

# Diane Boesten Project – Detailed View (v1)

By Bill Weis

Requirements:

1. Be able to use voice commands to control her full electric Medline bed

Solution – High Level:

1. Developed and provided a voice activated bed controller so Diane could control her full electric Medline bed using Alexa.

## Details of the Solution

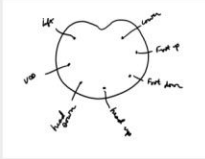
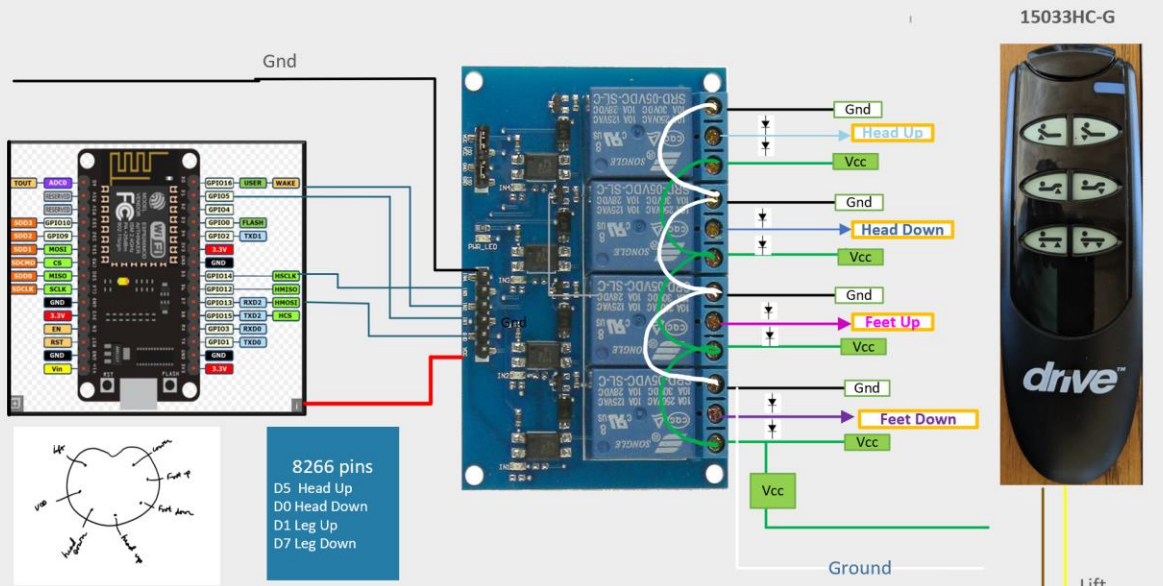
- 1. Voice Control her bed** – With most Medline beds, motor current is passed through the hand held remote and it takes a combination of two switches to perform each function. This bed design is much more difficult to provide a backup (hand held remote) solution, so the approach we took is when the internet goes down, someone will need to replace the bed controller with the original handheld pendant. In some cases, we have provided a switchbox, but for now Diane did not think that was necessary.

The standard pendant for this fully electric Medline bed controls the following functions: 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. (It is important to note that of the 6 buttons on the hand remote that is connected to our voice activated controller box, only the bed up and bed down buttons are functional).

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

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

Diane B. - Drive Full Electric Bed with remote 15033HC-G  
1/13/22 S/N 19039.03



8266 pins  
D5 Head Up  
D0 Head Down  
D1 Leg Up  
D7 Leg Down

Wires From Relays to Bed  
Lt Blue -> S1 -> Head Up  
Dk Blue -> S2 -> Head Down  
Pink -> S3 -> Feet Up  
Purple -> S4 -> Feet Down  
White -> GND Tied to all black wires on the relay  
Green -> VDD Tied to all Red wires on the relay

The hand held remote is only provided for performing manual lift and lower functions. Head and foot controls are voice only with no manual backup.  
Yellow is Lift  
Brown is Lower  
Green is connected to Green for VCC to hand held  
White is connected to White for Gnd to hand held

**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)