# Calibrating Mac With the Boxlight Interactve Flat Panel Display

# Introduction

This document provides instructions on calibrating Macs to the Boxlight interactive flat panel displays (IFPD). Changes in the Mac OS could affect the accuracy of the images and even the process. However, the information below is current and correct as of September 2019.

### Prerequisites

This document assumes:

- Mac laptop or desktop running MacOS 10.x or above
- Video connected via HDMI using Boxlight supplied cable
- Touch via interactive USB using Boxlight supplied cable

### Procedure

Mac models from 2015 and later should automatically calibrate with PTP setting in the IFPD

- Verify that the Mac setting **Optimize for** is set to **Mirror PC Monitor**.
  - In the top-right corner of the Mac desktop, you will find a pull-down menu with Display(s). Pulling it down will show the choices below.



 If the Mac being calibrated does not display the pull-down menu described above, go to System Preferences>Display and check Show mirroring options in the menu bar when available.



	PC Monitor		Q Search	
	Display Arrangemen	t Color		
	Optimize for:	PC Monitor	٥	
	Resolution:	1920 × 1080 1680 × 1050 1600 × 900 1440 × 900 1360 × 768		
	Rotation:	Standard	\$	
	Refresh Rate:	60 Hertz	٥	
Show mirroring options in the	menu bar when available		Gather Windows ?	

 For Macs with built-in Retina Display, the screen might look different. It is necessary to select the option that fills the screen and provides more accuracy than Best (Retina). On supported OSs, one can press and hold the Option key while clicking the Scaled button in the Displays Control Panel to see more available resolutions.

••• <>		uilt-in Retina Display	Q, Search
		Display Color Resolution: Best for disp Scaled Here's Color Here's to Here's to Here's to Troubler Larger Text Best (Ref Brightness:	Here's to the of Boddenskess, dies. And Here
AirPlay Display:	No Devices Detected	0	
Show mirroring	g options in the menu be	ar when available	?

- Set the IFPD to PTP (if not selected by default)
  - Launch Settings using the gear button on the panel or swipe up and click the three-dot icon in upper-right as shown below:



	General Setting				
PC	Android	HDMI1	HDMI2	HDMI3	DP
VGA					

• Click Screen, select PTP, then the Mac's video will fit the IFPD.

< Audio	Screen	Display	Adjust
	Pixel Shift 43	16.9 PTP	

# Troubleshooting

- With some USB-C to USB-A adapters, it is necessary to briefly unplug the touch USB and then plug it back in. This is believed to be due to the implementation of USB-C in some models of the USB-C adapters.
  - It may be necessary to scale to 1920 x 1080 or a suitable resolution for your Mac that gives accuracy (using 4K the text might be too small



#### even outside of the MimioStudio<sup>™</sup> software).

Display Col	or		
Optimize for:	PC Monitor		٢
Resolution:	1680 × 1050 1600 × 900 1440 × 900 1360 × 768		
Brightness:	1280 - 1024	0	
		Gather Window	/s ?

#### Drivers

- Drivers are not normally needed to calibrate the Mac to the Boxlight IFPD
- If it is impossible to adjust the Mac image output to fill the Boxlight IFPD screen, then the driver must be used. Please contact Boxlight Customer Support for the driver.
- Please note that using a driver reduces the system to single-touch because the driver does not support multi-touch. As stated above, a driver is rarely needed.

# Conclusion

If the above does not execute properly, contact Boxlight Customer Support. Contacting Support creates a Trouble Ticket, which includes a record of all communications and actions. That information becomes part of the Support Team's global knowledge that can be used to help others going forward.

