

Vicki Project – Detailed View (v1)

By Bill Weis

Vicki – Multiple Sclerosis

Requirements:

1. Be able to use voice commands to control her Drive hospital bed
2. Be able to use voice commands to control her TV

Solution – High Level:

1. Developed and provided a voice activated bed controller so Vicki could control her Drive hospital bed using both Alexa and Google
2. Provided a Logitech Harmony Hub so Vicki can use voice commands to control her TV

Details of the Solution

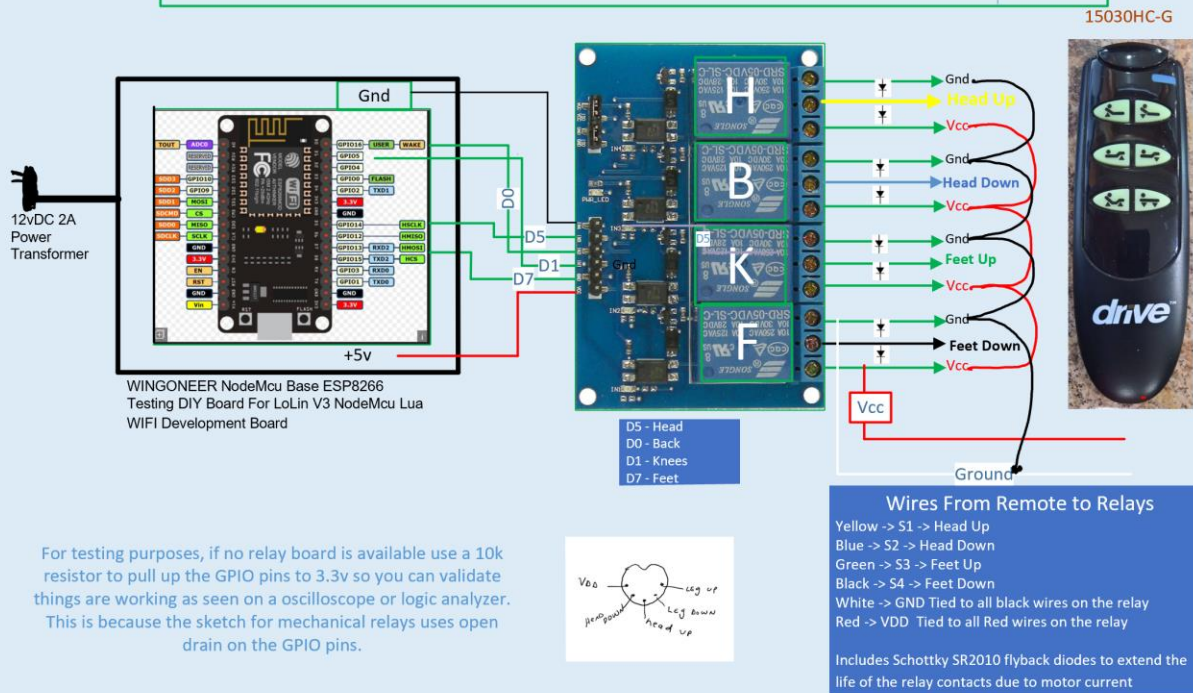
1. **Voice Control her bed** – The Drive hospital bed passes motor current through the hand held remote and utilizes a combination of two switches to perform each function. This bed design is much more difficult to provide a backup (hand held remote) solution, so the approach we took is when the internet goes down, someone will need to replace the bed controller with the original handheld pendant. One of our Drive bed customers has had this same design approach for more than a year with no complaints.

The Drive bed that Vicki has is semi-electric in that it has head up/down and foot up/down, but it requires manual cranking for bed up/down.

Vicki can voice control her bed from both Alexa and Google.

The voice activated bed controller design can be found on the next page.

Voice Controlled Bed Controller based on ESP8266 E-12 NodeMCU and Amazon Echo and Drive hand held remote for Drive Delta 1000 bed (Vicki)
Bill Weis 4-2-2019
S/N 18024.07



2. Voice Control her TV – Vicki has cable TV and with a combination of a Logitech Harmony Hub and an Amazon Echo Dot, she can now use voice commands to control her TV. She can power the TV on and off, adjust volume, change channels, etc.

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)