Lanie R. Project – Detailed view

By Bill Weis

Lanie R. - ALS

Requirements:

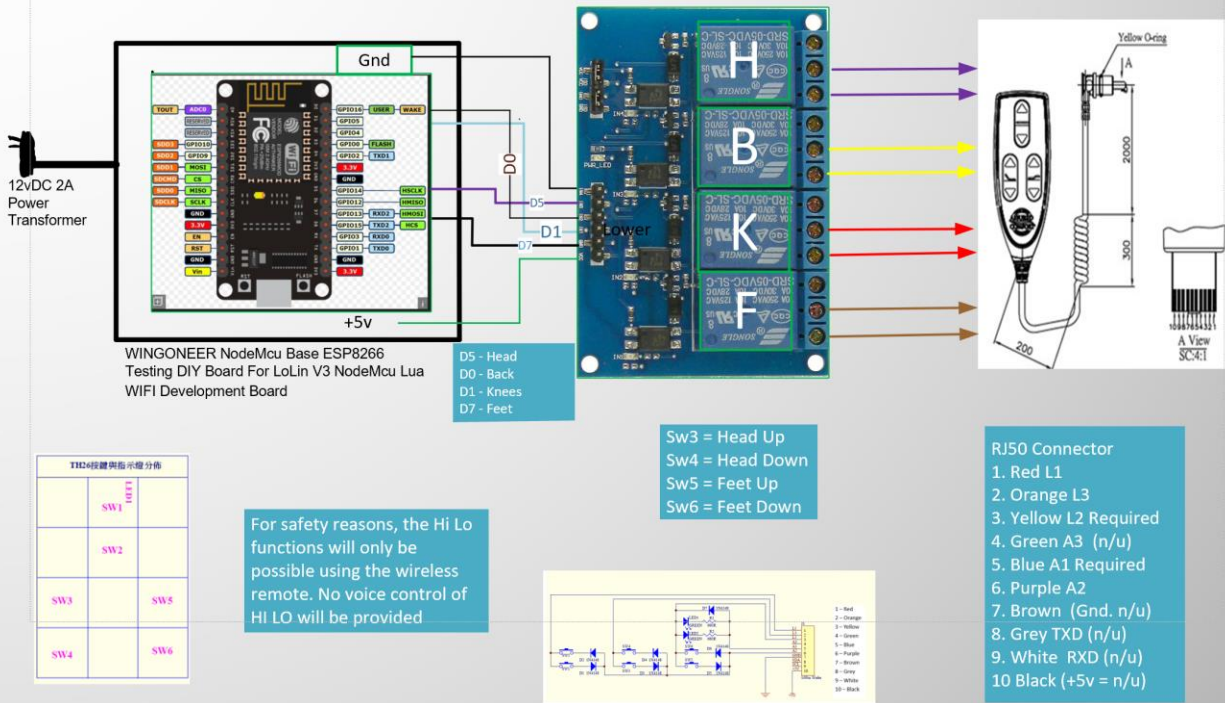1. Be able to use voice commands to control her adjustable bed

Solution – High Level:

1. Installed a voice activated bed controller that gives Lanie 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.

Lanie'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. We provided Lanie with 6 commands to raise the head of the bed and lower the head of the bed, and 4 commands to raise and lower the foot of the bed. The Hi Lo function is manual-only using the wireless remote.

Here is a schematic of the bed controller design

Voice Controlled Bed Controller for Lanie R, mechanical relays Assured Comfort AC Hi Lo Signature bed with wireless and TH26-5036-004 Hand Remote Bill Weis 3-10-2021 S/N 20081.11

12vDC 2A Power Transformer

WINGONEER NodeMcu Base ESP8266 Testing DIY Board For LoLin V3 NodeMcu Lua WIFI Development Board

D5 - Head
D0 - Back
D1 - Knees
D7 - Feet

Sw3 = Head Up
Sw4 = Head Down
Sw5 = Feet Up
Sw6 = Feet Down

For safety reasons, the Hi Lo functions will only be possible using the wireless remote. No voice control of HI LO will be provided

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)