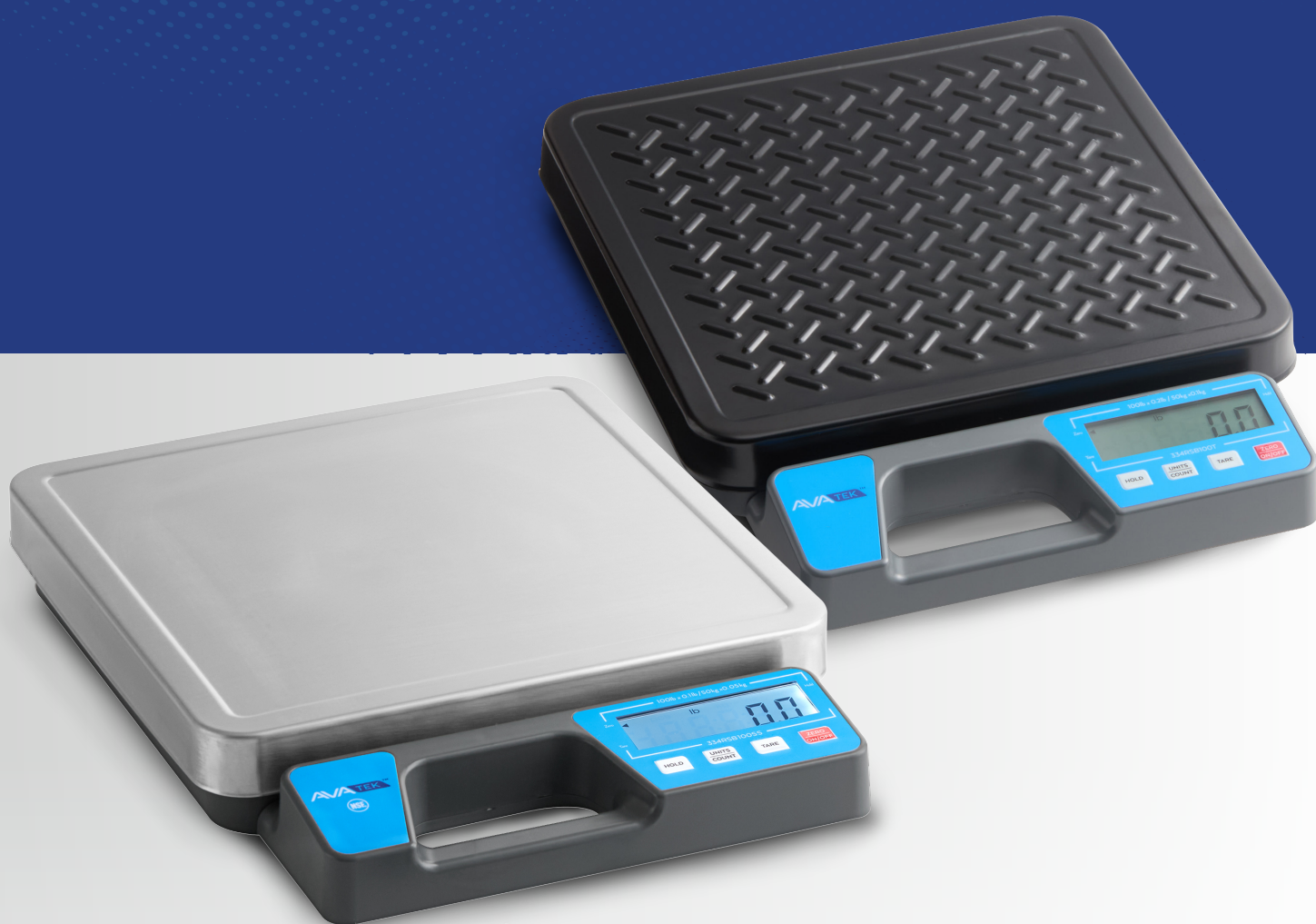


Digital Receiving / Portion Scale

with Built-in Handle



Standard Platform			Treaded Platform	
334RSB50SS	334RSB100SS	334RSB250SS	334RSB100T	334RSB250T
50 lb.	100 lb.	250 lb.	100 lb.	250 lb.

Introduction & Installation

General and Safety Information



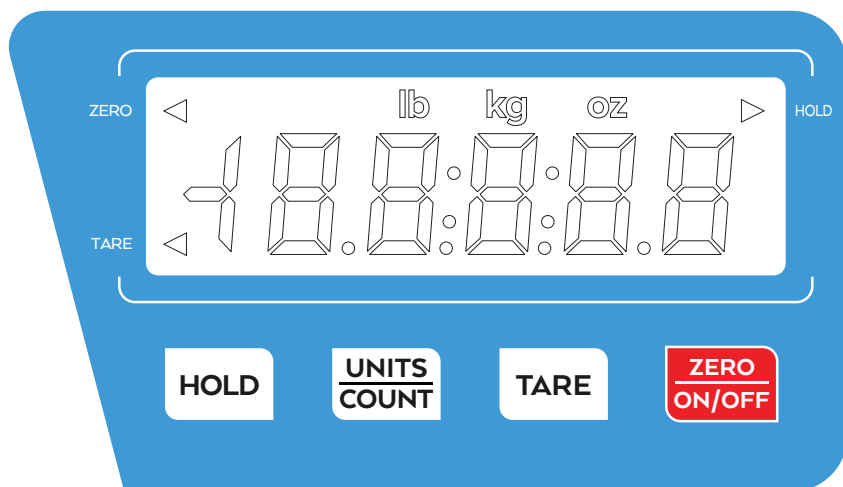
Risk of Electrical Shock: Disconnect all power sources before making cable connections to the scale platform or indicator.

- For use in dry environments only.
- Do not operate in hazardous areas.
- Read and understand all operating instructions before using this product. Keep this manual for future reference.
- Record the weight shortly after placing a load on the platform. After extended periods, the load cell's output signal may result in a less accurate reading.
- Place the scale on a hard, flat, and level surface before using.
- 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.
- Allow sufficient warm up time. Turn the scale on and allow up to 2 minutes for internal components to stabilize before weighing.
- 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.
- Avoid using in heavy vibration or heavy airflow conditions.

Specifications

Model		334RSB50SS	334RSB100SS	334RSB250SS	334RSB100T	334RSB250T
Capacity / Division	lb.	50 lb. x 0.5 oz.	100 lb. x 0.1 lb.	250 lb. x 0.2 lb.	100 lb. x 0.2 lb.	250 lb. x 0.5 lb.
	kg	22 kg x 0.01 kg	50 kg x 0.05 kg	120 kg x 0.1 kg	50 kg x 0.1 kg	110 kg x 0.2 kg
Platter Material		Stainless Steel			Non-Skid Treaded Stainless Steel	
Platter Size		12" x 12" (305 x 305mm)				
Weighing Units		kg / lb. / lb.:oz.				
Application Modes		Weighing / Counting				
Display		0.65" (16.5mm) 7-Segment LCD, 5½ Digits with Backlight				
Zero Range		±20% of Full Capacity				
Tare Range		Full Capacity				
Stabilization Time		<3 Seconds				
Operating Temperature		40-105°F (5-40°C)				
Humidity Range		<90% Relative Humidity, Non-Condensing				
Power Supply		Alkaline Batteries: (4) AAA Size Cells AC Adapter: 9Vdc/600mA, Central Positive				
Safe Max Overload		150% of Capacity				

Control Panel



Function Keys

Key	Mode		Definition
ZERO ON/OFF	Weighing Mode	<3 Seconds	Zero the platform weight.
		>3 Seconds	Power off the scale.
	Setup or Calibration Mode/Displaying A/D Code or Input Voltage Mode		Exit to normal weighing mode.
TARE	Weighing Mode		Tare the weight.
	Setup or Calibration Mode		Confirm the input data and continue to next step.
UNITS COUNT	Weighing Mode	<3 Seconds	Select units of measure.
		>3 Seconds	Enter counting mode.
	Counting Mode		Add the flashed digit by 1.
HOLD	Weighing Mode		Enter or exit HOLD mode.
	Other Modes		Change the digit on flashed position to the right.
ZERO ON/OFF + HOLD	Weighing Mode	>3 Seconds	Go to show A/D code or input working voltage of indicator mode.
ZERO ON/OFF + TARE	Weighing Mode	>3 Seconds	Enter calibration mode.
ZERO ON/OFF + UNITS	Weighing Mode	>3 Seconds	Enter user parameter setup mode.

Display Icons

Icon	Definition
ZERO	Scale is zeroed and gross weight is 0, tare is 0.
TARE	Display reading is net weight; tare is not 0.
lb.	Unit of measure is lb. or lb. : oz.
oz.	Unit of measure is lb. or lb. : oz.

Icon	Definition
kg	Unit of measure is kg.
HOLD	Scale is in HOLD mode.
	Flashing: Actual fluctuating weight is displayed. Solid: Locked weight is displayed.

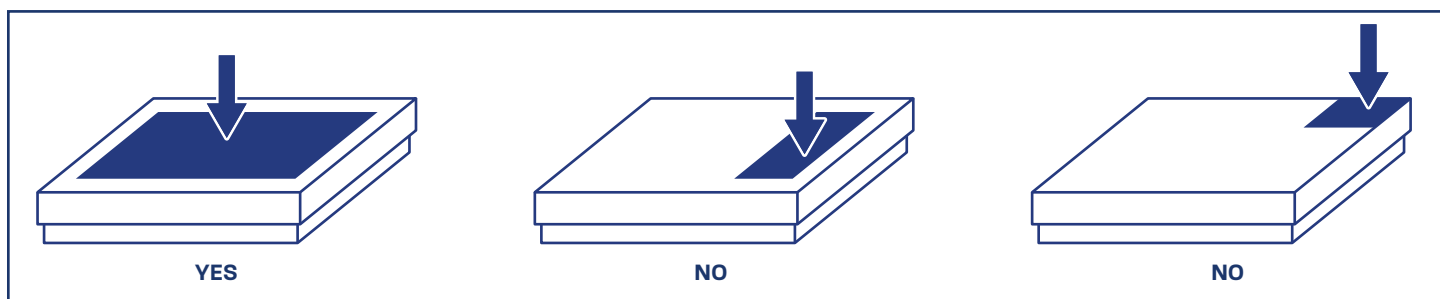
Display Characters

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

Operations

Normal Weighing Mode

1. Power on the scale by pressing the **ZERO/ON/OFF** key.
2. When the display stabilizes, but it doesn't show zero, press **ZERO/ON/OFF** to set a new zero point.
3. Place objects on the scale platform and read the weight on the indicator.
NOTE: Objects should be placed at the center of the platform. Corner or side loading heavy objects may risk overloading an individual load cell and damage the scale.



4. To change the weight unit of measure, press the **UNITS/COUNT** key.
5. Power off the scale by pressing and holding the **ZERO/ON/OFF** key for 4 seconds.

Zero

1. If the display does not show “0”, and there is nothing on the platter, press the **ZERO/ON/OFF** key to zero the reading.
2. Zero range: $\pm 20\%$ * full Capacity.
3. The zero function is unavailable when the displayed reading is out of the zero range and the indicator will show the error message “0---” or “0___”, meaning the scale is over or under zero range.

Setting A Tare Weight

1. Zero the scale as described above.
2. Place an empty container on the platform, press the **TARE** key. The display will return to zero, eliminating the weight of the container. The **TARE** indicator will be lit on the display.
3. Put the material or object to be weighed in the container. The net weight will be displayed.
4. To exit tare mode, remove all weight from the scale. The display will show a negative weight. Press the **TARE** key to return the display to zero.

Hold Function

1. The Hold function is used if you would like to hold the results on the display after the weight/load has been removed from the scale.
2. Press **HOLD** key while scale is under load.
3. HOLD indicator will be lit on the display.
4. The weight remains saved in the display after unloading the scale.
5. For deactivation of the Hold function, press the **HOLD** key again.

Counting

1. In normal Weighing mode, press and hold the **UNITS/COUNT** key for more than 4 seconds to enter Counting mode.
2. When the scale displays “**SPL.--**”, put the sampling objects on the center of the scale platter, press **TARE** key to confirm.
3. Now scale displays “**00000**” and the first 0 flashes. Input the samples quantity by pressing **UNITS/COUNT** and **HOLD** keys, press **TARE** key to confirm.
4. Now put more objects on the scale for counting.
5. In Counting mode, press and hold **UNIT** key to go back to Weighing mode.

Calibration

NOTE:

- Before calibrating the scale, you should prepare standard weights (more than 25% of FS weight) for calibration.
 - In the following steps, pressing **ZERO/ON/OFF** will exit calibration.
1. Move all weight from the scale. Under normal weighing mode, press and hold **TARE** and **ZERO/ON/OFF** keys for more than 4s to enter calibration mode.
 2. The indicator will show "**CAL-?**", which means the scale is ready for calibration. Press the **TARE** key to confirm and continue into calibration mode.
 3. When "**CAL.P0**" is displayed, the scale will begin to calibrate the zero-point of the scale. Remove all weight from the scale. Press the **TARE** key to confirm, or press the **ZERO/ON/OFF** to exit this mode. After receiving the reasonable zero-point data, the next step will automatically occur.
 4. When "**CAL.P1**" is displayed, the scale will be calibrated on second calibration point. The default standard weight is 100%FS. Load 12.5%-100%FS weight on the scale, then use the **UNIT** and **HOLD** keys to input the loaded weight. Press the **TARE** key to confirm the input, and then the indicator will flash the input standard weight. After the scale becomes stable, the indicator will automatically be directed to next step. If the second point cannot be calibrated correctly, it will display "**CAL.Er**" and return back to step 3 for re-calibration.
 5. When "**CAL.P2**" is displayed, the scale will be calibrated on third calibration point. Load 25%-100%FS (must be equal or larger than the weight from the CAL.P1) weight on the scale. Other operations same as step 4.
 6. When "**CAL.P3**" is displayed, the scale will be calibrated on fourth calibration point. Load 50% -100%FS (must be equal or larger than the weight from the CAL.P2) weight on the scale. Other operations same as step 4.
 7. When "**CAL.P0**" is shown again, the scale will calibrate the zero-point again. Remove any weight from the scale, press the **TARE** key to confirm. If the indicator receives reasonable data, it will calculate and store all parameters into EEPROM. Then it will auto-reset, and back to weighing mode. If an error occurred in calibration, the scale will display "**CAL.Er**" and then it necessary to repeat the calibration.

User Parameter Setup

1. When the scale is off, press and hold **ZERO/ON/OFF** and **UNIT** keys until "**SETUP**" is shown, indicating that the scale is in Configuration parameter setup mode.
2. During the setup mode, press the **UNIT** key to change the flashed digits, press the **HOLD** key to change the flashed digit position. Press the **TARE** key to confirm the flashed digits. Press the **ZERO/ON/OFF** key to exit this mode.

Parameter	Settings	Default
P1.xy Auto-Off Time	0 = No auto-off; 01-15 = Minutes auto-off time	5
P2.xy Hold Function	0 = No hold function; 1 = Hold larger weight reading; 2-50 = When the variety is within +2d ~ +50d, auto hold the current displayed weight. When the weight below 10d, release the HOLD function. Auto-hold new stable weight when a new weight is more than 10d.	2
P3.xy Resolution	00 = 500 08 = 2400 16 = 7500 24 = 35000 01 = 600 09 = 2500 17 = 8000 25 = 40000 02 = 750 10 = 3000 18 = 10000 26 = 50000 03 = 800 11 = 3500 19 = 12000 27 = 60000 04 = 1000 12 = 4000 20 = 15000 28 = 70000 05 = 1200 13 = 5000 21 = 20000 29 = 75000 06 = 1500 14 = 6000 22 = 25000 30 = 80000 07 = 2000 15 = 7000 23 = 30000 31 = 100000	
P4.x Division	0 = 1 1 = 2 2 = 5	
P5.x Decimal Point In Calibration	0 = x1 1 = x0.1 2 = x0.01 3 = x0.001 4 = x0.0001 5 = x10	
P6.x Calibration Unit	0 = kg 1 = lb	0
P7.x Weighing Units Enable	0 = only kg 2 = only lb:oz 5 = lb or lb:oz; 1 = only lb 4 = kg or lb:oz 6 = kg, lb, or lb:oz	6
P8.x Power-On Zero-Point Range	0 = Calibration Zero-Point +1%FS 4 = Calibration Zero-Point +20%FS 1 = Calibration Zero-Point +2%FS 5 = Calibration Zero-Point +50%FS 2 = Calibration Zero-Point +5%FS 6 = Calibration Zero-Point +100%FS 3 = Calibration Zero-Point +10%FS 7 = No Limitation	7
P9.x Zero Range for ZERO Button	0 = Power-On Zero-Point +1%FS 5 = Power-On Zero-Point +10%FS 1 = Power-On Zero-Point +2%FS 6 = Power-On Zero-Point +20%FS 2 = Power-On Zero-Point +3%FS 7 = Power-On Zero-Point +50%FS 3 = Power-On Zero-Point +4%FS 8 = Power-On Zero-Point +100%FS 4 = Power-On Zero-Point +5%FS 9 = No Limitation	4

Parameter	Settings	Default
P10.x Data As Current Power-On Zero Point (Weight signal is in power-on zero point range)	0 = Current Weight 1 = Calibration Zero-Point 2 = Switch-Off Zero-Point	0
P11.x Data As Current Power-On Zero Point (Weight signal is NOT in power-on zero point range)	0 = Current Weight 1 = Calibration Zero-Point 2 = Switch-Off Zero-Point 3 = Continuously Display "0-----"	3
P12.x Zero Tracking Range	0 = 0d, No Tracking 2 = +0.5d 4 = +1.5d 6 = +3d 8 = +5d 1 = +0.25d 3 = +1d 5 = +2d 7 = +4d	6
P13.x Data Filter Intensity	0 = Very Weak 1 = Weak 2 = Middle 3 = Strong	2
P14.x Check Weight Stability Range	0 = +0.5d 2 = +1.5d 4 = +3d 6 = +5d 8 = +7d 1 = ±1d 3 = +2d 5 = +4d 7 = +6d 9 = +8d	3
P15.x Overload Limit Range	0 = FS+0d 2 = 101%FS 4 = 105%FS 6 = 120%FS 8 = 200%FS 1 = FS+9d 3 = 102%FS 5 = 110%FS 7 = 150%FS 9 = No Limitation	1
P16.x Backlight On-Off Mode Selection	0 = Backlight is Always Off 1 = Backlight is Always On 2 = Backlight is Auto On And Auto Off. Auto Off after 10s with no key operation, and Auto On when scale is unstable or has some key operation.	2
P17.x Wave Tare Sensitivity For External Display	0 = Wave Tare is Disabled 1-8 = Sensitivity Level (1 = Close Distance - 8 = Long Distance)	5

Quick Conversion Chart (for use with P4 & P5)

Kg	Lb.	Lb. : Oz.
0.0001kg	0.0002 lb	N/A
0.001kg	0.002 lb	N/A
0.01kg	0.02 lb	0.5oz
0.1kg	0.2 lb	5 oz
1kg	2 lb	N/A
10kg	20 lb	N/A
0.0002kg	0.0005 lb	N/A
0.002kg	0.005 lb	0.1 oz
0.02kg	0.05 lb	1 oz

Kg	Lb.	Lb. : Oz.
0.2kg	0.5 lb	N/A
2kg	5 lb	N/A
20kg	50 lb	N/A
0.0005kg	0.001 lb	N/A
0.005kg	0.01 lb	0.2 oz
0.05kg	0.1 lb	2 oz
0.5kg	1 lb	N/A
5kg	10 lb	N/A
50kg	N/A	N/A

Symbol Definitions

Symbol	Definition
0 ----	Zero point is over the setting range.
0 _____	Zero is below the setting range.
Ad ----	Analog digital converter chip over max. range.
Ad _____	Analog digital converter chip below min. range.
-----	Weight signal is too large.
_____	Weight signal is too small.
CAL-Px	Scale's calibration point.
CAL.Er	There is an error in calibration.
► Hold (H)	Hold function is active.
Net ◀	The display reading is net weight.
Zero ◀	The scale is at zero point.
CAP.--	Scale is at full capacity.
d.--	The division will be displayed.
Px.y	The Parameter (x) is set to (y). See chart on page 8-9.
Lo.bAt	The voltage of batteries or input power is below 4.7V.

Troubleshooting

Symptom	Probable Cause	Remedy
Does not turn on.	1. AC adapter is not securely connected. 2. Low battery. 3. Indicator is damaged.	1. Re-plug the AC adapter or rotate the plug to securely connect to the scale. 2. Replace the batteries. 3. Replace with a new indicator and perform calibration.
Ad ----	1. The cable from platform to indicator is not correctly connected, disconnected, or has short circuited. 2. Indicator is damaged. 3. Load cell cable is broken. 4. Load cell is damaged.	1. Check the cable. 2. Replace with a new indicator and perform calibration. 3. Return the scale for repair.
Ad ----		
o ----	Indication is out of key zero range.	Reduce the weight on platform, till the indication is within the key zero range.
o ----	Weight reading below Power On Zero limit.	1. Check whether an object is stuck between scale base, if yes, remove the object. 2. Perform zero calibration.
-----	1. Weight reading exceeds overload limit. 2. The weight value cannot be displayed in the current unit of measure because it exceeds 6 digits.	1. Reduce load on the scale until a weight value is displayed. 2. Use a more appropriate unit of measure.
-----	Weight reading below Under load limit.	1. Loosen the shipping protection screws. 2. Perform zero calibration.
CAL.Er	1. Input data or loaded weight is too small, or too big. 2. Weight signal is unstable, non-linear.	1. Input correct data, load correct weight onto platform. 2. Return the scale for repair.
Cannot zero the display.	1. Load on scale exceeds allowable limits (20%FS). 2. Load on the scale is unstable.	1. Remove load from the scale. 2. Wait for the load to stabilize, then press the ZERO/ON/OFF key to zero the display.
Max. capacity not same as marked on overlay.	Parameters are not correctly set.	Re-set parameters per table on page 7-8.
Any function invalid.		
Any measuring units missed.		
Weighing is not accurate.	1. An object is stuck between the load cell and scale base. 2. Load cell received a heavy impact.	1. Remove the object. 2. Perform calibration. 3. Place the load on the center of the weighing platform.