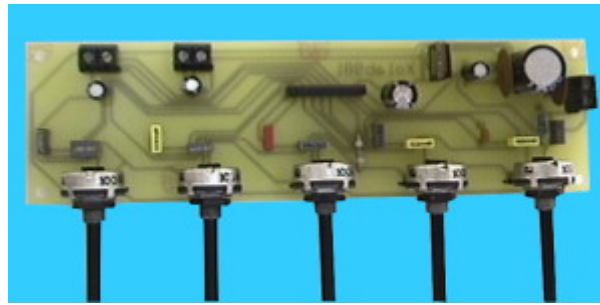
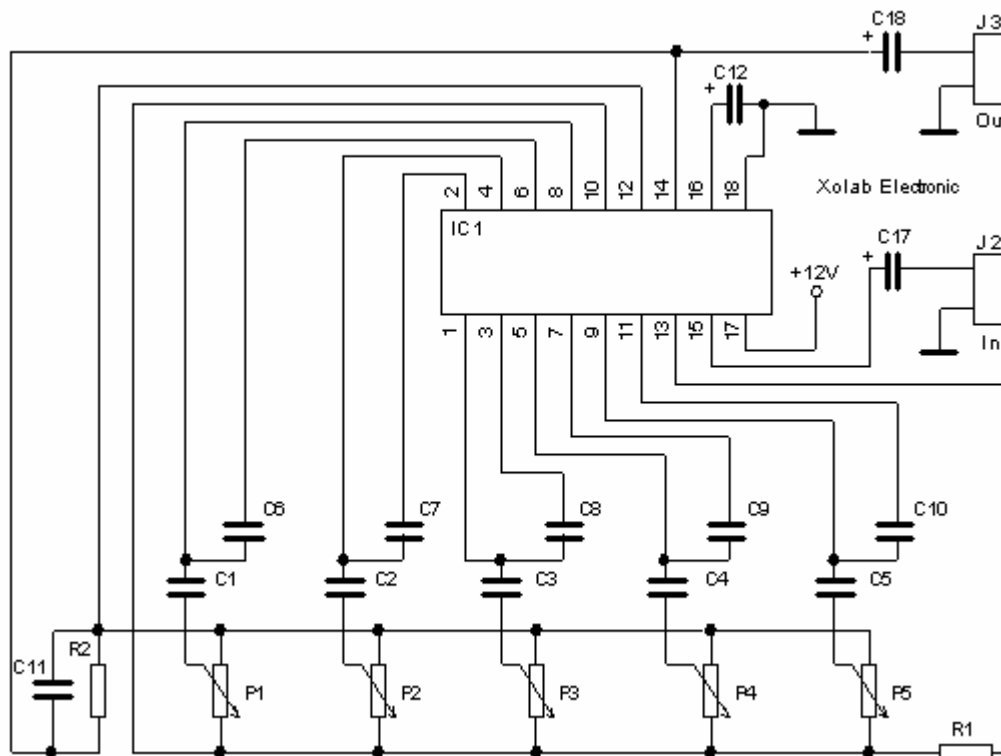


5-band mono graphic equalizer



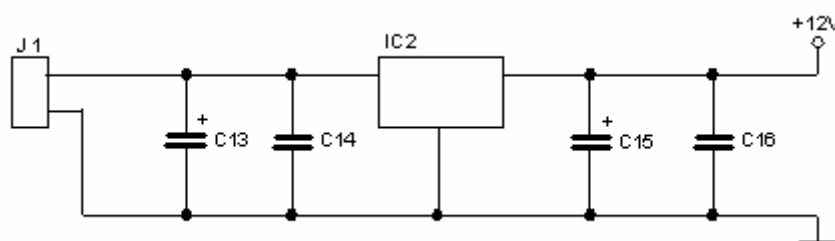
Graphic equalizer is used to equalize a low-frequency signal when classic treble and bass corrector is not enough. It cuts or gains signal in 5 frequency bands using 5 single pots. The kit is built on one-sided parts circuit board (PCB) sized 45x160mm. The circuit is based on ROHM manufactured integrated circuit BA3812L.

Figure 1



The schematic is shown on Figure 1. Voltage stabilized power supply (schematic shown on Figure 2) is based on 7812 voltage stabilizer. Use the layout to stock the PCB correctly. All parts are suited on this PCB. This circuit does not have any adjustable components and it works on first time. If you own a digital multi-meter you can check the filter's frequency characteristics in all bands. All technical data taken from the manufacturer's data sheet are listed in the table. The BA3812L can be replaced by KA22235 produced by Samsung.

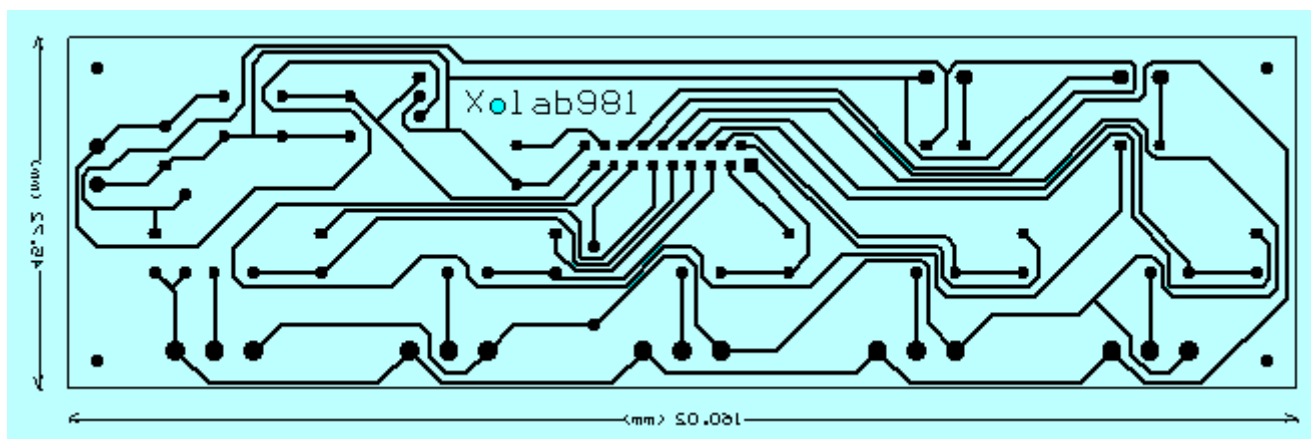
Figure 2



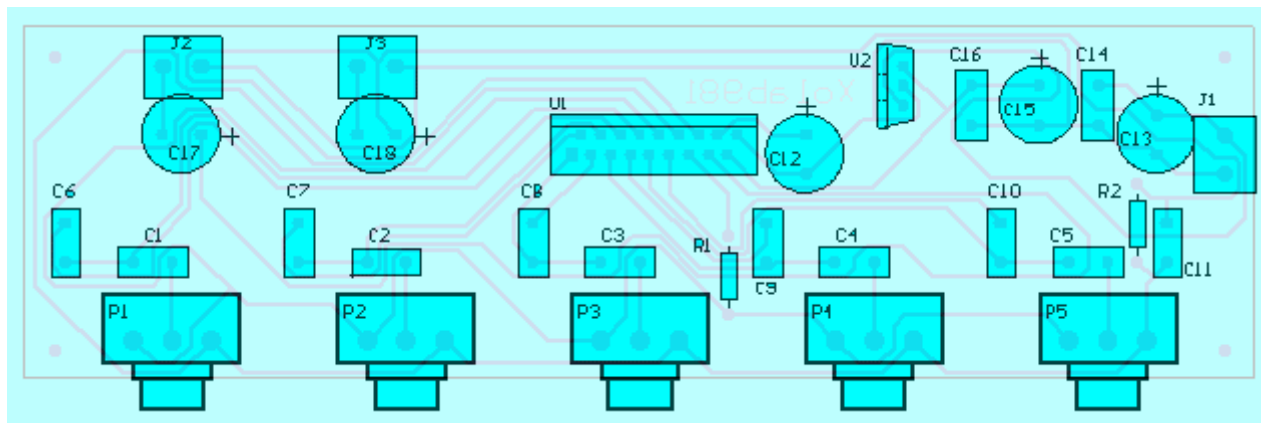
Technical specification

Supply Voltage:	12 ... 32 V =
Bands:	5
Frequency ranges:	67Hz, 250Hz, 1kHz, 4kHz, 11kHz
Control range:	typ.-12 ... +12 dB
Max. output voltage:	max. 2,1 V THD = 1%
Input/output gain:	0 dB
Total harmonic distortion:	0,01 % (Vout=120mV, 1kHz)

PCB - bottom side



PCB - component side



Parts:

R1, R2	6k8
P1, P2, P3, P4, P5	100k/lin.
C1	680nF
C2	220nF
C3	68nF
C4	22nF
C5	6n8
C6	100nF
C7	22nF

C8	4n7
C9, C11	1nF
C10	390pF
C12, C13	100uF/50V
C14, C16	100nF cer.
C15, C17, C18	10uF/50V
U1	BA3812L
U2	7812