

Assembly of the NHRC Intelligent Remote:

The NHRC-REMOTE is a fairly simple project to build. Minimal electronic experience is required. Assembly time should be around 1 hour.

Organize your parts per the parts list. Use a small soldering iron of approx. 25 watts. (DO NOT USE A SOLDERING GUN). Consider using a water-soluble flux-core solder (such as Alpha Metals Aqualine 6000). A quick rinse under warm water in your sink after assembly and your finished product will look professional. Rosin flux-core solder is OK as well, but be sure to clean your board after assembly with isopropyl alcohol.

As you install a part check it off on your parts list. *Socket your chips!* Pin 1 of many components are denoted by the square pad on the PCB. Install the IRF510 FET's (Q1-6) so the heatsink surface faces JP2, note the silkscreen orientation of the LED's (D1-8) and small transistors (Q7-9) when installing them. If the resistor pack (RP1) you use has 10 pins, cut off the 10th pin before installing (rev A PCB only). Be careful to install all polarized capacitors (C2, C5, and C6) per the silkscreen (note the "+" sign). Reversing the polarity of the caps will let out the smoke! The band (cathode) of the zener diode (D9) goes to the square pad on the PCB.

Once assembly is complete, power up your board without the chips installed. Refer to the schematic and check voltages to your chips. (Example: +5 volts across bypass caps C1 and C4) When all checks out OK, install the chips in their sockets, power-up the board, INIT the processor and enjoy!

Notes:

A detailed trouble shooting guide is available on our web site at <http://www.nhrc.net>.

Alpha Metals solder info is available at <http://www.alphametals.com>