

Photron FASTCAM Viewer

for High Speed Digital Imaging

Release Notes
Ver. 4.5.0.0 E

Photron

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Chapter 1. Release Summary

1.1. PFV4 Release Notes

1.1.1. PFV Version

- PFV Ver. 4.5.0.0
- SDK (PDCLIB.DLL) Ver. 4.5.0.0

1.1.2. Contents of the installation data

- | | |
|-----------------------|---|
| - PFV Setup64: | PFV installer for 64bit Windows |
| - PFA: | PFA (Photron FASTCAM Analysis) installer |
| - SDK: | SDK components, documents, and samples |
| - LabVIEW and MATLAB: | SDK for LabVIEW and MATLAB, documents, and samples |
| - Doc: | PFV4 Users Manual, First Step Guide, and License Activation Guide |
| - CheckerBoard: | Image data of checkerboard for lens distortion correction |
| - ReleaseNotes: | PFV4 Release Notes |
| - ReportSample: | Sample data for Report output function |
| - Driver: | Device drivers |

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Chapter 2. New Functions

2.1. PFV4.5.0.0 New Functions

2.1.1. New Camera Support

N/A

2.1.2. Additional Function

Common to the all modes	
Item	Fixed / Modified Item
Other	<p>The shortcut keys for [Ctrl] + [C] have been changed as follows.</p> <ul style="list-style-type: none"> - When text is selected: Copy text - When the view window is clicked and selected: Snapshot.

LIVE mode		
Item	Fixed / Modified Item	
[Function panel]	[Edit info] - [Refresh rate]	The camera image refresh rate can now be displayed. This allows you to check the image update status even when there is no movement in the subject, and to check the communication status with the camera based on the image refresh rate.
	[Setup] - [Low light]	<p>Changed the display to make it easier to see when the low light function is enabled.</p> <ul style="list-style-type: none"> - The color of the “Low Light On” text displayed in the “Frame rate” of the Live info. display has been changed from light blue to green. - The background of the low light menu on the function panel has been changed to blue.
[MENU]	[Export support file]	Changed so that a snapshot of the MCAT window is saved while MCAT is running.
[Add-ons]	[MCAT]	<p>The item name on the synchronization settings window in the MCAT detailed settings menu has been changed.</p> <ul style="list-style-type: none"> - Old: Camera Hub IP address - New: Master Camera Hub IP address
Other	<p>Mini R3/R5 (Firmware version Ver. 8.2 or later) now supports the following features.</p> <ul style="list-style-type: none"> - Random trigger - Live image update speed prioritized display 	

MEMORY mode	
Item	Fixed / Modified Item
[Save]	Changed so that the settings for normal saving and layout saving, which were previously shared, can now be applied separately with different formats, save locations, and other settings.

MEMORY/FILE mode		
Item	Fixed / Modified Item	
[Layout save]	-	Changed the settings to display a confirmation message when the horizontal resolution after merging is 5,000 pixels or more. Please note that we have confirmed a bug where the image cannot be saved properly when using an Intel integrated GPU and the horizontal resolution after merging is 5,464 pixels or more.
[MENU]	[Configuration] - [Alert]	

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Chapter 3. Bug Fix and Other Changes

3.1. PFV4.5.0.0 Fixed Bugs and Changes

Common to the all modes		
Item	Fixed / Modified Item	
[Quick Tools]	[Rotate image] / [Invert image]	The rotation and flip display window that appears at the bottom right of the view window when settings were applied was not displayed. This bug is fixed.
	[Invert image]	When images were inverted while a rectangular area was displayed on the view window, dragging the mouse to change the size of the rectangle would cause unintended changes to the edges of the rectangle. This bug is fixed.

LIVE mode		
Item	Fixed / Modified Item	
Other	<p>PFV4 might crash when you perform “Record while saving” with the following settings.</p> <ol style="list-style-type: none"> 1. Set the number of partitions to two or more. 2. Check “Record while saving” and select “GRAW” as the save format. 3. Complete recording on all partitions. 4. Click the [Cancel] button on the save progress window. 	

MEMORY mode		
Item	Fixed / Modified Item	
[Layout save]	<p>When “Use GPU encoding/decoding” was enabled, layout save with the following settings would cause the entire image to turn green. This bug is fixed.</p> <ol style="list-style-type: none"> 1. Check “Enable GPU encoding/decoding” from [MENU] - [Configuration] - [Preference]. 2. Click [Layout save], then check “Info save” in the Layout settings window. 3. Click the [Edit] button, uncheck “Display inside image”, and save the image. 	

MEMORY/FILE mode		
Item	Fixed / Modified Item	
[MENU]	[Export support file]	<p>If the support file was output with the following procedure, the snapshot might not be output, or PFV4 might crash. This bug is fixed.</p> <ol style="list-style-type: none"> 1. With data with a resolution of “1,024 x 1,024”, set the zoom ratio to “801% or higher” using the “Zoom ratio” feature in the Quick Tools. 2. Open the Save window, check the “Save scaling” option, and click the [OK] or [Cancel] button to close the window. 3. Click [MENU] - [Export support file] to output the support file.
[Edit]	[Trimming]	<p>Even if “Fixed aspect ratio” and “Set original aspect ratio as standard” were enabled, rotating the image by 90° or 270° using the Quick Tools “Rotate image” feature would change the aspect ratio to a different size. This bug is fixed.</p>
		<p>The saved range was not saved correctly when the start and end frames of the playback range were set to negative values. This bug is fixed.</p>

MEMORY/FILE mode		
Item	Fixed / Modified Item	
[Special Effects]	[Lens Calibration]	Drawing misalignment might occur with data saved using the following settings. This bug is fixed. 1. Load a correction file in [Special Effects] - [Lens Calibration]. 2. Check “Apply image processing” on the Save window and save in a format other than raw data.
[Graph]	Graph drawing took a long time for data with a large number of samples, causing the PFV4 to become unresponsive. This bug is fixed. Graph drawing speed has been improved.	
	When tracking points were not set continuous in [Measurements] - [Manual Tracking], the line on the graph might be missing. This bug is fixed.	

FILE mode		
Item	Fixed / Modified Item	
[Open]	When importing waveform data in CSV format into a skip saved file, a confirmation message appeared stating, “The frequency and framerate are not integer multiples. The camera image and the waveform are shifted. Do you want to read it as it is?”. This bug is fixed.	
[Graph]		
[Edit]	[Trimming]	When trimming multiple save ranges, even if the length of one side of a save range exceeded the maximum save resolution (8,196 pixels), saving would be executed as long as the other save ranges did not exceed the maximum resolution. This bug is fixed. - Old: Saving was executed even if the resolution limit was exceeded, and the file was output. Files that exceeded the resolution limit caused a read error and could not be opened. - New: If the resolution limit is exceeded, an error message is displayed and saving is not executed.
[Assistance]	[Image Overlay]	If “Apply image processing” was enabled on the Save window, PFV4 would become unresponsive after performing image overlay using the following procedure and clicking the [Save] button. This bug is fixed. 1. Open two files (A and B) in FILE Mode. 2. From [Assistance] - [Image Overlay], overlay B onto A. 3. Enable “Sync” in the Play mode of the recording/playback panel. 4. Click on the overlaid file (B) to set it as the current file.
Other	When playing BMP sequential images in PFV4.4.0.0, unnecessary logs were output and playback speed was slowed down. This bug is fixed.	

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Chapter 4. The Contents of SDK

4.1. The Contents of SDK

4.1.1. New Camera Support

N/A

4.1.2. Additional Function / Improvement

N/A

4.1.3. Bug Fix

N/A

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