

BlueSpot[®]



ALL PURPOSE VOLTAGE TESTER

User Manual



13543

General Information

Thank you for purchasing a BlueSpot product, you can find further information on our range at **www.BlueSpot.uk.com**. Please ensure that you are using the product correctly and that all guidance and cautions are followed in accordance with the instructions. Please retain these instructions for future reference.

Safe use

Please make sure that you read these instructions carefully in order to avoid injury when using the voltage tester. Follow all health and safety rules and regulations. If in doubt and available please contact a more knowledgeable source.

DO NOT use if damaged.

- Maintain tool in good and clean condition for best and safest performance.
- Keep the work area clean, uncluttered and ensure there is adequate lighting.
- Maintain correct balance and footing. Ensure the floor is not slippery and wear non-slip shoes.
- Keep children and unauthorised persons away from the work area.
- **NEVER** use the voltage tester to test voltages above the stated voltage.
- The correct indication is only assured in temperatures from -10°C to +50°C (14°F to 122°F) and the frequency range from 50 to 500 Hz.
- **BE AWARE** the perceptibility of the indication can be impaired in unfavourable lighting conditions (eg. In bright sunlight) or in unfavourable positions (eg. On ladders etc).
- **ALWAYS** test the voltage tester before use. To test the voltage tester hold the blade of the voltage tester in one hand and then touch the magic sense screw at the other end. A red light indicates correct function.
- **NEVER** use the voltage tester to perform a task it was not designed to do. The voltage tester blade must only be used for testing voltage on live parts. Other work must not be carried out without isolating the voltage.
- **NEVER** modify any components inside the voltage tester.
- **BE AWARE** a false reading could be indicated by static electricity caused from the plastic body of the voltage tester.
- **NEVER** use the voltage tester in damp or wet conditions.
- If the voltage tester is damaged do not use.

Introduction

The BlueSpot All Purpose Voltage Tester is specially designed for fuse testing, continuity and socket testing, verifying DC polarity, testing AC voltage, detecting microwave leakage, detecting AC power and locating breakpoints in the wiring. Features a handy pocket clip for convenient carrying. Includes batteries. TÜV / GS-approved.



Specification

AC Voltage Test	70-250 VAC – Contact method from 70-600 VAC – Non-contact method from
DC Voltage Test	Up to 250 VDC
Polarity Test	3V-36 VDC
Continuity Check	0-50 M Ω
Microwave Leakage Detective	\geq 5MW/CM ²

Ideal temperature range – -10°C to +50°C (14° F to 122° F).

Ideal frequency range – 50 to 500 Hz.

Indication can be impaired in poor light conditions or unfavourable positions such as up ladders.

How to Replace the Batteries

Battery replacement – 2x LR41 button batteries

1. Unscrew the screw anticlockwise. The screw is at the alternative end to the voltage tester blade.
2. Straighten the wire over the batteries.
3. Replace the batteries. The negative side of the battery should be the inside position.
4. Carefully bend the wire back over the batteries.
5. Screw the screw back onto the voltage tester clockwise.
6. Make sure the screw is securely fastened before using the voltage tester.

Operation

ALWAYS test the voltage tester before use. To test the voltage tester hold the blade of the voltage tester in one hand and then touch the magic sense screw at the other end. A red light indicates correct function.

Testing AC Voltage

Contact Method (70-250VAC)

Carry out this method whilst not touching the magic sense screw of the tester.

- The tip of the voltage tester must be in direct contact with the live part of the AC Voltage.
- The red light will light up when there is a fault in the line system when the neutral or Earthing/ground is disconnected.

Non-Contact Method (70-600VAC)

Identifying Polarity of AC Voltage

We recommend holding the tip of the voltage tester while testing to increase the sensitivity.

- To locate the live side of the wire run the tester slowly along the wire.
- The red light will light up to indicate the live wire.
- A fault point in the live wire is indicated by an interruption in the red light.
- When the voltage tester is placed near a socket or plug it is able to find the AC voltage by lighting up red when found.

High Voltage / Electrical Appliances / Hidden Wire Check

The voltage tester can detect high voltage such as in the car ignition system, in a transformer/wire, improper connection or circuits and ungrounding in electrical appliances. As well as wires inside wooden/dry wall etc.

Static Radiation / Microwave Leakage

The voltage tester is able to detect a safe distance of static radiation on TV. The approximate safe distance is obtained when the red light turns off.

Testing microwave leakage –

- Place a cup of water inside the microwave (it is not safe to operate the microwave empty).
- Set the microwave to high on 1 minute and turn the microwave on.
- Move the voltage tester slowly over and around the edge and front of the microwave door. The LED lights up when microwave leakage is detected.

Testing AC Voltage (continued)

Sensitivity Select (AC Voltage Only)

Low Sensitivity	For more sensitivity touch the Magic Sense when testing.
High Sensitivity	To obtain a higher sensitivity and better visibility when using the voltage tester hold by the tip and place the magic sense towards the object being tested.
Reduce the Sensitivity	When holding the voltage tester in one hand, place your other hand on the object being tested (eg. grip the wire) to reduce sensitivity. Note: Under a high humidity environment sensitivity may be reduced.

Continuity Test

ALWAYS make sure you have disconnected any AC mains or high voltage before beginning.

Polarity Check

The voltage tester identifies the polarity of DC voltage (3-36VDC). The voltage tester will light up at positive only and will not light up at negative.

Electrical Check

The voltage tester can test and verify the connection of wire, plug sockets, fuses, bulbs, heater/heating elements, toasters, fans etc.

Electronic Component Check

The voltage tester can test, check and identify the condition of rectifier, diode, resistor, capacitor, transistor, cable, computer cable, PCB etc.

Battery Test

The voltage tester can roughly test the condition of a battery cell (1.5 volts and up). A normal battery is when the LED lights up at the positive side, while a reverse indication shows a weak/drained battery.

Examples for Testing/Checking

Wrong Connection Check

With the power off move the voltage tester close to a hairdryer. The red light will light up if the plug is inserted wrong or a live wire is connected incorrectly to the socket.

Examples for Testing/Checking (continued)

Ground/Earthing Disconnected Check

With the power off move the voltage tester close to a toaster. The red light will light up when the ground/earthing is not connected to the system.

Capacitor

The light comes on and then goes off. This indicates the capacitor is good when a similar indication is shown by switching legs.

Diode Rectifier

The light lights up at a forward direction only.

Transistor (NPN Type)

The light lights up both at 'C' and 'E' with the finger touching at 'B'

Transistor (PNP Type)

The light lights up at 'B' with the finger alternatively touching at 'C' and 'E'

Ignition Check

The light flashes consistently when the voltage tester is moved close to the ignition wire with high voltage pressure.

Fault Finding

Checks fault condition of wiring such as loose connection.

Locating Broken Wire

Run the voltage tester slowly along the wire. The voltage tester will light up where the wire is broken.

Static Radiation from TV

The voltage tester is able to detect a safe distance of static radiation on TV. The approximate safe distance is obtained when the red light turns off.

Checks AC Power

Find out the presence of AC voltage without the need to remove the plug.

Cleaning & Maintenance

To clean just use a dry cloth to wipe over the voltage tester.

DO NOT use water or any liquids to clean the voltage tester as this will cause damage.

Storage

ALWAYS ensure the voltage tester is stored out of reach of children.

Store the voltage tester in a secure, dry place.

Disposal

Always check and adhere to national regulations when disposing of any tools that are no longer functional and cannot be repaired.

- Contact your local waste disposal authority for information on how to correctly dispose of tools.

Environmental Protection

Recycle unwanted materials instead of disposing of them as waste. All tools, accessories and packaging should be sorted, taken to a recycling centre and disposed of in a manner which is compatible with the environment. When the product becomes completely unserviceable and requires disposal, drain any fluids (if applicable) into approved containers and dispose of the product and fluids according to local regulations.



Contact

Find out more about the BlueSpot® Lifetime Guarantee at www.BlueSpot.uk.com

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