

Transmitter Description of Operation

The transmitter is a Key Fob type, to be used as part of an automotive remote function actuation system. It consists of a custom integrated circuit, three momentary push buttons as inputs, a 3 Volt lithium coin cell battery and an antenna on the printed circuit board. The custom integrated circuit contains the radio frequency source, a crystal referenced voltage controlled oscillator/ phase locked loop operating at 315 MHz.

When a button is pushed the custom integrated circuit forms the appropriate digital data stream, then performs 2 kHz rate on/off keying modulation of the radio frequency output stage that drives the printed circuit board antenna. After the transmission of the message is complete the custom integrated circuit returns to the idle mode until the next button press.