

# Megger<sup>®</sup>



## VF5

AC VOLTAGE DETECTOR WITH FLASHLIGHT

USER GUIDE

The Megger VF5 Voltage Detector is intended to check for the presence of AC voltage, indicated by a bright red LED situated within the white nylon tip and an audible sounder plus vibration alert. A small white LED work light is also mounted in the tip.

The detector has both low voltage (12 V - 1000 V) and medium voltage (100 V - 1000 V) ranges.

The VF5 has the added advantage of a bright-white LED torch for use in poor light.

The Megger VF5 is useful for identifying live conductors, finding a break in a wire, verifying a blown fuse while in circuit, and detecting AC voltage at:

- Socket outlets
- Switches
- Circuit breakers
- Fuses
- Wires and cables
- Luminaires

#### Features

- Non-contact detection of AC voltage
- 12 V ~ 1000 V AC and 100 V ~ 1000 V AC 50 Hz / 60 Hz CAT IV 1000 V
- Visual, audible and vibration warning of low and medium voltages
- Durable rubber over-moulded body
- Built-in bright-white LED torch
- Low power consumption
- Convenient pocket-size

#### Safety Warnings

Read, understand and follow Safety Warnings and Operating Instructions in the manual before using this product.

The detector's safety features may not protect the user if not used in accordance with the manufacturer's instructions.

Check on a known live source within the rated AC voltage range of the detector before use to ensure it is in working order.

Insulation type and thickness, distance from the voltage source, shielded wires, and other factors may affect reliable operation.

The VF5 may help in the indication of live AC circuits only and must not be used as verification of a de-energised circuit. This is not a Safety Test Lamp.

Do not use if the detector appears damaged or if it is not operating properly. If in doubt, replace the product.

Do not use on voltages that are higher than as marked on the VF5.

Use caution with voltages above 30 V AC as a shock hazard may exist.

Comply with all applicable safety codes. Use approved personal protective equipment when working near live electrical circuits -particularly with regard to arc-flash potential.

Do not operate detector if Low Battery warning occurs. Replace batteries immediately.

**NOTE:** The VF5 is unable to detect voltage on armoured or sheathed cable, or on cable in conduit, behind panels or in metallic enclosures.

#### CATIV

Measurement category IV: Equipment connected between the origin of the low-voltage mains supply outside the building and the consumer unit.

#### CATIII

Measurement category III: Equipment connected between the consumer unit and the electrical outlets.

#### CATII

Measurement category II: Equipment connected between the electrical outlets and the user's equipment.

#### International Safety Symbols



Potential danger. Indicates the user must refer to the manual for important safety information



Indicates hazardous voltages may be present



Equipment is protected by double or reinforced insulation



Equipment complies with current EU directives



End of life disposal

## Detector Description

### 1. Screw on battery cover

### 2. Torch

### 3. Torch button

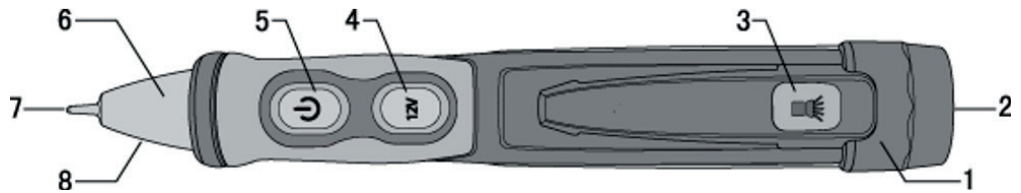
### 4. 12 V button

### 5. On/Off button

### 6. LED indicators

### 7. Detector tip

### 8. Work light



## Operation

1. Turning the VF5 on: Momentarily press the detector On/Off button. The detector will beep once, vibrate once and the green LED will illuminate to indicate that the detector is on and ready for use.
2. Turning the VF5 off: Momentarily press the On/Off button. The VF5 will beep twice, vibrate twice and the green LED will turn off.
3. Turning the Sounder and Vibrating motor off: Turn the VF5 on as described above. The VF5 will now operate with both the sounder and the vibrating motor. To turn the sounder and vibrating motor off, press and hold the On/Off button until the green LED flashes once. To turn the sounder and vibrating motor back on press and hold the On/Off button until the green LED flashes, the sounder beeps and the unit vibrates.
4. Verify Operation: Before using VF5, (1) Make sure the green LED is on, (2) Check VF5 on a known live AC voltage that is within the defined detection range of the VF5.
5. Low Voltage Mode (12 V to 1000 V AC): Press and hold the 12 V button. The green LED will change to orange to indicate the VF5 is in the low voltage mode. While pressing the 12 V button place the tip of the VF5 near an AC voltage. When AC voltage is detected the LED will turn red and flash, the sounder will beep and the detector will vibrate. The flash, beeping and vibration rate will increase as the VF5 gets closer to the voltage source. If the VF5 detects a medium voltage (100 V – 1000 V) it will automatically change over to the medium voltage mode, the red LED will change to a steady glow, the sounder will beep rapidly and the detector will vibrate constantly.

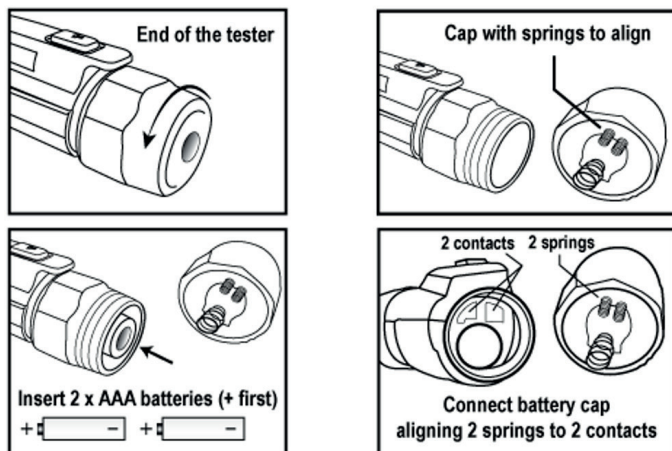
6. Medium Voltage Mode (100 V to 1000 V AC): Place the tip of the VF5 near an AC voltage. If the VF5 detects voltage within the defined detection range the green LED will turn off, the red LED will turn on, the sounder will beep rapidly and the detector will vibrate constantly.

**NOTE:** The detector cannot determine the actual voltage. The voltage level where the detector switches from the low to medium voltage mode is affected by insulation type and thickness, distance from the voltage source, and other factors.

7. Low Battery Indication: Replace the batteries if the green LED does not turn on. When the detector is on and the battery voltage is too low for reliable operation, the sounder will beep three times and the green LED will turn off indicating the detector is not operational. Replace the batteries to restore operation.
8. Auto Power Off: To conserve battery life, the detector will automatically turn off after approximately 5 minutes of inactivity. When powering down the detector will beep, vibrate twice twice and the green LED will turn off.
9. Torch: Momentarily press the torch button to turn the torch on or off. To conserve battery life, the torch will automatically turn off after approximately 5 minutes.

**NOTE:** If the battery voltage is too low to operate the torch the detector will indicate this condition by beeping three times and the torch will turn off. The voltage detector has its own low battery threshold and may remain operational. Refer to Verify Operation (Step 4) in this guide before using detector.

## Battery replacement



1. Carefully unscrew battery cap at the rear (torch end) of the detector.
2. Replace batteries with 2 x AAA 1.5V batteries. Observe polarity.
3. Carefully align cap with detector as shown above.
4. Screw cover onto the detector until it feels tight; do not use excessive force.
5. Verify operation by using the detector on a known live AC voltage within the defined detection range of the detector.

**Note:** When batteries are loaded for the first time, please remove the white rectangular security strip before installing.

When replacing the batteries, be sure to secure the cap firmly to maintain IP67 water and dust protection. A loose or over tightened battery cap may compromise water and dust protection.

## Specifications

Detection voltage range	12 V AC to 1000 V AC, 100 V to 1000 V AC
Frequency range	50/60 Hz
Batteries	2 x AAA / LR03 1.5 V
Ambient Operating temperature	0 °C to 50 °C (32 °F to 122 °F)
Storage temperature	-10 °C to 60 °C (14 °F to 140 °F)
Humidity	80 % max.
Altitude	2000 meters
Pollution Degree	2
Safety Compliance	CAT IV 1000 V
Auto Power Off	5 minutes
Ingress Protection Rating	IP67
Product manufactured in China	

## Maintenance

Do not attempt to repair this detector. It contains no user-serviceable parts.

Repair or servicing should only be performed by qualified personnel.

## Cleaning

Periodically wipe the case with a dry cloth and detergent, do not use abrasives or solvents.

## WEEE Directive

The crossed out wheeled bin symbol on the instrument and on the batteries is

a reminder not to dispose of them with general waste at the end of their life.

Megger is registered in the UK as a Producer of Electrical and Electronic equipment. The registration No is; WEE/ DJ2235XR.

Users of Megger products in the UK may dispose of them at the end of their useful life by contacting B2B Compliance at [www.b2bcompliance.org.uk](http://www.b2bcompliance.org.uk) or by telephone on 01691 676124.

Users of Megger products in other regions should contact their local Megger office or distributor.

## **Battery Disposal**

The batteries in this product are classified as Portable Batteries under the Batteries Directive. Please contact either Megger Ltd, your local Megger office or distributor for instructions on the safe disposal of these batteries.

Megger is registered in the UK as a producer of batteries.

The registration number is BPRN01235.

For further information see [www.megger.com](http://www.megger.com)

## **Warranty (3 years)**

This meter is warranted to the original purchaser against defects in material and workmanship for 3 year from the date of purchase.

During this warranty period, the manufacturer will, at its option, replace or repair the defective unit, subject to verification of the defect or malfunction.

This warranty does not cover fuses, disposable batteries, or damage from abuse, neglect, accident, unauthorised repair, alteration, contamination, or abnormal conditions of operation or handling.

Any implied warranties arising out of the sale of this product, including but not limited to implied warranties of merchantability and fitness for a particular purpose, are limited to the above. The manufacturer shall not be liable for loss of use of the instrument or other incidental or consequential damages, expenses, or economic loss, or for any claim or claims for such damage, expense or economic loss. Some states or countries laws vary, so the above limitations or exclusions may not apply to you.