SCRATCH4PHIRO*

+ INSTALLATION GUIDE +



Installation Procedure of Scratch4Phiro for Mac OS

Welcome to the world of **Scratch4Phiro** , where you can bring your ideas to life and make the Phiro robot do amazing things!



This guide will help you install and setup **Scratch4Phiro** on a Mac OS. Follow these steps, and you'll be ready to create your very first program in no time. Let's dive into the fun of coding and robotics!

This installation procedure is divided into two stages:

- Installation of Scratch 2.0 Offline Editor with Adobe AIR
- 2. How to connect and use PHIRO using Scratch4Phiro software

Installation of Scratch 2.0 Offline Editor with Adobe

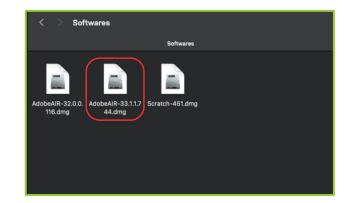
AIR

Step 1 - Install Adobe AIR

- Install Adobe AIR version 33.1.1.744.dmg file provided in the Scratch4PhiroSoftwares folder.
- 2. You can download the software folder from here

Step 2 - Install Scratch 2.0 Offline Editor

- After successfully installing Adobe AIR on macOS, click on the Scratch-451.dmg file provided in the Scratch4PhiroSoftwares folder.
- 2. Follow the on-screen instructions to install Scratch 2.0.

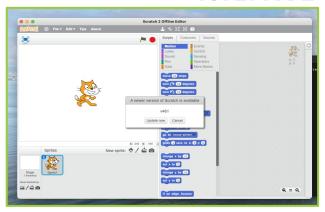


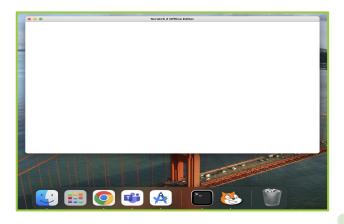


Step 3 - Open Scratch 2.0

- 1. Open **Scratch2.app** from **Spotlight Search.**
- 2. Click on the **search icon** on macOS and search for **Scratch2.app.**
- 3. If the "Scratch app Not Installed" error appears:
 - a. Go to **Settings > Privacy & Security.**
 - b. Scroll down and find the **Allow Applications** section.
 - c. Click on **Scratch app** and allow the installation to proceed.

Important: If the software opens with a blank space, follow the next steps.Otherwise, proceed to Step 1 of the Open Phiro app section.(Page no 8)





Bypassing Adobe AIR to Open Scratch 2.0

Uninstalling Adobe AIR 33.1.1.744

To remove Adobe AIR 33.1.1.744 from macOS:

- Open Applications, locate Adobe AIR, right-click and select Move to Trash.
- Empty the Trash.
- Open Terminal and run the following commands to remove all related files:

```
sudo rm -rf /Library/Frameworks/Adobe\ AIR.framework
sudo rm -rf ~/Library/Application\ Support/Adobe/AIR
sudo rm -rf ~/Library/Caches/Adobe/AIR
sudo rm -rf ~/Library/Preferences/com.adobe.AIR.plist
sudo rm -rf ~/Library/Preferences/Adobe/AIR
```

4. Verify uninstallation by running:

Is /Library/Frameworks/ | grep Adobe

If no output appears, Adobe AIR has been successfully removed.

```
Last login: Fri Mar 14 22:36:81 on console rajkumarselvaraj@Apple ~ % sudo rm -rf /Library/Frameworks/Adobe\ AIR.framework

[Password: rajkumarselvaraj@Apple ~ % sudo rm -rf ~/Library/Application\ Support/Adobe/AIR

rajkumarselvaraj@Apple ~ % sudo rm -rf ~/Library/Caches/Adobe/AIR

rajkumarselvaraj@Apple ~ % sudo rm -rf ~/Library/Preferences/com.adobe.AIR.plist

rajkumarselvaraj@Apple ~ % sudo rm -rf ~/Library/Preferences/Adobe/AIR

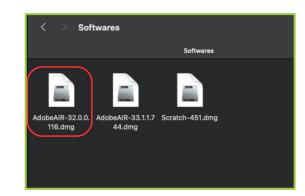
rajkumarselvaraj@Apple ~ % sudo rm -rf ~/Library/Preferences/Adobe/AIR

rajkumarselvaraj@Apple ~ % ls /Library/Frameworks/ | grep Adobe

rajkumarselvaraj@Apple ~ % |
```

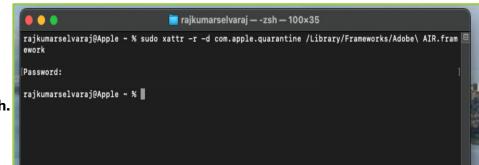
Step 4 - Install Adobe AIR 32.0.0

Install **Adobe AIR 32.0.0** version from the **Scratch4PhiroSoftwares** folder by clicking on the **.dmg file.**



Step 5 - Open Scratch 2.0 Again

- Try opening **Scratch2.app** from **Spotlight Search.**
- If it does not open, use **Terminal and execute:**



sudo xattr -r -d com.apple.quarantine /Library/Frameworks/Adobe\ AIR.framework

Step 6 - Open Scratch 2.0

- Open **Scratch2.app** from **Spotlight Search.**
- When prompted, do not press the update button.



Bypassing the Adobe AIR process is now complete.



How to connect and use PHIRO using Scratch4Phiro software

Step 1: Enable Bluetooth Discovery

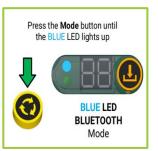
Go to **System Settings > Bluetooth.**

Step 2: Turn on Phiro

Power on the **Phiro robot** and switch it to **Bluetooth Mode.**

Step 3: Add Phiro as a Bluetooth Device

- 1. Open System Settings > Bluetooth & Devices.
- Click Add Device and search for Phiro's Bluetooth ID
 (found at the bottom of the Phiro bot).
- 3. Select the device and, when prompted, enter the **PIN 1234** to pair.







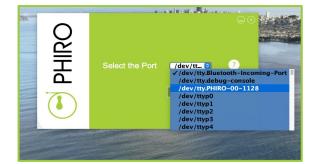
Step 4: Open the Phiro App

- 1. Open the **Phiro app** from the **Software Folder.**
- 2. Once the app is open, click the **blue button** to open the dropdown menu.
- 3. If the "Phiro app Not Installed" error appears:
 - a. Go to **Settings > Privacy & Security.**
 - b. Scroll down and find the **Allow Applications** section.
 - c. Click on **Phiro app** and allow the installation to proceed.

AdobeAIR-32.0.0. AdobeAIR-33.1.1.7 PHIRO_NEW.s2e PhiroDemo Scratch-451.dmg

Step 5: Select the PHIRO Connection

- 1. In the dropdown menu, select the value that starts with /dev/tty.PHIRO.
- 2. Ensure the green LED is turned on in the PHIRO device.



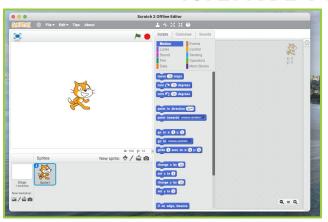
Step 6: Open Scratch 2.0

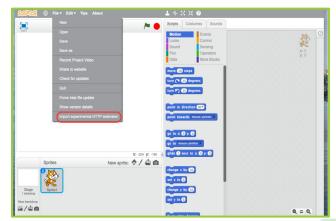
Now, Scratch 2.0 should open successfully.

Note: Ensure that Scratch 2.0 is opened before launching the Phiro application to avoid any connection issues.

Step 7: Enable HTTP Extension

- 1. Press SHIFT KEY + FILE.
- 2. Click Import Experimental HTTP Extension.

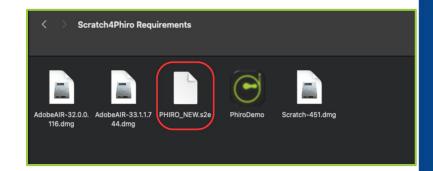




Step 8: Import PHIRO Blocks

- Import the PHIRO_new.s2e file from the Scratch4Phirosoftwares folder.
- 2. The blocks will appear in the More Blocks section.

Now, you can control the Phiro device using the Scratch 2.0 offline editor.



Step 9 - Run your First Program

Ready to see your robot in action? Let's run a sample program:

- Download a Sample Program from <u>here</u>.
- 2. Open **Scratch4Phiro.**
- 3. Click **File > Open**, then select a sample program you downloaded.
- 4. Click the **Flag icon** to start the program.
- 5. Watch as Phiro follows your commands!

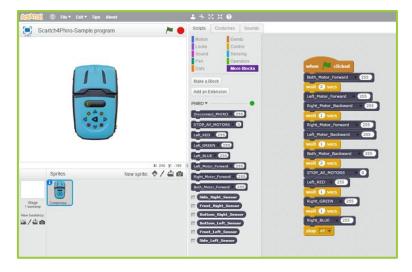


Image 8

Troubleshooting - Common Issues & Solutions

Issue	Solution	Page No
Scratch App Installation Problem	Follow Step 3 - Open Scratch 2.0	<u>Page 3</u>
Scratch App Not Installed Error	Follow Step 3 - Open Scratch 2.0	<u>Page 3</u>
Phiro App Not Installed Error	Follow Step 4 - Open the Phiro App	<u> Page 8</u>
Phiro Not Connecting via Bluetooth	Follow Step 3 - Add Phiro as a Bluetooth Device	<u>Page 7</u>
Scratch 2.0 Opens with a Blank Screen	Follow Step 5 - Open Scratch 2.0 Again	<u>Page 6</u>
Adobe AIR Installation Issues	Follow Step 4 - Install Adobe AIR 32.0.0	<u>Page 5</u>
Phiro Blocks Not Appearing in Scratch	Follow Step 8 - Import PHIRO Blocks	<u>Page 10</u>
Java Error	Download the Java OpenJDK version "17.0.7"	<u>From here</u>

THANK YOU

Scan the QR Codes below to explore more using Phiro



Phiro Video



Phiro with Scratch & Pocket Code Video Playlist