



LC-VS SERIES

Low-Cost Vet Scale
Tempered Glass Model



LC-VS 330

Operating Manual

Professional Weighing Equipment

NOTE: THIS PRODUCT HAS BEEN FACTORY CALIBRATED. PLEASE
REFER TO THE MANUAL BEFORE RE-CALIBRATING PRODUCT!

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Declaration of Conformity

Declaration of conformity for apparatus with CE mark

We hereby declare that the product to which this declaration refers conforms to the following standards.

Electronic scale: Vet Scales Series

Available Models **LC-VS 330**

Mark Applied	EU Directive	Standards
	2004/108/EC	EN 61326-1: 2006

Signature:



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Date: 02.26.2006

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Customer Service

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Introduction

What you should know about this Operation Manual:

Tree® Professional Weighing Equipment products are simple to operate. Nevertheless, you should read through these operating instructions in their entirety, so that you can make optimum use of the full potential of the weighing scale in your daily work activities.

These operating instructions contain guidance in the form of pictograms and keyboard diagrams, which should help in finding the required information:

For the labeling of potential hazards, please refer to the safety proportion of this operation manual.

Safety

Representations & Symbols

Note: Important instructions which involve safety are highlighted with the appropriate mark:



Safety Recommendations

When using the weighing equipment in surroundings with increased safety requirements, the corresponding regulations must be observed.

The weighing scale may only be used with the power adapter supplied.

Before connecting the power adapter to the scale, the user must ensure that the operating voltage stated on the power adapter is compliant with the mains voltage. If not, please contact Customer Service at the address above.

If the power adapter or its cable is damaged, the weighing scale must immediately be disconnected from the electricity supply (unplug the power adapter).

If there should be any reason to believe that it is no longer safe to operate the scale, it should be immediately unplugged from the electricity supply (unplug power adapter) and secured against inadvertent operation.

During maintenance work, it is essential to follow the recommendations set out in maintenance and servicing.

The weighing scale must not be operated in an area subject to explosion risks.

Care must be taken when weighing liquids to ensure that no liquid is spilled inside the scale, into connections on the rear of the equipment, or the power adapter. If liquid is spilled on the scale, it must immediately be unplugged from the main electricity supply (unplug power adapter).

The weighing scale may be operated after it has first been inspected by a service technician.

These operating instructions must be read by each user and should always be easily accessible at the workplace.

Features

Model Number	Capacity	Division
LC-VS 330	330lb	0.1lb
Platter / Tray	33.1 x 16 in	
Net/Gross Weight	15.4 lb/22 lb.	
Package	Standard Carton: 22 x 16 x 7 in	
Operating Temperature	Optimum: 15-30C (62-90F)	
Indicator	4×AA Batteries or AC/DC	
Power Source	Adapter 6V /300mA	

- Auto shut off (optional)
- Auto calibration
- Auto zero tracking
- AC power
- Large LCD
- Hold function
- Tempered glass platter
- Auto backlight (optional)

Application & Conformity

The weighing scale may only be used for the weighing of solid materials and of liquids contained in secure containers.

The maximum capacity load of the weighing scale must never be exceeded, otherwise the weighing scale may be damaged.

In using the weighing scale in combination with other devices including those produced by other manufacturers, the appropriate regulations for the safe use of the relevant attachments and their application in accordance with instructions must be observed.

The weighing scale has been manufactured and tested in accordance with the standards and recommendations set out in the declaration of conformity.

The power adapter supplied for the weighing scale complies with the appropriate electrical protection class.

Getting Started

The scale is packaged in an environmentally friendly carton, which provides optimum protection for the balance during transportation.

We suggest that you keep the original packaging to avoid damage if you are shipping or transporting the scale to a different location. It is also the best way to keep it in the best condition if it will not be used for an extended period.

To avoid damage, please follow the instructions provided below, when unpacking the scale:

- Unpack the scale carefully.
- When outside temperatures are very low, the scale should be stored for a couple hours in its box in a dry room at normal temperature. This prevents condensation from settling on the unit when opening the box.
- Check the scale immediately after unpacking for any external visual damage. If there is any damage on scale, contact customer service immediately.
- If the scale is not to be used immediately after purchase, it should be stored in a dry place where fluctuations in temperature are low. (reference pg. 12).
- Read through these operating instructions, before you work with the unit and pay attention to the safety recommendations (reference Safety pg. 5).

Delivery

Inspect delivery for completeness immediately on unpacking all components.

Checklist for complete delivery

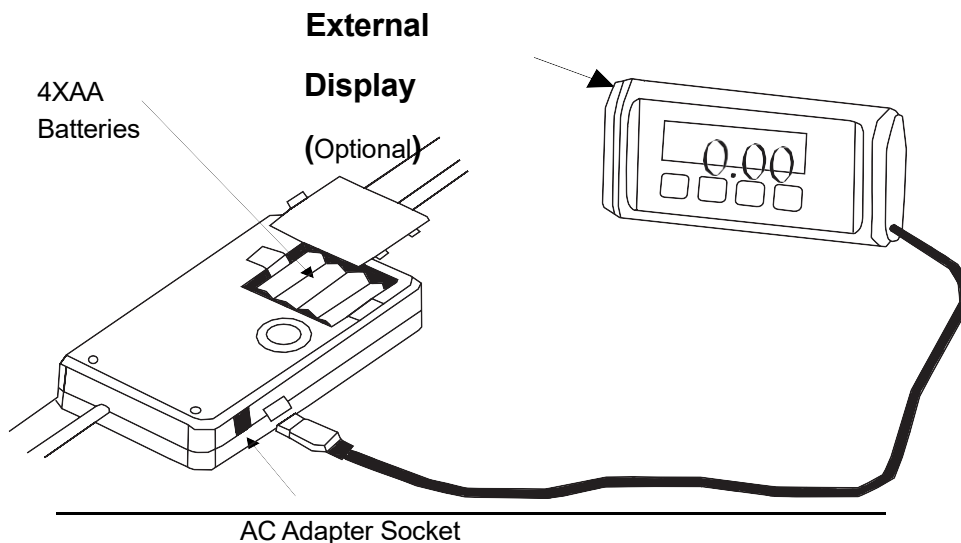
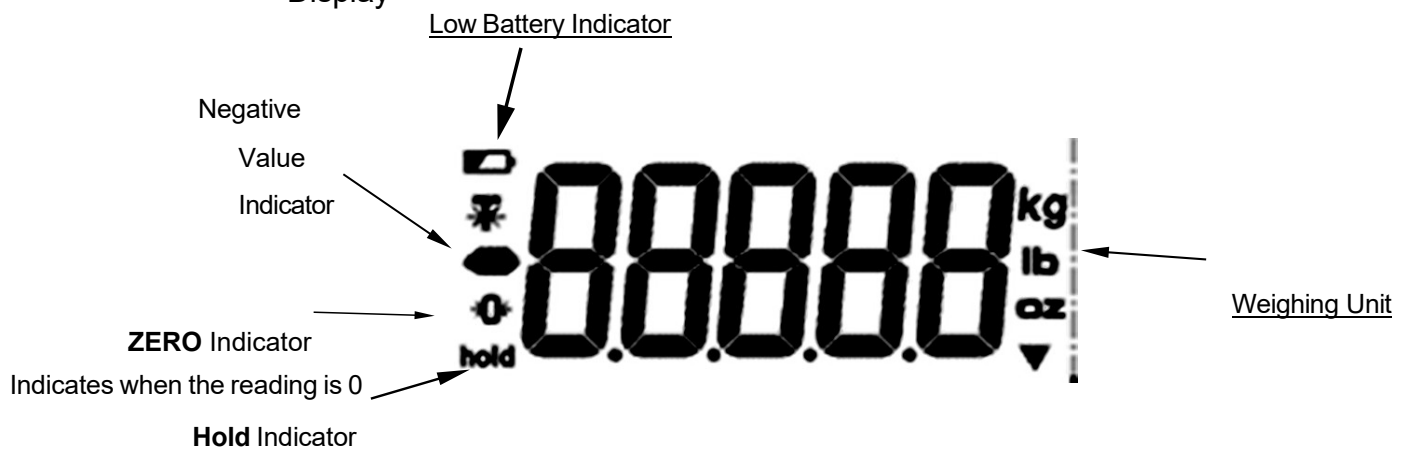
Component delivered	Present Yes / No
Weighing unit body	
Rubber mat	
Remote display (optional)	
Power adapter	
Operating manual	



Key Descriptions

- **ON/OFF**: Press the key to turn the scale on or off
- **HOLD**: Press this key to store weight value
- **UNIT**: Select weighing unit: kg and lb.
- **Zero**: To deduct the weight of the container such as pan on the scale and the tare range is up to 100% of full capacity.

Display



Functions

Hold Function

- Place the item on the scale platform.
- Wait for the weights to be displayed.
- Press the **HOLD** key. The “hold” indicator will turn-on.
- Remove the item from the scale platform. The item’s weight reading will remain on the display. You can also convert this to other measures (i.e. to pounds, pounds & ounces, or kilograms) by pressing the **UNIT** key.
- Quit hold function: Once an item is weighed and the hold function is enabled; and you want to quit to hold function, press the **HOLD** key again to cancel the “hold” indicator and return the scale to weight mode.

Weighing

Before weighing

Whenever possible, please allow the scale to warm up for one minute after first turning the power on so that the scale will function properly and accurately.

Weighing procedures

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

When the power is turned on, all display segments appear for a few seconds and "0" will appear on the display.

Select the weighing unit with **UNIT**.

Press **UNIT** to select a weighing unit "kg", "lb".

Once the unit has been selected, the selected unit will be displayed next to the weight value.

Start weighing

If you do not use a container for weighing, verify the reading is "0". If not, press **Zero** to display "0". Place the items to be weighed on the platform.

If you do use a container for weighing, place an empty container on the platform. Wait for the stability weighing to be displayed and press **Zero**. Place the objects to be weighed in the container.

FUNCTION SETTINGS

- Enter function setting mode. Press and hold Zero, then press ON/OFF. the display will show A_OFF.
- Selection of auto shut off mode. When the scale enters the function setting menu, the display will show A_OFF. Press Zero to choose ON or OFF: selection display ON, this means auto shut off function active. Press Zero again, the display will show OFF, this means auto shut off function inactive.
- Selection of auto back-light mode. When the scale enters function setting menu, press UNIT key, the display will show L-ON (or OFF). Press Zero to choose ON or OFF: selection display ON, this means auto back-light function active, press Zero again, the display will show OFF, this means auto backlight function inactive, i.e. shut off backlight function.
- Selection of auto HOLD mode. Press UNIT key, the display will show H_ON or H_OFF, press Zero, selection display H_ON, this means AUTO-HOLD function active, press Zero again, the display will show H_OFF, this means AUTO-HOLD function inactive.
- Return to weighing mode. Press ON/OFF to turn the power off, press ON/OFF again to turn on the power and the scale return to the weighing mode.

Calibration is done in the factory. Don't recalibrate the machine unless it is not accurate. Calibration may be required when the weighing scale is initially installed or if the scale is moved a substantial distance from the original location. The weighing machine should be allowed to warm up for 10 minutes before calibration.

What you need:

1. Using a calibration or test weight that is **2/3** of the max capacity is strongly recommended for recalibration.
2. If you do not have a test weight or calibration weight. You can use any object of "known weight" to calibrate with our scales **AnyCal** Calibration software.

****NOTE: When calibrating even if you use a "known weight" the more exact the weight is the more precise the calibration will be. ****

How to Calibrate

- Press and hold **[UNIT]** key and then press **[ON/OFF]** key to turn on the scale, the display will show **CALU=**, press **[UNIT]** key to select **calibration unit kg** or **lb.**, press **[HOLD]** key to confirm the selection.
- The display will show **XXX.XX** kg or lb., press **[UNIT]** key to move the flashing digit to **right**, press **[Zero]** key to **increase the value** of the flashing digit, press **[HOLD]** key to confirm the selection.
- The display will show **-CAL-**, press **[UNIT]** key, the display will show **AD value**, press **[UNIT]** key when the **stable indicator** displayed, it will show the flashing **calibration weight**.
- Place the known test weight on the platform, press **[UNIT]** key after the **stable indicator** displayed, it will show-----, and then the **AD value**, the calibration is **complete**.
- **Turn off the scale**, remove the test weight from the platform.
- Press **[ON/OFF]** key to turn the scale on to test if the weighing is accurate, if not, repeat above steps.

If calibration is repeatedly incorrect then: 1) Replace the batteries, 2) Try a more stable surface or vibration and interference free location.

Maintenance & Service



- For maintenance work, the balance must be disconnected from the power supply (remove power adapter plug from socket). Also, ensure that the balance cannot be connected to the power supply during the work by a third party.
- Make sure that no liquid spills into the scale while performing maintenance work. If liquid is spilled on the scale, it must be inspected by a service technician.
- **Regularly** maintain the weighing pan and the weighing pan holder by removing any dirt or dust from under the weighing pan and on the weighing scale housing. Use a soft brush or a soft, lint-free cloth moistened with a mild soap solution.
- **Never** use solvents, acids, alkalis, paint thinners, scouring powders, or other aggressive or corrosive chemicals for cleaning; these substances can cause damage to the surfaces of the scale housing.

Transportation & Storage

Your weighing machine is a precision instrument, treat it carefully. Avoid shaking, severe impacts, and vibration during transportation. Make sure that there are no marked temperature fluctuations during transportation and that the weighing machine does not become damp (condensation).

If you would like to take the weighing machine out of service for an extended period, disconnect it from the electricity supply, clean it thoroughly (refer to Maintenance & Service) and store it in a place that meets the following conditions:

- No violent shaking or vibrations
- Minimum temperature fluctuations
- No direct solar radiation
- Minimum moisture

The weighing machine should preferably be dispatched and transported in the original packaging to avoid transportation damage.

CAUTIONS

Overcharging will cause permanent damage.

- When the recharging sign “” indicates, please charge the battery for 8 to 10 hours. When the charging is done, the orange light will turn green.
- Only use the charger (adapter) supplied with the indicator.
- After recharging, if the battery does not last long, replace it with a new battery.

Troubleshooting

Error Code	Issue	Troubleshoot	Solution
ERR-O/0	Overload error	Turn scale off, then back on, and try weighing using weight under max capacity to verify the loadcell still functions.	If scale still registers accurate weight refrain from continued over loading. If error continues loadcell may be damaged.
ERR-Z/2	Exceeded zero tracing range when powered on.	Turn scale off and clear weighing platform. Turn scale back on and attempt recalibration.	If scale was recalibrated successfully then error is resolved. If error persists, scale may need a linearity calibration or has a damaged loadcell.
ERR-S/5	Scale not stable when powered on.	Make sure scale is stable when powered on. Do not touch, shift, or place anything on the weighing platform until after the countdown.	If error persists, scale may need recalibration. If error continues after recalibration, then loadcell may be damaged.
ERR-C	Calibration weight was not entered during calibration	Enter calibration weight during calibration process.	If error persists, call support.
ERR-P	Counting set error	Place sample before entering counting settings.	If error persists, call support.
ERR-L	Calibration weight was not placed during calibration.	Be sure to place weight when recalibrating.	If error persists, call support.
ERR-E	Software issue	If error persists, call support.	If error persists, call support.
ERR-B/6	Low battery error	Attempt to charge battery.	If error persists, battery will need to be replaced. Make sure to not leave scale with rechargeable battery plugged in constantly.
<u>For any error that is not shown on this list or that persists after troubleshooting you will need to contact support.</u>			



Your support enables us to continue creating and providing high-quality products and services. We hope you enjoy your new scale and that it brings you as much satisfaction as it brings us to serve customers like you.

We would love to know what you think of our TREE products and your experience with us. If you have a chance, please visit www.lwmeasurements.com and leave a review.

Thank you for choosing LW Measurements family.

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