



**LEICA SL2**

Firmware update

## FIRMWARE

Camera model	Firmware version
Leica SL2	5.0

### PHOTO

**\_NEW:** Perspective control

### VIDEO

**\_NEW:** The incremental value for a direct setting of the ISO value can now be selected via the setting wheels (1 EV, 1/2 EV, 1/3 EV, or 1/6 EV)

### PHOTO/VIDEO

**\_NEW:** The lens profile menu has been supplemented with additional focal length settings

**\_NEW:** The dropdown list for FN button assignments is now customizable and has been extended

**\_DETAILED:** Supported lenses

**\_IMPROVED:** In some cases, the lens Exif information is missing for third-party lens adapters

**\_CORRECTED:** In some rare cases, the functions **Pair** and **Delete** were no longer available in the **Leica FOTOS** menu, once the connection was disabled

**\_CORRECTED:** Some minor issues with the newly introduced function **Toggle Focus Point** have been remedied. The focus positions are now saved correctly.

## FIRMWARE UPDATES

Leica is continuously working on the further improvement and optimization of your camera. Since many camera functions are entirely controlled by software, some of these improvements and additions to the functional scope can be installed in retrospect. Leica offers firmware updates at irregular intervals, which you can download from our website.

Leica will notify you of any new updates, once you have registered your camera. Users of Leica FOTOS will also be automatically notified about firmware updates for their Leica cameras.

There are two options for installing firmware updates.

- conveniently via the Leica FOTOS app
- directly via the camera menu

### Finding the currently installed firmware version

- ▶ Select **Camera Information** in the main menu
  - The current firmware versions are displayed.



More information about registering, firmware updates and how to download them to your camera, as well as any amendments and additions to this manual can be found in the customer area of our website at:

<https://club.leica-camera.com>

## EXECUTING A FIRMWARE UPDATE

Any interruption of a running firmware update may cause serious and irreparable damage to your equipment!

You will therefore have to take particular note of the following, when carrying out a firmware update:

- Do not switch off the camera!
- Do not remove the memory card!
- Do not remove the rechargeable battery!
- Do not detach the lens!

### Notes

- A warning message will appear if the battery is insufficiently charged. Recharge the battery and then repeat the process described above.
- You will find additional device and country-specific registration marks and numbers in the **Camera Information** submenu.

## PREPARATION

- ▶ Fully charge and insert the rechargeable battery
- ▶ The second SD memory card (where applicable) must be removed from the camera
- ▶ Any stored firmware files on the memory card must be removed
  - We recommend saving any images on the memory card and reformatting it before the update.  
(Caution: Loss of data! All data stored on the memory card will be lost during formatting.)
- ▶ Download the latest firmware version
- ▶ Save the download to the memory card
  - The firmware file must be stored in the main directory of the memory card (not in a sub-directory).
- ▶ Insert the memory card into the camera
- ▶ Switch the camera on

## UPDATING THE CAMERA FIRMWARE

- ▶ Preparation
- ▶ Select **Camera Information** in the main menu
- ▶ Select **Camera Firmware Version**
- ▶ Select **Start Update**
  - A prompt with information about the camera is displayed.
- ▶ Check the version information
- ▶ Select **Yes**
  - The prompt **Save profiles on SD Card?** appears.
- ▶ Select **Yes/No**
  - The update will start automatically.
  - The lower status LED will flash during this process.
  - Once the process has completed successfully, a relevant on-screen message and prompt to restart the device will appear on screen.
- ▶ Switch the camera off and on again

### Note

- Date & time, as well as the preferred language will have to be set up again after the restart. Relevant prompts will appear on screen.

## UPDATING THE LENS FIRMWARE

Where available, firmware updates can be performed for Leica SL lenses and for all other lens types by L-Mount Alliance.

Firmware updates for Leica SL lenses are generally uploaded alongside the latest version of the camera firmware and will not have to be implemented manually. Provided an SL lens is attached during the camera update, it will automatically receive the latest firmware version. Where that is not the case, a relevant prompt will appear when a lens is attached to a camera with updated firmware for the first time.

The instructions provided for camera firmware updates apply.

- ▶ Preparation
- ▶ Select **Camera Information** in the main menu
- ▶ Select **Lens Firmware Version**
- ▶ Select **Start Update**
  - A prompt with information about the camera is displayed.
- ▶ Check the version information
- ▶ Select **Yes**
  - The update will start automatically.
  - The lower status LED will flash during this process.
  - Once the process has completed successfully, a relevant on-screen message and prompt to restart the device will appear on screen.
- ▶ Switch the camera off and on again

## PERSPECTIVE CONTROL

This assist function displays a frame showing the expected cropped section of the image after a correction of the perspective of vertical falling lines. Perspective Control helps to achieve a generally straighter vertical line and straight horizon, which ensures a natural image effect, specifically in architectural images.

The function “Perspective Control” calculates the image section and the required distortion correction based on the actual panning angles of the camera and the lens used. In effect, the camera orientation during recording (determined by internal camera sensors) is the decisive factor and not the lines visible in the image object. The function is therefore unlike automatic perspective control features used for post-editing, which are generally based on the image content.

The functionality depends on the picture format used (JPG or DNG). For JPG format images, the correction occurs directly in the camera and the corrected image is stored. For DNG format images, the relevant information is written to the meta data of the original image. Image correction is done later on using a program like Adobe Photoshop Lightroom® or Adobe Photoshop®\*.

Factory setting: **Off**

### Notes

- In case of large panning angles, the distortion correction needed for a complete perspective control would be too extreme. That is why this function is automatically skipped or only partially used where angles are too large. In that case, we recommend creating DNG format images and effecting the desired corrections in a post-editing step.
- While Perspective Control is active, the auxiliary displays for **Level Gauge**, **Histogram** and **Grid**, as well as the function **Auto Review** will be temporarily disabled.
- Perspective Control is not available for continuous shooting or for **Multishot**.
- All data edits will be written to the meta data of DNG shots, even if the function is deactivated. If the function is active, then a special tag is added, which recommends the edit to supported image editing software.

\* See p. 8 for more information.

- ▶ Select **Perspective Control** in the main menu
- ▶ Select **On**



## ACTIVE PERSPECTIVE CONTROL



## DETECTED PERSPECTIVE IN SHOOTING MODE



## CORRECTED PERSPECTIVE IN REVIEW MODE



## JPG FORMAT IMAGES

For JPG format images, the correction occurs directly in the camera and only the corrected image is stored. Any image content outside the frame will be lost.

## DNG FORMAT IMAGES

In DNG format, the entire sensor image is stored unchanged. The data calculated by Perspective Control is written to the meta data of the image. Image correction is done later, using appropriate software like Adobe Photoshop Lightroom® or Adobe Photoshop®\*. A corrected preview version of the image (thumbnail) is displayed in Review mode. The same applies for automatic review directly after the image is taken.

However, when opening the file in Adobe Photoshop Lightroom® or Adobe Photoshop®, the original recording will be displayed. Depending on the default settings of the software, the image can also be directly displayed with the corrections from the auxiliary frame.

## PERSPECTIVE CONTROL IN ADOBE LIGHTROOM® AND ADOBE PHOTOSHOP®

Perspective Control can be done as part of the post-editing process for DNG format images using e.g. Adobe Photoshop Lightroom® or Adobe Photoshop®. Read the Adobe Online Help for more detailed information about the topic.

### ADOBE LIGHTROOM®:

<https://helpx.adobe.com/en/lightroom-classic/help/guided-upright-perspective-correction.html>

### ADOBE PHOTOSHOP®:

<https://helpx.adobe.com/en/photoshop/using/perspective-warp.html>

### CORRECTION AND DISPLAY OF AUXILIARY LINES

Select the function “With auxiliary lines” under “Geometry” > “Upright” to apply the correction defaults of the camera and display the auxiliary lines.

Correction will automatically applied if the RAW default setting “Camera Settings” is selected.

Correction can be disabled under “Upright” at any time.

<https://helpx.adobe.com/en/photoshop/kb/acr-raw-defaults.html>

► Select “Camera Settings” as the RAW default setting



## ADDING LENS PROFILES MANUALLY

The lens profiles for lenses attached via third-party mechanical adapters can now also be added. The focal length can be configured. This information will be then be written to the Exif data.

- ▶ Select **Camera Settings** in the main menu
- ▶ Select **Lens Profiles**
- ▶ Select **Other lens**
- ▶ Select the desired focal length

## CUSTOMIZABLE DROPDOWN LIST FOR FN BUTTONS

It is now possible to customize the menu elements available for FN button assignments in the direct access dropdown list (the dropdown list appears when pressing and holding the FN button). The customization process is similar to **Edit Favorites**, but there is no limit to how many menu elements can be added.

The customized configuration will then be saved to the user profiles.

- ▶ Switch to the desired mode (photo or video)
- ▶ Select **Customize Control** in the main menu
- ▶ Select **FN buttons**
- ▶ Activate or deactivate the desired functions.