

**Dave Gr. – ALS**  
**Details by Bill Weis**

Requirements:

1. Be able to voice control his Sleep Number bed
2. Be able to voice control the TV
3. Be able to have video calls through the TV using the Fire TV Cube

Solution – High Level:

1. Collaborated with Linak-US to swap out existing control box and linear actuator with replacement parts that would allow our bed controller to control the bed using voice commands.
2. We installed an Amazon Fire TV Cube
3. We added a webcam and installed Zoom

**Details of the Solution**

**1 – Voice Control his bed** – Dave wanted to be able to use voice commands to raise and lower the head and foot of his Sleep Number Bed. Sleep Number uses Leggett and Platt as their base which is BTLE (Bluetooth Low Energy) controlled.

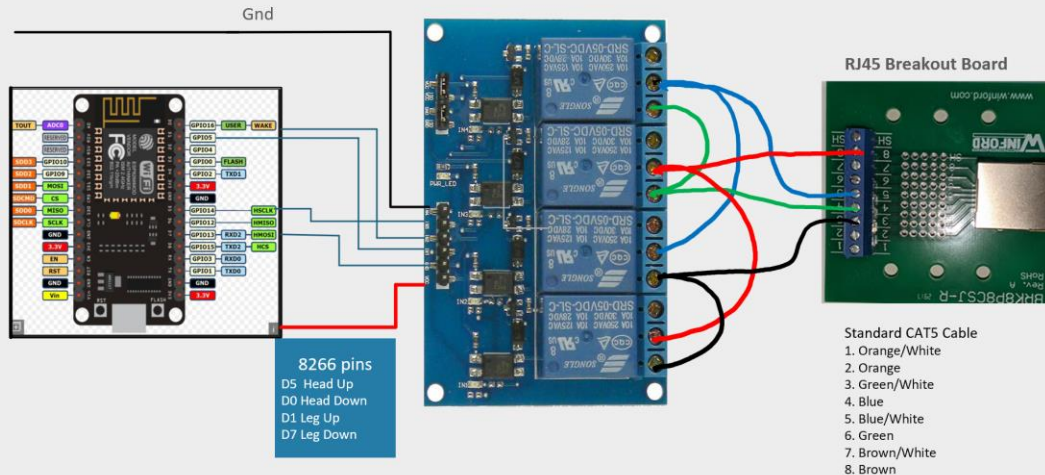
The real success of this project is thanks to Jim and his colleagues at Linak-US. We have a history of working together on other similar projects and they were awesome to work with once again. We would have had a very difficult time interfacing with the original control box in the Leggett and Platt base and Linak provided us with the parts we needed at a discounted price.

**2 – Installed an Amazon Fire TV Cube** – A standard installation of the Amazon Fire TV cube with no sound bar on the TV. We added all the necessary apps so Dave can watch his favorite content using voice commands. It is important that all the updates are installed. **Settings -> My Fire TV -> About -> Check for Updates**

**3 – We added a camera to the Fire TV Cube for Dave to have video calls with kids, and friends** – We added a camera to the Fire TV Cube and installed the Zoom app. Here is a list of components needed when adding a camera.

- a. [NexiGo 1080P Webcam](#)
- b. [Micro USB Male to USB Female cable](#)
- c. [Type A Male to Female USB Extender cable](#)

Dave Gregg – Sleep Number bed, Leggett and Platt BTLE Controlled Base  
 (Actuator and Control board swap out)  
 Bill Weis 9/7/22 S/N 22112.08



A custom CBD6S replaced the original controller  
 A standard ethernet cable was used for the connection from the voice activated bed controller to the bed.  
 RJ45 pin 3 - Green/White - Black Wire on RJ45 Breakout board  
 RJ45 pin 4 - Blue - Green Wire on RJ45 Breakout board  
 RJ45 pin 5 - Blue/White - Blue Wire on RJ45 Breakout board  
 RJ45 pin 8 - Brown - Red wire on RJ45 Breakout board

Position	Direction	Wire Connection	Wire Connection
Head	Up	pin 5	pin 4
Head	Down	pin 8	pin 4
Foot	Up	pin 5	pin 3
Foot	Down	pin 8	pin 3

**Resources**

[Amazon Echo](#)

[Alexa Support](#) (Contact Support via the Amazon Alexa app - can have them call your number)

Alexa Fire TV Cube support numbers

888-280-2073

888-375-9365