THE IRWIN S. CHANIN SCHOOL OF ARCHITECTURE

CLASSROOM PROJECTION TUTORIALS

These tutorials will explain how to project with a Windows or Mac using an HDMI connection or a wireless ScreenBeam connection in rooms 315F and 712F.









This is 315F. Note these two areas of the room which contain and control the relevant interfaces for video projection and stereo amplification.





This is 712F. We will focus on these two areas of the room for this tutorial.



For clarity, this is an HDMI cable.

And this is an audio 3.5mm cable.



Both of them should be plugged into the wall for video and audio connections to work.

Make sure they are well connected to the wall.



First, prepare the room for projection by lowering the projector screen. You may use this switch to lower and raise the projection screen.



Next, turn the projector on using the remote control that's located next to the projector screen switch. If the remote control is missing you may borrow one from the School of Architecture office.

Press the "power" button and watch for the projector status light to turn from red to green.



Wait until the Panasonic warm up screen appears and disappears.



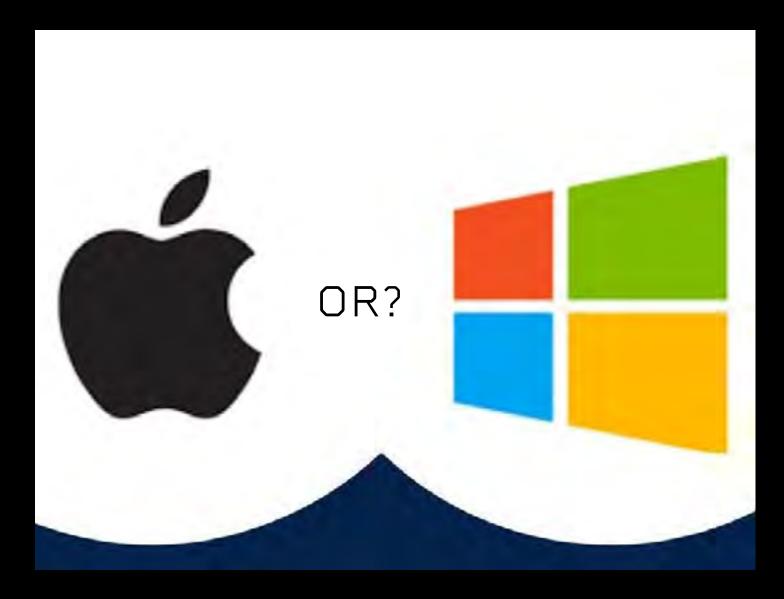
Make sure that the correct input is selected.

Using the remote control, press the "HDMI" button which is located next to the power button.



Once the projector ends its warm up cycle, the ScreenBeam welcome screen will appear. The information displayed on this screen will be useful in connecting to the projector wirelessly.

You have successfully prepared the room for projection.



Now select the appropriate tutorial from the chapters in this booklet based on whether you are using a Mac or a PC.

Be aware that Macs require an additional USB WiFi adapter to connect to the internet while using the ScreenBeam system. Windows machines can connect to the internet while using ScreenBeam without additional devices.



PROJECTING THROUGH AN HDMI CONNECTION USING A MAC

Once you have prepared the room for projection, you may proceed to connect your computer to the projector.

We suggest that you bring your own laptop and dongle for class. As an alternative you may borrow a Mac computer and dongle from the School of Architecture Office before class and with advance notice.



PROJECTING THROUGH AN HDMI CONNECTION USING A MAC

Depending on the model year, your Mac will have different kinds of ports to connect to a projector:

Older Macs are equipped with MiniDisplay Ports — shown on the left.

Newer Macs are equipped with USB-C ports — shown on the right.





PROJECTING THROUGH AN HDMI CONNECTION USING A MAC

315F and 712F have an HDMI cable and an 3.5 audio cable wall panel connected to the projector and room speakers, respectively. In order to connect your Mac to these you will need a dongle that fits your Macs' ports.

Older Macs use MiniDisplayto-HDMI dongles — shown on the left. Newer Macs use USB-C to HDMI dongles — shown on the right.



PROJECTING THROUGH AN HDMI CONNECTION USING A MAC

We suggest that you bring your own dongle to class. However, if you need one you may borrow it from the School of Architecture Office in preparation for your class.

Connect the HDMI cable from the wall panel to the dongle and then connect the dongle to your laptop. Your screen will flicker once and change resolution to match the projector's.



PROJECTING THROUGH AN HDMI CONNECTION USING A MAC

At this point the projection screen should mirror your laptop screen.



PROJECTING THROUGH AN HDMI CONNECTION USING A MAC

If you would like to amplify your computer audio over the room's speakers you may connect the audio cable coming from the wall into your laptop's headphone jack.



PROJECTING THROUGH AN HDMI CONNECTION USING A MAC

When you are finished projecting, disconnect the HDMI and audio cable from your computer and kindly place it neatly by the wall plate.



PROJECTING THROUGH AN HDMI CONNECTION USING A MAC

Use the projector's remote control to turn off the projector by pressing the "power" button twice.

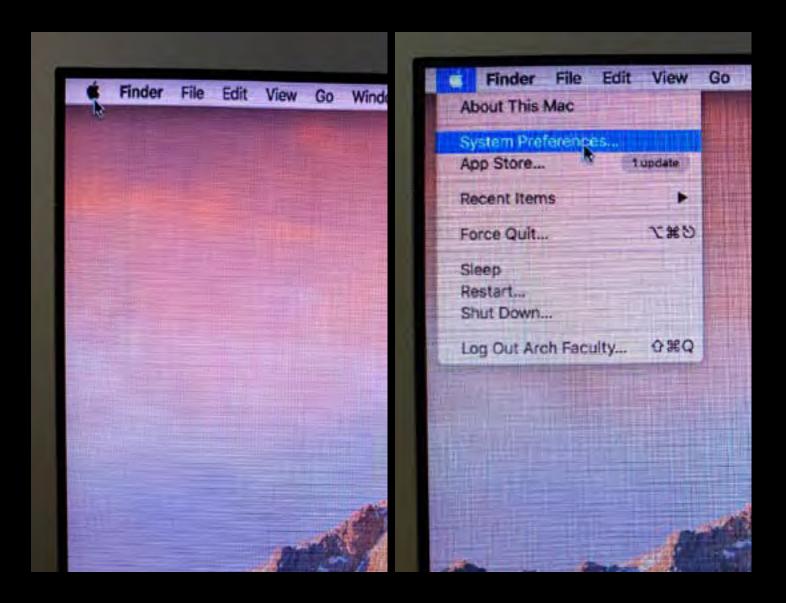


If the following troubleshooting procedures do not help, contact the AV department at (212)353-4329 or inform the School of Architecture Office

PROJECTING THROUGH AN HDMI CONNECTION USING A MAC: TROUBLESHOOTING

If you connected the HDMI cable to your dongle, computer, and the wall but your computer display is not projecting:

Make sure to have followed all prior steps of this tutorial correctly and repeat them. Disconnect and reconnect the HDMI cable and dongle to each other, the wall, and to your computer. Alternatively, you may project wirelessly using the ScreenBeam system.

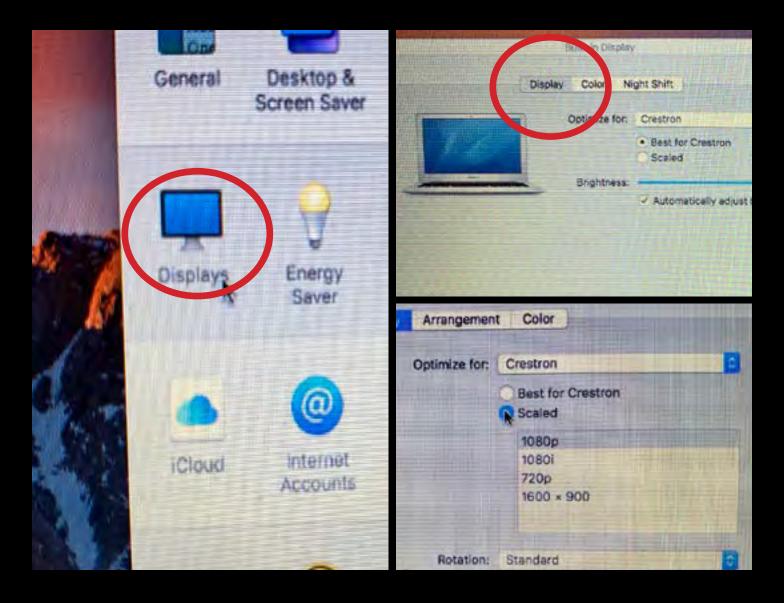


PROJECTING THROUGH AN HDMI CONNECTION USING A MAC: TROUBLESHOOTING

If, once projecting, your computer resolution is off:

You may change your display settings by clicking on the Apple logo at the top-left corner of your screen.

Select "System Preferences" from the drop-down menu.

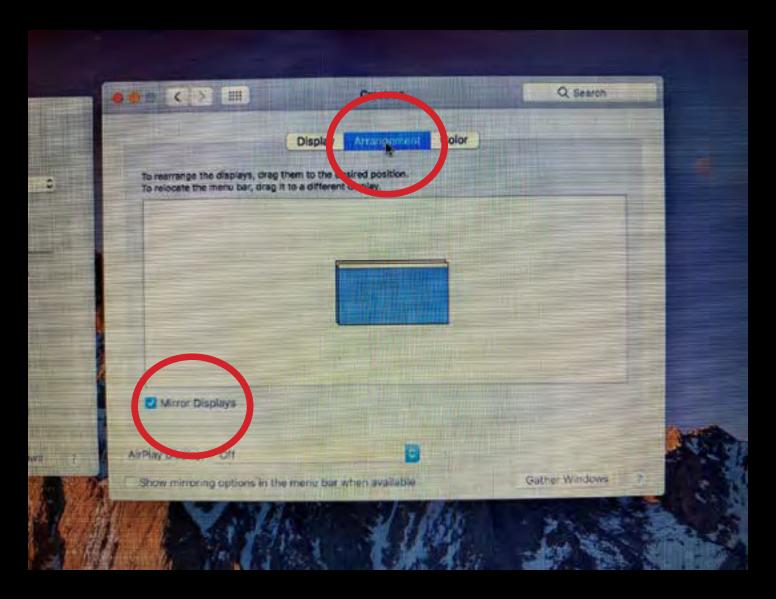


PROJECTING THROUGH AN HDMI CONNECTION USING A MAC: TROUBLESHOOTING

Click on the "Display" icon.

Under the "Display" section, you can change the resolution settings for your computer screen and the projection screen.

If you switch over to "Scaled" you will have options to enlarge or shrink your interface by changing the resolution.



PROJECTING THROUGH AN HDMI CONNECTION USING A MAC: TROUBLESHOOTING

Under the "Arrangement" section, you can select to mirror your screen or to add a frame onto which to drag any application window from your computer to be projected directly.

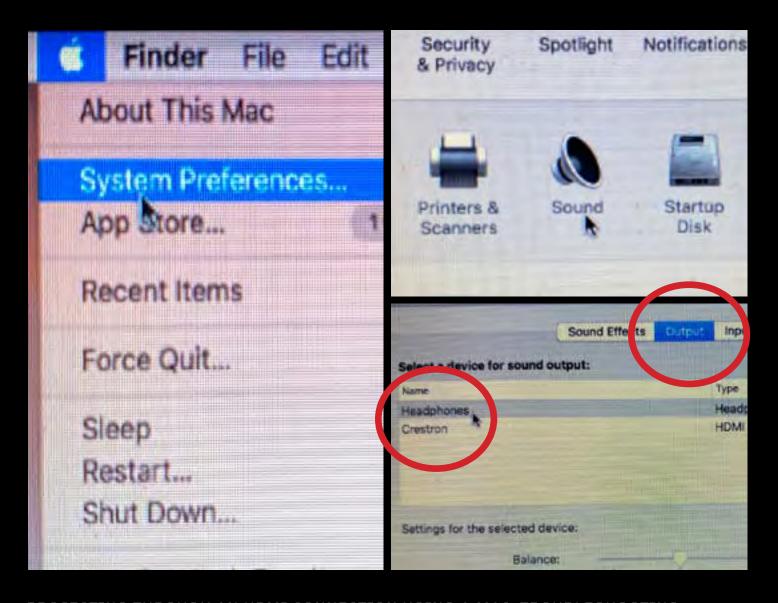
Those are the two most relevant options to fine tune your projection.



PROJECTING THROUGH AN HDMI CONNECTION USING A MAC: TROUBLESHOOTING

If the audio cable is connected but there is no sound:

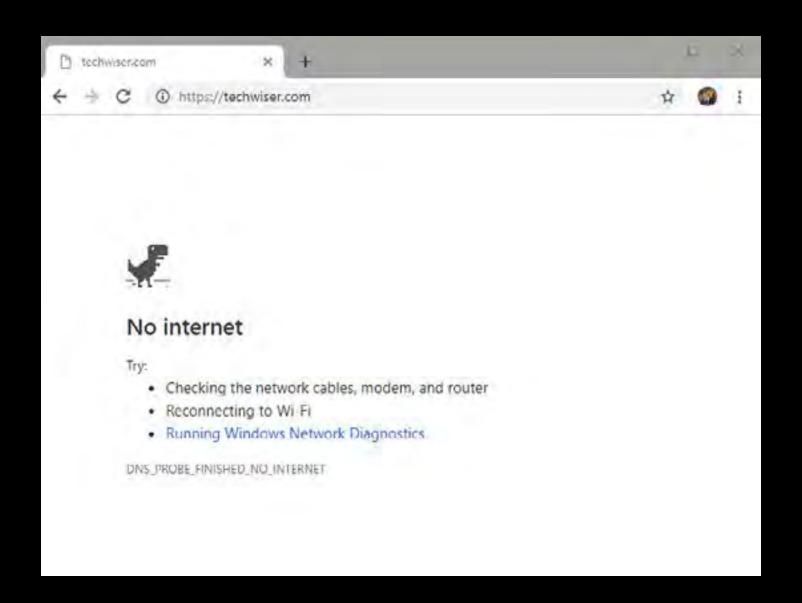
Disconnect and reconnect the audio cable to the wall and to the laptop.



PROJECTING THROUGH AN HDMI CONNECTION USING A MAC: TROUBLESHOOTING

Check that you have the correct audio output by following these instructions:

Click on the apple logo at the top-left corner of your screen and select "System Preferences". Click on the "Sound" icon and select the "Output" section at the top. Select the correct output device.



PROJECTING THROUGH A SCREENBEAM CONNECTION USING A MAC

The ScreenBeam system allows you to connect wirelessly to the projector.

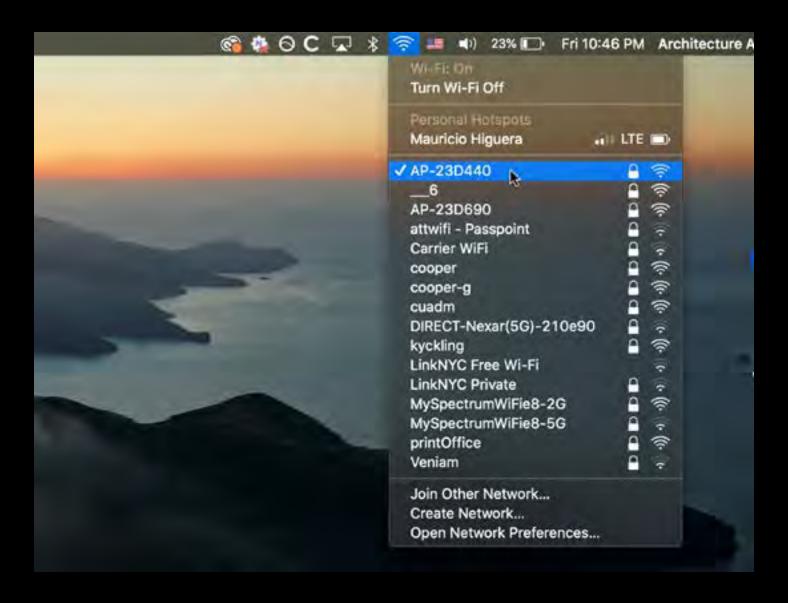
Be aware that using to the ScreenBeam system will impede Macs from connecting to the internet simultaneously.

If you need an internet connection while projecting, connect to the projector using the HDMI cable in the classroom.



PROJECTING THROUGH A SCREENBEAM CONNECTION USING A MAC

Once you have prepared the room for projection, take note of the projection screen and the information displayed. You will need it to connect to the projector wirelessly.



PROJECTING THROUGH A SCREENBEAM CONNECTION USING A MAC

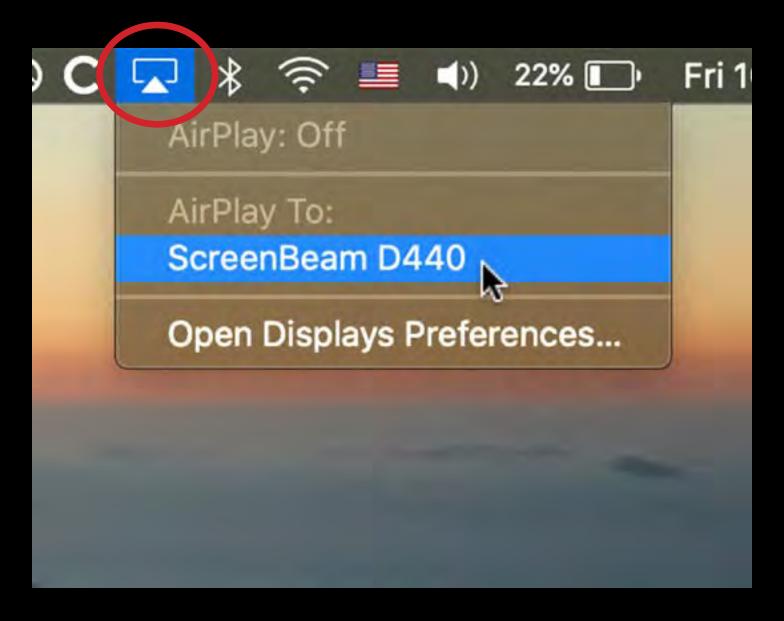
To project from a Mac laptop you should connect to the Wi-Fi network noted on the projection screen:

Click on the WiFi icon on the top-right of your screen.

In 315F, select AP-23D440. The password is: screenbeam

Turn your WiFi "On" and select the correct Wifi.

In 712F, select AP-241B10. The password is: screenbeam



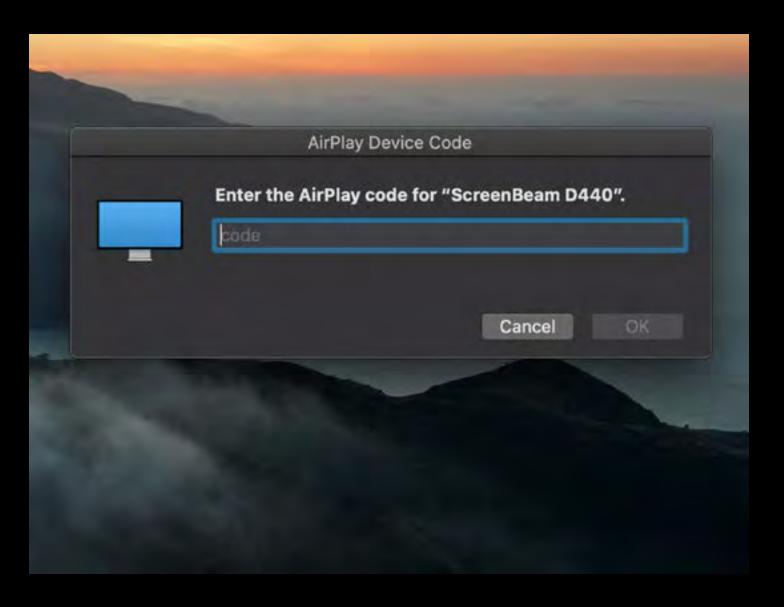
PROJECTING THROUGH A SCREENBEAM CONNECTION USING A MAC

Once connected to the ScreenBeam through WiFi you may select it as your Airplay display. To do this:

Click on the "AirPlay" icon on the menu bar at the top of your screen.

In 315F, proceed to select ScreenBeam D440.

In 712F, proceed to select ScreenBeam 1B10.



PROJECTING THROUGH A SCREENBEAM CONNECTION USING A MAC

A pop up will appear prompting you to enter the AirPlay code. Enter the code that is displayed on the projection screen.



PROJECTING THROUGH A SCREENBEAM CONNECTION USING A MAC

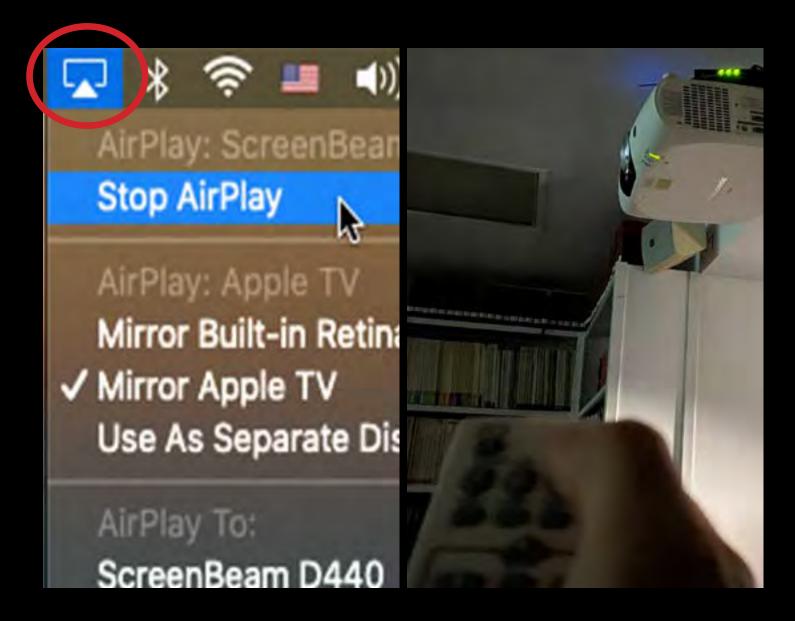
Your screen will flicker once and the projection screen will display a "connecting" status.

If successfully connected, your computer display will mirror onto the projection screen.



PROJECTING THROUGH A SCREENBEAM CONNECTION USING A MAC

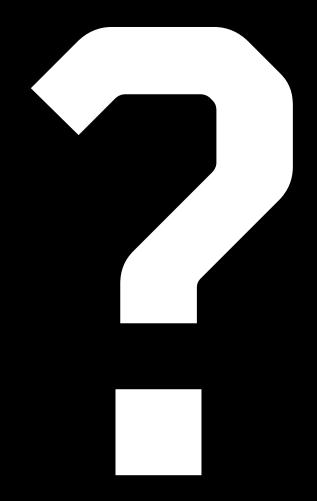
If you would like to amplify your computer audio over the room's speakers you may connect the audio cable coming from the wall into your laptop's headphone jack.



PROJECTING THROUGH A SCREENBEAM CONNECTION USING A MAC

When you are finished projecting, click on the AirPlay icon at the top menu bar of your screen and select "Stop AirPlay".

Disconnect the audio cable from your computer and place it neatly by the wall plate. Turn off the projector with the remote control by pressing the "power" button twice.



If the following troubleshooting procedures do not help, contact the AV department at (212)353-4329 or inform the School of Architecture Office

PROJECTING THROUGH A SCREENBEAM CONNECTION USING A MAC: TROUBLESHOOTING

If the ScreenBeam does not successfully connect after several attempts using this tutorial:

You may still project in the classroom using a direct HDMI connection. Please refer to "PROJECTING THROUGH AN HDMI CONNECTION USING A MAC" for instructions.

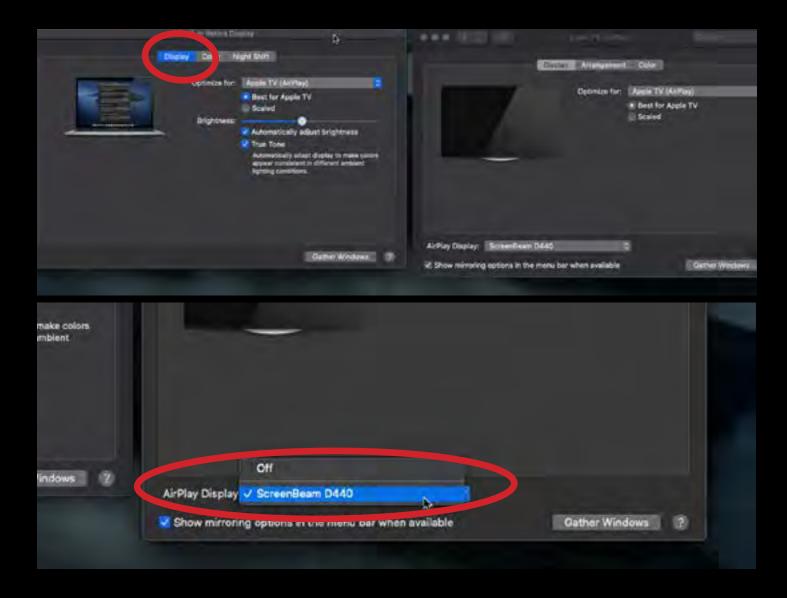


PROJECTING THROUGH A SCREENBEAM CONNECTION USING A MAC: TROUBLESHOOTING

If, once projecting, your computer resolution is off:

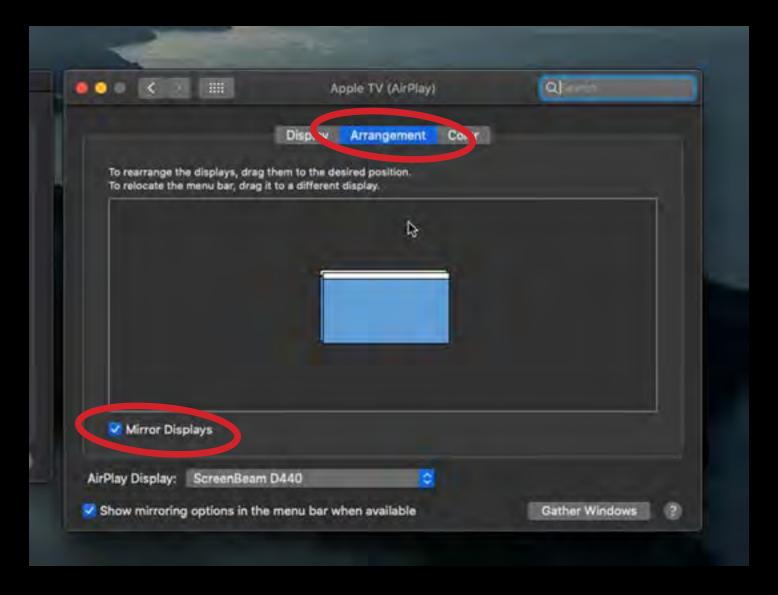
You may change your display settings by clicking on the Apple logo at the top-left corner of your screen.

From the menu that appears select "System Preferences" and click on the "Display" icon.



PROJECTING THROUGH A SCREENBEAM CONNECTION USING A MAC: TROUBLESHOOTING

At the bottom of the window there should be a menu option under "Airplay Display". Make sure your ScreenBeam display is selected. Under the "Display" section, you can change the resolution settings for your computer screen and the projection screen.



If you switch over to "Scaled" you will have options to enlarge or shrink your interface by changing the resolution.

Under the "Arrangement" section, you can select to mirror your screen or to add a frame onto which to drag any application window from your computer to be projected directly.



PROJECTING THROUGH A SCREENBEAM CONNECTION USING A MAC: TROUBLESHOOTING

If the audio cable is connected but there is no sound:

Disconnect and reconnect the audio cable to the wall and to the laptop.



Check that you have the correct audio output by following these instructions:

Click on the apple logo at the top-left corner of your screen and select "System Preferences". Click on the "Sound" icon and select the "Output" section at the top. Select the correct output device.



PROJECTING THROUGH AN HDMI CONNECTION USING A PC

In preparation for your class, we suggest that you bring your own laptop equiped with an HDMI port or complement your computer with a dongle to connect to an HDMI cable.

As an alternative you may borrow a Mac computer and dongle from the School of Architecture Office before class and with advance notice.



PROJECTING THROUGH AN HDMI CONNECTION USING A PC

Newer Windows laptops come equipped with HDMI ports and will not need a dongle to connect to the rooms' HDMI cables.

Both 315F and 712F have an HDMI cable and an 3.5 audio cable wall panel connected to the projector and room speakers respectively.

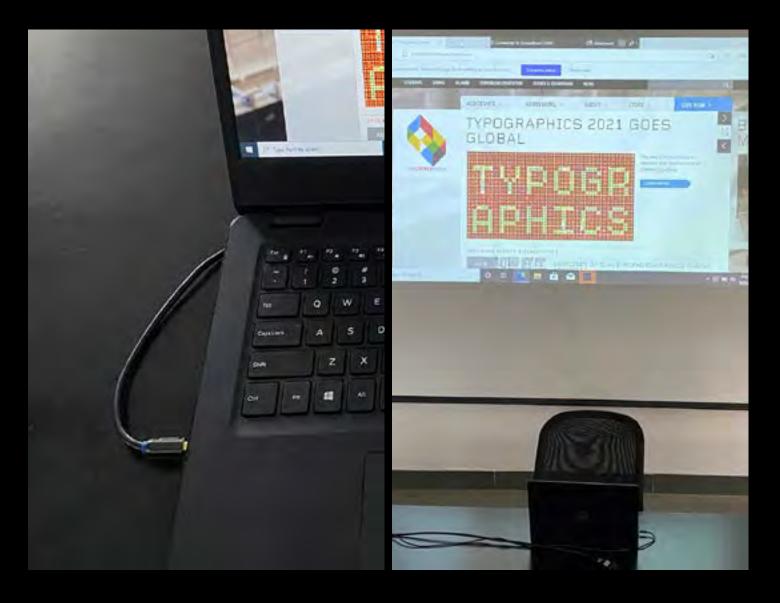


PROJECTING THROUGH AN HDMI CONNECTION USING A PC

Locate the HDMI port and headphone jack on your Windows laptop.

Connect the HDMI cable coming from the wall panel of the room to your laptop.

Once connected to HDMI, your laptop's screen should flicker once and its resolution may change to match the projector.



PROJECTING THROUGH AN HDMI CONNECTION USING A PC

If you would like to amplify your computer audio over the room's speakers you may connect the audio cable coming from the wall into your laptop's headphone jack. When you are finished projecting, disconnect the HDMI and audio cable from your computer and kindly place it neatly by the wall plate.



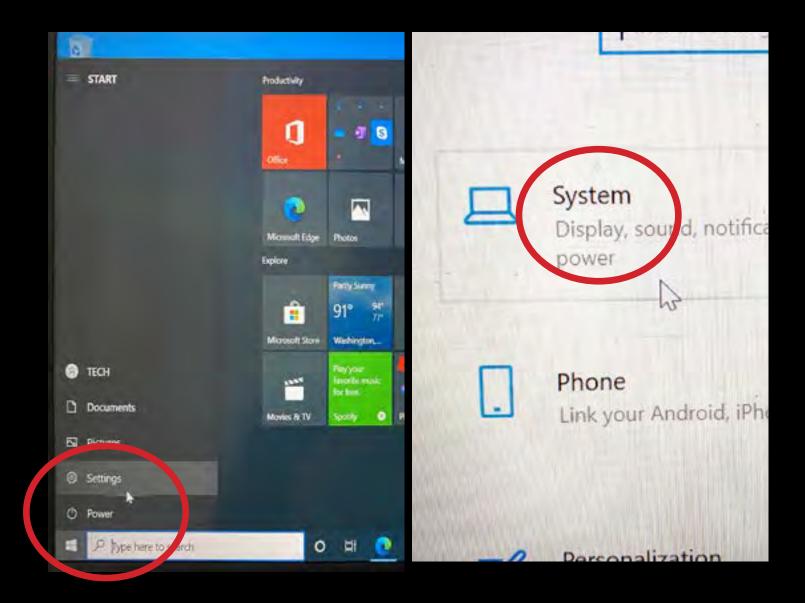
If the following troubleshooting procedures do not help, contact the AV department at (212)353-4329 or inform the School of Architecture Office

PROJECTING THROUGH AN HDMI CONNECTION USING A PC: TROUBLESHOOTING

If you connected the HDMI cable to your dongle, computer, and the wall but your computer display is not projecting:

Make sure to have followed all prior steps of this tutorial correctly and repeat them. Disconnect and reconnect the HDMI cable and dongle

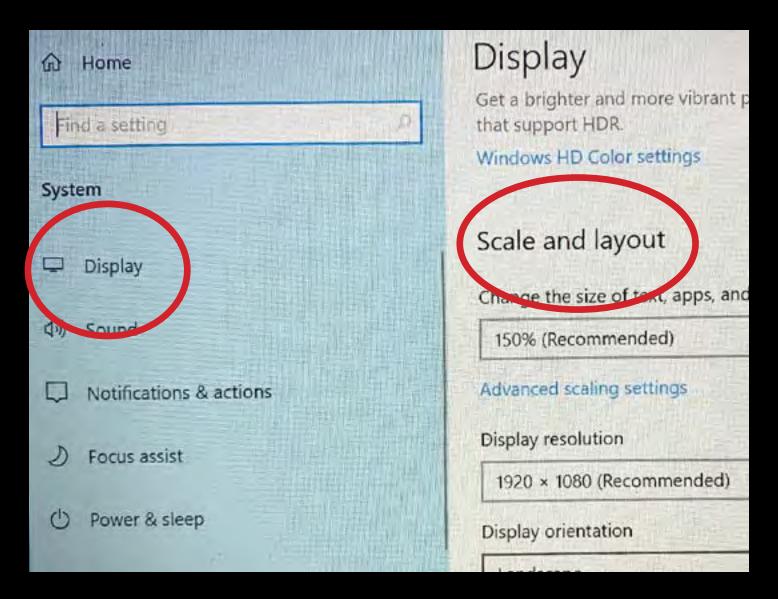
to each other, the wall, and to your computer. Alternatively, you may project wirelessly using the ScreenBeam system.



If, once projecting, your computer resolution is off:

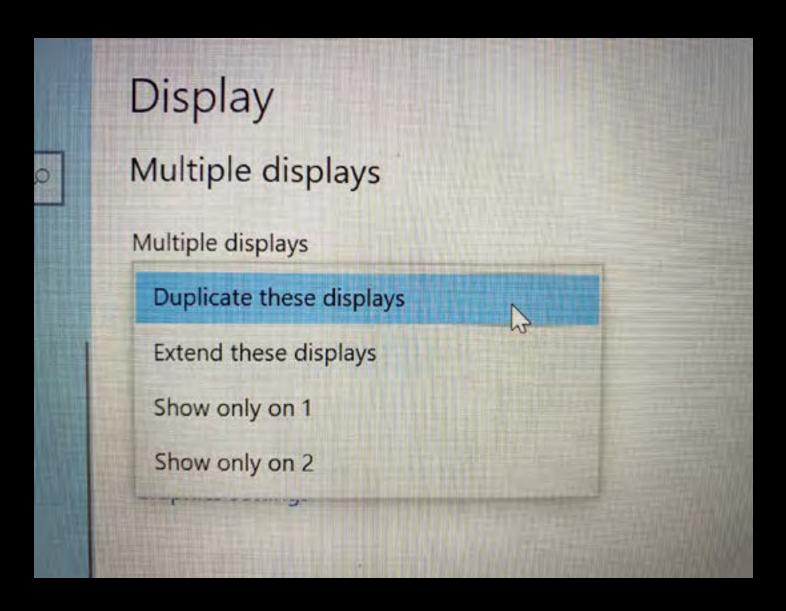
You may change your display settings by clicking on the Windows "Start" button at the bottom-left corner of your screen and select "Settings".

Click on the "System: Display, sound, notifications, power" button.



Select "Display" from the menu on the left side of the window.

Scroll down on the right side of the window until you see the "Scale and Layout" section. Here you may make adjustments to text size, display resolution, and display orientation.



Scroll down more until you see the "Multiple displays" section. Here you can change between mirroring your screen or extending it through a frame onto which to drag any application or

window from your computer to be projected directly.

Those are the two most relevant options to fine tune your projection.



PROJECTING THROUGH AN HDMI CONNECTION USING A PC: TROUBLESHOOTING

If the audio cable is connected but there is no sound:

Disconnect and reconnect the audio cable to the laptop and to the wall.



PROJECTING THROUGH AN HOMI CONNECTION USING A PC: TROUBLESHOUTING

You may also check that you have the correct audio output selected by following these instructions:

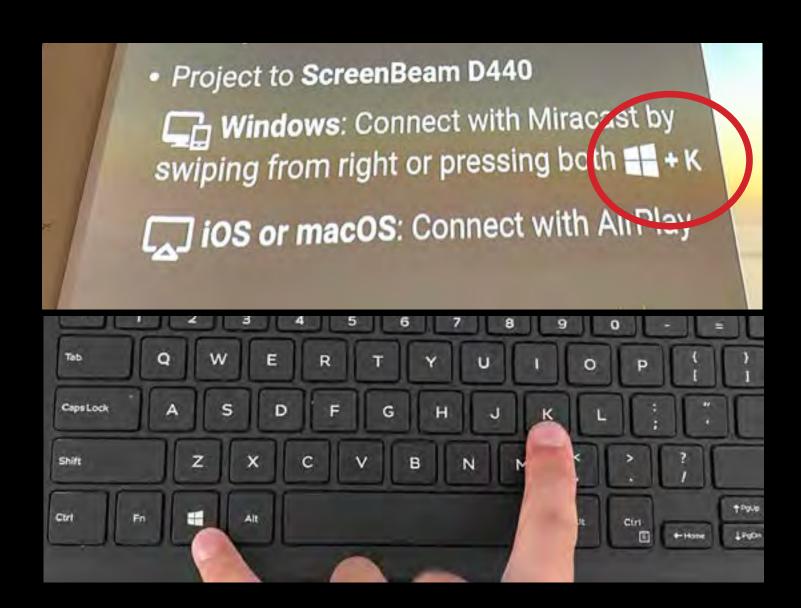
Click on the speaker icon at the bottom-right corner of your screen. Click on the up arrow to the right of "Select playback device". Select the correct output device such as "Speakers/ Headphones (Realtek(R) Audio)".



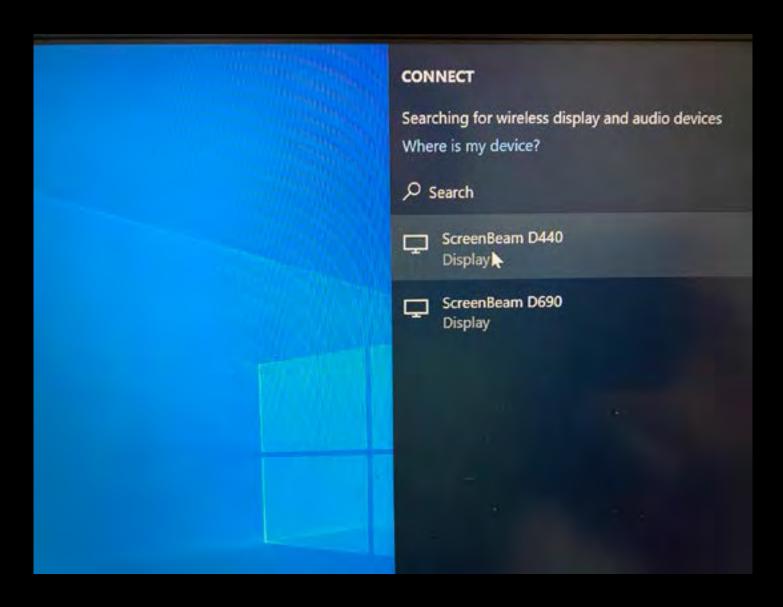
PROJECTING THROUGH A SCREENBEAM CONNECTION USING A PC

The ScreenBeam system allows you to connect wirelessly to the projector. Windows machines allow you to connect to the internet while using the ScreenBeam system.

Once you have prepared the room for projection, take note of the projection screen and the information displayed. You will need it to connect to the projector wirelessly.



As noted on the projection screen, to project from a Windows machine you should press and hold the "WINDOWS" key while pressing the letter "K" on your keyboard.

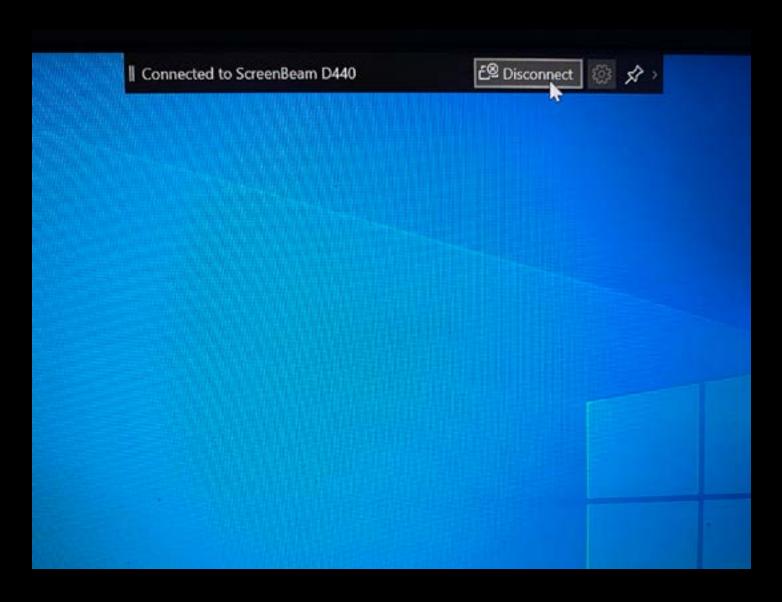


A window will appear on the right side of your computer screen.

Now click on the name of the ScreenBeam display that is projecting in the classroom:

In 315F, proceed to select ScreenBeam D440.

In 712F, proceed to select ScreenBeam 1B10.



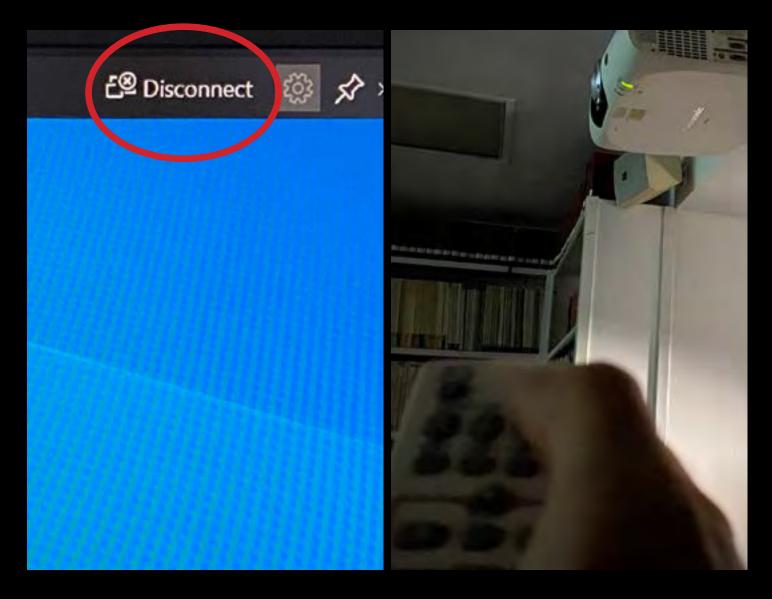
If prompted to enter the PIN for your device. Type in the PIN that is being projected on the projection screen and click on the "Connect" button.

If successful, a "Disconnect" button will pop up at the top of your computer screen and the status will read "Connected to ScreenBeam D440" or "...1B10" depending on room location.



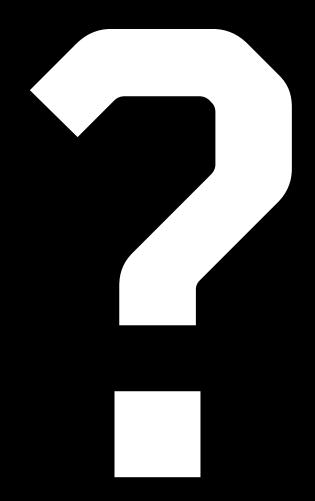
You should now be connected to the projector through ScreenBeam and your computer display should mirror on the classroom's projection screen.

If you would like to amplify your computer audio over the room's speakers, you may connect the audio cable coming from the wall into your laptop's headphone jack.



When you are finished projecting, press the "Disconnect" button at the top of your screen.

Use projector's remote control to turn off the projector by pressing the "power" button twice.

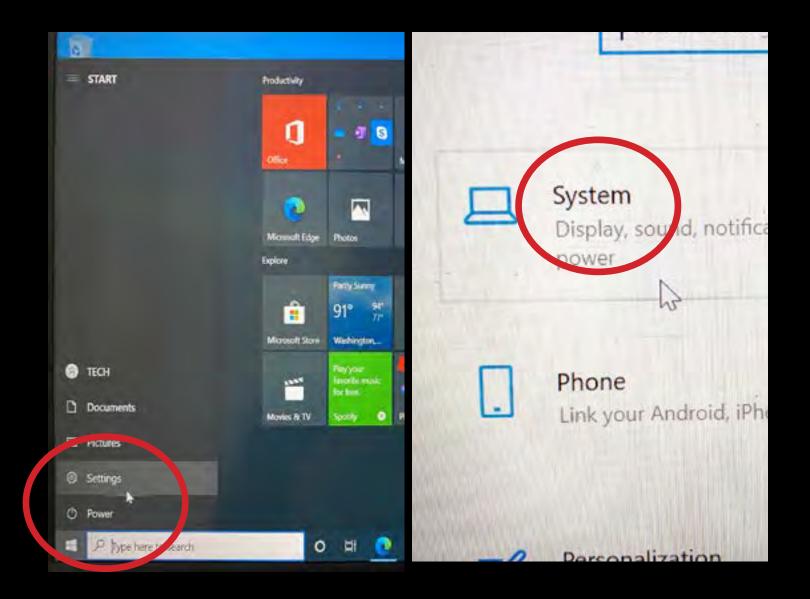


If the following troubleshooting procedures do not help, contact the AV department at (212)353-4329 or inform the School of Architecture Office

PROJECTING THROUGH A SCREENBEAM CONNECTION USING A PC: TROUBLESHOOTING

If the ScreenBeam does not successfully connect and your screen does not project after several attempts using this tutorial:

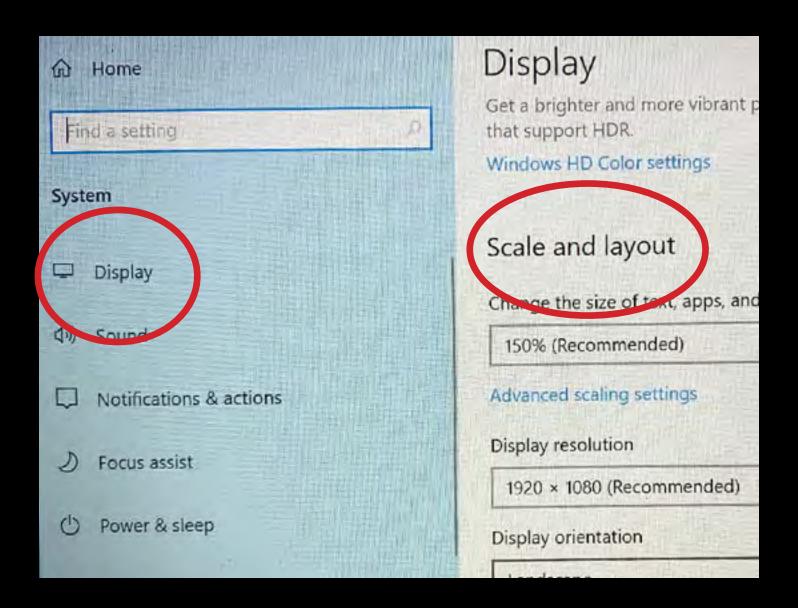
You may still project in the classroom using a direct HDMI connection. Refer to "PROJECTING THROUGH AN HDMI CONNECTION USING A PC" for instructions.



If, once projecting, your computer resolution is off:

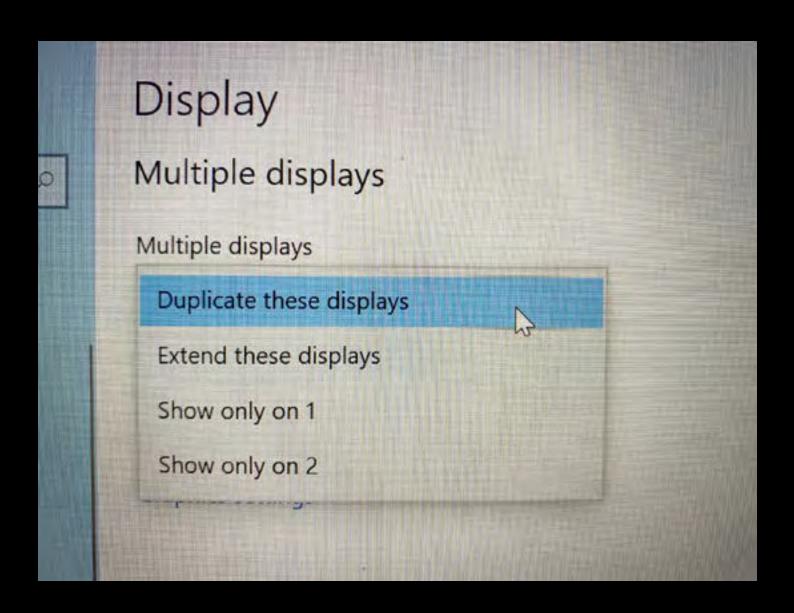
You may change your display settings by clicking on the Windows "Start" button at the bottom-left corner of your screen and select "Settings".

Click on the "System: Display, sound, notifications, power" button.



Select "Display" from the menu on the left side of the window.

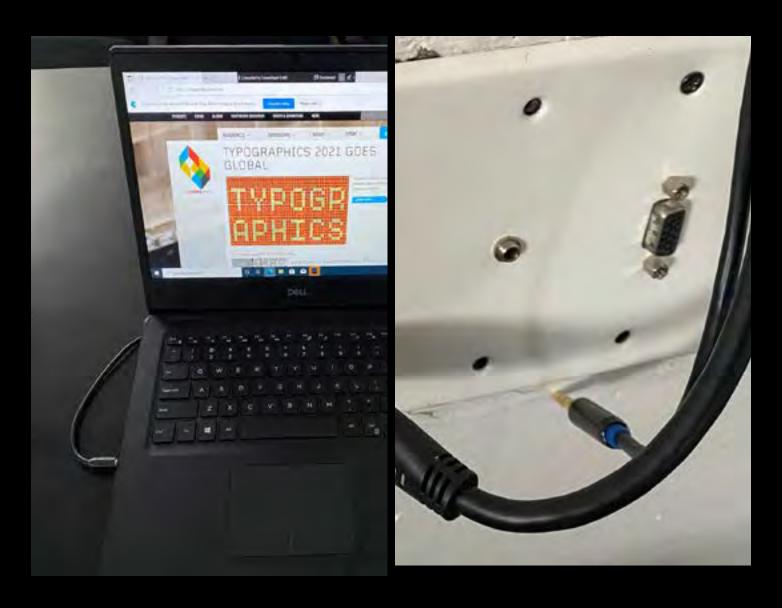
Scroll down on the right side of the window until you see the "Scale and Layout" section. Here you may make adjustments to text size, display resolution, and display orientation.



Scroll down more until you see the "Multiple displays" section. Here you can change between mirroring your screen or extending it through a frame onto which to drag any application or

window from your computer to be projected directly.

Those are the two most relevant options to fine tune your projection.



If the audio cable is connected but there is no sound:

Disconnect and reconnect the audio cable to the laptop and to the wall.



You may also check that you have the correct audio output selected by following these instructions:

Click on the speaker icon at the bottom-right corner of your screen. Click on the up arrow to the right of "Select playback device". Select the correct output device such as "Speakers/ Headphones (Realtek(R) Audio)".