

Christopher L. Project #2 – Detailed view (v1)

By Bill Weis

Requirements:

1. Be able to control his Drive bed using eye gaze sending IR Signals

Solution – High Level:

1. Designed a voice activated bed controller which gave Christopher the ability to control all desired functions of his adjustable bed using eye gaze control Sending IR Signals

Details of the Solution

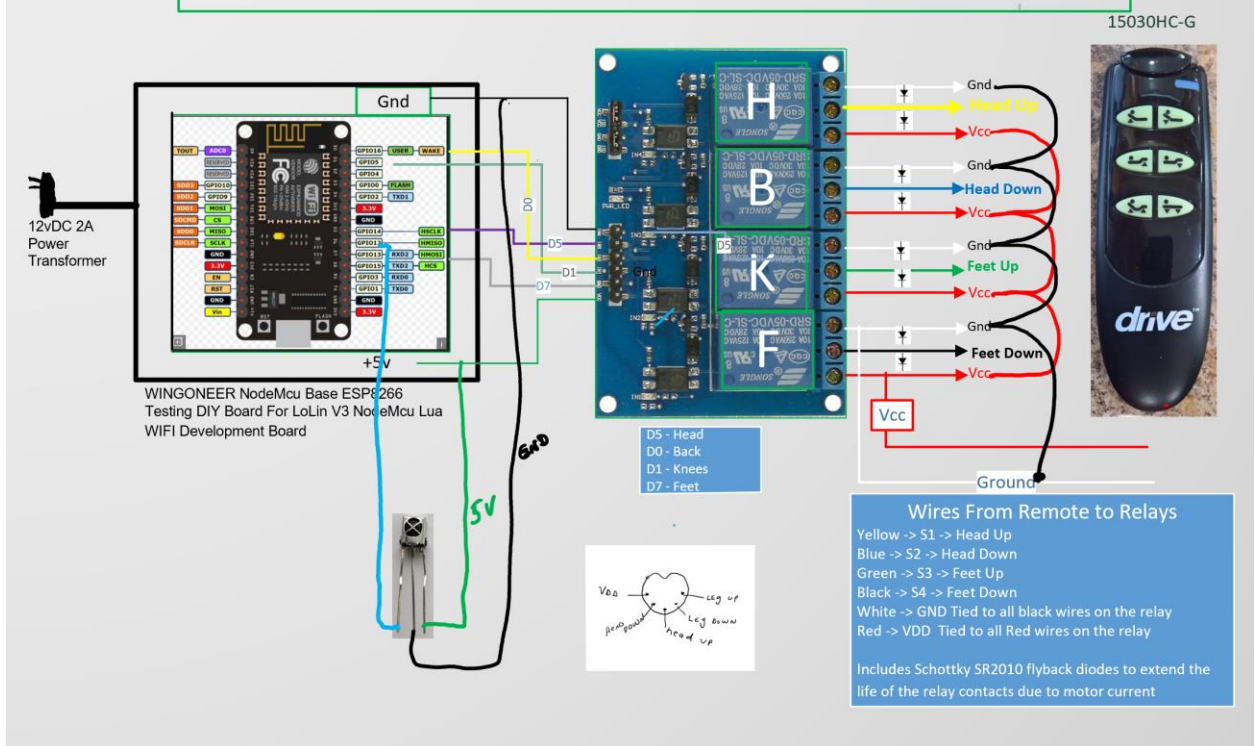
1 – Voice Control his bed – Christopher has a Drive Delta 1000 bed with a hard wired remote. He wanted the four functions of Head Up, Head Down, Foot Up and Foot Down to be controlled by IR Signals. Christopher has a Grid 12 device that is capable of learning IR Signals from Infrared Remotes, and he wanted to see if we could provide him with a controller that responds to IR signals. One reason for this request was the fact his internet goes down frequently and this solution is standalone meaning no internet is needed.

The functional engineering drawing on the next page shows the connections between the microcontroller, the IR Receiver and the relays, as well as the relays to the bed. The actual IR Receiver we used is different than the one shown in the drawing. The picture gives a better example of the actual IR Receiver used.

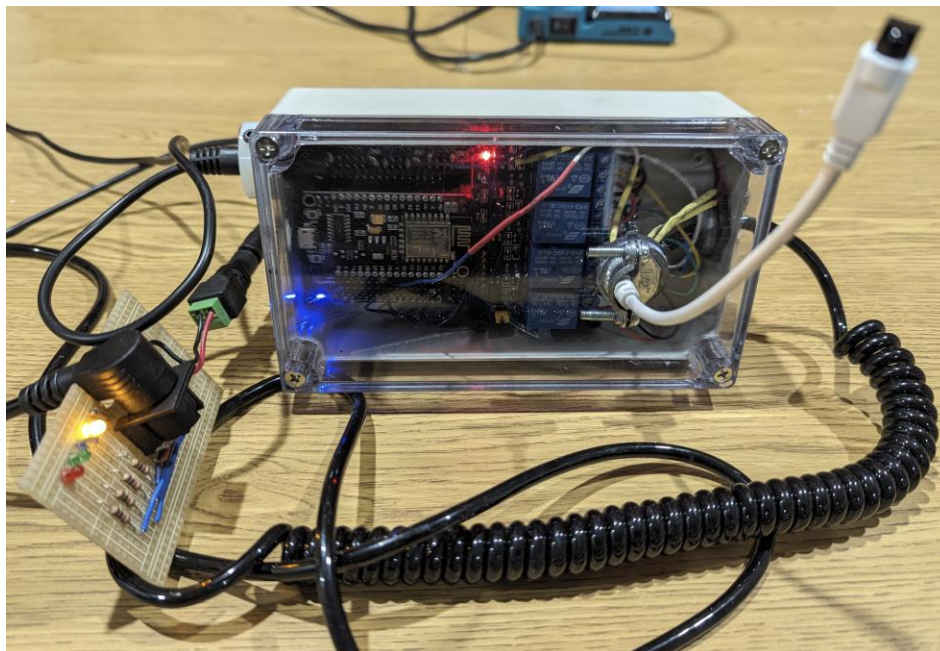
IR Controlled Bed Controller for Semi-Electric Drive bed (Chris L.)

Bill Weis 8/3/23

S/N 23125.08



Infrared controller for his Semi-Electric Drive bed.



Here is the control page Chris was able to create to allow him to use eye-gaze 'clicks' to control his environment including the call attendant, fan, lights and his bed.

