How to Film Your Swimming Underwater

This Guide covers the essential steps for filming your swimming, ready to upload the Glide swimming analysis and coaching app. In this guide, we include essential steps on:

- setting up your camera
- different filming methods
- important safety considerations

You will learn how to position your camera correctly, keep it steady, and ensure the best framing for clear footage. Additionally, we will explore camera types, waterproof housings, and practical tips to get the most out of your recordings.

Set Up

Camera

A camera that can film underwater is essential. This can include action cameras, waterproof cameras, or smartphones in water-tight casings. If you have advanced settings on your camera, you can experiment with frame rates, making sure they are above 60 frames per second (fps) for smoother playback. If you are using a smartphone, ensure it is enclosed in a reliable waterproof case before submerging it.

Camera Mounts

Using a camera mount is beneficial for attaching your camera to a pole or selfie stick. A pole-mounted setup allows for a steady, controlled shot while following the swimmer. Selfie sticks can also be used effectively, especially when extended underwater. A secure mount prevents the camera from tilting or shifting due to water resistance. Below, we discuss different filming methods, including how mounts can help enhance stability and video quality.

The Filmer

Having a friend film you is the best option because they can move the camera to match your swimming pace and ensure the camera stays level. A friend can adjust the camera angle to capture your entire swimming stroke and maintain the best filming angle. This also allows the swimmer to focus entirely on their stroke without worrying about equipment positioning. Below, we also provide guidance on how to film without a friend.

Filming

To get the most of the Glide swimming app ensure you film the swimmer side on.

Camera Positioning

The camera must be fully submerged and positioned side-on to the swimmer. This perspective provides the best view of technique, the Glide app can effectively assess your stroke mechanics.

Keeping the Camera Level

Water resistance can cause the camera to tilt as it moves through the water. The person filming should hold the camera firmly while staying mobile to counteract this resistance. A steady hand and controlled movement help maintain a level shot, ensuring consistent footage accurately capturing the swimmer's technique.

Capturing the Entire Swimmer

Keep the camera underwater whilst filming the swimmer. The swimmer should be far enough from the camera to fit entirely within the frame but not so far that details become difficult to see. This is particularly important in open water, where visibility may be limited. If necessary, footage can be cropped later to make the swimmer appear closer.

Framing the Swimmer

The swimmer should be centered in the footage and avoid capturing too much of the water surface. You want the swimmer in the center of the screen.

Methods

When using a mounted pole or selfie stick, follow the swimmer's hip line to maintain a consistent angle. Move in sync with the swimmer's pace and ensure the camera remains level despite water resistance. Walk smoothly along the pool deck, staying stable and safe while filming. Aim to capture at least four full strokes, 4 strokes from each arm, to get a balanced view of the stroke cycle.

Using a Pole and Mount

This is the preferred method for most specialist coaches. Almost any type of pole can be used, including hardware store poles or broom handles. Mount the camera near the bottom of the pole, adjusting the angle to keep the swimmer centered. Most mounts allow for angle adjustments, which can be helpful for holding the pole at a comfortable angle whilst keeping the swimmer centered.

Selfie Stick

When using a selfie stick, extend it fully and position the camera as described above. In some cases, the camera may need to be upside down while filming to maintain the best filming angle. Many cameras will automatically correct the orientation, but footage can also be rotated afterwards on the camera or desktop.

Friend Swimming in the Water

A friend can swim alongside the swimmer, holding the camera steady while keeping the swimmer in frame. You can film while swimming backward or side-on to maintain stability. Practising with the camera before filming is recommended. Using fins can improve stability and help keep pace with the swimmer. While filming the swimmer side, you can hold a kickboard flotation device with your leading arm to help maintain balance and control.

Self-Filming

If filming alone, place the camera in a stable position underwater, such as on a pool ledge or step. A suction mount can attach the camera to the pool wall. Some swimmers use a selfie stick that is laid extended on the pool deck, with the camera angled underwater. If you try this method, ensure the camera is at an angled level.

When self-filming, ensure the footage does not capture too much of the water surface. You may need to swim further from the camera to keep your full stroke in the frame. Footage can always be cropped later for better framing.

Using Your Phone or Camera Underwater

If your camera is not waterproof, use a water-tight housing designed for underwater filming. This is a cost-effective solution for underwater filming. When purchasing a waterproof case, read product reviews to ensure reliability. The last thing you want is water damage to your camera or phone.

Safety

Your safety is the top priority. Before filming, check for obstacles in the pool or open water. Choose a safe filming location and wear appropriate footwear or swimwear. Be cautious of your surroundings, especially when using a mounted pole or selfie stick. If using a short selfie stick, avoid crouching excessively to prevent instability. If filming whilst swimming, ensure the filmer stays within their swimming ability and never enter the water if they feel uncomfortable.

Tips

- Film multiple takes to get the best footage.
- Practice capturing both short and long distances to compare filming technique.
- Review footage after each take to identify areas for improvement.
- If possible, have a backup setup to experiment with different filming methods.
- Most importantly, enjoy the process and have lots of fun.

Great Camera Filming Underwater

- GoPro HERO series
- DJI Osmo Action
- Olympus Tough TG series
- Insta360 X3 (for 360-degree underwater filming)
- Waterproof compact cameras
- Smartphones with appropriate waterproof casings

Camera and Phone Waterproof Housings Examples

- GoPro waterproof housing
- DJI Osmo Action housing
- Universal smartphone waterproof pouches
- Dedicated underwater camera cases (e.g., SeaFrogs, Kraken Sports)
- Dive housings for professional cameras (e.g., Nauticam, Ikelite)