

Automatic switch-off power supply

This power supply was designed to operate a digital exposure timer constructed from t.t.l. circuits. Because the logic is required only when the enlarger lamp is on, it was decided to automatically switch off the power supply when on standby. The supply to the t.t.l. circuits is turned on by closing the switch at the same time as the timing cycle is activated, which sets the timer output to 5V and turns on the lamp. Diode D_2 is also connected to this logic point and the power supply remains on when the switch is released. When the timer output goes low and the lamp is extinguished, gate current to Tr_4 is cut off which switches off Tr_1 and removes the current supply from the zener diode. The supply voltage therefore drops to zero.

This circuit is applicable to all uses where the logic is required for only part of the time, which allows a smaller transformer to be used to reduce weight and cost.

E. R. Rumbo,
Acton,
Australia

