

Lee Diehr – Detailed view (v1)

By Bill Weis

Lee Diehr – ALS

Requirements:

1. Be able to voice control his Golden recliner

Solution – High Level:

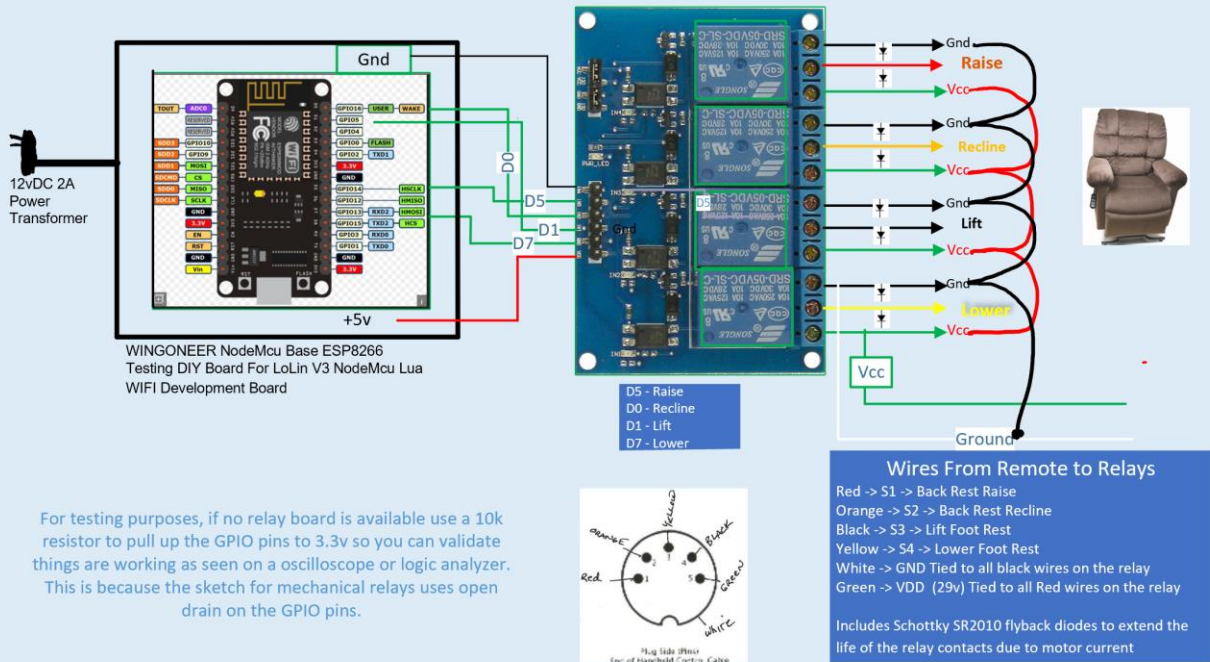
1. We developed a voice activated controller that enables Lee to give voice commands of various durations to move the head rest and foot rest ends of his Golden recliner.

Details of the Solution

1 – Voice Control his Golden Recliner – Lee has ALS and prefers to sleep in his recliner over an adjustable bed. Similar to people with limited mobility that sleep in adjustable beds, Lee's comfort level improves with the ability to change positions frequently. Lee's ability to speak was taken away by the ALS disease, so to generate the voice commands to our controller, he uses a Tobii system to generate voice commands based on his eye movement.

Here is a Visio diagram of the solution.

Voice Controller for Lee Diehr - Golden Recliner PR505-LRG-DSC-MPA
Bill Weis 11-24-19
S/N 19054.10



For testing purposes, if no relay board is available use a 10k resistor to pull up the GPIO pins to 3.3v so you can validate things are working as seen on a oscilloscope or logic analyzer. This is because the sketch for mechanical relays uses open drain on the GPIO pins.

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)