

AVAWEIGH

COMMERCIAL SCALES

USER MANUAL



Digital Price Computing Scales

Legal for Trade

334PCS15	334PCS40	334PCS40T	334PCS60	334PCS60T
15 lb.	40 lb.	40 lb. w/ Tower	60 lb.	60 lb. w/ Tower

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GENERAL & SAFETY INFORMATION

FOR USE IN DRY ENVIRONMENTS ONLY.

READ & UNDERSTAND ALL OPERATING INSTRUCTIONS BEFORE USING THIS PRODUCT

KEEP THIS MANUAL FOR FUTURE REFERENCE.

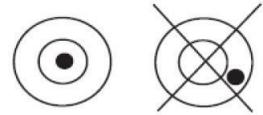
- Allow sufficient warm up time after turning the scale on to allow the internal components and load cell to have enough time to stabilize and balance heat.
- Avoid using in extreme heat or cold. For best results, keep away from wet environments or areas of intensive temperature, humidity, and pressure changes.
- For accurate results, read the scale immediately after the reading is stable. There may be minor fluctuations after an extended time.
- When storing the scale for extended periods, the battery must be charged every 90 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.

SPECIFICATIONS

	334PCS40	334PCS40T	334PCS15	334PCS60	334PCS60T
MAX CAPACITY	LB unit: 40lb x 0.01lb OZ unit: 640oz x 0.2oz KG unit: 20kg x 0.005kg	LB unit: 40lb x 0.01lb OZ unit: 640oz x 0.2oz KG unit: 20kg x 0.005kg	LB Unit: 15lb x 0.05lb OZ unit: 96oz x .05oz KG unit: 6kg x .002kg	LB Unit: 60lb x 0.02lb OZ Unit: 960oz x .5oz KG Unit: 30kg x 0.01kg	LB Unit: 60lb x 0.02lb OZ Unit: 960oz x .5oz KG Unit: 30kg x 0.01kg
MIN WEIGHT	0.2lb / 0.1kg / 4oz	0.2lb / 0.1kg / 4oz	0.2lb / 0.1kg / 4oz	0.2lb / 0.1kg / 4oz	0.2lb / 0.1kg / 4oz
MAX WEIGHT	40.09lb / 20.045kg / 641.8oz	40.09lb / 20.045kg / 641.8oz	15lb / 6kg / 96oz	60lb / 30kg / 960oz	60lb / 30kg / 960oz
TARE RANGE	40lb / 20kg / 640oz	40lb / 20kg / 640oz	15lb / 6kg / 96oz	60lb / 30kg / 960oz	60lb / 30kg / 960oz
ZERO RANGE	Power-on zero range: Calibration zero point -2%/+10%FS Zero point range: Power-on zero \pm 1.5%FS				
UNIT	kg / lb / oz (default at lb)				
INTERFACE	RS232 and USB (cables not included)				
LCD DISPLAY	14.2mm (0.56"), (18) digits: (6) for weight reading, (6) for unit price, (6) for total price				
UNIT PRICE RANGE	0.00 - 9999.99 \$/kg, \$/lb or \$/oz				
TOTAL PRICE RANGE	\$0 - 999.99 (limited by bar code print function, otherwise, it can be up to \$9999.99)				
PLU	265 including 5 direct PLU (Addr: M1-M5)				
WORKING TEMPERATURE	14° - 104°F (-10° - 40°C)				
HUMIDITY RANGE	<90% relative humidity, non-condensing				
POWER SUPPLY	12Vdc, \geq 500mA with positive center AC adapter (included) 6Vdc4AH lead-acid battery (included)				
SCALE DIMENSION (L x W x H)	290 x 327 x 118mm 11.42" x 12.87" x 4.65"	290 x 387 x 450mm 11.42" x 15.2" x 17.7"			
PLATTER SIZE (W x D)	285 x 210mm 11.22" x 8.27"	285 x 210mm 11.22" x 8.27"			

UNPACKING & SETUP

1. Take the scale out of 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.
2. 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 it's location is changed.
3. Before using the scale for the first time, the internal rechargeable battery should be fully charged for up to 12 hours.
4. 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.
5. If the scale will be stored or transported in the future, save the packaging material to ensure the best possible protection for the scale.



PACKING LIST

- Scale
- Weighing Platforms
- 12Vdc/500mA Adapter
- Manual
- Tower Assembly (334PCS40T Only)

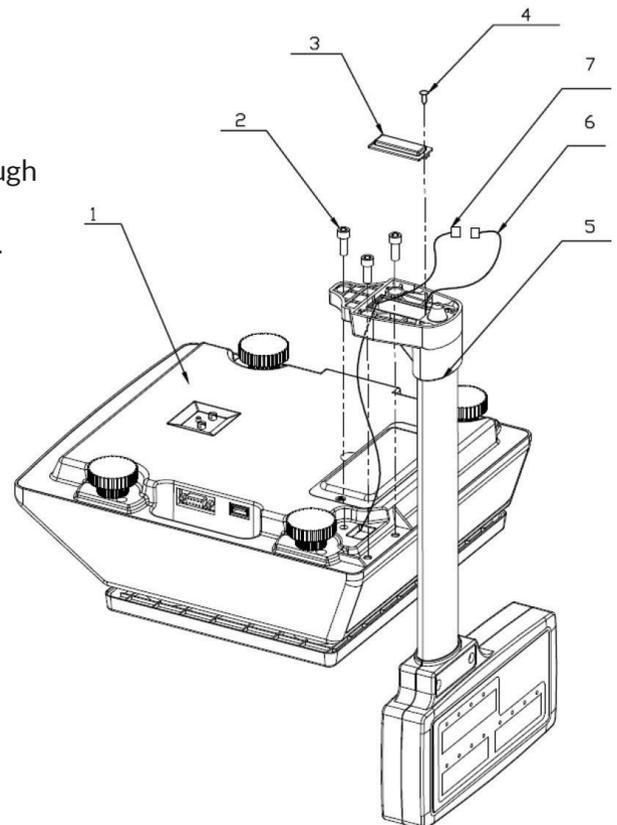
ASSEMBLY

334PCS40

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

334PCS40T

1. Install the weighing platforms onto the base, with the pan properly aligned.
2. Install the tower display.
 - Pass the socket on the bottom of the scale base through the pole bracket, and plug it into the connector.
 - Connect the column to the base and tighten together with the hexagon socket head cap screws.
 - Place the connector in the bracket, put on the cover, and fix it with tapping screws.

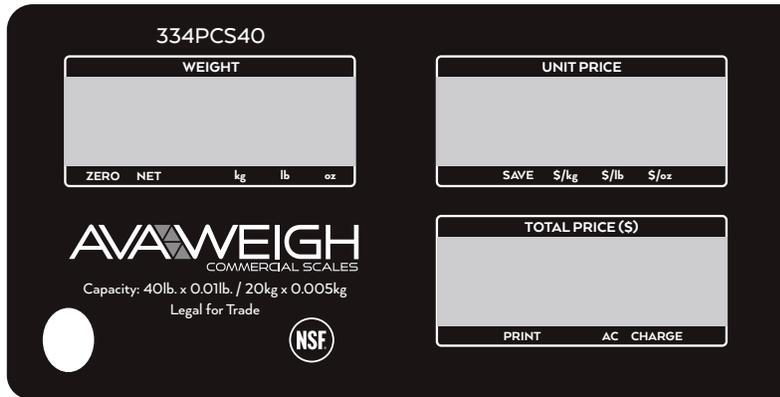


No.	Item
1	Scale Base
2	Hexagon Socket Head Cap Screws (3 pcs)
3	Cover
4	Tapping Screws (2 pcs)
5	Column
6	Connector
7	Socket

DISPLAYS

334PCS40

Front Display

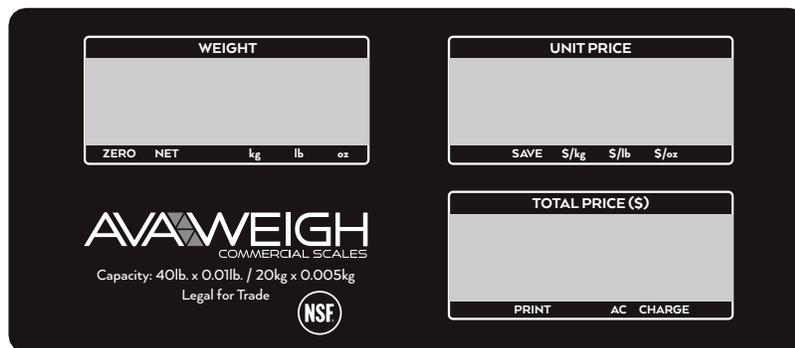


Rear Display



334PCS40T

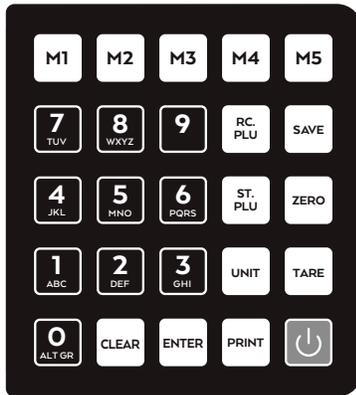
Front & Rear Tower Display



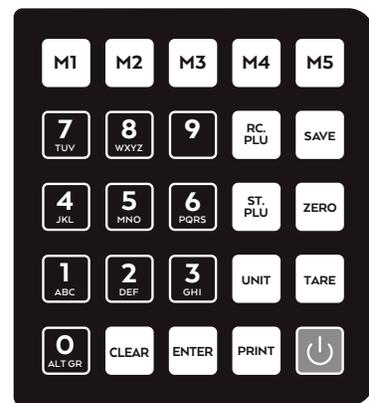
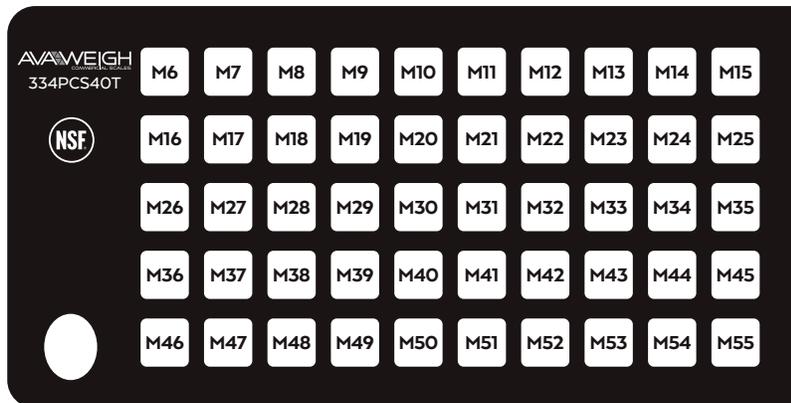
- **ZERO:** Scale is zeroed, gross weight is 0, tare is 0
- **TARE:** Display reading is net weight; tare is NOT 0
- **SAVE:** Unit price fixing indicator
- **kg/lb/oz:** Weight unit indicator
- **UNIT PRICE:** Unit price display window
- **\$/kg, \$/lb or \$/oz:** Unit price per kg/lb/oz indicator
- **TOTAL PRICE(\$):** Total price display window
- **PRINT:** Data output indicator
- **AC:** AC Adapter in-use indicator
- **CHARGE:** Battery being charged indicator

KEYPADS

334PCS40



334PCS40T



- **0-9:** Numeric keys, used to enter numerical data or letters
- **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 (334PCS40T only)
- **CLEAR:** Clears the recorded data
- **ENTER:** Confirms the operation or entered data
- **SAVE:** Saves the tare weight and unit price, so that the data will not be cleared after one weighing operation
- **ZERO:** Sets the zero point after the scale is stable. The range is "power-on zero point \pm 1.5%FS"
- **TARE:** Zeros out the weight. When the 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:** Outputs the data when RS232 hardware is attached
- **UNIT:** Switches the unit of price & weight
- **ON/OFF:** When the display is off, press key to turn on the scale. When the display is on, press and hold key for 3 seconds to turn off the scale. To exit current mode, press key.
- **ON/OFF+0:** Enters business's name setup mode
- **ON/OFF+1:** Enters LCD contrast setup mode
- **ON/OFF+2:** Enters auto-off time setup mode
- **ON/OFF+3:** Displays A/D inner code or working voltage
- **ON/OFF+4:** Enters RS232 parameters setup mode
- **ON/OFF+5:** Enters date and time setup mode
- **ON/OFF+6:** Enters ID setup mode
- **ON/OFF+7:** Enters OS2130D back feed setup mode (if "232.out" is set to HOST, this setting is invalid)
- **ON/OFF+8:** Enters OS2130D origin setup mode (if "232.out" is set to HOST, this setting is invalid)

DISPLAY CHARACTERS

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

OPERATIONS & SETTINGS

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.

TARE FUNCTION

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

WEIGHED TARE

1. 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.
2. 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.

PRE-SET TARE

1. Use the number keys to input the tare weight. Your entry will be displayed in the **UNIT PRICE** 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.
2. 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.
3. To clear the manually entered tare weight, press the **TARE** key to confirm.
4. 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

- Under non-save mode, tare and unit price will be cleared automatically
Press **SAVE** key to enter save mode.
- 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, to clear tare weight and unit price.

PRINT FUNCTION

In normal weighing mode, the zero function can be operated when the scale reading is stable (the weighing unit light is dim). Press **PRINT** key to output the data via RS232 or USB serial port according to the set method. Print formats are as follows:

- Print Out format in HOST mode

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

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

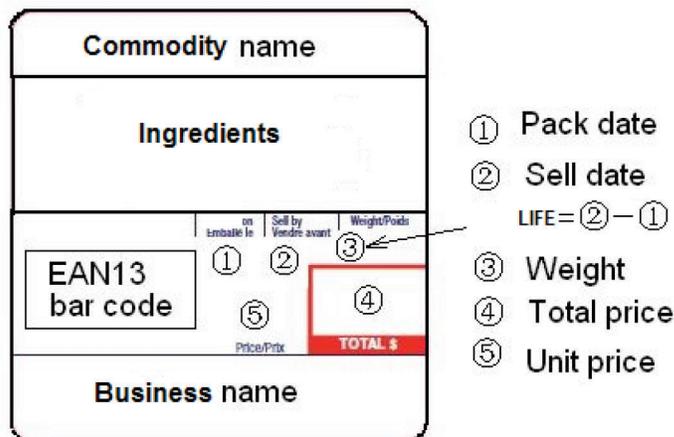


Label dimension is 58 x 40mm



Label dimension is 58 x 60mm

- Content of printed out label:



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 on the scale, the **WEIGHT** window will show its weight and **TOTAL PRICE** window will show its total value.

NOTE: After unit price is entered, if there is no operation in 3s, the scale will 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 & 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 first six characters of the trade name stored previously. If there is no stored name, the unit price window displays blank.
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 shelf life), the unit price shows the input data that stored previously. If there is no stored data, the unit price window displays 0.
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", "Unit.1" or "Unit.2" is shown in the **UNIT PRICE** window, that means the weight unit of the stored unit price is per kg (Unit.0), per lb (Unit.1), or per oz (Unit.2). "-----" 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 stored unit setting, namely, plus one to the last Address, then repeat the steps from 1-15. Or press **ON/OFF** key to finish inputting and go back to normal weighing mode.

RECALL DIRECT PLU

1. Recall the stored direct unit price by pressing M1-MXX key, the recalled unit price will be displayed in **UNIT PRICE** window. The **TOTAL PRICE** window will display the first six characters of the item name, 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 the first six characters of the item name 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)

LCD CONTRAST & BACKLIGHT MODE SETTING

1. In normal weighing mode, press and hold down **ON/OFF** and **1** key at the same time until the **WEIGHT** window shows "Setup", **UNIT PRICE** windows shows "BLT.MOD" (LCD backlight mode) and the **TOTAL PRICE** window shows the backlight mode "x" (x=1,2,3).
Use the **0-3** numerical keys to input the mode, and press the **ENTER** key for confirmation and go to step 2. Press **ON/OFF** key to exit this mode and the scale will automatically reset.
x=1 – backlight is always off
x=2 – backlight is always on
x=3 – backlight on request (backlight temporarily switches off after 15 seconds of inactivity)
In normal weighing mode, if the backlight mode is set to 1 or 3, press and hold **ON/OFF** key to toggle the backlight on or off.
2. When **UNIT PRICE** window shows "LCd.CST" (LCD contrast) and the **TOTAL PRICE** window shows the contrast level x (x=1-4, default is 1). 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.

AUTO-OFF TIME SETTING

1. 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 in minutes (xx=00-30 minutes, 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.

DISPLAY A/D INNER CODE AND WORKING VOLTAGE

1. In normal weighing mode, press **ON/OFF** and **3** key at the same time until the **WEIGHT** window shows "Code 2." 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 an AC power adapter, the voltage is the power adapter voltage after regulating. If an AC adapter is not used, the voltage is the battery's voltage. A/D internal code will be displayed in **TOTAL PRICE**.

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 (334PCS40/334PCS40T) is connected with host device, e.g. a PC)
 - 2.2 Prtd40 (334PCS40/334PCS40T) is connected with the OS-2130D, label dimension is 58mm × 40mm, date will be printed on label)
 - 2.3 Prtd60 (334PCS40/334PCS40T) is connected with the OS-2130D, label dimension is 58mm × 60mm, date will be printed on label)
 - 2.4 PrtNd4 (334PCS40/334PCS40T) is connected with OS-2130D, label dimension is 58mm × 40mm, no date will be printed on label)
 - 2.5 PrtNd6 (334PCS40/334PCS40T) 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, **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--19200bpsPress **ENTER** key for confirmation to go to the next step, **ON/OFF** key to exit this mode.
4. Then, the **WEIGHT** window will display "232.dFt" (data format), the **TOTAL PRICE** window will display 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 display "Prtd.dt" (OS-2130D print date format), the **TOTAL PRICE** window will display data format xxx. Use **0, 1, 2** key to select data format:
 - 0--CANADA Canadian format: YY MM DD
 - 1--USA USA format: DD-MM-YY
 - 2--Numerical format: YY.MM.DDPress **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--19200bpsPress **ENTER** key for confirmation to go to the next step, **ON/OFF** key to exit this mode.

8. Then, the **WEIGHT** window will display "USb.dFt" (data format), the **TOTAL PRICE** window will display 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 display "D.CODE", the **TOTAL PRICE** window will display 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 display "B.PRT.FT" (format of barcode for printing), the **TOTAL PRICE** window will show the barcode. Use the numerical key **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 displays 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 or oz)<CR> <EXT>
<LF>Tare:              xxx.xxx kg(or lb or oz)<CR> <EXT>
<LF>Net:               xxx.xxx kg(or lb or oz)<CR> <EXT>
<LF>Unit price:       xxxxxx.xx $/kg(or $/lb or $/oz)<CR><EXT>
<LF>Total price:      xxxxxx.xx $<CR> <EXT>

```

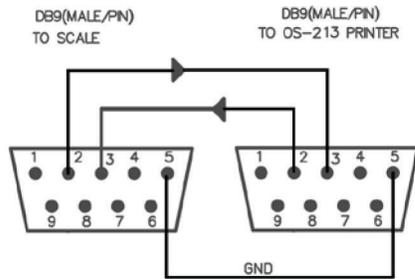
NOTE: The ID information can only be printed out after setting. Press **ENTER** key to confirm the input and go to the next step, or use **ON/OFF** key to exit this mode.

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:



DATE & TIME SETTING

- 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 will be lost after the scale is powered off if the rechargeable battery is not installed.
- After entering into this mode, the **WEIGHT** window will display "SETUP", the **UNIT PRICE** window will display "dAtE"(date, prompt to input date) and the **TOTAL PRICE** will display 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.
- When the **WEIGHT** window remains "SETUP", the **UNIT PRICE** displays "TiME"(time, prompt to input time) and the **TOTAL PRICE** window displays 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.

BUSINESS NAME SETTING

- 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.
- The **WEIGHT** window displays "bUSI.N1" (prompt to input "business name" in first line), the **UNIT PRICE** window and the **TOTAL PRICE** window display the last 12 char of the business name.
- 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.
- The **WEIGHT** window displays "bUSI.N2"(prompt to input "business name" in second line business name), the **UNIT PRICE** window and the **TOTAL PRICE** window display the last 12 char of the business name.
- 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.

KEY FUNCTIONS IN BUSINESS NAME SETTING MODE

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

ID SETTING

- 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 is reset)
- The **WEIGHT** window displays "SETUP", the **UNIT PRICE** window displays "Id" and the **TOTAL PRICE** window displays Id code xxxxxx(the default Id code is 000000).
- Use the numerical keys to input ID code, then press **ENTER** key to confirm the input and exit this mode.

OS-2130D BACK FEED SETTING

- 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).
- The **WEIGHT** window displays "SETUP", the **UNIT PRICE** window displays "BAK.FED"(Back Feed), and the **TOTAL PRICE** window displays "DISABL"(Disable).
- 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.

OS-2130D ORIGIN SETTING

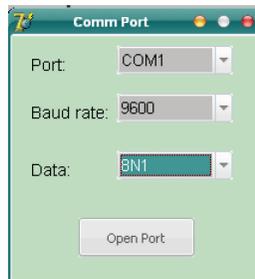
1. Under the normal working mode, press and hold **8** and **ON/OFF** key for more than 3s to enter this mode. In this mode, you can set the origin point (OS-2130D).
2. The **WEIGHT** window displays “SETUP”, the **UNIT PRICE** window displays “ORG.X”(Origin.X), and the **TOTAL PRICE** window displays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

PLU UPLOAD & DOWNLOAD

1. Connect the scale to PC through RS232 interface, run 334PCS40-40T.exe, this software can only process *.xls files.

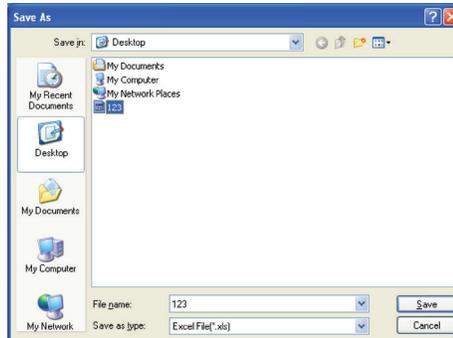
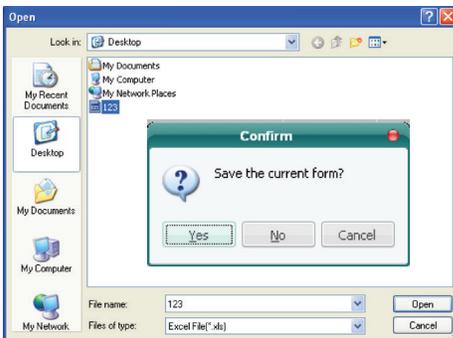


2. Software searches all serial ports on PC, and tries to connect with the scale. In the Status bar, it will separately display present serial port, baud rate, data format. Take the following figure for example, “COM2,2400,8N1” refers to the present serial port COM2, baud rate 2400, data format 8N1. If the connection status displays “Connecting the scale”, it means the Software is searching EHC-PH scale, if it displays “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 it connects with the scale. Manual connection is also available by using “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 dialog box to choose and open the right file.



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 display CAL.ON, which means the calibration switch is on. The UNIT PRICE window displays "Unit.0" or "Unit.1", which means the chosen calibration weighing unit is kg(Unit.0) or lb(Unit.1), the TOTAL PRICE window displays 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 displays CAL.ON, UNIT PRICE window displays "unLoAd" (this means that the scale is ready to calibrate the zero point position, please remove any weight on the scale), the TOTAL PRICE window display 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 display of the WEIGHT window remains the same, the UNIT PRICE window displays "LoAd", which means the scale is ready to calibrate the standard weight. The display of the TOTAL PRICE and WEIGHT window remain the same. Place 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 display of the WEIGHT window remains the same, the UNIT PRICE window displays "InP.Ld" Input Load Weight, the TOTAL PRICE window displays 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 please remove any weight on the scale.
7. When the WEIGHT window displays "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 completes, the UNIT PRICE window displays "CAL.END" and TOTAL PRICE window displays current weight.
9. If there's an error occurred in calibration, the scale will display CAL.ERR, It usually means incorrect data input or loading weight.
10. Once the calibration switch is changed to OFF; the scale will exit the calibration mode.

DISPLAY SYMBOL MEANINGS

888010	Weight signal is too large
888020	No proper data can be displayed
888030	Weight signal is too small
888040	Zero point is over the setting range
888050	Zero point is below the setting range
888060	Error in unit key operation
888120	The setting parameter(s) is not in normal range
888200	There is an error in calibration
888300	ADC is over max. range CAP. -----Capacity
000000	Voltage
5E PLU	To set and store the indirect unit price
888000	PLU address
000E00	Weighing unit selecting
000PLU	Recall PLU
0000AD	To unload the weight
000000	To load the weight
000000	To input load weight
080000	Calibration enable switch is ON
080000	Calibration enable switch is OFF

TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	SOLUTION	
Power-On Problem	No Display	Batteries loaded incorrectly, or adapter/plug loose/not connected	Check that the batteries are correctly loaded, if correct, replace batteries. Check power supply connections.
		Damage to electrical components	Replace with new PCB
		Key button malfunction	Replace with new Key button
	Displaying Irregular Characters	Crystal-Oscillator on PCB malfunction or MCU is not correctly inserted	Replace the Crystal-Oscillator. Correctly insert the MCU
	Does not go to 0 after testing display	Key, PCB, or Load Cell malfunction	Check the Key button, replace PCB or Load Cell
	Missing segments or marks on LCD	LCD connect pin broken	Replace LCD
Error	Err04 Zero point is over the setting range	Object on platform is more than 1.5%FS when pressing ZERO key; Load Cell zero balance changes	Remove the objects from the platform; calibrate again, or replace Load Cell
	Err05 Zero point is below the setting range	There is one foot not standing on solid base; Platter removed before power-on; Load Cell zero point output changes	Place all feet on solid base; Place platter back on scale; Calibrate again, or replace Load Cell
	Err20 Calibration error	Load Cell with no signal; Too small or large output; Load Cell signal wire broken; Load Cell broken; Load Cell zero point changes	Recalibrate scale; Replace PCB or Load Cell
	Err01 Weight signal too large	Weight exceeds max. capacity; The Load Cell output signal is too big	Remove the object; Change Load Cell; Recalibrate scale
	Err03 Weight signal too small	Platter removed while scale is on	Place platter back on scale
	Err30 ADC is over max. range	Load Cell signal is too large	Replace the Load Cell; Replace PCB
	Lo.bAt Low battery	Voltage is lower than 5.7V	Charge battery

	PROBLEM	POSSIBLE CAUSE	SOLUTION
Inaccurate Weighing or Unfinished Calibration	Different Areas of the Platform Give Different Weight Readings	Platform or feet are not level; Load cell broken; Objects between Load Cell & scale	Ensure the platform is level and that all four feet are on a solid, level surface; Clear the objects; Replace the Load Cell
	Big Tolerance with Full Corner		
	Repeating Function Malfunction	The platform is not level; Broken Load Cell; Aging problem with the PCB; Objects between Load Cell & scale	Ensure the platform is level and that all four feet are on a solid, level surface; Clear the objects; replace the Load Cell
	Calibration Can't Be Finished	The inner code at zero point is too small or too large; Scale is unstable; Objects between Load Cell & scale; Broken Load Cell	Recalibrate the scale; Replace PCB; Clear the objects; Replace the Load Cell
Function Problem	Key Button Malfunction	Broken Key button; Aging problem of the apparatus on PCB	Check the button, replace if necessary; Replace PCB
	Not Communicating Smoothly	Communication wire broken; Interface apparatus broken	Replace wire; Replace PCB

CHARGING THE BATTERY

Power is supplied by an internal rechargeable 6V 4Ah rechargeable battery.

When "Lo.bAt" is displayed, the battery must be recharged.

- Plug in the AC power adapter to recharge the battery.
- The scale may continue to be used on AC powered 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 replaced.
- When storing the scale for extended periods, the battery must be charged every 90 days to avoid premature performance degradation.