PREPLINE

PSPS40 / PSPT40

User/Technical Manual

Contents subject to change without notice

Version 1.0
04/2021

PREPLINE

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1. Introduction

1.1. General and Safety Information

- For use in dry environments only.
- Read and understand all operating instructions before using this product. Keep this manual for future reference.
- Allow sufficient warm up time. Turn the scale on and allow up to 3 minutes for internal components to stabilize before weighing.
- Record the weight shortly after placing a load on the platter. Leaving loads in place for extended periods may vary the load cell's output signature and may result in a less accurate reading.
- Avoid extended exposure to extreme heat or cold. Optimum operation is at normal room temperature. See operating temperature range in the specifications table. Allow the scale to acclimate to room temperature before using.
- When storing the scale for extended periods, the battery must be charged every 60 days to avoid premature performance degradation. If the operating time is no longer acceptable even after recharging, the battery must be replaced.
- Electronic scales are precision instruments. Do not operate near cell phones, radios, computers or other electronic devices that emit radio frequencies that may cause unstable readings.

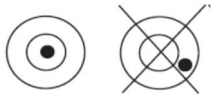
1.2. Specifications

Model	PSPS06 PSPT06	PSPS15 PSPT15	PSPS30 PSPT30	PSPS40 PSPT40	PSPS60 PSPT60
Capacity	3kg	6kg	15kg	20kg	30kg
	6lb	15lb	30lb	40lb	60lb
	96oz	240oz	480oz	640oz	960oz
Division	0-1.5kg: 0.5 1.5-3kg: 1g	0-3kg:1g 3-6kg:2g	0-6kg: 2g 6-15kg: 5g	0-10kg:5g 10-20kg:10g	0-15kg:5g; 15-30kg:10g
	0-3lb: 0.001lb 3-6lb: 0.002lb	0-6lb:0.002lb 6-15lb:0.005lb	0-15lb:0.005lb; 15-30lb:0.01lb	0-20lb:0.01lb 20-40lb:0.02lb	0-30lb: 0.01lb; 30-60lb:0.02lb
	0-48: 0.02oz 48-96: 0.05oz	0-96oz:0.05oz 96-240oz:0.1oz	0-240oz:0.1oz; 240-480oz:0.2oz	0-320oz:0.2oz 320-640oz:0.5oz	0-480oz:0.2oz; 480-960oz:0.5oz
Min weight	10g / 0.02lb / 0.4oz	20g / 0.04lb / 1oz	40g / 0.1lb / 2oz	100g / 0.2lb / 4oz	100g / 0.2lb / 4oz
Tare range	-1.5kg	-3kg	-6kg	-10kg	-15kg
	-3lb	-6lb	-15lb	-20lb	-30lb
	-48oz	-96oz	-240oz	-320oz	-480oz
Max weight	3.009kg	6.018kg	15.045kg	20.09kg	30.09kg
	6.018lb	15.045lb	30.09lb	40.18lg	60.18lb
	96.45lb	240.9oz	481.8oz	644.5oz	964.5oz
Power-on zero range	calibration zero point -10%~+10% FS	calibration zero point -10%~+10%FS	calibration zero point -5%~+10%FS	calibration zero point -3%~+10%FS	calibration zero point -1.5%~+10%FS
Zero Key rang	power-on zero ±1.5%FS				
Interface	RS232, USB				

Max memory(PLU)	PSPS Series: 265 Including direct PLU :M1~M5 PSPT Series: 265 Including direct PLU: M1-M55
Scale dimension	PSPS Series: 290(L)x350(D)x115(H)mm PSPT Series: 290(L)x387(D)x450(H)mm
LCD display	18 digits：6 digit for weight reading，6 digit for unit price，6 digit for total price
Unit price range	0.00 – 9999.99 $/kg or $/lb
Total price range	0-999.99$
Working temp.	0℃ ～ 40℃
Power supply	1)12Vdc,500mA with positive center, AC adaptor or 6Vdc4AH lead-acid battery. 2)Average working current is about 45mA(excluding recharge current) 3)When using AC adaptor, the lamp of “A.C.ADP” is on. When charging the battery, the lamp of “CHARGE” is on.
Rechargeable battery life	80 hours continuous use when backlight is off with 12 hour recharge time 30 hours continuous use when backlight is on with 12 hour recharge time (when the battery voltage is below 5.6v, “Lo.bat” is displayed, and beep for 10 seconds and then auto off.)
Platter size:	LxD: 288x210

2. Unpacking and setup

- Take out the scale from the box and place it on a firm, level surface. Avoid locations with rapid temperature changes, excessive dust, moisture, air currents, vibrations, electromagnetic fields, heat or direct sunlight.
- Adjust the leveling feet until the bubble is centered in the circle of the level indicator (located on the front panel).



NOTE: Ensure that the scale is level each time its location is changed.

- Before using the scale for the first time, the internal rechargeable battery should be fully charged for up to 12 hours.
- Connect the supplied AC adapter to the power input receptacle underneath the scale. Plug the AC adapter into a properly grounded power outlet and the battery will begin charging.
- If the scale will be stored or transported in the future, save the packaging material to ensure the best possible protection for the scale.

2.1 Packing List

- Scale
- Manual
- Weighing platforms (one plastic platform +one stainless steel platform)
- Tower assembly (PSPT40 only)
- 12Vdc/500mA adapter

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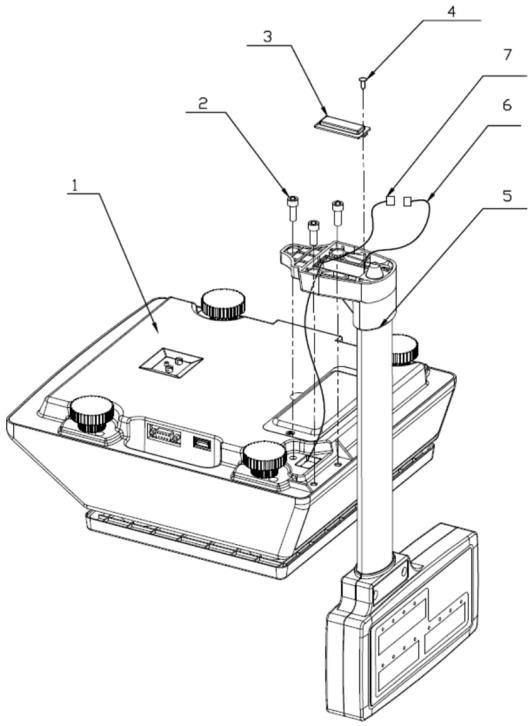
2.2 Assembling

PSPS40: Install the weighing platforms onto the base, with the pan properly aligned.

PSPT40: Follow below procedure to install the tower display.
1. Pass the socket on bottom of scale base through the pole bracket, and plug it to the connector.
2. Connect the column to the base and tighten them together with the hexagon socket head cap screws.
3. Place the connector in the bracket, put on the cover and fix it with tapping screws.
4. Installation is complete

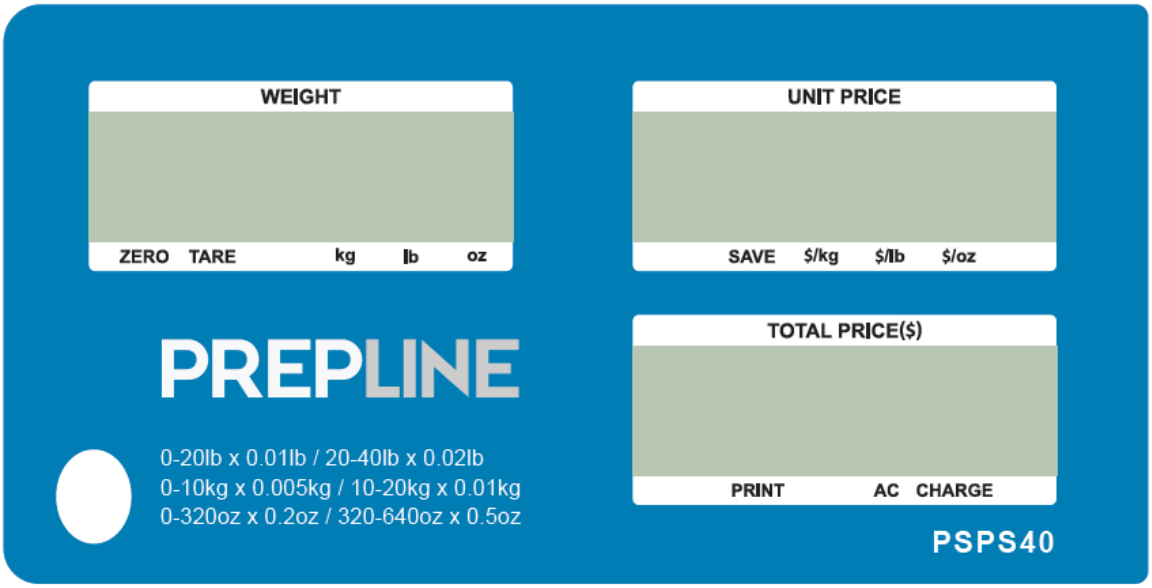
No.	item
1	Scale base
2	Hexagon socket head cap screws (3pcs)
3	Cover
4	Tapping screws (2pcs)
5	Column
6	Connector
7	socket



3. Display and keypad

3.1 Faceplate

- Front Display



- Rear Display

WEIGHT - Weight display window

- **Zero** - Scale is zeroed, gross weight is 0, tare is 0
- **Tare - Dis**play reading is net weight; tare is **not** 0
- **SAVE -** Unit price fixing indicator
- **kg/lb/oz** - Weight unit indicator

UNIT PRICE - Unit price display window

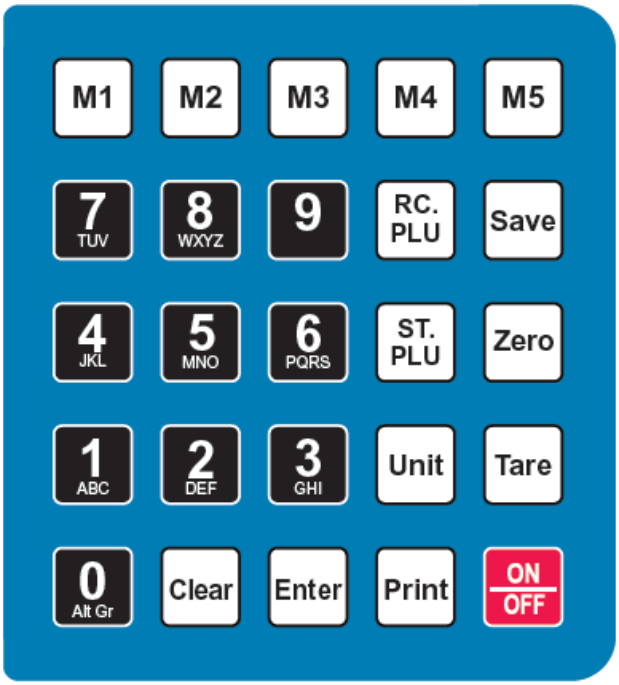
- **$/kg,$/lb, $oz -** Unit price per kg/lb/oz indicator

TOTAL PRICE($) - Total price display window

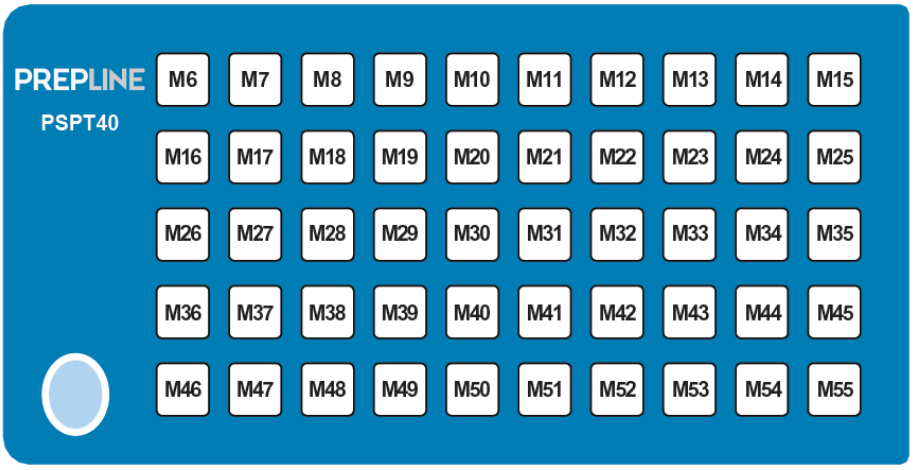
- **PRINT -** Data output indicator
- **AC -** AC Adapter in-use indicator
- **Charge -** Battery being charged indicator

3.2 Keypad functions

- PSPS40 keypad



- PSPT40 keypad



- **0-9:** Numeric keys, used to enter numerical data or alphabets
- **M1-M5:** Direct PLU keys, used to directly recall the stored unit price
- **M6-M55:** Direct PLU keys, used to directly recall the stored unit price (only for PSPT40)
- **CLEAR**: Used to clear the recorded data
- **ENTER**: Used to confirm the operation or entered data
- **SAVE**: Save the tare weight and unit price when input the unit price, so that the data will not be cleared after one weighing operation.
- **ZERO**: Used to set the zero point after the scale is stable, the range is "power-on zero point±1.5%FS"
- **TARE**: Used to tare the weigh, When total weight is 0, tare weight is cleared, **NET** indicator is off.
- **ST.PLU**: Ready to enter indirect store mode (PLU)
- **RC.PLU**: Ready to enter indirect recall mode (PLU)
- **PRINT**: Used to output the data when has RS232 hardware
- **UNIT**: Switch the unit of price and weight
- **ON/OFF**: When the display is off, press **ON/OFF** key to turn on the scale. When the display is on, press **ON/OFF** key for 3s to turn off the scale. Or the **ON/OFF** key is used to exit the current mode.
- **ON/OFF+0:** Used to enter the business's name setup mode
- **ON/OFF+1**: Used to enter the LCD's contrast setup mode
- **ON/OFF+2**: Used to enter the auto-off time setup mode
- **ON/OFF+3**: Used to display A/D inner code or working voltage
- **ON/OFF+4**: Used to enter RS232 parameters setup mode
- **ON/OFF+5**: Used to enter the date and time setup mode
- **ON/OFF+6**: Used to enter ID setup mode
- **ON/OFF+7**: Used to enter OS-2030D Back Feed setup mode (If "232.out" is set to "HOST", this setting is invalid)
- **ON/OFF+8**: Used to enter OS-2030D Origin setup mode (If "232.out" is set to "HOST", this setting is invalid)

3.3 The meaning of the special displayed character：

Symbol	7-segments digit	Symbol	7-segments digit	Symbol	7-segments digit
0		A		N	
1		B		O	
2		C		P	
3		D		Q	
4		E		R	
5		F		S	
6		G		T	
7		H		U	
8		I		V	
9		J		W	
(		K		X	
)		L		Y	
		M		Z	
À		Â		Æ	
Ç		È		É	
Ê		Ë		Î	
Ï		Ô		Ù	
Û		Ü			

4. OPERATIONS

▪ Normal Weighing Mode

1. Place the scale on a flat, stable surface. Level the scale using the leveling bubble at the lower left side of the display.
2. With the weighing platter empty, turn on power switch (located underneath on the right-hand side of the scale). Due to the high resolution of this scale, allow 10 minutes for the scale to warm up before use for optimum results.
3. Press the ON/OFF key to power on the scale. The self-check will run and the scale will display a zero reading. The scale is now ready for weighing.
   Note: If the scale does not zero, an error code will be displayed. See **Troubleshooting** to resolve.
4. To change the weighing unit of measure, press the Unit key to toggle between kg, lb or oz.
5. Set the tare weight if desired.
6. Place objects on the scale platter and read the weight on the indicator.
7. When finished weighing, press the ON/OFF key for 4 seconds to power off the scale.

▪ ZERO function

1. Under the normal weighing mode, press Zero key to set the scale to zero point when the scale reading is stable (the
   weighing unit light without shining).
2. When under the tare mode, ZERO key is invalid.
   Note: If the scale cannot be zeroed, an error code will be displayed. See **Troubleshooting** to resolve.

▪ Setting the Tare Weight

This scale allows for both a manually entered pre-set tare weight, as well as a "weighed" tare weight.

1. **To enter a weighed tare:**
   a. Place an empty container on the platter and press the Tare key. The display will return to zero, eliminating the weight of the container. The **Zero** light will go off and the **Tare** light will be lit.
      Note: The gross weight must be positive to enter a weighed tare.
   b. To clear the weighed tare, remove all weight from the scale. The display will show a negative weight. Press the TARE key to return the display to zero, eliminating the weight of the container. The **Tare** light will go off and the **Zero** light will be lit.
2. **To manually enter a known tare:**
   a. Use the number keys to input the tare weight. Your entry will be displayed in the "WEIGHT" display window. Then press the Tare key to confirm or press the ON/OFF key to exit and not confirm.
      Example: With the platter empty, entering 100g and pressing the Tare key will display "-0.100" kg.
   b. To recall the previously stored tare weight, press the RC.PLU key. Press the ON/OFF key to return to weighing.
      Note: The previously stored tare weight can only be recalled with the RC.PLU key when in tare setting mode.
   c. To clear the manually entered tare weight, (enter "0" and) press the Tare key to confirm.
   d. If unit price is in un-saved mode, the tare weight and unit price will be auto cleared after transaction and objects being moved.

▪ Save function

1. Under non-save mode, tare and unit price will be cleared automatically; Press SAVE key to enter save mode.
2. Under save mode, tare and unit price will not be cleared automatically; Press SAVE key to exit save mode, if the gross weight is 0, clear tare weight and unit price.

▪ Print function

In normal weighing mode, when the scale reading is stable (The weighing unit light without flashing), press PRINT key to output the data via RS232 or USB serial port according to the set method. Print format are as follows:

1. Print Out format in HOST mode

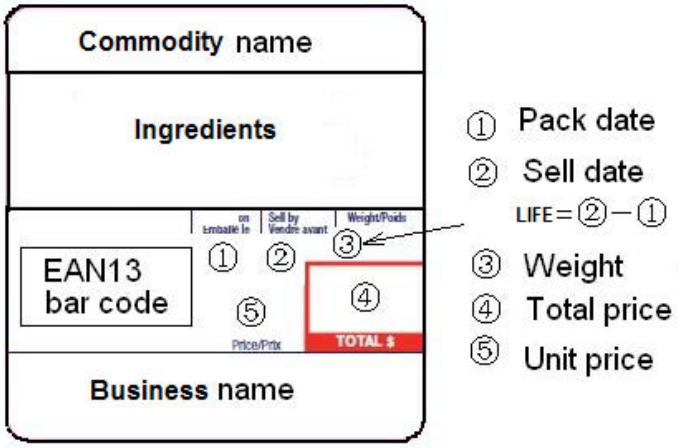
ID: xxxxxx
Date: yy-mm-dd
Time: hh:mm
Gross: xxxx.xxx kg/lb
Tare: xxx.xxx kg/lb
Net: xxxx.xxx kg/lb
Unit Price: xxxxxx.xx $/kg($/lb)
Total Price: xxxxxx.xx $
==========

2. Print out format when OS-2130D printer is connected (example):

Label dimension is 58mm × 40mm

Label dimension is 58mm × 60mm

3. Content of printed out:



▪ Input the unit price directly

1. Use numerical key to enter unit price (range: 0000.00～9999.99)
2. Press ENTER key within 3s to confirm the unit price
3. Press CLEAR key to remove the input number
4. Put the weighing objects, the WEIGHT window will show its weight and TOTAL PRICE window will show it total value.

Note: After unit price is entered, if there is no operation in 3s, the scale with automatically confirm the unit price and exit the mode.

If under non-save mode, the unit price will be cleared automatically after weighing and removing the objects.

▪ Set and Recall direct and indirect PLU

1. Under the normal weighing mode, press ST.PLU key, "St.PLU" will be shown in WEIGHT window and "Addr." (prompt to input PLU's address) will be shown in UNIT PRICE window (The Address range is from 1 to 265, M1-M5 is for direct PLUs). The UNIT PRICE window will display "------".
2. Input the Address by numerical keys 0～9 and CLEAR key, use ENTER key for confirmation to go to the next step, or press ON/OFF key to exit this mode and return back to the normal weighing mode.
3. When the TOTAL PRICE window displays “NAME” (prompt to input trade name), the UNIT PRICE window shows the last six characters of the trade name.
4. Use numerical keys and CLEAR key to input the trade name (the length of the trade name is 20 characters), use ENTER key to confirm the characters on flashed position or confirm the trade name, or use ON/OFF key to exit this mode and return back to the normal weighing mode.
5. When the TOTAL PRICE window displays “INGRDT” (Ingredients, prompt to input ingredients, only available when 232.out is set to PRTd60), the UNIT PRICE window shows the last six characters of the ingredients.
6. Use numerical keys and CLEAR key to input the ingredients (the length of the ingredients is 80 char), use ENTER key to confirm the char on flashed position or confirm the ingredients, or use ON/OFF key to exit this mode and return back to the normal weighing mode.
7. When the TOTAL PRICE window displays “LIFE” (prompt to input shell life), the unit price shows the input data.
8. Use numerical keys and CLEAR key to input the LIFE(<=253), use ENTER key to confirm, or press ON/OFF key to exit this mode and return back to the normal weighing mode.
9. When "Unit.0" or "Unit.1" is shown in the UNIT PRICE window, that means the weight unit of the stored unit price is per Kg (Unit.0) or per lb (Unit.1). "------" will be shown in the TOTAL PRICE window.
10. Use UNIT key to choose $/kg, $/lb or $oz, press ENTER key to save the chosen unit and go to the next step, or press ON/OFF to exit the input and return back to the normal weighing mode.
11. The TOTAL PRICE window displays “Unit.P” (prompt to input unit price), the UNIT PRICE window shows input data.
12. To press 0～9 and CLEAR key to input the unit price, press ENTER key to store and confirm, or press ON/OFF key to exit this mode and return back to the normal weighing mode.
13. The TOTAL PRICE window displays "Tare" (set the digit tare), the UNIT PRICE window displays the entered data.
14. Use the numerical keys 0-9, CLEAR key to input the tare weight, use ENTER key to store and confirm.
15. The TOTAL PRICE window displays "ItEm.C" (set the item code), the UNIT PRICE window displays the entered data that stored previously.
16. Use the numerical keys 0-9, CLEAR key to input the tare weight, use ENTER key to store and confirm. then go to the next store unit setting, namely, plus one to the last Address, then repeat the steps from 1-15. Or press ON/OFF key to give up input and back to the normal weighing mode;

- **Recall direct PLU**

Recall the stored direct unit price by pressing 1-9 key down more than 2.5s, the recalled unit price will be displayed in UNIT PRICE window. The TOTAL PRICE window will display “duP.xx”, then followed by the actual total price.

- **Recall indirect PLU**

1. Under the normal weighing mode, press RC.PLU key to enter this mode, and display "rc.PLU" in WEIGHT window, display "Addr." (The Address range is from 1 to 265) in TOTAL PRICE window. The UNIT PRICE window will display input address data.
2. Use the numerical 0～9 and CLEAR key to input the PLU’s address, use Enter key to confirm and go to the next step or press ON/OFF key to exit this mode and return back to the normal weighing mode.
3. Then the UNIT PRICE window will display the recalled unit price, the TOTAL PRICE window displays “PLU.XXX”(XXX is the Address) and then will go back to the normal total price displaying mode later, and then use new unit price, tare weight, new weight unit trade name, shell life)

5. LCD contrast and Backlight mode setting

1. Under the normal weighing mode, press and hold down ON/OFF and 1 key at the same time until the WEIGHT display window shows “SETUP”, UNIT PRICE window shows "BLGt.Md" (backlight mode) and the TOTAL PRICE window shows the backlight mode code x(x=1-3), use the numerical keys to input the backlight mode, and press ENTER key for confirmation.
   Press ON/OFF key to exit this mode and the scale will automatically reset.
   x=1 – back light is always off
   =2 – back light is always on
   =3 –Backlight On Request (backlight temporarily switches off after 15 seconds of inactivity, and reactivates with a key press or with an item placed on or removed off the pan)
2. When UNIT PRICE window shows “LCd.CST” (LCD contrast) and the TOTAL PRICE window shows the contrast level x (x=1-9,default is 9). Use the numerical keys to input the contrast level, and press ENTER key for confirmation.
   Press ON/OFF key to exit this mode and scale will automatically reset.

6. Auto-off time setting

Under the normal weighing mode, press and hold ON/OFF and 2 key at the same time until the scale displays “SETUP” in WEIGHT window, “A.OFF.t” (auto off time) in UNIT PRICE window and auto-off time xx (xx=00～30, when 00 is used that means no auto off function) in TOTAL PRICE window. Use numerical keys to input the auto-off time and press Enter key for confirmation. Press ON/OFF key to exit this mode and the scale will automatically reset.

7. Display A/D inner code and working voltage

When in normal working mode, press ON/OFF and 3 key at the same time till the UNIT PRICE window shows “CodE 2” to enter this mode. Now WEIGHT window will show “UoL.x.x” (Voltage x.x V), this means the inner working voltage is x.x V. If the scale uses AC power adaptor, the voltage is the power adaptor voltage after regulating. If AC adaptor is not used, this around voltage is battery’s voltage. A/D internal code will be displayed in TOTAL PRICE.

8. The details about RS232 communication

1. Under the normal working mode, press and hold ON/OFF key and 4 key at the same time until the WEIGHT window shows "SETUP" . Under this mode, you can set the RS232 baud rate, data format and communication format.
2. After entering into this mode, the weight window will show "Setup", the UNIT PRICE window will show "232.oUt" (RS232 output
   content format) and the TOTAL PRICE window shows one of following content:
   2.1 **HOST** (PSPS40/PL-xxxx is connected with host device, e.g. a PC)
   2.2 **Prtd40** (PSPS40/PSPT40-xxxx is connected with the OS-2130D, label dimension is 58mm × 40mm, date will be printed on label)
   2.3 **Prtd60** (PSPS40/PSPT40-xxxx is connected with the OS-2130D, label dimension is 58mm × 60mm, date will be printed on label)
   2.4 **PrtNd4** (PSPS40/PSPT40-xxxx is connected with OS-2130D, label dimension is 58mm × 40mm, no date will be printed on label)
   2.5 **PrtNd6** (PSPS40/PSPT40-xxxx is connected with the 2130D, label dimension is 58mm × 60mm, no date will be printed on label)
   Use numerical keys **0,1,2,3,4** to choose RS232 output content format (0-HOST, 1- **Prtd40**, 2- **Prtd60**, 3- **PrtNd4**, 4- **PrtNd6**), use ENTER key for confirmation to go to the next step, or ON/OFF key to exit this mode.
3. Then, the WEIGHT window will show "Setup", the UNIT PRICE window will show "232.bPS" (RS232 band rate: bit per second) and TOTAL PRICE window shows baud rate xxxxx. Use numerical keys 1,2,3,4,5 to choose RS232 baud rate:

   1--1200bps
   2--2400bps
   3--4800bps
   4--9600bps
   5--19200bps

   Press Enter key for confirmation to go to the next step, or ON/OFF key to exit this mode.
4. Then, the weight window will disPSPT40ay "232.dFt" (data format), the total price window will disPSPT40ay data format xxx. Use 1, 2, 3 key to select data format:

   1—8N1 8 bits data, no odd or even , 1 start bit, 1stop bit
   2—7O1 7 bits data, 1 even , 1 start bit, 1stop bit
   3—7E1 7 bits data, 1 odd, 1 start bit, 1stop bit,

   Press Enter key to confirm the input and go to the next step, or use ON/OFF key to exit this mode.
5. Then, the WEIGHT window will disPSPT40ay "Prtd.dt" (OS-2130D print date format), the TOTAL PRICE window will disPSPT40ay data format xxx. Use 0, 1, 2 key to select data format:

   0—CANADA Candadian format: YY MM DD
   1—USA USA format: DD-MMM-YY
   2—Numerical Numerical format

   Press Enter key to confirm the input and go to the next step, or use ON/OFF key to exit this mode.
6. Then, the UNIT PRICE window shows "USb.oUt" (USB output content format) and the TOTAL PRICE window shows HOST (the scale is connected with host device, e.g. a PC), use ENTER key for confirmation to go to the next step, or ON/OFF key to exit this mode.
7. Then, the WEIGHT window will show "SETUP", the UNIT PRICE window will show "USb.bPS" (USB band rate: bit per second) and TOTAL PRICE window shows baud rate xxxxx. Use numerical keys **1,2,3,4,5** to choose RS232 baud rate:

1--1200bps
2--2400bps
3--4800bps
4--9600bps
5--19200bps

Press Enter key for confirmation to go to the next step, or ON/OFF key to exit this mode.

8. Then, the WEIGHT window will disPSPT40ay “USb.dFt” (data format), the total price window will disPSPT40ay data format xxx. Use 1, 2, 3 key to select data format:

1—8N1 8 bits data, no odd or even , 1 start bit, 1stop bit
2—7O1 7 bits data, 1 even , 1 start bit, 1stop bit
3—7E1 7 bits data, 1 odd, 1 start bit, 1stop bit,

Press Enter key to confirm the input and go to the next step, or use ON/OFF key to exit this mode.

Then, the Unit Price window will disPSPT40ay "D.CODE", the TOTAL PRICE window will disPSPT40ay the department code. Use the numeric keys 0-9 to input the code (00-99). Press Enter key to confirm the input and go to the next step, or use ON/OFF key to exit this mode.

Then, the UNIT PRICE window will disPSPT40ay "B.PRT.FT" (format of barcode for printing), the TOTAL PRICE WINDOW will show the barcode. Use the numerical keys 0, 1, 2, 3 to select which format will be used.

NO	TYPE	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18
0	EAN13	D	D	I	I	I	I	I	S	P	P	P	P	C					
1	EAN13	D	D	I	I	I	I	s	P	P	P	P	P	C					
2	EAN13	D	D	I	I	I	I	I	I	P	P	P	P	C					
3	EAN13	D	D	I	I	I	I	I	P	P	P	P	P	C					
4	EAN13	D	D	I	I	I	I	P	P	P	P	P	P	C					
5	EAN13	D	D	I	I	I	P	P	P	P	P	P	P	C					
6	EAN13	D	D	I	I	P	P	P	P	P	P	P	P	C					
7	EAN13	D	D	I	P	P	P	P	P	P	P	P	P	C					
8	EAN13	D	D	I	I	I	I	I	T	W	W	W	W	C					
9	EAN13	D	D	I	I	I	I	t	W	W	W	W	W	C					
10	EAN13	D	D	I	I	I	I	I	I	W	W	W	W	C					
11	EAN13	D	D	I	I	I	I	I	W	W	W	W	W	C					
12	EAN13	D	D	I	I	I	I	W	W	W	W	W	W	C					
13	I2of5	D	D	I	I	I	I	W	W	W	W	W	P	P	P	P	P	P	C

D: Department Code;
I: Item Code;
S: Check-sum for price (4 digits);
S: Check-sum for price (5 digits);
T: Check-sum for weight (4 digits);

T: Check-sum for weight (5 digits);
P: Total Price (If the weight window disPSPT40ay zero, it will be unit price);
W: Weight;
C: Check-sum for all characters;

Press ENTER key to confirm, press ON/OFF key to exit.

Note: if the price, weight or code is not in the range, there will be a mistake when printing the labels.

9. Then, the UNIT PRICE window shows "Urt.CFt" (communication format), the TOTAL PRICE window shows communication format xxx. Use the numerical keys 0, 2 to select the communication format:

0—Non communication

2—When the scale becomes stable, the data will be output after pressing PRINT key, the format when "232.out" is set to "0-HOST" is as follows. The format when "232.out" is set to "1- **Prtd40**", "2- **Prtd60**", "3- **PrtNd4**" or "4- **PrtNd6**" can refer to "**Print out format when OS-2130D printer is connected"** on page 7.

<LF>ID: xxxxxx<CR><EXT>
<LF>Date: YY-MM-DD<CR><EXT>
<LF>Time: hh:mm<CR><EXT>
<LF>Gross: xxx.xxx kg(or lb)<CR> <EXT>
<LF>Tare: xxx.xxx kg(or lb)<CR> <EXT>
<LF>Net: xxx.xxx kg(or lb)<CR> <EXT>
<LF>Unit price: xxxxxx.xx $/kg(or $/lb)<CR><EXT>
<LF>Total price: xxxxxx.xx $<CR> <EXT>

NOTE： The ID information can only be printed out after setting.

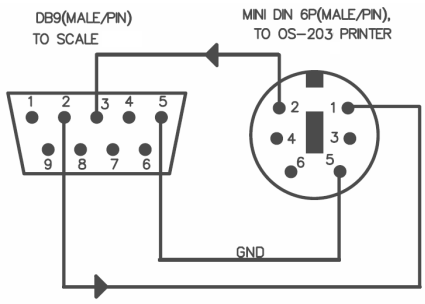
Press Enter key to confirm the input and go to the next step, or use ON/OFF key to exit this mode.

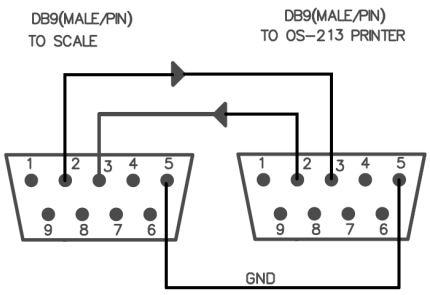
10. RS-232 connects between scale and host：

SCALE(Indicator) -------CABLE（9 pins）----------HOST
DB9(Female)----------DB9(Male)--------DB9(Female)----------DB9(Male)
PIN2 TXD----------2----------2----------PIN2 RXD
PIN3 RXD----------3----------3----------PIN3 TXD
PIN5 GND----------5----------5----------PIN5 GND
PIN4 DSR----------4----------4----------PIN4 DTR
PIN6 DTR----------6----------6----------PIN6 DSR
PIN7 CTS----------7----------7----------PIN7 RTS
PIN8 RTS----------8----------8----------PIN8 CTS
PIN1 NC----------1----------1----------PIN1 NC
PIN9 NC----------9----------9----------PIN9 NC

Note: PIN4 and PIN6, PIN7 and PIN8 are shorted in the scale!

11. RS-232 cable connects between scale and OS-2130D：





9. Date and time setting

1. Under the normal working mode, press and hold 5 and ON/OFF key for more than 3s to enter into this mode. In this mode, you can set the system date and time.（Note: the date and time in scale will be lost after the scale power off if no RTC module is installed）
2. After entering into this mode, the WEIGHT window will disPSPT40ay “SETUP”, the UNIT PRICE window will disPSPT40ay “dAtE”(date, prompt to input date) and the TOTAL PRICE will disPSPT40ay the current date xx.xx.xx. Use the numerical keys to input the date (format: YY.MM.DD), use Enter key to confirm and go to the time setting mode.
3. When the WEIGHT window remains “SETUP”, the unit price disPSPT40ays “TiME”(time, prompt to input time) and the TOTAL PRICE window disPSPT40ays the current time xx.xx.xx, Use the numerical keys to input the time (Format: hh.mm.ss), press Enter key to confirm the input and exit this mode.

10. Business name setting

1. Under the normal working mode, press and hold 0 and ON/OFF key for more than 3s to enter. In this mode, you can set the business name.
2. The WEIGHT window disPSPT40ays “bUSI.N1” (prompt to input “business name” in first line), the UNIT PRICE window and the TOTAL PRICE window disPSPT40ay the last 12 char of the business name.
3. Use numerical keys and CLEAR key to input the business name (the max length of the business name is 20 char), use ENTER key to confirm the business name and exit this mode.
4. The WEIGHT window disPSPT40ays “bUSI.N2”(prompt to input “business name” in second line business name), the UNIT PRICE window and the TOTAL PRICE window disPSPT40ay the last 12 char of the business name.
5. Use numerical keys and CLEAR key to input the business name (the length of the business name is 20 char), use ENTER key to confirm the business name and exit this mode.

11.Key function in the trade name or business name setting mode

0	0 space ( ) ÀÂÆÇÈÉÊË Î ÏÔÙÛÜ	1	1ABC
2	2DEF	3	3GHI
4	4JKL	5	5MNO
6	6PQRS	7	7TUV
8	8WXYZ	9	9

12.ID setting

1. Under the normal working mode, press and hold 6 and ON/OFF key for more than 3s to enter this mode. In this mode, you can set ID code. (Note: the data will be lost after the scale reset)
2. The weight window disPSPT40ays "SETUP”, the UNIT PRICE window disPSPT40ays “Id” and the TOTAL PRICE window disPSPT40ays Id code xxxxxx(the default Id code is 000000).
3. Use the numerical keys to input ID code, then press Enter key to confirm the input and exit this mode.

13. OS-2130D Back Feed setting

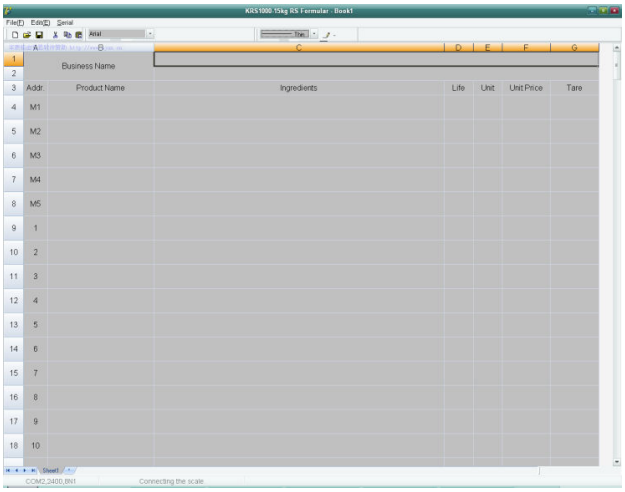
1. Under the normal working mode, press and hold 7 and ON/OFF key for more than 3s to enter this mode. In this mode, you can set the back feed (OS-2130D).
2. The WEIGHT window disPSPT40ays “SETUP”, the UNIT PRICE window disPSPT40ays “BAK.FED”(Back Feed), and the TOTAL PRICE window disPSPT40ays “DISABL”(Disable).
3. Use 1 key to select "ENABLE" (OS-2130D will feed about one more inch so that the user can see the whole label.), use 0 to select "DISABLE", use ENTER key to confirm and exit this mode.

14. OS-203/213 Origin setting

1. Under the normal working mode, press and hold 8 and ON/OFF key for more than 3s to enter this mode. In this mode, you can set the origin point (OS-2130D).
2. The WEIGHT window disPSPT40ays “SETUP”, the UNIT PRICE window disPSPT40ays “ORG.X”(Origin.X), and the TOTAL PRICE window disPSPT40ays the X direction offset number.
3. Use digit keys and Clear to input X offset (0-255), press Enter key to confirm the input and go to the next step.
4. The WEIGHT window disPSPT40ays “SETUP”, the UNIT PRICE window disPSPT40ays “ORG.Y”(Origin.Y), and the TOTAL PRICE window disPSPT40ays the Y direction offset number.
5. Use digit keys and Clear to input Y offset (0-255), press Enter key to confirm the input and the OS-2130D will print out a new blank label samPSPT40e using new start position, and then exit this mode

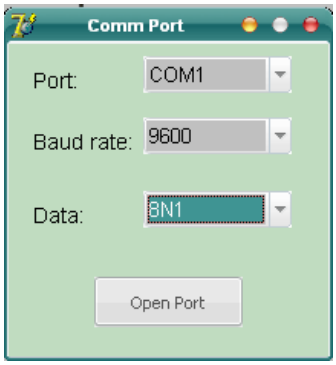
15. PSPT40U uPSPT40oad and download

1. Connect the scale to PC through RS232 interface, run PSPS40.exe, this software can only process *.xls files. (The following is ExamPSPT40e for PSPS40-1530)

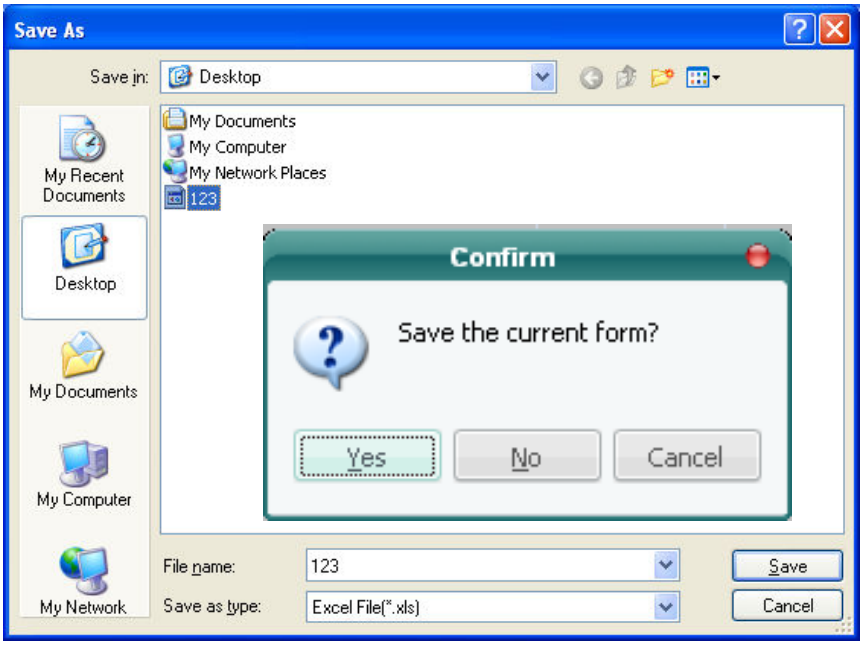


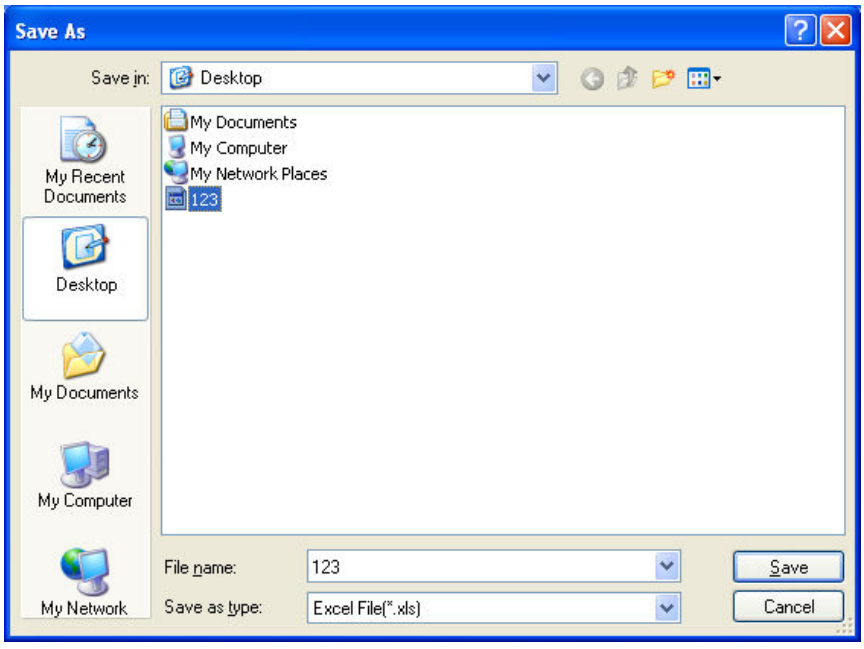
2. Software searches all serial ports on PC, and tries to connect with the scale. In the Status bar, it will separately disPSPT40ay present serial port, baud rate, data format. Take the following figure for examPSPT40e, “COM2,2400,8N1” refers to the present serial port COM2, baud rate 2400, data format 8N1. If the connection status disPSPT40ays “Connecting the scale”, it means the Software is searching PSPS40 scale, if it disPSPT40ays “The scale is connected”, it means the Host has been connected with the scale.

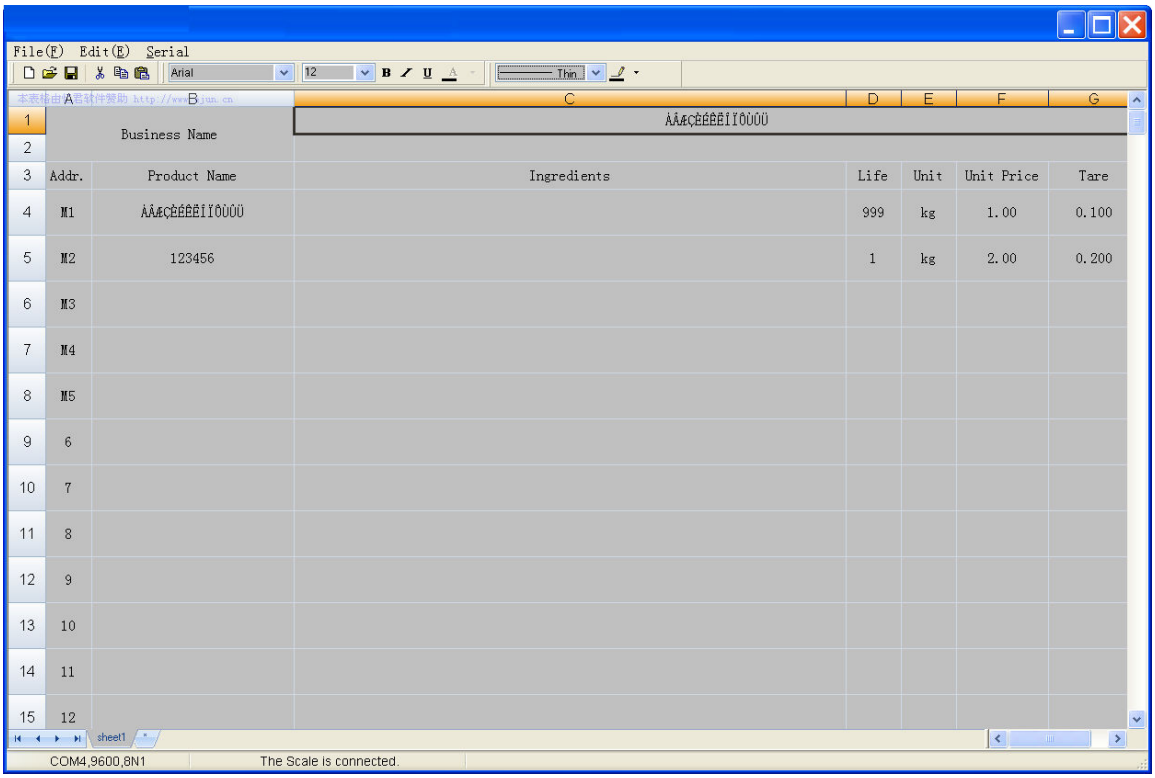
3. The Software can search all the present serial ports automatically, until connect with the scale. Manual connection is also available by use “Serial Set” in “Serial” menu.



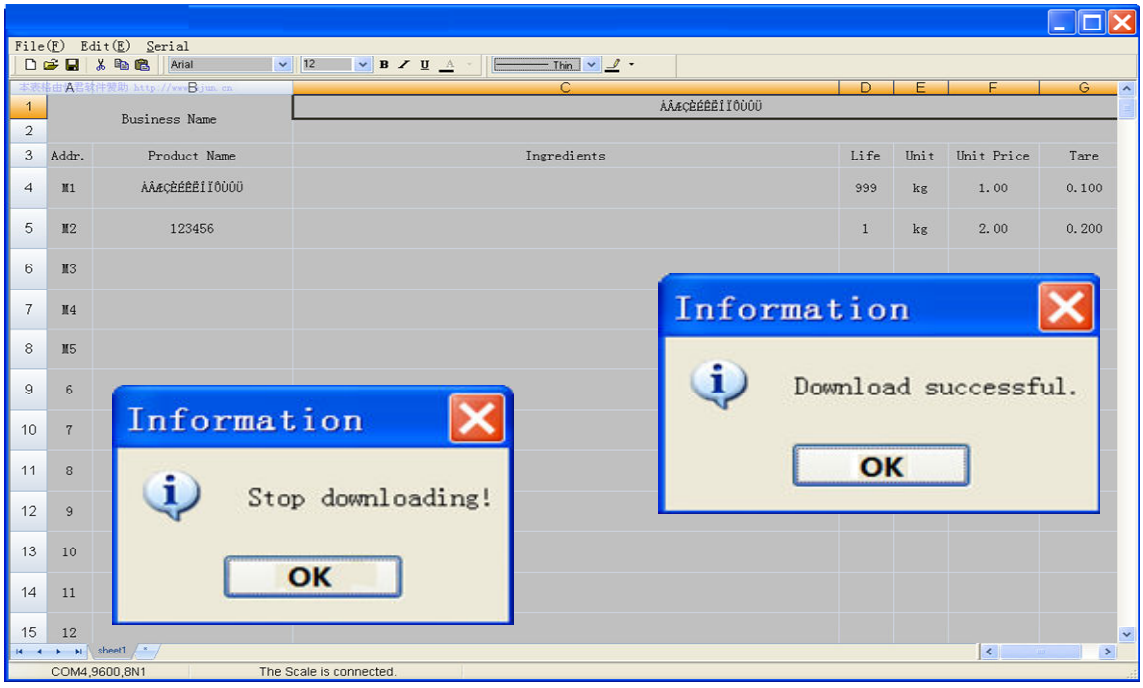
4. Press “Open” or “open file” button in “File” menu, it will first remind you whether to save the current file, and then open the file and dialogue box to choose and open the right file.







5. Choosing “Down Load” in “Serial” menu, the scale will disPSPT40ay “DNLOAD”, the status bar will disPSPT40ay the present download information, if it disPSPT40ays “downloading business name”, it means it’s downloading the store name. If it \ disPSPT40ays “Downloading Mxx”, it means it’s downloading the information of M1～M9 (direct unit price). If it disPSPT40ays “Downloading No. xxx”, it means it’s downloading the information of PSPT40U1～265. “Download successful” will be disPSPT40ayed after downloading finished. In downloading, to use "Serial\Download\Stop" or F9 can stop down load PSPT40U.

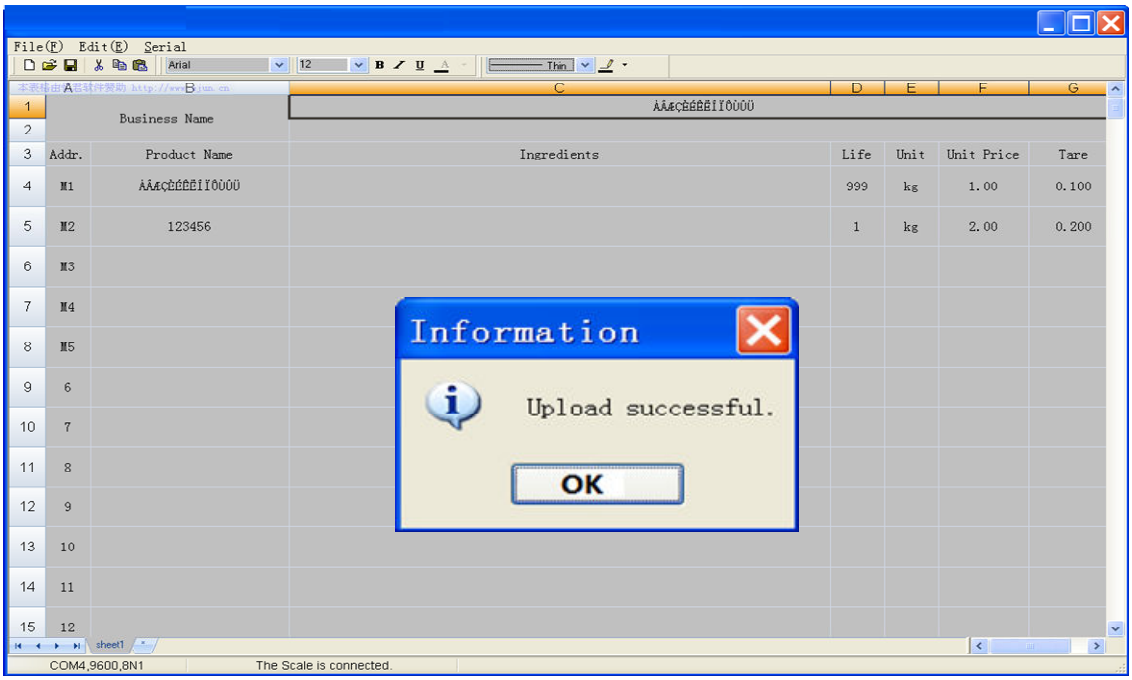


6. Choose “UPSPT40oad” in “Serial” menu, the scale will disPSPT40ay “UPSPT400AD”. the status bar will disPSPT40ay the present uPSPT40oad

information, if it disPSPT40ays “uPSPT40oading business name”, it means it is uPSPT40oading the store name. If it disPSPT40ays

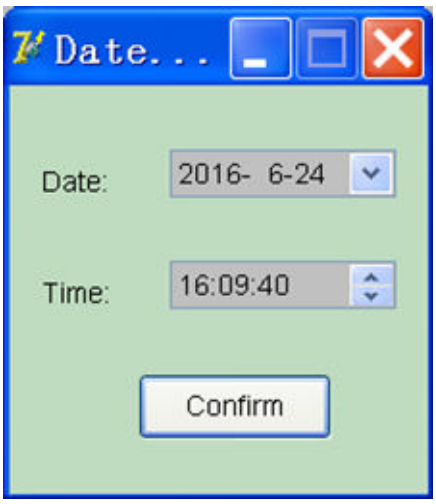
“uPSPT40oading Mxx”, it means it is uPSPT40oading the information of M1～M9. if it disPSPT40ays “uPSPT40oading No. xxx”, it means it is

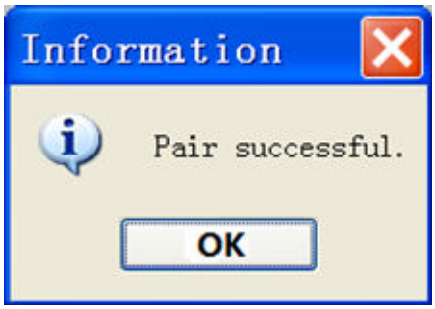
uPSPT40oading the information of PSPT40U1～265. “UPSPT40oad successful” will be disPSPT40ayed after uPSPT40oading finished.



7. Date and Time setting

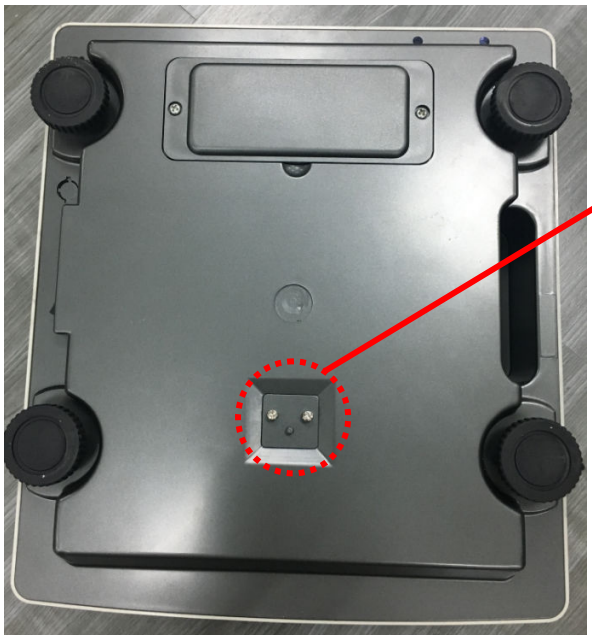
Choose ”Pair” in “Serial” menu to open the date and time setting dialogue box, it will disPSPT40ay the system clock of PC, press “Confirm” or exit the dialogue box directly. After the software send date and time setting data to the scale, it will disPSPT40ay “Pair successful.”.





PREPLINE

16. Calibration



The calibration switch is located underneath the scale base.
When the switch is set towards the USB or RS232 interface, it means CAL switch is on.
When the switch is set towards the power switch, it means the CAL switch is off.

1. When the calibration switch is ON, turn on the scale, or make the calibration switch ON when the scale is under the weighing mode, the scale will enter the calibration mode automatically.
2. After entering into the calibration mode, the WEIGHT window will disPSPT40ay CAL.ON, which means the calibration switch is on. The UNIT PRICE window disPSPT40ays "Unit.0" or "Unit.1", which means the chosen calibration weighing unit is kg(Unit.0) or lb(Unit.1), the TOTAL PRICE window disPSPT40ays empty.
3. Use Unit key to choose the calibration weighing unit kg or lb (the corresponding unit indicator will be lightened on), use ENTER key to confirm the unit and go to the next step.
4. The WEIGHT window still disPSPT40ays CAL.ON, UNIT PRICE window disPSPT40ays "unLoAd" (this means that the scale is ready to calibrate the zero point position, PSPT40ease remove any weight on the scale), the TOTAL PRICE window disPSPT40ay the output inner code of A/D. When the scale is stable and the unit indicator stops flashing, press ENTER key to confirm the zero point calibration. After the scale is stable and gets the zero point, the scale will go to the next step automatically.
5. The disPSPT40ay of the WEIGHT window remains the same, the UNIT PRICE window disPSPT40ays "LoAd", which means the scale is ready to calibrate the standard weight. The disPSPT40ay of the TOTAL PRICE and WEIGHT window remain the same. PSPT40ace a standard weight between 25%-100% FS on the center of the scale, press ENTER key to confirm the standard weight calibration after the scale is stable and the unit indicator stops flashing. When the scale gets the stable data, it will go to the next step automatically.
6. The disPSPT40ay of the WEIGHT window remains the same, the UNIT PRICE window disPSPT40ays "InP.Ld"（Input Load Weight, the TOTAL PRICE window disPSPT40ays 0, use 0-9 numerical key or CLEAR to input loaded standard weight, then press ENTER key for confirmation, the input data will be shown on the total quantity window, and then PSPT40ease remove any weight on the scale.
7. When the WEIGHT window disPSPT40ays "unLoAd" again, the scale is ready to re-confirm the zero point, remove any weight on the scale, after the scale is ready and unit indicator stops flashing, press Enter key to confirm.
8. After the calibration comPSPT40etes, the UNIT PRICE window disPSPT40ays "CAL.END" and TOTAL PRICE window

disPSPT40ays current weight.

9. If there's an error occurred in calibration, the scale will disPSPT40ay CAL.ERR; It usually means incorrect data input or loading weight, and PSPT40ease try to return back to the last step to disposal.
10. Once the calibration switch is changed to OFF; the scale will exit the calibration mode.

17. The meaning of some disPSPT40ayed symbols

Err 01--------Weight signal is too large
Err02-------No proper data can be disPSPT40ayed
Err03-------Weight signal is too small
Err04--------Zero point is over the setting range
Err05--------Zero point is below the setting range
Err06--------Error in unit key operation
Err 12--------The setting parameter(s) is not in normal range
Err20--------There is an error in calibration
Err30--------ADC is over max. range
CAP.--------Capacity
UoL.--------Voltage
SE.PSPE40U------To set and store the indirect unit price
Addr.--------PSPT40U address
UNIt --------Weighing unit selecting
rC.PSPE40U------Recall PSPT40U
UNLoAd-----To unload the weight
LoAd --------To load the weight
INP.Ld--------To input load weight
CAL.oN------Calibration enable switch is ON
CAL.oFF-----Calibration enable switch is OFF

18.Troubleshooting and Battery Charging

Troubleshooting

Troubleshooting		Possible causes	Solution
Power-on problem	No disPSPT40ay	Not well load with the batteries or no electricity or not well insert with adapter or PSPT40ug.	Check if the batteries have been load with the wrong polarity , if well connection with batteries; RePSPT40ace new batteries; Check the power supPSPT40y with the adapter
		There're some electric components of power on circuit damaged, crystal-oscillator or IC	RePSPT40ace with new PCB
		Key button not work	RePSPT40ace with new key button
	DisPSPT40ay irregular character	there is something wrong with the crystal-oscillator on PCB, or MCU not well insert	RePSPT40ace the crystal-oscillator; well insert the MCU.
	After testing disPSPT40ay ,n ot go to 0	Something wrong with the keys, or faulty PCB board, or Load cell	Check the key button; RePSPT40ace the PCB or load cell
	Missing segment or marks on LCD	LCD connect pin broken	RePSPT40ace LCD
Err	Err04	Power-on zero point exceed the 10%FS of calibration zero point; Object on the PSPT40atform is more than 1.5%FS when pressing ZERO key; Load cell zero balance changes;	Remove the objects on the PSPT40atform; calibrate again, or rePSPT40ace load cell
	Err05	zero point below the -1.5%FS of the data when calibrating; There is one foot not stand on the solid base; Remove SS PSPT40atter before power on the scale; Load cell zero point output changes;	Lay the foot in the same level; Put back the SS PSPT40atter; Calibrate again , or rePSPT40ace load cell
	Err20	Calibration doesn't work; Load cell with no signal; or too small output or too big output l; Inner code twinkles too much. Load cell signal wire broken; Load cell broken; Load cell zero point changes;	Calibrate scale again; rePSPT40ace PCB or load cell
	Err01	Weight exceed 9d of the max capacity; or the load cell output signal is too big	Remove the object; Or change the load cell; Calibrate scale again
	Err03	Remove the SS PSPT40atter when scale is on	Put back the SS PSPT40atter
	Err30	The load cell signal is too big.	RePSPT40ace the load cell; or RePSPT40ace PCB

	DisPSPT40ay Lo.bAt	Voltage lower than 5.7V	RePSPT40ace with new batteries
Weighing not accurate or calibration can't be finished	Linearity is not good	The PSPT40atform is not laid in level; Four feet are not laid in level; Moveable leg lock the seal cover of the foot; Load cell broken; There are some objects between load cell and scale.	Lay the PSPT40atform in the same level; Set the four feet in the same level; Check the moveable foot; Clear the objects; RePSPT40ace the load cell.
	Big tolerance with full corner	The PSPT40atform is not laid in level; Four feet are not laid in level; Moveable foot lock the seal cover of the foot; Load cell broken; There are some objects between load cell and scale.	Lay the PSPT40atform in the same level; Set the four feet in the same level; Check the moveable foot; Clear the objects; RePSPT40ace the load cell.
	There is some problem with repeating function	The PSPT40atform is not laid in level; Bottom dust proof wash lock the bottom bolt; Broken load cell; Aging problem with PCB; There is some objects between load cell and scale.	Lay the PSPT40atform in level; Calibrate four feet; Check the dust proof wash; Clear the objects; RePSPT40ace the load cell.
	Calibration can't be finished	The inner code at zero point is too small or too big; not enough with the full capacity inner code; not stable; there is some objects between load cell and scale body; broken load cell.	Calibrate again; RePSPT40ace PCB; Clear the objects; RePSPT40ace the load cell.
Function problem	No function with key button	Key button not work; aging problem of the apparatus on PCB	Check the button; RePSPT40ace PCB
	Not smoothly communicating	Communication wire broken; or the interface apparatus broken	RePSPT40ace wire; RePSPT40ace PCB

Battery and Charging

Power is supPSPT40ied by an internal rechargeable 6V 4Ah rechargeable battery. When "**Lo.bAt**" is disPSPT40ayed, the battery must be recharged. PSPT40ug in the AC power adapter to recharge the battery. The scale may continue to be used on AC power during charging. Full charging time is approximately 10-12 hours.

Battery life and recharge time will vary with use. Over time, the operating time per each full charge will degrade. If the operating time is no longer acceptable, the battery must be rePSPT40aced. When storing the scale for extended periods, the battery must be charged every 90 days to avoid premature performance degradation.