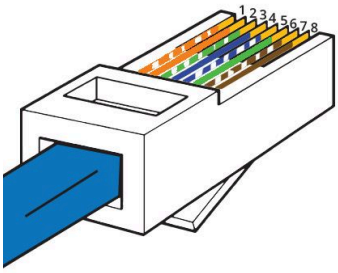
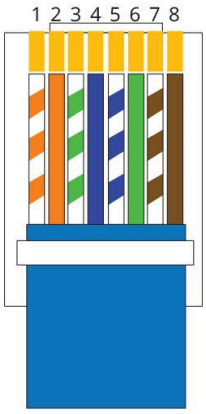
## *REFERENCES*

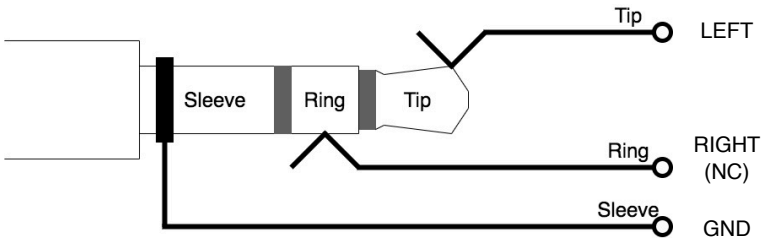
# RJ45 Pinout
T-568B



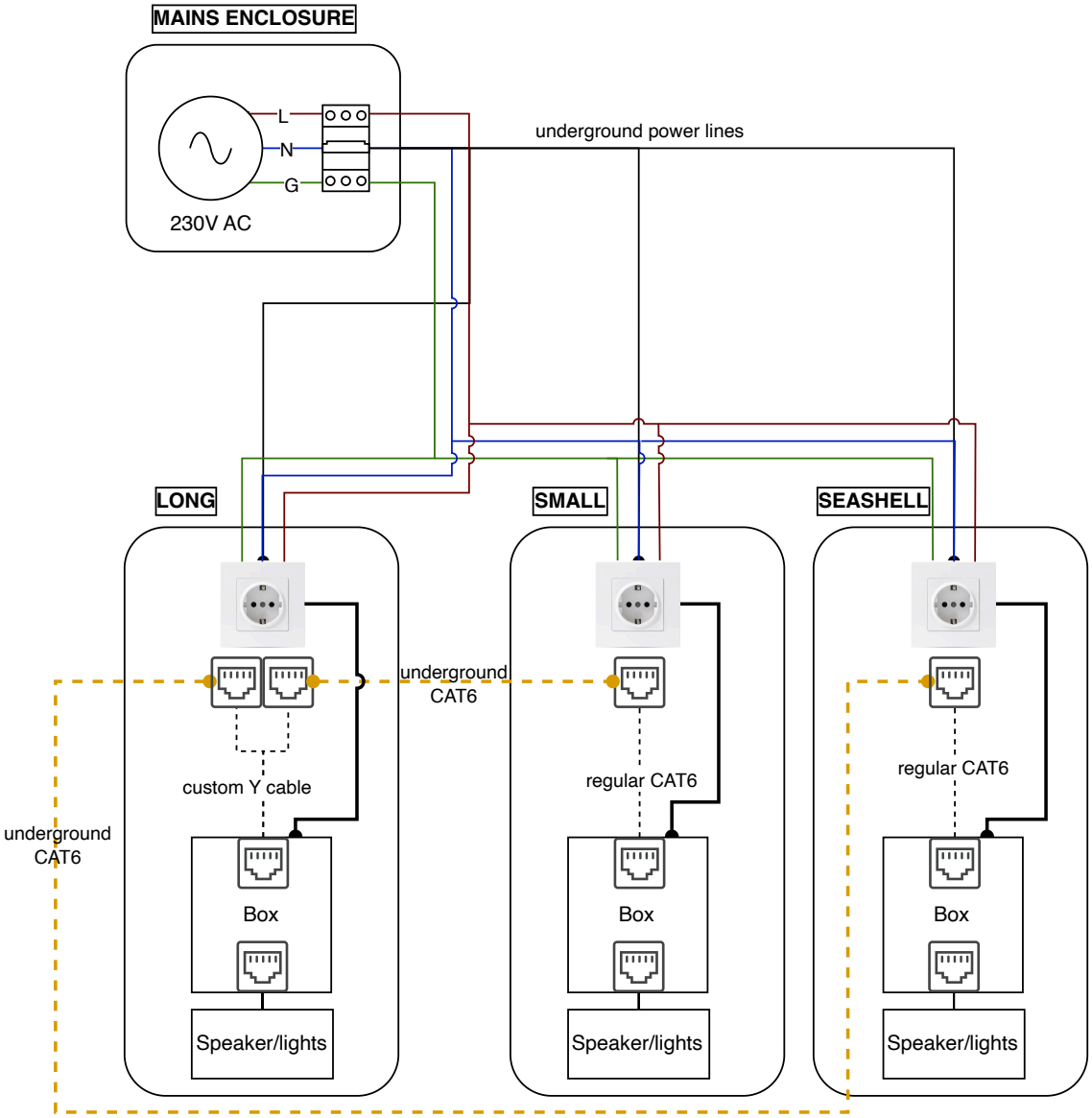




| | |
|---|---|
| 1. White Orange | 5. White Blue |
| 2. Orange | 6. Green |
| 3. White Green | 7. White Brown |
| 4. Blue | 8. Brown |

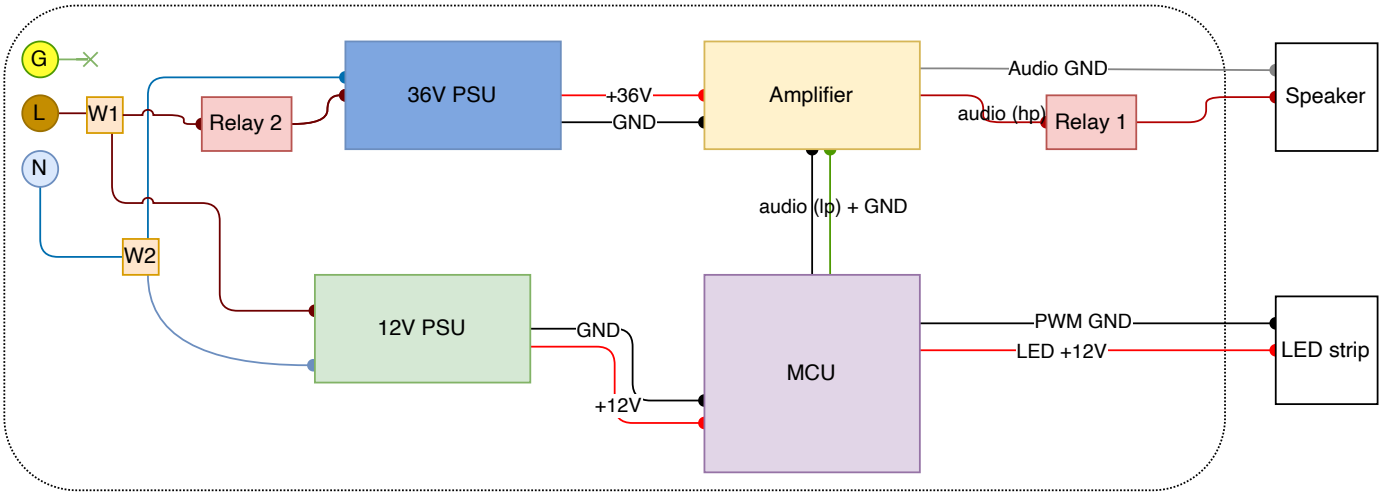
## TRS 3.5 minijack pinout



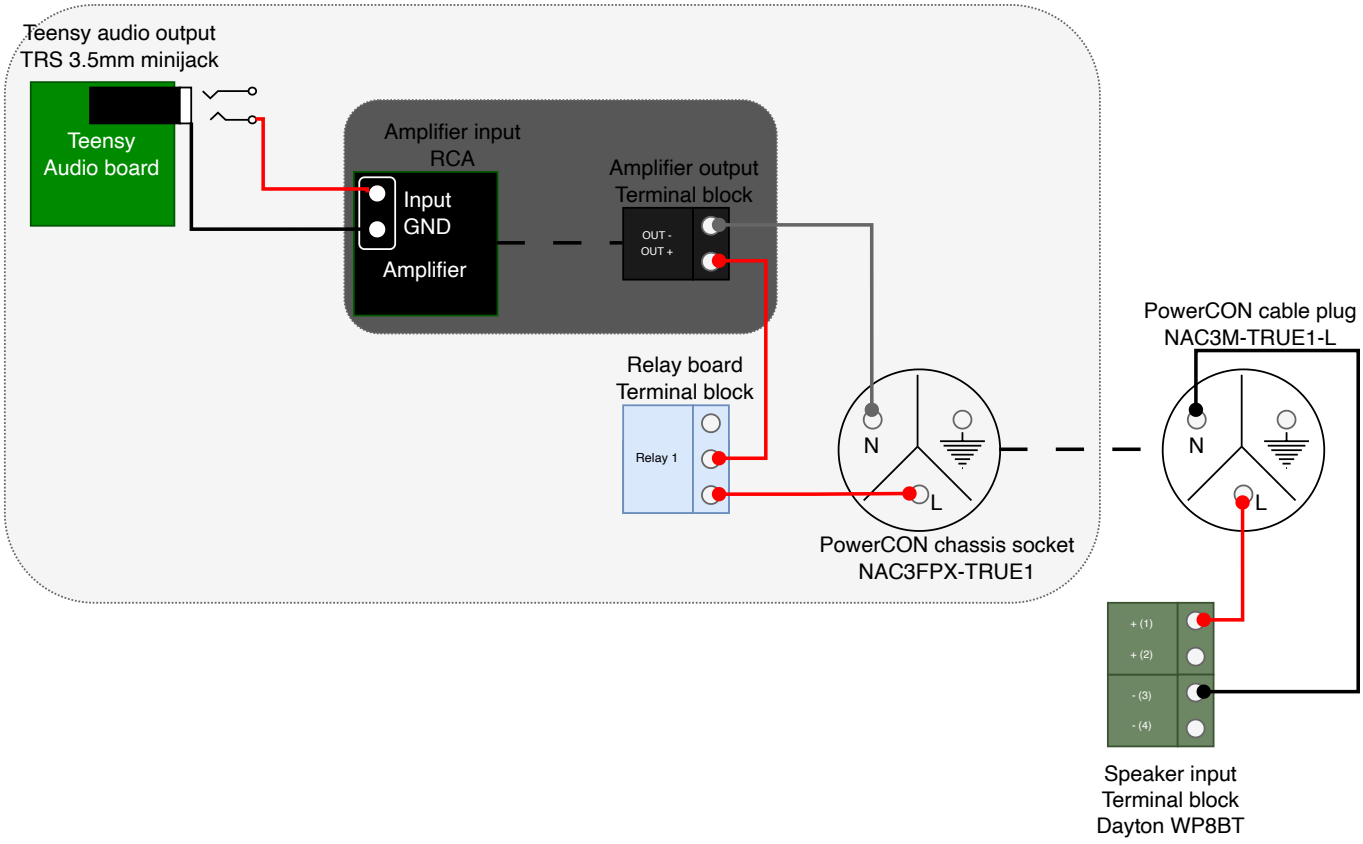

## *POWER AND NETWORK WIRING ONSITE*



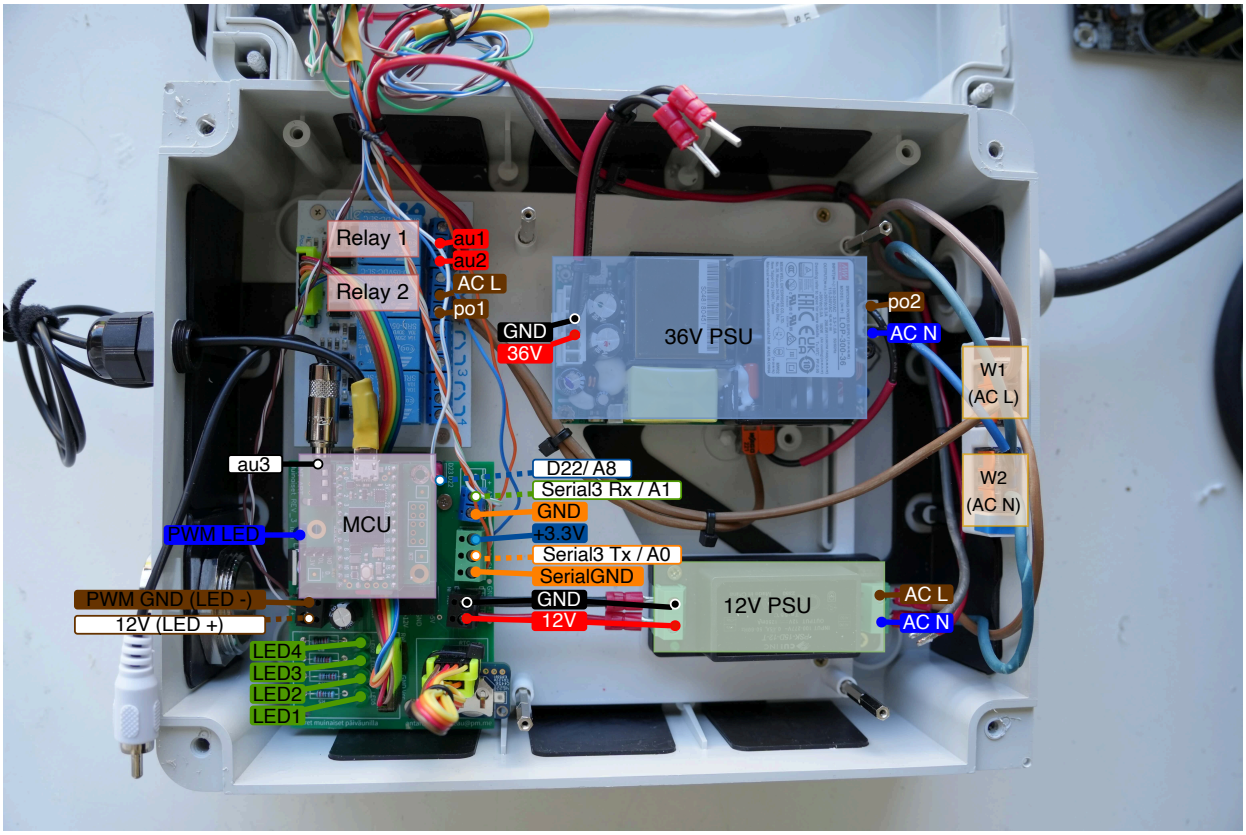
## *BLOCK DIAGRAM WIRING IN LONG / SMALL / SEASHELL*



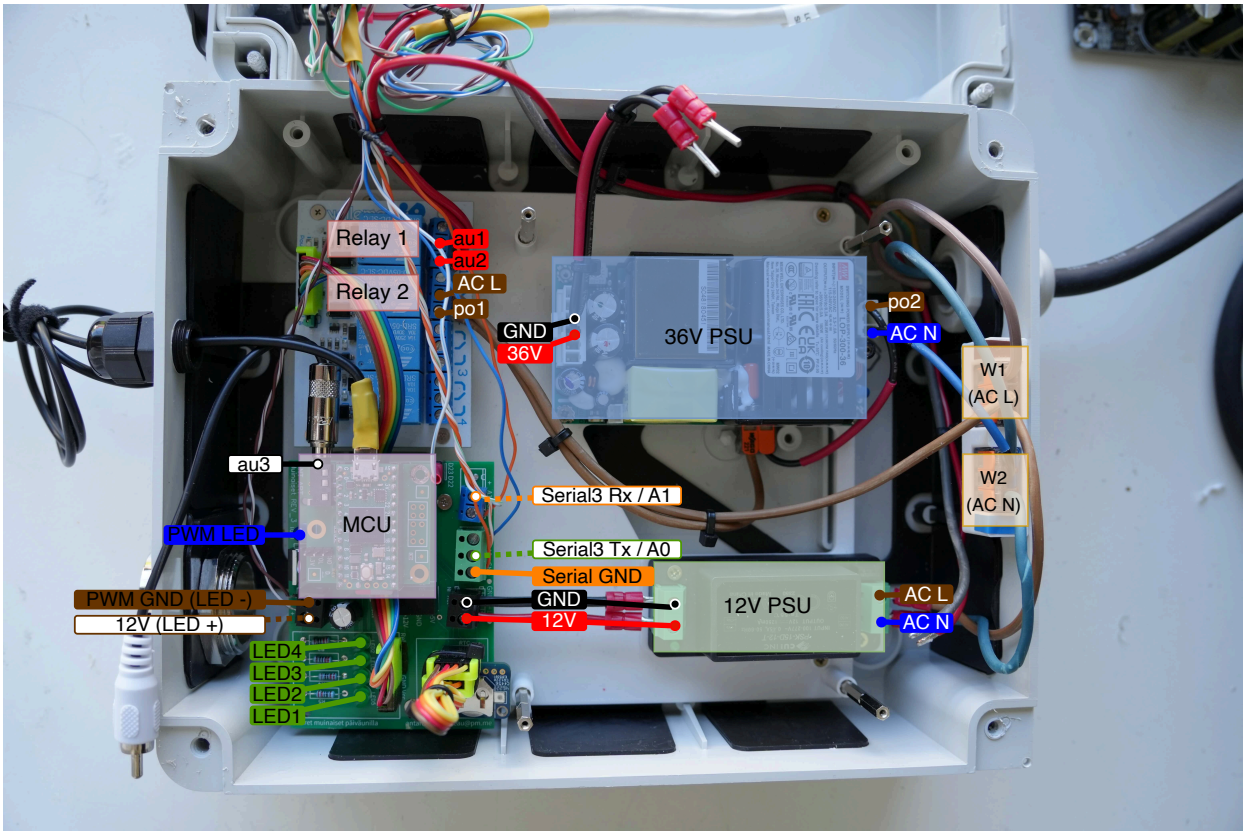

## *LONG / SMALL / SEASHELL - AUDIO SIGNAL CHAIN*



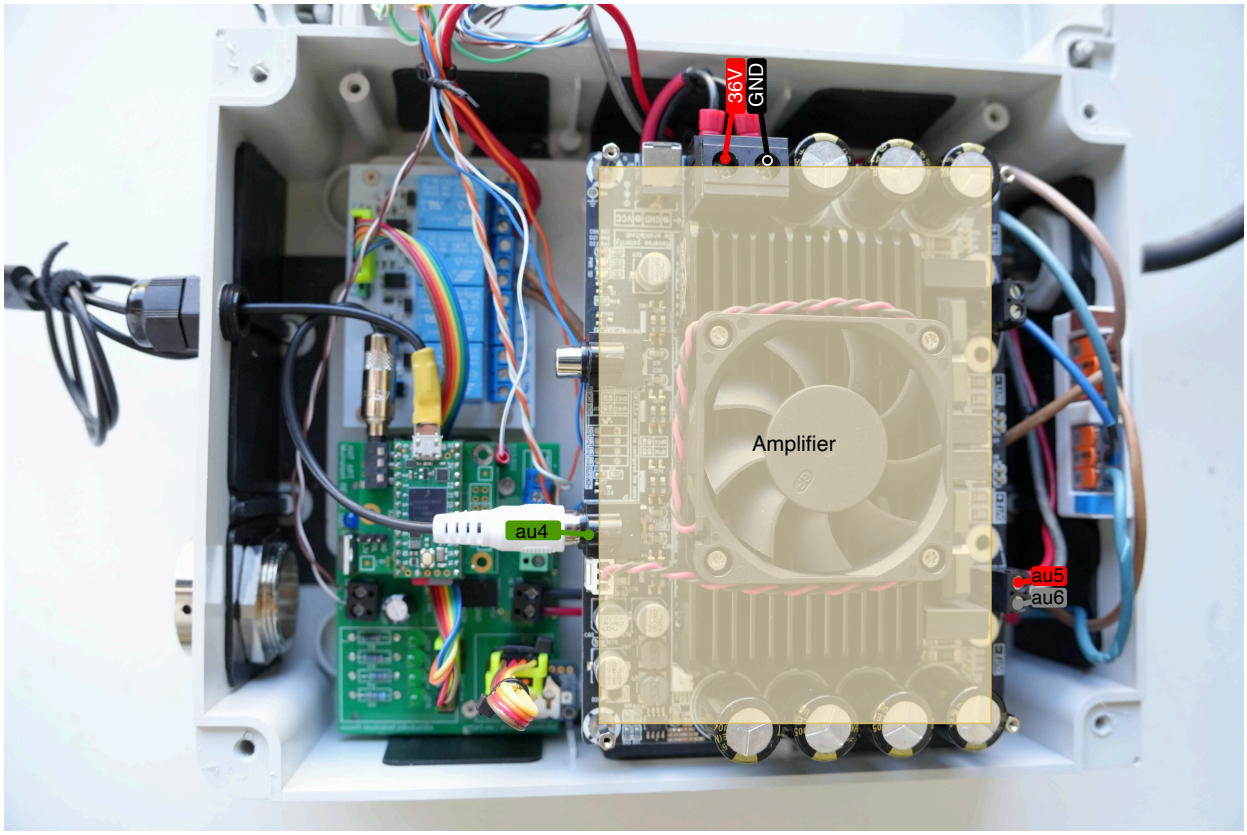
***LONG PINOUT***




***SMALL / SEASHELL PINOUT***



## *LONG/SMALL / SEASHELL AMPLIFIER PINOUT*




### Status LEDs

| | |
|---|---|
| PWM LED | PWM status |
| LED4 | System status |
| LED3 | |
| LED2 | |
| LED1 | |

### Audio Connections

| | |
|---|---|
| au1 | Relay 1 input (from Amplifier out +) |
| au2 | Relay 1 output (to Speaker +) |
| au3 | MCU output (minijcak) |
| au4 | Amplifier input (RCA) |
| au5 | Amplifier out + |
| au6 | Amplifier out - |

### Serial LONG

| | |
|---|---|
| Serial3 Rx / A1 | Serial3 receive |
| Serial3 Tx / A0 | Serial3 transmit |

### Serial SMALL/SEASHELL

| | |
|---|---|
| Serial3 Tx / A0 | Serial3 transmit |
| Serial3 Rx / A1 | Serial3 receive |

### Power AC

| | |
|---|---|
| AC L | 220V AC Line |
| AC N | 220V AC Neutral |
| po1 | Relay 2 output (to 36V DC PSU) |
| po2 | 220V AC Line for 36V DC PSU (from Relay 2) |

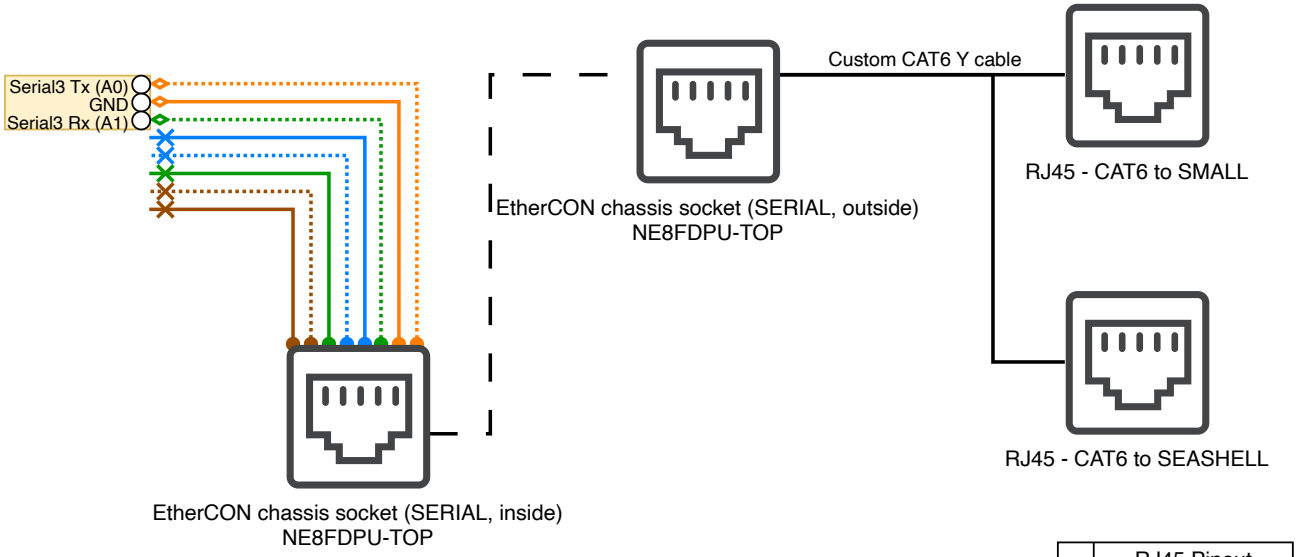
### Power DC

| | |
|---|---|
| 12V | +12V DC |
| 36V | +36V DC |
| GND | 0V DC / Ground ref |
| PWM GND (LED -) | PWM 0V DC / LED - |
| 12V (LED +) | +12V DC / LED + |
| Serial GND | 0V DC / Serial3 Ground ref |

### Volume control LONG

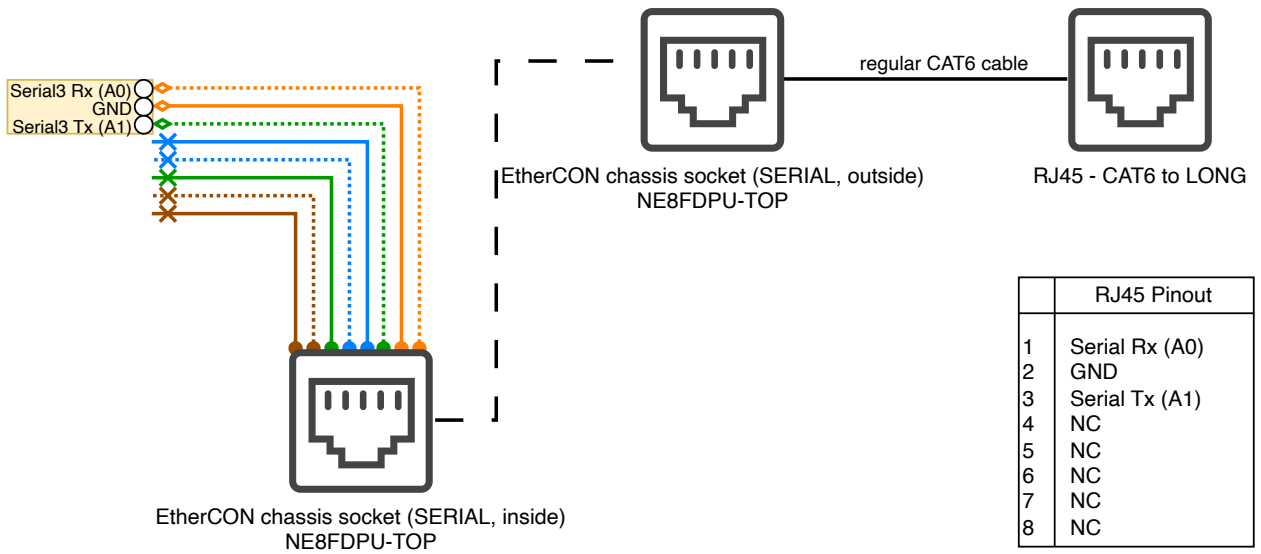
| | |
|---|---|
| D22/ A8 | Volume pot analog input |
| +3.3V | +3.3V DC to volume pot |
| GND | 0V DC / Ground ref |

## *LONG - SERIAL WIRING*



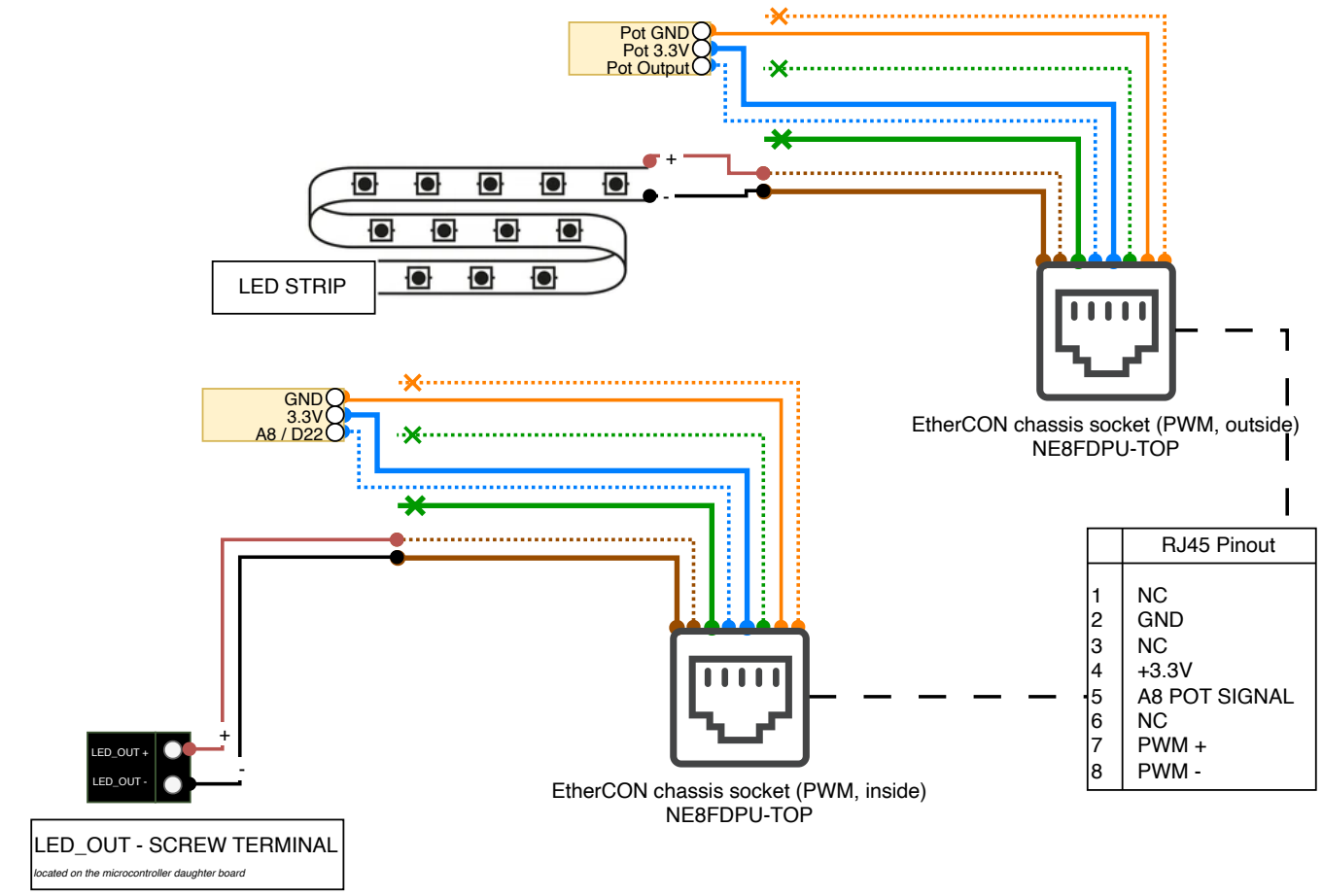

| | RJ45 Pinout |
|---|---|
| 1 | Serial Tx (A0) |
| 2 | GND |
| 3 | Serial Rx (A1) |
| 4 | NC |
| 5 | NC |
| 6 | NC |
| 7 | NC |
| 8 | NC |

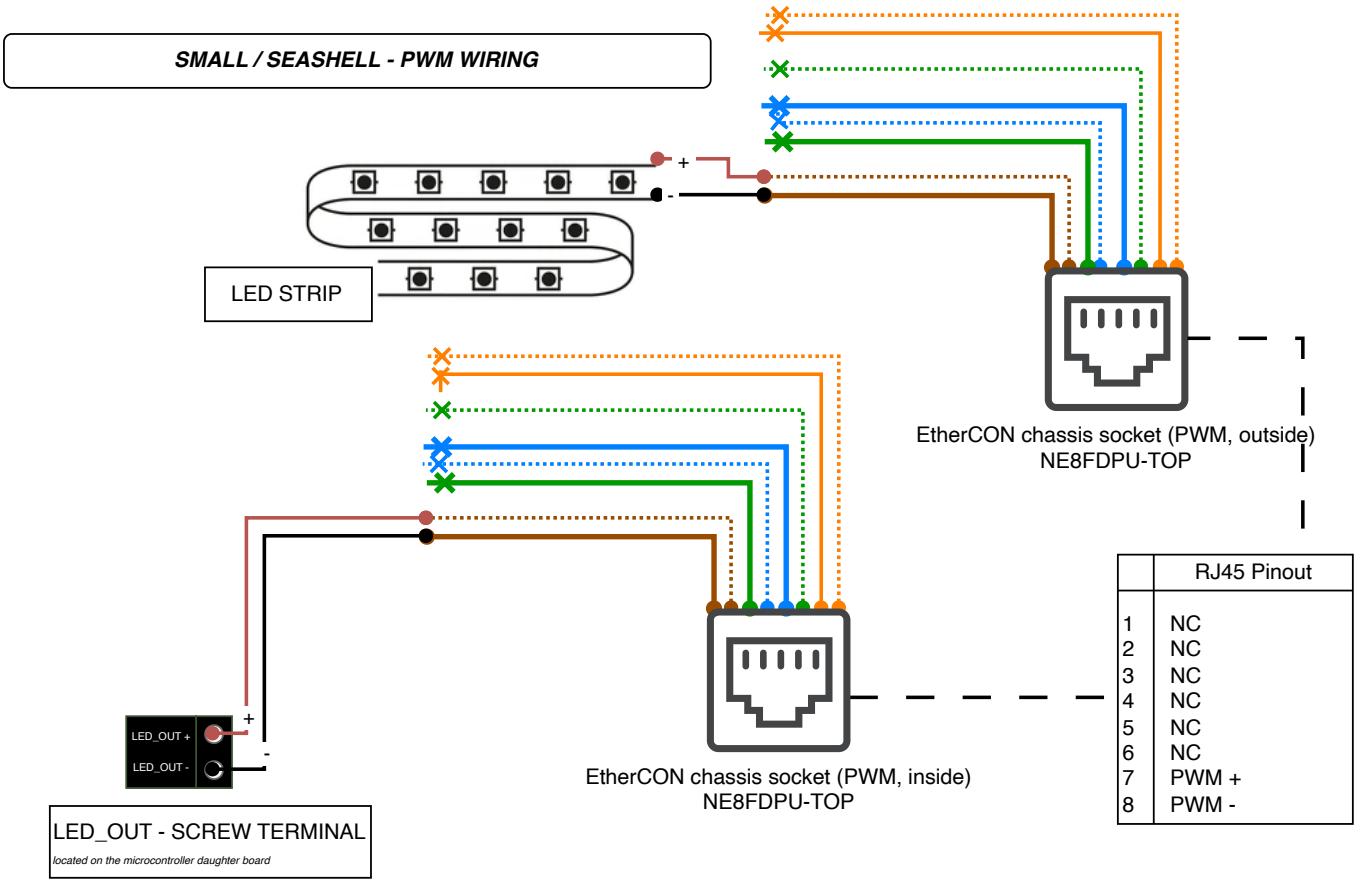
## *SMALL / SEASHELL - SERIAL WIRING*




| | RJ45 Pinout |
|---|---|
| 1 | Serial Rx (A0) |
| 2 | GND |
| 3 | Serial Tx (A1) |
| 4 | NC |
| 5 | NC |
| 6 | NC |
| 7 | NC |
| 8 | NC |

## *LONG - PWM / VOLUME CTRL WIRING*




## *SMALL / SEASHELL - PWM WIRING*