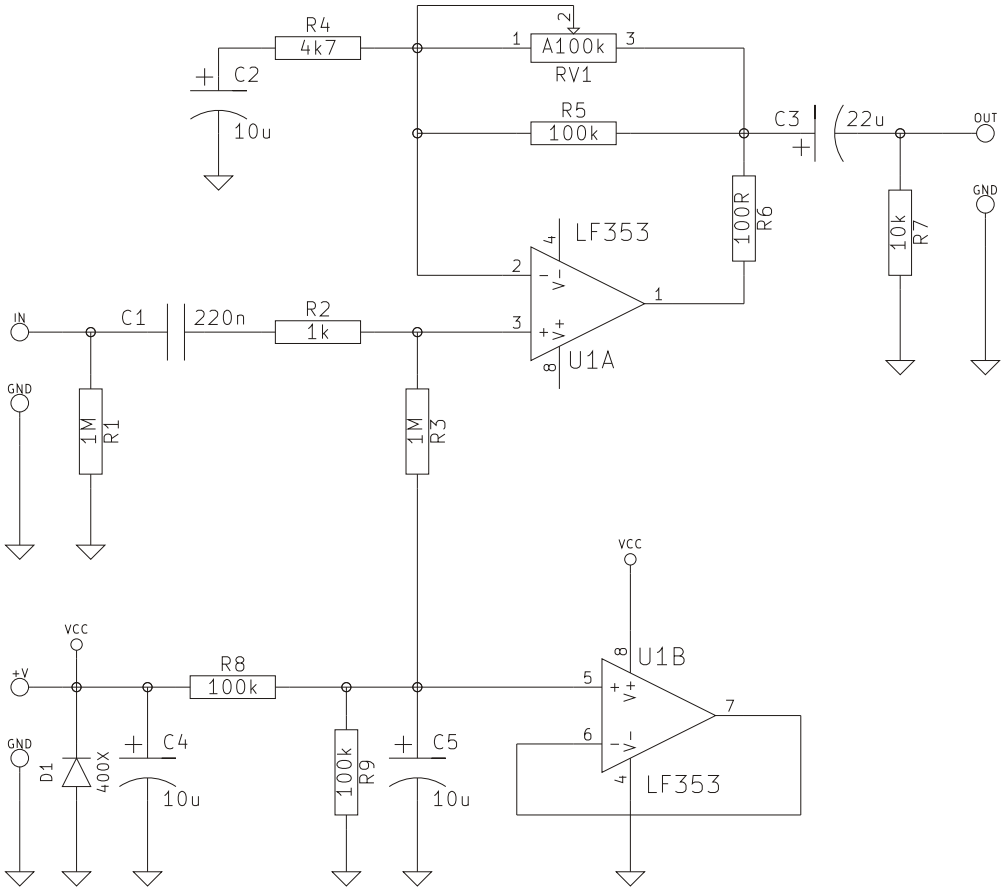
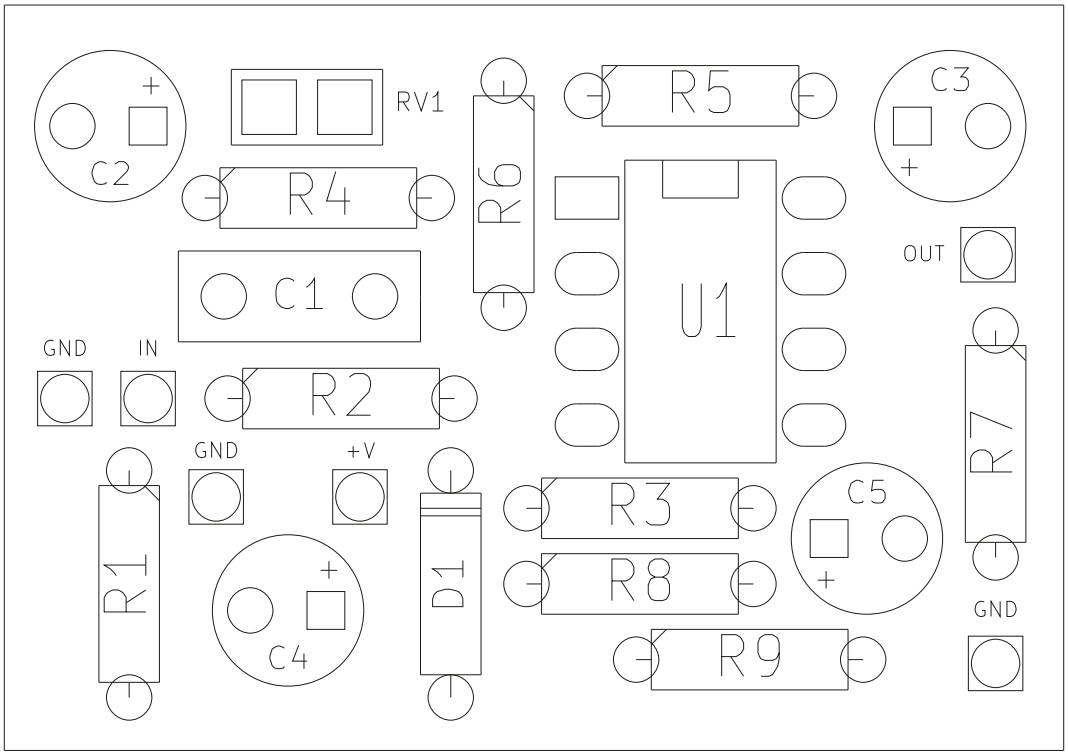
MC401® schematic: **20.02.2019**



PCB parts placement diagram:



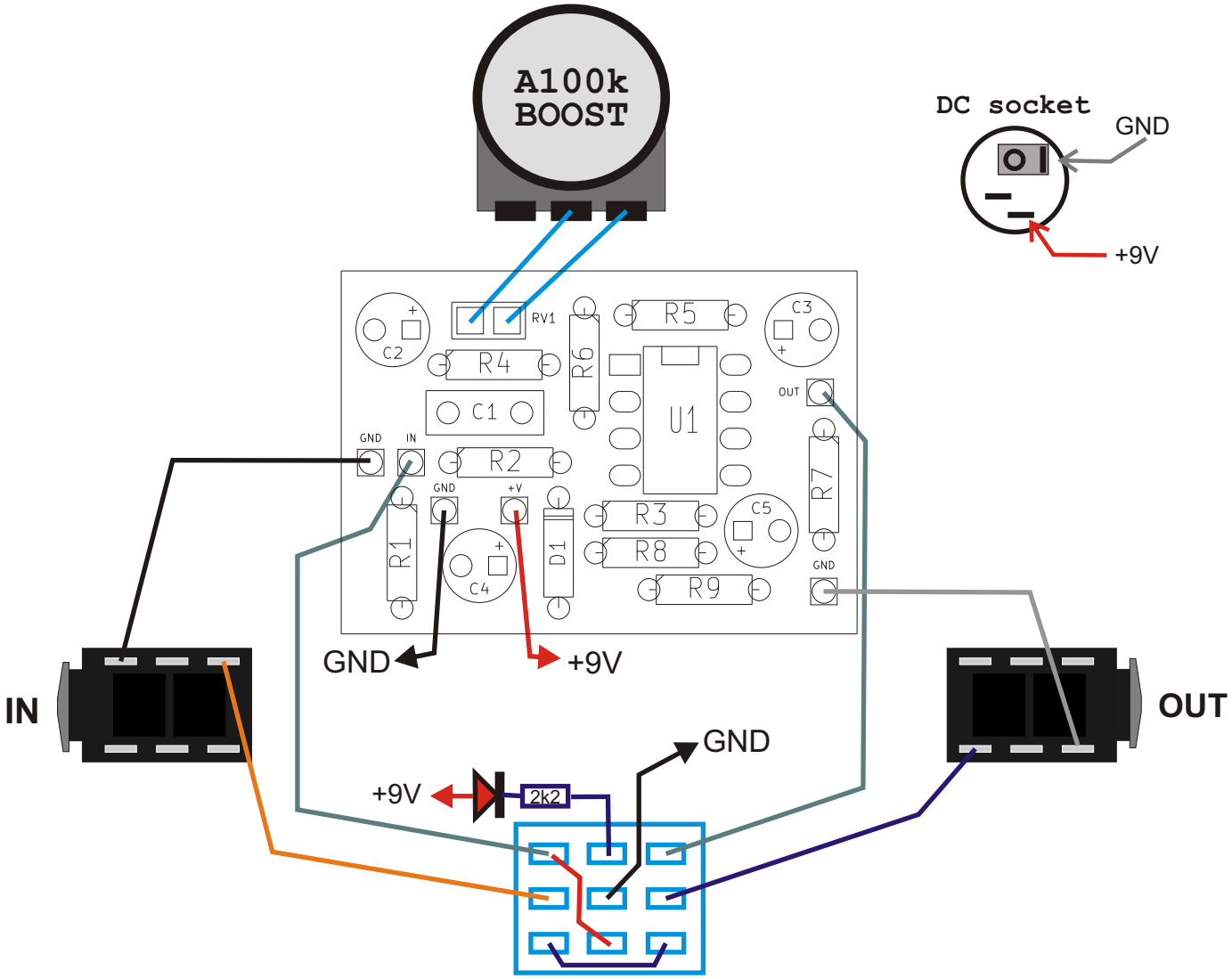
R1 1M
R2 1k
R3 1M
R4 4k7
R5 100k
R6 100R
R7 10k
R8 100k
R9 100k

RV1 A100k

C1 220n
C2 10u
C3 22u
C4 10u
C5 10u

U1 LF353
D1 1N400X

Wiring (bottom view):



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

Bill of materials:

Resistors:
100R 1pcs. "R6"
1k 1pcs. "R2"
2k2 1pcs. "LED"
4k7 1pcs. "R4"
10k 1pcs. "R7"
100k 3pcs. "R5 R8 R9"
1M 2pcs. "R1 R3"

Potentiometers:
A100k 1pcs.

Capacitors:
220n 1pcs. "C1"

Electrolytic capacitors:
10u 3pcs. "C2 C4 C5"
22u 1pcs. "C3"

Semiconductor:
1N400X 1pcs. "D1"
LF353 1pcs. "U1"
LED 1pcs.

Other:
Footswitch 3PDT 1pcs.
Knobs 1pcs.
JACK socket 2pcs.
DC socket 5.5/2.1 1pcs.

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