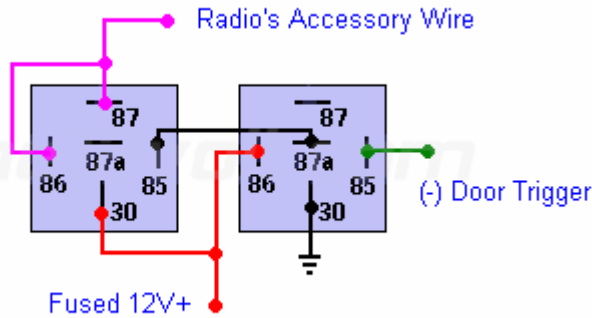


Radio On Until Door Opened (Retained Accessory Power) ([link](#))

If you wish to keep the radio (or any other device that is powered by an accessory circuit) on until a door is opened, you can do so by creating a latch when the accessory is turned on with the relay shown below on the left, then breaking ground to the latch when a door is opened as shown with the relay below on the right. While this will keep the radio on, the entire accessory circuit will see 12V+ until a door is opened with the key in the off position.



If you want to prevent 12V+ from feeding back into the accessory circuit or have more than one device on this circuit and do not want all of them to stay powered, you can isolate the device you want to stay powered by cutting the accessory wire going to it and adding two 1 amp diodes and an additional relay as shown below. The first diode near the top left of the diagram is to prevent 12V+ from going back into the accessory circuit. The second diode between terminals 87 and 86 prevents the radio from pulling current through the first diode. If the second diode is not in place, the first diode will become toast. The additional relay is needed to prevent the radio from turning off when the key is in the accessory position and a door is open.

