

Deb L. Project #2 – Detailed View (v1)

By Bill Weis

Requirements:

1. Be able to use voice to control her adjustable Full Electric Basic American bed

Solution – High Level:

1. We designed a voice activated bed controller that allows Deb to control her Full Electric Basic American bed.

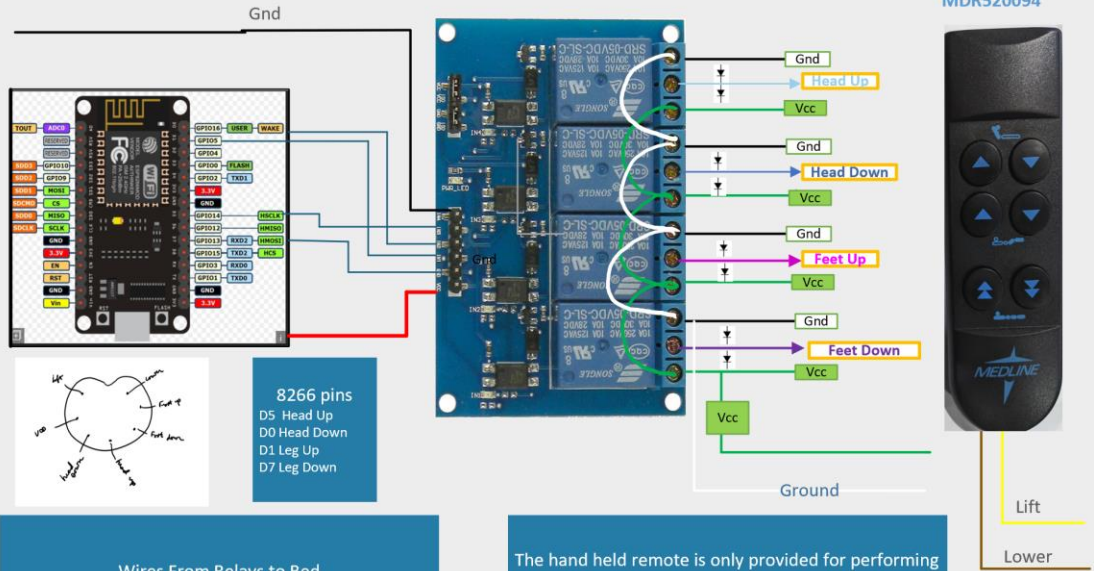
Details of the Solution

1. **Voice Control her bed** – The standard pendant for this fully electric Basic American 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.

Deb L. – Basic American Full Electric
8/17/23 S/N 19050.09



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)