

## Walfront VD700

# Walfront VD700 Digital AC/DC Voltage Test Pencil Instruction Manual

Model: VD700

## 1. INTRODUCTION

The Walfront VD700 Digital Test Pencil is a versatile tool designed for detecting AC and DC current within a range of 12-250V. It is also capable of identifying zero lines, phase lines, and breakpoints in AC circuits, as well as testing non-live conductors and continuity. Constructed from chrome vanadium alloy steel and ABS insulating plastic, this test pencil offers high hardness, wear resistance, and durability. Its insulated, ergonomic handle ensures comfortable and safe operation.

## 2. SAFETY INFORMATION

**WARNING: Always prioritize safety when working with electrical systems. Failure to follow these instructions may result in electric shock, injury, or death.**

- **Maximum Voltage:** Do not measure AC voltage exceeding 250V.
- **Insulation:** The tool features an insulated handle for safety. Ensure your hands are dry and you are not standing in water when using the device.
- **Physical Condition:** Do not use the device if the screen is not lit, if there is visible damage, or if the tip is not intact.
- **DC Voltage:** The tester WILL NOT detect voltage if the voltage is DC.
- **Shielded Wires:** The tester WILL NOT detect voltage if the wire is shielded.
- **Grounding:** The tester WILL NOT detect voltage if the operator is not grounded or is otherwise isolated from the ground.
- **Conduit/Insulation:** The tester MAY NOT detect voltage if the wire is partially buried, in a grounded metal conduit, too far from the voltage source, or if the insulation is too thick or incompatible.
- **Known Live Circuit:** Always test on a known live circuit before use to ensure the tester is functioning correctly.

## 3. PRODUCT OVERVIEW



The Walfront VD700 Digital Test Pencil, featuring a digital display and ergonomic design.



Compact, pen-sized design for comfortable and easy gripping.

### Key Features:

- **Material:** Chrome vanadium alloy steel and ABS insulating plastic for high hardness and durability.
- **Voltage Range:** Detects 12-250V AC and DC current.
- **Functionality:** Simple detection of zero line, phase line, and breakpoints in AC current. Also tests non-live conductors and continuity.
- **Ergonomic Design:** Soft, insulated handle for comfortable and safe use.
- **LED Lighting:** Integrated LED for improved visibility in low-light environments.

## 4. SETUP

### Battery Installation:

The Walfront VD700 Test Pencil requires 3 AG10 (1.5V) batteries (not included). Follow these steps to install them:

1. Unscrew the cap at the top of the test pencil to reveal the battery compartment.
2. Insert three AG10 batteries, ensuring correct polarity (+/-).
3. Securely screw the cap back onto the test pencil.



Open the top cap to access the battery compartment for AG10 battery installation.

## 5. OPERATING INSTRUCTIONS

### Voltage Detection (12-250V AC/DC):

1. Ensure the test pencil is powered on and functioning correctly.
2. Gently touch the tip of the test pencil to the conductor or surface you wish to test.
3. The digital display will indicate the detected voltage.

### Zero Line, Phase Line, and Breakpoint Detection (AC Current):

1. Press the "inductive break point test" button on the test pencil.
2. When the charged symbol appears on the display, the line being tested is the phase line.
3. To detect a breakpoint in a live circuit, move the test pen along the wire. The point where the charged symbol disappears indicates the breakpoint.

### Using the LED Light:

The integrated LED light can be activated to illuminate dark work areas, enhancing visibility during testing.



LED lighting, easy to use  
in low-light environment

The integrated LED light assists in testing electrical outlets in low-light conditions.



The digital display provides clear voltage readings during use.

## 6. MAINTENANCE

- **Cleaning:** Wipe the test pencil with a dry, clean cloth. Do not use abrasive cleaners or solvents.
- **Storage:** Store the device in a cool, dry place away from direct sunlight and extreme temperatures.
- **Battery Replacement:** Replace batteries when the display becomes dim or the device fails to power on. Ensure correct battery type and polarity.

## 7. TROUBLESHOOTING

- **Device Not Powering On:** Check battery installation and ensure batteries are not depleted. Replace if necessary.
- **No Voltage Detection:**
  - Ensure the circuit being tested is within the 12-250V AC/DC range.
  - Verify the wire is not shielded or in a grounded metal conduit.
  - Confirm the test pencil is in close proximity to the voltage source.
  - Check if the insulation of the wire is too thick for non-contact detection.
  - Test the device on a known live circuit to confirm functionality.
- **Inaccurate Readings:** Ensure proper contact with the conductor and that environmental factors (e.g., strong electromagnetic fields) are not interfering.

## 8. SPECIFICATIONS

Feature	Detail
Brand	Walfront
Model	VD700
Material	Chrome vanadium alloy steel and ABS insulating plastic
Voltage Detection Range	12-250V AC and DC
Battery Model	3 x AG10 (1.5V) (not included)

Feature	Detail
Product Dimensions	25 x 7 x 2 cm
Item Weight	0.02 Kilograms
Color	Yellow
Style	Digital, Ergonomic

## 9. WARRANTY AND SUPPORT

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For warranty information or technical support, please refer to the product packaging or contact Walfront customer service directly. Keep your purchase receipt for any warranty claims.