

By adjusting the potentiometer, you can change the point in the AC cycle at which the TRIAC is triggered, effectively controlling how much power is delivered to the fan. Speed Regulation: As the TRIAC is turned on later in the AC cycle (due to higher resistance), less power is delivered to the fan, resulting in lower speeds. Triggering the TRIAC: Once the voltage across the Diac reaches its breakdown voltage, it conducts and sends a pulse to the gate of the TRIAC. 2.4.5