

COEX VMP

V1.4.0



Release Notes

Contents

Contents	i
1 Upgrade Instructions	1
1.1 Upgrade Steps	1
1.2 Operating Procedure.....	1
1.3 Special Note.....	2
2 New Version Introduction	2
2.1 Release Notes.....	2
2.2 Compatible Product.....	2
3 Key Features	3
3.1 Adaptive Thermal Compensation	3
3.2 ST 2110.....	4
3.3 Backup	5
3.4 Project/Screen.....	6
3.5 Multi-batch Module Adjustment.....	7
3.6 Schedule/Peripherals.....	8
3.7 Optical Port Expansion	9
3.8 Offline Mode	10
4 Other Optimizations	11
5 Bug Fixes	12
6 Known Issues	13

1 Upgrade Instructions

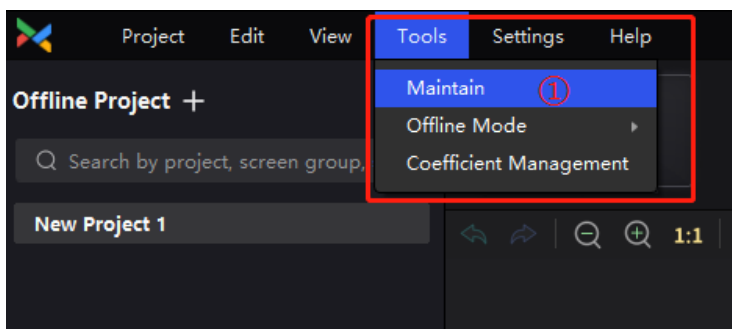
1.1 Upgrade Steps

To ensure compatibility, VMP V1.4.0 must be paired with LED display controller V1.4.0. Follow these steps to upgrade:

First, upgrade VMP to V1.4.0. Then, using VMP, upgrade the corresponding controller to V1.4.0.

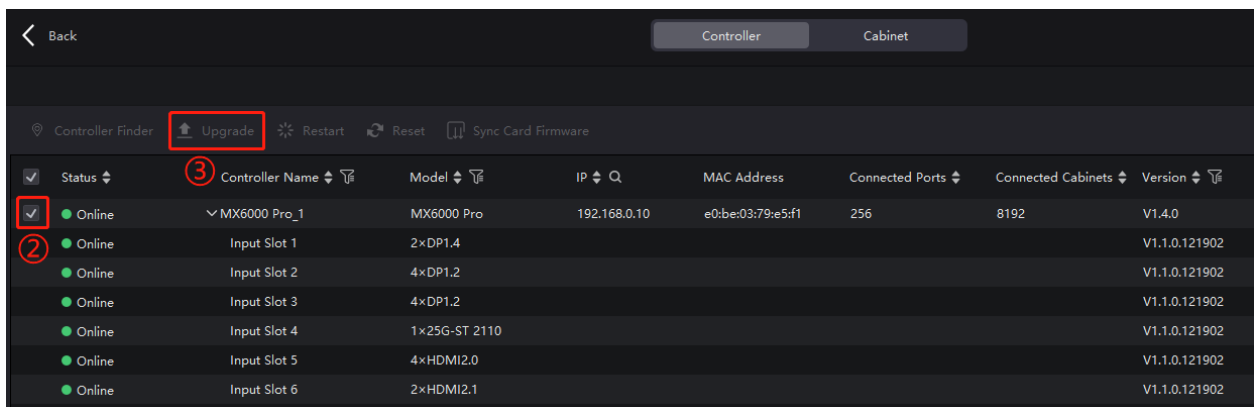
1.2 Operating Procedure

Step 1 From the menu bar, choose **Tools > Maintain**.



Step 2 On the **Controller** page, select the target controllers.

Step 3 Click **Upgrade**, select the V1.4.0 firmware program file (.img) or .zip file and click **OK**.



Note:

- It is recommended to perform the upgrade using a wired network.
- All the devices of a screen must be upgraded at the same time.
- When upgrading card-based controllers (MX6000 Pro and MX2000 Pro), all of the cards must be upgraded at the same time. If the cards span across different screens, the devices that are under the same screen as the card must also be upgraded together.

1.3 Special Note

The COEX platform includes controllers and receiving cards, which together constitute a complete system.

Additionally, certain new or optimized features require upgrading the firmware of both the controllers and receiving cards.

The latest product user manuals and firmware packages are available on NovaStar's official website at:

https://www.novastar.tech/downloads/?_sasdk=dMTg4NDI2YTE0Mjc3ZGQtMDAyYTEyZDZkN2U1OTdhMi0yNjAzMWE1MS0yMDczNjAwLTE4ODQyNmExNDI4MTAzOQ

2 New Version Introduction

2.1 Release Notes

Version 1.4.0 includes new features and improvements such as adaptive thermal compensation, ST 2110 configuration, enhanced backup options, project/screen improvements, multi-batch module adjustment, scheduling, optical port expansion, along with other optimizations and bug fixes.

2.2 Compatible Product

Product	Model
LED Display Controller	MX6000 Pro, MX2000 Pro, MX40 Pro, MX30, MX20, KU20
Input Card	MX_1×DP 1.4+1×HDMI 2.1, MX_1×ST 2110 (25G), MX_2×ST 2110 (25G), MX_2×DP 1.4, MX_2×HDMI 2.1, MX_4×12G-SDI, MX_4×DP 1.2, MX_4×HDMI 2.0
Output Card	MX_4×10G_Fiber, MX_1×40G_Fiber
Receiving Card	A5s Plus, A7s Plus, A8s and its series, A8s-N, A8s Pro and its series, A10s Pro and its series, CA50E, XA50 Pro
Fiber Converter	CVT10, CVT10 Pro, CVT8-5G
Multifunction Card	MFN300
Light Sensor	NS060

3 Key Features

- **Adaptive Thermal Compensation**

Ensures that the LED screen maintains consistent brightness, color fidelity, and uniformity across various temperatures.
- **ST 2110**

Compatible with the ST 2110 (25G) input card, supporting the settings for video stream, primary and backup optical port IP addresses, PTP, and more.
- **Backup**

A new "Backup" menu has been added to the navigation bar, which includes settings for device backup, card backup, and Ethernet port backup.
- **Project/Screen**

The left sidebar now features a new list structure that includes projects, screen groups, and screen hierarchies. This update aims to better align with on-site management operations and enhance user-friendliness.
- **Multi-batch Module Adjustment**

Optimized device performance to improve the smoothness and speed of multi-batch adjustments.
- **Schedule/Peripherals**

A new "Schedule" menu has been added to the navigation bar, offering adjustments for screen brightness and switching presets as per schedules.
- **Optical Port Expansion (Exclusive to MX40 Pro)**

Allows expansion from 20 to 40 Ethernet ports for optical output.
- **Offline Mode**

Enhanced offline mode capability, now supporting device-to-device backups and customizable cabinet specifications.

3.1 Adaptive Thermal Compensation

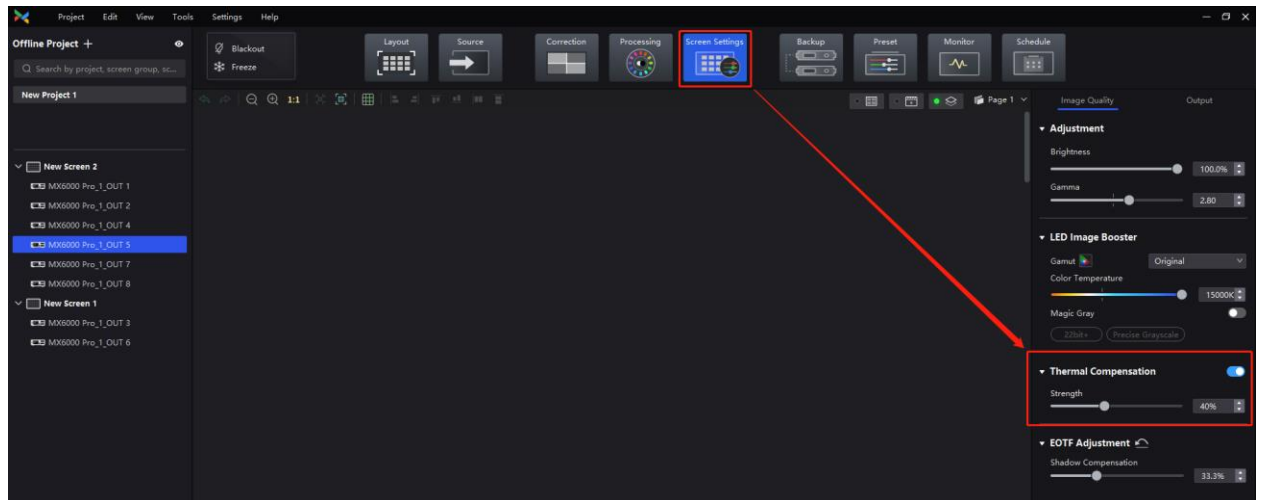
Reason for Optimization

Ensuring uniform display quality at all times through manual adjustment of the thermal compensation coefficient can be indeed challenging.

Optimization Details

In addition to manual adjustments, an automatic mode has been added. When activated, this mode automatically adjusts the thermal compensation coefficient to maintain consistent brightness, color fidelity, and uniformity of the LED screen across different temperatures.

VMP Screenshot



3.2 ST 2110

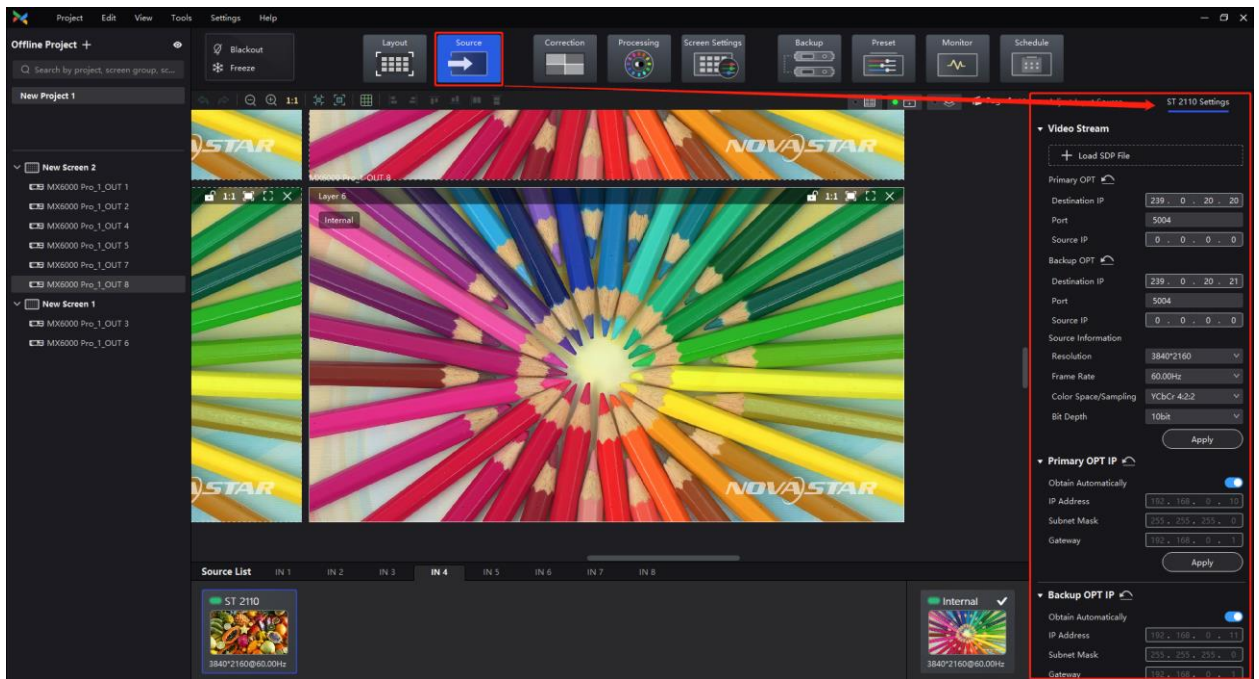
Reason for Optimization

To accommodate the new input cards: MX_1×ST 2110 (25G) and MX_2×ST 2110 (25G)

Optimization Details

Enables configurations for ST 2110 input cards, including settings for video stream, primary and backup optical port IP addresses, PTP, and more.

VMP Screenshot



3.3 Backup

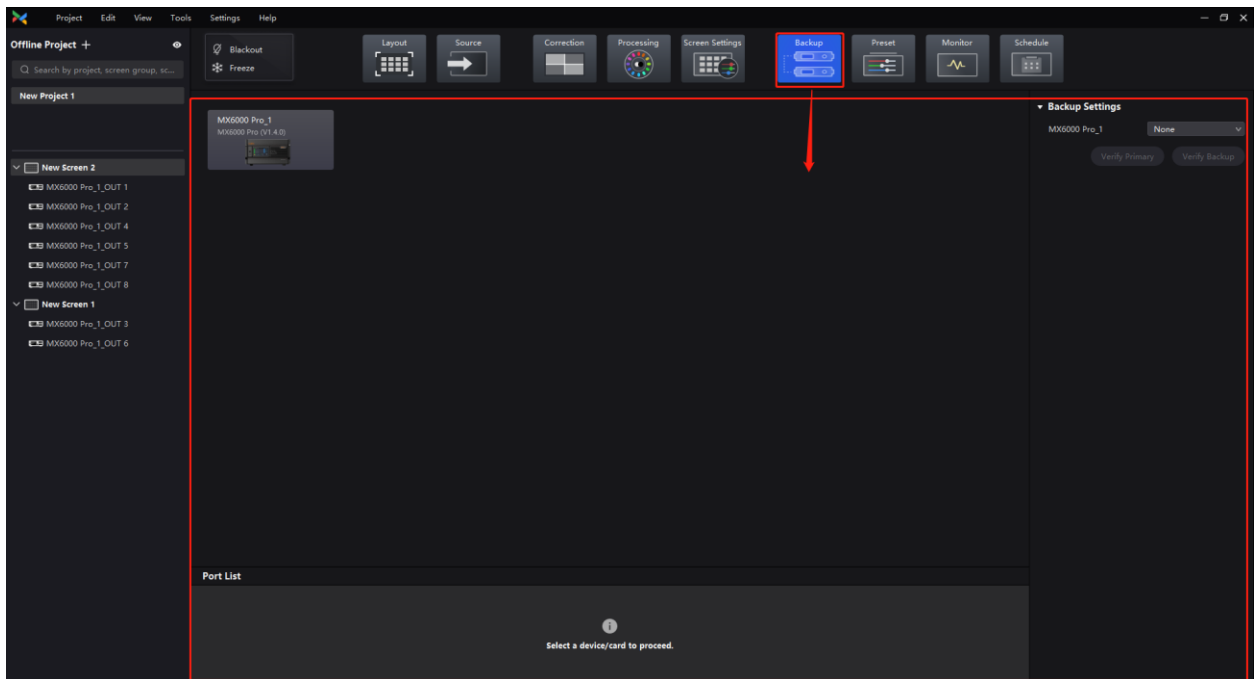
Reason for Optimization

The backup function's multiple access points were creating a poor user experience.

Optimization Details

A "Backup" menu has been added to the navigation bar, consolidating settings for device backup, card backup, and Ethernet port backup (including custom backups) into a single page.

VMP Screenshot



3.4 Project/Screen

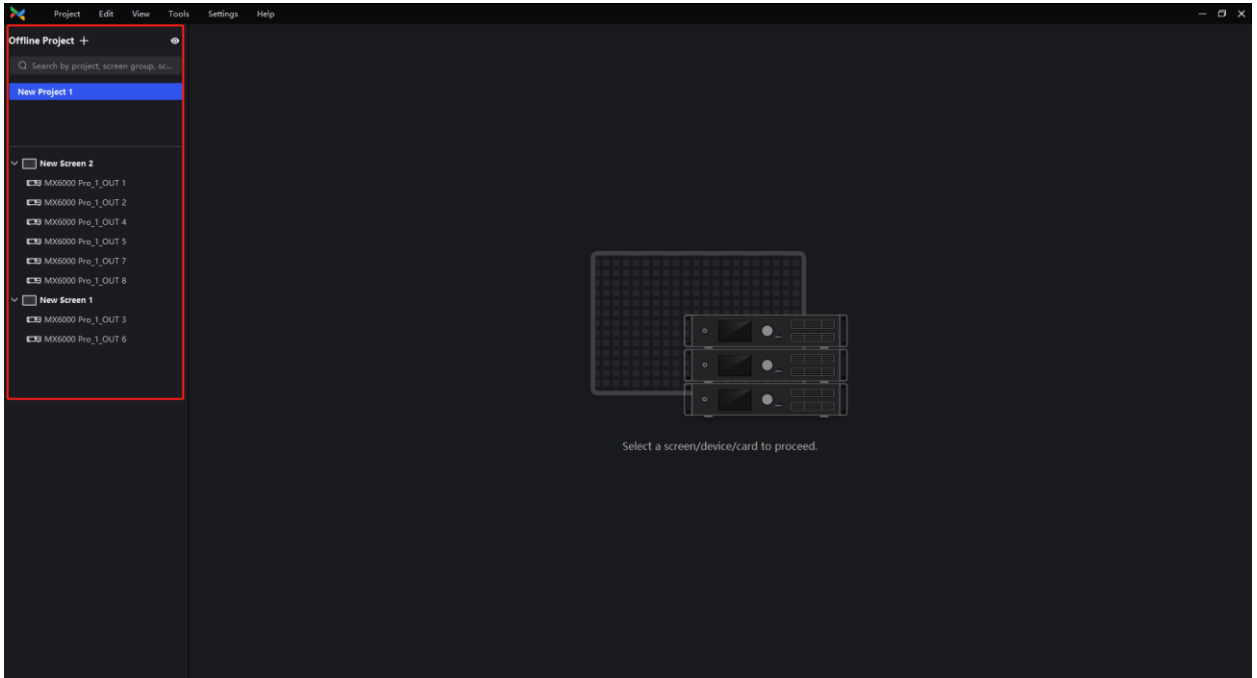
Reason for Optimization

The improvements were designed with on-site management operations in mind, aiming to manage all devices within a single project. A project comprises screen groups and screens, where each screen consists of devices or output cards.

Optimization Details

Shifting from device management to project management, the new approach encompasses screen groups, screens, and devices. This allows for the operation and management of LED screens on a group or individual screen basis, enabling more efficient execution of batch operations

VMP Screenshot



3.5 Multi-batch Module Adjustment

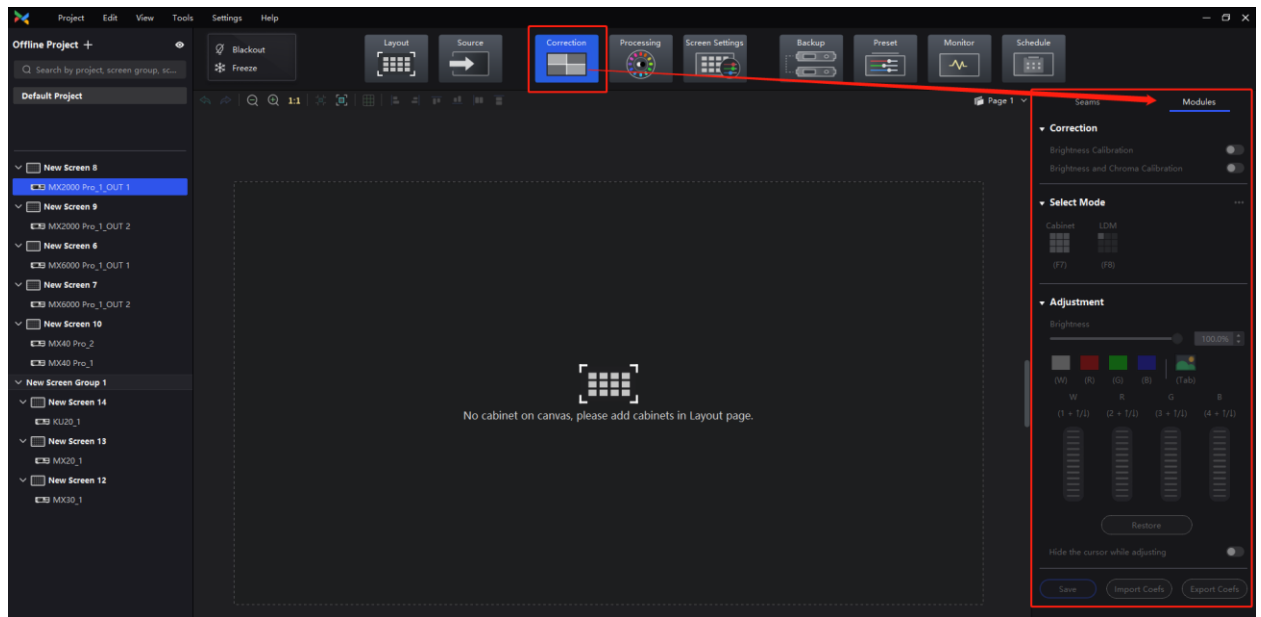
Reason for Optimization

The speed of multi-batch module adjustment was too slow, and the results were hard to manage, leading to excessively high trial-and-error costs.

Optimization Details

Improve the fluidity and speed of multi-batch module adjustment, and add support for copying, pasting, importing, and exporting adjustment coefficients.

VMP Screenshot



3.6 Schedule/Peripherals

Reason for Optimization

To expand the range of applications for our product.

Optimization Details

- Schedule

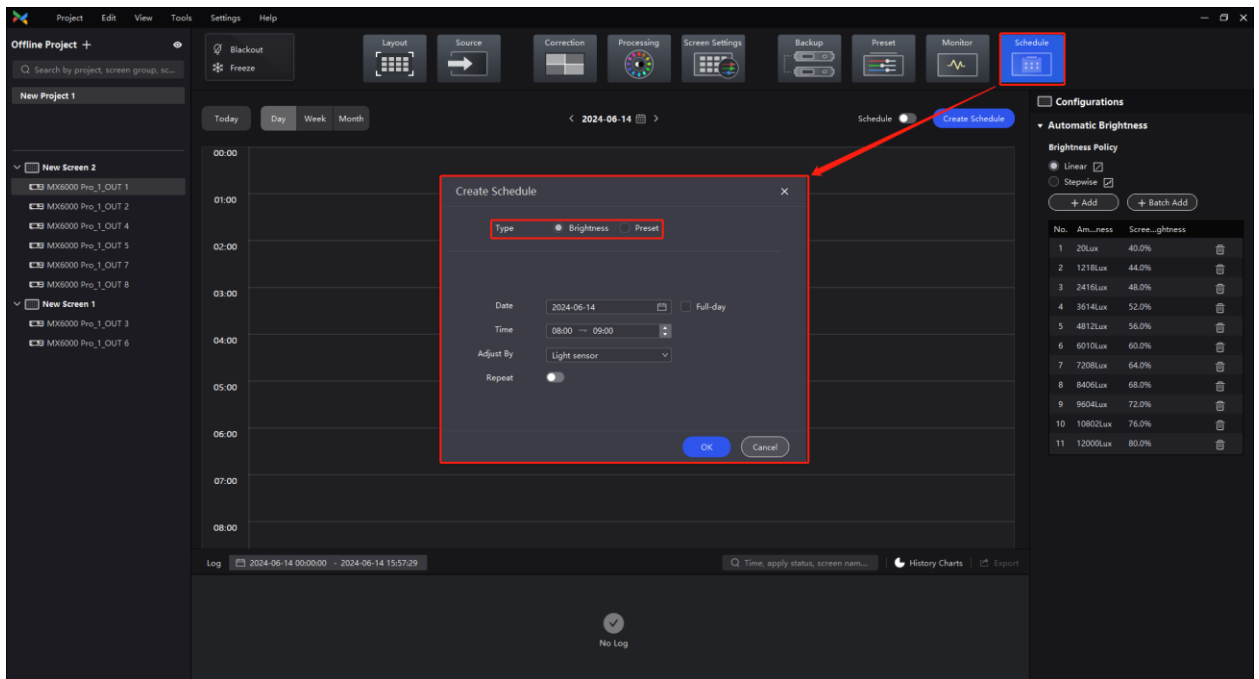
A new "Schedule" menu has been added to the navigation bar, allowing users to set up timed tasks for the LED screen. This includes options for adjusting screen brightness with customizable brightness strategies and switching between presets.

- Peripherals

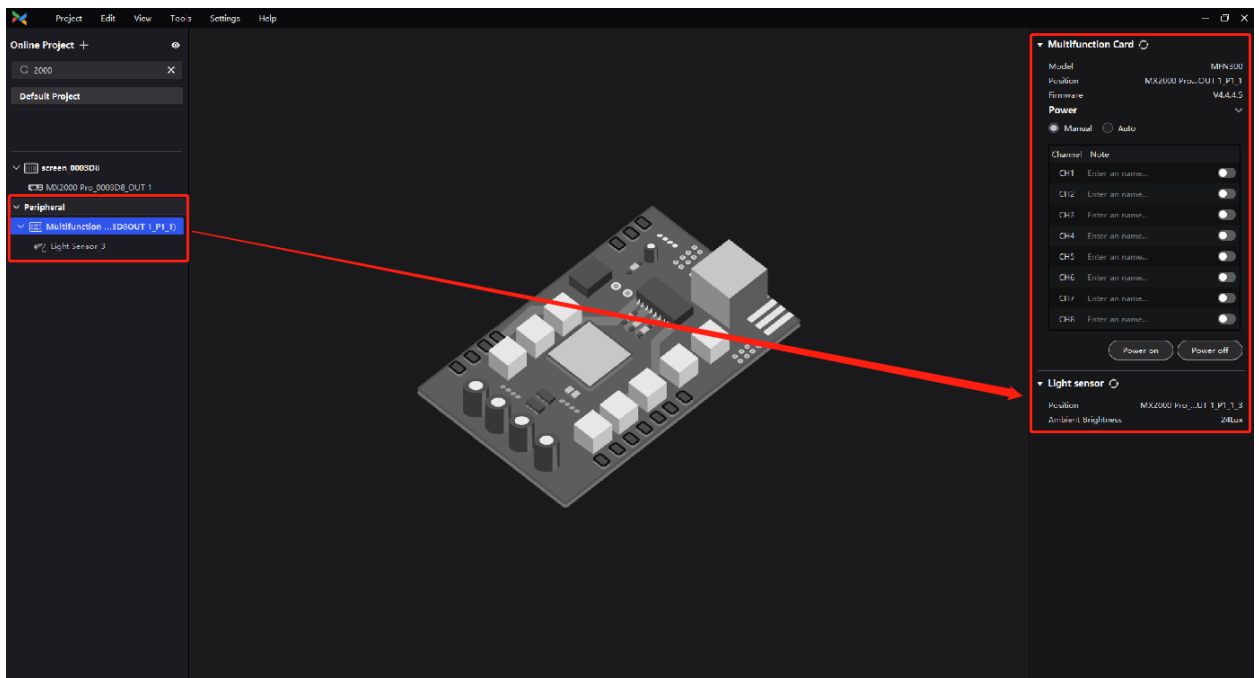
The project list on the left side now includes peripherals (multifunction cards/sensors). Users can leverage these multifunction cards to configure power control strategies. The system also integrates with the scheduling module to accept parameters like automatically adjusting screen brightness based on ambient light sensors.

VMP Screenshot

- Schedule



● Peripherals



3.7 Optical Port Expansion

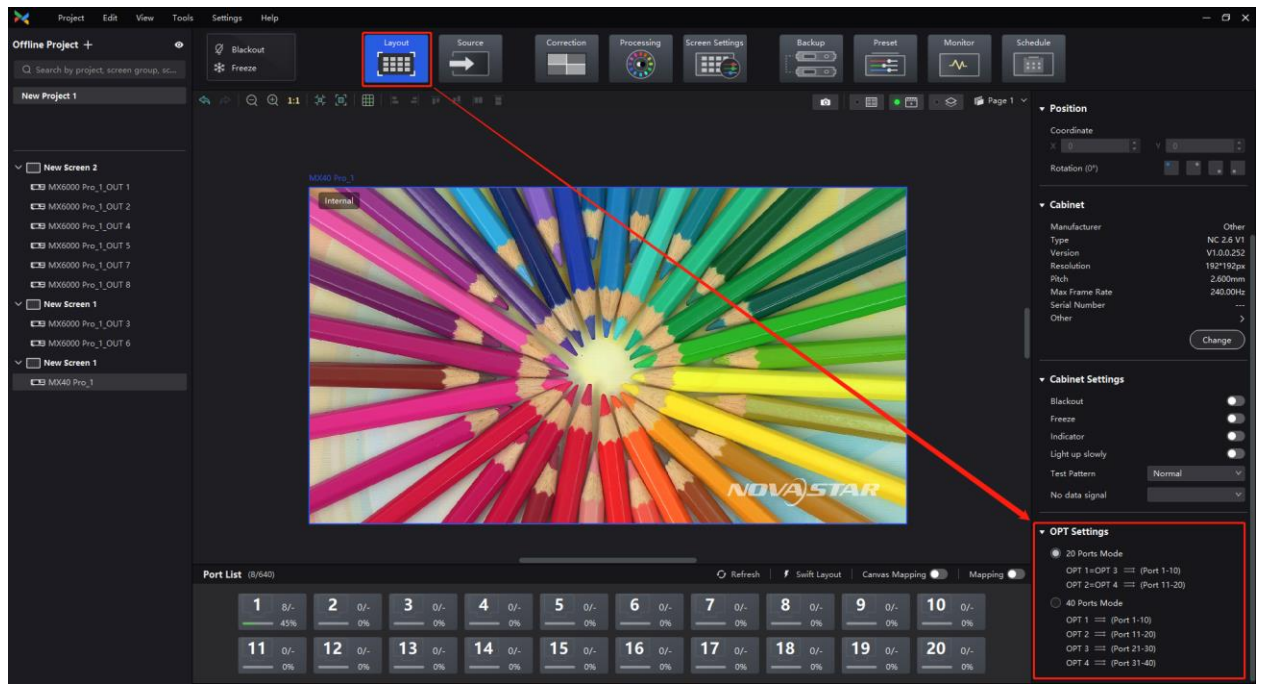
Reason for Optimization

By broadening the product's application scenarios, on-site wiring can become more versatile, accommodating even the most complex screen configurations.

Optimization Details

The system now supports changing the OPT copy mode to an independent output mode, effectively expanding from 20 Ethernet output ports to 40 ports.

VMP Screenshot



Note:

Optical port expansion is exclusive to MX40 Pro.

3.8 Offline Mode

Reason for Optimization

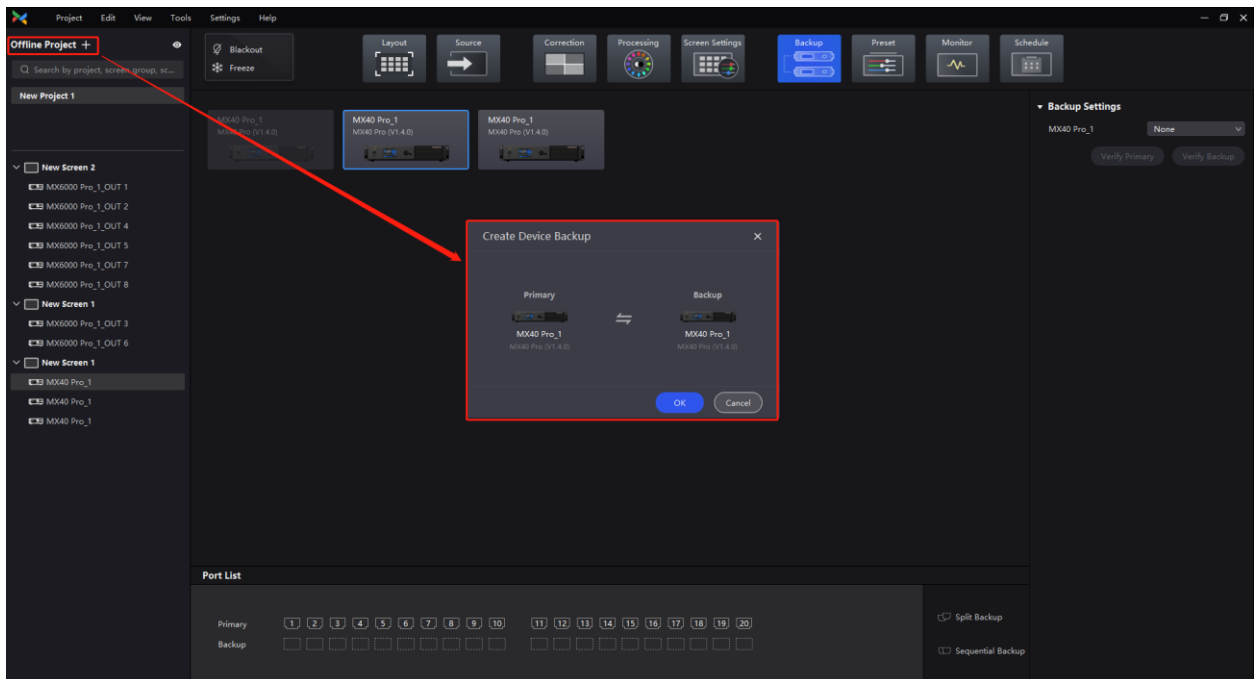
Certain features available in online mode are missing in offline mode. To enhance the usability of offline mode, we aim to improve functionalities related to feature demonstrations and project setup.

Optimization Details

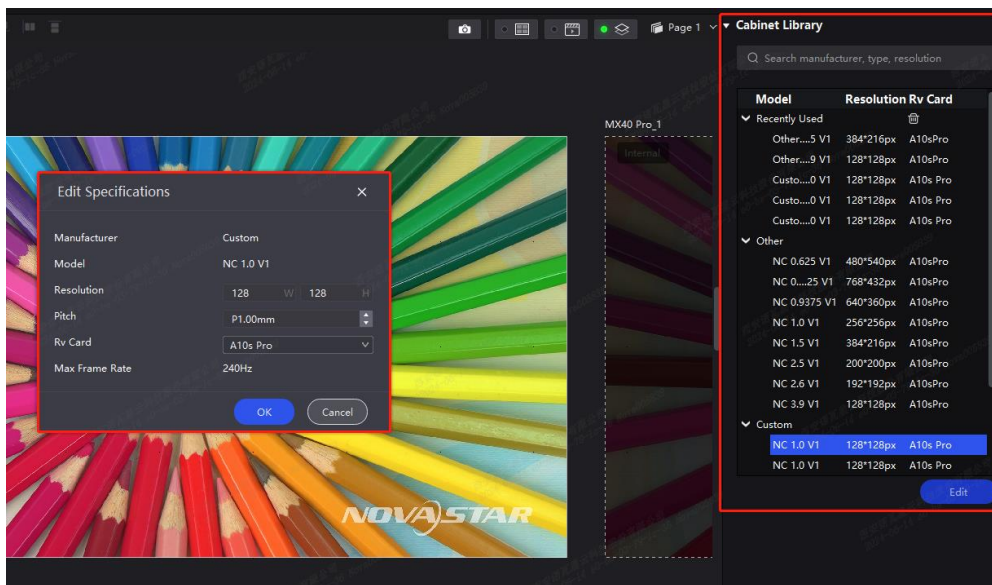
- Offline mode now supports device-to-device backups.
- Offline mode now allows for the customization of cabinet specifications, featuring 7 built-in cabinet options with editable specifications.

VMP Screenshot

- Offline mode: Device-to-device backup



- Offline mode: Customizable cabinet specifications



4 Other Optimizations

- Version Matching

When the VMP version does not align with the controller firmware version, the software interface will now display relevant notifications and operational guidance.

- Diagnosis Notification

If warnings or error messages appear during the device power-on self-check, the VMP interface will provide corresponding explanations and operational instructions.

- Snapshot

On-site staff can now use specific construction drawings as the preview background for screen topology configuration within the VMP.

- Page

A single device can carry multiple LED screens, with options for paginated screen topology configuration and screen parameter adjustments.

- Correction

Entering the "Correction" or "Coefficient Management" menu will no longer automatically switch the output image on the LED screen.

- 3D LUT

File uploads now support precision formats of 33x33x33 and 65x65x65.

- Color Gamut

A new D63 option has been added to the standard DCI-P3 color gamut.

- Preset

Users can now choose to enable or disable the black screen transition mode. If disabled, transitions will occur directly without a black screen.

- Cabinet Library

Enhancements include NCP usage indicators, new version detection, NCP missing prompts, and optimized NCP release status.

- Offline Mode

- Added project management capabilities.
- New input and output cards have been added for card-based controllers.
- The input source preview image has been updated.

5 Bug Fixes

1. Significantly enhanced VMP performance, now supporting the management of up to 40,000 cabinets, an increase from the previous limit of 10,000.
2. Fixed an issue where VMP could not automatically detect receiving cards after they were removed and inserted again.
3. Fixed a discrepancy between the topology shown in the monitoring interface and the topology in other editing areas.
4. Fixed an issue that prevented a single device from being upgraded while in backup mode.
5. Fixed an occasional issue where disconnecting the Ethernet cable between cabinets in a backup loop caused the VMP interface to display a disordered cabinet topology.

6. Fixed an issue where aligning different cabinet groups would align at the cabinet level instead of the entire group level.
7. Fixed an occasional misalignment between the maintenance table header and its content.
8. Fixed an issue where, after completing an NCP upgrade, the progress bar showed completion, but the device list on the left remained inactive and could not be interacted with.
9. Fixed an issue where the output interface would incorrectly display an overload warning when the Ethernet port load reached exactly 100%.

6 Known Issues

1. The layer settings in the controller's preset are currently saved in the screen layout module. To retain these settings, please make sure to select the screen layout option when saving the preset.
2. When importing a project file, the screen name will be overwritten, but the device name will remain unchanged.
3. While dragging a device in VMP's device list on the left, if the device's frame rate or bit depth doesn't match the target screen, the screen may flicker briefly as the parameters synchronize, then return to normal.

Copyright © 2024 Xi'an NovaStar Tech Co., Ltd. All Rights Reserved.

No part of this document may be copied, reproduced, extracted or transmitted in any form or by any means without the prior written consent of Xi'an NovaStar Tech Co., Ltd.

Trademark

NOVA STAR is a trademark of Xi'an NovaStar Tech Co., Ltd.

Statement

Thank you for choosing NovaStar's product. This document is intended to help you understand and use the product. For accuracy and reliability, NovaStar may make improvements and/or changes to this document at any time and without notice. If you experience any problems in use or have any suggestions, please contact us via the contact information given in this document. We will do our best to solve any issues, as well as evaluate and implement any suggestions.

[Official website](http://www.novastar.tech)
www.novastar.tech

[Technical support](mailto:support@novastar.tech)
support@novastar.tech