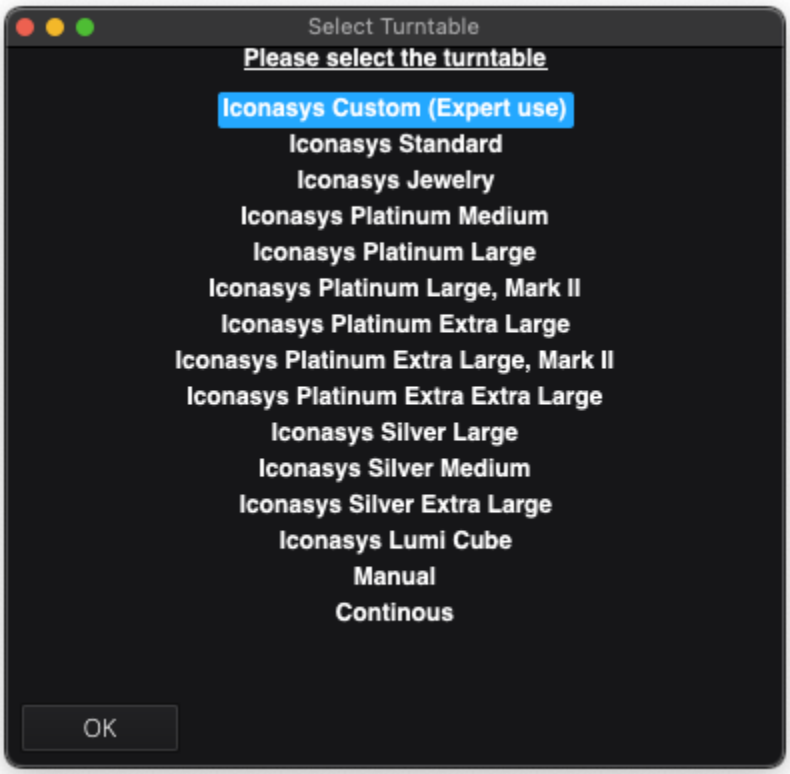
Calibrate Turntables

Whether you're using a Pictomic or Iconasys-branded turntable, you may occasionally need to perform a calibration. Minor variations in the manufacturing process—such as differences in gear size—can cause slight under- or over-rotation during a full turn. This article outlines the steps required to precisely calibrate your turntable for accurate 360° rotations.

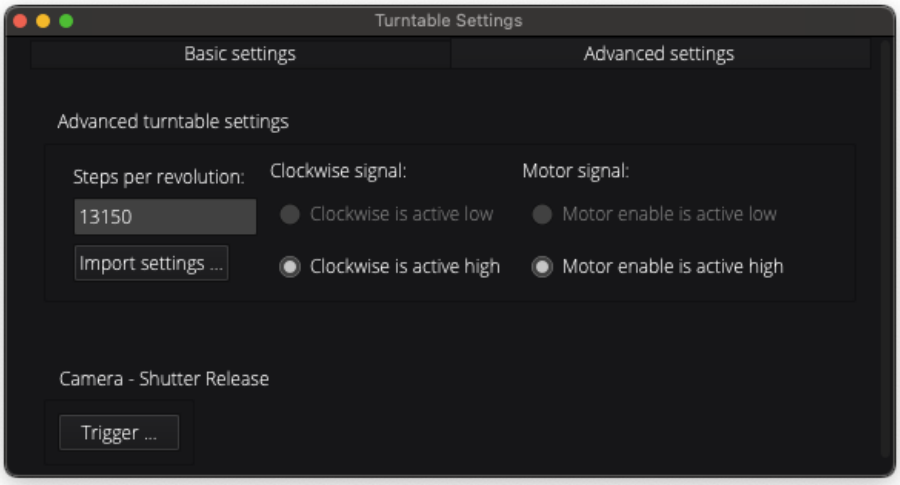
Step-by-Step Guide

To calibrate your turntable you will need to select the **Iconasys Custom (Expert use)** turntable and set the new number of steps. Here are the step by step details:

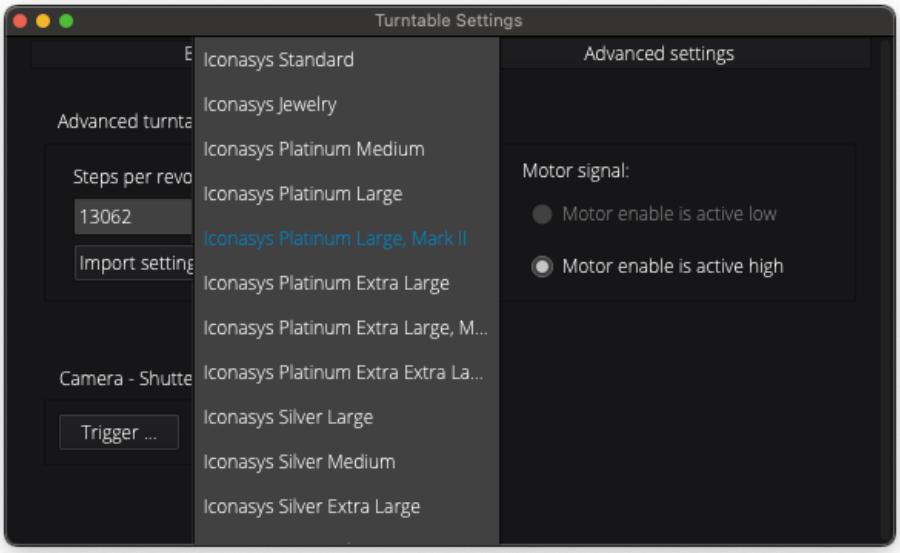
1. In the upper right corner of Visere Captura click on the gearbox then click **Select turntable.**
2. Choose the **Iconasys Custom (Expert use)** then click **OK**:



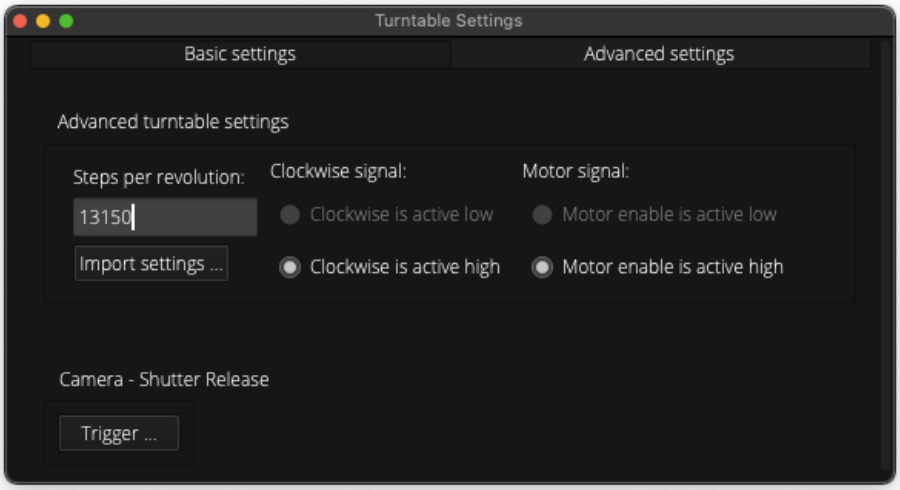
3. Click on the **Control Turntable** button on the left side of Visere Captura.
4. Click on the **Advanced settings** tab of the top of the Turntable Settings:



5. Click on the **Import settings ...** to import the default settings for the turntable you are using. For example Platinum Large Mark II



6. Set the number of new steps for a full turn. In all cases you should only change the settings for the number of steps, as these are the only things that can be off over time, or you may require more precision for your own table.



7. Once complete, go back to your **Basic settings.**

In most cases, the most challenging part of calibration is determining the correct number of steps for a full rotation. Sometimes, our technical support team may have already calculated this value for your specific turntable prior to shipment. If so, you should have received that information via email from our support team. However, if you prefer to determine the correct number of steps yourself, please continue to the next section for step-by-step instructions.

Determining the Correct Number of Steps

To determine the precise number of steps your turntable requires for a full 360° rotation, you'll need to perform a simple manual calibration. Minor variances in the gear manufacturing process can cause slight over- or under-rotation, so it's important to fine-tune accordingly. One key point: always rotate the turntable in the same direction throughout this process (either clockwise or counter-clockwise) to avoid inconsistencies caused by gear play.

1. **Mark the Start Position:**
    - Place a box of similar height next to the turntable.
    - Apply a piece of tape across both the turntable and the box.

- Cut the tape along the turntable's edge. These tape ends will serve as your alignment markers for one full rotation.

2. **Initial Rotation Test:**
    - In **Visere Captura**, go to **Control Turntable Advanced settings**, and import the settings for your turntable model.
    - Switch to **Basic settings**, and issue a full 360° rotation in one direction (e.g., **Nudge CW**).
    - If the tape ends realign perfectly, your calibration is complete.

3. **Adjust for Over-Rotation:**
    - If the turntable rotates past the alignment mark, go to **Advanced settings** and reduce the **Steps per revolution** until the rotation slightly under-shoots the mark.

4. **Fine-Tune the Under-Rotation:**
    - Note your current **Steps per revolution** value (e.g., 13000).
    - In **Advanced settings**, temporarily change the **Steps per revolution** to a small number (e.g., 10). This lets you nudge the table in small increments.
    - Switch back to **Basic settings**, and begin clicking **Nudge CW** repeatedly, counting how many clicks it takes to bring the tape ends back into perfect alignment.
    - Multiply the number of clicks by the step size (e.g., 6 clicks × 10 steps = 60 steps).
    - Add this to your original step count: 13000 + 60 = **13060**.

5. **Final Test:**
    - Return to **Advanced settings** and enter the new total **Steps per revolution** (e.g., 13060).
    - In **Basic settings**, issue another 360° rotation using **Nudge CW**.
    - Confirm that the tape marks align perfectly.

Your turntable should now be finely calibrated for precise 360° rotations.

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