May 2018

DT AutoColumn

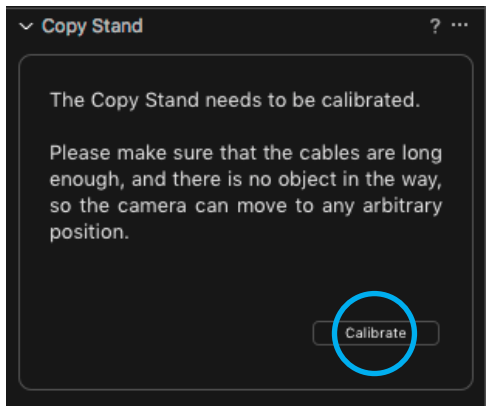
Setup and Calibration Guide for Capture One CH and Phase One / Digital Transitions Systems

PHASEONE

DIGITAL TRANSITIONS®
DIVISION OF CULTURAL HERITAGE

Calibrating

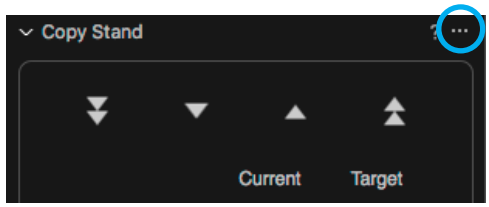
Before You Begin: During calibration the camera will move to the top of the column, and during use the camera may move to the bottom. It is critical to check that the hard safety stops are set correctly. The bottom safety stop should be set such that, even with a long lens installed, the lens cannot hit the table top or subjects placed on the table. The cabling between the computer and camera must also be installed such that camera movement will not snag the cables.



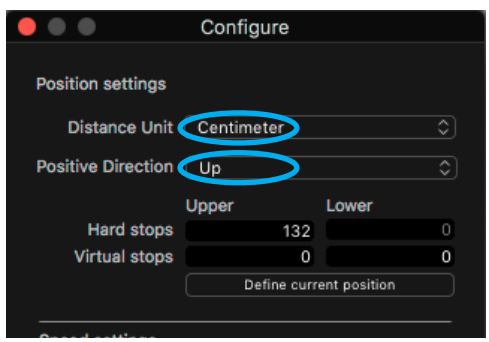
Step 1: Turn on the Auto Column (using the power switch on the AutoColumn Control Box), connect the USB cable to the computer (or to a hub connected to the computer) and open Capture One CH. In the Copy Stand tool, select “Calibrate.”

The carriage will rise to the top of the column, make contact with the safety stop, lower slightly, then gently return to the top.

Note that while moving, the Copy Stand tool converts into a large “Abort Calibration” button which can used if you need to abruptly stop for any reason.

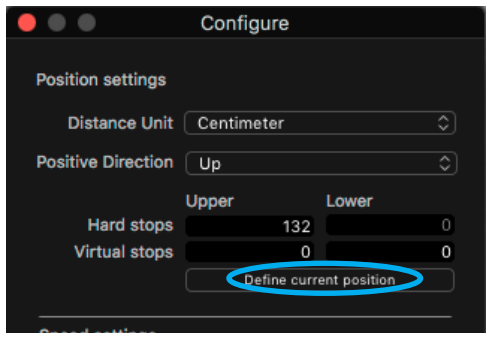


Step 2: Click the three-dot (…) icon on the top right of the Copy Stand tool and select “Configure.”

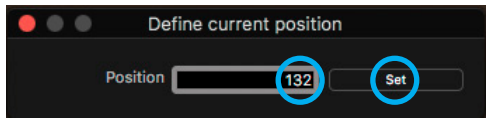


Set the Distance Unit to “Centimeter” and Positive Direction to “Up.” This matches the physical markings on the column (which are in **centimeters** and get larger as you move **up** the column.

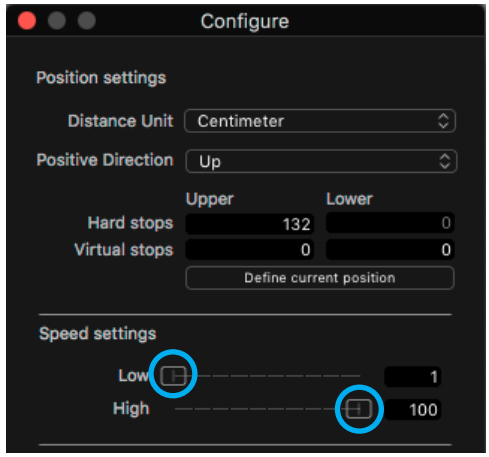
Step 3: Note the height of the carriage. The height is read where the bottom of the carriage makes contact with the ruler on the AutoColumn's face. In the example picture, the carriage height reads 132 cm.



Step 4: Click on "Define Current Position,"

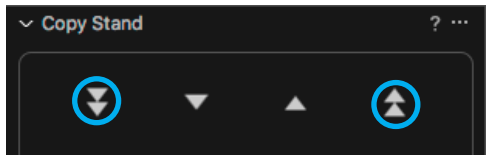


Enter the carriage height from step 3 into the dialogue box, then click "Set." In our example the carriage height is 132 cm; the answer for your system depends on where you've placed the top safety stop.



Step 5: In Speed settings set "Low" to 1 and set "High" to 100. This is partially personal taste so feel free to experiment with other settings.

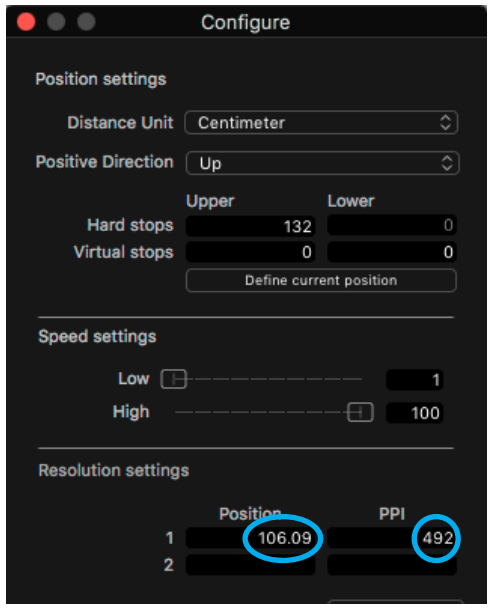
Press Done.



Step 6: Using the fast up and down arrows move the carriage down roughly a third of the way from the top. Double check that the "Current" position listed in the Copy Stand tool still matches the position of the carriage on the AutoColumn. If not, double check that you correctly completed Step 2.

Shown left is the DT Atom with a DT AutoColumn and Phase One iXG, with the camera roughly one third of the way from the top; the idea is the same with any system that uses the DT AutoColumn.

With the carriage at this position, enter live view, focus the camera, take a picture, and record the resolution (PPI) using the "Capture Resolution Ruler."



Open the Copy Stand's "Configure" tab and enter the Current Position and PPI into Field 1 under "Resolution settings."

In our example the Current Position was 106.9 and the PPI Tool showed a resolution of 492 PPI.

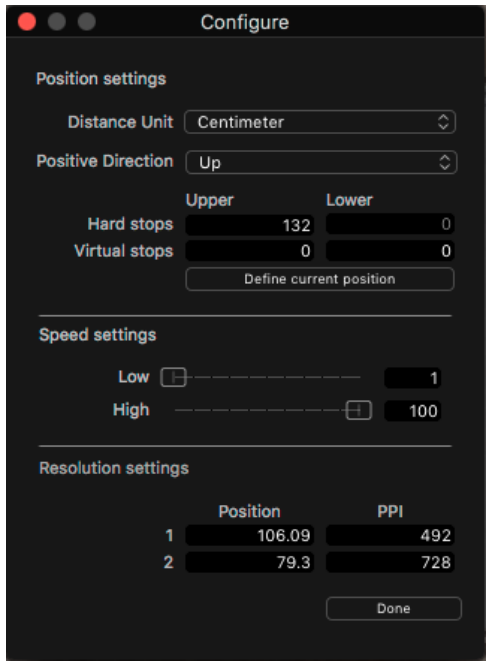
Press Done.

Step 7: Move the carriage down another third of the way, so that it's around two thirds of the way toward the bottom and repeat Step 6, entering the newly noted Position and PPI values into Field 2.

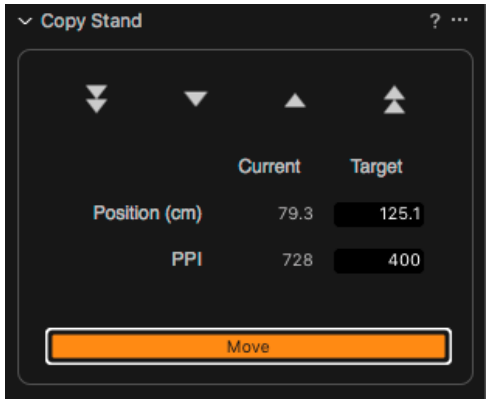
You've now provided the PPI for two points on the column. Using those two points Capture One CH can easily extrapolate the PPI for any point on the column.

If you change cameras or lenses, add an extension tube, or change the position of the top hard-stop then you will need to recalibrate.

Press Done.



Normal Use



Normal Use: Now that you've calibrated the AutoColumn, the user need only enter either a resolution (PPI) or position (cm) into the "Target" field of the Copy Stand tool and press "Move."

This will place the camera at the height required. After moving the camera, focus the camera and confirm your resolution with the Capture Resolution Ruler. The result should be accurate within 1% (as required by FADGI 4-star guidelines).