StillDragon DIY Controller; 220 VAC (USA), with MAIN and SECONDARY (small) Heating Elements

When I built my beer boiler/keg I used the elements I had on hand; a 110vac 1,500 watt and a 220vac 5,500 watt element. Below is the diagram for my boiler. It has four switches; 1) small element on/off, 2) main element on/off (black leg), 3) main element on/off (red leg), 4) two/way switch; main element ON Bypass (full power) or ON Adjustable (POT controlled).

This arrangement allows me to run one or both heating elements. With switches 1, 2 & 3 in the OFF position, no (zero) power goes to the controller or to the elements/keg. The Earth Ground should be connected to the ground lug on all switches, SSR (center mounting bolts—either end), project box—if metal, grounding tab on POT, and the keg/boiler. This same diagram can be used with just the single 220vac 5,500watt element; just eliminate switch #1. By doing so, the Neutral wire is not used (it is ONLY for the 110vac element only).

NOTE: 220vac (USA WIRING) uses 2 (two) separate 110vac lines to make the 220vac circuit.

Provided by FlyboyTR: This is my personal diagram, check with your electrician before using. I am not responsible for how you may use this diagram.

