

Wendy B Project #2 – Detailed view (v1)

By Bill Weis

Wendy B. project #2 - ALS

Requirements:

1. Be able to voice control her new recliner

Solution – High Level:

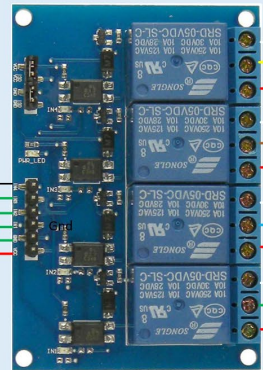
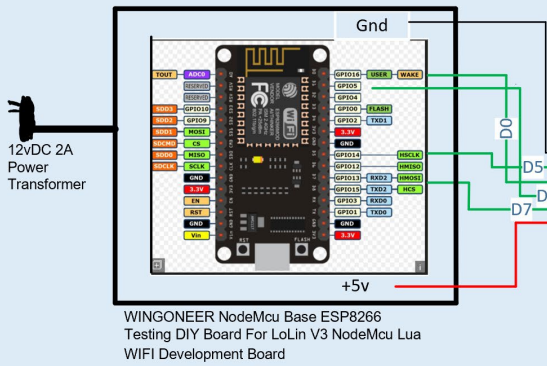
1. Wendy purchased a second recliner that she also would like to be voice activated. The new recliner is a Cyrus Triple-Power heated Lift Recliner that is through Home Meridian International. The wired remote is a HSW208J

Details of the Solution

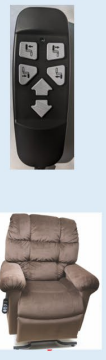
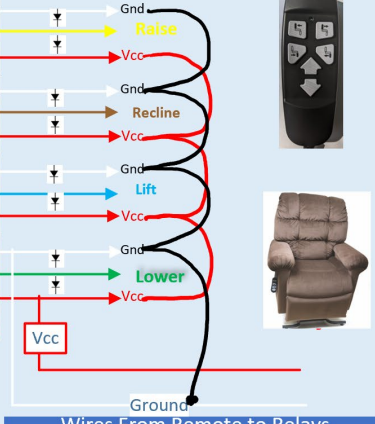
1 - Voice Control her recliner – Wendy's added a new recliner to her collection. A few months ago, we provided a voice activated controller and a switchbox for her Cabo recliner. The main purpose of that recliner is to watch TV in the living room and to have the ability to raise and lower the footrest by voice. Wendy has since ordered a new recliner to be located in the bedroom and to serve as an alternative sleeping arrangement. The new recliner has additional features over the other recliner in that it is also a lift chair. Besides being a lift chair, one interesting feature is when the lift (chair up) button is depressed, it turns on two actuators at once. One actuator to move the head rest forward to the full upright position and the other actuator lowers the foot rest. Once the footrest is fully down, further depressing the Lift button causes the chair to lift. Since Wendy plans to sleep in the recliner at times with a specific position in mind of foot rest full up and backrest slightly reclined 2.8 seconds back from full up, we were able to provide a single voice command to set the chair in that specific position.

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

Voice Controller for Wendy B. – Home Meridian Cyrus Triple-Power Heated
 seat Lift chair
 Bill Weis 8-12-21
 S/N 20083.12

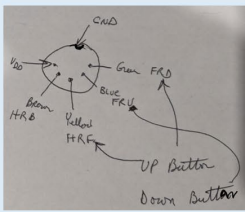


D5 – Raise backrest
 D0 - Recline
 D1 - Lift
 D7 - Lower



Note- Lift is actually foot rest down since lift is in reference to lifting the chair not the foot rest.

- Test board LEDs**
- Raise Backrest = Yellow
 - Lower Backrest = Blue
 - Raise Footrest is Lower Chair = Red
 - Lower Footrest is Lift Chair = Green
 - Lift button is Yellow and Green
 - Lower button is Red



Wires From Remote to Relays

- Yellow -> S1 -> Back Rest Raise
- Brown -> S2 -> Back Rest Recline
- Blue -> S3 -> Lift Foot Rest
- Green -> S4 -> 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)