

## Cecilia Beane Project – Detailed View (v1)

By Bill Weis

Requirements:

1. Be able to use voice commands to control her full electric Drive bed
2. Be able to voice control her TV. Change channels for over-the-air antenna, change volume, mute, and turn on/off tv.

Solution – High Level:

1. Developed and provided a voice activated bed controller so Cecilia could control her full electric Drive bed using both Alexa and Google.
2. We provided a Logitech Harmony Hub to allow Cecilia to control her TV.

### Details of the Solution

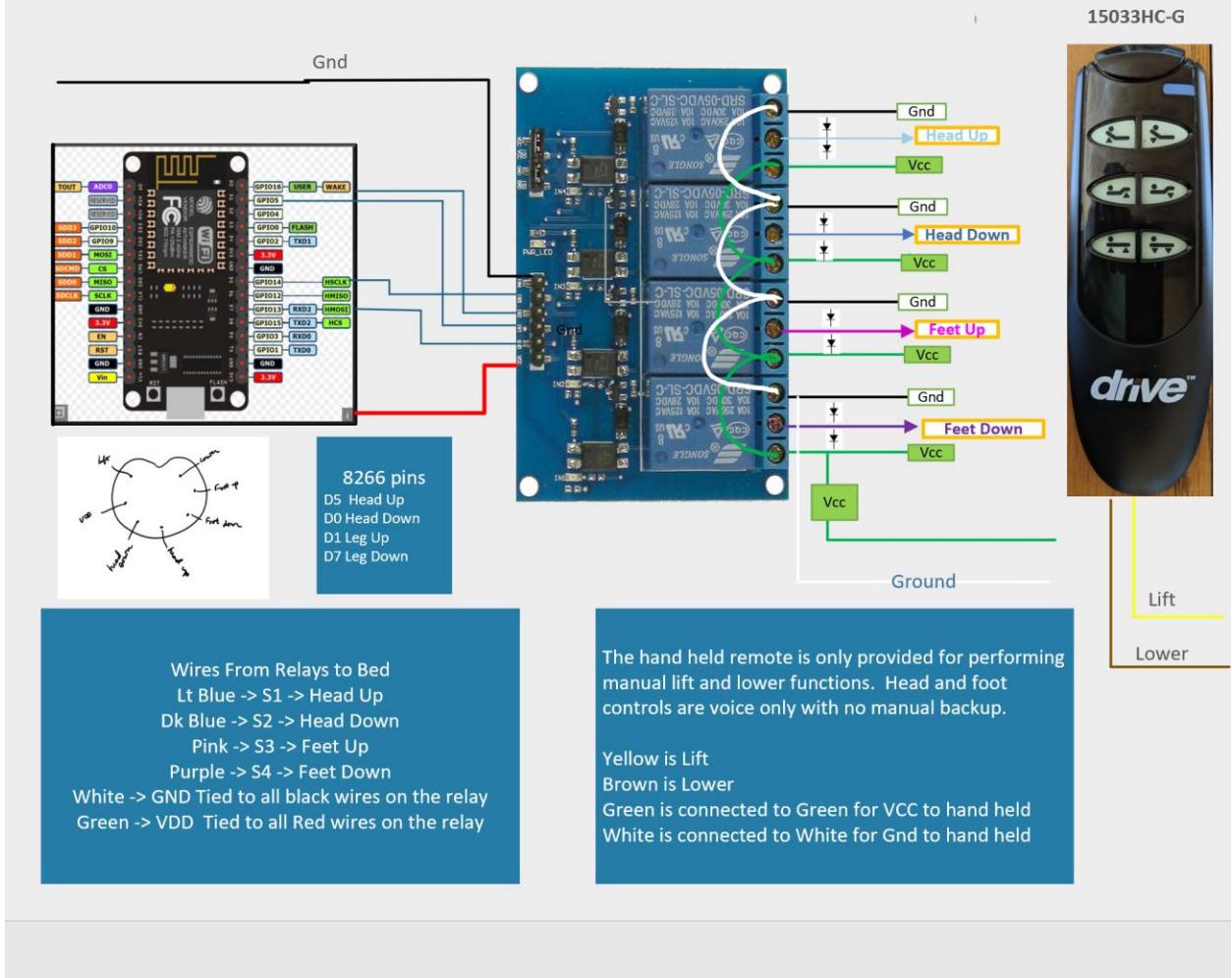
1. **Voice Control her bed** – With the Drive beds, motor current is passed through the hand held remote and it takes a combination of two switches to perform each function. This bed design is much more difficult to provide a backup (hand held remote) solution, so the approach we took is when the internet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

The Drive bed with pendant 15033HC-G is fully electric in that it has head up/down, foot up/down, as well as bed up/down. For safety reasons, we do not provide voice commands for bed up/down and we instead provide a wired pendant into our bed controller so the caregiver can continue to manually control bed up/down features the same way they would prior to the voice activated bed controller being installed. Cecilia can voice control her bed from both Alexa and Google.

To prolong the life of the relays, flyback diodes were added.

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

**Cecilia Beane - Drive Full Electric Bed with remote 15033HC-G**  
**5/9/2020 S/N 19039.03**



2. We provided a Logitech Harmony Hub to voice control TV – Cecilia has an Amazon Fire TV Cube which is a nice way to watch Netflix programs using voice commands, however one thing the Fire TV Cube does not do is allow you to use voice to control over-the-air TV channels. We provided a Logitech Harmony Hub to address this particular short comings of the Amazon Fire TV cube.

## 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)