

Key Cinematic Drone and Camera Movements

Here is a cheatsheet of key cinematic drone and camera movements, along with essential tips, for filming a landmark with a drone.

- **Basic Orbit / Partial Orbit**
 - **Purpose:** Allows you to see a couple of different angles and adds motion to the shot. Motion helps footage look better.
 - **Execution:** Fly the manoeuvre faster in person rather than speeding up footage in post-production.
 - **Note:** Avoid excessive orbiting as it doesn't utilise the drone to its full extent; aim for variety.
- **Closer Orbit (with Parallax Effect)**
 - **Purpose:** Get a closer shot of interesting features and create a parallax effect between the foreground and background.
 - **Execution:** Fly in close to a feature, match sideways movement to yaw, and orbit in a direction that keeps the subject on the sun-facing side.
 - **Enhancement:** Particularly effective if you have a drone with a zoom lens (e.g., Air3 or A3S) for good image compression.
- **Rising Up (from Top-Down Perspective)**
 - **Purpose:** Achieve a cinematic top-down shot that transitions upwards.
 - **Execution:** Start high above the subject with a top-down view and rise up. You can include forwards or backwards movement if desired.
- **Descending Spin (Top-Down Movement)**
 - **Purpose:** Introduce two dimensions of movement to make a top-down shot more dynamic and interesting.
 - **Execution:** Start recording, slowly **descend** and input **yaw** (rotate) simultaneously.
 - **Tip:** If unsure how to get directly above your starting point, practice this move in reverse.
- **The Three Distance Rule (Far, Medium, Close-up Shots)**
 - **Overall Purpose:** To create a diverse range of shots by capturing the subject from varying distances.
 - **Far Away Shot (Approaching the Subject)**
 - **Purpose:** Provides context of the surrounding area and what's happening around the subject, giving a bigger picture.
 - **Execution:** Position the drone far away from the subject, start recording, frame the shot, and fly towards the subject.
 - **Medium Shot (Transitional / Arrival Shot)**
 - **Purpose:** Can serve as a nice transitional shot, making it look like you are arriving at the location.
 - **Execution:** Start with the gimbal slightly down, then fly forwards, descend, and rotate the gimbal up.

- **Leading Lines Shot**
 - **Purpose:** Utilise natural pathways or features as leading lines to guide the viewer's eye and provide more context of the surrounding area.
 - **Execution:**
 - **Simple:** Tilt the gimbal down and fly along the leading lines.
 - **Enhanced:** Start the gimbal slightly up, fly forward slowly, and gradually tilt the gimbal down as you advance.
- **Flying Through an Opening / Gate**
 - **Purpose:** Create a dynamic and immersive shot by passing through an architectural feature or natural opening.
 - **Execution:** Line up the drone, descend for precise framing, turn off obstacle avoidance (with caution), switch to **sport mode**, and fly forwards gently, maintaining a straight path. Motion blur from surrounding elements like trees can enhance the shot.
- **Close-up Feature Orbit**
 - **Purpose:** Focus on specific details and features of the landmark, providing a closer, more detailed perspective.
 - **Execution:** Fly close to an interesting feature (e.g., the top section), switch to **normal mode** for precision, and perform a controlled orbit around it.
- **Rearwards Reveal**
 - **Purpose:** Gradually reveal the subject as the drone flies backwards.
 - **Execution:** Position the drone past the subject, spin around, establish correct height (often lower), fly backwards, tilt the gimbal down, and then push it up as you come over the centre of the subject.
- **Foreground Shot (Low with Trees / Objects)**
 - **Purpose:** Add depth and dynamic movement to footage by incorporating foreground elements.
 - **Execution:** Get the drone low, look up so that trees or other elements act as foreground, and fly along, potentially with a slight orbit. Maintain a slow, controlled movement near treetops for better framing.
- **Low Fast Shot**
 - **Purpose:** Create an "epic" and dynamic feeling by flying quickly at a low altitude.
 - **Execution:** Set up the drone low and fly fast, optionally adding an upwards gimbal rotation for extra dynamism.
- **Flying Over Treetops (Foreground Variation)**
 - **Purpose:** Another way to add foreground to footage, especially if flying low and fast is uncomfortable.
 - **Execution:** Fly slowly over the top of trees, allowing them to frame the shot and add interest.

- **Upward Reveal (Vertical Ascent)**
 - **Purpose:** Create a sense of height and the illusion that the subject is very tall.
 - **Execution:** Position the drone close to a vertical feature, point the gimbal up, and slowly rise upwards, gradually tilting the gimbal down as you ascend.

General Filming Principles and Tips

- **Lighting and Positioning:**
 - Always film on the **sun-facing side** of the subject to ensure details are visible and avoid harsh shadows. Flying on the shadow side will result in a blown-out sky and lack of detail.
 - Consider wind conditions and position yourself accordingly.
- **Camera Settings (Manual Mode Recommended)**
 - **Manual Mode:** Shoot completely in manual mode.
 - **ISO:** Generally 100. Can be increased (e.g., to 200 or 400) to balance exposure in softer or changing light conditions.
 - **Shutter Speed:** Locked at 1/60 for 4K 30fps footage, adhering to the **180° shutter rule** (shutter speed double the frame rate).
 - **Colour Profile:** Use Dlogm for maximum colour information and best dynamic range.
 - **White Balance:** Lock at 5,500 Kelvin for midday shooting.
 - **Exposure:** Easier to lift exposure in post-production than to bring it down.
- **Shot Variety and Planning:**
 - **Create a diverse variety of shots** to fully utilise the drone's capabilities and avoid repetitive footage.
 - **Film more than you need:** Always capture extra footage; you can't use what you haven't filmed. Multiple takes are encouraged.
 - **Focus on features:** Go beyond wide shots to capture close-up details of the subject.
 - **Mix footage:** Combine drone footage with ground footage for a comprehensive view.
- **Movement and Framing:**
 - **Add multiple dimensions of movement** to make shots more interesting and dynamic.
 - **Horizon placement:** Generally, aim to keep the horizon on the lower grid line for framing.
 - **Gimbal control:** Smoothly control gimbal movements for professional-looking shots.
 - **Precision vs. Speed:** Use **normal mode** for precision and **sport mode** for faster, more dynamic movements.
- **Environmental Awareness:**
 - Be aware of surroundings like kites or people to ensure safety.
 - Obstacle avoidance sensors can be helpful but may need to be turned off for certain shots (use with extreme caution).
 - Be prepared for unpredictable weather conditions.