

CIRCUIT DESCRIPTION

Device: WIRELESS KEY (FOB)

Model: WLS929 FOB

ESI Identifier:

Schematic Diagram:

Description:

The WLS 929 FOB transmitter sends the button status information encoded appropriately to which button has been pressed to the control unit of the wireless security system. A rubber key mat switch is incorporated to sense openings and closings while pressed or released to accept inputs from pressing by hand of operator.

This unit consists of two main circuit sections. A control section with a microprocessor & digital logic and the RF transmitter.

The control section receives sensor inputs and unit status information that is then coded to produce the Direct Sequence Spread Spectrum (DSSS) modulation signal. This section also controls transmitter activity.

The transmitter consists of a crystal reference oscillator, a divide-by-64 prescaler, and a phase detector forming a phase-lock-loop (PLL)system. The phase comparator compares the reference frequency and the divide-by-64 output signal frequency, if there is any difference, it will produce an error voltage to lock the free running VCO to 924MHz. A RF amplifier with matching compensation provides the output signal of approximately 12 dBm to the antenna.