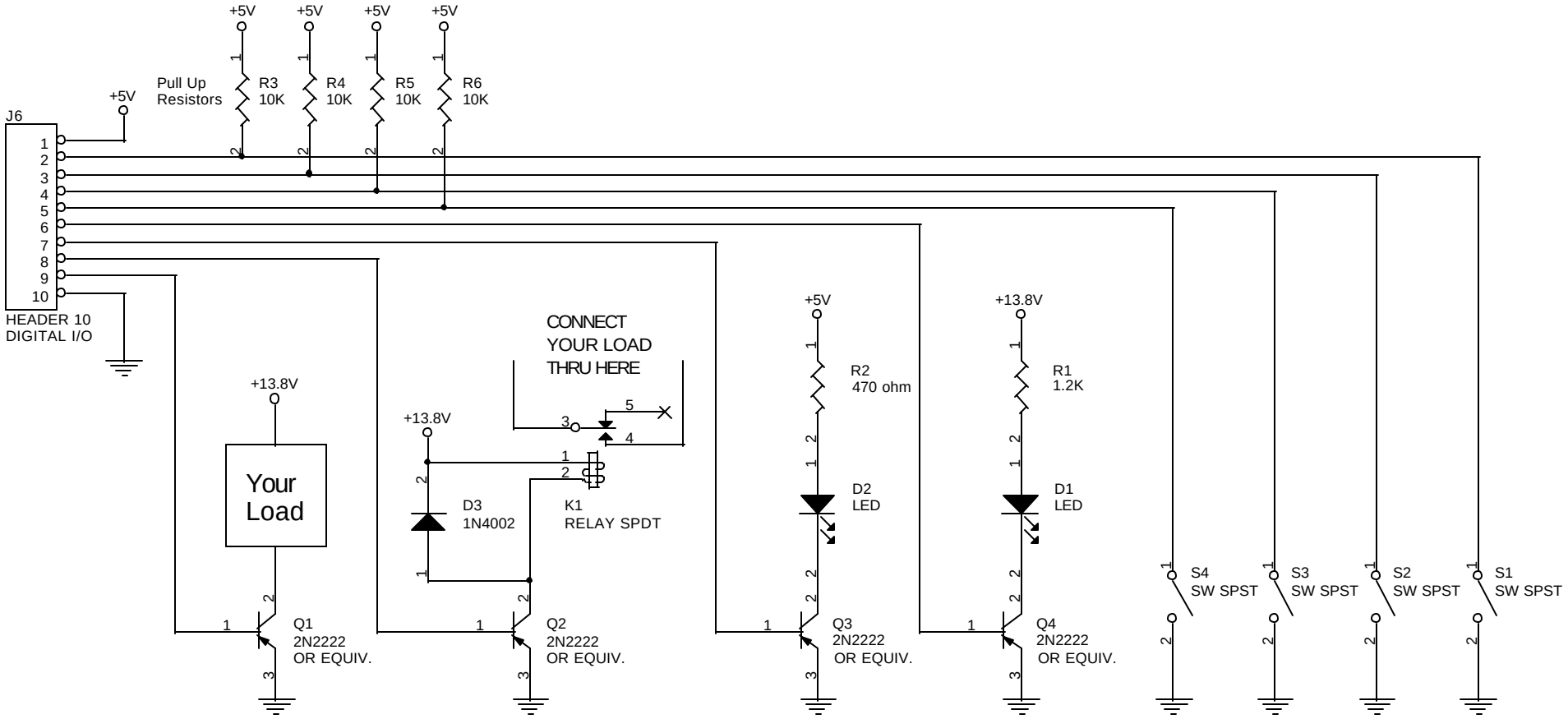
# Suggested hook up and uses for the NHRC-5 I/O Port




## LOAD DRIVING NOTES

1. The transistors do not require a resistor in series with the base as the controller has a 4.7K resistor in series with all I/O leads.
2. When driving relays be sure to us a diode to quench back EMF (see D3).
3. Larger high current transistors or FETs can be used to drive higher currnet loads.
4. Do not attempt to drive loads over 250mA from the DC power available from the controllers I/O port.
5. Never drive motors directly from this power source.

## SWITCH NOTES

1. The switches shown can be substituted for tempurature sensors or alarm contacts or active low CAS from a receiver as desired.
2. All Inputs are active low.

## WARNING

Use this App Note at your own risk. Failure to connect your external equipment to the controller I/O properly will result in permanent damage to your controller.


NHRC Repeater Controllers
444 Micol Road
Pembroke, NH 03275
603-485-2248
http://www.nhrc.net


| | | |
|---|---|---|
| Title: NHRC-5 DIGITAL I/O APP NOTE | | |
| Size: A | Document Number: 5 I-O.PDF | Rev: A |
| Date: Sunday, February 03, 2002 | DRAWN BY: KA1OKQ | Sheet 1 of 1 |