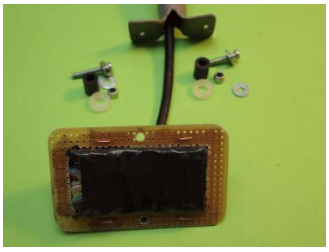
Description of the construction of some big probe measuring coils

For measuring radiation (EMC) from big cable truncs or cabinets

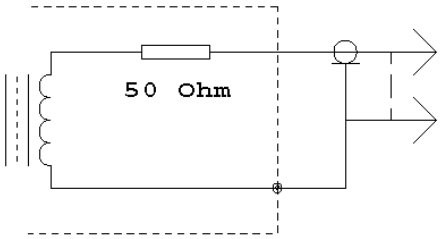
Or to detect location of radiating cables in the street.

<table>
<tr>
<td>  </td>
<td>    </td>
</tr>
<tr>
<td> 
big sniffer</td>
<td>coil form = 4 halves FT114-61 or TDK clone or 4C65 – 28 or 36 mm in an open PCB mounting frame.

N = 4, multi conductor, completely screened with copper foil except toroidal fracture side, it is a voltage probe, series terminator = 50 Ohm.

Isolated and protected with vulcanizing tape.

Usable range = 10 kHz to 100 MHz

  </td>
</tr>
<tr>
<td>  </td>
<td>coil form = 2 halves 4C65 – 36 mm.

N = 10, current terminated with 10 Ohm, series to coax with 39 Ohm. This version with open construction.

Usable range = 10k to 100 MHz</td>
</tr>
<tr>
<td>  </td>
<td>coil form = 2 halves 4C65 – 36 mm.

N = 5, With double wire and current terminated with 5 Ohm, series to coax with 39 Ohm. Screened with a tiny tomato can.

Usable range = 10k to 100 MHz</td>
</tr>
</table>

	Coil form = plastic pipe. NO magnetic medium. N depends on pipe diameter, N should be equivalent to 25 x 25 cm square. 1/16 sq. Meter. With a 70 mm pipe form (removed) N = 16.2. Winding is coax short circuit loop, but series terminated with 50 Ohm on point where N = 16.2. Like mini drawing above. It is rebuild, see next item. Usable range from 50 Hz to 10 MHz.
	Here a coil form is used, two parts of two bottles. The coil pickup head is made rotatable. Electrical construction is the same as above. Used with a 85 mm bottle, now N = 11 Usable range from 50 Hz to 10 MHz.