

4. Technical Data

Supply Voltage	typ. 9V DC (7...10V)	Battery or accumulator, type 6LR61
Supply Current	4...18mA	
Measure Voltage	Typ. 5.0V DC (4.5 ... 5.5V)	At opened connection
Measure Current	typ. 10mA DC (9.5...10.5mA)	Output voltage below measure voltage
Trigger Level	>25Ω / <20Ω (typ.)	Break / contact
Operation Temperature	5 ... 40°C	
Storage Temperature	-15 ... 55°C	

Additional Technical Hints

- The device is protected against foreign voltage at the input plugs by a suppressor diode and a semiconductor fuse (PTC). If this fuse responds, “no connection” will be signaled for a few minutes. Please note, that damages can be possible nevertheless!
- Turn off the test instrument after usage to increase battery life time.
- Never leave an empty battery inside the device! Remove the battery, when the test instrument is not used for a longer time.

5. Warranty and Disclaimer

A warranty of two years is granted for this product, except the battery.

The product warranty will expire, when a damages occurs, caused by foreign voltage, leaked battery or a non appropriate usage.

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CBT11

Test Instrument for Cable Breaks and Contact Loose



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1. Introduction

The CBT11 helps to track cable breaks in electrical wires and slack joints in electrical connectors and switches. In application it is similar to an ordinary contact tester. In function there are some important differences:

- A time limited signal tone sounds, when the resistance value of the proofing connection exceeds the limit, also for a short time.
- A red light emitting diode lights for a minimum time, when the resistance value of the proofing connection exceeds the limit, also for a short time.
- The display changed to a lightning green emitting diode, when the resistance remains under limit for the given minimum time.

In difference to an ordinary contact tester, also very short raising ups of the electrical resistance, how they are usual for cable breaks and slack joints, will be detected reliable. They will be signalized optical and acoustical.

2. Before First Use

Please check the packaging contents, before You use the instrument. Beside this manual the following parts belongs to the product:

- the CBT11 device
- battery 9V block, type 6LR61
- proof cable with alligator clip, red
- proof cable with alligator clip, black
- storage bag

Insert and Change Battery

Open the lid on the device backside. For battery change remove the clip from the old battery. Put the clip to a fresh battery and take it into the compartment. Please use a 9V battery, type 6LR61 or an accumulator of this size (has to be charged external).

3. Usage

Plug in the banana jacks of the proof cables into the test instrument. Squeeze the alligator clips to the electrical connection, which has to be checked (cable, plug connection, switch etc.).

Important Hint!

Please take care, that the electrical pins, where You connect the test instrument, are free of voltage! The device is certainly protected against over voltages, but damages might not be impossible.

Discover Cable Breaks

Connect the test instrument to the stripped ends of the particular core. Usually a proper connection will be signalized at an assumed cable break. Bend the cable at the assumed position more times. If a break appears, the test instrument will signalize this properly (red LED and signal tone).

Discover Slack Joints in Plug Connectors

Connect the test instrument to the other ends of the proofing plug connection. Contact problems often appears at connecting or disconnecting. Also beats (e.g. with the handle of a screw driver) to the bad connection will cause rising junction resistances, which will be signalized properly by the test instrument (red LED and signal tone).

Discover Contact Problems of Switches

Mechanical outworn switches or burnt out contacts often shows a raised junction resistance, when the mechanics will be moved a little bit, without real switching. The short time resistance variation will be signalized by the test instrument properly (red LED and signal tone).