Notes

1. PCB
    a. The PCB does not reflect the digipot connections.
    b. There did not exist a 3d model for the STM board nor the linear pots and USB connector.
    c. Decoupling capacitors were excluded for simplicity but in implementation, did not make a noticeable difference in system operation.
    d. The USB connection lacks protection measures.
    e. It was not clear to me which pin the USB power should be connected to.
    f. There was a body of errors in the PCB which prescribed that I connect all my GND vias. I am unsure of why the software required this.
    g. There are holes in the PCB enclosure that serve as pilot holes for mounting the PCB.
    h. Because the linear pots lacked 3d models, it was moot to define the enclosure height with certainty.
2. Code
    a. The code does not account for the SPI digipot control, this will be completed in the future, then implemented on PCB.
    b. An external code library was utilized to control the LCD. This library can be found with explanation at https://controllerstech.com/interface-lcd-16x2-with-stm32-without-i2c/
    c. There is an error in the LCD string where the whole body of text shifts if a pot value decreases by a decimal place
    d. The code was unable to be integrated by the deadline. I suspect that it was an issue with the debugger driver or the system memory of the STM board. I was unable to find a conclusive answer as to this malfunction.