SMALLHD

SmallHD PageOS 5 Firmware v5.0.0-Beta-2   June 30th, 2022

CHANGELOG

Important Beta Software Information:

- Beta 2 Supports all monitors except the DSMC3 RED® Touch and Action 5
- There are known significant bugs with this Beta (see complete list below before installing)
- There may be some unknown bugs with v5.0.0 Beta 2
- Please report bugs to the following email address:support@smallhd.com
- Further beta releases are expected to be provided in the coming weeks

Firmware update Best practices:

- SD card 2,4,8,16GB
- Backup your profile before update (recommended)
- Use AC power or fully charged battery
- Note older version of firmware before update

Firmware Compatibility:

- This firmware **is NOT compatible with the DSMC3 RED® Touch** or **Action 5**
- This firmware **is NOT compatible with legacy monitors** (DP1, DP6, DP4, AC7, and DP7-PRO)
- Please read through **Known Issues** before installing

Hardware Updates:

- Add support for Vision 24

IMPORTANT - Known Issues in Beta 1:

- Waveform does not work on 4K Production Monitors when positioned at the top of the screen
    - Workaround: Move the waveform to the bottom of the screen
- Waveform at some widths may not work when the display has been rotated
    - Workaround: Use a waveform width that doesn't exhibit the issue
- **Multiview Video may momentarily flicker on 4K Production Monitors**
- HDMI Output does not work when viewing the Multiview Page on 4K Production Monitors

- CalMAN integration has not been finalized and fully validated
- Image Capture may not work as expected on PQ Color Pipes
  - The raw input data is captured using image capture. The overlaid image is NOT subject to the Color Pipe, it's assumed that all images being overlaid are already in the same color space as the calibration target
- 4K Production Monitors do not work with 10-bit video from a Murideo color generator
  - Workaround: Use a different source
- 4K Production Monitors cannot display 59.98 FPS video from a Black Magic Ultrastudio
  - Workaround: Use a different frame rate
- Luma Histogram bars may be colored on some Multiview Panes
- 720p SDI video does not work on 4K monitors
    - Workaround: Use a different resolution

Beta 1 Issues Resolved by Beta 2:

- EL Zone Ranges were incorrect on some cameras
- EL Zone UI improvements - Scale was reversed and colors improved
- Monitors occasionally lost configurations through a power cycle
- Calibration Does Not Work - It now does work!
- Fixed a bug causing VISION panel updates to occur twice in a row
- Fixed color picker issues
- Zooming in and out of a video page altered the position of video page elements
- Fixed blocking tutorial steps for small monitors
- Resolved instances of some Multiview panes not showing video
  - The video in pane 3 may have shown no video unless pane 4 had video

Features Added:
- Look-Around Camera Control
- HDMI Out enabled for 4K Production Monitors (allows adding a 3D LUT to Output)
- Multi-View on 4K Production Monitors
  - VISION monitors support dual-view
  - All other 4K production monitors support up to quad-view
- Added a Horizon Indicator Tool (Add Tool > Frame > Horizon Level)
- EL Zone Tool
  - Option in the Exposure Assist tool. Only works when using a LOG Color Pipe
  - Image Capture can't currently capture the EL Zone tool
- Added Touch Screen Function Buttons to touch screen monitors
- Active 4K TX can now be assigned to a function button
  - Allows using function buttons to change between paired transmitters
- Switch from tri-linear to tetrahedral LUT interpolation
- Added support for 33pt Calibration LUTs on 4K Production Monitors
- 4K Production Monitor Speakers are now enabled
- Added configurable low voltage warning on 4K Production Monitors
- Color Pipes can be assigned to function buttons
- Allow users to assign unique calibrations to Color Pipes

Improvements and Alterations:

- General Performance improvements
- Performance improvements when switching between Color Pipes
- Added Input Tool, allows assigning a specific input to a video page
- Updated RED Log3G10 LUT
- Improved OLED 27 battery switching, should drain both batteries before dying
- Added UI indication when a monitor is outputting a video format an attached 4K TX wireless module will NOT be able to transmit
- Unassigned function buttons can now be configured to perform no action on press
- Added Dashboard Page to function button assignments
- Allowed more granular backlight control. From 20% steps to 5% steps
- Modified Waveform axis for clarity when showing code values on legal range data
- Dropping calibration saturation to 0 now results in a grayscale image
- Add LOG Color Pipes to ALL monitors (required for EL Zone Tool)

Bugs Fixed:

- Smart 7 Monitors no longer have artifacts when combining Crop & Scale with rotation
- Fixed issues receiving 4K video from some HDMI sources
- Improved behavior of add new Page menu
- Camera Control for KOMODO no longer prevents iris changes while recording
- Smart 7 Touchscreen would occasionally stop responding
- 4K Production Monitor Max Brightness Mode now properly disables all color conversions
- Fixed issues with the Waveform data not being aligned to the legend
- Fixed issue where the Pixel Zoom settings menu didn't scroll
- USB Keyboard should work to control monitors again
- Pressing the back button can no longer lock a 4K Production Monitor
- RCP2 Camera Control: Auto Focus menu no longer opens without an AF lens
- Fixed potential crash in Image Gallery menu
- SD Card will be the default capture location as soon as a card is inserted
- Fixed bug causing profile load to fail if profile > 1MB
- Waveform ROI data is no longer sometimes rendered in the wrong color
- Exiting the Calibration menu no longer leaves Custom Calibration selected unless a new calibration was created. Aborting early will leave the calibration menu in the original state, from before the calibration menu was opened
- Fixed issue with OLED 22 Judd Offset being applied when the toggle was off
- 4K Production Monitors now report user-facing monitor names (i.e. sending HDMI from a computer)
- Fixed 4K Production Monitor Waveform sometimes not displaying on DCI-4K video
- Color Pipe EI menu now properly scrolls
- Color Picker Active/Inactive state now preserved through power cycle
- Last Clip Info now available wirelessly on RX monitor
- Fixed several bugs regarding downstream video

(Historical) Beta 0 Issues Resolved by Beta 1:

- HDMI input from an M1 Mac does not work
- After a monitor reboots, the current page will not always be set to the correct input.
- HDR + SDR color pipes cannot be used simultaneously on Multi View
- EL Zone tool may not function on some older products
- Smart 7 Monitors do not work with SDI
- 4K Production Monitors may require cycling cables after a restart before SDI will display
- OLED 22 and OLED 27 display turn black briefly when changing inputs
- 4K Production Monitor SDI out does not work

Recommended Practices

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

Chart Below represents the software roadmap for the official 5.0 release as it relates to SmallHD monitors:

	Lookaround Cam Control	Quad View	Dual View	Horizon Indicator	On screen Touch function buttons	Calman integration	EL Zone	Improved 4k upscaling	RT Marks	Tetrahedral LUTS
Focus 5				Yes	Yes	Yes	Yes		Yes	Yes
Focus Pro	Yes			Yes	Yes	Yes	Yes		Yes	Yes
Focus 7				Yes	Yes	Yes	Yes		Yes	Yes
Cine 7	Yes			Yes	Yes	Yes	Yes		Yes	Yes
Indie 7	Yes			Yes	Yes	Yes	Yes		Yes	Yes
702 Touch	Yes			Yes	Yes	Yes	Yes		Yes	Yes
703U				Yes		Yes	Yes		Yes	Yes
503U				Yes		Yes	Yes		Yes	Yes
703Bolt				Yes		Yes	Yes		Yes	Yes
702 Bright				Yes		Yes	Yes		Yes	Yes
502 Bright				Yes		Yes	Yes		Yes	Yes
502/501				Yes		Yes	Yes		Yes	Yes
702L				Yes			Yes			Yes
701L				Yes			Yes			Yes
Cine 13		Yes	Yes			Yes	Yes	Yes	Yes	Yes
Cine 18		Yes	Yes			Yes	Yes	Yes	Yes	Yes
Cine 24		Yes	Yes			Yes	Yes	Yes	Yes	Yes
Oled 22		Yes	Yes			Yes	Yes	Yes	Yes	Yes
Oled 27		Yes	Yes			Yes	Yes	Yes	Yes	Yes
Vision 17			Yes			Yes	Yes	Yes	Yes	Yes
Vision 24			Yes			Yes	Yes	Yes	Yes	Yes
1303HDR						Yes	Yes		Yes	Yes
2403HDR						Yes	Yes		Yes	Yes
1703 HDR						Yes	Yes		Yes	Yes
1703 P3Yes						Yes	Yes		Yes	Yes
1703 P3						Yes	Yes		Yes	Yes
1303 Studio						Yes	Yes		Yes	Yes
3203 HDR						Yes	Yes		Yes	Yes