

Products	QuickVu 4K, QuickMatrix 4K, Pulse 4K, Eikos 4K
Date	Jully 06 th , 2023
Version	3.0.31

The version (s) indicated here above has (have) been tested and validated by the QA Department.

Technical Notes:

Important

- For the Eikos 4K:
 - when upgrading the firmware from version 2.0, if the template is “Vertical Blend”, then after the upgrade, the configuration will a Blend (template) in Horizontal mode (Canvas). It is necessary to change the canvas mode to “Vertical” to recover the previous configuration.
 - When loading a configuration file made in a version lower than v2.1.41 to a Eikos 4K with a version higher to v2.1.41, if the template in the file is “Horizontal Blend” or “Vertical Blend”, then the configuration could be considered as Invalid. It is necessary to select another template (either “Mixer” or “Matrix”) to get back to a valid configuration.

New features:

- None.

Improvements:

- None.

Bug fixes:

- Net mask of Dante board could be changed
- Content is correctly displayed on aux output after loading a new configuration
- Interlaced source is displayed correctly after a reboot on layer 1
- LUT: Importation of file with \t (tabulation) instead of space is now possible

Known issue:

- The sharpness of live input is weak when the content is downscaled.
- T-Bar transitions with RC400T and SB124T-3 may not be smooth.

PREVIOUS VERSIONS

Products	QuickVu 4K, QuickMatrix 4K, Pulse 4K, Eikos 4K
Date	February 15 th , 2023
Version	3.0.21

The version (s) indicated here above has (have) been tested and validated by the QA Department.

Technical Notes:

Important

- For the Eikos 4K:
 - o when upgrading the firmware from version 2.0, if the template is “Vertical Blend”, then after the upgrade, the configuration will a Blend (template) in Horizontal mode (Canvas). It is necessary to change the canvas mode to “Vertical” to recover the previous configuration.
 - o When loading a configuration file made in a version lower than v2.1.41 to a Eikos 4K with a version higher to v2.1.41, if the template in the file is “Horizontal Blend” or “Vertical Blend”, then the configuration could be considered as Invalid. It is necessary to select another template (either “Mixer” or “Matrix”) to get back to a valid configuration.

New features:

- o None.

Improvements:

- o The update procedure is now more reliable.

Bug fixes:

- o Background frames, foreground frame and snapshots work properly again.
- o Transitions:
 - There are no more flashes at the end of the transition when crossfading two inputs with different aspect ratios.
 - Layers don't freeze anymore during 1 or 2 frames at the end of the transition.
- o DisplayPort inputs:
 - BT.2020 4:2:2 isn't mismatched with BT.2020 4:4:4 anymore.
 - Color bit depth status is now correct.
- o After a DHCP request, the timeout for receiving the answer is increased so the address assignment doesn't fail if the DHCP server takes a long time to answer.
- o Web RCS:
 - The list of selected screens now appears once in the Live pages.
 - Loading Master Memories created with more screens than currently existing, the list of selected screens is now displayed properly (non-existing screens don't appear anymore).

Known issue:

- o The sharpness of live input is weak when the content is downscaled.

- T-Bar transitions with RC400T and SB124T-3 may not be smooth.

Products	QuickVu 4K, QuickMatrix 4K, Pulse 4K, Eikos 4K
Date	February 19 th , 2022
Version	3.0.13

The version (s) indicated here above has (have) been tested and validated by the QA Department.

Technical Notes:

Important

- For the Eikos 4K:
 - when upgrading the firmware from version 2.0, if the template is “Vertical Blend”, then after the upgrade, the configuration will a Blend (template) in Horizontal mode (Canvas). It is necessary to change the canvas mode to “Vertical” to recover the previous configuration.
 - When loading a configuration file made in a version lower than v2.1.41 to a Eikos 4K with a version higher to v2.1.41, if the template in the file is “Horizontal Blend” or “Vertical Blend”, then the configuration could be considered as Invalid. It is necessary to select another template (either “Mixer” or “Matrix”) to get back to a valid configuration.

New features and Improvements:

- **Processing**
 - New Processing Architecture based on Look-up Tables (LUT).
 - There are two types of LUTs:
 - **Conversion LUTs:** to be used for color space and dynamic range conversions.
 - **Correction LUTs:** to be used to correct the colors of an input or an output. For outputs, they are typically useful for color calibration.
- **Streaming**
 - It is now possible to stream an input or an output up to a format of 1080p30 (previously limited to 720p30)
- **EDID**
 - It is now possible to read the preferred formats of an EDID even if they are defined in extensions (CEA-861-G and DisplayID 1.3)
- **Protocols**
 - Integration of the Tally protocol TSL (version TSL v3.1 and TSL v4.0), only available in the Front Panel menus.

Bug fixes:

- Using the Dante audio clock as reference now works

Known issue:

- The sharpness of live input is weak when the content is downscaled
- T-Bar transitions with RC400T and SB124T-3 may not be smooth.

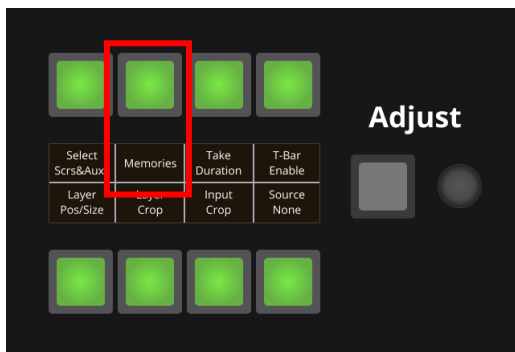
Products	QuickVu 4K, QuickMatrix 4K, Pulse 4K, Eikos 4K
Date	June 1st, 2022
Version	2.2.33

The version (s) indicated here above has (have) been tested and validated by the QA Department.

Technical Notes:

New features and Improvements:

- o **RC400T**
 - When a screen PGM or PRW is locked on the WebRCS and the RC400T is synchronized with WebRCS, the lock is also effective with RC400T for a safer behavior. It is not possible anymore for this screen:
 - to change the input assignment of a layer
 - to load a Screen memory
 - to overwrite its content while loading a Master Memory
 - Memories can now be saved and deleted in the user keys area of RC400T:
 - Master Memories
 - Screen Memories
 - Layer Memories



Bug fixes:

- NA

Known issue:

- The sharpness of live input is weak when the content is downscaled

Products	QuickVu 4K, QuickMatrix 4K, Pulse 4K, Eikos 4K
Date	February 23, 2022
Version	2.1.41

The version (s) indicated here above has (have) been tested and validated by the QA Department.

Technical Notes:

New features and Improvements:

o **Template modifications**

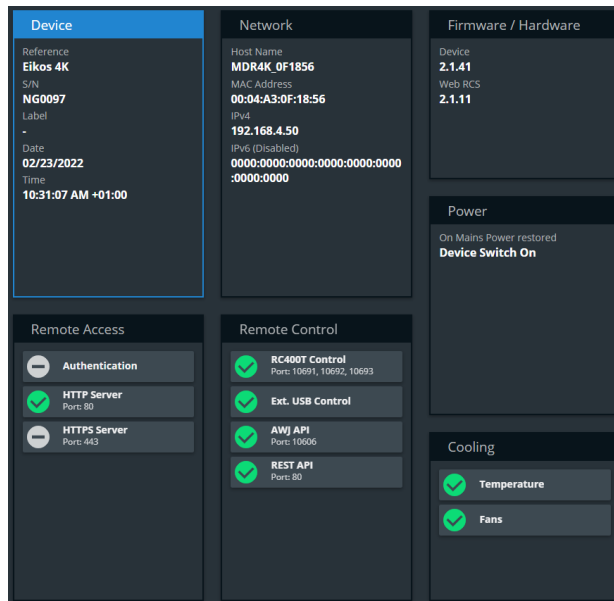
- For the Eikos 4K, the “Blend” template replaces the former “Horizontal Blend” and the “Vertical Blend” templates.
The selection of the Horizontal or Vertical mode for the Blend is now available in the Canvas page.

Important

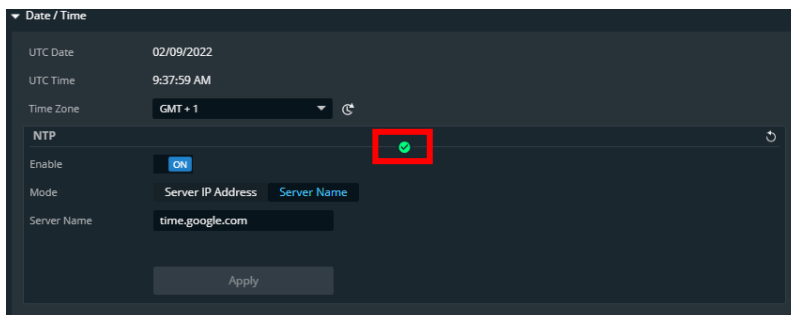
- For the Eikos 4K:
 - o when upgrading the firmware to the version 2.1.41, if the template is “Vertical Blend”, then after the upgrade, the configuration will a Blend (template) in Horizontal mode (Canvas). It is necessary to change the canvas mode to “Vertical” to recover the previous configuration.
 - o When loading a configuration file made in a version lower than 2.1.41 to a Eikos 4K with a version 2.1.41, if the template in the file is “Horizontal Blend” or “Vertical Blend”, then the configuration could be considered as Invalid. It is necessary to select another template (either “Mixer” or “Matrix”) to get back to a valid configuration.

o **Web RCS:**

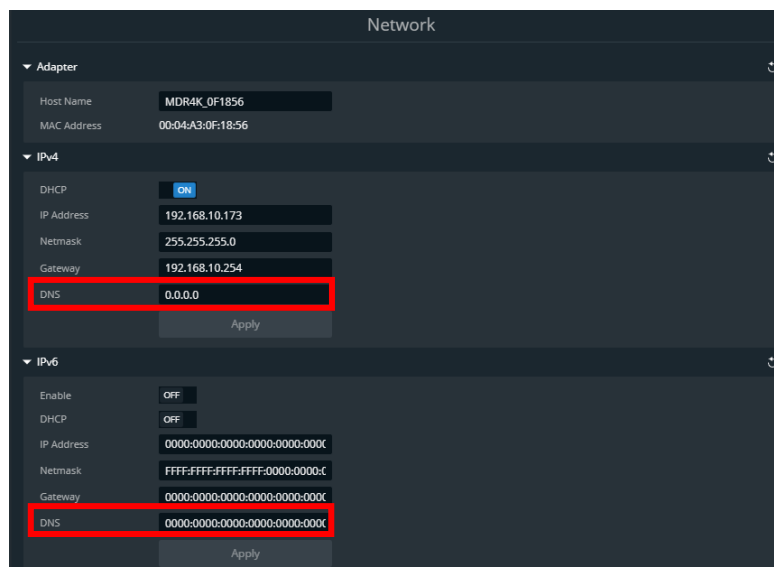
- **Dashboard**
 - New layout of the Dashboard page



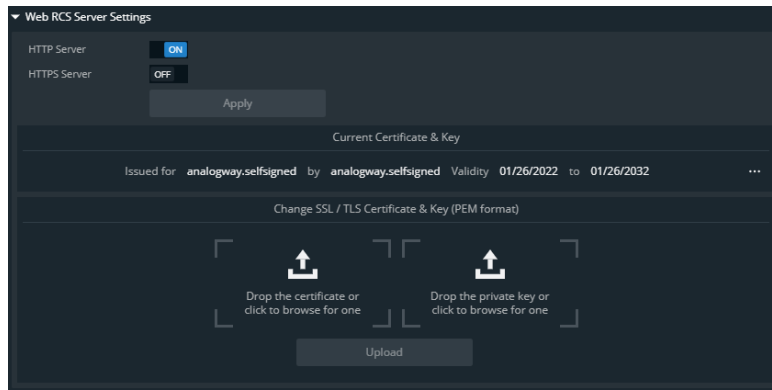
- New connection status for the NTP server



- Add the possibility to set the DNS address in the Web RCS



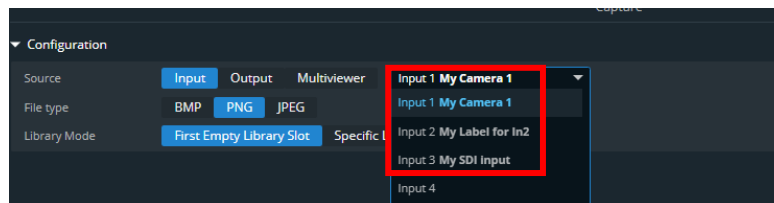
- New interface of the HTTP/HTTPS settings, allowing to control the activation of HTTP and HTTPS protocol independently



- **Display a progress bar when updating the firmware device**

Image Library

- For the Capture function, the source label is now displayed in the drop-down list



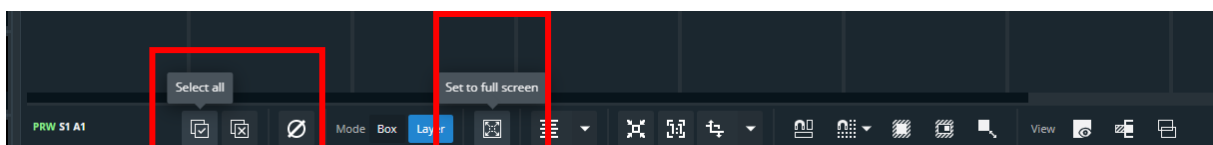
Audio

- In the Audio CUSTOM page, an audio bar graph (VU meter) indicates the volume of each audio channel (not enable by default)

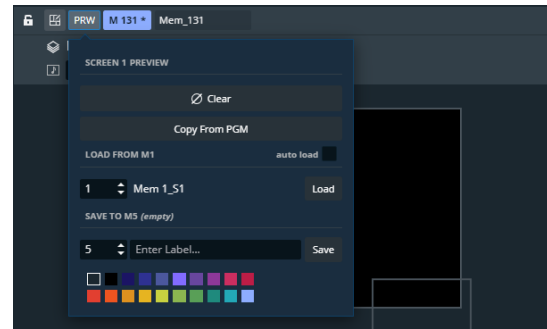
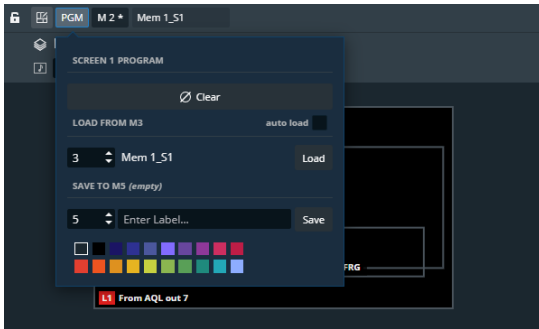


Live pages

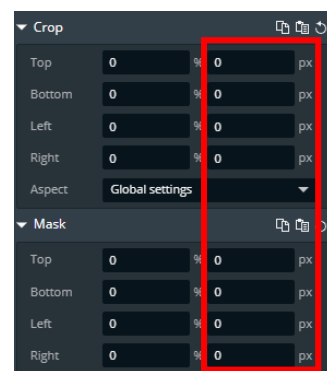
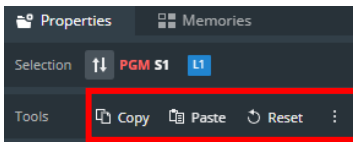
- **Modification of the bottom tool bar**
 - A shortcut button is now available for setting a layer full screen in one step instead of centering it and then setting it at full screen size.
 - Add "Select All", "Unselect All" and "Clear" buttons



- **Integration of the shortcut function for each program and preview screen**



- **Improvement of the layer property management**
 - New global Copy/Paste/Reset tools for layer properties.
 - New option to lock the aspect ratio of a layer while resizing it in the properties panel (independent from the one in the bottom tool bar)
 - Layer cropping and masking now achievable either in pixels (new) or in percentage



- o **Front Panel menu**
 - Integration of a hardware auto diagnostic function (Services > Diagnostic Mode) that could be required by Analog Way Technical Supports to help for troubleshooting a possible hardware issue.
Note that the diagnostic lasts several minutes, and your device is not available during this time.
- o **RC400T**
 - Integration of a "Select/Unselect All Screens/Aux" function in the User Keys area
 - Management of the joystick for
 - Size and Position of the layer
 - Layer crop (not to be mismatched with layer masking)
 - Input crop



Bug fixes:

- When the Audio output lines (analog) is set in 'Direct routing' mode, and when a source is applied to one of the Audio Line, then the second Audio Line is now not muted.

Known issue:

- The sharpness of live input is weak when the content is downscaled

Products	QuickVu 4K, QuickMatrix 4K, Pulse 4K, Eikos 4K
Date	November 02, 2021
Version	2.0.22

The version (s) indicated here above has (have) been tested and validated by the QA Department.

Technical Notes:

Bug fixes:

- For the Eikos 4K using the Edge-Blend template (either Vertical or Horizontal), if the Background Set is configured with still images, the content of the Background Set for the output 1 is now well updated and displayed when transitioning or changing the PGM background set.
- For the pulse 4K, after upgrading to version 2.0.20, if the device was using the Matrix template, the live source for the Background sets were not available; it was necessary to apply the Mixer template and then apply again the Matrix template to access the live inputs for the background sets.
Now, the live sources for the Background sets are directly accessible without changing the operating mode.

Known issue:

- The sharpness of live input is weak when the content is downscaled

Products	QuickVu 4K, QuickMatrix 4K, Pulse 4K, Eikos 4K
Date	October 19, 2021
Version	2.0.20

The version (s) indicated here above has (have) been tested and validated by the QA Department.

Technical Notes:

New features and Improvements:

- Support of the RTMP IP streaming of any input and output
- Support of Live content for Background Set for Pulse 4K products
- Support of the RC400T controller, including the synchronization with the Web RCS session
- Support of resolution (input, output, custom format) for 4K capable connectors, up to
 - 4096 pixels width,
 - 4096 pixels height,
 - within a bandwidth equivalent to an active area of 4096x2160 @ 60Hz
- Management of rates up to 240Hz for inputs and up to 144Hz for processing and outputs
- Management of the Time Zone and NTP (Network Time Protocol)
- Support of the HTTPS protocol for the WebRCS and the Rest API connection
- Integration of a Timestamp and a Label when saving the device Configuration into a Slot
- Display of the MAC Address of the Dante™ interfaces (Web RCS and Front Panel menus)
- Synchronization of different Web RCS sessions
- Implementation of a global HDCP configuration for Inputs and Outputs
- Integration of dedicated RGB settings for brightness and contrast configuration
- Integration of Audio management in the HTTP API Rest

In the Web RCS

- Availability of the capture of Input, Output and Multiviewer content
- Implementation of the Layout helper for Live Layers (Grid, Cascade)
- Management of the Audio Custom sets

In the Front Panel menus

- Implementation of the shortcuts “Set to Screen Center”, “Set to Fullscreen”, and “Set to content size” in the Layer Position menu of each Screen
- Implementation of the Layout helper for Live Layers (Grid, Cascade)
- Minor modifications of the organization of the menus

Bug fixes:

- The color of the shadow border is now well saved in the Memories
- The Anchor points for the Background Set are now configurable for Horizontal or Vertical soft-edge screen with an important Coverage area
- The 'Covering' test pattern for soft-edge Screen is now displayed properly if the AOI is different from the format
- The device is no more changing the Layer mode (from Split to Mixing), when importing a backup configuration with a Screen in Split Layer mode
- The duration of the audio transition is now following the value defined in the audio settings
- In the WebRCS, the settings for Blend curves, Black Area and Black Level are now always visible
- The Test Pattern for Auxiliary Screen is now displayed even if no content has been assigned
- The snapshots of the outputs in the WebRCS are now well displayed when the AOI is different from the format
- The interlaced inputs can now be keyed

Known issue:

- The sharpness of live input is weak when the content is downscaled

Products	QuickVu 4K, QuickMatrix 4K, Pulse 4K, Eikos 4K
Date	April 29, 2021
Version	1.3.17

The version (s) indicated here above has (have) been tested and validated by the QA Department.

Technical Notes:

New features and Improvements:

- Integration of the input crop finder
- The Preview widget of the Multiviewer can now be up to 1920x1080 if the Screen resolution is higher or equal to 1080p (the previous limitation was 1280x720)
- Improvement of deinterlaced signals
 - The live background source can now be deinterlaced (for interlaced live input on Eikos 4K)
 - The Pulldown settings are set up automatically (for all products)
- New full-size greyscale test pattern
- New limitations to import the still images
 - New resolution up to 18.000 pixels width and 10.000 pixels height, with maximum Pixel Space at 35 Mega Pixels (Max. File Size remains at 25MB)
 - Possibility to downscale the images that are between 35 and 70 Mega Pixels
- New last loaded master preset indicator (shotbox, control box and web RCS)
- New option to allow user to ignore output color space standard limitations
- Management of the “Out of My Box” user preferences (only available via the Front Panel Menus)
- Support of the new controller SB124T-3
- New API method available to load a Master Memory with the REST API

In the Web RCS

- Integration of the audio settings and audio routing features
- Integration of the Quick Preset feature
- Management of the EDID preferred formats
- Set up of the Output format in Outputs page
- Some minor improvements: new layout for reference Layer, Tallies for Screens an Auxiliary Screens memories, display of the Dante version....

Bug fixes:

- In the Web RCS, it is no more necessary to select first the operating template and then selecting the Layer mode for the initial modification of the Layer Mode (Mixing / Split)
- The dual output screens (Eikos 4K) with output formats higher to 1920x1200@60Hz are now properly supported
- Audio for SDI inputs and outputs are now properly supported
- The connection problems to the SB124T-2 controller at startup have been fixed
- The 'tif' image format is now supported

Known issues:

- When importing a backup configuration with a Screen in Split Layer mode, if the current configuration of this screen in the machine is also in Split Layer mode, then it is switched to Mixing Layer mode
- The interlaced inputs cannot be keyed
- The 'Covering' test pattern for soft-edge Screen is not displayed properly if the AOI is different from the format
- The thumbnails of the outputs in the Web RCS could be inconsistent if the AOI is different from the format
- The input signal with a height superior to 2160 (beyond the limits of the devices) are considered as valid signal but cannot be well displayed

Products	QuickVu 4K, QuickMatrix 4K, Pulse 4K, Eikos 4K
Date	March 15, 2021
Version	1.2.7

The version (s) indicated here above has (have) been tested and validated by the QA Department.

Technical Notes:

New features and Improvements:

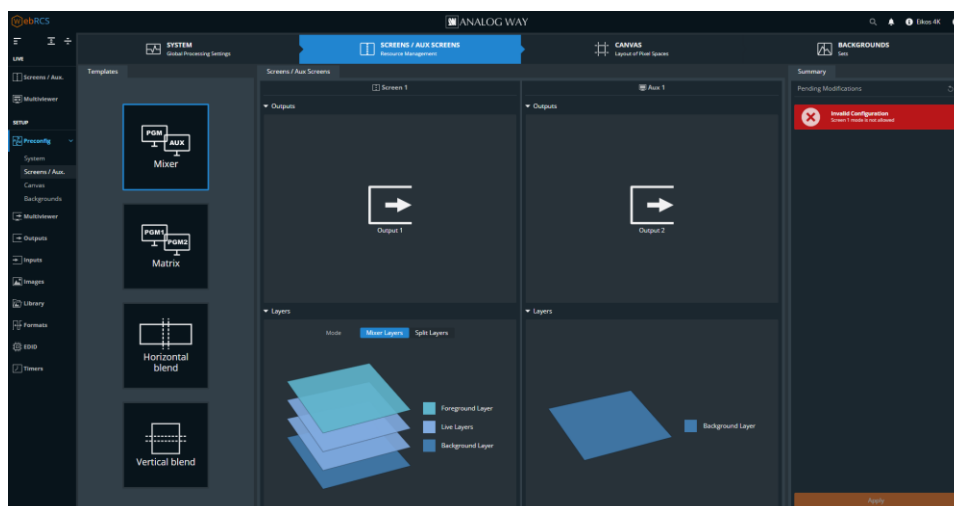
- Support of the Split Layers mode

Bug fixes:

- HDCP 2.x for outputs was not functional
- Some layer transitions were not correctly done when a border was enabled
- The transition was not properly done when the HDMI output plug was not connected to a display (only using the SDI output plug)
- The Preview widgets in the Multiviewer were not properly displayed when the same template was reloaded

Known issues:

- After a reset, the initial modification of the Layer mode from Mixing to Split in the Web RCS requires to first select an operating template and then modify the Layer mode.
 - Tip: you can click on the current template (or single one for the QuickVu 4K and QuickMatrix 4K) to not modify your current setup.



When trying the directly change the Layers Mode after a reset, an invalid configuration is detected.

Products	QuickVu 4K, QuickMatrix 4K, Pulse 4K, Eikos 4K
Date	February 16, 2021
Version	1.1.9

The version (s) indicated here above has (have) been tested and validated by the QA Department.

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Technical Notes:

New features and Improvements:

- Support of the Border and Shadow feature for Live Layers (Screens)
- Improve the availability of formats depending on plug types
- Support of the management of the EDID Preferred Format in the User Bank via the Front Panel menus
- In Web RCS, improve the layout of the Preconfig>Screens/Aux. page
- In Web RCS, enable the Lock / Unlock button for Screens and Auxiliary Screens
- In Web RCS, support of the shortcut toolbar for quick actions on layer selection
- In Web RCS, support the configuration of the SDI output plug and display its status
- In Web RCS and Rest API, support the Standby mode by displaying an informative pop-up (Web RCS) and rejecting HTTP request (AP), except for the Wake-Up command.
- In Web RCS, display the "AutoScale" feature when loading Master Memories (previously only available for Screen Memories)
- In Web RCS, support the Filter management (Category & Layer) when saving a Master Memory for Screens and Auxiliary Screens

Bug fixes:

- The 'Circle' transition for Live Layer made a Fade transition
- Some HDMI inputs were not useable after a reboot of the device
- The inputs with a 4:2:0 subsampling could not be displayed in the Multiviewer (black content)

Known issues:

- For the Auxiliary Screen, the status of the Audio Layer for the Preview is not correct. It is the one of the Program (of the same Auxiliary Screen).

Products	QuickVu 4K, QuickMatrix 4K, Pulse 4K, Eikos 4K
Date	December 17, 2020
Version	1.00.03

The version (s) indicated here above has (have) been tested and validated by the QA Department.

Technical Notes:

Initial published release

- Support for Midra™ 4K products: QuickVu 4K (QVU-4K), QuickMatrix 4K (QMX-4K), Pulse 4K (PLS-4K) and Eikos 4K (EKS-4K)
- Support formats up to 4K60 on HDMI2.0, DP1.2, and SDI-12G input and output connectors
- Various predefined templates available (depending on the product) to easily configure the system:
 - Mixer template: 1x Program Screen up to 4K60 + 1x 1080p Auxiliary Screen
 - Matrix template: 2x independent Program Screens up to 4K60
 - Horizontal Blend template: One Horizontal Hard/Soft Edge Program Screen with 2 outputs up to 4K60
 - Vertical Blend template: One Vertical Hard/Soft Edge Program Screen with 2 outputs up to 4K60
- Independent Multiviewer with up to 16 configurable widgets (Inputs, PGM/PRW, Timers)
- Create and load Screen Memories, Master Memories
- Manage TAKE per Screen
- Upload and display still images for Background and Foreground Layers
- Advanced Audio routing and processing:
 - De-embed/embed audio channels on all inputs/outputs (PCM)
 - Delay, Mute, Adjust all audio channels
 - Optional Analog and Dante™ card
- Quick Preset functions, with 3 modes: Fade to Black, Image and Master Memory
- SB80-2 and SB124T-2 supported via direct USB connection (one controller max)
- Support custom formats with a width up to 4096px
- EDID management supported up to 4K
- HDCP 1.x and 2.x supported (depending on the plug)
- Fully featured front panel buttons and menus
- Remote User Interface via the embedded HTML Web RCS
- HTTP REST API available with documentation
- AWJ JSON protocol
- Import/Export backup file from Web RCS or front panel

Known limitations

- Some features are only configurable and useable on the Front Panel Menu, and not available on the Web RCS yet:
 - Audio configuration (routing and processing)
 - Quick Preset function
 - Preferred Format edition in EDID input slots
 - Category and Layer save filters for Master Memories
 - Input and Output capture
- Split Layers not available yet (only mixing layers are available)
- Quick Layout tools to easily define layer positions not available yet
- Keyboard shortcuts not currently available except the “delete” key
- HDR processing not available yet
- Border management for Layers not available yet
- Input freeze content not available yet
- Auxiliary Screen Memory not manageable on SB80-2 and SB124-T2
- RC400T management not available yet

Known issues

- Circle transition not performing as it should: a fade transition is performed instead.