

## Binocular



## Monocular



## OBS Studio software

- preview and record eye movements
- combine multiple camera sources
- add custom text eg: patient, test, & clinician
- pause during recording
- hotkeys speed up use
- works on Windows or Mac
- free software licence



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## Introduction

This manual is relevant to clinicians wanting to use Vesticam2 IR video goggles with a computer (PC or Mac). OBS Studio is a feature-rich software package that enables clinicians to preview & record patient eye movement and save the recording as an mp4 video file.

### Why OBS Studio software?

- allows multiple camera sources eg. 2<sup>nd</sup> eye camera (binocular) and/or a room camera
- allows custom text to be embedded on the mp4 video eg. patient, test, date & clinician
- allows for pause during recording
- assigning of hot keys to simplify and speed up use
- the software is free, works on Windows PC or Mac and is used widely
- Vesticam provide setup services and ongoing support.

To save you time, the Vesticam support team assist by email, phone or screensharing to ensure the OBS setup is complete and the equipment works to its specifications. An OBS Studio setup for Vesticam2 takes between 30-60 minutes. To book this free service with Vesticam support, send an email with your preferred times to [support@vesticam.com](mailto:support@vesticam.com) or [Book online meeting](#).

Note: OBS is not required for viewing and recording with Vesticam2 IR video goggles. Clinicians not requiring the features of OBS Studio may prefer to use standard video recording software such as “Camera” (Windows) or “Photobooth” (Mac) included on their PC/Laptop/Mac. Vesticam2 as a monocular device can also be used with an android recording device (smartphone) and the Vesticam App.

## Hardware Requirements:

### Vesticam2 infrared video goggles - Monocular package / Binocular package

- Vesticam2 goggles face plate
- Eye cover
- One / Two Vesticam camera unit(s) with USB Type-C male plugs
- Single / Dual Type-C Extension Lead (female/male) 2.0 metre
- Adapters for USB-A connection to PC/Laptop/Mac (if required)
- Vesticam2 Custom carry case [29x20x9cm]

### PC/Laptop/Mac

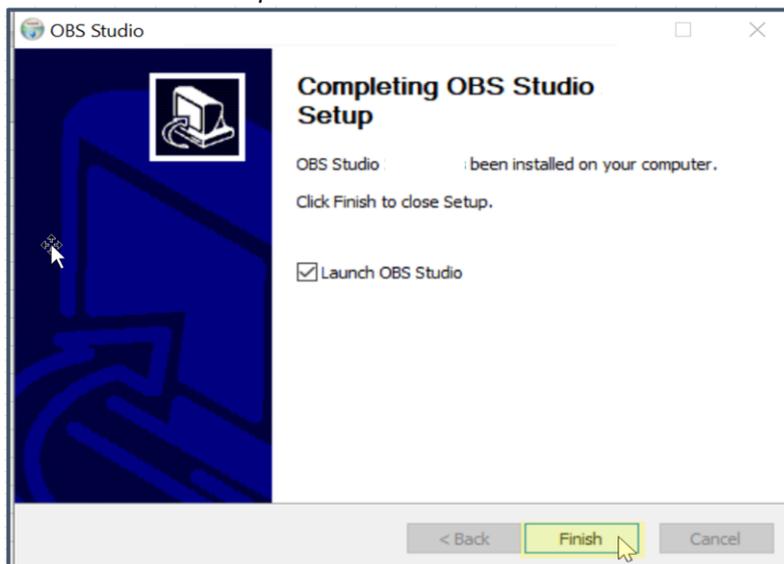
- Operating System for PC = MS Windows 10 or for Mac = Sierra (macOS 10.13 and newer.)
- RAM: 4GB minimum
- Processors: Core i5, i7, equivalent or higher
- Free disk space 30GB (for 1000 x mp4 videos of 2min each)
- Two dedicated USB-A and/or USB Type-C Ports – USB 2.0 or USB 3.0+  
*Tip: Free up a USB port if needed by using a Bluetooth mouse.*
- Built in microphone or external microphone to record audio.
- Speaker for audio playback of session
- Internet connectivity is not required.

A Room Camera is optional. The room camera can be added by using your laptops built in camera or by purchasing an External USB Camera & Tripod from Vesticam or other supplier. Note: A 3<sup>rd</sup> dedicated USB port is required on the computer to use an external USB room camera.

## OBS Studio setup for Vesticam2

### Install OBS Studio software

1. On the Laptop/PC/Mac open your web browser and go to <https://obsproject.com/download>
2. Select your operating system (Windows or Mac)
3. Select "**Download Installer**"
4. **OBS-Studio-27.2.4-Full-Installer-x64.exe** (112 MB) will download to your downloads folder and appear in the bottom left-hand corner of your screen.
5. Use the righthand mouse to list options and select "**Open**"
6. "Do you want to allow this app to make changes to your device?". Select "**Yes**"
7. Click "**Next**" to start the OBS Studio installation
8. Respond to the License Agreement screen. Select "**Next**"
9. Confirm the program folder [eg.. **C:\Program Files\obs studio**] then select "**Next**"
10. Ignore the "Choose Components" screen and select "**Install**"
11. Select "**Finish**" .... as per the screen below



*OBS Studio is now installed on your Laptop/PC/Mac.*

### Opening OBS Studio and the Auto-Configuration Wizard

1. The shortcut to open OBS Studio will be on your desktop
2. The "**Auto-Configuration Wizard**" pops up the first time you open OBS Studio. It can also be found under the **Tools** menu
3. Select "**Optimize just for recording, I will not be streaming**" and select "**Next**"
4. Assign **Base (Canvas Resolution)** ... eg 1920 x 1080 (depending on your screen)
5. Assign **FPS = 30**
6. Select "**Apply Settings**"

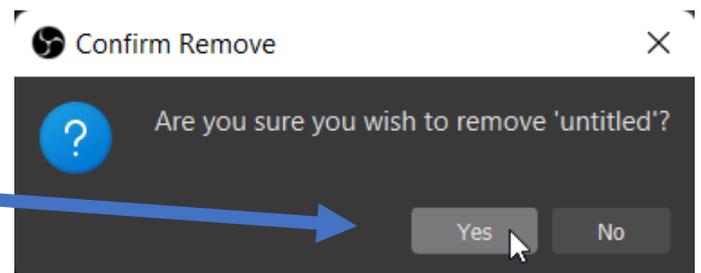
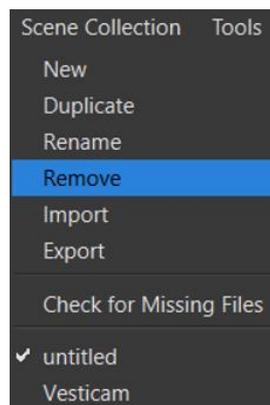
## Download Vesticam OBS Studio setup files

- Open File Explorer and create folder “C:\Vesticam OBS Studio setup files”
- Use link to [Vesticam OBS Studio setup files](#) and download each file to “C:\Vesticam OBS Studio setup files” or email [support@vesticam.com](mailto:support@vesticam.com) and request **Vesticam OBS Studio setup files.zip**

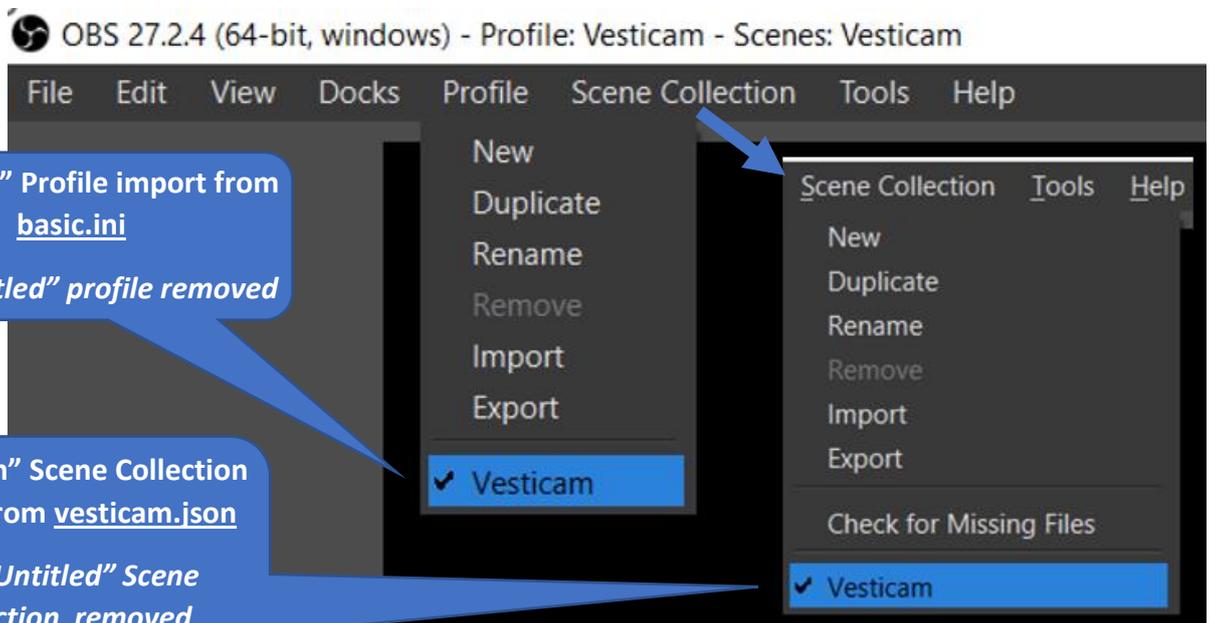
C:\Vesticam OBS Studio setup files	File implementation	Page
Vesticam2 - OBS Studio Manual.docx	User Manual	
Basic.ini	OBS > Profile > Import	6
vesticam.json	OBS > Scene Collection > Import	6
vesticam-clock.html	OBS Add Source: Browser	13
advanced-timer.lua	OBS Add Tools > Scripts	14

## Import Scene Collection and Profile

1. Open OBS Studio > Scene Collection > Import  
Answer “No” ... If prompted to search for Scene Collections  
Select “Add” locate the file in C:\Vesticam OBS Studio setup files\Vesticam.json “add” and “import”
2. Open OBS Studio > Profile > Import ... select the folder C:\Vesticam OBS Studio setup files where basic.ini is saved.
3. Tidy up by removing “untitled” Profiles and Scene Collections. Select ✓ and then “remove”



## Import success....

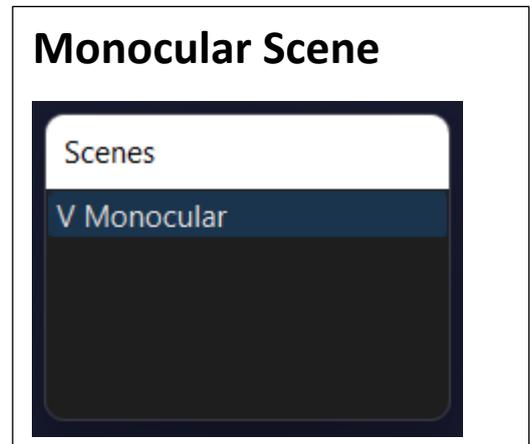


## Simplify scenes if using Vesticam with one camera (monocular)

If you are running Vesticam2 with one camera (monocular)

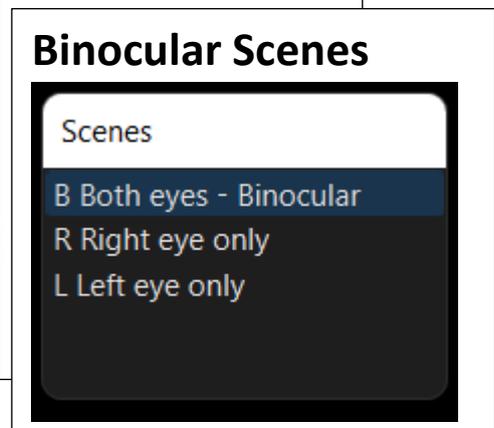
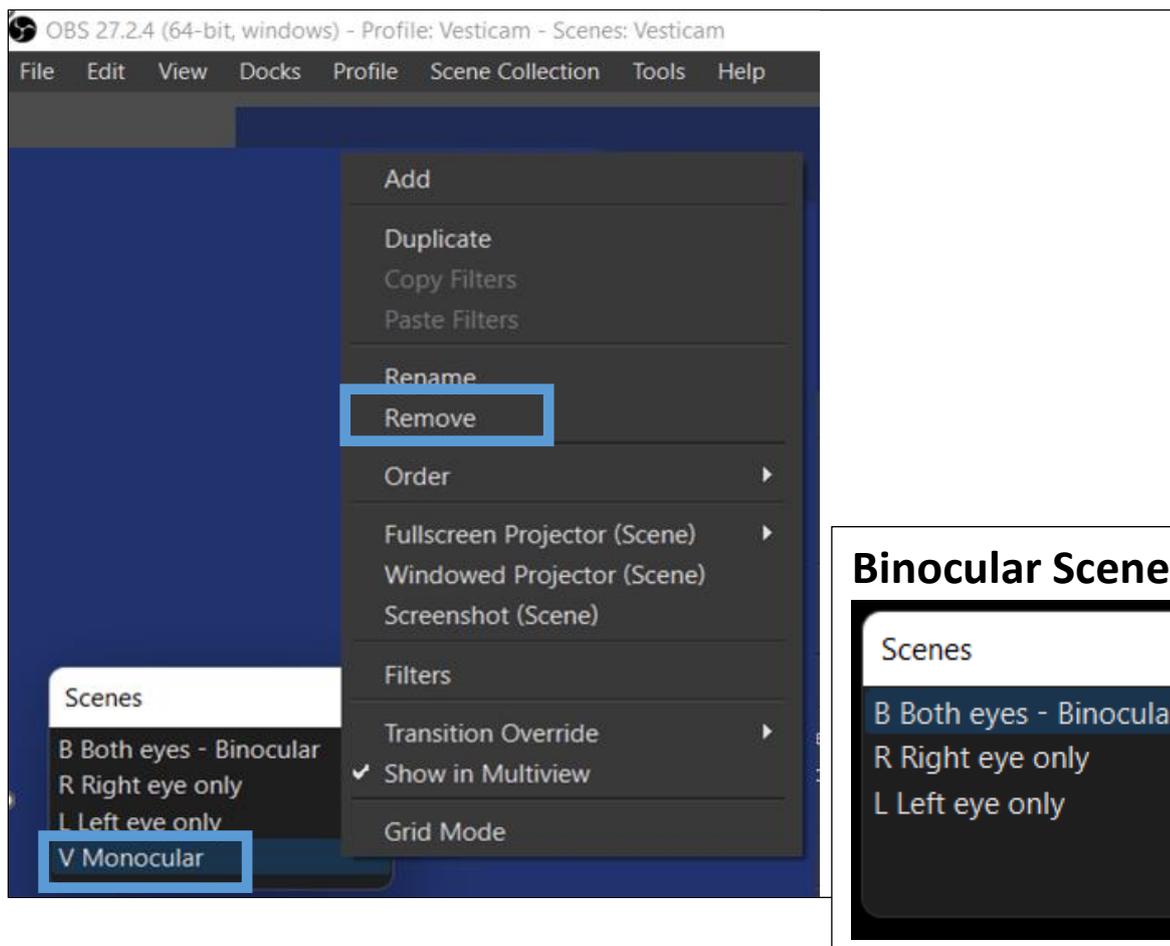
remove the three scenes:

- “B Both eyes - Binocular”
- “R Right eye only” and
- “L Left eye only”



If you are running Vesticam2 with two cameras (binocular)

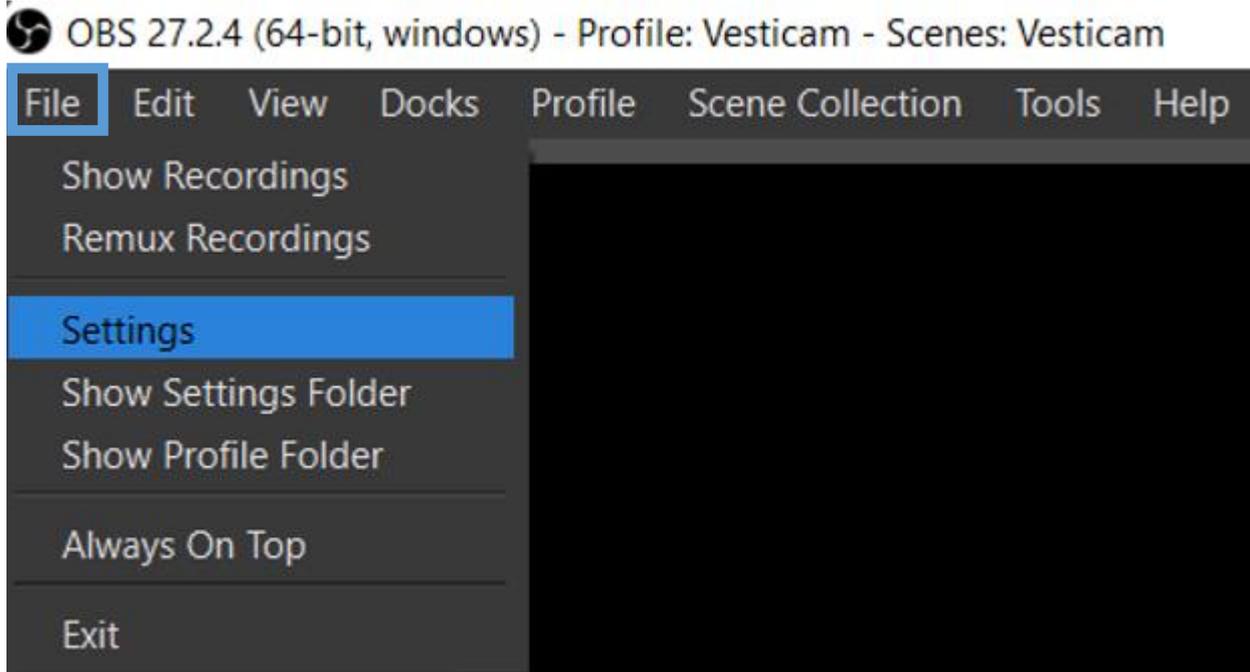
Remove the scene “V Monocular”



This manual describes OBS set up for binocular IR video goggles. If your Vesticam unit has one camera (monocular device) please use the same instructions but only set up for one eye.

To upgrade from monocular to binocular Vesticam2, see [www.vesticam.com/orders](http://www.vesticam.com/orders)

## OBS Studio - File > Settings > Output ... Recording Path

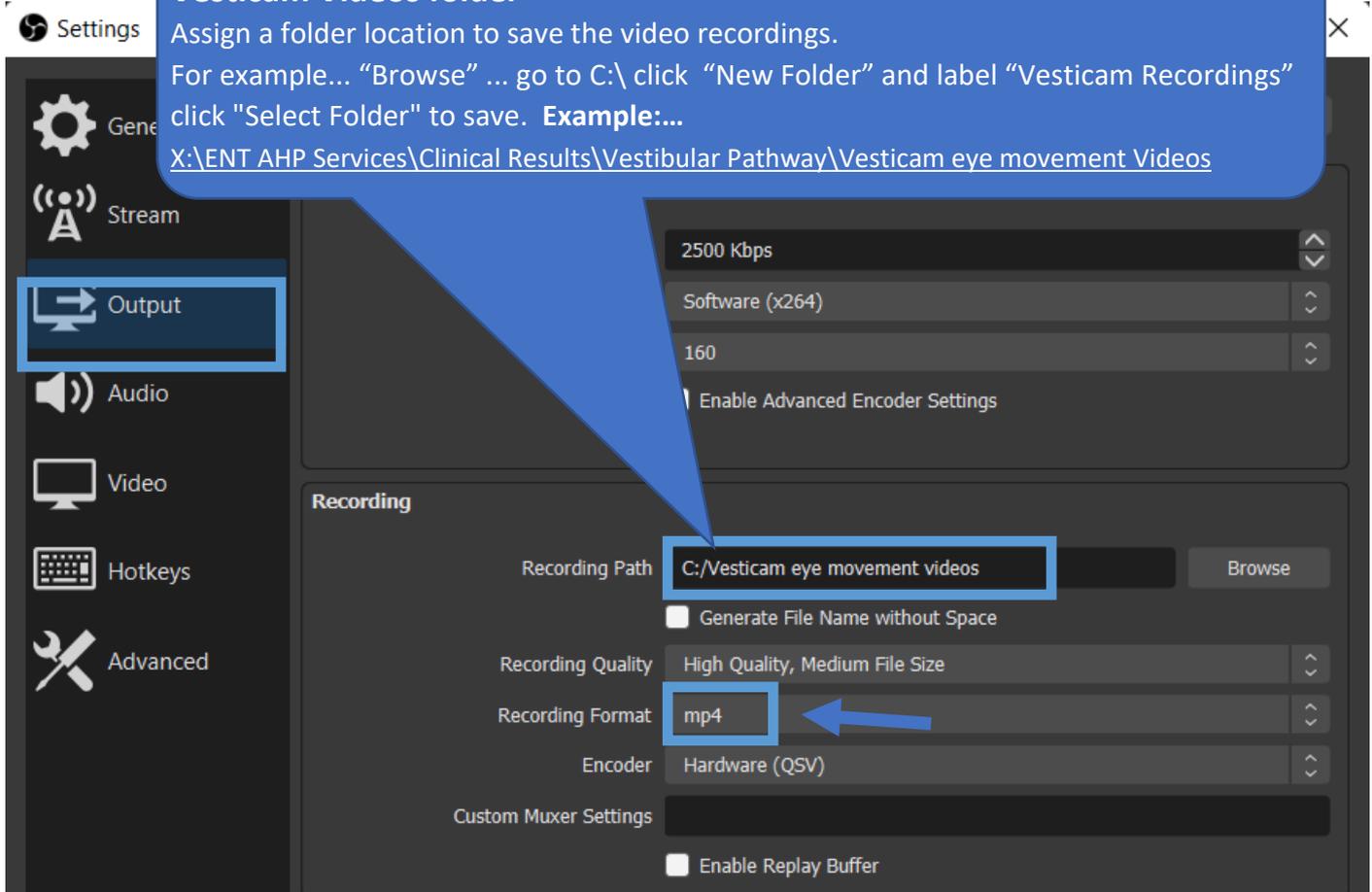


### Vesticam Videos folder

Assign a folder location to save the video recordings.

For example... "Browse" ... go to C:\ click "New Folder" and label "Vesticam Recordings" click "Select Folder" to save. **Example:...**

X:\ENT AHP Services\Clinical Results\Vestibular Pathway\Vesticam eye movement Videos



## OBS Studio – File > Settings > Hotkeys

Settings

Filter  Filter by Hotkey

- Start Streaming \*
- Stop Streaming \*
- Stop Streaming (discard delay)
- Start Recording \* **Alt + X** ⚠️
- Stop Recording \* **Alt + X** ⚠️
- Pause Recording \* **Alt + Z**
- Unpause Recording \* **Alt + Z**
- Start Replay Buffer \*
- Stop Replay Buffer \*
- Start Virtual Camera \*
- Stop Virtual Camera \*
- Reset Stats
- Screenshot Output
- Screenshot Selected Source
- Reset Timer **Alt + 0**
- Start/Stop Timer **Alt + X** ⚠️
- Alt + 9**

- Enter the key stroke
- For MacOS .. use “Command ” key (in place of “Alt”)
- Use the rubbish bin icon to clear the field if needed
- Do not use a single text key alone as a hotkey (eg: just “X”, or just “spacebar”). This will cause labelling issues later.

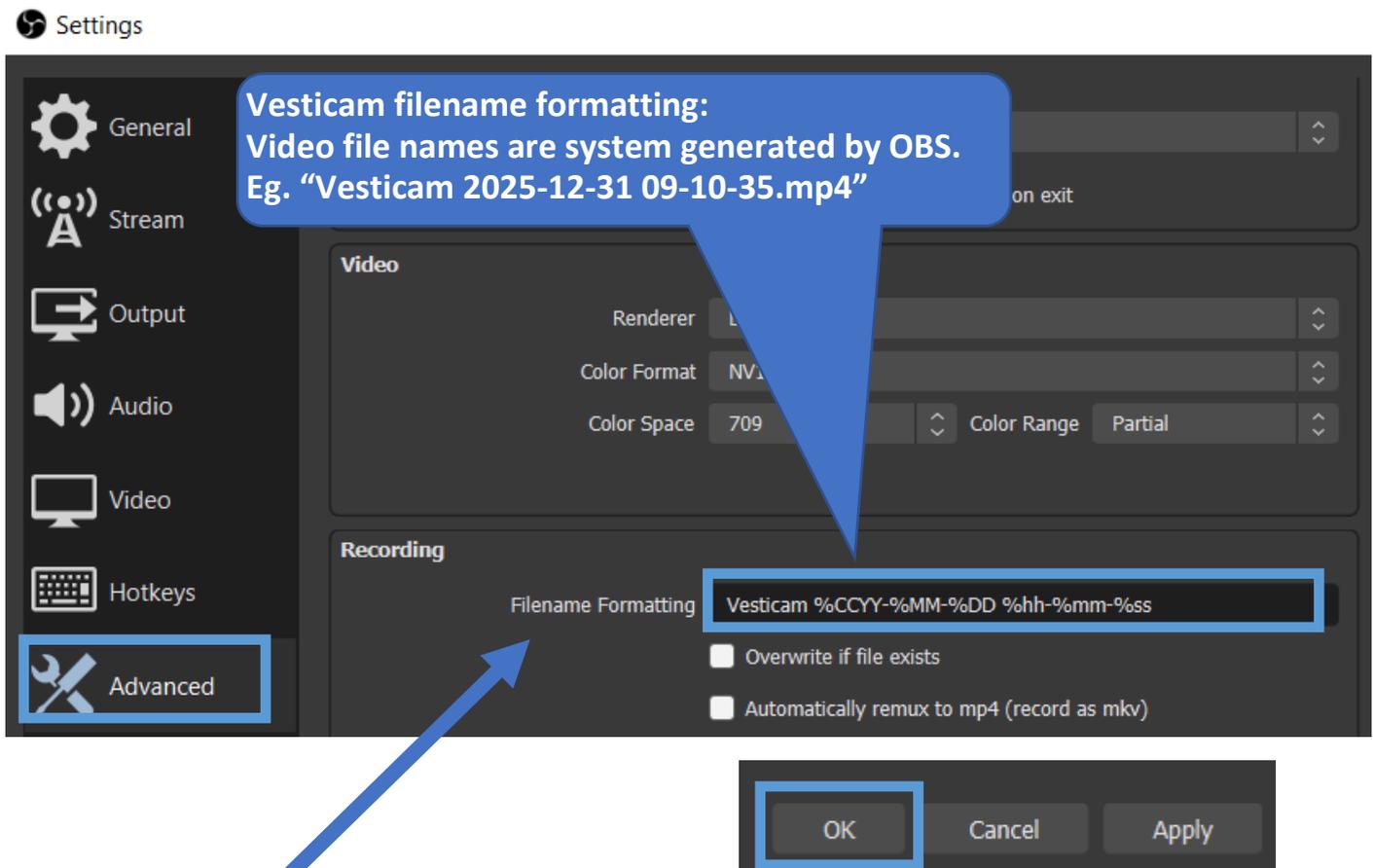
*Down the list .....*

**B Both eyes - Binocular**  
Switch to scene **Alt + B**

**L Left eye only**  
Switch to scene **Alt + L**

**R Right eye only**  
Switch to scene **Alt + R**

## OBS Studio – File > Settings > Advanced



### TIP!

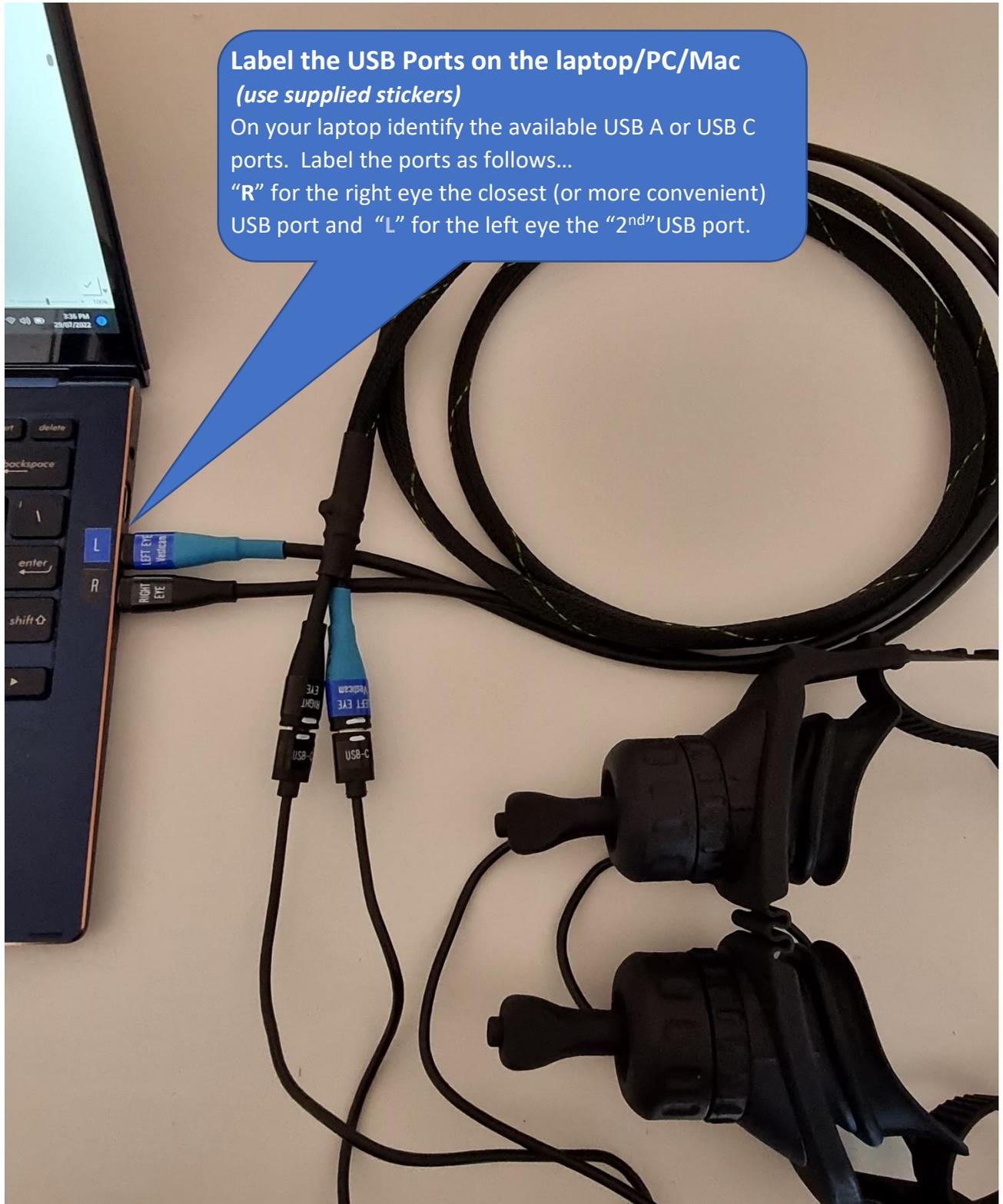
For extra detail add suffix to denote the CLINIC, CLINICIAN, COMPUTER etc

Eg. File Formatting: Vesticam %CCYY-%MM-%DD %hh-%mm-%ss CLINIC-CLINICIAN

You can exit OBS Studio anytime.... either from **File > Exit**, or by clicking the **X** on the top left of the screen.

Every time you exit OBS, your current settings are saved.

## Connect the Vesticam Cameras to the PC/Mac



### **Connect the Vesticam cameras to the Laptop with the Dual extension lead 2.0m.**

Connect the right camera plug to the right labelled port and Left camera to the left port (If required, use the supplied Adapter(s) to connect to USB-A ports on the PC/Mac. Listen for the beep tone from the Laptop (Windows only) when you plug and unplug the cameras.

**Macbook users – please read special note (below)**

## Special note for Macbook/iMac users: Vesticam extension lead 180 degree orientation fix

If adding the 2m extension lead causes the Vesticam cameras stop working :

1. Flip camera plug (male) 180degrees and re-connect to extension lead (female).
2. Exit and reboot the Mac.
3. Open OBS (or Photobooth) and confirm the camera(s) are now working.

If your cameras are still not working, re-test without the extension lead and contact [support@vesticam.com](mailto:support@vesticam.com). We value your feedback.

To assist Mac users (using one camera or two cameras) we label the plugs with white paint for easy reference. See below.

### ***Cable labelling for MacBook to ensure correct orientation....***

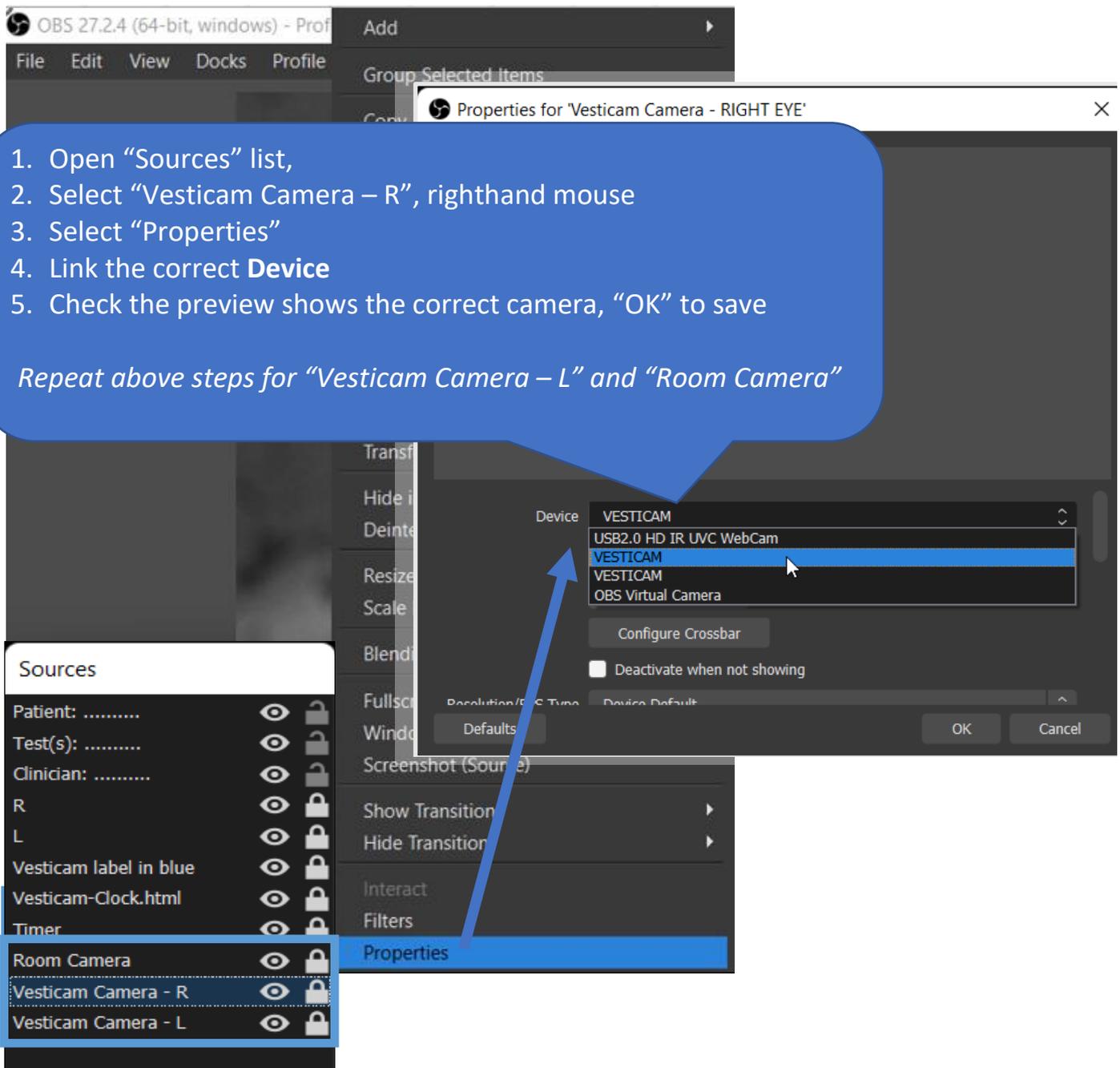


With the extension lead in place, the Mac recognises the Vesticam Camera with the plug seams are on the same side. Refer 1) & 2) above

*The "seam" refers to where the sides of the metal plug joins*

Connecting the white painted sides together enables the Mac to work with the Vesticam extension lead 2.0m

## Sources: Link the Device to the USB camera “VESTICAM”



If the cameras are not previewing in OBS Studio, try these steps:

1. exit OBS and reconnect cameras with dual extension lead. Then open OBS attempt to link cameras (as above). If the problems persists,
2. exit OBS and reconnect cameras without dual extension lead. Then open OBS attempt to link cameras (as above). If the problems persists,
3. confirm the cameras are working by opening Windows Camera App or Photobooth (Mac).

Use this button to switch between cameras .....

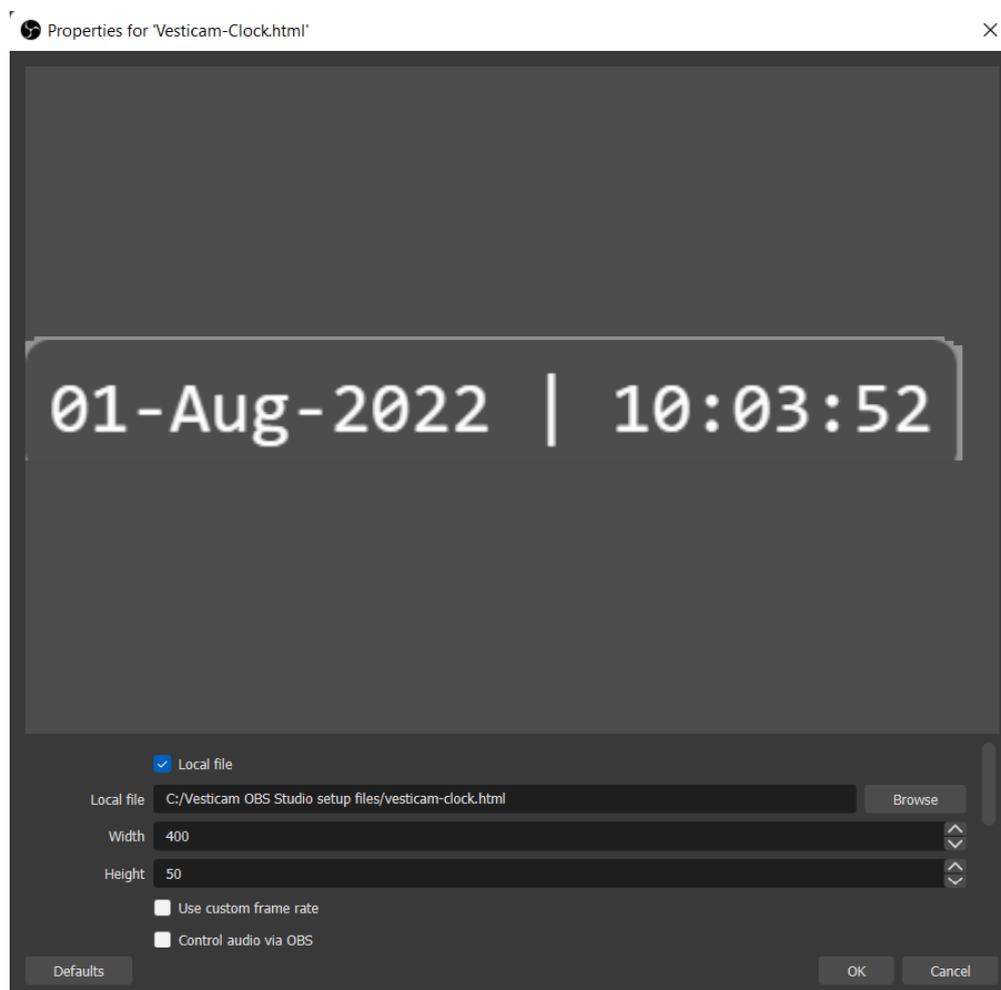


4. Contact [support@vesticam.com](mailto:support@vesticam.com) if the problem was not resolved.

## Sources: Add Vesticam-Clock.html

23-Jul-2022 | 09:56:20

1. Confirm that you have C:\Vesticam OBS Studio setup files\ **Vesticam-Clock.html** , or download **Vesticam-Clock.html** from this link ... [Setup OBS for PC or Mac](#)
2. Open OBS studio
3. Select scene “B Both eyes – Binocular”
4. In Source list, add browser labelled “**Vesticam-Clock.html**”
5. Select  Local file
6. Browse to the **Vesticam-Clock.html** file
7. Adjust the height and width to: Height = 50 Width = 400 exact size will vary according to screen resolution
8. Position the clock at the middle/bottom of the OBS canvas.



### Add Vesticam-Clock.html to other scenes

Select scene “R Right eye only”, Source “Add” “Browser” .. “Add Existing”, select **Vesticam-Clock.html**  
Repeat for “L Left eye only” scene

### Resource for Vesticam-Clock.html

<https://obsproject.com/forum/resources/time-and-date-overlay-updated.1461/>

<https://gist.github.com/kirinelf/932d7704e623fd42970801597ddcccc4>

## Sources: Add timer

The “Timer” will assist in locating eye movement changes on the video. The timer values are saved on the mp4 video file for reference.



### STEP 3 – Create “Timer” Text Source

1. Open OBS studio
2. Select scene “B Both eyes – Binocular”
3. In Source list, Add, “Text (GDI+)”, **create new “Timer”**; “OK”
4. **Use the following descriptors:**
  - Font: Ariel, Font style: Regular, Size: 256, “OK”
  - Text: 00:00,
  - Colour > Select Color: White (HTML #ffffff),
  - Opacity: 100%
  - Background Color > Select Color: Black (HTML #000000),
  - Background Opacity: 0%
5. Select “OK”
6. Resize and reposition the “00:00” on the OBS Studio canvas.

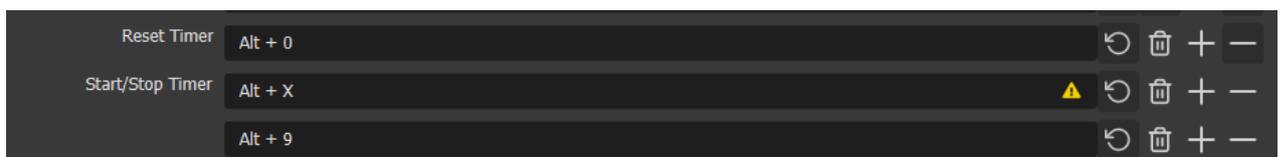
Repeat for other Scenes: “R Right eye only” (Alt-R) & “R Left eye only” (Alt-L).  
Source > Add > “Text (GDI+)” > Add Existing > “Timer”

### STEP 2 – Tools > Script

1. Download with the link to [advanced-timer.lua](http://advanced-timer.lua)
2. Save to C:\Vesticam OBS setup files\advanced-timer.lua
3. Open OBS studio
4. Tools > Scripts > + Add Script ... locate and open **advanced-timer.lua**
  - Mode: Countup,
  - Format: %0m:%0s
  - Text source: Timer
  - Activation Mode: Global (timer always active)
5. Close

### STEP 3 – Hotkeys

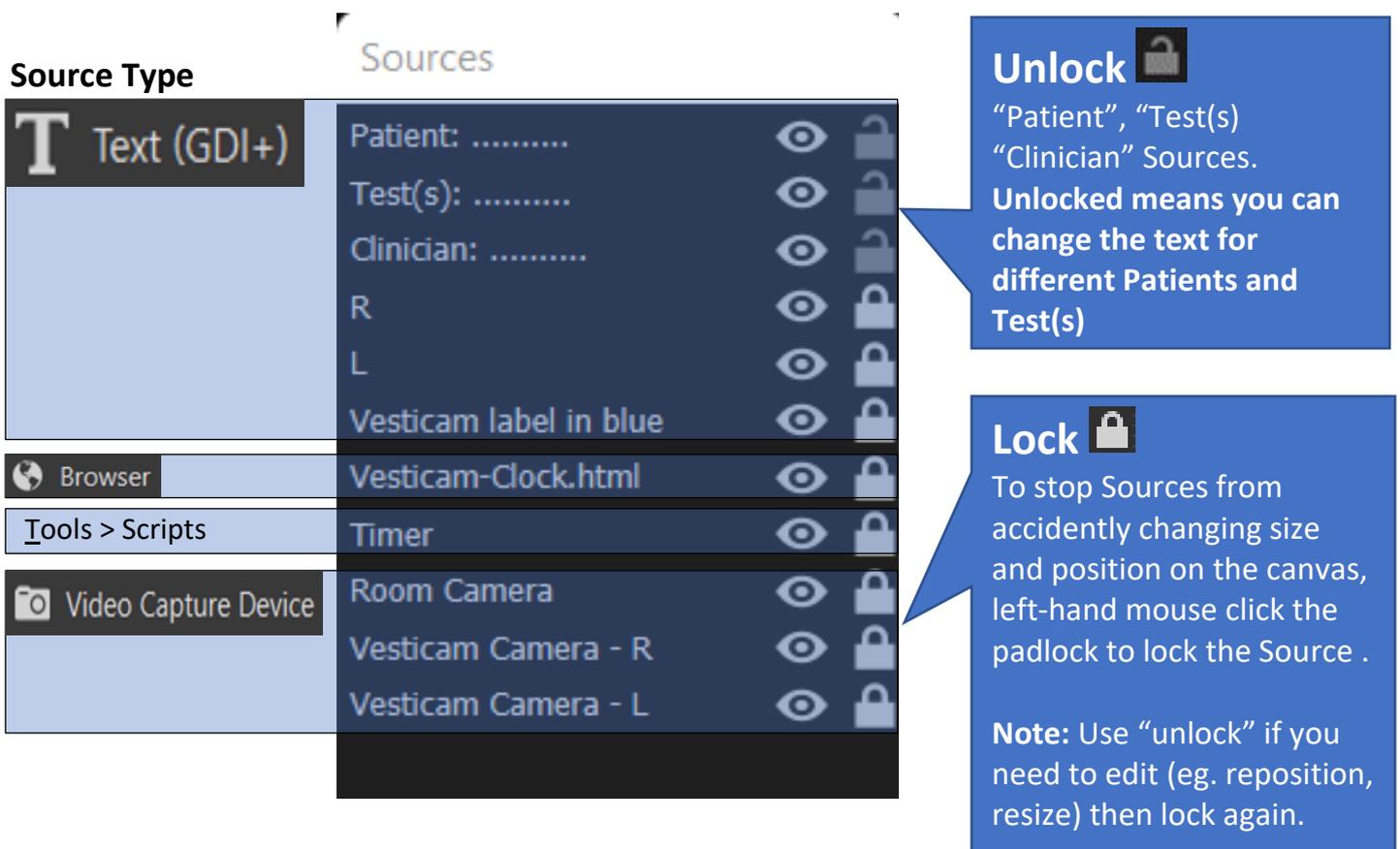
1. File > Settings > Hotkeys
2. Find the “Timer” ..... 21 lines down
3. **Reset Timer:** Alt + 0 .... that’s zero
4. **Start/Stop Timer:** Alt + X ..... timer will start with Alt + X when recording  
Alt + 9 ..... timer can start manually



### Resource for Count up timer

<https://www.youtube.com/watch?v=hZ7o6lu2okA>

## Sources: List order, lock position, and hide from display



The screenshot shows the 'Sources' panel in OBS Studio. On the left, the 'Source Type' column lists categories like 'Text (GDI+)', 'Browser', 'Tools > Scripts', and 'Video Capture Device'. The main 'Sources' list contains items such as 'Patient: .....', 'Test(s): .....', 'Clinician: .....', 'R', 'L', 'Vesticam label in blue', 'Vesticam-Clock.html', 'Timer', 'Room Camera', 'Vesticam Camera - R', and 'Vesticam Camera - L'. Each source has an eye icon and a padlock icon to its right.

**Unlock**   
 "Patient", "Test(s)"  
 "Clinician" Sources.  
 Unlocked means you can change the text for different Patients and Test(s)

**Lock**   
 To stop Sources from accidentally changing size and position on the canvas, left-hand mouse click the padlock to lock the Source .

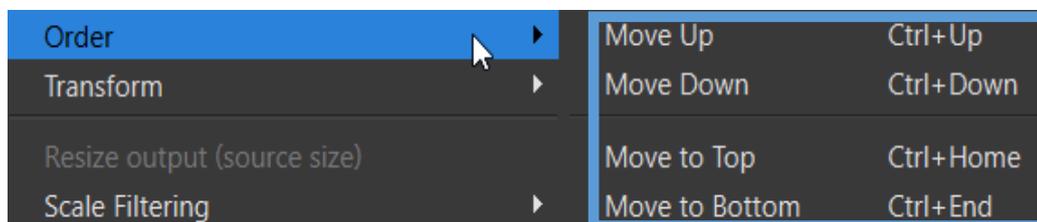
**Note:** Use "unlock" if you need to edit (eg. reposition, resize) then lock again.

### Source list order

The source list order is important. It ensures sources overlay and underlay correctly. Sources at the top of the list overlay (on top) and sources at the bottom of the list (eg. cameras) are layered at the back.

**The sources list presented above is in the correct order.**

If you wish to change the order, select the source item, right hand mouse, select "Order" and then "Move Up", "Move Down", "Move to Top" or "Move to Bottom". Alternately use the keyboard shortcuts or drag and drop.



### Hide Source from display

To hide a source from displaying on the OBS Studio canvas, left-hand mouse click on

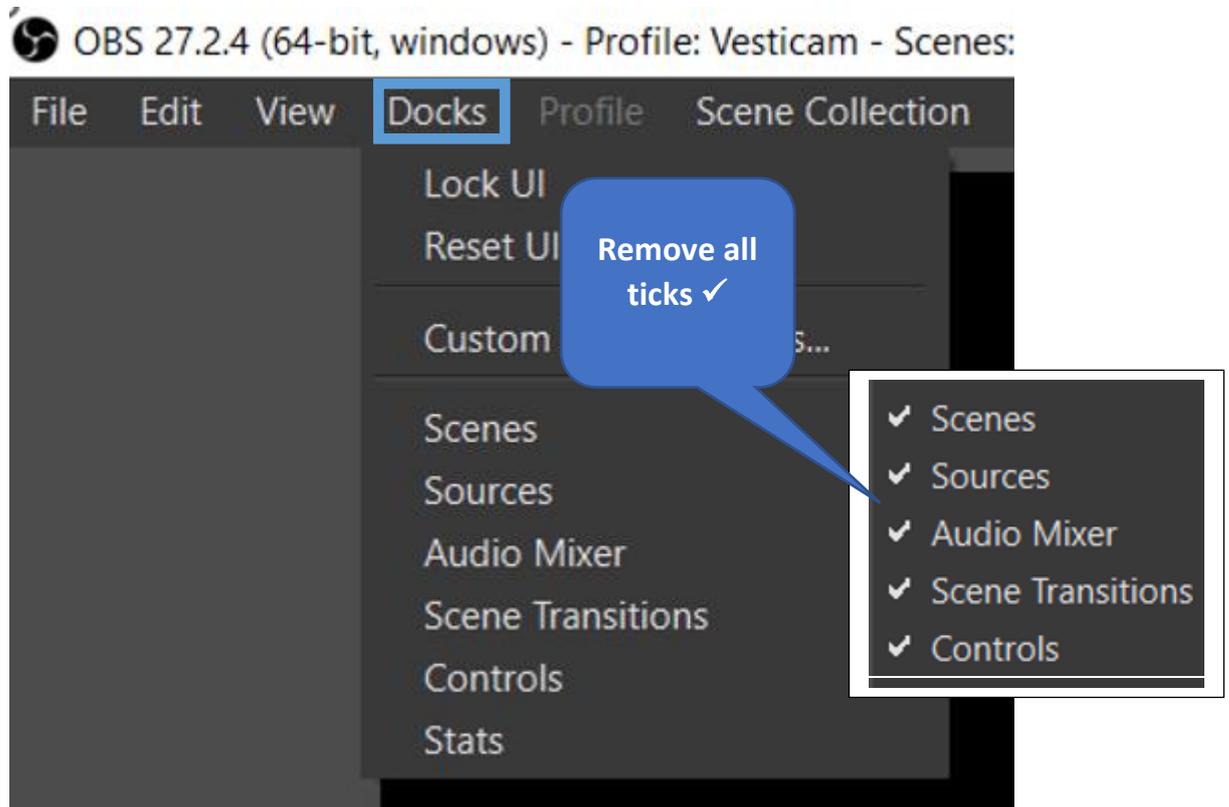
the eye  graphic in the source list to 

OR simply edit the text source and remove details for "Patient", "Test(s)" "Clinician".

## Hide Docks on OBS desktop to maximise viewing screen

To maximize eye viewing and unclutter the screen, simply **untick** “Scenes”, “Sources”, “Audio Mixer”, “Scene Transitions” and “Controls”. You can easily “re” tick lists to view them at anytime.

**Fullscreen Interface F11** ... maximises the working display size



To update the OBS configuration for “Scenes” & “Sources” .... **Docks** > “tick”   
This will make the “✓ Scenes” & “✓ Sources” lists available for editing again.



## Clinician – Vesticam Session

### Connect the Vesticam Cameras to the Computer

1. **Switch computer ON**
2. Connect the Vesticam camera plugs to the dual extension lead 2.0metre
3. Connect the Extension lead USB Type-C (male) to the labelled Computer ports. If needed, use the supplied adaptors for USB-A. There should be an **audible beep** (Windows only) which confirms the camera is correctly connected.

If possible, keep the adaptors and extension lead connected to the cameras to reduce wear or damage to the computer ports.

4. **Once the cameras are connected, open OBS Studio** by double clicking on the icon
5. **Both eyes and room camera should now be visible on the screen and respond to motion.**

If the images are frozen and do not respond, simply exit OBS studio and reopen it.

If there is still no response exit OBS studio, remove and reinsert adaptors. There should be an audible beep which indicates that the camera is connected.

6. **Labelling the eye movement video:**

**Left Click on “Patient: ...”** the box should appear highlighted with a **red coloured outline**.

Right Hand mouse then select **“Properties”**

Edit the **Text section** to update the **“Patient: EXAMPLE, J”** or name then select **“OK”**.

Repeat for **“Test(s): ...”** and **“Clinician”** (if required)

TIP: Sources **Patient: ...;** **“Test(s): ...”** & **“Clinician: ...”** must be unlocked  to enable edit.

The Patient, Test and Clinician details will be recorded on the video. These settings will NOT change the mp4 file name. The file name can be edited after recording.

7. The default Scene displayed is **B Both eyes - Binocular** (Alt + B).  
For monocular (single eye) preview/recordings select the Scene **R Right eye only** (Alt + R) or **L Left eye only** (Alt + L)

### Setting up Vesticam binocular goggles on your patient

(see also Quick Start Manual in case)

1. Start with the camera cylinders off...not attached to the goggles
2. Follow your normal patient hygiene pathways when applying the goggles. Use effective alcohol/anti-microbial wipes to clean goggles face plate, silicone eye cups and head band before and after each patient. Do not use on patients with infective disorders. (see also 3.1.2 “Cleaning and avoiding contamination” and Appendix 1 full instruction manual)
3. The goggles are comfortable, high quality and flexible enough to fit most face shapes and sizes. Loosen the head strap by squeezing the quick release buttons and the goggles flange together
4. Help your patient to position the goggles for comfort. Most patients can do this themselves, like swimming goggles.
5. To adjust for interpupillary distance, loosen the locking rings at the front of the mounting plate by turning anti-clockwise. Allow the mounting plates to slide into a comfortable position on your patient’s face. Your patient should be able to see out of both viewing holes. Pull rubber tags at each

## Vesticam2 (Binocular or Monocular) OBS Studio software user manual

side of goggles to tighten gently, and then lock the mounting plates into place by firmly tightening the locking rings in a clockwise direction.

6. Hold the camera cylinder so that the lead is exiting the cylinder at “5 o’clock”. Insert the camera cylinder into the mounting plate and rotate it clockwise until the camera cylinder “clicks” and locks into place (lead should be at “6 o’clock” when locked).
7. TO FOCUS and fine tune eye position use one hand to stabilize the camera cylinder and the other hand to move the camera joystick up / down and side / side until the eye image is central on screen. Firmly pull camera joystick in / out to focus the image of the iris and edge of the pupil. The camera cannot be pushed into the eye as there is an end stop. It is important to focus the eye to ensure that possible torsion is visible
8. Repeat for the other eye
9. NOTE: for ease of viewing, ensure that both eyes are centralized to each screen and level.
10. If/when you require fixation, press the small button at the end of the joystick IN to active the light. NOTE: the fixation light will only work when the camera is plugged into the computer.
11. Position the room camera, or computer external camera to view your patient.

Vesticam goggles are designed to be light tight. Adjust the goggles with your patient so they are comfortable, secure, light tight, and firm. If there is still light leakage, gently move the goggles on your patient’s face to eliminate any gaps between face and goggles. If you have any questions or concerns, please check [www.vesticam.com/support](http://www.vesticam.com/support) or email [support@vesticam.com](mailto:support@vesticam.com)

## Recording with OBS Studio / Hotkeys

Once the views from cameras are visible and in focus and the room camera is in position:

1. Press “**Alt + X**” to start **AND stop recording**. The recording time in the bottom right corner of the screen should show seconds changing/time change. ie: ● REC: 00 : 00 : 01
2. Press “**Alt + Z**” to **Pause** and to un-pause.  in the bottom right corner of the screen.
3. Change Scenes if required.
  - Alt + B** ... to record both eyes by selecting scene: **B Both eyes - Binocular<DEFAULT>**
  - Alt + R** ... to record right eye only by selecting scene: **R Right eye only**
  - Alt + L** ... to record left eye only by selecting scene: **L Left eye only**
4. Timer starts with the recording “**Alt + X**” or with “**Alt + 9**” Use “**Alt + 0**” to reset timer to **00:00**

The set up and layout of OBS are automatically saved, even if you exit the software.

**Note : OBS will record audio.** *Speaking while recording can assist with identifying subjective responses to different tests, recording verbal consent if required and naming vestibular tests. For example, you can start recordings with: “(patient’s name), are you happy for me to record this test”. While recording, you can also provide a commentary of tests, movements, positions and observations of your patient.*

## Video Playback with VLC Media Player software

1. In OBS Studio, go to **File** (top left of screen). Click **Show Recordings**.
2. To review video simply **double click on the required video**.

**Note:** Consider installing a Video Player that can replay at half speed (eg. [VLC Media Player](#))

## Rename Videos

In OBS Studio, go to **FILE** (top right of screen). Open (double click) **“Show Recordings”**.

To rename your patient eye movement video, **click once on the file name** and insert the required details.

To retain the date sort order of the file list, add details after the date and time.

Eg: Original Example: Vesticam 2025-12-31 09-10-35.mp4

Changed example: Vesticam 2025-12-31 09-10-35 SMITH, J .mp4

## Sharing, Backing up and archiving videos

To ensure the security of your patient video recordings, always follow your usual patient electronic medical record pathways and transfer/copy the patient video files to your organization’s required location.

Health records and privacy Health information is regarded as one of the most sensitive types of personal information. For this reason, the Privacy Act 1988 (Privacy Act) provides extra protections around its handling. Video recordings of the eye and associated audio recordings are considered protected health information and should not be shared without the patient’s consent.

Vesticam is not responsible for the protection of any patient health data, or for any diagnosis made by practitioners based on Vesticam videos. To reduce any risk to the security of patient health data, Vesticam recommends that patient eye movement videos are not stored on any portable device, but are deleted or uploaded to the purchaser’s usual safe and central health record system.

## Troubleshooting

### If the cameras are not working in OBS Studio:

1. Exit OBS and reopen OBS Studio. Cameras still not working?
2. Exit OBS Studio, disconnect and reconnect the cameras at the USB port. Now reconnect and listen out for the audible beep (Windows PC) of the computer recognising the camera. Reopen OBS Studio. Cameras still not working?
3. In OBS, check the cameras in the Source list are linked to the correct devices. (see page 12) Cameras still not working?
4. Exit OBS, restart the computer, reconnect cameras and then reopen OBS Studio. Cameras still not working?
5. Exit OBS Studio, exclude the extension lead 2.0metre and reconnect the cameras at the USB Port, now reconnect and listen out for the audible beep (Windows PC) of the computer recognising the camera. Reopen OBS Studio. Cameras still not working?
6. Instead of OBS, test the cameras using your standard video recording software (Windows Camera or Mac PhotoBooth). Cameras still not working?
7. Contact Vesticam support

## Contacting Support

We welcome you contacting Vesticam support: [support@vesticam.com](mailto:support@vesticam.com) to

- book a time for Vesticam to setup OBS Studio remotely and provide a handover (approx. 45mins)
- seek a resolution to an issue with the equipment or software
- provide feedback of your experiences, suggestions for improving the documentation, or anything else.

We value your feedback 😊

## Appendices

### i) OBS Studio - Sources & Scenes – Step by step

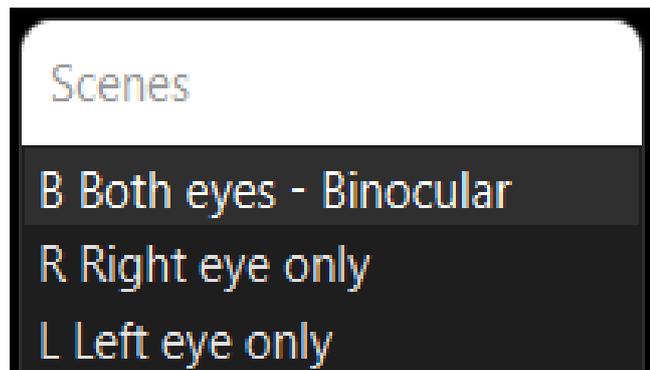
For those wishing to build their OBS from scratch, this slower, step by step process can be used instead of simply importing Scene collection (**vesticam.json**, see page 5)

**This is not required if you chose to import scene selection.**

#### Setup Scenes

1. In the **Scenes** box, Select the default scene, click righthand mouse, select “Rename” and enter the name “**B Both eyes Binocular**”
2. In the **Scenes** box, Select the “B Vesticam BINOCULAR” scene, click righthand mouse, select “Duplicate” and add a new scene named: “**R Right eye only**”
3. In the **Scenes** box, Select the “B Vesticam BINOCULAR” scene, click righthand mouse, select “Duplicate” and add a new scene named: “**L Left eye only**”

#### Scenes list...



“Vesticam” in the **Scenes** box, Select the default scene, click righthand mouse, select “Rename” and enter the name “**B Both eyes Binocular**”

#### Adding Sources – Video Capture Device

1. In the Sources box Click righthand mouse, select “Add”
2. Select “**Video Capture Device**” • Create New ... type “**Vesticam Camera – R**” (Patients right eye) then click “OK”
3. In the Properties for “Device” select “**VESTICAM**”, Select OK  
PLEASE NOTE:
  - a) The Vesticam cameras need to be connected (listen the audible tone from your Windows PC as you plug or unplug the cameras) before opening OBS Studio
  - b) For Binocular, expect to see two “**VESTICAM**” devices listed. Use trial and error to select the camera which matches the correctly

#### Adding Sources - Text

1. In the Sources box Click righthand mouse, select “Add”
2. Select “**Text (GDI+)**” .. • Create New ... type “**Vesticam Studio Label**” then click “OK”
3. In the Properties Text box enter the “**Vesticam**”
4. *REPEAT TO ADD OTHER TEXT SOURCES (REFER TO THE TABLE BELOW)*

# Vesticam2 (Binocular or Monocular) OBS Studio software user manual

## Add Sources as listed ...

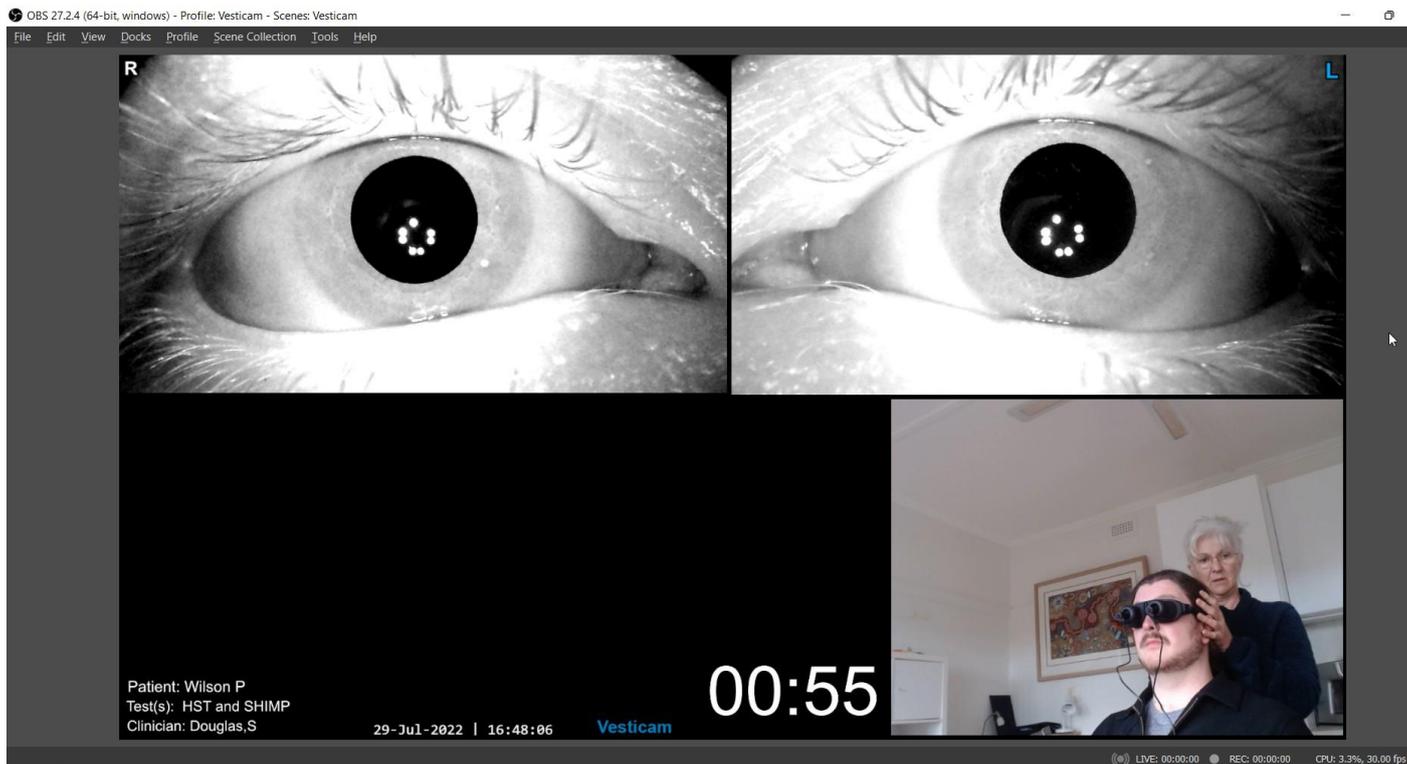
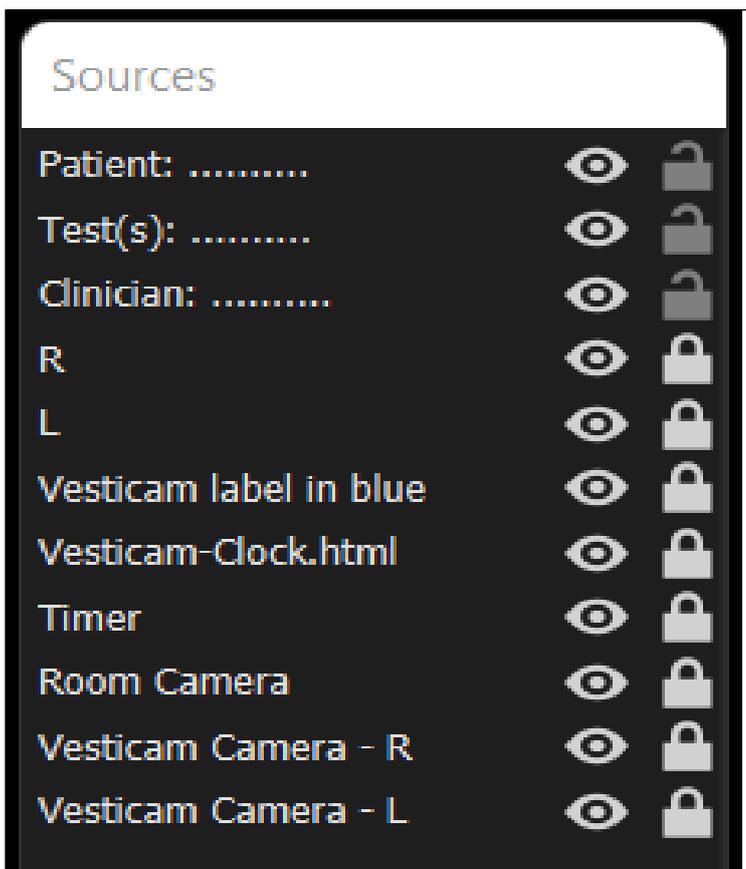
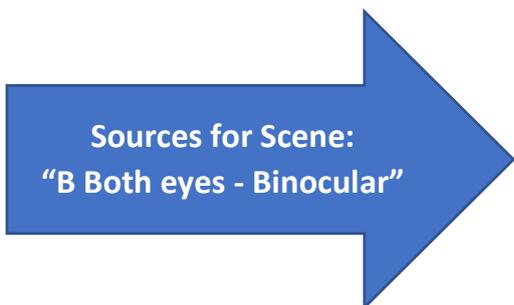
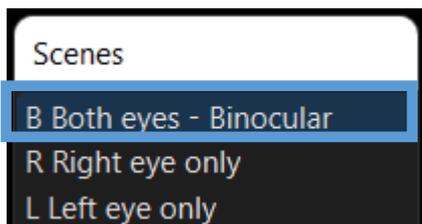
Source Type	Source Name	Properties: Device	1 Note
Video Capture Device	Room Camera	USB Webcam	2
Video Capture Device	Vesticam Camera – L	VESTICAM	3
Video Capture Device	Vesticam Camera – R	VESTICAM	3

Source Type	Source Name	Properties: Text	
Text (GDI+)	Vesticam	Vesticam	
Text (GDI+)	R	Label for Right eye	
Text (GDI+)	L	Label for Left eye	
Text (GDI+)	Clinician: .....	Clinician: <Enter Name>	4
Text (GDI+)	Test(s): .....	Test(s): <Enter Test(s) >	4
Text (GDI+)	Patient: .....	Patient: <Enter Patient name or ID>	4

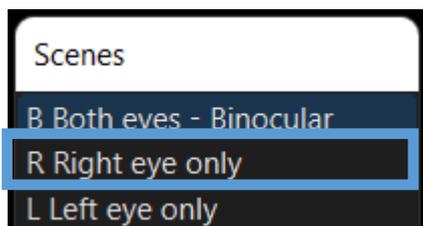
### Note

1. Enter **Sources** in the listed sequence .. new **Adds** are added to the top of the list. Alternately use the Up/Down Arrows or drag/drop to tidy up the sort order.
2. The Room camera is optional. It could be the webcam on the laptop or 3<sup>rd</sup> party external USB Camera.
3. In devices listed both (Left & Right) Vesticam Cameras are named “USB 2.0 HD Camera”. Use trial and error to match the input device to the correct RIGHT EYE or LEFT EYE
4. The text **Sources** for CLINICIAN:, TEST/DATE:, PATIENT ID can be edited before recording tests with patients.

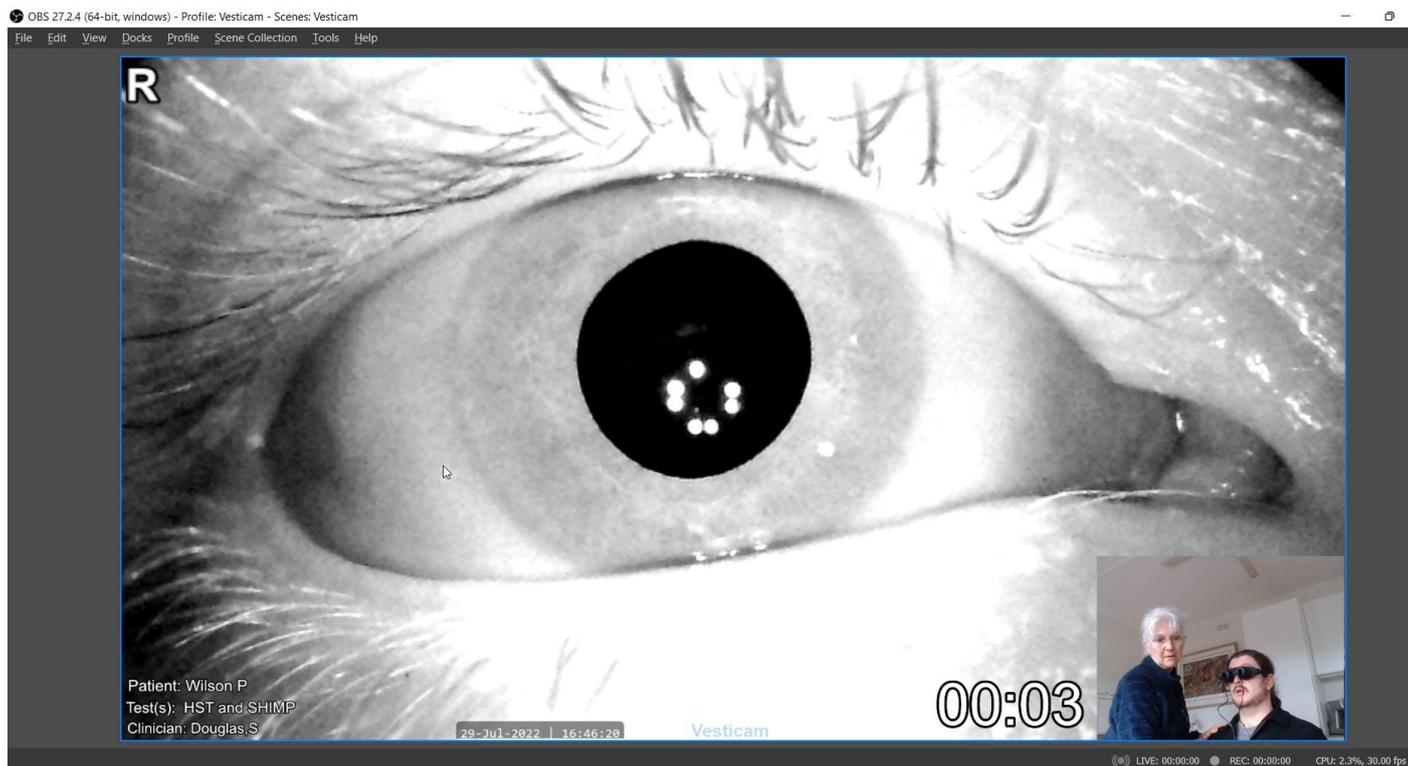
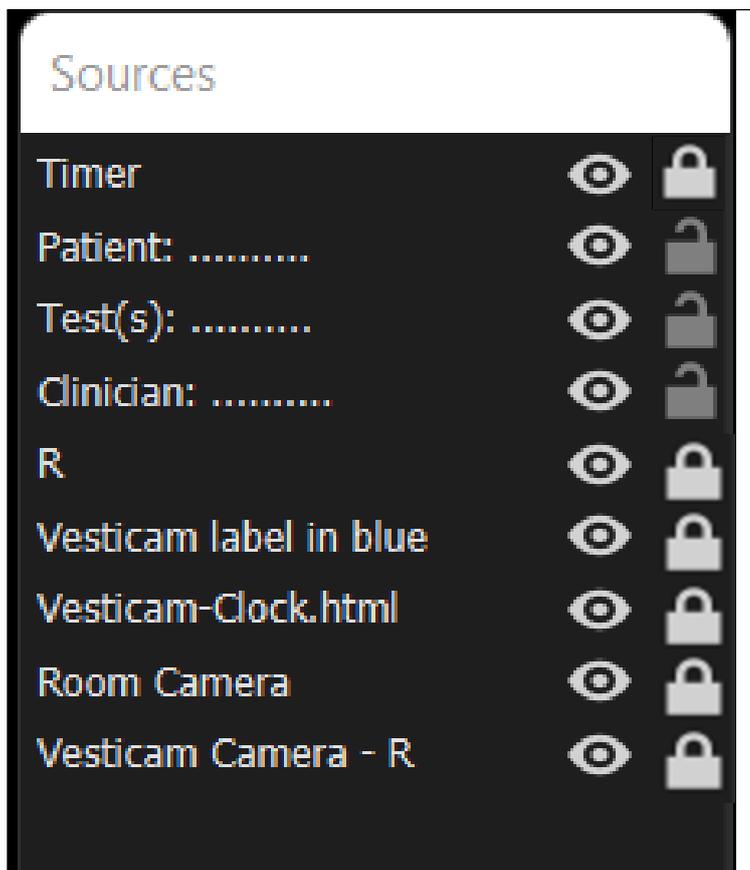
### Scene: B Both eyes - Binocular



Scene: R Right eye only



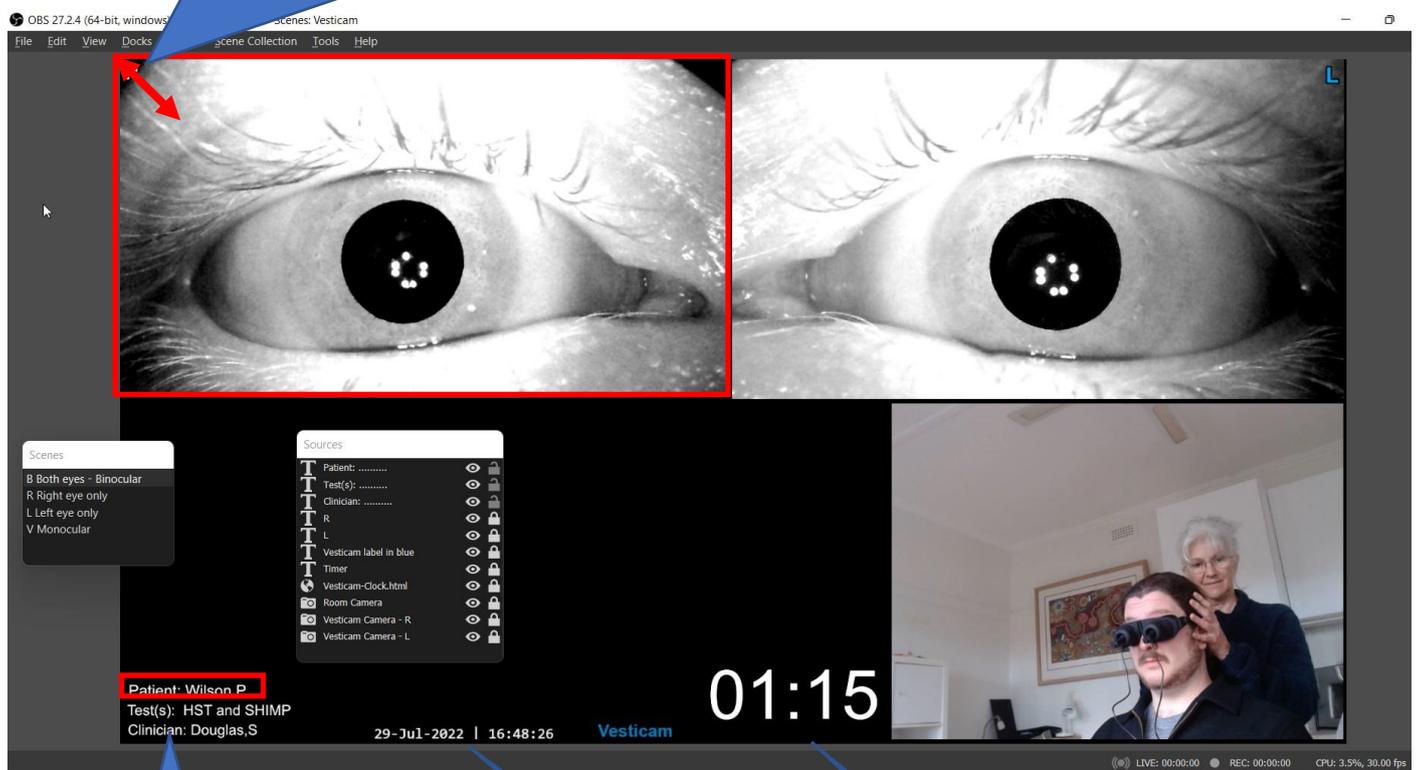
Sources for Scene:  
"R Right eye only"



## ii) OBS Studio – Screen Layout

Select a **Source** so that it appears in a red box, then use the mouse to position and resize the box on the OBS canvas (as per screenshot layout below). Repeat this for each **Source**. Repeat for each **Scene**.

With Source highlighted in red box (unlocked ) , use the mouse to resize and reposition as required



Session labels for

- Patient
- Tests(s)
- Clinician

Vesticam-Clock.html  
(Page 13)

Timer  
(Page 14)

### iii) Software components & locations

Source	Folder	File	Notes
Use link to <a href="#">Vesticam OBS Studio setup files</a> and download each file to “C:\Vesticam OBS Studio setup files” or email <a href="mailto:support@vesticam.com">support@vesticam.com</a> and request Vesticam OBS Studio setup files.zip	C:\Vesticam OBS Studio setup files	Basic.ini	OBS > Profile > Import
		vesticam.json	OBS > Scene Collection > Import
		vesticam-clock.html	OBS Source: Browser
		advanced-timer.lua	OBS Tools > Scripts
<a href="https://obsproject.com/download">https://obsproject.com/download</a>	C:\Program Files\obs-studio\bin\64bit\	obs64.exe	OBS program
Generated during OBS install and configuration	C:\Users\<USERNAME>\AppData\Roaming\obs-studio	<i>configuration files</i>	<b>User specific configuration</b>
OBS > File > Settings > Output > Recording Path	Eg. C:/Vesticam eye movement videos or, specify a network folder for easier sharing and backup.	<i>Example file name:</i> Vesticam 2025-12-31 09-10-35.mp4	Backup patient video data.

### iv) Transferring OBS settings to other login user or other computer

The OBS Studio settings are maintained separately for each user login.

Note: It may be more efficient to maintain a single login for a PC running OBS. Using separate user logins means the OBS configuration will change each time and may be difficult to manage.

#### Option 1:

The OBS Studio user profile/settings are stored in %appdata% for each user. eg. C:\Users\<USERNAME> \AppData\Roaming\obs-studio

Open an explorer window to your application data. Start -> Run -> %AppData%

There you will find a subfolder called “OBS-studio”.

Copy the “OBS-studio” sub-folder to the same %AppData% folder on the 2nd PC or (other User login if on the same PC).

Changes in drive mappings or different screen resolution may make Option 1 more challenging. If option 1 does not work, Option 2 can be applied

#### Option 2:

Repeat the steps provided in this Manual including “Importing Vesticam Scene Collection & Profile”

## v) Remote control with Android/Bluetooth for OBS Hotkeys

There are three methods for vestibular clinicians to control OBS Studio.

1. With the “Controls” & “Scene” lists displayed, **use the mouse** to select “Start Recording”, “Stop Recording”. Displaying lists takes up valuable screen space. The mouse is fiddly to use when working with patients. This method is not recommended.
2. **Hotkeys.** Are quicker but require keyboard nearby (wireless keyboard may be better)
3. **Remote control** with Android/Bluetooth for OBS Hotkeys.

### Hotkey review

“Alt + X” to Record and to Stop recording. • REC: 00 : 00 : 01

“Alt + Z” to Pause and to un-Pause  in the bottom right corner of the screen.

Change Scenes with “Alt + B “ (both eyes), or “Alt + R” or “Alt + L”

Timer starts with “Alt + X” or “Alt + 9” ..... reset Timer to 00:00 with “Alt + 0” (that’s a zero)

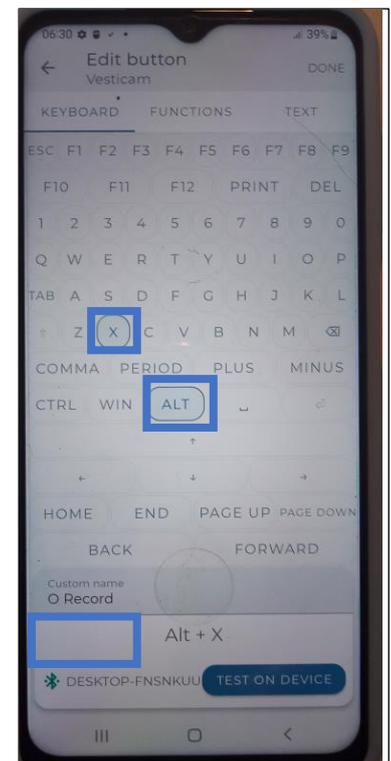
### Steps to setup remote control with Android/Bluetooth for OBS Hotkeys.



1. Check both the Android device & Computer running OBS both have Bluetooth
2. Ensure Hotkeys are setup in OBS Studio. (refer page 8 of this manual)
3. On Android, open Google Play, search for “Serverless Bluetooth Keyboard & Mouse for PC/Phone” and Install the “blukimo – Bluetooth keyboard & Mouse” App by AppGround IO.
4. Open the “Bluetooth keyboard & Mouse” App
5. Connect Bluetooth between Android and Computer

### Setup Custom Layout: and assign OBS hotkey as buttons

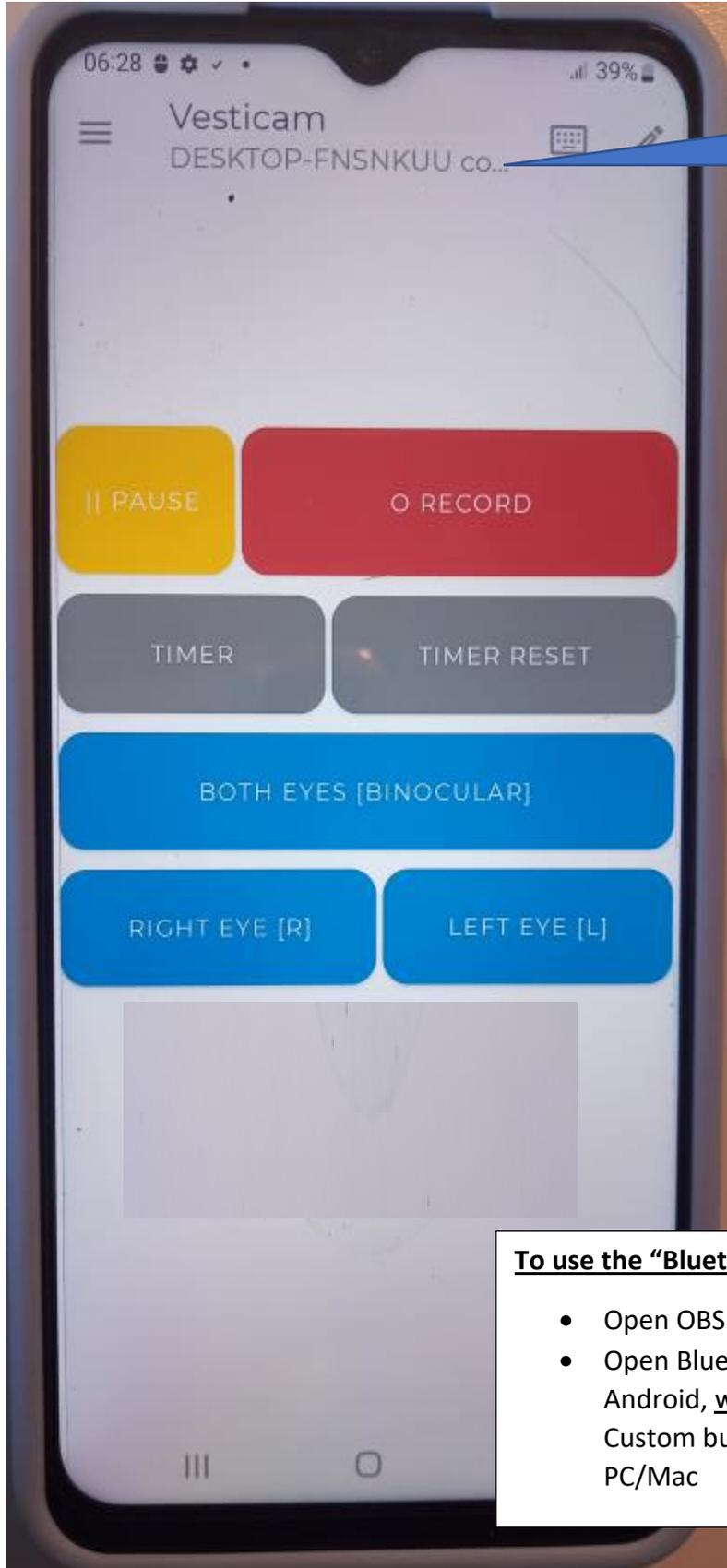
6. Create a Custom Layout .. “Vesticam”
7. Select the pencil to edit the layout (top right)
8. ADD COMPONENT ... “BUTTON” (bottom)
9. Custom name... eg. “O Record”
10. Assign Hotkey eg. by selecting “Alt” and “X” eg. Alt + X
11. “DONE” (top right)
12. Repeat Steps 8,9,10,11 for other Hotkeys.
13. Select “SAVE” (top right)
14. To complete .... Select the edit pencil tap on each Button to “Edit key” and select colour palette (bottom left) and resizing arrows (bottom) and use drag’n drop position buttons as required.
15. To delete a button, Select the edit pencil tap on each Button to “Edit key” and select the bin (top right)
16. To close select “X Edit key” (top left) then “SAVE” (top right)



**CHECK ANDROID SCREEN ON THE NEXT PAGE (page #28)**



Bluetooth keyboard & Mouse (Android App)



Bluetooth connected to PC/Mac running OBS Studio

OBS Hotkeys	
RECORD	Alt + X
PAUSE	Alt + Z
TIMER	Alt + 9
TIMER RESET	Alt + 0
BOTH EYES	Alt + B
RIGHT EYE	Alt + R
LEFT EYE	Alt + L

**To use the “Bluetooth keyboard & Mouse” App**

- Open OBS Studio
- Open Bluetooth keyboard & Mouse” App on the Android, with Bluetooth connected, use the Custom buttons to control OBS Studio on your PC/Mac