

Transient Image

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Perform the common setup in [Quick Start Steps](#), then click **Transient Image** to start. Continue with the steps below.

1. Hardware

1. Set the Base Temp to 20 °C, then click **Set Base Temp**.
 - Note: Microscope Settings are auto-filled from Project Manager (no need to reselect them).

2. Timing/Illumination

1. Set Device Pulse Width(s) to 100 μ s.
2. Set Duty Cycle to 10%.
3. Auto-select the Brightness (%).
 - Note: Make sure the "Brightness Good" indicator is green. Increasing the duty cycle increases the overall illumination and the total power delivered to the device, which may lead to device overheating.

3. 3D Alignment - Load Ref

1. Click **Load Ref** to load the file from Calibration, or Focus and Capture a new image.
2. Wait a few seconds until the selected region is focused and the Load Ref indicator turns green.
3. Set the parameters for 3D Nano Alignment and Digital Anti-Vibration.
4. Set the initial parameters for Focus Tolerance, Alignment %, and Vibration Filter. The indicator lights turn green when the image is in range.
 - Note: Increasing the Alignment % value and decreasing the Vibration Filter improves alignment accuracy.

4. Device Control

1. The Device Trigger OUT outputs 5 V into 50 Ohms. If the device has high impedance, Device Trigger applies 10 V.
2. Update Voltage is automatically on.
3. The software sets Image Delay(s) to 100 μ s.
4. Press **Start Measurement**.

5. Save Thermal Image

1. After sufficient averaging time, the hot line should appear (a few seconds).
2. Change the Palette from Temperature to Rainbow display.
3. Select a region on Thermal Image View to get the Region Temperature while the measurement is running. (Example in source: the middle of the green 5 μ m x 500 μ m band is selected.)

4. Enter the estimated Thermoreflectance Coefficient (Cth) from the calibration to get a more accurate ROI Temperature.
 5. Under Save Images, check that the directory and "File Path" name are correct.
 6. When ready to save the data, press **Save Image**.
 - Note: Save the image before stopping the measurement.
 7. To stop the measurement, click **STOP MEASUREMENT**, or click **File > Quit**.
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