DETECTO®

RP30
Ingredient Scale
Operation Manual

INTRODUCTION

The Detecto RP30 is a 30lb/15kg capacity ingredient scale equipped with a rotating tray to allow even distribution of ingredients. The RP30 features include a Display Backlight, a Sleep Mode/Auto-Off function and a Weight Accumulator.

This manual contains information on the operation of this scale. Please read it before attempting to use the scale and keep it handy for future reference.

FCC COMPLIANCE STATEMENT

WARNING! This equipment generates uses and can radiate radio frequency and if not installed and used in accordance with the instruction manual, may cause interference to radio communications. It has been tested and found to comply with the limits for a Class A computing device pursuant to Subpart J of Part 15 of FCC rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area may cause interference in which case the user will be responsible to take whatever measures necessary to correct the interference.

You may find the booklet "How to Identify and Resolve Radio TV Interference Problems" prepared by the Federal Communications Commission helpful. It is available from the U.S. Government Printing Office, Washington, D.C. 20402. Request stock No. 001-000-00315-4.

TABLE OF CONTENTS

SPECIFICATIONS

| Power:	Built-in rechargeable 6v/4Ah battery or 115 VAC 50/60Hz or 230 VAC 50/60 Hz AC adapter
Operating Temperature:	14 to 104º F
Display:	Six digit, seven segment, 0.5 inch high LCD (both lb and oz)
Capacity:	30lb x 0.1oz (15kg x 5g)
Scale Size:	12.5" W x 13.5" D x 4.00" H
Rotating Platform Size:	17" W x 13" D
Optional Rotating Platform Size:	13" Diameter

UNPACKING AND ASSEMBLY

Unpacking

Before beginning installation of your scale, make certain it has been received in good condition. When removing the scale from its packing, inspect it for signs of damage, such as exterior dents and scratches. Keep the carton and packing material for return shipment if it should become necessary. It is the responsibility of the purchaser to file all claims for any damages or loss incurred during transit. You should have the following items:

(1) Scale
(1) Lower Stationary Platform
(1) Upper Rotating Platform
(1) AC Adapter

Assembly
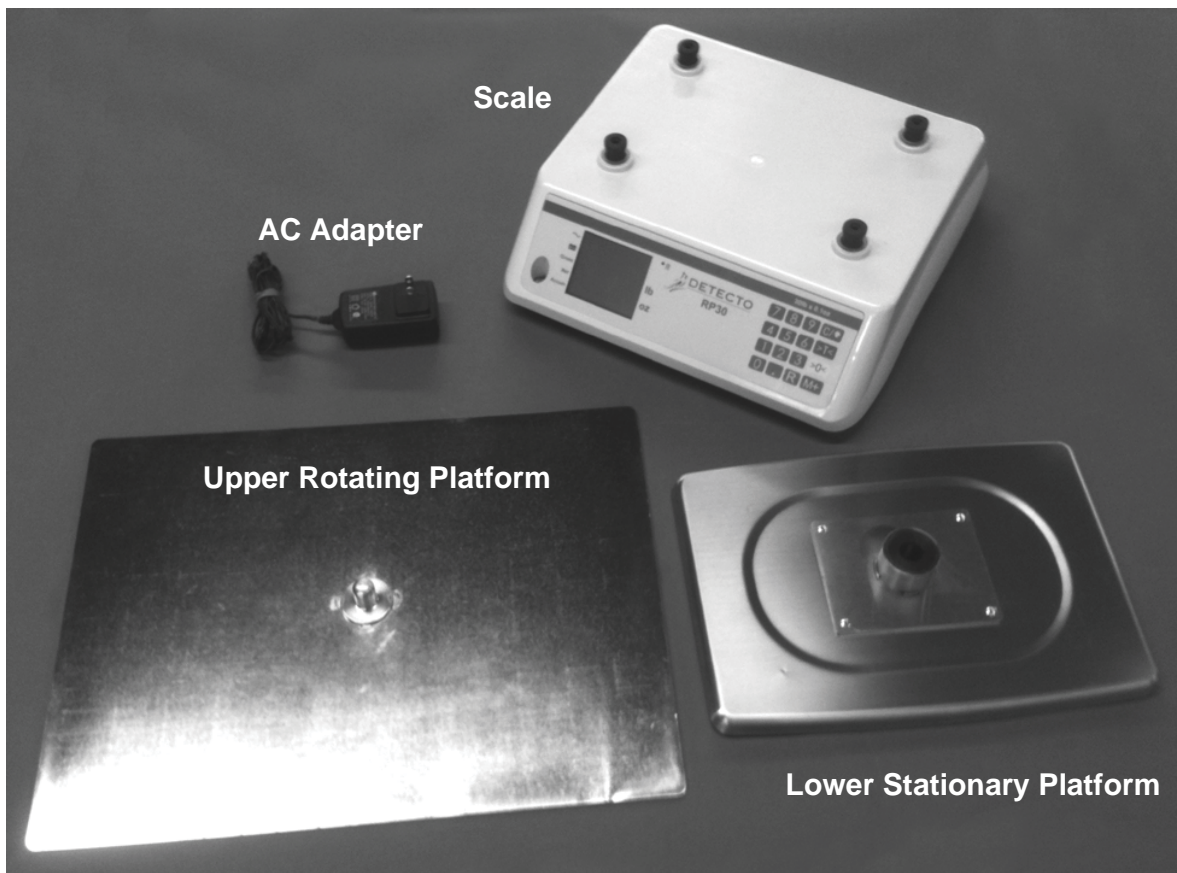
1. Turn the scale upside down and insert the plug from the AC adapter cable into the power jack in recessed area on the bottom of scale near the ON/OFF switch.

2. Set the scale on a stable, vibration-free level surface away from direct sunlight and any rapidly moving air source (heating/cooling vents, fans, etc.). This will prevent sudden temperature changes and air currents that may result in unstable weight readings.

3. Place the lower stationary platform on the scale, inserting the four studs on bottom of the platform into holes of the scale platform supports.

4. Place the upper rotating platform onto the lower stationary platform, inserting the single stud on the bottom of the rotating platform in the hole of the support on the stationary platform.

5. Level the scale using leveling bubble at front of scale and adjustable feet.

6. Make certain the cord from the AC adapter is routed out of the way of normal traffic and plug the AC adapter into the wall outlet. Note the battery indicator on front of scale - red is charging, green is fully charged.
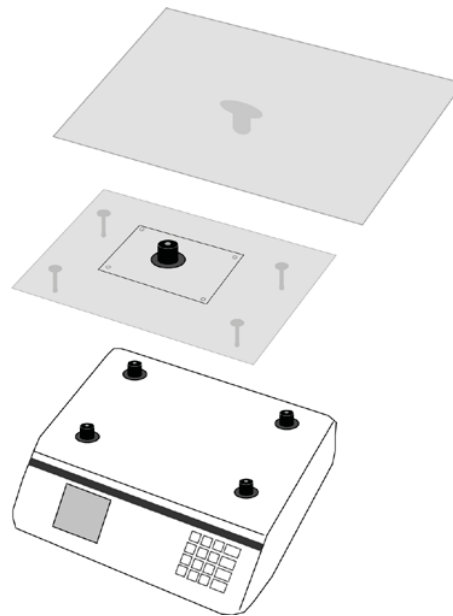
Quick Operation

Although it is recommended that you read this manual before attempting to operate the scale, this section is included to provide a condensed set of instructions on using the scale.

1. Turn the scale ON using switch at lower right side of scale.

2. Place cake/product on scale. Scale will display weight. Press the **TARE** (>T<) key.

3. Begin icing cake/adding ingredients. When icing/ingredient layer reaches desired weight, press the **TARE** (>T<) key.

4. Continue icing cake/adding ingredients, repeating Step 3 for each layer.

5. When cake/product is complete, remove cake/product from scale.

6. Display will show total weight of cake with icing/product with all ingredients.

7. Press the **ZERO** (>0<) key to clear tare weight for next cake/product.

Level Adjustment

The level indicator is located at the front of the scale. If the scale is not level (the bubble will not be centered), level the scale by turning the adjustable feet on the bottom of the scale until the bubble indicator is in the center of the circle. All four feet must touch the surface to make sure the scale does not rock.

Not Level   Level
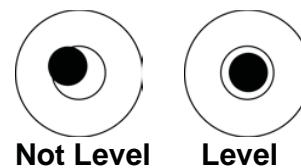
OPERATOR DISPLAY
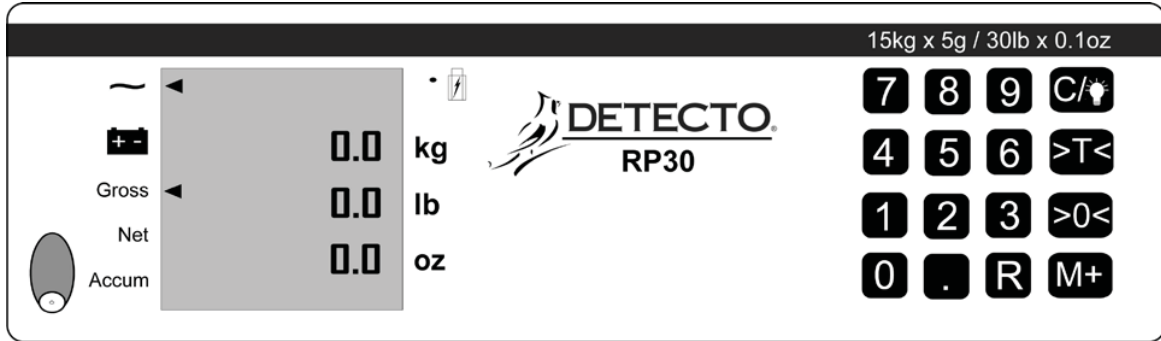
KEY FUNCTION

Key	Name	Function
0 ~ 9	Numeric Keys	Ten numerical keys to enter price
C/W	Clear/Backlight	The total accumulator will be cleared when the **C/w** key is pressed.
>T<	Tare Key	Subtracts unwanted weight. Such as the weight of a container, from weight calculations.
>0<	Zero Key	Zero's the weight display when no weight is on the tray, to provide accurate calculations.
M+	Accumulation Key	Add the current weight on display to the accumulator.
R	Recall	The R (recall) key will display the value of the total accumulator.

ANNUNCIATOR DESCRIPTION

Annunciator	Detail
~	This annunciator is turned on when the weight display is stable.
+-	This annunciator is turned on to indicate that the battery voltage is low and the battery will soon need to be recharged.
Gross	This annunciator is turned on to show that gross weight is displayed. Gross weight will be displayed when no tare weight is stored.
Net	This annunciator is turned on when the displayed weight is Net weight (Gross weight less Tare weight).
Accum	This annunciator is turned on when there is accumulation in memory.
· ⚡	Red light: The battery is charging. Green light: The battery is fully charged.

OPERATING INSTRUCTIONS

Power Switch

The Power Switch is located on the bottom right side panel towards the front of the scale. Place the power switch in the on position. The scale will perform a brief lamp test. This test consists of illuminating all display segments and annunciator LED's to allow the operator to make a visual verification that the display is operational. After completion of the lamp test, the scale will display the model number, the software revision level and then the WEIGHT display will show zero weight, indicating the scale is ready for use.

Before using the scale, it should be allowed to "warm up" (turned on and unloaded for approximately 5 to 10 minutes).

Display Backlight

Auto Backlight

The RP30 is equipped with a back lit display. When enabled, the display backlight will be turned on during weighing and will automatically turn off 5 seconds after the weight has been removed from the scale. Note that the Backlight uses additional energy and will shorten battery usage between charges.

To turn the backlight ON, press the **C/W** key and hold for 3 seconds. The scale will beep indicating the backlight has been turned ON.

Backlight Off

Press the **C/W** key and hold for 3 seconds. The scale will beep indicating the backlight has been turned OFF.

NOTE! The backlight mode is stored in memory and will restored when the scale is switched off and back on again.

Sleep Mode/Auto Off (Battery Powered Use)

The Sleep Mode feature conserves battery power when the scale remains unused for a period of approximately 30 seconds to 1 minute (depending on the setting selected in the configuration procedure). The display will be blank except for a flashing cursor. To activate the scale, press any key or add/remove weight from scale. Note that the sleep mode feature may be disabled by selecting OFF during the configuration procedure.

The Auto Off (automatic shut-off) feature helps prolong battery life by turning the scale off after a predetermined period of inactivity. To turn the scale back on you must use the ON/OFF switch.

During the configuration procedure, the Auto Off feature can be set for 2, 3, 4, 5, or 10 minutes of inactivity before the scale will automatically shut off. Note that the Auto Off feature may be disabled by selecting OFF during the configuration procedure.

Weighing Units

The Detecto RP30 is shipped configured to weigh in Pounds / Ounces. If Kilogram weighing is required follow the simple instructions below.

1. With the scale turned OFF, press and hold the M+ key and turn the scale ON.

2. The display will show $5EEUP$ and the software revision level.

3. Release the **M+** key. The display will change to show $5EEUP, Un it$.

4. Press the **>T<** key to toggle between (Lb = Lb) and (HG = kg).

5. Press the **M+** key to save the selection.

6. Press the **C/W** key. The display will change to show $5EEUP, 5AuE$.

7. Press the **M+** key to save setup changes and restart scale.

Weight Display

Zero the Weight Display

If the display shows a positive or negative weight, the scale must be re-zeroed.

1. Make sure that nothing is on the scale platform.

2. Press the **ZERO** (>0<) key once.

3. 0.0 should appear on the weight display.

Tare-Operation

Push Button Tare

1. With the scale in the Weight mode (0.0 is displayed on all displays), place the empty container on the scale platform.

2. Press the **TARE** (>T<) key. The display will change to zero and the Net annunciator will be turned on, indicating net weight is being displayed. The empty container's weight has been entered as "tare weight".

Pre-Tare Function

If you know the weight of an item such as a food container or wrapping that you use to contain or pack items on the scale and you want to use this as a tare weight, you can manually enter the tare weight into the scale.

1. Make sure that nothing is on the scale platform and press the **TARE** (>T<) key once to enter into the pre-tare setting mode.

2. The display will change to show $PrEtA$ and prompt for the tare weight.

3. Using the numeric keypad, enter the desired tare weight. EX: Pre-tare value is "1lb 12.5oz; you will enter "01125".

4. After the desired tare value has been entered, press the **TARE** (>T<) key.

5. The display will show a negative weight (to represent the tare weight) and the NET annunciator will be turned on. Note that this is the Net weight (Gross minus tare).

6. Proceed with the weighing operation.

To Clear the Tare

To return to a zero tare, simply remove all material from the scale platform and press the **TARE** (>T<) key, which will reset the tare weight to zero and return the scale to a center-of-zero gross weight condition.
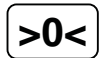
Accumulator

Adding to the Weight Accumulator

1. With the scale in the Weight mode (*0.0* is displayed on all displays), place the first item on the scale platform.

2. Press the **M+** key to add to the value of the Weight Accumulator.

3. The display will show accumulator values (to indicate the addition to the accumulator has taken place). After 1 second, the scale will return to the weight mode.

4. Remove the item from the scale or press the **ZERO** (>0<) key.

5. The scale is ready for the next weigh operation.

6. Repeat steps 1 to 5 until all items are weighed.

Displaying the Accumulator

With the scale in the Weight mode, press the **R** key to display the content of the accumulator.

Zero Display and Return to the Weight Accumulator

>0< With the total accumulator weight displayed, pressing the **ZERO** (>0<) key will return the scale to zero in the gross weight accumulator mode for additional weight accumulations.

Return to the Weight Mode

R With the total accumulator weight displayed, pressing the **R** key again will return the scale to the Weight mode. This will not affect the accumulator.

Clearing the Accumulator

With the scale in the Weight mode, press the **R** key to display the content of the accumulator.

C/W With the total accumulator weight displayed, press the **C/W** key to clear (reset) the total accumulator. The display will return to the Weight mode.

CONFIGURATION

The RP30 has been pre-configured at the factory and should not require configuration for use in most applications. In the event that the factory settings do not meet the requirements of your application, the following describes the steps to configure the scale.

To Begin Configuration
1. With the scale turned OFF, press and hold the **M+** key and then turn the scale ON.
2. The display will show *SEtUP* and the software revision level.
3. Release the **M+** key.
4. The display will change to show *SEtUP, Unit*.

NOTE! During the configuration process it is necessary to enter operational parameter values using the scale's keypad. The following keys are used to input the values.

M+   Press the **M+** key to save the parameter value displayed and advance to the next parameter.

>T<   Press the **>T<** key to toggle between (or step through) the option values for the displayed parameter.

>0<   Press the **>0<** key to back-up to the previous parameter.

C/W   Press the **C/W** key at any time to advance to the Save Setting parameter.

Unit **– Weighing Units**
With *SEtUP, Unit* displayed the current setting for the Weighing Units parameter will be shown. If the setting displayed is acceptable, press the **M+** key to proceed to the next parameter.

Otherwise, use the **>T<** key to toggle between the selections and then press the **M+** key to save it and proceed to the next parameter. Allowable values are:

    kG   = kg (kilograms)
    Lb   = Lb (pounds)

bUrr **– Beeper**
With *SEtUP, bUrr* displayed the current setting for the Beeper parameter will be shown. If the setting displayed is acceptable, press the **M+** key to proceed to the next parameter.

Otherwise, use the **>T<** key to toggle between the selections and then press the **M+** key to save it and proceed to the next parameter. Allowable values are:

    YES   = Enable Beeper
    no   = Disable Beeper

NOTE! The Sleep Mode/Auto-Off functions apply only during battery powered use.

5LEEP – Sleep Mode

With 5EtUP, 5LEEP displayed the current setting for the Sleep Mode function parameter will be shown. If the setting displayed is acceptable, press the **M+** key to proceed to the next parameter.

Otherwise, use the **>T<** key to toggle between the selections and then press the **M+** key to save it and proceed to the next parameter. Allowable values are:

305	=	If no activity occurs on scale for **30** seconds, the scale will enter Sleep Mode. The display will be blank except for a flashing cursor. To activate the scale, press any key or add/remove weight from scale.
605	=	If no activity occurs on scale for **60** seconds, the scale will enter Sleep Mode. The display will be blank except for a flashing cursor. To activate the scale, press any key or add/remove weight from scale.
OFF	=	The Sleep Mode function is disabled.

ROFF – Auto-Off

With 5EtUP, ROFF displayed the current setting for the Automatic Shut-Off function parameter will be shown. If the setting displayed is acceptable, press the **M+** key to proceed to the next parameter.

Otherwise, use the **>T<** key to toggle between the selections and then press the **M+** key to save it and proceed to the next parameter. Allowable values are:

1205	=	After 120 seconds (2 minutes) of no activity the scale will shut off and must be turned on using the ON/OFF switch.
1805	=	After 180 seconds (3 minutes) of no activity the scale will shut off and must be turned on using the ON/OFF switch.
2405	=	After 240 seconds (4 minutes) of no activity the scale will shut off and must be turned on using the ON/OFF switch.
3005	=	After 300 seconds (5 minutes) of no activity the scale will shut off and must be turned on using the ON/OFF switch.
6005	=	After 600 seconds (10 minutes) of no activity the scale will shut off and must be turned on using the ON/OFF switch.
OFF	=	The Auto Shut-Off function is disabled.

5Ru£ – **Save Setting**

> With 5£ŁUP, 5Ru£ displayed the current setting for the Save Setting parameter will be shown. If the setting displayed is acceptable, press the **M+** key to proceed to the next parameter.
>
> Otherwise, use the **>T<** key to toggle between the selections and then press the **M+** key to save it and proceed to the next parameter. Allowable values are:
>
> ยE5 = Save the settings
>
> no = Do Not save the settings

The scale display will reset and perform a brief lamp test. After completion of the lamp test, the scale will display the model number; the software revision level and then the WEIGHT display will show zero weight.

- If ยE5 (YES) was selected for the Save Setting parameter, the scale is ready for use with the <u>new</u> parameters.

- If no (no) was selected for the Save Setting parameter, the scale will continue to operate with the *previous* parameters.

ERROR AND STATUS MESSAGES

When the scale shows an error message, always first turn off the scale, wait approximately 5 seconds and turn on the scale. Refer to the error message list, when the error message is still on the display.

ERROR MESSAGE	DESCRIPTION
Err	Over capacity
$Lo\ bAt$	Low battery
$\boxed{ooooo}$	Zero value is too low when starting
$\boxed{ooooo}$	Zero value is too high when starting
$ErrH$	Zero value is too high
$ErrL$	Zero value is too low
$ErrE$	E^{2}prom Error
$ErrS$	Keypad Error

RECHARGEABLE BATTERY

Battery Charging

The scale can charge the battery (lead-acid rechargeable battery, 6v/4Ah). Just connect the scale to the external power supply to charge it. The battery will be charged regardless if the scale is on or off. It takes approximately 12 hours to charge the battery to full capacity depending on the voltage of the battery. If the battery has been-discharged, a prolonged charging time is required to bring the battery back to full capacity.

Red light: The battery is charging.
Green light: The battery is fully charged.

Low Battery

When the battery voltage falls below 5.8v, the low battery annunciator will be turned on. Continued use (approximately 15 minutes later), the display will show $bAt\ L$ in the weight field. If the battery voltage drops too low for accurate weighing, the scale will automatically shut off and you will be unable to turn it back on. When the low battery indicator is displayed, the operator should plug the power supply into the scale and then into the proper electrical wall outlet. The scale will begin charging the battery.

Notice

The battery should be recharged at least every 5 months regardless if it is used or not. After a long time storage, e.g. over 3 months, it is desired to cycle (charge/discharge) the battery 3 times to let it restore to full capacity.

When replacing the battery, pay much attention to the poles. The positive (+) terminal must be connected to the red connector and the negative (-) terminal must be connected to the black connector. If connected wrongly, the battery will be damaged.

> **NOTE!** The battery cover can be removed by loosening a single captive screw. This screw remains attached to the cover which prevents it from falling out of the cover or being dropped and lost.

The capacity of the batteries will reduce over the years and therefore also the total operation time of the scale. This is not an error of the scale, but it is normal behavior or rechargeable batteries.

STATEMENT OF LIMITED WARRANTY

DETECTO warrants its equipment to be free from defects in material and workmanship as follows: DETECTO warrants to the original purchaser only that it will repair or replace any part of equipment which is defective in material or workmanship for a period of **two (2) years from date of shipment**. Detecto shall be the sole judge of what constitutes a defect.

During the **first ninety (90) days** DETECTO may choose to replace the product at no charge to the buyer upon inspection of the returned item.

After the first ninety (90) days, upon inspection of the returned item, DETECTO will repair or replace it with a remanufactured product. The customer is responsible for paying for the freight both ways.

This warranty does not apply to peripheral equipment not manufactured by DETECTO; this equipment will be covered by certain manufacturer's warranty only.

This warranty does not include replacement of expendable or consumable parts. This does not apply to any item which has deteriorated or damaged due to wear, accident, misuse, abuse, improper line voltage, overloading, theft, lightning, fire, water or acts of God, or due to extended storage or exposure while in purchaser's possession. This warranty does not apply to maintenance service. Purchased parts will have a ninety (90) day repair or replacement warranty only.

DETECTO may require the product to be returned to the factory; item(s) must be properly packed and shipping charges prepaid. A return authorization number must be obtained for all returns and marked on the outside of all returned packages. DETECTO accepts no responsibility for items lost or damaged in transit.

Conditions Which Void Limited Warranty

This warranty shall not apply to equipment which:
A.) Has been tampered with, defaced, mishandled or has had repairs and modifications not authorized by DETECTO.
B.) Has had serial number altered, defaced, or removed.
C.) Has not been properly grounded according to Detecto's recommended procedure.

Freight Carrier Damage

Claims for equipment damaged in transit must be referred to the freight carrier in accordance with freight carrier regulations.

This warranty sets forth the extent of our liability for breach of any warranty or deficiency in connection with the sale or use of the product. DETECTO will not be liable for consequential damages of any nature, including but not limited to, loss of profit, delays or expenses, whether based on tort or contract. Detecto reserves the right to incorporate improvements in material and design without notice and is not obligated to incorporate improvements in equipment previously manufactured.

The foregoing is in lieu of all other warranties, express or implied including any warranty that extends beyond the description of the product including any warranty of merchantability or fitness for a particular purpose. This warranty covers only those DETECTO products installed in the forty-eight (48) contiguous continental United States.

DETECTO
102 E. Daugherty, Webb City, MO 64870 USA
Ph: 417-673-4631 or 1-800-641-2008
Fax: 417-673-2153
www.Detecto.com
Technical Support: 1-866-254-8261
E-mail: tech@cardet.com

8528-M401-O1 Rev C 06/17