RL-DBS-2

Digital Baby Scale

Operation Manual



RICE LAKE®
WEIGHING SYSTEMS

PN 161724 Rev B

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1.0 Introduction

The Rice Lake Digital Baby Scale (*RL-DBS-2*) provides precise weighing of babies with a highly sophisticated microprocessor technology that produces accurate, reliable and repeatable weighments. Movement compensation technology eliminates errors caused by spontaneous movement of the baby. The weight can be displayed in pounds/ounces or in kilograms.

This manual can be viewed and downloaded from the Rice Lake Weighing Systems website at www.ricelake.com/health



Figure 1-1. Rice Lake Digital Baby Scale

Standard Features

- Convenient lb/kg toggle key
- Large, easy-to-read one inch LCD (Liquid Crystal Display)
- Built-in measuring tape
- Recall key to view the last weight measurement
- Power: four AA batteries (included), 120V or 230V AC adapter (included)
- Automatic shut off ensures long battery life

1.1 Safety

Safety Signal Definitions:

DANGER *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.*

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 may 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 infant 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 4.

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 Assembly

The *RL-DBS-2* comes fully assembled and includes the scale and a 120 V or 230 V AC adapter.

Use the following instructions to set up the scale.

1. Place the scale on a sturdy, level surface.
2. Connect the 120 V or 230 V AC adapter to the back of the scale.



Figure 2-1. AC Power Connection Site

The *RL-DBS-2* can also be powered by four AA batteries if an additional power source is not available. 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 Setup

The following section describes the *RL-DBS-2* operating keys and their functions.

3.1 Display Descriptions

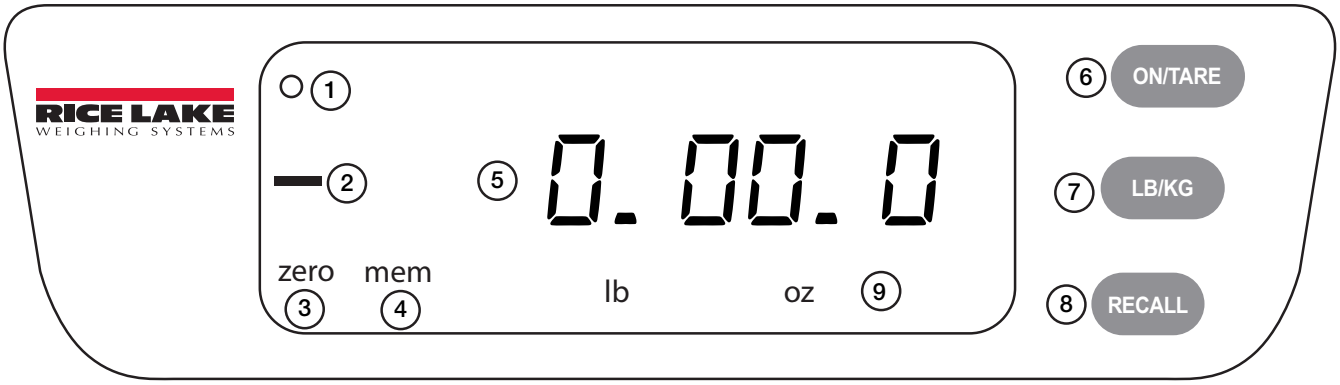


Figure 3-1. RL-DBS-2 Display

Item	Description	Function
1	Motion indicator	Displays when a weight reading is complete
2	Negative or Minus indicator	Indicates a negative weight reading
3	Zero indicator	Indicates the scale is stable and ready for use
4	Memory indicator	Indicates the weighing process is complete
5	6-Digit LCD digital display	Displays the weight in pounds/ounces or kilograms
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 baby on the scale and then remove the baby Press **RECALL** and the baby's weight displays again
9	LB/OZ indicator	Indicates the scale is weighing in pounds/ounces
	KG indicator	Indicates the scale is weighing in kilograms

Table 3-1. Front Panel with Annunciators Displayed

Note ***The Rice Lake Digital Baby Scale (RL-DBS-2) comes pre-calibrated from the factory.***

3.2 Initial Setup

Use the following steps to set up and verify the *RL-DBS-2* upon initial power up and periodically thereafter.

1. Plug the AC adapter cable into the back of the scale (Figure 2-1 on page 3) 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 to display the weight in lb/oz or kg.
5. Remove the weight from the scale. To display the weight again, press RECALL.

Note ***If the setup procedure failed, see Section 5.3 on page 7. If the problem is not resolved, refer to a qualified service provider.***

3.3 Set Units

The *RL-DBS-2* can be set up to display weights in lb only, kg only or to toggle between lb and kg units on the scale.

3.3.1 KG Units Only

Lock the weight units to display in kg only.

1. Power on the scale, if not already on.
2. Press LB/KG to change the displayed units to kg
3. Press and hold LB/KG for five seconds until the ***kg*** indicator flashes
4. Release LB/KG. The weight units are now locked in kg. Pressing LB/KG does not switch units to lb.

3.3.2 LB Units Only

Lock the weight units to display in lb only.

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

3.3.3 Unlock Units

Unlock the weight units to toggle between lb and kg.

1. Power on the scale, if not already on.
2. Press and hold LB/KG for five seconds until the ***kg*** or ***lb oz*** indicator flashes.
3. Release LB/KG. Pressing LB/KG toggles units between lb and kg.

4.0 Operation

The *RL-DBS-2* accurately weighs babies up to 44 lb (20 kg). Use one of the following procedures to weigh a baby.

Note

The scale automatically turns off to save battery life, if it has not been used for two minutes. Press ON/TARE to restart the scale.

4.1 With a Tare

The tare function removes the weight of additional items, for example a pad or blanket, on the scale at the time the baby is weighed.

1. Turn on the scale. ***0:0.0 lb oz*** or ***0.00 kg*** displays.
2. Place a pad on the weighing tray; ensure the edges of the pad are not touching the stand. **O** displays when the weight reading is complete.
3. Press ON/TARE to remove the weight of the pad or any other accessory on the weighing tray.
4. Place a baby on the scale. **O** displays when the weight reading is complete.
5. Remove the baby from the scale.
6. Press RECALL to display the weight again, if necessary.

4.2 Without a Tare

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

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

5.0 Maintenance

The following section provides instructions for maintaining, cleaning and troubleshooting the *RL-DBS-2*.

Important ***Maintenance operations not described in this section must be performed by qualified service personnel.***

5.1 Basic Maintenance

- Before the first use of the scale and after periods of non-use, check scale for proper operation and function.
- 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.

5.2 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 or other liquid solutions. 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.

5.3 Troubleshooting

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

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

Table 5-1. Troubleshooting Table

5.4 Specifications

Capacity

0-22 lb x 0.2 oz (10 kg x 5 g)
22-44 lb x 0.5 oz (10-20 kg x 10 g)

Power Requirements:

Four AA batteries (included)
AC adapter (included)
Adapter is UL and C-UL approved

Environmental:

Operating temperature: 50 to +104ºF (10 to +40ºC)
Storage temperature: -4 to +140ºF (-20 to +60ºC)
Humidity: <80% relative humidity

Dimensions:

23.5" (L) x 11" (W) (60 x 28 cm)

Weight:

5.26 lb (2.5 kg)

RL-DBS-2 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.

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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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