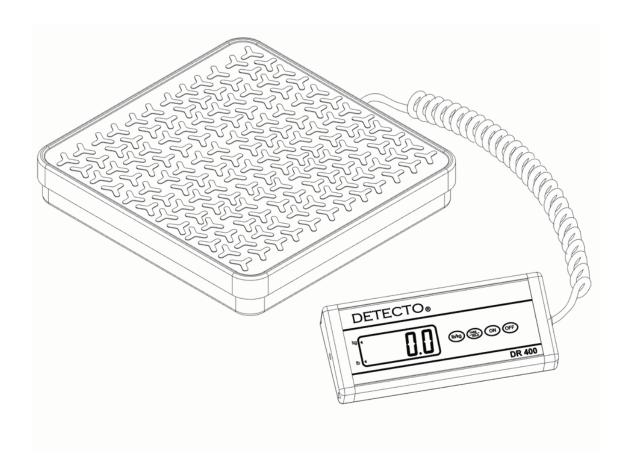


# MODEL DR150/400 DIGITAL RECEIVING SCALE Operation Manual



8525-M275-O1 Rev B 09/09

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## INTRODUCTION

The Model DR150 is a 150lb Digital Receiving Scale. The Model DR400 is a 400lb Digital Receiving Scale. Both units can be powered by battery or AC adapter (included). The scale is equipped with a movable display that can be placed on the work surface or mounted to the wall.

## **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. The Stock No. is 001-000-00315-4.

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Serial Number				
RETAIN THIS INFORMATION FOR FUTURE USE				

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# **FEATURES**

Display: 1.0" high LCD display

Tare/Hold Button: Pressing once will tare (zero out) the load on the platform. When pressed and held for 2-3 seconds, used to toggle the Hold option by prompting to hold "H or" or not hold "H or" the weight displayed after the load has been removed.

**Lb/kg Button:** Converts the displayed weight from pounds to kilograms or from kilograms to pounds.

**Capacity:** DR150 = 150lbs

DR400 = 400lbs

Graduations: DR150 x .2lbs

DR400 x .5lbs

**Auto Shut-off:** Powers off the scale after 2 minutes of non-use

**Power Source:** 6 AA batteries (not included) with automatic shut-off *OR* included UL listed 120V AC 60Hz to 9V DC 300mA adapter.

#### **PRECAUTIONS**

Before using this instrument, read this manual and pay special attention to all "WARNING" symbols:



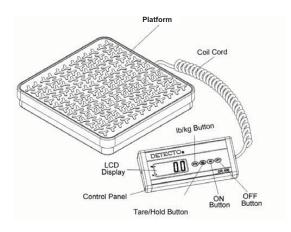


ELECTRICAL WARNING

Congratulations on your purchase of the Digital Receiving Scale. Your Digital Receiving Scale is an example of superior design and craftsmanship. In order to optimize its function, be sure to read this instruction manual carefully before use. Keep instructions handy for future reference.

## **Description of Parts**

#### Model DR150/400



## **Main Features**

• LCD Display

1" digit size displays weight.

#### Tare/Hold Button

When pressed, one time the scale will tare (zero out) the load on the platform. When pressed and held for 2-3 seconds, the scale will prompt to hold "H on" or not hold "H off" the weight displayed after the load has been removed.

## Lb/kg Button

When pressed, converts the weight display from pounds to kilograms or from kilograms to pounds.

ON Button

When pressed turns the scale "ON".

OFF Button

When pressed turns the scale "OFF".

Auto Shut Off

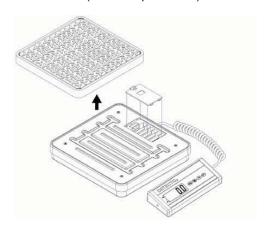
Powers off the scale after 2 minutes of nonuse.

## **Before You Begin**

- 1. Remove scale from its box along with control panel and the 120V Adapter.
- If using the 120V Adapter, plug one end into the receptacle (connector) at the rear of the scale. Insert the other end (the adapter) into a 120V outlet.

## **Battery Installation**

The Digital Receiving Scale operates with (6) "AA" batteries (Alkaline preferred).



- 1. Place unit upright on a flat surface and lift platform from top of scale.
- Remove battery compartment door and insert batteries into compartment. Make certain to observe the correct polarity.
- 3. Replace compartment door and platform cover on scale.

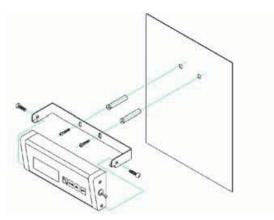
#### **Auto Shut-off Feature**

This feature makes the scale shut-off after 2 minutes of nonuse to conserve the battery. You can disable this feature and the scale will operate continuously.

- With the scale off, press the "UNIT CONVERSION" button and hold down.
- Press and hold "ON" button, while holding the "UNIT CONVERSION" button down.
- 3. The display will show "8888" and then "8\_oF" will appear. The auto-off feature is now defeated. Release the buttons.
- 4. To make the auto-off active again, repeat step 1 and 2 and "ਖ਼ "ou" will appear. The auto-off is now functional.

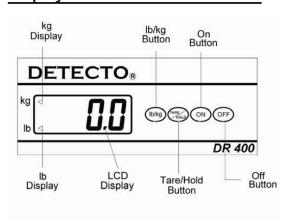
## **Mounting the Unit**

- Mount bracket to wall using (2) screws that are appropriate anchors for the surface being mounted to.
- Lower control panel into mounted bracket. Insert flat tip screws (included) through round holes in mounting bracket and drive the screws into existing threaded holes in lower half of control panel to secure control panel to bracket.



YOUR SCALE IS NOW READY FOR USE.

# **Display and Function**



## **General Operation**

#### **POWER ON**

To turn the scale on, press the button marked "ON". The display will first show "8888" for approximately two (2) seconds, then display "LD". This indicates that the scale is ready for use.

#### WEIGHING

When the display shows "LLD" it is ready to weigh an object. If the object exceeds the capacity of the scale by more than 5%, the display will show "occo".

Until the overload condition is reached, objects can be placed on the platform, with the display showing the total weight of all objects on the platform.

#### TARE OPERATION

To tare (zero out) a load on the platform (i.e.: the weight of a container), press the button marked "TARE/HOLD" one time. When this is done, the display will show the value "LD". This could be followed by the addition of another load, if so desired. The display will show the sum of all additional loads above and beyond the tared load.

#### TARE CAPABILITY

A load of up to the capacity of the scale can be tared (zeroed out).

When a load is tared, an additional load up to the full capacity of the scale can be weighed.

**Example:** The Model DR150 has a capacity of 150 lbs if a load of 20 lbs on that scale is tared (zeroed out), an additional load or loads of up to 130 lbs can be weighed.

#### **HOLD OPERATION**

With the scale at zero, press and hold the Tare/Hold button for 2-3 seconds. The display will prompt "H on" or "H off". This will allow you to toggle between the two options. With "H on" selected, any load on the scale will continue to be displayed after the load has been removed. To clear the weight displayed and return to zero, press the Tare/Hold again. With "H off" selected, the scale display will not show (hold) the weight after the load has been removed.

NOTE! The "H on" must be selected each time the scale is turned on.

# **Error and Status Messages**

#### **Low Battery**

If battery is discharged, the display will show the "batter" message. The operator should replace the batteries or use the adapter.



#### Over Load

If the total load exceeds the maximum capacity of scale, the display will show the """ message. The weight must be removed from the platform and not allowed to remain on the platform.



## Minus weight

If the weight value is less than -99.9 lbs, the display will show the following: "----". To adjust the minus weight, press the "Tare/Hold" button.



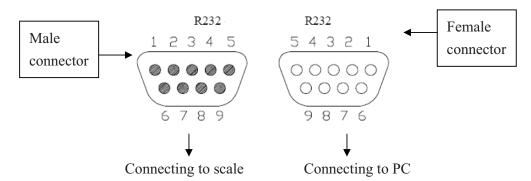
#### **EPROM Failure**

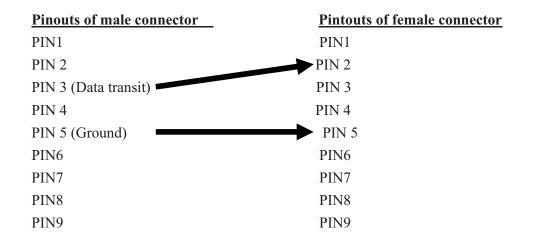
If the " $\mathcal{E} \cap \mathcal{E}$ " message appears, the operator should contact their scale service representative.



# DR SERIES SERIAL OUTPUT CONNECTOR

# RS232 data transmission cable:





# DR SCALE DATA FORMAT

FORMAT: (LF). (SIGN). XXXX.XXX. (UNIT). (LF). hh (ETX) 2400 BAUD, 8 BITS, NO PARITY, 1 STOP BIT.

CONTINUOUS OUTPUT: TRANSMISSION INTERVAL IS 16 ASCII CHARACTERS EVERY 450 m SEC.

(LF): LINE FEED (ASCII – 0AH) (ETX): END OF TEXT (ASCII – 03H)

(SIGN): CAN BE EITHER '+' OR '-'

XXX.XXX: THE WEIGHT READ BY THE SCALE

(UNIT): CAN BE EITHER 'LB OR 'KG'

hh: TWO BYTE HEX CODE:

HIGH ORDER BYTE

BIT 0: 0 = SCALE STABLE
BIT 1: 1 = SCALE IN MOTION

BIT 2: NOT USED BIT 3; NOT USED

LOW ORDER BYTE

BIT 0: 0 = SCALE IS UNDER CAPACITY
BIT 1: 1 = SCALE IS OVER CAPACITY

BIT 2: NOT USED BIT 3; NOT USED

TRANSMISSION EXAMPLE:

DISPLAY READS: 123.4 KG

DATA TRANSMITTED:

LF\*0123.400kg (0AH)(2BH)(30H)(31H)(32H)(33H)(34H)(30H)(30H)(6BH)(67H)

LFhhETX (0AH)(30H)(03H)