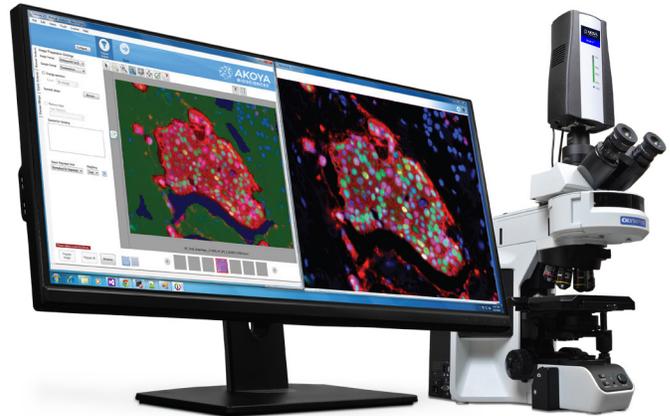


We've rebranded some of our products. *Phenoptics™* is now *Phenolmager™* and *Vectra® Polaris™* is now *Phenolmager™ HT*.

Mantra 2™ High Plex LED Upgrade FAQ

Q My light source still works, but we are about to embark on a new 6-month long project, should I proactively change out the light source?

A | The best time to change to LED is between projects and your next will benefit from consistency from start to finish.



Q Do I need to update my spectral libraries?

A | Yes, after changing out the light source you should take new, optimized spectral libraries, but now you won't need to update libraries as frequently.

Q Do I need to update my analysis software after changing to LED light source?

A | Your analysis software is unaffected by this hardware upgrade.

Q Will the LED require annual replacement?

A | The lifetime of the LED light source is expected to last upwards of 20,000 hours (or ~10 years if running at 40/hr week)

Q Will my research data be affected if I switch to light sources in the middle of a study?

A | Yes, we recommend you complete your current projects before changing your illumination source as the intensity & counts will be different. Changes will be similar to what you are used to with bulb replacements.

Q | Can I run the same 7 color MOTiF™ assay on Mantra 2™ that I use on Phenomager™ HT (formerly Vectra® Polaris™)?

A | MOTiF refers to automated whole slide rapid scanning of the slide using multi, narrowband filters, as well as an integrated workflow, which is exclusive to the Phenomager HT. Because Mantra 2 is manual and only acquires fields of view, MOTiF is not possible, however, with the upgrade, users will be able to develop MOTiF (6-plex, 7-color) multiplex panels that can be easily transitioned to the Phenomager HT.

Q | Can I run my 9 color Phenomager HT assays on Mantra 2?

A | Yes, we have created a technical note that displays the signal intensity differences for each fluorophore under different Mantra 2 illumination parameters to help provide a starting point for titrating their Opal™ fluorophore concentrations without having to undertake additional laborious experiments for re-optimization of their multiplex panels.

Q | Can I use multiband filter cubes now that Mantra 2 has an LED light source?

A | No, with Mantra 2 the imaging process is manual, and the LED cannot be programmed to illuminate multiband filter cubes

Q | Can I choose to change from a low-power setting (similar to my mercury bulb) to a high-power setting (similar to Phenomager HT) at a later point in time?

A | While we would prefer that these settings not change once selected, customers do have the option of upgrading to a high-power setting at a future time point. This will require a field service engineer visit.