

# MAKERSPACE

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VIDEO & PODCAST  
USER GUIDE

## Podcasting Overview:

Here is a basic guide to creating a new audio podcast, using the RodeCaster Pro system.



### Rodecaster Pro Overview:

The RodeCaster Pro system is a “Standalone (no computer required)” podcasting system. It can record and play recordings as well as be used to trigger sounds and music during such a recording. For convenience it will be used alongside the computer in the MakerSpace to record and transfer these recordings directly to storage on the Apple M1 computer.



- **Listen Button (Green).**

The two channels “Podmic1” and “Podmic2” represent the two microphones located in the video space. To prepare for recording, press the green “Listen” button on each channel. (if both microphones are being used, then ensure you press both green buttons, one on each channel).

- **Mute Button (Red)**

If you want to keep the microphone active, but temporarily mute it, then press the red mute button on the desired channel. This will ensure that the channel is not recording armed and will be bypassed during recording.



- **Microphone Volume**

The two channels “Podmic1” and “Podmic2” represent the two microphones located in the video space. To adjust their input volume (the volume to be recorded), simply move the

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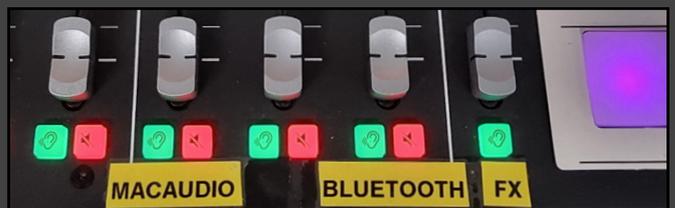
- **Microphone Input Level Metering**

Speak into the microphone until you see the levels of channel #1 show activity on the output meter. Note: you will also see L&R channels show activity (as this is the main output bus that is going to the speakers and headphones).



- **Adjust Headphone Levels**

Adjust headphone volume levels for both pairs of headphones by turning the volume encoder dials labelled “HP1” and “HP2” clockwise to increase the volume and anti-clockwise to decrease the volume.



- **Adjust Other Output Levels**

Note: Ensure that you press the “Green” listen button before adjusting any of these levels in order for them to become active.

- Macaudio Channel: Adjusts the volume of the Yamaha speakers.
- Bluetooth Channel: Adjusts the volume for any paired bluetooth device (e.g mobile phone).
- FX Channel: Adjusts the volume for the multi-coloured pad buttons. You can press these buttons to play FX during a podcast.

## Open Broadcaster (OBS):

This guide will assist you in understanding the basic use of the “Open Broadcaster (OBS)” Software.

### Open Broadcaster (OBS) Overview:

Open Broadcaster (OBS) is an easy to use video platform that allows you to take multiple sources (e.g a PC monitor, a video file, an image, a website etc) and bring them together simultaneously as different layers. (Think laying pieces of paper on top of each other). OBS also has the ability to “Stream” or go live, so you can also link it together with Youtube and other popular streaming platforms.



### What Are “Scenes” and “Sources”:

Scenes are a collection of sources that can be laid out in different ways.

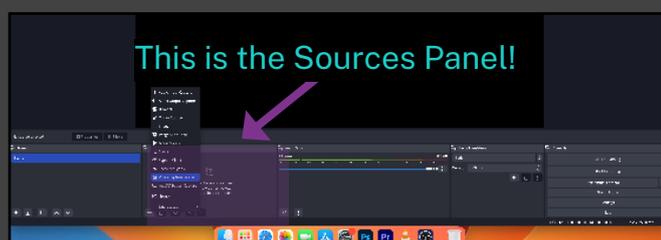
Sources are locations that contain some form of content. Examples of sources include:

- Web Browser
- Image
- Media Source (Video File)
- Text
- Video Capture Device (A Camera)

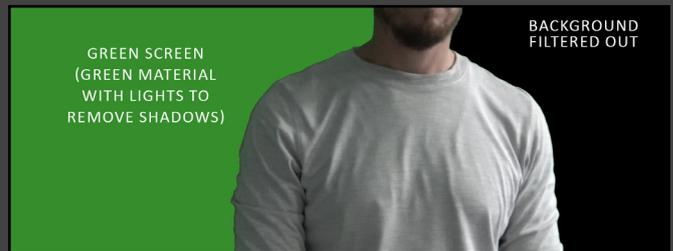
One scene might have a simple webcam covering the entire screen, while another half the screen an image and the other half a video file playing.

The idea behind scenes is to layout all of your sources or layered objects however you like, then when you are live or recording, you can simply flick between scenes as if you are producing a movie live and as you go!

Once you understand the concept, you can quickly start to create professional content for your videos such as “Green Screen / Chroma Key captures” and professional looking “Youtuber” style vodcasts and podcasts.

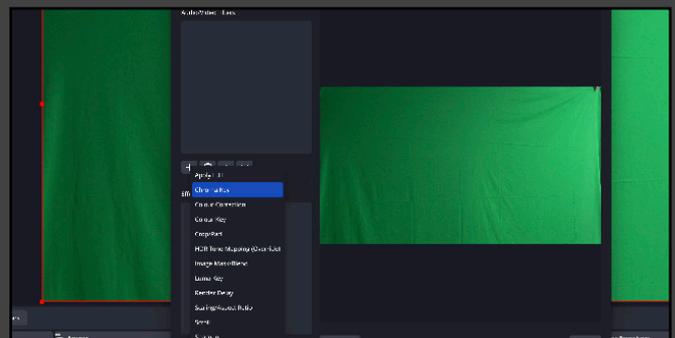


## Makerspace | Video Video Space Guide



### Understanding Green Screens (Chroma Key)

- A green screen is a very simple concept. The green colour is specifically chosen as it is not found commonly on clothing nor on the human body or many everyday objects. So it is an ideal colour to use.
- The algorithm or camera filter will look for this colour and know that it needs to eliminate it (key it out). Which gives you a believable effect and allows the actor to move around freely and still remain keyed out.



Above: OBS has a built in filter effect (“Chroma Key”) for the removal of any green screen or coloured backgrounds.



### Example Above:

In the example above, we have created a filter to remove “Chroma green” (there are many colours that can be used such as blue, white, red etc).

We have then placed a video of a dinosaur creeping up on the actor. The actor can then act accordingly and OBS can then record this scene and it can be used in a movie or for a bit of fun to share amongst friends.

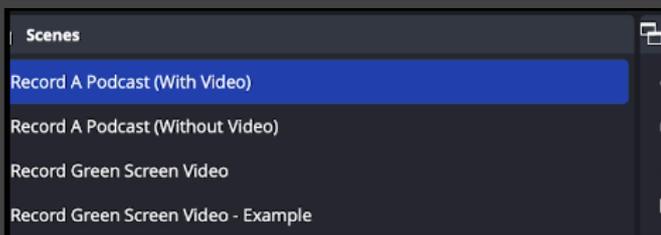
## New Podcast Recording:

Here is a basic guide to creating a new audio podcast, using the RodeCaster Pro system.



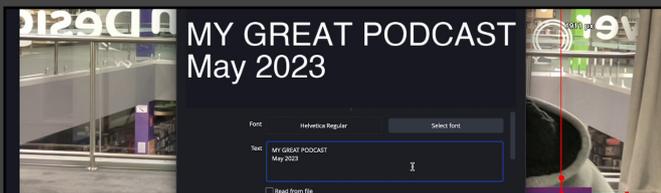
### 1. Locate and Launch Open Broadcaster (OBS)

- Locate and launch the Open Broadcaster (OBS) software on either the dock or the desktop.



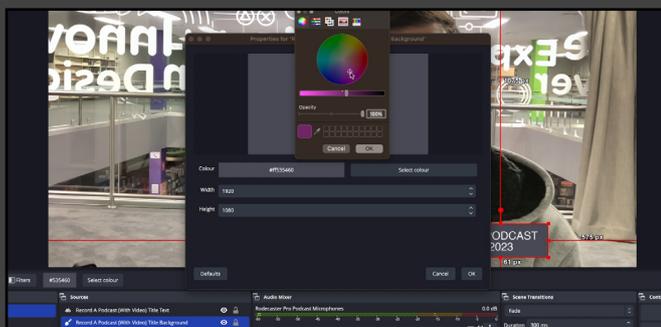
### 2. Choose A Scene Layout:

- There are four templates that have been setup as examples and to make it easier to record video content.
- Select "Record A Podcast (With Video)".



### 3. Adjust The Title Text (If You Require It)

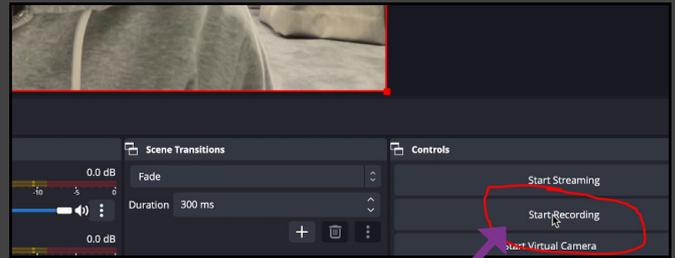
- In the "Sources" panel:
- Enable the "Title Text" source/layer (click the eye) and edit it accordingly.



### 4. Adjust The Text Background

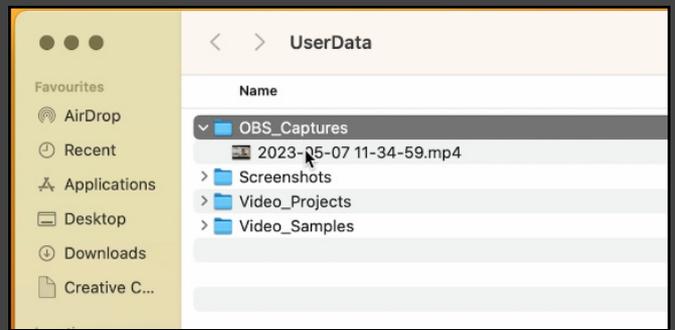
- Enable the "Background Text" source/layer.
- Double click on the source to edit the background colour

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### 5. Record Your Podcast:

- Select the "Start Recording" button to begin recording your podcast.
- Select "Stop Recording" to complete the recording.



### 6. Locating Your Podcast Recordings:

- Locate the USERDATA drive on the Desktop and open it.
- Browse to the "OBS\_Captures" folder and open it.
- You will see your latest recordings in .MP4 format.
- Double click on the video file and it will open in VLC media player.



- Note: This example above does not show the Podcast Title Text as it was not enabled. If it is enabled it will be rendered into the video file (.MP4).

### Podcast Recording Tips:

- Keep the microphones away from speakers!
- Keep the microphones within an inch of your mouth for clear audio.
- Speak slowly and as clear as you can for best results.

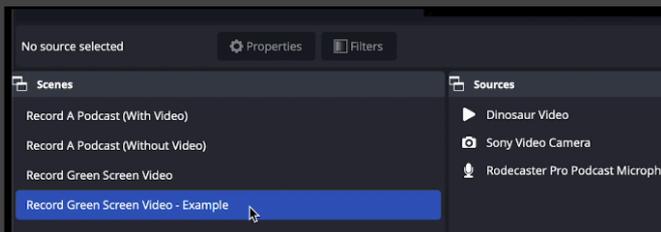
## Green Screen Example:

Here is a basic guide to creating various recordings, using the Open Broadcaster (OBS) software.



### 1. Turn On Sony Video Camera

1. Ensure the power is switched on in the video space (the power-points behind the equipment).
2. Flip open the video camera's digital viewfinder screen which will turn on the camera.



### 1. Green Screen Video Example:

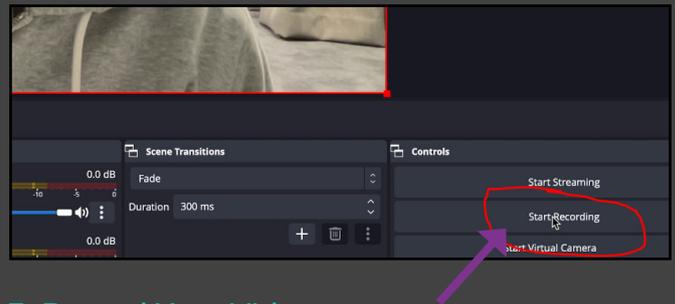
- The green screen video example includes a dinosaur loop sitting on top of a green screen layer.
- This is a very simple example of how you can use a variety of sources acting as layers to assemble a fun and inspiring video using minimal time and effort.
- Select "Record Green Screen Video - Example".
- Ensure ALL sources are enabled.



### 2. Rehearse The Shot!

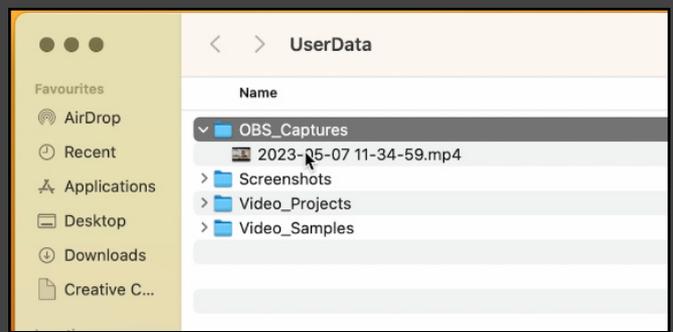
- Stand in front of the green screen and play with your position and where to stand.
- For the best effect, pretend the T-Rex is real!

## Makerspace | Video Podcasting Guide



### 5. Record Your Video:

- Select the "Start Recording" button to begin recording your podcast.
- Select "Stop Recording" to complete the recording.



### 6. Locating Your Video Recordings:

- Locate the USERDATA drive on the Desktop and open it.
- Browse to the "OBS\_Captures" folder and open it.
- You will see your latest recordings in .MP4 format.
- Double click on the video file and it will open in VLC media player.



### Green Screen Recording Tips:

- Check the lighting, ensure the area is well lit, this will ensure there is no graininess and you get a nice clean looking chroma key.
- Experiment with different videos and search for green screen content (or make your own).
- Try to break up your movie into scenes, record different scenes/takes and edit it all together later, this ensures you are in creative mode and not in editing mode.

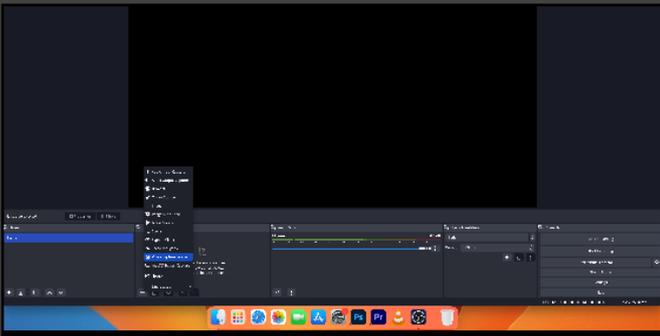
# Chroma Key From Scratch:

This guide will assist you to understand the steps to building your own chroma key scene.



## 1. Turn On Sony Video Camera

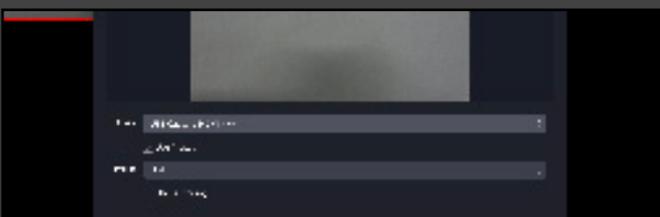
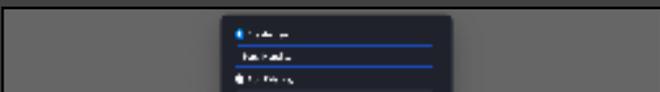
1. Ensure the power is switched on in the video space (the power-points behind the equipment).
2. Flip open the video camera's digital viewfinder screen which will turn on the camera.



## 2. Add A Video Camera To OBS

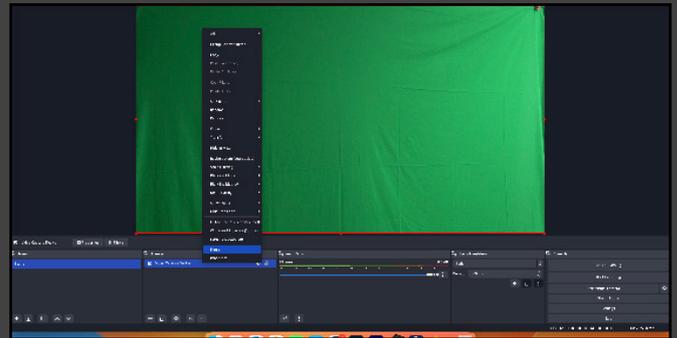
Note: If the Sony video camera has already been added to OBS and you can see a picture or chroma key is already setup then you can skip steps 2 to 4.

1. Press the + button in the sources section of OBS and choose "Video Capture Device"
2. Rename the device to "Sony Handicam" and press OK.



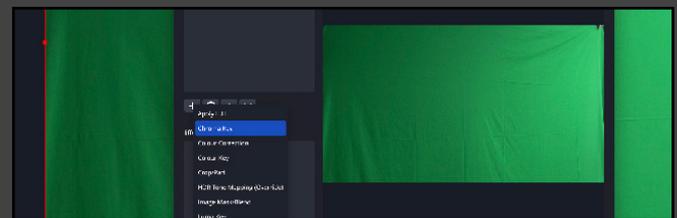
3. Select the "USB Capture HDMI 4K device" (The Magewell Capture Card) and press "OK" to continue.

# Makerspace | Video Video Space Guide

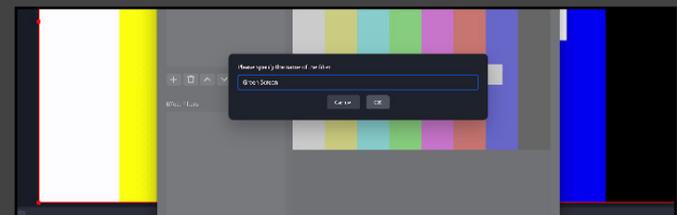


## 3. Create A Chroma Key Filter

1. Now that your Video Capture Device has been created, right click on it and choose "Filters" from the menu.



2. In the "Effects" menu in the bottom left of the pop up window choose "Chroma Key".



3. Rename the effect to "Green Screen" and press "OK".



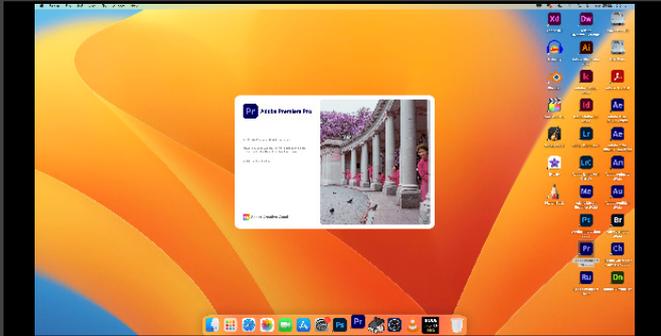
## 4. Fix / Adjust Your Lighting

- Note: The image above shows some areas that are not completely black. This is a sign that the lighting is too dark within this area. Two ways to fix this are:

1. In the daytime: Open the window near the green screen area and introduce more natural light to assist in brightening up the area.
2. At night / Artificial Lighting: Use any provided artificial lighting and position it until all sections of the image appear nice and black. It helps to have a 2nd person to stand in front of the screen while you do this!

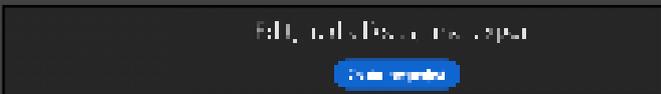
## New Video Edit Project:

This guide will assist you in getting started in the Adobe Premiere video editing software:



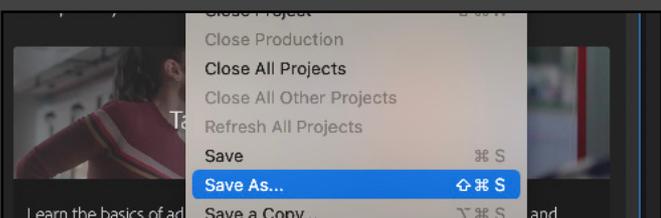
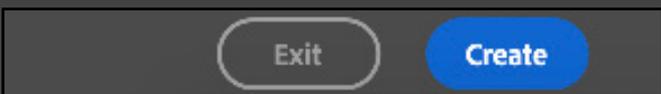
### 1. Launch Adobe Premiere Application

- On the dock or desktop, locate and double click on the Adobe Premiere “PR” icon.



### 2. Create A New Project

- Locate the “Create New Project” button and click on it to launch the new project window.
- Leave the project location as default (we will set this in the next steps) and click the “Create” button.

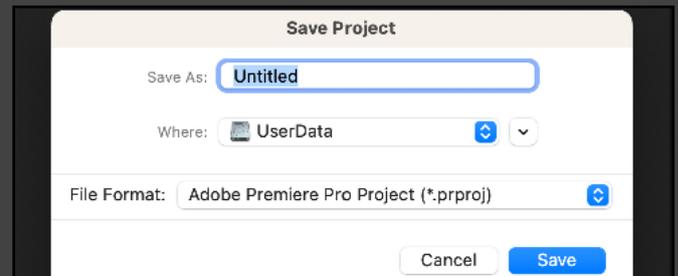


- In the Adobe Premiere “File” menu at the top of the screen, locate and click “Save As” to set your save location.

## Makerspace | Video Video Space Guide

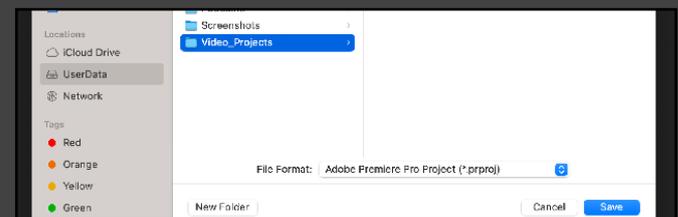
### IMPORTANT! (RISK OF DATA LOSS!)

You MUST save your data in the “USERDATA” drive, or your data WILL disappear. Any data saved in any other location will not be kept during a computer restart. You are responsible for your own data (Please bring a USB drive).

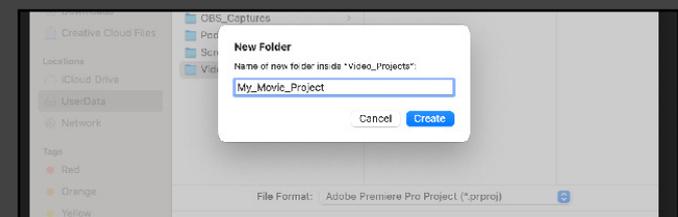


### 3. Save Your Project

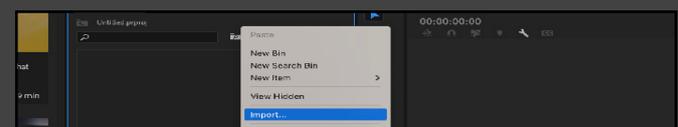
- In the “Save As” description, give your project a name.
- In the “Where” list, choose the “UserData” drive.
- Click save when ready to proceed.



- Locate and click the “New Folder” button.



- Enter a folder name for your project. Here we have used the example of: “My\_Movie\_Project”.
- When you are ready click “Save” to create the folder.



### 4. Import Media & Get Started

- You are now ready to start importing your media clips and creating a sequence.
- Please see the learning resources for beginner lessons in using Adobe Premiere and related video software.

## Learning Resources

Here are some additional learning resources that will allow you to understand how to use the Adobe Premiere Software for video editing and production.



### 1. Premiere Pro 2023 For Beginners: Video Everything You Need To Know!

URL: <https://www.youtube.com/watch?v=keoszhf4DZ8>



### 2. Creating A Sequence

URL: <https://youtu.be/keoszhf4DZ8?t=167>



### 3. Workspaces In Adobe Premiere

URL: <https://youtu.be/keoszhf4DZ8?t=220>

## Makerspace | Video Video Space Guide

Learning to create and edit videos may seem overwhelming when you first get started (like most technical things), yet within just a few sessions you can be making very high quality content.

The best way to learn is to watch the videos at each step along the way then practice!



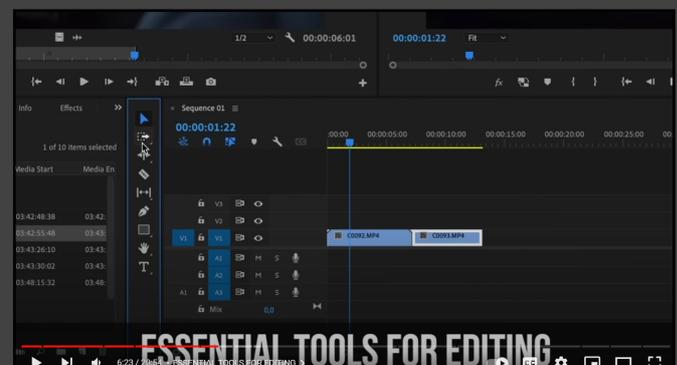
### 4. Importing Media (Photos / Videos)

URL: <https://youtu.be/keoszhf4DZ8?t=270>



### 5. Main Parts & Sections

URL: <https://youtu.be/keoszhf4DZ8?t=352>



### 3. Essential Tools For Editing

URL: <https://youtu.be/keoszhf4DZ8?t=383>

## Video Space Checklist

Here is a checklist to assist with the setting up and packing up of the Video space in the Makerspace.

### When Entering The Room:

1. Switch on the powerpoints near the Apple M1 Mac computer.
2. Power on the Apple M1 Mac computer (button is rear left side).
3. Power on the Rode Podcaster Pro (button is a red button located on the rear right side of the device)
4. Power on both speakers (power is rear left side on each speaker).

### When Leaving The Room:

1. Power off both speakers first before anything.
2. Power off the Rode Podcaster Pro device.
3. Power off the Apple M1 Mac computer.
4. Ensure the Sony handycam digital viewfinder screen is closed so that the camera will go to sleep.

### Maintenance:

#### The Apple Mouse:

The Apple Mouse uses a USB-C connection to charge. Periodically it is required to charge the mouse by inserting a USB-C cable into its base for a period of an hour or more. This will ensure it is always charged and ready for use. There is a trackpad with the equipment that can be used also if preferred, and will also require charging.

#### Dust & Cleaning (Cleaning is for Library Staff only)

Avoid using harsh chemicals to clean everything, some of the electronic components will not like this. A dry antistatic cloth is best for dusting but if a deeper clean is required then anti-bacterial wipes without chemicals or fragrance (baby wipes) are fine. Always do this when the equipment is switched off.

#### Vacuuming:

It is recommended to frequently vacuum as electronic equipment encourages dust buildup. If the room requires vacuuming, please notify the Library staff.

## Makerspace | Video Video Space Guide

### Common Issues / Errors:

#### PROBLEM: "Video Camera Not Detected"

- **SOLUTION A:** Ensure you have opened the camera's digital viewfinder screen to power on the camera.
- **SOLUTION B:** Under the desk is the Magewell USB 4k Capture card. Ensure that all connections are firmly connected.
- **SOLUTION C:** Restart the Apple M1 Mac computer and retry the task if using the camera.

#### PROBLEM: "Podcasting: NO SD CARD DETECTED"

- **SOLUTION A:** An SD-Card must be inserted into the rear of the Rode Podcaster Pro device. If this has been removed / stolen then the device will no longer function until a card has been replaced. It is hard to remove the card easily without a finger nail or sharp device.
- **SOLUTION B:** If there is indeed an SD-Card inserted into the Rode Podcaster pro then power off the device and power it back on again to verify if the problem still occurs.

#### PROBLEM: "Various OS Issues"

- **SOLUTION:** Restart the Apple M1 and try again. (This resets any OS changes back to its pristine setting).
- **SOLUTION B:** Check that the blue E-licenser USB key is firmly connected. If in doubt, unplug it and plug it back in. Check that it is also not missing.

### Technical Issues:

If you encounter technical issues during your use of the Audio Booth please do the following:

1. Write down as best you can the issue or take a photo of the error or problem you have encountered.
2. Notify the Library staff and they will attempt to troubleshoot the issue for you.
3. If the issue is a problem with any of the equipment then place the "Out of Order" sign on the door to the room. This may require a third party technician to troubleshoot and resolve the issue.
4. NEVER take apart any equipment or attempt to fix any of the Audio Booth hardware. This can result in damage and delays in allowing the space to become fully operational again.