

***Jim W. – Injured from Explosion***  
***Detailed view by Bill Weis***

**Requirements:**

1. Be able to voice control his TV
2. Be able to use voice to call his nurse.
3. Be able to voice control his Pride Mobility PLR-4955 lift chair

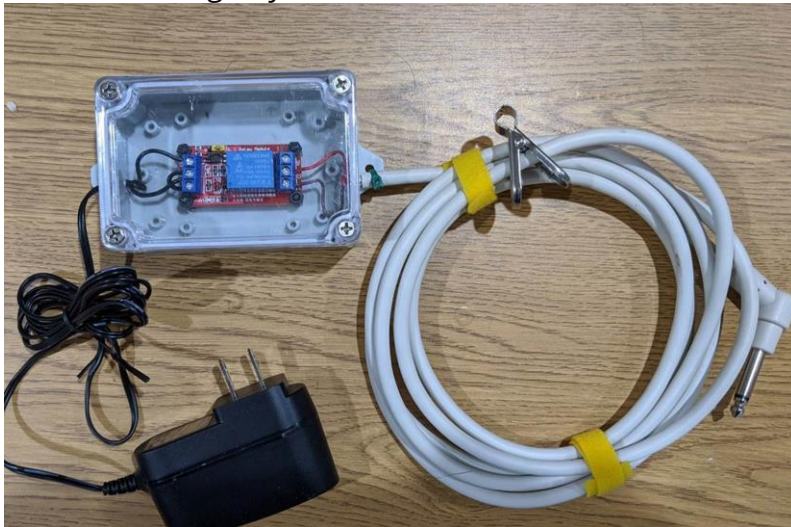
**Solution – High Level:**

1. Provided an Amazon Fire TV Cube to control his TV (Requires new TV)
2. Designed a solution that allows Jim to use voice commands to call his nurse by providing an Amazon Smart switch and a small relay box with the Nurse Call light cable attached.
3. Designed a voice activated recliner controller that allows Jim to use voice to control all functions of the Pride Mobility PLR-4955 lift chair

**Details of the Solution**

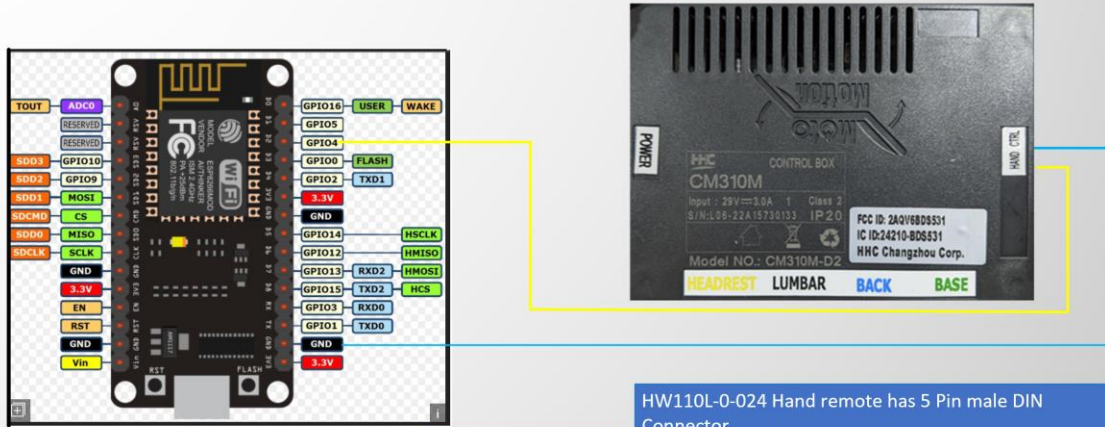
**1 – Be Able to Voice Control his TV** – The Amazon Fire TV Cube will allow Jim to voice control his TV when a replacement TV is available.

**2 – Call Nurse Button via voice** –We designed a solution using a small box that holds a relay and wired to the normally open contacts on that relay are the wires for Call Nurse. Power to the relay box is controlled by an Amazon Smart plug which he can turn on by voice. An Amazon routine was created which turns the relay on for 5 seconds then automatically turns it off. This simulates the way the call button works which closes the contacts as long as you hold the button.



### 3 - Voice Control his Pride Mobility PLR-4955 Lift Chair – We designed a voice solution that gives Jim the ability to fully control his new PLR-4955 lift chair.

Jim W. Recliner Project  
 Pride VivaLift Tranquility PLR4955 V2 Model  
 Hand Controller HW110-0-024  
 S/N 23122.06 1-9-24



This is the 5 pin DIN male connector



Using a 15030HC-G harness

- Pin 1 - Orange
- Pin 2 - Yellow
- Pin 3 - Green
- Pin 4 - Blue
- Pin 5 - Black

HW110L-0-024 Hand remote has 5 Pin male DIN Connector

Pin #	Purpose
1. Red	LEDs for each button on remote
2. Yellow	Did not tear the remote apart, output signal to here +5v
3. Green	+5v
4. White	Ground
5. Blue	Did not tear the remote apart to check

Control box harness (Actuator Control Pins)

Pin #	Purpose
1. -20v	LEDs for each button on remote
2. n/c	Did not tear the remote apart, output signal to here +5v
3. -25v	+5v
4. output	(ie Inflate lumbar=30vdc, deflate lumbar=-30vdc)
5. Gnd	Did not tear the remote apart to check

For our solution, we only needed to connect our controller to the recliner using DIN connector pin 4 for a common ground and pin 2 so we can provide the digital signal to the chair. Our control box replaces the hand remote. The control box in the chair is a HHC Moto Motion CM310 L06-20201670028.