

# Marty M. Project – Detailed view (v1)

By Bill Weis

## Requirements:

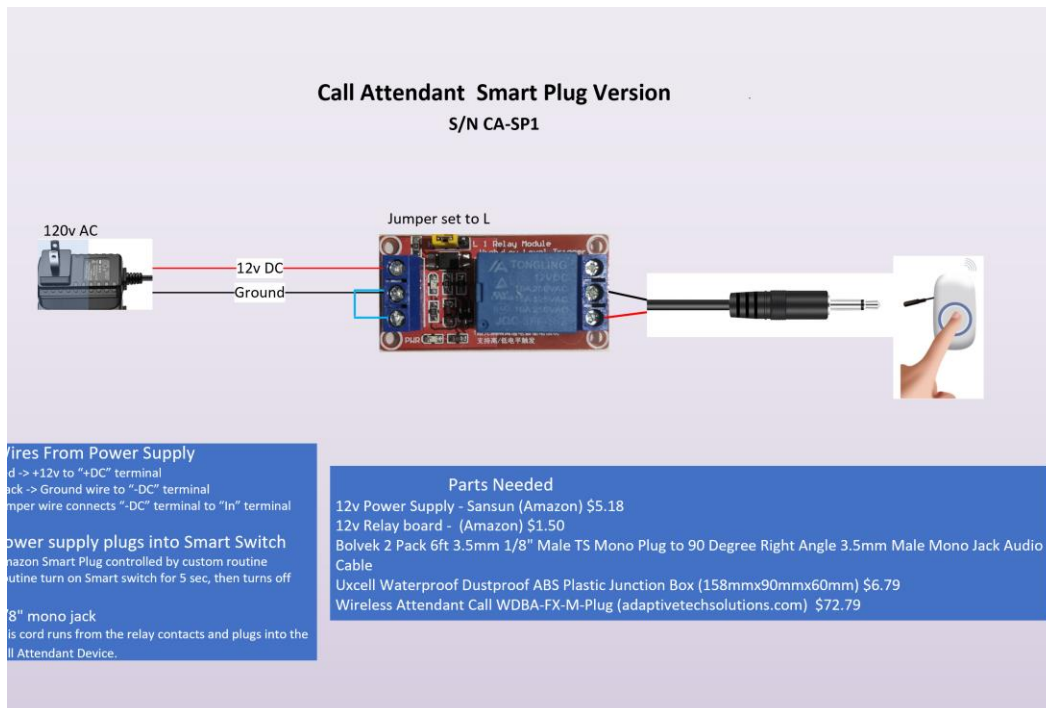
1. Be able to use voice to activate the Adaptive Tech Solutions Call Attendant device
2. Be able to voice control his Pride Mobility PLR3955 lift chair/recliner

## Solution – High Level:

1. We provided a custom relay box that works with a smart plug that enables Marty to use voice to activate the Call Attendant device.
2. We provided a solution where Marty could issue voice commands for the Pride Mobility PLR3955 lift chair

- 1. Be able to Use Voice to Control the Adaptive Tech Solutions Call Attendant** – We designed a custom relay box that is set to close contacts when the relay box is powered on. We also included a Smart Plug that can be controlled by Alexa and when the custom relay box is plugged into the Smart Plug and a voice command is given to turn on the smart plug, the Call Attendant receivers notify the caregiver that assistance is needed.

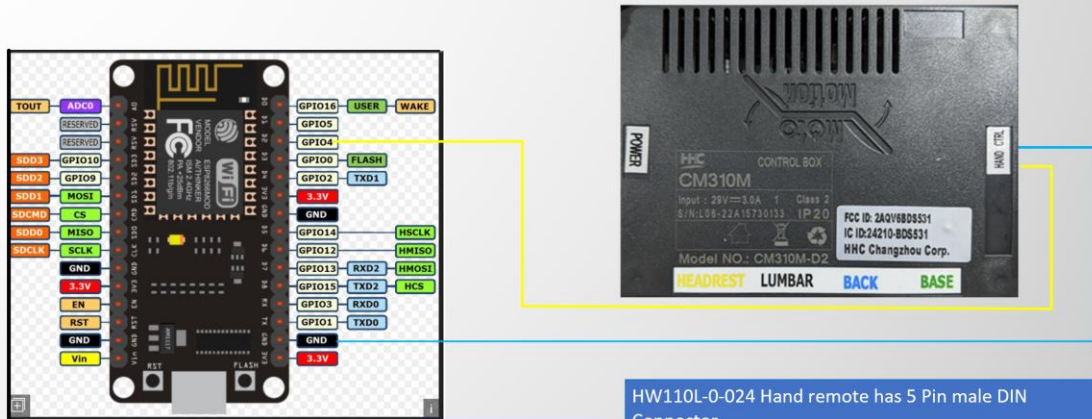
## Here is a design of the solution



**2. Be able to control his Pride Mobility PLR3955 using Voice commands** – We designed a solution where Marty could use voice commands for all the desired features of his new lift chair.

Here is a schematic of the bed controller design

Marty M. Recliner Project  
 Pride VivaLift Tranquility PLR3955 V2 Model  
 Hand Controller HSW110-0-024  
 S/N 23119.04 6-6-24



This is the 5 pin DIN male connector



Using a 15030HC-G harness

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

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
3. -25v	+5v
4. output	(ie inflate lumbar=30vdc, deflate lumbar=-30vdc)
5. Gnd	Did not tear the remote apart to check

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
3. Green	+5v
4. White	Ground
5. Blue	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