

**Greg N**  
**Detailed View by Bill Weis**

**Greg – Quadriplegic**

**Requirements:**

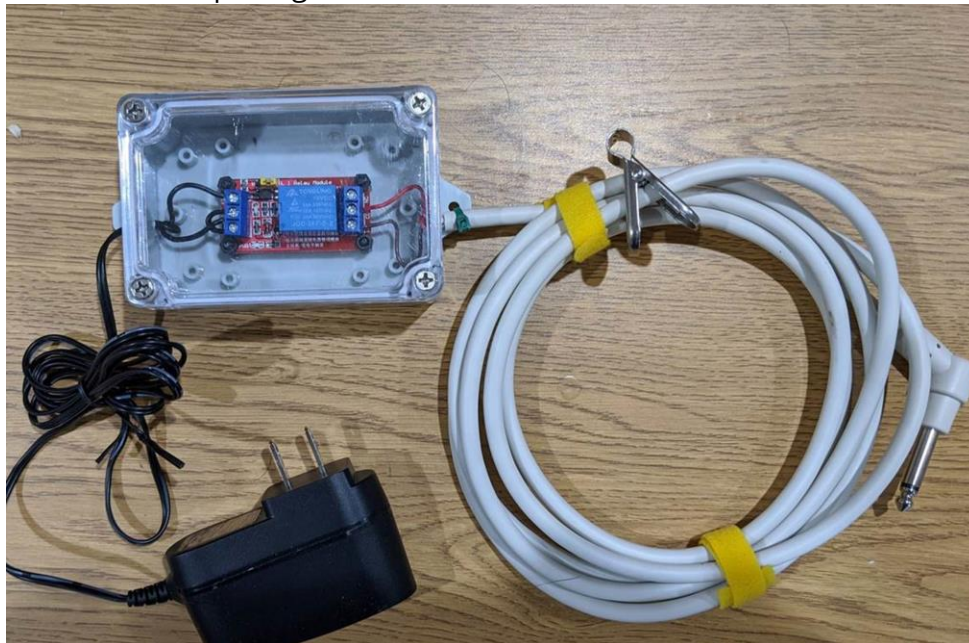
1. Be able to use voice to call his nurse.
2. Be able to voice control his adjustable bed

**Solution – High Level:**

1. Designed a solution that allows Greg to use voice commands to call his nurse by providing an Wemo Smart mini switch and a small relay box with the Nurse Call light cable attached.
2. Designed a voice activated bed controller which gives Greg the ability to control the Head Up/Down and Foot Up/Down functions of his adjustable Invacare CS7 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.

**Details of the Solution**

**1 – Call Nurse Button via voice** – Greg is a quadriplegic and he lives in a care facility. He was finding it increasingly difficult to depress the nurse call button and wanted a voice solution for that. We provided Greg with a Wemo smart mini plug which he can control using his Google smart speaker, and the device shown in the picture which we designed. The small relay in this box is set to close contacts when power is applied. Using a Google Routine, Greg is able to give a simple command to Call Nurse, which then simulates a person depressing the call nurse button by closing the contacts in the relay for a few seconds then opening those contacts.

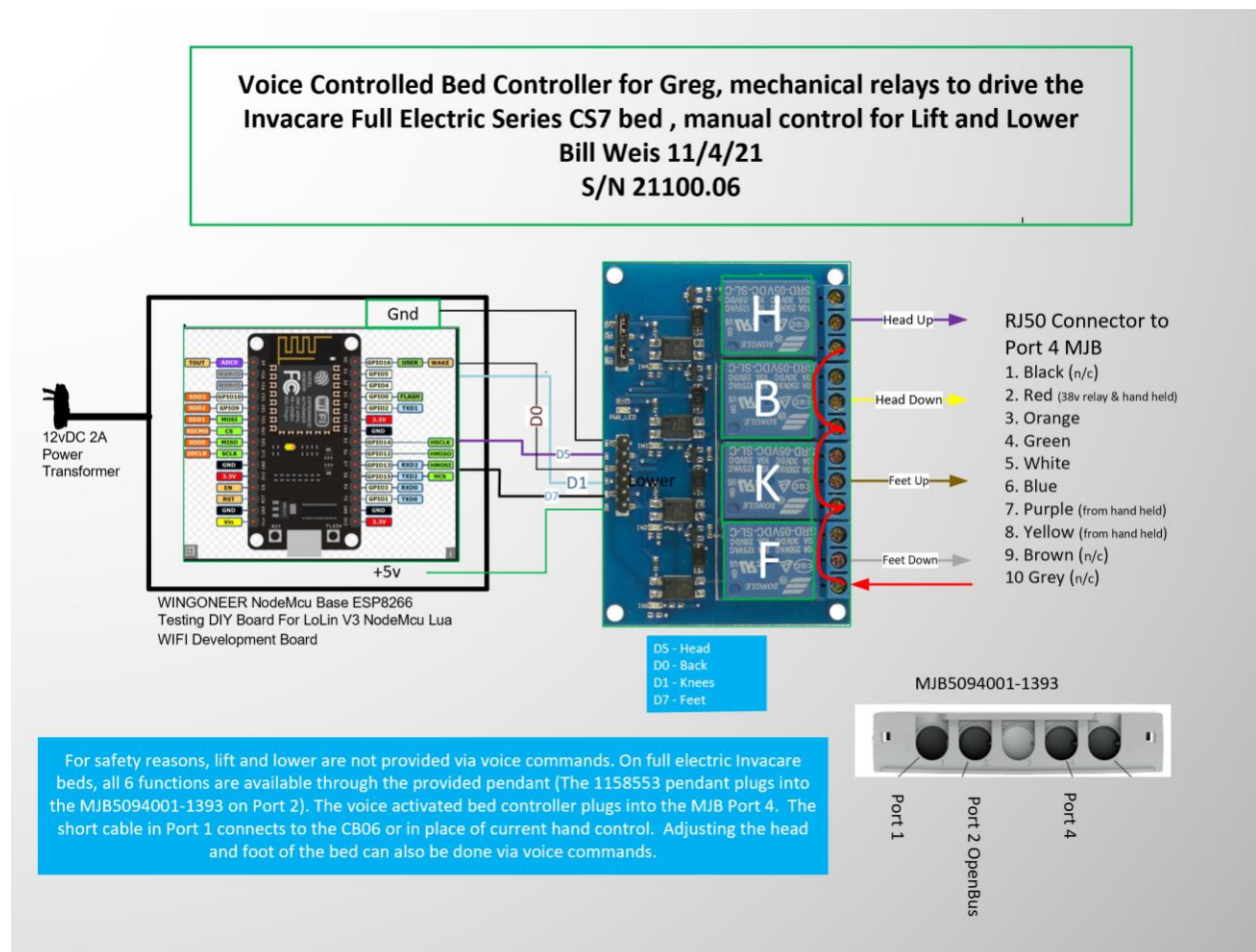


**2 - Voice Control his bed** – Greg has a full electric Invacare CS7 bed that uses a 11158435 (aka 1158553) hand remote with a white tag of Linak p/n HB00-U033-01. This bed is a 6-function bed which includes Head Up, Head Down, Foot Up, Foot Down, Bed Up and Bed Down. For safety reasons, Bed Up and Bed Down require use of the original hand pendant which is connected to the open bus port on the MJB device. 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 original pendant

The voice commands are issued to the Google Mini.

We provided Greg with the ability to move the head and foot of the bed up/down for different durations. Routines were created on Google to make these voice commands customized for Greg's preference.

Here is a Visio diagram of the solution.



## **Resources**

[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)

[Wemo Support](#) Phone number for Support = 1-844-745-wemo (9366)