MEASURING ZDB AT THE BOARD

WHY TEST AGAIN WITH THE EARTH RECONNECTED?

With the earthing conductor **reconnected**, repeat the tests at each distribution board **other than the main one** — a garage, workshop or summer-house board: earth lead on that board's **earth bar**, line and neutral as before. Nothing is disconnected, so the parallel paths are in.

- **Z_{db}** and the board's I_{pf} go at the top of the **schedule of test results** for that board.
- Z_{db} is the Z_s of the distribution circuit feeding that board, so it takes in that cable as well as the supply. **Record what you see.**
- For the **main board** itself, the Z_{db} box takes your Z_e value.

One board or several?
Z_e exists only at the origin. Every board gets its own schedule of test results and its own Z_{db} box — at a sub-board it's the loop impedance measured at that board. In a house with one board there's no separate Z_{db} to measure: the box takes your Z_e.

✋ **Probe on metal.** A thin probe into a large terminal screw can sit in the hollow without touching anything. Go in at an angle, onto the metal.

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