How to flash the binaries of the ESP32 edition of TCode controller
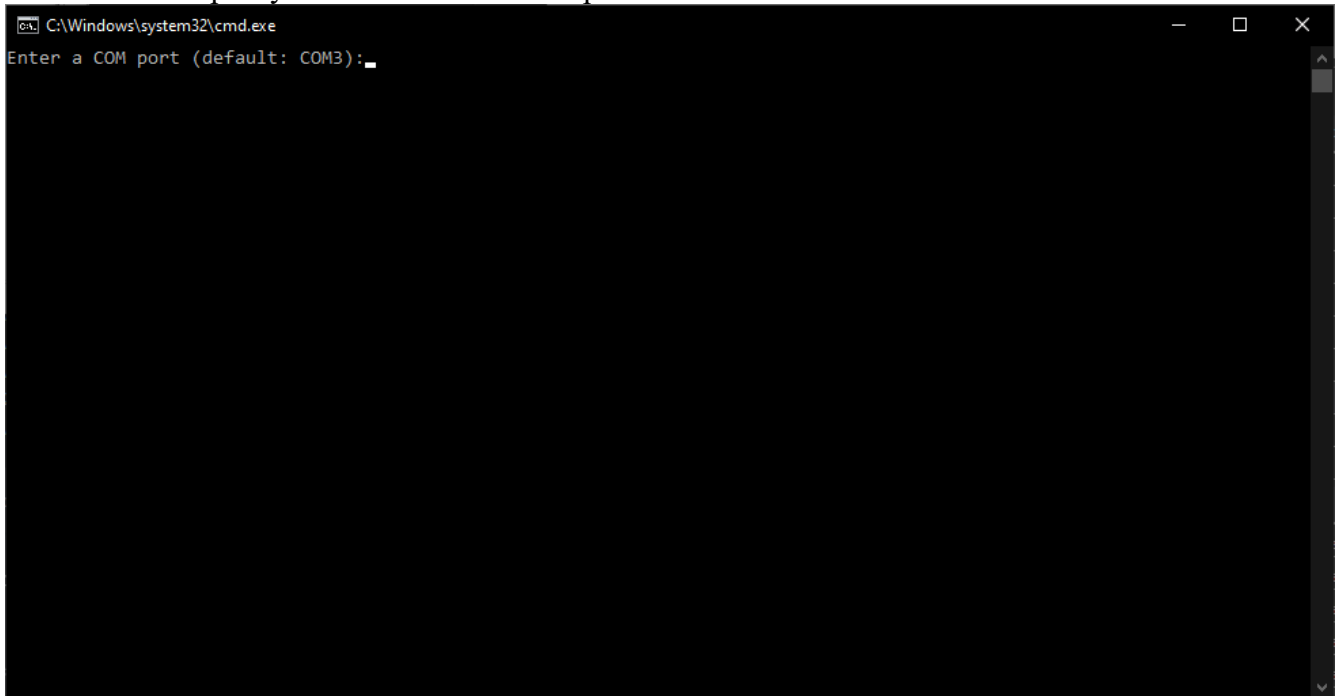
Extract the zip archive.
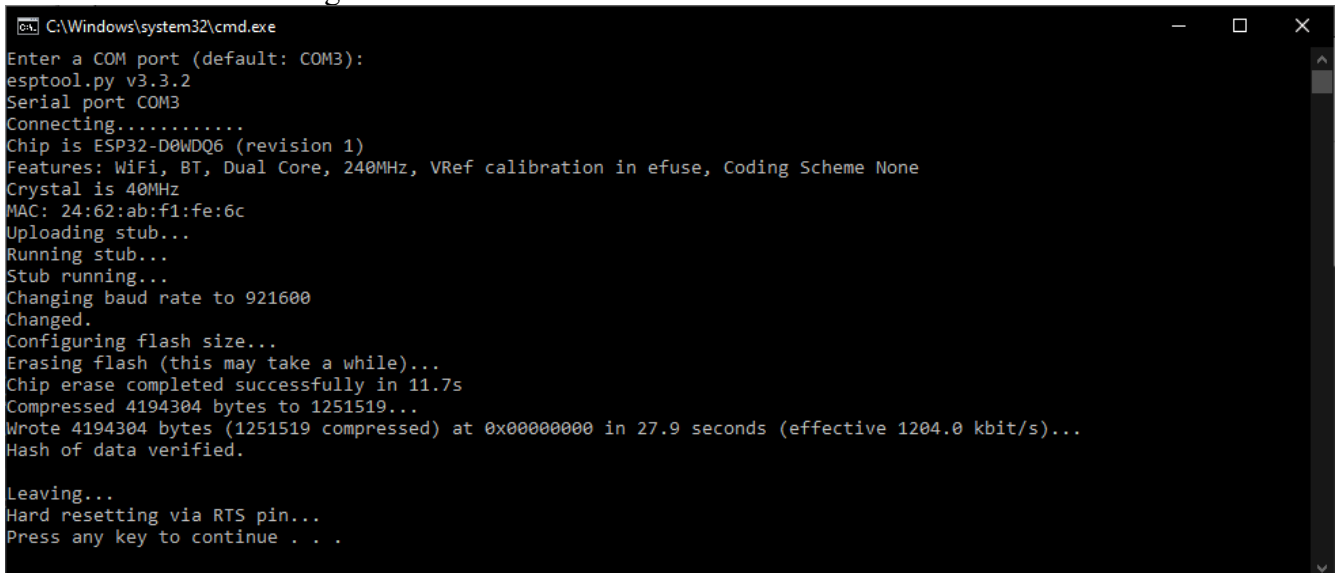*(Linux/Mac users [click here](#) viewing the the batch content should be simple enough to extract the command needed)*

(Windows users)
Run "flash.bat"
Enter the COM port your ESP32 is on. Example: COM12

```
C:\Windows\system32\cmd.exe                                          —   □   ×
Enter a COM port (default: COM3):_
```

You should see something like this in the terminal

```
C:\Windows\system32\cmd.exe                                          —   □   ×
Enter a COM port (default: COM3):
esptool.py v3.3.2
Serial port COM3
Connecting...........
Chip is ESP32-D0WDQ6 (revision 1)
Features: WiFi, BT, Dual Core, 240MHz, VRef calibration in efuse, Coding Scheme None
Crystal is 40MHz
MAC: 24:62:ab:f1:fe:6c
Uploading stub...
Running stub...
Stub running...
Changing baud rate to 921600
Changed.
Configuring flash size...
Erasing flash (this may take a while)...
Chip erase completed successfully in 11.7s
Compressed 4194304 bytes to 1251519...
Wrote 4194304 bytes (1251519 compressed) at 0x00000000 in 27.9 seconds (effective 1204.0 kbit/s)...
Hash of data verified.

Leaving...
Hard resetting via RTS pin...
Press any key to continue . . .
```
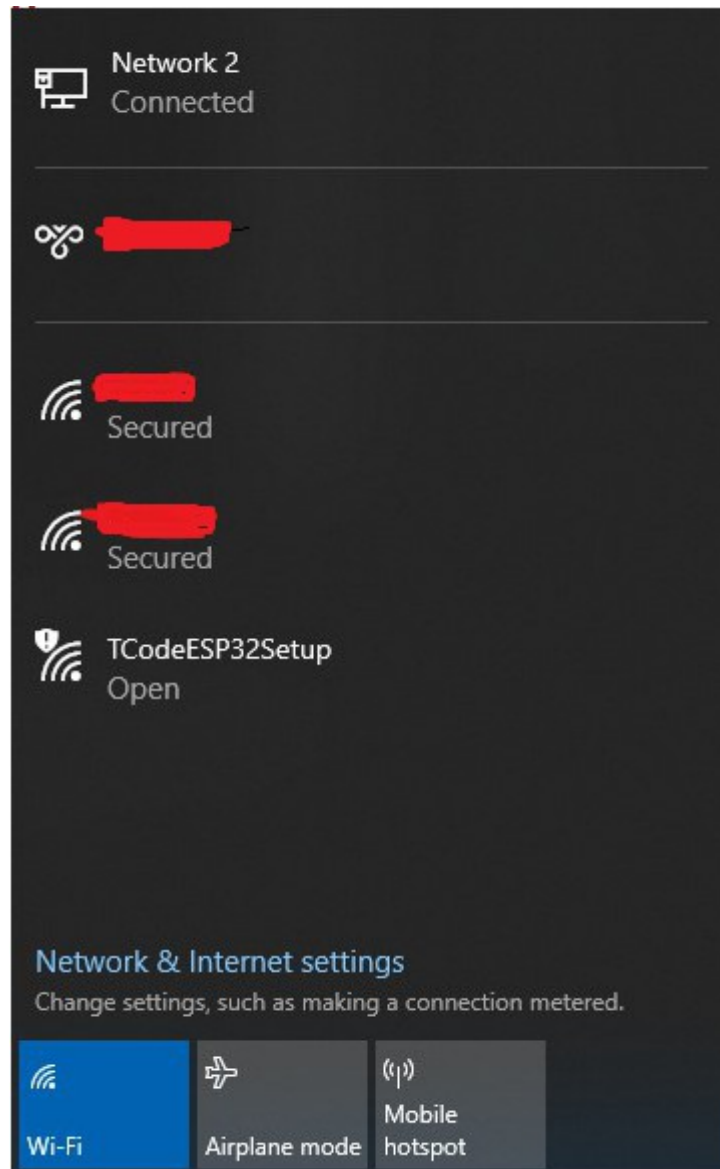
Now that your image is flashed time to configure the wifi if you wish to do so
<mark>IMPORTANT! The ESP32 we are using currently is ONLY compatible with 2.4ghz WiFi</mark>

You can either configure with the Android app or via the AP mode instructions below.

Reboot the ESP32
Check your available wifi networks

Connect to TcodeESP32Setup (leave connect automatically **unchecked**)
No password
Once connected (It can be slow be patient. About 30 secs or so)

Open your internet browser and navigate to 192.168.1.1

Enter your wifi ssid and password and change the network info if required

And wait for the Settings saved text to appear..

Click restart device or unplug and re-plug the usb powering the ESP32.

Your device should reboot and connect to the network.

You can verify this by using serial monitor

```
PROBLEMS    OUTPUT    TERMINAL    GITLENS    DEBUG CONSOLE

SPI_FAST_FLA
INFO: ESP32 Chip model = ESP32-D0WDQ6 Rev 1
INFO: This chip has 2 cores
INFO: Chip ID: 15859308
INFO: Read Settings: /userSettings.json
INFO: Last reset reason: Reset due to power-on event
INFO: Version: ESP32 v0.251b
INFO: Setting up wifi
INFO: Station Mode Started
INFO: Mac: 24:62:AB:F1:FE:6C
INFO: Establishing connection to hex
WARNING: Disconnected from station, attempting reconnection
INFO: Reason: 0
INFO: Unknown reason 0
INFO: Connected to
INFO: IP Address: 192.168.0.95
.INFO: Connected IP: 192.168.0.95
INFO: Starting UDP
INFO: UDP Listening
INFO: Starting web server on port: 80
INFO: Setting up webSocket
hostName: tcode
friendlyName: ESP32 TCode
ESP32 v0.251b
TCode v0.3
Ready!
```

Or by logging into your router and looking for A Device named "TcodeESP32"

| 10 | TCodeESP32 | ☑ | 192.168.0.145 |

You should now be able to access the configuration page from or what ever you type into the Host

Manual lube speed (1-255)	255
Udp port	8000
Host name	tcode
Friendly name	ESP32 TCode

name field on the configuration.

Once you have this IP address you can get into your machine settings via the web browser.

From here you can view the default pin out and change them if you know what you are doing.
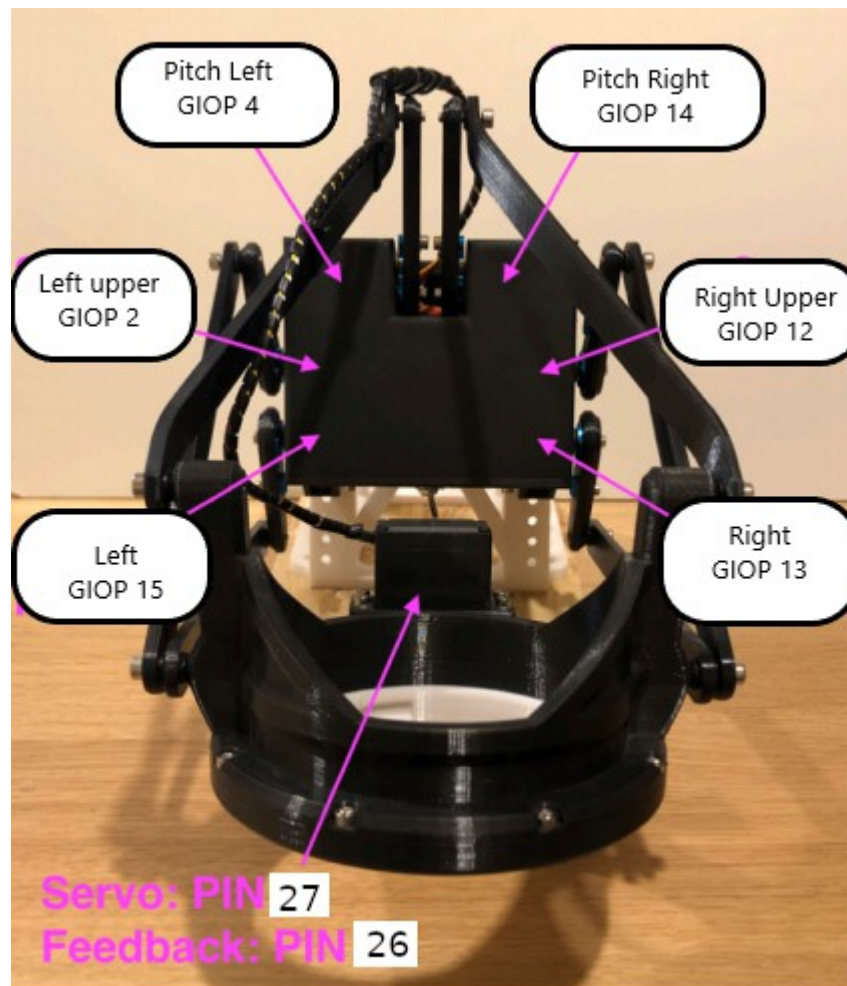
You can also set the default servo zeros.
If you are using this in an OSR MAKE SURE YOU UNCHECK "SR6 Mode"

Enjoy your wireless device!

PS.. this release is in its early stages with missing features and bugs. if you find any issues please report them on Github.