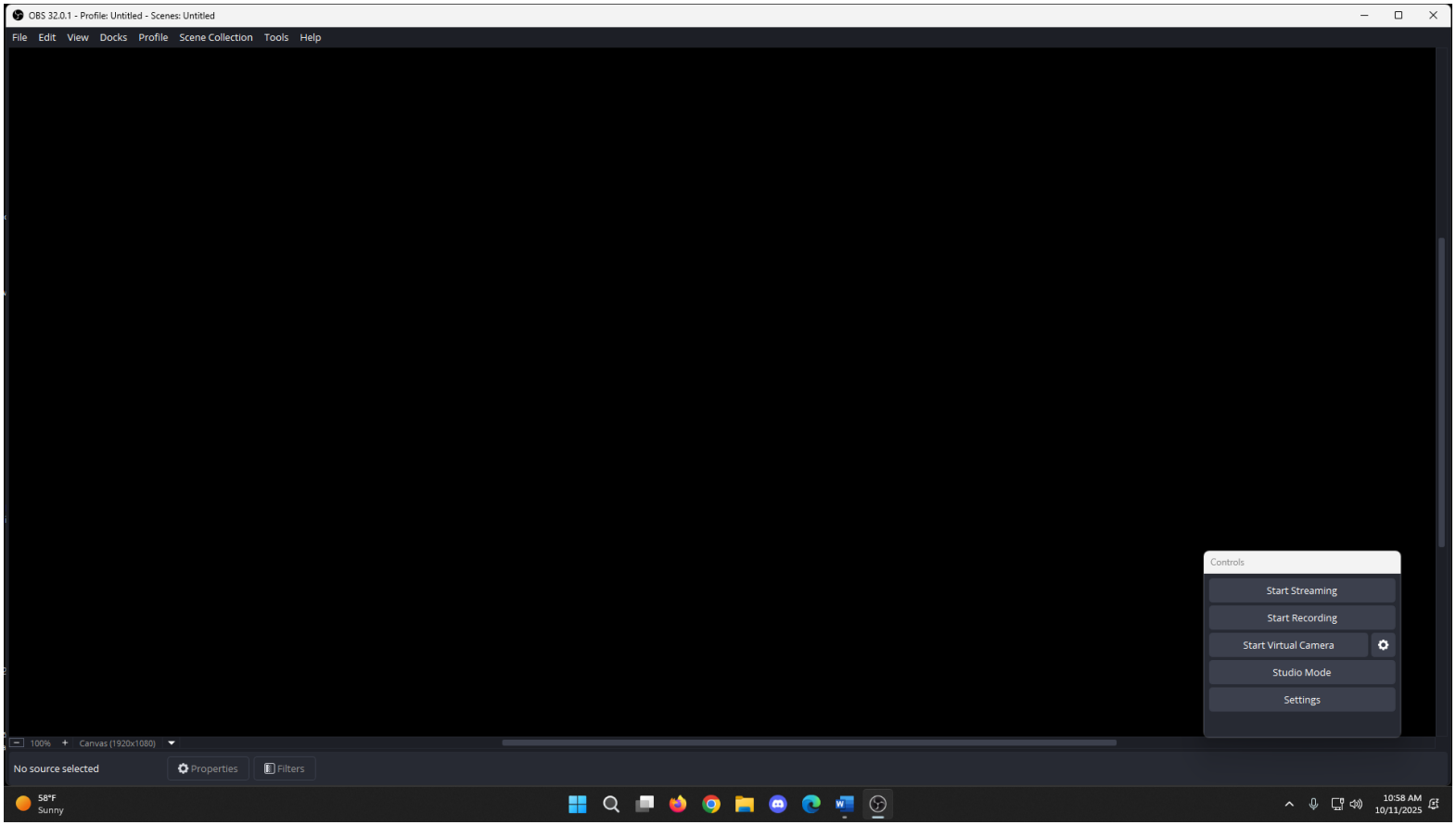
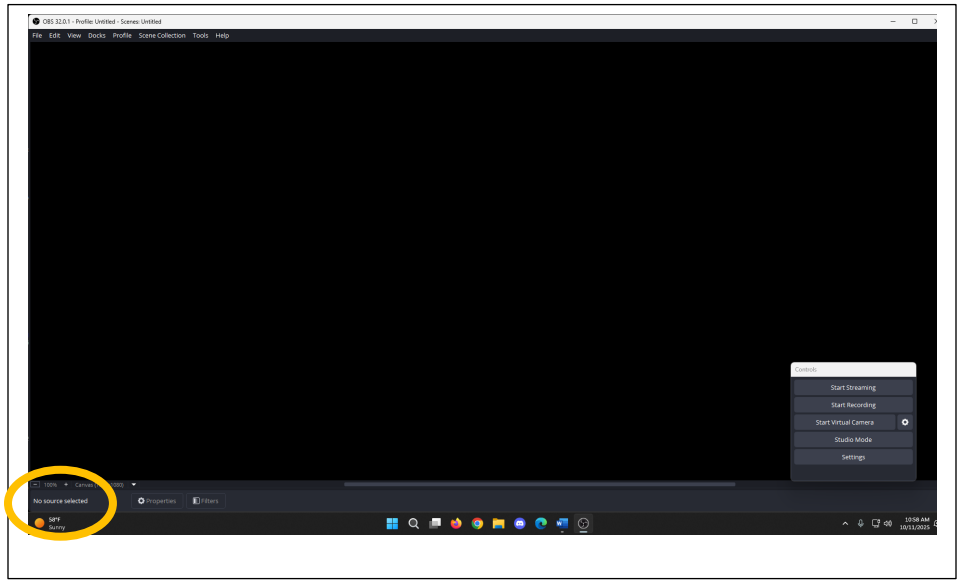
Using AquaCam With OBS For Recording

These are the instructions for testing and using your camera with the OBS software for the first time at home. If your AquaCam is not plugged into your computer, do so now. Wait 20 seconds then open OBS. (For HD users the NearSync program must already be closed.) Your screen should look something like this because all the OBS settings have been saved from the first set of instructions. If you had the OBS already open, WAIT between 10 and 20 SECONDS FOR THE PROGRAM TO SEARCH FOR VIDEO SIGNAL. It may or may not appear quickly, depending on your hardware or processor.

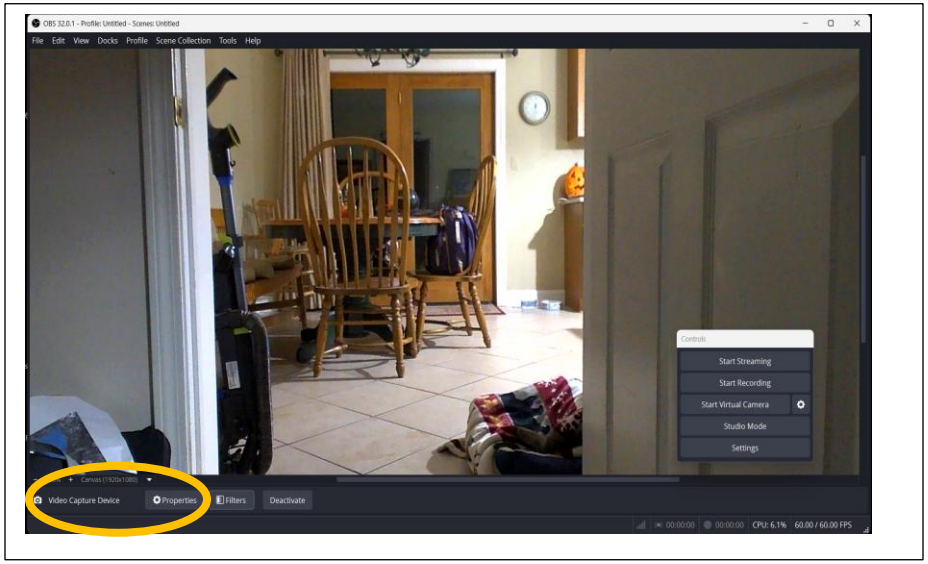


After 20 seconds, whether you see a picture or not, look at the bottom left hand corner of your OBS screen. It will say one of two things .....

WITH or WITHOUT video, it says: **"No source selected"**



WITH video, it says: **"Video Capture..."** or **"No source..."**



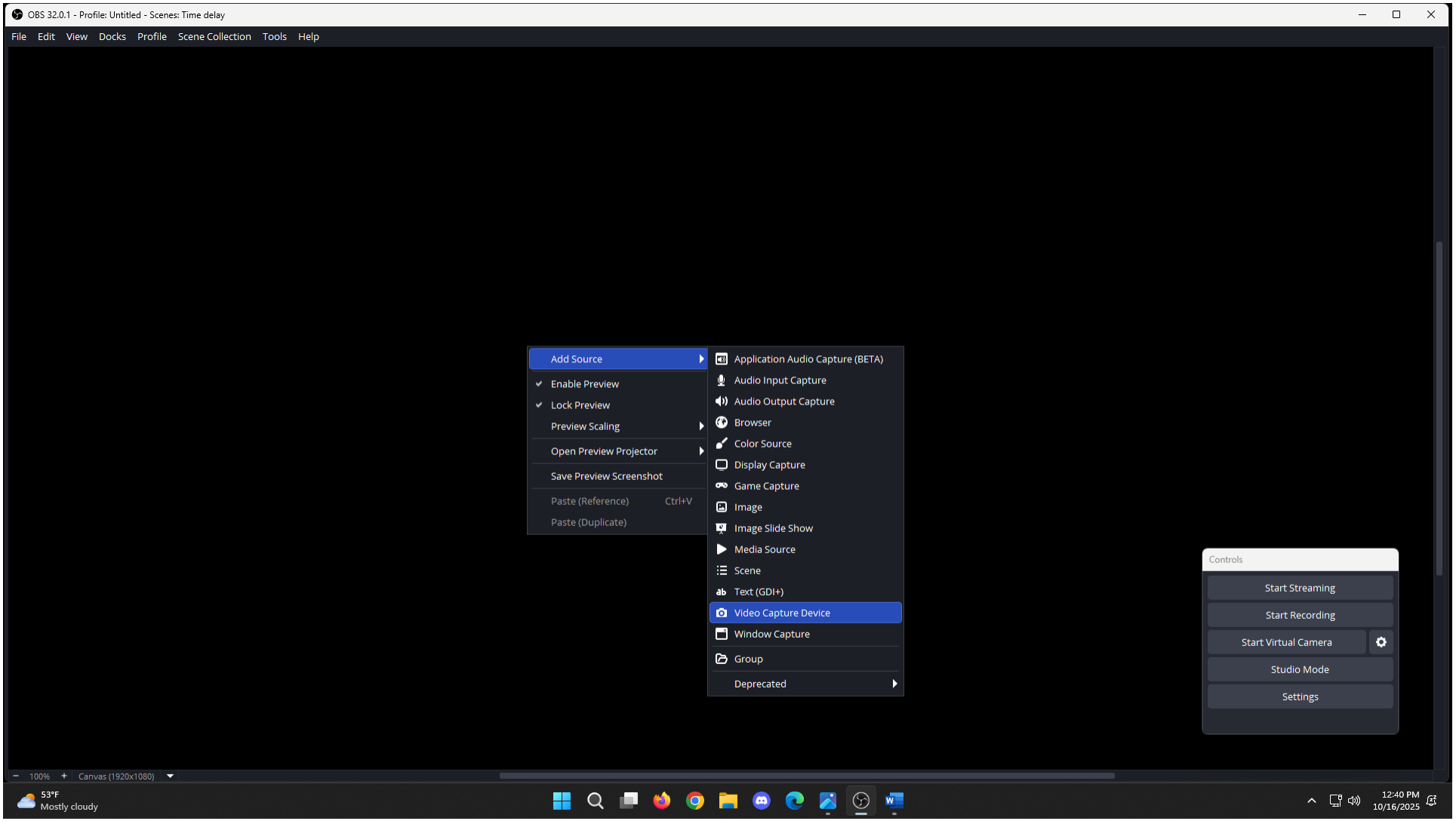
If you don't see the options circled it is because your computer's taskbar (like at the bottom of the first photo) is covering it. Adjust the OBS window so it is showing.

If you **don't** see video and get "**No source selected**" at the bottom, follow the instructions **A** on the next two pages.

If you **DO** see video, with either "Video Capture Device" or "No source selected" at the bottom, skip the next two pages.

A If “No Source Selected”: Right click your mouse on the center of the blank screen, select **Add Source**, then select **Video Capture Device**.

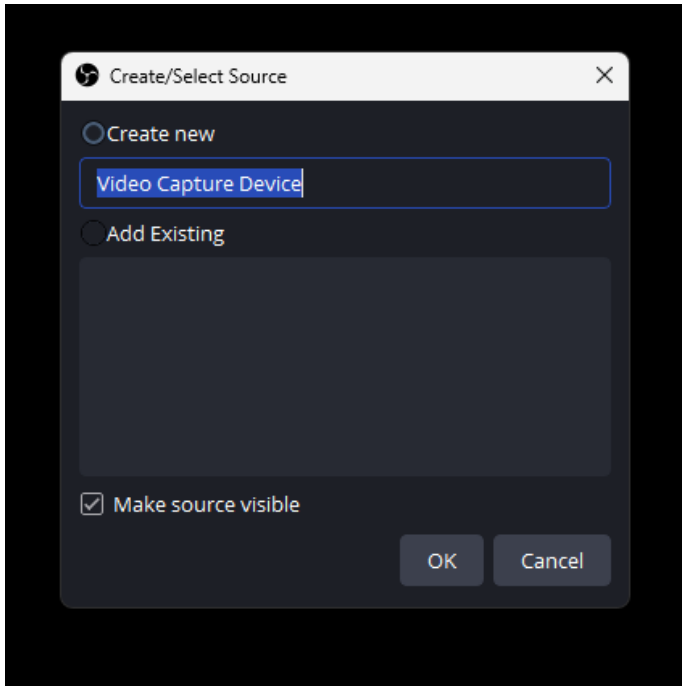
WAIT ANOTHER 20 SECONDS FOR THE COMPUTER TO SEARCH FOR SIGNAL!

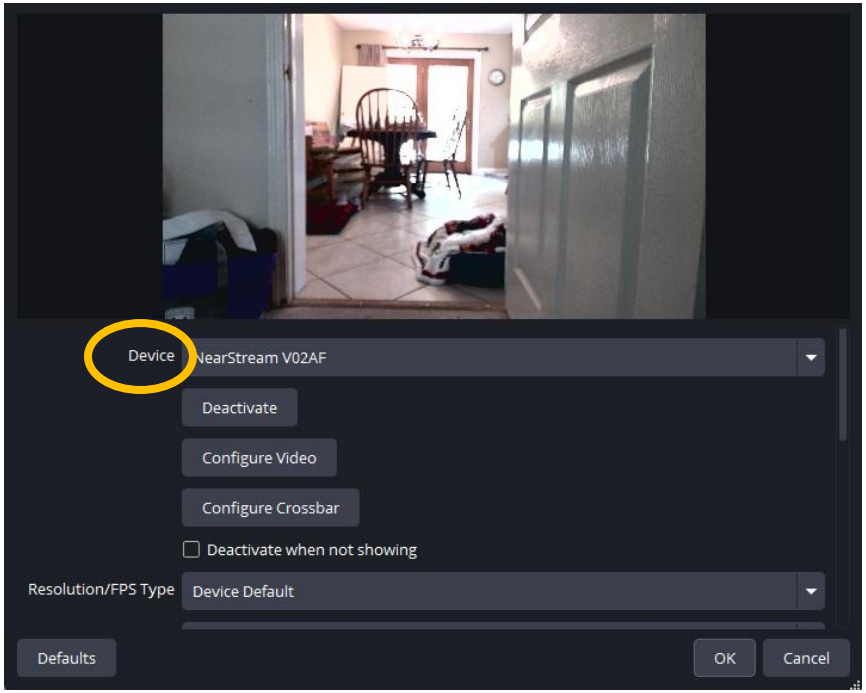


A **If video now appears**, the very bottom left (in small letters) will now show “Video Capture Device” or “No source selected”. You can now skip to the next page.

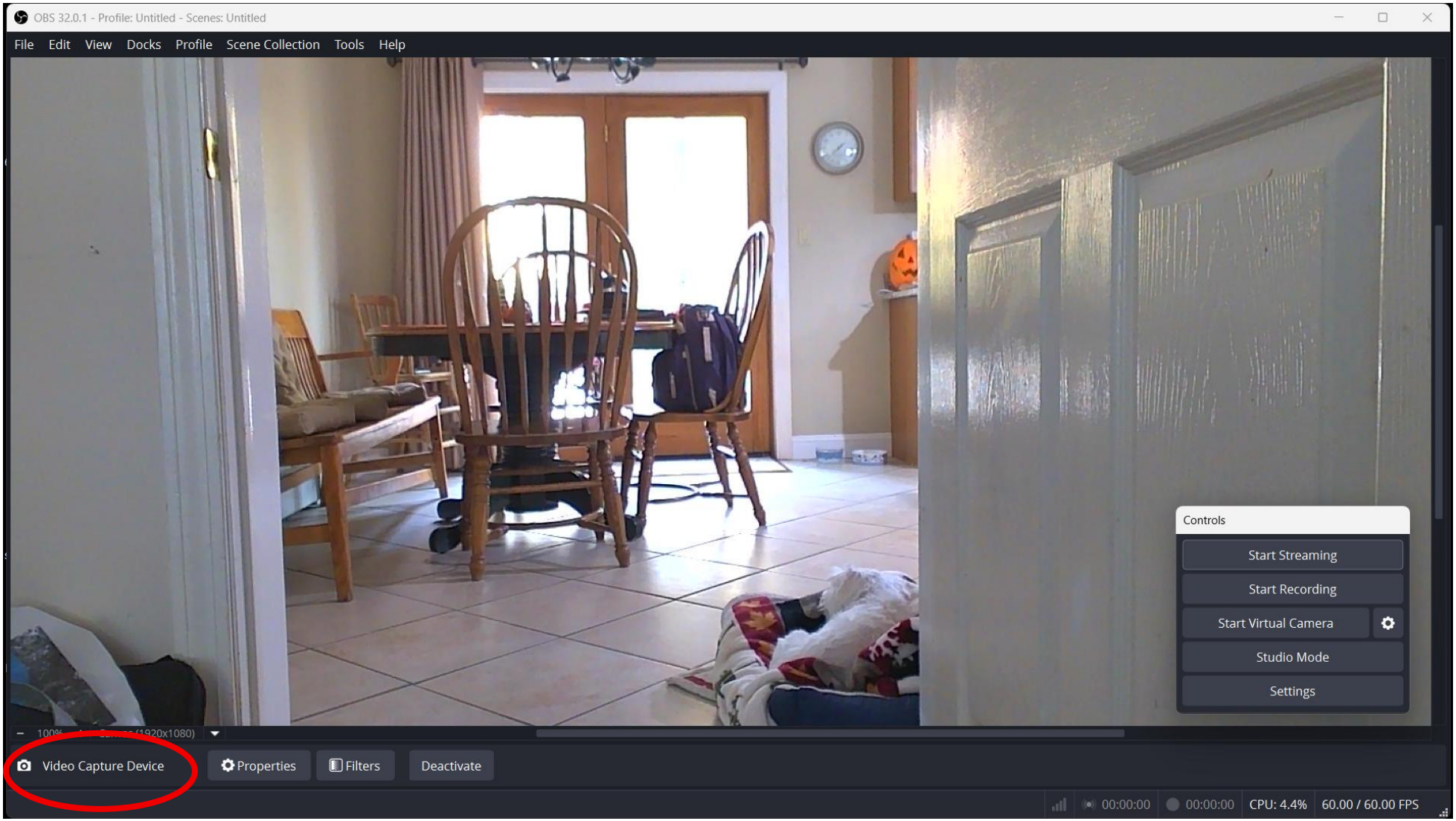
If video does not appear, the window below left WILL.

The small circle next to “Create new” means you are locking your camera to that device. Check the box that says “make source visible” and Select **OK**. The bottom left will now say “Video Capture Device”. If the “Properties” window (below right) pops up in the center, you will see a pull-down menu called “Device.” If you see video from the AquaCam, you are good. If you see something else, click the down arrow on “Device” and click on each, waiting 5 seconds, to see which one works. (Some laptops are set to use their webcam as the default video source and you may need to change that in your settings.) The devices will be called “Nearstream VO2AF” for the HD AquaCam and “Video Capture” or “Analog” device for the SD model. **Click OK.**





You should now be seeing a screen like this, with “Video Capture Device” showing at the bottom left. If it still says “No source selected”, **LEFT** click in the center of the video screen and it will change.



At this point, two things *may* occur…**red outline** and **out of focus**. But if the picture is **in focus** and you don't see a red outline around the video, skip this page. Otherwise …..

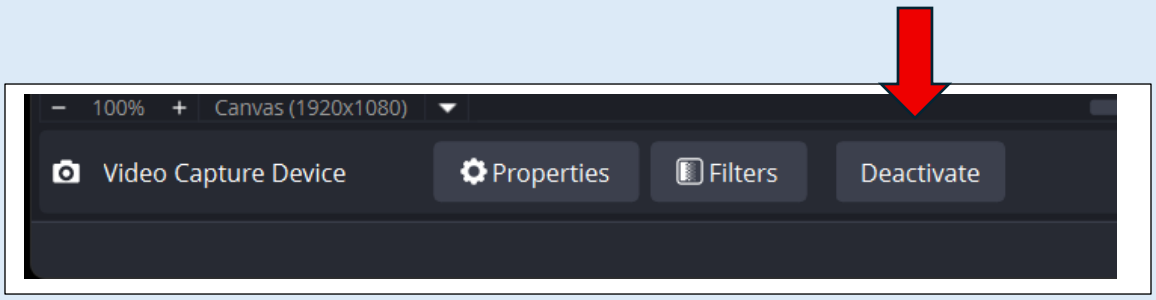
Red Outline: First, check the scale options at the lower left. If you have not changed them previously, set the first to 100% and leave Canvas to 1920x1080 for HD and 1280x720 for SD. Drag the side window to fill the screen. Now click down from 100% (99, 98, 97, etc.) until you get a screen you like. It will now be set this way every time you open the program.

If video is Out of Focus: During initial setup with the High Definition (HD) AquaCam, this occasionally happens. Turn OBS **OFF**. Open the NearSync program. Wait 10 to 20 seconds for the options to load.

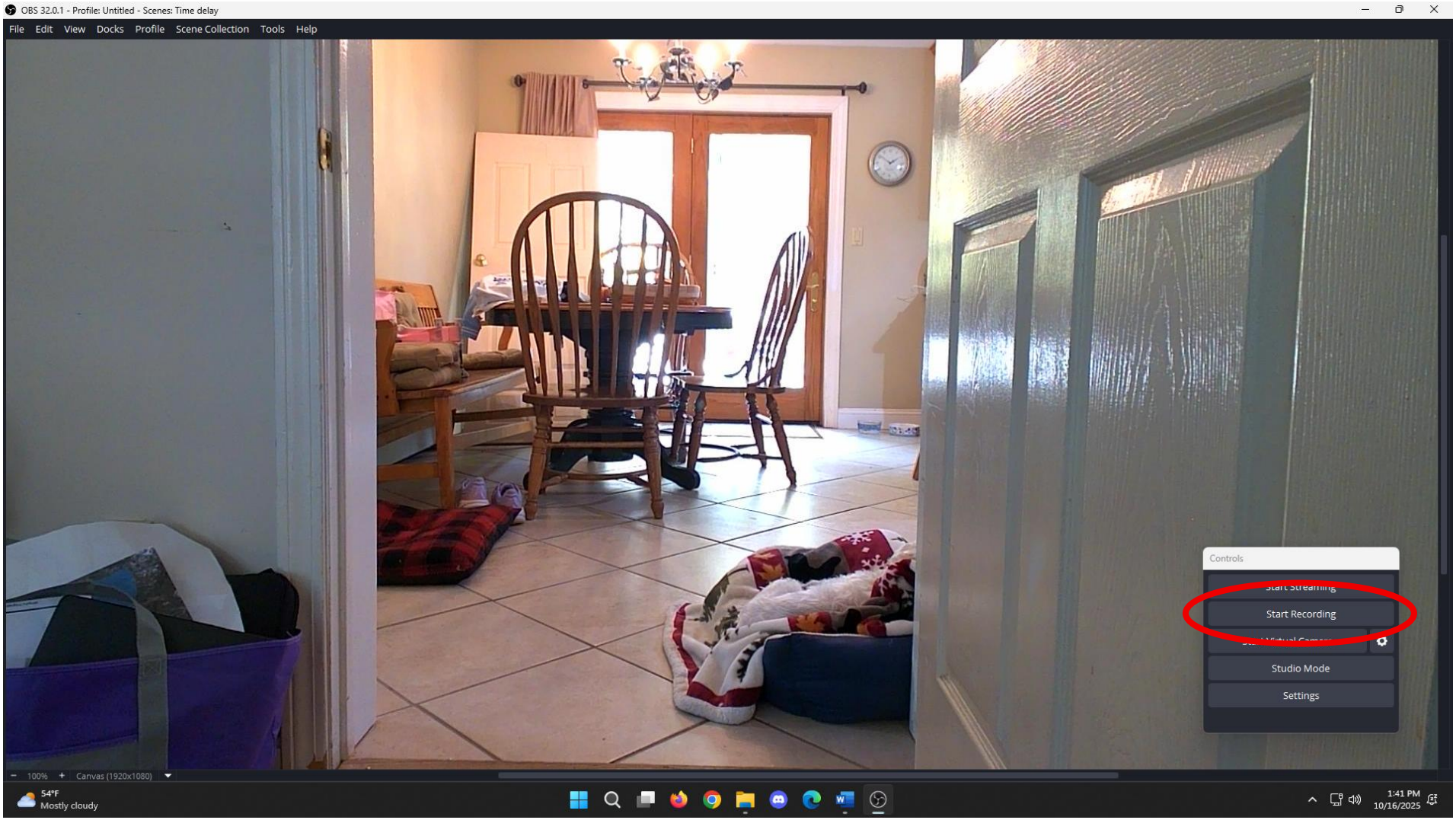
Open the **Device Settings** window and your camera image appears with your previous adjustments for Field of View (FOV), AutoFocus, and Resolution. **Turn ON** AutoFocus, point camera to an object 15 feet away, let it focus clearly, then turn it off. Focus is now set for between 4 feet and infinity. (There is no need to check any other settings because you set them earlier.)

With the video now in focus, **CLOSE** the program at the upper right (X) and click **"Confirm".**

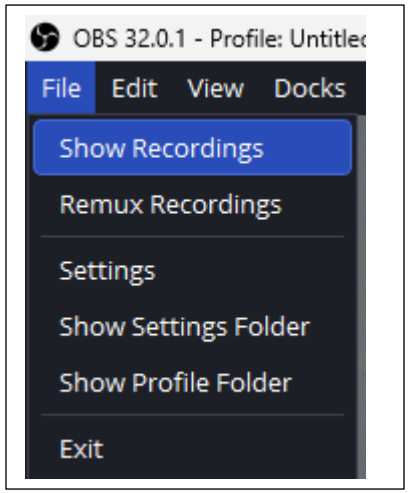
Now open the OBS program and your video should be showing on the screen within 10 seconds. (If you did not open NearSync first, it will not.) If the very bottom left says "No source selected", just **LEFT** click the center of the video screen and it will change to "Video Capture Device".
Another option is to click the "Deactivate" button here, then click again to "Activate".
Video will now appear.



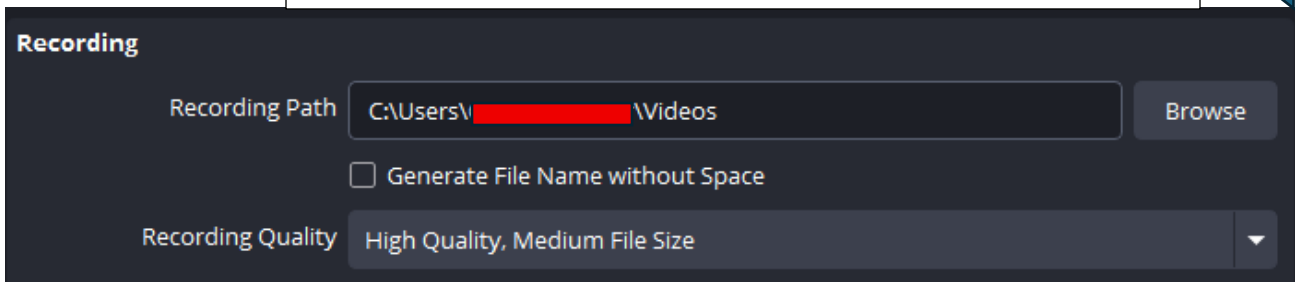
Now let's test record a video. Click on **"Start Recording"**, let it record for a few seconds. Shake the camera or wave your hand in front of it. Then press **"Stop Recording".** The video is automatically saved.



Click the File menu at the upper left and select **Show Recordings**. It will bring you to the location you set when you installed the OBS software earlier.



You already set this up earlier.



Your video files will be stored by year, followed by date, as shown below. You can then drag them into different folders labeled by swimmer or stroke and rename each one for easy retrieval.

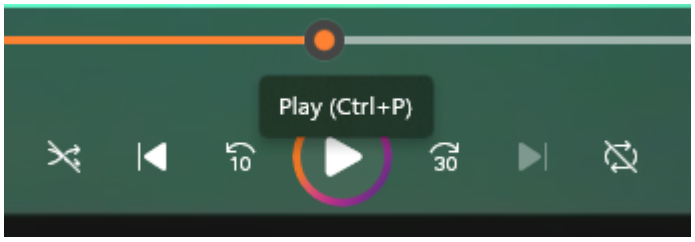

2024-04-07 12-58-11.mp4

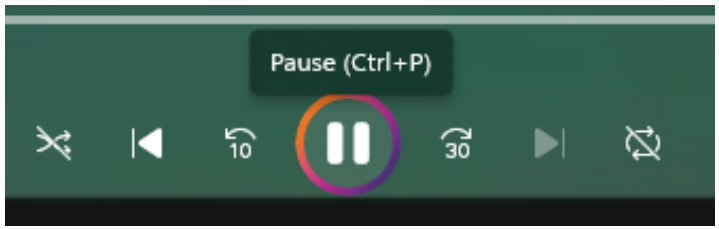

2025-10-16 13-49-14.mp4

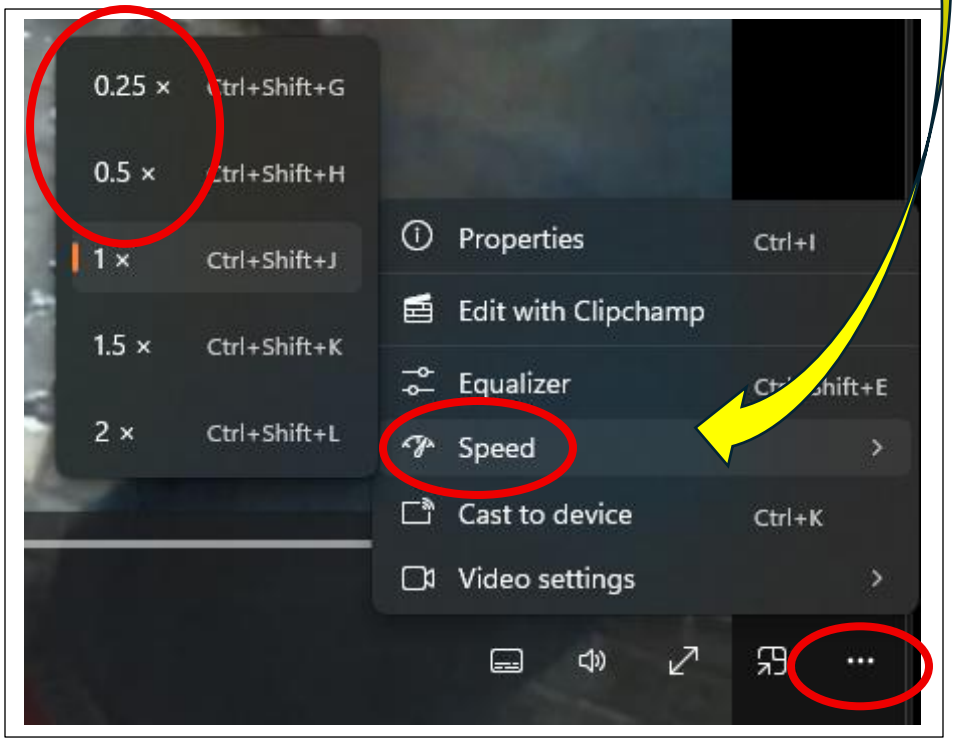

2025-10-16 14-00-23.mp4

Your files are in .mp4 format and can be played back on Windows **Media Player.** Select a file and right-click it. Select **"Open with"** and pick **Media Player**. At the bottom right of the window are three dots (•••) Click on those and the following window appears when you hover over **Speed.**

You can select a slow-motion playback of half speed (.5) or one quarter speed (.25). At any speed you can use the Pause and Play buttons in the center (below) to freeze-frame at any point.

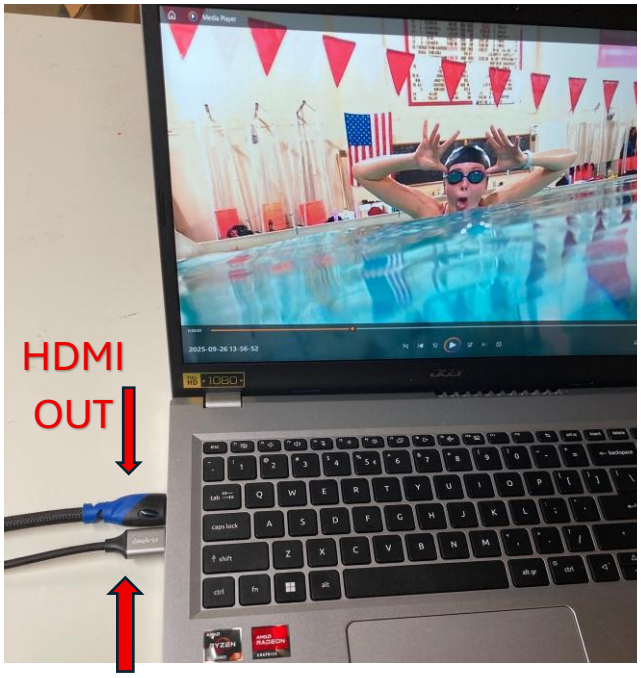


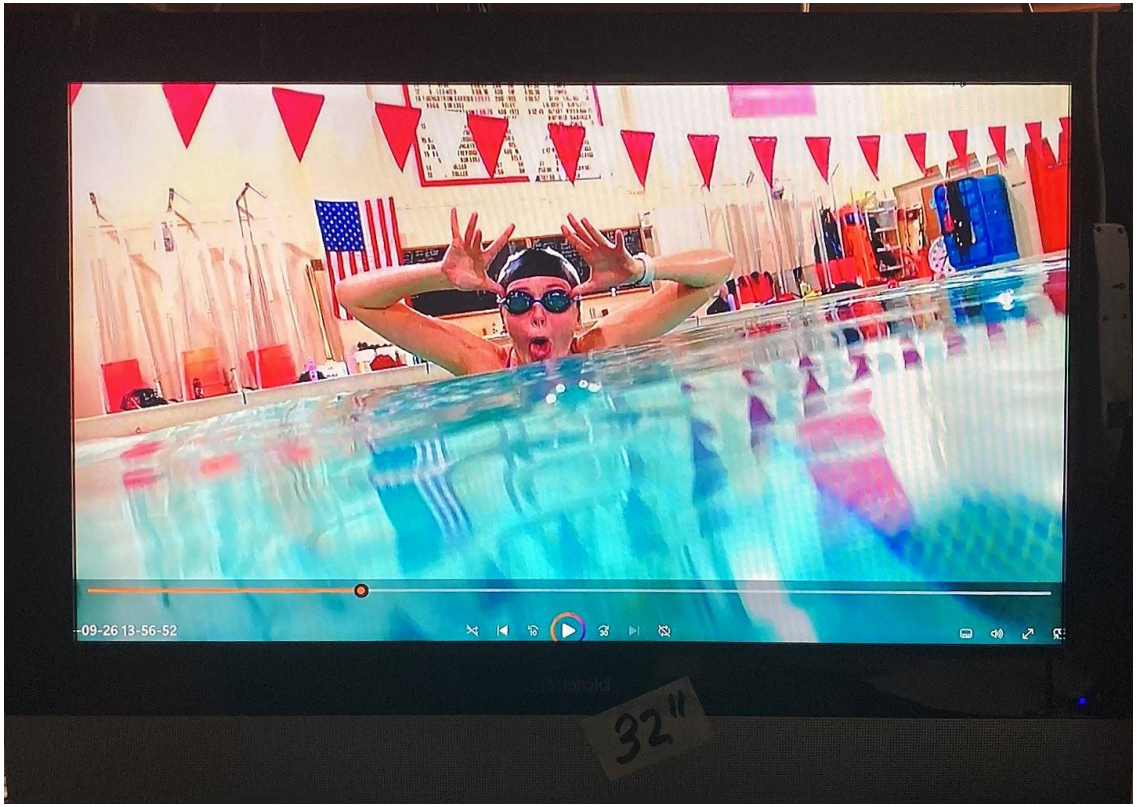




PLAYBACK A RECORDING – On laptop or Lage Screen TV

Now record (then stop) a video that is about 20 to 30 seconds long where you slowly move the camera around. Viewing a recording on a laptop is fine for one or two swimmers. Or you can playback on a large TV for multiple swimmers with an HDMI cable if your laptop has an HDMI output. With one end of the cable plugged into the TV, plug the other end to the laptop HDMI output as shown below. (You don't need to remove the USB AquaCam cable unless you are finished recording for the day.) Follow the playback instructions above and play with the slow-motion and freeze frame with the large image on the TV. This video played on a 32" TV below.





When done testing, or anytime you finish recording swimmers, close the OBS program FIRST if using the HD, then unplug the AquaCam. No need to do this with the SD.

Since you have files saved on your computer, you can send them vie e-mail, put them on your team's Facebook page, or save them to a thumb drive to give to other coaches to view and analyze. You can even run clinics, such as Masters clinics, where they will pay you for your recordings. (They bring their own thumb drive you download the video to.) Be sure to tell them how to use Media Player to slow-motion and freeze-frame their video.

Time Delay: How to do this is in a separate set of instructions on the "Instructions" page.

The next four pages are your instructions for when you are using it at the pool. We suggest printing them off and storing them with the AquaCam for easy reference. Having assistant coaches using it is a great thing, but they need to practice. It also gets them excited and learning more about proper technique

Anyone can become an expert at it with a few sessions of use.

AquaCam USE AT THE POOL The following instructions in the **blue shaded box** are for the HD AquaCam. Scroll past them if you have the SD AquaCam.

When you first bring your camera to the pool, setting up to record is the same as you practiced at home. You don't need to check your camera with the NearStream program. Just plug it in, wait about 20 seconds, and then open OBS. You have already saved the camera settings. When you are comfortable using the system you can tweak and save the settings later.

Any focus adjustments needed when you use the camera and program at the pool can be done as explained on page 6 above.

Now open the OBS program and your video should be showing on the screen with the adjustments made in NearSync. (If you did not open NearSync first, it will not.) If the very bottom left says "No source selected", just LEFT click the center of the video screen and it will change to "Video Capture Device". (This selection allows you to access the "Filters" menu [to the right] when you want to do Time Delay.)

After a couple days of playing with the AquaCam and tweaking the settings, you will get very good with it and coach and swimmers will learn a lot.

TROUBLESHOOTING

When done recording, always close the OBS program first before unplugging the camera. When setting up to record at the pool, always plug the camera in first, and wait 10 to 20 seconds before opening any programs. Some laptops will give a little “ding” when they have sensed the new peripheral.

For HD AquaCam’s: Waiting 15 to 20 seconds for OBS to recognize the camera is important. This is a function of the processor speed of your hardware. The faster the processor, the quicker the video will appear. You should not need to make any video adjustments with the NearStream program once settings have been selected at home.

Out of Focus: On the rare occasion where the AquaCam is out of focus, use the fix on page 6 to correct this.

Video does not appear after 20 seconds: Some laptops prefer a “default” video source, like its own built-in camera, over others and force you to choose each time you open and close programs. If video does not appear when you open OBS, and the camera has been plugged in for at least 20 seconds, use the two tips at the bottom of page 6 to correct this.

For SD AquaCam’s: Open OBS right away.

VIDEO FREEZES:

When the video freezes, and the camera is still plugged in, it means that the cable plug connection into the laptop moved or twisted, breaking the flow of the video.

Moving around the deck with a camera pole and laptop can pull and twist on the cable unless you are careful. Even if it was only for a split second, that is enough to freeze the video. Take the following steps:

1. Close out of OBS.
2. Unplug the AquaCam.
3. Plug the AquaCam back in.
4. Wait 15 seconds for the computer to recognize the AquaCam.
5. Open OBS and the video should appear as normal.

Laptops inputs are not as beefy as larger computers and inputs are susceptible to strain if the cable constantly moves around, stressing the plug/input connection. To prevent possible “freezing”, we suggest keeping the connection firm by taping the cable to the back or bottom of the laptop or tablet. That is why we attach a shorter, more flexible extension cable with every AquaCam.



Finally, if you have used OBS previously, and already have it loaded on your computer, you may have issues with the Scenes settings. You may already have many Scenes labeled in your program and different camera inputs. If so, call us for tips that may help you get around some issues.

AquaCam - (207) 332-8664