

# ProfiScale LOCATE S Detector multifuncional

Operating instructions

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Introduction

The ProfiScale LOCATE S is an advanced multifunc-tional detector. It can detect metal and alternating current and localise current passage and the location of breaks in cables. It can also be used to test light bulbs and fuses and can determine polarity. Use the LOCATE S multifunctional detector to minimise the risk of causing damage to live cables, metal pipes and objects when drilling.

# Illustration

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A Metal sensor B LED lamp C Selector switch D Sensitivity regulator E Switch for the light F AC detection area G Metal plates H Battery cover







# Safety instructions

# Failure to observe the following instructions may result in personal injury:

- 1. Before using the device, you must read these instructions carefully to ensure that you operate the device safely. Keep these instructions in a safe place.
- Shielded or live cables in metal cladding, metal walls or thick walls cannot be detected. In this case, you can use the metal detection mode to take readings.
- 3. Proceed with caution when hammering nails, cutting or drilling into walls, ceilings or floors containing cables or pipes close to the surface.
- 4. The device's detection capability may vary due to the humidity of the material, composition of the wall, its coating and the size of the object to be detected. This can lead to a reduction in detection depth.
- 5. Do not use the device to find cables whose voltage lies outside the specified voltage range.
- 6. Before using the device, check that it is working properly.
- If you obtain unclear readings, you should, if possible, choose another location to drill, screw etc. If in doubt, seek expert advice.
- 8. Keep the device away from children and unauthorized persons.
- 9. For safety reasons and to maintain the warranty
- on the device, repairs to the measuring device must only be carried out by qualified personnel using genuine parts.
- 10. Never expose the device to an electric voltage, as this could damage the electronics.
- 11. Do not use the device in the vicinity of inflammable or explosive gases.
- 12. Do not use the device if it is defective.
- 13. Handle the device with care and do not drop it.
- 14. To avoid functional errors, do not dismantle the device.
- 15. Keep the device clean and dry.
- 16. When not in use, the device should be stored in the bag supplied.
- 17. Avoid contact with water and dust.
- 18. Do not use abrasive cleaners or solvents to clean the device. Use a damp cloth and mild detergent.
- 19. Check the battery/batteries regularly to prevent damage.
- 20. Remove the battery if you are not going to use the device for a long period.





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# Warranty

#### Congratulations!

Thank you for choosing ProfiScale quality measuring technology by BURG-WÄCHTER. BURG-WÄCHTER offers a warranty of 2 years' duration from the date of purchase. The warranty does not cover damage caused by improper use, overloading the device or incorrect storage as well as normal wear and defects that only have an insignificant effect on the value or usability of the device. The warranty shall be immediately invalidated if unauthorized persons work on the device. In the event that a warranty claim arises, please hand over the entire device incl. packaging, description and batteries along with the sales receipt to your dealer.

Technical data	
Metal sensor	For metal objects with a diameter of 20 mm and above
Max. detection depth	30 mm
Alternating current voltage	70 – 660 VAC
Current passage test	0 – 50 ΜΩ
Direct current polarity test	6 – 36 VDC
Power supply	9V compound (e.g. 6LR61)
Operating temperature	-10°C – 40°C
Storage temperature	-10°C – 50°C

# Operating the device

#### Check for proper operation

Before using the device, please perform this test to ensure that it is working properly.

- Before testing alternating current voltage/current passage, set the selector switch to position "II", open the metal sensor and touch the metal plates with the thumb on your left hand while using the finger of your free hand to touch the raised metal button. If the LED lamp lights and the buzzer sounds, the device is working properly.
- Before searching for metallic objects, set the selector switch to position "I" and slowly turn the sensitivity regulator until the LED lamp stops flashing and the buzzer no longer sounds (the device is now at the maximum sensitivity setting for metal detection)

Test the metal sensor close to a metallic object. The detector is fully functional if the LED lamp flashes and the buzzer sounds.

# Metal detection mode

- 1. Keep the device away from the area you want to test and from other metal objects. Open the metal sensor.
- 2. Set the selector switch to "I" and slowly turn the sensitivity regulator until the LED lamp stops flashing. The device is now set to the highest sensitivity.
- 3. Place the metal sensor on the wall and move it slowly and steadily across the area of the wall you want to check. The LED lamp will start to flash and the buzzer will sound if a metal object is located.
- To pinpoint the exact location of the metal object, turn the "sensitivity regulator" slightly forwards to reduce the sensitivity and check the relevant area again.
  If a metal object is detected, the built-in buzzer sounds and the LED lamp

If a metal object is detected, the built-in buzzer sounds and the LED lamp flashes.

#### Note:

The device will not work on surfaces lined with metal fibre or metal foil. The device cannot detect plastic pipes.

# Alternating current detection mode

- 1. Set the selector switch to "II" (do not open the metal sensor).
- 2. Turn the sensitivity regulator as far as the stop, so that the maximum sensitivity is set.
- 3. Move the alternating current detection area on the device close to or over the surface to be checked.

If the device passes close to a live AC wire, the buzzer sounds and the LED lamp starts to flash. To pinpoint the wire's exact location, lower the sensitivity by turning the regulator back slightly and check the relevant area again.

# Note:

Rubbing the device along or bumping it against the wall can generate static electricity, which in turn can cause a false reading. *Leakage current:* since it requires only a very low passage of current to trigger the device, you may occasionally obtain unexpected readings. If a poorly insulated cable touches a damp wall, for example, the device will indicate a current flow on the wall. In this case, the device will show a possible source of risk, which should be checked using a voltmeter.

# Distinguishing between live wires and earth cables

- 1. Set the selector button to "II".
- 2. Turn the sensitivity regulator as far as the stop to set the maximum sensitivity
- 3. Hold the AC detection area of the device close to the wire that you want to check.
- 4. Reduce the sensitivity setting to a suitable level by turning back the sensitivity regulator. Unlike an earth cable, a live wire will also trigger a signal tone from quite a distance.

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# Locating a break in a cable

The method used here is similar to that used above. To pinpoint the location of the break in a cable, adjust the sensitivity regulator to a suitable level. If the acoustic and light signals are interrupted, you have found the location of the break.

# Checking whether the outer metal cladding of an electrical appliance is connected to an earth cable

- 1. Set the selector switch to "II" (do not open the metal sensor).
- 2. Turn the sensitivity regulator as far as the stop to set the maximum sensitivity.
- 3. Move the AC detection area on the device close to an electrical appliance such as a microwave, a kettle, a heater or a washing machine. The LED lamp and the buzzer will sound if the electrical appliance is not connected to an earth cable.

# **Polarity test**

**Caution:** Ensure that there are no AC or high-voltage networks in the vicinity.

# Testing battery polarity

- 1. Turn the metal sensor between 90 and 180 degrees. Set the selector switch to "II".
- Use one thumb to touch the metal plate. With your other thumb, touch an electrode on the battery while at the same time ensuring that the raised metal button on the device touches the other electrode on the battery.
- 3. The LED lamp and the buzzer will activate if the positive terminal touches the raised metal plate.

**Note:** To avoid interference, you should not stand close to electromagnetic fields.

# Continuity test for light bulbs and fuses

This function allows you to check the correct working of light bulbs and fuses.

# **Testing fuses**

- 1. Turn the metal sensor between 90 and 180 degrees. Set the selector switch to "II".
- 2. Use one thumb to touch the metal plate. Touch a conductive side of the fuse with one finger on your free hand while at the same time ensuring that the other conductive side of the fuse touches the raised metal button. If the LED lamp and the buzzer activate, the fuse is working properly.

# **Testing light bulbs**

The method used to test fuses can also be used to test light bulbs. If the LED lamp and the buzzer issue a signal, the light bulb is working properly.

### Detecting electromagnetic radiation

- 1. Set the selector switch to "II". Turn the sensitivity regulator as far as the stop to set the maximum sensitivity.
- 2. Move the AC detection area of the device close to the TV/computer screen. The buzzer will sound and the LED lamp will light up if the device detects radiation.
- Move the device away from the screen. The buzzer and lamp will switch off at the point where the radiation is no longer strong.

# **Light function**

Set the selector switch to "OFF". Press the button for the light. The LED lamp turns on.

#### **Replacing the battery**

If the device no longer works correctly (e.g. abnormal sounds), you should replace the battery. To replace the battery, slide the battery compartment cover outwards and replace the empty battery with a new one of the same type (9V compound, e.g. 6LR61). Close the battery compartment cover again.

# Disposal

Dear customer,

Please help us avoid unnecessary waste.

Should you intend to dispose of this device at any time, please remember that many components of this device contain valuable materials, which can be recycled.



Please be aware that electrical and electronic equipment and batteries shall not be disposed of as household waste, but rather collected separately. Please obtain information on the collecting points for electrical waste from the responsible authority of you municipality.

If you have any questions concerning the EC declaration of conformity, please use info@burg.biz