

DeAnn – Detailed view (v1)

By Bill Weis

Requirements:

1. Be able to voice control opening her front and back doors
2. Have the ability to voice control her thermostat
3. Be able to intercom with caregiver
4. Be able to turn on and off lights by voice

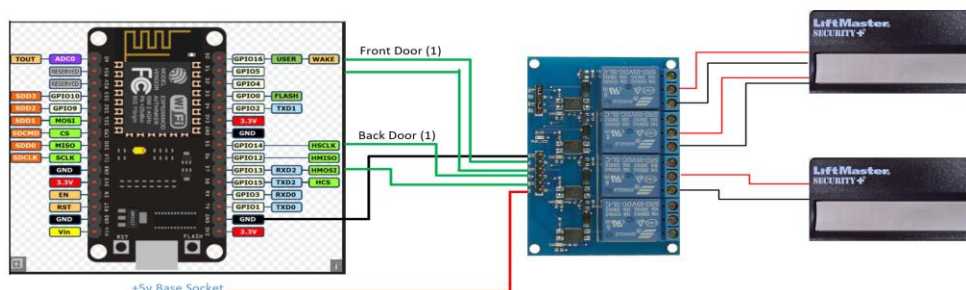
Solution – High Level:

1. Developed a voice activated controller that works with the existing Open Sesame product to give DeAnn the ability to use voice commands to open her front and back door
2. Added an Amazon Echo-enabled Nest thermostat to enable DeAnn to control her thermostat by voice
3. Installed an Echo Dot in DeAnn’s room so she can ‘Drop-In’ on the other Amazon Echo device to serve as an intercom to her caregiver
4. DeAnn had already installed some devices which allow her to control the various lamps and ceiling lights in her house.

Details of the Solution

1 – Voice Control front and back doors – DeAnn has the [Open Sesame](#) product installed on her front and back doors. After hearing about Holly Payne’s voice activated solution for her bed, DeAnn wondered if a similar solution could be developed for Open Sesame doors. We were able to re-use the same core design we developed for Robbie’s and Holly’s bed controller to provide voice activated control of her doors. Here is a [link](#) to DeAnn’s showing off her new solution.

Here is a Visio diagram of the solution.



The Open Sesame door activation solution uses GPIO Pins 16 and 5 to open the Front Door, and GPIO pins 14 and 1 to open the Back Door. Inside each LiftMaster remote is a push button switch that is essentially double pole double throw. This required two GPIO and two corresponding relays for each door opener. The good news here is it offers redundancy since no single point of failure should result in unintended door opening.

2. Have the ability to voice control her thermostat – DeAnn is capable of adjusting her old thermostat with the help of some notches at the end of a yardstick. We thought why not add a voice enabled thermostat to replace her old method. Here is the thermostat we chose - [Nest T3008US Learning 3rd Generation Thermostat \(Professional Version\)](#)

3. Be able to intercom with caregiver – It is important for the individual and the caregiver to be able to communicate with each other. We added an Echo Dot to DeAnn’s room to allow her to ‘Drop-In’ with the other Echo device. [Here](#) is the guidance to install that feature. (You can enable device to device Drop-In feature within a house by going into the app on a PC or Tablet and simply turning off Do Not Disturb.

4. Be able to turn on and off lights by voice – DeAnn already had this figured out. She installed some Etekcity WiFi Smart Plug Mini Outlets to control some lamps, and she had some TP-Link light bulbs installed in her ceiling lights.

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)