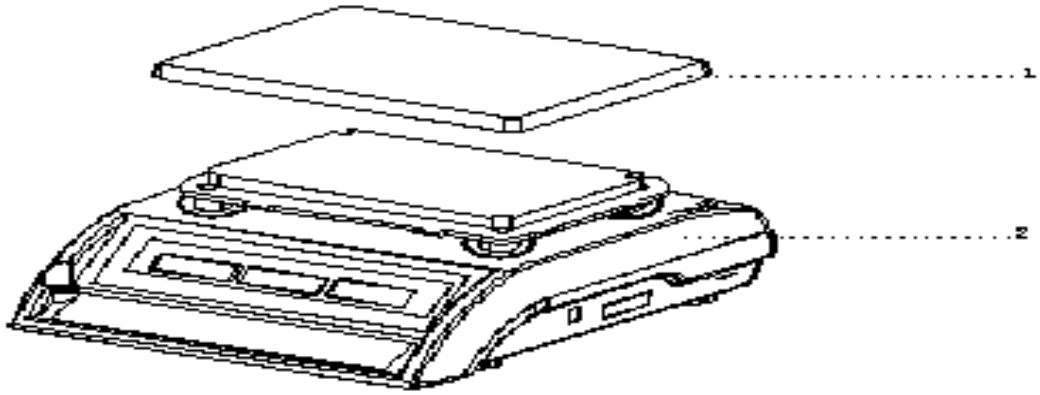
CHAPTER

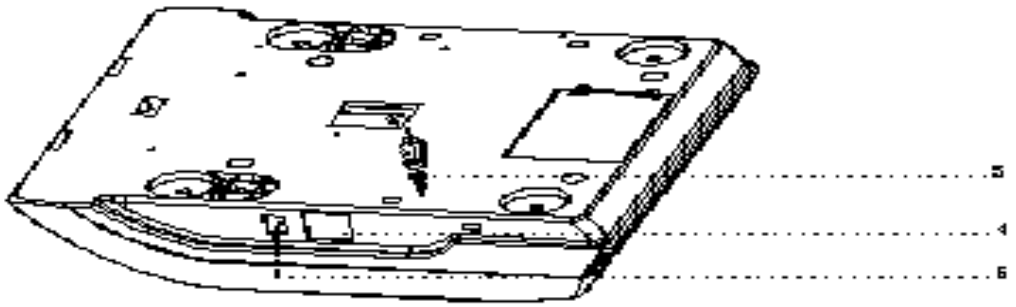
1. INTRODUCTION

Thank you for your purchase of a JADEVER high precision electronic counting scale; this scale enables you to measure the quantity, and weight. The scale is easy to operate, precise, stable and with fast display reaction. It is applicable in the electronic, hardware, plastic, medicine, textile and various other industries. It is useful for packaging, inventory and various production and quality control cases.

※ It could be dangerous by using improper battery or wrong connection of battery.

2、ASSEMBLY:





MODEL: JCE

3. INSTALLATION

a) Put the weighing pan【1】 on the scale【2】.

b) Release and remove the protection screw【3】（30kg mode without protection screw）.

c) Always lock the protection screw【3】（30kg mode without protection screw）before transportation.

d) Power socket 【4】.

e) Power switch 【5】.

4. PRECAUTION

a) 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.)*

b) Install the equipment on a level and stable surface.

c) Do not install the equipment near the air conditioning or a vibrating machine.

d) Install the equipment in an environment with steady temperature, prevent from rapid temperature changes.

e) Independent AC outlet for this equipment is recommended, check the voltage before plug in.

f) Warm up the equipment for 15 minutes before use.

5. FEATURES

a) The microprocessor in this scale features
   1) Automatic zero point tracking function.
   2) Tare and pre-tare function.
   3) HI, LO, OK checking function.

b) Easy operating and water-resistant membrane keypad.

c) Easy to read backlight LCD display.

d) Accumulating function for weight, quantity and times.

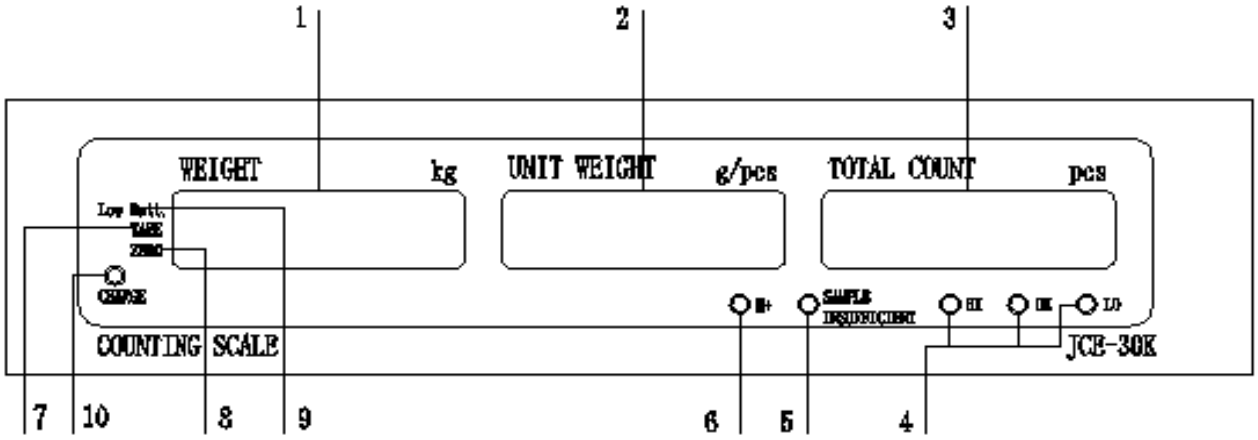
e) Weighing function is applicable.

f) Tare range is unlimited.

g) ACAI function is applicable for the accuracy of unit weight.

h) Stainless steel weighing pan is used for long-term operation.

6. LCD DISPLAY



1. **Weight:** Display the total weight

2. **Unit weight:** Display the unit weight

3. **Total count:** Display the number of counting

4. **Indicators of HI, LO, OK:** Indicators for checking function

5. **Indicator of insufficient sample:** Indicate when sample is less than 10pcs or unit weight smaller than 4/5 of minimum weighing capacity

6. **Indicator of accumulation:** Indicate when accumulation is done

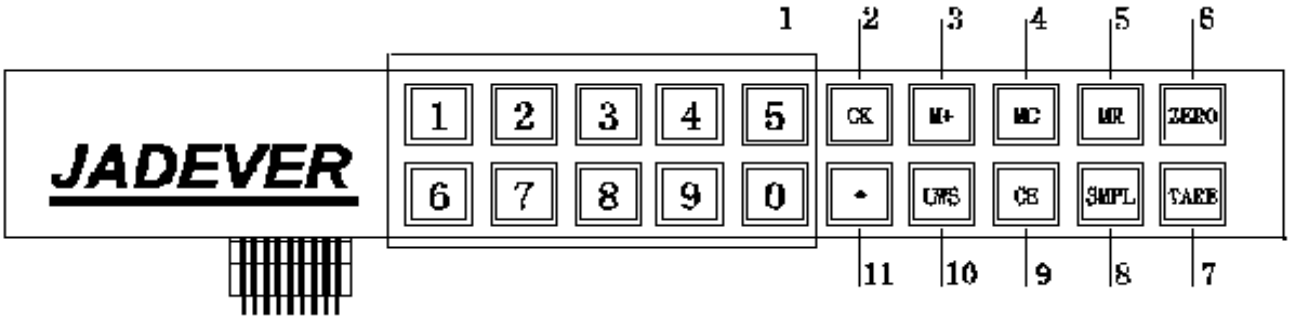
7. **TARE:** “TARE” shown on the display means tare weight is set

8. **ZERO:** “ZERO” shown on the display after reset of the weight to zero

9. **Low Batt. :** Symbol shown on the display means battery low, recharge the battery is required

10. **Indicator for battery:** Red means that the battery needs to be charged. When the indicator turn green, means that the battery is fully charged.

7.KEYPAD:



1. Numeric keys [0] ~ [9] for input the number.

2. [CK] key for enable the checking function, the indicator of HI, LO, OK will light up accordingly. (Only if you set the beep function on)

3. [M+] key for using in accumulating the weight and quantity. (the indicator of accumulation will light up while accumulating.)

4. [MC] key for deleting the accumulation.

5. [MR] key for display the weight , the times and the quantities of accumulation.

6. [ZERO] key for reset the scale. The symbol of 

will be shown on the left screen.

7. [TARE] key for setting the tare weight.

8. [SMPL] key is for averaging the unit weight of the object. Put the object on the weighing pan, key in the numbers of quantity and press [SMPL] key. The left screen will show the weight, middle screen will show the unit weight and the right screen will show the total quantity.

9. CE key for cancel the input.

a) Press CE key to clear to zero when input by using numeric keys.

b) Press CE key to cancel the value in the SMPL and UWS command

10. UWS for input the unit weight directly by using numeric keys. Key in the value of unit weight and press UWS to complete the input.

11. • Key for two functions

a) As a decimal key.

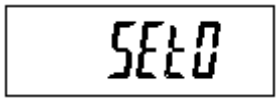
b) To switch the Hi, Lo setting when using the checking function.

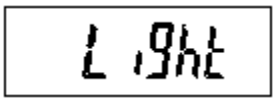
8. FUNCTION SETTING

1.Parameter setting

Power on while holding down the ZERO key, the scale will go into function setting mode and the left screen will show SEt, SCALE shown on middle screen and right screen show FunC. Switch between the settings by using the numeric keys (0 to 9) At this stage you can do the keyboard test by pressing ZERO key to test the keyboard. The left and middle screen will show offset value, right screen will show the testing key.

a) Backlight setting

To enter the Backlight setting press 0. The display will show 

, 

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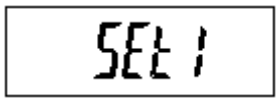
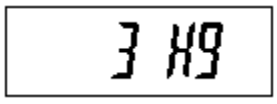
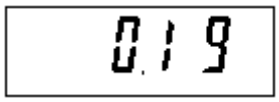
Press 0 key to change the setting, backlight ON, backlight OFF, backlight ONOFF (automatic backlight when weight is over 9 times of resolution).

b) Capacity-resolution setup :

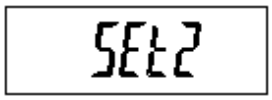


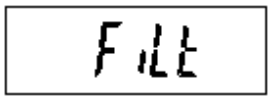
, 

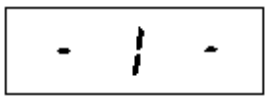
, 

Press 1 key to change your desired capacity – resolution.

c) Filter setup:



, 

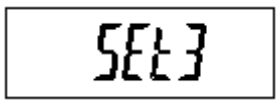
, 

Press 2 key to switch the filter degree as 1 or 2.

Lever 1: Reaction is faster, effect on filtering is lower.

Lever 2: Reaction is slower, effect on filtering is higher.

d) Auto power off setup



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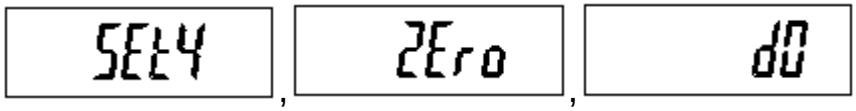
Press 3 key to set the time of auto power off. Auto power off enables the scale to automatically turn-off when there’s no load on the pan, depending on the setup time. The available settings are OFF, 5, 10, 30, 60 minutes.

e) Zero band:

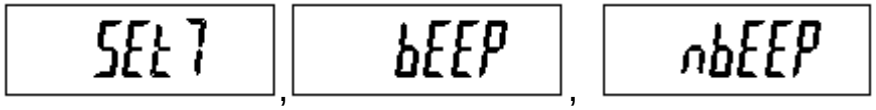


Select the weight range where the scale will display zero. The weight range is in terms of number of display divisions set for both positive and negative directions. Press 4 key to set in circle d0, d1, d2, d3, d4, d5.

f) Baud rate setting:

Press 5 to set baud rate at 9600, 4800, 2400.

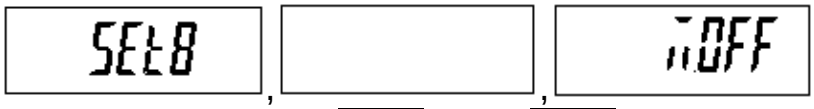
g) Checking function (Hi-Lo-OK):



Press 7 key to change the setting.

I. beep. Un – Beep sounds when quantities are over the setting of Hi limit.
II. beep. In – Beep sounds when quantities are within or equal the setting of Hi and Lo limit.
III. beep. No – Beep sounds when quantities are out of setting of Hi and Lo limit.
IV. beep. Lo – Beep alert when quantities are less than the setting of Lo limit.
V. beep. Nbeep – No beep alert.

h) Memory on/off setting:



Press 8 to set memory function on M.on or off M.off. With memory on, the value of Hi, Lo setting will kept in the scale's memory.

i) Printing mode setting**:**

SEtG , Print , PrtPr press 9 to set the printing mode,

1) Prt.Pr – data sent when key pressed
2) Prt.St – data sent automatically when stable symbol shown
3) Prt.Co – data sent continuously

j) External device setting**:**

SEtG 、 Print 、 PC Press CK key to set desired setting PC，AX，TP，SH，EZ。

REMARKS:

Press ZERO key to save the settings and return back to normal operating mode after finish the setting.

9. Operation

◆ **Hi/Low setting.**

Press CK key , CH will be shown on the left screen, Hi or Lo will be shown on the right screen, key in the HI and LO value limit by using numeric keys value, press • key to switch Hi or Lo on the right screen. After the values of Hi and Lo have been set properly, press CK to save and return to normal operating mode.

REMARK:

1) The value of Hi must be set higher than the value of Lo, otherwise, press CK will not go back to normal operating mode.

2) The indicator of Hi will light up if parameter is set bEEP.Hi, the indicator of OK will light up if set to bEEP.in or bEEP.no, the indicator of Lo will light up if set to bEEP.Lo, the indicators will be all off if set to bEEP.nbEEP.

3) With the function of beep alert, press CK key, then press • key twice will disable the alert function. (When you hear the beep sound you can disable the sound by executing the above procedure)

◆ **Sampling.**

Put the objects on the weighing pan, key in the sampling quantity and press SMPL key. The left screen will show the weight, middle screen will show the unit weight and the right screen will show the total quantity. Now, the scale can be operated for counting by putting the same objects on the weighing pan.

a) For getting a more accurate unit weight we recommended you to use sample of approximately 1/4 of total quantity.

b) For getting more accuracy of unit weight by using ACAI function. After average the unit weight of samples, add extra samples on the weighing pan, the unit weight will be re-calculated for more accuracy. (The quantities of extra samples added cannot be over the quantities that already are on the weighing pan.)

REMARKS:

The indicator of insufficient sample will light up if the samples for averaging the unit weight are less than 10 pieces.

You can key in the unit weight directly by using numeric keys. After key in the value of unit weight then press UWS to complete the step.

OPERATION:

Key in the numbers of unit weight by using [0]~[9] numeric keys **and** [•] key, press [UWS] to save the data of unit weight. Press [CE] key to cancel the unit weight setting. The indicator of insufficient sample will light up if the value entered for unit weight is less than 4/5 of resolution.

◆ Accumulation

The accumulation can be operated by putting the object on the weight pan and press the [M+] key, the weight of the object, times of accumulation and quantity will be shown on the display. The maximum accumulation is 99 times. Press the [MR] key, the total weight of accumulation will be shown on the left screen, times of accumulation shown on middle screen, the quantities of accumulation shown on right screen. Pressing the [MR] key again.
You can see the individually accumulation by pressing the [MR] key again.

◆ Tare

There are 2 operations to set the tare weight.
1) Put the container on the weighing pan and press [TARE] key, the symbol of <TARE> will be shown on the left screen 

display ,to indicate the weight has been tare.

2) Key in the weight of the container by using [0]~[9]numeric key and [•] Key. The middle screen will display the figures, press [TARE] key, the value of tare will be shown on the left screen in negative, put the container on the weighing pan, 

will display on the left screen and the weight of container is been tare.

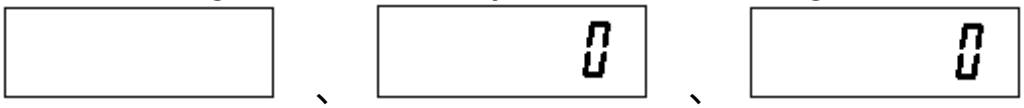
To cancel the tare,

a) Remove the container from the weighing pan, the value of tare shown the left screen in negative, the symbol of <TARE> and <zero> shown 

on the screen simultaneously. Press [TARE] key to reset the zero point and cancel the tare value.

b) Under the tare mode, press [ZERO] key to cancel the tare value. If the weight of object on the weighing pan is within the zero range, the scale will set to zero , otherwise, the scale will get into normal operating mode.

10. Weighing Unit Setting!

Power on while holding down [SMPL] key, the middle and right screen will display 

Input the code [1][1][3][2], then press [SMPL] key for entering the weight unit mode, press [1] key to switch g or lb.

REMARKS:

1. Press [SMPL] key return to setting mode. .

2. Press [SMPL] and [ZERO] keys to return back to normal operating mode.

APPENDIX 1

a) Error message

Message	Problem	
Err2	Initial zero point over＋/－10%	
Err3	Over/lower A/D resolution range	
Err4	EEPROM Chksum error	
Err5	Over load（max. capacity +9e）	
Err6	Wrong weighing master when calibration	
Err7	Times, quantities or weight of accumulation over display range	
over	Unit weight input over display range	
Battery symbol	Low battery	

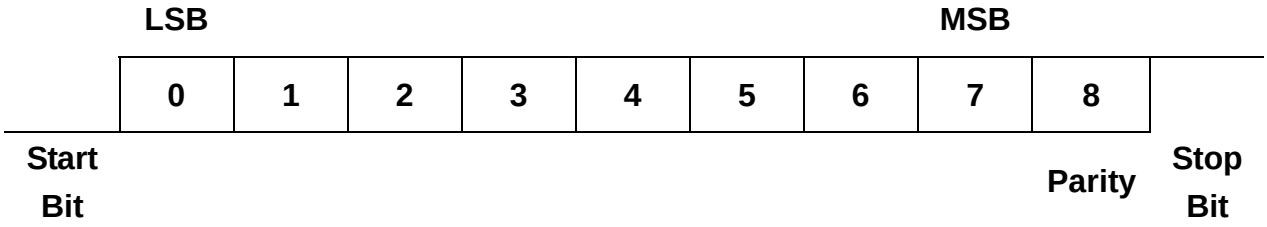
b) Trouble shooting

When	Error message	Trouble shooting
Power on	Err2	Check and remove the object from weighing pan or malfunction of LOAD CELL
Power on	Err3	Check if A/D or LOAD CELL malfunction
Power on	Err4	Beep alert. Switch power off and power on again, or make the calibration
Power on	Battery symbol appear	Charge the battery with power on
Normal weighing mode	Err5	Check if weighing object over the capacity+9e
Calibration	Err6	Change weigh master

APPENDIX 2

■ RS-232 OUTPUT FORMAT

Baud Rate ： 2400、4800、9600
Data Bit ： 8
Parity ： N (None)
Stop Bit ： 1
Code ： ASCII
Bit Format ：



Data Format：

kg

G/N	.	W	.	：	+/-								k	g	CR	LF

weight

U	.	W	.	：									g	/	p	c	s	CR	LF

Unit weight

T	O	t	a.	l	：						p	c	s	CR	LF

pcs

Example:
G.W. ：+ 2.2352 kg
U.W. ：+ 0.5352 g/pcs
Total ： 4176 pcs

1、 lb

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

weight

U	.	W	.	:									l	b	/	p	c	s	CR	LF

Unit weight

T	o	t	a.	l	:						p	c	s	CR	LF

pcs

Example:
G.W. ：+ 2.2352 lb
U.W. ：+ 0.5352 lb/pcs
Total ： 4176 pcs

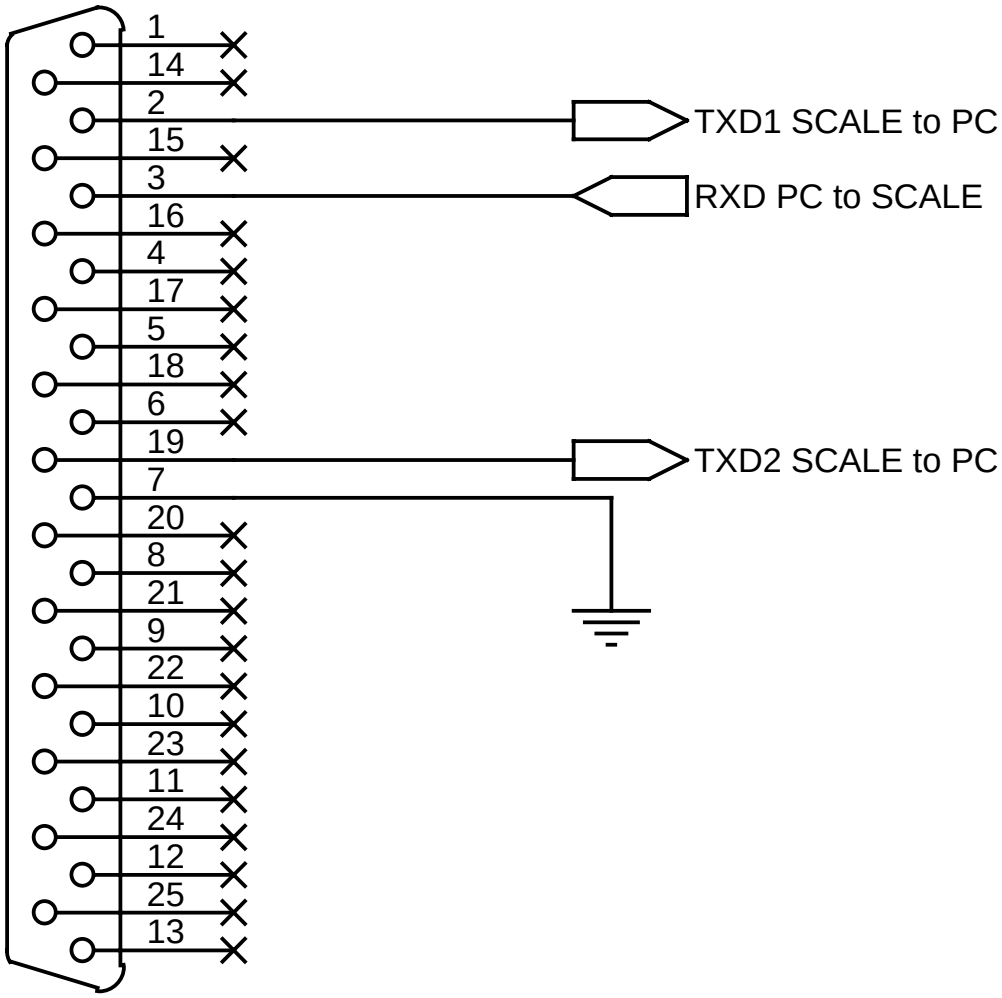
G = GROSS N = NET

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

Printer & Printing Format (example: kg)

TP-24	SH-24	EZ2-S	AX-III	TDP-643
T.W.: +0.0000 kg N.W.: +1.6025 kg G.W.: +1.6025 kg	T.W.: +0.0000 kg N.W.: +1.6025 kg G.W.: +1.6025 kg	T.W.:+0.0000 kg N.W.:+1.6025 kg G.W.:+1.6025 kg		

■ RS-232 Connector



CONNECTOR DB25