

# THE INFINITY BOARD

## PROBLEM STATEMENTS

- 1) To create a sound effect device with either multiple effects or a unique combination of effects to create new sounds.
- 2) To create a unique and easy to use interface for the user of this device.

## SOLUTION

To create a single pedal board that houses several effects digitally, and allows the user to adjust any feature of the pedals by stepping on them. The digitally stored effects can be rearranged and "re-wired" in any imaginable combination to create even more diverse sounds.

## REQUIREMENTS

### FUNCTIONAL:

- One output signal is manipulated by the sound effects and the other is the original signal
- Must have the ability to change all the settings of a particular pedal in a performance setting
- Has the ability to change the order of the effects easily and quickly

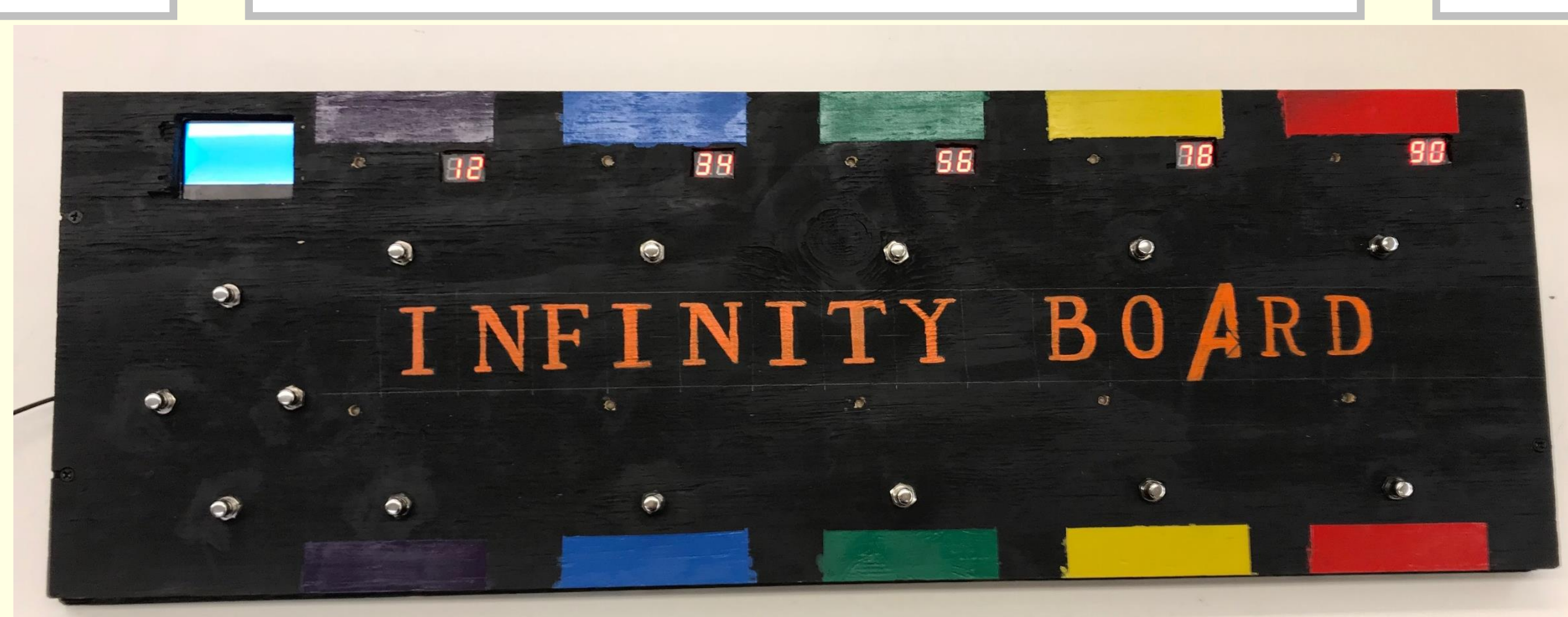
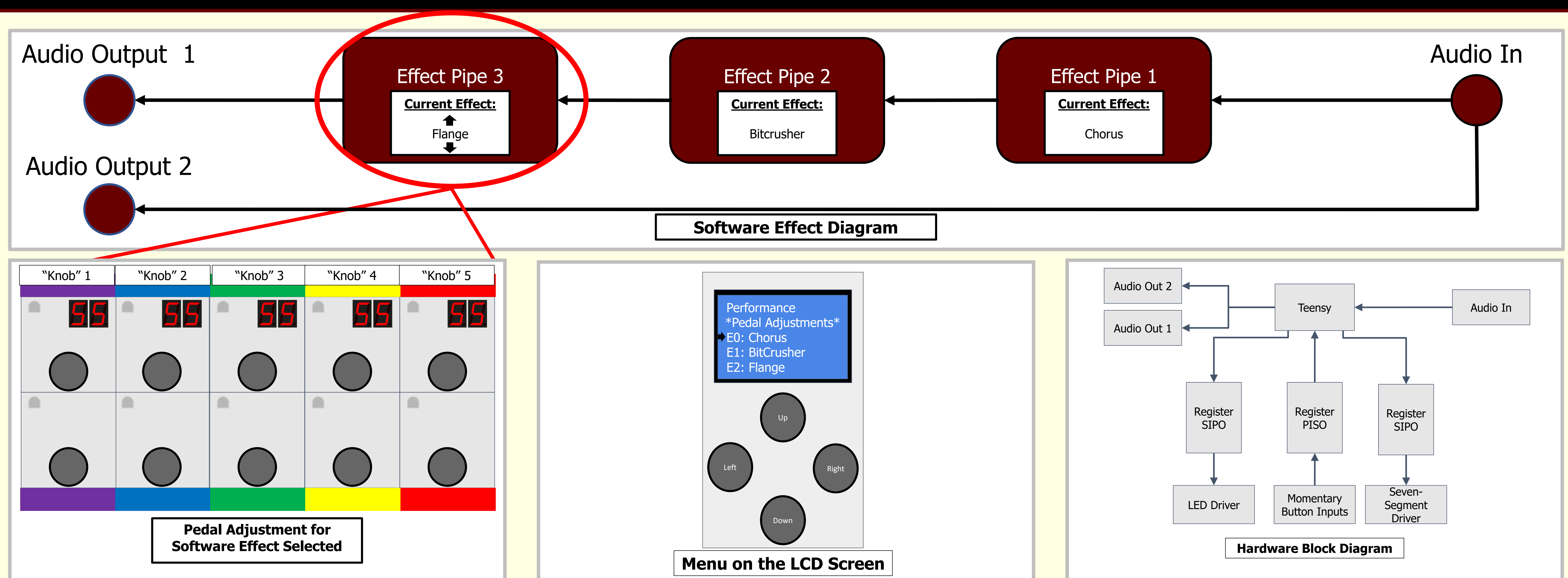
### NON-FUNCTIONAL:

- Functions with a power supply of 9 Volts or less
- There must not be a significant delay between the input signal and the output signal

### OPERATING ENVIRONMENT:

- The pedal board will be used in a live performance setting or can be used for recording as a musician

## DESIGN



## TESTING PROCESS AND STRATEGY

- 1) We tested the menu system by making our potential users turn the pedalboard on and program the first initial pedal layout.
- 2) Then we had them toggle various pedals on/off to guarantee that the effects worked independently as well as together.
- 3) After that, we had the users adjust the settings of a single pedal by using the momentary push buttons to fine tune, as if they were in a live setting.
- 4) Finally, we had them change the order of the pedals to show how easy it is to change them, and to show the various sounds they can achieve.

