## "Zauberling" v0.2 Functions

Prog	DIP1	DIP2	DIP3	DIP4	Function	Input 1	Input 2	Input 3	Input 4	Potentiometer 1	Potentiometer 2
0	-	-		-	Power switch and direction toggle with gradual speed	On/Off CLK	Forward	Reverse		Input Treshold	Smooth 0~5000ms
1	-	-	-	ON	1*4 input AND/NAND gate	In 1a	In 1b	In 1c	In 1d	Input 1 & 2 Treshold	Input 3 & 4 Treshold
2	-	-	ON	-	2*2 input AND/NAND gate	In 1a	In 1b	In 2a	In 2b	Input 1 & 2 Treshold	Input 3 & 4 Treshold
3	-	-	ON	ON	1*4 input OR/NOR gate	In 1a	In 1b	In 1c	In 1d	Input 1 & 2 Treshold	Input 3 & 4 Treshold
4	-	ON	-	-	2*2 input OR/NOR gate	In 1a	In 1b	In 2a	In 2b	Input 1 & 2 Treshold	Input 3 & 4 Treshold
5	-	ON	-	ON	1*4 input XOR/XNOR gate	In 1a	In 1b	In 1c	In 1d	Input 1 & 2 Treshold	Input 3 & 4 Treshold
6	-	ON	ON	-	2*2 input XOR/XNOR gate	In 1a	In 1b	In 2a	In 2b	Input 1 & 2 Treshold	Input 3 & 4 Treshold
7	-	ON	ON	ON	SR-flipflop	Set	Clock	Reset		Input 1 & 2 Treshold	Input 3 & 4 Treshold
8	ON	-	-	-	Monoflop with Reset (set time with Potentiometer)	Disable	Trigger			Input Treshold	Pulse 10~5000ms
9	ON	1		ON	Two (resettable) counters	Count 1a	Count 1b	Count 2a	Count 2b	Input 1 & 2 Treshold	Input 3 & 4 Treshold
10	ON	1	ON	-	Pulse generator / oscillator	Enable	Toggle on/off			HIGH 10~5000ms	LOW 10~5000ms
11	ON	-	ON	ON	Outputs sequencer (chase light etc.)	On/Off	On/Off CLK			Input Treshold	Time 10~5000ms
12	ON	ON	1	-	2 bit binary decoder (or I2C Nunchuk (if compiled)	CLK	bit2	bit1	bit0	Input 1 & 2 Treshold	Input 3 & 4 Treshold
13	ON	ON	-	ON	I2C Color sensor TCS34725 (if compiled) R-G-B-Y out					-	-
14	ON	ON	ON	-	Two speed-regulated motors	Power	Edge	Direction M1	Direction M2	Speed 0 ~max M1	Speed 0 ~max M2
15	ON	ON	ON	ON	Motor Demo - Min to max speed and direction M1 & M2					-	-

bit3 bit2 bit1 bit0