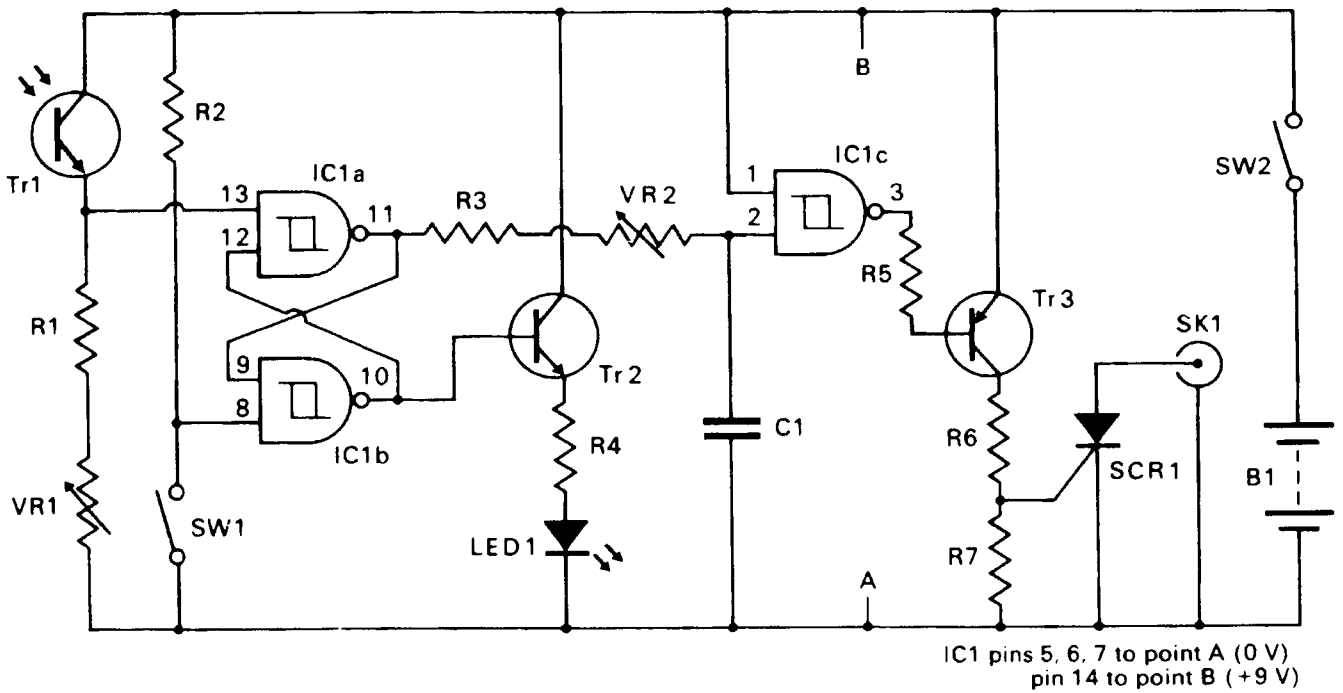

IC1 pins 5, 6, 7 to point A (0 V)
pin 14 to point B (+9 V)

The unit, above, provides a variable delay between a light beam being broken and the firing of a flashgun, and allows sequences such as that shown on the opposite page to be taken.

Switch SW2 is the on/off switch. Switch SW1 is a push-button which 'arms' the unit in readiness for a picture to be taken. LED1 lights to indicate that the unit is armed and ready for use, and extinguishes as soon as the light beam is broken. VR1 is a sensitivity control and is adjusted according to the intensities of the light beam and the ambient light. If the sensitivity is set too low the LED will extinguish as soon as SW1 is released, if set too high the unit may fail to trigger when the beam is broken. VR2 adjusts the delay between the beam being broken and the flash being fired. The precise range of delays obtainable is dependent on the characteristics of the actual integrated circuit used, and will vary from sample to sample, but for the values of VR2, R3 and C1 quoted is typically from 11 mS to 200 mS. Longer delays can be obtained by increasing the value of C1, shorter delays by reducing it. For maximum consistency of delay, C1 must be a non-electrolytic type. IC1 is a CMOS integrated circuit, and the usual precautions should be taken to avoid damage to its inputs during handling. Socket SK1 is shown correctly connected for the majority of flashguns but, as with the slave unit described previously, some makes may require the connections to the socket to be reversed.

PARTS LIST

R1	4k7
R2	100k
R3	5k6
R4	2k2
R5	22k
R6	1k
R7	1k
VR1	47k potentiometer
VR2	100k potentiometer
C1	2·2 μF polycarbonate or polyester
Tr1	Phototransistor TIL78 or similar
TR2	BC109 or similar
TR3	BC479 or similar
SCR1	C106D or similar
LED1	TIL209 or similar
IC1	CD4093B or equivalent
SW1	Push-button switch (momentary action, push-to-make)
SW2	SPST on/off switch
SK1	3 mm female flash socket
B1	9 volt battery