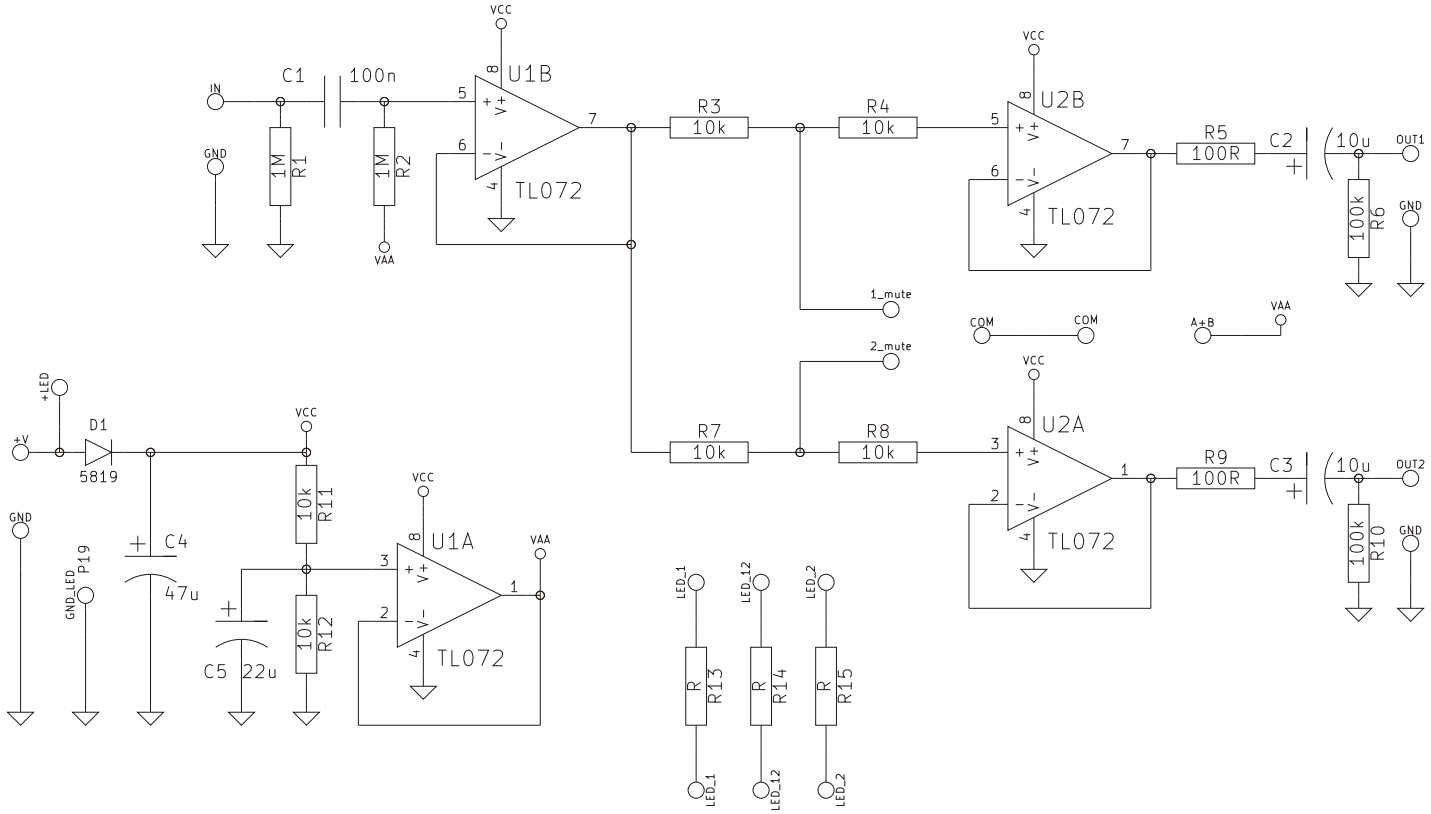
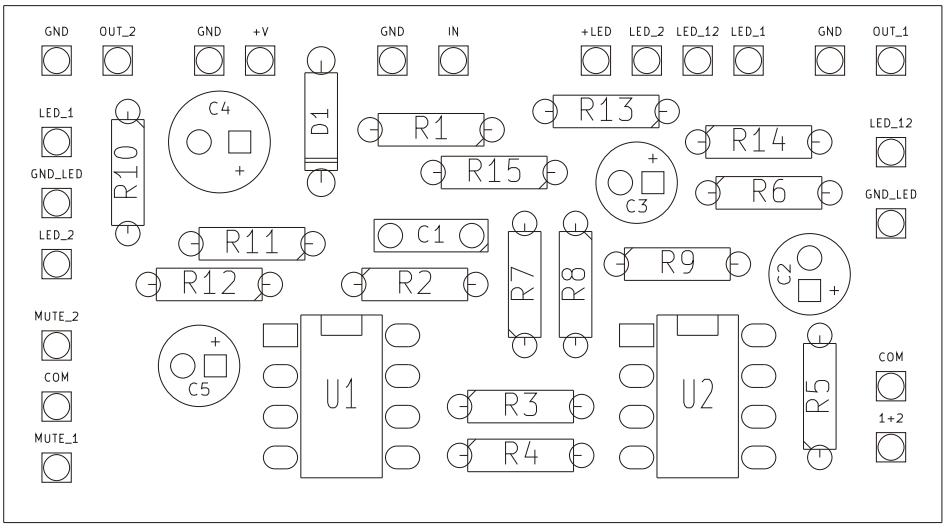
ABY buffered switch schematic: **17.03.2019**

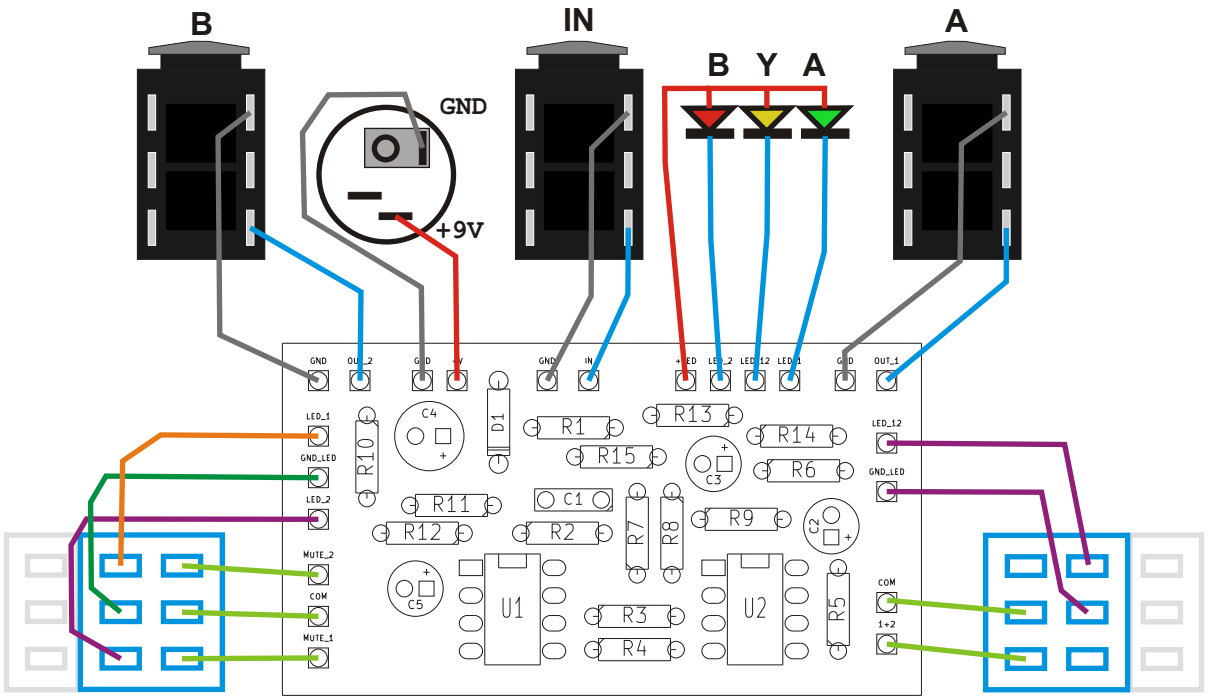


PCB parts placement diagram:



R1 1M	**C1 100n**
R2 1M	**C2 10u**
R3 10k	**C3 10u**
R4 10k	**C4 47u**
R5 100R	**C5 22u**
R6 100k	
R7 10k	**D1 5819**
R8 10k	**U1 TL072**
R9 100R	**U2 TL072**
R10 100k	
R11 10k	
R12 10k	
R13 470R	
R14 510R	
R15 2k2	

Wiring (bottom view):



Use metal enclosure connected to ground.
Power supply: 9V DC

Bill of materials:

Resistors:

100R	2pcs.	"R5 R9"
470R	1pcs.	"R13"
510R	1pcs.	"R14"
2k2	1pcs.	"R15"
10k	6pcs.	"R3 R4 R7 R8 R11 R12"
100k	2pcs.	"R6 R10"
1M	2pcs.	"R1 R2"

Other:

Footswitch	2pcs.
JACK socket	3pcs.
DC socket 5.5/2.1	1pcs.

Capacitors:

100n	1pcs.	"C1"

Electrolytic capacitors:

10u	2pcs.	"C2 C3"
22u	1pcs.	"C5"
47u	1pcs.	"C4"

Semiconductors:

1N5819	1pcs.	"D1"
TL072	2pcs.	"U1 U2"
LED	3pcs.	"RED GRN YEL"

Resistor color code:

390 x 10Ω = 3,9kΩ

Color	Band 1	Band 2	Band 3	Multiplier	Tolerance
Black	0	0	0	1 Ω	
Brown	1	1	1	10 Ω	1%
Red	2	2	2	100 Ω	2%
Orange	3	3	3	1k Ω	
Yellow	4	4	4	10 kΩ	
Green	5	5	5	100 kΩ	0,5%
Blue	6	6	6	1 MΩ	0,25%
Purple	7	7	7	10 MΩ	0,1%
Gray	8	8	8	100 MΩ	0,05%
White	9	9	9	1 GΩ	
Gold				0,1 Ω	5%
Silver				0,01 Ω	10%

Capacitors markings:

471 = 47 x 10^1 pF = 470pF
472 = 47 x 10^2 pF = 4700pF = 4,7nF
473 = 47 x 10^3 pF = 47000pF = 47nF
474 = 47 x 10^4 pF = 470000pF = 470nF

100pF	100p	100	101
220pF	220p	220	221
4,7nF	4n7	0.0047	472
10nF	10n	0.01	103
100nF	100n	0.1	104
220nF	220n	0.22	224
470nF	470n	0.47	474
1000nF	1uF	1u	105