



3-60V INTEGRATED TEST LIGHT/VOLTMETER

MODEL NO: **AK4013**

Thank you for purchasing a Sealey product. Manufactured to a high standard, this product will, if used according to these instructions, and properly maintained, give you years of trouble free performance.

IMPORTANT: PLEASE READ THESE INSTRUCTIONS CAREFULLY. NOTE THE SAFE OPERATIONAL REQUIREMENTS, WARNINGS & CAUTIONS. USE THE PRODUCT CORRECTLY AND WITH CARE FOR THE PURPOSE FOR WHICH IT IS INTENDED. FAILURE TO DO SO MAY CAUSE DAMAGE AND/OR PERSONAL INJURY AND WILL INVALIDATE THE WARRANTY. KEEP THESE INSTRUCTIONS SAFE FOR FUTURE USE.



Refer to instructions



Wear eye protection

1. SAFETY

- ❑ **WARNING! DO NOT** use test light with domestic 110-230Volt supplies. Only use with DC Voltages between 3 and 60Volts.
- ✓ Observe standard workshop safety procedures when using the meter.
- ✓ Keep the work area clean, uncluttered and ensure there is adequate lighting. Keep tools and other items away from the engine and ensure you can see the working parts of the engine clearly.
- ✓ Maintain correct balance and footing. Ensure the floor is not slippery and wear non slip shoes.
- ✓ Remove ill fitting clothing. Remove ties, watches, rings and other loose jewellery. Contain or tie back long hair.
- ✓ Ensure extension leads and probes are kept clear of hot surfaces and rotating parts.
- ✗ **DO NOT** drape cables around neck or arms – danger of entanglement.
- ✗ **DO NOT** disassemble meter.
- ✗ **DO NOT** get test light wet or use in damp or wet locations or areas where there is condensation.
- ✗ **DO NOT** use the meter for any purpose other than for which it is designed.
- ✗ **DO NOT** use the meter if damaged.
- ✓ When not in use, store tester in a safe, dry, childproof location.

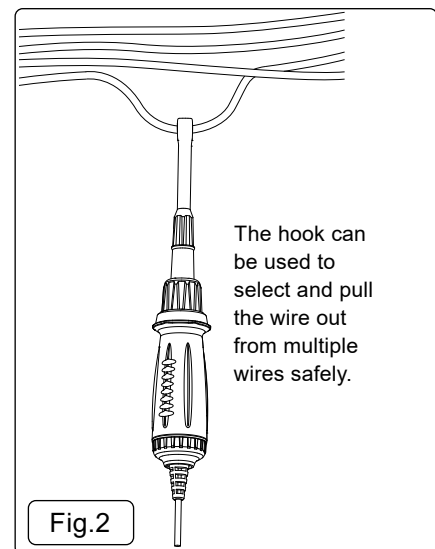
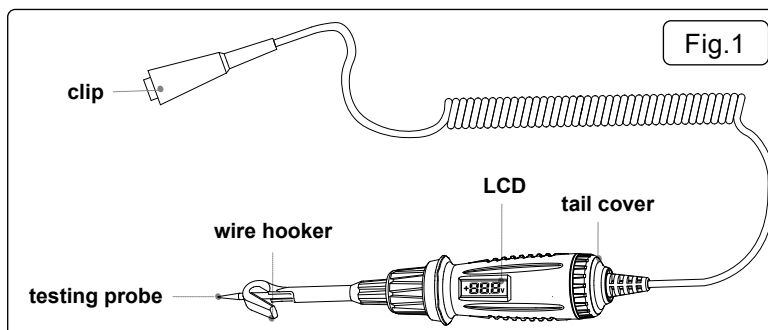
2. INTRODUCTION

Identifies the polarity of the circuit being tested on the LCD, red for positive and green for negative. Wire hook probe design, makes piercing wire insulation easier, the hook can be locked out of the way when probing terminals. LCD meter draws minute currents making this tool safe around delicate electronic components. With a range of 3-60V DC, this tool is suitable for motorcycle, car, mild hybrid and commercial vehicles. Supplied with 3m coiled cable and insulated crocodile earth clamp. Do not use on airbags. Battery 1 x CR2032 (supplied).

3. SPECIFICATION

Model No.: **AK4013**
 Accuracy: $\pm(1\%+0.3V)$
 Computer Safe: Testing current < 10mA
 Range: 03-60V DC

4. OPERATION



4.1. VOLTAGE MEASUREMENT

- 4.1.1. Push down the hook and rotate it clockwise to expose the testing probe.
- 4.1.2. Contact the probe to the 3 ~ 60V DC voltage source.
- 4.1.3. Connect the test probe to positive and clip to the negative of the test object or circuit. The voltage value and "+" will be displayed on the LCD with a "Red" background when the circuit is live.
- 4.1.4. Connect the test probe to negative and clip to the positive of the test object or circuit. The voltage value and "-" will be displayed on LCD with "Green" background when the circuit is live.

NOTE: If user removes the probe away from the voltage source, the measured value will be held on the LCD about 3 seconds.

4.2. AC/DC INDICATION

- 4.2.1. A red background and '+' sign indicates positive polarity.
- 4.2.2. A green background and '-' sign indicates negative polarity.
- 4.2.3. If no "+" or "-" sign shows on the LCD, and the background light is red colour, you are connecting with an AC voltage source. Please stop the measurement.

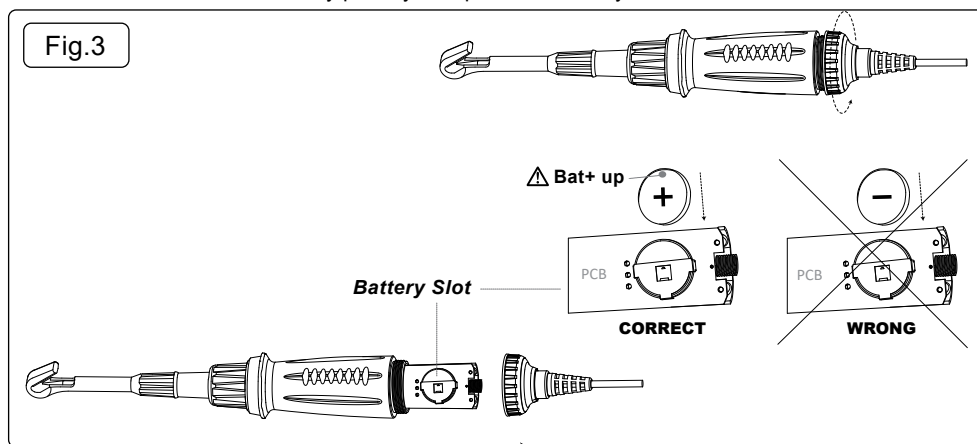
4.3. OVER-VOLTAGE WARNING

- 4.3.1. Only use the tester within the specified voltage range. Exceeding this range may damage the tester and/or cause harm.
 - **WARNING!** Please stop the measurement if any of the following warnings appear on the LCD:
- 4.3.2. 70 ~ 100V, "OL0" will show on the LCD
- 4.3.3. 100 ~ 200V, "OL1" will show on the LCD
- 4.3.4. 200 ~ 300V, "OL2" will show on the LCD
- 4.3.5. > 300V, "OL3" will show on the LCD
- 4.3.6. Voltage greater than 400V may damage the tester, please make sure the tester is not damaged before next measurement.

5. MAINTENANCE

5.1. REPLACING THE BATTERY (FIG.3)

- 5.1.1. Rotate the tail cover and pull out the PCB to replace the battery.
- 5.1.2. Insert the new battery into the battery slot, with the positive side facing outward.
- 5.1.3. If "Lo" and red colour background light appears on LCD, it indicates low battery power. Please replace the battery.
- 5.1.4. If the value on the LCD is flashing, it indicates low battery power. Please replace the battery.
- 5.1.5. If nothing appears on LCD and the background light doesn't light up, it indicates no battery power or the battery polarity is reversely installed. Please check the battery polarity or replace the battery.



5.2. REPAIRS

NOTE: Repairs or servicing should only be performed by qualified personnel.

5.3. CLEANING

- 5.3.1. Remove grease and grime with a clean, dry cloth.
 - * **DO NOT** use abrasives or solvents. **DO NOT** use alcohol, ammonia or cleaners containing solvents.



ENVIRONMENT PROTECTION

Recycle unwanted materials instead of disposing of them as waste. All tools, accessories and packaging should be sorted, taken to a recycling centre and disposed of in a manner which is compatible with the environment. When the product becomes completely unserviceable and requires disposal, drain any fluids (if applicable) into approved containers and dispose of the product and fluids according to local regulations.



WEEE REGULATIONS

Dispose of this product at the end of its working life in compliance with the EU Directive on Waste Electrical and Electronic Equipment (WEEE). When the product is no longer required, it must be disposed of in an environmentally protective way. Contact your local solid waste authority for recycling information.



BATTERY REMOVAL

Under the Waste Batteries and Accumulators Regulations 2009, Jack Sealey Ltd are required to inform potential purchasers of products containing batteries (as defined within these regulations), that they are registered with Valpak's registered compliance scheme. Jack Sealey Ltd Batteries Producer Registration Number (BPRN) is BPRN00705.

Note: It is our policy to continually improve products and as such we reserve the right to alter data, specifications and component parts without prior notice.

Important: No Liability is accepted for incorrect use of this product.

Warranty: Guarantee is 12 months from purchase date, proof of which is required for any claim.



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