

# Dave Project – Detailed view (v1)

By Bill Weis

## Requirements:

1. Be able to voice control his adjustable bed

## Solution – High Level:

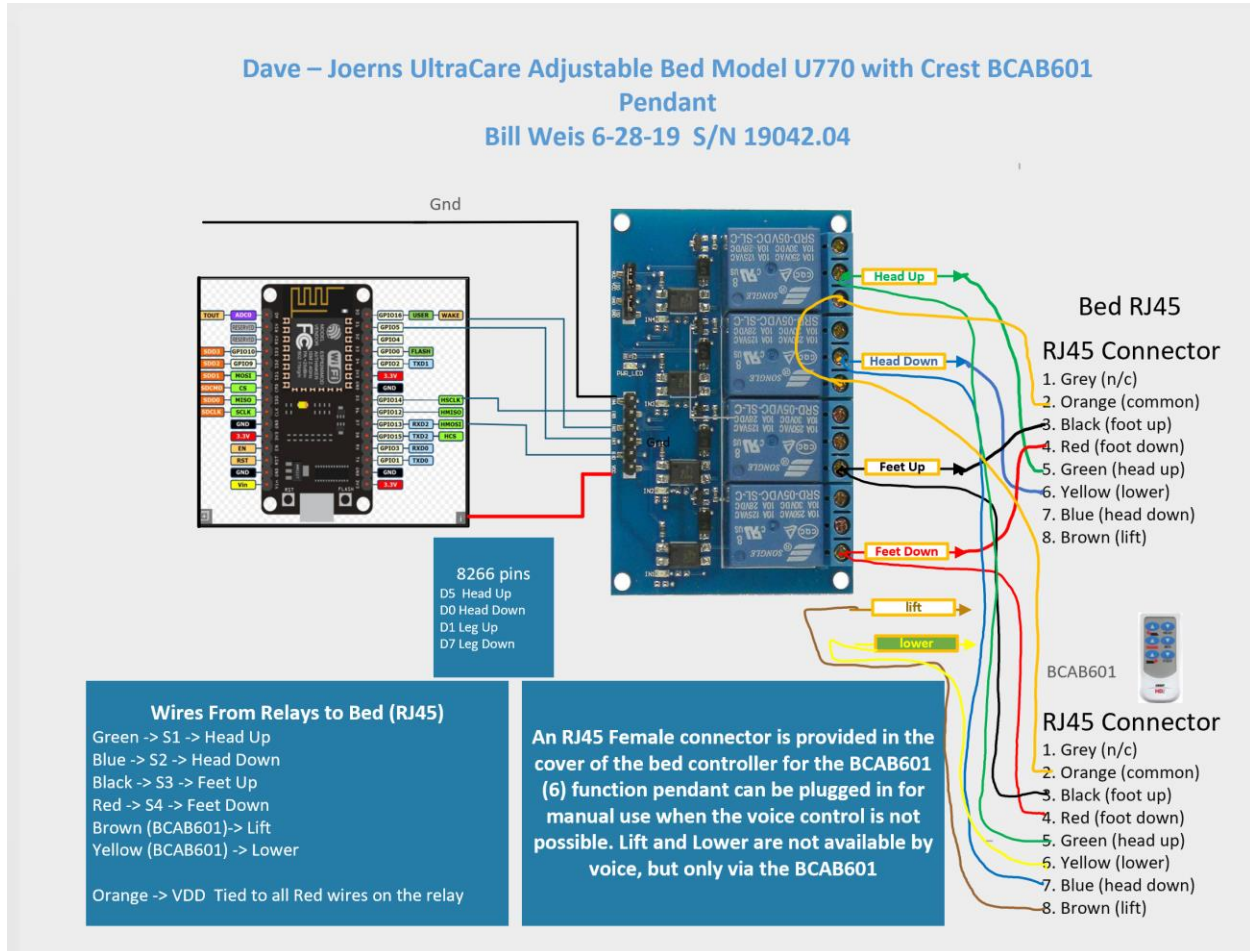
1. Designed a voice activated bed controller which gave Dave the ability to control the Head Up and Head Down functions of his adjustable bed. We also provided the means for all 6 functions including Head Up, Head Down, Feet Up, Feet Down, Bed Up and Bed Down to be manually controlled. He can control the bed using Google and Alexa.

## Details of the Solution

**1 – Voice Control his bed** – Dave has a Joerns UltraCare Model U770 adjustable bed which is controlled by a Crest BCAB601 pendant. This bed is a 6-function bed which includes Head Up, Head Down, Foot Up, Foot Down, Bed Up and Bed Down. Dave's preference was to only use voice to control Head Up and Head Down. For safety reasons, Bed Up and Bed Down require use of the Crest pendant which is functional through the use of the RJ45 connector that we added to our controller. Bed Up and Bed Down is a feature that is only used by a caregiver anyhow, and the caregiver can continue to perform Bed Up and Bed Down as they always have. All 6 functions are still controllable via the Crest pendant and two of the functions are also controlled by voice (Head Up and Head Down). The voice commands can be issued through Alexa as well as through the Google Hub. The benefit of being able to voice control the bed via either smart speaker is redundancy as well as to be able to compare the performance of Alexa vs Google.

Dave felt that a Head Up command that ran for 3 seconds would be ideal for sleeping position, and if he added another Head Up command which also runs for another 3 seconds, that would put him in the ideal position for watching TV. Routines were created on both Amazon and Google to make these voice commands customized for Dave's preference.

Here is a Visio diagram of the solution.



## 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)

