# Chapter

## 1. *Summary*

*The JWI/JPS/JS series is a multi-function weighing indicator that offer flexibility together with good features! Ideal weighing indicator for clients that want stability ,good quality together with a competitive cost .*

## 2. INTRODUCTION:
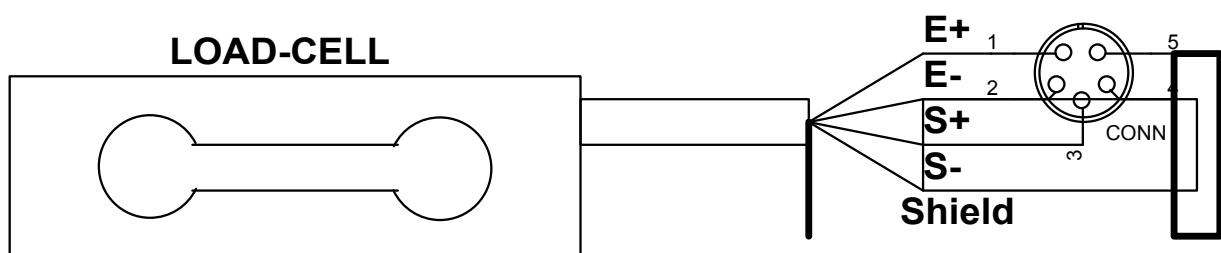
Thank you for your purchase of this high precision electronic weighing indicator / scale of our company. The main features of the Weighing Indicator / scale is :-

1. The microprocessor in this indicator features
   A: Automatic zero point tracking function.
   B: Selection of the ON/OFF of the zero tracking
   C: Selection of the baud rate of the RS232 interface
   D: The beep(alarm) function can be activated when the weighing reach the HI –LO limits .Multiple choices for checking functions .
   E: Tare function
   F: Pre-tare function
   G: Automatic tare function
   H: The weight accumulation function
2. Easy operating and water-resistant membrane keypad
3. Easy to read backlight HTN- LCD display.(JWI588 uses LED screen)
4. Simple counting function is applicable.
5. Tare range is unlimited.
6. Bi-direction RS-232 signal output are applicable.
7. AC power or rechargeable battery is applicable. The battery's checking system can check automatically whether or not the battery is recharged.
8. Fast, stable and accurate display reading with simple operation.

## 3. PRECAUTION：
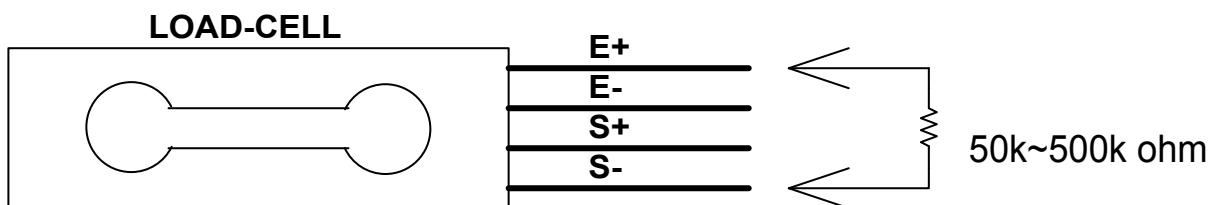
1. Full charge the battery after unpacking the scale.
   **Recharge the battery**: *When battery symbol appears on the LCD display, charge the battery with AC power cord plug in, the indicator of charge will light up in red, when it becomes green means charge completed. (It takes about 8 hours to full charge the battery.)*
2. Install the equipment on a level and stable surface.
3. Do not install the equipment near the air conditioning or a vibrating machine.
4. Install the equipment in an environment with steady temperature(-5℃~40℃), prevent from rapid temperature changes.
5. Independent AC outlet for this equipment is recommended, check the voltage before plug in.
6. Warm up the equipment for 15 minutes before use.

## 4. CONNECTION of L/C and JWI-586:
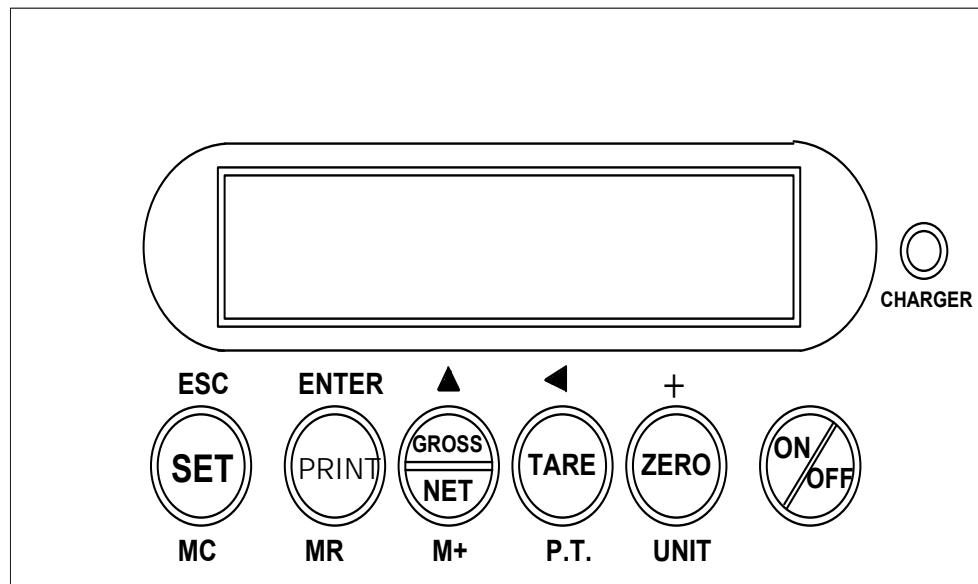
**LOAD-CELL**

E+  1
E-  2
S+
S-  3
Shield
CONN 5

|  | PIN | SIGNAL |
|---|---|---|
| *LOAD CELL CONNECTION* | 1 | E+ |
| | 2 | E- |
| | 3 | S+ |
| | 4 | S- |
| | 5 | SHIELD |

The solution of the LOAD CELL when its output is too high ：

**LOAD-CELL**

E+
E-
S+
S-

50k~500k ohm

The solution of the LOAD CELL when its output is too low ：

**LOAD-CELL**

E+
E-
S+
S-

50k~500k ohm

# *5. KEYBOARD:*



* JWI588 uses LED screen, see Page 15

| ITEM | OPERATION | FUNCTION |
|---|---|---|
| ON/OFF | 👉 ON/OFF | Power switch |
| ZERO | 👉 ZERO | Reset to zero |
| TARE | 👉 TARE | Tare |
| G.W./N.W. | 👉 G.W./N.W. | Change G.W & N.W enter RCT time display |
| PRINT | 👉 PRINT | Print |
| SET | 👉 SET | Change the key and checking function setting |
| CHANGE THE UNIT | 👉 SET 👉 ZERO | Change the unit |
| PRE-TARE | 👉 SET 👉 TARE | Per- tare |
| ACCUMULATION | 👉 SET 👉 G.W./N.W. | Accumulation |
| ACCUMULATION DISPLAY | 👉 SET 👉 PRINT | Accumulation show |
| CANCEL THE ACCUMULATION | 👉 SET 👉 SET | Cancel the accumulation |

+ : digit+1

▲ : Function selection

ESC: leave the setup

◄ : digit displacement

ENTER: go into the setup

👉 : press the key once

# 6. SETTING OF THE CAPACITY AND THE RESOLUTION(JWI sereies):

1.Turn Power on while holding down PRINT key and the scale goes into the function setting with **POS2** shown on the screen.

2. Press PRINT key and then SET key to set the maximum capacity

3. Press G.W./N.W. key in sequence to set the capacity as diagram shown below ; when **FrEE** appears on the screen ,press PRINT key and **000000** will shows on the screen where you can set the maximum capacity according to what you need; pressing ◄ key enables the digit to move leftwards and + key enables the digit to increase; press SET key to move to the next setting which is the setting of the resolution.

4. Press G.W./N.W. key to set the resolution [1.2.5.10.20.50] in sequence then press SET key to set the next one that's the location of the decimal fraction.

5. Press G.W./N.W. key to set the location of the decimal fraction in sequence. Then press ZERO key and **POS2** will shows on the screen. In the end press ZERO key and this enables the indicator to return to the normal operation mode.

| CAPACITY | RESOLUTION | | | | | |
|---|---|---|---|---|---|---|
| Max | 1Min. of graduation | 2 Min. of graduation | 5 Min. of graduation | 10 Min. of graduation | 20 Min. of graduation | 50 Min. of graduation |
| 300 | 1 / 300 | ------------ | ------------ | ------------ | ------------ | ------------ |
| 400 | 1 / 400 | ------------ | ------------ | ------------ | ------------ | ------------ |
| 500 | 1 / 500 | ------------ | ------------ | ------------ | ------------ | ------------ |
| 600 | 1 / 600 | 1 / 300 | ------------ | ------------ | ------------ | ------------ |
| 800 | 1 / 800 | 1 / 400 | ------------ | ------------ | ------------ | ------------ |
| 1,000 | 1 / 1000 | 1 / 500 | ------------ | ------------ | ------------ | ------------ |
| 1,200 | 1 / 1200 | 1 / 600 | ------------ | ------------ | ------------ | ------------ |
| 1,500 | 1 / 1500 | 1 / 800 | 1 / 300 | ------------ | ------------ | ------------ |
| 2,000 | 1 / 2000 | 1 / 1000 | 1 / 400 | ------------ | ------------ | ------------ |
| 2,500 | 1 / 2500 | 1 / 1250 | 1 / 500 | ------------ | ------------ | ------------ |
| 3,000 | 1 / 3000 | 1 / 1500 | 1 / 600 | 1 / 300 | ------------ | ------------ |
| 4,000 | 1 / 4000 | 1 / 2000 | 1 / 800 | 1 / 400 | ------------ | ------------ |
| 5,000 | 1 / 5000 | 1 / 2500 | 1 / 1000 | 1 / 500 | ------------ | ------------ |
| 6,000 | 1 / 6000 | 1 / 3000 | 1 / 1200 | 1 / 600 | 1 / 300 | ------------ |
| 8,000 | 1 / 8000 | 1 / 4000 | 1 / 1600 | 1 / 800 | 1 / 400 | ------------ |
| 10,000 | 1 / 10000 | 1 / 5000 | 1 / 2000 | 1 / 1000 | 1 / 500 | ------------ |
| 12,000 | 1 / 12000 | 1 / 6000 | 1 / 2400 | 1 / 1200 | 1 / 600 | ------------ |
| 15,000 | 1 / 15000 | 1 / 7500 | 1 / 3000 | 1 / 1500 | 1 / 750 | 1 / 300 |
| 20,000 | ------------ | 1 / 10000 | 1 / 4000 | 1 / 2000 | 1 / 1000 | 1 / 400 |
| 25,000 | ------------ | 1 / 12500 | 1 / 5000 | 1 / 2500 | 1 / 1250 | 1 / 500 |
| 30,000 | ------------ | 1 / 15000 | 1 / 6000 | 1 / 3000 | 1 / 1500 | 1 / 600 |
| 40,000 | ------------ | ------------ | 1 / 8000 | 1 / 4000 | 1 / 2000 | 1 / 800 |
| 50,000 | ------------ | ------------ | 1 / 10000 | 1 / 5000 | 1 / 2500 | 1 / 1000 |
| 60,000 | ------------ | ------------ | 1 / 12000 | 1 / 6000 | 1 / 3000 | 1 / 1200 |
| 75,000 | ------------ | ------------ | 1 / 15000 | 1 / 7500 | 1 / 3750 | 1 / 1500 |
| 80,000 | ------------ | ------------ | ------------ | 1 / 8000 | 1 / 4000 | 1 / 1600 |
| 100,000 | ------------ | ------------ | ------------ | 1 / 10000 | 1 / 5000 | 1 / 2000 |
| 120,000 | ------------ | ------------ | ------------ | 1 / 12000 | 1 / 6000 | 1 / 2400 |
| 150,000 | ------------ | ------------ | ------------ | 1 / 15000 | 1 / 7500 | 1 / 3000 |
| 200,000 | ------------ | ------------ | ------------ | ------------ | 1 / 10000 | 1 / 4000 |
| 250,000 | ------------ | ------------ | ------------ | ------------ | 1 / 12500 | 1 / 5000 |
| 300,000 | ------------ | ------------ | ------------ | ------------ | 1 / 15000 | 1 / 6000 |
| 400,000 | ------------ | ------------ | ------------ | ------------ | ------------ | 1 / 8000 |
| 500,000 | ------------ | ------------ | ------------ | ------------ | ------------ | 1 / 10000 |
| 600,000 | ------------ | ------------ | ------------ | ------------ | ------------ | 1 / 12000 |
| 700,000 | ------------ | ------------ | ------------ | ------------ | ------------ | 1 / 14000 |
| 750,000 | ------------ | ------------ | ------------ | ------------ | ------------ | 1 / 15000 |

## 7. CONNECTION of the INPUT/OUTPUT DELICACY:

The loadcell input sensitivity is 0.13u V/D or more . The input sensitivity indicates the variation in the loadcell output voltage required to change the display one point on the display.; when designing a weighing system, the loadcell 's output voltage must accord with the input V/D of the weighing display so all must accord with the following formula . In order to achieve a system with a stable performance , it should be designed so that sensitivity is as great as possible.

### One LOAD CELL IN USE:

**Formula  :**  0.13 $\leqslant$ 【 ( 5000 × B × D ) ÷ A 】
A: LOAD CELL's rated load capacity.
B: LOAD CELL's rated output m V/V
D: Minimum   divison
5000: LOAD CELL's excitation voltage in milivolt / the weighing display offers 5V=5000m V
0,2 is the input sensitivity in V.

### Multiples LOAD CELL(the number is N) IN USE:

**Formula  :**  0.2 $\leqslant$ 【 ( 5000 × B × D ) ÷ ( A × N ) 】
A: LOAD CELL's rated load capacity.
B: LOAD CELL's rated output m V/V
D: Minimum   divison
5000: LOAD CELL's excitation voltage in milivolt / the weighing display offers 5V=5000m V
N: LOAD CELL's number.
0,2 is the input sensitivity in V.

### EXAMPLE:
LOAD CELL's rated load 750kg,
LOAD CELL's rated output 3m V/V
The scale need: the maximum capacity 300kg ; the minimum of resolution 0.05kg

Estimation as the following:

0.13 $\leqslant$ 【 ( 5000 × 3 × 0.05 ) ÷ 750 】
**conclusion: A=750      B=3      D=0.05      N=1**
All data comply with the formula and there is therefore no problem with the design of the weighing application.

When a lever is used, the lever ratio should be taken into consideration.

n ＝ The lever ratio    0.6 $\leqslant$ 5000 x B x D ÷ ( A x N x n )

## 8. FUNCTION SETTING:

Turn power on while holding down SET key and the indicator goes into the function setting with CAL shown on the screen. Pressing SET key in sequence will allow you to move through the different settings .

| Display | Function illumination | Selection of function setting | Detailed |
|---|---|---|---|
| **CAL** | Calibration | | Remark 1 of page 7 |
| **ON/OFF kg** | Selection of unit | ON/OFF | Remark 2 of page 7 |
| **Init = kg** | Selection of initial unit | Kg/g/lb/t | Remark 3 of page 7 |
| **Default** Kg | | | |
| **UM OFF** | Selection of HI / LO memory function | ON/OFF | Remark 4 of page 7 |
| **Default** ON | | | |
| **Fil.1** | Selection of digital filtering setup | 1/2/4/8 | Remark 5 of page 7 |
| **Default** 2 | | | |
| **Aut. No** | Selection of auto-power off | NO/5/10/30/60 | Remark 6 of page 7 |
| **Default** 60 | | | |
| **Lit. Aut** | Selection of backlight | OFF/ON/AUT | Remark 7 of page 7 |
| **Default** Aut | | | |
| **Zero.0** | Selection of zero range display | 0/1/2/3/4/5 | Remark 8 of page 7 |
| **Default** 2 | | | |
| **BAu.96** | Selection of baud rate of RS-232 | 2400/4800/9600 | Remark 9 of page 8 |
| **Default** 9600 | | | |
| **Prt.Pr** | Selection of print method | Pr/St/Co | Remark 10 of page 8 |
| **Default** Co | | | |
| **Peri** | | | Remark 11 of page 8 |
| **P C** | Selection of external setting | PC/TP/SH/ TDP-643/ET | Remark11 of page 8 |
| **Default** PC | | | |
| **Bp.Un** | Selection of beep of check function | Un/In/no/Lo/3b/OFF | Remark 12 of page 8 |
| **Default** LO | | | |
| **Reset** | Return to the initial setting in the factory | | Remark 13 of page 8 |
| **TrA.ON** | Function of the zero tracking | ON/OFF | Remark 14 of page 8 |
| **Default** ON | | | |
| **A.t.OFF** | Automatic tare function | ON/OFF | Remark 15 of page 8 |
| **Default** OFF | | | |
| **M  OFF** | Selection of checking & memory function | ON/OFF | Remark 16 of page 8 |
| **Default** OFF | | | |
| **rtc. OFF** | Selection of RTC function | ON/OFF | Remark 17 of page 9 |
| **Default** OFF | | | |

## Remark 1 :

When ⌐ **CAL** ⌐ shown on the screen, no object must be on the pan .press TARE key to perform the zero calibration , **zero CAL** will shown on the screen. When zero point calibration is completed the screen will show next ⌐ **0000.00 kg** ⌐ for the span calibration. Press ◄ key to select the digit and + key to change the weight. Put the corresponding weighing mass (number represents the weight of the weighing mass) on the pan and then press SET key to end the setting. ⌐ **CAL kg** ⌐ shown on the screen means the scale goes into the SPAN calibration, when beep sounds and with **PASS kg** shown on the screen means the completion of span calibration . Then press ZERO key to leave the setting function and return to the normal operation mode; press SET key to set the following function continually.

## Remark 2 :

⌐ **ON kg** ⌐ shows on the screen and then press TARE key to set the unit in sequence . "**ON**" means this unit is in use; press G.W/N.W. key and ⌐ **OFF kg** ⌐ shows on the screen. "**OFF**" means this unit isn't in use. Press G.W/N.W. key can switch "**ON**" and "**OFF**"

## Remark 3 :

⌐ **Init= kg** ⌐ shown on the screen represents the present initial unit. Press TARE key to select the wanted unit . and the chosen unit will appear on the screen when you power on next.( pcs and % cannot be the initial unit).

## Remark 4 :

**UM OFF** shows on the screen and press TARE key to select the memory function of HI / LO ( pcs and % cannot be the initial unit)."NO" or "YES" can be chosen.

## Remark 5 :

⌐ **Fil 1 kg** ⌐ shows on the screen and press TARE key to select 1 or 2 or 3 or 4, the larger number means slower reaction speed but better filtering effect.

## Remark 6 :

⌐ **Aut.NO kg** ⌐ shows on the screen and press TARE key to set the time of power off automatically. there are 5,10,30,30,60min to be chosen.

## Remark 7 :

⌐ **Lit.Aut** ⌐ shows on the screen and press TARE key to select in sequence the backlight options. There are ON,OFF, Auto (light up only if the weight is more than 9 times of the resolution) to be chosen..

## Remark 8 :

⌐ **ZERO.0** ⌐ shows on the screen and press TARE key to set the zero range ; there are 0~5 classes to be chosen(the bigger, the wider).

## Remark 9 :

**bAu.96** shows on the screen and press TARE key to set the baud rate ; there are 2400,4800 and 9600 to be chosen..

## Remark 10 :

**Prt.Pr** shows on the screen and press TARE key to set the print mode . there are Pr,St,Co to be chosen.(Pr means data sent when key pressed; St means data sent when the reading is stable; Co means data sent continuously.

## Remark 11 :

**Peri** then **PC** show on the screen and press TARE key to set the external equipment.    There are PC, ET, SH-24, TDP-643 to be chosen.( ET is large-scale external connection LED, which demanded to send out continuously)

## Remark 12 :

**BP.Un** shows on the screen and press TARE key to set the checking function . There are Un, In, no, Lo, 3b, OFF to be chosen.

**Un – HI Beep sounds (when reading are over the setting of Hi limit).**
**In   –OK Beep sounds( when reading are within or equal to the setting of Hi and Lo limit.)**
**No – Beep sounds when reading are out of the setting of Hi and Lo limit     .**
**Lo – Beep alert when reading are less than the setting of Lo limit.**
**3b---three phases checking(beep silent)**
OFF—function doesn't work

## Remark 13 :

**RESET** shows on the screen and press G.W./N.W. key to return to the initial situation setting from the factory.

## Remark 14 :

**tr A.ON** shows on the screen and press TARE key to set zero tracking function . There are ON, OFF to be chosen.

## Remark 15 :

**At. OFF** shows on the screen and press TARE key to set the memory of the Auto –Tare function . There are ON, OFF to be chosen.

## Remark 16 :

**M OFF** shows on the screen and press TARE key to set in circle the memory function or not. There are ON, OFF to be chosen.

## Remark 17:

 **rtc. OFF**  shows on the screen and press TARE key to set in circle the memory function or not. There are ON, OFF to be chosen.

After the above setting, press ZERO key can end the setting function and turn into the normal weighing operation mode automatically; or press SET key to return to the first step after remark 17.

# 9. OPERATION(NORMAL POWER ON)

## Remark:

Single calibration must be processed before the normal power on. The period between the first SET key and the next key must be within 3 seconds, otherwise only the function of the SET key is acknowledged

## Unit Switch

Press  SET  key and then ZERO key to switch the weighing unit.

## Pre-tare:

Press SET key and then TARE key to turn into the pre-tare mode with **XXXXX** $_{kg}$ appearing on the screen .press ◄ key to choose the digit and  +  key to change the weight. after the setting, press PRINT key to enable the scale to go into the operation mode . Pre-tare value appear in the display .

## Accumulation:

Press SET key and G.W/N.W key and then  **M+XXXXXX kg**  shows on the screen(accumulation cannot process until the scale is stable with load on the pan)

## Accumulation display:

Press  SET key and PRINT key and then  **zero ALLXX kg**  shows on the screen. The next screen display  **XXXXXX kg**  and after a while the scale return to the operation mode.

## Cancel the accumulation:

Press SET key and then SET key to cancel all the accumulation value.

## Simple counting:

Press SET key and then ZERO key in sequence and wait for  **zero   0 pcs**  appearing on the screen. Then press  G.W./N.W. key for 3 seconds and  **S=100 $_{pcs}$**   shows on the screen; press  G.W./N.W.   key to select 25,50,100 as the three kinds of sampling. Put the samples on the pan and press  SET  key .counting begins when  **CAL**  appears on the screen.

## *Percentage:*

Press SET key and then ZERO key in sequence and wait for $\boxed{\textbf{zero} \quad \textbf{0} \text{ \%}}$ appearing on the screen Then press G.W./N.W. key for 3 seconds and $\boxed{\textbf{S=100}\text{\%}}$ shows on the screen; press G.W./N.W. key to select 25,50,100 as the three kinds of sampling. Put the samples on the pan and press SET key calculation of percentage begins when $\boxed{\textbf{CAL}}$ appears on the screen.

## *Checking:*

Press SET key for 3 seconds or more and $\boxed{\textbf{FUN}}$ appears on the screen; press ▲ key to switch Hi, Lo , NC and then press PRINT key to go into the checking setting; press ◄ key to choose the digit and + key to change the weight. Press SET key to return to the **FUN** setting after finishing the setting; pressing ZERO key enables the indicator to the operation mode. **Hi** value must be bigger than **Lo** value, or Error9 will appears. **NC** means to cancel the checking setting.

## *Power save mode (JWI588 only):*

When there is nothing on the scale and not and key pressed for 5 minutes, the indicator turns into Power save mode. Press any key for one second or put something to the scale could wave it up.

## *10. RTC TIME SETTING：---*

When RTC function been selection, then set it to ON at $\boxed{\textbf{rtc.OFF}}$ function setting；At weighing, press G.W./N.W. key for 2~3 seconds, $\boxed{t\ 00.00}$ will show time, press SET key could change date $\boxed{d00.00}$ and year $\boxed{y00.00}$, press TARE key change time, and press TARE key again to change modified place, then press ZERO key for adding digits at such place, press G.W./N.W. key to save time setting, and press PRINT key to exit (p.s. PRINT key does not have time saving function).

## *11. UNIT CONVERSION*

1 lb=453.59237g                               1 t=1000kg=1000000g
1 jin=500g
1 HK-liang=37.799375g                    1HK-jin=16HK-liang
1 TW-liang=37.49995g                      1TW-jin=16TW-liang

## *12. OUTPUT OPERATION*

OP-01：RS-232
OP-02：Large LED display
OP-03：Junction Box
OP-04：RELAY examine weighing signal output

## 13. SPECIFICATION:

| TYPE | JWI-586 |
|---|---|
| Input sensitivity | 0.13u V/DIV |
| Input the range of the voltage | -0.5m V to 16.5 mV |
| LOAD CELL Excitation voltage | 5V DC ±5% |
| LOAD CELL driving capability | Drive Up to max. 8 load cells (350 ohm ,120m A) |
| Non-linearity | 0.006% of full scale |
| Input the resistance | 10M ohm or more |
| A/D converting | Δ-Σ |
| A/D internal resolution | 700000 count |
| A/D conversion rate | 8 times / set |
| Out display resolution | 15000 count |
| LCD digit | 6 digit |
| KEY amount | set, print, g. w./n. w. , tare, zero, on/off |
| Power standard | 110V or 220V & 6V 4A Recharge BAT |

## Appendix   1 :

1、Error message

| Message | Problem | operation |
|---|---|---|
| Err | Over/low display range | |
| Err2 | Initial zero point over+/-30% (use 10% for referring point) | |
| Err3 | Over/low A/D resolution range | |
| Err4 | EEPROM Chksum error | |
| Err5 | Over load (max: capacity +9e) | |
| Err8 | Setting of operation unit and initial unit incorrect; (only % and pcs are settled as operation) | |
| Err9 | Set LOW value ≥ Hi value | |
| Err11 | RTC time setting error | |
| Over | Accumulation exceeds 99 times | |
| Battery symbol | Low battery alarm | |

2、Trouble shooting:

| Where | Possible Error message | Trouble shooting |
|---|---|---|
| Power on | Err2,-Err2 | Check and remove the object from weighing pan or malfunction of LOAD CELL |
| Power on | Err3,-Err3 | Check if A/D or LOAD CELL malfunction |
| Power on | Err4 | Beep alarm. switch power off and power on again, or make the calibration |
| Power on | Battery symbol | Charge the battery |
| Normal weighing mode | Err5 | Check if weighing object over the capacity +9e |

## *Appendix 2:*

## RS-232 OUTPUT FORMAT

**Baud Rate ： 2400、4800、9600**

**Data Bit ： 8**

**Parity ： N ( None )**

**Stop Bit ： 1**

**Code ： ASCII**

**Bit Format ：**

| | LSB | | | | | | | | MSB | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | |

**Start Bit** ... **Parity** **Stop Bit**

## Data Format：

1、kg

| G/N | . | W | . | : | +/- | | | | | | | | k | g | CR | LF |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

Weight

Example：
N.W. : +2.2352kg
G.W. : +2.2352kg

2、g

| G/N | . | W | . | : | +/- | | | | | | | g | CR | LF |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

Weight

Example：
N.W. ：+ 1235.2g
G.W. ：+ 2235.2g

1、lb

| G/N | . | W | . | : | +/- | | | | | | | l | b | CR | LF |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

Weight

Example：
N.W. ：+ 1.2352lb
G.W. ：+ 2.2352lb

2、lb-oz

| G/N | . | W | . | : | +/- | | | | - | l | b | | | | | o | z | CR | LF |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

Weight

Example：
N.W. ：+ 3- lb12.235 oz
G.W. ：+ 3- lb12.235 oz

3、metric ton

| G/N | 。 | W | 。 | : | +/- | | | | | _ | - | | | | CR | LF |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

Weight

Example：
N.W. ：+ 12.645t
G.W. ：+ 12.645t

## 6、pcs

| T | o | t | a | l | : | +/- | | | | | p | c | s | | CR | LF |
|---|---|---|---|---|---|-----|---|---|---|---|---|---|---|---|----|----|

<div align="center">pcs</div>

Example：

Total：+　645 pcs

## 7、%

| +/- | | | | | | % | CR | LF |
|-----|---|---|---|---|---|---|----|----|

<div align="center">%</div>

Example：

+ 24%

## *G=GROSS　　　N=NET*

## RS-232 INPUT FORMAT

**Baud Rate: 2400　　4800　　　9600**
*Data Bit : 8*
**Parity : N(None)**
**Stop Bit : 1**
**Code : ASCⅡ**
**Command on computer:**
**'R'=READ　　　　'Z'=ZERO　　　　　'T'=TARE**
**JWI588 could output only when using kg unit.**
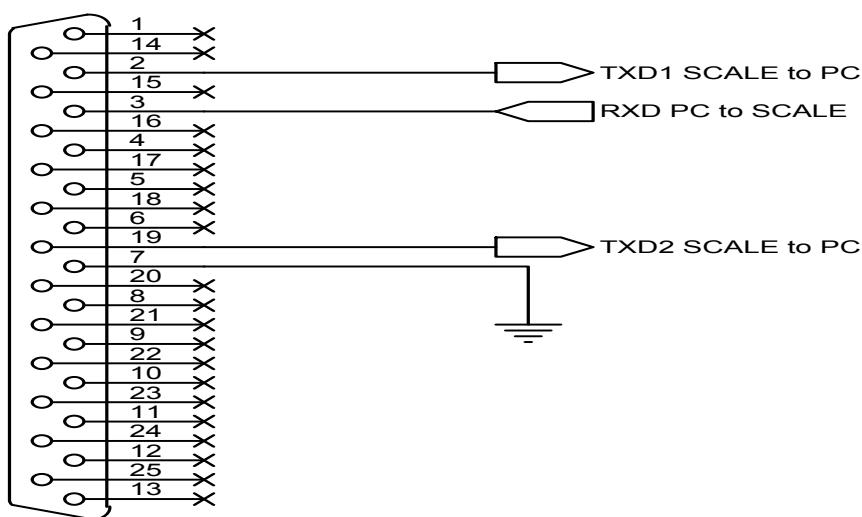
## Printing Format (example : kg)

| TP-24 | SH-24 | EZ2-S | AX-III | TDP-643 |
|-------|-------|-------|--------|---------|
| T.W.:<br>+0.0000 kg<br>N.W.:<br>+1.6025 kg<br>G.W.:<br>+1.6025 kg | T.W.:<br>+0.0000 kg<br>N.W.:<br>+1.6025 kg<br>G.W.:<br>+1.6025 kg | T.W.:+0.0000 kg<br><br>N.W.:+1.6025 kg<br><br>G.W.:+1.6025 kg | 扣重 :+0.0000 kg<br>淨重 :+1.6025 kg<br>總重 :+1.6025 kg | 2002/6/3　　15:24:13<br>扣重 :+0.0000 kg<br>淨重 :+1.6025 kg<br>總重 :+1.6025 kg |

## *RS-232 Connector*



CONNECTOR DB25

TXD1 SCALE to PC
RXD PC to SCALE
TXD2 SCALE to PC

## RTC Output Format：

2007/10/12
12:25:53
T.W.:
+0.0000 kg
N.W.:
+1.6025 kg
G.W.:
+1.6025 kg
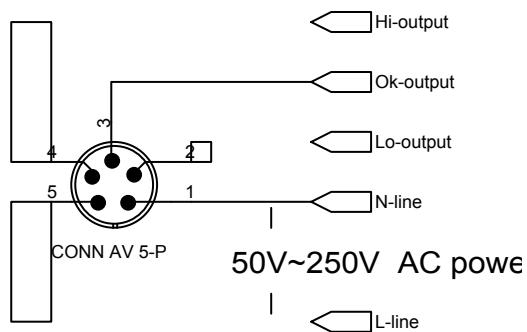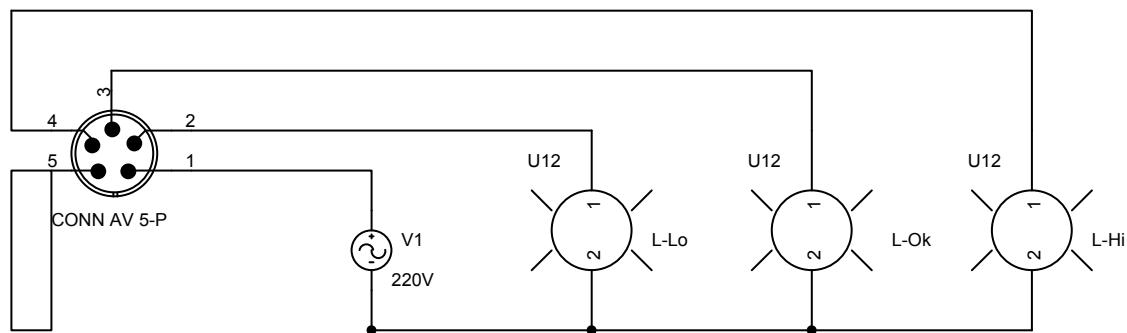
## SSR the setting of the indicator

Hi-output

Ok-output

Lo-output

N-line

3

4  2

5  1

CONN AV 5-P

50V~250V AC power

L-line
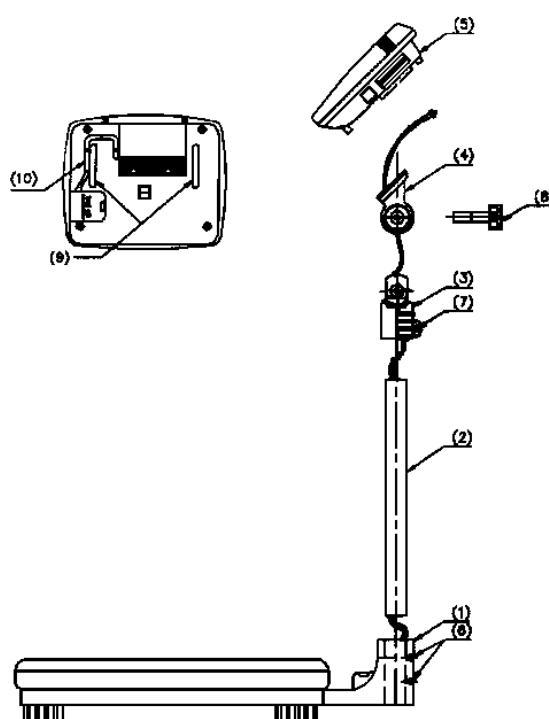
## SSR the application examples of the indicator

3

4  2

5  1

CONN AV 5-P

V1
220V

U12
1
2
L-Lo

U12
1
2
L-Ok

U12
1
2
L-Hi

## *APPENDIX 3：*
## *ASSEMBLY*

## INTRODUCTION OF PARTS

（1）stem base       （2）stem            （3）bottom bracket   （4）upper bracket

（5）display        （6）screw           （7）screw            （8）plastic knob

（9）slot           （10）channel        （11）bolt

- Drill the Load Cell thread on the stem base(1) through the stem(2),insert the stem (2)in the hole of the screw base and lock the two screw(6) tightly.

- Drill the Load Cell thread through the bottom bracket (3), insert the bottom bracket (3) in the stem(2) and lock the screw(7) tightly.

- Drill the Load Cell thread through the upper bracket (4),jointing the display(5), and insert the upper bracket (4) in the slot (9) to the slot's half deepness【the thread should be outside the upper bracket】.

- Lay the Load Cell thread in the channel(10),assembling the bottom bracket (3) and the upper bracket (4) then inserting the upper bracket (4) in the slot (9) entirely, In the end lock the bottom bracket (3) and the upper brackets(4) via the plastic knob(8) and then insert the bolt in.

- Use the plastic knob(8) to adjust the display to the optimum situation and then lock close to fix up.


## *APPENDIX 4*

**JWI-588 LED Screen**