

# XK3118T1 Manual

- **PLEASE READ THIS MANUAL CAREFULLY BEFORE USE**
- **PLEASE KEEP THIS MANUAL PROPERLY FOR REFERENCE**

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(Note: The Printing Version may not be Suitable for the Real products due to New Function Increase. Please contact our company for the latest E-Version)

Ver1.00/08/12/08

## 1.0 BRIEF INTRODUCTION

XK3118T1 weighing indicator adopts high anti-jamming Single-chip microprocessor and high precision  $\Sigma-\Delta$  A/D conversion technology, widely applied in platform scale, platform balance and other weighing applications.

### Features:

kg/lb one key switch, total, upper and lower limit, animal scale, RS232 communication

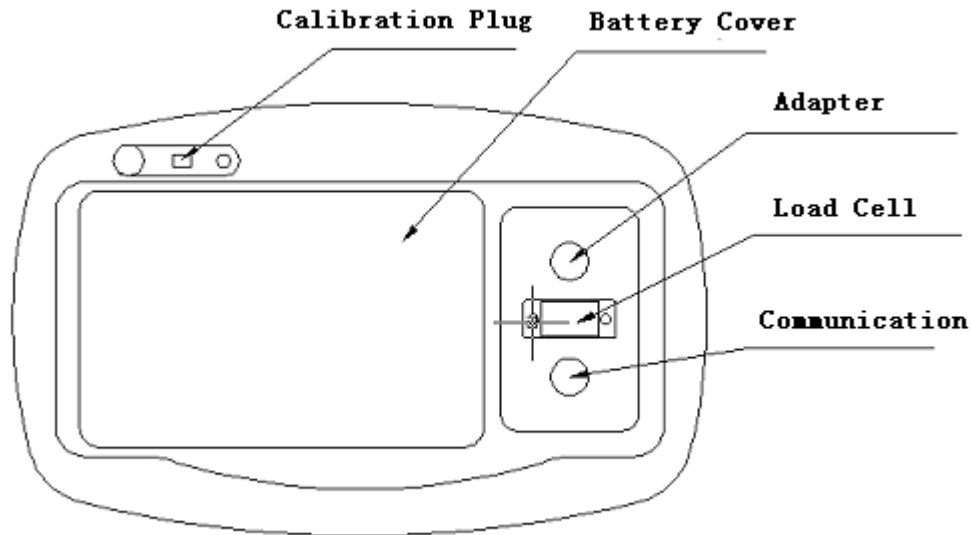
## 1.1 TECHNICAL PARAMETER

- ◆ Accuracy Class: III, n=3000
- ◆ A/D Conversion Mode: Adopts  $\Sigma-\Delta$  Technology, 10 Times per Second
- ◆ Input Sensitivity  $\geq 1.5\mu\text{V/e}$
- ◆ Excitation: DC 5V
- ◆ Input Signal:  $-16\text{mV}\sim 18\text{mV}$
- ◆ Load Cell Connection Mode: 6 Wire Connection (Long Wire Auto Compensation )
- ◆ Division 1/2/5/10/20/50 Optional
- ◆ Power Supply: AC 85~245V, 50Hz~60Hz; Build-in Battery DC 6V/4AH
- ◆ Working Temperature:  $0\sim 40^{\circ}\text{C}$ ; Working Humidity  $\leq 90\%\text{RH}$
- ◆ Working Temperature :  $-10^{\circ}\text{C}\sim 40^{\circ}\text{C}$  , Humidity 10 % ~85 % , No Condensation
- ◆ Storing Temperature:  $-30^{\circ}\text{C}\sim 60^{\circ}\text{C}$  , Humidity 10%~70% , No Condensation

## 2.0 INSTALLATION

### 2.1 INDICATOR INTERFACE

#### 2.1.1 XK3118T1 Back Side



#### 2.1.2 Connection with Load Cell

Assignment	
①	-Excitation
②	-Feed Back
⑥	+Excitation
⑦	+Feed Back
⑧	-Signal
⑨	+Signal
⑤	Shield Wire

Shield	F-	E-
⑤	④	③
⑨	⑧	⑦
S+	F+	E+
S-		

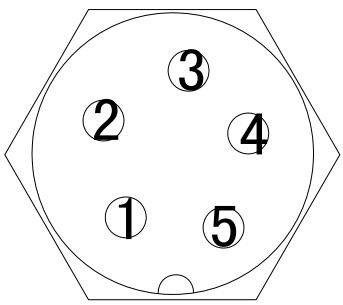
Short connect PIN 1 and 2, PIN 6 and 7 when connected a load cell with 4 wire cable;

**▲ ! Connection between load cell and indicator must be reliable; shield wire must be connected to ground reliably. Connection or disconnection are not allowed when the indicator is on, which may damage the indicator or load cells.**

**▲ ! Static protection must be properly adopted as the load cell and indicator are all static sensitive equipments. Welding or other strong electricity operation should be strictly forbidden. During thunderstorm season, proper lightning protection should be taken care of to protect the load cells and indicators from damaging by lightning and to ensure the personal safety and the safely running of the weighing and related equipments.**

### 2.1.3 Serial Port Communication Wire Connection

Serial Port Chart

	Port Assignment	
	①	RXD
	②	TXD
	③	GND
	④	Current Loop Big Screen Input
⑤	Current Loop Big Screen Output	

## **3.0 OPERATION**

### **3.1 AUTO ZERO WHEN TURN ON AND OFF**

The indicator power can be controlled by the on-off key on the front faceplate. The indicator will perform self-check after turned on. If the scale was found departure from the calibrate zero however still within the range of turn on auto zero then the indicator will display “0” and the indicator light for “zero digit” will be on. If the scale was found departure from the calibrate zero and out of the range of turn on auto zero then the indicator will display the current read

If the range setting of the turn on zero is “- -” which means zero of last turn off, then zero operation will not be carried on and the zero of last turn off will be automatically readin and the current weight will be displayed.

### **3.2 MANNUALLY ZERO**

Indicator will back to zero when pressing “ZERO” key if the gross weight is within the range of manually zero and stable. Manually zero is not valid under the “NET” displaying mode;

### **3.3 TARE**

TARE Operation can be carried out if both gross weight and net weight are above zero and stable. The indicator will display “0” after pressing the “TARE” key. The tared weight is current gross weight. And the indicator will enter “NET” displaying mode and the “NET” indicator lights will be on;

The indicator will exit “NET” displaying mode after pressing “TARE” when the gross weight is “0” and under “NET” displaying mode

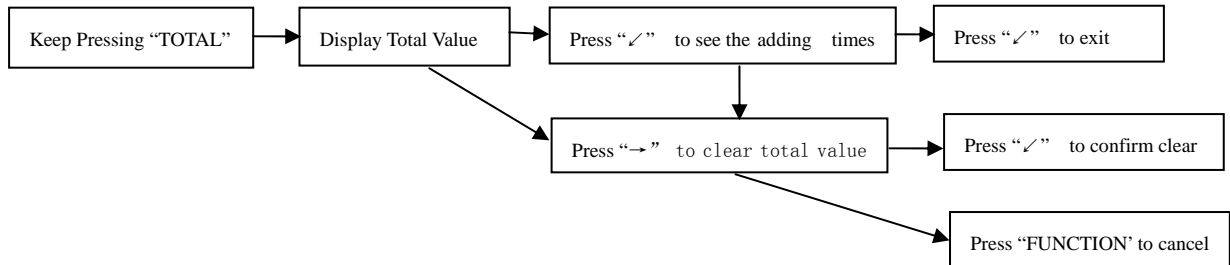
### **3.4 OPERATION FOR TOTAL, TOTAL DISPLAY AND TOTAL CLEAR**

1. In case, the net weight is bigger than the minimum measurable value (5 division) and stable, when pressing “TOTAL”, the current net weight will be added and the “TOTAL” indicator light will be on and total value will be displayed, which will be changed to adding times 【n \*\*\*】 after 3 seconds and exit the total displaying status after another 3 seconds. Next operation will be only valid when the net weight is smaller than the minimum measurable value.

2. If keep pressing “TOTAL” until buzzer alarms under the weighing status, “FUNCTION” and “TOTAL” lights will be on and you can check the total value by pressing “↙” to see the adding times and again “↙” to exit.

3. If you press “→” after keep pressing “TOTAL” and enter the total displaying status there will be an notice 【CLRAr-】 which means to clear the total value or not. Press “↙” to clear and “FUNCTION” to exit and keep the value.

Operation as follows:



### 3.5 OTHER PARAMETER SETTING AND FUNCTION

Parameter setting mode can be entered if keep pressing "FUNCTION" under normal weighing status until buzzer alarms. Detailed operations are as follows:

Steps	Operations	Display	Note
1	Keep Prssing "FUNCTION" to Enter "↑"to Switch "↵"to Confirm	【Fn **】	<b>"Function" Setting:</b> 【 Lb】: One Key Switch (kg/lb), (Not available under net weighing status) . 【ANL】: Animal Scale, One key total and lock display. 【 --】: No Function
2	"↑"to Switch "↵"to Confirm	【PS **】	<b>Power Save Setting:</b> 【oFF】: Power save mode off 【 oN】: Open power save mode. The power save mode will be entered 5 minutes after weight stable. The indicator will only display date circultly in last digit 【onP】: Enhanced power save mode which will automatically turn off the indicator after 5 minutes power save mode.
3	"↑"to Switch "↵"to Confirm	【br****】	<b>Baud Rate Setting:</b> 600~9600bps Optional
4	"↑" to Switch "↵" to Confirm	【Co *】	<b>Communicate Mode Setting:</b> 1~6 Optional, Detailed format followed
5	High Setting	【H*****】	<b>High Setting:</b> Press "→" the flash digit will move towards right Press "↑" to increase the number of flash digit Press "↵"to confirm and enter next step such as 2000
6	Low Setting	【L*****】	<b>Low Setting:</b> Press "→" the flash digit will move towards right Press "↑" to increase the number of flash digit Press "↵"to confirm and enter next step such as 1000 If weight is higher than High setting the "HI" light on left side of the indicator will be on If weight is lower than Low setting the "LO" light on left side of the indicator will be on If the weight is between High and Low setting then the "OK" light will be on

**COMMUNICATION MODE FORMAT:**

Serial	Number of each frame	Note
1	8	Reversely send the Net Weight date. For example if the net weight is 23.45kg, ASCII code 54.3200 will be sent. And if the net weight is -23.45kg, ASCII code 54.320- will be sent.
2	8	Reversely send Gross Weight date. The format is same as serial 1
3	14	Positively send the Net Weight date with unit. For example if the netweight is 23.45kg, ASCII code =0023.45 (kg) will be sent. End with Hex number OD,OA
4	14	Positively send the Net Weight date with unit. The format is same as serial 3
5	No confirm	<b>Order Response Mode:</b> Order mode 02 "Order" 03 (Hex) There are 5 pieces order, ASCII code 'A'~'E'. Take gross weight 23.45kg, netweight 13.45kg and tare 10.00kg for example 'A':Read gross weight, indicator back:GW:0023.45(kg) 'B':Read net weight, indicator back:NW:0013.45(kg) 'C':Read tare, indicator back:TW:0010.00(kg) 'D':Manually zero, indicator back:'D' 'E':Tare operation, indicator back:'E' <b>All order back add 02 at the beginning and 03 at the end (Hex)</b>
6		Net and total weight can be automatically output in Total operation and the date can be printed if connected with serial printer

#### 4.0 ERROR NOTICE

Display	Note
<b>Err 01</b>	Exceed the Zero Range
<b>Err 02</b>	Not Meet the Requirement of Total
<b>Err 03</b>	Weight Overloaded
<b>Err 04</b>	Weight not stable during Calibration
<b>Err 05</b>	Load Calibration Error. Too low load or Calibration code too small or AD reverse
<b>Err 09</b>	Data read verify Error, Data Memory Damaged
<b>Err 10</b>	Boot verify Error, SCM damaged

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### XK3118T1 Packing List

Serial	Name	Model no.	Quantity	Remarks
1	Indicator	XK3118T1	1pc	
2	Adapter	10.5V1A	1pc	
3	Communication Plug	9 Core D Type (Pin)	1pc	
4	9 Core D Type Jacket		1pc	
5	Manual		1pc	
6	Certificate		1pc	
7				
8				
9				
10				
11				
12				
13				
14				
15				

Pack: \_\_\_\_\_ Check: \_\_\_\_\_