

WHAT ARE WE
CONNECTING TO
THE ARDUINO?

5V

GND

INPUT

OUTPUT

DO WE NEED?

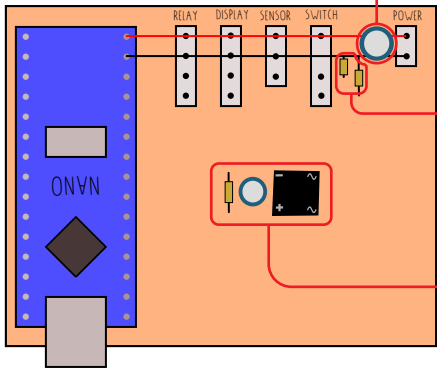
-RELAY MODULE	✓	✓		2	4
-DISPLAY	✓	✓		2	4
-HALL SENSOR MODULE	✓	✓	1		3
-THREE STATE SWITCH	✓	*	2		3
-POWER SUPPLY	✓	✓			2

* THE SWITCH READOUTS ARE CONNECTED TO GROUND THROUGH TWO PULL-DOWN RESISTORS OF 10KOHM

SO HOW MANY
CONNECTIONS
DO WE NEED?

WHAT IT LOOKS LIKE IN THE SCHEMATIC

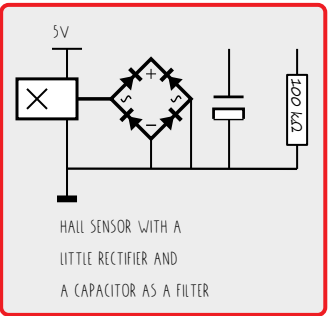
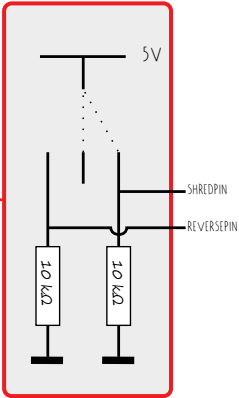
SO THIS IS WHAT OUR BOARD
LAYOUT WILL LOOK LIKE:



THIS IS A HUGE CAPACITOR TO
EVEN OUT VOLTAGE SPIKES
(ARDUINO DOESN'T LIKE THOSE)

THESE ARE THE 10 KΩ
PULL DOWN RESISTORS
FOR THE SWITCH

THIS IS THE FILTER
THAT EVENS OUT
THE SIGNAL FROM
THE HALL SENSOR



ON THE BACK OF THE BOARD WE HAVE TO MAKE
SURE SOME CONNECTIONS ARE CUT.

