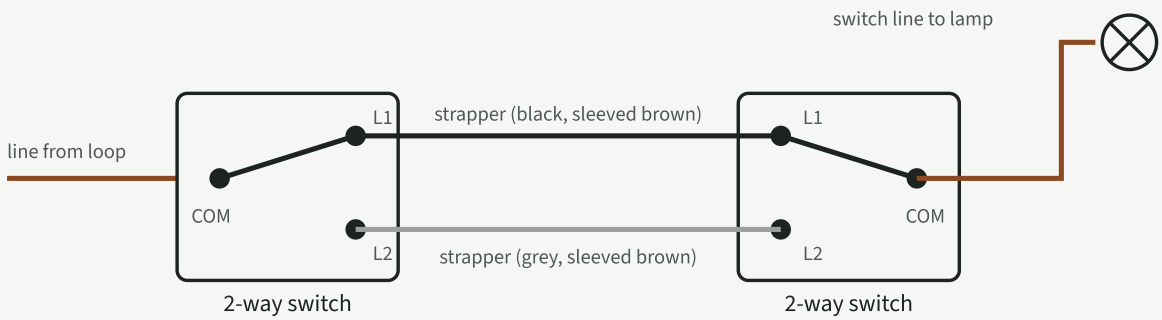
TWO-WAY AND INTERMEDIATE SWITCHING

HOW DO YOU SWITCH ONE LIGHT FROM THREE PLACES?

TWO-WAY SWITCHING

A two-way switch has **3 terminals**: **COM** (common), **L1** and **L2**. Pressing it doesn't turn it "on" or "off". It just **swaps** COM between L1 and L2. The two switches are linked by **3-core & earth** cable (brown, black, grey plus a bare CPC). The two cores that link L1 to L1 and L2 to L2 are the **strappers**; the third core carries the common.



3-core & earth between the switches

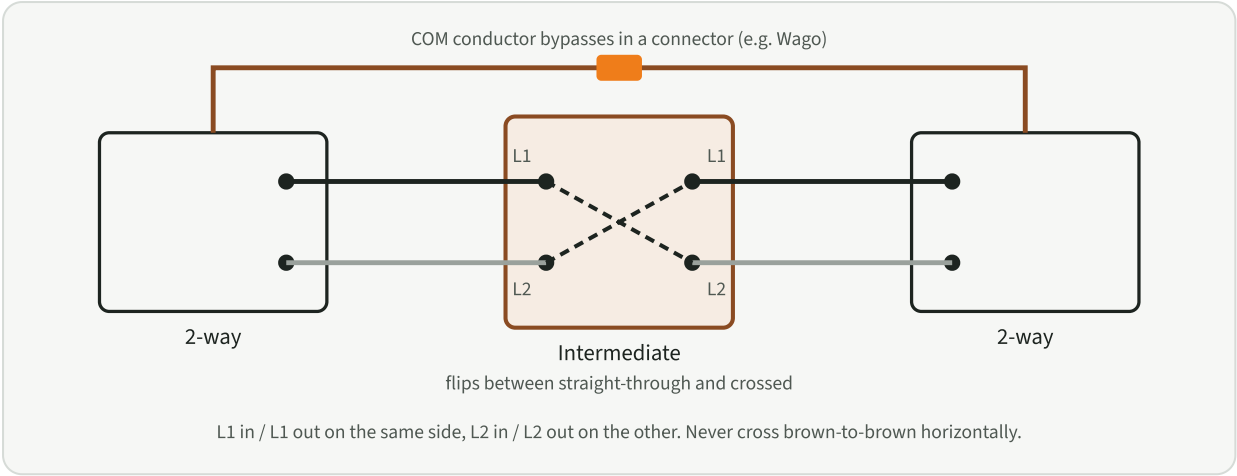
Both switches on L1 = closed = lamp **on**. Flip either switch = open = lamp **off**. Flip the other one too and it's on again.

- **Sleeve every strapper brown** (black and grey), because they're all line conductors. You *could* buy all-brown 3-core, but then you couldn't tell which is which.
- **There's no right or wrong colour** for COM, L1 or L2. Swap the two strappers (L1 and L2) at one end and it still works. What stops it working is mixing **COM** with a strapper, so keep COM to COM.
- Coiling the CPC neatly in the back box is purely cosmetic. It adds length, and length means resistance.

> **On-Site Guide** · Section 7 · Figure 7.4.4 two-way switching wiring (black in COM in that drawing) · **p.107**

INTERMEDIATE SWITCHING

To control a light from **3 or more** places, fit **intermediate** switches **between** the two two-way switches. You can have as many as you need, e.g. a stairwell over several floors or a big room with several doors. They're mainly commercial, and rare in homes.



Wire it as before, common to common. The **common** conductor (whatever colour you used in COM) doesn't connect to the intermediate. It just **joins through in a connector** in the back box. It isn't an earth.

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