

Fault Finder Remote Control Handset

Introduction

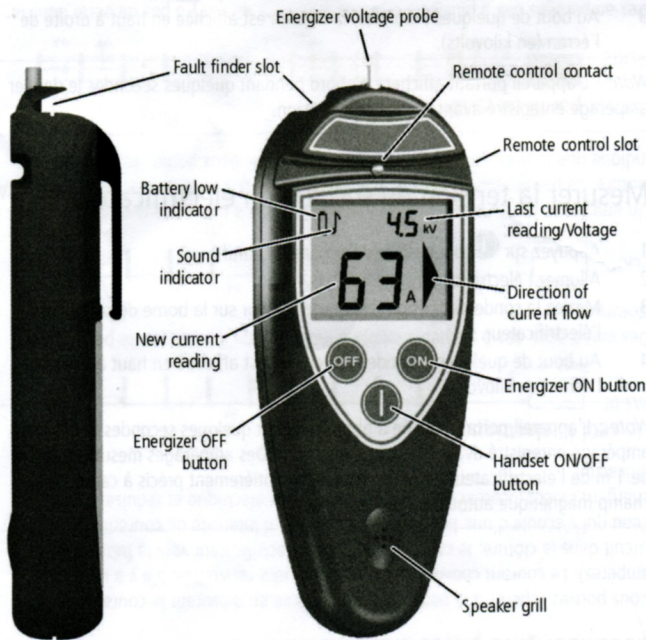
The Fault Finder Remote Control Handset has three functions:

- Voltmeter - provides instant feedback on fence performance (voltage and current)
- Fault finder - assists in the location of faults anywhere on the fence system
- Remote control - allows you to switch a remote controlled energizer on or off from anywhere on the fence system.

Models covered by this manual

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

Parts of the handset



Fault Finder Remote Control Handset

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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

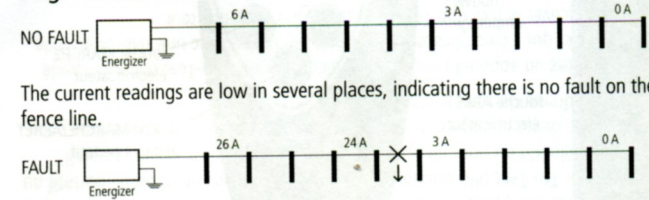
- 1 Press **⏻** to turn on the handset.
- 2 Turn on the energizer.
- 3 Touch the Energizer voltage probe against the energizer's output terminal.
- 4 After a few seconds, the voltage is displayed in the top, right-hand corner of the display (in kilo volts).

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.

Configuring for use with a Tru-Test remote-controlled energizer

If you buy an additional or replacement handset for a Tru-Test remote-controlled energizer originally supplied with a handset (RS model) or a system already operating with a handset, you will need to configure the new handset to communicate with the energizer by matching it to the energizer's address setting.

If you buy a handset and a Tru-Test remote-controlled energizer separately and the energizer has never been used with a handset before, you will need to activate the remote function of the energizer.

If you are having problems with your handset interfering with a neighbour's energizer, or you are having interference problems with your own energizer, you may need to change the energizer's address setting.

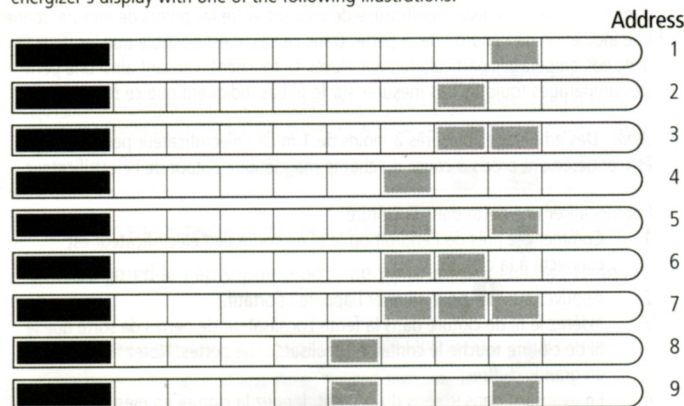
Configuring a handset to communicate with a Remote System (RS) energizer

Follow these instructions if you have purchased a replacement or an additional handset for use with a Remote System (RS) energizer (an energizer that is already set up to obey commands from a handset):

Identify the energizer's address setting

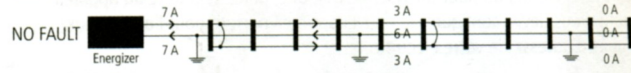
When first connected to the power source, all light segments on the energizer's LED display illuminate. They then illuminate separately from left to right and back again. This indicates that the energizer is operating normally. The LED display then displays a light sequence, for three seconds, that identifies the address setting of the energizer.

To identify your energizer's address setting, match what you see on the energizer's display with one of the following illustrations.

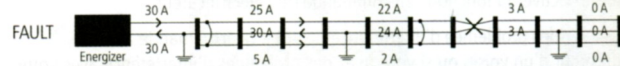


The current reading is particularly high indicating there is a fault somewhere on the fence line. The significant reduction in current between the two readings (24 A and 3 A) indicates that the fault is located somewhere between these points on the fence line.

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 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.



Note: If only the large, red light segment on the left hand side is illuminated, your energizer is set to address zero.

This means that you have a Remote Ready (R) energizer and you will need to activate the remote control function of the energizer (see the section *Configuring a Remote Ready (R) energizer to obey commands from a handset*).

Set the handset to the same address setting as the energizer

- 1 Press and hold **ON**, then press **I** to enter the Set-up mode.
- 2 Press and hold **ON** to scroll through the list of available options.
- 3 Select the Address (Ad) option, and press **OFF** repeatedly to scroll to the address setting you identified earlier.
- 4 Press **ON** to store the new address setting.
A moving arrow on the handset screen indicates that the address setting is being saved. After a few seconds, the handset will automatically switch itself off.

To exit the Set-up mode without storing the new address setting:

- Instead of pressing **ON** in step 4, which stores the address setting, press **I**. This switches off the handset without storing the new energizer address setting.

Test whether the energizer is obeying commands from the handset

- 1 Press **I** to turn on the handset and move to within 150-300 mm (6-12") of the energizer.
- 2 Press **ON** or **OFF** to turn the energizer on or off.

Tip: Make a note of the energizer's address setting to save time should the address be accidentally changed, or if an additional remote control is required in the future.

Turning the fence off or on using the remote control function

To turn on the fence:

- 1 Press **I** to turn on the handset.
- 2 Insert the fence wire into the Remote control slot, ensuring that the fence wire touches the Remote control contact.
- 3 Press **ON** to turn on the fence. The handset will beep with each pulse of the energizer.

Tip: If the remote control function doesn't work, the fence wire has probably rusted or oxidised. Try rubbing the Remote control contact against the fence wire to break through the layer of rust or oxidation.

To turn off the fence:

- 1 Press **I** to turn on the handset.
- 2 Insert the fence wire into the Remote control slot, ensuring that the fence wire touches the Remote control contact.
- 3 Press **OFF** to turn off the fence. The energizer is now in Standby mode.

Warning!

- Do not touch the fence until the beeping has stopped.
- The energizer is designed to automatically reactivate following an interruption to the input power supply. This will occur even if it was deactivated by remote control before the power failed. For this reason, it is strongly recommended that if you are working on a section of fence for an extended period, you should either safely isolate the section with a cut-out switch, or unplug the energizer from the power outlet.

Configuring a Remote Ready (R) energizer to obey commands from a handset

Follow these instructions if you have purchased a handset for use with a Remote Ready (R) energizer (an energizer that has not been set up to obey commands from a handset):

Activate the remote control function of a Remote Ready (R) energizer

A Remote Ready (R) energizer will not respond to commands sent by the handset until the remote control function has been activated.

Before activating the energizer's remote control function:

- Switch off the power supply to the energizer and wait for 1 minute, then switch on the power supply again.

Note: A Remote Ready (R) energizer will only accept a new address within four minutes of the power supply being switched on. The energizer must be on and must not be in Standby mode before the remote control function can be activated.

To activate the energizer's remote control function:

- 1 Press and hold **ON**, then press **1** to enter the Set-up mode.
- 2 Press and hold **ON** to scroll through the list of available options.
- 3 Select the Address (Ad) option, and press **OFF** repeatedly to scroll to the desired address setting.
- 4 Hold the handset within 150-300 mm (6-12") of the energizer then press **ON** to transmit the new setting to the energizer.
A moving arrow on the handset's screen indicates that the command is being sent to the energizer. The large, red light on the left illuminates for 6 seconds as the energizer receives the command. The energizer then resumes in Standby mode with only the large, green light on the right flashing. After a few seconds, the handset will automatically switch itself off.

To exit the Set-up mode without activating the energizer's remote control function:

- Instead of pressing **ON** in step 4, which transmits the new setting, press **1**. This switches off the handset without transmitting the new setting.

Test whether the energizer is obeying commands from the handset

- 1 Press **1** to turn on the handset and move to within 150-300 mm (6-12") of the energizer.
- 2 Press **ON** or **OFF** to turn the energizer on or off.

Tip: Make a note of the energizer's address setting to save time should the address be accidentally changed, or if an additional remote control is required in the future.

Changing the settings

Sound setting

The handset beeps each time the energizer pulses whenever the fence wire is in the Fault finder slot or the Remote 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).

To disable or enable the sound:

- 1 Press and hold **ON**, then press **1** to enter the Set-up mode.
- 2 Press **ON** once to scroll until you see **OFF**. **OFF** now acts as a toggle to switch the sound on or off.
- 3 Do one of the following:
 - To disable the sound, press **OFF** until OFF appears on the screen.
 - To enable the sound, press **OFF** until ON appears on the screen.
- 4 Press **ON** to store the setting.
- 5 Press **1** to switch off the handset.

Backlight

The handset has a backlight for better screen visibility when there is not enough daylight. If required, this feature can be turned off to conserve battery life.

To disable or enable the backlight:

- 1 Press and hold **ON**, then press **1** to enter the Set-up mode.
- 2 [bL] will now be flashing. **OFF** now acts as a toggle to switch the backlight on or off.
- 3 Do one of the following:
 - To disable the backlight, press **OFF** until OFF appears on the screen.
 - To enable the backlight, press **OFF** until ON appears on the screen.
- 4 Press **ON** to store the setting.
- 5 Press **1** to switch off the handset.

Changing an energizer's address setting

Follow these instructions to overcome close proximity interference (for example your neighbour's energizer is receiving commands from your handset, or your own energizer is switching to Standby mode or switching OFF for no particular reason):

Note: Before changing the energizer's address setting, the energizer must be in Standby mode.

Switch the energizer to Standby mode

- 1 Switch off the power supply to the energizer and wait for 1 minute, then switch on the power supply again.
- 2 Press **1** to switch on the handset.
- 3 Hold the handset within 150-300 mm (6-12") of the energizer and press **OFF**. The energizer will stop pulsing (may take up to 2 seconds) and only the large, green light on the right will continue flashing.
- 4 Press **1** to switch off the handset.

Change the energizer's address setting

- 1 Press and hold **ON**, then press **1** to enter the Set-up mode.
- 2 Press and hold **ON** to scroll through the list of available options.
- 3 Select the Address (Ad) option, and press **OFF** repeatedly to scroll to the desired address setting.
- 4 Hold the handset within 150-300 mm (6-12") of the energizer then press **ON** to transmit the new setting to the energizer.
A moving arrow on the handset's screen indicates that the command is being sent to the energizer. The large, red light on the left illuminates for 6 seconds as the energizer receives the command. The energizer then resumes in Standby mode with only the large, green light on the right flashing. After a few seconds, the handset will automatically switch itself off.

To exit the Set-up mode without changing the energizer's address:


- Instead of pressing **ON** in step 4, which transmits the new setting, press **1**. This switches off the handset without transmitting the new setting.

Test whether the energizer is obeying commands from the handset

- 1 Press **1** to turn on the handset and move to within 150-300 mm (6-12") of the energizer.
- 2 Press **ON** or **OFF** to turn the energizer on or off.

Tip: Make a note of the energizer's address setting to save time should the address be accidentally changed, or if an additional remote control is required in the future.

Replacing the battery

When you see  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, alkaline 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.