

DIY production reminder for spot welding machine, please make your own comparison and modification.

### **1: Does not trigger on power-on**

Answer: The working power supply of the control board of the spot welder needs AC power. If there is no trigger, DC power is basically used, and it will not work without triggering. Change the AC power supply (within the range of AC9V-AC12V).

### **2: Welding is not strong, the reason why the soldering piece will fall off as soon as it is torn. (All of the following reasons must be met. If one of the reasons is not met, it will cause poor welding.)**

A: The power of the welding transformer is not enough. Most DIY friends use microwave oven transformers to transform them. First of all, a microwave oven transformer (whether 800W aluminum or 900E copper) welding 0.15 nickel plated sheet and 0.1 pure nickel sheet is ideal. Some friends want to use a microwave oven transformer to weld 0.2 nickel sheets, which is more difficult. So, first look at whether your welding transformer has enough power.

B: The wire used for the secondary transformation of the transformer is too thin. To transform the secondary, at least a cable of 25 square meters or more is required, and the kind of fine silk cord (red copper material is the best) is required, and the outer skin is used for insulation and then wound. The secondary voltage is about 3.5V. Some friends use too thin a secondary wire, although the number of windings is large, and the voltage is high, but it limits the current and causes the welding to fail. Therefore, please compare the cable thickness, at least 25 square meters (referring to the national standard line, non-standard is not acceptable). The thicker the effect, the better.

C: The spot welding pen is too thin and too long. We recommend that the spot welding pen is as short as possible. We generally do about 50CM, and the thicker the pen, the better the effect. For example, some friends use a 16 square wire with a length of one meter, which cannot be welded.

D: Transformers are "parallel imports": the rise of DIY in recent years has made used microwave oven transformers popular all the way, and some unscrupulous merchants have started this market idea. Dear friends, take a look at the transformers in your hands. Although some are nominally 800W, they are not thick enough. The normal thickness should be around 77mm. If the thickness is lower than this thickness, the power is not enough, and the basic welding thickness is about the same as the nickel-plated solder plate of 0.1mm, and some even 0.1 can not be welded firmly.

### **3: How to set parameters for welding nickel sheet**

Answer: This parameter is not fixed, because DIY is different for everyone. The normal parameter range should be: D01 and D03, D04 type within time 05, current above 60, D02 type current above 600, within time 05, and the first current is less than the second current, the interval time is also within 05. Try to keep the time as short as possible. If you feel that the firepower is not enough, increase the current, and debug according to your own situation. The debugging requires patience. Welding requires more practice. Everyone will weld the beautiful solder joints you expect.

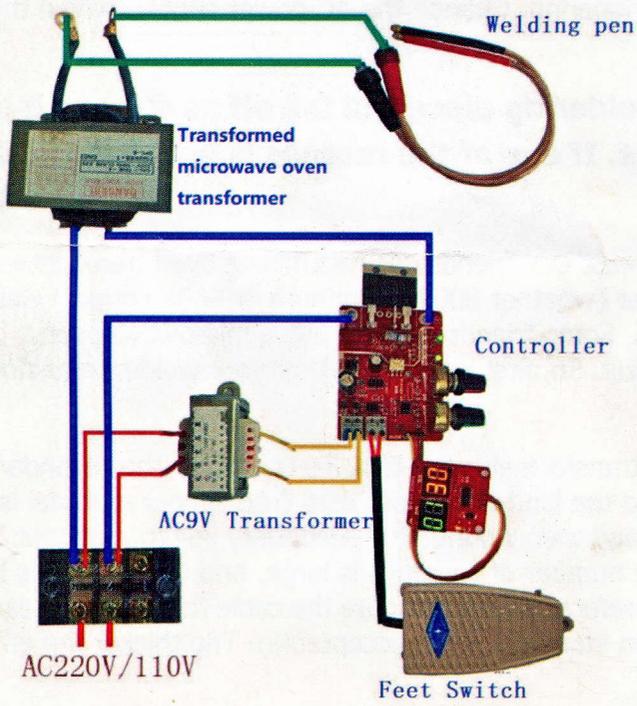
### **4: Q: Do you need to add heat sinks?**

Answer: Because the spot welding machine works instantaneously, so the DIY pros generally do not need to add a heat sink. That is to say, the heat sink is not necessary. Of course, it is also good if you want to add one. Regarding the heat sink, there is no stipulation that it is necessary. Generally, aluminum heat sink is sufficient.

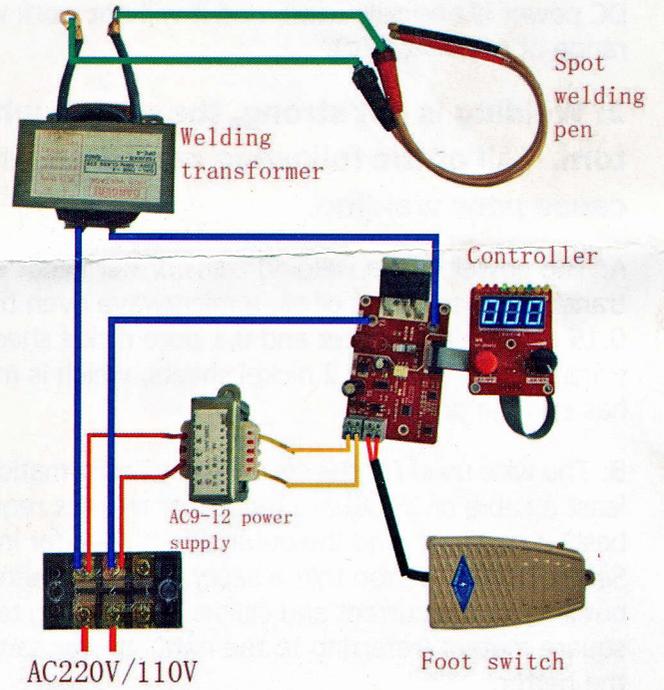
### **5: Q: How to transform the two microwave oven transformers?**

Answer: If you use two microwave oven transformers, it is recommended to choose two identical ones, the primary parallel to the secondary series, one with two turns, the thicker the secondary line, the better, at least 50 square meters. Pay attention to the two transformers, be sure to use a 100A control board, 41A is easy to be broken down.

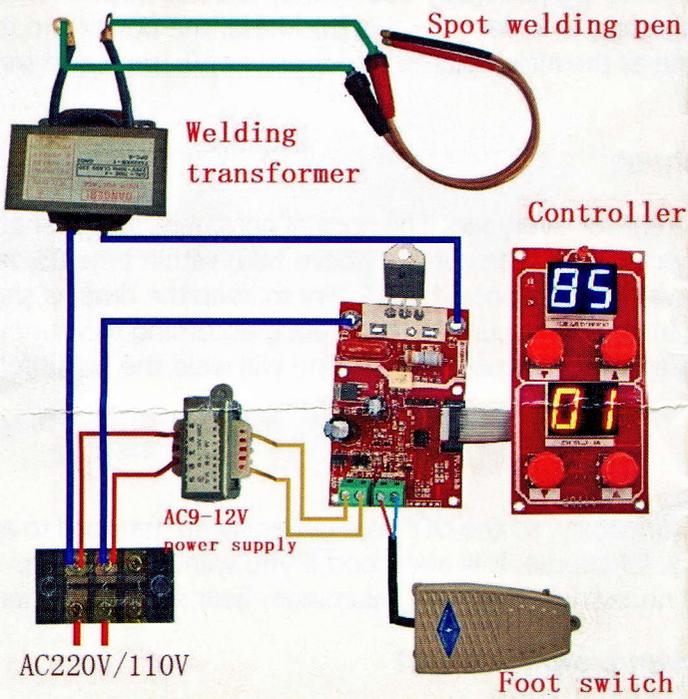
Physical wiring diagram reference



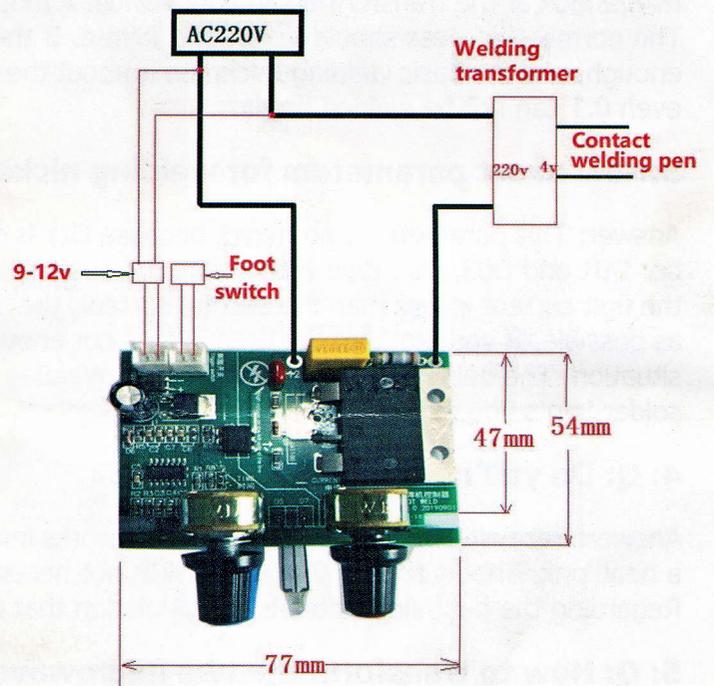
NY-D01 control board reference diagram



NY-D02 control board reference diagram



NY-D04 control board reference diagram



Green board reference wiring diagram