

Firmware Version 1.4.2 for Video Display DP-V1710

Details of changes made to the firmware

This firmware (Version 1.4.2) incorporates the following fix:

1. Fixes a malfunction that may prevent the use of the on-screen tally display function utilizing the TSL UMD protocol.
2. Fixes a UI (User Interface) bug that may impact displays equipped with luminance boost and running Firmware Versions 1.4 or 1.4.1 when they are connected to a DC Power Supply.

Firmware Version 1.4.2 is for the DP-V1710 4K Reference Display running Firmware Version 1.4.1 and earlier. If the Reference Display's firmware is already version 1.4.2, it is not necessary to update the firmware.

Please note that Firmware Version 1.4.2 includes all the enhancements available in Firmware Version 1.4. The details of Firmware Version 1.4 are as follows.

1. The full screen white luminance and peak luminance in boost mode has been raised from 600 cd/m^2 to 1000 cd/m^2 .
2. The full screen white luminance and peak luminance during local dimming has been raised from 300 cd/m^2 to 600 cd/m^2 .
3. The black luminance has been improved to 0.001 cd/m^2 in boost mode and local dimming.
4. LUT files in .cube format can now be directly imported to the display unit.
5. 1D-LUTs can now be imported to User LUT. The video signal range can also now be converted before or after User LUT (1D-LUT / 3D-LUT) processing.
6. HDR video and SDR video can now be displayed simultaneously on the waveform monitor when viewing or comparing waveforms after LUT conversion.
7. When outputting Canon Log video from a Cinema EOS camera⁴ over SDI or HDMI, the display unit can now auto detect and display the color range (full or limited) matching the output video range (full range or narrow range).
8. Added two LUTs to "CDL/User LUT" that convert video taken with RED Digital Cinema cameras to HDR (PQ) and SDR.
9. Added a function to "Pixel Value Check" that indicates the xy chromaticity values of a specified pixel as well as its coordinate position on the chromaticity diagram.⁵
10. Added "Peak Range" to "Range Check" that highlights high-luminance range areas set with the normal "Over Range" setting.
11. Errors detected by "Signal Monitoring" can now be exported as a log to USB memory sticks or other external memory devices. The error log is now preserved even after a power down-power up cycle.
12. Changed the range of settings for the area size (width and height) and the area display position (horizontal and vertical) for the "Safety Zone Marker". Also added "Box (Mask)" to the area shapes.
13. Added "Area Marker 2". It is now possible to set two area markers.
14. Added 80% (UHD) – 95% (UHD) to the "Grid Marker" Interval setting.

15. Added settings to adjust the channel order and display position on the "Audio Level Meter".
16. It is now possible to select and display 16:9 and 4:3 to match the aspect ratio when displaying SD-SDI signal video. Auto-detection and display with Payload ID is now also possible.
17. The unit can now automatically detect and switch the display when the input signal switches between SD-SDI and HD-SDI.
18. Added "Marker 1/2/3", "Monochrome", "Blue Only", "Red Off", "Green Off", and "Blue Off" to the functions that can be saved under each GPI pin under "Remote(GPI)".
19. Added 10% and 5% to the display scaling options for HDR / SDR ratio graphs on the "Frame Luminance Monitor".
20. Improved web browser usability, including moving the position of the pixel value checker by click or touch on the View window during remote operation via Wi-Fi or LAN and allowing direct entry of values for the adjustment bar on the Control window.
21. Added a setting to keep the unit button names continuously lit.
22. Changed the behavior when using auto system gamma for Hybrid Log-Gamma (HLG).
23. Added a power-save function.
24. Made other usability and display improvements.

*1 Luminance values stated here are standard values at the time of factory shipment and are not guaranteed performance values.

*2 Requires purchase of a license. Applicable only when the unit is operated from the AC power supply.

*3 Applicable only when the full screen is displayed in black.

*4 Cinema EOS camera models that permit Canon Log range selection
C500 Mark II / C300 Mark III (both SDI/HDMI are supported)
C700 / C700 GS / C700 FF (User LUT settings and SDI only)
(Current as of the end of May 2020)

*5 Only for the BT.2020 color gamut and a 1.0, 2.2, 2.35, 2.4, 2.6, PQ, or HLG (excluding HLG RGB) gamma curve.

Preparations for updating the firmware

It is recommended that current settings are exported before attempting to update the firmware. Once the firmware is updated, settings can be imported back to the display.

The downloaded folder contains the new firmware. (Filename: "update_dpv1710.rom", file size: 23,230,199 bytes) It also contains the firmware update procedure document (multilingual PDF file in following languages: Japanese, English, French, German and Chinese (simplified characters)). Before proceeding to update the firmware, please read the firmware update procedure document.

The following items are required to perform the firmware update:

1. Display unit
2. Personal computer
3. USB memory (FAT16 or FAT32)
4. Firmware (The downloaded file)

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■linux kernel, busybox, SquashFS, JFFS2, FUSE

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■glibc, libfuse, avahi-autoipd

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■Newlib(libc)

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