

Cary Lea Project – Detailed view (v1)

By Bill Weis

Cary Lea – Quadriplegic

Requirements:

1. Be able to voice control his bed (Hill Rom Pendant P3207C-01))

Solution – High Level:

1. We designed a voice activated bed controller that would allow Cary to use voice to control the head and foot of his bed.

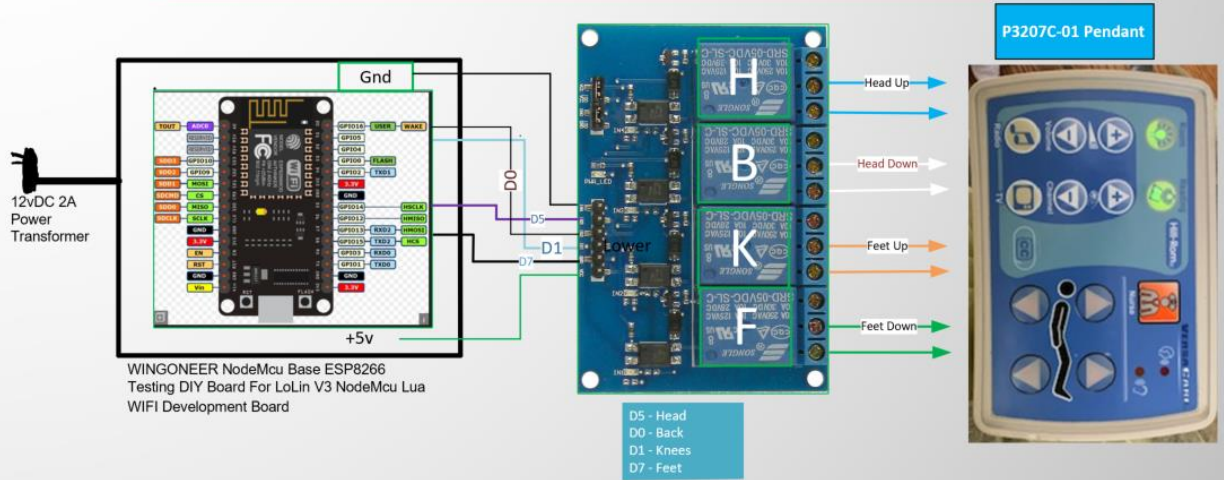
Details of the Solution

1 – Voice Control his bed – Cary has a Hill Rom Bed Product using pendant P3207C-01. This is a modern bed that allows for multiple controls including those built into the side/foot panel. The controller in this Hill Rom bed determines which switch is activated by sending pulses throughout all the panels and pendants. The easiest design was to use the circuit board from within the P3207C-01 pendant, and wiring that circuit board to our relays.

Cary will be able to raise/lower the head and foot of the bed using a handful of timed commands that run for specific durations for each motion of the bed. He can give voice commands to Google and Alexa to control the bed, thus providing some redundancy.

The next page contains the basic schematic of the bed controller design.

Voice Controlled Bed Controller for Cary Lea, mech relays to drive the Hill Rom Bed Pendant P3207C-01
Bill Weis 8-22-2020
S/N 20074.08



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)