#### Polarity Testing

This tool can test the uncertain polarity of contact in the circuit of a vehicle. Unroll the leads. Connect the red clip to the positive terminal of the vehicle's battery. Connect the black clip to the negative terminal of the vehicle's battery. Contact the probe tip to a positive (+), the LED should light RED. Contact the probe tip to a negative (-), the LED should light GREEN.

#### Continuity Testing

Unroll the leads. Connect the red clip to the positive terminal of the vehicle's battery. Connect the black clip to the negative terminal of the vehicle's battery. Connect the auxiliary ground lead to one side of the tested wire along with the probe tip connecting to the other side. When continuity is present, the LED will light GREEN. If LED doesn't light up, no continuity present.

## Testing Components Out of Vehicle's Electrical System

Unroll the leads. Connect the red clip to the positive terminal of the vehicle's battery. Connect the black clip to the negative terminal of the vehicle's battery. Connect the auxiliary ground lead to the negative terminal of the tested component. press the button to "-" side to have LED light Red. Contact probe tip to the positive terminals of the tested component to activate the component. If LED turns Green with a buzzer sounding, stop testing and check the component. If defective or not, or rating current of the component is higher than that of this tester.

## Testing Components in Vehicle's Electrical System

Unroll the leads. Connect the red clip to the positive terminal of the vehicle's battery. Connect the black clip to the negative terminal of the vehicle's battery. when the component's control switch is located at the side of the positive terminals of the component, press the button to "-" side to have LED light red. Contact probe tip to the positive terminals of component, the component will be activated.

### Jumper Lead Operation

The black clip and auxiliary ground lead are connected directly through the unit. Users can consider it as a long jumper test lead by leaving the right clip disconnected from the battery.

#### Jumper Lead Operation

For some components of which negative terminal is required to be well-grounded for large current flowing, this tester is a good tool to test their grounding. Unroll the leads, connect the red clip to the positive terminal of the vehicle's battery. Connect the black clip to the

negative terminal of the vehicle's battery. press button to "-" side, the LED should light RED, and a positive voltage is supplied. Then have the probe tip quickly contact the negative terminal of the component as does as possible, LED indicator turns to GREEN with buzzer sounding, which means it is well-grounded. if NOT, the LED remains RED without any buzzer.

Unroll the leads, connect the red clip to the positive terminal of the vehicle's battery. Connect black clip to the negative terminal of vehicle's battery, press button to ''-' side, the LED should light RED, and a positive voltage is supplied. Remove the blown fuse from the fuse box and begin tracking from two terminals of the fuse socket. Use the probe tip quickly to contact the wire. If LED lights GREEN with buzzer, short circuit or overloading component appears in this side.

Please note this wire's a color or identification code. Follow the wire as far as you can along with the wiring harness. Locate the color-coded wire in the harness and expose it to cut the wire. Follow the wire in the shorted direction and repeat this process until the short is located. If there are check the components individually if good or not.

### Note:

- 1. Do not use the item around explosive gas, vapor, or dust. When the power switch is pressed (or rocked), battery current is conducted directly to the tip which may cause sparks when contacting the ground or certain circuits.
- 2. The unit is not to be used with 110/220V house current, it is only used for DC  $6^{\sim}24V$  systems.
- 3. Do not use on AC voltage.
- 4. After you finishing checking vehicle, correctly restored all the connection—s which you disconnected.
- 5. Always follow the instructions and procedures indicated in the vehicle's service manual before attempting to disconnect any part or subsystem of the electrical circuit.
- 6. Never touch any dangerous part of the vehicle with your hand for safety. Don't touch any live conductor with your hand or skin.
- 7. Don't use it if it is damaged.
- 8. Some components of the vehicle work on low voltage, they cannot withstand the voltage allied by the item. To avoid damage to these components, don't use the item to apply voltage directly or indirectly.
- 9. Before driving, please always make sure that the vehicle is safe and reliable.
- 10. Don't use this item when driving.

# Specification:

Operation voltage: 6-24V DC

Cable length: about 4m

Overload protection: 7A (When the current exceeds 7A, this item will

disconnect the

current automatically.)

Weight: about 200g

Material Type: plastic and stainless

tem Length: 225mm/8.85inch

Lead Length: approximately 4M /157.5inch

Item Width: 30mm/1.18inch

# Package List:

1 × Power Scan

1 × Probe Tip

 $1 \times Battery Hookup Clips$ 

1 × User Manual