

Makeing a Network Hub with out power.

items needed:

- (1) 3 port wall plate
- (3) 1n914 in4148 switching diode (radio shack part number 276-1122)
- (3) rj45 cat5e tooless modules
- (1) wire jumper kit (radio shack part number 276-173)
- (1) 6x4x2" project box (radio shack part number 270-1806)
- (1) univeral PC Board ( radioshack part number 276-0168)
- cat5e wire

Tools:

Soldering iron

Solder

Solder wick

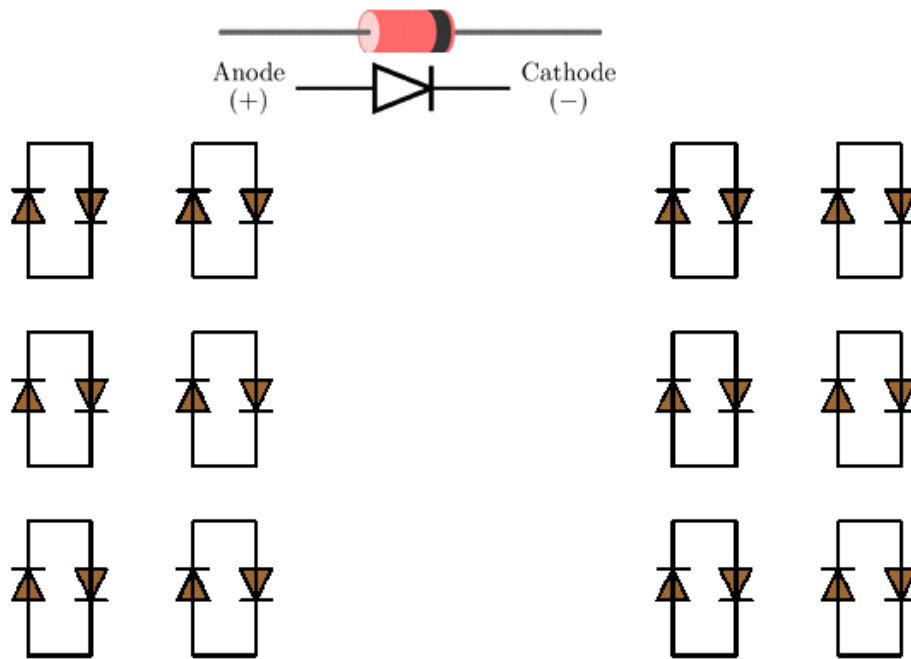
Phillips screw driver

Dremmel tool w/ cut off wheel

optinal:

Multi metter for locateing pin out on rj45 connector module if not labled  
bread board (for mocking up circite)

- (1) First count out 24 diodes
- (2) place diodes onto bread board / pc board so that it matchies the below scematic.

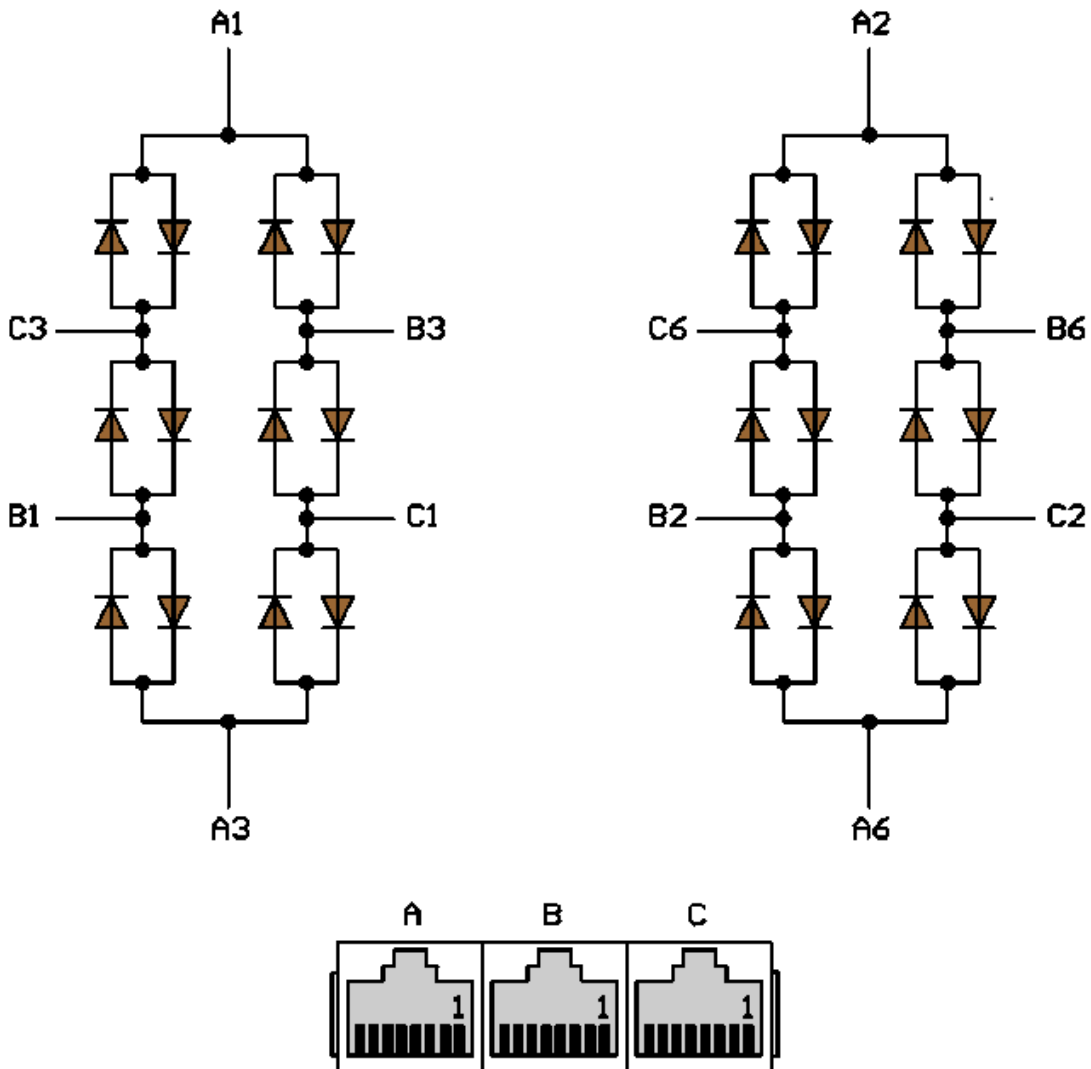


(3) then add the wires going from the rj45 tooless modules making sure to hookup pins 1-2-3-6 following the green, green/white , orange , orange/white pairs

(4) hook up the other two modules as instructed by #3

(5) put the three modules onto bread board / pc board making sure that none of the wires overlap with one each other.

(6) follow the diagram below to finish circuit.



where A1 = pin 1 of A , A2 = pin 2 of A, B1 = pin 1 of B, B2 = pin2 of B and so on.

(7) when done test w/ two cat5 cables and two computers u have to have a cable in A for hub to work.  
also note this circite will only operate at 10mb half duplex or 10mb full duplex.

(8) cut a hole on the project box for wallplate, and screwin pc board and wallplate.

completed design / circet:

