

Ask Jon Eakes

How do I separate the outlet from the light switch in the bathroom?

Last Updated: Saturday, November 17th, 2001, Created: Saturday, November 17th, 2001

David wants the electrical outlet in the bathroom to be on all the time and not just when the light switch is on. How do you wire that, he asks?

You may or may not be able to do it with the existing wires.

Start by opening up the light electrical box. Turn off the light switch. Measure the voltage between all the combinations possible of the wires present. If none of them read 110 volts, then make the same test with the wires in the outlet box. If there is no voltage present at all, then as in the first graphic, the power is coming totally through from the switch box. What you are hoping to find is a pair of wires connected to each other and not connected to either the light or the outlet. This wire will be taking the hot power line from this area, over to the switch and back, as in the second graphic. If there is power here, you will be able to directly connect the hot and the return lines from the electrical panel to the outlet without passing through the switch. The light will remain wired as before.

If there is no power at all at either the light or the electrical box with the switch off, open the switch box. Here you will always be able to measure 110 volts if the switch is off and there is a light bulb in the socket, because the electricity is waiting to run through the switch. But if you remove the light bulb and turn the switch off, the only place that will measure 110 volts will be the two wires coming from the electrical panel. If you confirm that the power source runs through the switch box, you will not be able to separate the light and the outlet without running a new wire someplace. Your choices are to run a separate line from the electrical box to the outlet, or run a separate line from the hot lines in the light switch box to the outlet.

One tip is to make a little drawing of what is connected to what as you take things apart, even tagging wires with labels if you need to. That will at least allow you to get it back to how it was before you started if nothing seems to be working out.

If all of this is confusing to you, you will be better off calling in an electrician to be sure that your wires are always safe.

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Keywords:

Circuits, Electrical, Lighting, Outlets, Wire, Wiring