



This is a general wiring primer on how to connect the probe to your control

It does not contain information on software, fanuc, haas, centroid anilam etc controls

A probe is basically a normally closed switch

It doesn't have a brain, it doesn't think, it is just a switch

It uses one of your input connections in the same way a limit or home switch does

The probe requires some type of input connection to your computer

This is generally done through the parallel port

Your computer also needs some type of motion control software with a probing routine

The probe also needs some type of input jack to connect and disconnect the probe from the controller

The ever fading Radio Shack has mono jacks and plugs

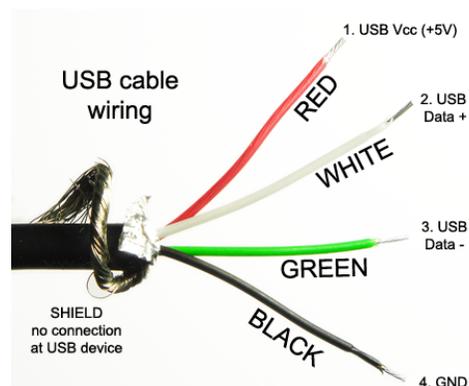
Some folks use stereo jacks and plugs etc

Below is the basics on how to connect to a controller without a breakout board or input connections

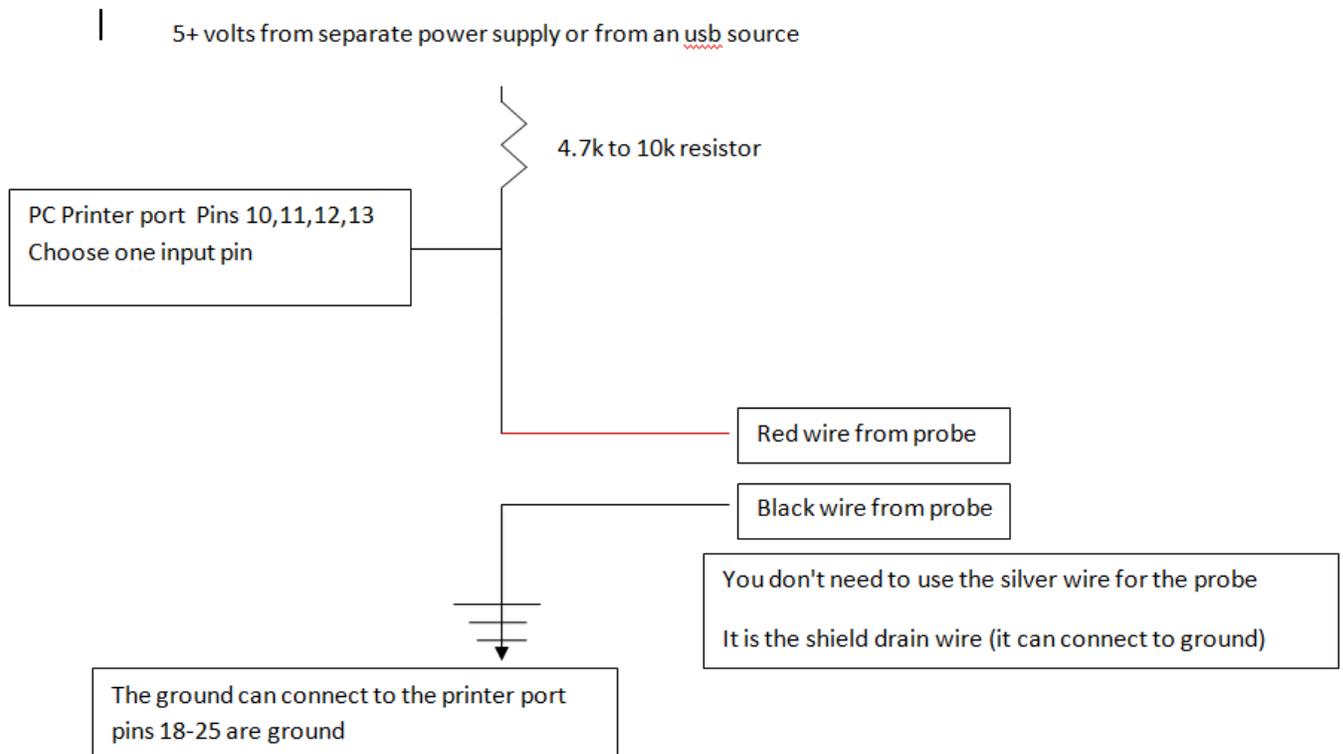
The chosen parallel port pin is connected to a +5vdc power supply and through a 4.7k to 10k Ω resistor

Again this half watt resistor can be sourced from RadioShack

You can use a usb cable to power the circuit



Below diagram cites different input pins again this is for mach 3



A resistor protects the parallel port from the excess current that it would receive if the pin was directly hotwired to the power supply

The 5v pulls the pin high. Also wired to the same parallel port pin is the normally closed probe switch

Using a breakout board with built in pull up resistors and Gecko G540

Using Mach 3 the following input pins are available 10, 11, 12, and 13 (you need to choose one)

One wire is connected to one of the above mentioned db25 pins through the breakout board (the g540 has a built in breakout board see gecko website for hookup info)

The other wire from the probe is grounded to one of the 18-25 (db 25 pins) as a last resort use the power supply low voltage ground

When the switches are all closed, the parallel pin is grounded

When the probe switch is moved it is in an open state and the current will travel to the parallel port pin, and the pin will be pulled high