Controlling Bird RF Hawks from a Desktop Computer

Scrcpy provides a practical solution to mirror and control SiteHawk, SignalHawk and GenHawk devices from a desktop environment. Scrcpy stands out for its low latency, high-resolution display capabilities, and minimal operational overhead, making it an optimal tool for accessing your Hawk's capabilities from a Desktop computer. Users should note that using Scrcpy with the default USB-C connection will pause communication to the units RF module. This guide shows users how to identify the device via USB-C and transfer the connection to a wireless network.

Scrcpy (pronounced "Screen Copy") is open-source software that utilizes the Android operating system used by the RF Hawks. This guide details the installation and configuration process, leveraging USB debugging and developer options built into Android. By focusing on the technical setup, including prerequisites and step-by-step instructions, this guide aims to equip users with the ability to access the interface of their Bird SignalHawks, SiteHawks and GenHawk devices.
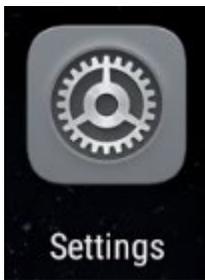
What You'll Need

- A Windows 10 or 11 PC
- A Bird SiteHawk, SignalHawk, or GenHawk
- A USB cable (for the one-time setup)
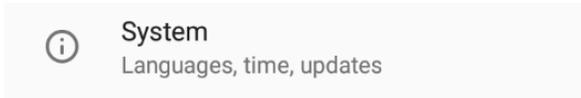- Both devices connected to the same Wi-Fi network
- About 10 minutes

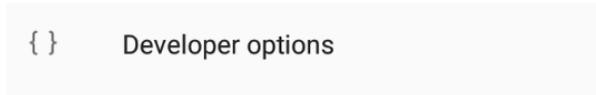## Procedure

On Your RF Hawk

Step 1: Start by going to the **Settings** App on the Bird Handheld Analyzer.
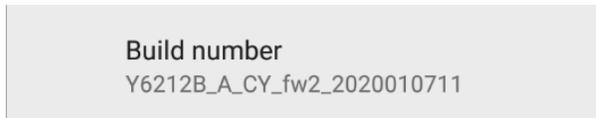

Step 2: Scroll down and enter the **System** menu.
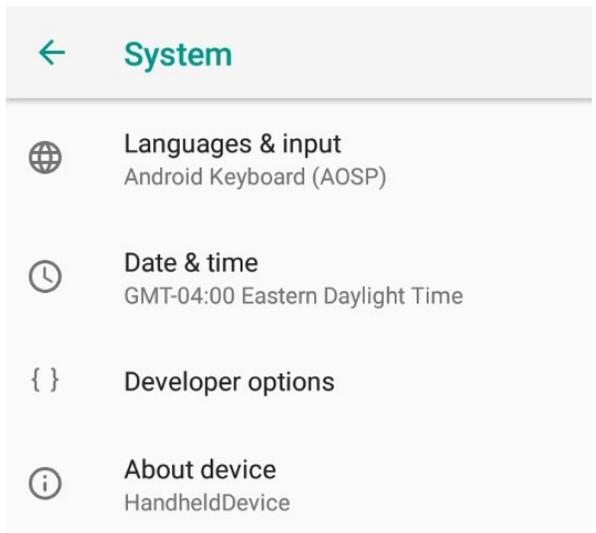

Step 3: If you see **Developer options** you can skip to Step 5. If you do not have Developer options enabled, follow Step 4 to enable.

Step 4: To enable Developer options select **About device** and scroll to the bottom of the menu. Then tap **Build number** 7 times.

Now select the back arrow and you should see **Developer options** in the System menu.

Step 5: Go into the **Developer options** menu and scroll down until you see Debugging and make sure USB debugging is turned on.

Debugging

USB debugging
Debug mode when USB is
connected

Step 6: Connect your device to the computer via USB using the adapter included with your kit. On your device, tap Allow on the prompt asking for USB debugging

On Your Computer

Step 7: Download scrcpy (screen mirroring tool):
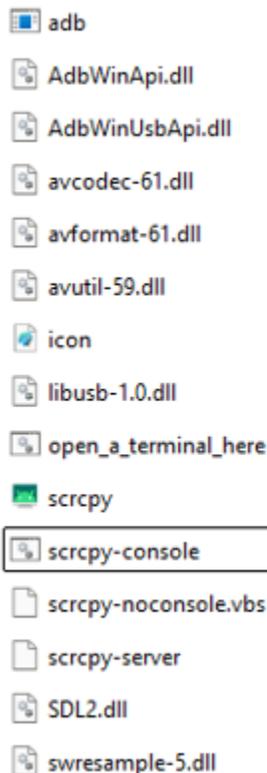Go to the official page: SCRCPY
Scroll down and download the file named:
scrcpy-win64-v3.3.1.zip
Right-click the zip file > Extract All
Move the extracted folder somewhere easy to find, like your Desktop.

Step 8: Open the scrcpy folder you extracted in step 7. Find and double-click the file named scrcpy-console.bat.

adb
AdbWinApi.dll
AdbWinUsbApi.dll
avcodec-61.dll
avformat-61.dll
avutil-59.dll
icon
libusb-1.0.dll
open_a_terminal_here
scrcpy
scrcpy-console
scrcpy-noconsole.vbs
scrcpy-server
SDL2.dll
swresample-5.dll

Scrcpy-console opens a command window and launches screen mirroring.

Note: The device will not be able to connect to the RF module when the USBC port is in use. You will need to mirror the screen using a wireless connection to mirror the device in use.

Step 9: Once scrcpy is running, close the mirror window. If the terminal closes you can reopen it with the [open_a_terminal_here] file.

In the command window, type:

`adb tcpip 5555`

Step 10: On your Android device, go to Wi-Fi settings, tap your network, and note your IP address.

Step 11: On your computer, go back to the command window and type:

`adb connect <your-phone-ip>:5555`

Make sure to disconnect the USBC cable or the next command will not work.

Step 12: Now type:

`scrcpy`

Your screen should now mirror wirelessly

⊘ scrcpy

Result

If everything has been done correctly, you should not only see the display but also be able to use your mouse to interact with the Android device.

Next Connection

You don't need the USB anymore. In the future, just launch scrcpy-console.bat and type:

```
adb connect <your-device-ip>:5555
scrcpy
```

Need Help?

If you ever see an error or don't know your IP, just reconnect the USB and repeat steps 9–12.

Summary

Connecting your device via USB allows Scrcpy to make a connection to the device and uses built-in debugging tools to mirror the screen. A USB connection is used for device discovery but will not allow the user to access the device's RF module. For full operation of the device a wireless connection must be used.

The command prompt is used to tell Scrcpy where to find the device on your network allowing for a wireless connection via Wi-Fi. This allows you to use and operate an android device from a remote location on the same network.

For more information about Bird's full range of RF Solutions, visit https://birdrf.com.