

How to Build a Power Tap

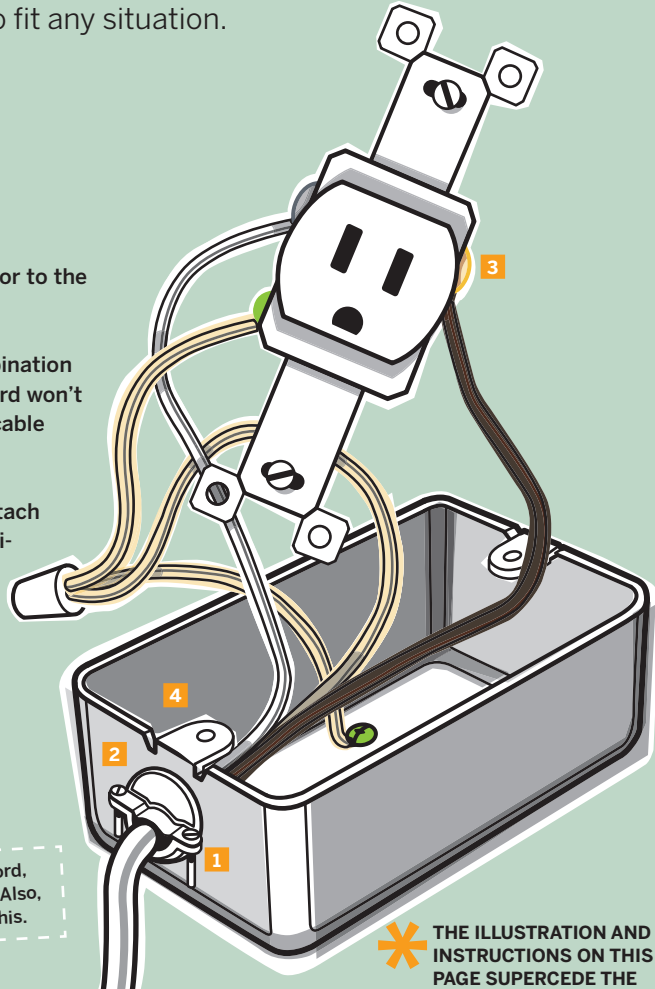
Build a power tap and put the power where you need it. Electrical junction box systems are the Lego of electrical. All sorts of adapters, connectors, and doodads are available to fit any situation.

MATERIALS

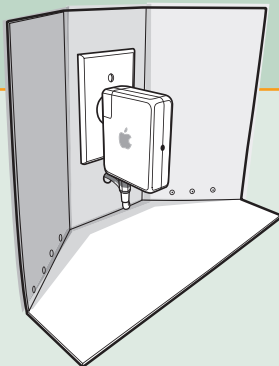
- » Electrical outlet and face plate
- » Single-gang junction box
- » Combination connector
- » Extension cord made from 3-conductor Romex cable

- 1** Connect a combination connector to the side of the junction box.
- 2** Feed the cord through the combination connector and tighten so the cord won't inadvertently pull out. Test the cable with a hard tug.
- 3** Separate and strip the wires. Attach the black wire to the brass terminal, the white wire to the silver terminal, and the bare ground wire to a wire nut that has two other wires terminating at the green ground screws.
- 4** The outlet comes with the correct screws to install it to the junction box.

WARNING: This is safe as an extension cord, but don't wire your whole house like this. Also, don't plug anything over 200 watts into this.



✳ THE ILLUSTRATION AND INSTRUCTIONS ON THIS PAGE SUPERCEDE THE PRINT EDITION AND PREVIOUS DIGITAL EDITION.



Now Make Yourself Useful

You can use all these tips to make this wi-fi hotspot signal deflector. Put it all together and you end up with a pretty decent wi-fi extender that actually works! In addition to the reflector gain, it really helps to get the Airport higher than a typical wall outlet or a floorbound surge protector. The all-important office-to-garage test netted another bar or two of wi-fi signal strength. Not too shabby considering it can be built for bubblegum money!

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