A RING FINAL WITH NO CROSS-CONNECTION: WHAT IT LOOKS LIKE

READINGS RISE, THEN FALL. WHAT DID YOU FORGET?

A failure mode worth recognising, because the circuit is wired perfectly and the readings still look wrong.

WHAT YOU SEE	WHAT IT MEANS
Every outlet reads **the same**	Correct — properly cross-connected ring
Readings **rise** the further you get from the board, then fall again	You have **not cross-connected** in the consumer unit

THE SIGNATURE, GOING ROUND THE RING

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Socket 1   0.01      close to the board
Socket 2   0.02
Socket 3   0.05      furthest point
Socket 4   0.01      coming back down the other leg

Rising and falling = you are measuring each leg separately,
not the ring as a loop.
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This is not a polarity problem.

It is purely the missing figure of eight. It is also the only way you will spot it, so take the readings seriously when they are not all equal.

Why it happens, and how to avoid it.

You cannot always tell which leg is which in the consumer unit — the sheath may be stripped right back, or the ring may be wired in singles in conduit where every brown looks the same. Good practice is to **mark the cables**: feed and outgoing, or leg 1 and leg 2. The same habit helps with two-way switch lines.

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