XK3190-A9P

Weighing Indicator

Operational Manual

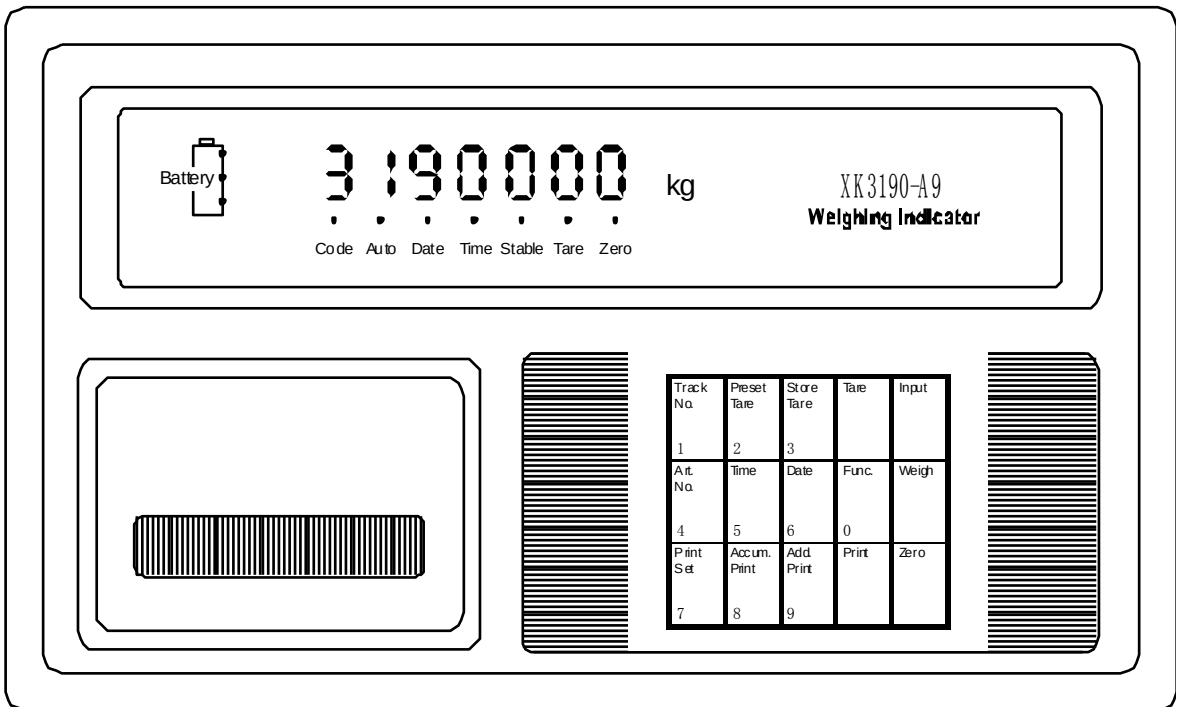
NOTE: Please read the opertional manual carefully when use this indicator!

1. Specifications

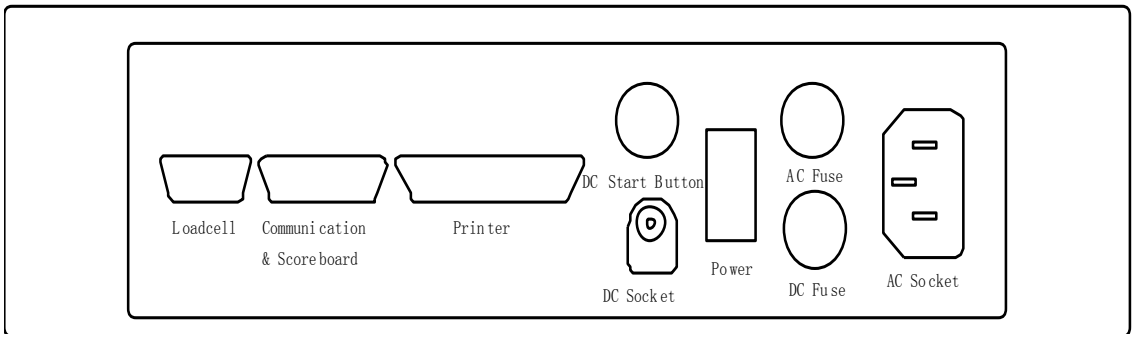
1	Model	XK3190-A9P
2	Sample rated	10~15 times / sec
3	Load cell sensitivity	1~ 2mv/v
4	Division	1/2/5/10/20/50/100 optional
5	Display	7-bits LED digital display 0.56” in character height and 7 status indicating.
6	Clock	can display day/month/year and second/minute/hour
7	Scoreboard display interface	Using serial output method : current loop signal, transmission distance ≤50m RS323 signal, transmission distance ≤30m
8	Communication port	RS-232C Baud rate: 600/1200/2400/4800/9600 optional
9	Printing Port	Standard parallel output port, can connect with Tpup16 micro-printer, TM800,LX-300, KXP－1121and LQ-1600k wide-line printer.
10	Power Supply	AC 187～242V ; 49~50Hz
11	Operating Temperature and Relative Humidity	0～40℃, ≤ 90% RH
12	Storage /transportation Temperature	－25 ～55℃
13	Fuse	500mA

2. Installation

2.1 Front & Back View of the Indicator



(Graph 2-1) Front View



(Graph 2-2) Back View

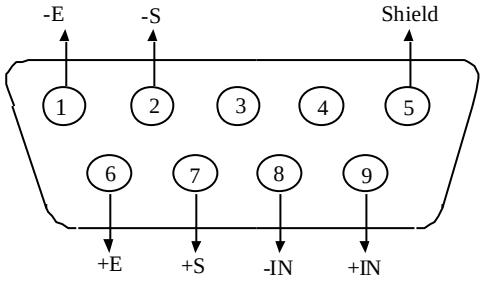
2.2 Connecting Load cell to Indicator

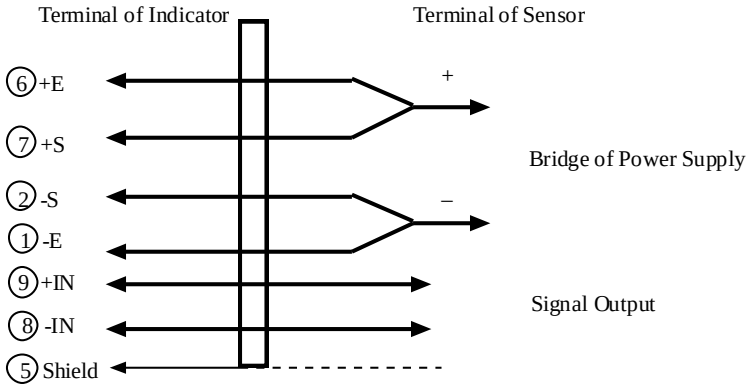
1. The 9-pin socket is used for the link-up of loadcell, which has been clearly shown in the graph 2-3.

2. The 4-pin shielded cable is used, +S must be short connected with +E, -S and -E. The indicator does not have the function of long distance compensation.

3. **▲! Indicator must be reliably connect ed to Load cell and shielded-cable of load cell must be reliably connect ed to underground . If indicator is powered on, the user should not insert or withdraw the plug in order to protect the indicator and loadcell.**

4. **▲! Sensor and indicator are static sensitive devices; you must adopt anti-static measures. In order to protect the operator ,indicator, and relevant devices, you should install lightning rod in the thunderstorm frenquently happening area**

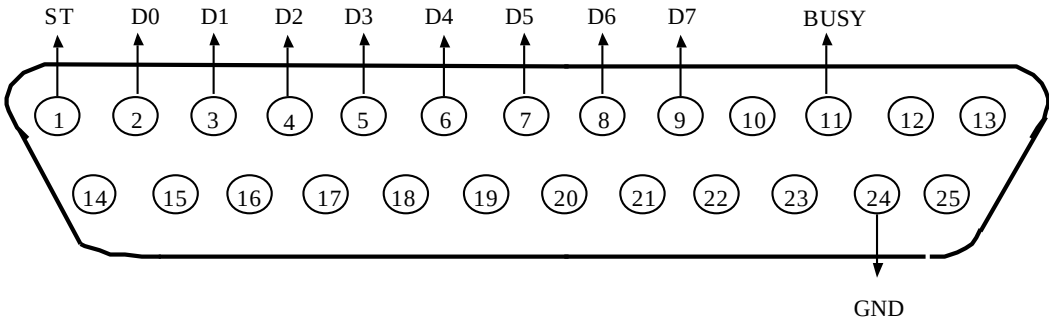




Connection of the load cell

2.3 Connecting the printer to indictor

The printing interface adopts the standard parallel interface. The 25-pin RS232 socket is illustrated below:



3. Calibration

According to the Graph 2-3, connecting Indicator and loadcell, and the indicator enters weighing mode.

1. Connecting calibration jumper to the 15- pin socket on the indicator back panel. (There is a 15-pin plug in the packing carton with its 14-pin short connected with 15-pin)
2. According to table 4-3, carry out calibration step by step.

Table 4 – 1

step	Operation	Display	Explanation
1	press [FUNC]		after calibration jumper is inserted
2	press [1] [0] press [Input]	[E **] [E 10]	Enter division value selecting 1/2/5/10/20/50/100/200 Example: 10
3	press [0] press [Input]	[dc *] [dc 0]	Enter decimal point (0 -4) Example: without Decimal point 0
4	press [0] [2] [3] press [Input]	[pon XYZ] [pon 023]	Enter Parameters X: Applying Field (0-1) 0: Non Commercial 1: Commercial Y: Zero setting range (1-5) Repsenting respectively The percentage of F.S. For example: 2% 4% 10% 20% 100% Z: Power on Zero Set Range (1-5) Repsenting respectively The percentage of F.S. 2% 4% 10% 20% 100%
5	press [3] [0] [0] [0] [0]	[F *****] [F 30000]	Inputting the F.S. If the calibration is needed. You should enter F, then push [Input]. You will enter directly to step 10 by pushing [Input]. And you can return to [weigh] Status by pushing [weigh] key.
6	press [Input]		Example: 30000
7		[noLoadn]	Confirming Zero position. At this time there is no load on the scale.Pressing [Input] when the stable light is on.

step	Operation	Display	Explanation
8	press [2] [0] [0] [0] [0] press [Input]	[Aload1] [20000]	The weight loaded should be no less than 50% Max F.S.. It is better that the loaded weight is near to the F.S. for example: 20000. You should press [Input] to confirm when the stable light is on.
9	press [Input] press [Input] press [Input]	[H ******] [C ******] [CH ****]	Don't change H,C,CH which are three calibration coefficients.
10	press [1] press [Input]	[Adr **] [Adr 01]	Communication Address (01-26) for example 1
11	press [1] press [Input]	[bt *] [bt 1]	Band rate for serial communication : (0-4) repsenting respectively the band rate of 600,1200,2400,4800,9600 For example: 1
12	press [0] press [Input]	[tF *] [tF 0]	Serial Communication Mode 0- consecutive transmission, not receiving 1- command response For example :0
13		Weigh status	Calibration is over

CAUTION:

When calibration is over, the calibration jumper must be pulled out.

4. Operation Instructions

4.1 power on and auto zero-setting

1 The indicator will perform “999999-000000” self-checking when turning on. Then it will enter “WEIGH” status.

2 The self-checking can be stopped by pushing any key.

3 When power on, if loading weight on the scale deviates from the zero point, but still within zero set range, the indicator will set zero automatically.

4.2 Manual zero setting:

1 The indicator will perform zero-setting by pushing [Zero] key, the “zero” light is on at this time.

2 If displayed value deviates from zero point, but still within zero-range, pressing [Zero] key is available. Otherwise, [Zero] key is invalid. (In this status, please recalibrate or reset zero parameters)

3 Only when stability lamp is on, you are allowed to set zero operation.

4.3 Tare function

1 Normal Tare:

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

2 Preset tare:

When Indicator at weighing status, press [Pre Tare] key, and indicator will display [P *****], Using digital key entering known tare weight value, then press [Enter] key, the pre-tare is finished. At this time indicator displays net weight and tare sign lamp is lighted.

4.4 Date **and Time**

1. The indicator will display the present date and the “date” light is on if you push [Date] key in “weigh” status. If the date is correct. You can exit by pushing [Input] or [weigh] key. If the date is not correct, you should enter the correct date by numerical key, and then push [Input]
2. The indicator will display the present time and the “time” light is on if you push [time] key in “weigh” status. If the time is correct. You can exit by pushing [Input] or [weigh] key. If the time is not correct, you should enter the correct time by numerical key, and then push [Input]

3. The clock will stop when powered off, so you should have the correct time and date when power on each time.

4.5 Rechargeable battery

1. There are 3 battery lights to indicate the battery electricity. The battery electricity is insufficient if only one light is on. You should charge I\the battery at this time. The continual use in the insufficient battery status will result in the power-off.
2. You can charge the battery by connecting the battery to indicator and turning on the AC power (charging time is 30 hours)

4.6 Internal code

1. The indicator will display the internal code if you push [print set] key and input [2], [8] in “weigh” status, at this time the internal code light is on. You can exit the “internal code” status by pushing [print set] key again, and inputting [2], [8], the “internal code” light will be off.

2. In “internal code” status, all the keys except for [Zero] and [Print Set] keys are null.

4.7 Printing

1. Printing set

Step	Operation	Display	Note
1	Push [print set] Push [9] [7] Push [Input]	[P 00] [P 97]	Input 97
2	Push [1] Push [Input]	[Auto *] [Auto 1]	Selecting Auto/Manual Printing 0- Manual 1- Auto
3	Push [3] Push [Input]	[Type *] [Type 3]	Selecting printer: 0-invalid printing 1-TPup16 micro-printer[English] 2-TM800 printer 3-Panasonic KX-P1121 Printer 4-Epson CQ-1600K
4	Push [5] [0]	[HL **]	Selecting Printing Restriction

	Push [Input]	[HL 50]	00-print only when display returns zero 25-print only when display <25% F.S. 50- print only when display <50% F.S. 75- print only when display <75% F.S. 99 Print even when it is at F.S.
5	Push [3] Push [Input]	[Arr *] [Arr 3]	Selecting Printing format: Arr=0: record format 1: 1-page format 2: 2-page format 3: 3-page format
6	Push [1] [0] [0] Push [Input]	[L *****] [L001,00]	Setting the minimum weight which can see printed out in auto printing mode. L must be lager than 10 divisions for example: 1.00
7	Push [1] Push [Input]	[Ode *] [Ode *]	Selecting blank- filling print format: 0-blank-filling print not selected 1-blank filling print selected
8	Push [1] Push [Input]	[Dct *] [Dct 1]	Selecting the discount rate at blank-filling print form: 0-discount rate is not used 1-discount rate is used
9	Push [0] [1] [1] Push [Input]	[Sys ***] [Sys 011]	All the number entered except 0 are regarded as 1 in this status

Record Format:

Weight Bill

Date 97-01-31

NO.	Time	Gross (kg)	Tare (kg)	Net (kg)	Accumulating(kg)
0001	08.56.16	299.98	1	298.98	298.98
0002	09.00.09	299.98	2	297.98	596.96
0003	09.00.28	299.98	3	296.98	893.94

Document Format

Weight Bill

NO. :	007
Date :	96-09-25
Time :	09.03.21
Gross :	299.98 (kg)
Tare :	9.98 (kg)
Net :	290.00 (kg)
Total :	2059.90 (kg)

Blank filling format (<u>Compelet printing only in five sconds</u>)

WEIGHT BILL		
Fist bill for operator		
SERIAL No.	123	
DATE	1999-05-28	
TIME	12.35.28	
VEHICLE No.		
CARGO No.		
GROSS	1580	kg
TARE	80	kg
DISCOUNT	10	%
NET	1350	kg
REMARK		

5. Maintenance and Announcements

5.1 To guarantee the clarity and using life, the indicator shouldn't be placed directly under sunshine and should be placed in the plain space.

5.2 The indicator should avoid dust pollution, vibration and moisture.

5.3 Loadcell should connect with indicator reliably, and the system should be connected into ground properly. The indicator must be detected from high electrical fields.

▲ **！In order to protect the operator, indicator, and relevant device, you should mount lightning rod in thunderstorm frequently happening area.**

▲ **！Load cell and indicator are static sensitive devices; you must adopt anti- static measures.**

5.4 It is strictly forbidden to clean the case of indicator with intensive solvents (for example: benzene and nitro oils)

5.5 Liquid and electrical conducting particles should not poured onto the indicator, otherwise the electronic components will be damaged and electric shock is likely to happen.

5.6 You should cut off power supply of indicator and relevant device before you pull-in and out the connecting line of indicator and external device.

▲ **！You must cut off power supply of the indicator , before you plug the connecting line of the load cell in and out.**

▲ **！You must cut off power supply of the indicator and the printer, before you plug in connecting line of the printer.**

▲ **！You must cut off power supply of the indicator and the scoreboard, before you plug connecting line of the scoreboard in and out.**

▲ **！You must cut off power supply of the indicator and the master computer, before you pull connecting line of communication in and out.**

▲ **！You must cut off power supply of the indicator and external connecting system, before you pull connecting line of control output in and out.**

5.7 The user should return this indicator to our company for repair. Non-weighing manufacturer should not repair it, or by you, otherwise further destruction may occur.

5.8 From invoice date, the indicator has a total one-year free repair period. If any non-artificially obstacle about the indicator occurs while under correct using conditions within the period, the user is allowed to send the product with its guarantee card (of the correct number) back to our corporation for free repair.

5.9 The indicator shouldn't be taken apart; otherwise free guarantee will be cancelled.

6. Errors and Information

6.1 Normal information

1 ····· Wait a moment, and this is a normal display.

2 **Prnt** Wait a moment, the data are being transmitted between indicator and printer.

3 **LoAd** Storing data, it will indicate for not less than 2 seconds to prompt the operator.

4 **--OF--** No meaning.

6.2 Error information indicating

1 **Err 03** Overload warning

2 **Err 19** Zero or Negative weight value, can't be printed.

3 **Err 11** dissatisfing demands of document format , or printing set is wrong.

4 **Err 12** dissatisfying demands of the printer set.

5 **Err 16** Date or Time is illegal.

5 **Err 09** This truck No does not exist.

6 **Err 10** The truck No restored exceeds 255.

6.3 Wrong setting information indicating

1 **Err 13** Wrong setting of the division value .

2 **Err 14** Decimal point must be less than 5, please reset the decimal bit.

3 **Err 15** Overload warning must be > 100, please reset it.

Err 17 Enter new data which should be less than 65000.

6.4 Wrong connection information indicating

1 **Err P** It means the printer has trouble or is wrongly connected. Push any key to quit.

2 **Err 01** It means the load cell signal line is wrongly connected, or its signal is negative.

（1） If this scale is under usage, then can be sure: the load cell connecting wires had troubles, or load cell has been damaged.

（2） If this scale hasn't been calibrated, the user should check the load cell's connective wires first. (Whether the signal line has been negatively connected). If

the loadcell cable is corretly linked, but the indicator still indicates Err01, the problem can then be solved by short connecting pin 4 and pin 6.

3. **Err 02** It means the load cell's wires are wrongly linked, or the signal value exceeds the A/D converting range.

（1） If this scale is under usage, then can be sure: the load cell's connective wires had troubles, or load cell is damaged.

（2） If this scale hasn't been calibrated, please check as following:

a) Carefully check the load cell's connective wires are right or not.

b) Check if load cell is suitable or not: It should satisfy the following terms: the "scale's dead load + scale's rated capacity" must be less than the load cell's rated capacity.

c) This may happen in case that there are more than one load cell in the weighing system.

d) Short connecting the pin 4 and pin 1 on the socket of the load cell.

4. Err 05 : Long-distance compensation feedback voltage is not correct.

1) If 4-pin shielded cable is used, please check if you had short-connected the tE and tS, -E and -S.

2) Please check if the connection of load cell is correct.

6.5 Error of components and solving method

1 **Err 18** Key board has problems, It will indicates for ten seconds, then indicator enters weighing mode.

2 **Err 20** The data is partly lost in RAM. Operator should put in the calibration plug to self-check, and then pull it out.

3 **Err 21** Calibrating data have been lost in RAM and EPROM, Operator must put in the calibration plug, then reenter the original calibration data, turn on the indicator again or re-calibrate it.

4 **Err 22** EPROM has been damaged.

5 **Err 23** RAM has been damaged.

6.6 Other information indicating

1. **Err 24** In normal operation, you must pull off the calibration jumper.The indicator

is under normal operation, and the calibration jumper shouldn't be put in. If calibration is needed, the calibration jumper should be put in at set-up. You should pull out the calibration jump when turning off the indicator. If the indicator finds that the calibration jump was inserted when turning on, it will display **Err 24** for 6 seconds to prompt the operator.

2. **Err 25** Illegal software, or E2PROM was damaged.
3. **ctnu 0** The indicator will display this if it can not receive the stable data within 25 seconds during the step 8 or step 9 of the calibration process. At this time, the operator can input 0, 1 or 2.

   0: (Abort) The indicator will not do this step and enter next step.

   1: (Retry) Try again.

   2: (Ignore) The unstable data can be used.

Hotline Call to our company TPS Corporation in Viet Nam

Call	Tel
Hotline	(028) 62.888.666 - (028) 62.999.111
Mr Cuong (24/24)	0915.999.111
Mr Xa	0974.000.333
Ms Cuong	0908.444.000