

# **Testboy 113 Non-contact voltage tester with acoustics Instruction Manual**

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**Testboy 113 Non-contact voltage tester with acoustics** 



#### **Notes**

### Safety notes

#### **WARNING**

- An additional source of danger is posed my mechanical parts which can cause severe personal injury. Objects can also be damaged (e.g., the instrument itself can be damaged).
- An electric shock can result in death or severe injury. It can also lead to property damage and damage to this instrument.
- Never point the laser beam directly or indirectly (on reflective surfaces) towards the eyes. Laser radiation can cause irreparable damage to the eyes. You must first deactivate the laser beam when measuring close to people.

# **General safety notes**

#### WARNING

Unauthorized changes or modifications of the instrument are forbidden – such changes put the approval (CE) and safety of the instrument at risk. In order to operate the instrument safely, you must always observe the safety instructions, warnings and the information in the "Proper and Intended Use" Chapter.

#### **WARNING**

Please observe the following information before using the instrument:

- Do not operate the instrument in the proximity of electrical welders, induction heaters and other electromagnetic fields.
- After an abrupt temperature fluctuation, the instrument should be allowed to adjust to the new temperature for about 30 minutes before using it. This helps to stabilize the IR sensor.

- Do not expose the instrument to high temperatures for a long period of time.
- · Avoid dusty and humid surroundings.
- Measurement instruments and their accessories are not toys. Children should never be allowed access to them!
- In industrial institutions, you must follow the accident prevention regulations for electrical facilities and equipment, as established by your employer's liability insurance organization

Please observe the following five safety rules:

- 1. Disconnect.
- 2. Ensure that the instrument cannot be turned back on again.
- 3. Ensure isolation from the main supply voltage (check that there is no voltage on both poles).
- 4. Earth and short-circuit.
- 5. Cover neighbouring parts that are under live electrical load

#### Proper and intended use

This instrument is intended for use in applications described in the operation manual only. Any other usage is considered im-proper and non-approved us-age and can result in accidents or the destruction of the instrument. Any misuse will result in the expiry of all guarantee and warranty claims on the part of the operator against the manufacturer.

- Remove the batteries during longer periods of inactivity in order to avoid damaging the instrument.
- We assume no liability for damages to property or personal injury caused by improper handling or failure to observe safety instructions. Any warranty claim expires in such cases. An exclamation mark in a triangle indicates safety notices in the operating instructions. Read the instructions completely before beginning the initial commissioning. This instrument is CE approved and thus fulfils the required guidelines.

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# Disclaimer and exclusion of liability

The warranty claim expires in cases of damages caused by failure to observe the instruction! We assume no liability for any resulting damage!

Testboy is not responsible for damage resulting from:

- failure to observe the instructions,
- changes in the product that have not been approved by Test-boy,
- the use of replacement parts that have not been approved or manufactured by Testboy,
- the use of alcohol, drugs or medication.

### **Correctness of the operating instructions**

These operating instructions have been created with due care and attention. No claim is made nor guarantee given that the data, illustrations and drawings are complete or correct. All rights are reserved in regards to changes, print failures and errors.

#### **Disposal**

For Testboy customers: Purchasing our product gives you the opportunity to return the instrument to collection

points for waste electrical equipment at the end of its lifespan.

The WEEE directive regulates the return and recy-cling of electrical appliances. Manufacturers of elec-trical appliances are obliged to take back and recy-cle all electrical appliances free of charge. Electrical devices may then no longer be disposed of through conventional waste disposal channels. Electrical ap-pliances must be recycled and disposed of separate-ly. All equipment subject to this directive is marked with this logo.

# Disposing of used batteries

As an end user, you are legally obliged (by the rele-vant laws concerning battery disposal) to return all used batteries. Disposal with normal house-hold waste is prohibited!

Contaminant-laden batteries are labelled with the adjacent symbol which indicates the prohibition of disposal with normal household waste.

The abbreviations used for heavy metals are:

Cd = Cadmium, Hg = mercury, Pb = lead.

You can return your used batteries for no charge to collection points in your community or everywhere where batteries are sold!

# **Certificate of quality**

All aspects of the activities carried out by Testboy GmbH relat-ing to quality during the manufacturing process are monitored permanently within the framework of a Quality Management System. Furthermore, Testboy GmbH confirms that the testing equipment and instruments used during the calibration process are subject to a permanent inspection process.

### **Declaration of Conformity**

The product conforms to the present directives. For more de-tailed information, go to www.testboy.de

# Operation

Thank you for choosing a Testboy® 113.

- Non-contact voltage tester from 12 V AC
- · High performance LED flashlight
- Audible warning tone

# Non-contact voltage test



The Testboy® 113 is capable of detecting wires carrying live voltages using the built-in circuits in its tip.

If a voltage of 110 V AC or more is detected, the white cap will glow red (1a) and a warning tone will sound. To detect voltages below 110 V AC, switch the flashlight on using the switch (1b). Now voltages from 12 V AC can be detected.

A flowing current is not required!

Check the voltage tester before use against a known voltage supply (e.g. a power socket) to ensure that it is working correctly.

When using the Tester, if tip does not glow, voltage could still be present. The Tester indicates active voltage in the presence of electrostatic fields of sufficient strength generated from the source (MAINS) voltage. If the field strength is low, the Tester may not provide indication of live voltages. Lack of an indication occurs if the Tester is unable to sense the presence of voltage which may be influenced by several factors including, but not limited to:

- · Shielded wire/cables
- Thickness and type of insulation
- · Distance from the voltage source
- · Fully-isolated users that prevent an effective ground
- Receptacles in recessed sockets/ differences in socket de-sign
- Condition of the Tester and Batteries

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

#### FOR USE BY COMPETENT PERSONS

Anyone using this instrument should be knowledgeable and trained about the risks involved with measuring voltage, espe-cially in an industrial setting, and the importance of taking safety precautions and of testing the instrument before and after using it to ensure that it is in good working condition.

The single-pole phase testing is not appropriate to determine whether a line is live or not. For this purpose, the double-pole voltage test is always required.

#### Definition of measurement categories.

- Measurement category II:
  - Measurement category II is applicable to test and measuring circuits connected directly to utilization points (socket outlets and similar points) of the low-voltage mains installation. Typical short-circuit current is < 10kA.
- Measurement category III:
  - Measurement category III is applicable to test and measuring circuits connected to the distribution part of the building's low-voltage mains installation. Typical short-circuit current is < 50kA.
- · Measurement category IV:
  - Measurement category IV is applicable to test and measuring circuits connected at the source of the building's low-voltage mains installation. Typical short-circuit current is >>50kA.
  - Read the instruction before use. If the equipment is used in a manner not specified by the manufacturer, the protection pro-vided by the equipment may be impaired.
  - All parts of the device and its accessories are not allowed to be changed or replaced, other than authorized by the manufactur-er or his agent.

For cleaning the unit, use a dry cloth.

### **Flashlight**

Turn on the built-in flashlight with the switch (1b). Using a high-performance LED a burning time of up to 80 hours per set of batteries is possible! The life of the LED is over 100,000 hours.

# Changing the batteries

Insert a screwdriver in to the notch (2) and pry the battery compartment cover off. Make sure you insert the batteries the right way round!

Do not dispose of batteries in normal household rub-bish! Use an authorised local collection point!

# **Technical data**

Voltage range	12 - 1000 V AC
Power supply	2 x 1.5 V AAA Micro
Degree of protection	IP 40
Overvoltage category	CAT III 1000 V / CAT IV 600 V
Testing standard	IEC/EN 61010-1 (DIN VDE 0411)

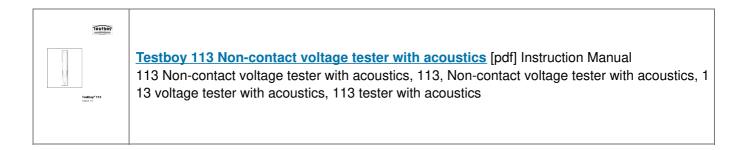
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# **Documents / Resources**



#### References

• 15 Testboy Messgeräte & Prüfgeräte | Testboy GmbH

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