

EXHIBIT O– Operational Description

FCC ID 07O-SPR

Sprite O7O-SPR

Operational Description

Inductive road loops are excited by self oscillating circuit driven by two transistors and various resistors and capacitors. Oscillation frequency is defined by this circuit and the inductance of the attached road loop. Road events are monitored by an op-amp-type comparator circuit that drives a digital buffer circuit. Oscillation is transferred to the loops through a 1:1 ratio isolation transformer. A capacitor on the output side of the transformer matches road loop impedance.

11. Sprite loop Block Diagram. $V_+ = 3.3V$

