

## SPECIFICATIONS

Voltage sensing range:	50v AC to 500 kV AC
Light source:	High Intensity LED
Sound Source:	Electromagnetic piezo 85 dB @ 10cm (3.937')
Operating temperature :	-10 to 65°C (14 to 149°F)
IP rating	IP 40
Weight (no Batteries)	120g (4.2 oz)
Dimensions	L= 125.47 mm (4.94') W= 65.85 mm (2.75') H= 33.98 mm (1.34')
Power Supply	110/240 volt mains AC 12 volt DC Regulated 300mA (OPTIONAL)
Vehicle Charger	12 volt DC 200mA Fuse
Battery	9 volt PP3 Alkaline
Rechargeable Battery	9 volt PP3 NIMH 200mA (use only NIMH)
Battery Life (200 mA NIMH Rechargeable)	
ON (no alarm)	30+ Hours
ON (alarm on)	10+ Hours
Battery Life (500 mA Alkaline)	
ON (no alarm)	70+ Hours
ON (alarm on)	15+ Hours

## CARRY POUCH



A nylon belt carry pouch protects in all on-site weather conditions.

**THIS UNIT WILL NOT DETECT DC VOLTAGES .**

## WARNINGS

- ◆ The GLM Mini SWER Tester is not designed to function where mains cable is armoured or enclosed in metal conduit or any situation where the AC field is negated by metal shielding.
- ◆ If a voltage is detected, there is no need to bring the detector any closer to the energised line.

## WARNING

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

DO NOT HOLD THIS INSTRUMENT IN CONTACT WITH ANY ELECTRICAL 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.



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**MODIEWARK**  
GLM MINI AC NON-CONTACT  
HIGH/LOW VOLTAGE DETECTOR  
**MODEL- SWER & POLE**

**PROTECTING  
THE  
COMMUNITY  
SINCE 1968**



## WARNING

HIGH VOLTAGE TESTING SHOULD ONLY BE CARRIED OUT BY TRAINED PERSONNEL DO NOT HOLD THIS INSTRUMENT IN CONTACT WITH ANY ELECTRICAL CONDUCTOR IN EXCESS OF 650 VOLTS WITHOUT FURTHER INSULATION.

## PART IDENTIFICATION



## BATTERY REPLACEMENT



The Battery is located on the rear of the tester and requires a 9 volt PP3 Alkaline Battery. Ensure the battery is fitted the correct way placing the positive terminal as indicated on the inside base of battery compartment.

## SELF TESTING FEATURE

The Self Test button is located on the front face of the tester. This is a full function test of all components of the unit Testing:

- ◆ Audio indicator
- ◆ Visual indicator
- ◆ Battery condition
- ◆ Transistor circuit verification

The Self Test function has a two second delay between deactivation of self test and normal detection mode.

This feature should be activated every time the unit is turned on and at regular intervals during the working day. In the event the tester fails please refer to (service and trouble shooting).

## LOW BATTERY INDICATOR

To the bottom right of the tester an **ORANGE** indicator light will appear when battery level reaches 8.2 volts this indicates the battery should be replaced or charged.

## SENSITIVITY SWITCH

This switch allows the sensitivity of the GLM Mini SWER Tester. There are two methods to change sensitivity the main high low switch located at the top left and the rotor sensitivity dial. On the low setting and the dial to the left the tester will detect 200 volts no load, the dial to the right will detect a lower voltage at a given distance that the situation requires. The high setting increases the detection distance to voltage.

## GLM MINI SWER

The Modiewark GLM Mini SWER Tester is a universal pocket size proximity non-contact voltage detector, operating in the AC voltage range 30 volts AC to 500Kvolts AC given the correct setting range.

The GLM Mini SWER has been designed for testing single wire earth return (SWER) or situations that require a manual variation in voltage distance detection. The unit is design for qualified and trained personnel in the electrical power line industry.

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

## UNIT OPERATIONS

- 1) Switch the unit to the 'ON' position a **GREEN** LED power light will immediately illuminate, indicating a good battery connection.
- 2) For SWER Pole Testing place the Sensitivity Switch to Low and the Sensitivity Dial to the far right.
- 3) Check the Low Battery indicator is not **ORANGE** and continue with the operation. If the **ORANGE LED** illuminates, replace battery before use or recharge NIMH battery with approved charger.
- 4) Press the Self Test button to check the unit is operating correctly. A repeating tone will be heard, indicating a healthy circuit. It is recommended that regular checks using the Self Test function be used during the working period to ensure optimal performance.
- 5) Always hold the GLM Mini with your thumb placed on the indicated position with your arm outstretched. This allows maximum detection distance. The closer the unit to the trunk of the body the lower the detection distance.



6) When testing for pole leakage in a SWER system keep the pole to be tested at a minimum distance of ten metres.

7) Approach the overhead SWER line until wires are directly above.

8) Raise the tester above the head and adjust the sensitivity dial until the voltage in the mains is detected.

Fig 1



Fig 2

9) Lower the tester to chest height until the field is broken. (fig 2)

**Note:** If the signal has not been lost return to (fig 1) above and adjust the rotary dial back to the left to decrease the sensitivity.

10) Check the over head mains again and lower the tester to chest height.

**The tester should not alarm in this position or pole test will not be correct.**



Fig 3

11) With the tester at arm's length approach the pole to be tested. (fig 3)

12) If the tester does not alarm it is a SAFE pole.

**Note:** There will always be some leakage present and if there is current flow, the tester will pick up a low voltage of 30 volts at 20mm away on a high setting.

**Note:** Electric fields from power lines can be disturbed and redirected by objects that are grounded. A tree near a power line will lower the strength of an electric field which causes you to change the setting on your SWER tester. Other influences such as weather, water (humidity) will change the electric field strength.

**The further away the SWER Tester alarms from the Pole under test the higher the leakage voltage that is present.**

The SWER Tester detects AC fields and each pole must be tested as per procedures above because of varying heights of the poles and levels of SWER mains voltage.