# ****Hardware****

### ****M5Stack Mini Dual Button Unit Connections****

* Red Button connected to Arduino D6 → Yellow Wire
* Blue Button connected to Arduino D7 → White Wire

### ****Power Supply for the 160 LEDs****

The 220V power is connected to the pinball service power supply connection.

| ****Source**** | ****Pin**** | ****Destination**** | ****Pin**** |
| --- | --- | --- | --- |
| Mean Well RD-65A | 12V | Pinduino | 12V |
| Mean Well RD-65A | 5V | Pinduino | 5V |
| Mean Well RD-65A | GND | Pinduino | GND |
| Mean Well RD-65A | GND | Pinball | GND |
| Mean Well RD-65A | GND | M5Stack Mini Dual Button Unit | GND |
| Mean Well RD-65A | 5V | M5Stack Mini Dual Button Unit | 5V |
| M5Stack Mini Dual Button Unit | Red Btn Input / Yellow Cable | Arduino Nano | D6 |
| M5Stack Mini Dual Button Unit | Blue Btn Input / White Cable | Arduino Nano | D7 |
| Arduino Nano | D10 | LED Strip 1 | D10 |
| Arduino Nano | D11 | LED Strip 2 | D11 |

### LED Mode Configuration

For the LED configuration, an M5Stack Mini Dual Button Unit is used.

### M5Stack Mini Dual Button Functions:

| ****Button**** | ****Presses**** | ****Function**** | ****Comment**** |
| --- | --- | --- | --- |
| Red | 1 | - Turn On | When not in playfield lighting color selection mode |
|  | - Turn Off |
| Blue  (when LEDs on) | 1 | - Lighting Only | Only when LEDs are on |
| - Full Effects |
| Red | 2 | Full effects and maximum brightness  Static color according to setting | When not in playfield lighting color selection mode |
|  |  |
| Blue | Held down | Adjust brightness | Not available in: |
|  |  |  | - LED off mode |
|  |  |  | - Playfield lighting color selection mode |
| Blue  (when LEDs off) | 1 | Enters playfield lighting color selection mode | Only when LEDs are off |
|  |  |  |

### Playfield Lighting Color Selection Mode:

| ****Button**** | ****Presses**** | ****Function**** | ****Comment**** |
| --- | --- | --- | --- |
| Red | 1 | Next color |  |
| Red | 2 | Reset to first color |  |
| Blue | 1 | Exits color selection mode |  |