MQTT decoder

**Topics available for Arduino control:**

1. control/peristaltic
2. control/valve
3. control/dc\_pump

**Topics available to read off Arduino sensor info from**

1. readings/IR1
2. readings/IR2

commands are **3 digits!**

|  |  |  |  |
| --- | --- | --- | --- |
| Topic | Digit 1 | Digit 2 | Digit 3 |
| control/peristaltic | 1 = on, 0 = off | ms delay between steps | N/A |
| control/valve | 1-8 for valve selection | 1 = open, 0 = pinched | N/A |
| control/dc\_pump | 1-2 for pump selection | 1 = on, 0 = off | Direction of pump 1. N/A for pump 2 |

**Examples**

1. in control/peristaltic a command of 120 is sent. It means micro peristaltic pump turns on and has a speed of 2ms between steps or 500 steps a second or 2.5 RPS or 150 RPM. This is approximately 125uL/s.
2. in control/valve a command of 110 opens up valve 1.

IR2 is read from pin A2 and IR1 is read from A0. Reads off every 2ms. No commands are needed as it reads off sensors and loads into appropriate topic.