

HD **AquaCam** INSTRUCTIONS AND TIPS FOR USE

Contents of your **AquaCam** kit:



AquaCam video unit
with 15 foot USB
cable.



Pole adaptor
(with holes for clip)
If no pool brush pole.

Easy step-by-step instructions for loading all the video software are at

<https://swimcoaching.com/AquaCam-Instructions>

This page is not accessible through the regular web site. Please follow the instructions in the proper order.

Important notes before you get started:

Software Programs: There are two included (downloadable) programs that allow you to use the superior definition of the HD AquaCam to its fullest.

The first is the **NearSync program** for your AquaCam camera. It allows you to select between 1080p at 60 Frames per Second or 2K at 30 frames per second. It also allows you to pick three different Fields of View (FOV). 60 degrees is the normal selection and 75 or 90 is for recording swimmers who are very close to the camera, such as tracking shots in an end lane. You can also select Auto White Balance and adjust other video controls for your pool lighting and water clarity.

The second program is **OBS Studio (Open Broadcaster Software)**.

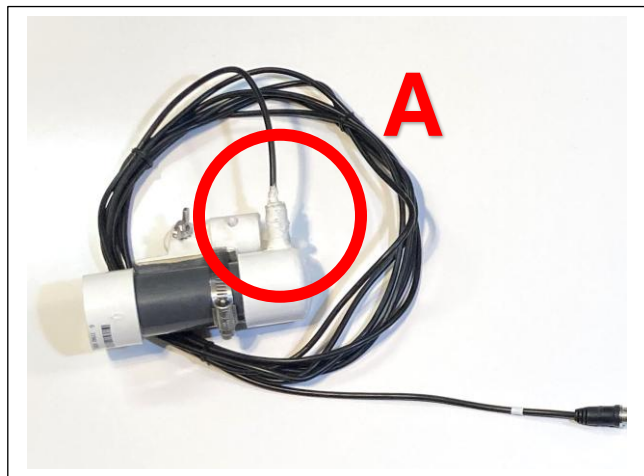
OBS Studio is a powerful, free, and open-source application for video recording and live streaming that is also excellent for creating live video delays (AKA Time Delay). Full instructions are on the web page link at the top. Please follow those directions carefully as OBS has features that professional studios use and clicking the wrong options accidentally can cause glitches and confusion. Coaches will use less than 10% of what the program is capable of, but that 10% is awesome.

Time Delay Option: This is now included at no extra cost in the OBS program. Full instructions are on the instruction website above.

Laptop Harness: If you ordered this option, it may arrive in a separate USPS mailing box with its own instructions. This allows one of your hands to always be free to stop/start recording or gesture to swimmers while the other holds the AquaCam pole.

Initial Testing: We recommend you follow the set-up instructions on the web site first, at home, and become comfortable with the features as you see the displayed video. Practice closing the OBS program and disconnecting the AquaCam, then turning it on again and plugging it back in. You can keep the downloaded instructions in the background of the computer and refer to them as needed. When you become comfortable with opening the program and connecting the AquaCam, you can bring it to the pool and test it there, making video clarity adjustments through the NearSync program if needed. The same procedure should be followed when you want to try the time delay.

The gray, rubber-coated cable brace (A) coming from the base of both our SD and HD AquaCams is for strain relief of the cable, not for water-proofing. (Your AquaCam is sealed from inside.) But this area should not be bent or pinched during storage. A loose coil (as shown) is recommended. If the wire shown in the circle is constantly stressed over time, it can weaken the rubber cable allowing water to potentially enter the wires and corrode them. Water will not get into the AquaCam but the video signal may begin to show static if the wire(s) are compromised.



If you need extra length to reach a TV on deck for time delay, you can purchase an extension cable on Amazon for under \$15. It should be a USB-A type 3 cable, male to female. Analog video (SD) can travel long distances without signal loss but digital signals start losing quality after 30 to 50 feet. Those connection plugs, although they will be out of the water, are **not** meant to get wet. If they lay on the deck, please keep them away from pools of water by setting them on a kickboard and cover them with a towel. Check them after use for moisture or water. Otherwise, corrosion may form inside.

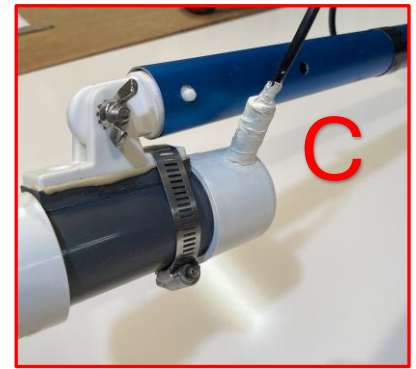
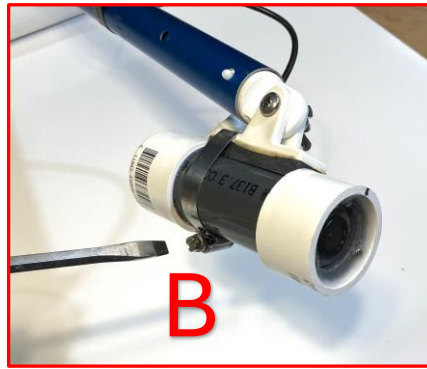
The AquaCam can be connected to any standard pool brush pole using the press clips. If you do not have access to a brush pole, the included adaptor can be screwed or taped to a pole or wooden broom handle. The 15 foot cable length allows for deeper submersion or for laptop (or monitor) placement away from the pool edge.



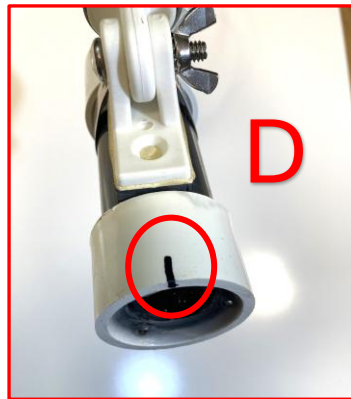
We recommend you practice following the swimmers with the camera (keeping them centered in the frame) before you do any actual recording. Twisting the pole with your wrist rather than walking along to follow the swimmer can help avoid any mishaps. Watching the swimmer on your screen while walking can be a distraction, which can lead to walking into the pool with your laptop!

Twisting a thin pole can make your “hand twist” fast and jerky. Tape a piece of pool noodle onto the pole helps slow the “twist” and smooths out the video.

Both the SD and HD AquaCams have a swivel pole-connector that loosens and tightens with a thumb screw (**A**) so you can adjust your forward angle. The side angle can be adjusted by loosening the stainless-steel hose-clamp (**B**) that holds the swivel-piece to the AquaCam body. The current (standard) clamp position holds the camera in perfect level position when the pole is held straight up and down vertically.



The wire exit and strain relief is offset (**C**) so the pole can swivel completely backward (horizontally) if needed. Use the mark on the top of the glare shield (**D**) as a rough guide to keep the camera leveled when prepping for different positions. Hand tighten and only apply the clamp on the back side of the swivel base (**E**), not the front side (close to the lens cover).



When using with a laptop or tablet, the USB input is susceptible to twisting and movement. Protect the sensitive input by keeping it from moving with tape or by being extra careful.



Over 30 years' experience using video recording around pools has revealed common errors and misuse that can occur.

Please instruct anyone using this product of the following procedures! We recommend printing this page separately and including it where you store your AquaCam.

This is a sensitive electronics product that, although sealed to be waterproof, is still susceptible to bangs and jolts. Do not use the pole and unit as a “walking stick”. Take care not to bang the unit while moving the pole.

The cylindrical black or white cover attached over the front lens area is **NOT** removable. It is there to protect the lens face from scratches.

The last couple feet of the cable (where the USB plug is) should be kept dry during use.

If you are walking or moving with the AquaCam while recording, be aware of your surroundings. Keeping your eye on the screen instead of where you are going can lead to walking into the pool with your laptop or monitor, which are not as waterproof as the AquaCam:)

Do not use any cleaning product on the lens cover. Water stains can be removed with a soft cloth and greasy smears removed with a mild soap and rinse.

Finally (as shown at right), coil the cable loosely when storing the AquaCam. It may be tempting to wind or coil the wires tightly to fit the unit in a small space but this can lead to small cracks in the waterproof wire over time. This may lead to interior wire corrosion and a “flickering” image.

