

### Introduction

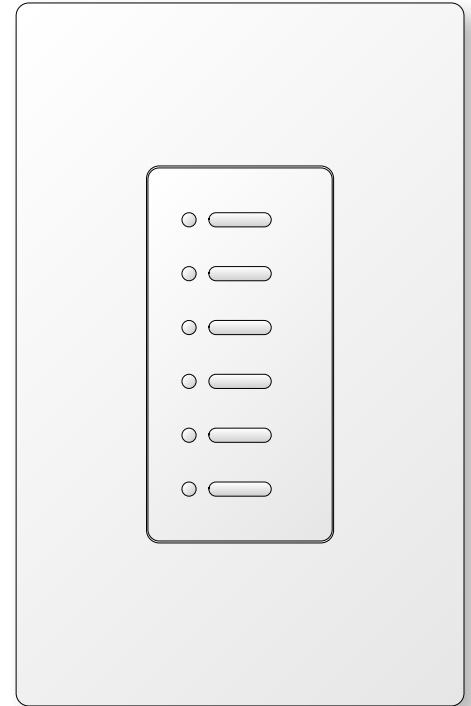
The 4-Wire CueStation is designed to be a high-performance button station that uses a 4-conductor network for linking together up to 50 stations from a single hub up to 4,000 feet away. The 4-Wire network carries both power and data to each of the stations.

Use the ST-HUB CueStation Network Hub to power 4-Wire CueStations.

This document describes some of the technical specifications of the 4-Wire Stations as well as the required DIP Switch settings needed to configure each station.

### Specifications

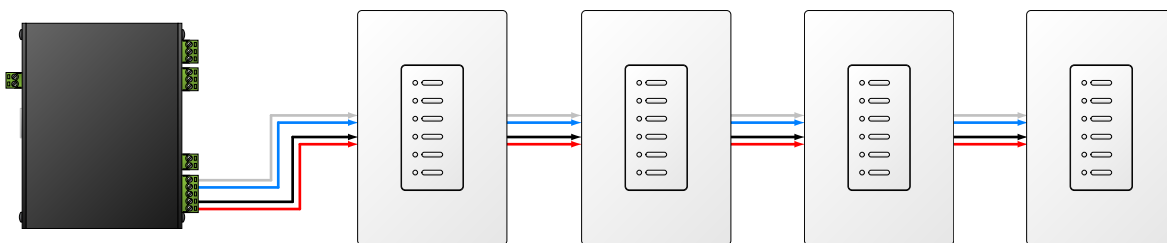
- 4 conductors needed for each station
- Wiring must be made in a daisy-chain manner
- Cable distance to farthest station is 4,000 feet (1,200m)
- RGB indicator LED for each button (dip switch selectable color for all LEDs on the station)
- Recommended cable type is 4-Conductor Belden 1502 (or similar)



### Wiring

The 4-Wire CueStation Bus uses a 4-conductor cable (2 18AWG conductors for power and 2 22AWG conductors for data, Belden 1502 or similar) to carry both power and data to and from each station location. The network is wired in a daisy-chain manner, meaning that the signal begins at the hub and then runs to the first station, then to the second station, then to the third, and so on.

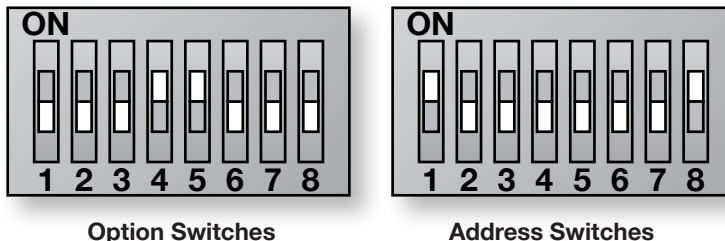
4-Wire Station Bus Wiring Example



## Configuring the Stations

Each station connected to the same Hub must be assigned a unique address from 1 to 50. This assignment is made by setting DIP Switches on the back of the station. Also, the LED color and intensity are chosen by DIP Switches as well.

View the DIP Switches so that the writing on the switches is upright. There are two banks of 8 switches. The bank of 8 on the left side are the option switches. The bank of 8 on the right side are the address switches.



## Option Switch Settings

The option switches are used to set the LED indicator color and intensity. On 4-wire stations, all LEDs are individually controllable for on, off and flash patterns, but the color and intensity of all indicators are the same and chosen by these switch settings.

Option Switches	1	2	3	4	5	6	7	8
LED Indicator Intensity								
LED Intensity 12%	OFF	OFF	OFF					
LED Intensity 25%	ON	OFF	OFF					
LED Intensity 37%	OFF	ON	OFF					
LED Intensity 50%	ON	ON	OFF					
LED Intensity 62%	OFF	OFF	ON					
LED Intensity 75%	ON	OFF	ON					
LED Intensity 87%	OFF	ON	ON					
LED Intensity 100%	ON	ON	ON					
LED Indicator Color								
LED Color Off						OFF	OFF	OFF
LED Color Blue						ON	OFF	OFF
LED Color Green						OFF	ON	OFF
LED Color Cyan						ON	ON	OFF
LED Color Red						OFF	OFF	ON
LED Color Magenta						ON	OFF	ON
LED Color Yellow						OFF	ON	ON
LED Color White						ON	ON	ON
Reserved Switches Must Be OFF								
Reserved				OFF	OFF			

## Address Switch Settings

Address Switches	1	2	3	4	5	6	7	8	First Button
Address 1	ON	OFF	OFF	OFF	OFF	OFF	OFF	ON	1
Address 2	OFF	ON	OFF	OFF	OFF	OFF	OFF	ON	9
Address 3	ON	ON	OFF	OFF	OFF	OFF	OFF	ON	17
Address 4	OFF	OFF	ON	OFF	OFF	OFF	OFF	ON	25
Address 5	ON	OFF	ON	OFF	OFF	OFF	OFF	ON	33
Address 6	OFF	ON	ON	OFF	OFF	OFF	OFF	ON	41
Address 7	ON	ON	ON	OFF	OFF	OFF	OFF	ON	49
Address 8	OFF	OFF	OFF	ON	OFF	OFF	OFF	ON	57
Address 9	ON	OFF	OFF	ON	OFF	OFF	OFF	ON	65
Address 10	OFF	ON	OFF	ON	OFF	OFF	OFF	ON	73
Address 11	ON	ON	OFF	ON	OFF	OFF	OFF	ON	81
Address 12	OFF	OFF	ON	ON	OFF	OFF	OFF	ON	89
Address 13	ON	OFF	ON	ON	OFF	OFF	OFF	ON	97
Address 14	OFF	ON	ON	ON	OFF	OFF	OFF	ON	105
Address 15	ON	ON	ON	ON	OFF	OFF	OFF	ON	113
Address 16	OFF	OFF	OFF	OFF	ON	OFF	OFF	ON	121
Address 17	ON	OFF	OFF	OFF	ON	OFF	OFF	ON	129
Address 18	OFF	ON	OFF	OFF	ON	OFF	OFF	ON	137
Address 19	ON	ON	OFF	OFF	ON	OFF	OFF	ON	145
Address 20	OFF	OFF	ON	OFF	ON	OFF	OFF	ON	153
Address 21	ON	OFF	ON	OFF	ON	OFF	OFF	ON	161
Address 22	OFF	ON	ON	OFF	ON	OFF	OFF	ON	169
Address 23	ON	ON	ON	OFF	ON	OFF	OFF	ON	177
Address 24	OFF	OFF	OFF	ON	ON	OFF	OFF	ON	185
Address 25	ON	OFF	OFF	ON	ON	OFF	OFF	ON	193

Address Switches	1	2	3	4	5	6	7	8	First Button
Address 26	OFF	ON	OFF	ON	ON	OFF	OFF	ON	201
Address 27	ON	ON	OFF	ON	ON	OFF	OFF	ON	209
Address 28	OFF	OFF	ON	ON	ON	OFF	OFF	ON	217
Address 29	ON	OFF	ON	ON	ON	OFF	OFF	ON	225
Address 30	OFF	ON	ON	ON	ON	OFF	OFF	ON	233
Address 31	ON	ON	ON	ON	ON	OFF	OFF	ON	241
Address 32	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON	249
Address 33	ON	OFF	OFF	OFF	OFF	ON	OFF	ON	257
Address 34	OFF	ON	OFF	OFF	OFF	ON	OFF	ON	265
Address 35	ON	ON	OFF	OFF	OFF	ON	OFF	ON	273
Address 36	OFF	OFF	ON	OFF	OFF	ON	OFF	ON	281
Address 37	ON	OFF	ON	OFF	OFF	ON	OFF	ON	289
Address 38	OFF	ON	ON	OFF	OFF	ON	OFF	ON	297
Address 39	ON	ON	ON	OFF	OFF	ON	OFF	ON	305
Address 40	OFF	OFF	OFF	ON	OFF	ON	OFF	ON	313
Address 41	ON	OFF	OFF	ON	OFF	ON	OFF	ON	321
Address 42	OFF	ON	OFF	ON	OFF	ON	OFF	ON	329
Address 43	ON	ON	OFF	ON	OFF	ON	OFF	ON	337
Address 44	OFF	OFF	ON	ON	OFF	ON	OFF	ON	345
Address 45	ON	OFF	ON	ON	OFF	ON	OFF	ON	353
Address 46	OFF	ON	ON	ON	OFF	ON	OFF	ON	361
Address 47	ON	ON	ON	ON	OFF	ON	OFF	ON	369
Address 48	OFF	OFF	OFF	OFF	ON	ON	OFF	ON	377
Address 49	ON	OFF	OFF	OFF	ON	ON	OFF	ON	385
Address 50	OFF	ON	OFF	OFF	ON	ON	OFF	ON	393