



**SmallHD Production Monitor Firmware
1.4 CHANGELOG**

February 17, 2017

Official Support for the new 1703-P3 Production Monitor added.

- a. This monitor adds support both DCI-P3 and Rec 709 color spaces.

Features Added:

1. RGB Offsets have been added to the appearance menu for custom color adjustment.
2. Added support for RED's new IPP2 workflow: Input color space list now includes REDWideGamut/LOG3G10 (also removed the deprecated LOG3G12 gamma).

Improvements:

1. Color space options in the menu are renamed for clarity. The name now indicates both the expected gamma and gamut.
2. Pong now contains instructions to press the back button if you would like to exit the mini game
3. Disabling the Calibration LUT now disables all internal color conversion. This ensures user calibration will be more accurate. The UI elements of the Input Menu and Appearance Menu now update to reflect this.
4. Adjustable Studio Brightness range has been increased.

Bugs Fixed:

1. Fixed a bug causing some 17" monitor's screens to go black during a user upgrade.
2. Fixed a bug with the waveform's spot meter.

Notes:

New Firmware Issues

1. Functional Issues
 - a. 3203HDR OLED Gamma Match Switch Does not function correctly. Toggling switch changes image, but until gamma shift slider is changed, the correct gamma is not displayed. In order to achieve correct gamma, switch must be toggled and slider modified.

Known Existing Issues

1. Image Rendering Issues
 - a. Interlaced & psf formats "bounce" for high frame-rates(120 frames)
 - b. Bottom Row of panel Rendered several pixels to the left.
 - c. Collage page display can have artifacts & flickering.

- d. Enabling Exposure Assist and Peaking at the same time will result in the bright peaking lines being introduced into the false color image. Most noticeable in images with fine detail, high contrast edges
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SmallHD Production Monitor Firmware 1.1 CHANGELOG

August 30th 2016

Features Added:

1. Official Support for newest Production Monitors

- a. 2403 HDR
- b. 1303 HDR
- c. 1303 Studio

2. Enhanced Input Menu:

- a. Each input type (HDMI, SDI1, SDI2) can be configured to support different incoming gamma formats.
- b. **HDR Preview Setting (HDR Models Only)**
 - i. Enable with any SmallHD supported log format (HDR models only)
 - ii. Histogram added to help users judge incoming data & make gamma decisions
 - iii. List of recognized input color spaces:
 - **HDR Monitors Only**
 - BT 2020/2084/2100: Uses a 2020 gamut and the 2084 PQ EOTF
 - HLG
 - **All Production Monitor Models**
 - REC 709 (with various gamma options)
 - SLOG
 - SLOG2
 - CLOG
 - LOGC
 - RedLogFilm
 - iv. Improved log correction from the above formats

3. New “Appearance” menu which provides controls for the following:

- a. The Appearance menu is not affected by the “disable calibration” button on the calibration page
 - i. Sharpness: *Increase or decrease the edge contrast of the image*
 - ii. Contrast: *Increase or decrease the separation between dark and bright levels of the image*
 - iii. Brightness: *Adjusts the black levels of the monitor*
 - iv. Gamma Shift: *Adjust image gamma curve with a new slider.*

- v. RGB Gain: *Used to adjust the red, blue, and green balance in the image.*
 - vi. OLED Gamma Match: *Changes monitor gamma to resemble an OLED display*
 - vii. The Appearance menu is not affected by the “disable calibration” button on the calibration page
4. **Added Backlight Settings**
 - a. Studio Brightness: 100 nit studio mode for true Rec.709 representation on all* production monitors
 - i. Excludes the 1703HDR
 - b. Standard Range: Factory calibrated range of brightnesses
 - c. Max Brightness: Uncalibrated maximum brightness
 5. **USB Support Added**
 - a. USB ports are now activated, and can be used to power accessories - Outputs 5v through each port 1.5amp shared (total)"
 - b. USB flash drives may be used to load/save LUTs, Profiles, and Image Overlays
 6. **Crop Tool Added** (located in the Image Scale tools menu)
 - a. Allows user to crop a region of the image and then blow that up to the full video area.
 7. **Image Flip Added**
 - a. Flip the on-screen video signal and menu both horizontal and vertically
 - i. Horizontal
 - ii. Vertical
 - iii. Horizontal + Vertical
 - iv. Menu Flip
 - v. Auto Flip
 8. **Multi View Page Enhancement**
 - a. You can now select Dual input view or Quad input view for your multiview page. This is configurable in the monitor’s settings menu.
 9. **Enhanced Focus Tools**
 - a. Focus Assist and Focus Peaking tools now contain a Contrast & Brightness value which can be modified for each page. This will make your focus assist even easier to read when contrast is turned up and brightness is turned down.
 - b. Peak Thresh option has been added to Focus Assist tool, this allows you to have increased control in your Focus Assist
 10. **Image Scale tool name has changed to Image Location**

Improvements:

1. Added SD-SDI Support
 - 480i
 - 576i
2. In Page-View, the small tool icons are now rendered green if the tool is active

3. Audio meters are now available in multiview
4. Added screen capture functionality to multiview. There are 3 ways to use this function.
 - Select the page you want to image capture by clicking your joystick and highlighting the page of interest - then hit the image capture button.
 - Press the image capture button, and then use to joystick to outline the numbered window that you would like to image capture. (The highlight will be a white box around the window number)
 - Press the image capture button, and then press the corresponding window's page button for the window that you want to image capture.
5. "Please Wait" message now displays while monitor is performing long actions:
 - Max Bright
 - Factory Reset
6. LUT button behavior
 - When a LUT or multiple LUTs exist on a page...
 - i. LUT button cycles through all the LUTs in the toolbar, ending by turning off all LUTs
 - ii. Each time LUT button is pressed, the name of the active LUT (or "No LUT" when appropriate) appears in text discreetly on screen for 3 seconds
 - If no LUT exists on a page, The system will prompt the user to select a LUT in the file browser
7. Speakers now mute when headphones are connected

Recommended Practices

- ***Connect external recorders directly downstream of your source device (i.e. camera), not downstream of the monitor.***

