M2-200s Readme

Version 4.99 SR1

Change Log:

Version 4.99 SR1 07/29/2022
- Fixed a timing issue which could cause M² runs to hang.
- Added a logging file located at: C:\Spiricon\M2-200-FW-SCOR\Motor1.log

Version 4.99 11/1/2019
- Added support for Windows 10.
  - Firewire cameras are not supported in Windows 10.
- Added support for SP920 camera.
- Added ability to install M2-200s-FW and BeamSquared on the same machine.
  - BeamSquared must be installed first.

Version 4.96 SR1 (Service Release), 9/28/2017
- Amended camera licensing to allow compatibility with current versions of BeamGage.

Version 4.96, 3/28/2016
- Corrected error in exponent of BPP result.

Version 4.95, 2/9/2016
- Increased accuracy of results.

Version 4.93, 8/24/2015
- Increased accuracy of SP300.

Version 4.93, 12/30/2014
- Added support for SP300.

Version 4.92, 7/15/2014
- Fixed problem sending plot when running in Live mode.
- Added ability to retrieve beam image and plot when a data file is loaded.

Version 4.91, 4/22/2014
- Now supports both original and upgrade motor controller.

Version 4.90, 4/11/2014
- Added support for new motor controller

Version 4.81, 5/20/2013
- Fixed bug where table and program locked up when running to the limit in Live mode.

Version 4.80, 2/22/2013
- Added 7.5 or 3.75 Hz Frame Rate control to Camera dialog. 3.75 Hz allows a longer exposure to help prevent blooming with some lasers.

Version 4.78, 11/19/2012
- Fixed astigmatism calculation which contained a rounding error.

Version 4.77, 8/13/2012
- M-200s-FW and M2Utility now work on 64-bit Windows 7

Version 4.76, 10/6/2011
- Renamed M2+LBA to M2 Utility
- Borland allowed two global variables with the same name but linked to different modules. This confusion caused ActiveX to fail in v4.75.

Version 4.75, 6/1/2010
- New version of M2+LBA

Version 4.74, 4/8/2010
- Was not handling skipped frames in manual table mode.

Version 4.73, 3/23/2010
- Removed the need for Spiricon to be in the vendor name of the camera.

Version 4.72, 04/09/2009
- Changed table sequence to close the shutter while the table is returning to start position.

Version 4.71, 12/21/2008
- ZLens was not stored in and restored from a data file.

Version 4.70, 9/8/2008
- Added support for GRAS20 camera.
- Removed use of Point Grey dialog. All camera controls are now in our dialogs or on the toolbar.

Version 4.61, 12/04/2007
- Fixed bugs in ActiveX server.

Version 4.60, 03/02/2007
- Major enhancements including support for new M2-200 optical train, manual step table, and four cuts method.
- The laser waist location was being computed with an invalid equation. The new equation now crosschecks with other values.
- Added Rayleigh range, Astigmatism, and Asymmetry to after lens results.
- Curve fit was not iterating properly so that we stopped with the first or first few sets of parameters. This was OK with a well behaved curve but gave a bad fit with sketchy data.
- Added more information to print outs.

Version 4.58, 03/02/2007
- The ActiveX EXE was corrupted and would crash during a run.

Version 4.57, 02/05/2007
- Fixed problem where M2 would calibrate on every frame.
- Added calibration before first frame to avoid problems with bad pixels.
- Various other bug fixes.

Version 4.56, 11/20/2006
- Another character translation problem caused a crash when saving a CFG file.

Version 4.55, 11/03/2006
- In the Japanese version of Windows XP/SP2, the copyright symbol "©" is translated into the letter "c". M-200-FW-SCOR uses this symbol as a marker for constructing the title bar string when a CFG file is loaded or saved. If this symbol is not found then a null pointer causes a crash. Converted all copyright symbols to "(c)" so that it will work correctly in all languages. Also, added some defense in case a null pointer is returned.

- We assume that this fix also applies to the Chinese, Korean, and possibly German versions of Windows XP/SP2.
- The M^2 superscript does not translate into the Japanese version of Windows XP/SP2. Removed or replaced the superscript for all start menu folders and items, folder names, menus, etc.

Version 4.54, 10/13/2006
- Bug in the knife edge algorithm. A value overflowed when there was a large amount of energy on the detector causing the knife edge beam width to be invalid. This in turn caused the auto aperture to be the wrong size.
- Added "Disable Camera Imager Boundary Constraint" checkbox to M2 dialog. When this box is unchecked, M2-200-FW-SCOR behaves the same as previous versions. When checked, M2-200-FW-SCOR ignores slight or sever misalignment and ignores beams that are too big in either or both axes. We will print a warning and explanation about this new "feature" for insertion in the manual.

Version 4.53, 9/19/2006
- The customer was prevented from starting Manual mode if the camera had a high pixel, i.e. "please block the beam". Since most of the SCOR-20 cameras have a high pixel, we removed the test so the run can continue. Note that you will always get some "please block the beam" messages. These are normal and part of the Manual mode process which requires the user to block the beam in order to calibrate or check the calibration of the camera.

Version 4.52, 8/15/2006
- M2-FW-SCOR v4.51 does not work with the Point Grey driver shipped with LBA-FW-SCOR v4.75. Users attempting to change the camera Settings would get the message, "FlyCapture operation failed." This release of M2-FW-SCOR was built with and ships with the same Point Grey driver v1.6.0.4 that ships with LBA-FW-SCOR.

Version 4.51, 4/19/2006
- Allowed for manual as a separate release. The manual is no longer included with the software release. Engineering will now place the manual in the \\max\ship\chipM2FWSCOR\manual\ directory where it will be copied by Production onto the \M2-200-FW-SCOR X.XX\manual\ directory on the CD.
- Was missing ActiveX examples.

Version 4.50, 4/11/2006
- Initial release.
- New ActiveX interface same as M^2-200 v4.50.