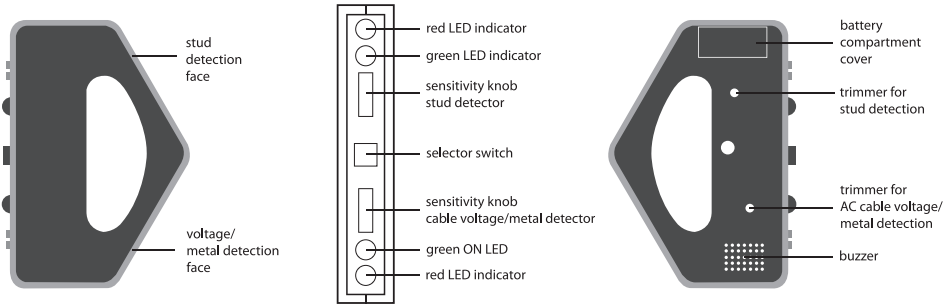
amtech®

3-in-1 detector

Stock Code: L4505

INSTRUCTION MANUAL & SAFETY GUIDE

These instructions are for your safety. Please read through them thoroughly before use and retain for future reference.



Battery Installation

Slide the battery compartment cover off and connect the 9V PP3 alkaline battery (remove shrink film). Replace the compartment cover and securely snap in place (see Fig. 1).

Operating Instructions

1. Metal/Voltage Detection

1. Hold the unit as shown in Fig. 2 and turn the red knob fully clockwise.
2. Make sure the unit is away from any metal or current-carrying cable. Set the Selector Switch to the VOLTAGE/METAL DETECTOR position. The green "ON" LED will light up immediately.
3. Turn the red knob anti-clockwise until the indicators come on (red LED lights and BUZZER sounds). Reverse the red knob gently until the indicators just go out.
4. Make sure the unit is working properly prior to use by placing the detector near to a metal object or known live power cable (e.g. table lamp cable or extension lead.) See point (6) if no detection is made.
5. Hold the detector as shown in Fig. 3 and move it across the wall. When a metal object is detected, a continuous buzzer tone will sound. A current-carrying cable will be identified with a red blinking LED and a beeping sound from the BUZZER (see Fig. 4).
6. After the set has been switched on, an adjustment has to be made if the detector does not appear to work. Please refer to "UNIT ADJUSTMENT" in section 4 in these instructions.

Important Note:

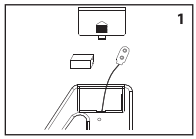
1. The detector will not detect shielded cables, i.e. those in metal conduit, it only shows the presence of metal. If in doubt always check with a qualified electrician.
2. Metallic fibres and foils used for fireproofing in some walls will spread the area of voltage picked up. Placing your free hand on the wall may cancel the effect.
3. Rubbing or banging the detector on the wall may generate static electricity and cause false readings.

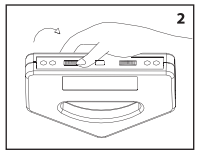
Caution:

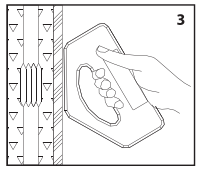
The unit can detect weak AC sources, which may result in apparent false readings being seen in some situations. This can occur when a cable with poor insulation is in contact with a conductive surface, e.g. a damp wall. As such, cable location may not be able to be pinpointed accurately. The unit may be indicating a potential hazard which should be checked with a voltmeter by a qualified electrician.

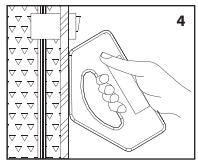
2. Stud Detection

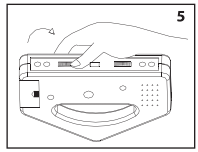
1. Hold the detector vertically as shown in Fig. 6 and turn the red knob fully clockwise.
2. Set the Selector Switch to the STUD DETECTOR position.
3. Turn the red knob anti-clockwise until the indicators come on (green LED and red LED successively light, and BUZZER sounds).
4. Reverse the red knob gently until the red LED just goes out and BUZZER ceases.
5. It will need to be adjusted if the unit cannot be set accordingly. For details, please refer to "UNIT ADJUSTMENT" in section 4 in these instructions.
6. Make sure the detection face marked "STUD" is placed against the wall when moving the unit horizontally across the wall (see Fig. 6). If the incorrect face is used, the green LED will go out and you will need to commence calibration from step (1) again.
7. Mark the position on the wall when an edge of a batten or wall stud is under the groove of the unit, the red LED will come on and the BUZZER will sound (see Fig. 7).
8. Resume the movement of the unit. When the green LED comes on and the BUZZER stops, mark this position also. These marks indicate the edges of the batten or wall stud. The middle point between two marks will be the centre of the batten or wall stud.

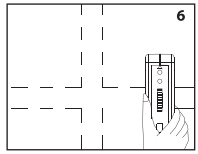










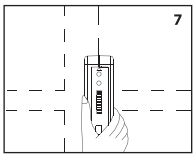


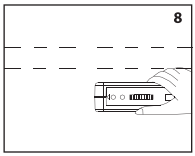
Locating horizontal battens or stud braces, refer to the following procedure:

1. Place the unit horizontally against the wall (see Fig. 8).
2. Apply the same method as indicated above for locating vertical battens or wall studs.

Important:

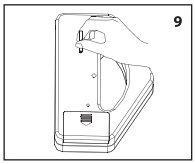
1. The stud detection may not function on some types of foil backed plasterboard or metallic fabric surfaces.
2. If the unit is placed over the wall batten or stud to process calibration, the green LED will go out and the BUZZER will cease when the edge of batten or wall stud is under the groove of the unit.
3. A double width may be found around door and window frames due to double battens or studs being encountered.
4. A solid wood header beam may exist in some doors or windows. The stud location will not be found if the unit is calibrated on a normal wall first and then moved to the header area, it will indicate the presence of a header.
5. It is recommended to take several readings along the vertical batten or stud as a nail may change the apparent centre position.
6. To avoid any false readings, frequent recalibration is recommended.
7. Please note that some small securing screws or nails may be detected. We recommend carrying out metal/voltage detection to make sure the detected batten or wood stud is not a pipe or cable.





3. Maximizing Accuracy

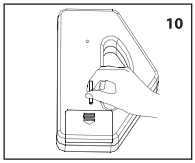
To increase the sensitivity of the unit and improve the location of pipes, cables, battens and studs; sweep the unit across the area with light and buzzer sounding. After each sweep, gradually adjust red knob until light and buzzer are no longer activated. Gently reverse knob before each subsequent sweep until the red LED and BUZZER go out at the location of hidden pipes/cables, battens or studs.



4. Unit Adjustment

1. Metal/Voltage Detection Adjustment

1. Turn red Metal/Voltage sensitivity knob by half a turn.
2. Set the selector switch to the VOLTAGE/METAL DETECTOR position.
3. Use the small plastic screwdriver located inside the battery compartment cover to turn the trimmer for METAL/VOLTAGE DETECTION.
4. Slowly turn the trimmer clockwise until the red LED and BUZZER are just on. Slowly turn back the trimmer until the green LED just comes on and the BUZZER ceases. Now the unit is correctly adjusted.
5. If the red LED and BUZZER come on, slowly turn the trimmer anti-clockwise until the green LED is just on and the BUZZER is off. The unit is now correctly adjusted (see Fig. 9)



2. Stud Detection Adjustment

1. Turn the red Stud sensitivity knob by half a turn.
2. Set the selector switch to STUD DETECTOR position.
3. Hold the unit with the STUD face against the wall.
4. Use the small screwdriver located inside battery compartment cover to turn the trimmer for STUD DETECTION.
5. Slowly turn the trimmer clockwise until the red LED and BUZZER just come on. Slowly turn back the trimmer until the green LED is just on and the BUZZER is off. The unit is now correctly adjusted (see Fig. 10).

Important Note:

1. The detector will give a **guide** as to the location of metal pipes or electrical cables. Safe working margins should be employed around the area of positive detection when using power tools to drill or cut surfaces. Always ensure that a properly functioning RCD (Residual Current Device) unit is used with power tools. When using cordless drills, hand drills or saws, work slowly and carefully.
2. Deeply buried pipes or cables may not be detected. Always ensure drilling or sawing devices are supported firmly to prevent sudden movement when surfaces such as plasterboard have been penetrated.
3. Modern building construction uses plastic water pipes (hot & cold water and central heating pipes). These should have been identified with a steel tracer wire or metallic tape so they can be detected. To avoid potential water damage due to undetected plastic water pipes, if in doubt, always seek the advice and guidance of a qualified plumber or building professional.

Warnings

Keep this product away from children and always store in a safe place.
Always remove exhausted batteries from these products.
Do not use rechargeable batteries in this product.
Do not allow water to come into contact with the batteries or wiring.
Do not dispose of batteries in a fire or pierce as they may explode or leak.
The battery must be correctly inserted (ensure the correct polarity +/-).
Only use the recommended 9V PP3 alkaline battery.

ENVIRONMENTAL PROTECTION
Waste electrical products should not be disposed of with household waste. Please recycle where facilities exist. Check with your local authority or retailer for recycling advice.

IMPORTANT:
No liability is accepted for the incorrect use of the product. Whilst every effort has been made to ensure accuracy of information contained in this manual the DK Tools Ltd policy of continuous improvement determines the right to make modifications without prior warning.