

The circuit diagram shows a two-stage vacuum tube amplifier. The first stage uses a 6X4 tube (V1) as a diode rectifier for the power supply and as a detector/amplifier. The input signal (IN 2V RMS) is coupled through a 25K resistor (P1) to the grid of V1. The cathode is bypassed by a 0.22μF capacitor (C1). The plate is connected to a 250V B+ supply (B+2 ret) through a 1K resistor (R2). A 330K resistor (R1) is connected from the input to ground. The output of the first stage is taken from the plate through a 330Ω resistor (R5) and is biased at 2.6-3.4v (TP1). The second stage uses a 6AV6 tube (V2) as a push-pull audio amplifier. Its grid is driven by the first stage's output through a 0.47μF capacitor (C3). The grid is also biased by a -250V BIAS ret supply through a 10M45S tube (Q4) and a 330Ω resistor (R10). The cathode of V2 is bypassed by a 100K resistor (R11) and a 1μF capacitor (C58). The plate of V2 is connected to a 1080V B+ supply (B+1 left) through a 100μF capacitor (C4). The output is taken from the plate through a 2μF capacitor (C5) and is coupled to a speaker (SPK) via a transformer (OPT LL1688 90mA 9k). The transformer's primary is connected to the plate through a 100V 1200v PIO capacitor (C5) and its secondary is connected to the speaker terminals (+ and -). The speaker is also connected to ground through a 33K resistor (R13).





