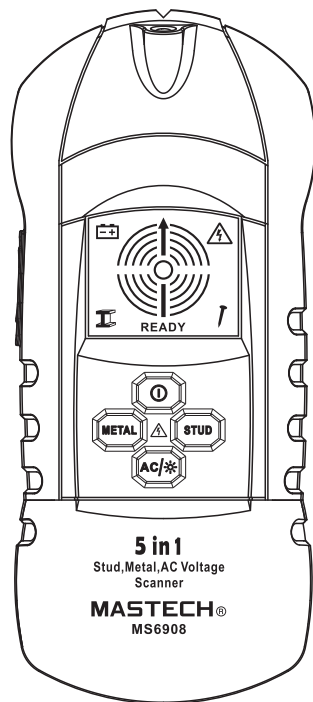


5 in 1 Scanner

Stud+NCV+Metal+Socket tester+GFCI



MASTECH®

I. Maintenance

- Keep clean with a dry cloth.
- When the symbol of "battery" is display on the LCD, please unscrew and remove cover, insert new 9V battery so as to the meter is well-balanced.

II. General Description

The functions of meter are accurately and safely. Apply install 3 wire electrical box, switch and outlet. Detects wood or metal edge, metal pipe and AC voltage hidden behind board.

III. Specification

- Stud detection depth and accuracy : 1.2" ±1/8"
- Metal Pipe detection depth: 2~1.2"
- AC volt detection depth: 3~1/2"
- Operating Range:
 - Non-contact AC Detector 50~600V 50-60HZ.
 - Plug in receptacle tester 110~120V AC 50-60HZ.
- Test 3 wire state and GFCI
- Automatism turnoff (7 minute)
- Energy: 9 V battery
- Operating temperature and humidity: 0 ~ 50°C 80%(MAX)

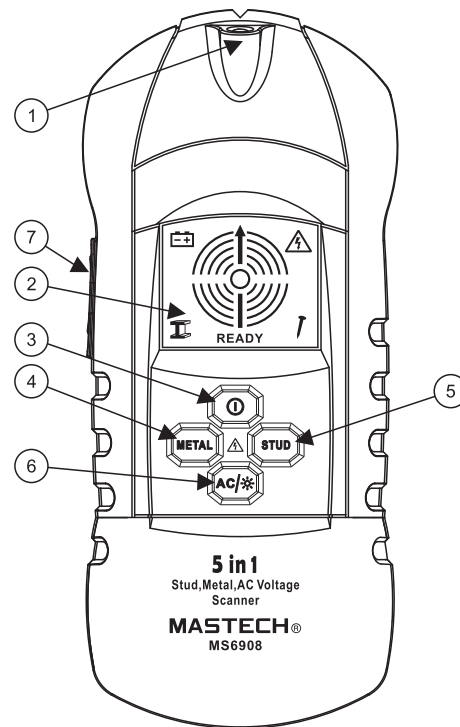
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IV. Meter Function

1. Flashlight
2. Display
3. On-off button
4. Metal detection
5. Wood and metal stud edge detection
6. AC voltage detection(50-600VAC) and back light
7. Scan button
8. Metal marking tip to mark location of stud edge
9. Operate from 9 V battery
10. Status chart

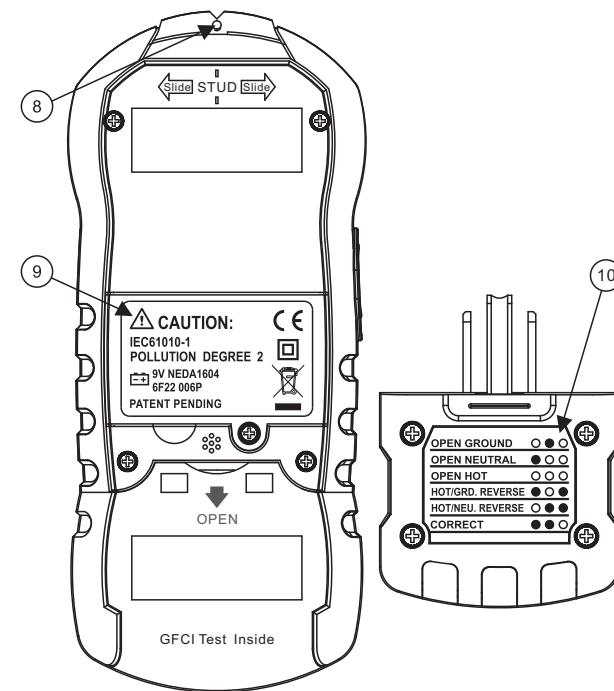
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FRONT PANEL



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BACK PANEL



V. Operating Instratations

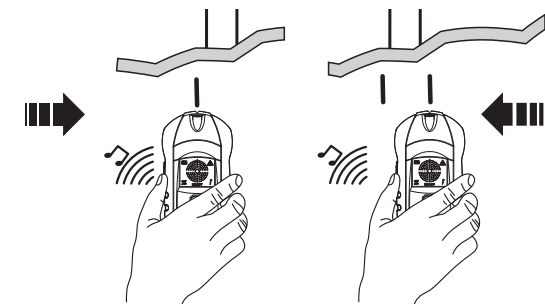
The functions of meter are accurately and safely. Apply install 3 wire electrical box, switch and outlet. Detects wood or metal edge ,metal pipe and AC voltage hidden behind wall. 3 wire outlet test and GFCI test forverify the outlet has instal wired network.

VI. Notice

- Will not detect damp wood or board. ("STUD" mode)
- Will not detect a combination of defects. ("STUD" mode)
- Will not detect two hot wires in a circuit. ("AC" mode)
- Will not indicate quality of ground. (3 wire test)
- Will not indicate a reversal of grounded and grounding conductors. (3 wire test)

VII. Stud Detection (wood and metal)

- A. Press the "STUD" button.
- B. Place unit flat on the wall. Press and hold the scan button. Do not move the unit until calibration is complete. When calibration is complete, the symbol of "READY" will display and concomitance a buzzer.
- C. If you calibrate over a stud, the level of the signal is full and the beep sounds. Move the unit a few inches right or left , release the scan button and iterate step "B".
- D. After calibration is complete, continue to hold the scan button and slowly slide the unit across the surface.
- E. When the unit detect a stud edge, the level of the signal is full and the beep sounds. Mark this location with the metal tip build into the top of the unit.
- F. Continue scanning beyond the marked spot until the level of the signal is vacancy. Slide unit in reverse direction to locate other edge of stud. The middle of the stud is centered between the two marks.



VIII. Metal Pipe Detection

- A. Press the "METAL" Button.
- B. Place unit suspend in the air. Press and hold the scan button. Do not move the unit until calibration is complete. When calibration is complete, the symbol of "READY" will display and concomitance a buzzer.
- C. When the unit detect a metal pipe , the level of the signal is full and the beep sounds.
- D. Mark this location with the metal tip build into the top of the unit.

IX. AC Volt Detection

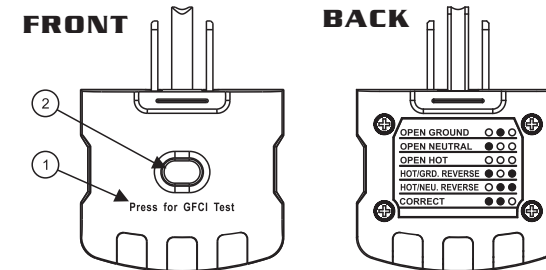
- A. Press the "AC" Button.
- B. Place unit flat on the wall. Press and hold the scan button. slowly slide the unit across the surface.
- C. When the unit detect a "live"50V or higher source , such as a wire, the level of the signal is full and the beep sounds.

- D. Mark this location with the metal tip build into the top of the unit.

X. 3 Wire Test

- A. Detach the receptacle tester from the scanner housing.
- B. Plug the tester into any 110~120V standard or GFCI outlet.
- C. View the indicators on the tester and match the chart on the tester.
- D. If the tester indicates a wiring problem then turn off all power to the outlet and repair wiring.

Indicator	Fault
○ ● ○	Open Ground
● ○ ○	Open Neutral
○ ○ ○	Open Hot
● ○ ●	Hot/Ground/Reverse
○ ● ●	Hot/Neutral/Reverse
● ● ○	Correct



XI. GFCI Test

- A. Consult the GFCI manufacturer installation to determine that the GFCI is installed in accordance with the manufacturer specifications.
- B. Check for correct wiring of receptacle and all remotely connected receptacles on the branch circuit.
- C. Operate the test button on the GFCI installed in the circuit. The GFCI must trip. If it doesn't, don't use the circuit and consult an electrician. If the GFCI does trip, reset the GFCI. Then insert the GFCI tester into the receptacle to be tested.
- D. Activate the test button on the GFCI tester for a minimum of 6 seconds when testing the GFCI Condition. Visible indication on the GFCI tester must cease when tripped.
- E. If the tester fails to trip the GFCI, please consult with an electrician to check the condition of the wiring and GFCI.

