DIY KIT 115. 1W STEREO AMPLIFIER

This is a stereo version of our popular Kit 17. It is in fact two Kit 17's on a single PCB. There is one design improvement over the usual amplifier module If you use the LM386N-1 then the Zobel network on the output may be omitted. This follows the recommended circuit from National Semiconductor in its Data Book. (But it is not in the data sheet which you may download from **nsc.com** .)

The LM386 is a power amplifier designed for use in low voltage consumer applications. Input (+/- 0.4V) is ground referenced. The output is biased to a half the supply voltage. The quiescent power drain is only 24mW at 6V.

Input voltage can be between 4V to 12V DC. Pins 1 and 8 provide gain control. The gain is set at 20 for an open circuit between pins 1 and 8 (no jumpers attached) and 200 (jumpers attached.) We have not supplied speakers since they usually readily available and are a matter of personal choice. They should be rated at 3W or over.

COMPONENTS		
1K resistor 5% brown black red	R1	1
2u2/16V ecap	C1 C5	2
10u/25V ecap	C2 C9	2
100u/16V ecap	C4	1
470u/16V ecap	C6 C8	2
100n monoblok	C3 C7	2
10K potentiometers		2
2 pin post-header		2
Jumpers		2
LM386N-1		2
8 pin IC socket		2
3mm LED		1
K115 PCB		1
SPDT PCB-mounted switch		1

Just follow the overlay for the assembly. The monoblok capacitors fit inside the 8 pin IC sockets. You should have no trouble getting this amplifier to work.