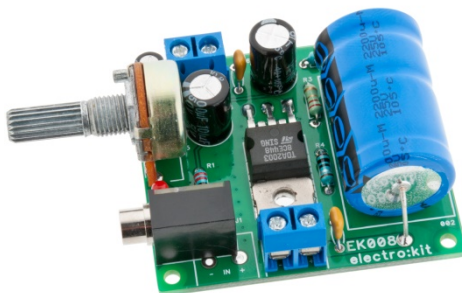


EK008 – 10W Amplifier Mono

Kit description:

EK008 is a class-AB audio amplifier. It's based around the well known TDA2003 IC, which will deliver a maximum output power of 10W into 2ohm loads. With 4 ohm speakers and 16V supply the amplifier can output a maximum of 6W. A potentiometer on the input can be used to attenuate hot signals. When building this kit, you have the option to mount either a 3.5mm phone jack or a screw terminal for the input signal. The speaker output and power supply are connected using screw terminals.



- * Supply voltage: 8 - 18VDC
- * Current draw: 3.5A max
- * Output power: 10W (2ohm, 16V) / 6W (4ohm, 16V) / 4W (4ohm, 12V)
- * Gain: 40dB
- * Dimensions: 50.8 x 45.7mm
- * Mounting holes: c-c 45.7 x 40.6mm, \varnothing 2.5mm

Assembly guide:

Before you begin mounting components, make sure the board is free from damage and scratches. Make sure all the components are included and are of correct value. Compare with the component list!

Begin mounting the lowest components and work your way up to the largest. IC sockets, resistors, ceramic capacitors and diodes go first. Electrolytic capacitors, connectors and potentiometers go last. Some components are polarized and must be mounted in the right way. Please observe the markings on the board!

Component list:

RefDes	Value	Qty.	Part.no.
IN, OUT, PWR	5mm 1x2p	3	41016290
J1	3.5mm jack	1	41004701
R1	2 kohm	1	40811320
R2	220 ohm	1	40811222
R3	2.2 ohm	1	40811022
R4	1 ohm	1	40811010
R5	10 kohm log	1	40910067
C1	10 uF	1	40520003
C2	470 uF	1	40520019
C3	2200 uF	1	41016019
C4, C6	100 nF	2	41003038
C5	100 uF	1	40520031
D1	LED 3mm	1	
U1	TDA2003	1	40352103

Schematic:

