## Interface Definitions

<table>
<thead>
<tr>
<th>Interface</th>
<th>Description</th>
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</table>
| outside_to_system_acpwr          | Vmin: 115 VAC  
Vmax: 125 VAC  
Ipeak 15A  
Inominal 500mA |
| outside_to_system_userin         | Turn light (1 / 2) ON(button), Turn light (1 / 2) OFF(button), Turn both lights ON/OFF (sound control) |
| system_to_outside_acpwr          | Up to 100 Watts for two sources simultaneously |
| outside_toFuse_acpwr             | I(nominal): 2A  
I(peak): 5A  
Vmin: 115 VAC  
Vmax: 125 VAC |
| pwr_thru_fuse                    | I(nominal): 2A  
I(peak): 5A  
Vmin: 115 VAC  
Vmax: 125 VAC |
| 5V_pwr_to_pi                     | I(nominal): 120mA  
I(peak): 2.5A  
Vmin: 4.5V  
Vmax: 5V |
| outside_to_system_userin         | Inputs: on/off for power outputs 1 and 2 of the switch |
| relay_ctrl                       | Vmin: 0 V  
Vmax: 3.3 V  
Inominal: 3 mA  
Ipeak: 16 mA |
| GUI_interface                    | Outputs: GUI on web page accessible by mobile device  
Channel 1 On/Off button  
Channel 2 On/Off button  
Sound Activation On/Off button  
Channel 1 current display  
Channel 2 current display |
| sound_data                       | Outputs digital signal |
| **raw_current_data**     | Vmin: 0V  
<table>
<thead>
<tr>
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<th>Vmax: 550mV</th>
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</thead>
<tbody>
<tr>
<td><strong>digital_current_data</strong></td>
<td>Outputs digital signal</td>
</tr>
</tbody>
</table>
| **5V_pwr_to_nano**      | Vmin: 5V  
|                         | Vmax: 5V   
|                         | Inominal: 3mA  
|                         | Ipeak: 16mA |
| **LED_ctrl**            | Vmin: 4V  
|                         | Vmax: 7V   
|                         | Inominal: 144mA |
|                         | Ipeak: 144mA |