

Tom S. Project – Detailed view (v1)

By Bill Weis

Requirements:

1. Be able to use voice commands to control his TV
2. Be able to use voice to control his adjustable Hill Rom P870 Full Electric bed

Solution – High Level:

1. We provided an Amazon Fire TV Cube so Tom could use voice commands to control his TV
2. We designed a voice activated bed controller that allows Tom to control his Hill Rom P870 Full Electric bed

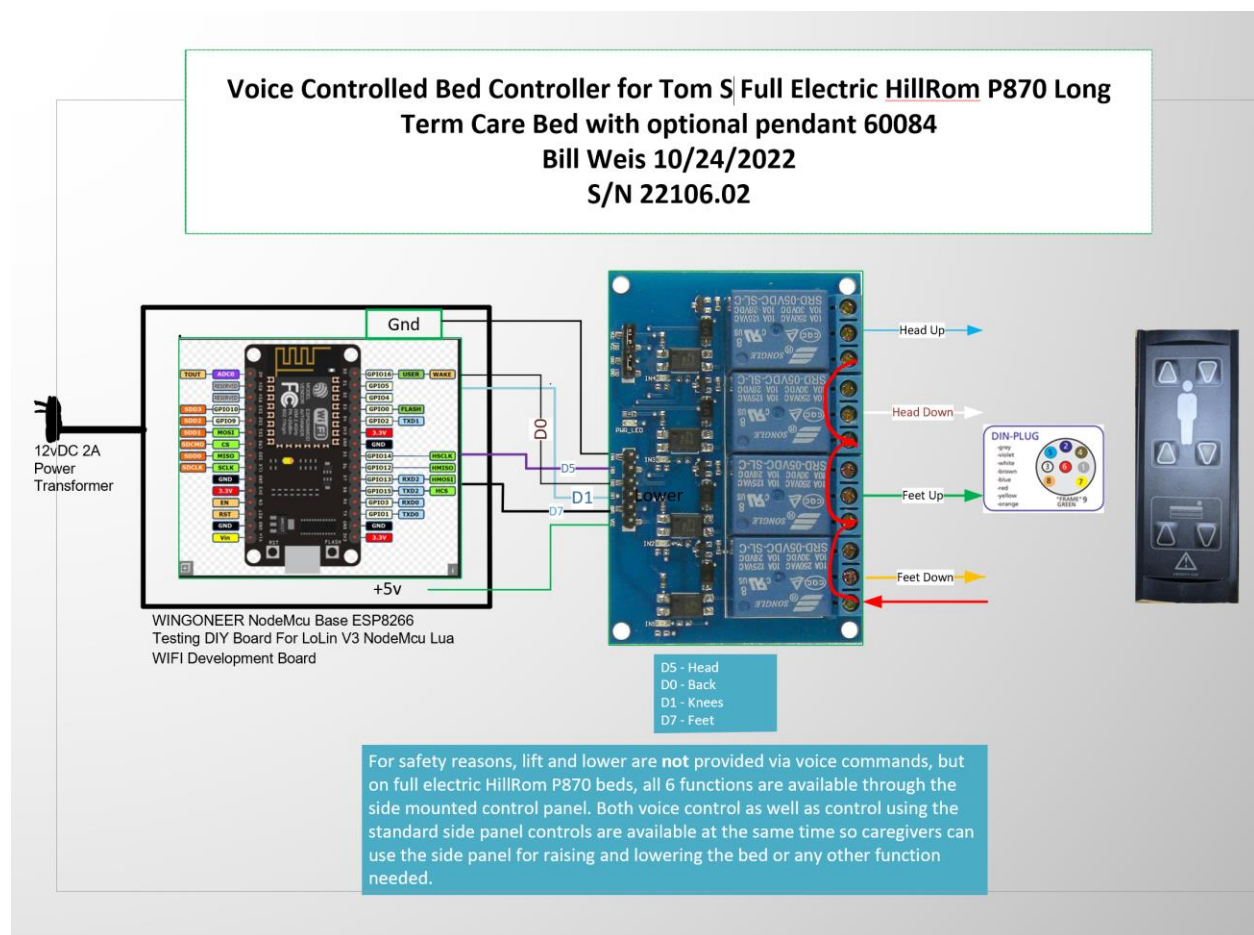
Details of the Solution

1 – Be able to use voice commands to control his TV - Tom is in a health care facility and is in a semi private room. The default solution for residents to be able to call the nurse or control their TV is using the hand remote below, and they call this system the speaker pillow. The TV speaker is located at the bed so two people can share a room and watch their own TV programming. Our initial thoughts were to install an Amazon Fire TV Cube for TV control, and provide a blue tooth speaker that he could have bedside to replace the pillow speaker. We would then need to design a solution for nurse call, which we did but it was not implemented as you will see as you read on in section 2. One main drawback to the Fire TV Cube was that it's IR control was controlling both TVs in the room since they are the same model and respond to the same IR Codes. On the positive side, being able to watch streamed content on Prime Video and YouTube was a great improvement over the standard content, and the roommate was content with watching the same movies that Tom would call up using the Fire TV Cube.



2 - Be able to use voice commands to control his Full Electric Hill Rom P870 bed – We designed a voice activated bed controller for the Hill Rom P870 bed, however due to stringent lock down of the facilities IT network, we were unable to install the bed controller. Understanding that Tom would gain independence by using technology similar to what we provide, the upper management of the facility investigated other solutions. They found a solution called *autonoME* from Accessibility Services Inc and will evaluate that solutions soon. [autonoME Hospital - Accessibility Services, Inc.](#) AutonoME will give Tom the ability to call the nurse, control the TV, and control the bed. We will see if Tom and his roommate want to give up the Amazon Fire TV Cube and lose some of the benefits it provides in favor of the autonoME solution.

Here is a visio diagram of the bed controller



Resources

[Amazon Echo](#)

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

[Fire TV: Amazon Digital and Device Forum \(amazonforum.com\)](#)

Fire TV Cube Support **888-280-4331**