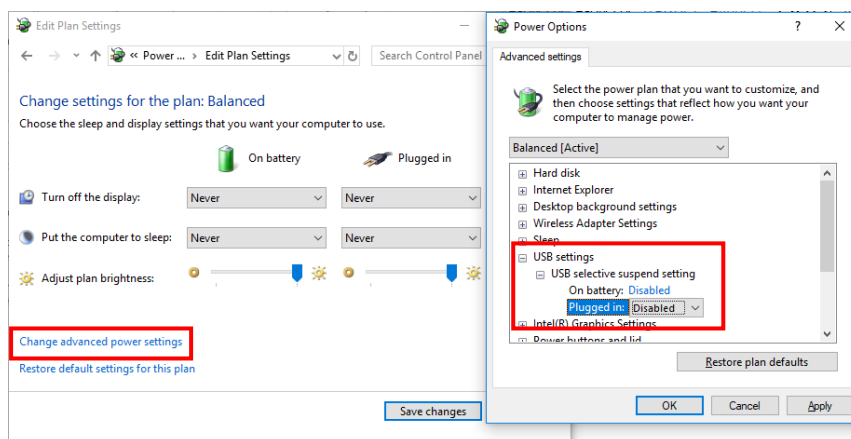


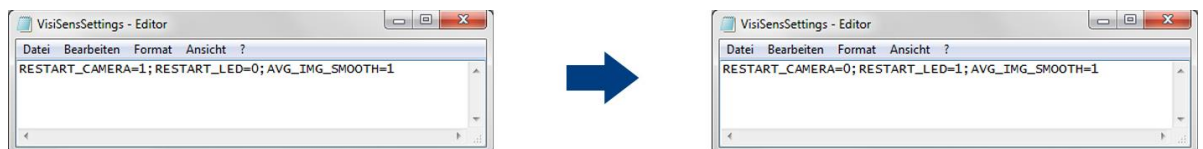
Getting Started with VisiSens™ -

General Usage Notes

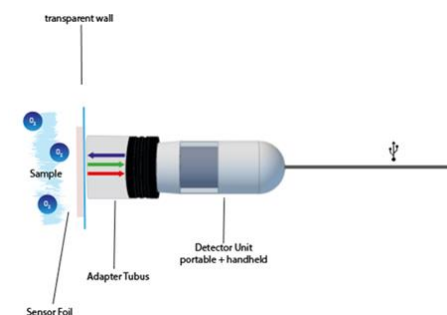
1. Please remove or turn off any webcam on the PC or laptop you are using for the measurements. Set the energy options to maximum and turn off any energy saving options respectively. Furthermore, change the USB settings: Go to **Control Panel > (Hardware and Sound) > Power Options**. Click **Change Plan Settings** and select **Change advanced power settings** at the bottom. Select **USB settings** in the window that opens, and switch all settings to **Disabled**.



2. If you recognize 'jumps' in your time series, please make following modifications:
 1. Go to C:\Program Data\PreSens\VA1\Admin.
 2. Open the VisiSensSettings.ini file with the editor.
 3. Change the VisiSensSettings.ini to "RESTART_CAMERA=0" and "RESTART_LED=1" and save the changes.



Please avoid ambient light during the measurement. For exclusion of ambient light and for defining a fixed distance and field of view, we recommend one of our standard adapter tubes (<https://www.presens.de/products/detail/visisenstm-adapter-tubes.html>).



Adapter Tubes			
Specifications	Tube 1 (standard, included)	Tube 2	Tube 4
Dimensions (tube length)	25 mm	12 mm	129 mm
Field of view (typical)	~ 1.6 x 1.3 mm ² to ~3.6 x 3.0 cm ² ; typically ~1.2 x 1.0 cm ²		

Different Adapter Tubes:

Please note that the default settings are only valid for the standard adapter tube. The smaller and larger tubes require setting adjustment, yet only values for 'Exposure' should be changed. There are two focus points for the small adapter tube. Please choose the focus in which the foil is more picture-filling.

- The calibration should ideally be performed in the final measurement set-up: identical temperature, ambient light conditions, camera settings, distance to the sample, medium,...
- Prior to starting any measurement in your final set-up, please always go to **Options > Settings** in the VisiSens Analytical software to check the settings, adjust / confirm them and repeat this procedure at least one more time. Sometimes the communication between software and detection unit is 'slow' and the software settings will not necessarily match the camera performance.
- Do not turn off the camera during an ongoing experiment by using the STOP button. Please use the buttons LED 1 and LED OFF in Options / Settings instead.
- We recommend using the averaging function when recording time series with an interval > 1 minute.

USEFUL LINKS:

Product Information

<https://www.presens.de/products/imaging.html>

<https://www.presens.de/products/detail/visisenstm-adapter-tubes.html>

How2 Videos (exemplary instructions for VisiSens Oxygen imaging system)

how-to-start-and-do-measurements:

<https://www.presens.de/support-services/videos/video/visisens-analytical-1-measurement-937.html>

basic functions of the VisiSens AnalytiCal 1 software:

<https://www.presens.de/support-services/videos/video/visisens-analytical-1-basic-functions-935.html>

how-to-perform-a-calibration:

<https://www.presens.de/support-services/videos/video/visisens-analytical-1-calibration-936.html>