

## Rev.3.Dec.26.2005

The circuit diagram shows a 100 Hz sine wave generator. It starts with an AC ADAPTOR providing 9V to a 510k resistor connected to the base of a 2N2222A transistor (Q1). The emitter of Q1 is grounded, and the collector is connected to the non-inverting input of the first op-amp (IC1a). The inverting input of IC1a is connected to a voltage divider (10k and 10k) and a 1uF NP capacitor. The output of IC1a is connected to a diode bridge rectifier (D1, D2, D3, D4) with a 51pF capacitor and a 500k feedback resistor. The output of the rectifier is connected to the non-inverting input of the second op-amp (IC1b). The inverting input of IC1b is connected to a voltage divider (20k and 220k) and a .22uF tantalum capacitor. The output of IC1b is connected to a 1uF NP capacitor and a 1k resistor. The output of the 1k resistor is connected to the base of a second 2N2222A transistor (Q2). The emitter of Q2 is grounded, and the collector is connected to a 10k resistor and a 47uF capacitor. The output of the 47uF capacitor is connected to the output of the circuit.