

Spectral Products

Spectrometers · Spectrophotometers · Color Instruments · Spectrographs · Monochromators

111 Highland Drive · Putnam, CT · 06260 · USA
PHONE (860) 928-5834 · FAX (860) 928-2676
<http://www.spectralproducts.com>

SM32ProForSM301vR6

Release Note

1. Introduction

SM32ProForSM301vR6 is an S/W that includes various functions related to SM301-EX operation and provides a library that includes API functions for application development when installed. Spectral Products distributes SM301-EX for driving and application development reference. For more information, you can download it together with the User Manual from the homepage.

1-1. Contact us

For technical inquiries related to the spectrometer and S/W, please contact the e-mail address below or call us.

E-mail: sales@spectralproducts.com, support@spectralproducts.com

Phone: (860) 928-5834

1-2. Homepage

Website: www.spectralproducts.com

Download: <https://www.spectralproducts.com/Downloads>

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2. Revision History

Date	Revision	Description
06/16/17	v.2.12.02	<ul style="list-style-type: none">• Added function related to the board setting• Per Pixel uniformity function added during the dark scan• Global skim balancing option added
07/10/19	v.2.12.11	<ul style="list-style-type: none">• Modification related to the External Trigger function• Error MessageDlg disable• Fixed some function errors• Library update• Added User Manual
11/05/19	v.2.12.12	<ul style="list-style-type: none">• Time Line function bug fix• LabVIEW SDK bug fixes• Add External Trigger Manual• DLL code stabilization
12/05/19	v.2.12.13	<ul style="list-style-type: none">• UI bug fixes• DLL bug fixes
02/04/20	v.2.12.14	<ul style="list-style-type: none">• Supplement some features
02/20/20	v.2.12.15	<ul style="list-style-type: none">• Fixed UI information output error
03/16/20	v.2.12.16	<ul style="list-style-type: none">• Bug fix in Record function
06/10/20	v.2.12.17	<ul style="list-style-type: none">• Modification related to program start mode
07/14/20	v.2.12.18	<ul style="list-style-type: none">• DLL Installation bug fix
03/08/23	v.2.12.19	<ul style="list-style-type: none">• Add DLL functions• Labview SDK bug fix
04/06/23	v.2.12.20	<ul style="list-style-type: none">• SM Setup bug fix (External trigger mode)
08/29/23	v.2.12.21	<ul style="list-style-type: none">• Add x64 DLL file• Add Matlab SDK example
05/17/24	v.2.12.22	<ul style="list-style-type: none">• Fixed a bug in the wavelength calibration page

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Date	Revision	Description
06/14/24	v.2.12.23	<ul style="list-style-type: none">• Fixed a bug for the folder browsers• Added the baseline correction parameters in the ini file
10/31/24	v.2.12.24	<ul style="list-style-type: none">• Added Python & C# SDK examples• Fixed various bugs

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v2.12.02

DATE: 06/16/2017

Issue:

- Detect Bias value setting function of the Board
- Added function to apply Per Pixel Uniformity during Dark Scan
- Apply the Global Skim option when balancing

Fixed:

- Load and apply the last Detect Bias value of the board (in the DLL function)
- Added whether to use Shatter
- **Per Pixel Uniformity** applied when using Shutter
- Added whether to apply the Global Skim Value set in the Balance workboard

Comments:

- * Per Pixel Uniformity:

Baseline calibration work. Bases CCD data immediately after closing the shutter

Subtract from the line and apply 7000 for offset and x1.5 for gain.

- Global Skim application option

Without Global Skim: Do not use Global Skim Value

Without Global Skim: Apply Global Skim Value

Auto Global Skim: Set and apply automatic Global Skim Value

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v2.12.11

DATE: 07/10/2019

Issue:

- Improved usability of external trigger-related functions
- Eliminate unnecessary error messages when an error occurs
- Fixed spGetWLTable function error
- Board drive Library update
- User Manual added

Fixed:

➤ Except Polarity parameter of spReadData_Extrg function, -99 is returned when Time out

Fix to use with spReadDataEx when using an external trigger

➤ Error Message Disable in Board Drive Library

➤ In calculating spPolyFit and spPolyCalc, the order value is corrected when the number of calibration data points is 3 or less.

➤ ArrayBoardR6_Lib v1.55 applied

➤ API Function, Install, User Guide Manual added

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v2.12.12

DATE: 11/05/2019

Issue:

- When using the Timeline function, an error occurs when the setting values of Interval and Integration Time are similar.
- Bug fix in LadbVIEW SDK
- External Trigger Manual added
- Stabilization of DLL API Function

Fixed:

- Thread synchronization code fix (Time Line function bug cause)
- Fix UI error when working with LabVIEW SDK Balance

Fix not to use other functions in External Mode

- External Trigger function and function usage manual added
- DLL API Function Critical Section added

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v2.12.13

DATE: 12/05/2019

Issue:

- Improved Dialog function related to some settings
- DLL API Function Critical Section bug fixed

Fixed:

- When there is no setting change in Setup Dlg, Balance Dlg, maintain the status of Dark, Ref, Balance
- Fixed an infinite waiting condition due to an error in some critical section areas

v2.12.14

DATE: 02/04/2020

Issue:

- Improvement of TEC-related functions

Fixed:

- Modified to be TEC off at the end of the program

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v2.12.15

DATE: 02/20/2020

Issue:

- Integration Time notation error in some UIs

Fixed:

- Fixed integration time notation error in Print Dlg

v2.12.16

DATE: 03/16/2020

Issue:

- Program freeze occurs when recording

Fixed:

- Thread synchronization code related correction

Stabilize Record Thread code

v2.12.17

DATE: 06/10/2020

Issue:

- Program start mode related fixes

Fixed:

- Fixed bug in program execution mode without connecting SM301-EX unit

SDF file simulation function only

Apply Wavelength Calibration of SDF file

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v2.12.18

DATE: 07/14/2020

Issue:

- DLL Installation bug fix

Fixed:

- Fixed bug to install a different SPdbUSBABR6.dll file during the installation process

v2.12.19

DATE: 03/08/2023

Issue:

- Add DLL functions
- Labview SDK bug fix

Fixed:

- Add spReadDataEx_Raw(), spReadDataEx_Adv() functions and Manual/SDK for them
- Add baseline correction parameters in the SM32Pro for SM301 vR6
- Fixed the bug in the Labview SDK source code related to the spGetWLTable function (reading wrong information from EEPROM)

2.12.20

DATE: 04/06/2023

Issue:

- SM Setup bug fix (External Trigger mode setting)

Fixed:

- Fixed the error on the External Trigger Edge mode setting

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v2.12.21

DATE: 08/29/2023

Issue:

- Add x64 DLL
- Add Matlab SDK

Fixed:

- Add the x64 DLL file and COM registry installation
- Add Matlab SDK example (2017b)

v2.12.22

DATE: 05/17/2024

Issue:

- Bug on the Wavelength calibration page

Fixed:

- Fixed the error in the factory default value loading and calibration data save/load functions

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v2.12.23

DATE: 06/14/2024

Issue:

- Bug on the folder browser in the Export/Import popup windows
- Baseline correction parameter initialized issue

Fixed:

- Fixed the error in the folder browser in the data export & import popup windows
- Added the baseline correction parameters (gain & offset values) in the ini file to reuse the previous setting values.

v2.12.24

DATE: 10/31/2024

Issue:

- Bug on the record function in the external trigger mode
- Bug on functions to change the setting variables (TEC control, Balance, etc.) in the external trigger model
- Requirements for the Python & C# SDK examples

Fixed:

- Fixed the various bugs
- Added Python & C# SDK examples