#### RICOH THETA Stitcher Manual for Windows

#### Product overview

This software is for stitching together images that were output as raw images by RICOH THETA and then developed by Adobe Photoshop Lightroom Classic.

### Recommended operating environment

This software operates in the following environment.

- ✓ Windows: Windows 10 64-bit (version 1903 or later) / Windows 11
  - ➤ Note: Windows 8.1 and 32-bit are not supported.
- ✓ GPU with support for OpenGL 4.1 or later must be installed.
- ✓ 16 GB or more of DRAM is recommended.
- ✓ 4 GB or more of Video RAM is recommended.
- ✓ Adobe Photoshop Lightroom Classic: Version 11.4.1

# Installation procedure

Run the "RICOH THETA Stitcher Setup.exe" and install the app while following the instructions in the installer dialog boxes.

### Uninstallation procedure

Uninstall this software with the following procedure.

- Select RICOH THETA Stitcher from [Apps & features] of [Settings].
- 2. Select [Uninstall].

# Stitching with RICOH THETA Stitcher

Use this software as described in the following procedure.

<When activated as an Adobe Photoshop Lightroom Classic plug-in>

- 1. Import raw images into Adobe Photoshop Lightroom Classic.
- 2. After the developing and other processing is complete, click [File] [Export] on

the menu bar.

3. In the [Export Location] area, select [Same folder as original photo] for [Export To] and then clear the [Put in Subfolder] check box.

Recommendation: Select the [Add to This Catalog] and [Add to Stack] check boxes in the [Export Location] area.

(Note) The exported image file and the original DNG file must be saved in the same folder. If the original DNG file does not exist in the same folder as the exported image file, the DNG file selection screen(\*) appears. You can manually specify the original DNG file on this screen.

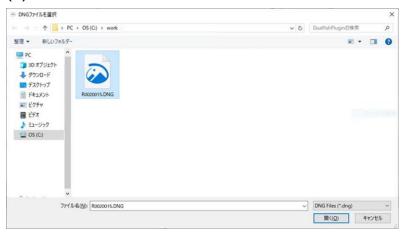
- 4. Select the check box for [Rename To] under the [File Naming] field, and select the desired settings.
- 5. Select JPEG or TIFF for [Image Format] in the [File Settings] area.
- 6. Clear the [Resize to Fit] check box in the [Image Sizing] area.
- 7. Under the [Post-Processing] field and [After Export], select "Open in other application ...".
- 8. Under [Application], select "C:\Program Files\RICOH THETA Stitcher\RICOH THETA Stitcher\u00e4cer\u00e4ricon".
- 9. Click [Export] at the bottom right.

#### <When activated as standalone software>

- 1. Develop the RAW images with Adobe Photoshop Lightroom Classic, and then export them as dual-fisheye JPEG/TIFF files.
- 2. Double-click the RICOH THETA Stitcher icon 😭 to activate it, and then drag and drop the exported image file.

(Note) The exported image file and the original DNG file must be saved in the same folder. If the original DNG file does not exist in the same folder as the exported image file, the DNG file selection screen(\*) appears. You can manually specify the original DNG file on this screen.

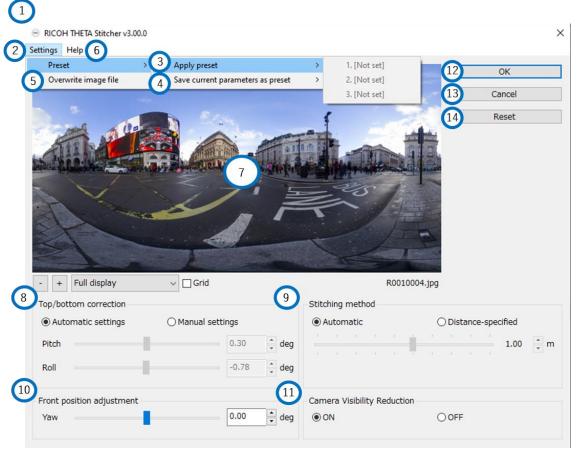
# (\*) DNG file selection screen



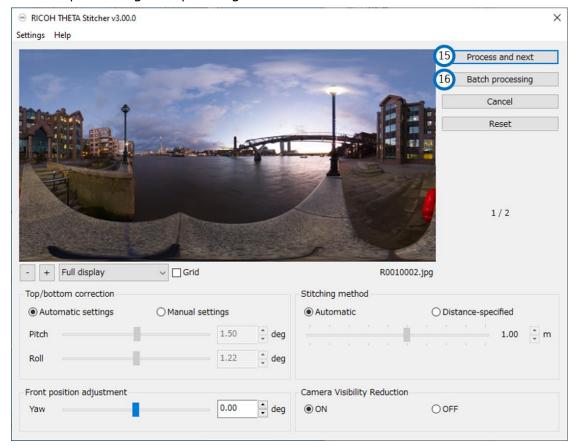
#### Screen

The following describes the screen of this software. The screen that appears differs depending on the number of exported images.

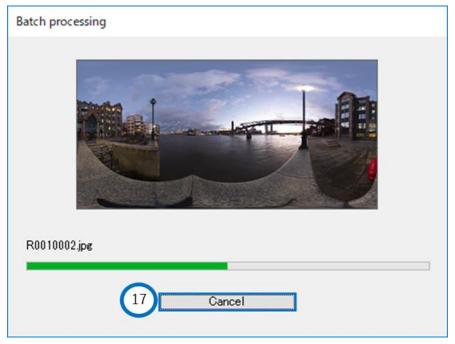
<When processing a single image>



# <When processing multiple images>



During batch processing, the following screen showing the processing progress appears.



	Item	Description	Default	Settable
	name		value	values
1	Window	The display size can be changed by	_	_
		dragging the edge of the window.		
2	Settings	Changes various settings.	_	_
3	Apply	The saved preset will be applied.	_	_
	preset			
4	Save	You can save up to 3 presets of all	_	_
	current	stitching parameters* and apply them		
	paramete	to different images.		
	rs as	(* Zenith correction, front position		
	preset	adjustment, stitching method, and		
		camera visibility reduction)		
(5)	Overwrite	Unchecking the checkbox adds "_er" to	_	_
	image file	the end of the file name and saves it as		
		a separate file.		
6	Help	Displays the manual.	_	_
7	Preview	Displays a preview of the stitching	_	_
	area	result.		
8	Top/bottom	Performs rotation correction so that the	Autom	Automatic or
	correction	sky is up and ground is down.	atic	Pitch: -
				90.00 to
				90.00 [deg]
				and Roll: -
				180.00 to
				180.00
				[deg]
9	Stitching	Method to use when stitching together	Autom	Automatic or
	method	two images. Basically, we recommend	atic	0.30/0.40/0.
		setting this to [Automatic] but the		50/0.60/0.75
		distance for stitching can also be fixed		/1.00/1.50/3
				.00/5.00/∞

		as desired.		[m]
10	Front position adjustme nt	Moves the images parallel in the horizontal direction. Use this when you wish to adjust the composition.	0.00 [deg]	-180.00 to 180.00 [deg]
(1)	Camera Visibility Reduction	[ON] Reduces the amount the camera is captured in the shot.  [OFF] Improves stitching accuracy towards the bottom of the camera.	Differe nt depend ing on the image	ON, OFF
12	OK	Outputs the stitching result.	_	_
(13)	Cancel	End RICOH THETA Stitcher.  *Images will be saved as they were prior to stitching in Adobe Photoshop Lightroom Classic.	_	_
14)	Reset	The parameters will be reset to their default values.	_	_
15)	Process and next	You can continue with the next image and process it after outputting the stitching results.	_	_
16	Batch processin g	Two or more images will be batch processed with the same settings.	_	_
17	Cancel	RICOH THETA Stitcher will end after processing the current image.  Subsequent images will be saved as they were prior to stitching.		

# Troubleshooting

Message displayed	Description/solution		
No compatible DNG files	DNG files that can be processed on this		
	software are RAW image files output from		
	RICOH THETA.		
Files other than JPEG and TIFF are	Formats that are supported on this		
not supported	software are JPEG and TIFF. When		
	activating from Adobe Photoshop		
	Lightroom Classic, select JPEG or TIFF as		
	the file format.		
The DNG file was not found.	Specify the original DNG file on the "DNG		
Check "Stitching with RICOH THETA	file selection screen".		
Stitcher" in [Help] for details.	When activating from Adobe Photoshop		
	Lightroom Classic, refer to the above		
	"Stitching with RICOH THETA Stitcher"		
	item, and then set [Export Location] or		
	[File Naming] correctly.		
The images could not be processed	DNG files that can be processed on this		
successfully: 0x0000001	software are RAW image files output from		
	RICOH THETA.		
The images could not be processed	Update the driver of the graphic board.		
successfully: 0x0000005,			
0x00010500, 0x00010501,			
0x00010502, 0x00010503,			
0x00010504, 0x00010506			
The images could not be processed	There is insufficient memory.		
successfully: 0x00010505			