

SPLITGRADE

Software-Releases

4.0 / 11.05.2026

- Significantly faster calculation of gradation and time. This enables quick adjustments using the control knob via Splitgrade-Comfort
- You can navigate through the main menus forward and backward.
- Yellow and magenta colour is now available for exposure with LED cold light sources
- In the test strip menu, time and gradation can be set before launching the test strip
- After creating a test strip, the user can enter the number of the correct exposure. Splitgrade calculates the suitable exposure time and grade from this.
- The 3-second red light phase before each exposure has been removed. If necessary, the user can switch on the red light beforehand and start the exposure afterward.
- Choosing white light is available for dodging and burning. The function is located between gradations 5 and 00 and is displayed as “---”.
- The designations for the Multigrade IV RC and Multigrade V RC papers have been updated to match the naming conventions now used by Ilford.
- If the light is much too dim at the start of the measurement, this is indicated as an error.
- The Splitgrade Controllers of the 02 and 03 series have reached the limit of their memory capacity with the new functions. Only one more paper type can be added.

3.9M / 26.02.2024

- Bug fix in density measurement: Incorrect digit display in 1st line deleted
- Bug fix in test strip mode: Exposure time is now correct after entering test strip mode

3.9L / 11.03.2022

- Bug fix in test strip mode „Grade“

3.9K / 06.02.2022

- For LED cold light source: An exposure from activated red light is now started immediately without short-term activation of the safelight.
- Time measurement can now be restarted, even after 32 measured values
- Time measurement with reference value set to Grey: The time calculation after altering the paper grade is now correct.

3.9I / 02.12.2021

- Bug fix for Zone system display in Splitgrade Comfort unit.
- New paper calibration Ilford Multigrade FB Classic

3.9H / 05.10.2021

- Bug fix for white light exposures on fixed grade papers using LED cold light sources

3.9G / 01.09.2021

- Separate offsets for films with stain are now enabled again

3.9F / 22.08.2021

- The adjustment of the light intensity of LED cold light sources is now also possible for exposures with white light. This applies both to fixed-grade papers and to burn in exposures with white light.

3.9E / 19.05.2021

- In the burn in menu, the letter "T" is now used instead of "Z" to indicate the burn in time.

3.9D / 26.03.2021

- Error correction for exposure with white light in test strip mode. Correction of a faulty text display which appears after a burn in exposures has been executed.

3.9B / 17.03.2021

- Revision of the complete software
- Calculations of exposure time for negative contrasts outside the copy range has been improved
- The reference value is now displayed in the first line (info line) of the main menu

3.8A / 10.07.2020

- The paper calibration for Ilford FB Classic was changed
- Troubleshooting the dimmer control of LED cold light sources

3.8 / 13.05.2020

- The paper calibration for Ilford Multigrade (V) RC DeLuxe has been changed
- The values of the last triggered exposure in the main menu are saved during power off
- Optimisation of the PaperFlasher function with regard to the accuracy of time calculation
- Extension of the dimmer range for LED cold light sources to 4 f-stops

3.7 / 20.01.2020

- New paper calibration for Ilford Multigrade (V) RC DeLuxe

3.6C / 13.12.2019

- Bug fixed in the Paper Flasher function. The Paper Flasher is now switched off during exposure and focus sequences.

3.6B / 07.07.2019

- Bug fixed in the burning and dodging menu, calculation in f-stop mode
- New software function for add on device called "PaperFlasher"

3.5 / 15.11.2018

- Bug fixed at burning and dodging times with grade 00: Short exposure flashes with magenta or blue have been deleted
- Bug fixed in linear time mode: Setting a time below 0.6s is possible now
- Bug fixed at very short exposure times: The green or yellow exposure is executed now.
- Bug fixed in test strip mode 'additive': The exposure time is calculated correct now

3.4 / 10.05.20

- New paper calibration for BERGGER Prestige Variable CB

3.3 / 15.02.2018

- New paper calibration for Tetenal Vario RC

3.2D / 4.7.2014

- Bug fixed in menu for BurnIn exposures: If exposure mode is set to 'Mixed light' the actual grade setting is used for the burning and dodging mode. Up to software 3.2C, the grade of the main exposure was used.

3.2C

- Calibration of ADOX MCP310 modified according to actual paper batch.

3.2B

- Bug fixed in burning and dodging menu

3.2A

- Bug fixed in measurement routine

3.2

- New paper calibration for Ilford Multigrade FB Classic und FW Cooltone

3.1

- New function 'Mixed light' for LED cold light sources available. Older light sources might be hardware upgraded
- A Beep signals the end of a burning and dodging sequence
- New measurement mode called 'Time measurement' is implemented

3.0

- New paper calibration for Ilford Art 300 and Adox MCC
- Display of temporary / manual changes of paper grade and / or time
- Papers which are no longer under production have been cancelled, but up to 7 could be reloaded selective by the customer
- Extended test strip functions. All test strips could be centred or are created in one direction only, i.e. lighter / darker / softer / harder
- Old Splitgrade-Controllers (Release 01) could be updated in Italian or French language now
- A new selection of a reference point will serve to keep either shadows, lights or mid grey tone values stable, while doing manual changes of the paper grade.
- For future updates there as an option to adapt the paper settings individual to LED light characteristic. The necessary calibration will be done step by step by Heiland.
- Totally revised software update application, which will run not only under Windows, but also with Mac/Apple OS X operating system.
- Updates of controllers with release 01 and 02 could be done via an USB/serial adapter, if the PC is not equipped with a serial port. These adapters are available in computer shops or at Heiland electronic.

2.8

- First software version which serves also for the new hardware release 3. This unit is build up in a smaller case and equipped with a red light illuminated LCD
- Improved reciprocity failure compensation – individual for yellow and magenta light
- Red safelight function for LED cold light heads improved
- The main menu contains information about the temporary exposure offsets

2.7

- New paper calibration for ADOX Variotone and ADOX MCP310 glossy

- Modified paper calibration for ILFORD Multigrade FB Warmtone, as the emulsion has been changed by ILFORD. The channels for the discontinued papers FORTE Polygrade V RC and Polywarmtone RC have been deleted.

2.6

- New paper calibration for: FOMA Variant III RC, FOMA Variant 311, FOMABROM Variant 111 FB, FOMATONE MG Classic 131 FB, ROLLEI Vintage 311. The channels for the discontinued papers of KODAK and ORIENTAL have been deleted.

2.5

- New Safelight function for LED coldlight source
- New function for Durst 2501/2506: Burning and dodging with any filter setting
- New enlarger type: Kienzle C120
- Optimised Greyscale function in combination with large offsets

2.4

- The calibration of Kentmere VC Select and Fineprint VC has been changed
- New driver for LED coldlight sources.
- New enlargers Durst CLS1000, CLS2000, 2501, 2506, Beseler 45, Super Chromega

2.3

- The greyscale display has been optimised
- The SPLITGRADE® enables now a density measurement in the measurement mode called 'Multipoint'

2.2A

- Paper Amaloco Varimax no longer in the list of calibrated papers
- New enlarger module Kienzle Sys. 500

2.2

- The calibration of the AGFA MCP RC paper was modified (about 0,3 f-stop darker)
- The calibration of the ILFORD Multigrade RC Warmtone paper was modified
- If you switch on the focus light while the controller is in the 'burning and dodging' menu or in the 'test strip' menu, the light is also automatically switched off after 5 minutes.

2.1

- The functionality of the greyscale has been extended, by showing an additional display with a higher resolution on the LCD of the controller
- While changing or selecting the module type, you are able now to program a delay between switching on the transformer and opening the shutter.
- New enlargers Durst M601, M605, DeVere 504, 507 are supported

2.0

- The greyscale of the SPLITGRADE® Comfort unit has been activated
- Calibration of Moersch Sepia VC RC paper has been modified

1.19F

- Calibration of 3 new papers FORTE Polywarmtone RC, FORTE Polygrade V FB, FORTE Polygrade V RC and the calibration of paper FORTE Polywarmtone Plus has been modified.

1.19E

- Calibration of paper AGFA MCP RC has been changed (approximately 0,5 f-stops lighter) and the Schwarzschild correction of this paper has been modified.
- Manual changes of exposure time, that are not done in the 1/10 f-stop mode, have now the following resolution: 0.01 s if time is less than 10s, 0.1s if time is between 10 and 100 s and 1s if time is longer than 100s. If the buttons '+' or '-' are pressed and hold the time will change faster
- New menu to store up to three modules / enlargers with offset values. Easy selection of one of these enlargers.
- The software checks now the state of motorised filter modules. In case of an error, the controller displays a warning
- Several small changes in calculating and measurement routines have increased the accuracy of exposure grade and time.

1.19D

- New calibration for Kentmere papers: VC Select and Fineprint VC
- New calibration for C41-Filmtype: Kodak Portra

1.19C

- New calibration for Bergger papers: Prestige Variable CB, Prestige Variable NB,
- New calibration for Kodak: Polycontrast III RC, Polymax Fine Art FD
- New calibration for Zone VI: Brilliant VC III
- Fast switch function to move from the main menu to the burning and dodging menu - by pressing simultaneously the keys 'Page' and 'Cursor right' or 'Page' and 'Cursor left' you move direct from the main menu to the burning and dodging menu
- All burning and dodging time could be selected to be independent from the main exposure or to be referenced to the main exposure (e.g. 0,3 f-stops of main exposure). This eases the task of altering the enlargement scale.

1.19B

- Supports the new SPLITGRADE® Comfort panel
- Bug fix in test strip mode 'Time separate'

1.19A

- The selection of the paper- and film-type is done via a new submenu. The papers and films are sorted by the manufacturer and displayed until the 'page' key is pressed.
- New papers calibrated: MOERSCH Sepia RC, MOERSCH Sepia FB, ORIENTAL Seagull FB and 3 free channels for other papers
- The exposure time range has been extended from 0.5s to 500 s.
- The exposure time is now displayed with a dynamic resolution of 0.01s / 0.1s / 1 s.
- Customers who do not use the 1/10 f-stop method for manual time changes are now able to do manual changes faster. This is done by a dynamic step resolution with the finest value of 0.1s (for a short exposure time) up to a coarse value of 5s (for a long exposure time).
- After switching on the focus light the previous measured contrast is displayed again.
- The time offset value for the calibrated papers has been extended to +/- 4 f-stops. Therefore special jobs like Lith-Prints can be done.
- If the (contrast) range of the selected paper will be exceeded after the measurement a warning is displayed
- The range of enlargers and cold light sources that could be equipped by SPLITGRADE® is extended, e.g.: Meopta, Zone VI, Aristo, Durst 138, Durst M805, Philips and more.
- 3 different types of test strips could now be produced automatically:

- Separate exposures for a time test strip
- Additive exposures for a time test strip
- Paper grade test strip
- The test strip could have a various amount of strips (3/5/7/9/11/13) and a variable step size (0,1 to 0,9 f-stops or 0,1 to 0,9 grade).
- The burning and dodging feature has been totally changed and is now prepared for all imaginable tasks.
- The main exposure could be followed from up to 7 burning and dodging times
- A kind of a chain is simply built by setting the first time which should not be executed to a value of 0 sec.
- All burning and dodging times are stored automatically
- For every burning and dodging time an independent paper grade could be selected, including white light exposures.
- Switching the focus light on does not interrupt the burning and dodging chain. This feature enables the search of areas to be dodged between the single burning and dodging steps (off coarse by using a red light filter on the enlarger).

1.18

- While measuring the word 'Density' was replaced with the word 'Contrast'
- Changes made for exposure with white light. First the filters are removed then the light is switched on. This enables white light exposure without a short yellow flash
- Calibration of paper 'Vario Comfort RC' changed (-0.3 f-stop)
- Calibration of paper 'Vario Ultra' changed
- Calibration of paper 'Forte' basically changed (error removed)
- New language 'French'
- New paper 'ILFORD Cooltone RC'
- New paper 'AMALOCO Varioprof RC'
- New paper 'AMALOCO Varimax RC'

1.17

- Various smaller errors removed, text messages changed

1.16

- New languages English and Japanese
- New film types: C41 processed films
- The focus light is switched off after 5 minutes automatically
- LED in probe-switch lights after 'Focus On' and while measuring higher contrasts
- Calibration of paper 'TETENAL Vario Fineart' changed
- Calibration of paper 'ILFORD RC Warmtone' changed
- New paper channel: 'Other papers'
- Detailed paper- and film names are displayed for 1s while changing
- Mode 'Probe off' is cancelled
- New mode 'order of filters: yellow/magenta or magenta/yellow'
- 4 programmable burning and dodging times
- Offset for time and paper grade is now specific to the selected paper
- Exposure can be paused or cancelled

1.15

- Exposure and grade offset for Kaiser enlarger
- New paper 'TETENAL Vario Comfort RC'
- New paper 'TETENAL Vario Ultra RC'
- New paper 'TETENAL Fine Art FB'
- New paper 'TETENAL Baryt Vario FB'

1.14

- New paper 'FORTE Polywarmtone'
- Calibration for paper 'KODAK Polymax II' is changed

1.13

- Exponential 'Long exposure compensation' leads to better results at long exposure times
- Error 'exposure time sometimes stop at 2,5s' was removed

1.12

- Paper calibration for 'ILFORD RC WT' and AGFA-papers (RC/FB) changed
- New function 'long exposure compensation' (linear)
- New paper channel 'Fixed' for exposures with white light
- Offset 'Time' and 'Contrast' on page 3 off LCD
- Previous page 3 (long paper name) cancelled

- Fast switching to grade 5.0 with 'Cursor Right' and 'Up' or to grade 00.0 with 'Cursor Left' and 'Down'

1.11

- First version