

# 2. Installing the Code!!!

## Part 1: Dependencies

The software relies on other programs to run smoothly. We'll install these now. **If not already, connect using PuTTY.**

### 1. Install Main Dependencies

```
sudo apt install git python3-xyz python3-pip python3-setuptools python3-flask -y  
  
sudo pip install django-templates
```

### 2. Now, we're going to install the official PiCar-V code.

```
cd ~/   
git clone https://github.com/sunfounder/SunFounder_PiCar-V.git
```

### 3. Enter the directory

```
cd ~/SunFounder_PiCar-V
```

### 4. Install smaller dependencies

```
sudo ./install_dependencies
```

### 5. **VERY IMPORTANT!!! REBOOT THE CAR**

```
sudo reboot now
```

## Part 2: Extra Settings

In this part, we'll enable I2C in the Pi's Config. This allows you to control the motors. Don't worry, this one's quick, and you're almost ready to drive :}}}}

### 1. Enter the Raspberry Pi config

```
sudo raspi-config
```

### 2. Select interface options by pressing the number for the option using your keyboard.

3. Enable I2C by moving down to the option and pressing enter.
4. You can **use "esc" to exit**.

## Part 3: Drivers and Services

**If not already using the batteries, connect the Pi to the batteries.**

Now, we'll install the drivers for the servos on the car, and we'll write some code to ensure the program runs on boot.

1. Navigate to the PiCar code directory

```
cd ~/SunFounder_PiCar-V
```

2. Run the Servo Setup Script - This will move servos in the car, so **make sure it is on the floor in an open space**.

```
picar servo-install
```

3. This next part sets up AutoStart for the remote control program. We'll make a new "service file" so the pi knows to start it after booting.

```
sudo nano /lib/systemd/system/PiCar.service
```

4. Paste the following code, then exit.

```
[Unit]
Description=PiCarServer
After=multi-user.target

[Service]
Type=idle
ExecStartPre=/bin/sleep 10
ExecStart=/usr/bin/python3 /home/pi/SunFounder_PiCar-V/remote_control/manage.py runserver 0.0.0.0:8000

[Install]
WantedBy=multi-user.target
```

5. Now we'll enable the service with the following commands.

```
sudo systemctl daemon-reload  
sudo systemctl enable PiCar.service
```

**DONE!** The next page explains how to connect to the car.

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