

RS-130/RS-160

*Price Computing Retail Scale
Version 2.0*

Operation Manual



RS-130 Model Shown

RICE LAKE[®]
WEIGHING SYSTEMS

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1.0 Introduction

This manual provides all the necessary information to set up and operate the RS-130/RS-160 retail scale. The RS-130/RS-160 provides unmatched convenience and accuracy using one-button operation with weight displays in either pounds, kilograms or ounces.



Manuals are available for viewing and/or downloading from the Rice Lake Weighing Systems website at www.ricelake.com/manuals

Warranty information can be found on the website at www.ricelake.com/warranties

1.1 Overview

The RS-130/RS-160 retail scale offers practical solutions for a full range of point-of-sale weighing and price computing applications. Its compact design makes it easy to transport and the customer display on the rear of the RS-130/RS-160 offers extra convenience.

Standard features of the RS-130/RS-160 include:

- NTEP Certified Legal for Trade
- Customer display on rear of unit
- Operates on 110 VAC or 6 VDC internal rechargeable battery (included)
- Battery charge indicator
- Configurable for lb, kg or oz
- Cash back calculation
- Nine PLU keys for direct price lookups
- Green backlight
- Large stainless steel platter



1.2 Safety

Safety Signal Definitions:



Indicates an imminently hazardous situation that, if not avoided, will result in death or serious injury. Includes hazards that are exposed when guards are removed.



Indicates a potentially hazardous situation that, if not avoided, could result in serious injury or death. Includes hazards that are exposed when guards are removed.



Indicates a potentially hazardous situation that, if not avoided, could result in minor or moderate injury.



Indicates information about procedures that, if not observed, could result in damage to equipment or corruption to and loss of data.

General Safety



Do not operate or work on this equipment unless this manual has been read and all instructions are understood. Failure to follow the instructions or heed the warnings could result in injury or death. Contact any Rice Lake Weighing Systems dealer for replacement manuals.



Failure to heed could result in serious injury or death.

Do not open the indicator, all procedures that require work inside the indicator enclosure are to be performed by qualified service personnel only.

Do not operate without the enclosure completely assembled.

Do not use for purposes other than weight taking.

Do not place fingers into slots or possible pinch points.

Do not use this product if any of the components are cracked.

Do not exceed the rated specification of the unit.

Do not make alterations or modifications to the unit.

Do not remove or obscure warning labels.

Do not submerge.

Before opening the unit, ensure the power cord is disconnected from the outlet.



1.3 Menu Navigation

This section describes the front panel keys, annunciators and display functions of the RS-130/RS-160.

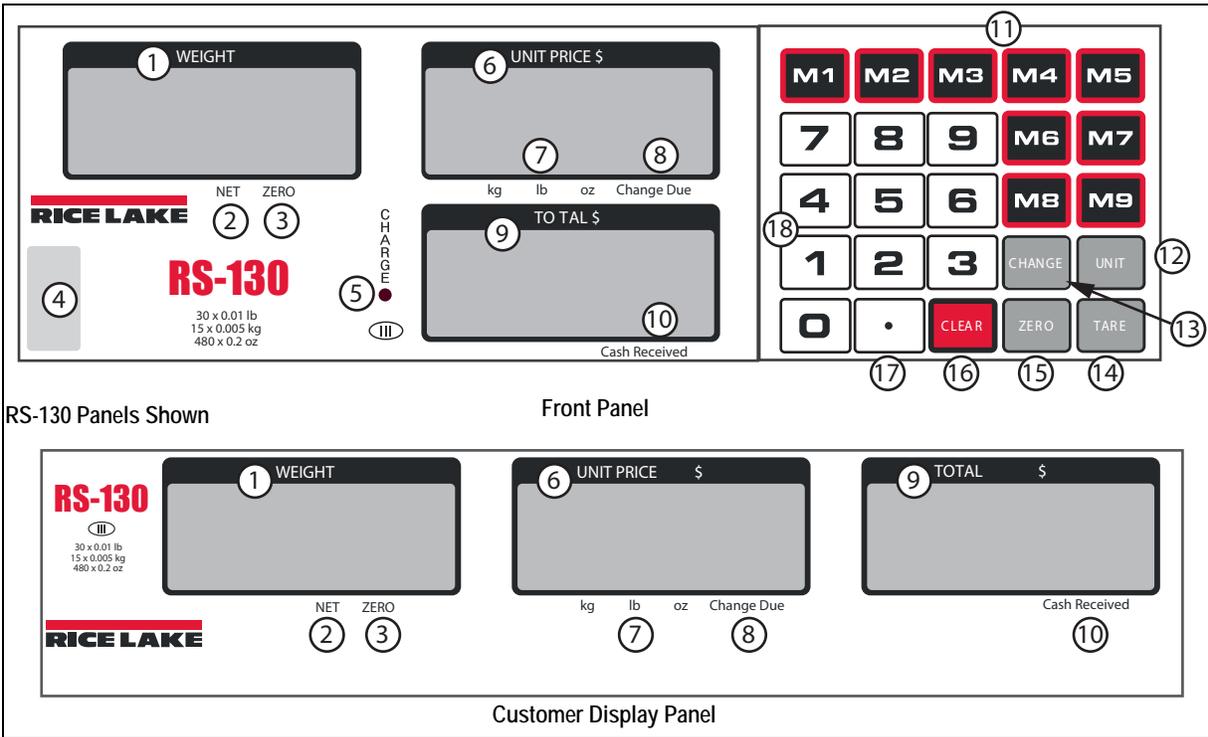


Figure 1-1. Front Panel and Customer Display

Item No.	Function/Description
1	Weight Display – displays current weight of product on scale
2	Net – indicates scale is in NET mode
3	Zero – indicates scale is at 0
4	Level Bubble – when the bubble is in the center of the circle, the scale is level
5	Battery Light – status of battery charging: Red: initial charge Orange: charging Green: fully charged
6	Unit Price – displays the unit price of product on the scale
7	Units – indicates weight is in either lb, kg, or oz
8	Change Due – indicates the amount of change due
9	Total Price – displays total price of product on the scale
10	Cash Received – indicates the amount of cash received
11	M1 - M9 Keys – nine direct PLU's for saving different unit prices or figures. See Section 3.4 on page 9 .
12	Unit Key – selects the unit of measure (kg, lb or oz) in weighing mode. See Section 3.2 on page 8 .
13	Change Key – computes the amount of change to be given back to a customer for their purchase. See Section 3.5 on page 10 .
14	Tare Key – acquires the net weight value of the object being weighed. See Section 3.3 on page 8 .
15	Zero Key – resets gross weight to zero. See Section 3.1 on page 8 .
16	Clear Key – press to erase the value shown in the UNIT PRICE \$ display. See Section 3.6 on page 10 .
17	Decimal Point Key – sets the decimal point. See Section 3.7 on page 10 .
18	1-9 Numeric Keypad – enter the numeric value required. See Section 3.8 on page 10 .

Table 1-1. Face Plate and Customer Display Descriptions

1.4 Start-up Self Check

The RS-130/RS-160 must charge for 24 hours prior to operation. Turn on the scale using the ON/OFF switch on the bottom, right side of the scale. The main program provides the following display check.

- Shows the total capacity (**30** or **60**) in the *WEIGHT* display
- Counts from one to nine in each display window
- Displays the total capacity (**30** or **60**) in the *WEIGHT* display again
- Displays **0.00** for operation

1.5 Power Supply

The RS-130/RS-160 can use power supplied by either a plug-in 110 VAC or the internal sealed, lead-acid rechargeable battery with a life expectancy of five years under normal use.

- AC - 110V/60Hz \pm 10% (battery recharging only)
- DC - 6V / 25mA; P=0.2W (max) 4Ah

1.6 Battery Recharging

The battery has 100+ hours of use before it needs recharging. When the battery is low, the total display shows **-LO-** and there are three beeps. After the initial warning of low battery, the scale has approximately two to three hours of battery life left. If the battery is not charged, the scale will beep and then shut down. To recharge the battery, allow eight to ten hours for a full charge. Table 1-2 describes the Charge LED colors.

LED Color	Description
Red	Initial connection
Orange	Charging
Green	Fully-charged

Table 1-2. Battery Charge LEDs

1.7 Setting the Auto-Off Feature



Note Work inside scale enclosure is not required.

1. Turn on the scale while pressing **CHANGE** until **6.3** displays (approximately three seconds).
2. Press and hold **ZERO** until **SETUP** displays in *WEIGHT* (approximately three seconds).
3. Press **3**, *USUAL* displays.
4. Press **2** to enter the *Auto-Off* mode. **-OFF-** displays.
5. Use **CLEAR** to select **-30-**, **-15-**, **-5-** or **-OFF-**.
6. Press **CHANGE** to confirm setting. The scale will automatically restart.



Figure 1-2. ON/OFF Switch Location



2.0 Setup

2.1 Unpacking

Carefully take the scale out of its package. Make sure there is no damage and all accessories are included.

- Remove the scale from the carton
- Remove the protective covering
- Inspect the scale and upper display (pole type only) for damage
- Make sure all components are included

If any parts were damaged in shipment, notify Rice Lake Weighing Systems and the shipper immediately.

2.1.1 Components

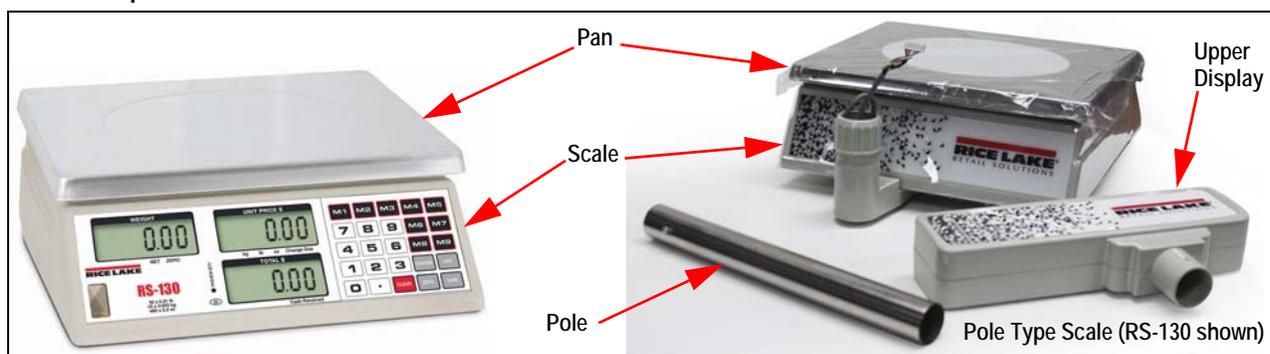


Figure 2-1. RS-130/RS-160 Scale Components (RS-130 shown)

- Scale
- Pan
- Power cord
- Pole (pole type only)
- Upper display (pole type only)

2.2 Leveling the Scale



Figure 2-2. Level Bubble

1. Place the scale on a flat level surface.
2. Check the level bubble in the lower left corner of the front panel.
3. Adjust the four corner feet until the scale is level and all feet contact the support surface so the scale does not rock.
4. Lock the jam nuts on the feet when the final level is correct.

2.3 Assemble Pole Type Scale

The pole type scale requires assembly as follows:



Figure 2-3. Pole Type Scale Assembly

1. Place the scale on a flat level surface.
2. Loosen the nut where the pole goes into the base.
3. Thread the cable through the pole.
4. Place the pole into the opening and tighten the nut securely.

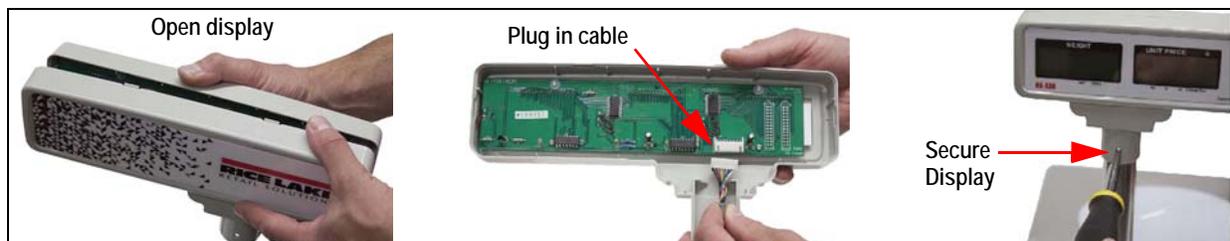


Figure 2-4. Connect and Mount Display

5. Carefully open the upper display by snapping the two sides apart.
6. Plug the cable into the display board.
7. Snap the two sides back together.
8. Remove the screws from the upper part of the pole and slide the display onto the pole.
9. Secure by reinstalling the screws.
10. Level the scale, see [Section 2.2 on page 5](#).

2.4 Power Scale

To turn on the scale, toggle the *On/Off* switch located on the bottom, right side of the scale.



Figure 2-5. Power Switch

2.5 Setup Functions

The following settings can be set to the user's requirements.

2.5.1 Auto-Backlight Enable/Disable

1. Turn on the scale and press and hold  until **6.3** displays.
2. Press and hold  until **SETUP** displays.
3. Press , **USUAL** displays.
4. Press , the scale beeps (twice for enable, once for disable) and **good** flashes twice. The scale automatically restarts.

2.5.2 Keyboard Tare Enable/Disable

1. Turn on the scale and press and hold  until **6.3** displays.
2. Press and hold  until **SETUP** displays.
3. Press , **USUAL** displays.
4. Press , the scale beeps (twice for enable, once for disable) and **good** flashes twice.

2.5.3 Unit Price Auto Clear Enable/Disable

1. Turn on the scale and press and hold  until **6.3** displays.
2. Press and hold  until **SETUP** displays.
3. Press , **USUAL** displays.
4. Press , the scale beeps (twice for enable, once for disable) and **good** flashes twice.

2.5.4 Tare Auto Clear Enable/Disable

1. Turn on the scale and press and hold  until **6.3** displays.
2. Press and hold  until **SETUP** displays.
3. Press , **USUAL** displays.
4. Press , the scale will beep (twice for enable, once for disable) and **good** flashes twice.



Note *When the Tare Auto Clear and Unit Price Auto Clear features are both enabled, the original Tare memory (M1-M9) is deleted.*



3.0 Operation

To turn on the scale, toggle the *On/Off* switch located on the bottom, right side of the scale. See [Figure 2-5 on page 6](#).

3.1 Zero

Press  to reset the gross weight to zero. 0.00 displays with an arrow over ZERO.



Figure 3-1. Weight Display at Zero

3.2 Units

Select the unit of measure (kg, lb or oz) in weighing mode.

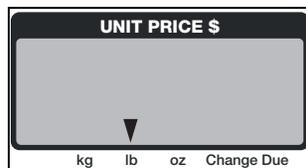


Figure 3-2. Unit Price Display – lb

1. Press , *ch9*-displays.
2. Using the numeric keypad, enter:
 - 1 to select kg
 - 2 to select lb (default)
 - 3 to select oz

The annunciator flashes above the selected unit of measure in the *UNIT PRICE \$* display.

3.3 Tare

To acquire the net weight value of the object being weighed, use the tare function to remove the value of the container being used.

3.3.1 Using a Known Weight

If tare weight is known:

1. Use the numeric keypad to enter the weight.
2. Press , a negative weight displays and the arrow is over NET.



Figure 3-3. Known Weight Tare

3.3.2 Using a Container

When using a package/container to weigh product:

1. Place the empty package/container to be used on the platter. The weight of the container displays.
2. Press **TARE**. 0.00 displays and the arrows are above **ZERO** and **NET**.

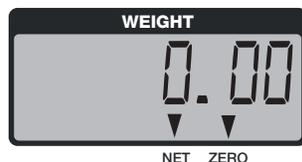


Figure 3-4. Tare a Package/Container



Note Do not remove the weight until the memory finishes saving.

3.3.3 Keyboard Tare



Note This feature is only available on SN B00551 and higher

In Gross mode, place item on scale.

1. Use the keyboard to enter the tare weight.
2. Press **TARE**.

Example: with a tare of 61, 0.61 NET displays.

3.4 M1 – M9 Keys

There are nine memory keys available to save **UNIT PRICE**, **TARE WEIGHT** and **UNIT OF MEASURE** values.

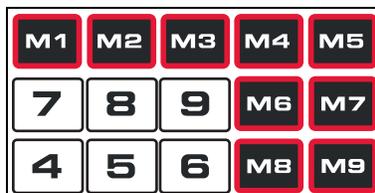


Figure 3-5. Memory Keys

1. Choose the **UNIT of MEASURE**, see [Section 3.2 on page 8](#).
2. Enter the **TARE WEIGHT**, see [Section 3.3 on page 8](#).
3. Use the numeric keypad to enter the **UNIT PRICE \$**.
4. Press and hold one of the **M** keys until the scale beeps.



Note Do not remove the weight until the memory finishes saving.

3.4.1 Weighing Product Using M Keys

1. Press the programmed **M** key (**M1-M9**).
2. Place product on the scale.
 - **WEIGHT** displays weight of product.
 - **UNIT PRICE \$** displays unit price and arrows flash above selected unit (kg, lb, oz).
 - **TOTAL \$** displays the total cost of product being weighed.

To change the setting of one of the memory keys, follow the steps in [Section 3.4](#).

3.5 Change

Use to compute the amount of change to be given back to a customer for their purchase:

1. **TOTAL \$** displays the amount owed for the product on the scale.
2. Press .
3. Use the numeric keypad to enter the amount received from the customer. The **UNIT PRICE \$** displays **C** (change due). The **TOTAL \$** displays **20.00** (cash received).

3.6 Clear

Press  to erase a value displayed in the **UNIT PRICE \$**.

3.7 Decimal Point

Set the decimal point. This feature available on SN B00551 or higher only.

3.8 Numeric Keys (0 - 9)

3.8.1 Enter a Numeric Value

Use the numeric keys to enter the price-per-unit, PLU number or cash received.

3.8.2 Display Battery Voltage

Press and hold  to display the battery voltage.

- **6.1 - 6.5** indicates the battery is fully charged.
- Less than **5.6** indicates the battery is in low charge.
- Press  to return the display to normal operating mode.

4.0 Troubleshooting

Table 4-1 lists error messages for the RS-130/RS-160.

Display	Description	Corrective Action
WEIGHT display shows "Err-1"	IC93C66 data-loss or IC93C66 damaged/faulty	Contact your nearest RLWS dealer
WEIGHT display shows "Err-3"	At power-up, the weight on the platter is more than 5% of the maximum capacity	Remove the weight from the scale, or lighten the weight to under 5% of capacity and restart the scale
TOTAL \$ display shows "E"	Total price value is larger than 9999.99	Remove the measured object from the platter and press CLEAR to clear the unit price setting

Table 4-1. Error Messages and Troubleshooting





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