

### INITIAL SETUP

Power up the equipment

- Press the red “POWER” switch on the power strip mounted behind the desk to power up the studio equipment.

Optional - turn on the red “On Air” light switch by the door. The “On Air” light outside the door will come on to alert others that you are recording in the studio.



Make sure you see the front-facing camera feed on the teleprompter.

- The front-facing camera is positioned behind the teleprompter screen in front of you. If you do not see yourself on the teleprompter screen:
  - Press **In1** button on the black remote control to select the Camera Feed option on the HDMI switch.
  - You can also switch between the inputs by pressing the **Switch** button on the HDMI switch until the **In1** /CAMERA indicator lights up blue.



### STUDIO LIGHTS

#### Key Light

The key light is the large light dome in front of you. To use the key light:

- Locate the silver **KEY LIGHT** remote on the desk.
- Turn on the key light by pressing the top left button on the remote (several times if necessary).

- ⚠ If the remote doesn't work, make sure that channel 1 (**ch 1**) is selected. You can select the channel by pressing the red CH button.



- Adjust the key light's intensity to your preference by pressing the + and - buttons in the top row of the remote, or by rotating the **Brightness** wheel on the controller.

### Background Light

The background light is used to illuminate the background in a color of your choice.

- Press the **Preset 1** button and then the **Preset 2** button in the left bottom row of buttons on the “BACKGROUND LIGHT” controller:



- Configure the desired background light color by using the Red, Green, Blue, and White sliders on the controller:

⚠ If the controller doesn't respond and all its lights are off, it's probably turned off. Use the On/Off switch on the back panel to turn it on.

### Hair Light

The hair light highlights your hair/head from behind, helping to separating you from the background. The light comes on automatically and no adjustments are needed.

- ⚠ If you see the hair light on the teleprompter screen, the camera needs to be tilted down. Loosen the lock on the tripod under the camera on your left and tilt the camera down about  $-3^\circ$ . You can use a leveling app on your phone, such as the “Measure” app on iOS or the “Bubble Level” app on Android. Once adjusted, retighten the lock.



### Ceiling Lights

You can turn off the ceiling lights (recommended) using the light switch by the door. Adjust the intensity of the key and background lights as needed while checking your picture on the teleprompter screen with the CAMERA input selected to achieve optimal lighting.

### STUDIO COMPUTER

Log into the Studio Laptop using your Emory credentials.

#### ⚠ If you cannot login:

- Make sure the USB-C cable is connected to the computer. If that is not the issue,
- Login as *lcuser*, password *unc0mm0nbalance*. As it is a shared account, delete your files after you're done. Alternatively, you can log out and then log back in with your Emory credentials, which should now work.

⚠ If you think there's an **Internet connectivity** issue, try accessing a website to verify. If it doesn't load, unplug the power cable from the back right of the CalDigit hub and plug it back in.



### STUDIO CAMERAS

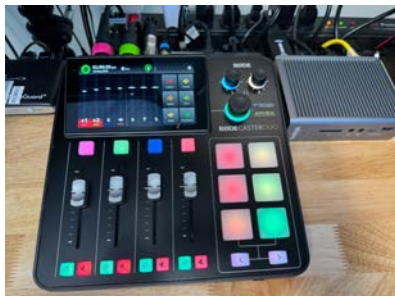
#### 1. Front-Facing Camera.

The front-facing camera is positioned behind the teleprompter screen. The camera is hands-free and does not need any adjustment.

#### 2. Overhead Camera

The overhead camera is positioned above the desk to capture and display documents, visuals, objects, or other content that benefits from a direct overhead view. Since using this camera is optional, it is covered further in this guide.

### AUDIO SETUP

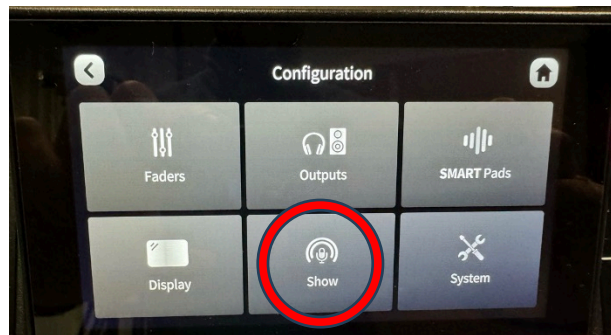


The audio is controlled by the RØDEcaster Duo device. If the device is off, turn it on by pressing the red power button on the back.

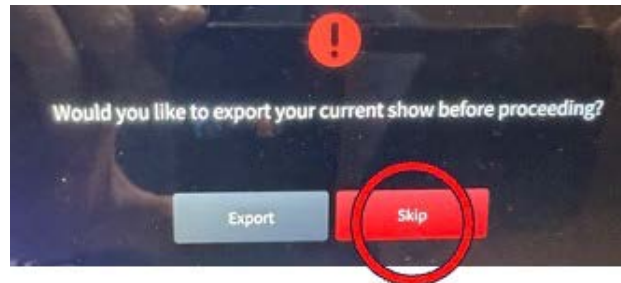
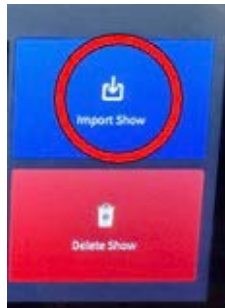
The two studio microphones are numbered as 1 and 2. The microphones are also color-coded as pink and green.

### RØDECaster Duo

- Position the faders about halfway to align with the thicker line.
- Recommended: Reset the RØDECaster Duo settings to the preset optimized for the studio setup:
  - Tap the gear icon in the top left corner of the home screen.
  - Under Configuration, tap 'Show'



- Tap 'Import', then select the 'SRS preset'.
- Tap Import Show again. On the next screen, tap **Skip**



### Microphones

Choose your microphone.

- Sound can be captured by the **Sennheiser boom** microphone mounted on the arm over the camera or by **Shure SM7B podcasting** microphone on the low-profile arm.
- Use the **boom** microphone when you want to keep the microphone out of the video frame. It is connected to Input 1 of the RØDECaster Duo and is color-coded **pink**. The **Sennheiser boom** microphone should be placed about a foot in front of you and pointing toward your face.



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- Use the **podcasting** microphone mounted on the boom arm to record videos with the microphone in front of you. This Shure SM7B industry-standard microphone for podcasting and broadcasting captures a flat "radio" voice. It is connected to Input 2 of the RØDECaster Duo and is color-coded green. The Shure SM7B microphone should be placed 1-6 inches from your mouth.



- The microphones are muted by default. The corresponding mute button is lit when the microphone is muted. To unmute the desired microphone, press the mute button under its respective channel on the RØDECaster Duo device.

Check the selected microphone level:

- Ensure that the microphone channel fader on the RØDECaster Duo device is set around the middle at the thicker line.
- Ensure that the microphone is not muted (the red Mute button for the channel is not lit)
- While speaking, you should see the green indicator bar for the microphone peaking around the thicker line. If the bar is too low or too high:
  - Press the microphone channel button (#1/pink for the boom, #2/green for the podcasting microphone) on the RØDECaster Duo.
  - Tap the '+' and '-' buttons on the RØDECaster Duo screen to adjust the level so that the meter is peaking within the green line and does not reach the red. Typically, the boom microphone should be set to around 46dB, while the Shure podcasting microphone should be set to around 65dB.
  - Press the Home icon in the top right of the screen to exit to the home screen.

### Speakers and Headphones

- The output controls for the headphones and the speakers are located at the top-right of the RØDECaster Duo.
- The headphones are controlled by knob "1," which is lit blue.
- The speakers are controlled by the larger knob, which is lit teal. Additionally, there is a volume control knob on the left speaker.



**!** The output sound should come from the external speakers and/or headphones. If the sound is coming from the computer speakers instead, click on the Apple logo in the top left corner of the desktop, select System Preferences, then Sound, and ensure the Output is set to RØDECaster Duo Main.

**!** If there's no sound coming from the speakers, ensure they are turned on. The power switch is located on the left speaker.



### VIDEO RECORDING

The studio laptop has Open Broadcaster Software (**OBS**) installed for video recording and streaming. You can learn how to use many OBS features for video recording and streaming by watching a YouTube tutorial.

#### 1. Launch OBS application

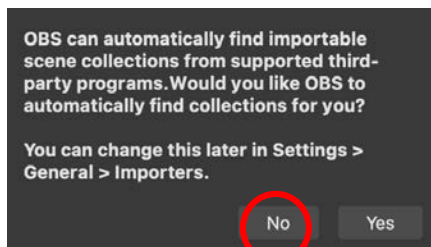
- If asked, grant OBS access to the camera and the microphone.
- If Auto-Configuration Wizard window appears, click Cancel.

#### 2. Import the Preconfigured Scene

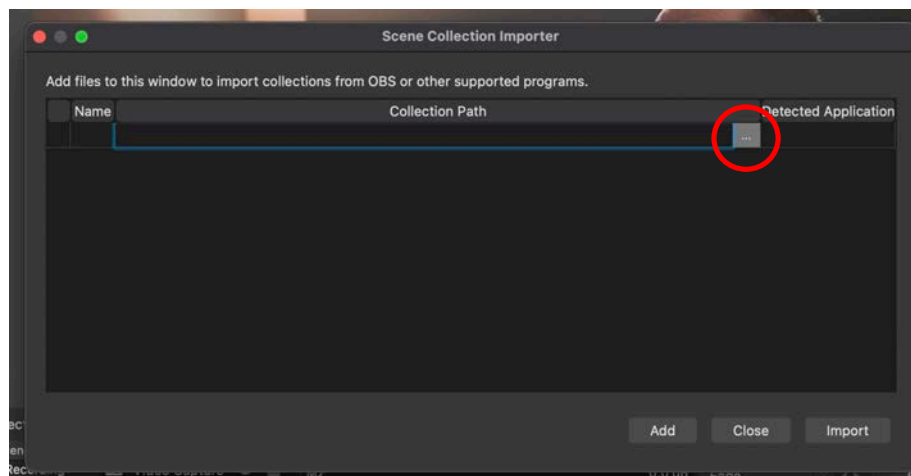
- OBS organizes your input sources by **Scenes**. You can import a Scene with already configured video and audio sources.

1. Click on the **Scene Collection** in the top menu and select **Import**.

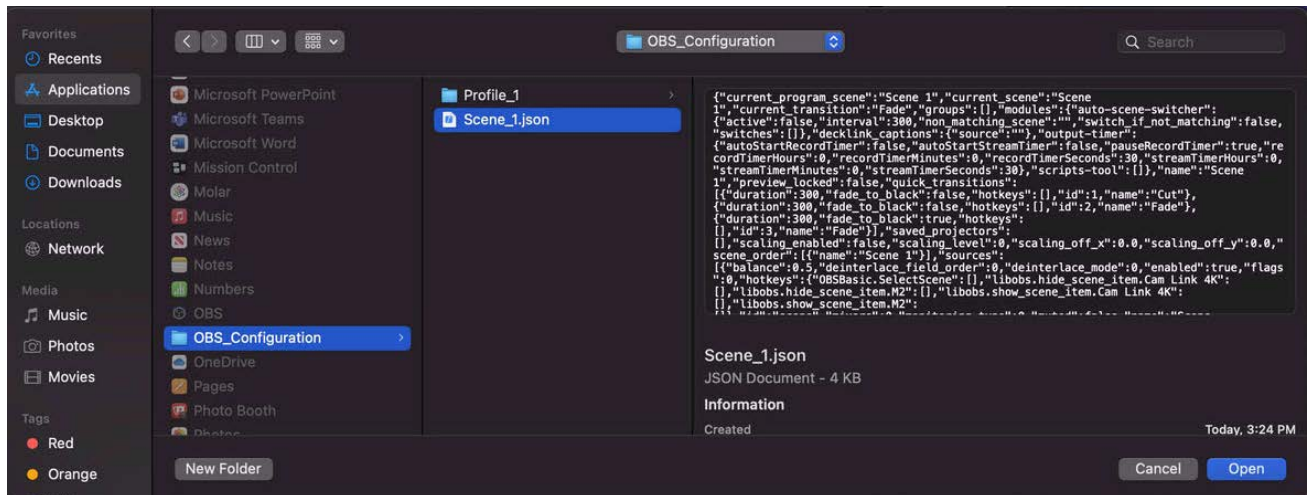
2. If this window opens, click **No**:



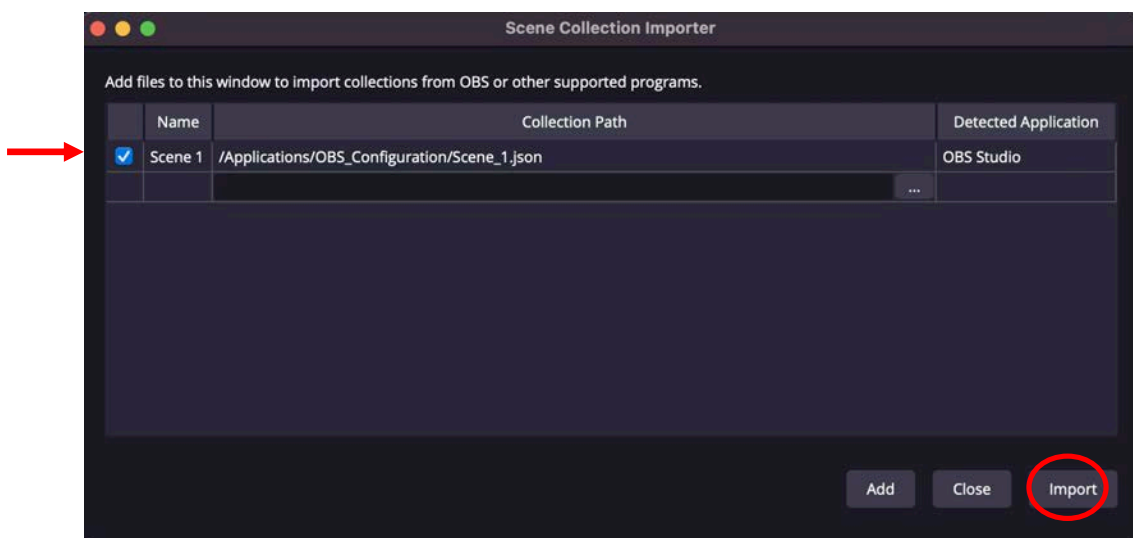
3. In the next window that opens, click on the “...” under the Collection Path:



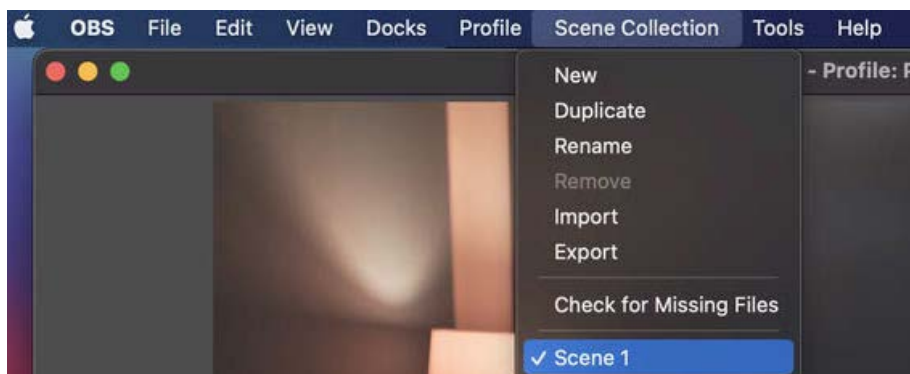
4. Navigate to **Applications**→**OSB\_Configuration**→**Scene\_1.json**. Click Open:



5. Check the box next to Scene 1 and click Import:

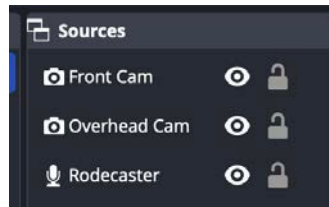


6. The preconfigured Scene is now imported. To load it, go to the **Scene Collection** in the top menu and select the newly imported **Scene 1**:



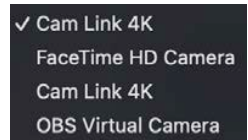
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7. In the OBS interface under Sources, you should now see **Front Cam** as your primary video source, Overhead Cam as an additional optional camera (covered further in a separate section), and **Rodecaster** as your audio source.



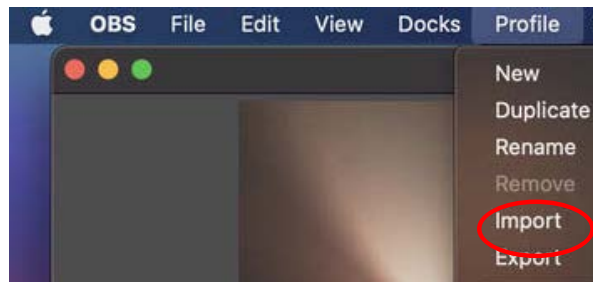
If there is no camera feed when you launch OBS after the setup:

1. Double-click the Front Cam source in the Sources window.
2. In the window that opens, select FaceTime HD Camera under Device.
3. Now, reselect one the Cam Link 4K cameras under Device (one is the front-facing camera, the other —overhead).
4. You should see the front-facing camera feed in the window. If not, select the other Cam Link 4K camera. Otherwise, click OK.

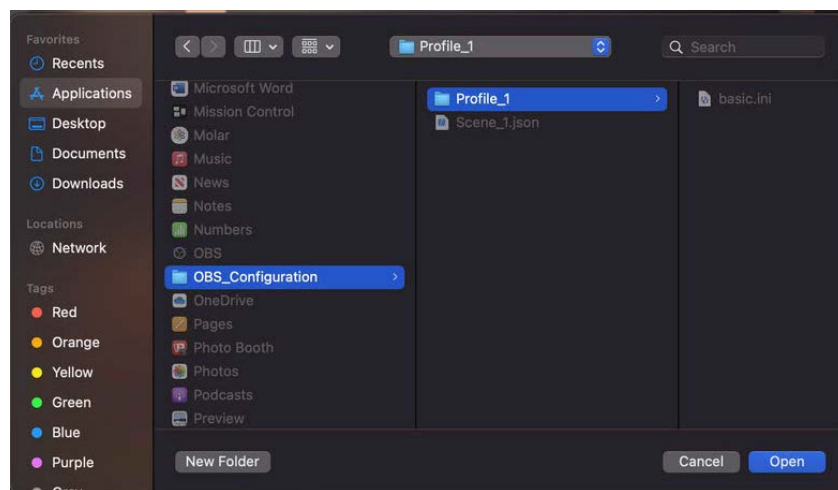


### 3. Import the Preconfigured Profile.

- Click on the **Profile** in the top menu and select **Import**:



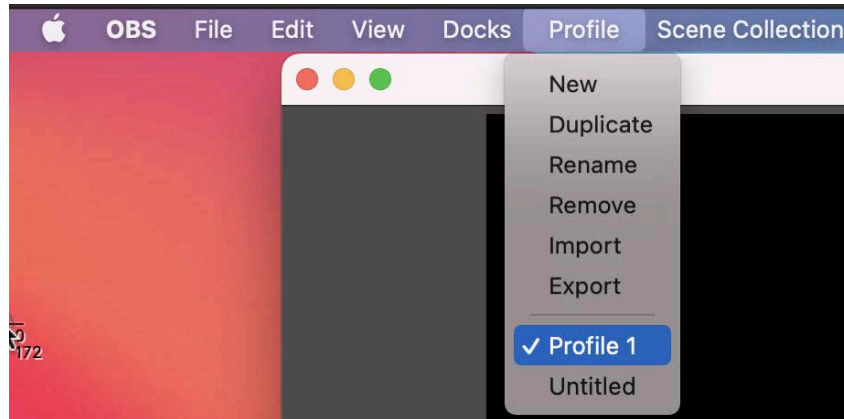
- Navigate to Applications/OBS\_Configuration/Profile\_1 folder and click Open:






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- The preconfigured Profile is now imported. To load it, go back to the **Profile** in the top menu and select the newly imported **Profile 1**:



### 4. Turn off Apple reactions.

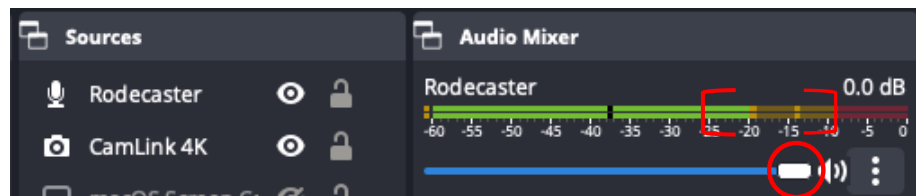
In the latest version of macOS, Apple introduced “Reactions” – a collection of animations featuring balloons, fireworks, hearts, thumbs up, and more that trigger with hand gestures. These reactions may be inappropriate for your content and may freeze your video feed. To turn them off:

- Click on the camera icon,  or , in the top right of the screen.
- Click on Reactions to deselect (it should not be green):



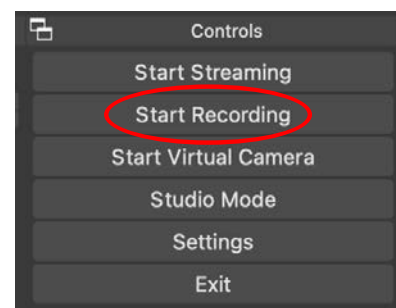
### 5. Check Microphone Gain

Ensure that when you speak, the sound level under Rodecaster stays in the green/yellow range and **does not enter the red**. Adjust the level using the volume slider in OBS as needed.



### 6. Recording

OBS is now configured for recording. Click **Start Recording** under Controls to start your recording. Click again to stop.



### 7. Using the Teleprompter Screen

Choose the CAMERA or COMPUTER input for the teleprompter on the HDMI switch as needed:



- Use the CAMERA input to see yourself on the teleprompter screen while recording.
- Use the COMPUTER input to display the computer's external monitor on the teleprompter screen while recording. This is useful for reading PowerPoint notes, Word documents, or a teleprompter script while looking into the camera.

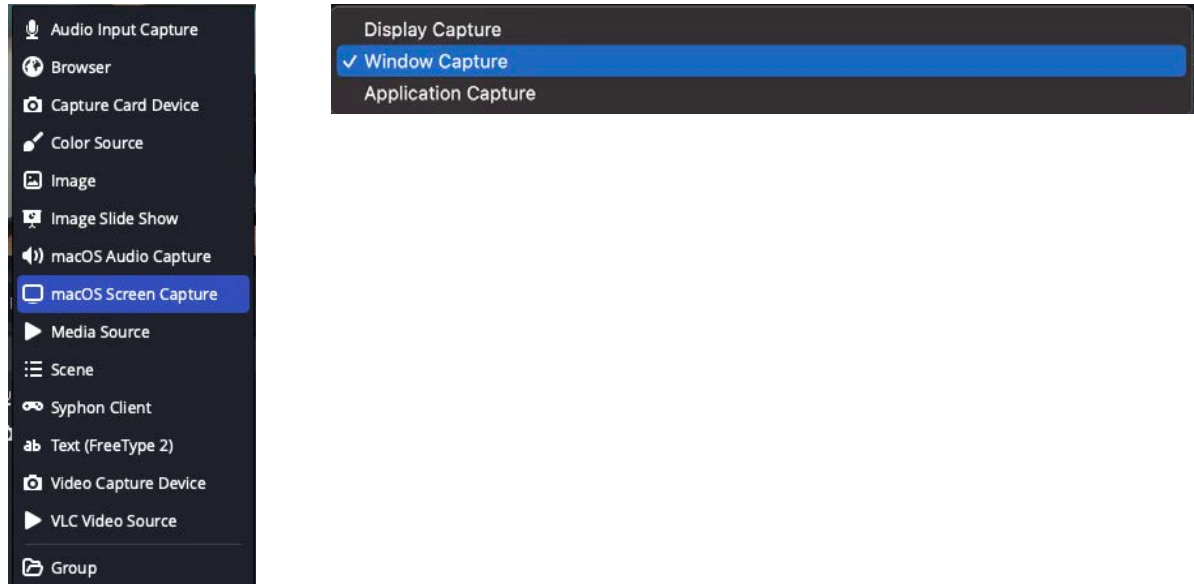
**i** OBS will always record the camera feed. The input selection only changes what's shown on the teleprompter screen.


#### **Optional:** Use a Teleprompter App


- Open your script file (PowerPoint, Word document, etc.), move it to the external monitor, and maximize it.
  - If you would like to use a teleprompter app, here are some options:
    - **Speakflow**, <https://www.speakflow.com/guide>: An online voice-activated teleprompter with a free option. “You can create an account, write scripts, and read them aloud while the teleprompter listens to your voice, and scrolls the page for you.” The free version is limited to one script up to 2000 characters at a time.
    - **Teleprompter Mirror**, <https://telepromptermirror.com/telepromptersoftware.htm>: Another free online voice-activated teleprompter that works only in **Chrome** browser.
    - **Teleprompter Pro+** app: installed in the Applications folder.
- Start your recording in OBS
- Start playing/reading the script.

## ADDING MORE VIDEO SOURCES IN OBS


You can add another input source by clicking the + under Sources. For instance, you can add macOS Screen Capture and then choose between Display Capture or Window Capture options:



 For Display Capture, choose the external display.

 For Window Capture, launch the desired app first and then select it from the list that opens under Window Capture.

You can also resize the camera window and place it over another video source (picture-in-picture effect). Select the camera in the list of sources so its frame is highlighted in red, then resize and move the frame as needed.

 Video sources are displayed from top to bottom. If your camera window isn't visible, move the Front Cam video input above the other video sources in the Sources panel.

 To preserve the correct height to width aspect ratio when adjusting the camera window:

- Right click on **Front Cam** under Sources.
- Select **Transform/Edit Transform**:



- Select **Bounding Box Type** → **No Bounds**:





 You can use the green screen (covered further in a separate section) for the picture-in-picture recording.

## VIDEO CONFERENCING

The studio computer has Zoom and Teams installed for video conferencing. You can also use any online video platform of your choice.

1. Configure your video and audio settings in your conferencing software by selecting **Cam Link 4K** (choose one that shows the **front-facing camera** feed) as your **video source** and **RØDECaster Duo Chat** as your **audio input and output**.

2. Disable Apple "Reactions" – a set of animations including balloons, fireworks, hearts, thumbs up, and more that are triggered by hand gestures. These reactions might be inappropriate for your content and could freeze your video feed. To turn them off:

- Click on the camera icon,  or , in the top right of the screen.
- Click on Reactions to deselect (it should not be green):



3. Select the COMPUTER input for the teleprompter to see your computer screen

- Press the **In2** button on the remote or the **Switch** button on the HDMI switch so that the “In2” light under the “COMPUTER” label turns blue:



- After switching to the computer input, the teleprompter will display the computer's external monitor.
4. Move your conferencing app window to the external monitor and maximize it. This way, you can look at your conference participants while also looking directly into the camera.

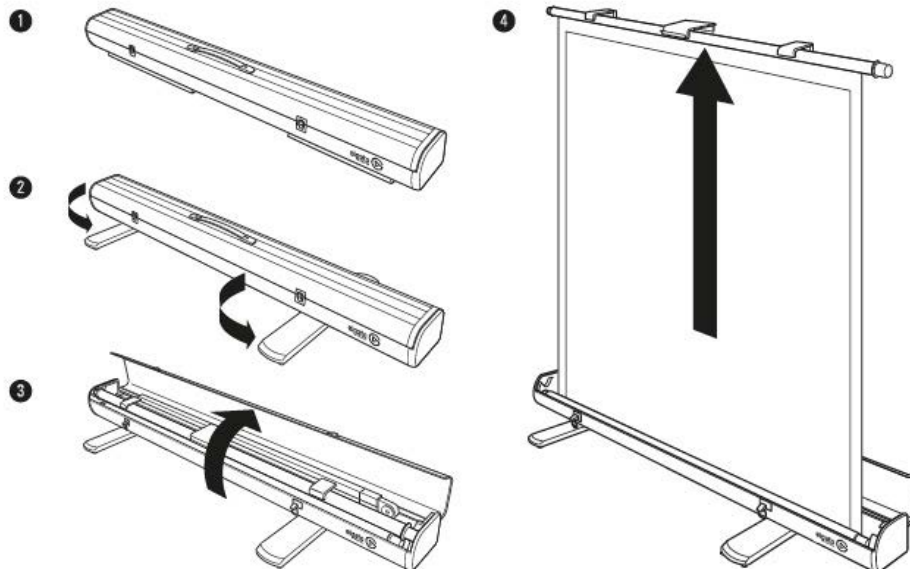
## GREEN SCREEN

The green screen can be easily setup for use with the OBS chroma key plugin to replace the background.



To setup the green screen:

- (1) Pick up the case and (2) extend the legs. Position the case behind the chair parallel to the desk, with the locks facing the desk.
- (3) Open the case and (4) using the central handle, raise the bar while keeping it level and avoiding contact with the fabric. The x-frame will automatically lock the canvas in place.



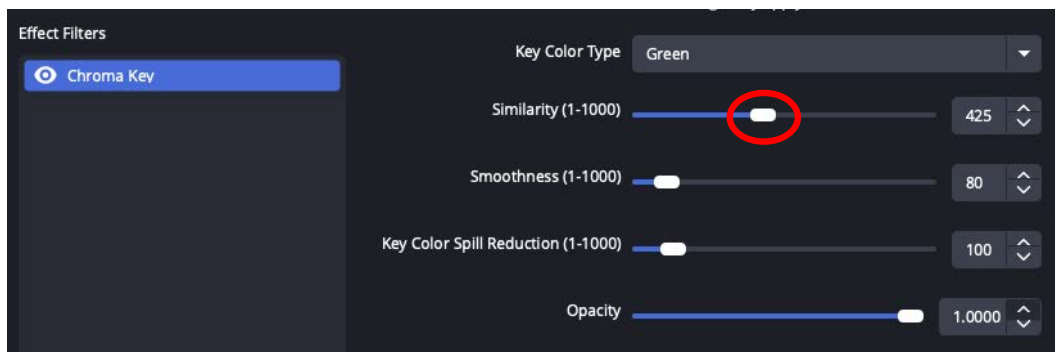
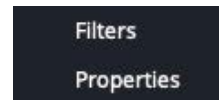
To collapse the screen, follow the above steps in reverse order. Store the case along the wall between the door and the shelving.



⚠ Do not attach any items to the screen.

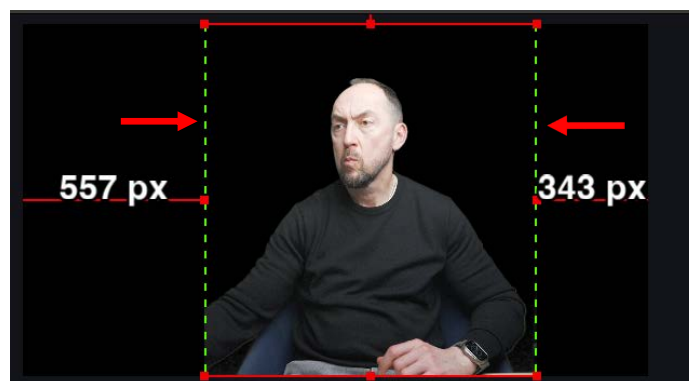
### Setting Up the Chroma Key Plugin in OBS

1. In OBS, right-click the **Front Cam** under **Sources**.
2. Click **Filters** at the bottom of the window.
3. Click the + under **Effect Filters** and select **Chroma Key**. Click **OK**.
4. While viewing the camera feed in OBS, increase the **Similarity** to blacken the background/green screen without affecting the foreground. You may also try **increasing the key light brightness** or **moving up the White light slider** on the background light controller. Click **Close**.



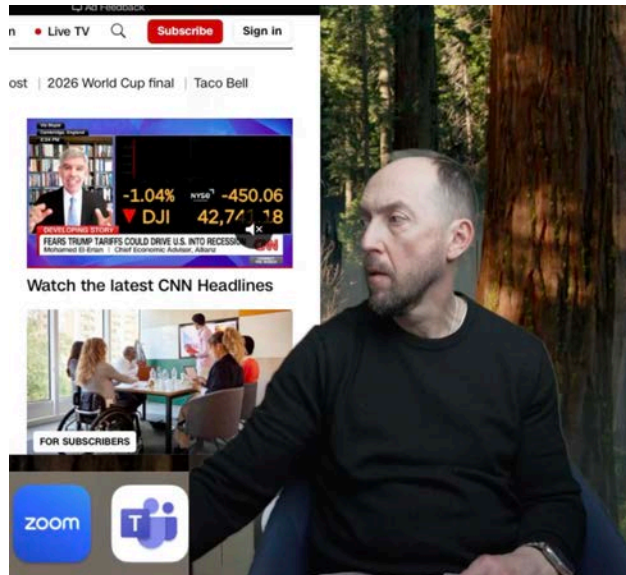
⚠ Avoid using the Red, Green, and Blue background light colors when the Chroma Key is in use, as it may interfere with its functionality.

5. Adjust the frame to align with the green screen: Holding the **Option** key, click on the right edge of the **Front Cam** frame (it should turn red), and drag it left to align with the green screen. Repeat for the left edge.



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6. You can now use the **Front Cam** source without a background, for example, on top of another video source for a picture-in-picture effect.



### OVERHEAD CAMERA

The studio features an overhead camera on a flexible arm for capturing and displaying documents, visuals, objects, or other content that benefits from a direct top-down view.

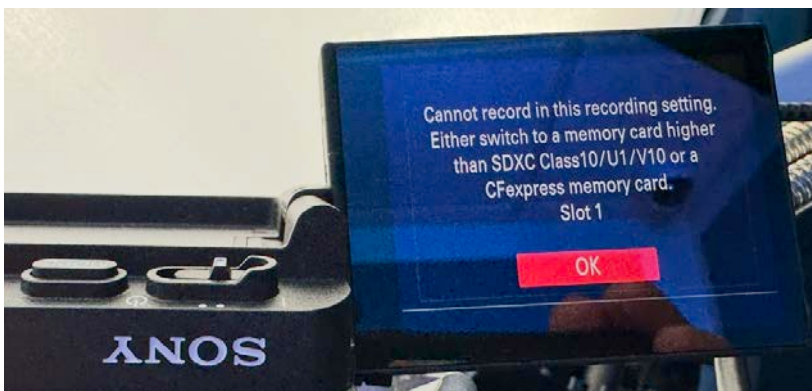


#### Setting Up the Overhead Camera

1. Move the arm to position the camera above the desk area you want to show.
2. Ensure that the focus switch on the lens is set to **AF**.
3. Turn the camera on by moving the power switch toward the **I**.



4. Open the camera display, turn it towards you, and tap **OK**.



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5. **Recommended:** Reset the camera settings to avoid any modifications made by previous users.

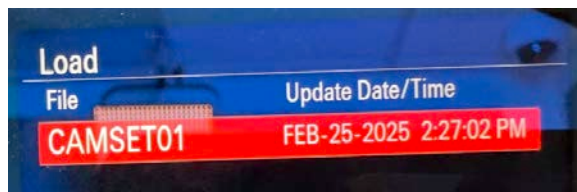
- Press the **Menu** button.



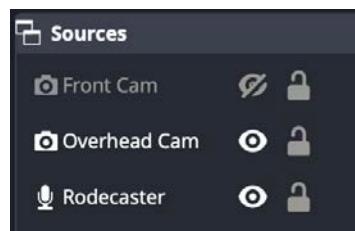
- Tap the yellow “Toolbox” icon at the bottom, then select **Save/Load Settings** and choose **Load, Media**.



- Tap **CAMSET**, then tap **OK**. The camera settings are now reset.



6. In OBS, click the Eye icon next to **Font Cam** under **Sources** to disable it:

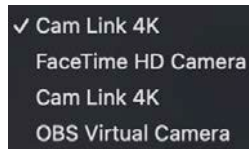


7. You should now see the **Overhead Cam** feed on the OBS display:

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8. If there is no camera feed for the Overhead Cam source selection:
- Double-click the **Overhead Cam** source
  - In the window that opens, select one of the **Cam Link 4K** options under **Device** (one is the front-facing camera, the other is the overhead camera):



- You should see the overhead camera feed in the window. If not, select the other **Cam Link 4K** option. Otherwise, click **OK**.





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9. While looking at the camera display or the OBS screen, adjust the position of the overhead camera above the desk as needed. Use the **Zoom ring** on the camera's lens to zoom in/out.

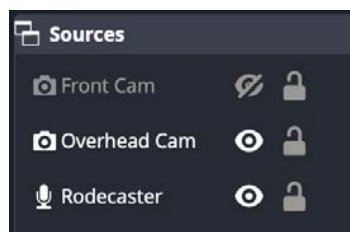


10. Ensure that the overhead camera is high enough and doesn't show on the teleprompter screen in the front-facing camera frame.

### Using the Overhead and Front-Facing Cameras

You can use the overhead and the front-facing cameras separately or together.

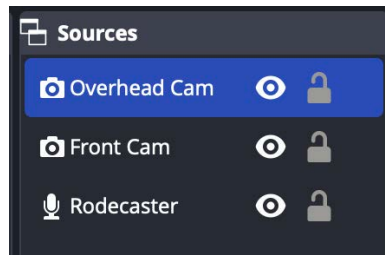
1. To switch between cameras:
  - In the Sources panel, click the **Eye** icon next to the camera source at the top to disable or re-enable it. For instance, if the **Front Cam** is at the top, disabling it will reveal the **Overhead Cam** further down the list.



2. To use both cameras as picture-in-picture:
  - Ensure both cameras are enabled in the **Sources** panel.
  - Place the camera you want to minimize at the top of the list.
  - Select this camera and adjust its frame size and position to achieve the picture-in-picture effect.

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In the example below, the **Overhead Cam** is displayed as a picture-in-picture within the **Front Cam** frame.

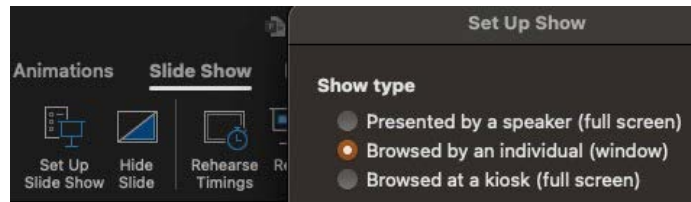


## POWERPOINT PRESENTATION AT A VIDEO CONFERENCE

1. Launch your PowerPoint presentation and start slide show.
2. Your slides should appear full screen on the right (laptop's desktop) and your notes—on the left (external monitor). If needed, click the **Swap Displays** option at the top left of your notes screen.
3. On your notes screen, decrease the slide field and increase the font of your notes to easily read them from the teleprompter screen. You may choose to duplicate your slides to divide longer notes between identical slides to avoid scrolling.
4. Once your PowerPoint presentation is set up, Start your conference call.
5. Press **Option+Tab** on the keyboard to toggle between open applications and select your videoconferencing application.
6. In your videoconferencing application, share the laptop's desktop with your PowerPoint slides with your audience.
7. Now you can present while reading your notes, looking directly into the camera, and sharing your PowerPoint slides with your audience.

## RECORDING A POWERPOINT PRESENTATION IN OBS

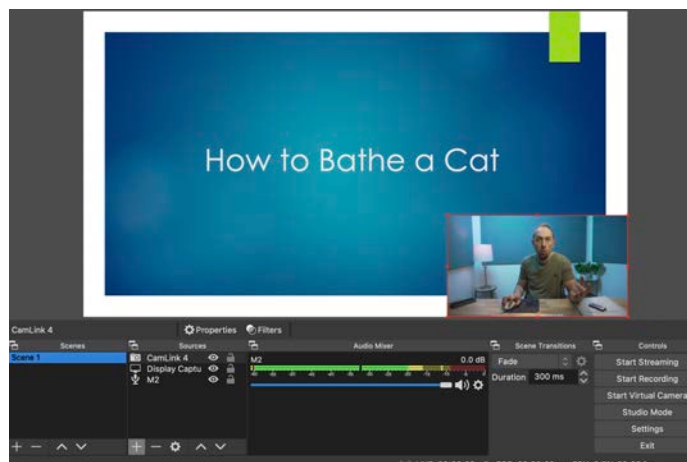
- Launch your PowerPoint presentation.
- In the PowerPoint top menu, select **Slide Show**, then **Setup Slide Show**, and choose **Browsed by an individual (window)**. Click OK



- Start your presentation slide show. Move your presentation window to the external monitor and maximize it.
- In OBS, under **Sources**, click on the + sign and select **macOS Screen Capture**, then choose **Display Capture** or **Window Capture**:



- Select **Display 1** for **Display Capture** or your PowerPoint window for **Window Capture** and click **OK**.
- OBS should now display your external monitor with your presentation and your camera feed on top:



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Video sources are displayed in layers from top to bottom. If you don't see your camera window, drag **Front Cam** in the **Sources** panel up above the **Display Capture**.



To adjust the video source window, make sure its frame is highlighted in red in the **Sources** panel.

- Select the COMPUTER input on the HDMI switch to see the presentation slides on the teleprompter screen.
- Start recording in OBS and begin your presentation.



You can capture any display or window content (e.g., recording a software training video or streaming a game) by following the above steps.



## WHEN YOU ARE DONE

1. **Save Your Work** to your own media or online storage. The studio computer may be wiped at any time for maintenance.
  - You can use a USB-C thumb drive, a regular USB (USB-A) thumb drive, an SD memory card, or an external hard drive to save your files. Connect your drive or insert your card into the HUB to the right of the RØDECaster Duo device.
2. **Logout** from the computer.
3. **Reset** the studio to the ready state: **Reconnect** any disconnected cables and switch back on any equipment you turned off.
4. **Power Off** the studio by pressing the red switch labeled “POWER” on the power strip.
5. If you used the **Overhead Camera**, ensure it is turned off and moved away to the wall.
6. If you used the **Green Screen**, ensure it is collapsed into its box and stored along the wall between the door and the shelving.
7. **Collect Your Belongings**, take out any **Trash**, and return any **Furniture** you brought in from the floor. Please leave the space **tidy and ready** for the next user.
8. **Turn Off** the ceiling lights and the “ON AIR” light using the wall light switch.
9. Exit the studio and make sure to shut the door behind you.

## TROUBLESHOOTING

### ⚠ Login Issues:

- Ensure the USB-C cable is properly connected to the computer.
- If the issue persists, log in using the credentials:
  - Username: lcuser
  - Password: unc0mm0nbalance
  - As this is a shared account, please delete your files after use.
  - Alternatively, you may log out and then log back in with your Emory credentials, which should now function correctly.

### ⚠ Internet Connectivity Issues:

- Verify the internet connection by attempting to access a website such as [sdl.emory.edu](http://sdl.emory.edu).
- If the site does not load, unplug the power cable from the back right of the CalDigit hub and reconnect it. This action should reset the wired internet connection (WiFi is not utilized in our spaces).



### ⚠ Teleprompter Screen Issues:

- If the teleprompter screen is blank, toggle between In1 and In2.
- If this does not resolve the issue, unplug the power cord from the back of the HDMI switch and reconnect it.

### ⚠ Key Light Remote Issues:

- If the remote buttons do not work, ensure that channel 1 (ch 1) is selected on the remote by pressing the red CH button.
- Alternatively, you can press the power button on the controller hanging on the light stand beneath the light.



### ⚠ Background Light Controller Issues:

- If the background light controller is unresponsive and all its lights are off, it is likely turned off. Use the On/Off switch on the back panel to turn it on.

### ⚠ Hair Light on Teleprompter Screen:

- If the Hair Light is visible on the screen, the front-facing camera needs to be tilted down.
  - Loosen the lock on the tripod under the camera on your left and tilt the camera down approximately  $-3^{\circ}$ . You can use a leveling app on your phone, such as the “Measure” app on iOS or the “Bubble Level” app on Android.
  - Once adjusted, retighten the lock.

### ⚠ Output Sound Issues:

- The output sound is coming from the computer speakers instead of the external speakers and/or headphones:
  - Click on the Apple logo in the top left corner of the desktop
  - Select System Preferences, then Sound, and ensure the Output is set to RØDECaster Duo Main.
- No sound is coming from the external speakers:
  - Ensure the external speakers are turned on. The power switch is located on the left speaker.

### ⚠ No Front Cam or Overhead Cam Feed in OBS:

- Double-click the Front Cam or Overhead Cam source in the Sources window.
- In the window that opens, select FaceTime HD Camera under Device.
- Now, reselect one the Cam Link 4K cameras under Device (one is the front-facing camera, the other —overhead).
- You should see the front-facing camera feed in the window. If not, select the other Cam Link 4K camera. Otherwise, click OK.



### ⚠ Aspect Ratio Issues When Adjusting Camera Window:

- To maintain the correct height-to-width aspect ratio:
  - Right-click on Front Cam (or Overhead Cam) under Sources.
  - Select Transform/Edit Transform.



- Select Bounding Box Type -> No Bounds.

