

XK3190-A9P

WEIGHING INDICATOR

MANUAL

PLEASE READ THIS MANUAL VERY CAREFULLY
BEFORE USE

Dec 2006

Specifications subject to change without prior notice

CONTENTS

1. GETTING STARTED
2. TECHNICAL PARAMETERS AND SPECIFICATIONS
3. LAYOUT AT FRONT AND BACK
4. Connecting to Other Devices
5. Calibration
6. Operation
7. CODE DISPLAY
8. APPENDIX

1. GETTING STARTED

CAUTION

- *This is not a toy. Keep out of reach of children;*
- *This indicator is not an explosion proof device;*
- *This indicator is not a water proof device;*
- *Do not open this indicator, no user serviceable parts inside. Always contact supplier for service.*

1.1 Introduction

Weighing indicator XK3190-A9P adopts high precision double integral A/D conversion technology, widely applied in electronic platform scale, electronic floor scale, electronic truck scale, static railroad track scale and so on alike static weighing system equipped with 1~8 load cell.

1.2 Features

- High precision A/D conversion with readability 30000
- Call and display inner code to replace weight observing and analysis tolerance
- Able to setup zero-tracking range, zero(auto/manual) range and zero speed
- Able to setup print function for fast filled weighing bill
- Able to save 255 vehicle ID and corresponding tare weight, 100 cargo ID, 205 weighing records

- Weighing data save protection in case of power off
- Indicating for battery volume or status
- Protection for low battery
- AC/DC power supply, with outside rechargeable 12V/7AH battery
- Standard RS232 communication interface with selectable baud rate and communication method
- Standard scoreboard interface with 20mA current loop
- Standard parallel print interface, able to connect with 9-pin or 24-pin wide-line printer
- With built-in printer

2. TECHNICAL PARAMETERS AND SPECIFICATIONS

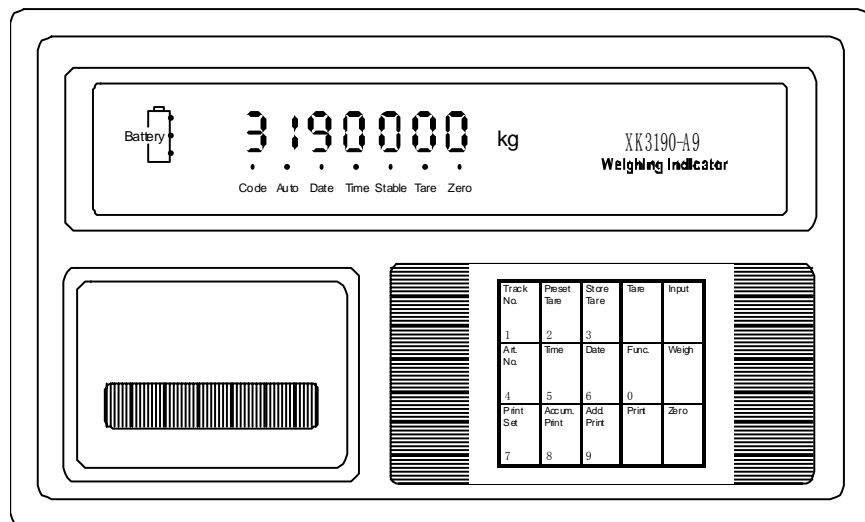
- Model: XK3190-A9P
- Accuracy: Class III, N=3000
- A/D Conversion Method: Double integral
- Input Signal Range: 0mV ~ 18mV
- Max.net input signal range: 18mV
- A/D conversion speed: 10~15 times/sec.
- Nonlinearity: <0.01%FS
- Load Cell Excitation: DC8V; $I \geq 250\text{mA}$
- Max. connection number of load cell: 8 at 350 ohm or 16 at 700 ohm
- Load cell connection mode: 6 wire, auto compensation for long distance ≤ 50 meters
- Display: 7 bits LED, 7 status indications, 3 battery

indications

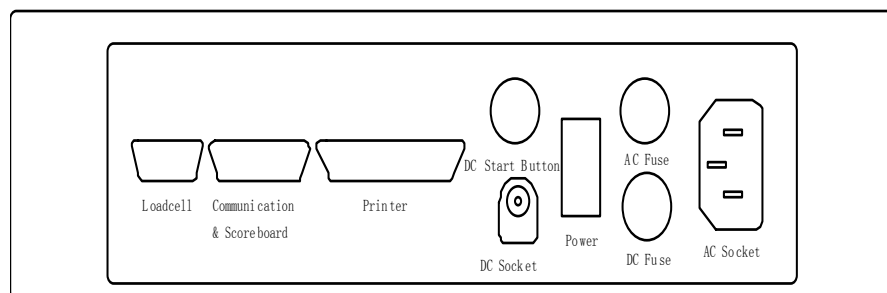
- Division: 1/2/5/10/20/50/100 optional
 - Clock: real clock without effect on power off
 - Scoreboard interface (Standard)
- Serial sending signal by current loop with baud rate 600.
Transmission distance: Current loop ≤ 100 meters;
- Communication interface(RS232 C standard; RS422 optional)
- Serial communication interface, with selectable baud rate by continuous sending method or on command method
Transmission distance: RS232C ≤ 30 meters; RS422 ≤ 1200 meters
- Print interface (Standard)
- Parallel sending, able to connect with wide-line printer model TM800、KX-P1121、KX-P1131、LQ300K、LQ1600K;
- Power supply: AC 187~242V, 49~51HZ; DC outside rechargeable 12V/7AH battery; battery charge time about 30 hours and 16 hours usage time after charge then charge again
 - Fuse for AC: 500mA; fuse for DC: 1.5A

3. LAYOUT AT FRONT AND BACK

3.1 Front view of the indicator



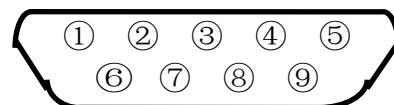
3.2 Back view of the indicator



4. Connecting to Other Devices¹ through various interfaces

4.1 Connection to load cell

Connect this indicator to load cell through the 9-pin load cell connector located at the back. Refer to the below table for load cell pin assignment.



PIN #	ASSIGNMENT
1	E-
2	S-
5	SHIELD
6	E+
7	S+
8	IN-
9	IN+

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

CAUTION

- *Connection between load cell and indicator must be reliable; shield-wire must be connected to ground reliably;*
- *Load cell and indicator are all*

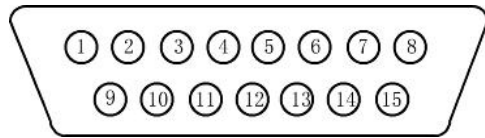
¹ Turn scale off and cut off power before making any connections or disconnections.

static-electricity-sensitive devices, measures must be taken to ensure safety.

4.2 Connection to PC or SCOREBOARD

From the 15-pin interface located at the back, you could

- Connect indicator to computer via RS232 output or RS422 output (optional);
- Connect indicator to scoreboard via 20mA current loop output;



15-pin connector

PIN #	ASSIGNMENT	PIN #	ASSIGNMENT
1	RS422 OUTPUT+	9	SCOREBOARD OUT+
2	RS422 OUTPUT-	10	SCOREBOARD OUT-
3	RS422 IN+		
4	RS422 IN-		
6	RS232 RXD		
7	RS232 TXD		
8	GND		
Note1: RS422 output is optional;			

4.2.1 Connect to PC

Data format for RS232 or RS422 is the same. Data is transmitted in ASCII code. Data format is as listed below(one group):

1	2	3	4	5	6	7	8	9	10
START	DATA								STOP

There are two modes to communicate with PC:

- Continuously send, and
- Command mode.

A. Continuously send

Data transmitted is tare weight or net weight from the display of the indicator. Each time it sends one frame data to pc, one frame consists of 12 groups while the data format of one group is as listed above. Below is the content for one frame:

GROUP NO.	CONTENT	NOTES	
1	02(XON)	START	
2	+ OR -	SIGN SINAL	
3	WEIGHING DATA	High digit	
4		...	
5		...	
6		...	
7		...	
8		Low digit	
9		Decimal point	From right to left, decimal point is from 0~4 ; 0 for no decimal point, 1 for 1 decimal point;
10		Verify	XOR HIGHT 4 BITS
11	Verify	XOR LOW 4 BITS	
12	03(XOFF)	STOP	

XOR=2 ⊕ 3 ⊕8 ⊕ 9

For example,

Now the indicator displays 50.00KG, then the frame indicator sends to PC is :+0050002;

If the indicator displays -0.040KG, then the frame indicator sends to PC is : -0000403;

B. Command mode

Indicator will act according to instruction from PC, one instruction from PC will trigger one act from indicator.

◆Format of instruction from PC is as followed:

GROUP NO.	CONTENT	NOTE
1	02(XON)	START
2	ADDRESS	From A~Z
3	COMMAND (FROM A~D)	A:For SHARKE B:For GROSS W C:For TARE W D:For NET W
4	Verify	XOR HIGHT 4 BITS
5		XOR LOW 4 BITS
6	03(XOFF)	STOP

NOTE: XOR=2 ⊕ 3

◆Format of data from indicator is as followed:

GROUP NO.	NOTES	
1	START XON (02)	
2	ADDRESS: A~Z	
3	A~D	A:TO SHARKE
		B:To send GROSS W
		C:To send TARE W
		D:To send NET W
4	COORESPONDING DATA ACCORDING TO COMMAND	
...		
N-1		
N		
N+1	Verify HIGH 4 BITS OF XOR	
N+2	Verify LOW 4 BITS OF XOR	
N+3	03(XOFF) STOP	
XOR==2 ⊕ 3 ⊕(n-1) ⊕ n		

Content of 4~N is as followed table according to different command:

COMMAND A	NO DATA	ONE FRAME (6 GROUPS)
COMMAND B :TO SEND GROSS WEIGHT	A: Sign bit(+/-)	ONE FRAME (14 GROUPS)
	B: Highest bit (6 BITS)	
	...(from high to low)	
	G:	
	H:DECIMAL POINT(0~4)	
COMMAND C :TO SEND TARE WEIGHT	A: Sign bit(+/-)	ONE FRAME (14 GROUPS)
	B: Highest bit (6 BITS)	
	...(from high to low)	
	G:	
	H:DECIMAL POINT(0~4)	
COMMAND D :TO SEND NET WEIGHT	A: Sign bit(+/-)	ONE FRAME (14 GROUPS)
	B: Highest bit for g.w	
	...(from high to low)	
	G:	
	H:DECIMAL POINT(0~4)	

Note: For verify of XOR

High 4 bits and low 4 bits of XOR is defined: if high 4 bits or low 4 bits of XOR is ≤ 9 , then add 30h and transmit in ASCII code; if high 4 bits or low 4 bits of XOR is > 9 , hen add 37h and transmit in ASCII code

C. Parameter setting at indicator for communication with PC

There are mainly three parameters to be set for communication with PC, they are address, baud rate and communication method. To set these parameter, first connect indicator to load cell properly so that indicator will work properly. Open the calibration board at the back of indicator, you will see the

calibration switch, turn the switch to right, then you could set these parameter as followed table:

Step	Operation	Display	Explanation
1	Press [function]		
2	Press[input]	[E **]	Non-communication parameter setting, not change it. Press [input] to next step.
3	Press[input]	[dc *]	Non-communication parameter setting, not change it. Press [input] to next step.
4	Press[input]	[Pn *****]	Non-communication parameter setting, not change it. Press [input] to next step.
5	Press[input]	[F *****]	Non-communication parameter setting, not change it. Press [input] to next step.
6	Press[1] Press[input]	[Adr **] [Adr 01]	Communication address(01-26) Example:1
7	Press[1] Press[input]	[bt *] [bt *]	Baud rate(0-4), indicate the baud rate respectively. 600,1200,2400,4800,9600 Example:1
8	Press[0] Press[input]	[tF *] [tF *]	Communication method(0~1) 0-Continuously sending 1-On command Example: 0
9		Weigh status	Finish

4.2.2 Connect to Scoreboard

Data is transmitted serially in binary code with baud rate 600.
Data format is as listed below (one group):

0	1	2	3	4	5	6	7	8	9	10
START	DATA(Low is prior to high)								SIGN	STOP

Indicator sends one frame data to scoreboard per 100ms, one frame consists of 3 groups while the data format of one group is as listed above. Below is the content for one frame:

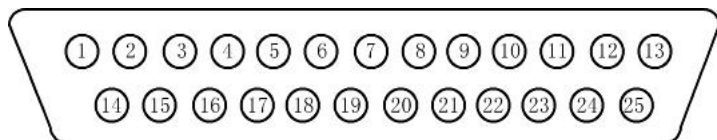
Group 1	0	1	2	3	4	5	6	7	8	9	10
	Start	D0	D1	D2	D3	D4	D5	D6	D7	SIGN	STOP
Group 2	0	1	2	3	4	5	6	7	8	9	10
	Start	D0	D1	D2	D3	D4	D5	D6	D7	SIGN	STOP
Group 3	0	1	2	3	4	5	6	7	8	9	10
	Start	D0	D1	D2	D3	D4	D5	D6	D7	SIGN	STOP

For group one, Sign bit is 0; X(D0,D1,D2)means decimal point (0~4); Y (D3) means sign(1 for negative while 0 for positive); Y (D4) for back up; G18,G17 and G16 is binary code;
For group two, Sign bit is 0; G15~G8 is binary code;
For group three, Sign bit is 1; G7~G0 is binary code;

From G0~G18 consists of 18 bit binary code, low prior to high.

with content of weighing data

4.3 Connection to Printer



25-pin interface

PIN #	ASSIGNMENT	PIN #	ASSIGNMENT
1	ST	7	D5
2	D0	8	D6
3	D1	9	D7
4	D2	11	BUSY
5	D3	25	GND
6	D4		

Description for each pin is as listed in above table. Before print operation, first set up parameter for print function, then connect indicator to printer with printer cable. Please refer to followed table for parameter setting:

Step	Operation	Display	Note
1	Press [print set] Press [9] [7] Press [Input]	[P 00] [P 97]	Input Password 97

2	Press [1] Press [Input]	[Auto *] [Auto 1]	Select Auto/Manual Print 0- Manual 1- Auto
3	Press [3] Press [Input]	[Type *] [Type 3]	Select printer type: 0-Print invalid 1-TPupl6(micro-printer] 2-TM800 printer 3-Panasonic KX-P1121 4-Epson LQ-1600K 5-Built in printer(For A9P)
4	Press [5] [0] Press [Input]	[HL **] [HL 50]	Print only when: 00-Back to zero 25-Back to <25% F.S. 50- Back to <50% F.S. 75- Back to <75% F.S. 99- Even it's F.S.
5	Press [3] Press [Input]	[Arr *] [Arr 3]	Select Print format: Arr= 0: record format 1: 1-page linked format 2: 2-page linked format 3: 3-page linked format

6	Press [1] [0] [0] Press [Input]	[L *****] [L001.00]	Set min. weight for auto print function It must be lager than 10d for example: 1.00		Press [Input]	[teln 8]	bits(0~8) 0-No telephone number The other-telephone number
7	Press [0][5] Press [Input]	[b **] [b 05]	Rows for printer(0~30)	12	Press [5][8][8][6] Press [Input]	[tH *****] [tH 5886]	Set for high 4 bits of telephone number
8	Press [1] Press [Input]	[Ode *] [Ode *]	Select filled-in print: 0-Not select 1-Select	13	Press [0][0][0][3] Press [Input]	[tL *****] [tL 0003]	Set for low 4 bits of telephone number
9	Press [1] Press [Input]	[Dct *] [Dct 1]	Select discount rate at filled-in print form: 0-Not use discount rate 1-Use discount rate	<p>Note 1: For A9 model, printer type could only be type 1,2,3,4; Note 2:Step 8,9 is only valid when printer type is 2,3; Note 3:Step 11,12,13 is only valid when printer type is 5; Note 4:Only when the print format is filled-in, discount rate is rated; Note 5, For print format example, please refer to appendix; Note 6,If print parameter set is valid, press [print] could both trigger save and print operation, that is to say, save one weighing record while print; Note 7, If a weighing record isn't printed out due to problem of printer or other, press [Add print] could print out the last saved weighing record after problem is solved. Note 8,Print [Accu print], then accumulation for weighing</p>			
10	Press [0] [1] [1] Press [Input]	[Y *****] [Y 00011]	Non zero input will be regarded as 1 ²				
11	Press [8]	[teln *]	Select telephone number				

² For parameter Y, there are 5 bits, from left to right, it corresponds 1~5, definition for each bit is as followed:

Bit 1 for weighing mode: 0 Two times weighing mode; 1 one time weighing mode

Bit 2 for power save choice: 0 not choose; 1 choose

Bit 3 for weight unit: 0 KG; 1 Ton

Bit 4 for choice for cargo no.: 0 not use; 1 use

Bit 5 for choice for truck no.: 0 not use; 1 use

records within a period could be printed out;

Note 9, Press [Print set], and [0][1], indicator could print out weighing records group by date, truck no. and cargo no.

Note 10, If indicator is set as two times weighing mode, no matter first loaded, then unloaded or first unloaded then loaded, for the first time save, indicator just display [LoAd] for 1.5 seconds to indicator operator due to uncomplete weighing data, but not print. But press [Add print] could print out the uncomplete weighing record as followed:

1, Serial no.: blank;

2, Gross W, net W: 0

3, Tare W: Current display

Note 11, If indicator is set as one time weighing mode, indicator will both save and print for every time weighing. If indicator is at tare status, then current tare weight will be regarded as saved tare weight; if indicator isn't at tare status, then indicator will recall saved tare weight according to truck no. (If there is no saved info, then tare weight will be regarded as 0)

5. Calibration

First connect indicator to load cell properly so that indicator will work properly. Then open the calibration board at the back of indicator, you will see the calibration switch, turn the switch to right, then you could calibrate as followed table:

step	Operation	Display	Note
1	press [FUNC]		
2	press [1][0] press [Input]	[E **] [E 10]	Enter division: 1/2/5/10/20/50/100 Example: 10
3	press [0] press [Input]	[dc *] [dc 0]	Enter decimal point (0 -4) Example: without Decimal point 0
4	press [1][2] [3] press [Input]	[pon VWXYZ] [pon 00123]	Enter Parameters value: ³ V: Application (0-1) 0: Non Commercial 1: Commercial W: Zero track speed(0~3) X: Zero track range (0~9) Y: Manual zero range(1~5) Z: Auto zero range(1~5)

5	press [3] [0] [0] [0] [0]	[F *****] [F 30000]	Input F.S. If need calibration,enter F value, then press [Input]. Directly to step 10 if press [Input],back to weighing status if press[weigh]
6	press [Input]		Example: 30000
7	press [Input]	[noLoad n]	Zero point calibration, press [input] when the stable light is on and assure it's unloaded
8	press [2] [0] [0] [0] [0] press [Input]	[Aload1] [20000]	Load the weight, no less than 50% Max,the closer to F.S, the better it is. Press [input] for confirm when stable light is on. For example:20000

W	0	1	2	3						
/S	0.4	0.3	0.2	0.1						
X	0	1	2	3	4	5	6	7	8	9
	NO	0.5e	1.0e	1.5e	2.0e	2.5e	3.0e	3.5e	4.0e	4.5e
Y,Z	1	2	3	4	5					
F.S	2%	4%	10%	20%	100%					

9	press [Input] press [Input] press [Input]	[H *****] [C *****] [CH ****]	H,C,CH are three calibration coefficients,don't modify them ,just record them. (In case they are lost,input these value will recover)
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) in for 600,1200,2400,4800,9600 For example: 1 for 1200
12	press [0] press [Input]	[tF *] [tF 0]	Communication Mode : 0-Continously sending 1-On command
13		Weigh status	Calibration over Note: Turn the calibration switch to left to forbidden calibration,then indicator could work in weighing status.

6. Operation

6.1 Power on and auto zero

A, If with AC power supply, just turn on power switch; if with DC power supply, first connect battery to indicator with the cable, and turn on power switch and DC power switch. After powered on, indicator will perform "999999-000000" self check and come into weighing status.

B, When power on, if weighs on platform deviates from zero point but within auto zero range, indicator will perform auto zero.

6.2 Manually zero

A, Press [Zero], indicator will be back to zero, and zero light will be on;

B, Zero key will only be valid when weighs on platform is within manual zero range;

C, Zero operation is valid only when stable light is on

6.3 Tare operation

There are three methods to tare:

Method 1, Normal tare

Press [tare] key when weighing data is positive and stable, the displayed weighing data will be regarded as tare weight, then indicator will display 0 and tare light is on

Method 2, Pre-tare

Press [Pre tare] key at weighing status, indicator will display [P *****], the displayed data is the former tare weight. If need to set new tare weight, just input by numeric key, press [input] to confirm.

Method 3, Call tare weight according to truck no.

Press [truck no.] at weighing status, indicator display [o *****], input truck no. by numeric key, press [tare] key, then indicator will find the corresponding tare weight of the truck no. for use.

At weighing status, continuous tare operation is permitted. When tare weight is 0, then tare light will be off; when indicator within manual zero range, press [zero] to make tare weight as 0, the tare light is also off.

6.4 Set for date and time

A, Indicator displays the present date and "date"

light is on if you push [Date] key at weighing status.

If the date is correct, you can exit by pressing

[Input] or [weigh] key. If the date is not correct,

Input the correct date by numerical key, then press

[Input] key for confirm.

B, Indicator displays the present time and "time" light is on if you push [time] key at weighing status. If the time is correct, you can exit by pressing [Input] or [weigh] key. If the time is not correct, Input the correct time by numerical key, then press [Input] key for confirm.

6.5 Battery usage

A, There are 3 battery lights to indicate the battery electricity. The battery electricity is insufficient if only one light is on. You should charge the battery at this time. The continual use in the insufficient battery status will result in the power-off.

B, You can charge the battery by connecting the battery to indicator and turning on the AC power (charging time is 30 hours)

C, The first time the battery is used, ensure charge fully for battery, then use

D, Red wire of cable is to connect "+" of battery while black wire of cable is to connect "-" of battery

6.6 Internal code display

A, The indicator will display the internal code if you press [print set] key and input [2], [8] at weighing status, at this time the internal code light is on. You can exit the "internal code" status by pressing [print set] key again, and input [2], [8], the "internal code" light will be off.

B, At internal code display status, all other keys are invalid except [zero],[print]

C, 20 internal codes is equal to one division

6.7 Save operation

A, For truck no., it's 5-bit number while for cargo no., it's 2-bit number. Max. truck no. is 255 while max. cargo no. is 100

B, Each time one weighing record is saved, then indicator will print out one weighing record (when print set up is valid)

C, There are three methods to save

- Method 1, two times weighing to consist of one weighing record

- Method 2, one time weighing to consist of one weighing record when tare weight is known

- Method 3, what weighs is just cargo, then one time weighing consist of one weighing record.

Rule for differ for above 3 methods is as followed:

--When truck no. is 00000, then save method is 3

--When tare light is on,then save method is 2

--When truck no. is any no. except 00000 and tare weight is off, then save method is 1

D,Save operation is as followed table:

step	Operation	Display	Note
1	Press [print]		Weighing status
2	Input truck no. Press [input]	[o *****] [o 03217]	Input truck no.: 03217
3	Input cargo no. Press [input]	[hn **] [hn 35]	Input cargo no.: 35
4	Input [10] Press [input]	[BFL **] [BFL 10]	Input discount rate in pertentage:10 %
			Save finish
Note1: When weighing data is unstable, or gross weight is ≤ 0 or net weight is ≤ 0 , data can't be saved Note2,When truck no. is more than 255, indictor will display [err10]			

6.8 Delete operation

A,There are two methods for delete:

- Method 1,delete all records(include truck no. and tare weight)

- Method 2,delete ont truck no. and corresponding tare weight, and all weighing records related to this truck no.

B, Operation

-Press [fun] at weighing status,it directs to method 1 for delete;

-Press [Truck no.],input the truck no. at weighing status, press [zero],it directs method 2 to delete;

During the course of delete, indicator will display [sure 0] to indicate operator whether to delete or not, press any key except 0 and [input] for confirm, press 0 and [input] to exit

6.9 Save tare weight

A, There are three methods for save tare weight:

-Method 1

step	Operation	Display	Note
1	Press [truck no.]		Weighing status
2	Input truck no. Press [input]	[o *****] [o 35790]	Example: 35790
3	Input tare weight Press [input]	[p *****] [p 01000]	Example: 1000
			Save finish

-Method 2, Press [tare save] when unloaded truck is on and stable light is on, input truck no. then press [input] to save tare weight

-Method 3, When save a weighing record, if the tare weight for the truck no. isn't saved before, then regard tare weight at this record as the tare weight of the truck.

6.10 Software version check

Press [print set] and input password [3][0], then press [input], indicator display [ver *.*] to show the version no. Press [weigh] back to weighing status.

7. Code display

7.1 Normal information

~.....

Wait a moment, and this is a normal display;

- Prnt

Wait a moment, data transmitted between indicator and printer

- LoAd

Storing data

---OF--

No meaning

7.2 Error code display

- Err 03

Overload warning

- Err 19

Zero or Negative weight value, can't be printed.

- Err 11

Not meet demands of set up for linked format setup

- Err 12

Not meet demands of set up for printer

- Err 16

Date or Time illegal

- Err 09

Truck no does not exist

- Err 10

Truck no restored exceeds 255

7.3 Code for wrong set up

- **Err 13**

Wrong set of the division

- **Err 14**

Decimal point must be less than 5, please reset the decimal point

- **Err 15**

Overload warning must be > 100, please reset it

- **Err 17**

Overload warning must be < 325000, please reset it

7.3 Code for wrong connection

- **Err P**

Printer has trouble or is wrongly connected,press any key to exit

- **Err 01**

Load cell connection or load cell signal has problem

- **Err 02**

Load cell connection or load cell signal exceeds A/D range

- **Err 05**

Long-distance compensation feedback voltage is not correct

7.4 Code for components error

Err 18

Key board has problems

Err 20

Data partly lost in RAM

- **Err 21**

Calibrating data lost in RAM and E2PROM

- **Err 22**

RAM has been damaged

- **Err 23**

E2PROM has been damaged

7.5 Code for others

- **Err 24**

When indicator is at normal working status, calibration switch should be at left, if when indicator is turned on, indicator check that calibration switch is at right, then it display Err 24 to indicate operator to pay attention

- **Err 25**

Illegal software, or E2PROM was damaged

- **ctnu 0**

Indicator will display this if it can not receive the stable data within 25 seconds during 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

8. Appendix(For printer type 2,3)

-Linked-format(3 page)

NO.	001	NO.	001	NO.	001
Date	1999-07-28	Date	1999-07-28	Date	1999-07-28
Time	12.02.31	Time	12.02.31	Time	12.02.31
Tr no	12345	Tr no	12345	Tr no	12345
Ca no	022	Ca no	022	Ca no	022
Gross	2.000(kg)	Gross	2.000(kg)	Gross	2.000(kg)
Tare	0.3000(kg)	Tare	0.3000(kg)	Tare	0.3000(kg)
Net	1.7000(kg)	Net	1.7000(kg)	Net	1.7000(kg)

-Record format

Weighing bill

Date:1999-07-28

NO.	Time	Truck no.	Cago no.	Gro W(kg)	Ta W(kg)	Net W(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
Accum: Gross W:8.000(kg) Net W: 6.800(kg)						

-Filled-in format

WEIGHT BILL	
Fist bill for operator	
SERIAL No.	123
DATE	1999-07-28
TIME	12.35.28
VEHICLE No.	
CARGO No.	
GROSS	1580 kg
TARE	80 kg
DISCOUNT	10 %
NET	1350 kg
REMARK	

-Report print (three copies group by time, truck no. and cargo no.)

A,Press [print set],indicator display [P 00], press [1] and [input] to print report,report date is current date of indicator.

The three reports are as followed:

B,Report

Time:10.57.27

Truck no:00001

Cargo no:001

Gross W:10.00kg

Tare W:1.00kg

Net W:9.00kg

Tel:12345678

Tot G.W:

10.00kg

Tot N.W:

9.00kg

Report 1(by time) Date:1999-07-28

NO.	Time	Truck no.	Cago no.	Gro W(kg)	Ta W(kg)	Net W(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
Accum: Gross W:8.000(kg) Net W: 6.800(kg)						

Report 2(by truck no.) Date:1999-07-28

NO.	Truck no.	Ta W(kg)	Time	Gro W(kg)	Net W(kg)
0001	12345	0.300	0002	4.000	3.400
0002	00888	0.300	0002	4.000	3.400

Report 3(by cargo no.) Date:1999-07-28

NO.	Cargo no.	Time	Net W(kg)
0001	022	0002	3.400
0002	033	0002	3.400

-Linked-in format(1 page, only for printer type 5)

No.:0001

Date:02-03-14