

# **Digital Weighing Indicator XK3190-A12**

## **User Manual**

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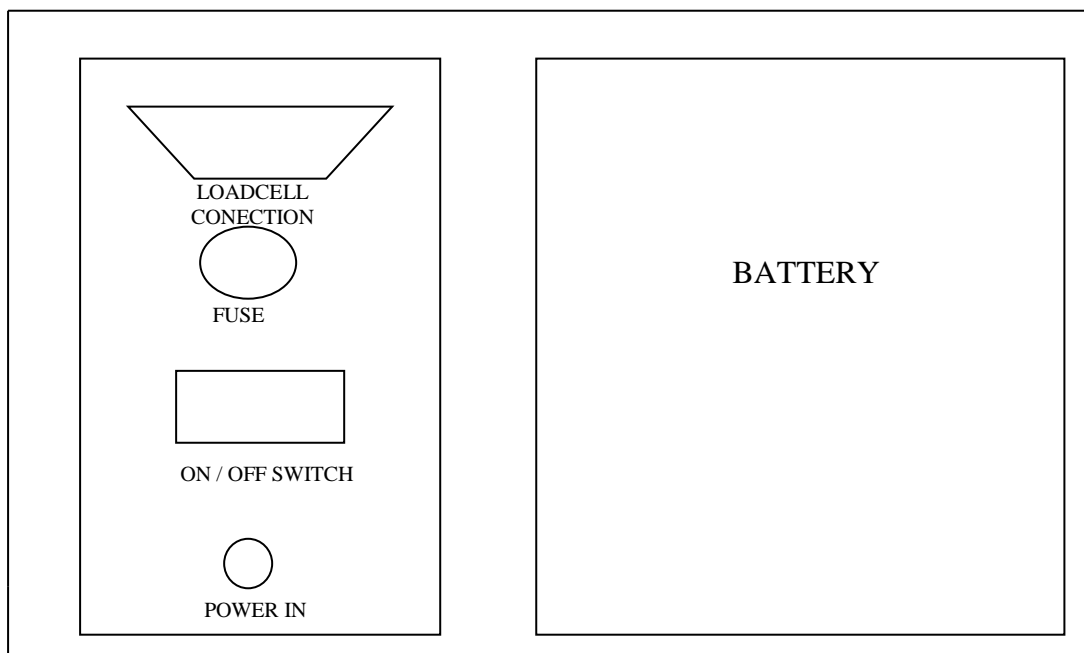
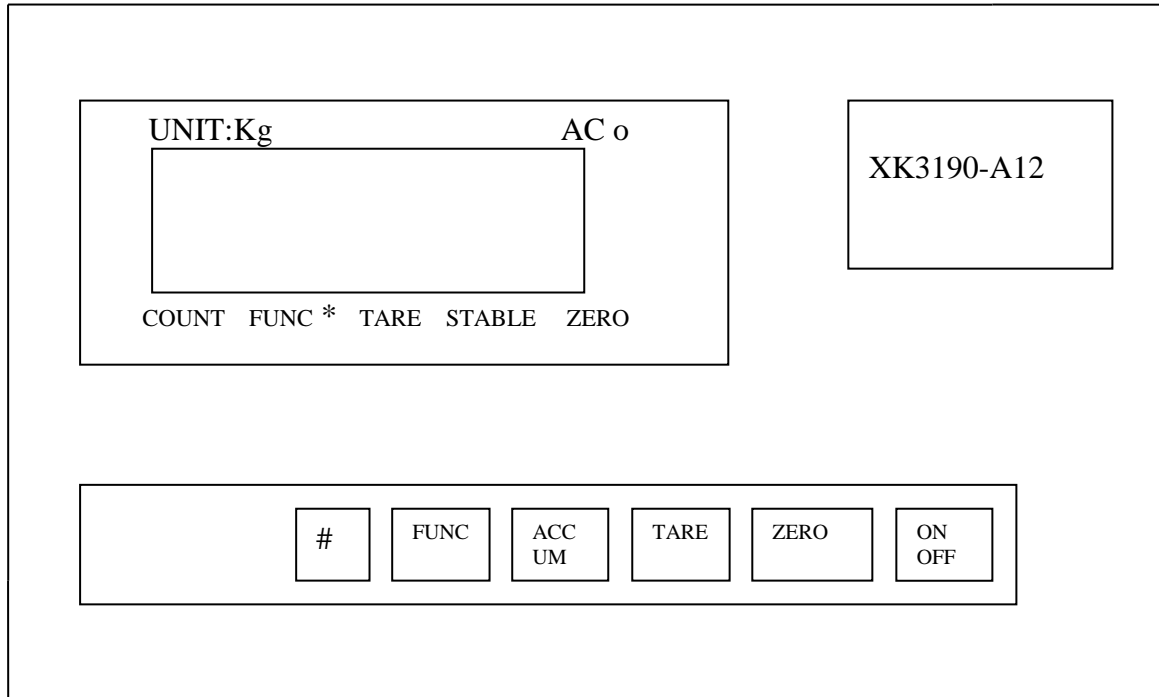
## Chapter 1 Main Specification

1. Model: XK3190-A12 weighing indicator (CE)
2. Accuracy: Grade III, n=3000
3. Sample Rate: 10 times / second
4. Load Cell Sensitivity: 1.5~3mV/V
5. Scale Interval: 1/2/5/10/20/50 option
6. Display: 6 bits LCD, 6 state indicating signals
7. Remote display (optional): In serial output mode: current loop signal, transmission distance <50m
8. Communication interface (optional): RS232C; Baud rate 1200/2400/4800/9600 optional
9. Power supply: Power Adaptor 12V DC 1A Tip +
10. Battery: DC6V/4AH
11. Operating temperature / humidity: 0~40 °C; <90% RH
12. Transporting temperature: -20~50°C

## Chapter 2 Installation

### 2.1 FRONT & REAR VIEW OF INDICATOR

FRONT VIEW



REAR VIEW

## 2.2 KEY FUNCTIONS

[FUNC]	Pressing this button for 5 seconds or more in weighing mode, will change the display to operator setting mode; pressing it for less than 5 seconds, will change the display to counting mode
[ACCUM]	Press this button to accumulate the weight in weighing mode. Press this button for sample taking in counting mode
[TARE]	Press this button to tare in weighing mode
[ZERO]	Press this button to zero in weighing mode
[ON / OFF]	Press this button to start the indicator when it is off; and press it to shut off when on.

## 2.3 CONNECTING LOAD CELL TO INDICATOR

1. The 9-pin socket is used for link-up of the load cells.
2. The 4-pin shielded cable is used, and the indicator does not have the function of long distance compensation.
3. Indicator must be reliably connected to Load cell and shielded-cable of load cell must be reliably connected to ground. If the indicator is powered on, the user should not insert or withdraw the plug in order to protect the indicator and load cells.
4. The load sensors and indicator are static sensitive devices; you must adopt anti-static measures. The electric welding operation and other strong electric operations are prohibited. Installing a lightning rod is recommended in order to protect the operator, indicator, and relevant devices.

9 PIN D TYPE PLUG (male connector)

PIN 1 = Excitation Negative

PIN 2 = Sense Negative

PIN 6 = Excitation Positive

PIN 7 = Sense Positive

PIN 8 = Signal Negative

PIN 9 = Signal Positive

## **Chapter 3 Operation**

### **3.1 POWER ON AND AUTO ZERO SETTING**

- 3.1.1 The indicator will perform '999999-000000' to self-checking when turning on. Then it will enter into weighing mode.
- 3.1.2 In weighing mode, if scale deviates from zero point, but still within the zero set range, the indicator will set zero automatically. If out of range, it may be necessary to adjust the zero point or recalibrate or reset.

### **3.2 MANUAL ZERO SETTING (AUTOMATICALLY)**

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

### **3.3 TARE FUNCTION**

When the indicator is in weighing status, and displaying a positive stable weight, pressing the [Tare] key will deduct the displayed weight value, and show as a tare weight. Then the indicator displays the net weight as '0', and the Tare sign annunciator is on.

### **3.4 ACCUMULATING FUNCTION**

In weighing mode, when the displayed value is positive and stable, press [Accum] key to accumulate the present weight and display the accumulated weight. The accumulate annunciator will be on. Pressing the key again, will revert back to weighing mode and the accumulate annunciator will be off. The next accumulating operation must be performed only after the weight has returned to zero. When the accumulated weight is displayed, press [Func] key to clear the accumulated weight in memory, and press [Accum] to return to weighing mode. If the accumulated weight needs to be checked, please keep any load off the platform, then press [Accum] to display the accumulated weight.

### **3.5 COUNTING FUNCTION**

In weighing mode, put sample on scale, eg, 100. Then press [Func] key. The display will show 'count'.  
Press [Accum] key.  
The display shows 'C00000'. Use the [Tare] key to move cursor right, and [Zero] key to increment up.  
Key in sample, eg 100, then press [Accum] key.  
The display will show 100 and is now in counting mode.  
To exit counting mode and revert back to weighing mode, press [Func] key.



Communication mode as follows.

1 Continuous mode

The data transmitted is weight (gross weight or net weight)

The data string in gross weight is ww000.000kg or ww000.000lb

The data string in net weight is wn000.000kg or wn000.000lb

Note: the position of above decimal point is decided by the decimal point set on the weight indicator

2 Command mode

The indicator performs the corresponding operation according to the command transmitted to the indicator

Command R The indicator receives and sends weight data one time  
(The format is the same as in continuous mode)

Command T The indicator receives the command and will tare the scale (the same as pressing tare key) if no receipt of the command the indicator returns CR LF

Command Z The indicator receives the command and will Zero the scale (the same as pressing the Zero key) if no receipt of the command the indicator returns CR LF



## Chapter 4 Error Indication

ERR 1	The AD value is too small when calibrated
ERR 2	The zero point is out of range when calibrated
ERR 3	The zero point is out of range upon starting scale
ERR 4	The inputted sample number is zero when sampling in counting mode
ERR 5	The inputted weight is zero when in calibration mode
ERR 6	The unit weight is less than 0.25e when sampling in counting mode
bAt-lo	Low battery power – recharge battery

## Chapter 5 Rechargeable Battery

- 6.1 When using the scale with AC power, the indicator will charge the battery automatically and the AC led will be illuminated.  
Note, the built-in battery should be fully charged before it is used for the first time
- 6.2 Only when you turn off the AC power and push the start key, the battery works. When the display shows 'Lo', there is insufficient voltage and the battery requires charging.
- 6.3 When you use the battery for the first time, you should charge the battery for 20 hours.
- 6.4 If you don't use the battery for a long time you should charge the battery for 10-12 hours every two months. This helps to prolong the life of the battery.

## Chapter 6 Maintenance

- 7.1 To guarantee indicator clarity and user life, the indicator should not be placed in direct sunlight and be free from obstruction.
- 7.2 The indicator should be used in a dust-free and vibration-free environment.
- 7.3 The load cells should be connected with the indicator properly, and the system should be well connected to ground. The indicator should be protected from highly electrical and magnetic fields.  
In order to protect the operator, indicator and relevant devices, it is recommended that a lightning rod be installed.  
Load cells and indicators are static sensitive devices and you must install anti-static measures.
- 7.4 It is strictly forbidden to clean the case of the indicator with intensive solvents, eg benzene or nitro oils.
- 7.5 Liquid and conducting particles should not be poured into the indicator; otherwise the electronic components will be damaged and there is severe risk of electrical shock.
- 7.6 You should cut off the power supply to the indicator and relevant devices before disconnecting the indicator or any external device.
- 7.7 During operation, if trouble occurs, the operator must turn off the power supply immediately. Should damage to the indicator occur, it should be returned for repair. Non-weighing manufacturers should not attempt to repair it as further damage may occur.
- 7.8 The battery is not included in your guarantee as it is an easily exhausted product. To extend the battery life, please charge the cell fully prior to use. Should you not use the indicator for a long time, it is recommended that you charge the cell every 2 months for 8 hours.
- 7.9 From invoice date, the indicator has a one-year guarantee. This does not cover misuse of the indicator or customer damage. Taking the indicator apart will also result in the guarantee being void.