Precision Counting Scale

Operation Manual

JSC-（B）TSC-en ,V5.0-2010

TABLE OF CONTENTS

I. Introduction

Thank you for your purchase of a high resolution electronic 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 quantity control cases.

II. Precautions

1) Full charge the battery after unpacking the scale.
2) Recharge the battery: when battery symbol appears on the LCD display, please plug in the power lug to charge the battery. The indicator of charge will light up in yellow. When it becomes red means charge completed (it takes about 8 hours to full recharge the battery)*
3) Install the equipment on a level and stable surface.
4) Do not install the equipment near the air condition or a vibration machine.
5) Please in the temperature of 0℃~40℃, prevent from rapid temperature changes.
6) Independent AC outlet for this equipment is recommended; check the voltage before plug in.
7) Warm up the equipment for 15 minutes before use.

III. Keypad Functions

Then enter the setting of the mode of data transmission. There are two kinds to be selected — **St** (output once when the reading is stable), **Co** (continue output). Press  key to select and  key to confirm.

RS-232 Communication format

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

Data Format:

G=GROSS N=NET

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
HEAD					DATA									UNIT		CR	
G/N	.	W	.		:	+/-								(K)	g	CR	LF

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
HEAD						DATA								UNIT					CR	
U	.	W	.		:	+								g	/	p	c	s	CR	LF

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
HEAD						DATA								UNIT			CR	
T	o	t	a	l	:	+								p	c	s	CR	LF

EXAMPLE ("Gross weight: 100g; Unit Weight: 0.2g; Total quantity: 500pcs", the display of screen is:**)**

G.W. : + 100 g
U.W. : + 0.2g/pcs
T0tal : + 500pcs

and displayed. An accumulating indicator is lightened. The display will show the accumulated times in the Total Weight display and total quantity in the Unit Weight display. The display will show "**OL**" when the total quantity exceeds the Max. Display range.

2). Press [M+] Key to clear the stored data.

16. External Calibration

When the scale does not read accurately, you may calibrate it with weight. Turn the scale on; press and hold [→0←] until the end of self-test.

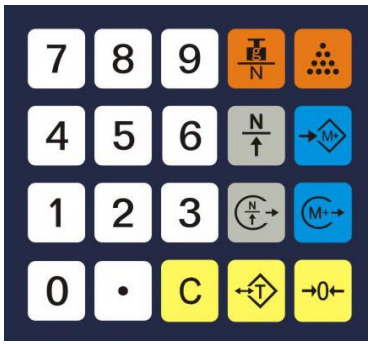
It will show "**CAL**". Press [→0←] to show "0" ; place a weight (2/3 of the Max. Capacity is recommended) on the tray; input the value of the weight via numeric keys. The unit is kg. (Ex. The Max. Capacity is 3kg; the weight should be 2kg; then enter 2). after stable, press [→0←] to confirm the entered. Now the calibration is end. (External calibration will not work when the error is outside the range of ±10% of entered value).

Ⅶ. Instructions of serial communication (optional)

Turn the scale ON, then press and hold [2] key until the end of self-test. the display will show " **Unit kg**" or " **Unit g** " . Press [T] key to change unit; press [→0←] to confirm.

then select baud rate parameters. There are three classes to be selected — **2400bps**, **4800bps**, **9600bps**; the display of screen is **bAud 2400**, **bAud 4800**, **bAud 9600**. Press [T] key to select and [→0←] key to confirm.

(JSC-TSC)



(JSC-BTSC)

[0] ~ [9] : Numeric keys.

[•] : Decimal point key.

[→0←] : Zero key.

[T] : Tare key.

[g/N] : Used when manually keying in the unit weight.

2Press [0] ～ [9] or [•] , then press this key, could input unit weight.

 : Sample Key, Used when keying in a sample amount. Press [0] ～[9], then press this key, Counting and display unit weight.

 : Use this key to clear the readings entered.

 : Use this key to confirm the entry of check number.

 : Use this key to cancel checking number.

 : This key is used for total count accumulation.

 : Use this key to clear the total count accumulation.

IV. Symbol Definition

 : Scale is in Zero mode.

 : Minus sign.

 : Scale is in TARE mode.

 : Battery is at low voltage.

kg : The unit is kilogram.

g : The unit is gram .

 : Sampling is shortage.

M+ **:** Scale is in ACCUMULATION mode.

Hi :raise the alarm when the amount **more than** the high limit .

Lo:raise the alarm when the amount **less than** the low limit .

In :raise the alarm when the amount **within** the high–low limits.

13. Select single or double division

Turn the scale ON, then press and hold [5] key until the end of self-test. the display will show "SIN" (single)or "dbl" (double). Press  key to change parameters ; press  to confirm.

14. Set and cancel checking number

Users can set a number for counting check, when the number of objects on the pan meet all the preset check number, the alarm will beep out a warning.

Set: 1)press  key. LCD displays "down 0", input the desired low limit value,

2) then press  key. LCD displays "UP 0", input the desired high limit value, There are four states to be selected.

STATE	DOWN	UP	Symbol
1	0	the high limit value(A)	Hi
2	the low limit value(B)	0	Lo
3	the low limit value(B)	the high limit value(A)	In
4	the high limit value(A)	the low limit value(B)	Ou

NOTE: A>B>9d

3) press  key to exit.

Clear: Press  key to cancel limit

15. Accumulation

1). Press  key after total count has been calculated

2) **Selection of Zero display range.** There are two classes to be selected — **Zero-S** (invalid) and **Zero-L** (when the weight within the range of ±3d, the display is "**0**").

3) **Select whether "0" will be shown while the weight within the range of –15d~0d.** There are two classes to be selected — **15d ON** and **15d OFF.**

10. Division Selection

Turn the scale ON, then press and hold [•] key until the end of self-test. The display will show "**div x.xx**". **x.xx** is the value of division. Press [→T←] key to change and press [→0←] to confirm.

11. Setting backlight

Turn the scale ON, then press and hold [1] key until the end of self-test. the display will show "AUTO" (AUTO backlight) or "OFF" (Disable backlight) or " ON " (Backlight is ever lighting). Press [→T←] key to change; press [→0←] to confirm.

12. Counting and Auto-average

Turn the scale ON, then press and hold [3] key until the end of self-test. Function keys: [→T←] used for change parameters; [→0←] used for confirm.

1) **Selection of counting mode**. There are two classes to be selected — " **div** " (counting division) and " **Code** " (counting ISN).

2) **Auto-average**. There are two classes to be selected— "OFF"(turn auto-average off) or "ON"(turn auto-average on).

Ou :raise the alarm when the amount **outside** the high–low limits.

V. FUNCTION ILLUMINATE

KEY	FUNCTION	PARAMETER
ON/OFF + [→0←]	External Calibration	
ON/OFF + [→T←]	Filter setting	nb0~nb3
ON/OFF + [•]	Division setting	0.1/0.2/0.5/ 1/2/5/10
ON/OFF + [0]	Zero tracking range	0.0d/0.5d/1.0d /1.5d/2.0d/3.0d
	Zero display range	zero-s/ zero-L
	display 0 within –15d~0d	15d on / 15d off
ON/OFF + [1]	Backlight setting	auto/on/off
ON/OFF + [2]	switch UNIT	unit kg/unit g
ON/OFF + [3]	Counting mode	div/code
	Auto-average	on/off
ON/OFF + [5]	Select single or double division	sin/dbl

ATTENTION:
Press [→T←] to change parameter; press [→0←] to confirm it.

VI. Operations

1. Turn the scale ON

Remove all the objects on the scale; push the power switch to "ON" position. The scale will self-test and zero, then turn to weighing mode.

2. Turn the scale OFF

Push the power switch to "OFF" position to turn the scale OFF.

3. Zero function

During using the scale, the weight display isn't "0", but there is nothing on the pan. Please press →0← key to re-Zero Then the zero indicator " →0← " will be shown. When the weight display is outside the range capable of re-zeroing or the scale is in tare mode, pressing the key is invalid.

4. Tare function

In weighing with container instance, please operate as following steps to get the net weight: place the container to the pan; press the key ↔T to subtract the weight of container. Then the weight displayed is "0", and the tare indicator " →T " is shown. place the objects needed to weigh on the pan, then the net weight of the objects is shown; take both container and objects off, the weight displayed is negative. Press ↔T key again to cancel the tare mode.

5. Unit weight setting

A known unit-weight can be inputted directly by entering the value first then followed by pressing kg/N key.

6. Unit weight by sampling

1) Put the objects intended for sampling on the pan.
2) Input the number of the objects.
3) Press ⁂ key, the calculated unit -weight then will be shown in the Unit weight display. Now it is ready for counting.

7. Clear

When the numeric entered is wrong, press C key to clear the inputs, and then enter again. Also this key is used for clearing the unit weight.

8. Selection of Filter parameter

While the scale is used in a different location, changing the response speed could be desired. You can change the STABLE time and the stability of the scale by setting the filter parameter.

Press and hold ↔T key and turn the scale on, until the end of self-test; the display will show the current filter parameter. Press ↔T key again to change. Press the key →0← to confirm (∩**bX** represents a class of filter parameters and the larger "X" is, the slower respond speed is.).

9. Zero tracking range and Zero display range

Turn the scale ON, then press and hold 0 key until the end of self-test. The following settings use the key ↔T to select parameters and the key →0← to confirm.

1) **Selection of Zero tracking range.** There are six ranges ("0.0d", "0.5d", "1.0d", "1.5d", "2.0d", "3.0d") to be selected.