

# Jana Project – Detailed view

By Bill Weis

## Jana - Quadriplegic

Requirements:

1. Be able to use voice commands to control her adjustable bed

Solution – High Level:

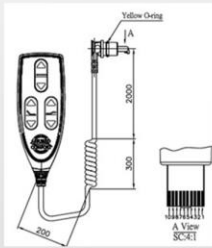
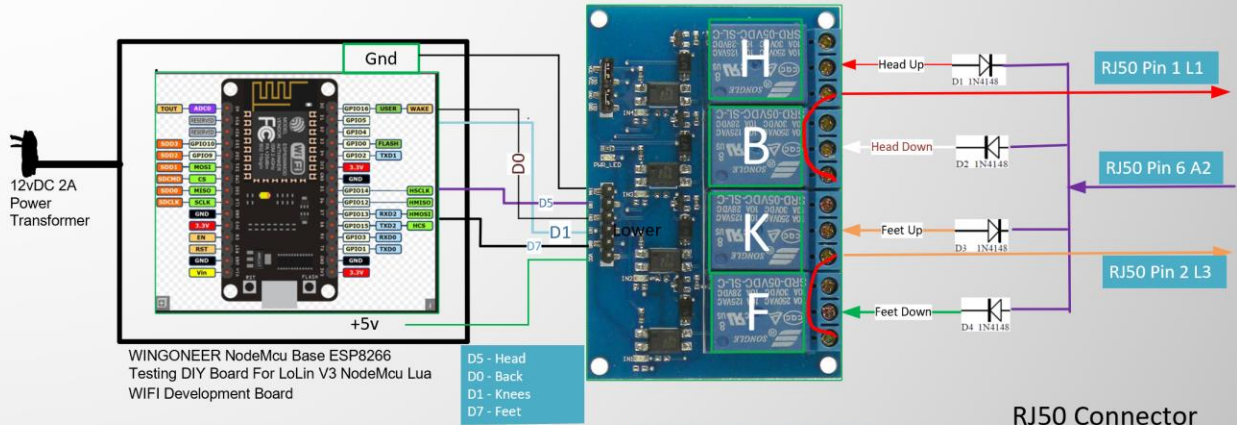
1. Installed a voice activated bed controller that gives Jana the freedom to change the position of her bed as desired.

### **1. Be able to issue voice commands to her Assured Comfort AC Hi Low Signature bed with a TiMOTION controller.**

Jana's Assured Comfort bed has a TiMOTION control box that supports a wired TH26-5036 wired controller in addition to the TH30-5036 wireless remote (2.4ghz). Although the hand remote only has 6 functional switches and connects to the control box using a RJ50 connector, it still uses the pulse approach to detect which button is being depressed. One thing to note is although the circuitry inside the wired remote is the same, the actual switch number assignment differs depending on the model of the wired remote.

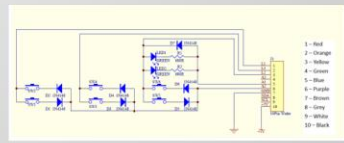
**Here is a schematic of the bed controller design**

**Voice Controlled Bed Controller for Jana, mechanical relays  
 Assured Comfort AC Hi Lo Signature bed with wireless and  
 TH26-5036-004 Hand Remote. Added cable SP01-P703-80E  
 Bill Weis 10-22-2020  
 S/N 20066.02**



SW1	SW2
SW3	SW4
SW4	SW3

Sw1 = Bed Up  
 Sw2 = Bed Down  
 Sw3 = Head Up  
 Sw4 = Head Down



- RJ50 Connector**
1. Red L1
  2. Orange L3
  3. Yellow L2 Required
  4. Green A3 (n/u)
  5. Blue A1 Required
  6. Purple A2
  7. Brown (Gnd. n/u)
  8. Grey TXD (n/u)
  9. White RXD (n/u)
  - 10 Black (+5v = n/u)

**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)