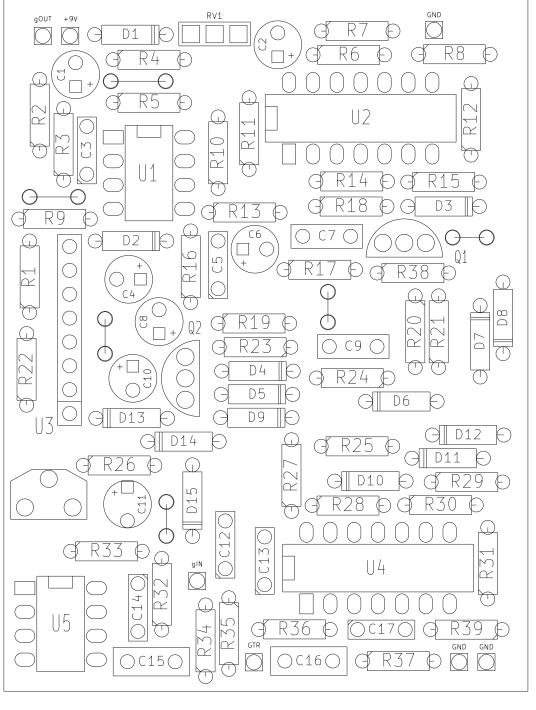


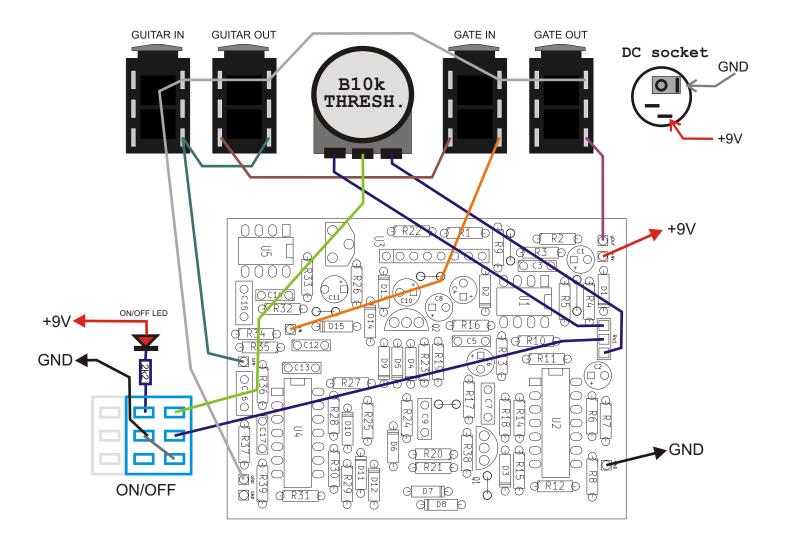
PCB parts placement diagram:



C1	22u	RV1	B10k	D1	1N400X			
C2	10u	RV2	Tr.1M	D2	1N5819			
C3	22p			D3	1N4148			
C4	22u	U1	LF353	D4	1N4148			
C5	100n	U2	LF347	D5	1N4148			
C6	10u	U3	THAT2181C	D6	1N4148			
C7	330n	U4	LF347	D7	1N4148			
C8	100u	U5	LF353	D8	1N4148			
C9	330n			D9	1N4148			
C10	1u	Q1	2N5551	D10	1N4148			
C11	10u	Q2	2N2222A	D11	1N4148			
C12	100n			D12	1N4148			
C13	100n			D13	1N4148			
C14	100p			D14	1N4148			
C15	470n			D15	1N4148			
C16	470n							
C17	100p	www.guitar-electronics.eu/en_US/index						

R1 560R R2 100R 20k R3 R4 100k 100k R5 R6 47k R7 100k R8 22k R9 750R R10 20k R11 20k R12 20k R13 20k R14 12k 20k R15 R16 20k R17 10M R18 100k R19 10k R20 12k 5k1 R21 R22 1k R23 200k R24 1M R25 5k1 R26 20k R27 150k R28 51k R29 10k R30 10k R31 10M R32 1k R33 1M R34 1M R35 1M R36 1k R37 1M R38 10M R39 10M

Wiring (bottom view):



Set volume level with trimmer. Use metal enclosure connected to ground.

Power supply: 9V DC

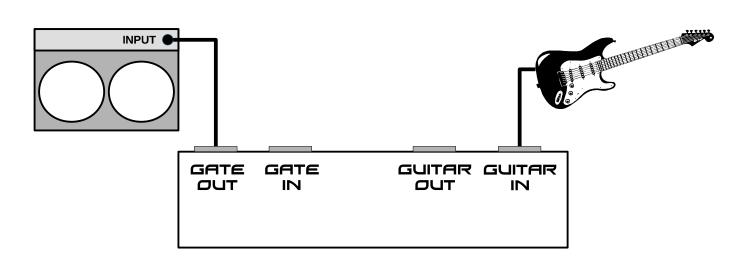
Bill of materials:

```
Resistors:
100R 1pcs. "R2"
560R 1pcs. "R1"
750R 1pcs. "R9"
1k
      3pcs. "R22 R32 R36"
2k2
      1pcs. "LED"
5k1
      2pcs. "R21 R25"
10k 3pcs. "R19 R29 R30"
12k
      2pcs. "R14 R20"
20k 8pcs. "R3 R10 R11 R12 R13 R15 R16 R26"
      1pcs. "R8"
22k
     1pcs. "R6"
47k
51k
     1pcs. "R28"
100k 4pcs. "R4 R5 R7 R18"
150k 1pcs. "R27"
      1pcs. "R23"
200k
1M
      5pcs. "R24 R33 R34 R35 R37"
10M
      4pcs. "R17 R31 R38 R39"
                          Semiconductors:
Potentiometers:
                                           "D1"
                          1N4007
                                    1pcs.
      1pcs. "Thershold"
B10k
                                    1pcs. "D2"
                          1N5819
1M Trimpot 1pcs.
                          1N4148
                                    13pcs. "D3 D4 D5 D6 D7 D8
                                    D9 D10 D11 D12 D13 D14 D15"
Capacitors:
                          2N5551
     1pcs. "C3"
                                    1pcs. "Q1"
22p
                          2N2222A
                                           "02"
100p 2pcs. "C14 C17"
                                    1pcs.
100n 3pcs. "C5 C12 C13"
                          LF353
                                    2pcs. "U1 U5"
                                           "U2 U4"
                          LF347
                                    2pcs.
330n 2pcs. "C7 C9"
                          THAT2181C 1pcs.
                                           "U3"
470n 2pcs. "C15 C16"
                          LED
                                    1pcs.
Electrolytic capacitors:
      1pcs. "C10"
                          Other:
1u
                          Knob
                                               1pcs.
10u
     3pcs. "C2 C6 C11"
     2pcs. "C1 C4"
                          JACK socket
                                               4pcs.
22u
100u 1pcs. "C8"
                          DC socket 5.5/2.1
                                               1pcs.
                          Footswitch DPDT/3PDT 1pcs.
```

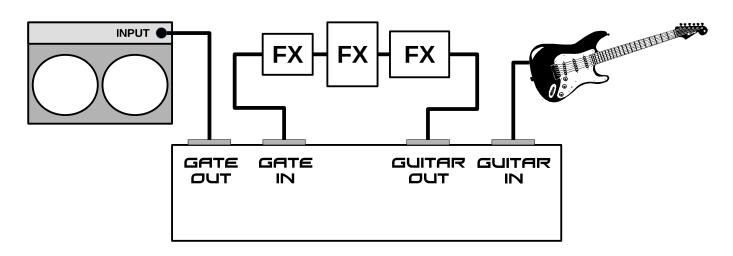
Wires

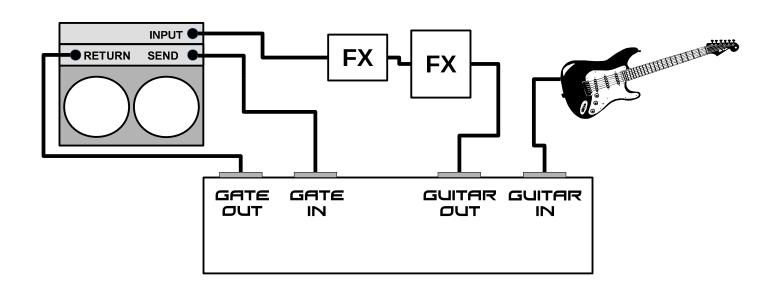
1pcs.

2 wires connections:



4 wires connections:





Resistor color code:



 $390 \times 10\Omega = 3.9 \text{k}\Omega$

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 ΜΩ	0,25%
Purple	7	7	7	10 ΜΩ	0,1%
Gray	8	8	8	100 ΜΩ	0,05%
White	9	9	9	1 GΩ	
Gold				0,1 Ω	5%
Silver				0,01 Ω	10%

Capacitors markings:

```
471 = 47 \times 10^{1} pF = 470pF
 472 = 47 \times 10^2 \text{ pF} = 4700 \text{pF} = 4,7 \text{nF}
 473 = 47 \times 10^{3} \, \text{pF} = 47000 \, \text{pF} = 47 \, \text{nF}
 474 = 47 \times 10^4 \, \text{pF} = 470000 \, \text{pF} = 470 \, \text{nF}
 100pF =
              100p
                             100
                                    = 101
 220pF = 220p =
                             220
                                    = 221
 4,7nF = 10nF =
                      = 0.0047
                                    = 472
               4n7
                      = 0.01
                                    = 103
                10n
 100nF = 100n = 0.1
220nF = 220n = 0.22
                                   = 104
= 224
 470nF = 470n = 0.47 = 474
1000nF = 1uF = 1u
                                    =
                                        105
```