VS-10

Veterinary Scale

Operation Manual





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www.ricelake.com

Revision History

This section tracks and describes manual revisions for awareness of major updates.

Revision	Date	Description
Α	September 8, 2023	Established revision history

Table i. Revision Letter History



Technical training seminars are available through Rice Lake Weighing Systems. Course descriptions and dates can be viewed at www.ricelake.com/training or obtained by calling 715-234-9171 and asking for the training department.

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Rice Lake continually offers web-based video training on a growing selection of product-related topics at no cost. Visit www.ricelake.com/webinars

1.0 Introduction

The Rice Lake Veterinary Scale (VS-10) provides precise weighing of animals for accurate, reliable and repeatable weighments. Movement compensation technology eliminates errors caused by spontaneous movement of the animal and the weight can be displayed in pounds/ounces or in kilograms.



Manuals are available from Rice Lake Weighing Systems at www.ricelake.com/manuals

Warranty information is available at www.ricelake.com/warranties



Figure 1-1. VS-10 Digital Veterinary Scale

1.1 Safety

Safety Definitions:



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



WARNING: 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.



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



IMPORTANT: 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.



▲ WARNING

Failure to heed could result in serious injury or death.

Ensure every individual operating or working with this unit has read and understands the following safety information.

Do not transport the scale with an animal on the weighing tray.

Clean the scale regularly to avoid cross contamination.

Do not allow minors (children) or inexperienced persons to operate this scale.

Do not use in the presence of flammable materials.

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

Do not drop the scale or subject it to violent shocks.

For accurate weighing, the scale must be placed on a level, stable surface.

Weight exceeding the maximum rated scale capacity may damage the scale.

Avoid contact with excessive moisture.

Do not make alterations or modifications to the scale; any alterations void the warranty.

For accurate weighing, verify proper setup is complete prior to first use. See Section 3.2 on page 8.

Operation at voltages and frequencies other than specified could damage the scale.

Utilizing adapters not supplied by Rice Lake Weighing Systems voids all warranties.



2.0 Setup

The VS-10 comes fully assembled and includes the scale and a 120 V adapter. Immediately after unpacking, visually inspect the VS-10 to ensure all components are included and undamaged. If parts were damaged in shipment, notify Rice Lake Weighing Systems and the shipper immediately.

Use the following instructions for scale setup:

- 1. Place the scale on a sturdy, level surface.
- 2. Connect the 120 V adapter to the back of the scale.
- 3. Plug the AC adapter into a power source.

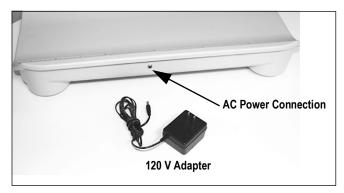


Figure 2-1. AC Power Connection Site

The VS-10 can also be powered by four AA alkaline batteries if an additional power source is not available. A battery powered scale automatically turns off after two minutes of not being used to save battery life. Replace the batteries or connect to an AC power source as soon as possible if the low battery indicator (*Lo*) displays.

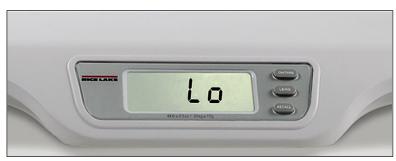


Figure 2-2. Low Battery Indicator



3.0 Operation

The VS-10 accurately weighs small animals up to 44 lb (20 kg). The weighing surface also includes a ruler for measuring the length of the animal. The built-in ruler can measure small animals up to 22.5 in (57 cm).



NOTE: If the scale is battery powered and has not been used for two minutes, it automatically turns off to save battery life.

3.1 Display Descriptions

The following section describes the VS-10 operating keys and their functions.

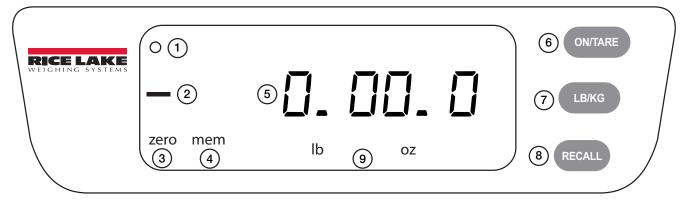


Figure 3-1. VS-10 Display

Item	Description	Function		
1	Motion annunciator	Displays when a weight reading is complete		
2	Negative/Minus annunciator	Indicates a negative weight reading		
3 Zero annunciator		Indicates the scale is stable and ready for use		
4	Memory annunciator	Indicates the last weight measurement is displayed after pressing RECALL Displays the weight in pounds/ounces or kilograms		
5	6-Digit LCD digital display			
6	On/Off Press to turn On Press and hold to turn Off			
	Tare	With weight on the scale, short press to tare off the weight, 0 displays		
7	LB/KG	Selects pounds/ounces or kilograms		
8	RECALL	Recalls the last weight measurement Example: Weigh a an animal on the scale and then remove the animal Press RECALL and the animal's weight displays again		
9	LB/OZ annunciator	Indicates the scale is weighing in pounds/ounces		
	KG annunciator	Indicates the scale is weighing in kilograms		

Table 3-1. Front Panel with Annunciators Displayed



NOTE: The VS-10 comes pre-calibrated from the factory.

3.2 Initial Setup

Use the following steps to set up and verify the VS-10 upon initial power up and periodically thereafter.

- 1. Plug AC adapter cable into the back of the scale (Figure 2-1 on page 6) and the AC adapter plug into a power source.
- 2. Turn on the scale. A self test runs and **0.00.0 lb** or **0.00 kg** displays when complete.
- 3. Place a weight, not exceeding 40 lb, on the scale. The weight measurement is complete when **O** displays.
- 4. Press LB/KG to select unit of measure, lb/oz or kg.
- 5. Remove the weight from the scale. To display the weight again, press RECALL



NOTE: If setup procedure fails, see Section 4.3 on page 10. If the problem is not resolved, refer to a qualified service provider.

3.3 Set Units

The VS-10 can be set to display weights in lb/oz only, kg only, or to toggle between lb/oz and kg units on the scale.

3.3.1 KG Units Only

Lock the weight units to display in kg only.

- 1. Ensure the scale is turned on.
- 2. Press LB/KG to change the displayed units to kg.
- 3. Press and hold LB/KG for five seconds until **kg** flashes.
- 4. Release LB/KG. The weight units are now locked in kg. Pressing LB/KG does not switch units to lb/oz.

3.3.2 LB/OZ Units Only

Lock the weight units to display in lb/oz only.

- 1. Ensure the scale is turned on.
- 2. Press LB/KG to change the displayed units to lb/oz.
- 3. Press and hold LB/KG for five seconds until *lb* oz flashes.
- 4. Release LB/KG. The weight units are locked in lb/oz. Pressing LB/KG does not switch units to kg.

3.3.3 Unlock Units

Unlock the weight units to toggle between lb/oz and kg.

- 1. Ensure the scale is turned on.
- 2. Press and hold LB/KG for five seconds until **kg** or **lb oz** flashes.
- 3. Release LB/KG . Pressing LB/KG toggles units between lb/oz and kg.



3.4 Weigh With A Tare

The tare function removes the weight of additional items on the scale, such as a collar or pad, at the time the animal is weighed.

- 1. Turn on the scale. 0:0.0 lb oz or 0.00 kg displays.
- 2. Place a collar on the weighing tray, ensuring the edges of the collar are not touching the stand. **O** displays when the weight reading is complete.
- 3. Press ONTARE to remove the weight of the pad or any other accessory on the weighing tray.
- 4. Place an animal on the scale. O displays when the weight reading is complete.
- 5. Remove the animal from the scale.
- 6. Press (RECALL) to display the weight again, if necessary.

3.5 Weigh Without A Tare

Use this procedure when there are no additional items on the scale at the time the animal is weighed.

- 1. Turn on the scale. 0:0.0 lb oz or 0.00 kg displays.
- 2. Place an animal on the scale. O displays when the weight reading is complete.
- 3. Remove the animal from the scale.
- 4. Press RECALL to display the weight again, if necessary.



4.0 Maintenance

The following section provides instructions for maintaining, cleaning and troubleshooting the VS-10.



IMPORTANT: Maintenance operations not described in this section must be performed by qualified service personnel.

4.1 Basic Maintenance

- Check the scale for proper operation and function before first use and after periods of non-use.
- Inspect the scale. If the scale does not operate correctly, contact qualified service personnel.
- Check the overall appearance of the entire scale for any obvious signs of damage.
- Inspect the condition of the AC adapter for cord fraying or for broken or bent prongs.

4.2 Cleaning

Proper care and cleaning is essential to ensure a long life of accurate and effective operation. Disconnect the scale from the AC power source before beginning the cleaning process.



IMPORTANT: Do not immerse the scale into cleaning solutions or other liquids. Do not use Isopropyl alcohol or other solutions to clean the display surface.

- 1. Clean all external surfaces with a clean, damp cloth or tissue. Mild soap and water solution can be used.
- 2. Dry with a clean, soft cloth.

4.3 Troubleshooting

Use the following instructions to troubleshoot any errors with the scale.

Symptom	Possible Cause	Corrective Action	
Scale does not turn on	Batteries are dead	Replace batteries or connect scale to a power source	
	Electrical outlet is faulty	Use a different electrical outlet	
	Power supply is faulty	Replace the adapter	
		NOTE: Utilizing adapters not supplied by Rice Lake Weighing Systems voids all warranties	
Scale displays questionable weight or	There is weight on or an object interfering with the scale	Remove animal, weight or interfering object from scale	
does not zero	Weight was placed on the scale before 0.0 displayed	Remove animal, or weight from the scale; zero scale and begin weighing process again	
	Scale is not on a level surface	Place scale on a stable surface and begin weighing process again	
	Weighing tray is not placed properly	Ensure weighing tray is properly installed	
	Scale is out of calibration	Check scale calibration with a known weight value; contact a qualified service provider to perform a new calibration if the calibration is incorrect	
o_Ld message is displayed	Load on the scale exceeds the capacity	Remove excess weight and use scale according to its stated limit	
Err message is displayed	RECALL key was pressed with insufficient weight on the scale	Place more than 2 lb 30 oz on the scale	

Table 4-1. Troubleshooting Table



5.0 Limited Warranty

Rice Lake Weighing Systems (RLWS) warrants that all RLWS equipment and systems properly installed by a Distributor or Original Equipment Manufacturer (OEM) will operate per written specifications as confirmed by the Distributor/OEM and accepted by RLWS. All systems and components are warranted against defects in materials and workmanship for two years.

RLWS warrants that the equipment sold hereunder will conform to the current written specifications authorized by RLWS. RLWS warrants the equipment against faulty workmanship and defective materials. If any equipment fails to conform to these warranties, RLWS will, at its option, repair or replace such goods returned within the warranty period subject to the following conditions:

- Upon discovery by Buyer of such nonconformity, RLWS will be given prompt written notice with a detailed explanation of the alleged deficiencies.
- Individual electronic components returned to RLWS for warranty purposes must be packaged to prevent electrostatic discharge (ESD) damage in shipment. Packaging requirements are listed in a publication, Protecting Your Components From Static Damage in Shipment, available from RLWS Equipment Return Department.
- Examination of such equipment by RLWS confirms that the nonconformity actually exists, and was not caused by accident, misuse, neglect, alteration, improper installation, improper repair or improper testing; RLWS shall be the sole judge of all alleged non-conformities.
- Such equipment has not been modified, altered, or changed by any person other than RLWS or its duly authorized repair agents.
- RLWS will have a reasonable time to repair or replace the defective equipment. Buyer is responsible for shipping charges both ways.
- In no event will RLWS be responsible for travel time or on-location repairs, including assembly or disassembly of equipment, nor will RLWS be liable for the cost of any repairs made by others.

These warranties exclude all other warranties, expressed or implied, including without limitation warranties of merchantability or fitness for a particular purpose. Neither RLWS nor distributor will, in any event, be liable for incidental or consequential damages.

RLWS and buyer agree that RLWS's sole and exclusive liability hereunder is limited to repair or replacement of such goods. In accepting this warranty, the buyer waives any and all other claims to warranty.

Should the seller be other than RLWS, the buyer agrees to look only to the seller for warranty claims.

No terms, conditions, understanding, or agreements purporting to modify the terms of this warranty shall have any legal effect unless made in writing and signed by a corporate officer of RLWS and the Buyer.

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6.0 Specifications

Capacity:

44 lb x 0.5 oz (20 kg x 10 g)

Power Requirements:

Four AA alkaline batteries (included) 120 V adapter (included) Adapter is UL and C-UL approved

Environmental:

Operating temperature: 50 to $+104^{\circ}$ F (10 to $+40^{\circ}$ C) Storage temperature: -4 to $+140^{\circ}$ F (-20 to $+60^{\circ}$ C) Humidity: < 80% relative humidity

Dimensions (L x W x H):

23.6" x 15.0" x 3.9" (60.9 x 38.1 x 9.9 cm)

Weight:

5.26 lb (2.5 kg)

Warranty:

Two-year limited warranty





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