# Initial Controller/Development Software Setup

## Setting Up ESP32

[Introduction to ESP32 - Getting Started (youtube.com)](https://www.youtube.com/watch?v=xPlN_Tk3VLQ)

## Arduino IDE for ESP32 Use

Board Selection

Pasted into Preferences > Boards

[raw.githubusercontent.com/espressif/arduino-esp32/gh-pages/package\_esp32\_index.json](https://raw.githubusercontent.com/espressif/arduino-esp32/gh-pages/package_esp32_index.json)

USB Driver for Computer connecting to ESP32 (for Windows PC)

[CP210x USB to UART Bridge VCP Drivers - Silicon Labs (silabs.com)](https://www.silabs.com/developers/usb-to-uart-bridge-vcp-drivers?tab=downloads)

(No Driver needed for Arduino IDE on Linux)

Seeting Up Remote Desktop for RPI

# Hardware Interface Tutorials

Servo with ESP32

<https://www.youtube.com/watch?v=zxBC1ivOVfM&t=1822s>

INA219 Current Sensor

[ESP32 #48: Bluetooth Logging Multimeter with INA219 and SSD1306 (youtube.com)](https://www.youtube.com/watch?v=_ELUt2EDUR0&t=22s)

ACS 712T Current Sensor

Pressure Transducer

<https://www.youtube.com/watch?v=junu_66G_QQ&t=1297s>

[Industrial Pressure Sensor - Arduino (youtube.com)](https://www.youtube.com/watch?v=junu_66G_QQ&t=45s)