AVATEK™

USER MANUAL

12/2025

Digital Portion Scales

Legal for Trade

334PCN10	334PCN20
10 lb.	**20 lb.**

Table of Contents

General & Safety Information

Risk of electric shock: disconnect all power sources before making cable connections to the floor scale platform or indicator.

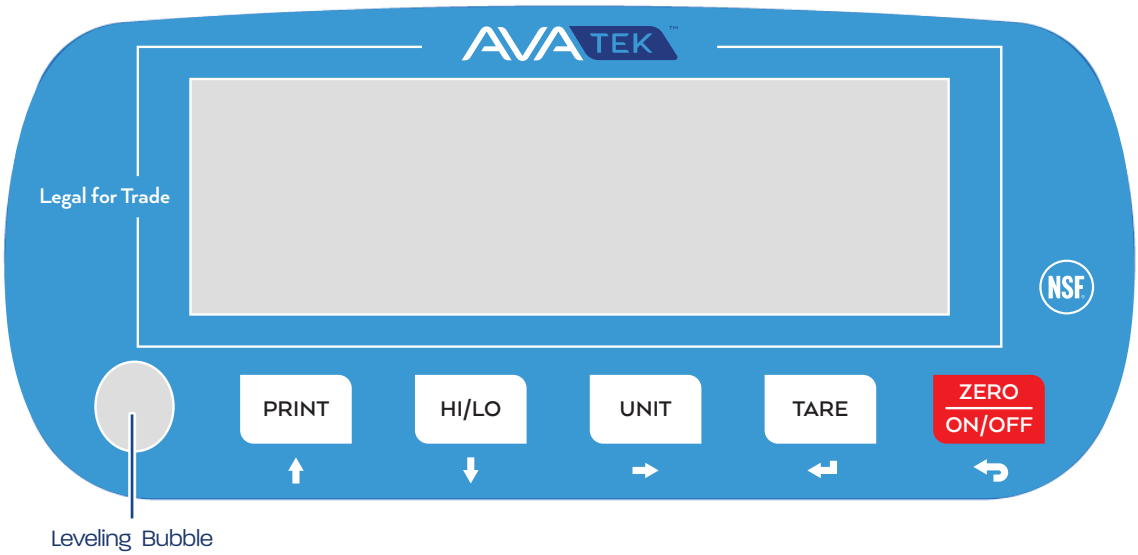
For use in dry environments only.

- Read & understand all operating instructions before using this product.
- Keep this manual for future reference.
- Allow sufficient warm up time. Turn the scale on and allow up to 10 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 90 days to avoid premature performance degradation. Over time, the operating time per charge will degrade. 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

Model	334PCN10	334PCN20
Max Capacity	10 lb. (5kg)	20 lb. (10kg)
Readability (certified e)	0.005 lb. (0.002 kg)	0.01 lb. (0.005kg)
Readability (d)	0.001 lb. (0.0005 kg)	0.002 lb. (0.001 kg)
Min Recommended Weight	0.1 lb. (0.0.04 kg)	0.2 lb. (0.1 kg)
Construction	Stainless steel platform, ABS housing	
Weighing Units	g / kg / lb. / oz.	
Calibration Units	kg / lb.	
Modes	Weighing	
Display	1-Window backlit LCD display, 0.68" (17.5mm) high, 5 ½ digits, 7-segment	
Zero Range	Power-on zero range: calibration zero point ±20% FS; ZERO key range: power-on zero ±5% FS	
Tare Range	Up to 100% FS	
Safe Overload Capacity	150% of capacity	
Stabilization Time	<3 seconds	
Operating Temperature	32°F - 104°F (0 - 40°C)	
Humidity Range	<85% relative humidity, non-condensing	
Power Supply	Alkaline Batteries: 6 x "AA" size cells AC Adapter: 9Vdc/600mA, central positive	
Communication Port	RS-232 with USB	
Platform Dimensions	7" x 7" (L x W)	
Base Dimensions	7" x 9 1/4" x 2" (L x W x H)	

Function Keys & Display



Function Keys

Keys	Mode		Definition
PRINT	Weighing Mode	<3s	Output data from communication port. In EXPAND mode, no data output.
		>3s	Enter the mode of viewing or selecting the Item Code
	Input Mode		Increases the digit in the flashing data entry position by 1.
HI/LO	Weighing Mode	<3s	Enter the Check-weighing mode.
		>3s	Enter or exit EXPAND mode when CONFIG-EXP = ON and LFT = ON.
	Input Mode		Decreases the digit in the flashing data entry position by 1, or modifies the menu selection.
UNIT	Weighing Mode	<3s	Switch weighing unit of measure.
		>3s	Enter the mode of parameter setting for RTC.
	Input Mode		Shifts the flashing data entry position from left to right.
	Inner Code / Voltage Mode		Switch to view Inner Code and Voltage.
TARE	Weighing Mode		Tare the weight, range 0-100%FS.
	Input Mode		Confirm input Data / Confirm menu selection.
	Inner Code Mode		Tare the inner or recover the tared inner code.
ZERO | ON/OFF	Power Off		Power on the scale.
	Weighing Mode	<3s	Zero the platform weight.
		>3s	Power off the scale.
	Other Modes		Cancel the operation and restart the scale.
ZERO | ON/OFF + TARE	LFT is set to OFF		Enter into calibration mode.
ZERO | ON/OFF + UNIT	Power On		Enter into USER menu parameter setting.

Display Characters

Digit	Symbol	Digit	Symbol	Digit	Symbol	Digit	Symbol	Digit	Symbol	Digit	Symbol
0		6		C		I		O		U	
1		7		D		J		P		V	
2		8		E		K		Q		W	
3		9		F		L		R		X	
4		A		G		M		S		Y	
5		B		H		N		T		Z	

Display Icons

Icon	Definition
	Scale is zeroed, gross weight is 0, tare is 0.
	Scale is stable.
NET	Display reading is net weight; tare is NOT 0.
lb	Measurement unit is lb. or lb. : oz.
oz	Measurement unit is oz. or lb. : oz.
kg	Measurement unit is kg.
	Battery level indicator.

Icon	Definition
HI	Data compare (check-weighing) is enabled. Current data (weight, pieces, or percent) is ABOVE the specified upper limit.
OK	Data compare (check-weighing) is enabled. Current data (weight, pieces, or percent) is BETWEEN the specified upper and lower limits.
LO	Data compare (check-weighing) is enabled. Current data (weight, pieces, or percent) is BELOW the specified lower limit.

Operation & Settings

Power ON / Power OFF

1. Place the scale on a flat, table surface. Level the scale using the leveling bubble at the lower left side of the display.
2. With the weighing platter empty, press the **ZERO | ON/OFF** key to power on the scale. The self-check will run, show the version number "***V01.00***", display full capacity e.g. "***CAP-xx***", at last, the scale will display a zero reading.
3. To power off the scale, press and hold **ZERO | ON/OFF** key.

Zeroing the Display

1. You can press the **ZERO | ON/OFF** key at any time to set the zero point from which all other weighing is measured. When the zero point is obtained, the display will show the indicator for zero.
2. **ZERO** key range is (power-on zero-point) ±2% FS. ZERO function is only activated when the scale is in a steady weighing mode. This also clears the recorded tare weight, the "**ZERO**" indicator will be lit up, while the "**NET**" indicator will be off.

Normal Weighing Mode

- When scale is powered on and back to 0, place the weighing objects on the platform. The display will show the weight and the units of weight currently in use.

Taring

1. Zero the scale by pressing the **ZERO | ON/OFF** key if necessary when reading is stable. The zero indicator will be on.
2. Place a container on the platform, a value for its weight will be displayed.
3. Press the **TARE** key to tare the scale. The weight that was displayed is stored as the tare value and that value is subtracted from the display, leaving zero on the display. The "**NET**" indicator will be on. As product is added only the weight of the product will be shown. The scale could be tared a second time if another type of product was to be added to the first one. Again only the weight that is added after taring will be displayed.
4. When the container is removed a negative value will be shown. If the scale was tared just before removing the container this value is the gross weight of the container plus all product that was removed. The zero indicator will also be on because the platform is back to the same condition it was when the **ZERO | ON/OFF** key was last pressed.

   NOTE: TARE range for this scale is up to 100%FS.

Switching Unit Of Measurement

- In normal weighing mode, press and hold Tare/Unit key to switching the measuring units between lb, kg, g, oz, lb:oz.

Check Weighing (Data Compare)

- Check-weighing is a procedure to cause an alarm to sound when the weight on the scale meets or exceeds values stored in memory. The memory holds values for a high limit and a low limit. Either limit can be used or both can be used.
- In normal weighing mode, press the **HI/LO** key, the display will show "***COMP***", then set the high and low limitation as per the following steps:
  - Press the **PRINT** key to increase the digit in the flashing data entry position by one.
  - Press the **HI/LO** key to decrease the digit in the flashing data entry position by one.
  - Press the **UNIT** key to shift the flashing data entry position from left to right.
  - Press the **TARE** key to confirm the input data.
  - Press the **ZERO | ON/OFF** key to exit the mode and back to normal weighing mode.
- After pressing the **TARE** key, the scale will return to weighing with the Check-weighing function enabled. When a weight is placed on the scale the ***HI/OK/LO*** symbol will be shown if the weight is above or below the limits and beeper function will sound as described below.
- **BOTH LIMITS SET**
  The display will show "***OK***" when the weight is between the limits.
- **LOW LIMIT SET, HIGH LIMIT IS SET TO ZERO**
  The display will show "***OK***" when the weight is higher than the Low Limit.
  Above the High Limit the display will show "***LO***".
- **HIGH LIMIT SET, LOW IS SET GREATER THAN HIGH**
  The display will show "***OK***" when the weight is less than the High Limit.
  Above the high limit, the display will show "***HI***".

  NOTE: Beeper sound works depending on how the "***Cbz xxx***" in user manual is set.

Set Real-Time-Clock

- In normal weighing mode, press and hold **UNIT** key until "***RTC***" is displayed,
  "***XX.XX.XX***" will be displayed, use below keys to alter date settings:
  - Press the **PRINT** key to increase the digit in the flashing data entry position by one.
  - Press the **HI/LO** key to decrease the digit in the flashing data entry position by one.
  - Press the **UNIT** key to shift the flashing data entry position from left to right.
  - Press the **TARE** key to confirm the input data.
  - Press the **ZERO | ON/OFF** key to exit the mode and back to normal weighing mode.
- When "***XX.XX.XX***" is displayed, follow the above same operations to do the same **TIME** setting.
- After the date and time is set correctly, the scale will automatically return to the normal weighing mode. Otherwise, it remains in real-time-clock setting mode.

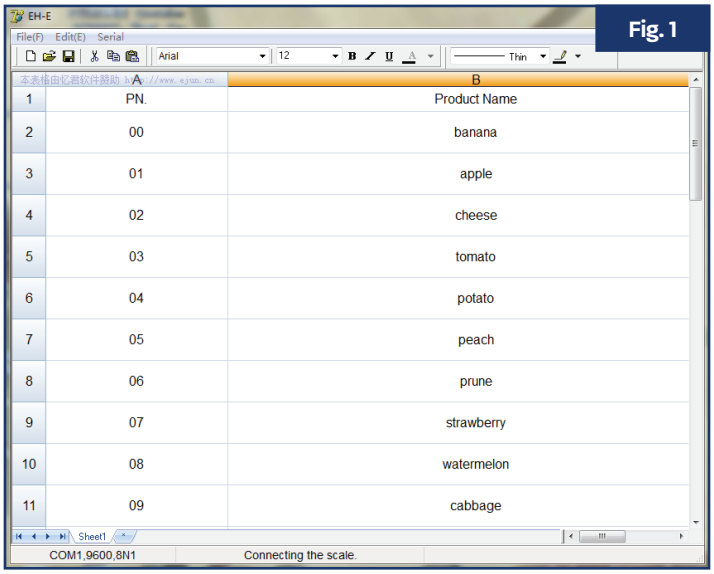
Set Item Code

- In normal weighing mode, press and hold **PRINT** key until "***ITMC xx***" is displayed. "***xx***", is the item code (range 00 - 39, corresponding to a product name with max length of 20 char) and will be stored in scale after setting. Use below keys to do the item Code setting:
  - Press the **PRINT** key to increase the digit in the flashing data entry position by one.
  - Press the **HI/LO** key to decrease the digit in the flashing data entry position by one.
  - Press the **UNIT** key to shift the flashing data entry position from left to right.
  - Press the **TARE** key to confirm the input data.
  - Press the **ZERO | ON/OFF** key to exit the mode and back to normal weighing mode.

Download Product Names to Scale Via Scale Mate Software

1. Open the scale mate software, input the product name (Fig. 1). The edited information can be saved as a ".xls" file.
2. Connect the scale with the computer via RS232 port, then power on the scale. Normally, the scale will be automatically connected to the computer and shows "This scale is connected". If not, click the "Serial" menu on the software (Fig. 2) to set the baud rate to 9600 and Data to 8N1, then confirm by clicking "open port" (Fig. 3).
3. Open the edited ".xls" file, click "download" in serial menu to download the product names into the scale.

Fig. 1



	A	B
1	PN.	Product Name
2	00	banana
3	01	apple
4	02	cheese
5	03	tomato
6	04	potato
7	05	peach
8	06	prune
9	07	strawberry
10	08	watermelon
11	09	cabbage

Fig. 2

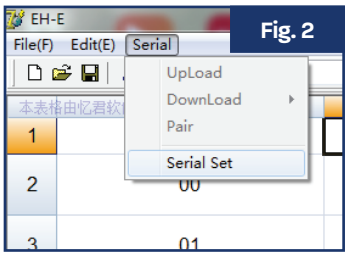
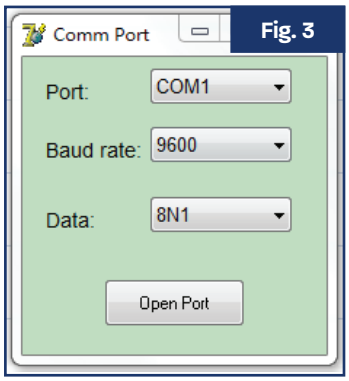


Fig. 3



Data Output (Print)

- When reading is stable, press **PRINT** to output data via the RS232 port to PC or OS-2130D printer.
  - RS232 output baud rate: 9600bps.
  - Data: 8N1 (8 dta bits, 1 stop bit, 1 start bit).
- See printout formats in images to the right.
  - Fig. 4 - HOST mode (a PC is connected).
  - Fig. 5 - OS-2130D printer is connected.

Fig. 4

```
Date:   x x - xx - xx
Time:   x x : xx : xx
P.No:    xx       (       item code)
P.NM:    xxxxxxxx   ( product name)
Gross:   x.xxx uu    (uu = kg, g, lb, oz)
Tare:    x.xxx uu    (uu = kg, g, lb, oz)
Net:   x   .xxx uu   ( uu = kg, g, lb, oz)
=============
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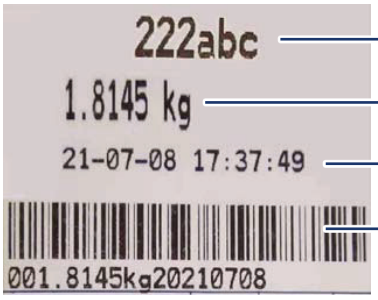
Fig. 5



Product Name

Net Weight

Date and Time

Barcode
(Code 128B, including item code / weight / unit / date)

User Submenu

- When the scale is on, press **ZERO | ON/OFF** and **UNIT** keys till "***USER***" is displayed, then release the two keys.
- Press and hold the **ZERO | ON/OFF** key to exit.

Parameter	Options	Factory Setting	Definition
A.O.T. x Auto off time	0-9	5	0 = No auto power off. 1-9 = Auto power off after (1-9) minutes of no operation or weight changing.
BLT. x LCD backlight	0-2	3	0 = Always off. 1 = Always on.. 2 = Auto on when key operation or weight change auto off after 15s elapsed.
CST. x LCD contraction level	0-5	5	1-5 = From weak to strong.
PRT. xxx RS232 interface connection	HST OS	OS	HST = Connect to a computer. OS = Connect to OS-2130D printer.
CBZ. xxx When buzzer beeps in check-weighing mode	OFF OUT O.H IN L.L	in	OFF = No beep. OUT = Beep when lower than low limitation or higher than high limitation. O.H = Only beep when in higher than high limitation. IN = Beep when in range of low and high limitation. L.L = Only beep when lower than low limitation.