

## **Vectra Polaris Software Release Notes**

Software Version: 1.0.13

This file provides information about Vectra Polaris software, version 1.0.13. Please read this information carefully as it supersedes all printed material or online help.

### **Overview:**

Vectra Polaris software provides the interface to running the Vectra Polaris Quantitative Pathology Imaging System. Vectra Polaris scans both brightfield and fluorescent slides, and can take multispectral imagery of user-specified areas of interest, user-chosen TMA cores, or areas of interest determined through the use of inForm Tissue Finder.

### **System Requirements:**

- U.S. English Version of Microsoft© Windows 10 64-bit
- .NET 4.6
- Minimum monitor resolution: 1600x1200 at 96 DPI
- Minimum RAM: 16 GB

### **Software Installation:**

To install on Windows 10:

1. Log in as an administrator
2. Close all open software programs
3. Double click on the Setup.exe
4. Follow the installer's instructions

### **Software Activation:**

Vectra Polaris ships with an activated license.

### **Vectra Polaris Version 1.0.13**

*Bug Fixes:*

- Updated software and LED configuration for new camera sensor
- Added configuration for the condenser
- Installer updates

*Known Issues:*

- Vectra Polaris scans are saved in the BigTIFF format; these files are not compatible with most TIFF viewers.
- If saturation protection is invoked during MSI imaging, the only notification is in the log.
- Polaris does not prompt if you overwrite a protocol file.
- Protocols and references taken in Polaris 1.0.7 are not backwards compatible to Polaris 1.0.6. Should you need to use version 1.0.6 after installation, you must delete and retake references, and must create new protocols in 1.0.6.
- Protocols and references taken in Polaris 1.0.1 are not backwards compatible to Polaris 1.0.0. Should you need to use version 1.0.0 after installation, you must delete and retake references, and must create new protocols in 1.0.0.
- The hotel LEDs may not update after a partially inserted carrier is fully inserted.

### **Vectra Polaris Version 1.0.12**

*Bug Fixes:*

- Fix for fluorescent scanning hangs

- Updated condenser rehomeing during carrier loads
- Installer updates

*Known Issues:*

- Vectra Polaris scans are saved in the BigTIFF format; these files are not compatible with most TIFF viewers.
- If saturation protection is invoked during MSI imaging, the only notification is in the log.
- Polaris does not prompt if you overwrite a protocol file.
- Protocols and references taken in Polaris 1.0.7 are not backwards compatible to Polaris 1.0.6. Should you need to use version 1.0.6 after installation, you must delete and retake references, and must create new protocols in 1.0.6.
- Protocols and references taken in Polaris 1.0.1 are not backwards compatible to Polaris 1.0.0. Should you need to use version 1.0.0 after installation, you must delete and retake references, and must create new protocols in 1.0.0.
- The hotel LEDs may not update after a partially inserted carrier is fully inserted.

**Vectra Polaris Version 1.0.11**

*Bug Fixes:*

- Fix for tab order in the epi-filter editor in hardware setup
- Prompt when overwriting an existing protocol when saving.
- Handle the new door model when starting up
- Rehome the brightfield condenser after every carrier load
- Update the maximum wavelength for new installs
- Add new factory filter kits
- Service app improvements

*Known Issues:*

- Vectra Polaris scans are saved in the BigTIFF format; these files are not compatible with most TIFF viewers.
- If saturation protection is invoked during MSI imaging, the only notification is in the log.
- Polaris does not prompt if you overwrite a protocol file.
- Protocols and references taken in Polaris 1.0.7 are not backwards compatible to Polaris 1.0.6. Should you need to use version 1.0.6 after installation, you must delete and retake references, and must create new protocols in 1.0.6.
- Protocols and references taken in Polaris 1.0.1 are not backwards compatible to Polaris 1.0.0. Should you need to use version 1.0.0 after installation, you must delete and retake references, and must create new protocols in 1.0.0.
- The hotel LEDs may not update after a partially inserted carrier is fully inserted.

**Vectra Polaris Version 1.0.10**

*Bug Fixes:*

- Fix for protocol deserialization
- Fix for unresponsive snapshots page
- Fix for Brightfield snapshot failures

*Known Issues:*

- Vectra Polaris scans are saved in the BigTIFF format; these files are not compatible with most TIFF viewers.
- If saturation protection is invoked during MSI imaging, the only notification is in the log.

- Polaris does not prompt if you overwrite a protocol file.
- Protocols and references taken in Polaris 1.0.7 are not backwards compatible to Polaris 1.0.6. Should you need to use version 1.0.6 after installation, you must delete and retake references, and must create new protocols in 1.0.6.
- Protocols and references taken in Polaris 1.0.1 are not backwards compatible to Polaris 1.0.0. Should you need to use version 1.0.0 after installation, you must delete and retake references, and must create new protocols in 1.0.0.
- The hotel LEDs may not update after a partially inserted carrier is fully inserted.

### **Vectra Polaris Version 1.0.9**

#### *Bug Fixes:*

- Fix for navigation tool error when going directly into snapshots
- Rehome BF condenser when a carrier loads

#### *Known Issues:*

- Vectra Polaris scans are saved in the BigTIFF format; these files are not compatible with most TIFF viewers.
- If saturation protection is invoked during MSI imaging, the only notification is in the log.
- Polaris does not prompt if you overwrite a protocol file.
- Protocols and references taken in Polaris 1.0.7 are not backwards compatible to Polaris 1.0.6. Should you need to use version 1.0.6 after installation, you must delete and retake references, and must create new protocols in 1.0.6.
- Protocols and references taken in Polaris 1.0.1 are not backwards compatible to Polaris 1.0.0. Should you need to use version 1.0.0 after installation, you must delete and retake references, and must create new protocols in 1.0.0.
- The hotel LEDs may not update after a partially inserted carrier is fully inserted.

### **Vectra Polaris Version 1.0.8**

#### *New Features:*

- Multispectral whole slide scanning
- Opal kit-based protocol selection
- Updated reference acquisition and shading correction

#### *Bug Fixes:*

- Scan band is no longer enabled when there is no scanning work present.
- Correct a race condition in the slide navigator
- Correct an error when clicking on the stage widget
- Correct the FL LED intensity so it affects the correct channel.
- Apply chromatic corrections in multispectral field acquisition
- Apply chromatic corrections for the 10x objective acquisition
- Service App improvements

#### *Known Issues:*

- Vectra Polaris scans are saved in the BigTIFF format; these files are not compatible with most TIFF viewers.
- If saturation protection is invoked during MSI imaging, the only notification is in the log.
- Polaris does not prompt if you overwrite a protocol file.
- Protocols and references taken in Polaris 1.0.7 are not backwards compatible to Polaris 1.0.6. Should you need to use version 1.0.6 after installation, you must delete and

- retake references, and must create new protocols in 1.0.6.
- Protocols and references taken in Polaris 1.0.1 are not backwards compatible to Polaris 1.0.0. Should you need to use version 1.0.0 after installation, you must delete and retake references, and must create new protocols in 1.0.0.
- The hotel LEDs may not update after a partially inserted carrier is fully inserted.

## **Vectra Polaris Version 1.0.7**

### *New Features:*

- Barcode decoding
- Loading and saving of scan setup information
- Tissue Finder optimized for TMAs

### *Bug Fixes:*

- Improved brightfield color alignment
- Move to a known position after overview acquisition
- Fix MSI reference bug for less than 3 wavelengths
- Handle focus error after drift correction cleanly
- Clear imagery after a failed strip acquisition
- Correct tab order in edit slides / edit carriers
- Confirm that file writers are always closed
- Fix deadlock in live stream
- Handle focus map failure for very small samples
- Force brightfield references to 20nm steps
- Fix for Geneva wheel hang
- Service App Improvements
- Update help to .pdf version

### *Known Issues:*

- Vectra Polaris scans are saved in the BigTIFF format; these files are not compatible with most TIFF viewers.
- Protocols and references taken in Polaris 1.0.7 are not backwards compatible to Polaris 1.0.6. Should you need to use version 1.0.6 after installation, you must delete and retake references, and must create new protocols in 1.0.6.
- Protocols and references taken in Polaris 1.0.1 are not backwards compatible to Polaris 1.0.0. Should you need to use version 1.0.0 after installation, you must delete and retake references, and must create new protocols in 1.0.0.
- If saturation protection is invoked during MSI imaging, the only notification is in the log.

## **Vectra Polaris Version 1.0.6**

### *New Features:*

- Protocol options for additional coverslips (#0, #3, #4)
- Improved focus algorithm
- New navigation tool for snapshots and exposure setting

### *Bug Fixes:*

- Service app improvements
- Increase the width for study and protocol dropdowns

- Adapt the default filters in FL protocols when narrowband filters are in use

*Known Issues:*

- Vectra Polaris scans are saved in the BigTIFF format; these files are not compatible with most TIFF viewers.
- Protocols and references taken in Polaris 1.0.1 are not backwards compatible to Polaris 1.0.0. Should you need to use version 1.0.0 after installation, you must delete and retake references, and must create new protocols in 1.0.0.
- If saturation protection is invoked during MSI imaging, the only notification is in the log.
- If drift correction fails due to an insufficient number of focus points, the error message is cryptic.

### **Vectra Polaris Version 1.0.5**

*New Features:*

- Added detection of slider or carrier seating problems
- Added a protocol option for thick (#2) coverslips
- Added focus drift correction to FL 20x scans

*Bug Fixes:*

- Multiple Service app improvements
- Rework reference taking in FL
- Rework the handling of dark frames in BF scanning
- Rework the position refresh for the hotel and loader
- Confirm proper ranges on startup; prompt for reboot if necessary
- Cope with system launch with robot beside carrier

*Known Issues:*

- Vectra Polaris scans are saved in the BigTIFF format; these files are not compatible with most TIFF viewers.
- Protocols and references taken in Polaris 1.0.1 are not backwards compatible to Polaris 1.0.0. Should you need to use version 1.0.0 after installation, you must delete and retake references, and must create new protocols in 1.0.0.
- If saturation protection is invoked during MSI imaging, the only notification is in the log.

### **Vectra Polaris Version 1.0.4**

*Bug Fixes:*

- Updated timespan in documentation for shipping temperature
- Multiple Service app improvements
- Updated drive level for front panel LEDs

*Known Issues:*

- Vectra Polaris scans are saved in the BigTIFF format; these files are not compatible with most TIFF viewers.
- Protocols and references taken in Polaris 1.0.1 are not backwards compatible to Polaris 1.0.0. Should you need to use version 1.0.0 after installation, you must delete and retake references, and must create new protocols in 1.0.0.
- If saturation protection is invoked during MSI imaging, the only notification is in the log.

### **Vectra Polaris Version 1.0.3**

#### *Bug Fixes:*

- Provide new camera firmware; fixes pixel shift known issue
- Multiple Service app improvements
- Brightfield filter wheel is homed each time a carrier is loaded to avoid position shift

#### *Known Issues:*

- Vectra Polaris scans are saved in the BigTIFF format; these files are not compatible with most TIFF viewers.
- Protocols and references taken in Polaris 1.0.1 are not backwards compatible to Polaris 1.0.0. Should you need to use version 1.0.0 after installation, you must delete and retake references, and must create new protocols in 1.0.0.
- If saturation protection is invoked during MSI imaging, the only notification is in the log.

### **Vectra Polaris Version 1.0.2**

#### *Bug Fixes:*

- Multiple Service App improvements
- Fluorescence slide markup detection improvements

#### *Known Issues:*

- Vectra Polaris scans are saved in the BigTIFF format; these files are not compatible with most TIFF viewers.
- Protocols and references taken in Polaris 1.0.1 are not backwards compatible to Polaris 1.0.0. Should you need to use version 1.0.0 after installation, you must delete and retake references, and must create new protocols in 1.0.0.
- The fluorescent live view has an occasional height shift of one pixel.
- If saturation protection is invoked during MSI imaging, the only notification is in the log.

### **Vectra Polaris Version 1.0.1**

#### *New Features:*

- Improved fitting algorithm for fluorescent shading
- Corrections for focus differences among filters

#### *Bug Fixes:*

- Set the tile height for the TIFF writer based on the camera tile height
- Reference viewer should size the view area based on the size of the binned reference
- Brightfield live view no longer has a stale image on startup
- Handle long path names in the disk space widget
- Hotel LED maintains state during scans
- Change when the door closes when the Load button is clicked
- Handle door requests cleanly during vectorized acquisition
- Correctly return to the live view after taking a snapshot
- Change the MSI default to be 20x
- Move the autofocus button close to the Z slider
- Improve error reporting when scanning a blank slide
- Disable the keyboard entry for the pause scanning dialog
- Handle illegal characters in the filenames
- Retry USB connections on startup
- Handle the case where previous scan directories are deleted
- Improve brightfield live view

- Handle a retry when the first filter wheel homing fails
- Add camera settings so FL exports are readable by inForm
- Handle loading protocols for which we are missing hardware
- Recover from camera sensor errors
- Correct the display for reference objectives in the table
- Acquire brightfield references with the correct offset applied
- Multiple Service App improvements

*Known Issues:*

- Vectra Polaris scans are saved in the BigTIFF format; these files are not compatible with most TIFF viewers.
- Protocols and references taken in Polaris 1.0.1 are not backwards compatible to Polaris 1.0.0. Should you need to use version 1.0.0 after installation, you must delete and retake references, and must create new protocols in 1.0.0.
- The fluorescent live view has an occasional height shift of one pixel.
- If saturation protection is invoked during MSI imaging, the only notification is in the log.

**Vectra Polaris Version 1.0.0**

*New Features:*

- Whole slide scans of brightfield and fluorescent slides at 1.0, 0.5, and 0.25 um/pixel resolution
- Multispectral imagery at 1.0, 0.5, and 0.25 um/pixel resolution
- New scanning interface
- Tamper-evident scan and multispectral image files

*Known Issues:*

- Vectra Polaris scans are saved in the BigTIFF format; these files are not compatible with most TIFF viewers.
- Hotel LED is out of state with the software UI during carrier scans
- The fluorescent live view has an occasional height shift of one pixel
- The brightfield live view shows a stale image when it first starts.
- Long path names can get cut off in the disk space widget.

**Documentation:**

- Complete documentation is accessible by selecting Help→Help within the Vectra Polaris software

**Support:**

Contact Akoya Biosciences Customer Care by phone or online.

Phone: +1 855.896.8401

Email: [CustomerCare@akoyabio.com](mailto:CustomerCare@akoyabio.com)

Email (outside the US): [CustomerCareEMEA@akoyabio.com](mailto:CustomerCareEMEA@akoyabio.com)

Website: <http://www.akoyabio.com>