



Date: March 1, 2010
Doc: Op description T74.doc

1-Way Beam Detector T74 – operational description

The unit is a wireless 433.92Mhz wireless active IR beam detector.

The detector is made of two parts:

IR transmitters part and IR receiver part.

Each part is composed of a master PCB and a number of slaves (3 slaves were in the tested units) , inside a metal tube with a plastic cover.

All masters and slaves are small PCB powered each by 1 CR123A lithium battery.

The RF transmitter is located in IR Receiver master unit.

Time Domain specifications:

1. The unit will transmit periodically (supervision mode) every 65 minutes.
2. The bit rate is 666 bps
3. Pulse time can be: 1.65ms
4. Modulation is OOK using the Manchester code. Thus for each Pulse
Ton=Toff= 50% Tpulse
5. exact calculations and plots can be find in the related FCC test report.