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make changes to the technology, features, specifications and design of the equipment
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updates can be found on our website:

www.ricelake.com
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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
The *Rice Lake Digital Baby Scale* (RL-DBS) provides precise weighing of babies. Highly sophisticated microprocessor technology allows accurate, reliable and repeatable weighments every time. Movement compensation technology eliminates errors caused by spontaneous movement of the baby. The weight display 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](http://www.ricelake.com)

**Standard Features**

- Convenient lb/kg toggle key
- Large, easy-to-read 1” Liquid Crystal Display (LCD)
- Built-in measuring tape
- Recall key to view the last weight measurement
- Power: four AA batteries (included), 120 V or 230 V 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 sure every individual who operates or works with this unit has read and understands the following safety information.

- To avoid cross contamination, the scale should be cleaned regularly.
- 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 flat, 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.
- Do not transport the scale while the infant is on the weighing tray.
- For accurate weighing, verify proper operation according to the procedure described in this manual before each use.
- Operation at other voltages and frequencies than specified could damage the equipment.
- Utilizing adapters not supplied by Rice Lake Weighing Systems voids all warranties.
2.0 Assembly Instructions

The RL-DBS 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 flat, sturdy surface.
2. Connect the 120 V or 230 V AC adapter. The AC power adapter plugs into the back of the scale as shown in Figure 2-1.

The RL-DBS is also capable of running on four AA batteries if an additional power source is not available. If the low battery indicator (Lo) displays, replace the batteries or connect to an AC power source as soon as possible.
3.0 Scale Setup

The RL-DBS has the capability of performing operations beyond just calculating weight. The following section describes the various operating keys and their functions.

3.1 Display Descriptions

Figure 3-1. RL-DBS Display

<table>
<thead>
<tr>
<th>Item No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Motion indicator – displays when a weight reading is complete Not displayed while the weight reading is being calculated</td>
</tr>
<tr>
<td>2</td>
<td>Negative or Minus – indicator displays for a negative weight reading.</td>
</tr>
<tr>
<td>3</td>
<td>ZERO – indicator displays the scale is stable and ready for use.</td>
</tr>
<tr>
<td>4</td>
<td>Memory indicator</td>
</tr>
<tr>
<td>5</td>
<td>6-Digit LCD Digital Display – displays the baby weight in pounds/ounces (LB) or kilograms (KG) LB/OZ – indicates that the scale is weighing in pounds/ounces KG – indicates that the scale is weighing in kilograms</td>
</tr>
<tr>
<td>6</td>
<td>ON/TARE – use for turning unit on/off and taring weight from the scale On Function – one short push turns scale on, press and hold to turn scale off (approx. five seconds) Tare Function – with weight on the scale, use one short press to tare out the scale and return it to zero.</td>
</tr>
<tr>
<td>7</td>
<td>LB/KG – This key selects either pounds, ounces or kilograms.</td>
</tr>
<tr>
<td>8</td>
<td>RECALL – allows the user to recall the last weighment. Example: Weigh a baby on the scale and then remove the baby. Press the RECALL and the baby’s weight will display again.</td>
</tr>
</tbody>
</table>

Table 3-1. Front Panel

Note: The RL-DBS is pre-calibrated from the factory.
Use the following steps to set up the *RL-DBS*:

1. To operate the unit using the AC adapter, 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. Press \( \text{ON/TARE} \) to turn on the scale. A self test process is run, then 0.00.0 (lb/oz) or 0.00 (kg) displays.

3. Place a weight (not exceeding 40 lb) on the scale. The weight calculation is complete once the motion (\( \circ \)) indicator turns on.

4. Press the \( \text{LB/KG} \) key to select the weight mode.

5. Remove the weight from the scale. To view the weight that was just on the scale, press \( \text{RECALL} \).

*Note* If the setup procedure failed, see Section 6.3 on page 8. If the problem is not resolved, refer to a qualified service provider.

### 3.2 Set Units

The units of the scale can toggle between LB and KG by pressing \( \text{LB/KG} \).

#### 3.2.1 KG Units Only

To lock the units so only KG is available:

1. Power on the scale, press \( \text{LB/KG} \) to change the displayed units to KG.

2. Press and hold \( \text{LB/KG} \) for 5 seconds until the kg indicator flashes.

3. Release \( \text{LB/KG} \), the measuring units will be locked to KG. Pressing \( \text{LB/KG} \) will not switch to LB.

#### 3.2.2 LB Units Only

To lock the units so only LB is available:

1. Power on the scale, press \( \text{LB/KG} \) to change the displayed units to LB.

2. Press and hold \( \text{LB/KG} \) for 5 seconds until the lb oz indicator flashes.

3. Release \( \text{LB/KG} \), the measuring units will be locked to LB. Pressing \( \text{LB/KG} \) will not switch to KG.

#### 3.2.3 Unlock Units

To unlock the units, press and hold \( \text{LB/KG} \) again for 5 seconds until the kg or lb oz indicator flashes, release \( \text{LB/KG} \). Pressing \( \text{LB/KG} \) will toggle between KG and LB again.
4.0 Operation

The RL-DBS can accurately weigh babies up to 44 lb (20 kg).

Use the following steps to weigh a baby:

1. Turn on the scale.
2. Wait until 0:0.0 (lb/oz) or 0.00 (kg) displays.
3. Place a pad on the weighing tray. Make sure that the edges of the pad are on the tray and are not touching the surface on which the scale is positioned. The motion (o) indicator displays when the weight calculation is complete.
4. Press ON/TARE to remove the weight of the pad or any other accessory that is on the weighing tray.
5. Place the baby on the scale. The motion (o) indicator displays when the weight calculation is complete.

Note: The scale will automatically turn off to save battery life if it has not been used for two minutes. To restart the scale, press ON/TARE.
5.0 Calibration

Use the following instructions to calibrate the *RL-DBS*.

1. Ensure the scale is installed on a level surface.
2. Turn the scale on.
3. If using kg weights, the scale needs to be set up using the following instructions (skip to step 4 if calibrating with lb weights).
   - Press and hold **LB/KG** and **ON/TARE** (at the same time) until the scale displays **CAL**. Release the keys. The scale displays the raw A/D counts.
   - Press **RECALL**. **CAL** displays and the *lb* indicator turns on.
   - Press **LB/KG** to switch to kg. **CAL** displays and the *kg* indicator turns on.
   - Press and hold **ON/TARE** to turn the scale off.
4. Press and hold **LB/KG** and **ON/TARE** (at the same time) until the scale displays **CAL**. Release the keys. The raw A/D counts display.
5. Press **ON/TARE** again. The scale will display 0.00.
6. Load the scale with a 40 lb or 20 kg test weight. The display reads 40.00.
7. Press **ON/TARE**.
8. Pass displays and the scale turns off automatically.
9. Remove the 40 lb weight from the scale.
10. Turn on the scale.
11. Place a known weight onto the scale to confirm the correct calibration. If it is not correct, repeat the calibration procedure.
6.0 Maintenance

The following section provides instructions for maintaining, cleaning and troubleshooting the RL-DBS. Maintenance operations other than those described in this section should be performed by qualified service personnel.

6.1 Basic Maintenance

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

6.2 Cleaning

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

**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.

6.3 Troubleshooting & Testing

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

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Possible Cause</th>
<th>Corrective Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>The scale does not turn on when using just batteries</td>
<td>Dead batteries</td>
<td>Connect the scale to a power source or change batteries</td>
</tr>
<tr>
<td>The scale does not turn on</td>
<td>Batteries are dead</td>
<td>Replace the batteries or connect the scale to a power source.</td>
</tr>
<tr>
<td></td>
<td>Electrical outlet is faulty</td>
<td>Use a different electrical outlet</td>
</tr>
<tr>
<td></td>
<td>Power supply is faulty</td>
<td>Replace the adapter. <strong>Important</strong>: Utilizing adapters not supplied by Rice Lake Weighing Systems voids all warranties</td>
</tr>
<tr>
<td>The scale displays questionable weight or does not zero</td>
<td>There is weight on or interfering with the scale.</td>
<td>Remove the baby, weight or interfering object from the scale.</td>
</tr>
<tr>
<td></td>
<td>Weight was placed on the scale before 0.0 displayed.</td>
<td>Remove the baby or weight from the scale. Zero the scale and begin the weighing process again.</td>
</tr>
<tr>
<td></td>
<td>The scale is not on a level surface.</td>
<td>Place the scale on a stable surface and begin the weighing process again</td>
</tr>
<tr>
<td></td>
<td>The weighing tray is not placed properly</td>
<td>Ensure the weighing tray is properly installed.</td>
</tr>
<tr>
<td></td>
<td>The scale is out of calibration.</td>
<td>Check the scale calibration with a known weight value. Perform a new calibration if the calibration is incorrect.</td>
</tr>
<tr>
<td>The o_Ld message is displayed</td>
<td>The load on the scale exceeds the capacity</td>
<td>Remove the excess weight and use the scale according to its stated limit.</td>
</tr>
<tr>
<td>The Err message is displayed</td>
<td>The RECALL key was pressed with insufficient weight on the scale.</td>
<td>Place more than 2 lb, 30 oz on the scale</td>
</tr>
</tbody>
</table>

*Table 6-1. Troubleshooting Table*
6.4 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 +104°F (10 to +40°C)
Storage temperature: -4 to +140°F (-20 to +60°C)
Humidity: <80% relative humidity

Dimensions:
23.5” (L) x 11” (W) (60 x 28 cm)

Weight:
5.26 lb (2.5 kg)

Warranty:
Two-year Limited Warranty
7.0  Rice Lake Digital Baby Scale 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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