

Fault Finder Handset

Introduction

The Fault Finder Handset has two functions:

- Voltmeter - provides instant feedback on fence performance (voltage and current)
- Fault finder - assists in the location of faults anywhere on the fence system

Models covered by this manual

This manual covers various handset models - Fault Finder / Fence Compass / Tracker

Parts of the handset



Measuring the voltage on a fence line

- 1 Press **⏻** to turn on the handset.
- 2 Insert the fence wire into the Fault finder slot, ensuring that the fence wire touches the Fault finder contact.
- 3 After a few seconds, the voltage is displayed in the top, right-hand corner of the display (in kilo volts).

Note: During the first few seconds, the handset displays the last recorded current reading in amperes before displaying the voltage reading.

Measuring the output voltage of an energizer

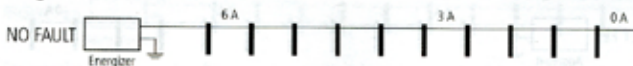
- 1 Press **⏻** to turn on the handset.
- 2 Turn on the energizer.
- 3 Touch the Energizer voltage probe against the energizer's output terminal.
- 4 After a few seconds, the voltage is displayed in the top, right-hand corner of the display (in kilo volts).

Note: During the first few seconds, the handset displays the last recorded current reading in amperes before displaying the voltage reading. Current readings taken within 1 m (3") of an energizer may not be completely accurate due to the magnetic field surrounding the energizer.

Finding a fault in the fence line

You can pin-point a fault in a fence line by taking current readings (measured in amperes). Current flows through the path of least resistance. If the fence has a short circuit, the current will flow from the energizer to the leak, much like water drains from a bath. Large flows of current load the energizer and the electric fence system reducing its effectiveness.

Single electric wire

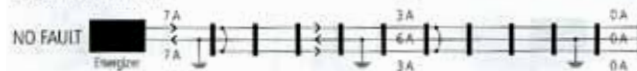


The current readings are low in several places, indicating there is no fault on the fence line.



The current reading is particularly high indicating there is a fault somewhere on the fence line. The significant reduction in current between the two readings (24 A and 3 A) indicates that the fault is located somewhere between these points on the fence line.

Earth wire return



The current readings are low in several places, indicating there is no fault on the fence line.



The current readings are particularly high indicating there is a fault somewhere on the fence line. The significant reduction in current between readings helps to identify the location of the fault. In this case, the two wires with abnormally high readings may be connecting with each other, causing a fault. The bottom wire has consistently low current readings indicating that this wire is OK.

Note: Current readings taken within 1 m (3') of an energizer may not be completely accurate due to the magnetic field surrounding the energizer.

To find a fault in the fence line:

- 1 Start close to where the energizer lead-out wire connects to the fence.
- 2 Press **1** to turn on the handset.
- 3 Insert the fence wire into the Fault finder slot, ensuring that the fence wire touches the Fault finder contact. Note the current reading (in amperes) in large numbers.
- 4 Travelling in the direction of the current flow, work your way along the fence line taking readings at regular intervals and at all junction points. At a junction, follow the branch that indicates an abnormal current reading. Each time you take a reading, compare it with the previous reading (this displays briefly in the top, right-hand corner of the screen each time the handset is turned on).
- 5 A significant reduction in current between one point and the next indicates the presence of a fault between these two points.
- 6 Move back in the direction of the previous reading until the fault is located.

Notes:

- Higher than normal current readings indicate short circuit faults. This could be caused by vegetation touching the fence line, a broken insulator etc. Lower than normal current readings with the same voltage usually indicates a poor connection or a broken wire.
- On an earth-wire-return fence, readings taken on the earth wire will show the current direction flowing towards the energizer.

Sound setting

The handset beeps each time the energizer pulses whenever the fence wire is in the Fault finder slot. This indicates that the energizer is on and the fence is live. The pitch of the sound rises with the magnitude of the current pulse. This is particularly useful when measuring currents in different branches at a junction point, and when the display cannot be seen. If the power supply to the fence has been switched off, the handset will not beep.

The sound can be disabled, if required (see the following instructions).

Disabling or enabling the sound

- 1 Move well away from the fence so that no fence pulse can be detected by the handset.
- 2 Press and hold **1** for 10 seconds until the handset beeps. **1** displays if the sound is being enabled, or disappears if the sound is being disabled.
- 3 Release **1** to switch off the handset.

Replacing the battery

When you see **1** on the screen, the battery needs replacing.

To replace the battery:

- 1 Unscrew the case back.
- 2 Unclip the old battery, and replace with a new PP3, 9 V battery.
- 3 Screw the case back into place, taking care not to trap the battery leads under the screws or in the case assembly.

Caring for the handset

- Do not leave the handset in direct sunlight, for instance on a vehicle dashboard.
- Use only a damp cloth to clean the handset.
- If the handset gets wet, wipe it dry and place it face down to allow any water to run out of the speaker grill. The handset is water-resistant and should require no further attention.

Warranty

Details of warranty periods and other terms applying are available at the place of purchase or at www.tru-test.com.