

G22 Install Instructions

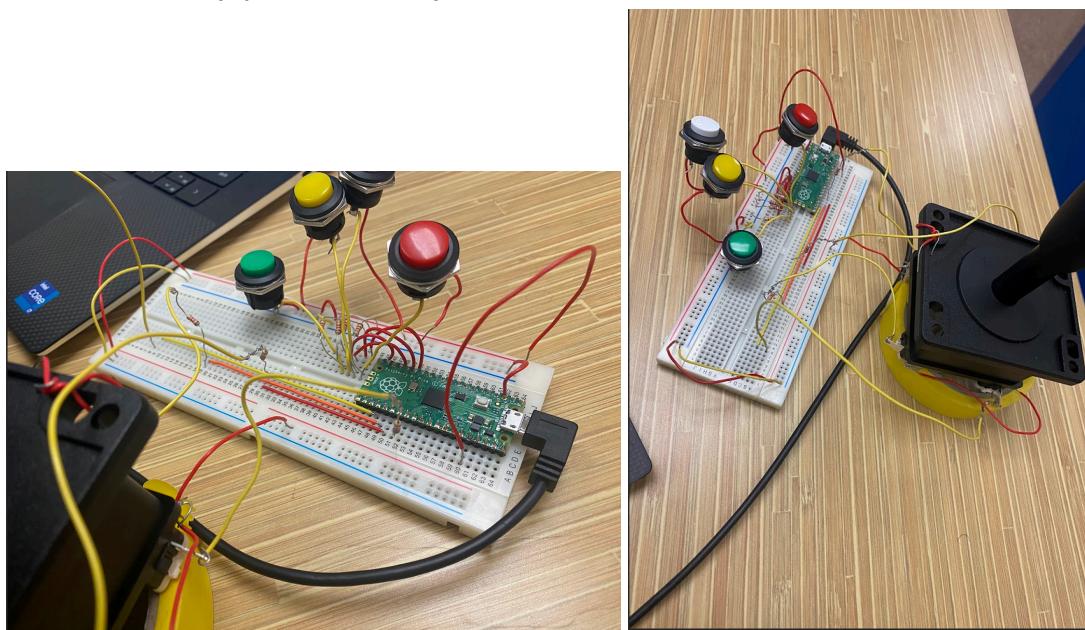
Game User Interface Install

1. Download the “ChargerArcade” folder from the GitHub repository to a Windows computer (to any directory you want)
2. Open the .pro file within the folder using the latest version of Qt Creator (v6.7.3 or newer, though older versions might also work)
3. Run the program using the green arrow in the bottom left of the Qt Creator editor

Hardware Setup

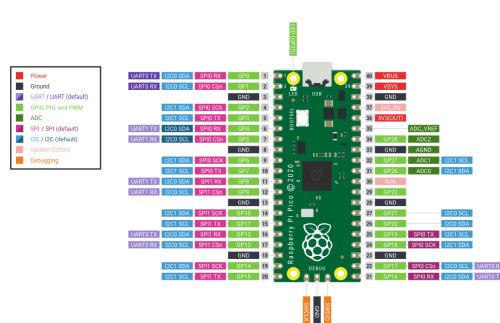
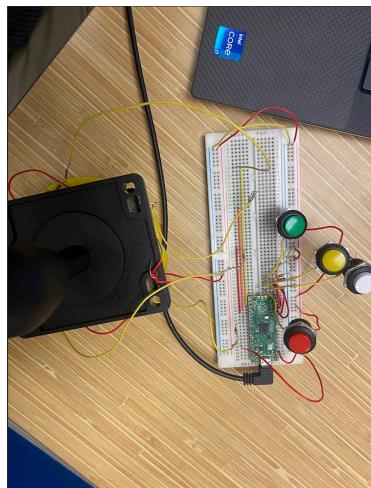
1. Wire breadboard, buttons, and joystick to raspberry pi pico according to below pictures
2. Yellow wire of buttons wired to resistors, resistors wired to GP 14, 13, 12, 11
3. Yellow wire of joystick wired to jumper cables, cables wired to GP 18, 19, 20 ,21

4.



Raspberry Pi Pico Pinout

5.



6. Install Arduino: <https://www.arduino.cc/en/software>

7. Open Arduino to a blank file
 8. Navigate to the serial folder in the directory and download testament.ino:
https://github.com/greenheron02/project_repo/blob/main/serial/testament.ino
 9. Follow the instructions in the link to upload with the Pico:
<https://www.upesy.com/blogs/tutorials/install-raspberry-pi-pico-on-arduino-ide-software>
 10. Open the testament.ino file using Arduino
 11. Upload the file to the Raspberry Pi Pico
- Arcade Input Receiving Setup
12. Install python via install link <https://www.python.org/downloads/release/python-31016/>
 13. Open IDLE via the start menu bar
 14. In IDLE run the following commands: import sys, sys.executable
 15. Copy the link and open the terminal
 16. Paste the link into the terminal followed by pip -m install pyserial
 17. If it doesn't work, look for python.exe in your folders and use that path instead of the copied one
 18. Navigate to the project repository:
https://github.com/greenheron02/project_repo/tree/main
 19. Download the serialfenagling.py and keyboardinputting.py files
 20. Open the files using IDLE, under the File tab
 21. Ensure they are saved to the same folder, otherwise move them to the same folder
 22. Run the serialfenagling.py file
 23. Select the COM port with a serial number listed by writing into the terminal
 24. You now have input if the Raspberry Pi Pico has been uploaded to correctly