

LindseyE
Detailed View by Bill Weis

Requirements:

1. Be able to voice control her semi-electric Drive bed that has a 15030HC-G remote
2. Be able to voice control her electric fire place/space heater

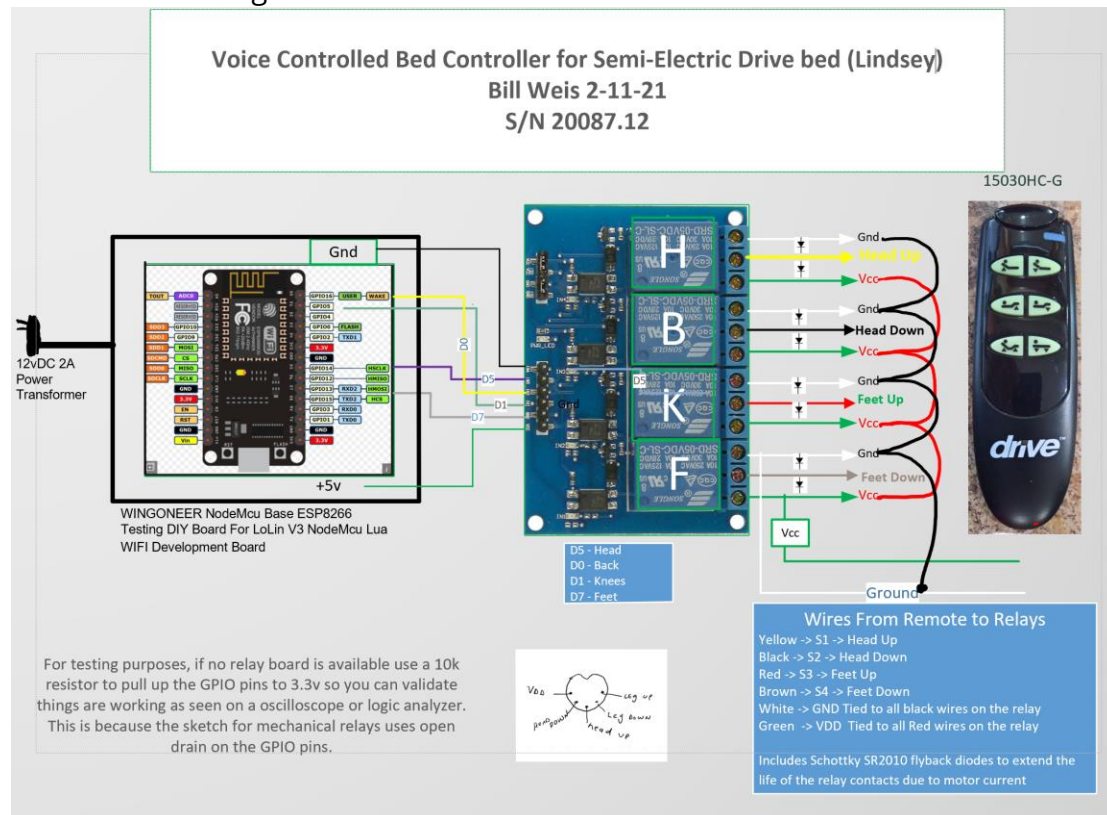
Solution – High Level:

1. We designed a voice activated bed controller for her Drive bed
2. We designed a voice activated controller for her IR based Fireplace

Details of the Solution

1 - Voice Control her bed – Lindsey has a semi-electric Drive bed with hand remote 15030HC-G. We provided Lindsey with the ability to raise/lower the head and foot ends of the bed using voice commands that run for specific durations. The solution is based on an ESP8266 Microcontroller and mechanical relays. Schottky diodes were added to protect the relay contacts and prolong the life of the relays. Lindsey can control her bed using both the Alexa and Google device smart speakers.

Here is a Visio diagram of the solution.



2 – Voice Control of her Electric Fireplace/space heater– Lindsey wanted to be able to voice control her electric fireplace which uses an IR remote. We captured the codes for the remote and built a voice-controlled solution.

Here is a Visio diagram of that solution

LindseyE - Voice Activated Electric Fireplace
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S/N 21089.02

Actual remote we are emulating

IR Codes	
FFA25D	Power Button
NEC	FFFFFFFF
NEC	FFFFFFFF
FFE21D	Fake Fire
NEC	FFFFFFFF
NEC	FFFFFFFF
FFE01F	750W
NEC	FFFFFFFF
NEC	FFFFFFFF
FF906F	1500W
NEC	FFFFFFFF
NEC	FFFFFFFF

The IR transmitting circuit was modeled after what is shown above. The ESP8266 Node MCU LUA microcontroller plugs into the wingoneer socket which provides the needed +5v and ground to the circuit (XXMicro Plug not needed therefore)

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](#)