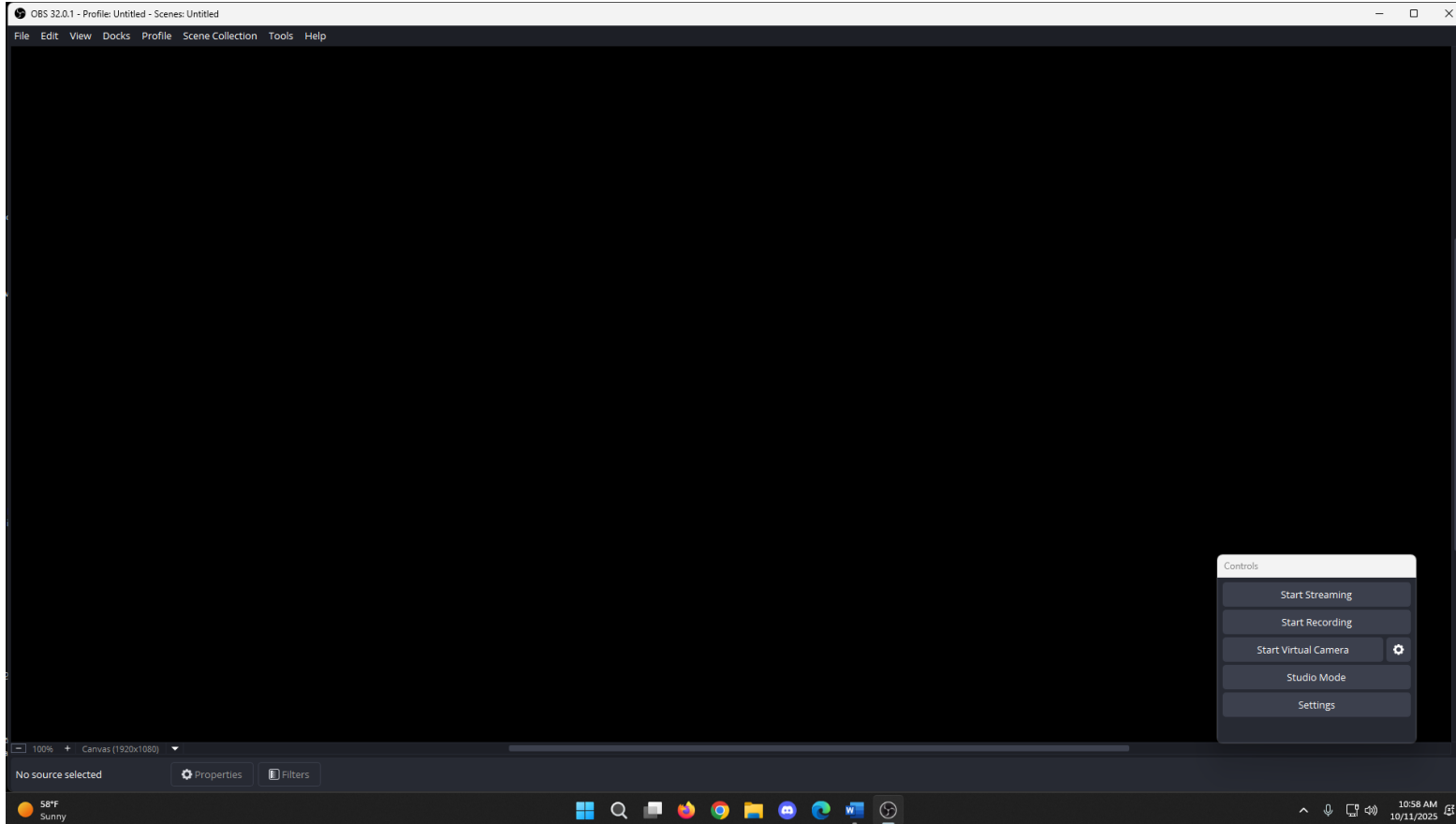


## Using AquaCam With OBS For Recording

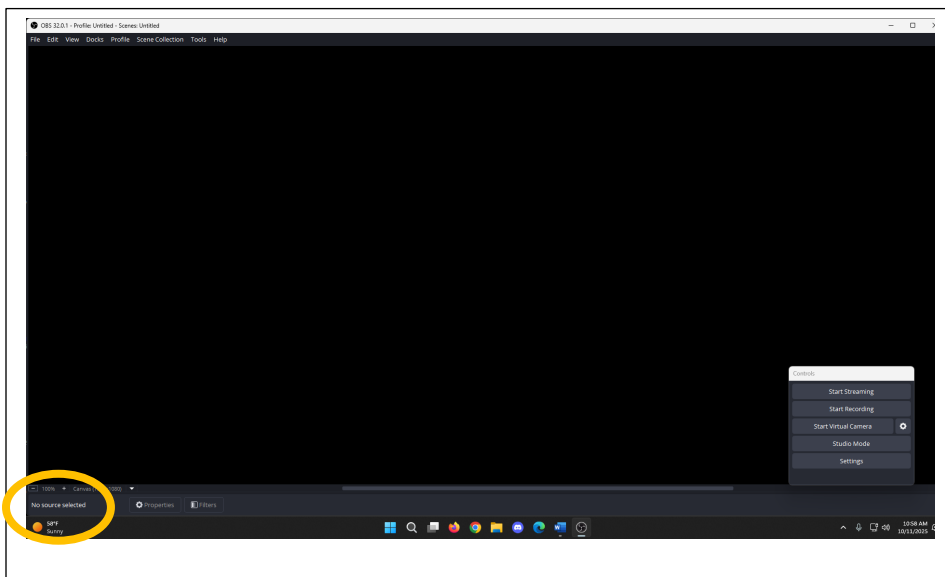
These are the instructions for using your camera with the OBS software for the first time at home, and then at the pool. If your AquaCam is not plugged into your computer, do so now. Then open OBS if it is not already open. (The NearSync program must already be closed.) Your screen should look something like this because all the OBS settings have been saved.

**WAIT between 3 and 20 SECONDS FOR THE PROGRAM TO SEARCH FOR VIDEO SIGNAL!** It may or may not appear, depending on your hardware or processor.

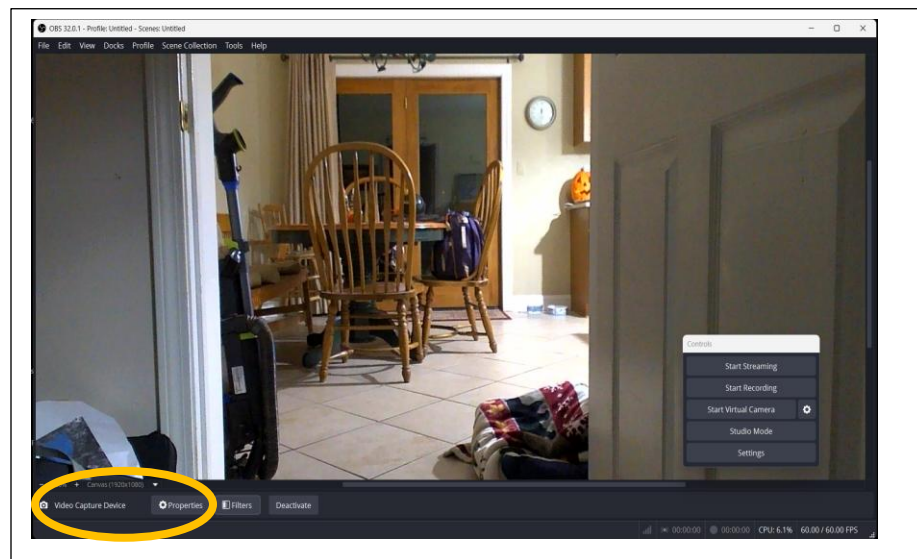


After 20 seconds, whether you see a picture or not, look at the bottom left hand corner of your OBS screen. It will say one of two things .....

**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.

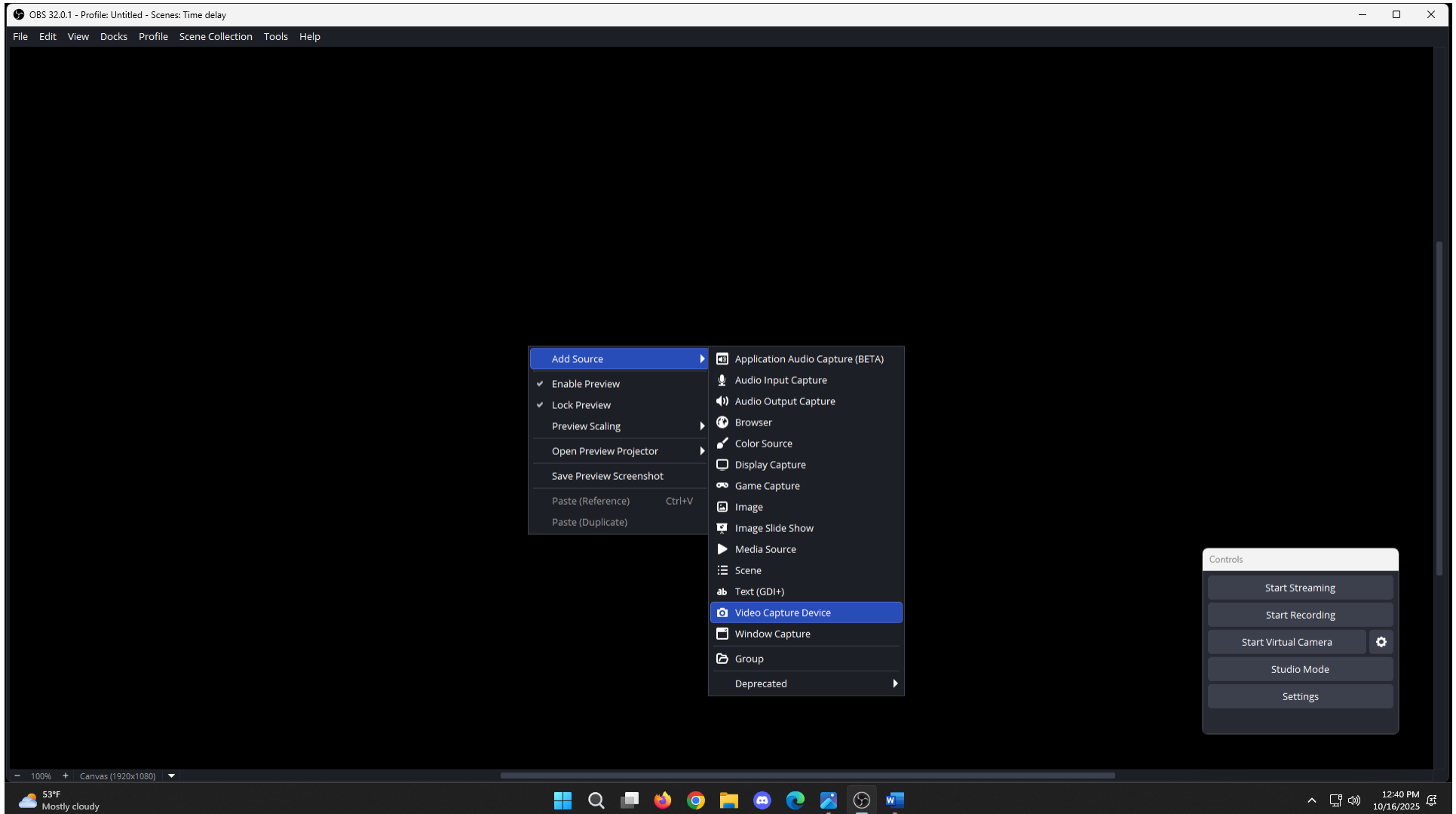
If you **don't** see video and get **“No source selected”** at the bottom, follow the instructions **A** on the next two pages.

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!**

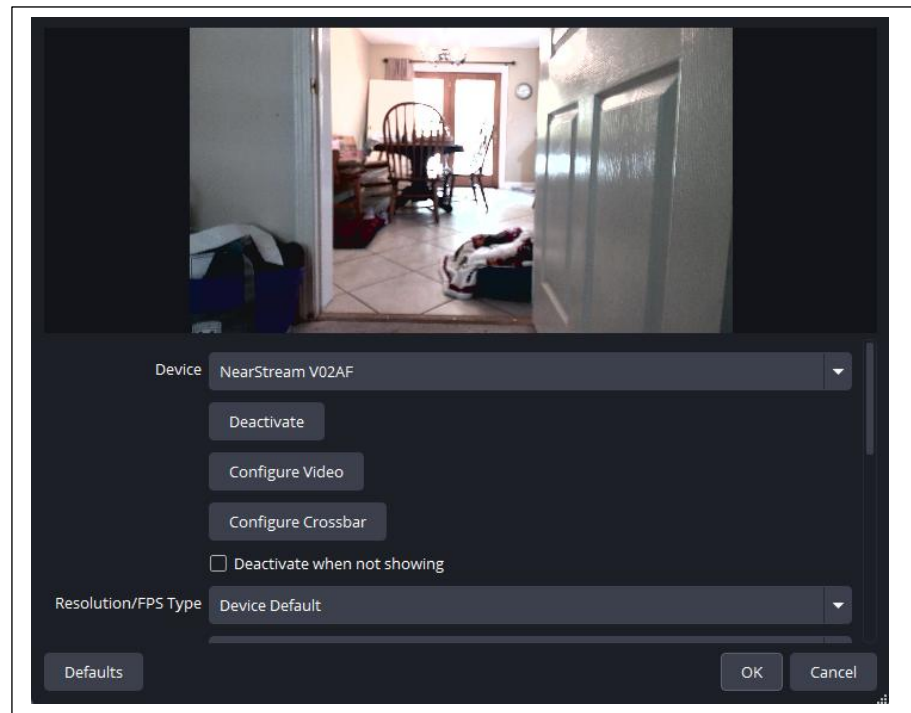
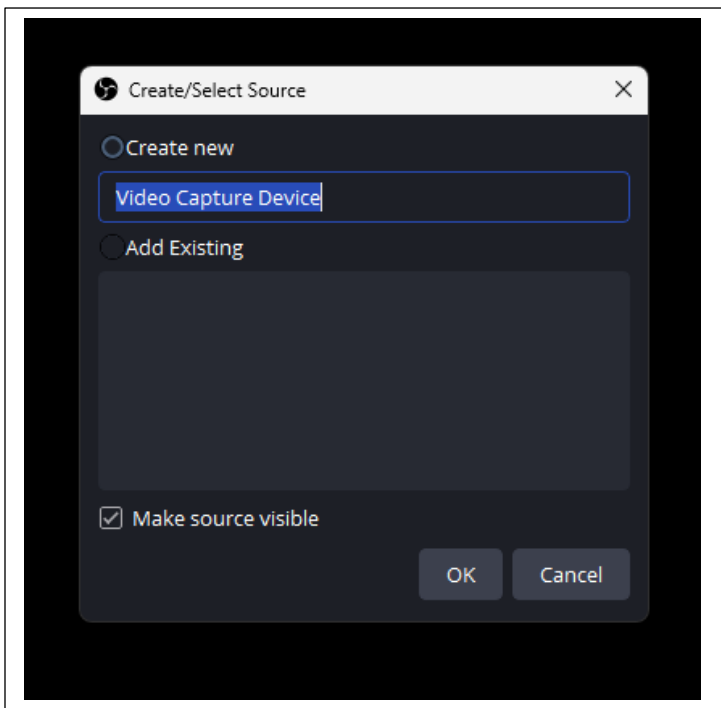


A

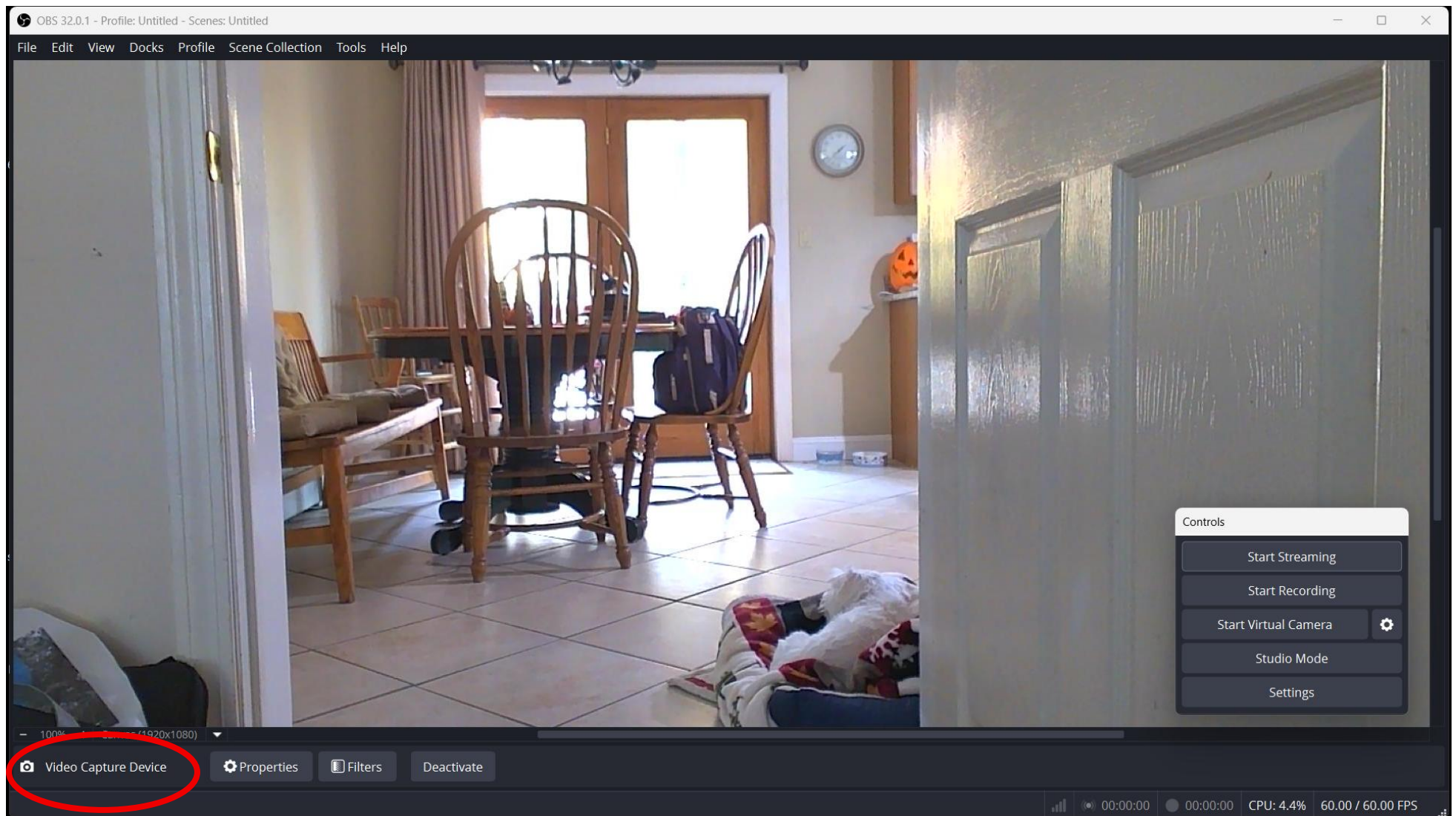
If video now appears, the very bottom left will now show “Video Capture Device” or “No source selected”. You can now skip to the next page.

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 label. Select **OK**. The bottom left will now say “Video Capture Device”. If the “Properties” window (below right) appears in the center, you will see that it says the Device is called “Nearstream VO2AF”. This is the same as “Video Capture Device”. It is just how the computer names the device. **Click OK**, not Cancel.



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. 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.

**Out of Focus:** During initial setup this occasionally happens. Turn OBS **OFF**. Open the NearSync program. Wait a few seconds for the options to load.

Open the **Device Settings** window and your camera image appears with adjustments for Field of View (FOV), AutoFocus, and Resolution. **Turn ON** AutoFocus, point camera to an object 15 feet away, let it focus, then turn it off. You may make those **other** adjustments when you get to the pool, but focus is most important now.

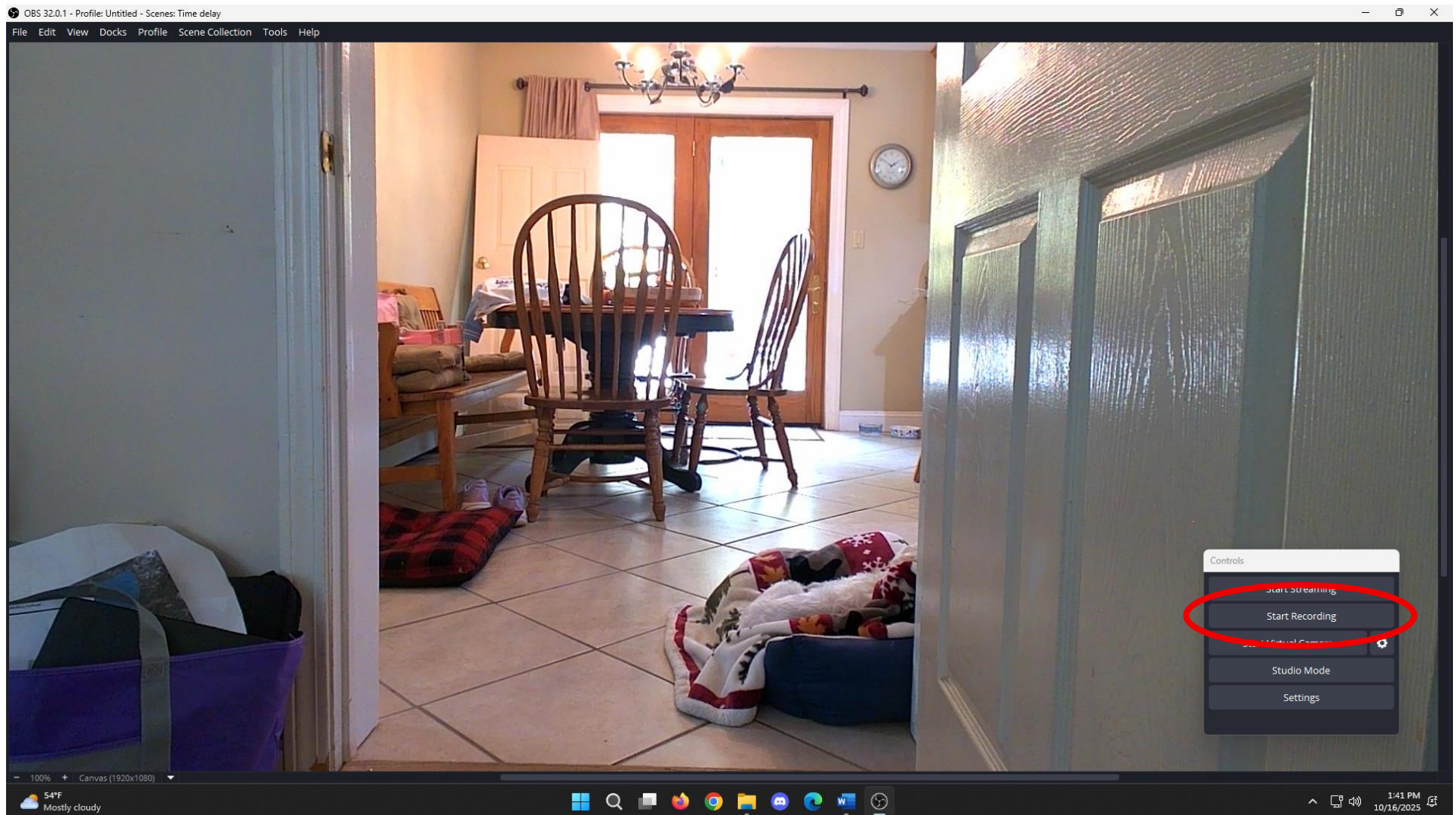
Now open the **Video Settings** window and your camera image appears with adjustments for Saturation, Brightness, Contrast and Hue with the AquaCam in the water. Keep the default options for now. You will adjust them when you use it in the pool for the first time.

Check that the Auto White Balance ON and make sure the Frequency is set to 60 if you are in the United States. (50 if you are in a country with PAL format.)

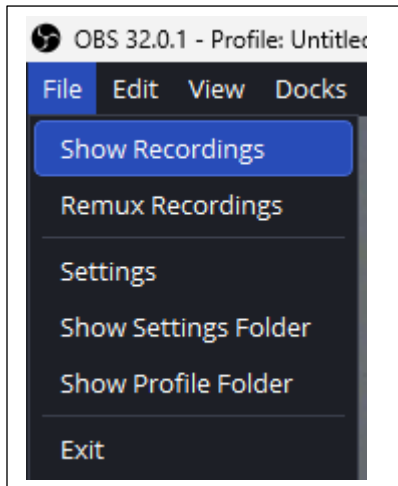
Before you close the NearSync program, make sure it is on the **Device** or **Video Settings** window, where the video is showing. Then close the program at the upper right and click **“Confirm”**.

**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”.

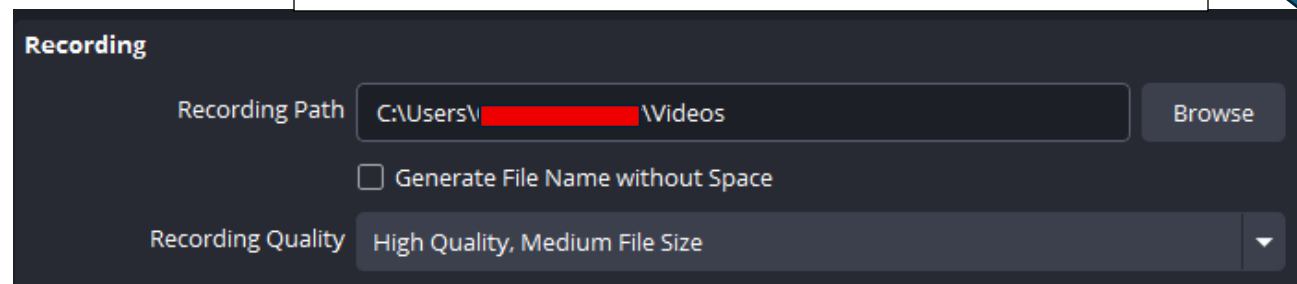
Now let's test record a video. Click on **“Start Recording”**, let it record for a few seconds. Shake the camera or wave your hand in front of it. Then press **“Stop Recording”**. The video is automatically saved.



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.



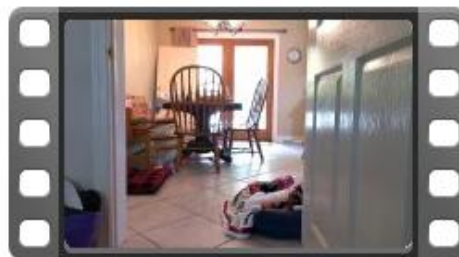
You already set this up earlier.



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

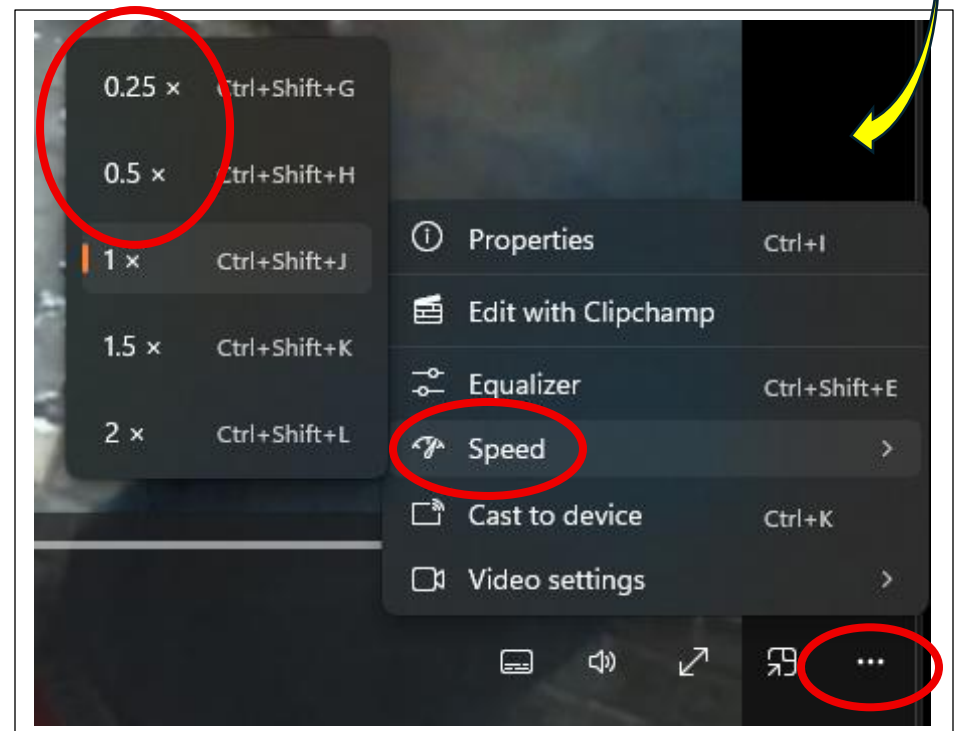
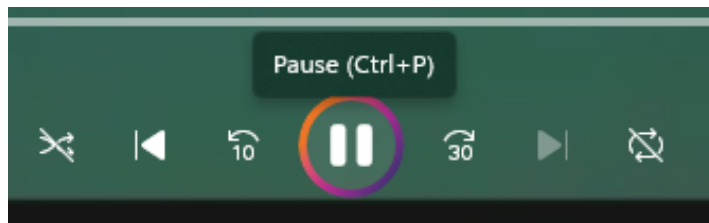
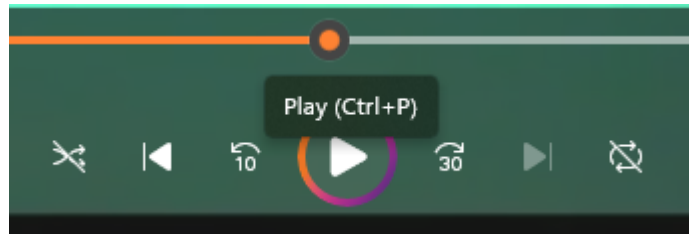


2025-10-16 14-00-23.mp4



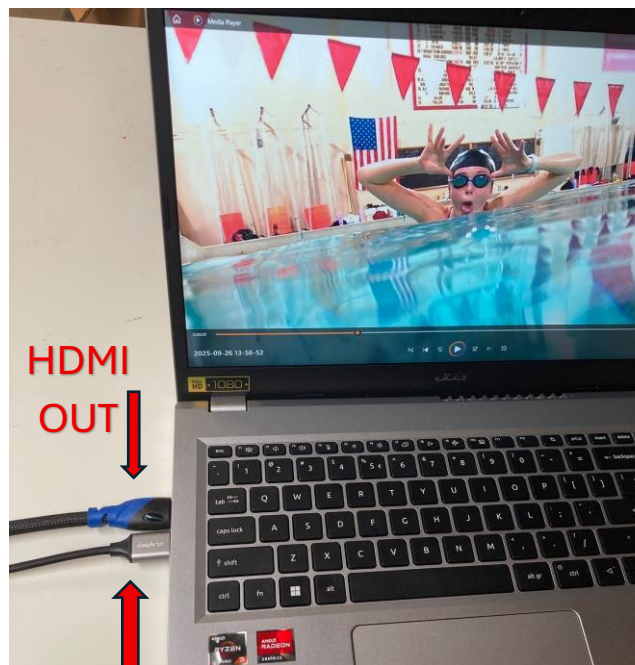
Your files are in .mp4 format and can be played back on Windows **Media Player**. Select a file and right-click it. Select “**Open with**” and pick **Media Player**. At the bottom right of the window are three dots (•••) Click on those and the following window appears when you hover over **Speed**.

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.

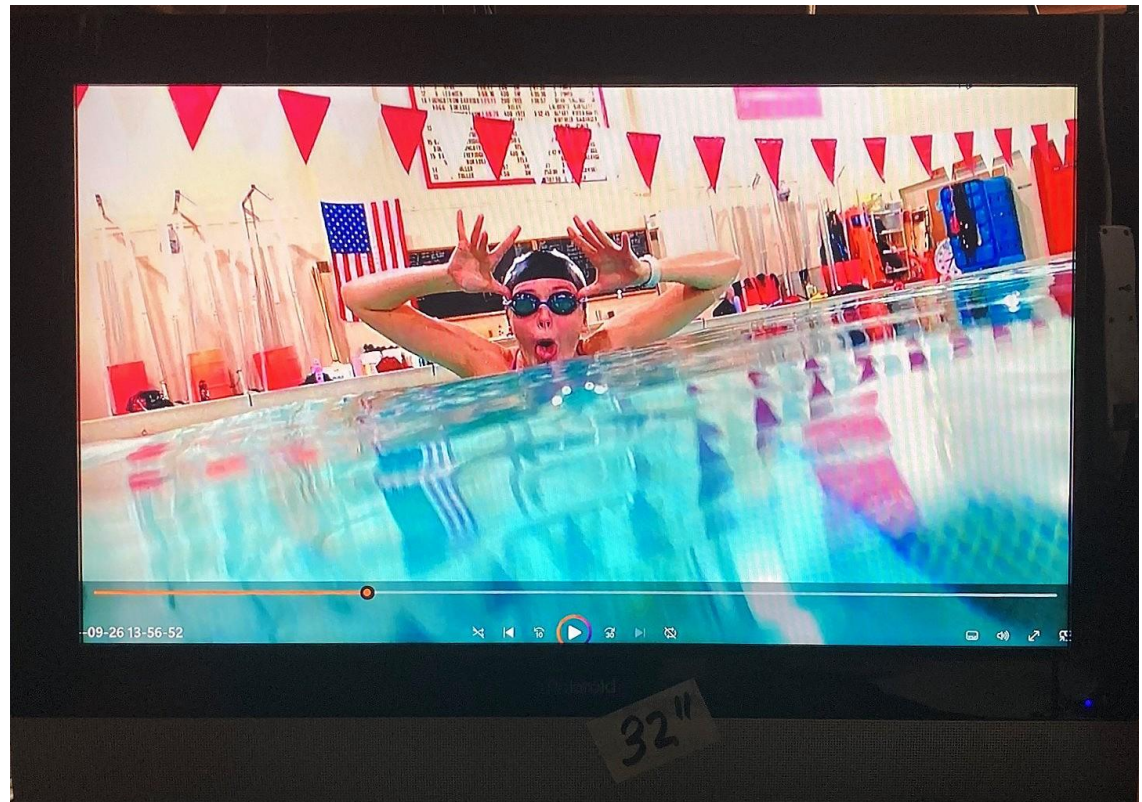


## PLAYING BACK ON A LARGE SCREEN TV

Now record (then stop) a video that is about 20 to 30 seconds long where you slowly move the camera around. You can play this back on a large TV if you have an HDMI cable. 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.



AquaCam IN



When done testing, or anytime you finish recording swimmers, close the OBS program FIRST, then unplug the AquaCam.

Since you have files saved on your computer, you can send them via 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 as well as stirring their creativity.**

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

# AquaCam USE AT THE POOL

When you bring your camera to the pool you ALWAYS want to take 30 to 60 seconds to adjust the camera using NearSync first to ensure good focus, and adjust for your pool lighting, water clarity, and (perhaps) Field of View (FOV).

Plug the camera in, (wait a few seconds) then open **JUST** the NearSync program. (**Not** OBS yet.) It may take a few seconds for the VO2AF menu to become clickable. When it does, click it and the settings menu appears.

Now open the **Device Settings** window and your camera image appears with adjustments for Field of View (FOV) depending on how close the swimmers will be to you. 60 is the most common, but a wider angle (like 75 or 90) may be better for swimmers who are very close to the camera, such as recording swimmers (or turns) in a lane next to a wall. You may want to test it in the pool now with side video and end-lane video .... where the swimmer is coming straight at the camera.

Also, check the focus again. Setting AutoFocus to an object 15 feet away (then turning it off) sets a clear focus for anything from 3 feet to infinity. You can experiment with AutoFocus ON at this time (with just the camera and the NearSync program) but you aren't recording. We have found that AutoFocus sometimes can't keep up with very fast swimmers coming directly toward the camera at the end of a lane. With slower, or younger, AG swimmers it is fine. (You can also play with the higher 2K resolution option but we have found it doesn't make much difference unless you're playing back on a very large (and expensive) video screen.)



Now open the **Video Settings** window and your camera image appears with adjustments for Saturation, Brightness, Contrast and Hue with the AquaCam in the water. You should get good video with the default (middle) settings but tweaking them can get you better results depending on pool lighting and water clarity. Play with the settings in different configurations and you should find a good one. Make note of the numbers of each setting so you can revert to them if needed. This is helpful when you practice in two different pools, or an indoor and outdoor.

Turn the Auto White Balance ON and make sure the Frequency is still set to 60 if you are in the United States. (50 if you are in a country with PAL format.) If Auto White Balance kicks off during use, let it. The camera is saying it doesn't need it.

Before you close the NearSync program, make sure it is on the **Device** or **Video Settings** window, where the video is showing. Then close the program at the upper right and click **“Confirm”**.

**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 its 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 15 seconds before opening the NearSync program. Make adjustments. Then **close** NearSync with the “Device” or “Video Settings” window showing. Now **open OBS**, wait 15 to 20 more seconds for OBS to recognize the camera. This is a function of the processor speed of your hardware. The faster the processor, the quicker the video will appear.

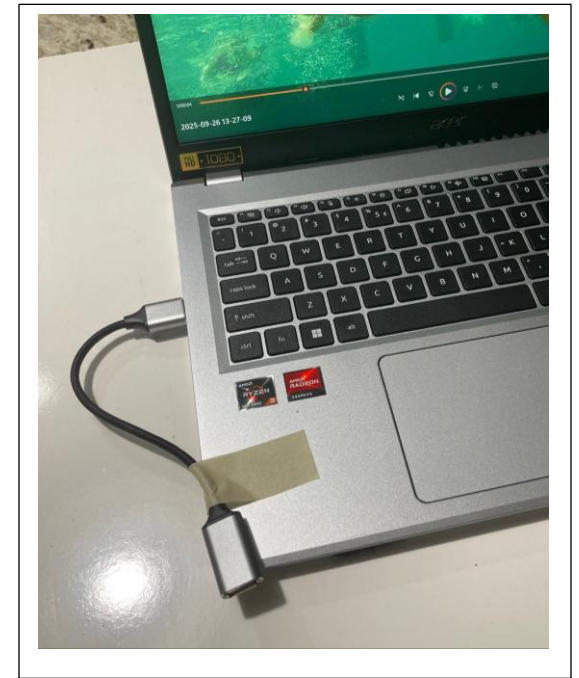
The only other issue we have found is the following.

## **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 include a shorter, thinner 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.

(207) 332-8664