U = unsigned (U = 2.5V

Rules

N_1 =

N_2 =

S_1 =

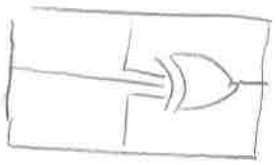
S_2 =

*Each tile has a 5 state code to differentiate themselves.

↳ The middle ~~tile~~ sensor cannot be unsigned and is ambiguous to polarity. Therefore the middle senser will be denoted solely by intensity (X1 & X2)

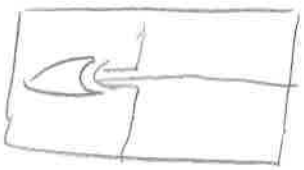
↳ When the middle magnet is positive, the tile code will be read left to right

→



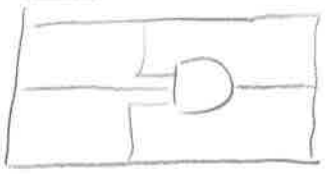
↳ Conversely, if the middle magnet is negative, the tile code will be read right to left.

←



Gates (middle = X_1)

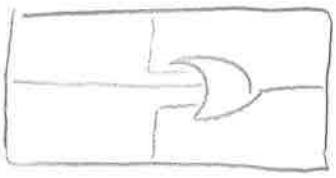
AND



Code

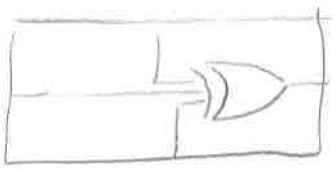
U X_1 N_1

OR



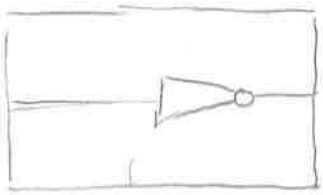
U X_1 N_2

XOR



U X_1 S_1

NOT

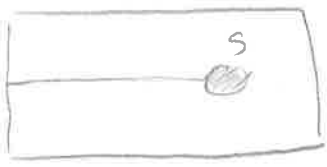


U X_1 S_2

Source

N_1 X_1 W_1

Sink



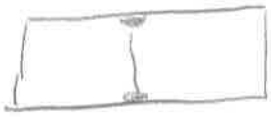
N_1 X_1 S_1

Connectors (middle = X_2)

Horizontal

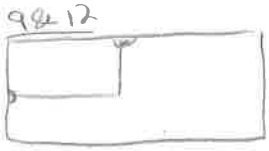
U X_2 N_1

vertical



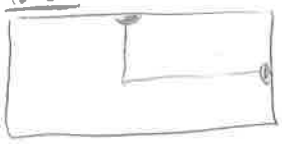
U X_2 S_1

9&12



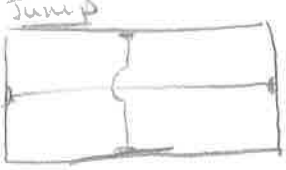
U X_2 N_2

1283



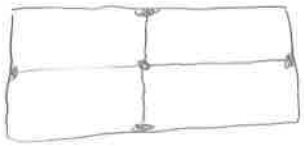
U X_2 S_2

Jump



N_1 X_2 N_1

Ultrawide

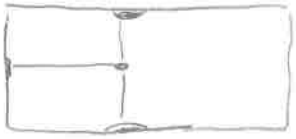


N_1 X_2 S_1

9/12/3

N_1 X_2 N_2

6/5/12



S_1 X_2 S_2

9/12 Double

S_1 X_2 N_1

1213 Double

S_1 X_2 S_1