



# G.L. MCGAVIN

## MODIEWARK NON-CONTACT & CONTACT VOLTAGE DETECTORS



**MODIEWARK**  
NON-CONTACT & CONTACT  
VOLTAGE DETECTOR



**MODIEWARK**  
SPOUT DETECTOR  
NON-CONTACT & CONTACT  
VOLTAGE DETECTOR



**MODIEWARK**  
PHASE DETECTOR  
NON-CONTACT & CONTACT  
VOLTAGE DETECTOR



**MODIEWARK**  
HOT STICKS & KITS  
NON-CONTACT & CONTACT  
VOLTAGE DETECTOR

## OPERATIONAL MANUAL



**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.

**MORRIS GROUP**  
ENGINEERING SOLUTIONS

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**D&N**  
ENGINEERING SUPPLIES

**PRITCHARD**  
ELECTRONICS

**G.L. MCGAVIN**

## CONTACT US



GL McGavin Pty. Ltd. Is a company that was formed in Sydney Australia in 1968, out of a need to protect electrical workers from being electrocuted. With its state of the art product the first of many models of the Modiewark non-contact & contact voltage detector was designed. The Australian power industry accepted this tester as a life saving device, implementing a national roll out in the early 1970's.

The Modiewark became a vital asset to the needs of the industry, improving itself by providing self testing capabilities, voltage selectors to suit each application and accessories to perform substation spout testing and phase compatibility testing.

In 2004 the Morris family, Darrell & Norma Morris (owner directors) and their sons Ashley & Linsey Morris (directors) of the Morris Group, took ownership of the company and consolidated its operation in Newcastle New South Wales, Australia. Long overdue improvements in its manufacturing techniques were put into place providing in house quality control on all construction processes. This made the product a safer and more reliable test instrument. With the aid of their experienced staff the product improved to include phase identification, spout testing application and water resistance devices.

In 2007 a team association with a local engineer, Mathew Dick developed a new product line of Modiewarks, The Modiewark Mini Testers provided a miniature and user friendly product allowing us to keep pace with the changing industry. Rescue departments in New South Wales Australia, accepted the new rescue tester, providing their staff with a safe approach procedure. The Mini SWER and Pole tester was designed for Country Energy for the testing of SWER(single wire earth return) and the application of pole leakage detection which costs the industry many thousands of dollars per year. The MR tester (Meter Reader) was developed to ensure the safety of the approach to meter boxes in case of life threatening faults.

To ensure quality control with this safety device Pritchard Electronics became an acquisition of the Morris group providing improved technologies and in house quality control.

With new technology on the way the goal of GL McGavin and its staff is to keep pace with the current industry standards and provide a better solution for electrical safety in the future. As one of the oldest and most reliable testers on the market today the GL McGavin Modiewark range of testers will assist the electrical industry in all electrical hazard safety applications.

### DELIVERY ADDRESS:-

43-45 Orlando Road  
Lambton NSW 2299  
Australia

### POSTAL ADDRESS:-

P.O. Box 83  
Lambton NSW 2299  
Australia

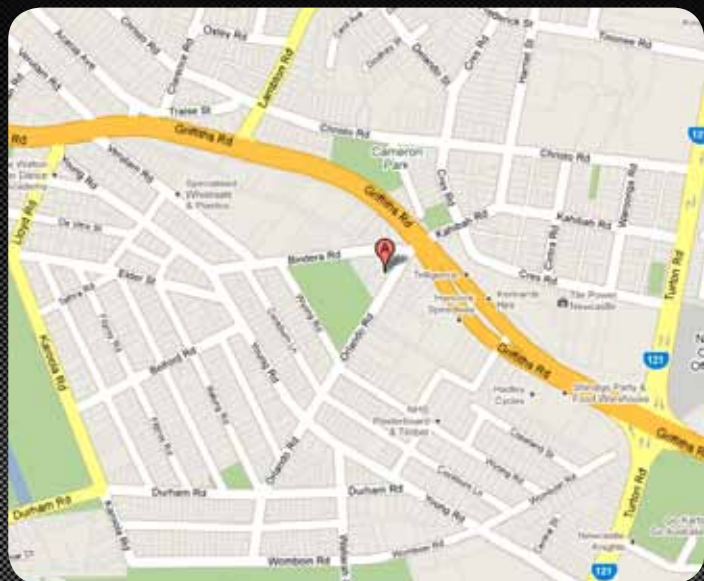
PHONE: 02 4952 6304

PHONE INT: +61 2 4952 6304

FAX: 02 4956 1054

FAX INT: +61 2 4956 1054

EMAIL: sales@dn.eng.com.au





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## GL MCGAVIN PTY. LTD.

Cannot authorise the method of use. Power distribution authorities have trained personnel who can advise on the operation and use. This document is developed from general principles and it may not be suitable for all conditions and localities contemplated by it. This document may be used only on the condition that GL McGavin Pty Ltd disclaims all liability.

# MODIEWARK NON-CONTACT & CONTACT VOLTAGE DETECTOR

The Modiewark is a non-contact & contact voltage detector, Proximity and touch device. which detects the presence of an alternating electric or electromagnetic field. Its unique switching action allows for the identification of alternating currents at a distance between 200 mm and 300 mm from a voltage source ranging from 110 volts to 750,000 volts.

The Modiewark has been used by industry professionals since the early 70's for live or dead voltage determination of overhead power lines and underground power 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 Modiewark can also be used indoors on the 240/110 volt setting, tracing voltage sources from power distribution 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 voltages on isolated conductors are checked by increasing the Modiewark's sensitivity.

Typical uses:-

- \* Identifying live conductors.
- \* Fault finding in flexible cables.
- \* Checking equipment grounding.
- \* Neon lighting servicing.
- \* Tracking live wires above and below ground at URD test points.
- \* Phasing conductors.
- \* High frequency radiation detection





## STANDARD MODELS

The Modiewark non-contact & contact voltage detector can be made with a selection of voltages ranging from 110/240 Volts to 750 K Volts. There is a selection of models in our standard range. Voltages can be determined per customers request with consultation with our sales staff.

Voltages in Blue, URD test point settings.

N.B Voltage levels stated are between phase voltages.

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•132kV•275kV
CSA	OFF•240V•4.2kV•15kV•25kV•35kV•66kV•132kV•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•4.8/8.3kV• 8.0/13.8//7.2/12.5kV •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
CUSTOM	CHOOSE THE VOLTAGE COMBINATIONS

# PART IDENTIFICATION



# MODIEWARK TESTER FUNCTIONS

## BATTERY REPLACEMENT

The Modiewark uses 3 C sizes 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 placed 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.



## CASE CONFIGURATIONS



The Modiewark case and handle are designed to channel a flashover around the internal circuit and into the battery housing. Please note any damage to the head of the Modiewark will result in a failure in the unit and must be taken out of service and repaired.

The Modiewark tester can now be fitted with moisture and dust proof fittings for harsh environments and provides an IP63 rating.

## SELF TESTING FUNCTIONS

There are two different configurations of Modiewark available SELF TEST and NON SELF TEST (Please note that all Australian models must be sold with the self test function) .This continuous self checking of the Modiewark tester provides a safety feature that:-

1. 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.
2. 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 take out of service and return for repair.
3. 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.

## HANDLES

The standard Modiewark is supplied with a sunrise (universal) fitting to allow the attachment of an insulation extension stick (hot stick) for all high voltage applications. A standard or plain handle can be requested without this fitting.

Sunrise (Universal)l Handle



Plain Handle





## MODIEWARK HAND HELD OPERATION

A) Hold the unit in the hand by the handle below the sunrise fitting.

B) Turn the unit on to the 240 volt switch setting (the first switch setting). This will allow for the most sensitive voltage detection.



C) 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:

1. 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.
2. If the self test is still unresponsive the unit may be faulty, take out of service and return for repair.
3. If the pulses are 2 to 3 seconds apart or greater this indicates a low battery status and batteries will need to be replaced.
4. 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.

D) To verify the tester using outside influences:-

1. Place the tester against live power outlet or equivalent above 110 volts AC.
2. Set switch at 35kV overhead setting and place head of unit as marked against the spark plug of a running truck or car engine.
3. Use the Modielive tester to test the activation of the unit on the 240 volt setting.

E) Hold the detection plate side to the power source under test a continuous tone will be heard indicating live voltage.



F) 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. Please remember that voltages over 240 volts AC require personal protective equipment, gloves and hotsticks to increase the distance from the voltage source under test

G) 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.

### IMPORTANT SAFETY CONCERN

It is recommended that the tester be moved progressively closer on the 240v setting, until warning of voltage is indicated or until it touches conductor, apparatus or test point elbow. It is recommended that all high voltage testing be carried out with further insulation gloves or insulation hot sticks



## MODIEWARK INSULATION STICK OPERATION

A) Place the unit onto the insulation stick using the sunrise (universal) fitting or the bayonet adaptor fitting.



Sunrise (Universal Fitting)



Bayonet Adaptor onto end of Handle

B) Turn the unit on to the 240 volt switch setting the first switch setting. This will allow for the most sensitive voltage detection.

C) 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:-

1. Remove the handle and check that the batteries are placed in the correct way and the battery strap is in place, shake handle and re-screw into place.
2. If the self test is still unresponsive the unit may be faulty take out of service and return for repair.
3. If the pulses are 2 to 3 seconds apart or greater this indicates a low battery status and batteries will need to be replaced.
4. 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.

D) Hold the detection plate side to the power source under test, a continuous tone will be heard indicating live voltage.

F) 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.

G) If the tester activates meters away from the known source, this may not prove 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 250 to 300mm away from the voltage source hot stick mounted.

The Modiewark tester is a directional electric field device. This feature allows the user to detect a given voltage source where other and larger voltage sources are around, by using the method stated above.

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

### IMPORTANT SAFETY CONCERN

If power lines are broken the two halves of the line may still be energized and a safe distance must still be maintained from both sections or electrocution may occur.

- Always assume the conductor is live until proven de-energised.
- Do not touch wire, car or any conductor without extra protective equipment , gloves, hotsticks

## MODIEWARK UNDERGROUND TESTING

To test underground power in a residential or industrial environment must be carried out with a unit designed for this purpose. Because of the depth, moisture content of the soil, testing for the cable underground is difficult. An accurate method of determining if URD connections are active is to test at the URD test point.

A) Hold the unit in the hand by the handle below the sunrise fitting or for higher voltages an insulation stick or hot stick is recommended.

B) Turn the unit on to the 240 volt switch setting the first switch setting. This will allow for the most sensitive voltage detection.

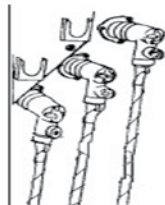
C) Listen and watch for the self testing function which will start automatically. If this does not occur there may be a few possibilities to consider before taking out of service:-

1. Remove the handle and check that the batteries are placed in the correct way and the battery strap is in place, shake handle and re-screw into place.
2. If the self test is still unresponsive the unit may be faulty take out of service and return for repair.
3. If the pulses are 2 to 3 seconds apart or greater this indicates a low battery status and batteries will need to be replaced.
4. 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.

D) To verify the tester using outside influences:-

1. Place the tester against live power outlet or equivalent above 110 volts AC.
2. Set switch at 35kV Overhead setting and place head of unit as marked against the spark plug of a running truck or car engine.
3. Use the Modielive tester to test the activation of the unit on the 240 volt setting.
4. Hold the detection plate side to the URD test point elbow under test a continuous tone will be heard indicating live voltage.

E) Hold the detection plate side to the URD test point elbow, if live a continuous tone will be heard indicating live voltage.



URD ELBOW TEST POINT

F) 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. Please remember that voltages over 240 volts AC require personal protective equipment, gloves and hotsticks to increase the distance from the voltage source under test

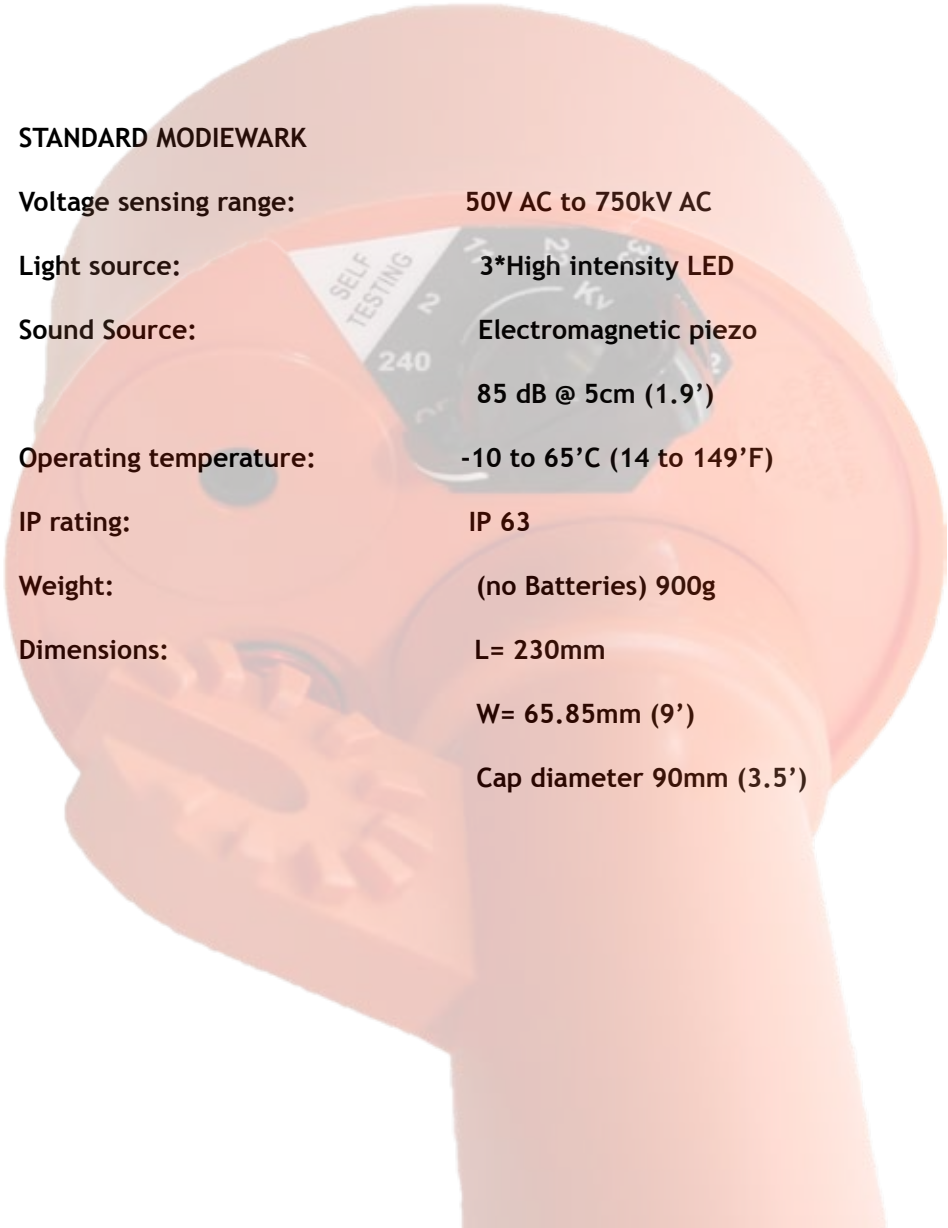
G) If the tester activates meters away from the known source, this may not prove the signal being picked up is from that source. Use the voltage range switch to determine the voltage required for the voltage test, by moving the switch settings higher as you approach the power source under test. The unit is designed to activate 100 to 200mm away from the voltage source hand held.





## MODIEWARK SPECIFICATIONS

### STANDARD MODIEWARK



Voltage sensing range:	50V AC to 750kV AC
Light source:	3*High intensity LED
Sound Source:	Electromagnetic piezo 85 dB @ 5cm (1.9')
Operating temperature:	-10 to 65°C (14 to 149°F)
IP rating:	IP 63
Weight:	(no Batteries) 900g
Dimensions:	L= 230mm W= 65.85mm (9') Cap diameter 90mm (3.5')

### IMPORTANT SAFETY CONCERN

The Modiewark tester is not designed to operate where mains cables are armoured or enclosed in metal conduit, underground or any situation where the AC field is negated by metal shielding.

The unit will not detect DC voltages and must be used by trained personnel around train tracks, railway control and signal boxes.

# MODIEWARK SPOUT TESTERS



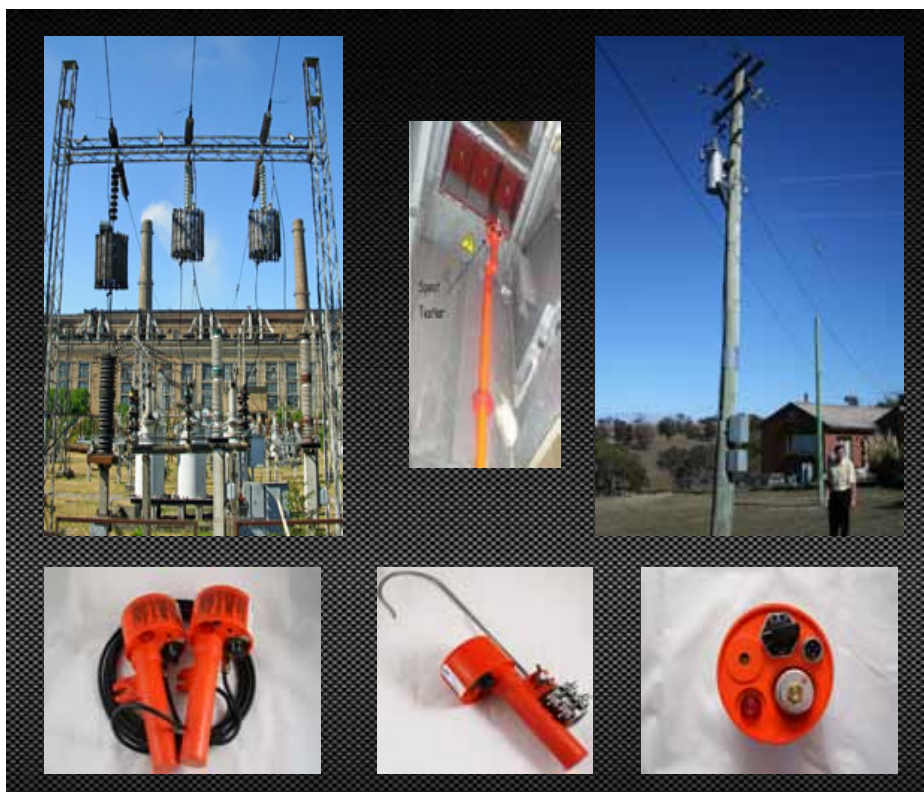
Modiewark spout tester Proximity and touch device is used specifically for the testing of live or dead spout applications up to 33kv. The Modiewark spout tester can be configured with, any voltage range required starting with 240 volts and ending in 33kv.

There are two standard modes available in spout testers SP-50 and the SP-150. Both available with or without depth limiters.

The SP-50 has an extension of 50mm to be used in applications where only one voltage is present.



The SP-150 has an extension of 150mm to be used in applications where more than one voltage is present.





## MODIEWARK SPOUT PART IDENTIFICATION



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# MODIEWARK SPOUT OPERATIONAL PROCEDURE

1) Turn the unit on to the 240 volt switch setting the first switch setting. This will allow for the most sensitive voltage detection.

2) Screw the spout into the spout head by placing the pin in the socket and turn in a clockwise direction. As the spout is being screwed in the unit, self test function will activate indicating that the spout is being screwed in and is working properly.



**Note:** The spout tester will not activate if the spout is disconnected preventing the unit being used without a sensor plate.

3) Hold the unit in the left of right hand by the handle below the sunrise fitting or for higher voltages an insulation stick or hot stick is recommended.

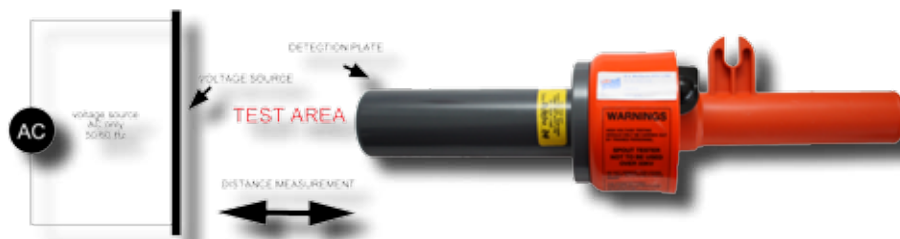
4) Listen and watch for the self testing function which will start automatically. If this does not occur there may be a few possibilities to consider before taking out of service:-

- Remove the handle and check that the batteries are placed in the correct way and the battery strap is in place, shake handle and re-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.
- The spout is not screwed in correctly undo spout and clean pin and check if pin is in good order re-screw in spout.

5) To verify the tester using outside influences:-

- Place the tester against live power outlet or equivalent above 110 volts AC.
- Rub the instrument head as marked on cloth or clothing to obtain static charge.
- 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.

6) Point the end of the spout detector towards the area under test



7) 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, If a tone is not heard at this point the voltage is below 50 volts ac.

8) If the tester activates meters away from the known source, this may not prove 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 200 to 300mm away from the voltage source hand held



## MODIEWARK SPOUT WINGS & SHIELDS

A Modiewark can be fitted with wings or depth limiters, these limiters allow the unit from entering restricted compartments and allow constant depth readings for many tests over time.

The Modiewark hand shield provides additional flash or arc protection as well as accidental movements of the operator.



## SPECIAL ORDER SPOUTS

The spout tester length can be configured for any purpose that is required; information on this can be obtained from our sales staff.

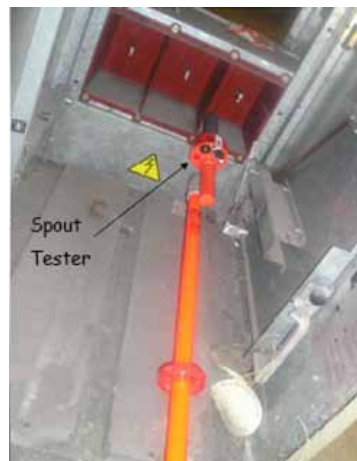


The Spout heads can be configured to any length up to 400 mm and as short as 50 mm. The diameters of the head of the spout can vary to fit the application 20mm dia to 46 mm dia.



A high Voltage Spout is Available This Spout is 400mm Long and 45 mm dia the tested breakdown voltage is 100,000 volts.

Each Spout Tester has NATA certification for the first 12 months. Re-testing is available on return of the tester and spout.



# MODIEWARK PHASE OUT TESTERS



The Modiewark Non-Contact & contact Phase Out detectors can be used on inside applications up to 33kv on metal clad switch gear. This unit detects the same phase angle and activates a green led located on the master unit if the test sources are the same.



Phase out testers are not available with the self testing feature and are used only for phase out testing.

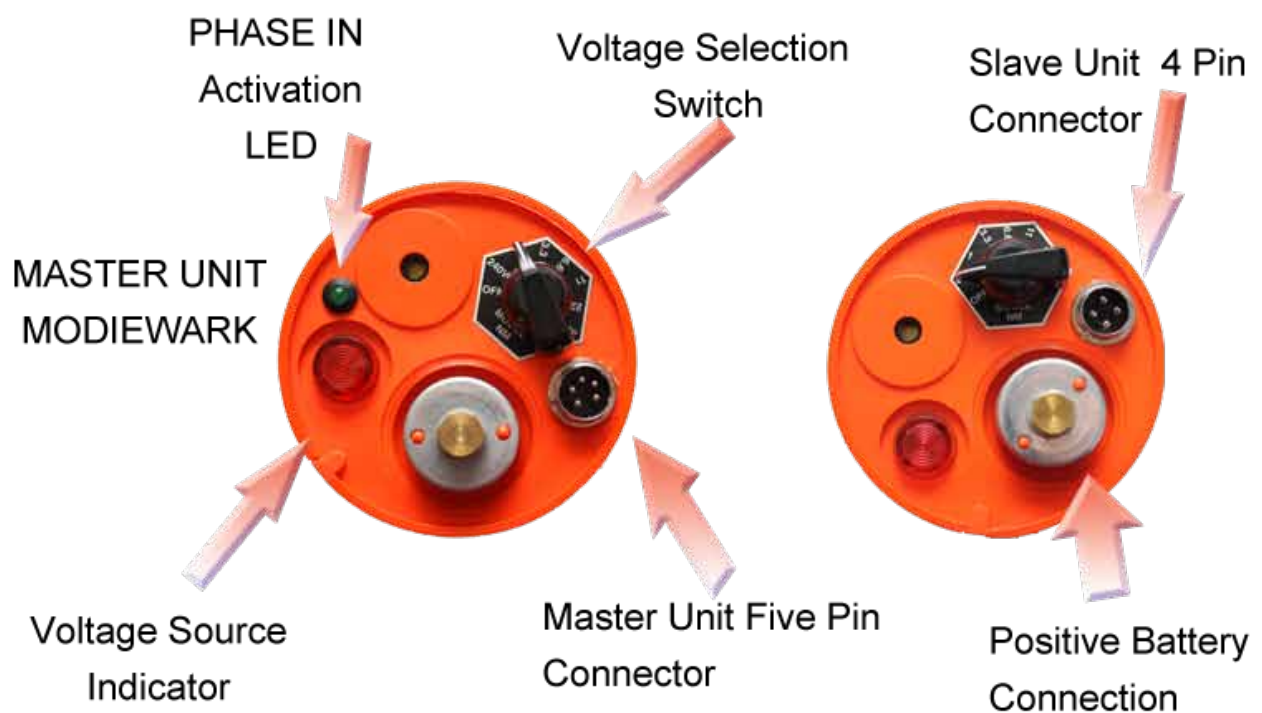
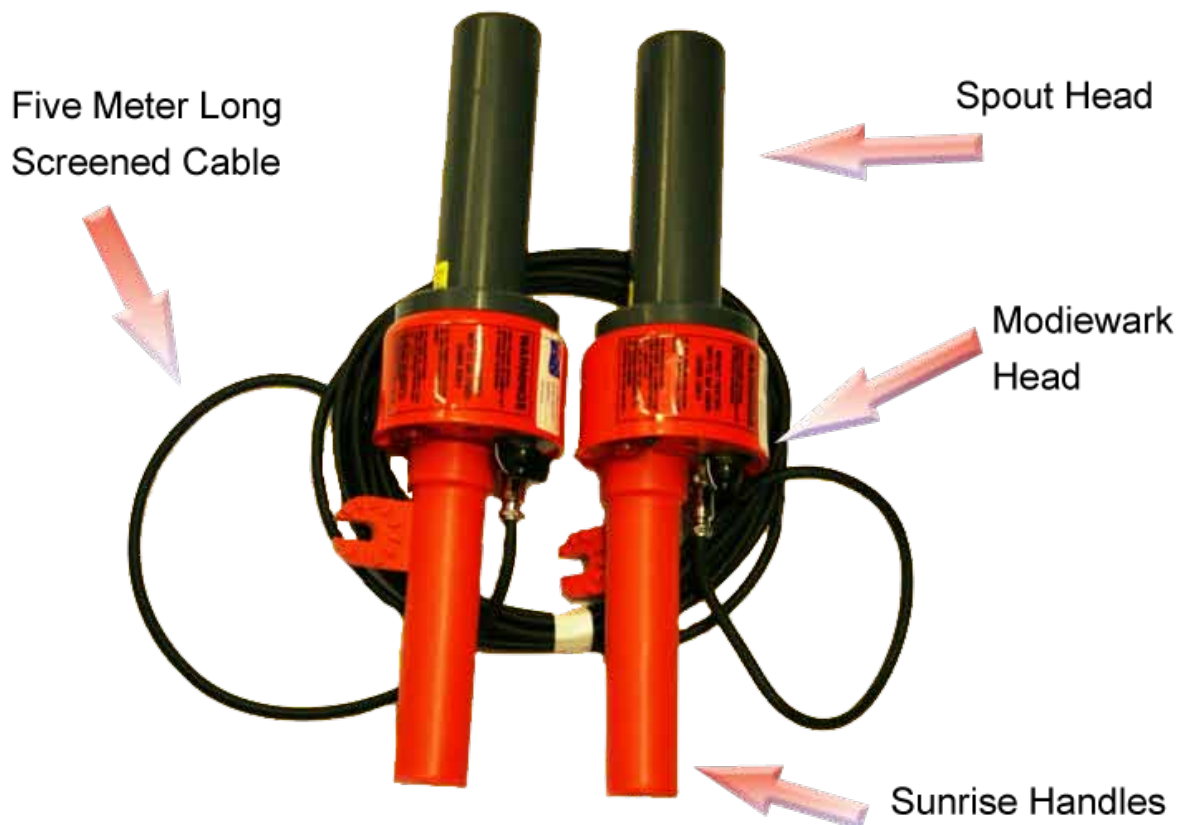
**IF BOTH TESTERS ACTIVATE AT THE SAME TIME AND LIGHT IS GREEN, THE TWO SOURCES ARE THE SAME PHASE.**

**IF BOTH TESTERS ACTIVATE AT THE SAME TIME AND GREEN LIGHT IS OUT THE TWO SOURCES ARE NOT THE SAME PHASE.**





# PHASE OUT DETECTOR PART IDENTIFICATION



## PHASE OUT OPERATIONAL PROCEDURES

- 1) Turn the unit on to the 240 volt switch setting the first switch setting. This will allow for the most sensitive voltage detection.
- 2) Screw the spout into the spout head by placing the pin in the socket and turn in a clockwise direction, repeat for both units.



Note: The spout tester will not activate if the spout is disconnected preventing the unit being used without a sensor plate.

- 3) To verify the tester using outside influences:-

\* Place the tester against live power outlet or equivalent above 110 volts AC

4) Connect the 5 metre lead to each of the units, noting that the five pin plug, plugs into the master unit, which has a green LED. The four pin Plug, plugs into the slave unit .The Phase Out tester can be used either held in the hand below the sunrise fitting or for higher voltages an insulation stick or hot stick is recommended.

5) To verify if the phase in detection is working correctly place both units sensor plates, towards the same power source of 240 volts, the green in phase light will activate. If this does not occur please check:-

- The lead is connect and screwed in.
- The batteries are of equal voltage.
- Both units are set to the same voltage setting.

6) Point the ends of both the phase out detectors towards the area under test.

7) If a tone is not heard at this point from either of the 240 volt settings move both tester closer to the conductor under test, until the head of the tester is ouching the conductor If a tone is not heard at this point the voltage is below 50 volts ac.

8) When a tone is heard and seen from both units at the same time and the green LED light on the master unit is glowing, this indicates that both sources are in phase. If the light is out then the two sources are not in phase.

9) If the tester activates meters away from the known source, this may not prove 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 200 to 300mm away from the voltage source hand held.

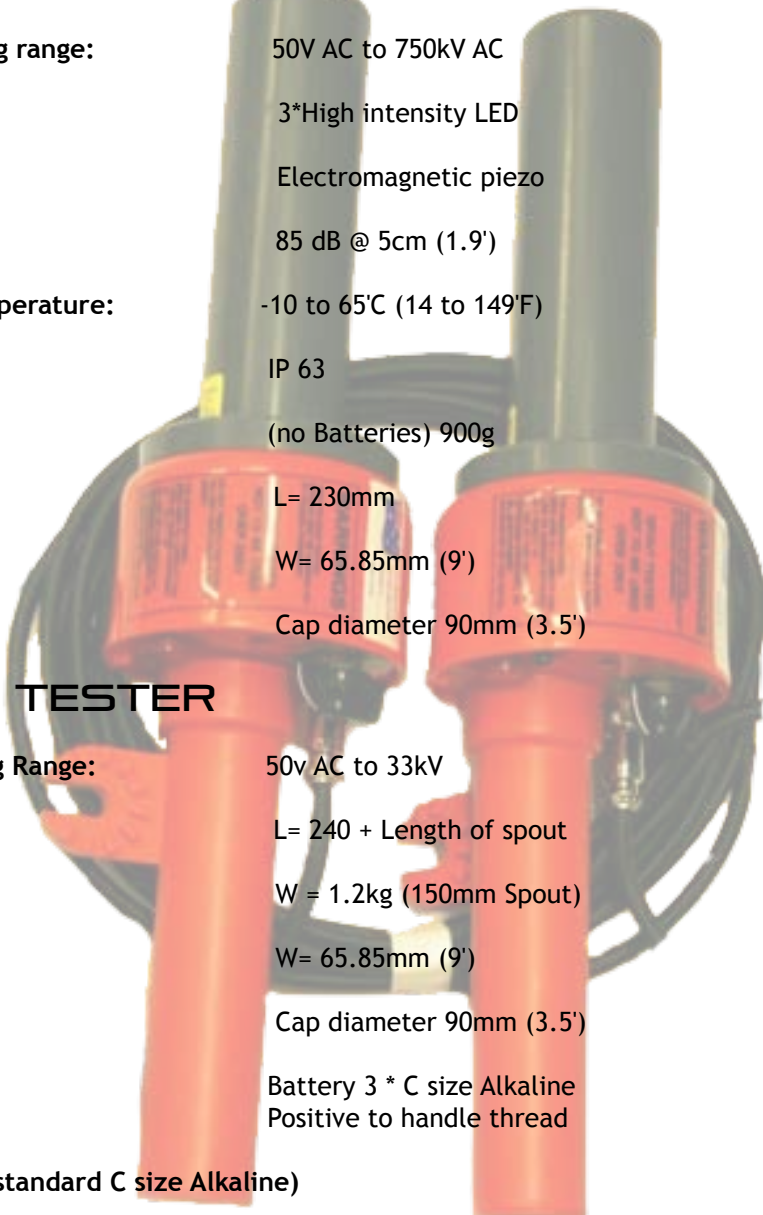
**IF BOTH TESTERS ACTIVATE AT THE SAME TIME AND LIGHT IS GREEN, THE TWO SOURCES ARE THE SAME PHASE.**

**IF BOTH TESTERS ACTIVATE AT THE SAME TIME AND GREEN LIGHT IS OUT THE TWO SOURCES ARE NOT THE SAME PHASE.**



# PHASE SPOUT SPECIFICATION

## STANDARD MODIEWARK



Voltage sensing range:	50V AC to 750kV AC
Light source:	3*High intensity LED
Sound Source:	Electromagnetic piezo 85 dB @ 5cm (1.9')
Operating temperature:	-10 to 65°C (14 to 149°F)
IP rating:	IP 63
Weight:	(no Batteries) 900g
Dimensions:	L= 230mm W= 65.85mm (9') Cap diameter 90mm (3.5')

## SPOUT TESTER

Voltage Setting Range:	50v AC to 33kV
Dimensions:	L= 240 + Length of spout W = 1.2kg (150mm Spout) W= 65.85mm (9') Cap diameter 90mm (3.5')
Batteries	Battery 3 * C size Alkaline Positive to handle thread
Battery Life: (standard C size Alkaline)	ON (no alarm) 140+ Hours ON (Self test) 90 + Hours ON (alarm on) 60+ Hours OFF No current drawn, battery shelf life

### IMPORTANT SAFETY CONCERN

The Modiewark tester is not designed to operate where mains cables are armoured or enclosed in metal conduit, underground or any situation where the AC field is negated by metal shielding.

The unit will not detect DC voltages and must be used by trained personnel around train tracks and railway control boxes and signals.

# MODIELIVE MODIEWARK TESTER

The Modielive is designed to be used in conjunction with the Modiewark non-contact & contact voltage detector. The Unit produces an EMF (electromagnetic field) which can be detected by the Modiewark to prove the Modiewark is working correctly.

The Modielive produces enough EMF to allow the Modiewark to be tested at the 500,000 volt setting At a distance of 50 mm.

The Modielive can be packaged with a Modiewark non-contact & contact voltage detector for a complete and confident testing solution.





## MODIELIVE OPERATION

**Step 1)** Unscrew battery compartment cap anti-clockwise and unfold battery connection leads to their extent.



**Step 2)** Attach batteries to clips and place into battery cap, fold leads into unit and screw cap and batteries into the units main body in a clockwise direction.



**Step 3)** The unit is now ready to activate. Use any model Modiewark non-contact & contact voltage detector and set it to the highest value that can be set.



**NOTE:** The tester is best tested on the maximum range setting of the Modiewark, if only one test is to be completed.

**Step 4)** Holding the Modiewark tester in one hand and the Modielive testing unit in the other hand. Face the two units towards each other making sure the LIVE AREA is facing the Modiewark non-contact & contact voltage tester and the On/Off button is fully depressed on the Modielive unit. The Modiewark non-contact & contact voltage detector will then indicate a voltage.



**Step 6)** If required Step 3 to step 5 can be repeated using every voltage on any of the Salisbury non-contact & contact voltage detectors .

Note: When on the 500 KV setting on the non-contact & contact 4344 or 4644 tester, the distance range between the to testers is 30 mm to 60 mm. As you decrease the voltage range on the Modiewark tester, the distance between the two testers will be further apart.

The lower the voltage setting on the Modiewark non-contact & contact voltage detector the further away the signal will be detected.

# MODIEWARK KITS & HOT STICKS

All GL McGavin products can be placed in specially designed kits for ease of transport and incident readiness.

These kits are supplied to personnel within the rescue industry as well as military operators. They are widely used by electrical energy suppliers for daily operational procedures to comply with regulated safety standards.

These kits can contain any combination of tester and Hot Stick and are contained in a PVC weather proof bag. The list below shows the contents and the optional extras that can be added to the kit. Minimum orders and delivery times are required. Please contact our staff for all information and Quotes

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## HOT STICK ACCESSORIES



Sunrise Adaptor which attaches to head of an Extension Operating Hot Stick

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Operating Hot Stick end Cap which attaches to the foot of the Stick.

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These Gloves are a high Quality Class 2 insulation glove, other classes are available upon request

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The Hand Slip guard fits over the Operating Hot Stick to prevent you entering the danger zone.

---



The retrieval hook has been specially designed to catch or hook a live conductor. This hook is mounted on a Sunrise (Universal) Operating Hot Stick

---



The universal disconnect is used by electrical authorities for the disconnection of power line equipment.

---



The Fuse Puller is used by electrical authorities for the disconnection of power line equipment.

## HOT STICKS (INSULATION STICKS)

GL McGavin are proud to supply T-mac Hot Stick. The T-mac stick is widely known and trusted within the electrical industry. All sticks are tested to current standards.

The sticks are available in two main categories

### SUNRISE (UNIVERSAL) OPERATING HOT STICKS

These Stick are supplied with a non-detachable sunrise (Universal) fitting.

The Base (Foot) is removable to attach to an extension section.

The Stick comes in Three Sizes

1200 mm Long

1800 mm Long

2400 mm Long



### EXTENSION OPERATING HOT STICKS

These extension Sticks will attach to the Sunrise (Universal) Stick and will also fit the detachable Sunrise (universal Head fitting shown Below).

The Stick comes in Three Sizes

1200 mm Long

1800 mm Long

2400 mm Long



### EXTENSION STICK SUNRISE ADAPTOR



Sunrise Adaptor which attaches to head of an Extension Operating Hot Stick.

### EXTENSION STICK SUNRISE ADAPTOR



Operating Hot Stick end Cap which attaches to the foot of the Stick.



## EMERGENCY SERVICES RESCUE KITS

A Rescue Kit is designed to be used in any type of emergency involving electrical power sources. These kits use a quick disconnection sunrise head which can be pre-loaded with any attachment that may be required, by simply pushing a button the stick and the attached extensions can be transformed into a disconnection hook, a cable repositioning hook or a non-contact & contact voltage detector. With this ability the emergency situation can be assessed with the non-contact & contact voltage detector, made inactive with the fuse puller and universal disconnection hook and made safe by removing the power lines with the cable retrieval hook.

### RESCUE KIT (CONFIGURATION 1) 1200 MM

- 4\* 1200 mm hot sticks
- 3\* Sunrise adaptors
- 1\* Hot stick end cap
- 1\* Gloves large class 2
- 1\* Brass retrieval hook
- 1\* Universal disconnect
- 1\* Hand Slip Guard
- 1\* Modiewark Voltage tester or Rescue Mini Tester
- 1\* Coloured PVC Rescue Carry bag



### RESCUE KIT (CONFIGURATION 2) 1800 MM

- 4\* 1800 mm hot sticks
- 3\* Sunrise adaptors
- 1\* Hot stick end cap
- 1\* Gloves large
- 1\* Brass retrieval hook
- 1\* Universal disconnect
- 1\* Hand Slip Guard
- 1\* Modiewark Voltage tester or Rescue Mini tester
- 1\* Coloured PVC rescue carry bag



### RESCUE KIT (CONFIGURATION 3) 1200 MM

- 3\* 1200 mm hot sticks
- 3\* Sunrise adaptors
- 1\* Hot stick end cap
- 1\* Gloves large
- 1\* Brass retrieval hook
- 1\* universal disconnect
- 1\* Hand slip guard
- 1\* Modiewark Voltage tester or Rescue Mini tester
- 1\* Coloured PVC rescue carry bag



### RESCUE KIT (CONFIGURATION 4) 1800 MM

- 3\* 1800 mm hot sticks
- 3\* Sunrise adaptors
- 1\* Hot stick end cap
- 1\* Gloves large
- 1\* Brass retrieval hook
- 1\* universal disconnect
- 1\* Hand slip guard
- 1\* Modiewark Voltage tester or Rescue Mini tester
- 1\* Coloured PVC Rescue carry bag



## ELECTRICAL SAFETY KITS

The Safety Kit is designed to be used by industry professionals. This kit can be made up of many combinations and accessories. The sticks included in these kits have a sunrise attachment permanently attached to help minimize day to day stresses and can be accompanied by an extension stick. If you wish to modify one of these kits please do by choosing the closest combination and using the order form on this page to add or decrease the options.

### SAFETY KIT (CONFIGURATION 1) 1200 MM

- 1\* 1200 mm hot stick with sunrise fitting
- 1\* Hot stick end cap
- 1\* Gloves large class 2
- 1\* Hand slip guard
- 1\* Modiewark voltage tester choose model
- 1\* Coloured PVC 1 stick side pocket carry bag



### SAFETY KIT (CONFIGURATION 2) 1800 MM

- 1\* 1800 mm hot stick with sunrise fitting
- 1\* Hot stick end cap
- 1\* Gloves large class 2
- 1\* Hand slip guard
- 1\* Modiewark voltage tester
- 1\* Coloured PVC 1 Stick Side Pocket carry bag



### SAFETY KIT (CONFIGURATION 3) 1200 MM

- 1\* 1200 mm hot stick with sunrise fitting
- 1\* Hot stick end cap
- 1\* Hand slip guard
- 1\* Modiewark voltage tester
- 1\* Coloured PVC 2 stick carry bag
- 1\* Modiewark PVC carry bag



### SAFETY KIT (CONFIGURATION 4) 1800 MM

- 1\* 1800 mm hot stick with sunrise fitting
- 1\* Hot stick end cap
- 1\* Hand slip guard
- 1\* Modiewark voltage tester
- 1\* Coloured PVC 2 stick carry bag
- 1\* Modiewark PVC carry bag





## SAFETY KIT (CONFIGURATION 5) 1200 MM

- 1\* 1200 mm hot stick with sunrise fitting
- 1\* 1200 mm extension stick
- 1\* Hot stick end cap
- 1\* Modiewark voltage tester
- 1\* Coloured PVC 2 stick carry bag
- 1\* Modiewark PVC carry bag



## SAFETY KIT (CONFIGURATION 6) 1800 MM

- 1\* 1800 mm hot stick with sunrise fitting
- 1\* 1800 mm extension stick
- 1\* Hot stick end cap
- 1\* Modiewark voltage tester
- 1\* Coloured PVC 2 stick carry bag
- 1\* Modiewark PVC carry bag



## SAFETY KIT (CONFIGURATION 7) 1200 MM

- 1\* 1200 mm hot stick with sunrise fitting
- 1\* 1200 mm extension stick
- 1\* Hot stick end cap
- 1\* Hand slip guard
- 1\* Modiewark Voltage tester
- 1\* Coloured PVC 4 stick side pocket carry bag



## SAFETY KIT (CONFIGURATION 8) 1800 MM

- 1\* 1800 mm hot stick with sunrise fitting
- 1\* 1800 mm extension stick
- 1\* Hot stick end cap
- 1\* Hand slip guard
- 1\* Modiewark voltage tester
- 1\* Coloured PVC 4 stick side pocket carry bag



## SAFETY KIT (CONFIGURATION 9) 1200 MM

- 1\* 1200 mm hot stick with sunrise fitting
- 2\* 1200 mm extension stick
- 1\* Hot stick end cap
- 1\* Hand slip guard
- 1\* Modiewark voltage tester
- 1\* Coloured PVC 4 stick side pocket carry bag



## SAFETY KIT (CONFIGURATION 10) 1800 MM

- 1\* 1800 mm hot stick with Sunrise Fitting
- 2\* 1800 mm extension stick
- 1\* Hot stick end cap
- 1\* Hand slip guard
- 1\* Modiewark voltage tester
- \* 1\* Coloured PVC 4 stick side pocket carry bag



## SAFETY KIT (CONFIGURATION 11) 1200 MM

- 1\* 1200 mm hot stick with Sunrise Fitting
- 3\* 1200 mm extension stick
- 1\* Hot stick end cap
- 1\* Hand slip guard
- 1\* Modiewark voltage tester
- \* 1\* Coloured PVC 4 stick side pocket carry bag



## SAFETY KIT (CONFIGURATION 12) 1800 MM

- 1\* 1800 mm hot stick with Sunrise Fitting
- 3\* 1800 mm extension stick
- 1\* Hot stick end cap
- 1\* Hand slip guard
- 1\* Modiewark voltage tester
- \* 1\* Coloured PVC 4 stick side pocket carry bag



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## MODIEWARK SPOUT KITS

The Spout Tester can be combined into a kit to allow easy mounting operation.

### SPOUT KIT (CONFIGURATION 1) 1200 MM

- 1\* 1200 mm hot stick with sunrise fitting
- 1\* Hot stick end cap
- 1\* Hand slip guard
- 1\* Modiewark spout tester specify spout length.
- 1\* Coloured PVC 2 stick Bag
- 1\* Coloured PVC Spout Bag



### SPOUT KIT (CONFIGURATION 2) 1800 MM

- 1\* 1800 mm hot stick with sunrise fitting
- 1\* Hot stick end cap
- 1\* Hand slip guard
- 1\* Modiewark spout tester specify spout length.
- 1\* Coloured PVC 2 stick Bag
- 1\* Coloured PVC Spout Bag



### SPOUT KIT (CONFIGURATION 3) 1200 MM

- 1\* 1200 mm hot stick with sunrise fitting
  - 1\* Hot stick end cap
  - 1\* Hand slip guard
  - 1\* Modiewark Spout tester specify spout length.
  - 1\* Coloured PVC 2 stick Bag
  - 1\* ABS case to suit 150 mm Spouts
- Note:** All other spout lengths must be detached to fit into case.



### SPOUT KIT (CONFIGURATION 4) 1800 MM

- 1\* 1800 mm hot stick with sunrise fitting
  - 1\* Hot stick end cap
  - 1\* Hand slip guard
  - 1\* Modiewark Spout tester specify spout length.
  - 1\* Coloured PVC 2 stick Bag
  - 1\* ABS case to suit 150 mm Spouts
- Note:** All other spout lengths must be detached to fit into case.



### SPOUT KIT (CONFIGURATION 5)

- 1\* Modiewark Spout tester specify spout length.
- 1\* Coloured pvc spout bag-modielive
- 1\* Modielive Modiewark tester



## PHASE OUT KITS

The Phase Out Tester can be combined into a kit to allow easy mounting operation.

### PHASE OUT KIT (CONFIGURATION 1) SPOUT 1200 MM

- 2\* 1200 mm hot stick with sunrise fitting
- 2\* 1200 mm extension stick
- 2\* Hot stick end cap
- 2\* Hand slip Guard
- 1\* Modiewark Phase Out tester spout
- 1\* Choice of spout lengths
- 1\* Coloured PVC 4 stick side pocket carry bag
- 1\* ABS case



### PHASE OUT KIT (CONFIGURATION 2) SPOUT 1800 MM

- 2\* 1800 mm hot stick with sunrise fitting
- 2\* 1800 mm extension stick
- 2\* Hot stick end cap
- 2\* Hand Slip Guard
- 1\* Modiewark Phase Out tester spout
- 1\* Choice of spout lengths
- 1\* Coloured PVC 4 stick side pocket carry bag
- 1\* ABS case



### PHASE OUT KIT (CONFIGURATION 3) 1200 MM

- 2\* 1200 mm hot stick with sunrise fitting
- 2\* 1200 mm extension stick
- 2\* Hot stick end cap
- 2\* Hand slip guard
- 1\* Modiewark Phase Out tester
- 1\* Coloured PVC 4 stick side pocket carry bag
- 1\* Aluminium case



### PHASE OUT KIT (CONFIGURATION 4) 1800 MM

- 2\* 1800 mm hot stick with sunrise fitting
- 2\* 1800 mm extension stick
- 2\* Hot stick end cap
- 2\* Hand slip guard
- 1\* Modiewark Phase Out tester
- 1\* Coloured PVC 4 stick side pocket carry bag
- 1\* Aluminium case





## MODIEWARK KITS

The Modiewark bag and case are a safe and practical method of storing and transporting your Modiewark, with various sizes to suit all combinations.

### MODIEWARK KIT (CONFIGURATION 1 )

- 1\* Modiewark
- 1\* PVC Modiewark bag



### MODIEWARK KIT (CONFIGURATION 2 )

- 1\* Modiewark
- 1\* Modielive (Modiewark tester)
- 1\* PVC Modiewark bag



### MODIEWARK KIT (CONFIGURATION 3 )

- 1\* Modiewark
- 1\* ABS foam filled case



### MODIEWARK KIT (CONFIGURATION 4 )

- 1\* Modiewark
- 1\* Modielive (Modiewark tester)
- 1\* ABS foam Filled case



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# G.L. MCGAVIN

**GL MCGAVIN** PTY. LTD.  
ABN 73 383 170 955

**DELIVERY ADDRESS:-**

43-45 Orlando Road  
Lambton NSW 2299  
Australia

**POSTAL ADDRESS:-**

P.O. Box 83  
Lambton NSW 2299  
Australia

PHONE:	02 4952 6304
PHONE INT:	+61 2 4952 6304
FAX:	02 4956 1054
FAX INT:	+61 2 4956 1054
EMAIL:	sales@dn.eng.com.au
WEB:	www.glmcgavin.com.au



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