

457 800 TRANSMITTER

OVERVIEW.

The product is a low power transmitter used to control the vehicle alarm and convenience features.

CIRCUIT DESCRIPTION.

Power is derived from a single CR2025 Lithium cell.

IC 1 is an encoder. It is programmed with the Keeloq algorithm and unique manufacturer's key. When a switch is pressed the IC outputs the next code in the sequence together with the switch information to pin 6.

Tr1 and associated components form a Colpitts oscillator. SAW1 sets the frequency. L1 is an inductor etched onto the PC Board. It is the DC path for the oscillator and also acts as the radiating element. C2 and C3 provide feedback and are resonant with L1. R3 prevents parasitic oscillations. The PWM output from pin 6 of IC1 provides the base bias for the oscillator. The oscillation is turned on and off by this signal.

C1 is a de-coupling capacitor.

The ground plane on the PC board and the battery provide the ground reference for the radiating element.