Evolve 512 Camera Update v9.75.08
(Released Friday 13, 2012)

Release notes:
The camera update application will update the following features for your Evolve 512 camera:

- Sequenced Multiple Acquisition Real Time Streaming Support (SMART Streaming)
  - Number of sequenced exposure times increased from 6 to 12 for the Evolve 512
  - Removed extra exposure trigger signal that was being generated

SMART Streaming:
The new Sequenced Multiple Acquisition Real Time Streaming (SMART Streaming) feature for the Evolve 512 provides the ability to choose a set of multiple different exposure times for capturing images and then to stream a large number of these image sets with the smallest possible delay time in between each. Switching between different exposure times adds an extra delay for each exposure time change, but SMART streaming significantly minimizes this.

This feature is highly advantageous for applications that require capturing many sequences of images and thus require minimal delay to keep acquisition time manageable. In particular, this would be extremely useful for live cell multi-color TIRF or super-resolution imaging, such as PALM, STORM, or SIM, using multiple fluorescent dyes or proteins.

- SMART Streaming provides the ability to have multiple exposure times set in a sequence.
- SMART Streaming is currently only supported on the Evolve 512 only.
- The SMART streaming feature functions in all triggering modes including timed mode and external triggering.
- In overlapped triggering mode, any entry in the expose time list that is less than the read-out time will automatically get replaced by the minimum exposure time.
- Additional settings such as delays between frames are not yet supported.
- See the PVCAM 2.8 Manual for description of SMART streaming scenarios and Code Examples for further details now to develop a PC application.

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Installation Instructions:

1. Download the camera update application.
2. Connect and turn-on only the Evolve 512 you intend to update.
3. Run the camera update application. Do not power off or disconnect the Evolve 512 while running the camera update application!
4. Accept the prompt to update – the application will determine your Evolve 512 camera version and apply the update accordingly.
5. After the update has completed, be sure to power-cycle the camera to ensure that all updates are applied.

If you have any questions or require further assistance, please call Photometrics Customer Service and Technical Support at +1 800.874.9789 or email support@photometrics.com.