# Protocol Ideas

*9th August 2007*

## Minimal protocol

Here is a minimal approach

### *From Switch Interface*

<chn><state>

1 byte:

[ 4bits chan][1 bit state]

Advantages:

- No configuration of switch type at the interface.
- WebBrick configuration consistent over both physical and interface implemented schemes.
- Easy to integrated into firmware

Disadvantages:

- May need fast baud rate to support rotary encoders

### *From WebBrick*

For setting Mimic level, two bytes:

Address ChnLevel

For setting fade rate:

F [*|chn] Rate

(what do we specifiy fade rate as? Steps per mS?)

## Addressing

### *Requirements*

Switch interfaces may have the same address. This is to handle rooms where there are multiple

points of entry or control.

We **could** avoid range by having each further switch use the next sequential address up. For example a 3 button switch starting at address '4' would create:

1. 4+state
2. 5+state
3. 6+state

## *Mechanism*

DIL switch