Problems

The most common cause of problems with the VPK is a dead or poor-quality battery. If your Fault Finder fails to operate, shows no readings, or shows strange symbols on the display, check the battery. If you don't have a battery tester or meter, use a **new** (heavy-duty or alkaline) battery and see if the problem disappears (also see "Checking and Replacing Battery").

Warranty

This Fault Finder is covered by a one-year warranty against defective parts (excluding batteries) and workmanship.

If you have any operational problems, difficulties, etc., call or email your questions or comments to Kencove Farm Fence Supplies.

Phone: 1-800-KENCOVE
Fax: 888-908-5353
Email: sales@kencove.com
Website: www.kencove.com

The Fault Finder and Voltmeter complies with AS/NZS 2064 Group 1 Class B, FCC Part 15, EN55011, EN50082-1.

Important Notes

- Use for testing agricultural electric fences only. Attempting to measure other high voltages could be extremely dangerous.
- The case is waterproof. Condensation can appear inside with large changes in temperature or pressure. If so, open the case and allow it to dry.
- To clean, simply wipe with a damp cloth.
- **Do not open the unit or touch the battery while the VPK is connected to an electric fence. You may damage the unit and receive a shock.**
- DO NOT leave a dead battery in the VPK Fault Finder.

KENCOVE FARM FENCE SUPPLIES

1-800-KENCOVE www.kencove.com

Manufactured for Kencove Farm Fence Supplies by Pakton Technologies

Kencove VPK Fault Finder & Voltmeter

User Manual

Specifications

Voltage: 0.2 to 9.9KV (peak) +/-10%
Current: 1-30 Amps (peak)

Introduction

The Kencove VPK Fault Finder and Voltmeter is the most technologically advanced electric fence fault finder available. It features microprocessor and surface mount technologies to make it the easiest to use and most effective electric fence fault finding device ever made.

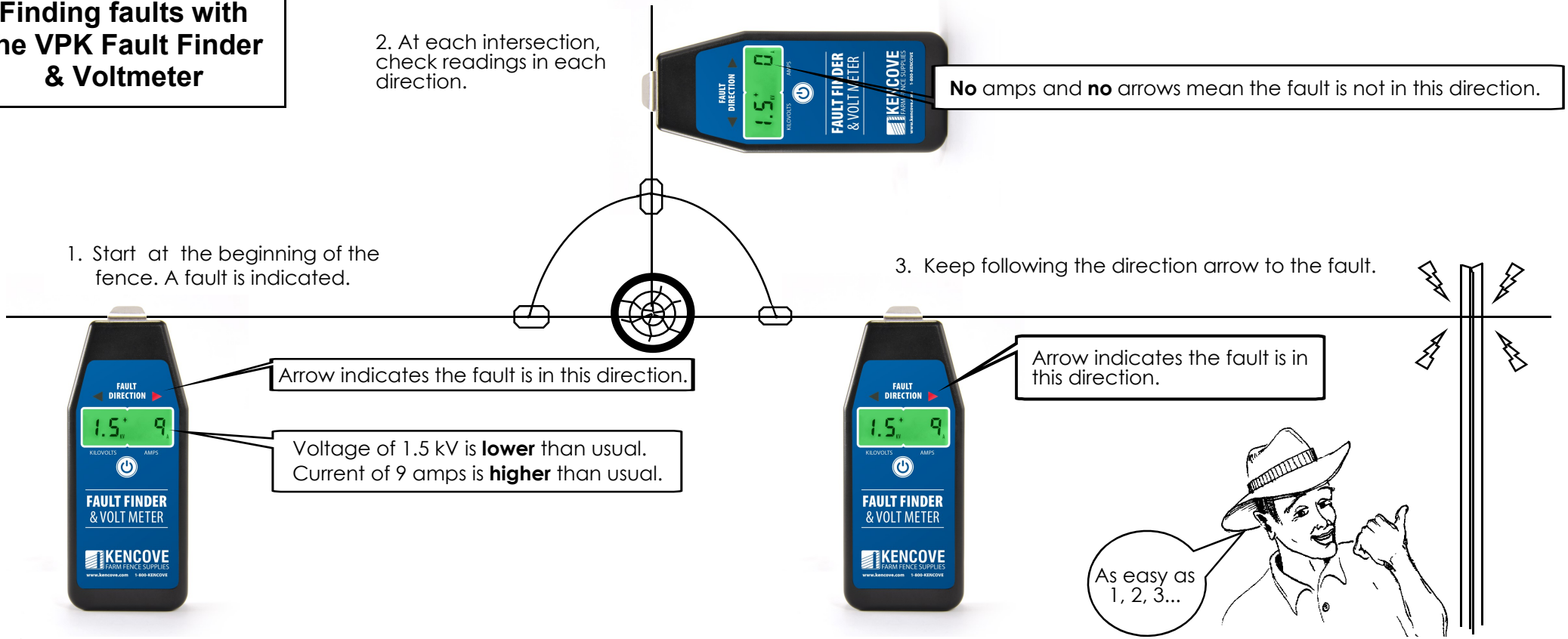
This Fault Finder is able to show the current voltage, current amperage, and direction to the fault in all electric fences, regardless of energizer and faults. The VPK needs no second (ground) connection to read fence voltage, as it uses the capacitance of the user's hand (nothing is felt).

Checking and Replacing Battery

The VPK comes with a 9-volt battery. To check or change the battery, follow the instructions below.

1. To check the battery, press the power button. A decimal place should appear on the left hand side of the display. If no decimal place appears or the battery symbol remains on the display, replace the battery.
2. To replace the battery, unscrew the four large screws from the back of the Fault Finder. Lift the back carefully as the O-ring may stick. Remove the old battery, and insert the new battery into position. Be sure to match '+' to '+' and '-' to '-'. The VPK uses a standard 9-volt battery.

Finding faults with the VPK Fault Finder & Voltmeter



Types of Faults

There are two common types of faults on electric fences.

1. An OPEN CIRCUIT is where the live wire is broken. In the sections of fence after the break, there will be NO voltage. These are relatively easy to find by testing the fence for voltage.
2. A SHORT CIRCUIT is where the live wire touches ground or a ground wire, or an insulator breaks down. This leads to a reduced voltage throughout the system and little to no voltage at and beyond the fault. When a SHORT CIRCUIT occurs, a large amount of current flows through the live wires.

Checking Your Fence

VOLTAGE: Use the VPK to measure the voltage on the fence by placing the metal tip over the live wire and pressing the **POWER** button. The reading is shown by the two digits on the left side of the display. If it is **lower** than usual, you may have a short circuit. To be an effective barrier, the fence should read higher than 2.5 kV.

AMPERAGE: The VPK will also measure current flow (amps) on the fence when the **POWER** button is pressed. Amperage is shown on the right side of the display. A **higher** than usual reading indicates that you may have a short circuit.

Take the time to play with the VPK Fault Finder and Voltmeter to get used to it. Place pretend faults (short the live wire to grounded metal) on your fence and find them.

This experience will be invaluable when you come to find real faults. Get to know the usual voltage on your fence. As a guide, usual amperage will be approximately 1 amp for every 2 1/2 miles of live wire. This will also depend on seasonal conditions such as grass and moisture.

Fault Finding Technique

Always start close to the energizer, but not within 12". A good place to start is where the lead-out wire connects to the fence. This way you will always start on the energizer side of a fault.

1. Place the metal tip over the lead-out wire and press the **POWER** button. If the voltage is **lower** than usual and the amperage is **higher** than usual, you may have a short circuit (see "Checking Your Fence"). The fault direction arrows will light when the VPK calculates that the leakage (amperage) is higher than an acceptable value.
2. Follow the directional arrows toward the fault. Check the fence at regular intervals and at every side fence or intersection. Also check each of your gates and cross fencing.
3. If the Fault Finder shows faults in more than one fence line or wire, ALWAYS follow the direction with the highest current reading.

Note: For a multi-wire fence, the current flow will be seen on the feed wire, but not on the blind (dead-end) wires.