

## MODIEWARK

The Modiewark is a Non-Contact & Contact Voltage Detector Proximity and Touch device that detects the presence of an alternating electric field. Its unique switching action allows for the identification of alternating currents at 200mm to 300mm away from a voltage source of 110 to 750,000 volts.

The Modiewark is used by industry professionals for live or dead voltage determination of outdoor overhead or underground at URD test points. Firstly as a proximity device to determine live or dead situations and then as a touch device to verify the tester has physically reached the AC field around designated mains under test. The unit works indoors tracing voltage sources in power boards and cable fault detection.

The unique nature of the sensor plate within the unit allows for directional checks such as checking low voltage when high voltage is nearby. Induced voltage on isolated conductors are checked by increasing the Modiewark sensitivity.

## SPECIFICATIONS

### STANDARD MODIEWARK

|                        |   |
|------------------------|---|
| Voltage sensing range: | 50V AC to 750KV AC  |
| Light source:          | 3*High intensity LED  |
| Sound Source:          | Electromagnetic piezo<br>85 dB @ 5cm  |
| Operating temperature: | -10 to 65° C (14 to 149° F)   |
| IP rating:             | IP 63   |
| Weight (no Batteries): | 300g  |
| Dimensions:            | L= 230mm<br>W= 65.85mm<br>Cap diameter 90mm                                     |
| Battery Life:          | ON (no alarm) 140+ Hours<br>ON (self test) 90+ Hours<br>ON (alarm on) 60+ Hours |

## WARNING

HIGH VOLTAGE TESTING SHOULD ONLY BE CARRIED OUT BY TRAINED PERSONNEL.

DO NOT HOLD THIS INSTRUMENT IN CONTACT WITH ANY ENERGISED CONDUCTOR.

USE ONLY NIMH BATTERIES WHEN CHARGING WITH APPROVED 110/240 VOLT AC PLUG PACK.

THE MANUFACTURER DISCLAIMS ALL LIABILITY FOR LOSS OR DAMAGE SUFFERED AS A RESULT OF:

- (A) USE OF THIS TESTER BY UNTRAINED PERSONNEL OR
- (B) UNAUTHORISED ALTERATION OF THIS TESTER.

## MODELS AVAILABLE

### Models Voltage Selection

|      |  |
|------|--|
| S4A  | OFF • 240V • 2kV • 6.6kV   |
| S4B  | OFF • 240V • 2kV • 6.6kV • 11kV  |
| S4C  | OFF • 240V • 2kV • 5kV • 11kV  |
| AIS  | OFF • 240V • 1kV • 6.6kV • 33kV  |
| VR   | OFF • 240V • 2.2kV • 6.6kV • 11kV • 22kV   |
| SECV | OFF • 240V • 6.6kV • 11kV • 22kV • 66kV  |
| MWB  | OFF • 240V • 3.3kV • 6.6kV • 11kV • 22kV • 33kV  |
| RTC  | OFF • 240V • 5kV • 6.6kV • 11kV • 12.7kV • 22kV • 33kV   |
| S9   | OFF • 240V • 2kV • 11kV • 22kV • 33kV • 66kV • 132kV • 330kV   |
| S9SA | OFF • 240V • 2kV • 6kV • 11kV • 22kV • 33kV • 66kV • 132kV • 275kV   |
| CSA  | OFF • 240V • 4.2kV • 15kV • 25kV • 35kV • 69kV • 115kV • 230kV   |
| NZ   | OFF • 240V • 2kV • 11kV • 22kV • 33kV • 66kV • 110kV • 220kV   |
| SEAQ | OFF • 240V • 3.3kV • 6.6kV • 11kV • 33kV • 66kV • 110kV • 275kV  |
| ETSA | OFF • 240V • 3.3kV • 7.6kV • 11kV • 33kV • 66kV • 132kV • 275kV  |
| NM   | OFF • 240V • 1kV • 3.3kV • 6.6kV • 11kV • 22kV • 33kV  |
| NRCC | OFF • 240V • 1kV • 3.3kV • 6.6kV • 11kV • 33kV • 66kV • 132kV  |
| WA1  | OFF • 240V • 3.3kV • 6.6kV • 11kV • 22kV • 33kV • 66kV • 132kV   |
| S7   | OFF • 240V • 2kV • 11kV • 22kV • 33kV • 66kV   |
| S7A  | OFF • 240V • 11kV • 33kV • 66kV • 132kV • 330kV  |
| CIG  | OFF • 240V • 415kV • 3.3kV • 6.6kV • 11kV • 22kV • 33kV • 66kV   |
| ABC  | OFF • 240V • 11kV • 33kV • 66kV • 132kV  |
| VRS  | OFF • 240V • 1kV • 2.2kV • 6.6kV • 11kV • 22kV   |
| HEC  | OFF • 240V • 6.6kV • 11kV • 22kV • 44kV • 88kV • 110kV • 220kV   |
| WRA  | OFF • 240V • 4.2kV • 15kV • 25kV • 35kV • 48kV • 69kV • 15kV • 25kV • 35kV   |
| RTC  | OFF • 240V • 5kV • 6.6kV • 11kV • 12.7kV • 22kV • 33kV   |
| VRS  | OFF • 240V • 1kV • 2.2kV • 6.6kV • 11kV • 22kV   |
| S10A | OFF • 240V • BATT • 4.8kV • 7.2kV • 16kV • 2.4/4.2kV • 4.8/8.3V • 8.0/13.8/17.2/12.5kV • 14.4/25/16/27.6kV • 44kV • 69kV |
| S11A | OFF • 240V • 2.4/4.2kV • 4.8/8.3kV • 7.2/12.5kV • 8/13.8kV • 14.4/25kV • 16/27.9kV • 44kV • 69kV • 115kV • 500kV         |

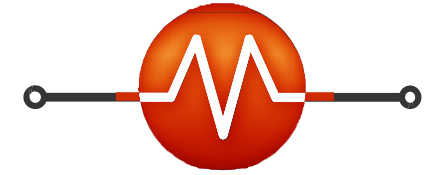
## MORRIS GROUP

### ENGINEERING SOLUTIONS

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NON CONTACT VOLTAGE DETECTOR



# G.L McGAVIN

## MODIEWARK

AC NON-CONTACT & CONTACT VOLTAGE DETECTOR



ACMA  
N15191

### WARNING

High voltage testing should only be carried out by trained personnel do not hold this instrument in your hand and make contact with live electrical conductors in excess of 650 VAC.

## PART IDENTIFICATION



## BATTERY REPLACEMENT

The Modiewark uses 3 x C size Alkaline, Lithium or Rechargeable batteries. They are placed in the handle with the positive side to the top. A battery strap is placed into the handle coil end first. When the batteries are replaced in the handle, shake to allow the battery strap to fall into the correct position. Screw the handle with batteries inside to the head unit, with a firm twist in a clock-wise direction.



## SELF TESTING FEATU

There are two different configurations of Modiewark available in SELF TEST and NON SELF TEST. (Please note all Australian models must be sold with self test). The continuous self checking of the Modiewark Tester provides the following safety features:-

- Provides a circuit test. A signal is generated within the unit and is passed to the sensor detection plate and then through the entire circuit, proving the circuit is active and in good working order.
- Provides a test to prove that the visual and audio indicators are working correctly. The visual indicator is produced by three long life LED's, which provides the tester with two redundant light sources.

**Note: If audio or visual indicators are faulty or Switch is misaligned remove from service and return for repair.**

- Battery low indicator. With a full battery charge of 4.5 volts the interval between the standby pulse is 1 second, as the battery power is lowered the pulse becomes further apart until it reaches 2.5 volts where the pulse becomes infrequent and stops. It is recommended to change the battery at a two second interval.

## UNIT OPERATIONS

- 1) Hold the unit in the hand by the handle below the sunrise fitting.
- 2) Turn the unit on to the 240 volt switch setting (the first switch setting). This will allow for the most sensitive voltage detection.
- 3) Listen and watch for the Self Testing function which will start automatically. If this does not occur there may be a few possibilities to consider before taking out of service:-
  - Remove the handle and check that the batteries are placed in the correct way and the battery strap is in place, shake handle and screw into place.
  - If the Self Test is still unresponsive the unit may be faulty, take out of service and return for repair.
  - If the pulses are 2 to 3 seconds apart or greater this indicates a low battery status and batteries will need to be replaced.
  - If the unit is a Non-Self Test model, tap the head of the Modiewark with a finger and listen for an activation tone in time with the tapping.
- 4) To Verify the tester using outside influences:-
  - Place the tester against live power outlet or equivalent above 110 volts AC.
  - Set switch at 35kV overhead setting and place head of unit as marked against the spark plug of a running truck or car engine.
  - Use the Modielive tester to test the activation of the unit on the 240 volt setting.
- 5) Hold the detection plate side to the power source under test, a continuous tone will be heard indicating live voltage.



- 6) If a tone is not heard at this point on the 240 volt setting move the tester closer to the conductor under test, until the head of the tester is touching the conductor at this point the voltage is below 50 volts AC.
- 7) If the tester activates metres away from the known source, this may not prove that the signal being picked up is from that source. Use the *voltage range switch* to determine the voltage required for the voltage test, by moving the switch settings higher as you approach the power source under test. The unit is designed to activate 100 to 200mm away from the voltage source if hand held.

## INSULATION STICKS (HOT STICKS)

The Modiewark testers can be attached to an insulation stick. This increases range and minimal safe distances that are required for high voltages.

To attach a Modiewark to an insulation stick, attach to the head of the stick using the sunrise (universal) fitting and secure tightly at the angle required.



Bayonet adapter fitting  
Rescue kits and bags can be configure to requirements upon request.



Modiewark testers can be supplied with a Modielive EMF generator to test the Modiewark. See our website for more details

**Note:** The higher the voltage on the selector switch the closer to the voltage source you will need to go.



IT IS RECOMMENDED THAT THE TESTER BE MOVED PROGRESSIVELY CLOSER AT 240V UNTIL WARNING OF VOLTAGE IS INDICATED OR UNTIL IT TOUCHES CONDUCTOR, APPARATUS, OR TEST POINT ELBOW.

**GL McGavin Pty Ltd cannot authorise the method of use. Power Distribution Authorities have trained personnel who can advise on operation and use.**