



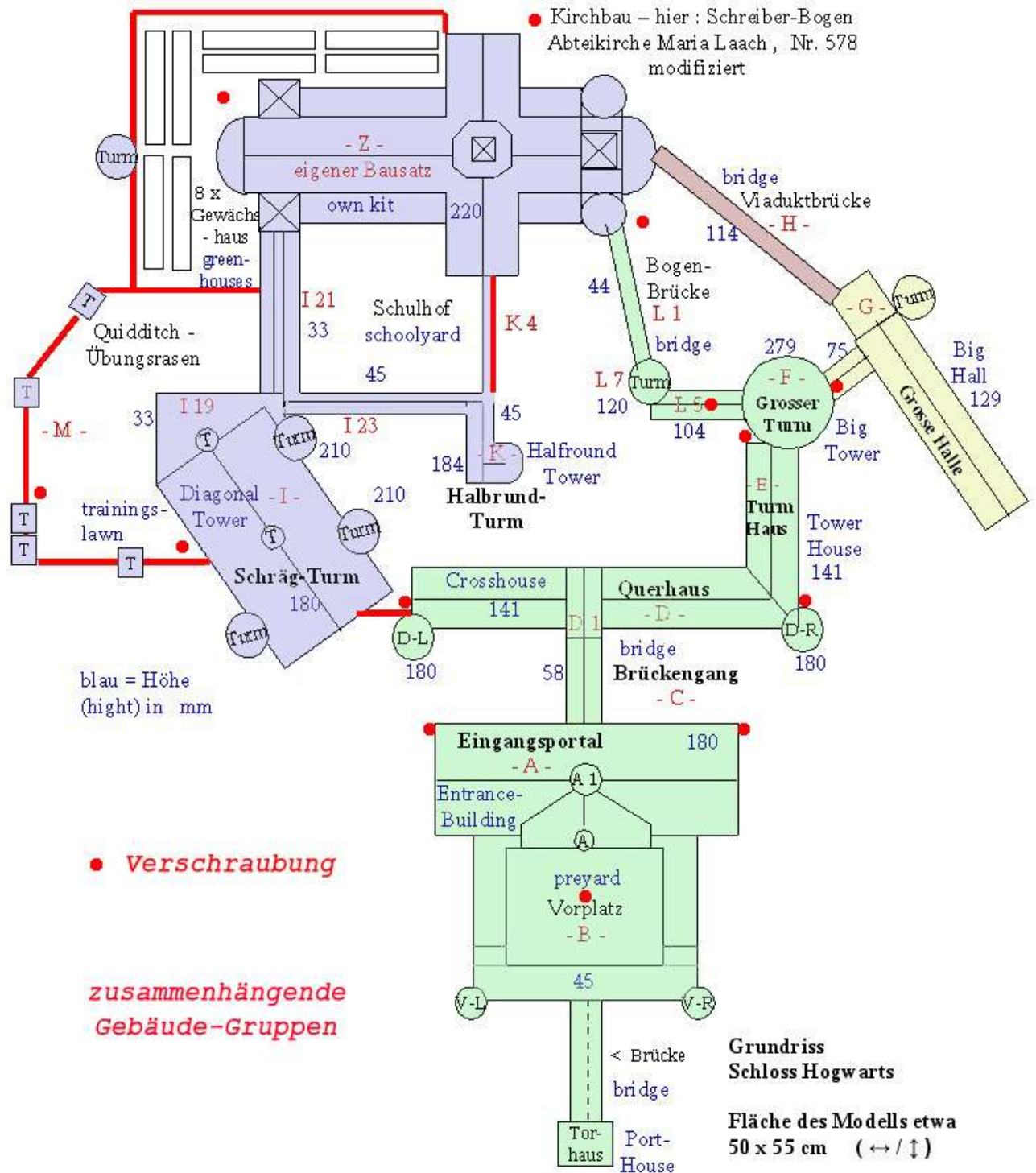
Klaus - D. Weber
 Harzhof 12
 24363 Holtsee

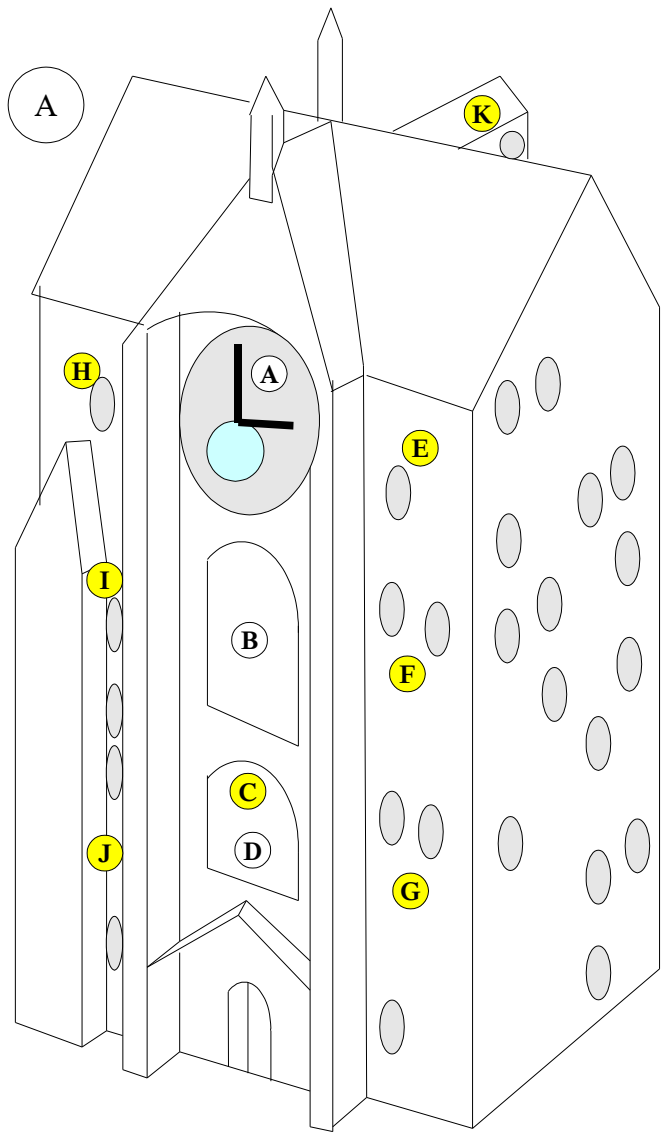
eMail : klaus-d.weber@gmx.de

gezeichnet : ab Juni 2008
 gebaut : Oktober 2008

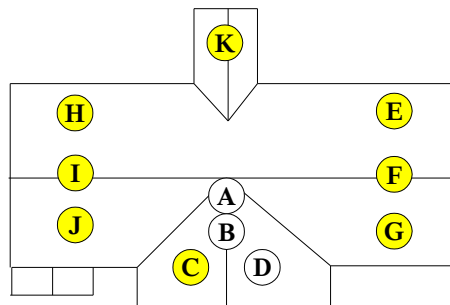
Grp	LED	Stränge	Strom - verbrauch	27	270	560
				-	-	-
				Ohm		
AB	- 12 LED	- 2 Stränge	- 40 mA	2	-	-
DE	- 22 LED	- 4 Stränge	- 80 mA	3	1	-
F	- 18 LED	- 3 Stränge	- 60 mA	3	-	-
G	- 18 LED	- 3 Stränge	- 60 mA	3	-	-
I	- 18 LED	- 3 Stränge	- 60 mA	3	-	-
I2	- 6 LED	- 1 Strang	- 20 mA	1	-	-
K	- 6 LED	- 1 Strang	- 20 mA	1	-	-
L	- 6 LED	- 1 Strang	- 20 mA	1	-	-
Z	- 30 LED	- 5 Stränge	- 100 mA	5	-	-
HH	- 2 LED	- 1 Strang	- 20 mA	-	-	1
138 LED - 24 Stränge 400 mA				22	1	1

HH = Hagrid's Hütte



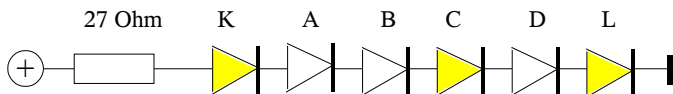


○ LED, weiss ● LED, gelb

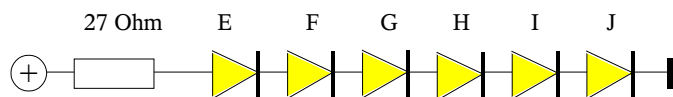


A B

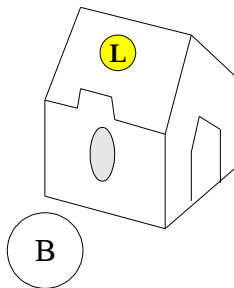
**Eingangsturm
+
Brückenhaus**

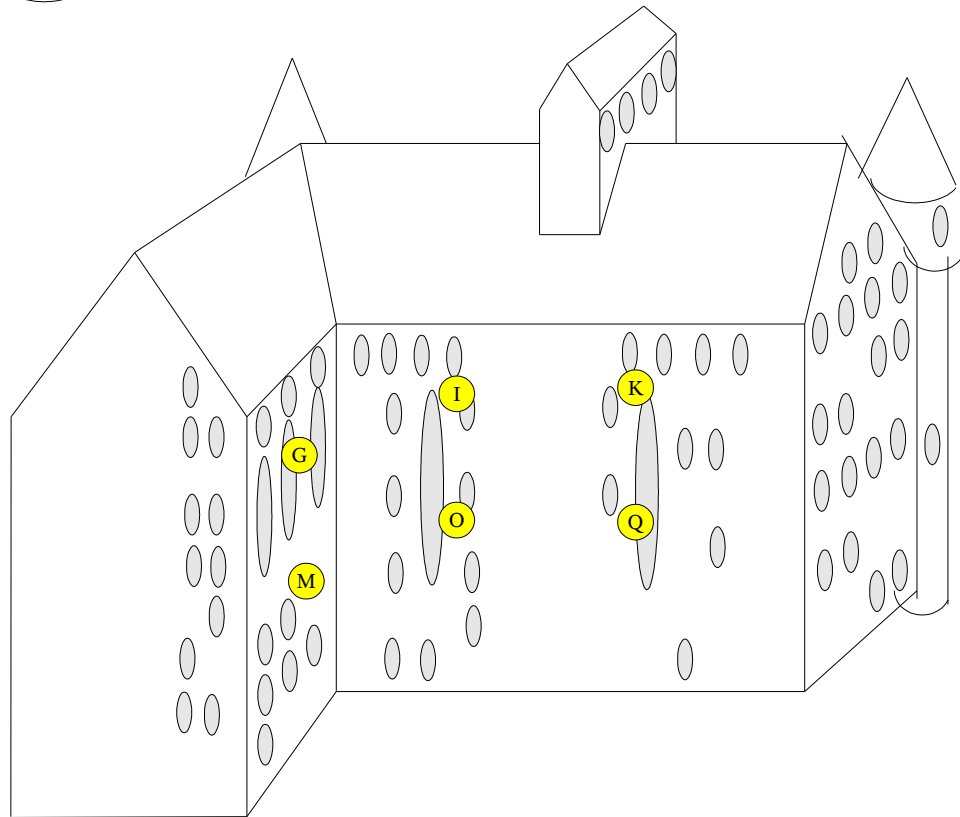
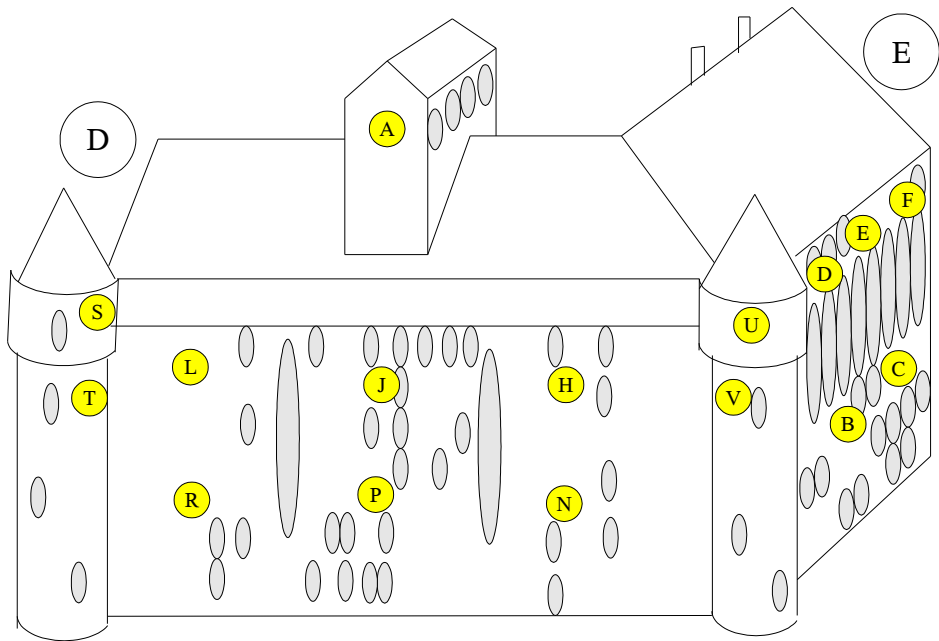


$U = 15\text{ V} =$

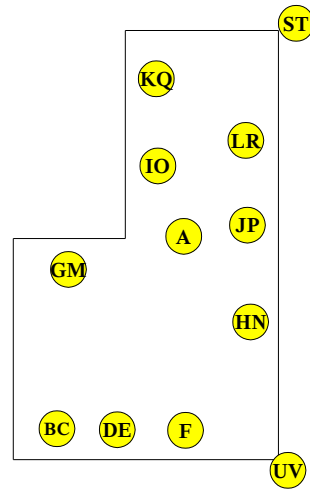


A + B + D = 5 mm, weiss
 C = 5 mm, gelb
 (Rest) = 3 mm, gelb - 2,1 V / 20 mA





○ LED, weiss ● LED, gelb

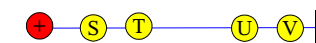
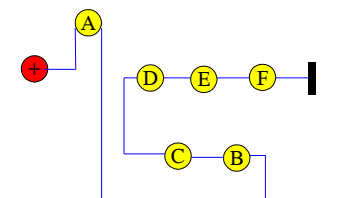
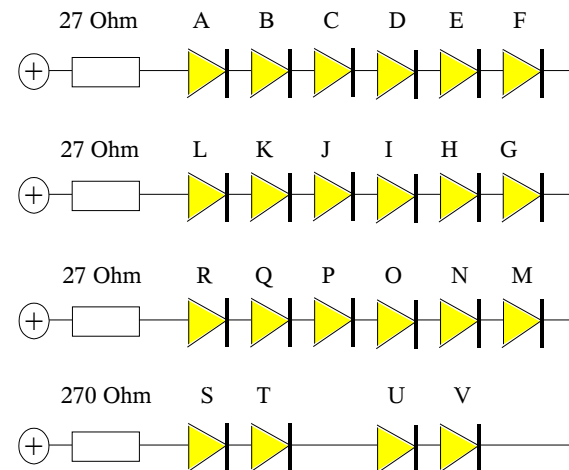
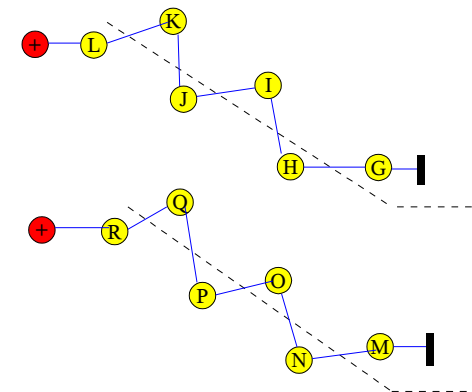


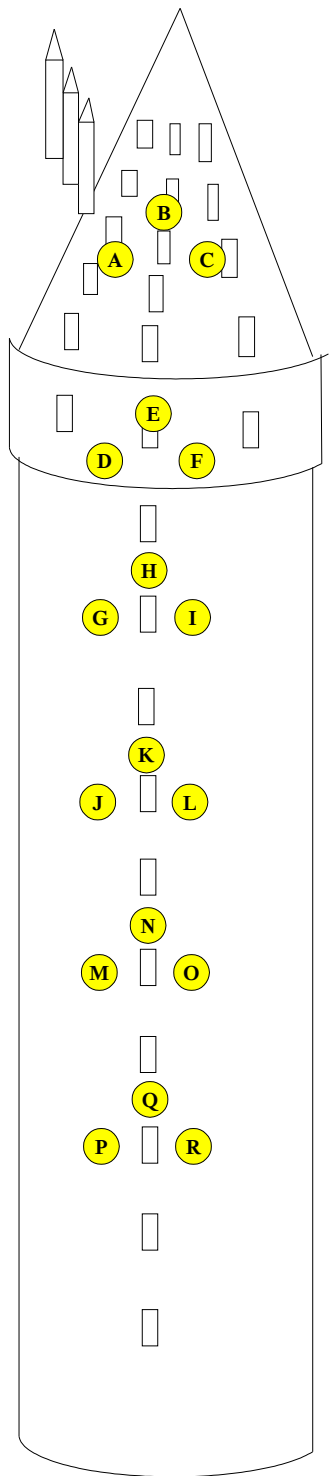
DE

**Querhaus
+
Turmhaus**

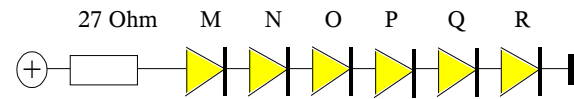
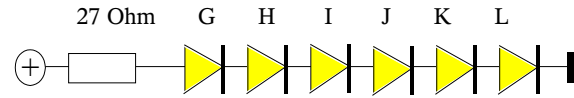
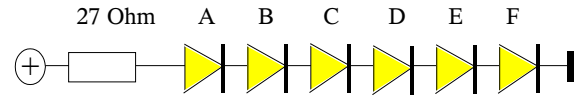
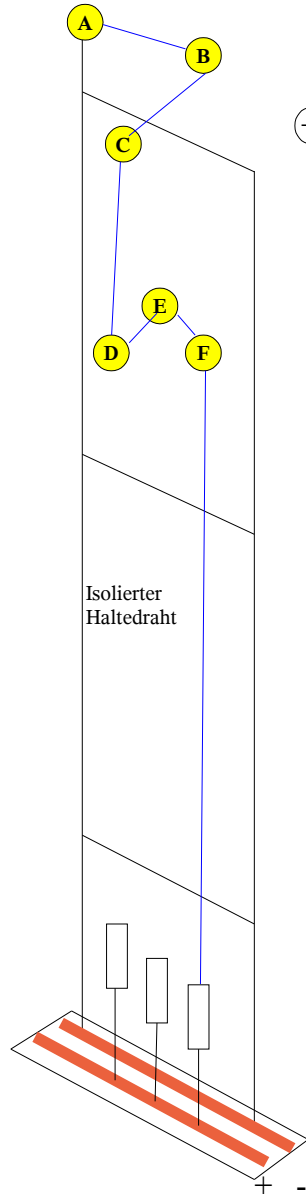
U = 15 V =

alle LEDs = 3 mm, gelb - 2,1 V / 20 mA

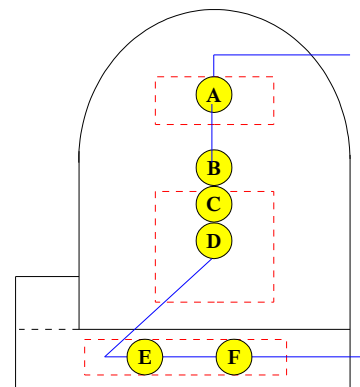




F
Grosser Turm

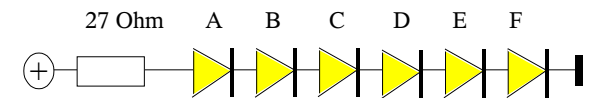
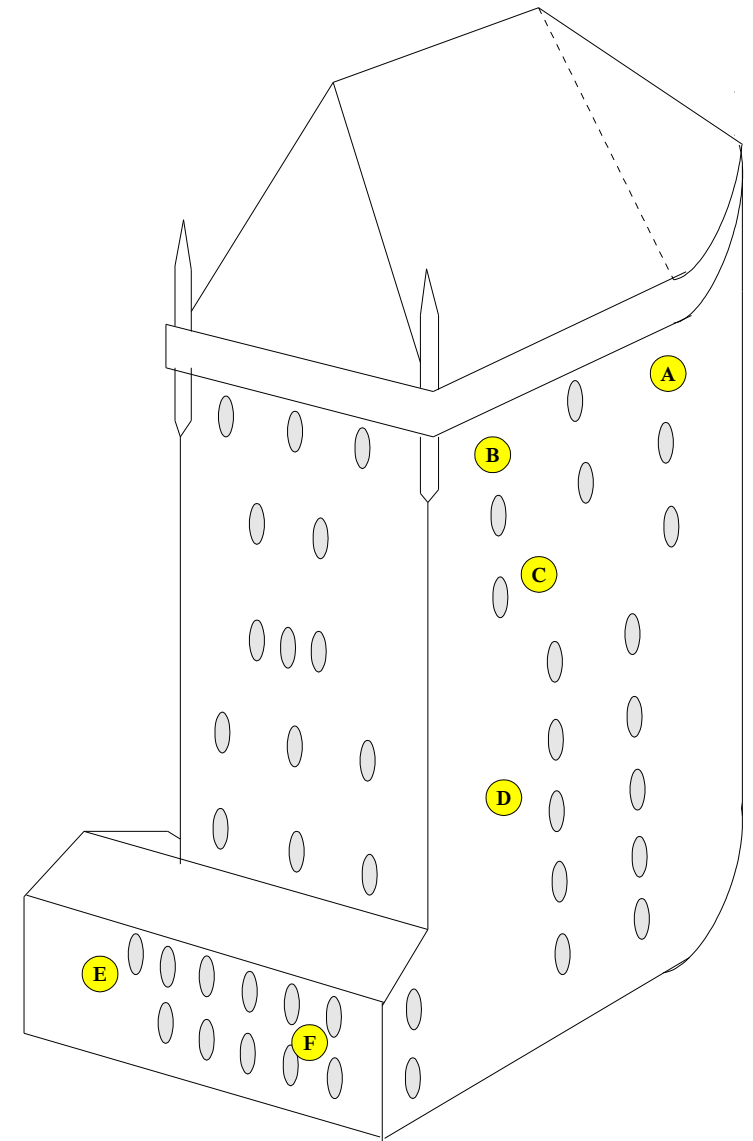


$U = 15\text{ V} =$
alle LEDs = 3 mm, gelb - 2,1 V / 20 mA



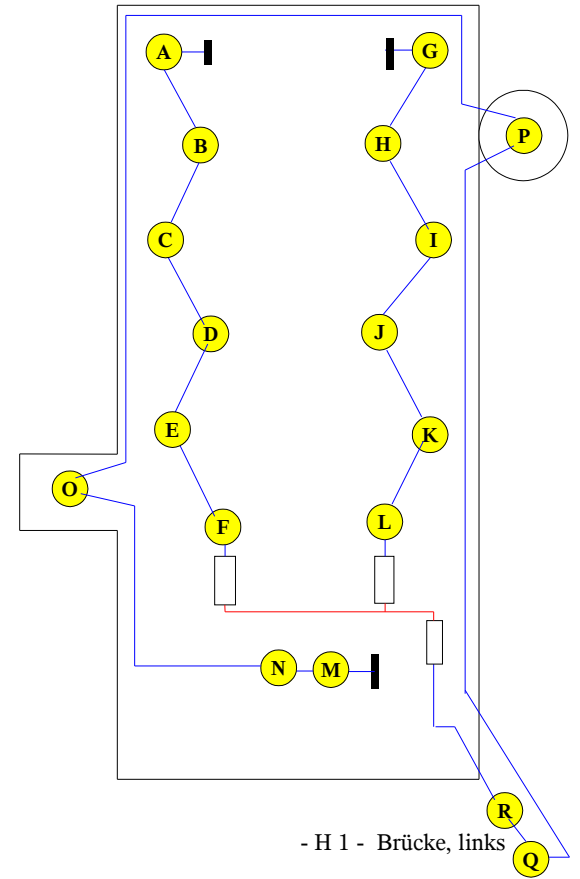
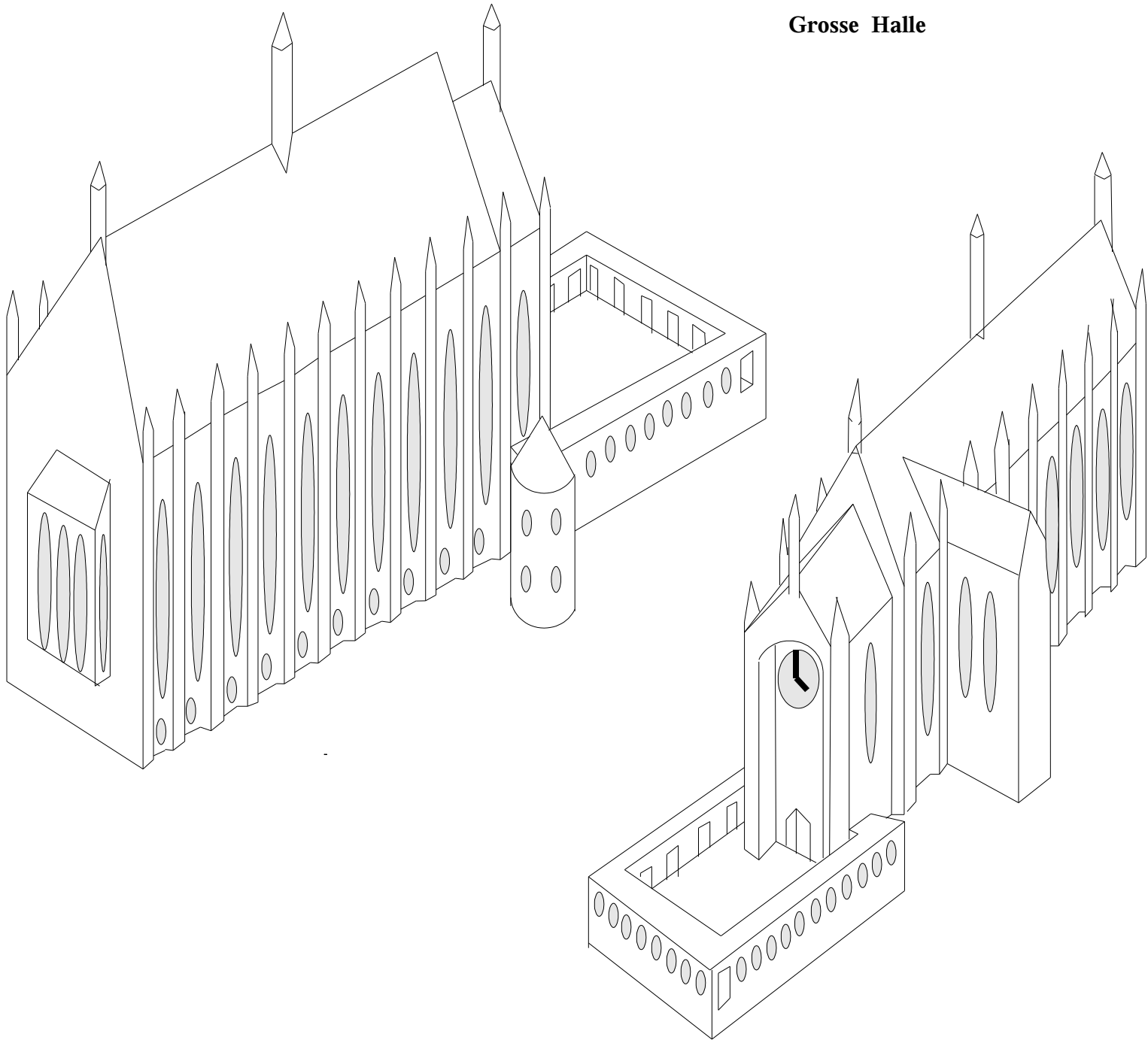
$U = 15\text{ V} =$
alle LEDs = 3 mm, gelb - 2,1 V / 20 mA

K
Halbrund-Turm



G

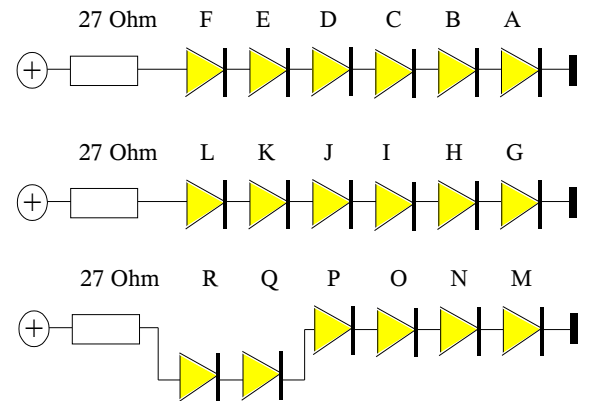
Grosse Halle

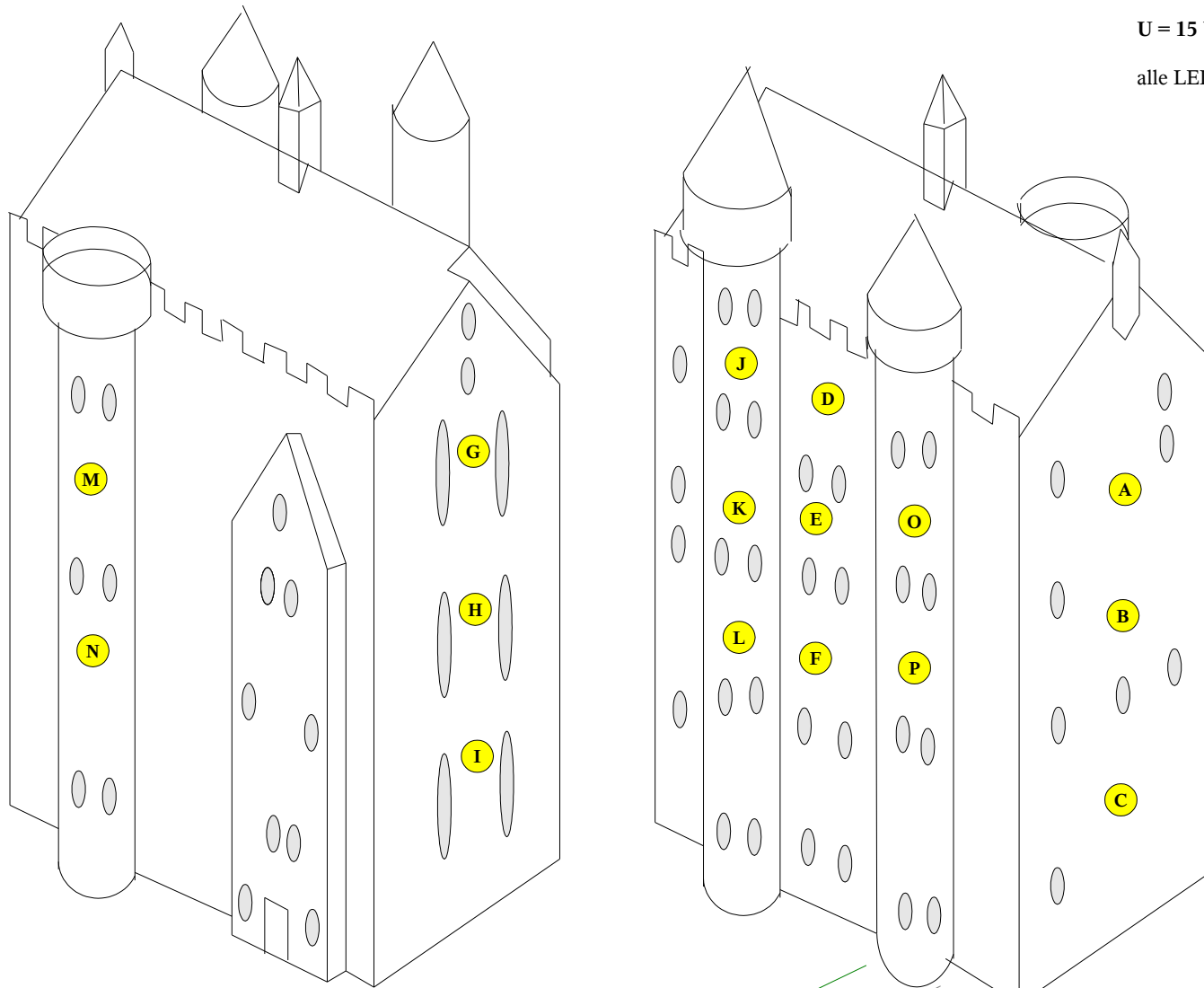


- H 1 - Brücke, links

$U = 15\text{ V} =$

alle LEDs = 3 mm, gelb - 2,1 V / 20 mA



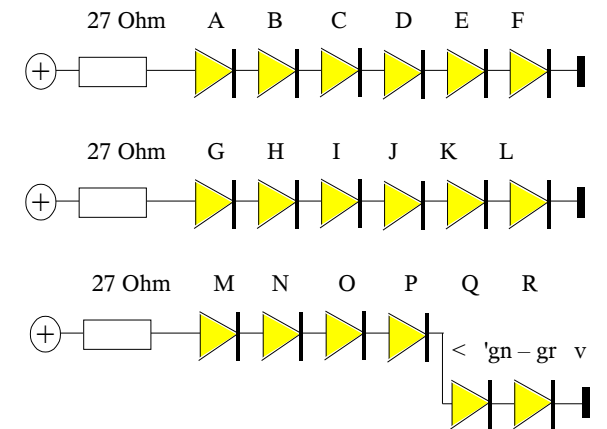
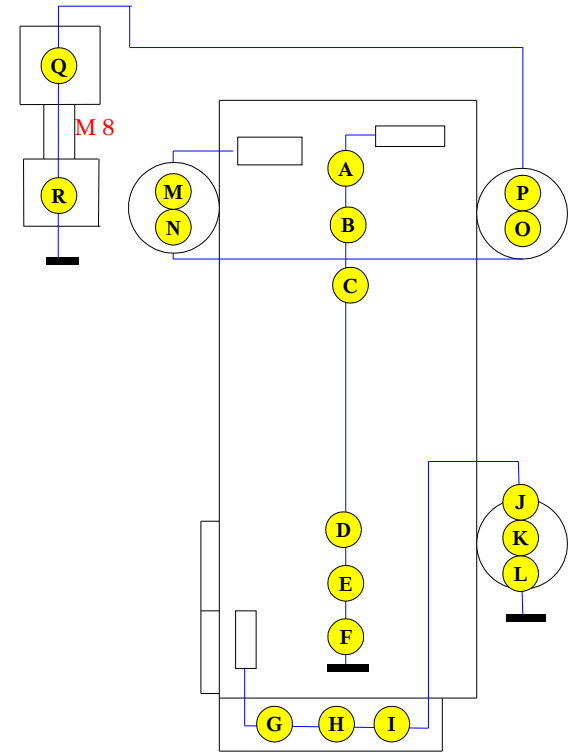
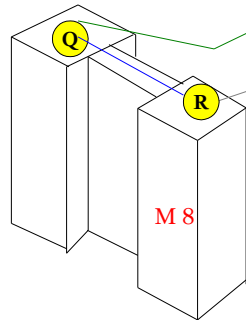


U = 15 V =

alle LEDs = 3 mm, gelb - 2,1 V / 20 mA

I

Schräg-Turm <45°

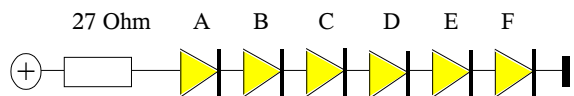
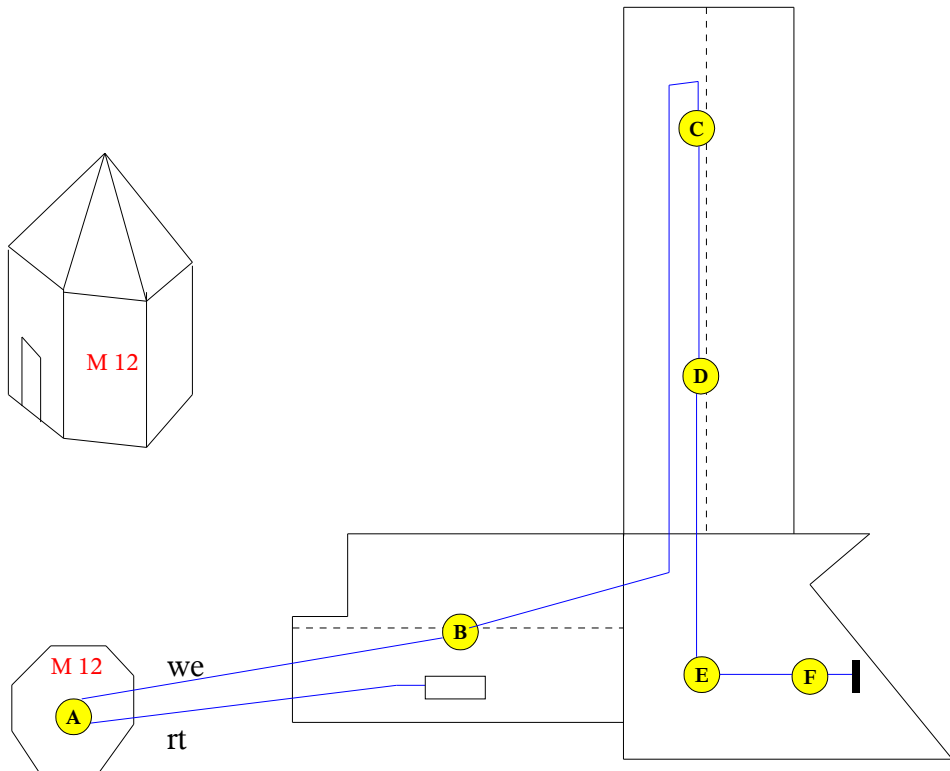


U = 15 V =

alle LEDs = 3 mm, gelb - 2,1 V / 20 mA

I 2

kleine Gebäude

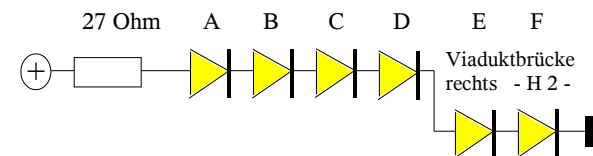
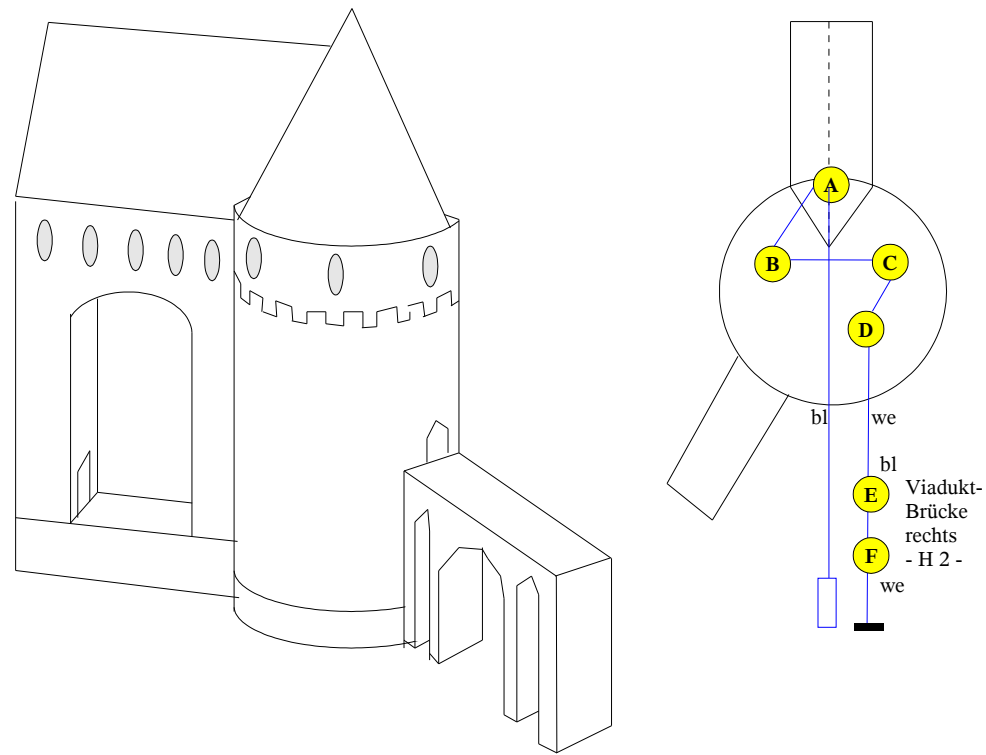


U = 15 V =

alle LEDs = 3 mm, gelb - 2,1 V / 20 mA

L

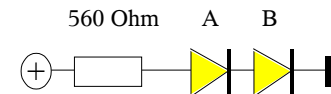
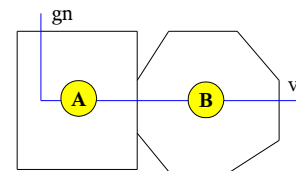
kleiner Turm + Brücke



U = 15 V =

alle LEDs = 3 mm, gelb - 2,1 V / 20 mA

Hagrid's Hütte

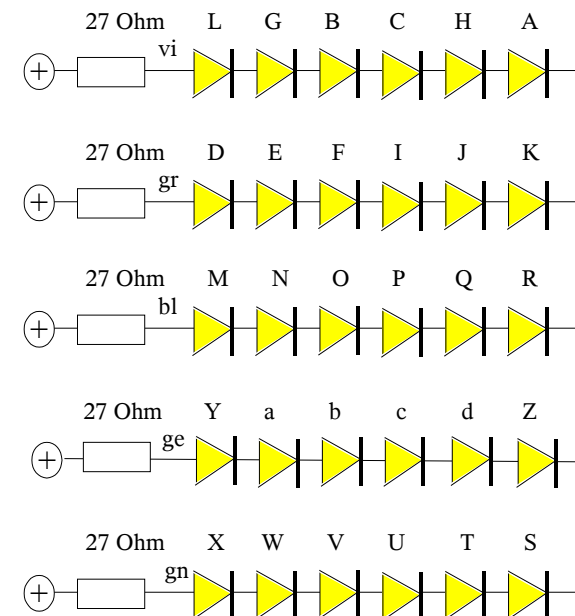
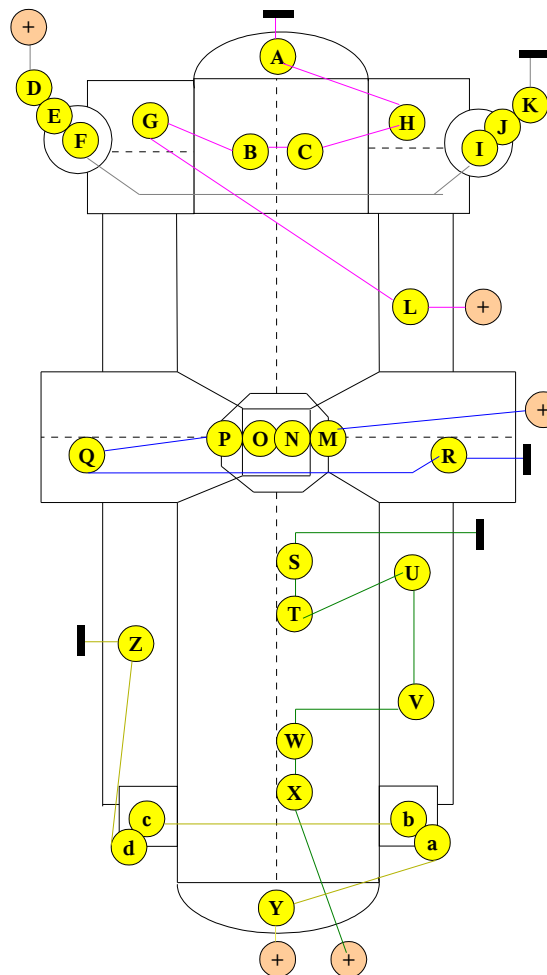
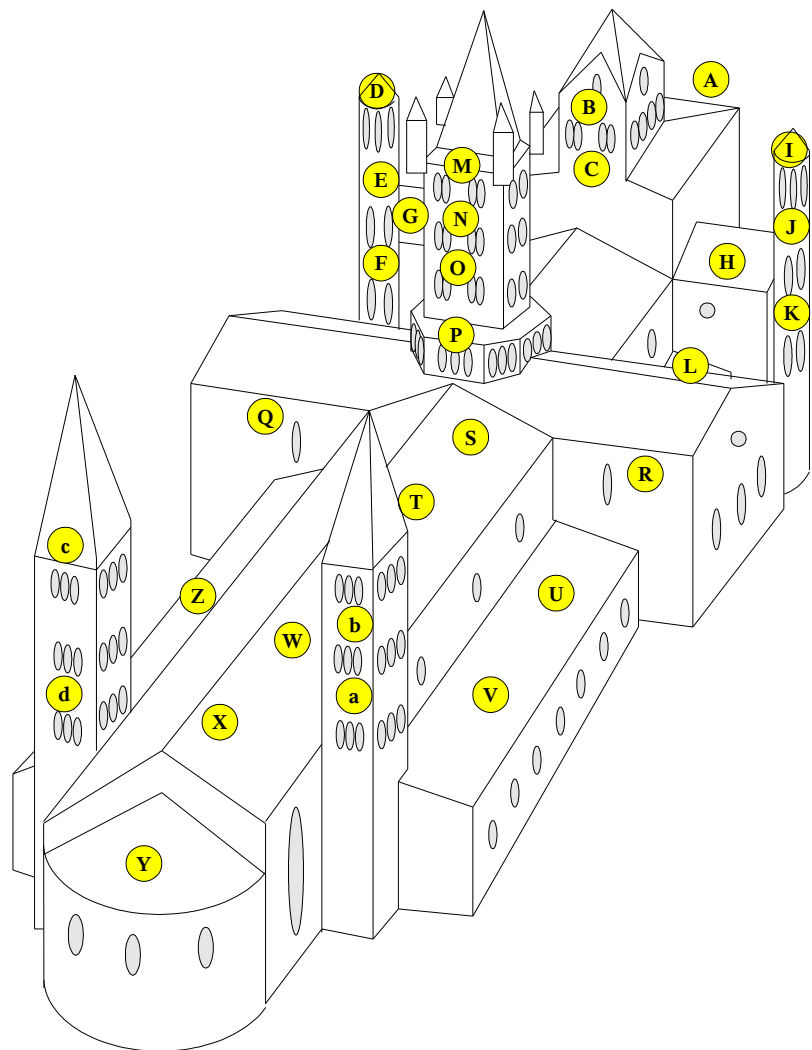


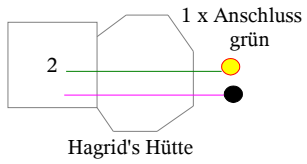
**Abteikirche
Maria Laach
(modifiziert)
Schreiber-Bogen
Nr. 578**

U = 15 V =

alle LEDs = 3 mm, gelb - 2,1 V / 20 mA

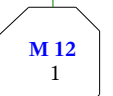
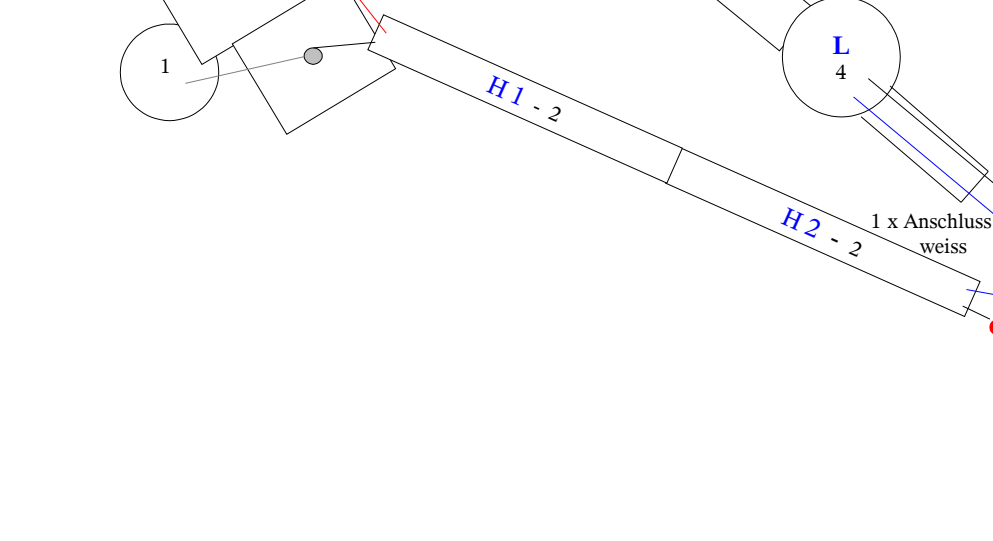
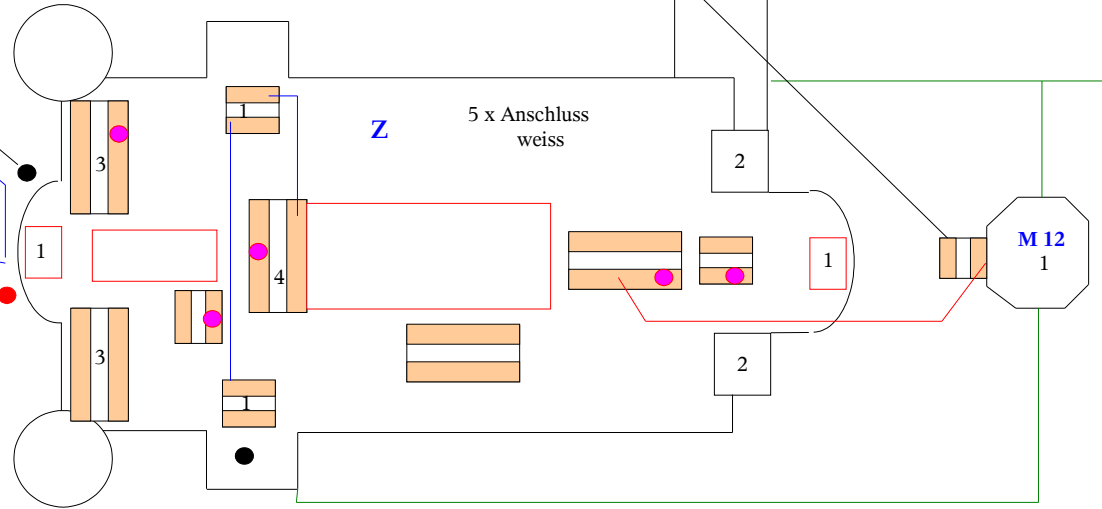
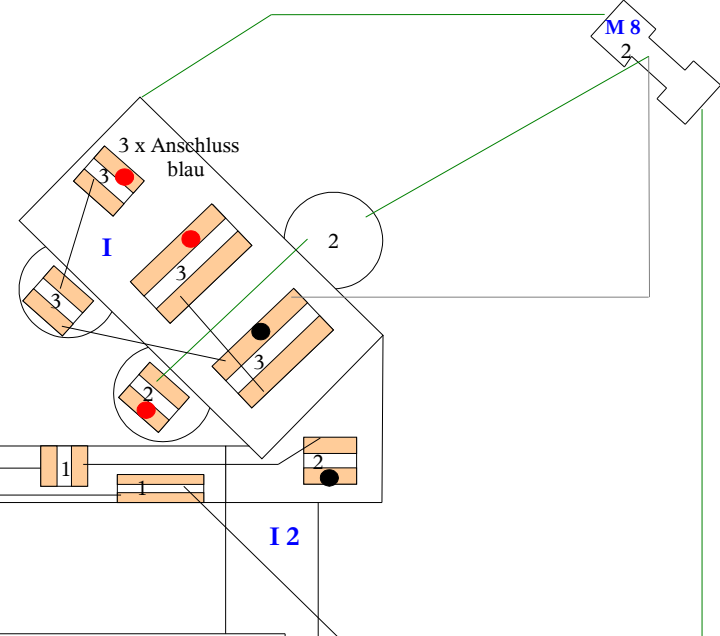
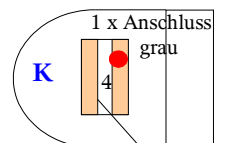
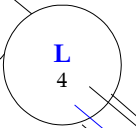
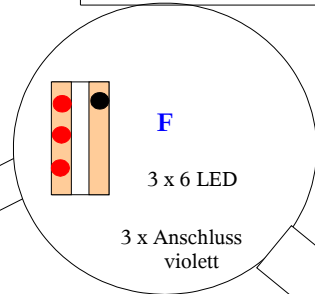
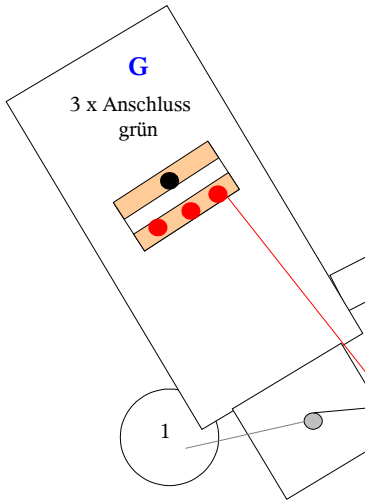
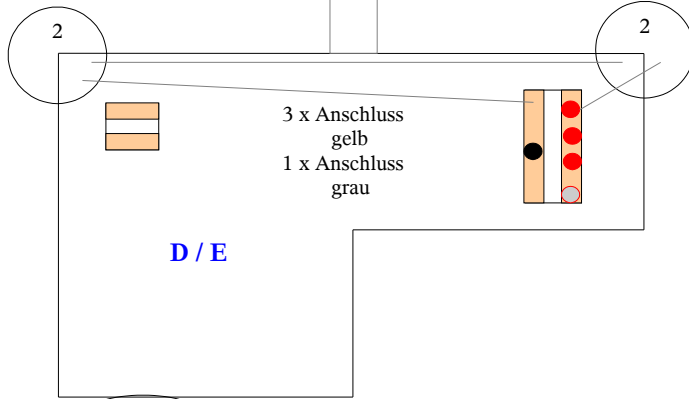
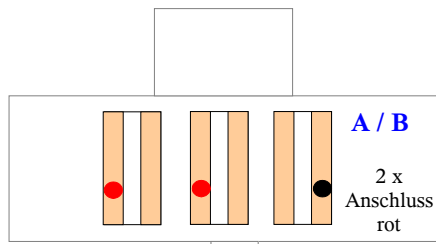
hier : 30 LEDs

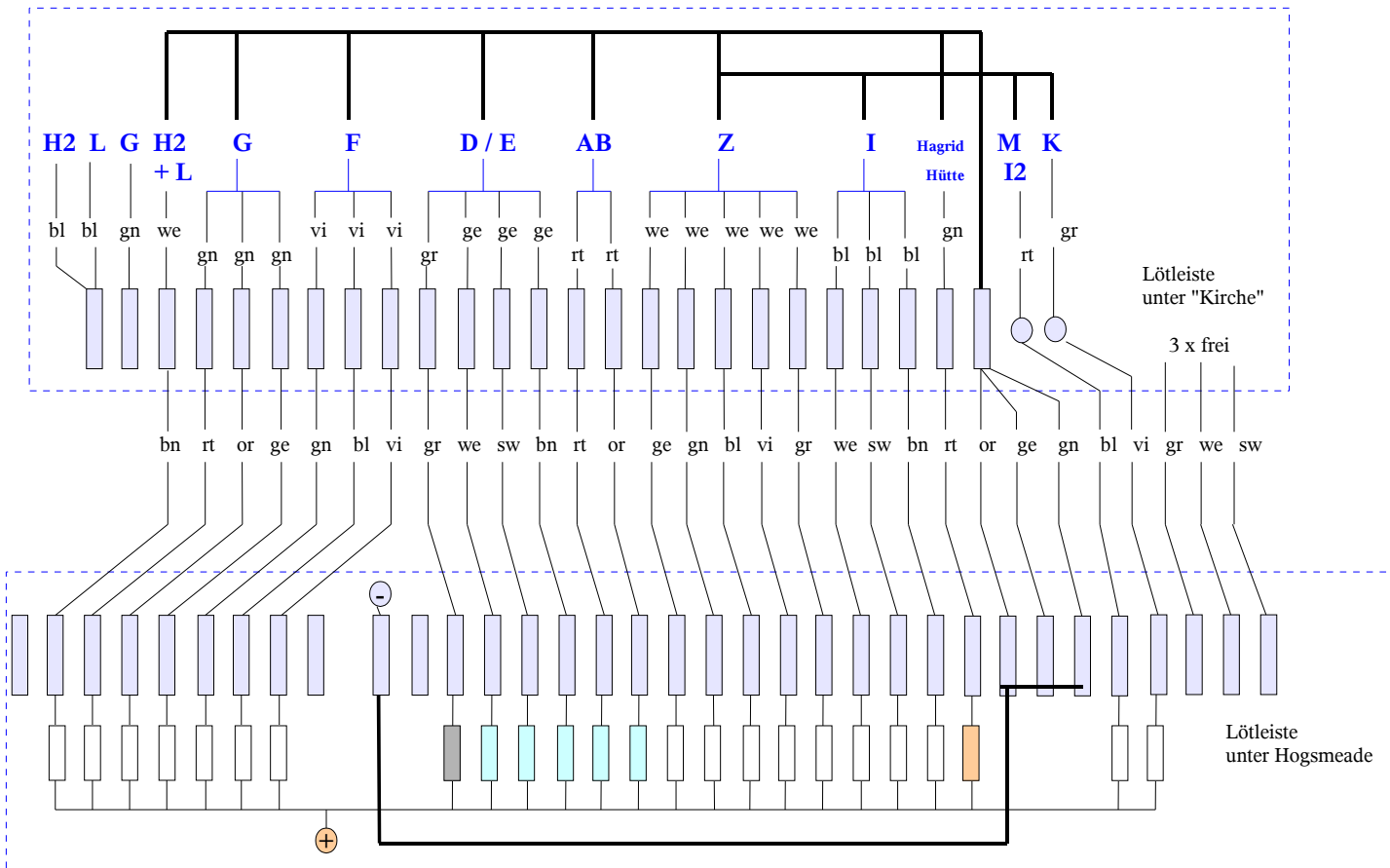




Vorwiderstand:

	A	DE	F	G	L	I	K	Z	gesamt
● 27 Ohm	2	3	3	3	1	2	1	0	> 15
● 33 Ohm	-	-	-	-	-	-	-	5	> 5
● 270 Ohm	-	1	-	-	-	-	-	-	> 1
● 560 Ohm	(Hagrid's Hütte / Cottage)								> 1
● Masse									





Betriebsspannung :
+ 13 V

Vorwiderstand :

27 Ohm

33 Ohm

270 Ohm

560 Ohm

Lötanschlüsse
 (Streifen)