61 Stereo Auto Shut-Off

☐ It's ironic, isn't it? Almost every cheap stereo system shuts itself off after the last record has been played, but just try to find a sophisticated, multi-component system that can do the same. Well, here's a circuit that may solve the problem for you. Plug all of your equipment into SO1. Touch S1 and K1 closes, thereby energizing your system. If no audio is fed from your amp's output (4-16 ohms) to R1, the system shuts down in approximately thirty seconds. However, if music is being fed into the shut-off circuit's input, C4 is constantly re-charged, and the power remains on until 30 seconds after the last record goes silent.

To set the circuit up, select the quietest passage to which you expect to listen. PRess S1 put the tonearm in the groove, and adjust R1 until LED1 begins to flicker on and off with the music. Now relax, knowing that you finally have all the advantages of a cheap stereo.

PARTS LIST FOR STEREO AUTO SHUT-OFF

C1—0.2-uF mylar capacitor
C2—.002-uF mylar capacitor
C3—0.1-uF mylar capacitor
C4—22-uF, 10-VDC tantalum capacitor
C5—0.1-uF ceramic disc capacitor
D1-D5—1N914 diode
IC1—LM324 quad op amp integrated circuit
K1—6-VDC, 500-ohm relay
LED1—light emitting diode
Q1—200-VDC, 500-ohm relay
R1—1,000-ohm linear taper potentiometer
R2—4,700-ohm, ½-watt resistor (all resistors 5% unless otherwise noted.)
R3, R4, R7—10,000-ohm, ½-watt resistor
R5, R13—1.000-ohm, ½-watt resistor
R6—1,000,000-ohm, ½-watt resistor
R8—270-ohm, ½-watt resistor
R9—51,000-ohm, ½-watt resistor
R10—39,000-ohm, ½-watt resistor
R11—3,900-ohm, ½-watt resistor
R12—680-ohm, ½-watt resistor
R14—100,000-ohm, ½-watt resistor
R15—47,000-ohm, ½-watt resistor
R16—27,000-ohm, ½-watt resistor
R17—1,000-ohm, 1-watt resistor
S1—pushbutton switch, normally open
SO1—AC power socket