PIXELHUE

Q8
V2.0.1

2026-06-15



Release Notes

1 V2.0.1

1.1 Supporting Software

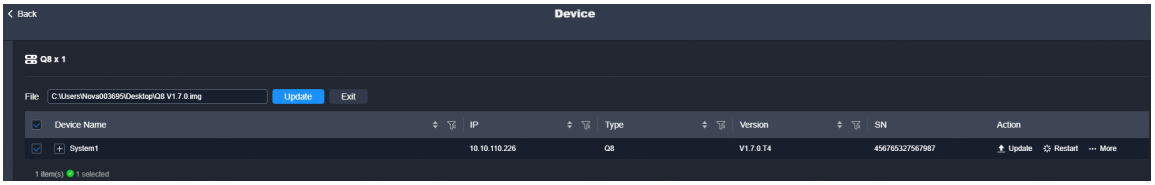
PixelFlow	V2.0.0

1.2 Supporting Event Controller

U5	V2.0.0
U5 Pro	V2.0.0

1.3 Update Instructions

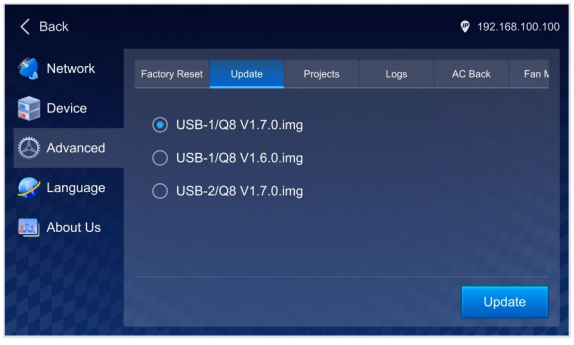
1.3.1 Online Update



1.3.2 Local Update

The Q8 supports firmware update via USB drive. To do that, save the update file in the root directory of the USB drive and then insert the drive into the USB port on the control card of the Q8.

On the **Advanced** screen, tap **Update** to enter the firmware update screen and the system will automatically detect and read the update file in the USB drive.



Select the update file, tap the **Update** button, and the system will automatically update the device.

The device will automatically restart during the update.

1.4 New Features

None

1.5 Improvements

None

1.6 Changes

None

1.7 Bug Fixes

- Fixed the issue of poor edge sharpening for text and lines after scaling in certain scenarios.
- Fixed the compatibility issue that the SDI input connectors did·not recognize specific 1080i sources.
- Fixed the issue where the confirmation dialog on the LCD screen would not appear when pressing the front panel power button again after tapping **Cancel**.
- Fixed the issue where the software's preview layer fails to display source information after disabling UMD for the second source in dual monitoring mode.
- Fixed an issue where downstream devices could not detect the optical signal source when outputting over optical ports with VPU enabled.

1.8 Notes

- Version 2.0.1 is backward compatible with project files from versions 1.7.0 up to 2.0.1, but it is not compatible with project files exported from versions earlier than 1.7.0.
- From version 1.7.0 onwards, lower version project files can be imported into higher version devices, but higher version project files cannot be imported into lower version devices.
- When updating a device from a version earlier than 1.7.0 to version 2.0.1, user data will be automatically cleared. Updating from version 1.7.0 and later versions to version 2.0.1 will not clear user data.

1.9 Components

Mainframe	
Q8 mainframe	V2.0.1
Input Cards	
Q_Input Processing Card	V1.0.0.96.STD
Q_4xHDMI2.0+4xDP1.2+4x12G-SDI Input Card	V1.0.0.96.STD
Q_8xHDMI2.0+4x12G-SDI Input Card	V1.0.0.96.STD

Q_2xST2110(25G) Input Card	V1.0.0.96.STD
Q_1xST2110(100G)+2xHDMI2.1/DP1.4 Input Card	V1.0.0.96.STD
Output Cards	
Q_Output Processing Card	V1.0.0.96.STD
Q_4xHDMI2.0+4xDP1.2+8xFiber Output Card	V1.0.0.96.STD
Q_4xHDMI2.0+4x12G-SDI+8xFiber Output Card	V1.0.0.96.STD
Q_1xST2110 (100G)+4x12G-SDI Output Card	V1.0.0.96.STD

2 Previous Versions

2.1 V2.0.0

2.1.1 Supporting Software

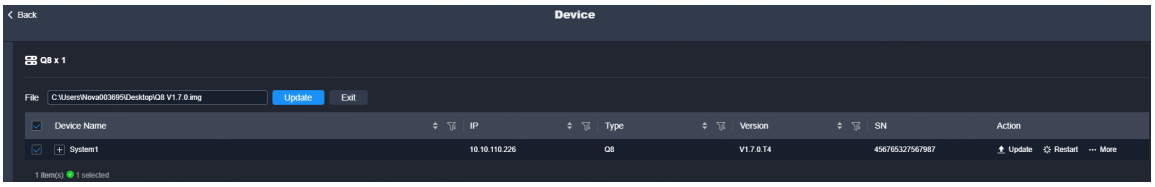
PixelFlow 2.0.0

2.1.2 Supporting Event Controller

U5 2.0.0
U5 Pro 2.0.0

2.1.3 Update Instructions

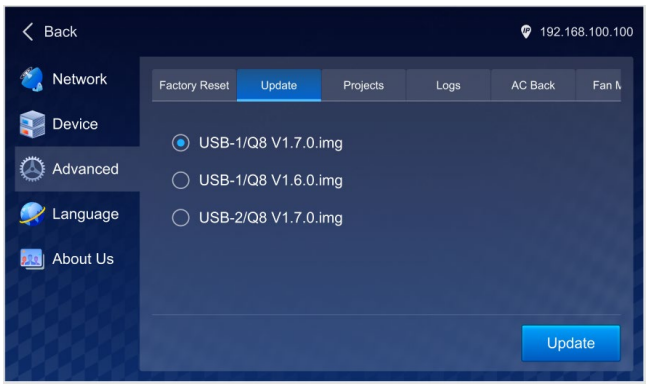
2.1.3.1 Online Update



2.1.3.2 Local Update

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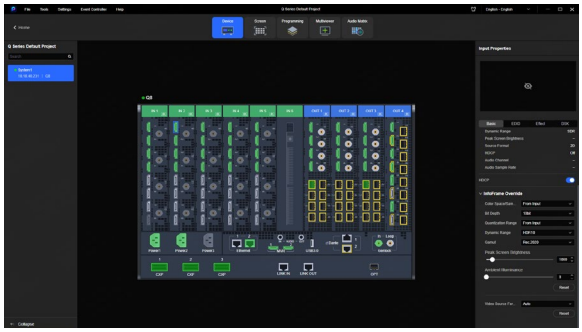
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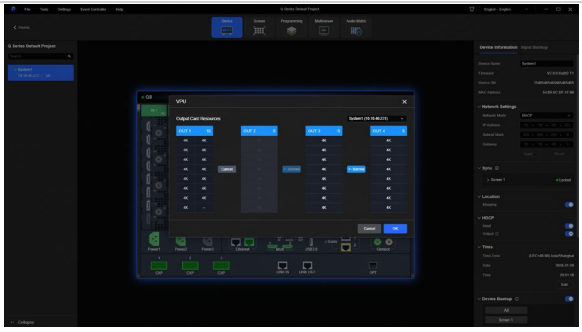
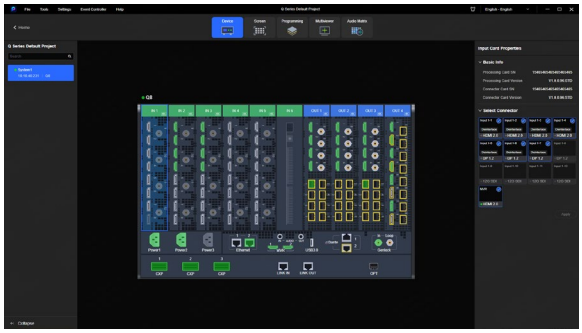
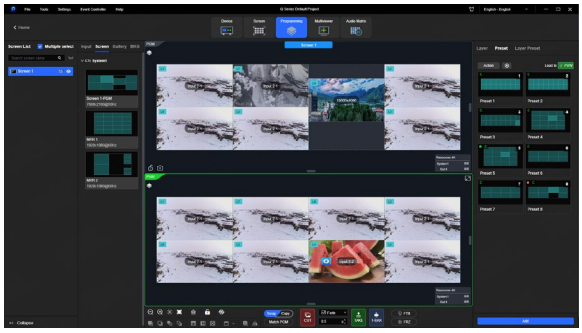


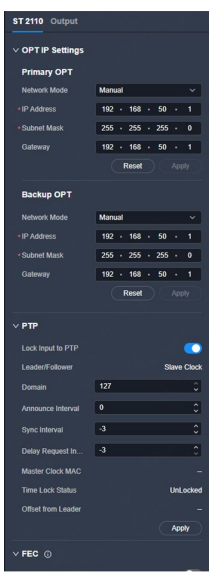
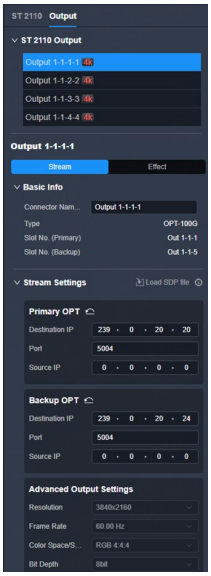
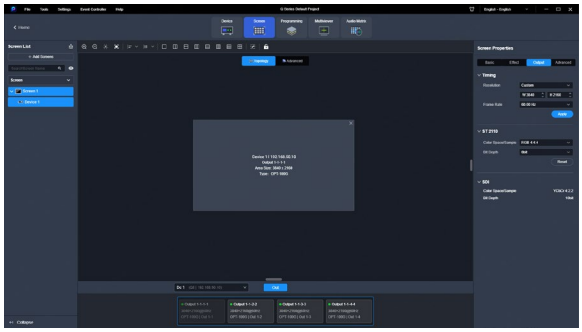
Select the update file, tap the **Update** button, and the system will automatically update the device.

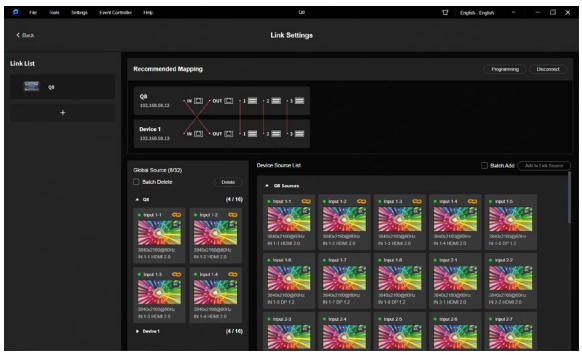
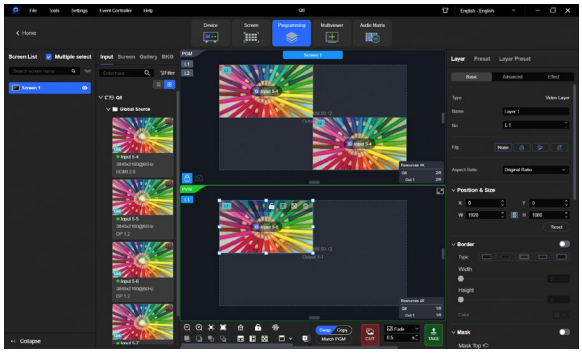
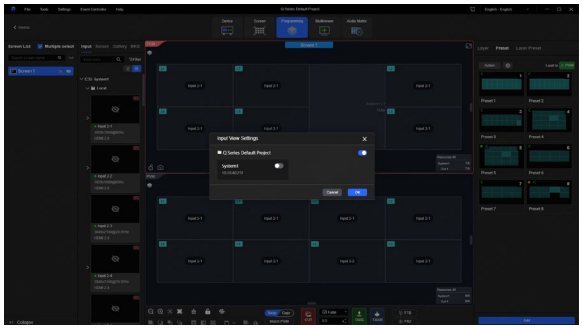
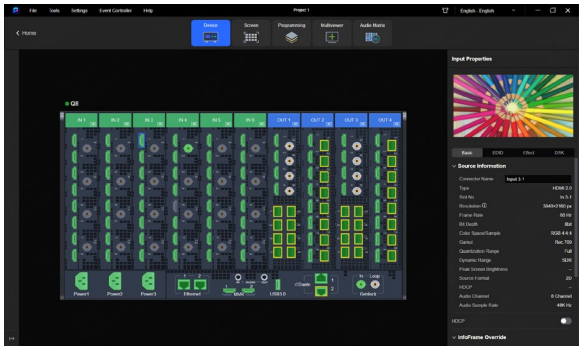
The device will automatically restart during the update.

2.1.4 New Features

No.	Feature	Reason	Description
1	VPU	Enabling the sharing of layer resources between multiple output cards to expand the available layer resources of a single card, thereby supporting more complex editing and display scenarios.	• Allows the sharing of layer resources from an adjacent subsequent output card to a preceding one. • Once sharing is completed, the number of layer resources of the preceding card will be 15, while the subsequent card will not support further usage. 

No.	Feature	Reason	Description
			
2	MVR source	Using the MVR source as a single composite source and distributing it to multiple screens via MVR unifies content layouts across multi-screen and multi-terminal deployments, thereby reducing the need for repeated layer configurations and minimizing resource consumption.	• Select MVR source via the connector of input card 1 on the device page. • Use the MVR source as the screen's layer source on the programming page.  
3	Q_1xST2110 (100G)+4x 12G-SDI Output Card	Support end-to-end ST2110 inputs and outputs.	 • A single card features two 100G OPT ports, with one primary and one backup. Additionally, it includes four 12G-SDI connectors, which duplicate the output of the primary 100G OPT port. • 2x 100G OPT – Up to 4x 4K×2K@60Hz 12bit 4:4:4 – Standard: Support SMPTE ST 2110 (-10, -20) and SMPTE 2059 (-1, -2). – Backup: Support the SMPTE 2022-7 standard. – Custom resolutions Maximum width: 8192 pixels Maximum height: 7680 pixels – PixelFlow control: Support loading video stream configuration by SDP file or directly inputting.

No.	Feature	Reason	Description
			Exporting SDP file is also supported. – Color gamut: Rec.601/Rec.709/Rec.2020/DCI-P3 – PTP settings: Support the IEEE 1588-2008 standard, enabling high-precision synchronization across different video streams when Lock to PTP is activated. – FEC configuration: With parameters set at the card level, this feature can automatically detect and correct errors during data transmission, enhancing the reliability of video signal transfer. Support RS-FEC and NO-FEC encoding methods. This feature requires configuration on the switch before it can be used. – IP address: IPv4 DHCP and static IP – Multicast protocol: IGMPv3 • 4x 12G-SDI – Support for only standard resolutions under the SMPTE protocol – Compatible with SD-SDI, HD-SDI, 3G-SDI and 6G-SDI – Support for interlaced video signal – Support for 8-channel embedded audio (24bit/48kHz)   
4	Link function	The link function	Supports creating link relationships between devices in a

No.	Feature	Reason	Description
	for simulation devices	is available for simulation devices.	simulation project.  
5	Input view	Displays the input view of multiple devices to deliver smooth user experience in large events.	• Allows users to set the input view switch for devices within the same project. • When a project has excess devices, the input view switch is automatically turned off to ensure user experience. 
6	HDR peak brightness for input sources	Displays HDR peak brightness of input sources.	Supports displaying HDR peak brightness. 

2.1.5 Improvements

No.	Improvement	Description
1	KeyFrame performance	Improved the switching speed of the first frame of KeyFrame when layer sources are different.
2	Layer downscaling performance	Improved the image quality in layer downscaling. With the upgraded Kalo Scaling, image clarity in layer downscaling scenarios is significantly enhanced.
3	Preset loading	Improved preset loading speed.
4	T-Bar operation	Improved T-Bar operation smoothness for more fluid transitions.

2.1.6 Changes

None

2.1.7 Bug Fixes

None

2.1.8 Notes

- Version 2.0.0 is backward compatible with project files from versions 1.7.0 up to 2.0.0, but it is not compatible with project files exported from versions earlier than 1.7.0.
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2.1.9 Components

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Q8 mainframe	V2.0.0
Input Cards	
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Q_8xHDMI2.0+4x12G-SDI Input Card	V1.0.0.96.STD
Q_2xST2110(25G) Input Card	V1.0.0.96.STD
Q_1xST2110(100G)+2xHDMI2.1/DP1.4 Input Card	V1.0.0.96.STD
Output Cards	
Q_Output Processing Card	V1.0.0.96.STD
Q_4xHDMI2.0+4xDP1.2+8xFiber Output Card	V1.0.0.96.STD
Q_4xHDMI2.0+4x12G-SDI+8xFiber Output Card	V1.0.0.96.STD
Q_1xST2110 (100G)+4x12G-SDI Output Card	V1.0.0.96.STD

2.2 V1.9.0

2.2.1 Supporting Software

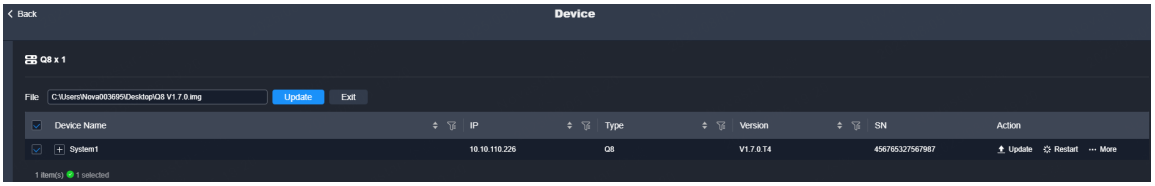
PixelFlow 1.9.0

2.2.2 Supporting Event Controller

U5 1.9.0
U5 Pro 1.9.0

2.2.3 Update Instructions

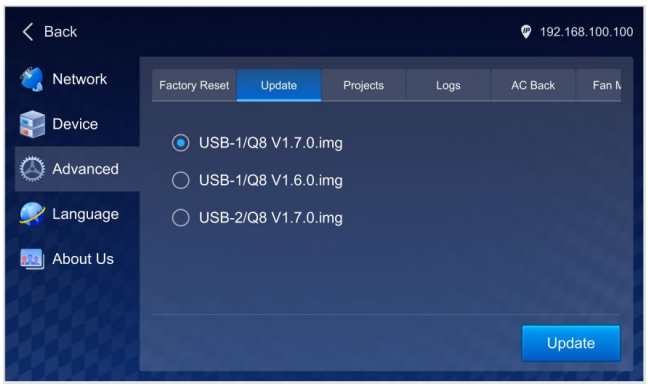
2.2.3.1 Online Update



2.2.3.2 Local Update

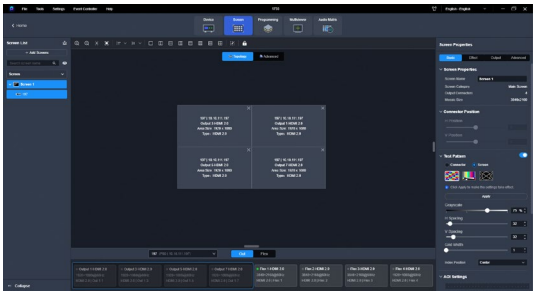
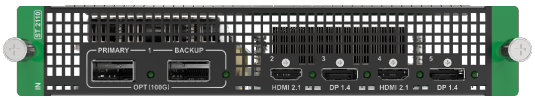
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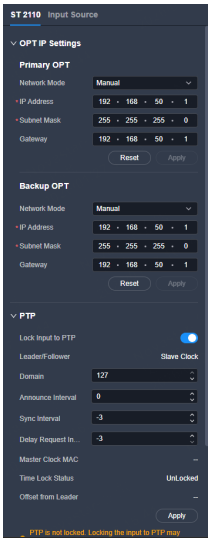
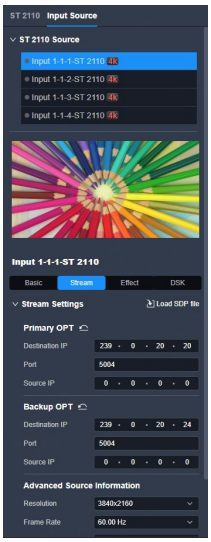
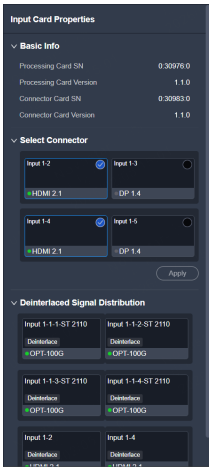


Select the update file, tap the **Update** button, and the system will automatically update the device. The device will automatically restart during the update.

2.2.4 New Features

No.	Feature	Reason	Description
1	Full-screen test pattern	Fulfill the needs of large-scale scenarios.	Supports setting different types of full-screen test patterns and allows for precise adjustments of the test pattern layout. 
2	Q_1xST2110 (100G)+2x HDMI2.1/DP1.4 Input Card	Support end-to-end ST2110 inputs and outputs.	 • A single card features two 100G OPT ports, with one primary and one backup. Additionally, it includes two HDMI 2.1 and two DP 1.4 connectors, where you can only use either one HDMI 2.1 or one DP 1.4 connector from each group at a time. • All connectors support de-interlacing processing. • 2x 100G OPT – Up to 4x 4K×2K@60Hz 12bit 4:4:4 – Standard: Support SMPTE ST 2110 (-10, -20) and SMPTE 2059 (-1, -2). – Backup: Support the SMPTE 2022-7 standard. – Custom resolutions Maximum width: 8192 pixels Maximum height: 7680 pixels – PixelFlow control: Support loading video stream

No.	Feature	Reason	Description
			configuration by SDP file or directly inputting. Exporting SDP file is also supported. – Color gamut: Rec.601/Rec.709/Rec.2020/DCI-P3 – PTP settings: Support the IEEE 1588-2008 standard, enabling high-precision synchronization across different input sources when Lock Input to PTP is activated. – FEC configuration: With parameters set at the card level, this feature can automatically detect and correct errors during data transmission, enhancing the reliability of video signal transfer. Support RS-FEC and NO-FEC encoding methods. This feature requires configuration on the switch before it can be used. – IP address: IPv4 DHCP and static IP – Multicast protocol: IGMPv3 • 2x HDMI 2.1 – Up to 8K×4K@30Hz 10bit 4:4:4 (Currently limited to 4K×2K@60Hz 8bit 4:4:4) – Support for processing of Full and Limited range videos – Support for HDR and 3D inputs – HDCP 1.4 and HDCP 2.3 compliant – Support for deinterlacing processing – Support for interlaced video signal – Support for 8-channel embedded audio (24bit/48kHz) – Custom resolutions Maximum width: 8192 pixels Maximum height: 7680 pixels • 2x DP 1.4 – Up to 8K×4K@30Hz 10bit 4:4:4 (Currently limited to 4K×2K@60Hz 10bit 4:4:4) – Support for processing of Full and Limited range videos – Support for HDR and 3D inputs – HDCP 1.3 and HDCP 2.3 compliant – No support for interlaced video signal – Support for 8-channel embedded audio (24bit/48kHz) – Custom resolutions Maximum width: 8192 pixels Maximum height: 7680 pixels

No.	Feature	Reason	Description
			  
3	Skin switching	To cater to different customer preferences and adapt to different day and night scenarios, two skins are available for selection.	Supports selecting skins with different color styles.  
4	Displaying device time on LCD	Facilitate on-site use	Displays the device time at the top of the LCD. 

2.2.5 Improvements

No.	Improvement	Description
1	Image import stability	Optimized the image import protocol to enhance import efficiency and prevent packet disorder during transmission.
2	Communication stability	Enhanced communication between internal hardware components for improved efficiency and stability.
3	UMD font library optimization	Updated the UMD font library with a new font.
4	Refresh advanced parameters after EDID import	Automatically fills in data to the **Advanced** tab of the connector EDID after importing the EDID file.
5	Resolution list optimization	Added some preset resolutions for input connectors.
6	Startup time optimization	Optimized the sequence of startup process to reduce startup time.
7	Added 5:4 aspect ratio	Introduced a 5:4 option in layer aspect ratio settings.

2.2.6 Changes

None

2.2.7 Bug Fixes

Module	Bug Description
Power button	Fixed the slow response issue of the power button on the front panel.
Multiviewer	Fixed the issue of diagonal tearing in four input sources spliced in the MVR.
Fan	Fixed the issue where the device passes self-check even after the fan cable was disconnected.
Connector	Fixed the issue where the 10-bit input source information cannot be read when Mac EDID compatibility is disabled.
Communication	Fixed issues related to device communication stability.
Layer	Fixed the issue of vertical stripes appearing on layers in PVW or PGM.

2.2.8 Notes

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2.3 V1.8.1

2.3.1 Supporting Software

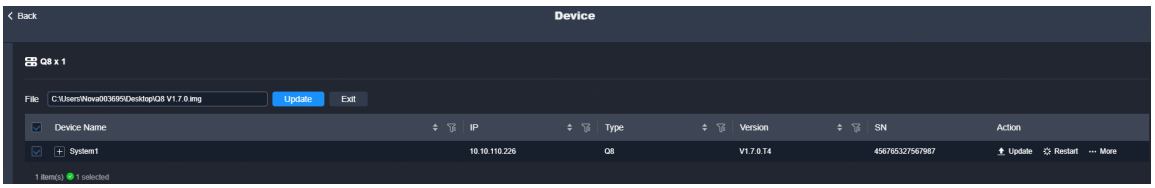
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2.3.2 Supporting Event Controller

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U5 Pro	1.8.0

2.3.3 Update Instructions

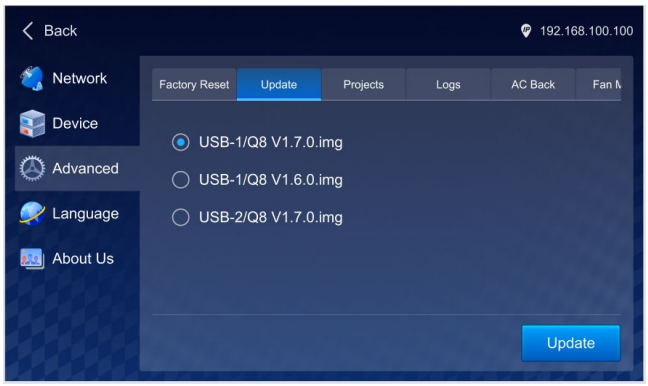
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Select the update file, tap the **Update** button, and the system will automatically update the device.

The device will automatically restart during the update.

2.3.4 New Features

None

2.3.5 Improvements

None

2.3.6 Changes

None

2.3.7 Bug Fixes

Module	Bug Description
Output	Fixed the occasional issue of vertical stripe artifacts on the display.

2.3.8 Notes

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2.4 V1.8.0

2.4.1 Supporting Software

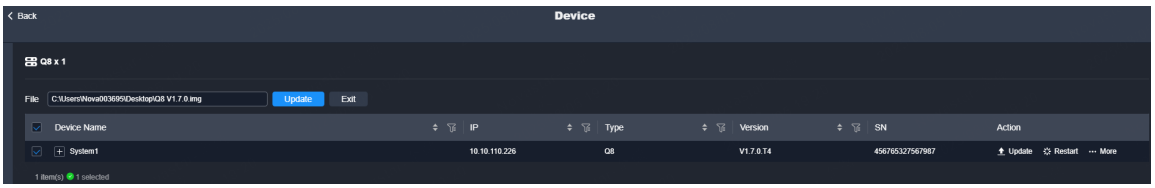
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2.4.2 Supporting Event Controller

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U5 Pro 1.8.0

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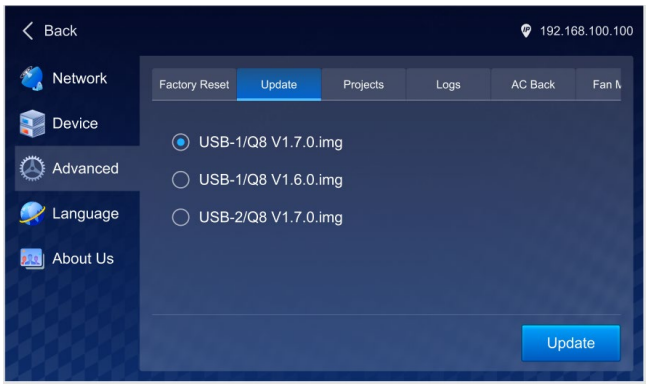
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On the **Advanced** screen, tap **Update** to enter the firmware update screen and the system will automatically detect and read the update file in the USB drive.

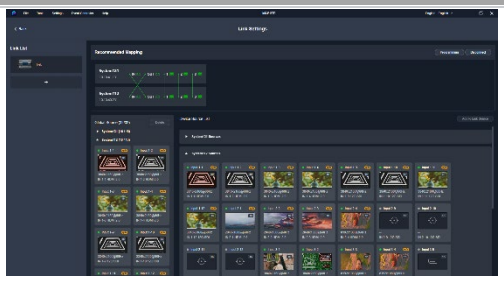
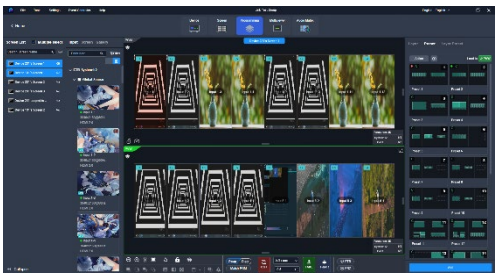
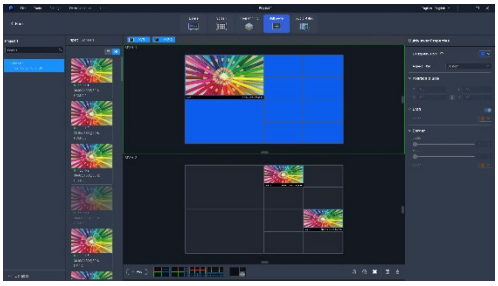
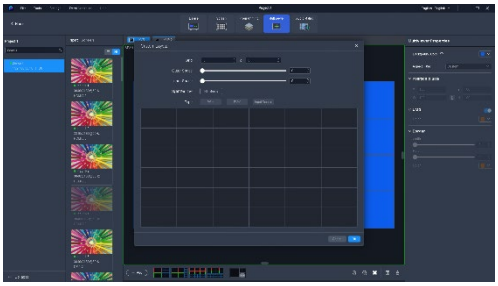


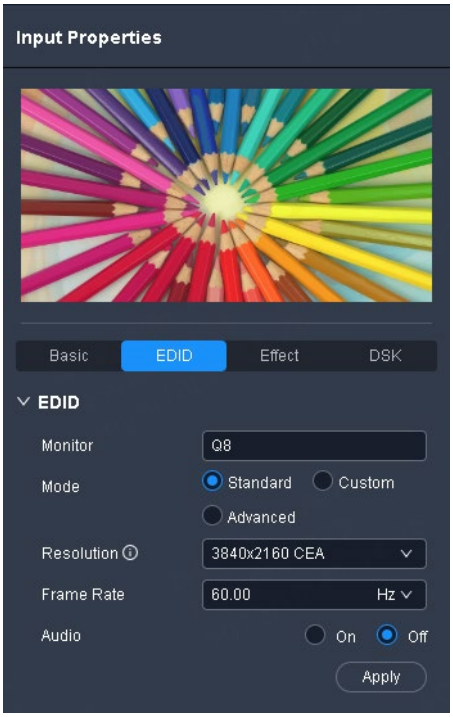
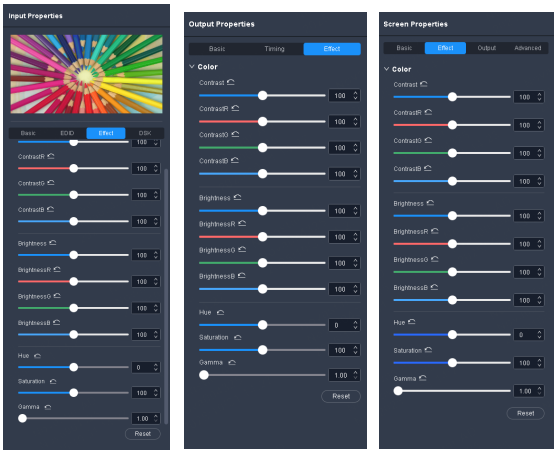
Select the update file, tap the **Update** button, and the system will automatically update the device.

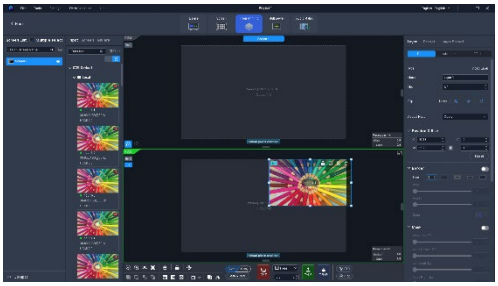
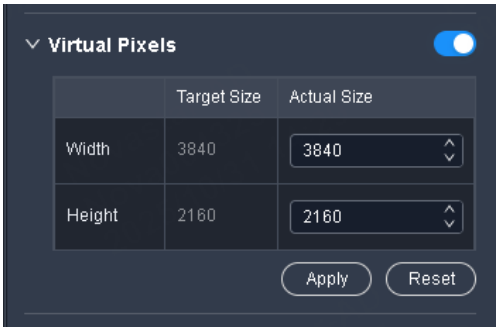
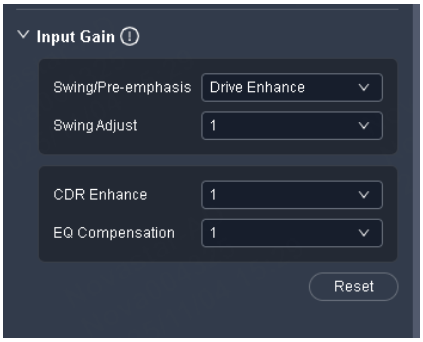
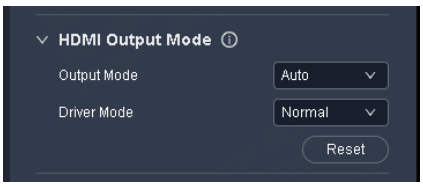
The device will automatically restart during the update.

2.4.4 New Features

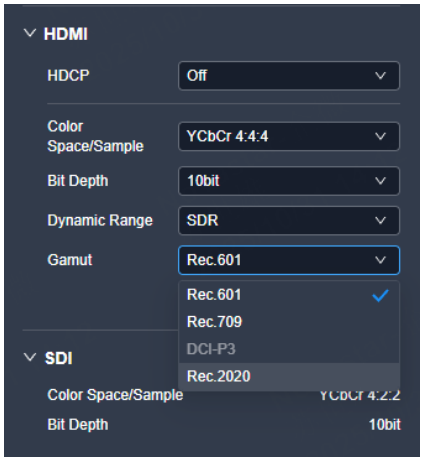
No.	Feature	Reason	Description
1	Link	A single device may not suffice in certain usage scenarios. By using the Link port for cascading, two devices can be centrally managed, thereby enhancing control efficiency.	• Users can establish a Link relationship between two devices on the same local network. • A recommended cabling solution for Link networking is provided to guide correct device connections. • Mutual sharing of input sources is allowed through the devices' Link ports, with each port supporting bidirectional sharing.

No.	Feature	Reason	Description
			
2	Link source	By leveraging the Link feature and creating shared sources, users can simultaneously access input sources from both devices.	• Input sources across devices within a Link group can be shared. • Shared sources are clearly identified, indicating the source device, source name, and signal status. • The status of shared sources is displayed in the input source list on the editing interface, with support for creating layers using shared sources. 
3	Dual monitoring	Two independent Multiviewer images for the same input source meet the need for simultaneous on-site monitoring.	• One source can be used twice in Multiviewer. • The source used a second time has fixed properties and layer size matching its first use. • For a source used twice in Multiviewer, adjusting properties and layer size in one MVR window syncs the other. 
4	Multiviewer layout customization	Enhance the user-friendliness of the Multiviewer feature.	• Up to 8 custom layout templates can be added. • Users can freely customize the layout of the template, grid content and grid spacing. 

No.	Feature	Reason	Description
5	Multiviewer background color adjustment	Satisfy diverse color preferences in various scenarios.	• Users can customize the Multiviewer background color. • Users can choose from preset color options for quick selection. • Users can see real-time response when adjusting colors.
6	EDID display name	In complex setups with many devices and connections, easily determine the relationship with source devices using EDID.	• Display name information is added to EDID and synced with front-end devices. • Editing of display names on devices is supported, with successful updates synchronized. 
7	Gamma adjustment	Provide more detailed effect adjustments throughout the entire chain.	• Gamma adjustment is supported on the input connectors, output connectors, and screen configuration. • Parameter range is 1.00 to 4.00, with a default value of 1. 

No.	Feature	Reason	Description
8	Function calculation for input components	Frequently needed for position and size calculations during on-site debugging.	Numeric input fields support addition, subtraction, multiplication, and division calculations. 
9	Virtual pixels	Enhance adaptability and is suitable for more scenarios.	Virtual pixels can be enabled based on the actual physical screen size.  
10	HDMI/DP connector input gain and output driver adjustment	In cases of excessively long cables or unstable connections, adjusting the advanced parameters for inputs and outputs helps restore stability.	Users can access these settings by pressing the **Ctrl+Shift+Alt+D** key combination to enter the developer mode.  

2.4.5 Improvements

No.	Improvement	Description
1	Transparency processing for BMP or PNG images in Cut layers	When the source of the Cut layer in the Cut & Fill feature is a BMP or PNG image, the transparency information in the image will also affect the Fill layer, optimizing the Cut & Fill effect.
2	Color space and gamut setting restrictions	In the color space and gamut settings for InfoFrame Override, output connector, and screen, the YCbCr and DCI-P3 settings are mutually exclusive.
3	Default polarity optimization for connector timing	Changed the default polarity of connector timing to align with the polarity in the protocol standard instead of defaulting to negative polarity.

2.4.6 Changes

New SDI output resolutions supported: 1280×720@24Hz, 1280×720@60Hz, 1920×1080@24Hz, 2048×1080@24Hz, 2048×1080@48Hz.

2.4.7 Bug Fixes

Module	Bug Description
BKG	Fixed the issue where an occasional exception in gallery sending caused BKG to be undeletable.
Layer	Fixed the issue where layers occasionally flashed black during preset loading.
Connector	Fixed the issue where the SDI output connector sometimes had no audio output after power cycling.
	Fixed the compatibility issue with the SDI output connector.
	Fixed the issue where the DP input connector occasionally failed to be recognized after power cycling.
	Fixed the issue where audio channels 6, 7, and 8 on the SDI input connector had no sound.
	Fixed the issue of display anomalies when connecting the DP1.2 output connector to the backend DP1.4 input connector.
	Fixed the issue of slow recognition for the SDI input connector at a resolution of 3840×2160@59.94Hz on certain hardware.
Optical output	Fixed the issue where the left and right halves of the 4K connector display image are reversed when connecting the optical output to the EP4 or EP2 device.
Communication	Fixed issues related to device communication stability.
Diagnostics	Fixed the issue where some devices reported an abnormal power status during diagnostics upon startup.

2.4.8 Notes

- Version 1.8.0 is backward compatible with project files from versions 1.7.0 up to 1.8.0, but it is not compatible with project files exported from versions earlier than 1.7.0.
- From version 1.7.0 onwards, lower version project files can be imported into higher version devices, but higher version project files cannot be imported into lower version devices.
- When updating a device from a version earlier than 1.7.0 to version 1.8.0, user data will be automatically cleared. Updating from version 1.7.0 and later versions to version 1.8.0 will not clear user data.

2.4.9 Components

Mainframe	
Q8 mainframe	V1.8.0

Input Cards	
Q_Input Processing Card	V1.0.0.94.STD
Q_4xHDMI2.0+4xDP1.2+4x12G-SDI Input Card	V1.0.0.94.STD
Q_8xHDMI2.0+4x12G-SDI Input Card	V1.0.0.94.STD
Q_2xST2110(25G) Input Card	V1.0.0.94.STD
Output Cards	
Q_Output Processing Card	V1.0.0.94.STD
Q_4xHDMI2.0+4xDP1.2+8xFiber Output Card	V1.0.0.94.STD
Q_4xHDMI2.0+4x12G-SDI+8xFiber Output Card	V1.0.0.94.STD

2.5 V1.7.1

2.5.1 Supporting Software

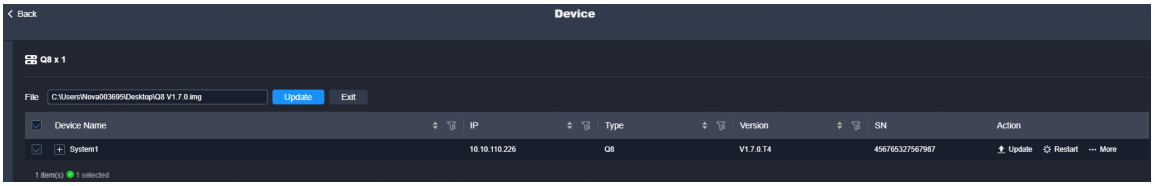
PixelFlow 1.7.1

2.5.2 Supporting Event Controller

U5 1.7.1
U5 Pro 1.7.1

2.5.3 Update Instructions

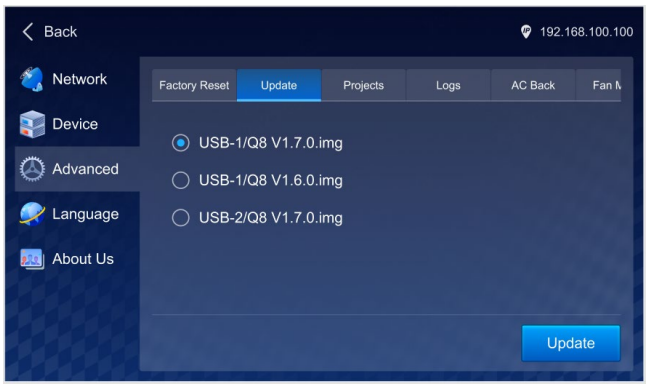
2.5.3.1 Online Update



2.5.3.2 Local Update

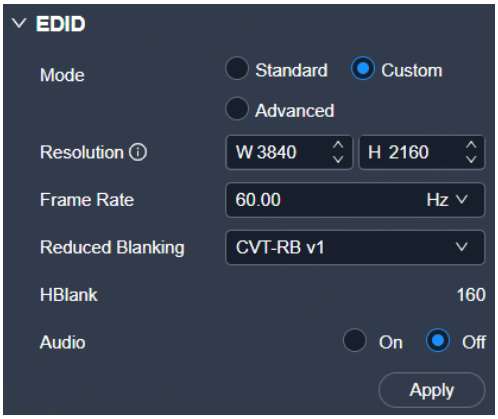
The Q8 supports firmware update via USB drive. To do that, save the update file in the root directory of the USB drive and then insert the drive into the USB port on the control card of the Q8.

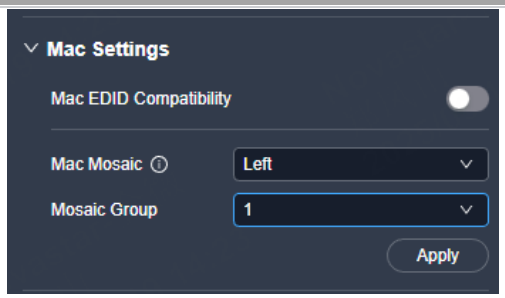
On the **Advanced** screen, tap **Update** to enter the firmware update screen and the system will automatically detect and read the update file in the USB drive.



Select the update file, tap the **Update** button, and the system will automatically update the device. The device will automatically restart during the update.

2.5.4 New Features

No.	Feature	Reason	Description
1	EDID reduced blanking	Enhance EDID functionality to support a wider range of timing standards.	• Supports the selection of multiple reduced blanking standards. The capability for audio transmission is determined by the value of HBlank.  • Reduced blanking options: – Standard: The value of HBlank is displayed, which is calculated according to the current resolution and cannot be adjusted. – CVT-RBv1: The value of HBlank is displayed, which is fixed at 160 and cannot be adjusted. – CVT-RBv2: The value of HBlank is displayed, which is fixed at 80 and cannot be adjusted. – CVT-RBv3: The value of HBlank is displayed, which can be adjusted within a range of 80 to 200. It defaults to 80 and the adjustment increment is 8. • Audio functionality is supported only when the HBlank value is ≥ 110.
2	Mac mosaic	Compatible with Mac mosaic	• When Mac is used as the input source, image mosaic is supported.

No.	Feature	Reason	Description
			 • It is required to use the same Mac for mosaic and ensure the connector type and timing are consistent. Otherwise, the mosaic may fail.
3	A new input card supported	Q_8xHDMI2.0+4x 12G-SDI Input Card	 • 8 out of 12 connectors can be used simultaneously • 8x 4K×2K@60Hz concurrent inputs per input card 8×HDMI 2.0 • Up to 4K×2K@60Hz 8bit 4:4:4, or 4K×2K@60Hz 10bit 4:2:2 • Support for processing of 8-bit, 10-bit and 12-bit inputs • Support for 4:2:0, 4:2:2 and 4:4:4 inputs • Support for processing of Full and Limited range videos • Support for HDR inputs • HDCP 1.4 and HDCP 2.2 compliant • Support for deinterlacing processing • Support for interlaced video signal • Support for 8-channel embedded audio (24bit/48kHz) • Custom resolutions – Maximum width: 8192 pixels – Maximum height: 7680 pixels **4x 12G-SDI** • Support for ST-2082 (12G), ST-2081 (6G), ST-424 (3G), ST-292 (HD) and ST-259 (SD) standard video inputs • Compatible with SD-SDI, HD-SDI, 3G-SDI and 6G-SDI • Support for interlaced video signal • No support for EDID management or bit depth settings • Support for 8-channel embedded audio (24bit/48kHz)

2.5.5 Improvements

None

2.5.6 Changes

None

2.5.7 Bug Fixes

Module	Bug Description
Connector	Fixed the issue that the deletion of output connectors during screen configuration is slow.
	Fixed the issue with mapping errors for audio channel 8 of SDI connector.
Programming	Fixed the issue where, after successfully saving a captured image from an input source and immediately powering off and restarting the device, the last saved image would appear grayed out and could not be deleted.

2.5.8 Notes

- Project files earlier than V1.7.1 cannot be imported into devices of V1.7.1 and later.
- After a device is updated from a version earlier than 1.7.1 to the current version, the device will be automatically reset to factory settings.

2.5.9 Components

Mainframe	
Q8 mainframe	V1.7.1
Input Cards	
Q_Input Processing Card	V1.0.0.91.STD
Q_4xHDMI2.0+4xDP1.2+4x12G-SDI Input Card	V1.0.0.91.STD
Q_8xHDMI2.0+4x12G-SDI Input Card	V1.0.0.91.STD
Q_2xST2110(25G) Input Card	V1.0.0.91.STD
Output Cards	
Q_Output Processing Card	V1.0.0.91.STD
Q_4xHDMI2.0+4xDP1.2+8xFiber Output Card	V1.0.0.91.STD
Q_4xHDMI2.0+4x12G-SDI+8xFiber Output Card	V1.0.0.91.STD

2.6 V1.7.0

2.6.1 Supporting Software

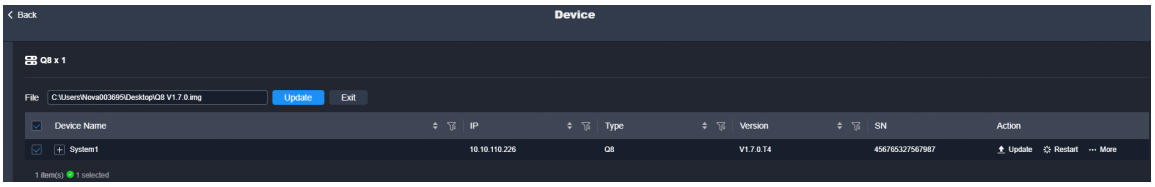
PixelFlow	1.7.0

2.6.2 Supporting Event Controller

U5	1.7.0
U5 Pro	1.7.0

2.6.3 Update Instructions

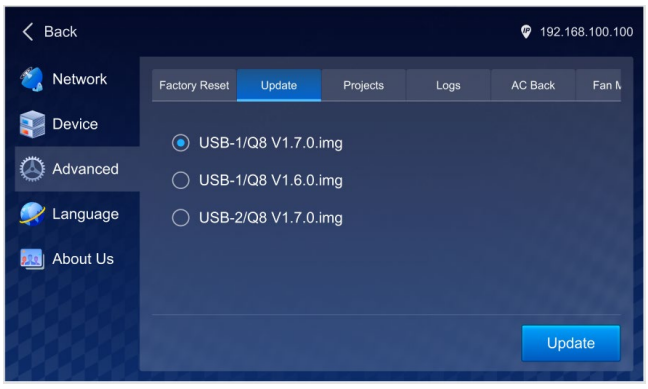
2.6.3.1 Online Update



2.6.3.2 Local Update

The Q8 supports firmware update via USB drive. To do that, save the update file in the root directory of the USB drive and then insert the drive into the USB port on the control card of the Q8.

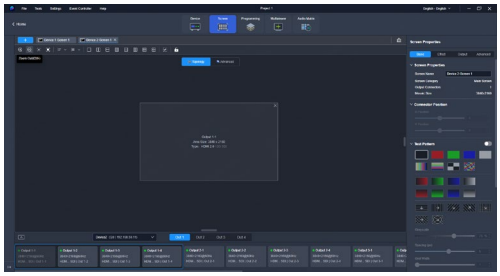
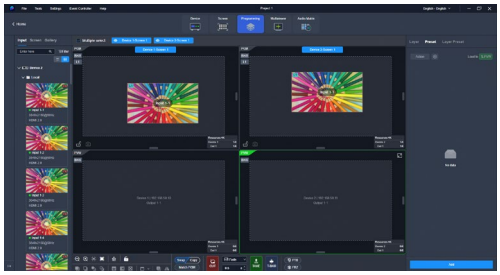
On the **Advanced** screen, tap **Update** to enter the firmware update screen and the system will automatically detect and read the update file in the USB drive.

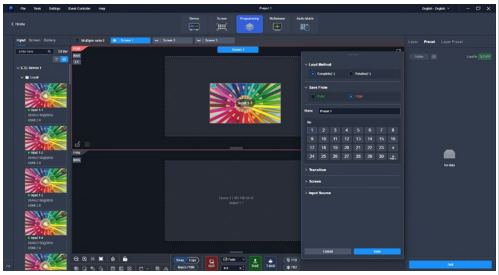
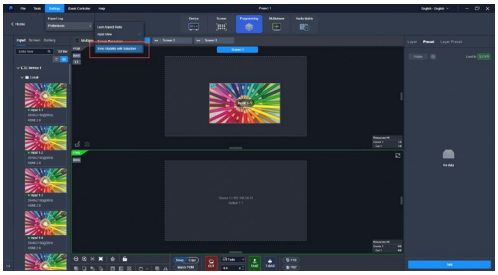
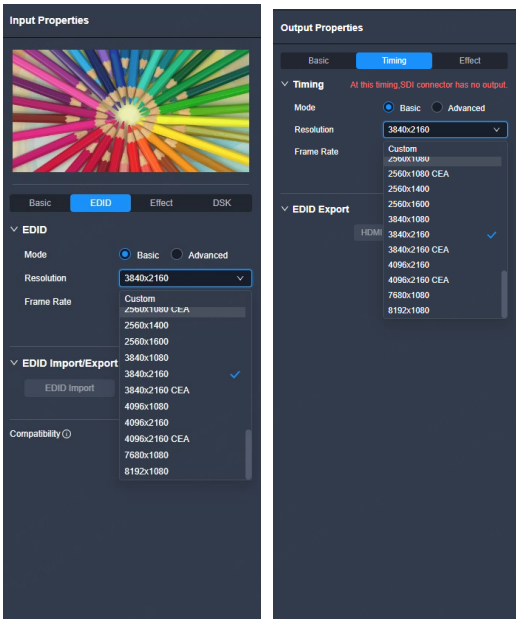


Select the update file, tap the **Update** button, and the system will automatically update the device.

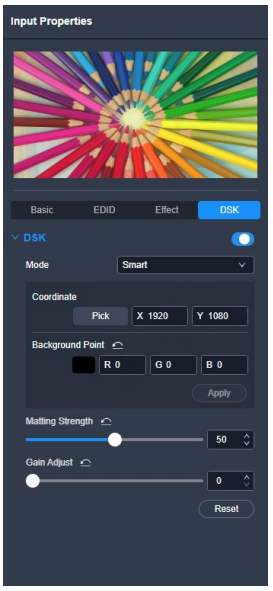
The device will automatically restart during the update.

2.6.4 New Features

No.	Feature	Reason	Description
1	Default project	When multiple switchers are being controlled simultaneously, the logic for creating projects is complex and needs to be simplified.	The procedure for creating projects is streamlined: There is no need to create new projects and switchers of the same series are automatically organized into a single project, enhancing simultaneous control. 
2	Improvements made to screen management on the **Screen** and **Programming** interfaces	• It is not convenient to configure multiple devices simultaneously. • In standard uniform control operations, there are excessive adjustment limitations, and the results for unselected devices are not displayed. • When devices are being managed by multiple users, their screen operations interfere with each other.	• Changed from single-device operation to simultaneous multi-device operation, inherently enabling simultaneous control of multiple devices. •  •  • The screen selection and transition effect settings from multiple terminals are independent, allowing for convenient multi-user operation without interference.
3	Improvements made to the preset feature	• Layers saved within a preset cannot be selected and differential loading is not supported. • Non-layer data such as effect and input source parameters cannot be saved within a preset. • The order of presets is fixed and does not align with the preset loading order during events. • Transition effects are not supported when presets are being loaded to PGM.	• When saving a preset, users can choose between relative and complete. – Relative preset: Only the data within the preset is loaded. The data not within the preset remains unchanged. – Complete preset: Only the data within the preset is loaded. The layers not within the preset are either turned off or removed. • Users have the option to load a preset to PGM or PVW, making it suitable for various applications. • The preset list can be rearranged to align more accurately with the preset loading

		• When a preset contains multiple screens, only one screen's layer outlines are displayed in the thumbnail of the preset.	order during events. • Loading a preset to PGM supports the fade effect. • More details in preset thumbnails: The layer outlines of all the screens within a preset are displayed. 
4	Preferences > Sync Visibility with Selection	The visibility of screens follows the changes of screen selection, which does not align with the habits of users.	Added a Sync Visibility with Selection option in Preferences. 
5	EDID/Timing settings	The standard resolutions only support fixed timings, failing to meet the requirements of different applications.	Added various common timings to all the standard resolutions for users to select. 

2.6.5 Improvements

Improvement	Description	Remarks
Improved the operation of picking a color for smart keying	After a color is picked for smart keying, users need to click **Apply** to apply the picked parameters. The **Apply** button is now grayed out and remains disabled until any parameters are modified.	

2.6.6 Changes

None

2.6.7 Bug Fixes

Module	Bug Description
Input view	When multiple outputs display still images, the input view displays a flickering or green screen.
	When using only the backup connectors of the ST2110 input card to pull streams, input view displays a black screen.
Connectors	When Mac outputs three signal sources to the seamless switcher, the three outputs occasionally display black screens at the same time.
	After setting the screen resolution differently from the sync source, enabling Genlock causes it to remain in continuous synchronizing.
	When two screens are synchronized to the same Genlock source, one screen shows an incorrect synchronization status after the Genlock source is disconnected.
Layers	If the first input card is not inserted, a still layer will not be created.

2.6.8 Notes

- Project files earlier than V1.7.0 cannot be imported into devices of V1.7.0 and later.

After a device is updated from a version earlier than 1.7.0 to the current version, the device will be automatically reset to factory settings.

2.7 V1.6.2

2.7.1 Supporting Software

PixelFlow	1.6.2

2.7.2 Supporting Event Controllers

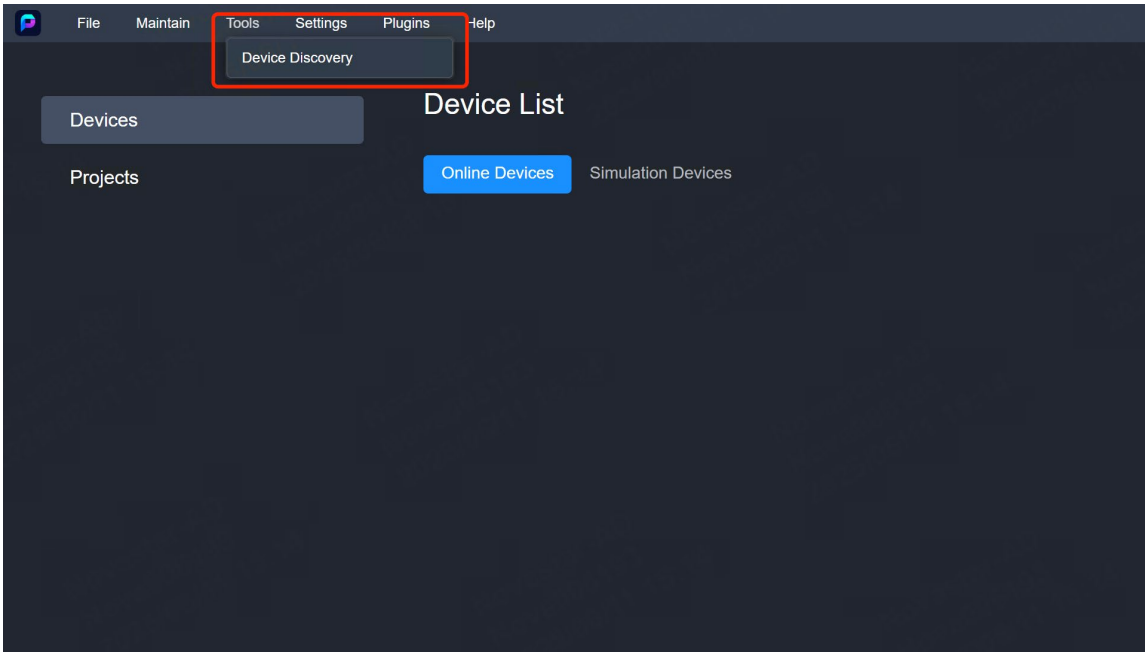
U5	V1.6.2
U5 Pro	V1.6.2

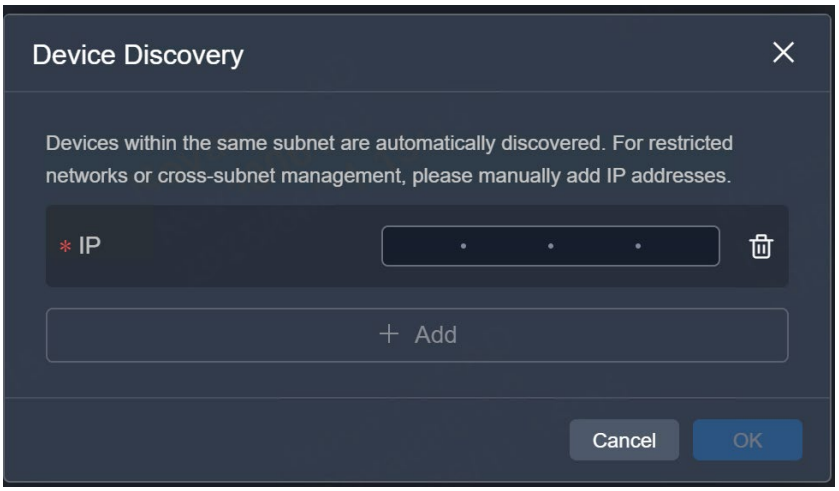
2.7.3 New Features

2.7.3.1 Adding Devices on Different Subnets Within a LAN via PixelFlow

Description

Choose **Tools** > **Device Discovery** from the menu bar of PixelFlow to add devices by entering their IP addresses.





2.7.4 Improvements

None

2.7.5 Changes

None

2.7.6 Bug Fixes

Function	Bug Description	Remarks
Common function	PixelFlow experiences lags due to unstable input sources.	

Common function	An incorrect device model is displayed due to IP conflicts.	
Programming	PixelFlow fails to display the "3D" mark for a 3D input source.	
Update	The device gets stuck occasionally during update.	
Preset	The layer brightness is abnormal after a preset is loaded.	
Device	The device has a small chance to reboot unexpectedly during operation.	
Device	The device has a small chance to lead to output blackout during operation.	
Connector	The DP input connector inaccurately identifies the 3D source from an AMD graphics card.	
Project File	Failed to import the project file through the LCD menu.	
-	Fixed some known issues.	

2.7.7 Notes

- Firmware V1.6.2 must work with PixelFlow V1.6.2.
- After a device restart or update, if the connector status displayed in PixelFlow is not the same as the actual status, you can restore it by going back to the homepage and entering the device again.

2.8 V1.6.1

2.8.1 Supporting Software

PixelFlow	1.6.1

2.8.2 Supporting Event Controllers

U5	V1.6.1
U5 Pro	V1.6.1

2.8.3 New Features

2.8.3.1 Importing EDID Files Containing DisplayID Information

Description

This feature allows more information to be contained in the EDID information of the input connectors to accurately output video sources.

On the **Device** tab, click an input connector. In the **Input Properties** panel on the right, select the **EDID** tab. Click **EDID Import** and choose an EDID file.



2.8.4 Improvements

None

2.8.5 Changes

None

2.8.6 Bug Fixes

Function	Bug Description	Remarks
-	Fixed some known issues.	

2.8.7 Notes

2.8.7.1 Hardware and Software Version Compatibility

Firmware V1.6.1 must work with PixelFlow V1.6.1.

2.8.7.2 Instructions for Importing EDID Files

After importing an EDID file containing DisplayID information, if the EDID resolution of the input connector is modified in the PixelFlow, the default EDID file will overwrite the imported one, requiring the EDID file to be re-imported.

2.9 V1.6.0

2.9.1 Supporting Software

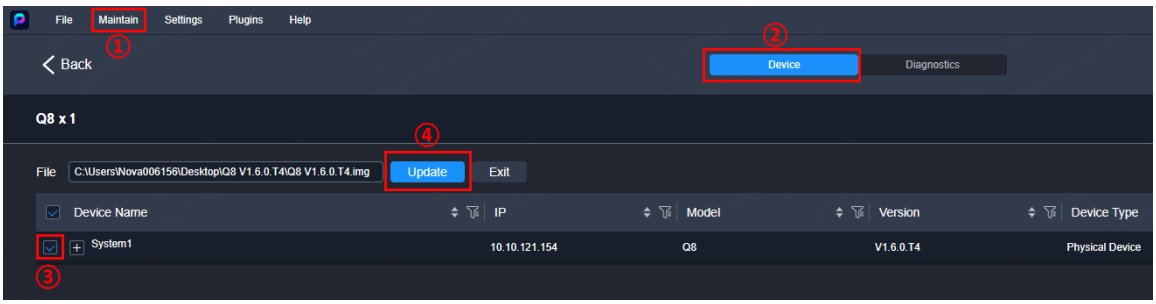
PixelFlow 1.6.0

2.9.2 Supporting Event Controllers

U5 V1.6.0
U5 Pro V1.6.0

2.9.3 Update Instructions

2.9.3.1 Online Update



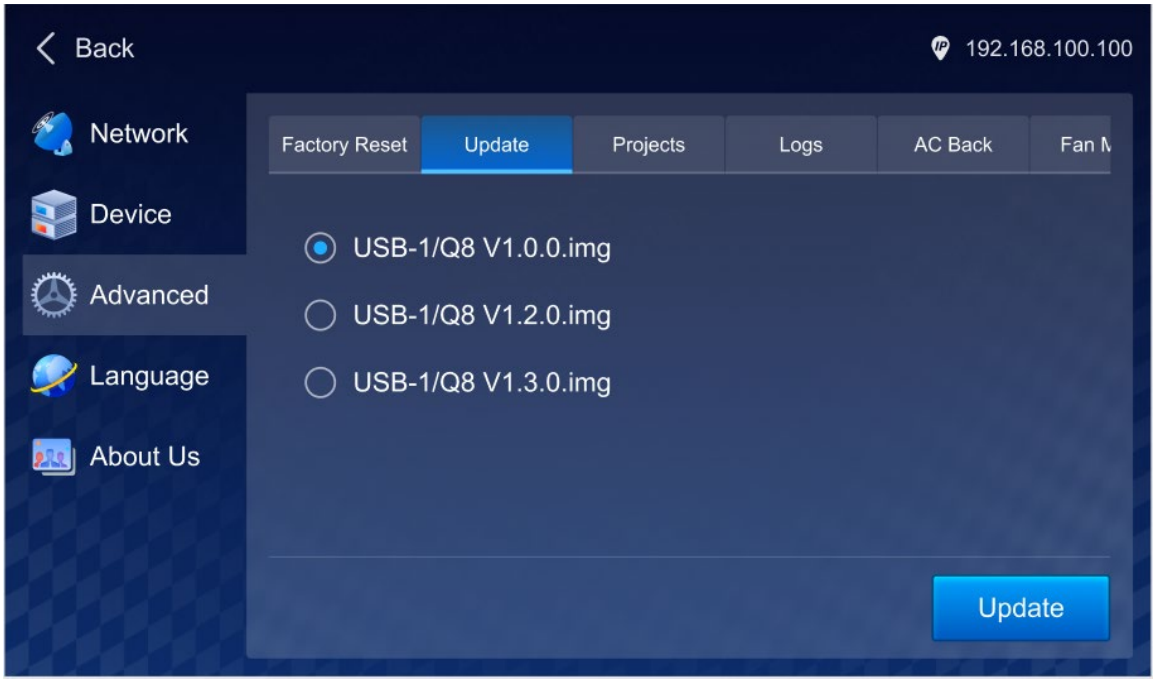
In PixelFlow, choose **Maintain** > **Device**. Select the device you want to update, and click **Update**. In the pop-up dialog box, select the update file (.img) and click **OK**. Then, confirm the device to be updated, and click the **Update** button again. In the pop-up dialog box, click **Yes** and wait until the update completes.

During the update process, please DO NOT POWER OFF the device or do any other operations.

2.9.3.2 Local Update via USB Drive

The Q8 supports firmware update via USB drive. To do that, save the update file in the root directory of the USB drive and then insert the drive into the USB port on the control card of the Q8.

On the **Advanced** screen, tap **Update** to enter the firmware update screen and the system will automatically detect and read the update file in the USB drive.



Select the target update file, tap **Update**, and the system will automatically update the device.

The device will automatically restart during the update.

2.9.4 New Features

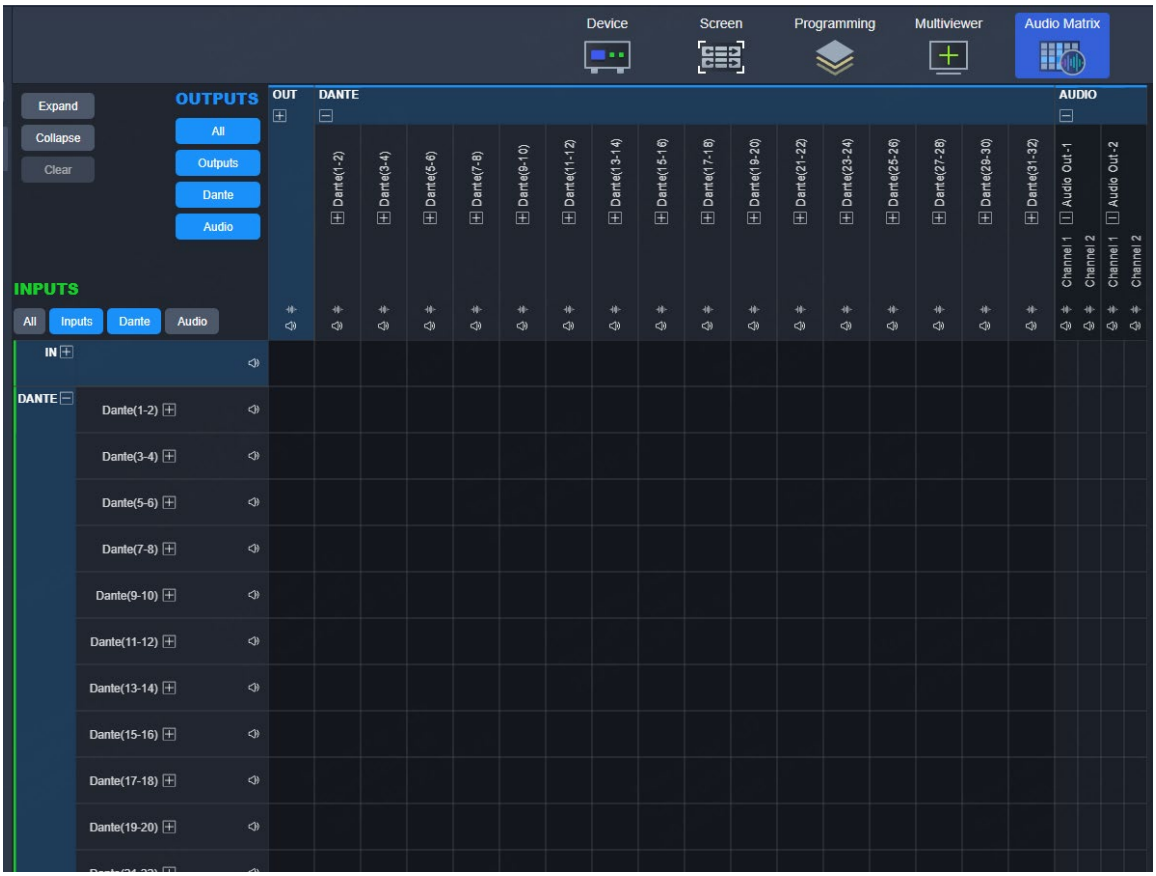
2.9.4.1 Audio Matrix

Allows users to manage audio inputs and outputs and map audio channels.

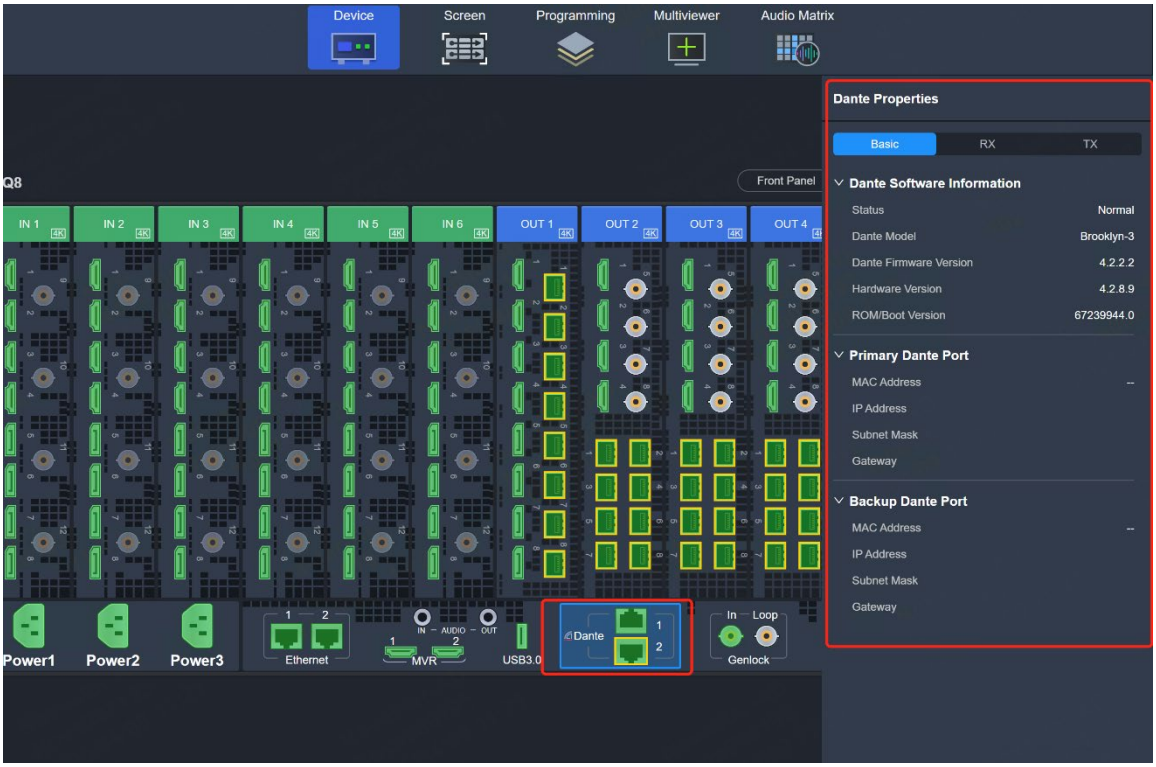
Description

V1.6.0 of switchers introduces an audio matrix feature. By clicking the **Audio Matrix** tab at the top of the homepage of PixelFlow, users can access the **Audio Matrix** tab page.

The top left corner of the page is the quick actions panel. The list on the left displays the inputs, where you can view input channel names and channel audio status, and mute the channels. The list at the top displays the outputs, where you can view the output channel names, play the test sound, and mute the channels. Click an input/output to expand or collapse the list.



On the **Device** tab page, click the Dante Ethernet ports to view Dante settings and change RX and TX channel names.



2.9.4.2 Output Connector Groups

Purpose

Increases the utilization of all connectors, allowing more connectors to be used for display, while accommodating different types of connectors for concurrent screen configuration.

Description



- Connectors are selected in groups. When the timing and effects of one connector within a group are modified, the timing and effects of the other connectors within this group are synchronously modified.
- When the specified timing is not supported by another connector, a prompt is displayed, saying that the connector will have no output.
- Different types of connectors can be used for configuration of a single screen.
- The connectors within a connector group output contents simultaneously, increasing the utilization of connectors.

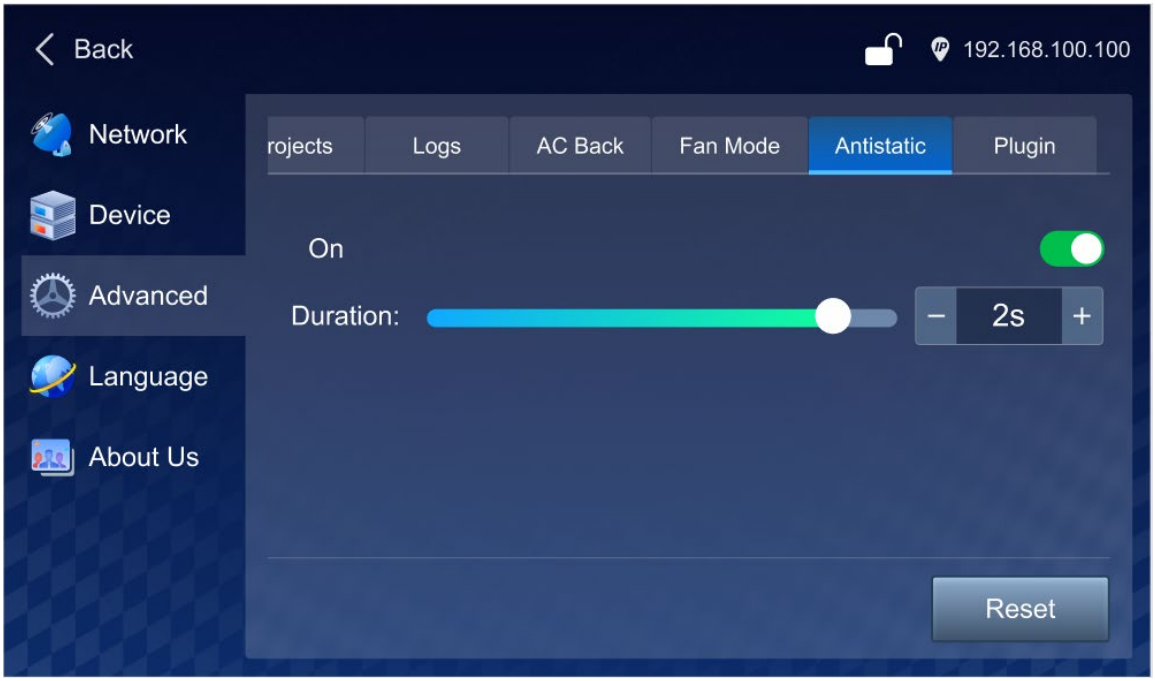
2.9.4.3 Antistatic

Purpose

In dry climate regions, static electricity tends to be more prevalent and can destabilize input sources, causing frequent disconnections. However, connectivity resumes immediately after static interference ceases. During such periods, users expect to avoid unintended triggers like hot-switching from primary source to backup source or screen blackouts. An antistatic function is required to prevent unwanted changes during interference.

Description

Access: Front panel LCD > Advanced > Antistatic



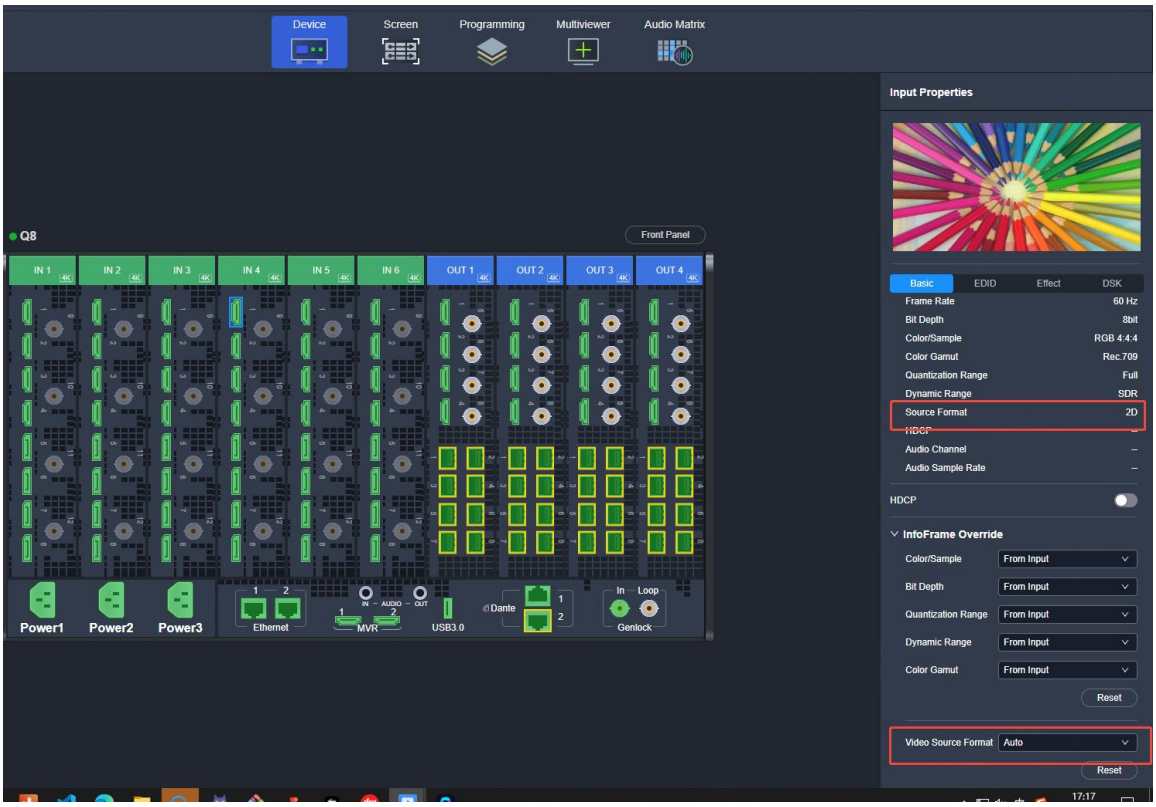
2.9.4.4 Full-Link 3D

Purpose

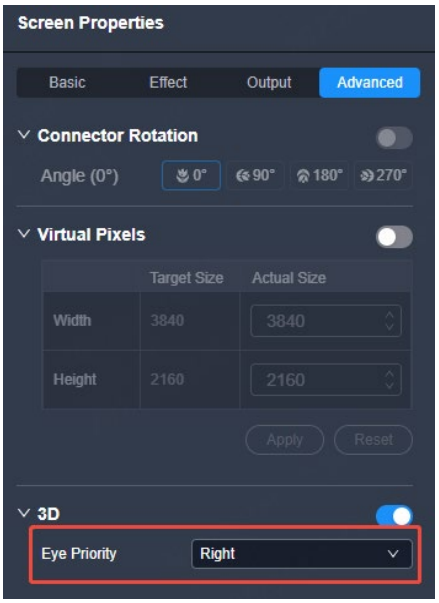
During live events, 3D sources may be used. As a video processing device, the presentation switcher must support input, processing, and output of 3D video sources.

Description

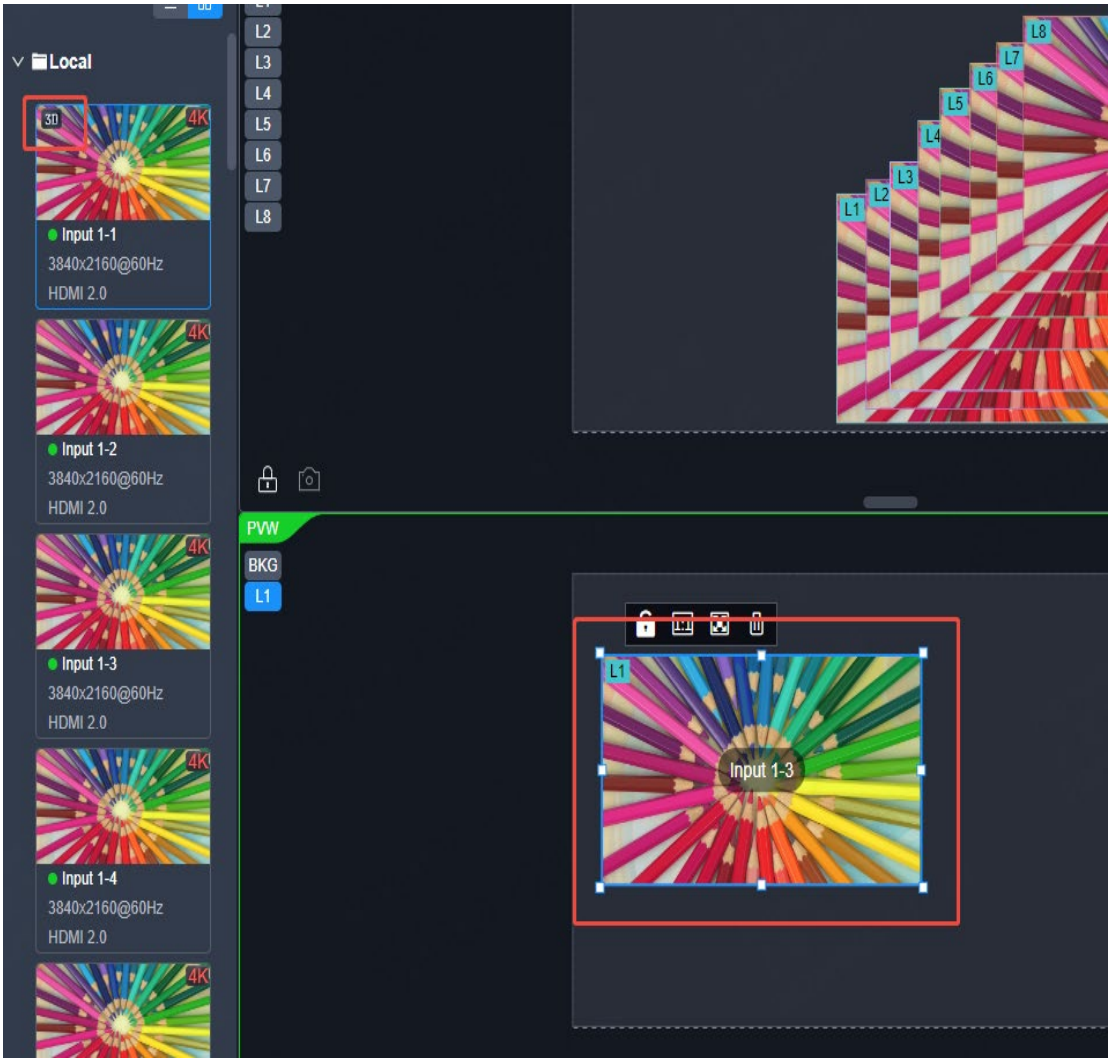
In the Input **Properties** section of the **Device** page, users can check whether the source is 2D or 3D. The 3D source type can either follow the source format or be manually overridden.



By navigating to **Screen** > **Screen Properties** > **Advanced**, users can set eye priority. (The switcher will uniformly process the input 3D source into a frame sequential format before output. By setting the first frame as a left or right eye image, it ensures correct matching with the back-end display device.)

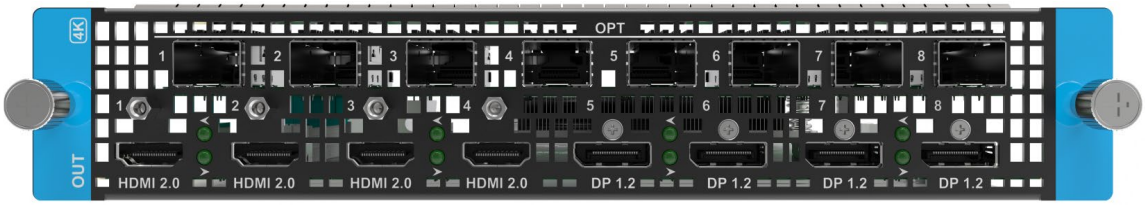


In the source list (left panel) of the **Programming** page, 3D sources are marked with a 3D icon in the top-left corner. The processed source will be displayed in the canvas area, with the side-by-side format showing the left image and the top-and-bottom format showing the top image.



2.9.5 New Output Card

Q_4xHDMI2.0+4xDP1.2+8xFiber Output Card



The 4x HDMI 2.0 and 4x DP 1.2 connectors are divided into 4 groups. Each group includes 1x HDMI 2.0 and 1x DP 1.2, and connectors within the same group copy each other's output.

- Connector 1 (HDMI 2.0) and connector 5 (DP 1.2) form Group 1.
- Connector 2 (HDMI 2.0) and connector 6 (DP 1.2) form Group 2.
- Connector 3 (HDMI 2.0) and connector 7 (DP 1.2) form Group 3.
- Connector 4 (HDMI 2.0) and connector 8 (DP 1.2) form Group 4.

4x HDMI 2.0

- Up to 4K×2K@60Hz 8bit 4:4:4 or 4K×2K@60Hz 12bit 4:2:2 output

- Support for 8-bit, 10-bit and 12-bit output settings
- Support for 4:2:2 and 4:4:4 output settings
- Support for YCbCr and RGB color space settings
- Support for HDR outputs
- Support for color gamut adjustment
- Support for interlaced video signal
- Support for 8-channel embedded audio (24bit/48kHz)
- Custom resolutions
  - Maximum width: 8192 pixels
  - Maximum height: 8186 pixels

4x DP 1.2

- Up to 4K×2K@60Hz 10bit 4:4:4 or 4K×2K@60Hz 12bit 4:2:2 output
- Support for 8-bit, 10-bit and 12-bit output settings
- Support for 4:2:2 and 4:4:4 output settings
- Support for YCbCr and RGB color space settings
- Support for 3D outputs
- No support for interlaced video signal
- Support for 8-channel embedded audio (24bit/48kHz)
- Custom resolutions
  - Maximum width: 8192 pixels
  - Maximum height: 8186 pixels

8x 10G OPT

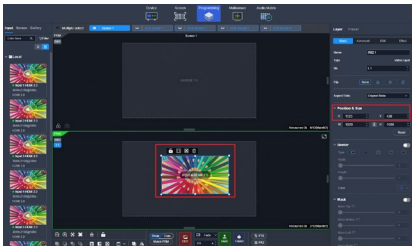
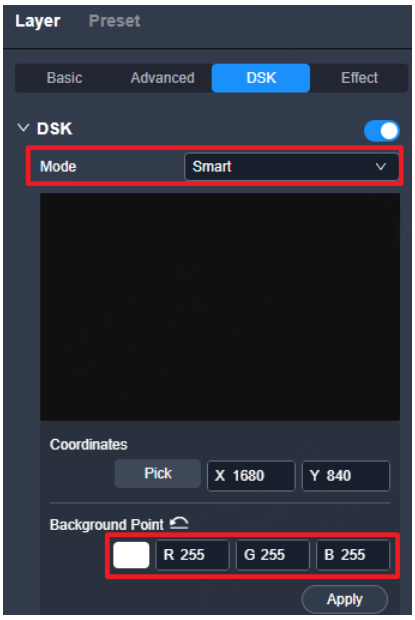
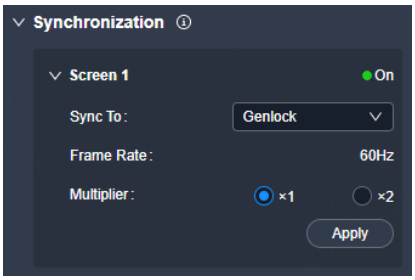
- Support for single-mode and multi-mode optical outputs
- Transmission distance up to 10km in single mode
- Support for 8-channel embedded audio (24bit/48kHz)
- OPT ports copy outputs on video connectors
  - OPT 1 and OPT 2 copy the output from Group 1.
  - OPT 3 and OPT 4 copy the output from Group 2.
  - OPT 5 and OPT 6 copy the output from Group 3.
  - OPT 7 and OPT 8 copy the output from Group 4.

Status LEDs

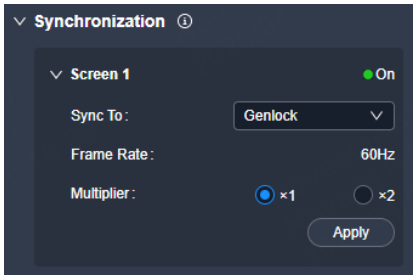
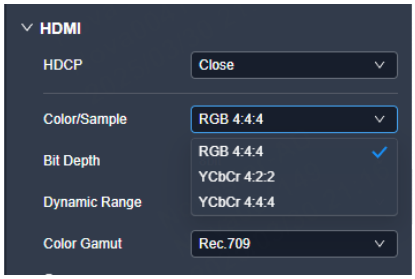
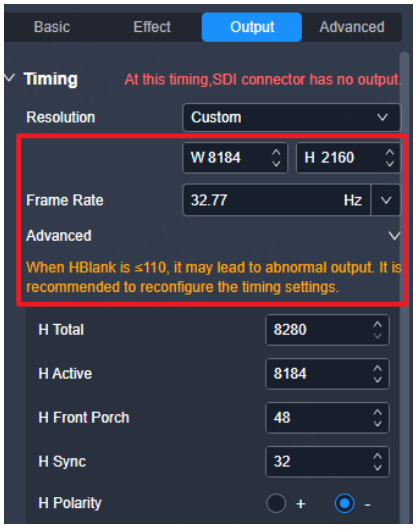
Each HDMI and DP output connector has a status LED which indicates the connection status of backend device. The optical port does not have status LEDs.

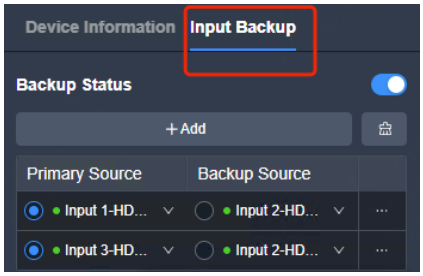
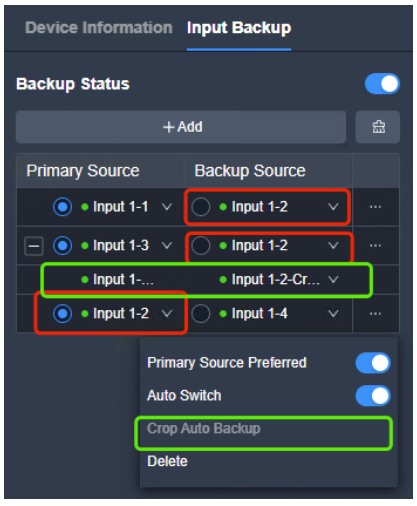
- On: The output connection is normal.
- Off: The output connection is abnormal.

2.9.6 Improvements

Improvement	Before	After
Layer repositioning by keyboard shortcuts	Layers can be repositioned only by dragging them or entering the coordinates.	After selecting a layer, you can move it in one-pixel increments using the keyboard arrow keys. By using **Shift** along with the arrow keys, the layer will move in increments of ten pixels. Holding the keys allows for continuous movement. 
Capable of keying out white background	DSK in smart mode does not allow white background to be keyed out.	DSK in smart mode allows white background to be keyed out. 
Deinterlacing delay	Deinterlacing delay: 2 frames	Deinterlacing delay: 1 frame
Genlock Multiplication	Genlock only supports the frame rate of the sync source.	You can choose to synchronize at a 1x or 2x multiplier of the sync source's frame rate. 

2.9.7 Changes

Change	Before	After
Genlock synchronization rule	After synchronization settings are completed, the synchronization signal is unstable, and it automatically synchronizes each time when the signal is reconnected.	Automatic synchronization is cancelled. After a synchronization failure, the user needs to click **Apply** to resend synchronization parameters. 
Output color space	The color space options on the output connector and screen properties pages support YCbCr 4:2:0.	YCbCr 4:2:0 is removed from the color space options on the output connector and screen properties pages. 
A prompt is added in advanced timing	Audio information is not included in advanced timing.	After audio is added, if HBlank is ≤110 in advanced timing, it may result in a black screen. A prompt is added: "When HBlank is ≤110, it may lead to abnormal output. It is recommended to reconfigure the timing settings." 
Advanced timing	Minimum vertical back porch: 1	Minimum vertical back porch: 3

Change	Before	After
Input backup location	Input backup needs to be configured on the device information page.	Moved to **Input Backup** in the upper right corner of the **Device** page. 
Input backup		1. The backup source can be used to create layers independently and does not participate in the backup relationship. 2. A backup relationship can be established automatically between a cropped source and its original source (Click **Crop Auto Backup** shown as below to automatically create a backup relationship). 3. Users can switch between the primary and backup sources using the buttons on the event controller. 4. One source can be configured as the backup of multiple primary sources. 5. Each backup relationship supports the independent configuration of primary source prioritization and automatic switching. 6. Input backup relationships between sources with different capacities are not allowed. 
DP connectors		DP connectors do not support interlaced signal output.

2.9.8 Bug Fixes

Function	Bug Description	Remarks
Device startup	Functional anomalies occur due to internal communication errors in devices after a power-reset.	
Input view	The connection of a Mac computer as an input source causes a color cast in input view.	
	There is an inconsistency between the preview and input view images.	
Diagnostics	There is a device diagnostics error upon startup.	Perform a manual diagnostics check. Once successful, the startup diagnostics results become normal, and the error popup disappears.
	Anomalies are prompted during device operation.	
Connector	There are compatibility issues with the DP input connector.	

2.9.9 Notes

2.9.9.1 Version Compatibility

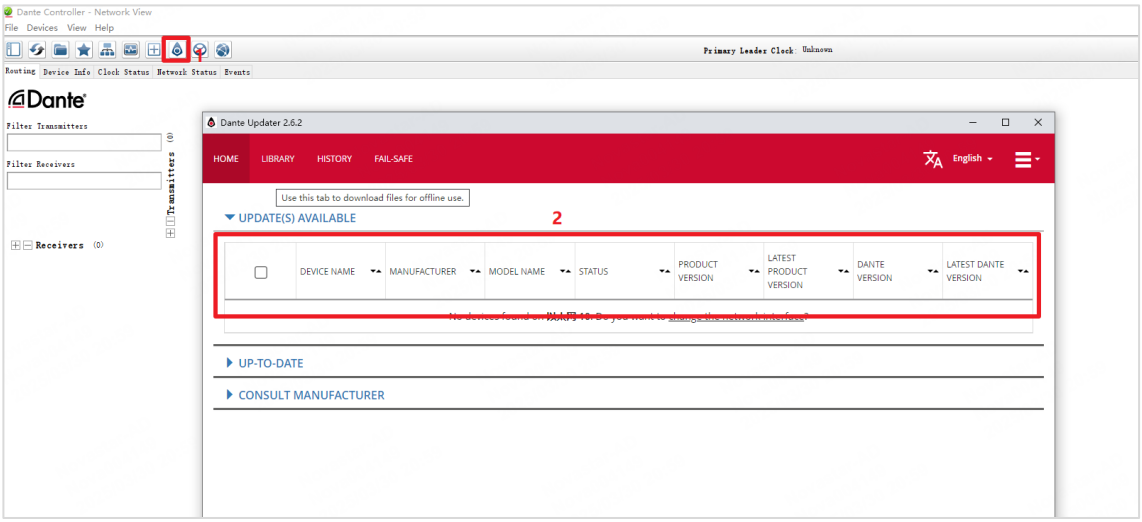
When importing project files from lower version devices into higher version devices, the output connectors on screens created using SDI may disappear.

Solution: Create the screen again and drag the output connectors to the screen to complete screen configuration.

2.9.9.2 Update Dante

The Dante firmware (.dnt) is pre-installed upon manufacture, and the audio matrix function can be directly used in PixelFlow. It is not advisable for users to update Dante firmware with packages not officially released by PixelFlow. Should any subsequent updates be necessary, use the official Audinate software, Dante Controller, as detailed below:

1. Download the official Audinate software, Dante Controller, from the website: https://www.audinate.com/
2. Within the Dante Controller software, click **Dante Updater** and select the firmware update released by PixelFlow from the available updates, as illustrated in the figure below.



2.9.9.3 Antistatic

When the antistatic function is enabled, if an input signal is disconnected due to instability, the source image will freeze on the last frame before signal loss throughout the specified protection duration. This prevents input source hot-switching until signal recovery. If the signal remains disconnected beyond this duration, it will be treated as disconnection. The longer the duration you set, the longer the image remains frozen.

2.10 Earlier Versions

**********2024.12.24 Q8 V1.5.1**********

[Q8 Mainframe] Q8 V1.5.1

[Supporting Software] PixelFlow V1.5.1

[Matching Controller] U5 V1.5.1

[New Features]

None

[Changes]

None

[Bug Fixes]

1. Fixed the issue where there was noticeable stuttering during the hot backup switching of input sources.
2. Fixed the issue where the screen briefly flashed black during the backup process for input sources with the same resolution and frame rate.
3. Fixed the issue where the PGM layer was incorrectly displayed on the PVW.
4. Fixed the issue where the Type-C to DP connector was not recognized.
5. Fixed the issue of still layers showing a black screen or some layers not displaying images after repeatedly loading presets.
6. Fixed the issue where the touch on the LCD screen was unresponsive.
7. Fixed the issue where enabling the BKG function did not take effect after an update.

8. Fixed the issue where neither the software nor the LCD refreshed after two out of three power sources were disconnected.

9. Fixed the issue where changing the Genlock source resolution did not cause a brief black screen and resulted in incorrect frame rate.

10. Fixed the self-check anomalies of serdes_status and det_clk_freq0 on the control card of certain devices after powering up.

11. Fixed the issue where switching to the internal sync source after the Genlock source was lost caused a brief black screen.

[Improvements]

1. Improved compatibility of the DP connector on input cards with graphics cards.

[Notes]

None

[Components]

Q8 mainframe version V1.5.1

1. Input card versions:

Q8_Input Processing Card V1.0.0.73.STD

Q8_HDMI2.0+DP1.2+12G-SDI Input Card V1.0.0.73.STD

Q8_ST2110_4xSFP25G Input Card V1.0.0.73.STD

Q8_ST2110_4xSFP25G Input Card_I V1.0.0.73.STD

2. Output card versions:

Q8_Output Processing Card V1.0.0.73.STD

Q8_HDMI2.0+12G-SDI+Fiber Output Card V1.0.0.73.STD

**********2024.9.30 Q8 V1.4.5**********

[Q8 Mainframe] Q8 V1.4.5

[Supporting Software] PixelFlow V1.4.4

[Matching Controller] U5 V1.4.5

[New Features]

None

[Changes]

None

[Bug Fixes]

1. Fixed the issue of the device not recognizing the DP source upon reboot.

2. Fixed the issue of frequent Genlock failure reporting.

3. Fixed the issue of blurry screen both on the main screen and Multiviewer screen.

[Improvements]

None

[Notes]

1. When upgrading the card individually, a forced reboot is required.

2. The screen would go black briefly when the source is disconnected and then reconnected after a successful Genlock synchronization.

3. When opening a still layer using a 64x64 image after a power cycle, the first frame occasionally fails to display. Moving the layer position would resolve the display issue.

[Components]

Q8 mainframe version V1.4.5

1. Input card versions:

Q8_Input Processing Card V1.0.0.64.STD

Q8_HDMI2.0+DP1.2+12G-SDI Input Card V1.0.0.64.STD

Q8_ST2110_4xSFP25G Input Card V1.0.0.64.STD

Q8_ST2110_4xSFP25G Input Card_I V1.0.0.64.STD

2. Output card versions:

Q8_Output Processing Card V1.0.0.64.STD

Q8_HDMI2.0+12G-SDI+Fiber Output Card V1.0.0.64.STD

**********2024.9.9 Q8 V1.4.4**********

[Q8 Mainframe] Q8 V1.4.4

[Supporting Software] PixelFlow V1.4.4

[Matching Controller] U5 V1.4.4

[New Features]

1. Support for the second-generation Q8_HDMI2.0+DP1.2+12G-SDI Input Card.

2. Fan mode switching

3. Support for the -Z model power module

4. Support for PixelFlow's new version of BKG gallery

5. noVS performance improvement

[Changes]

None

[Bug Fixes]

1. Fixed the issue of lag when switching between the two backup sources of the ST2110 input card.

2. Fixed the issue where the input card failed to recognize input sources after the 6800 graphics card is restarted.

3. Fixed the issue where static layers occasionally could not be created but functioned normally after being moved.

4. Fixed the startup issue that occurred in version V1.4.0 when the second-generation input card was inserted.

5. Fixed the issue where the output has no timing after upgrading the card alone.

6. Fixed the issue of frequent SDI source status reporting.

7. Fixed the issue where, with the primary source preferred function enabled, the software showed the primary source as active, but the actual output was from the backup source.

8. Fixed the issue where, after configuring the aging software, the MVR connector indicator remained on after a soft shutdown.

9. Fixed the issue where the editing page would time out without any operation after the device was powered on.

10. Fixed the issue where layers lacked numbering, and it was impossible to set layer numbers via the properties panel on the right.

[Improvements]

1. Optimized the noVS activation speed to prevent black screen from appearing on backend devices.

[Notes]

1. When upgrading the card individually, a forced reboot is required.

[Components]

Q8 mainframe version V1.4.4

1. Input card versions:

Q8_Input Processing Card V1.0.0.61.STD

Q8_HDMI2.0+DP1.2+12G-SDI Input Card V1.0.0.61.STD

Q8_ST2110_4xSFP25G Input Card V1.0.0.61.STD

Q8_ST2110_4xSFP25G Input Card_I V1.0.0.61.STD

2. Output card versions:

Q8_Output Processing Card V1.0.0.61.STD

Q8_HDMI2.0+12G-SDI+Fiber Output Card V1.0.0.61.STD

**********2024.7.17 Q8 V1.4.2**********

[Q8 Mainframe] Q8 V1.4.2

[Supporting Software] PixelFlow V1.4.0

[Matching Controller] U5 V1.4.0

[New Features]

None

[Changes]

None

[Bug Fixes]

1. Fixed the issue with occasional startup anomalies on the MCU of the backplane, connector card or processing card.

2. Fixed the garbage collection issue in the KeyFrame function.

3. Fixed the file handling issue when importing SDP files on the ST2110 input card.

4. Fixed the issue of layer flickering when using the ST2110 source as a sync source and moving layers.

5. Fixed the missing icon issue in the upgrade success pop-up window.

6. Fixed the display issue with the default style of the OPT output port.

7. Fixed the issue where colored borders were not fully displayed.

8. Fixed the issue of abnormal information reporting for the SDI input connector when connected to a YUV4:2:2 8-bit source.

[Improvements]

1. Device information display module on LCD: When the SN is not programmed into the connector card or processing card, it is now displayed as "--" instead of "0000000000000000" or "ffffffffffffffff".

2. FPGA: Communication optimization for input connector cards and processing cards: Removed proactive source change reporting to avoid conflicts with MCU communication.

[Notes]

1. When upgrading the card individually, a forced reboot is required.

[Components]
Q8 mainframe version V1.4.2
1. Input card versions:
Q8_Input Processing Card V1.0.0.51.STD
Q8_HDMI2.0+DP1.2+12G-SDI Input Card V1.0.0.48.STD
Q8_ST2110_4xSFP25G Input Card V1.0.0.51.STD
Q8_ST2110_4xSFP25G Input Card_I V1.0.0.51.STD
2. Output card versions:
Q8_Output Processing Card V1.0.0.51.STD
Q8_HDMI2.0+12G-SDI+Fiber Output Card V1.0.0.51.STD

**********2024.6.26 Q8 V1.4.1**********
[Q8 Mainframe] Q8 V1.4.1
[Supporting Software] PixelFlow V1.4.0
[Matching Controller] U5 V1.4.0
[New Features]
None
[Changes]
None
[Bug Fixes]
1. Fixed the occasional issue of layer blackout caused by input source resolution changes.
[Improvements]
None
[Notes]
1. When upgrading the card individually, a forced reboot is required.
[Components]
Q8 mainframe version V1.4.1

1. Input card versions:
Q8_Input Processing Card V1.0.0.48.STD
Q8_HDMI2.0+DP1.2+12G-SDI Input Card V1.0.0.48.STD
Q8_ST2110_4xSFP25G Input Card V1.0.0.48.STD
Q8_ST2110_4xSFP25G Input Card_I V1.0.0.48.STD
2. Output card versions:
Q8_Output Processing Card V1.0.0.48.STD
Q8_HDMI2.0+12G-SDI+Fiber Output Card V1.0.0.48.STD

**********2024.6.18 Q8 V1.4.0**********
[Q8 Mainframe] Q8 V1.4.0
[Supporting Software] PixelFlow V1.4.0

[Matching Controller] U5 V1.4.0

[New Features]

1. Multiple switchers can be controlled simultaneously by a single event controller or PC with PixelFlow

2. Layer KeyFrame

3. BKG size and position adjustment

4. End-to-end HDR settings

5. Layer preset

6. Smart key

[Changes]

None

[Bug Fixes]

1. Fixed the issue where the device IP address in the logs after exporting to a USB drive does not match the device's IP.

2. Fixed the issue of incorrect version number displayed after upgrade.

3. Fixed the issue with ESD protection failure during input source detection.

4. Fixed the issue of the ST2110 input card malfunctioning due to multiple switching between manual IP settings and DHCP.

5. Fixed the occasional issue of a blackout occurring on a layer after power cycling.

6. Fixed the rare flickering issue when switching connector types on a source-less layer.

[Improvements]

None

[Notes]

1. When upgrading the card individually, a forced reboot is required.

[Components]

Q8 mainframe version V1.4.0

1. Input card versions:

Q8_Input Processing Card V1.0.0.46.STD

Q8_HDMI2.0+DP1.2+12G-SDI Input Card V1.0.0.46.STD

Q8_ST2110_4xSFP25G Input Card V1.0.0.46.STD

Q8_ST2110_4xSFP25G Input Card_I V1.0.0.46.STD

2. Output card versions:

Q8_Output Processing Card V1.0.0.46.STD

Q8_HDMI2.0+12G-SDI+Fiber Output Card V1.0.0.46.STD

**********2024.5.16 Q8 V1.3.4**********

[Q8 Mainframe] Q8 V1.3.4

[Supporting Software] PixelFlow V1.3.3

[Matching Controller] U5 V1.3.3

[New Features]

None

[Changes]

None

[Bug Fixes]

1. Fixed frequent MCU freeze issues when using input cards with Mac computers.
2. Fixed the occasional program crashes due to card communication timeouts.
3. Fixed the FPGA loading issue due to the FPGA hardware differences.

[Improvements]

None

[Notes]

1. When updating the product firmware, make sure to update the card program at the same time.

[Components]

Q8 mainframe version V1.3.4

1. Input card versions:
   Q8_Input Processing Card V1.0.0.43.STD
   Q8_HDMI2.0+DP1.2+12G-SDI Input Card V1.0.0.43.STD
   Q8_ST2110_4xSFP25G Input Card V1.0.0.43.STD
   Q8_ST2110_4xSFP25G Input Card_I V1.0.0.43.STD
2. Output card versions:
   Q8_Output Processing Card V1.0.0.43.STD
   Q8_HDMI2.0+12G-SDI+Fiber Output Card V1.0.0.43.STD

**********2024.3.12 Q8 V1.3.1**********

[Q8 Mainframe] Q8 V1.3.1

[Supporting Software] PixelFlow V1.3.1

[Matching Controller] U5 V1.3.1

[New Features]

1. Added support for the Q_ST2110_4xSFP25G input card_I.

[Changes]

None

[Bug Fixes]

1. Fixed the issue of unstable operation after the device runs for extended periods.
2. Fixed the issue of abnormality in the source hot backup function on the ST2110 input card.
3. Fixed the issue where the ST2110 input card recognizes interlaced signals as progressive signals.
4. Fixed the issue where other devices may fail to recognize the HDMI output signal at 3840x2160@50Hz and 60Hz.

[Improvements]

None

[Notes]

1. When updating the product firmware, make sure to update the card program at the same time.

[Components]

Q8 mainframe version V1.3.1

1. Input card versions:

Q_Input Resource Card V1.0.0.36.STD

Q_4xHDMI2.0+4xDP1.2+4x12G-SDI Input Card V1.0.0.36.STD

Q_ST2110_4xSFP25G Input Card V1.0.0.36.STD

Q_ST2110_4xSFP25G Input Card_I V1.0.0.36.STD

2. Output card versions:

Q_Output Resource Card V1.0.0.36.STD

Q_4xHDMI 2.0+4x12G-SDI Fiber Output Card V1.0.0.36.STD

**********2024.1.30 Q8 V1.3.0**********

[Q8 Mainframe] Q8 V1.3.0

[Supporting Software] PixelFlow V1.3.0

[Matching Controller] U5 V1.3.0

[New Features]

1. Added support for the ST2110 input card.
2. Added the connector HDR feature.
3. Added the output connector rotation feature.
4. Added the layer resource display feature.
5. Added the feature of layer outer borders and halo borders.
6. Added the layer shadow feature.

[Changes]

None

[Bug Fixes]

1. Fixed the issue where, when multiple resource cards are installed on the Q8 in sequence, the resource cards without sub-cards have no MVR configuration.
2. Fixed the issue where there is a delay when turning on the cut and fill feature.
3. Fixed the issue where the startup and shutdown windows occasionally appear on the front LCD screen during the update process.

[Improvements]

None

[Notes]

1. When updating the product firmware, make sure to update the card program at the same time.

[Components]

Q8 mainframe version V1.3.0

1. Input card versions:

Q_Input Resource Card V1.0.0.34.STD

Q_4xHDMI2.0+4xDP1.2+4x12G-SDI Input Card V1.0.0.34.STD

Q_ST2110_4xSFP25G Input Card V1.0.0.34.STD

2. Output card versions:

Q_Output Resource Card V1.0.0.34.STD

Q_4xHDMI 2.0+4x12G-SDI Fiber Output Card V1.0.0.34.STD

**********2024.1.30 Q8 V1.2.1**********

[Q8 Mainframe] Q8 V1.2.1

[Supporting Software] PixelFlow V1.2.1

[Matching Controller] U5 V1.2.0

[New Features]

None

[Changes]

None

[Bug Fixes]

1. Fixed the issue where the DP YUV422 4K@60Hz signal from Mac computers is inconsistently recognized by the Q8.

2. Fixed the issue where the connector copying function exhibits unusual behavior when Genlock is activated.

[Improvements]

None

[Notes]

1. When updating the product firmware, make sure to update the card program at the same time.

[Components]

Q8 mainframe version V1.2.1

1. Input card versions:

Q_Input Resource Card V1.0.0.33.STD

Q_4xHDMI2.0+4xDP1.2+4x12G-SDI Input Card V1.0.0.33.STD

2. Output card versions:

Q_Output Resource Card V1.0.0.33.STD

Q_4xHDMI 2.0+4x12G-SDI Fiber Output Card V1.0.0.33.STD

**********2024.1.12 Q8 V1.2.0**********

[Q8 Mainframe] Q8 V1.2.0

[Supporting Software] PixelFlow V1.2.0

[Matching Controller] U5 V1.2.0

[New Features]

1. Added the feature of quick switching to the backup input source.

2. Added a device noVS backup feature.

3. Added the cut and fill feature.

4. Added an edge blending feature

5. Added the bezel compensation feature.

[Changes]

None

[Bug Fixes]

1. Fixed the issue of upgrade process getting stuck at 21%.

2. Fixed the issue of occasionally encountering an error when selecting the Genlock source with Genlock enabled on multiple screens.

3. Fixed the occasional logic issue encountered when modifying IP address on the LCD screen.

4. Fixed the logic issue encountered when opening still layers.

5. Fixed the compatibility issue with DP 1.2 input connectors.

6. Fixed the issue of incorrect HDCP status when HDCP is enabled on MVR connectors.

[Improvements]

None

[Notes]

1. When updating the product firmware, make sure to update the card program at the same time.

[Components]

Q8 mainframe version V1.2.0

1. Input card versions:

Q_Input Resource Card V1.0.0.26.STD

Q_4xHDMI2.0+4xDP1.2+4x12G-SDI Input Card V1.0.0.26.STD

2. Output card versions:

Q_Output Resource Card V1.0.0.26.STD

Q_4xHDMI 2.0+4x12G-SDI Fiber Output Card V1.0.0.26.STD

**********2023.12.28 Q8 V1.1.3**********

[Q8 Mainframe] Q8 V1.1.3

[Supporting Software] PixelFlow V1.1.1

[Matching Controller] U5 V1.1.1

[New Features]

None

[Changes]

None

[Bug Fixes]

1. Fixed the issue of image freezing during preset playback on SDI based screens.

2. Fixed the issue of blurry output images at certain scaling ratios by adjusting the sharpness coefficients.

[Improvements]

None

[Notes]

1. When updating the product firmware, make sure to update the card program at the same time.

[Components]

Q8 mainframe version V1.1.3

1. Input card versions:

Q_Input Resource Card V1.0.0.18.STD

Q_4xHDMI2.0+4xDP1.2+4x12G-SDI Input Card V1.0.0.18.STD

2. Output card versions:

Q_Output Resource Card V1.0.0.18.STD
Q_4xHDMI 2.0+4x12G-SDI Fiber Output Card V1.0.0.18.STD

**********2023.11.27 Q8 V1.1.2**********

[Q8 Mainframe] Q8 V1.1.2
[Supporting Software] PixelFlow V1.1.1
[Matching Controller] U5 V1.1.1
[New Features]
None
[Changes]
None
[Bug Fixes]
1. Fixed the issue of abnormal EDID locking of DP input connectors.
2. Improved the compatibility for DP input connectors.
3. Modified the driver of HDMI output connectors to fix their pixel flickering issue.
4. Fixed the Q8 upgrade failure issue.
[Improvements]
None
[Notes]
1. When updating the product firmware, make sure to update the card program at the same time.
[Components]
Q8 mainframe version V1.1.2
1. Input card versions:
Q_Input Resource Card V1.0.0.18.STD
Q_4xHDMI2.0+4xDP1.2+4x12G-SDI Input Card V1.0.0.18.STD
2. Output card versions:
Q_Output Resource Card V1.0.0.18.STD
Q_4xHDMI 2.0+4x12G-SDI Fiber Output Card V1.0.0.18.STD

**********2023.11.9 Q8 V1.1.1**********

[Q8 Mainframe] Q8 V1.1.1
[Supporting Software] PixelFlow V1.1.1
[Matching Controller] U5 V1.1.1
[New Features]
None
[Changes]
None
[Bug Fixes]
1. Fixed the issue of unstable connection between connector 4 of the W8100 graphics card and Q8 input connectors.

2. Fixed the issue where 4K×2K@60Hz sources from the D3 9100 graphics card cannot be recognized occasionally.

3. Fixed the issue where the image effect does not change when the opacity of still layers exceeds 50%.

4. Fixed the issue where the Q8 cannot recognize the DP connectors of M2/M2 Max laptops.

[Improvements]

None

[Notes]

1. When updating the product firmware, make sure to update the card program at the same time.

[Components]

Q8 mainframe version V1.1.1

1. Input card versions:

Q_Input Resource Card V1.0.0.17.STD

Q_4xHDMI2.0+4xDP1.2+4x12G-SDI Input Card V1.0.0.17.STD

2. Output card versions:

Q_Output Resource Card V1.0.0.17.STD

Q_4xHDMI 2.0+4x12G-SDI Fiber Output Card V1.0.0.17.STD

**********2023.10.13 Q8 V1.1.0**********

[Q8 Mainframe] Q8 V1.1.0

[Supporting Software] PixelFlow V1.1.0

[Matching Controller] U5 V1.1.0

[New Features]

1. Supports opening layers with PGM sources on other screens.

2. Added a limit for the number of power supplies during device start.

3. Displays USB device plugging and unplugging status.

4. Automatically performs diagnostics when starting up.

[Changes]

None

[Bug Fixes]

1. Fixed the issue where there is no prompt when the device starts with only one power supply.

2. Fixed the issue where the DP connectors are not recognized occasionally.

3. Fixed the issue where the EDID file upload to DP connectors fails.

4. Fixed the issue where the synchronization time is too long when the SDI output connector synchronizes with another connector whose frame rate is greatly different from the frame rate of the SDI output connector.

5. Fixed the issue where the user interface of the card diagnostics is incomplete when swiping with two fingers on the LCD screen.

[Improvements]

None

[Notes]

1. When updating the product firmware, make sure to update the card program at the same time.

[Components]

Q8 mainframe version V1.1.0

1. Input card versions:

Q_Input Resource Card V1.0.0.15.STD

Q_4xHDMI2.0+4xDP1.2+4x12G-SDI Input Card V1.0.0.15.STD

2. Output card versions:

Q_Output Resource Card V1.0.0.15.STD

Q_4xHDMI 2.0+4x12G-SDI Fiber Output Card V1.0.0.15.STD

**********2023.9.15 Q8 V1.0.2**********

[Q8 Mainframe] Q8 V1.0.2

[Supporting Software] PixelFlow V1.0.2

[Matching Controller] U5 V1.0.2

[New Features]

1. Added an indication for any abnormal fan card connections on the fan user interface of the LCD screen.

[Changes]

None

[Bug Fixes]

1. Fixed the issue of the linkage between Genlock and connector copying function.
2. Fixed the issue of occasional crash of the LCD program.
3. Fixed the issue of occasional crash of the SDK program.
4. Fixed the cp parameter configuration error of CXP backplane.
5. Fixed the issue where the table header displayed on the LCD screen can be dragged by touch.

[Improvements]

None

[Notes]

1. When updating the product firmware, make sure to update the card program at the same time.

[Components]

Q8 mainframe version V1.0.2

1. Input card versions:

Q_Input Resource Card V1.0.0.13.STD

Q_4xHDMI2.0+4xDP1.2+4x12G-SDI Input Card V1.0.0.13.STD

2. Output card versions:

Q_Output Resource Card V1.0.0.13.STD

Q_4xHDMI 2.0+4x12G-SDI Fiber Output Card V1.0.0.13.STD

**********2023.8.30 Q8 V1.0.1**********

[Q8 Mainframe] Q8 V1.0.1

[Supporting Software] PixelFlow V1.0.1

[Matching Controller] U5 V1.0.1

[New Features]

1. Card update is available on the Update user interface.
2. Compatible with the new CXP hardware.
3. YUV420 is supported on output connectors.

[Changes]

None

[Bug Fixes]

1. Fixed the compatibility issue between DP connectors and GTX3080 graphics cards.
2. Fixed the issue where the edge effects on portrait skin under the default parameters of chroma key are abnormal.
3. Fixed certain display problems of the Q8 LCD screen.
4. Fixed the issue of abnormal linkage between the SDI connector and the connector positioning function.
5. Fixed the issue of HDCP status reporting of DP connectors.
6. Fixed the issue of reversed left-right output on the optical port.
7. Fixed the communication-related crash issues.

[Improvements]

None

[Notes]

1. When updating the product firmware, make sure to update the card program at the same time.

[Components]

Q8 mainframe version V1.0.1

1. Input card versions:

Q_Input Resource Card V1.0.0.13.STD

Q_4xHDMI2.0+4xDP1.2+4x12G-SDI Input Card V1.0.0.13.STD

2. Output card versions:

Q_Output Resource Card V1.0.0.13.STD

Q_4xHDMI 2.0+4x12G-SDI Fiber Output Card V1.0.0.13.STD

**********2023.7.26 Q8 V1.0.0**********

[Q8 Mainframe] Q8 V1.0.0

[Supporting Software] PixelFlow V1.0.0

[Matching Controller] U5 V1.0.0

[New Features]

None

[Changes]

None

[Bug Fixes]

1. Fixed the issue where the output effect is incorrect after the T-bar is pushed halfway and then pushed back.

2. Fixed the issue where the Q8 device name on the LCD does not change synchronously after the name is changed in PixelFlow.

3. Fixed the issue where some test patterns are displayed abnormally on the screens created by the SDI output connectors.

4. Fixed the issue where the layer will not be displayed on the screens created by the SDI output connectors if the layer is not enlarged to full screen.

[Improvements]

None

[Notes]

1. When updating the product firmware, make sure to update the card program at the same time.

[Components]

Q8 mainframe version V1.0.0

1. Input card versions:

Q_Input Resource Card V1.0.0.10

Q_4xHDMI2.0+4xDP1.2+4x12G-SDI Input Card V1.0.0.10

2. Output card versions:

Q_Output Resource Card V1.0.0.10

Q_4xHDMI 2.0+4x12G-SDI Fiber Output Card V1.0.0.10

**********2023.7.5 Q8 V1.0.0.T2**********

[Q8 Mainframe] Q8 V1.0.0.T2

[Supporting Software] PixelFlow V1.0.0.T2

[Matching Controller] U5 V1.0.0.T2

[Notes]

1. When updating the product firmware, make sure to update the card program at the same time.

[Components]

Q8 mainframe version V1.0.0.T2

1. Input card versions:

Q_Input Resource Card V1.0.0.9

Q_4xHDMI2.0+4xDP1.2+4x12G-SDI Input Card V1.0.0.9

2. Output card versions:

Q_Output Resource Card V1.0.0.9

Q_4xHDMI 2.0+4x12G-SDI Fiber Output Card V1.0.0.9

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