

NEMTEK
Electric Fencing Products



Agri Remote TL-ARM

Instruction Manual



INTRODUCTION

The Nemtek Agri Remote can switch an energizer on and off along the electric fence by holding the remote against the fence wire. The Agri Remote also helps find faults on the fence by showing the direction and magnitude of the current flow. Note the current reading on the remote as you move along the fence. When the reading drops significantly, the fault is between the last two checkpoints. Fix the fault and check if the total fence current drops. If it doesn't, there might be another fault further along the fence.

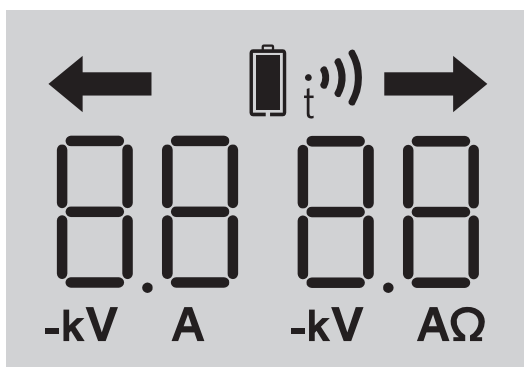
Features

- Switches the energizer on and off
- Patented fence probe tip offers more accurate readings
- Assists in fault finding
- Light weight and easy-to-carry
- Low battery warning
- Automatic energizer-polarity detection
- Can be used with selected Nemtek Agri energizers

Specifications

Voltage Display Range	0 to 15kV
Current Display Range	0 to 99A
Battery Type	9V alkaline, 6LR61
Operating temperature	-10°C to 50°C

Agri Remote Liquid Crystal Display

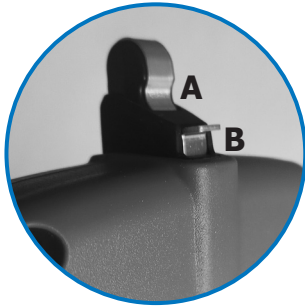


	Battery Depleted Indicator
	Fence Current Direction
	Fence Transmission (on/off)
	Flashes every measurement
	Startup mode is Kilovolts and Amps Press the function button for Ohms
	Energizer Address Number

Controlling the Remote

A. Fence Voltage and Current Tip

B. Energiser On/Off Command Contact



Liquid
Crystal
Display

On Button and
Display Scroll

Off Button and
Display Scroll

Function Button

9V Alkaline Battery
inside the case

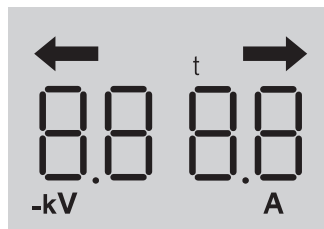
Ground Lead Plug

To replace the battery
remove the 6 screws to take
off the back of the case

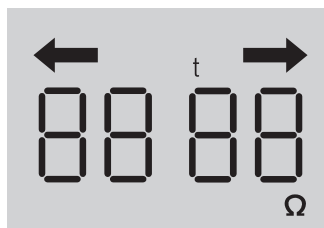
Fence Checking

1. Connect the ground lead to a metal fence post or earth wire. Hold the remote and place the fence voltage and current tip on a fence wire.

2. The following information
will appear on the display.
The arrow shows the
direction of the fence current.
The display gives the voltage
on the fence in Kilovolts and
the current in Amperes



3. Press the function button to
display the fence load
resistance in Ohms.



Fence Wire

Attach
ground lead
to metal post
or earth wire



Operation

Holding the meter

1. Grip the fence meter tightly in your hand, taking care not to grip too close to the electric fence wire, contact strip or LCD screen.
2. For the best results and a more accurate reading use the black ground lead supplied and attach it to an earthed metal pole or earth wire.
3. This meter can make use of capacitive coupling between the user, meter and earth and therefore, a firm grip with sufficient skin contact will ensure a more accurate reading.



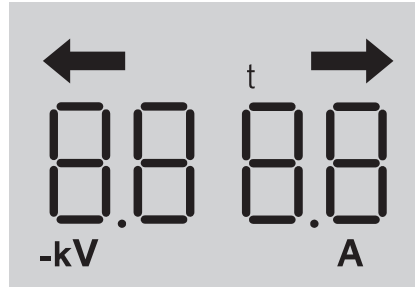
Taking a measurement

1. Place the meter tip against the live fence wire, making sure there is good contact between the fence wire and the metal strip.
2. The display will indicate fence voltage, current and if present, the direction of a possible fault.
3. If the energizer has a negative voltage output or in some instances, where the ground fence wire is measured, the negative voltage indicator will be displayed.
4. If the current in the fence wire is less than 2A, no fault direction arrows will be shown.
5. If the Fence Meter does not detect an energizer pulse for 30 seconds, the meter will automatically switch off.
6. Measurements taken in close proximity (less than 1m) to the energizer might not be accurate.
7. If only a voltage measurement is desired, it is not necessary to place the wire in the measuring pin slot, any contact to the metal strip will be sufficient.

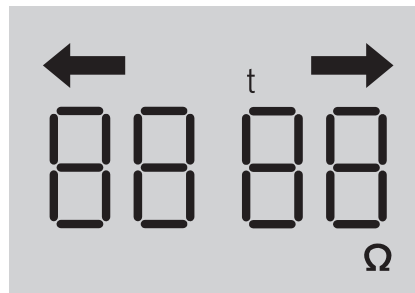
Mode Switching on the Remote

Press the function button, and one long press of the **ON/OFF** buttons to send the remote commands down the fence to the energizer

1. At power **ON**, the meter displays **kV** and **A** fields while it is in Voltage and Current Mode.



2. The next mode displays fence loading in Ohms. All 4 digits are used to display the ohms value.



3. The 3rd mode is for setting the address of the energizer that the remote **ON/OFF** commands will be sent to. Pressing the function button again will cycle through these 3 modes in a loop.

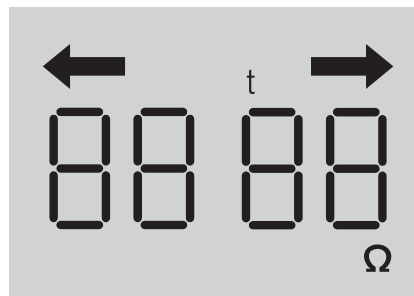


When in the 3rd Addressing Mode, the **ON** and **OFF** buttons act as increment and decrement buttons for setting the energizer address. The meter cannot be turned off using the **OFF** button in this 3rd mode, but long pressing **ON/OFF** will still send the remote command.

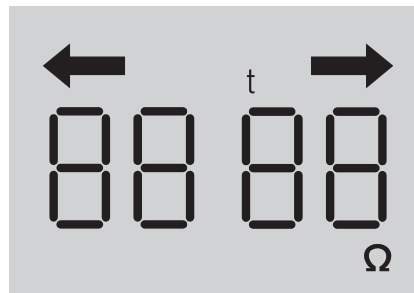
When a remote command is sent the fence transmission icon flashes.

Fault Finding

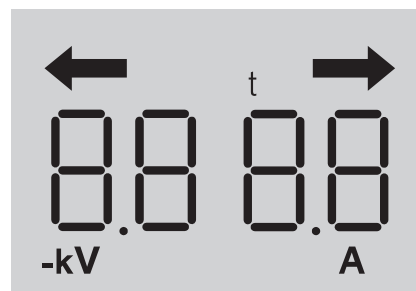
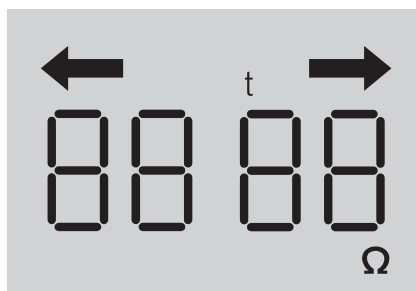
The resistance reading (Ohms) will be low when there is a short on the fence



1. Following the direction of the current, take readings approximately every 50 - 100m or at junction points along your fence line. At a junction point, follow the wire with the highest resistance.
2. Increasing proximity to a fault to earth is indicated by a decrease in resistance between adjacent checkpoints.



3. As you approach the fault when displaying fence voltage and current, the voltage will decrease to zero and the current reading will be high. The arrow will point in the direction of the fault. If the meter does not register or display anything then you have moved past the fault.
4. After correcting the fault you should see the resistance reading rise and the voltage go up. If not, check for further faults.



5. Open circuit faults can be determined by high fence voltage and very low current.

Using your remote with multiple energizers

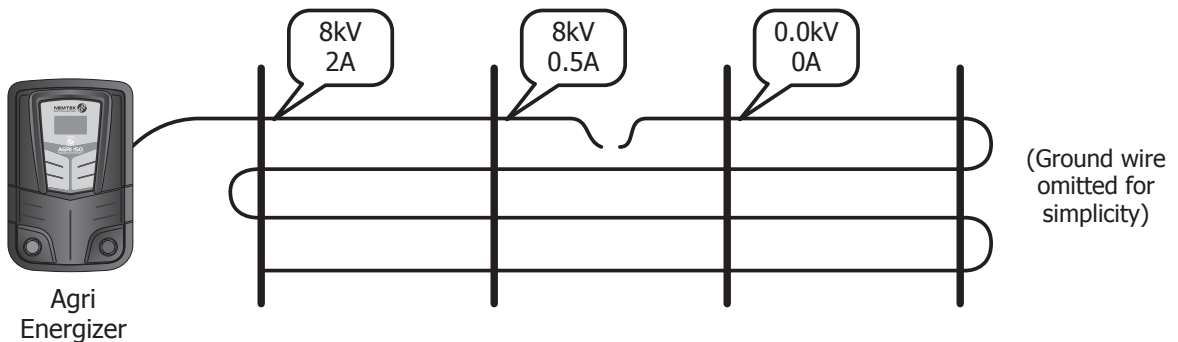
The remote has nine addresses that can be assigned to a specific energizer, enabling the remote to control up to nine energizers.

Fault Finding

The two most common faults in an electric fence installation are an open-circuit (wire break, poor connection etc.) fault or a short-circuit (insulator breakdown, vegetation, live and ground wire touching etc.) fault. In order to facilitate the fault-finding process, current and voltage measurements at regular points along the fence, when in a healthy condition, should be recorded for comparison when a fault occurs.

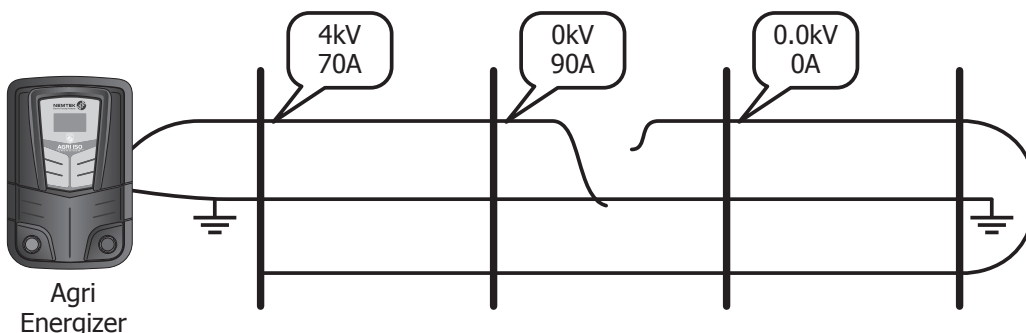
Open-circuit Fault

1. Start as close as possible to where the high voltage (HV) leads from the energizer connects to the electric fence and take a measurement on the live wire.
2. Take a measurement at regular intervals along the fence, while moving away from the energizer.
3. When the measurement shows a significant drop in voltage, the fault should be between the current and the previous measurement points.
4. Parallel fence wires should be inspected individually following the above process.



Short-circuit Fault

1. Start as close as possible to where the high voltage (HV) leads from the energizer connects to the electric fence and take a measurement on the live wire.
2. The fence current will be significantly higher compared to a healthy fence.
3. Take a measurement at regular intervals along the fence, while moving away from the energizer.
4. When the measurement shows a significant drop in current, the fault should be between the current and the previous measurement points.
5. When fault finding parallel fence wires, follow the wire with the highest current reading.



Warnings

- 1. This product is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the product by a person responsible for their safety.**
- 2. Electric fencing can be lethal. Avoid any head contact with the fence.**
- 3. Do not attempt to use or store this product in the presence of excessive moisture, as this may lead to electrical shock.**
- 4. Do not attempt to measure voltages in excess of 14 kV as this may damage the device or cause electrical shock.**
- 5. Do not attempt to measure any other electrical outputs other than that of electric fence energizers complying with the IEC 60335-2-76 specification.**

WARRANTY

Unless otherwise specified all Nemtek energizers have a 2 year warranty and all other fencing components have a 1 year warranty from date of sale against defects due to faulty workmanship or materials. Nemtek (Pty) Ltd will, at its discretion, either repair or replace a product that proves to be defective.

Nemtek (Pty) Ltd does not guarantee that the operation of the product will be uninterrupted and totally error free. Faulty products must be returned to one of the Nemtek Group outlets. The buyer shall pay all shipping and other charges for the return of the product to Nemtek (Pty) Ltd.

LIMITATION OF WARRANTY

The warranty does not apply to defects resulting from acts of God, modifications made by the buyer or any third party, misuse, neglect, abuse, accident or mishandling.

EXCLUSIVE REMEDIES

The remedies provided herein are Nemtek (Pty) Ltd's sole liability and the buyers sole and exclusive remedies for breach of warranty. Nemtek (Pty) Ltd shall not be liable for any special, incidental, consequential, direct or indirect damages, whether based on contract, tort, or any other legal theory. The foregoing warranty is in lieu of any and all other warranties, whether expressed, implied, or statutory, including but not limited to warranties of merchantability and suitability for a particular purpose.



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