

## Connector and wiring kit

### What do you get in the kit ?

- 12 contact female strip, 1mm pitch,
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- 2 miniature alligator clips (gavial clips)
- 4 magnets
- ~50 cm twisted pair of 0.14mm thermo-solderable magnet wire, 0.25 Ohm/m (the 2 wires in serie), 0.3g/m
- ~20cm of 0.25mm extra-thin solder



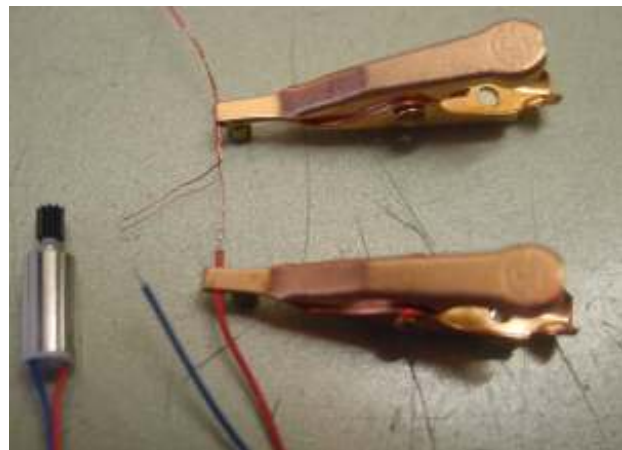
### How to cut the connector.

The best is to have access to a mill on which 0.2mm saw disk can be installed.

If not cut with a sharp pleyer, in the middle of a contact and sand the sides. You will loose 4 pins and get 4 strips of 2 and not the theoretically 6.

In general, the best is to have for the control wires the female part on the PCB and the connecting wires with a male plug. For power supply, it is the inverse, a female plug must always be on the battery side.

The best solution is tu use the gavial clip from Traudl-Riess. They have no teeth and can be prepared with a flat pleyer to hold thin wires, pictures below. They are maintained on a piece of metal with magnets.



Making the jaws parallel



Slightly open



Best fixture with the magnets



You will need good lenses to check

## How to solder BIRD coil wires

If you did it some day, you know it is terrible. There are three problems.

The first is holding the wires. The gavia clips and magnets solve this problem.

The second problem is to align the wires, pre-tinned on 1-2mm, so they are parallel and touch or are very close (the capillarity will bring them in contact when soldered). Put a small drop of flux where to solder.

The third problem is easy if the wires do not move when touched by the solder and soldering iron. Have a clean soldering iron, not too hot, and have a simultaneous touch of the wire, the solder and the tip of the soldering iron.

You prefer pictures ?



Position the two wires, make them straight. Prepare the soldering iron at maximum heat



Tin the tip. It will make a big drop of solder at the tip of the soldering iron and the flux will help



The drop must not stay on the wire of course. Reduce the temperature and align the wires



Heat with a little of fresh solder



That's done. But do not look closer !



With 1mm of good soldering, it is strong. The wires are overlapping on a too long distance



Second soldering to make it « clean ». Not really useful and there is a drop (add 0.001 gram)



But from the distance, you do not see it.