# More about Calibration

This document helps to better understand the multi-point calibration profile of the DinoCapture 2.0 software and give some tips on using the calibration profile.

**How the multipoint calibration works**

-The multipoint calibration profile uses y=mx+b linear regression equation. Having a couple calibration points and magnifications that are evenly distributed across the magnification range of the Dino-Lite, the better the accuracy of the calibration.

-If fixed magnification is required, simply calibrate for that magnification only for the most accurate results.

-Do not do a multi-point calibration that are close together such as 50x to 55x, then use a magnification out of its range such as 200x. It will significantly reduce the accuracy of the calibration.

**Magnification on the dial vs. calibrated mag value**

The magnification on the dial may have errors due to variables in manufacturing. Simply input the magnification you see on the adjustment dial and the adjusted magnification will be shown on the preview window for the convenience to let you know the calibrated magnification.

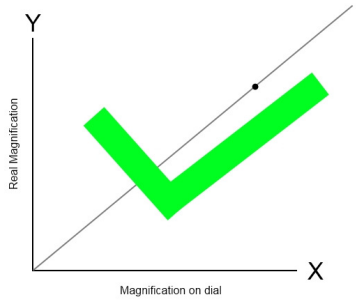
**Does depth of field matter?**

Yes, please notice that lower magnifications may introduce more inaccuracy to the calibration because of the larger depth of field at lower magnifications.

**Best results**

-It is best to have a focus for your calibration profile. For example if you want to calibrate the Dino-Lite at low magnifications using our standard magnification models such as AM413T that range from 10 x ~ 200x; create a calibration profile for low magnifications, and then do calibrations evenly distributed at low magnifications. The more magnifications you calibrate in that profile the more accurate the calibration will be for that range. If high magnification is your focus, then do the same for high magnifications.

- If one magnification is your focus then simply do one calibration at that magnification for that profile.




**Don’t do**

-If you measure with a magnification out of the calibrated range of your profile, the results may be significantly thrown off. For example with a standard magnification model such as AM413T or AM7013T that has a range of 10x~200x;  if you calibrate around 50x but then measure at  200x magnification, the measurement results may be inaccurate.