SOUND OPERATED FLASH

The circuit shown enables near instantaneous synchronisation between sound and flash. The latching facility has been incorporated so that the flash is not retriggered.

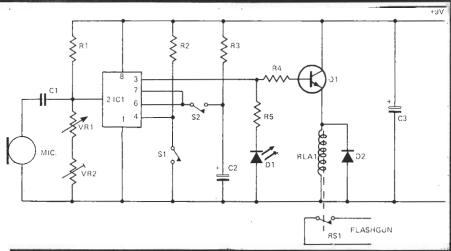
Resetting is by S1. With S2 closed, resetting occurs after a time after a time determined by 1.1xC2xR3. This approximately equals five seconds as shown.

D1 indicates triggering and is used when setting the sensitivity:- set VR1 to zero and increase VR2 until D1 just fails to light. A sharp snap of the fingers causes it to light. S2, R3 and C2 maybe omitted if not required.

The output from IC1 via R4 and Q1 activates the read relay, used for its simplicity and speed of action. The relay itself is connected across the flash sync leads.

The unit maybe battery powered e.g. PP3, as it consumes a mere 15mA or so.

The circuit has been built as the result of many modifications to other circuits. I find it an interesting toy and in its simplicity, should cost less than £2.



COMPONENTS	*(see text)		
Resistors R1 R2 R3 R4	330k Ω 22k Ω 1M Ω * all %W, 10% 4k Ω	Capacitors C1 C2 C3	10nF 4.7μF, 10V* 100μF, 10V
R5 Potentiometers VR1 VR2	560Ω $50k\Omega$ lin $250k\Omega$ preset	MISC. mic S1 S2	crystal mike insert push to make switch spst switch
Semiconductors IC1 Q1 D1		RLA1 RS1	reed relay coil normally open reed switch
D2	1N914		