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Electronic Location and Mapping of Underground Services.
Water Leak Detection.
Land Surveys.
Attribute Data-Base Compilation for Utilities.

Small-stethoscope

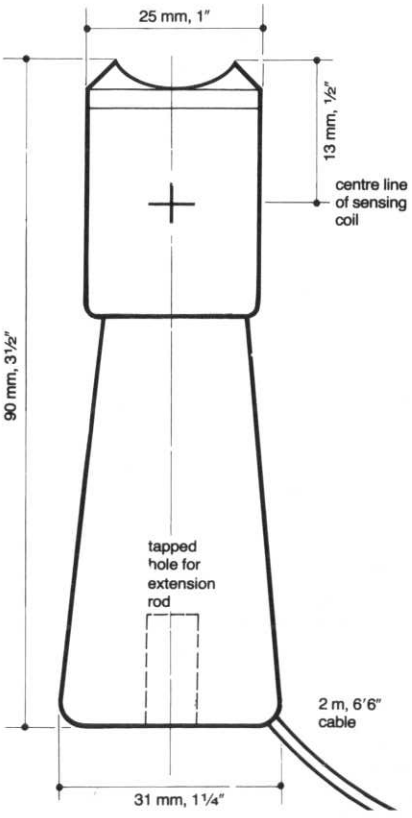
Small-stethoscope for identifying small diameter exposed cables or cables in trays.

Applications

The small-stethoscope with its 25mm/1″ diam. head (standard stethoscope head 45mm/1¾ diam) plugs into the RD600 Receiver and is suitable for identifying small diameter exposed cables or identifying cables in trays or racks.

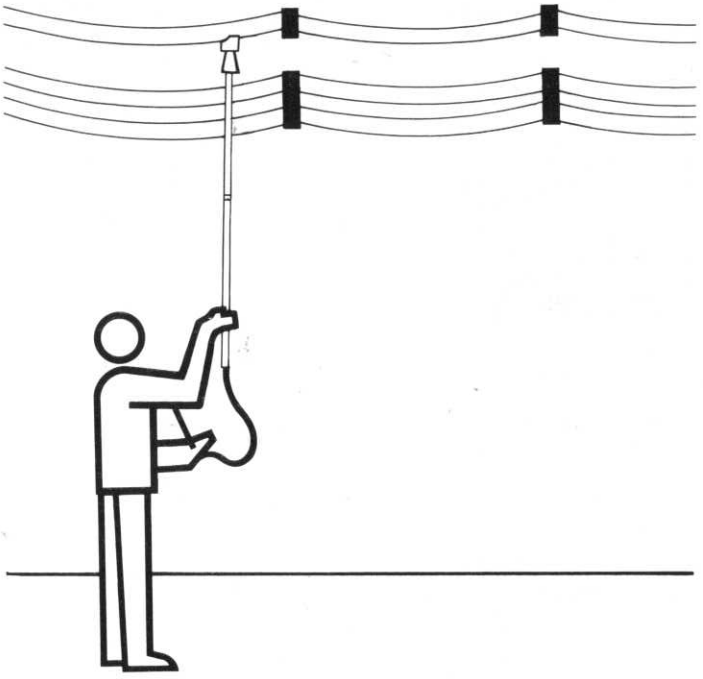
The small-stethoscope is supplied with a 2m/6′6″ lead. It can be fitted to the end of the 70cm/28″ extension rod, or if required to two rods joined together to locate or identify inaccessible cables.

The small-stethoscope can also be used as a miniature antenna in locations where the standard antenna is inconvenient. For example to locate pipes or cables hidden in walls.



Performance

The small-stethoscope is for use with the RD600 receiver. It will detect a 1, 8 or 33kHz transmitter signal in a cable and its performance is similar to the standard stethoscope.



Identifying an overhead wire

User instructions

The small-stethoscope is used in the same way as the standard stethoscope (section 4.6 of RD600 User Instructions).

In the event of more than one cable carrying the transmitter signal, apply the stethoscope to each cable. The cable to which the signal has been applied should give a meter reading of at least double that of any other cable carrying a stray signal.

Apply the concave head of the stethoscope so that it engages fully with one cable at a time and is not in contact with other nearby cables.

It is convenient to hang the RD600 Receiver on the chest with the receiver strap (Part No. 10/RD0182) while using the stethoscope.

One or two 70cm/28″ extension rods (Part No. 10/EXT) enables the small stethoscope to be used on high cables or other cables out of reach.

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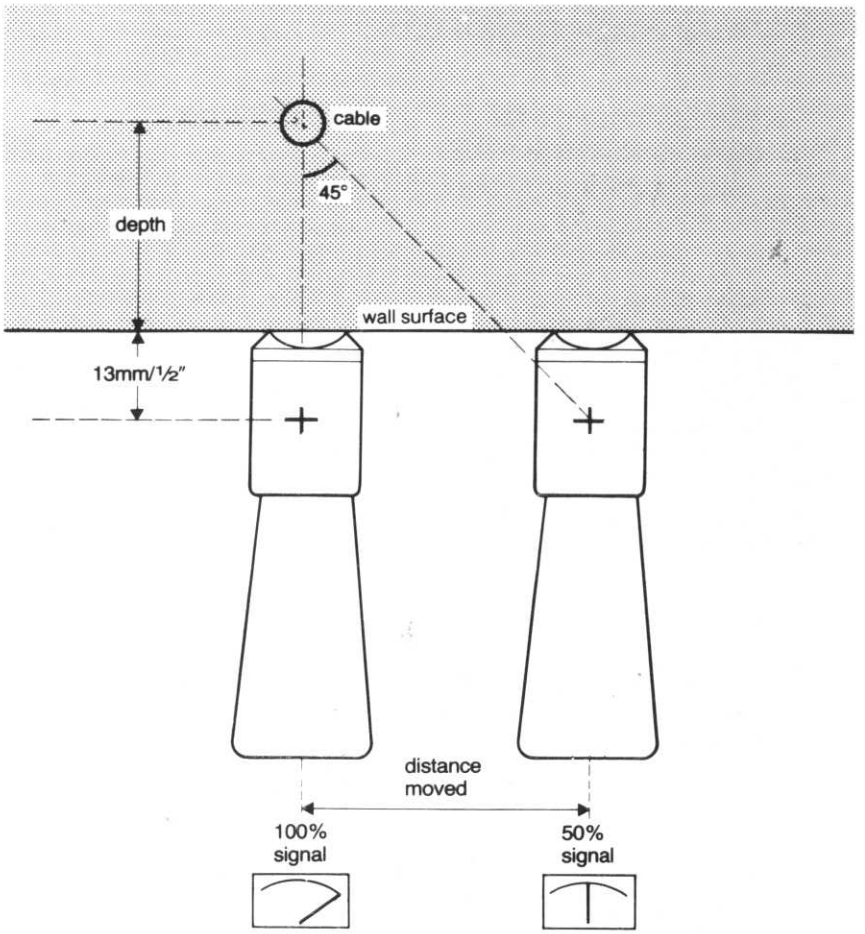
section C

With care, depth estimations can be made to cables buried in walls by using a variation of the triangulation technique described in the RD600 User Instructions section 6.4.

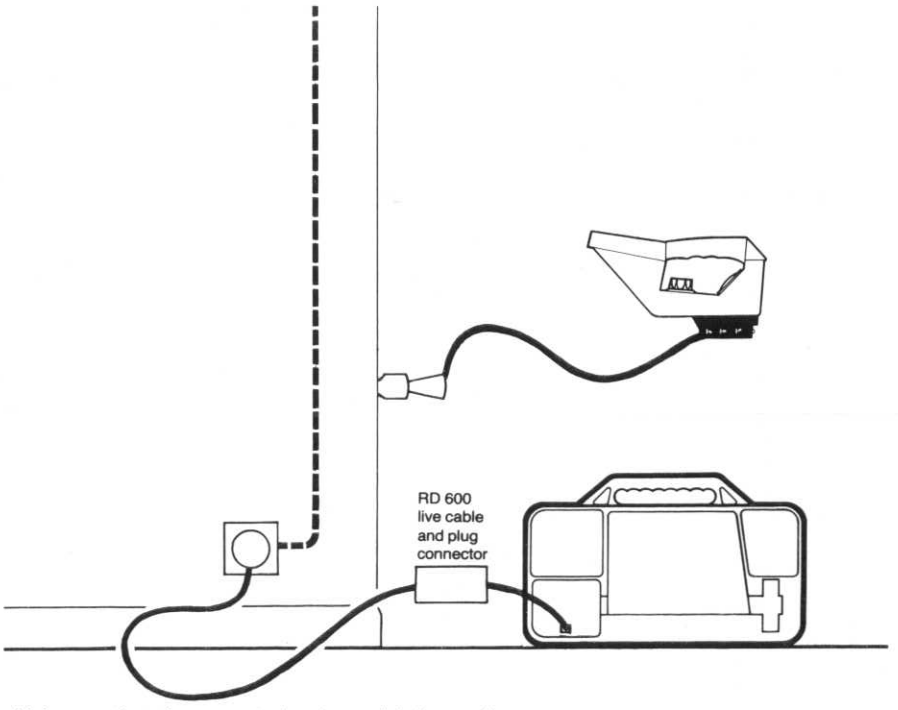
- Locate and mark the position and direction of the cable.
- Set sensitivity to convenient meter reading. e.g. 80 or 100.
- Move to the side until meter readings drop by 50%.
- Measure the distance moved.
- This distance moved less 13mm/½" gives the true depth; it includes compensation for the position of the coil relative to the stethoscope's front face.
- Accurate depth estimation requires that the signal is only on a single conductor. Use the RD600 Transmitter to energize power cables by double-ended connection (User Instructions section 5.3.3.) to the ground or neutral conductor.
- If two conductors of a power cable have been energized with the live cable connector, the stethoscope locates a null signal directly over the cable if the cable is flat due to the two signals cancelling. Round cable with twisted cores will produce a signal which regularly rises and falls as the stethoscope is moved along the route of the cable.

When using the small-stethoscope to locate cables in the wall it is important to ensure the stethoscope is oriented to be in line with the cable, i.e. so that the concave head would fit over the cable if it were exposed.

Order code
10/GP0310



depth = distance moved minus 13mm/½"



Using small-stethoscope to locate a cable in a wall