DETECTO®

www.Detecto.com

MODEL VET-330WH
Digital Veterinary and
General Purpose Scale
Owner's Manual

PROPER DISPOSAL

When this device reaches the end of its useful life, it must be properly disposed of. It must not be disposed of as unsorted municipal waste. Within the European Union, this device should be returned to the distributor from where it was purchased for proper disposal. This is in accordance with EU Directive 2002/96/EC. Within North America, the device should be disposed of in accordance with the local laws regarding the disposal of waste electrical and electronic equipment.

It is everyone's responsibility to help maintain the environment and to reduce the effects of hazardous substances contained in electrical and electronic equipment on human health. Please do your part by making certain that the device is properly disposed of. The symbol shown to the right indicates that this device must not be disposed of in unsorted municipal waste programs.

FCC COMPLIANCE STATEMENT

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 designed within the limits for a Class A computing device pursuant to Subpart J of Part 15 of FCC rules 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.

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DISCLAIMER

While every precaution has been taken in the preparation of this manual, the Seller assumes no responsibility for errors or omissions. Neither is any liability assumed for damages resulting from the use of the information contained herein. All instructions and diagrams have been checked for accuracy and ease of application; however, success and safety in working with tools depend to a great extent upon the individual's accuracy, skill, and caution. For this reason, the Seller is not able to guarantee the result of any procedure contained herein. Nor can they assume responsibility for any damage to property or injury to persons occasioned from the procedures. Persons engaging in the procedures do so entirely at their own risk.

TABLE OF CONTENTS

Serial Number _____ **Date of Purchase** _____ **Purchased Form** _____ _____ _____ RETAIN THIS INFORMATION FOR FUTURE USE	**PRECAUTIONS** Before using this instrument, read this manual and pay special attention to all "WARNING" symbols: ⚠ IMPORTANT ⚡ ELECTRICAL WARNING

INTRODUCTION

Thank you for purchasing our Detecto Model VET-330WH Digital Veterinary and General Purpose Scale. The VET-330WH is equipped with a rechargeable battery pack that (after 14 hours of charging) can provide approximately 8 hours of continuous use.

This manual will guide you through the setup and operation of your scale. Please read it thoroughly before attempting to operate this scale and keep it available for future reference.

SPECIFICATIONS

Capacity:	330 lb x 0.2lb (150 kg x 100 g)
Platform Dimensions:	36 in W x 22 in D x 1.97 in H (90 cm W x 55 cm D x 5 cm H)
Display Dimensions:	10.63 in W x 3.54 in D x 1.77 in H (270 mm W x 90 mm D x 45 mm H)
Weight Display:	Seven-Digit with decimal, seven-segment, 1.0-inch (25 mm) LCD
Power Requirements:	Built-in rechargeable battery pack 7.2V DC/1200mA (Cardinal P/N 6800-1067) or the included 120 to 230V AC 15V DC 300 mA multi-Blade input wall plug-in UL/CUL listed AC power adapter (Cardinal P/N 6800-1044)
Construction:	Stainless steel
Tare:	100% of scale capacity
Keys:	HOLD, UNIT, ON/ZERO/OFF, TARE
Operating Environment:	Temperature Range: 40 to 105 °F (+5 to +35 °C) Humidity: 25% ~95% RH
Net Weight:	40 lbs (18 kg)
Shipping Weight:	50 lbs (23 kg)

FEATURES

- Stainless steel enclosure for durability and easy wipe-down cleaning
- Built-in wheels and carrying handle for easy transportation of scale to a new location
- 7.0 ft (2.1 m) cable from scale base to display allows placing the display wherever it's easiest to operate keypad and read weight
- Included wall or desk mount display bracket and mounting hardware
- Minimal assembly required (install non-skid feet and mounting bracket to display)
- Rechargeable battery with low battery indicator
- Includes an AC power adapter to power scale and charge battery
- Selectable Auto Shut-Off feature (up to 5 minutes) turns the scale off when not used
- Zero is established on power up routine and maintained by auto-zero circuitry
- HOLD key allows the animal's weight to be retained after leaving the platform

SETUP AND INSTALLATION

Unpacking

Before beginning the installation of your scale, make certain the instrument 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. Remove all plastic wrapping, foam fillers, and cardboard material from the scale platform, display, and other components. You should have the following components:

(1) Scale Platform (with attached Display)

(1) Stainless Steel Platform Cover

(1) Wall or Desk Display Mounting Bracket

(1) 15V DC 300 mA AC power adapter

(1) Hardware Pack, containing:

    (2) Screws and Plastic Wall Anchors

    (2) Display Bracket Enclosure Knobs

    (4) Non-skid Scale Feet

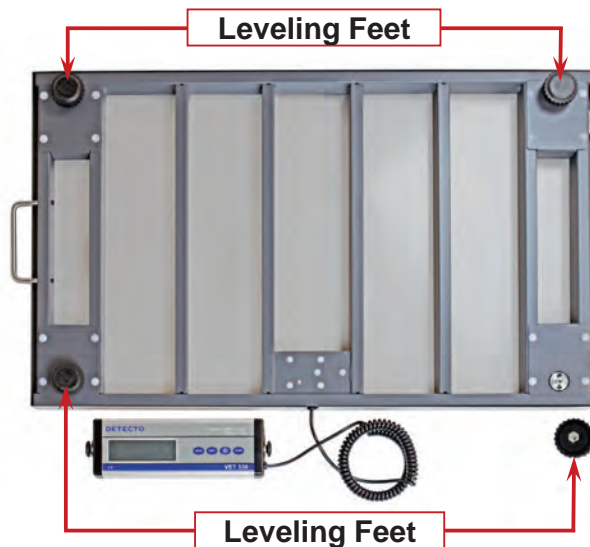## Install the Scale Feet

1. Remove the four leveling feet from the hardware pack and install one in each corner of the bottom of the scale base assembly.

⚠️ **IMPORTANT! THE LEVELING FEET MUST BE INSTALLED TO OPERATE THE SCALE.**

2. For best results, place the scale on a flat level surface and adjust the leveling feet to ensure the scale is sitting level.

3. The scale is now ready for use.

SETUP AND INSTALLATION, CONT.

Transporting the Scale

The VET-330WH has built-in wheels and an integral carrying handle for easy transportation of the scale to a new location. Follow the instructions below to safely lower and raise the scale to and from the floor when relocating the scale.

⚠️ **DO NOT DROP THE SCALE!** This scale weighs approximately 50 pounds. Damage to the Load Cells can occur if the scale is dropped or allowed to fall from the transport position. If damage to scale is determined to have been caused by falling or dropping scale, the warranty will be voided!

Lowering Scale from Transport Position to Floor

1. From the transport position, stand close to the scale with your feet 8 to 12 inches apart.

2. Firmly grasp the handle on the scale.

3. While stepping back, lower the scale to the floor, keeping your back straight and bending your knees until you're in a squatting position.

   Never bend at the waist with your legs straight!

Lifting Scale from Floor to Transport Position

1. Stand close to the scale with your feet 8 to 12 inches apart.

2. Keeping your back straight, bend your knees until you're in a squatting position.

   Never bend at the waist with your legs straight!

3. Firmly grasp the handle on the scale and lift it straight up. Don't twist to either side. Keep the scale close to you, not at arm's length.

Scale Transport Position

4. Use your leg muscles as you lift, keeping your back upright and in its natural posture. Always lift steadily and smoothly without jerking.

Storing the Scale

For storage, lay the scale flat for maximum protection against damage.

Placing the Scale

The scale should be placed on a flat, level floor or low-cut carpet away from any rapidly moving air source (heating and cooling vents). Check to make certain the scale is level. If it is not, adjust all four (4) feet as required to attain a level scale.

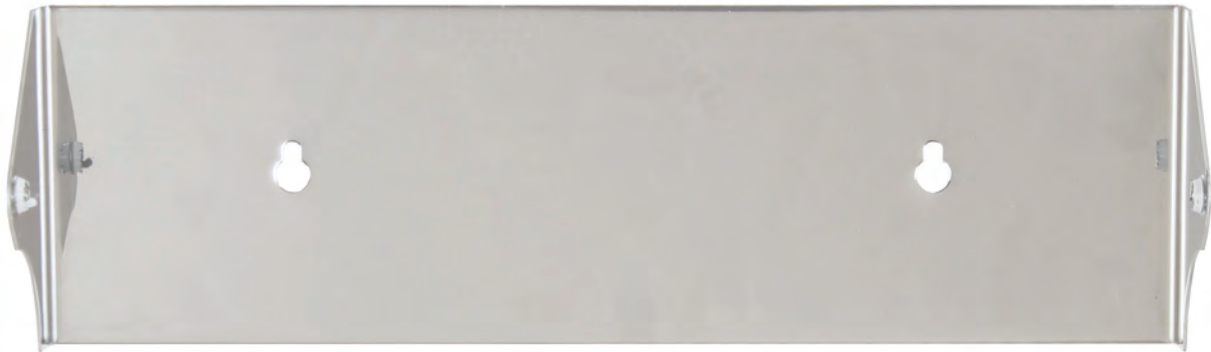⚠️ **NOTE:** Any time the scale is moved or re-located, be sure to check if the scale is level before using it.

SETUP AND INSTALLATION, CONT.

Placing the Display

The VET-330WH display has a 7.0 ft (2.1 m) cable to allow it to be placed at a convenient position away from the scale base. The included bracket can be used to mount the display on a wall or it can be used to place it on a desk or table for easy viewing.
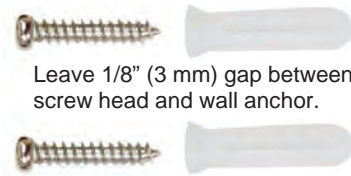
Wall Mounting

1. Choose the location to mount the display on the wall where it can be easily viewed, not subject to direct sunlight, and where the keypad is within easy reach of the operator.

2. Using the bracket for a template, place the bracket against the wall and mark the holes to mount it. Remove the bracket and drill two (2) 13/64 in (5 mm) holes in the wall for the mounting wall anchors.

Use the mounting bracket as a template to mark holes to drill.

3. Insert the wall anchors in the wall until they are flush with the wall.

4. Insert the two (2) M3.0x25 screws into the wall anchors, and then tighten them until there is approximately 1/8" (3 mm) gap between the screw head and the anchor.

Leave 1/8" (3 mm) gap between screw head and wall anchor.

5. Place the display in the bracket and install the included enclosure knobs. Adjust the angle of the display for the best viewing, and then completely tighten the knobs.

Place the display in the mounting bracket and install the enclosure knobs.

Adjust display for viewing angle and completely tighten enclosure knobs.

6. Place the large end of the slotted holes in the bracket over the screw heads, and gently pull down to secure the bracket and display to the wall.

SETUP AND INSTALLATION, CONT.

Desk Mounting

1. The location chosen should be a stable, level surface (either a desk or solid table), free of temperature extremes and water. The display should be where it can be easily viewed, not subjected to direct sunlight, and where the keypad is within easy reach of the operator.

2. Place the display in the bracket and install the included enclosure knobs. Adjust the angle of the display for the best viewing, and then completely tighten the knobs. Refer to the image for Step 5 in the Wall Mounting instructions on the previous page.

AC Power Adapter

To apply power to the scale using the supplied 120 to 230V AC 15V DC 300 mA wall plug-in UL/CUL listed AC power adapter (Cardinal P/N 6800-1044), insert the plug from the power adapter cable into the power jack on the right side of the display (as viewed facing the display) and then plug AC power adapter into the proper electrical outlet. The scale is now ready for operation.

AC Power Adapter Plug

AC Power Adapter

Battery Pack

The VET-330WH scale uses a 7.2V DC, 1200 mA built-in rechargeable battery pack (Cardinal P/N 6800-1067). The VET-330WH can operate for approximately 8 hours of continuous use with a fully charged battery pack.

Low Battery Indicator

When the battery pack needs to be recharged, a low battery indicator on the display will turn on. 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.

Battery Charging

When the low battery indicator is displayed, the operator should plug the AC power adapter into the scale display and then into the proper electrical wall outlet. To fully recharge the battery pack, the AC power adapter must be connected for approximately 14 hours. Note that the VET-330WH can still be operated while the battery pack is charging. Also, note that charging the battery pack for more than 14 hours *will not* damage it.

NOTE: If the AC power adapter is disconnected before the 14 hours, the scale will continue to charge the battery pack when the AC power adapter is plugged back in.

DISPLAY SYMBOLS

The display symbols are turned on to indicate that the scale display is in the mode corresponding to the symbol or that the status indicated by the symbol is active.

○ (STABLE)

This symbol is turned on when the weight display is stable.

▬ (NEGATIVE)

This symbol is turned on to indicate the displayed weight is a negative weight.

➜○← (ZERO)

This symbol is turned on to indicate that the weight display is at center-of-zero.

Low

This symbol is turned on to indicate the battery pack needs to be recharged.

◀ (HOLD)

The arrow symbol is turned on and will flash after pressing the **HOLD** key to indicate that the Hold function is On.

NOTE: The arrow symbol will stop flashing when the weight on the scale is above 3.3 lb (1.5 kg) and stable, or the **HOLD** key is pressed again to turn off the Hold function. Note that pressing the **TARE** key will also turn off the Hold function.

kg

This symbol is turned on to indicate that the displayed weight is in kilograms.

lb

This symbol is turned on to indicate that the displayed weight is in pounds.

KEY FUNCTIONS

HOLD

1. Press this key to turn the Hold function on. The arrow symbol will turn on and will flash to indicate that the Hold function is on.

> **NOTE:** The arrow symbol will stop flashing when the weight on the scale is above 3.3 lb (1.5 kg) and stable.

2. To turn off the Hold function, press the **HOLD** key again or press the **TARE** key.

3. In the Configuration Mode, press this key to confirm the setting for each menu.

UNIT

1. Press to change the weighing units to the alternate units of measurement (must be selected in the Configuration Mode).

2. In the Configuration Mode, press this key to select the menu.

ON/ZERO/OFF

1. When the scale is off, press and release this key to turn the scale on.

2. If the scale is already on, press and release this to turn the scale off.

3. If the weight display is not at zero, press this key to reset the display to zero (0.0).
NOTE: A maximum of up to 20% of the scale capacity can be zeroed.

TARE

1. Press this key to tare (zero) the weight of a container (e.g., a box, pet carrier, or travel cage) up to the *full capacity* of the scale.

2. When the Hold function is on, pressing this key will also turn the Hold function off.

3. Press and hold this key for three (3) seconds to enter the Configuration mode.

⚠ **DO NOT operate the keypad with pointed objects (pencils, pens, etc.). Damage to the keypad resulting from this practice is NOT covered under the warranty.**

OPERATION

Turn the Scale On

Press the **ON/ZERO/OFF** key to turn the scale on. The scale will display

$\mathit{88888}$ then change to the selected weighing units.

Select the Weighing Unit

Press the **UNIT** key to alternate between the selected weighing units. **NOTE:** The alternate weighing units must be enabled in the Configuration Mode for this function to be operational.

Basic Weighing

Place the pet or animal to be weighed on the scale platform. Wait a moment for the scale display to stabilize, then read the weight.

Zero the Weight Display

If the scale is not showing zero weight on the display, press the **ZERO** key. The weight display will return to zero ($\mathit{0.0}$) with the ➔○← (Zero) and ○ (Stable) symbols turned.

NOTE: The scale can be re-zeroed to a maximum of up to 20% of the scale capacity.

Tare the Weight Display

Place the container (e.g., a box, pet carrier, or travel cage) on the scale platform, allow the scale to stabilize, and then press the **TARE** key. The weight on the scale can be tared (zeroed off) until the full capacity of the scale is reached. Note that when removing the container from the scale platform, the scale will display negative weight.

To clear a tare weight, press the **TARE** key with the scale platform empty. This will reset the weight display to zero.

Hold the Displayed Weight

To hold the displayed weight of the pet or animal, press the **HOLD** key. The arrow symbol is turned on and will flash to indicate the Hold function is on. Place the pet or animal on the scale. When the weight on the scale is above 3.3 lb (1.5 kg) and stable, the arrow will stop flashing and the displayed weight will be held.

The weight on the display will be held until the **HOLD** key is pressed again or the **TARE** key is pressed to turn off the Hold function.

Turn the Scale Off

With the scale turned on, press the **ON/ZERO/OFF** key to turn the scale off.

CONFIGURATION

The VET-330WH scale has been pre-configured at the factory and should not require changes to use in most applications. If the factory settings do not meet the requirements of your application, the following describes the steps to change the configuration of the scale.

To Begin Configuration:

1. Press the **ON/ZERO/OFF** key to turn on the scale.

2. Press and hold the **TARE** key for 3 seconds.

3. When the display shows $5EL$, release the **TARE** key. The scale will enter the Configuration mode with the display showing $Un \, iL$.

Weighing Units

To select "kg" (kilogram) weighing units:

1. With the display showing $Un \, iL$, press the **HOLD** key. The display will change to show "kg".

2. Press the **HOLD** key to display kg status.

3. Press the **UNIT** key to toggle between:

    Enable (display will change to On) or

    Disable (display will change to OFF).

4. Press the **HOLD** key. The display will change to $Un \, iL$.

5. Proceed to **Automatic Shutoff**.

To select "lb" (pounds) weighing units

1. With the display showing $Un \, iL$, press the **HOLD** key and then the **UNIT** key. The display will change to show "lb".

2. Press the **HOLD** key to display lb status.

3. Press the **UNIT** key to toggle between:

    Enable (display will change to On) or

    Disable (display will change to OFF).

4. Press the **HOLD**. The display will change to $Un \, iL$.

5. Proceed to **Automatic Shutoff**.

Automatic Shutoff

1. With the display showing $Un \, iL$, press the press **UNIT** key. The display will change to show $AOFF$.

2. Press the **HOLD** key to begin the selection of the automatic shut-off time (in seconds). The display will change to show 120.

3. Press the **UNIT** key to toggle through the selections, 120, 180, 240, 300, or OFF.

4. When the desired time is displayed, press the **HOLD** key. The display will change to show $AOFF$.

5. Proceed to **Gravity Compensation**.

CONFIGURATION, CONT.

Gravity Compensation

1. With the display showing OAF, press the press **UNIT** key 4 times. The display will change to show $GrAU$.

2. Press the **HOLD** key.

    To Enable the Gravity Compensation mode, press the **UNIT** key. The display will change to On.

    To Disable the Gravity Compensation mode, press the **UNIT** key. The display will change to OFF.

3. Press the **HOLD** key again. The display will change to show $GrAu$.

4. Press the **UNIT** key. The display will change to show End.

5. Press the **HOLD** key to save the settings and reset the scale.

6. The setup is complete.

GRAVITY COMPENSATION

The Gravity Compensation for your VET-330WH scale has been pre-configured at the factory and should not require changing in most locations. If the factory settings do not meet the requirements of your location, contact the factory for the value for your location.

With $GrAu$ enable from the function setting of the Configuration mode, the scale will use the factory-set value of 9.796 for the Gravity Compensation.

If the $GrAu$ is disabled, the scale will use the value obtained from the factory and entered by the operator for the Gravity Compensation.

To Change the Gravity Compensation Value:

1. Press the **ON/OFF** key to turn on the scale.

2. Press and hold the **UNIT** key for 3 seconds to enter the Gravity Compensation mode, the display will show 9.796 (or the current value).

3. Enter the desired gravity value (press the **UNIT** key to choose a number from 0~9, and press the **HOLD** key to move to the right digit.

4. Press the **TARE** key (to confirm the entered gravity) and return the scale to the normal operating mode.

DISPLAY MESSAGES

The VET-330WH scale is equipped with software that tests various portions of the scale's circuitry and verifies proper operation. Should a problem be detected, a message will be displayed alerting the operator to that condition. The following lists the messages displayed and their meaning:

DISPLAY	MEANING
Low	This symbol is displayed when the battery pack needs to be recharged. **NOTE:** 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.
$ErrE$	This error will be displayed if the E^2PROM has some problem. Please consult your scale service representative.
$ErrL$	The Zero count is too low. Please consult your scale service representative.
Err	This error is display when the weight on the scale exceeds the scale capacity. Remove the weight to clear the error. This error can also be displayed if the Zero count is too high. Please consult your scale service representative.

CARE AND MAINTENANCE

The heart of the VET-330WH Digital Veterinary and General Purpose Scale is four precision load cells located in each corner of the scale base. It will provide accurate operation indefinitely if protected against overload of scale capacity, dropping items on the scale, or other extreme shocks.

- **DO NOT** submerge scale or display in water, pour or spray water directly on them.
- **DO NOT** use acetone, thinner, or other volatile solvents for cleaning.
- **DO NOT** expose scale or display to direct sunlight or temperature extremes.
- **DO NOT** place the scale in front of heating/cooling vents.
- **DO** clean scale and display with a damp soft cloth and mild non-abrasive detergent.
- **DO** remove power before cleaning with a damp cloth.
- **DO** provide clean AC power and adequate protection against lightning damage.
- **DO** keep surroundings clear to provide clean and adequate air circulation.

STATEMENT OF LIMITED WARRANTY

Detecto Scale 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 suspect 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 loss or damage in transit.

STATEMENT OF LIMITED WARRANTY

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 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.

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