

## Conductive Glue

Making conductive glue consists in adding metal or other conductive material like graphite in powdered form to ordinary glue, the later will result in a more resistive glue than a conductive one, in a process called particles loading.

The resulting conductivity may depend on different factors, like the granulometry (size of the grains) of the loading material, chemical nature of the glue itself, the quantity of the conductive material and many other factors, so you have a lot to try if you want to make it yourself at home, we present here an easy way to do it, certainly not the best, but it works.

### Materials

Regular school grade PVA glue;  
Metal Powder (powder for brazing);  
Powdered Graphite;  
Water;  
Sticks and disposable plastic cups.

### Preparation

The preparation is very easy, just add glue to the powder (metallic or graphite), the powder volume has to be twice the glue volume. Go on mixing and adding water to the mixture until it gets creamy.

Save the conductive, or resistive glue, in the glue's empty flacons. Because we added material, there will be a glue excess you can save in another flacon.

In my video I show how to prepare a conductive glue and a resistive one and I mixed both excesses together to have an intermediate resistive glue, but surprisingly the resulting resistance was higher than the one made of pure graphite. In previous attempts I obtained very good conductive glues adding some powdered graphite to metal loaded conductive glue.

I also had better results using glues formulated with synthetic rubber and organic solvents, but they are harder to handle and save for future use.

Adding a base as additive (like sodium hydroxide) is a good idea too, this will avoid the metal particles to create an oxide outer layer that will decrease the conductivity. How much? I don't know, you will have to try, but I suspect just a tiny quantity.

Good luck, and do better than I did!