

## **USER MANUAL**



# Digital Receiving/Portion Scales

with Built-In Handles

**Stainless Steel Platter** 

334RSB50SS **50 lb.** 

334RSB100SS

334RSB250SS

100 lb. 250 lb.

**Non-Skid Treaded Platter** 

334RSB100T

334RSB250T

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**

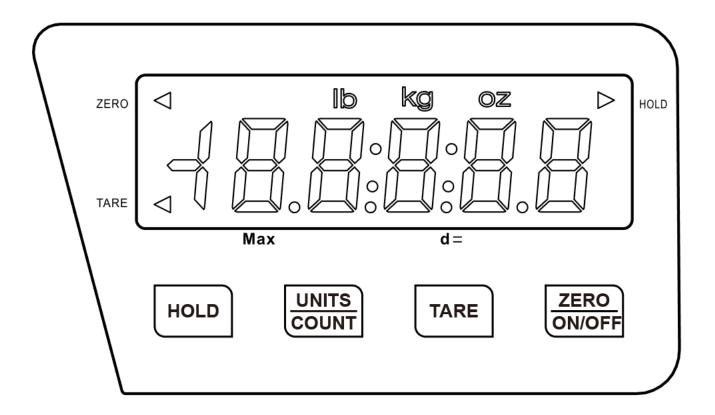
	334RSB50SS	334RSB100SS	334RSB250SS	334RSB100T	334RSB250T
CAPACITY/	50 lb. x 0.5 oz.	100 lb. x 0.1 lb.	250 lb. x 0.2 lb.	100 lb. x 0.2 lb.	250 lb. x 0.5 lb.
DIVISION	22kg x 0.01kg	50kg x 0.05kg	120kg x 0.1kg	50kg x 0.1kg	110kg x 0.2kg
PLATTER MATERIAL	Stainless Steel Non-Skid Treaded Stainless S			ed 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				

### **CONTROLS & FUNCTIONS**

### INDICATOR DISPLAY CHARACTER DEFINITIONS

ASCII	LCD/LED Show	ASCII	LCD/LED Show	ASCII	LCD/LED Show
0	<b>B</b> .	Α	8.	N	<b>B</b> .
1	8.	В	8.	0	8.
2	8.	С	8.	Р	8.
3	8.	D	8.	Q	8.
4	8.	Е	8.	R	8.
5	8.	F	8.	S	8.
6	8.	G	8.	Т	8.
7	8.	Н	8.	U	8.
8	8.	I	8.	V	8.
9	8.	J	8.	W	8.
		K	8.	Х	8.
		L	8.	Y	8.
		М	8.	Z	8.

### **CONTROL PANEL**



- 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.
- kg Unit of measure is kg
- HOLD Scale is in HOLD mode.
  - Hold flashes actual fluctuating weight is displayed.
  - Hold does not flash locked weight is displayed.

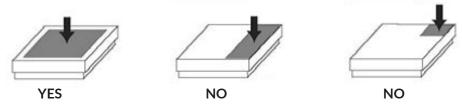
#### **FUNCTION KEYS**

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

### **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**

- If the display does not show 0, and there is nothing on the platter, press the ZERO/ON/OFF key to zero the reading.
- Zero range: ±20% \* full Capacity.
- 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**

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.

- 1. Press HOLD key while scale is under load.
- 2. HOLD indicator will be lit on the display.
- 3. The weight remains saved in the display after unloading the scale.
- 4. For deactivation of the Hold function, press the HOLD key again.

#### **COUNTING**

In normal Weighing mode, press and hold the UNITS/COUNT key for more than 4 seconds to enter Counting mode.

- 1. When the scale displays "SPL.--", put the sampling objects on the center of the scale platter, press TARE key to confirm.
- 2. 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.
- 3. Now put more objects on the scale for counting.
- 4. 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.PO" 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 step3 for recalibration.
- 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.PO" 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 PARAMETERS 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	SETTING	FACTORY SETTING	
P1.xy	AUTO-OFF TIME SETTING: 0 = no auto-off; 01-15 minutes auto-off time	5	
P2.xy	HOLD FUNCTION SETTING: 0=no hold function; 1=hold lager 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	
РЗ.ху	RESOLUTION SELECT: 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 SELECT: 0=1, 1=2, 2=5		
P5.x	DECIMAL POINT IN CALIBRATION: 0= x1		
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  1=Calibration Zero-Point +2%FS  2=Calibration Zero-Point +5%FS  3=Calibration Zero-Point +10%FS  4=Calibration Zero-Point +20%FS  5=Calibration Zero-Point +50%FS  6=Calibration Zero-Point +100%FS  7=No Limitation	7	

PARAMETER	SETTING	FACTORY SETTING	
Р9.х	ZERO RANGE FOR ZERO BUTTON:  0= Power-On Zero-Point +1%FS 1= Power-On Zero-Point +2FS 2= Power-On Zero-Point +3FS 3= Power-On Zero-Point +4FS 4= Power-On Zero-Point +5%FS  5= Power-On Zero-Point +10%FS 6= Power-On Zero-Point +20%FS 7= Power-On Zero-Point +50%FS 8= Power-On Zero-Point +100%FS 9= No Limitation	4	
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"		
P12.x	ZERO TRACKING RANGE: 0=0d, No Tracking 2=+0.5d 4=+1.5d6=+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		
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.		
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		
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	0.05kg 0.1 lb 2 oz			
0.5kg	1 lb	N/A		
5kg	10 lb	N/A		
50kg	N/A	N/A		

## **SYMBOL DEFINITIONS**

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 <b>∢</b>	The display reading is net weight
Zero <b>∢</b>	The scale is at zero point
CAP	Scale is at full capacity
d	The division will be displayed
Px.y	The Paramater (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.	<ol> <li>AC adapter is not securely connected</li> <li>Low battery</li> <li>Indicator is damaged</li> </ol>	<ol> <li>Re-plug the AC adapter or rotate the plug to securely connect to the scale</li> <li>Replace the batteries</li> <li>Replace with a new indicator and perform calibration</li> </ol>
Ad <sup></sup>	1. The cable from platform to indicator is not correctly connected, disconnected,	
Ad	or has short circuited  2. Indicator is damaged  3. Load cell cable is broken  4. Load cell is damaged	Check the cable     Replace with a new indicator and perform calibration     Return the scale for repair
0	Indication is out of key zero range	Reduce the weight on platform, till the indication is within the key zero range
0	Weight reading below Power On Zero limit.	<ol> <li>Check whether an object is stuck between scale base, if yes, remove the object</li> <li>Perform zero calibration</li> </ol>
	<ol> <li>Weight reading exceeds overload limit</li> <li>The weight value cannot be displayed in the current unit of measure because it exceeds 6 digits.</li> </ol>	Reduce load on the scale until a weight value is displayed     Use a more appropriate unit of measure
	Weight reading below Under load limit	<ol> <li>Loosen the shipping protection screws</li> <li>Perform zero calibration</li> </ol>
CAL.Er	<ol> <li>Input data or loaded weight is too small, or too big</li> <li>Weight signal is unstable, non-linear</li> </ol>	Input correct data, load correct weight onto platform     Return the scale for repair
Cannot zero the display	<ol> <li>Load on scale exceeds allowable limits (20%FS)</li> <li>Load on the scale is unstable</li> </ol>	<ol> <li>Remove load from the scale.</li> <li>Wait for the load to stabilize, then press the ZERO/ON/OFF key to zero the display</li> </ol>
Max. capacity not same as marked on overlay		
Any function invalid	Parameters are not correctly set	Re-set parameters per table on page 8-9
Any measuring units missed		
Weighing is not accurate	<ol> <li>An object is stuck between the load cell and scale base</li> <li>Load cell received a heavy impact</li> </ol>	<ol> <li>Remove the object</li> <li>Perform calibration</li> <li>Place the load on the center of the weighing platform</li> </ol>