Test Cases

Project: Sonic Cascade Rhythm Rumble

Date: 29/05/2023

LIST OF TEST CASES

1.) - Test case ID: 001

- Test case description: Testing basic functionality. LED lights and screen response. Testing whether the LEDs work and if the LCD screen responds to the inputs.

- Pre-conditions: SCRR is assembled, plugged in, screen's brightness is set correctly.

- Test steps: Plug SCRR in; Turn it on; See if LED lights up; Test mood and speed knob for response from the screen.

- Expected results: LED powers on with full brightness, mood, and speed knob changes are registered on the display.

- Actual results: Success, all expected results were met. No unordinary function was detected.

- Pass/Fail status: Pass

2.) - Test case ID: 002

- Test case description: Testing elements' response to each other. Testing if music creation works.

- Pre-conditions: SCRR is assembled, plugged in, screen's brightness is set correctly. BPM and Mood are set to middle setting.

- Test steps: Plug SCRR in; Turn it on; Change Mood and Speed to maximum; start music; see if the LEDs respond to changes in speed and mood changes

- Expected results: Changes in speed and mood influence the created music.

- Actual results: Partial success, mood does not influence the end result.

- Pass/Fail status: Partial fail

3.) - Test case ID: 003

- Test case description: Check actual functionality of LEDs if they align with music correctly.

- Pre-conditions: SCRR is assembled, plugged in, screen's brightness is set correctly. BPM and Mood are set to low setting.

- Test steps: Plug SCRR in; Turn it on; See if LED lights up; Test mood and speed knob for response from the screen; change speed and mood to maximum; start the music; see if LEDs work as intended, "falling down" one after the other, smoothly; checking if changes in mood and speed influence LED flow

- Expected results: LED works as intended, flows seamlessly, and changes with change in music.

- Actual results: Success, but only 15 LEDs are handled maximum at once by the Arduino

- Pass/Fail status: Pass (with 15 LED limitation)

CONCLUSION

With a pass ratio of 66% percent, the product Is not perfect, but basic functionality works, no further tests are needed as of now.