Jim K – ALS Detailed View by Bill Weis

Requirements:

- 1. Be able to voice control his semi-electric Drive bed that uses a 15030HC-G remote
- 2. Be able to voice control his Craftmade ceiling fan with remote UC7201T
- 3. Be able to control his TV including entertainment stored on the Cox Cable (Contour) DVR

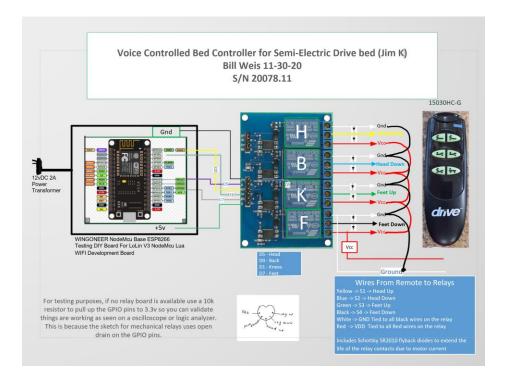
Solution – High Level:

- 1. We designed a voice activated bed controller for his Drive bed
- 2. We designed a voice activated controller so Jim could control his Craftmade ceiling fan including the fan lights and the three speeds
- 3. We provided a Logitech Harmony Hub to control the TV and attached Cable.

Details of the Solution

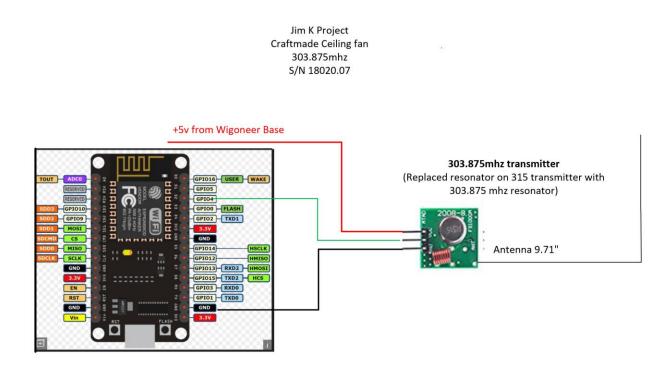
1 – Voice Control his bed – Jim has a semi-electric Drive bed with hand remote 15030HC-G. We provided Jim with the ability to raise/lower the head and foot ends of the bed using voice commands that run for specific durations. The solution is based on an ESP8266 Microcontroller and mechanical relays. Schottky diodes were added to protect the relay contacts and prolong the life of the relays. Jim can control his bed using both the Alexa and Google device smart speakers.

Here is a Visio diagram of the solution.



2 – Voice Control of his Craftmade ceiling fan – Jim wanted to be able to control his ceiling fan lights as well as the ability to turn the fan on and off along with adjusting the speed of the fan. The remote for that fan is a model UC7201T which uses simple OOK and a 303.875mhz transmission. We were able to track down some 303.875mhz resonators and we modified a 315mhz transmitting card by replacing the 315mhz resonator with a 303.875mhz resonator. The solution is based on the ESP8266 Microcontroller and allows Jim to control the fan with both Alexa and Google.

Here is a Visio diagram of that solution



3 - Be able to control his TV including entertainment stored on the Cox Cable DVR

We provided a Logitech Harmony Hub to give Jim the ability to control his TV and Cox Cable.

Resources

Amazon Echo

<u>Alexa Support</u> (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

<u>Logitech Harmony Support</u> Phone # for Support = 866-601-5644 (M-F 8am to 6pm PST) <u>Lifx</u>

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