] | [Y *****]<br>[Y 00011]  | The Y parameter has five digits, from left to right, 1 to 5.<br>The functions of each bit are as follows:<br>1st position : 0 double weighing and printing<br>mode 1 single weighing and printing mode<br>2Current weight printing mode<br>No. 2 : Reserved<br>The third digit : 0 weight unit is kilogram (kg) 1<br>weight unit is ton (t);<br>Position 4 : 0 Data record does not use the article number<br>1. Data records use the item number;<br>Bit 5 : 0 Data record does not use the vehicle number<br>1 5 -digit vehicle number<br>2 5 -digit alphanumeric vehicle license plate number<br>3 6 -digit vehicle number<br>4 6 -digit alphanumeric vehicle number<br>5 7 -digit vehicle number<br>6-7 digits mixed with letters and numbers<br>7 7 -digit full vehicle number with Chinese characters<br>See the next section for vehicle number input method<br>For example: select 00011, |
| 11   | Press<br>[8] Press                         | [TELN**]<br>[TELN 08]   | Number of phone digits: (0~12) 0: Do not<br>print the phone number, skip the following two steps                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 12   | [Enter] Press<br>[1234] Press              | [H**]<br>[H 12]         | Phone number high digit input                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 13   | [Enter] Press<br>[5678] Press [Enter]      | [L *****]<br>[L 345678] | Phone number low digit input                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|      |                                            | Operation completed     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

Note: (1) When using an external printer, select Printer Type from 1, 2, 3, 4, or 6 according to the printer type.

(2) Steps 8 and 9 only work when the printer model (Type) is 2, 3, or 4. They are meaningless for other models.

(3) When the printer type is 1, 5, or 6, the telephone number can be printed. For other models, the telephone number cannot be printed.

(4) When the first position of parameter Y is set to 2, the current weight is printed, the tare weight is saved as 0, and the vehicle number tare weight is not called.

ÿ You can choose whether to use the discount rate only when selecting the fill format.

ÿ For the specific printing format, please refer to the appendix

ÿ Fill-in type can use special format carbonless copy printing paper, quickly print three copies. You can also use special format ordinary  
Printing paper, print one copy quickly.

ÿ If users need to customize fill-in printing in a special format, they can contact the dealer.

2. The instrument stores and prints at the same time. Use the [Print] key to print out a group of weighing records while storing a complete set of records.  
(If printing is enabled).

3. If the weighing record cannot be printed due to some reason (such as printer failure, etc.), after troubleshooting,  
Press the [Print] button to print out the currently stored records.

4. After a weighing period is completed, press the [Cumulative Print] key to print out the cumulative value of the record.

5. The meter is set to the double weighing and printing mode, using the two storage methods of empty first and then loaded or loaded first and then empty.  
During the first storage, because the set of records is not complete, the instrument only displays [LoAd] for about 1.5 seconds to prompt the operator, but does not print.  
However, if you press the [Additional Print] key at this time, you can still print out this incomplete record.

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The printed result is always:  $\bar{y}$  The serial number is 0;

$\bar{y}$  Both gross weight and net weight are 0;

$\bar{y}$  The tare value is the currently stored weight.

(For the setting of double weighing printing mode, please refer to the Y parameter in the print setting ).

6. The meter is set to one-time weighing and printing mode, and each weighing will be stored and printed as a complete record.

If the instrument is in the tare state, the current tare weight is used as the recorded tare weight. If the instrument is not in the tare state, call the instrument

The tare weight corresponding to the vehicle number saved in the memory is used as the recorded tare weight (if there is no tare weight in memory, the recorded tare weight is

For the setting of single weighing printing mode, please refer to the Y parameter in the print setting .

## 8. Vehicle number selection and letter input:

1. Vehicle number type: The vehicle number can be a mixture of 5 to 7 digits and letters. The default is 5 digits.

2. Type parameter: The vehicle number type parameter is the rightmost digit of the Y parameter in the print setting, and can be entered as 0 to 7.

3. Correspondence between parameters and vehicle numbers:

0: Do not use the vehicle number

1: Use the 5 -digit vehicle number, letters are not allowed

2: Use a 5 -digit mixed license plate number

3: Use 6 -digit vehicle number

4: Use a 6 -digit mixed license plate number

5: Use 7 -digit vehicle number

6: Use a 7 -digit mixed license plate number

7: Use the complete 7 -digit vehicle license plate number with Chinese characters, and the leftmost digit is the abbreviation code for the province or city.

## 4. Display method:

When the number of digits is less than 7 , "0" is displayed on the far left, indicating that the input content is the vehicle number;

When the number of digits is 7 , before displaying the vehicle number, the instrument will display "0----" for about 1 second, and then automatically switch to the vehicle number display

## 5. Input method:

Numbers: Press the number keys to enter directly

Letters: Each letter button corresponds to two letters. Single-click to enter the previous letter, double-click to enter the next letter.

If you need to change letters after input, press the [Switch] key to switch to the current letter.

Chinese: When the vehicle number type is 7 , the leftmost digit is the abbreviation code of the province or city. Enter the code and the Chinese characters will be printed directly when printing.

The corresponding table of abbreviations is shown in the following table:

|                |                                                                                            |
|----------------|--------------------------------------------------------------------------------------------|
| Referred to as | Shanxi, Tibet, Shaanxi, Guangdong, Hebei, Jilin, Tianjin, Hong Kong, Macao, Gansu, Sichuan |
| Code           | 1 2 3 5 6 7 8 9 ABC                                                                        |

|        |        |         |         |          |              |         |          |          |          |         |
|--------|--------|---------|---------|----------|--------------|---------|----------|----------|----------|---------|
| Yunnan | Hubei  | Guangxi | Jiangxi | Shanghai | Heilongjiang | Beijing | Liaoning | Shandong | Mongolia | Ningxia |
| Code   | DEFGHI |         |         |          |              |         | JKLMN    |          |          |         |

|                                                                                                |  |  |  |  |         |  |  |  |  |  |
|------------------------------------------------------------------------------------------------|--|--|--|--|---------|--|--|--|--|--|
| Fujian , Guizhou, Qinghai, Jiangsu, Hainan, Xinjiang, Chongqing, Anhui, Hunan, Henan, Zhejiang |  |  |  |  |         |  |  |  |  |  |
| Code PQRS                                                                                      |  |  |  |  | TUVWXYZ |  |  |  |  |  |

For example: When the vehicle number type is 7 ,

If the vehicle number is entered as "HA23456", the printed vehicle number will be "yA23456".

If the vehicle number input is "3A88A88", the printed vehicle number will be "Shaanxi A88A88".

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## 9. Report printing:

- Press [Report], enter the date and press [Enter] to print the daily report of the classification statistics for that day (i.e. the daily report in chronological order).  
Statistical report, statistical report by vehicle number, statistical report by cargo number).
- Press [Report], then press [1] to print the total report 1 (i.e. the statistical report in chronological order)
- Press [Report], then press [2] to print the total report 2 (i.e. the statistical report by vehicle number)
- Press [Report], then press [3] to print total report 3 (i.e. statistical report by item number)
- Press [Report], then press [4] to print the total report 4 (i.e. the vehicle number tare weight report)

## 10. Query records:

Use the [Check] key to check the various memory contents in the meter in different ways. The operation is as follows: 1. Check the weighing records by date (Table 4-4)

| Steps           |                                                                                                    | Display                                                                                  | untie<br>release                                                                                                                                                                               |
|-----------------|----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1               | Press [Check]<br><br>Press [Enter]                                                                 | under weighing status<br><br>[REAd 1] Select the content and format you want to check    | REAd = 1 - Check all records for a certain day<br><br>2--Check all records of a certain vehicle number<br><br>3--Check all records of a certain item number<br><br>4--Check the vehicle number |
| 2 Delivery Date | Press [Enter]                                                                                      | [D **.**. **]<br>[D 08.08.25]                                                            | Select the day you want to check the records for<br>For example: August 25<br>Next, each record on August 25, 2008 will be displayed in sequence.                                              |
| 3               | Press [Enter]<br>Press [Enter]<br>Press [Enter]<br>Press [Enter]<br>Press [Enter]<br>Press [Enter] | [NO 0001]<br>[T **. **. **] [0<br>*****]<br>[HN***]<br>[A *****]<br>[T*****]<br>[N*****] | First<br>time (hour/minute)<br>Vehicle No.<br>Cargo No.<br>Gross<br>Weight<br>Tare Weight Net Weight<br>First record                                                                           |
| 4               | Press [Enter]<br>Press [Enter]<br>Press [Enter]<br>Press [Enter]<br>Press [Enter]<br>Press [Enter] | [NO 0002]<br>[T **. **. **] [0<br>*****]<br>[HN***]<br>[A *****]<br>[T*****]<br>[N*****] | Second<br>time (hour/minute)<br>Vehicle No.<br>Cargo No.<br>Gross<br>Weight<br>Tare Weight Net Weight<br>Second record                                                                         |
| ...             |                                                                                                    | ...                                                                                      |                                                                                                                                                                                                |
|                 | Press [Enter]                                                                                      | [ END ] End                                                                              |                                                                                                                                                                                                |
|                 |                                                                                                    | Return to weighing display                                                               |                                                                                                                                                                                                |

- In step 2 , press the [Zero] key to clear all weighing records for that date. (Clearing method ý)
- In step 3 and after step 3 , press the [Zero] key to clear the group of weighing records you are checking. (Clearing method ý)
- After entering the check state, press the [Check] key to query the records in reverse order.

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2. Check the weighing records according to the vehicle number. (Table 4-5)

| Steps   |                                                                                                                 | show                                                                                | untie release                                                                                                                                                                                            |
|---------|-----------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1       | Press [Check]<br>Press [2]                                                                                      | <b>Under weighing</b><br>[REAd 1]<br>[REAd 2] [o]                                   | Select 2 to check the record by vehicle number                                                                                                                                                           |
| 2 Press | [Enter] to send<br>the vehicle number                                                                           | ***** [o<br>12345]                                                                  | Select the vehicle number record you wish to check<br>For example:                                                                                                                                       |
| 3 Press | [Enter]<br>Press<br>[Enter]<br>Press<br>[Enter] Press<br>[Enter] Press<br>[Enter]                               | [NO 0001]<br>[D**.*.*]<br>[T**.*.*]<br>[HN***]<br>[A *****]<br>[T*****]<br>[N*****] | 12345 will then display all weighing records of vehicle No. 12345<br><br>Date (month/day)<br>Time (hour/minute) Article<br>No.<br>Gross<br>Weight<br>Tare Weight Net Weight<br><br>} <b>First record</b> |
| Press   | [Enter]<br>Press<br>[Enter]<br>4 Press<br>[Enter]<br>Press<br>[Enter] Press [Enter] Press [Enter] Press [Enter] | [NO 0002]<br>[D**.*.*]<br>[T**.*.*]<br>[HN***]<br>[A *****]<br>[T*****]<br>[N*****] | Date (month/day)<br>Time (hour/minute) Article<br>No.<br>Gross<br>Weight<br>Tare Weight Net Weight<br><br>} <b>Second record</b>                                                                         |
| ... ..  |                                                                                                                 | ...                                                                                 |                                                                                                                                                                                                          |
|         |                                                                                                                 | [ END ] End                                                                         |                                                                                                                                                                                                          |

- (1). Press the [Zero] key in step 2 to clear all records of the vehicle number, but retain its memory tare value. (Clearing method ý)
- (2) In step 4 and after step 4 , press the [Zero] key to clear the group of weighing records you are checking. (Clearing method ý)
- (3) After entering the check state, press the [Check] key to query the records in reverse order.

3. Check the weighing records by item number (Table 4-6)

| Step              | operation display                                                              |                                                                           | explain                                                                                                                                                                                  |
|-------------------|--------------------------------------------------------------------------------|---------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 Press           | [Check]<br>Press<br>[3] Press [Enter]                                          | <b>Under weighing</b><br>[REAd 1]<br>[REAd 3]                             | Select 3 to check records by item number                                                                                                                                                 |
| 2 Delivery number | Press                                                                          | [HN**]<br>[HN 23]                                                         | Select the item number you want to check, e.g. 23                                                                                                                                        |
| [Enter] 3 Press   | [Enter]<br>Press<br>[Enter]<br>Press<br>[Enter] Press [Enter] Press [Enter]    | [NO 0001] [o<br>*****]<br>[D**.*.*]<br>[T**.*.*]<br>[A *****]<br>[T*****] | Next, all weighing records for item number 23 will be displayed.<br><br>Vehicle number<br>Date (month/day)<br>Time (hour/minute) First record of gross<br>weight<br>Tare weight<br><br>} |
| 4 Press           | [Enter]<br>Press<br>[Enter]<br>Press<br>[Enter]<br>Press [Enter] Press [Enter] | [NO 0002] [o<br>*****]<br>[D**.*.*]<br>[T**.*.*]<br>[A *****]<br>[T*****] | Vehicle number<br>Date (month/day)<br>Time (hour/minute) Second record of gross<br>weight<br>and tare weight<br><br>}                                                                    |
| ... ..            |                                                                                | ...                                                                       |                                                                                                                                                                                          |
|                   |                                                                                | [ END ] End                                                               |                                                                                                                                                                                          |

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- (1). In step 2 , press [Zero] to clear all records of the article number. (Clearing method ý)
- (2). In step 3 and after step 3 , press [Zero] to clear the group of weighing records being checked. (Clearing method ý) (3). After entering the checking state, press [Check] to query the records in reverse order.

## 4. Check the vehicle number (Table 4-7)

| Steps         |                                                | Display                                              | explain                                              |
|---------------|------------------------------------------------|------------------------------------------------------|------------------------------------------------------|
| 1             | Press [Check]<br>and press [4]<br><b>Press</b> | <b>under weighing status</b><br>[REAd 1]<br>[REAd 4] | Select 4 to indicate<br><br>Check the vehicle number |
| [Enter]       | 2Press<br>[Enter]                              | [NO 001] [o<br>****] <b>The first car number</b>     |                                                      |
| Press [Enter] | 3Press [Enter] Press [Enter]                   | [NO 002] [o<br>****] <b>The second car number</b>    |                                                      |
| ...           | ...                                            | ...                                                  |                                                      |
| n             | Press [Enter]<br>Press [Enter]                 | [NO nnn] [o<br>****] <b>The last car number</b>      |                                                      |
|               | Press [Enter]                                  | [ END ] <b>Return</b>                                |                                                      |
|               |                                                | <b>to weighing display</b>                           |                                                      |

- (1) During the above operation, whenever the vehicle number is displayed, press the [Zero] key to clear the vehicle number and its memory tare weight and **All weighing records of the vehicle number. (Clear method ý)**
- (2) After entering the check state, press the [Check] key to query the records in reverse order.

## 11. Operations to clear records:

### 1. This instrument allows the following ways to clear records:

Method ý: Clear all records. (Including all vehicle numbers and memorized tare weights)

Method ý: Clear a vehicle number, the memory tare weight of the vehicle number, and all weighing records corresponding to the vehicle number. Method ý: Clear the

last stored weighing record. Method ý: Clear all records of a certain day.

Method ý: Clear all weighing records corresponding to a vehicle number. (But keep the vehicle number and its memory tare weight) Method ý: Clear all weighing records corresponding

to a cargo number. Method ý: Clear any weighing record in the instrument.

### 2. When clearing records in any way, the meter will display [SURE 0] and ask the operator to select whether to confirm.

[Sure]ý0, then press the [Enter] key to confirm. To deny, set [SURE]ý0, then press the [Enter] key or press the [Weigh] key quit.

### 3. Operation method:

1) In the weighing state, press the [Clear] key to clear all records. [Method ý] 2) In the

weighing state, press the [Vehicle No.] key, then use the numeric keys to enter a vehicle number, and then press the [Zero] key to clear the vehicle number.

No., and the corresponding memorized tare weight, and the corresponding

record. [Method ý] 3) In the weighing state, press [Clear], press [9], and press [Enter] to clear the last stored record. [Method

ý] 4) For clearing methods ý, ý, ý, and ý, refer to the section on data record check.

ý! Data cannot be restored after being cleared. Be careful when operating to avoid data loss due to misoperation.

ý! After calibrating or modifying the printing parameters, all weighing records must be cleared.

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## 12. About the input method of memory tare weight:

The meter can memorize 1023 tare values for a long time. There are three ways to input

tare weight: 1. Use numeric keys to input tare weight: (\*: original setting value) (Table 3-8)

| Steps                      | Operation | Display | Press [Vehicle No.] in weighing display | untie                      | release                                   |
|----------------------------|-----------|---------|-----------------------------------------|----------------------------|-------------------------------------------|
| 1                          |           |         | state 2 Enter vehicle number            |                            |                                           |
|                            |           |         | Press [Enter]                           | [0 *****] [0 35790]        | Enter the vehicle number , such as: 35790 |
| 3 to enter the tare weight |           |         | Press [Enter]                           | [P*****] [P 01000]         | Input tare weight , e.g.: 1000kg          |
| 4                          |           |         |                                         | Return to weighing display | Finish                                    |

### 2. Weighing method to store tare weight:

In the weighing state, place the empty vehicle on the scale, wait for the scale to stabilize, press the [Save Tare] key, then enter the vehicle number and press the [Enter] key.

3. When storing a set of weighing records, if the vehicle number does not have a tare weight in the memory, the tare weight value in the set of records will be used as

Store the tare weight into memory for this vehicle.

## 13. Gross and Net Weight Switch

In the weighing state, when there is tare weight (net weight display state), press the [Gross/Net] key to switch to the gross weight display state.

Press the [Gross/Net] key again to switch back to the original net weight display state.

After tare or preset tare weight, the indicator automatically enters net weight display state.

When there is no tare weight, the indicator is always in the gross weight display state, and the [Gross/Net] key is invalid.

## 14. Panel type micro paper feeding

XK3190-DS8P is equipped with a panel-type pin-type micro-printer. When the printer model TYPE parameter is set to 5 , press and hold [Feed]

key to enable the micro-printer to feed paper continuously.

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## Chapter 4 Maintenance and Precautions

1. To ensure the clarity and service life of the instrument, this instrument should not be placed under direct sunlight and should be placed on a flat surface.

2. It should not be used in places with severe dust and vibration, and should not be used in humid environments.

3. The sensors and instruments must be reliably connected, the system should be well grounded, and away from strong electric and magnetic fields.

Keep away from highly corrosive objects and flammable and explosive items.

⚠ Do not use it in the presence of flammable gas or flammable steam, and do not use it in pressure container systems.

⚠ In areas where lightning frequently occurs, reliable lightning protection should be installed to prevent damage from lightning strikes.

Instruments and corresponding equipment.

⚠ Sensors and instruments are electrostatically sensitive devices. Anti-static measures should be taken throughout the use. It is strictly forbidden to conduct

Welding operations or other strong electric field operations; During the thunderstorm, reliable lightning protection measures must

Damage to the instrument, ensure the personal safety of the operators and the safe operation of the weighing equipment and related equipment, ensure the personal safety of the operators and the safe operation of the weighing equipment and related equipment.

4. It is strictly forbidden to use strong solvents (such as benzene, nitro oil) to clean the casing.

5. Do not inject liquid or other conductive particles into the meter to prevent damage to the meter and electric shock.

6. Before plugging or unplugging the connection wires between the instrument and external equipment, the power supply of the instrument and the corresponding equipment must be cut off first!

⚠ Before plugging or unplugging the sensor connection line, the power supply of the instrument must be cut off first!

⚠ Before plugging in the printer cable, you must first cut off the power supply to the printer and the instrument! Before plugging in the printer cable, you must first cut off the power supply to the printer and the instrument!

⚠ Before plugging or unplugging the large screen connection line, you must first cut off the power supply of the instrument and the large screen! Before plugging or unplugging the large screen connection line, you must first cut off the power supply of the instrument and the large screen!

⚠ Before plugging or unplugging the communication connection line, you must first cut off the power supply of the instrument and the host computer! Before plugging or unplugging the communication connection line, you must first cut off the power supply of the instrument and the host computer!

VII. The company advises customers: ~~Before using our instruments, the instruments should be inspected and accepted.~~ responsible for the quality of the instruments themselves. Our company is only responsible for the quality of the instruments themselves.

The maximum compensation amount is within 2 times of the value of the faulty instrument itself. We are not responsible for any problems with the system in which the instrument is located.

8. The external interface of the instrument must be used strictly in accordance with the method marked in the instruction manual, and the connection must not be changed without authorization.

If a fault occurs during the process, unplug the device immediately and send it to a professional manufacturer for repair.

The instrument is not allowed to be opened at will, otherwise the warranty will be void.

9. Batteries are consumables and are not covered by the three guarantees.

⚠ To extend the battery life! , be sure to fully charge before use.

If not used for a long time, it must be charged every 2 months, each time for 20 hours.

⚠ Be careful when transporting or installing! Avoid strong vibration, impact or collision to prevent the internal electrodes of the battery from

Short circuit and damage to the battery.

10. Within one year from the date of sale, under normal use, any non-human faults of this instrument are covered by the warranty.

The product and warranty card (with matching serial numbers) should be sent together to the authorized maintenance station or supplier. The manufacturer provides lifetime maintenance for the instrument.

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## Chapter 5 Information Tips

### 1. Normal information prompt:

1. ---- means: Please wait, the instrument is performing calculations internally, do not perform any operations.
2. PRNT means: Please wait for the data to be transmitted between the instrument and the printer.
3. LOAD means: data storage, the display time does not exceed two seconds to prompt the operator.

### 2. Error operation information prompts Error operation information prompts:

1. ERR 03 means: Overload alarm, all or part of the load must be removed immediately.
2. ERR 10 means: The number of vehicle numbers stored exceeds 1023.
3. ERR 12 means: Hardware save error.
4. ERR 13 means: operation error, or operation conditions are not met.
5. ERR 17 means: The parameter settings do not meet the requirements, please reset them.
6. ERR 19 means: printing is not possible when the weighing is zero, negative or unstable; printing is not possible when the return to zero condition is not met.
7. ERR 28 means: The printed date is less than the date of the stored weighing record. Please reset the date and clear all records.
8. NO DATA means: no records or incorrect query conditions
9. DELETE means: the current record is empty and cannot be "re-entered"

### 4. Error connection information

prompt Error connection information prompt: 1. ERR P means: Printer connection error or printer error, press any key to exit and reconnect

Or replace the printer.

2. ERD \*\* means: communication failure of the digital sensor with communication address equal to "\*\*\*".
3. ERN \*\* means: The digital sensor protocol with the communication address equal to "\*\*\*" is incompatible.
4. ERM \*\* means: The digital sensor protocol with the communication address equal to "\*\*\*" is incompatible.

### 5. Component failure and troubleshooting tips:

1. ERR 05 means: The CPU inside the meter is damaged. Please return it to the factory for repair.
2. ERR 18 means: there is a problem with the keyboard. After displaying for 5 seconds, the weighing display will appear. The keyboard must be replaced.
3. ERR 20 means: E<sup>2</sup>Part of the data in the PROM is lost.
4. ERR 21 means: E<sup>2</sup>PROM calibration data is lost.
5. ERR 22 means: The real-time clock is damaged and a new chip must be replaced.
6. ERR 23 means: E<sup>2</sup>The PROM is damaged and must be replaced with a new chip.
7. ERR 24 Indicates: FLASH is damaged and a new chip must be replaced.

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## Appendix 1: (Applicable to printer types TYPE=2, 3, 4)

Form Format:

Weighing sheet

|                            |
|----------------------------|
| Serial number              |
| 0001 Date 1999-07-28       |
| Time 12.02.31 Vehicle      |
| number 12345 Item          |
| number 022                 |
| Gross weight 2.000         |
| (kg) Tare weight 0.300     |
| (kg) Net weight 1.700 (kg) |

Weighing sheet

|                         |
|-------------------------|
| Serial number           |
| 0001 Date 1999-07-28    |
| Time 12.02.31 Vehicle   |
| number 12345 Item       |
| number 022              |
| Gross weight 2.000 (kg) |
| Tare weight 0.300 (kg)  |
| Net weight 1.700 (kg)   |

Weighing sheet

|                        |
|------------------------|
| Serial No. 0001        |
| Date 1999-07-28        |
| Time 12.02.31          |
| Vehicle No. 12345      |
| Item No. 022           |
| Tare weight 2.000(kg)  |
| Gross weight 0.300(kg) |
| Net weight 1.700(kg)   |

Recording Format:

Weighing sheet

Date: 1999-07-28

| Serial number                                             | Time  | Vehicle number | Article number                        | Gross weight (kg) | 0002  | Tare weight | Net weight(kg) |       |      |       |
|-----------------------------------------------------------|-------|----------------|---------------------------------------|-------------------|-------|-------------|----------------|-------|------|-------|
| 12.03.24                                                  | 12345 | 033            | 0003                                  | 12.03.24          | 00888 | 033         | 0004           | 2.000 | (kg) | 1.700 |
| 12.04.11                                                  | 00888 | 022            | Total: Gross weight: 8.000 (kg) Fill- |                   | 2.000 | 0.300       | 1.700          |       |      |       |
| in format: ( Printing can be completed in only 5 seconds) |       |                |                                       |                   | 2.000 | 0.300       | 0.300          | 1.700 |      |       |
| Net weight: 6.800 (kg)                                    |       |                |                                       |                   |       |             |                |       |      |       |

| Weighing slip          |                      |
|------------------------|----------------------|
| WEIGHT BILL            |                      |
| 1st copy Operator      | Serial No. Date DATE |
| Time TIME Vehicle No.  | 123                  |
| VEHICLE No.            | 1999-07-28           |
| CARGO No.              | 12.35.28             |
| Gross weight           | 1580 kg              |
| GROSS Tare             | 80 kg                |
| weight TARE Discount   | 10 %                 |
| rate DISCOUNT          | 1350 kg              |
| Net weight NET Remarks |                      |
| REMARK                 |                      |

## Appendix 2: (Applicable to printer types TYPE=2, 3, 4)

list

Date: 1999-07-28

| Serial No    | Time     | Vehicle No.         | Item No. | Gross Weight (kg)     | Tare weight(kg) | Net weight(kg) |
|--------------|----------|---------------------|----------|-----------------------|-----------------|----------------|
| 0002         | 12.03.24 | 12345               | 033      | 2.000                 | 0.300           | 1.700          |
| 0003         | 12.03.24 | 00888               | 033      | 2.000                 | 0.300           | 1.700          |
| 0004         | 12.04.11 | 00888               | 022      | 2.000                 | 0.300           | 1.700          |
| Grand total: |          | Gross weight: 8.000 |          | Net weight: 6.800(kg) |                 |                |

(kg) Statistics

Date: 1999-07-28

| Serial number: | 0001 | 12345 | Vehicle weight (kg) | Number of times | Total weight (kg) | Total net weight (kg) |
|----------------|------|-------|---------------------|-----------------|-------------------|-----------------------|
|                |      |       | 0.300               | 0002            | 4.000             | 3.400                 |
| 0002           |      | 00888 | 0.300               | 0002            | 4.000             | 3.400                 |

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## Statistics

Date: 1999-07-28

| Serial Number     | Item Number | Times | Total net weight (kg) |
|-------------------|-------------|-------|-----------------------|
| 0001 022 0002 033 |             | 0002  | 3.400                 |
|                   |             | 0002  | 3.400                 |

## Appendix 3: (Applicable to printer type TYPE=6)

### Form Format:

Serial number 0001

Date 02-03-14 Time

10.57.27 Vehicle

number 00001 Cargo

number 001 Gross

weight 10.00kg Tare

weight 1.00kg Net

weight 9.00kg Tel:

013888888888

-----

-----

Total Gross Weight:

10.00kg

Total net weight:

9.00kg

-----

### Recording Format:

Date 02-03-14 Serial

Number Weight kg

0001 9 . 00

0002 9 . 00

Cumulative:

18.00kg

## Appendix 4: Printing operation examples: Printing operation examples

### 1. Manually preset tare weight once and print weighing slip

| Steps | Situation       | Operation                      | 1. Load the goods and    | show                                                                  | untie                                | release |
|-------|-----------------|--------------------------------|--------------------------|-----------------------------------------------------------------------|--------------------------------------|---------|
|       |                 | press [Set Tare]               | 2. Enter the preset tare | [P00.000]                                                             |                                      |         |
|       |                 | weight, such as [1000]         | 3. Press [Enter] and     | [P1.000]                                                              |                                      |         |
|       |                 | press [Print], such as [00123] |                          | [****] Subtract the tare weight                                       |                                      |         |
| 4     |                 |                                |                          | [0 ****] Original car number                                          |                                      |         |
| 5.    | Send car number |                                |                          | [0 00123] If you want the original vehicle number, just press [Enter] |                                      |         |
|       |                 |                                |                          |                                                                       | No need to change the vehicle number |         |
| 6     |                 |                                | Press [Enter]            | [HN **] Original Part Number                                          |                                      |         |
| 7     | Delivery Number |                                | as [11]                  | [HN 11] If you want the original item number, just press [Enter]      |                                      |         |
|       |                 |                                |                          |                                                                       | No need to change the item number    |         |
| 8     |                 |                                | Press [Enter]            | [ PRINT ] Print weighing slip                                         |                                      |         |

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3. Manually print the weighing slip of the goods directly at one time Manually print the weighing slip of the goods directly at one time

| Step 1: Load the goods on the scale | Operation            | Display solution [P *****] release                                                                    |
|-------------------------------------|----------------------|-------------------------------------------------------------------------------------------------------|
| 2: Enter "0"                        | Press [Print]        | original vehicle number                                                                               |
|                                     | such as              | [o 00000] "0" vehicle number means the vehicle is cargo                                               |
| 3                                   | [0] Press            | [HN **] Original Part Number                                                                          |
| 4 Delivery Number                   | [Enter] such as [11] | [HN 11] If you want the original item number, just press [Enter]<br>No need to change the item number |
| 5                                   | Press [Enter]        | [ PRINT ] Print weighing slip                                                                         |

3. Print weighing slip (two weighing storageage method that is to get truck first and then empty truck, or first loaded truck and then empty

| Step 1 Empty vehicle coming up (wait for stability Indicator light on) | Operation            | Display solution [o *****] release                                                                         |
|------------------------------------------------------------------------|----------------------|------------------------------------------------------------------------------------------------------------|
| 2Get a new car number                                                  | For example, [00123] | [o 00123] If you want the original vehicle number, just press [Enter]<br>No need to send a new item number |
| 3                                                                      | Press [Enter]        | [HN **] Original Part Number                                                                               |
| 4 Send new item number                                                 | as [11]              | [HN 11] If you want the original item number, just press [Enter]<br>No need to send a new item number      |
| 5                                                                      | Press [Enter]        | [ LOAD ] 1.5 seconds to return to weighing state                                                           |
| 6 Heavy vehicles come up (wait for stability Indicator light on)       | Press [Print]        | [o 00123] The car number given in "Step 2"                                                                 |
| 7                                                                      | Press [Enter]        | [ HN 11 ] The item number given in "Step" 3                                                                |
| 8                                                                      | Press [Enter]        | [ PRINT ] Print weighing slip                                                                              |

ý Note 5: If the first step is for a heavy vehicle, the sixth step is for an empty vehicle, and the other operations are similar.

4. Preset tare weight and automatically print weighing slip Preset tare weight and automatically print weighing slip:

| Step Situation                                                 | Operation Press [Set] Press [1] Press [Enter] | Display Explanation                               | untie |
|----------------------------------------------------------------|-----------------------------------------------|---------------------------------------------------|-------|
| 1                                                              | Press                                         | [AUTO *] Select 1 to print automatically          |       |
| 2                                                              | [Weigh]                                       | [AUTO 1]                                          |       |
| 3                                                              | Press [Set                                    | [TYPE *] The following do not need to be modified |       |
| 4                                                              | Tare] 6 Set                                   | [0000] Return to weighing state                   |       |
| 5                                                              | the preset                                    | [P***]                                            |       |
| tare weight Send e.g. [100] Press [Enter]                      |                                               | [P 00100]                                         |       |
| 7                                                              |                                               | [ -100] [ 400]                                    |       |
| 8 heavy trucks come up (wait for stability Indicator light on) |                                               | Load 500, minus tare 100                          |       |
| 9                                                              |                                               | [PRINT] Automatically print weighing slip         |       |

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5. Call the tare weight and print the weighing sheet according to the vehicle number Call the tare weight and print the weighing sheet according to the vehicle number:

| Steps | Situation                               | Vehicle number Tare                                                      | Operation     | Display                                                          | release                           |
|-------|-----------------------------------------|--------------------------------------------------------------------------|---------------|------------------------------------------------------------------|-----------------------------------|
|       |                                         | weight has been preset 1                                                 |               |                                                                  | The meter has stored              |
|       |                                         | Heavy vehicle comes up (wait for the stable indicator light to light up) | Press         | [o *****] Original car number                                    |                                   |
|       |                                         | [Vehicle number] 2 Enter the required vehicle number , such as [00123]   |               | [o 00123] If the original vehicle number matches, just press [Go |                                   |
|       |                                         |                                                                          |               | ***                                                              | No need to send the car number    |
| 3     |                                         |                                                                          | Press [Tare]  |                                                                  | ] minus the storage tare weight   |
| 4     |                                         |                                                                          | Press [Print] | [ [o *****] Required vehicle number                              |                                   |
| 5     |                                         |                                                                          | Press [Enter] | [HN **] Original Part Number                                     |                                   |
| 6     | Send new item number                    |                                                                          | as [11]       | [HN 11] If the original item number matches, just press [Enter   |                                   |
|       |                                         |                                                                          |               |                                                                  | No need to send a new item number |
| 7     |                                         |                                                                          | Press [Enter] | [ PRINT ] Print weighing slip                                    |                                   |
| 8     | There are negative numbers on the table |                                                                          | Press [Tare]  | [000] Return to weighing status                                  |                                   |

6. Set multiple vehicles to preset tare weight and print weighing slips manually Set multiple vehicles to preset tare weight and print weighing slips manually:

| Step    | Situation                                                              | Operation | Press [vehicle number] such as [00123] | Display solution                                                     | [o *****] release                |
|---------|------------------------------------------------------------------------|-----------|----------------------------------------|----------------------------------------------------------------------|----------------------------------|
| 1       |                                                                        |           |                                        | original vehicle number                                              |                                  |
| 2       | Get a new car number                                                   |           |                                        | [o 00123] If you want the original vehicle number, just press [Enter |                                  |
|         |                                                                        |           |                                        |                                                                      | No need to send a new car number |
| 3       |                                                                        |           | Press [Enter],                         | [P *****] Preset tare weight                                         |                                  |
| 4       | Send preset tare weight                                                |           | such as                                | [P 100] [ 000]                                                       |                                  |
| 5       |                                                                        |           | [100], press [Enter]                   | Return to weighing state                                             |                                  |
|         | Storage of various vehicles                                            |           | ...                                    | [.....] Set various vehicle preset tare weights.                     |                                  |
|         | Preset tare weight                                                     |           |                                        | Step 1-5 [o                                                          |                                  |
| 6       | Heavy vehicle coming up (wait for the stability indicator to light up) |           | press [vehicle                         | *****] Original vehicle number                                       |                                  |
| number] | 7. Enter the required vehicle number , such as [00123]                 |           |                                        | [o 00123] If the original vehicle number matches, just press [Go     |                                  |
|         |                                                                        |           |                                        |                                                                      | No need to send the car number   |
| 8       |                                                                        |           | Press [Tare]                           | [***] Minus the storage tare weight                                  |                                  |
| 9       |                                                                        |           | Press [Print]                          | [o *****] Required vehicle number                                    |                                  |
| 10      |                                                                        |           | Press [Enter]                          | [HN **] Original Part Number                                         |                                  |
| 11      | get new item number                                                    |           | as [11]                                | [HN 11] If the original item number matches, just press              |                                  |
|         |                                                                        |           |                                        | [Input], no need to send a new item number                           |                                  |
| 12      |                                                                        |           | Press [Enter]                          | [ PRINT ] Print weighing slip                                        |                                  |
| 13      | There are negative numbers on the table                                |           | Press [Tare]                           | [000] Return to weighing state (the vehicle drives away)             |                                  |

7. Print weighing sheet (one-time weighing storage method)

| Step 1: | Heavy vehicle coming                       | Operation            | Display solution                                                     | [o *****] release                 |
|---------|--------------------------------------------|----------------------|----------------------------------------------------------------------|-----------------------------------|
|         | up (wait for stability Indicator light on) | Press [Print]        | original vehicle number                                              |                                   |
| 2       | Get a new car number                       | For example, [00123] | [o 00123] If you want the original vehicle number, just press [Enter |                                   |
|         |                                            |                      |                                                                      | No need to send a new item number |
| 3       |                                            | Press [Enter]        | [HN **] Original Part Number                                         |                                   |
| 4       | Send new item number                       | as [11]              | [HN 11] If you want the original item number, just press [Enter      |                                   |
|         |                                            |                      |                                                                      | No need to send a new item number |
| 5       |                                            | Press [Enter]        | [PRNT] Print weighing                                                |                                   |