Streaming & Recording Studio: User Guide

INITIAL SETUP

Power Up and Log In

1. 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.

2. Press the red “POWER” switch on the power strip mounted behind the desk to power on the equipment:

3. Log into the computer using your Emory credentials.
   ! At your first login, you will have to go through the initial setup process.

Video Setup

The camera is positioned behind the teleprompter screen and turns on automatically. You can choose between the camera or the computer input to be displayed on the teleprompter screen by using the HDMI switch:

- Look at the teleprompter screen in front of you.
  - If you see yourself on the screen, you have the camera input selected. The In1 indicator on the HDMI switch marked as CAMERA is blue:
  - If you see your computer external monitor desktop on the teleprompter screen, you have the computer input selected. The In2 indicator on the HDMI switch marked as COMPUTER is blue:
You can switch between the inputs by selecting the desired input In1 or In2 on the remote or by pressing the Switch button until the desired input lights blue (you may need to circle through the inactive inputs).

⚠ If the screen is black, toggle between In1 and In2. If that does not work, reboot the computer.

**Lights**

1. **Key Light**

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

- Locate the KEY LIGHT remote on the desk.

- Turn on the key light by pressing the top left button on the remote (twice if necessary).

Alternatively, you can press the Power button on the controller hanging on the light stand under the light:

⚠ If the remote does not work, ensure that ch 1 is selected. You can select the channel by pressing the red CH button on the remote.
• Adjust the key light’s intensity to your liking (while checking your picture on the teleprompter screen with the CAMERA input selected) by pressing the + and - in the top row of buttons on the remote (or by rotating the Brightness wheel on the controller).
  o Suggested initial setting with the ceiling lights off – 48%
  o Suggested initial setting with the ceiling lights on – 52%

2. Background Light

The background light is attached to the ceiling to your right and is used to illuminate the background in a color of your choosing.

• Press the Preset 1 and then Preset 2 button (in that order) 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:

  Alternatively, you can select the desired color by pressing a button in the COLORS/CHASES section of the controller.

3. Hair Light

The hair light is positioned on the ceiling at the back wall. It highlights your hair/head from behind, separating you from the background. The light comes on automatically, and no adjustments are needed.

⚠ If you see the hair light in the frame, 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°. Retighten the lock.

4. Ceiling Lights

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

Audio Setup

- The sound is captured by the boom microphone on the arm. To adjust the microphone’s height (if needed):
  - While looking at the teleprompter screen (using the CAMERA input), lower down the boom mic so that you can see it on the screen.
  - Move the mic up just out of the frame.

- Adjust audio input and output as needed using the **MOTU M2** audio interface:

  - As you talk with your normal volume, adjust the microphone input using the BOOM MIC control knob. The “IN 1” indicator bar (see the pic above) should fluctuate in the green-yellow range when you talk but **should not go into the red**.

 ⚠️ If the “IN 1” indicator does not move, the mic may be muted. Depress the button labeled “MUTE” on the blue MicSwitch box to unmute.
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⚠ **DO NOT press the “MON” button** on the M2 device to avoid feedback.

- To adjust the output sound volume, use either the HEADPHONES or the SPEAKERS control knobs on the right as appropriate.

⚠ The output sound should be coming from the external desktop speakers and/or the headphones. If the sound is coming from the internal computer speakers instead, click on the Apple logo in the top left corner of the computer desktop, select System Preferences, then Sound, and make sure that the Output is set to M2.

⚠ If there is no sound coming out from the desktop speakers, make sure that the Speakers are on – the power switch is located on the left speaker.

Décor

- The studio has a lamp and a selection of artificial plants for your background. You are welcome to arrange those on the backwall tables to your liking, checking the look of your background on the teleprompter screen with the CAMERA input selected.
VIDEO CONFERENCING

The studio computer has **Zoom, Teams, and Skype for Business** installed for video conferencing. You can also use any online video platform of your choosing (e.g., Facebook Live).

1. Configure your video and audio in your conferencing software by selecting **Cam Link 4K as your video source** and select **M2 as your audio input and output**.

2. 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:
     - Once you have switched to the computer input, the teleprompter will display your computer external monitor.

3. Move your conferencing app window to the external monitor and maximize it. Now you can look at your conference participants while simultaneously looking straight into the camera:
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ℹ️ You can use the “MUTE” button on the blue MicSwitch box to mute your mic as needed during your call.

DELIVERING A POWER POINT PRESENTATION AT A VIDEO CONFERENCE

1. Complete steps 1 and 2 described in the above section.

2. Start your conference call.

3. Launch your power point and start the Slide Show.

4. Your slides should appear full screen on the right (laptop’s desktop) and your notes—on the left (external monitor). If needed, click on the Swap Displays option at the top left of your notes screen.

5. Increase the font of your notes to be able to easily read them from the teleprompter screen. You may divide your longer notes between several identical slides to avoid scrolling.

6. Press Option+tab on the keyboard to toggle between open applications. Select your videoconferencing application.

7. In your videoconferencing application share the laptop’s desktop with your PP slides.

8. Now you can present while reading your notes and looking directly into the camera and sharing PP slides with your audience.
VIDEO RECORDING SETUP

The studio computer 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 (e.g., Learn Everything OBS in 30 minutes—Ultimate Beginner’s Guide, https://youtu.be/jKgM18lOsr4).

To perform an initial basic setup of OBS, do the following:

1. **Launch OBS application**

   If Auto-Configuration Wizard window pops-up, click Cancel.

2. **Import the preconfigured inputs/Scene**

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

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

   - If this window opens, click **No**:
• In the next window that opens, click on the “…” under the Collection Path:

• Navigate to Applications/OSB_Configuration/Scene_1.json. Click Open:

• Check the box next to Scene 1 and click Import:
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- 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:

![Scene Collection](image1.png)

- Now under the Sources in the OBS interface, you should see Cam Link 4K – your video source/camera, and M2 – your audio source/microphone:

![Sources](image2.png)

3. **Import the preconfigured Profile.**

The next step is to import a profile with preconfigured OBS settings.

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

![Profile](image3.png)

- Navigate to Applications/OSB_Configuration/Profile_1 folder and click Open:
• 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:

The preconfigured settings are now loaded.

4. Check Microphone Gain

Make sure that when you talk, the sound level under M2 stays in the green/yellow range and does not go into the red. Adjust the level with the volume slider in OBS or with the BOOM MIC dial on the M2 audio interface as needed.
5. OBS is now configured for recording (see the next section for more info). You may click on **Start Recording** under Controls to start your recording (Once recording has started, the button will change to Stop Recording).

![OBS Controls](image1)

**Optional: Configure more video sources**

In the Scene 1 configuration, the camera is the only video source and fills the entire recording area. You can add another source by clicking on the + under Sources:

![OBS Sources](image2)

For instance, you can add Display Capture or Window Capture:
For Display Capture, choose Display 1 for the external display.

For Window Capture, launch the desired app first.

You can also make the camera window smaller, and place it over the other video source:

⚠ Video sources are displayed in layers from top to bottom. If you don’t see your camera window, drag your Cam Link 4K video input in the Sources panel up above the other video source.

⚠ To be able to adjust the video source window, make sure it is highlighted in red/selected in the Sources panel.

⚠ If there is no camera feed when you open OBS, delete the CamLink 4 source from the Sources window and add it back on by selecting +, Video Capture Device.
VIDEO RECORDING PROCESS

Once you have configured OBS (see the above section), you can use it for video recording.

Select the CAMERA or COMPUTER input for the teleprompter on the HDMI switch as needed for your recording.

- You can use the CAMERA input to see yourself on the teleprompter screen as you record.
- You can use the COMPUTER input to see the computer external monitor on the teleprompter screen as you record. Examples include reading a PowerPoint presentation notes or a teleprompter script while looking into the camera.

OBS will always record the camera feed even if you select COMPUTER input for the teleprompter. The input selection is for the teleprompter screen only.

1. Reading a teleprompter script while recording:

   (1) Open the teleprompter window in a browser. Here are some suggested links:
   o [https://www.speakflow.com/guide](https://www.speakflow.com/guide) – an excellent 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.
   o [https://telepromptermirror.com/telepromptersoftware.htm](https://telepromptermirror.com/telepromptersoftware.htm) - another free online voice-activated teleprompter that works only in Chrome browser.
   (2) Load/copy-paste/create your script in the online teleprompter.
   (3) Move your teleprompter browser window to the external monitor and maximize it.
   (4) Start your recording in OBS
   (5) Start playing/reading the script.
2. Delivering a presentation while recording yourself (without recording the presentation slides):
   (1) Launch your presentation on the computer.
   (2) Move your presentation window to the external monitor and maximize it.
   (3) Select the COMPUTER input on the HDMI switch to see the presentation slides on the teleprompter screen.
   (4) Start your recording in OBS (see the above section).
   (5) Begin your presentation.

3. Delivering a presentation while recording yourself and the Power Point slides:
   (1) Launch your Power Point presentation.
   (2) In the Power Point top menu, select Slide Show:
       ![Show options](image)
   (3) Next, select **Browsed by an individual (window)** and click OK:
(4) Start your presentation slide show. Move your presentation window to the external monitor and maximize it.

(5) In OBS under Sources, click on the + sign and select **Display Capture** or **Window Capture**:

![Display Capture in OBS](image)

(6) Next, select Display 1 for **Display Capture** or your PP window for **Window Capture** and click OK:

![Display Selection in OBS](image)

(7) OBS should now display your external monitor with your presentation and your camera feed on the top:

![OBS showing presentation and camera feed](image)
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⚠ Video sources are displayed in layers from top to bottom. If you don’t see your camera window, drag Cam Link 4K in the Sources panel up above the Display Capture.
⚠ To be able to adjust the video source window, make sure it is highlighted in red/selected in the Sources panel.

(8) Select the COMPUTER input on the HDMI switch to see the presentation slides on the teleprompter screen.

(9) Start recording in OBS and begin your presentation.

ℹ To record a presentation only without recording the camera feed, disable Cam Link 4K under Sources in OBS.

ℹ 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 can be wiped out 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 to or insert your card into the HUB to the right of the M2 audio device.

2. Logout from the computer.

3. Turn on the ceiling lights.

4. Power off the equipment by pressing the red switch labeled “POWER” on the power stip.

5. Collect your belongings, take out any trash, return any furniture you brought in from the floor. Please leave the space in a tidy and “ready for the next user” state.

6. Turn off the ceiling lights and the “ON AIR” light on the wall light switch.

7. Exit the studio and make sure to shut the door behind you.