

# Wendy B Project – Detailed view (v1)

By Bill Weis

## Wendy B - ALS

Requirements:

1. Be able to voice control her Cabo Dual Power Recliner
2. Be able to use voice to turn on/off the lamp next to the recliner

Solution – High Level:

1. We designed a voice activated solution for her Cabo Dual Power Recliner that allows her to give voice commands to control the elevation of the footrest.
2. We provided an Amazon smart plug to give Wendy the ability to turn the lamp on and off by voice.

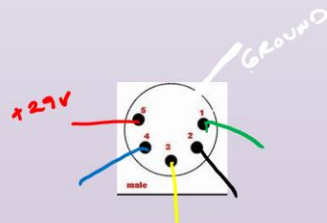
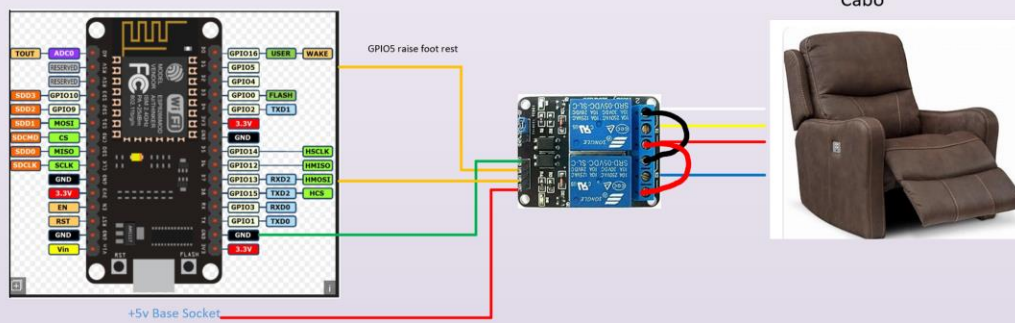
## Details of the Solution

**1 - Voice Control her recliner** – Wendy has a Cabo Dual Power Recliner and has difficulty working the hand remote because of the impact of ALS. The hand remote is built into the side of the recliner. She asked that we provide her with the ability to use voice commands to raise and lower the footrest. After working with her husband Jim, we were able to identify a connector in the chair that we could connect our voice activated controller via a 5 pin DIN connector. Thankfully, Jim has both mechanical skills as well as knowledge with using a digital volt/Ohm meter. We provided two commands for raising and two commands for lower the footrest. One command runs for 3.5 seconds and the other for 5 seconds.

**2 - Turn on/off a lamp by the recliner by voice** – We provided an Amazon Smart plug so Wendy could use voice to turn the lamp on and off.

The next page contains the basic schematic of the recliner controller.

**Wendy B. Voice activated controller for Cabo  
recliner S/N 21093.03  
3/11/21**



**Wires From Relay to Chair**

- Green -> Not used
- Black -> Not used
- Yellow -> Relay 1 -> Raise Foot Rest
- Blue -> Relay 2 -> Lower Foot Rest
- White -> GND Tied to all black wires on the relay
- Red -> VDD (29v) Tied to all Red wires on the relay

This color scheme is in the 15030HC-G harness  
Includes Schottky SR2010 flyback diodes to extend the life of the relay contacts due to motor current

**Resources**

[Amazon Echo](#)

[Alexa Support](#) (Contact Support via the Amazon Alexa app - can have them call your number)

[Google Home getting started](#)

[Google Home Help Forum](#)

[Google Home Support](#) Phone number for Google Home hardware support = 855-971-9121 (24/7 days a week)

[Logitech Harmony Knowledge Base](#)

[Logitech Harmony Support](#) Phone # for Support = 866-601-5644 (M-F 8am to 6pm PST)

[Lifx](#)

[Wemo Support](#) Phone number for Support = 1-844-745-wemo (9366)