

Operational Description

Garage Door Opener

Sept 7, 2010

1 Overview

The Garage Door Opener is a Bluetooth enabled hardware capable of receiving Bluetooth packets from select models of Bluetooth enabled devices and converting it into a relay switch output designed to be compatible with standard hardwire inputs provided on garage door openers

2 Basic Blocks

The AV Hub consists of 2 building blocks, these are

- Bluetooth Controller
- Relay out

3 Theory of Operation

3.1 Bluetooth Controller

The Bluetooth controller is configured to receive Bluetooth packets through a 2.4GHz RF link being transmitted from a paired and connected device. The Bluetooth packets received by the Garage Door Opener contains open, close, and optionally light comments. Once the Bluetooth packets are received and processed, the Garage Door Opener then communicates through an on board serial protocol to the relay to issue the command.

3.2 Relay output

Once the Garage Door Opener processes the Bluetooth packets, it then communicates with the relay via the digital circuitry. The relay will then cause an open or close as per instructions from the Garage Door Opener.