NovaLCT

V5.8.0

Release Notes

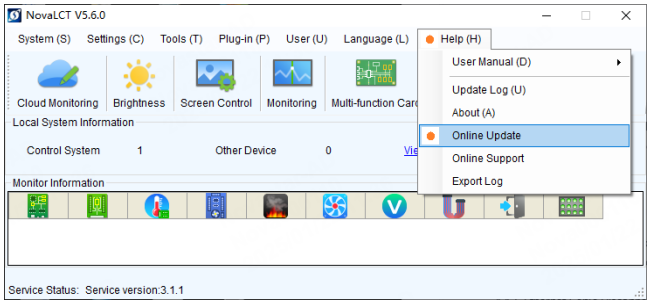
Contents

Contents i
1 Update Instructions 1
1.1 Online Upgrade 1
1.2 Local Update 1
2 Key Features 1
2.1 Automatic Brightness Adjustment Optimization 1
2.2 Optimized Compatibility of Configuration Files 2
2.3 Module Edit Function 4
2.4 Newly Supported Devices 6
3 Newly Supported Driver IC 6
4 New Features 6
4.1 Screen Configuration 6
4.2 Program Update 7
4.3 Cloud Module 9
4.4 Receiving Card 10
5 Improvements 13
5.1 NCP Management Optimization 13
5.2 Calibration 14
5.3 Screen Configuration 15
5.4 Monitoring 15
5.5 Program Update 16
5.6 Image Booster 16
6 Bug Fixes 17
7 Notices 17

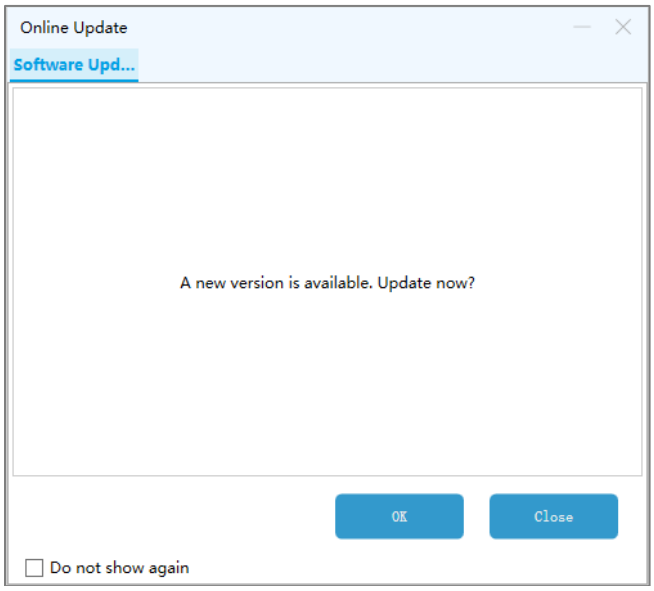
1 Update Instructions

1.1 Online Upgrade

Step 1 From the menu bar, choose **Help** > **Online Update**.



Step 2 Confirm the update.



1.2 Local Update

Step 1 Visit the "Downloads" page on the NovaStar website and download the NovaLCT V5.8.0 installation package.

Step 2 Double-click to run the package and proceed with the installation.

2 Key Features

2.1 Automatic Brightness Adjustment Optimization

- Optimized the auto-brightness adjustment logic to fix intermittent issues where it wasn't working.

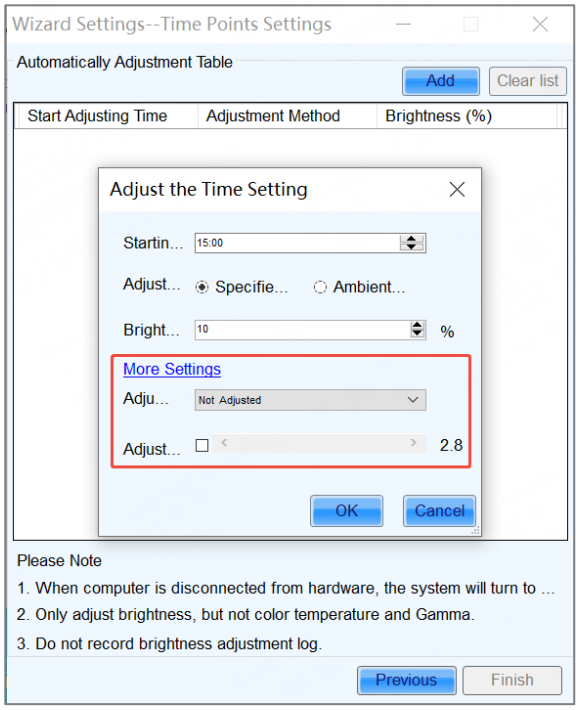
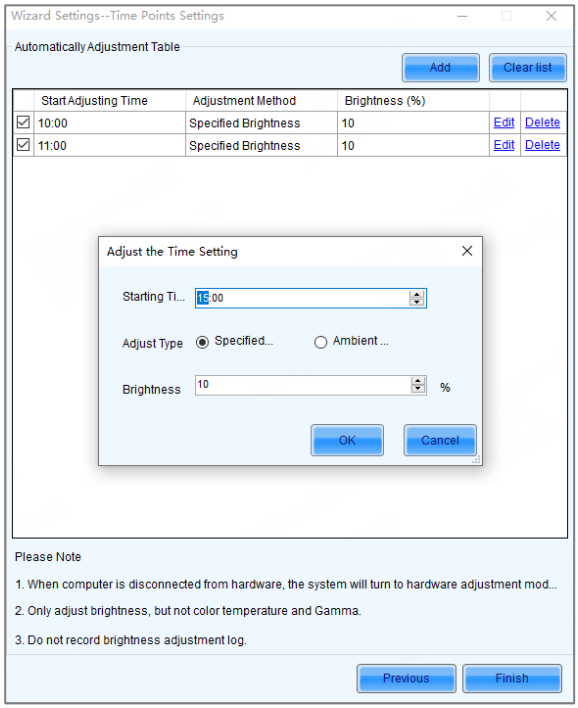
- Added detailed logging for brightness adjustments.
- Removed the ability to set gamma and color temperature in the auto-brightness settings.

Reason for Change

- To address occasional failures in auto-brightness to enhance user experience.
- To provide detailed logs for auto-brightness adjustments to help users track the process.
- Remove gamma and color temperature settings from auto-brightness based on market research.

Function

- Removed the ability to set gamma and color temperature in the auto-brightness settings.

Before	After
	

2.2 Optimized Compatibility of Configuration Files

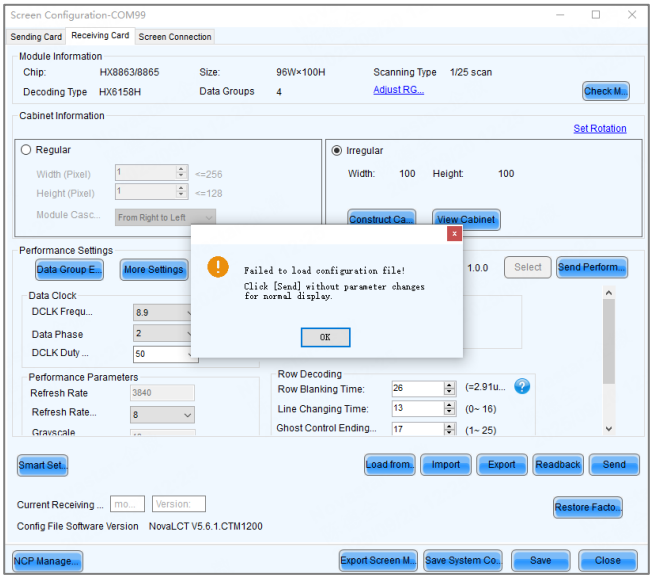
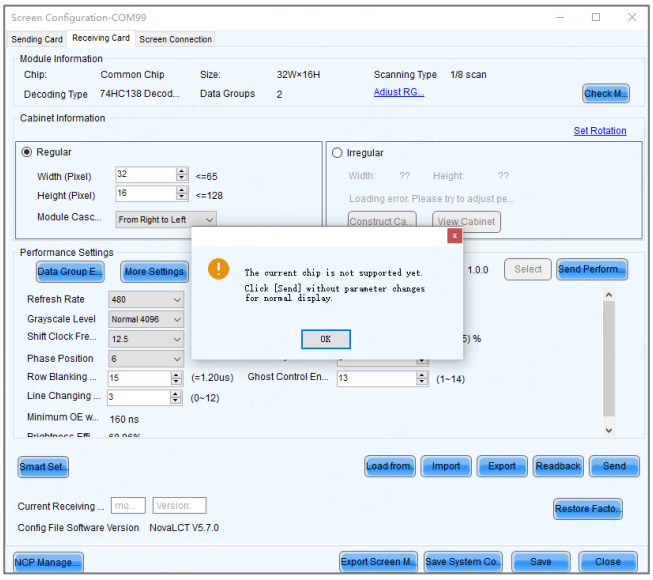
Loading .rcfgx Files	Edited Any Parameters	Did Not Edit Parameters
Load Successful	Apply the latest software effects.	Apply original effects from the file.
Load Failed	Apply effects may be abnormal.	Apply original effects from the file.

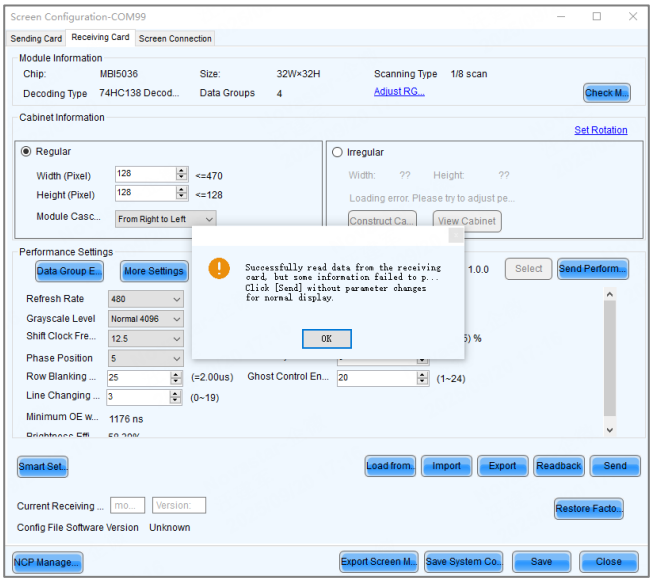
Reading Receiving Card Parameters	Edited Any Parameters	Did Not Edit Parameters
Parsing Successful	Apply the latest software effects.	Apply original effects from the reading.
Parsing Failed	Apply effects may be abnormal.	Apply original effects from the reading.

Reason for Change

- To resolve compatibility issues with loading old configuration files in the new version of NovaLCT. Ensures that simply loading the file without modifying parameters will light up the cabinet correctly.
- To address issues where sending receiving card parameters back after reading them altered the display for older screens.

Function

Load Configuration File	If the configuration file fails to parse, the parameters on the interface remain unchanged. Clicking Send without adjustments will send the loaded file data to the receiving card.  If a loaded configuration file has an unsupported driver IC, the parameters on the interface remain unchanged. Clicking Send without adjustments will still send the file data to the receiving card. 

Reading Receiving Card Parameters	If the receiving card parameter readback is successful, whether parsing succeeds or fails, clicking **Send** without altering the parameters on the interface will resend the read parameters to the receiving card. 

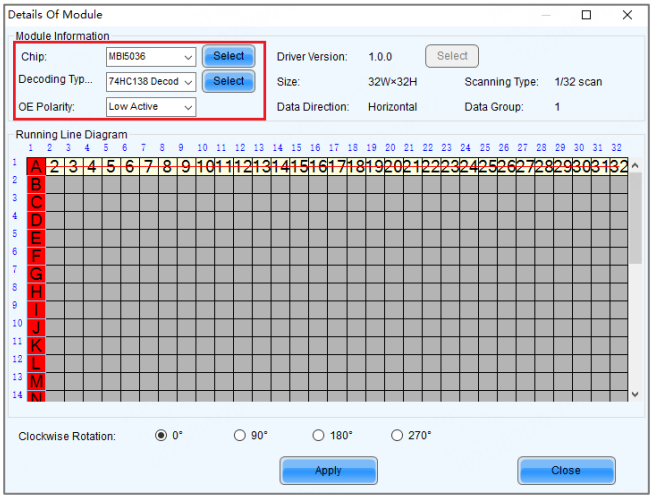
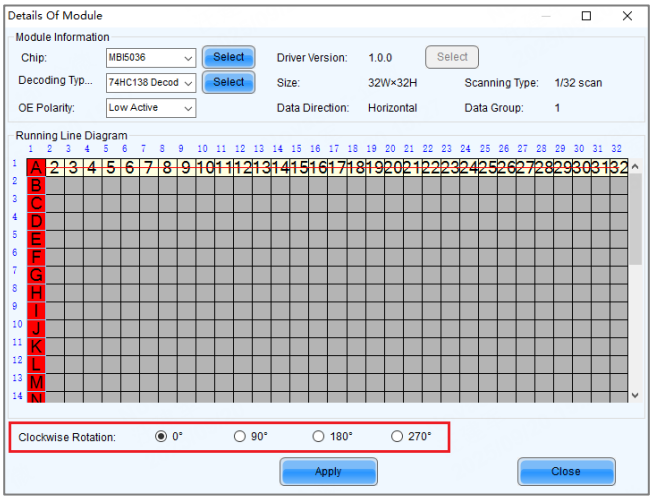
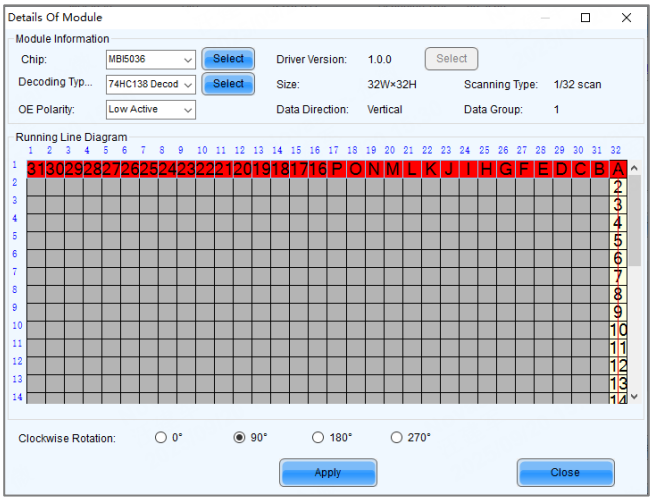
2.3 Module Edit Function

- Access: Screen Configuration> Receiving Card> Module
- Added the ability to edit driver chip, decoding chip, and OE polarity in module information interface.
- Added the ability to rotate the module wiring in 90° increments.

Reason for Change

- Improved efficiency for lighting up panels where the same specs are used but the driver or decoder chips differ, by allowing chip replacement options.
- Some receiving cards do not support rotation by 90-degree increments, requiring users to manually configure a new module. NovaLCT now offers a one-click rotation feature, improving the efficiency of lighting the cabinet.

Function

Edit Chip	In the module details interface, users can select the corresponding chip. Only chips with the same number of channels can be selected. If a chip with a different number of channels is selected, NovaLCT will display a notification. 
Module Rotation	Users can select the rotation angle based on the actual module configuration. After rotation, the wiring on the interface will update. Click the **Apply** button to replace the module information in the cabinet.  

2.4 Newly Supported Devices

No.	Device Model
1	SMP20 Pro
2	VC4S

3 Newly Supported Driver IC

No.	Manufacturer	Driver IC Model
1	DP	DP3365S
2	HX	HX8016H
3	HX	HX8065

4 New Features

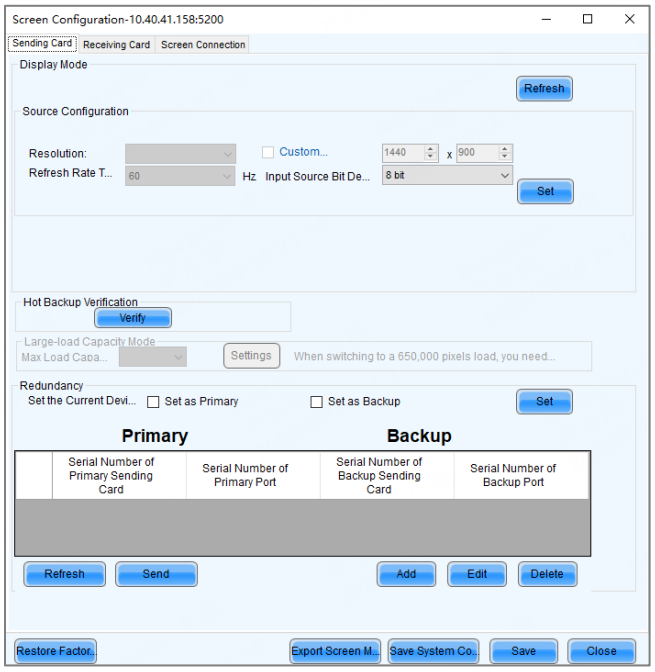
4.1 Screen Configuration

4.1.1 Expanded 2.2 Million Pixel Load

Reason for Change

- NovaLCT now supports a 2.2 million pixel load per Ethernet port.
- Receiving cards: Custom models of A8s Pro and A5s Plus.

Function



- Access: Screen Configuration > Sending Card > Large-load Capacity Mode
- The function's visibility depends on the capabilities of both the sending and receiving cards. The interface button is enabled only when both support the 2.2 million mode. If the sending card supports it but the receiving card does not, the option will be grayed out. If the sending card does not support it, the feature won't appear.
- When the system detects support and switches to 2.2 million mode, the configuration is deployed according to the enhanced capacity per Ethernet port.
- After switching to **Large-load Capacity Mode**, users must reconfigure the screen.

4.2 Program Update

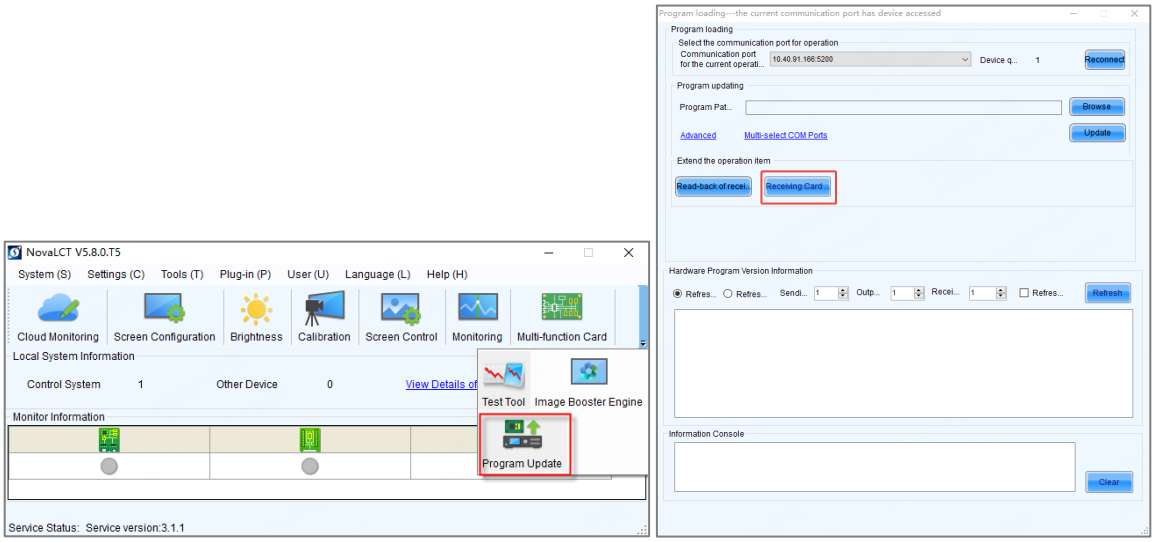
4.2.1 Cloud Upgrade for Receiving Card Firmware

Reason for Change

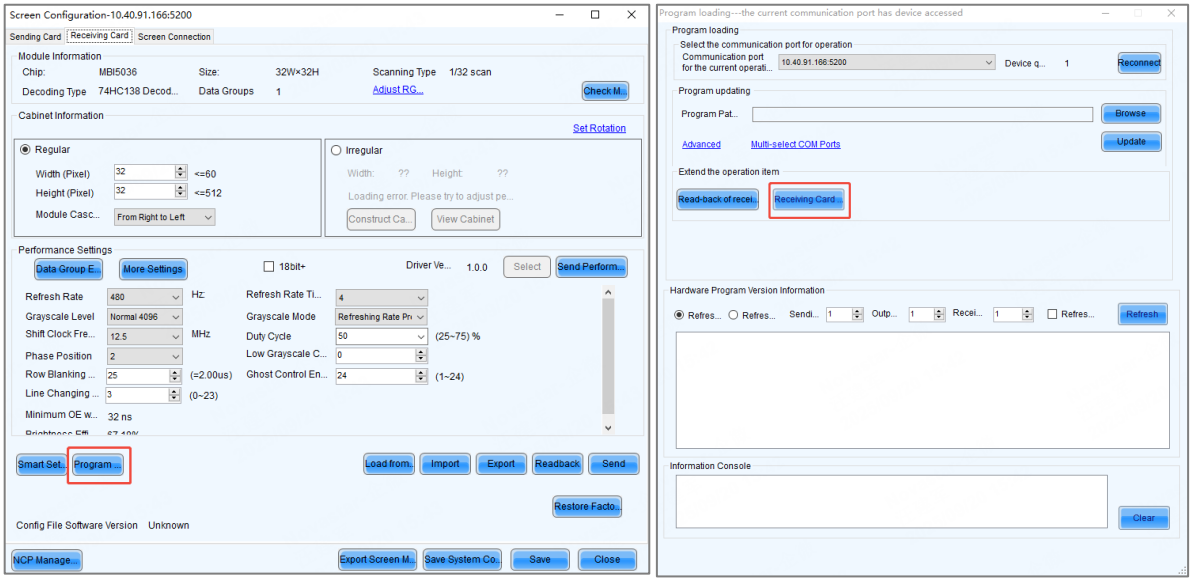
- Simplifies the process of finding firmware by addressing the issue of numerous receiving card models and program versions.
- Supports only the mainline firmware package for receiving cards.

Function

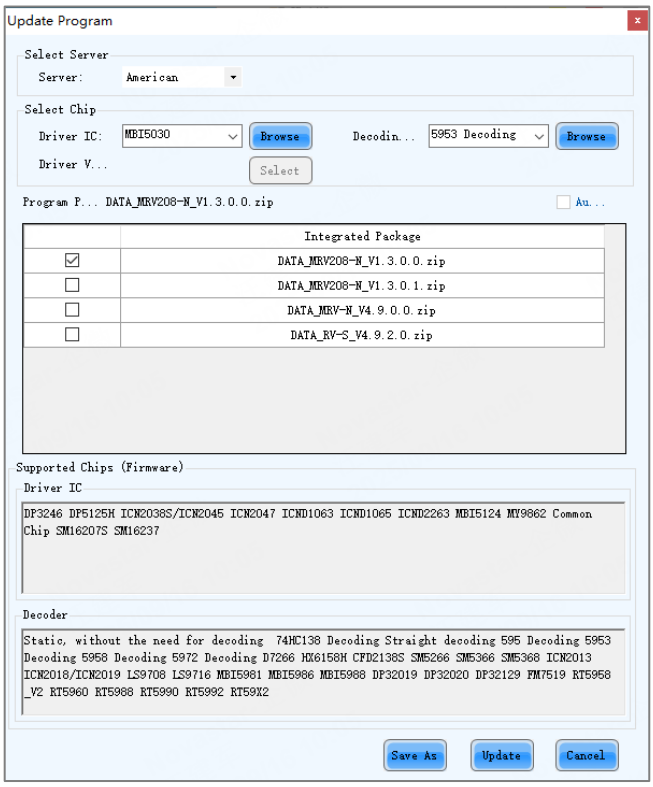
- Access 1: Program Update > Receiving Card Cloud Update. This entry requires users to input the driver and decoding chips.



- Access 2: Screen Configuration > Receiving Card > Program Update > Receiving Card Cloud Update. This entry automatically matches the chips shown in the receiving card interface.



- Servers: Available in China, USA, Australia, Europe, and India. Choose based on your location.
- Chip Selection: Choose the driver and decoding chips for the module you want to update. NovaLCT will find a compatible firmware package based on the selected information.
- Automatically matches the latest version of the connected receiving card model's firmware.
- If no receiving card is connected, it finds all firmware packages supporting the selected chips.

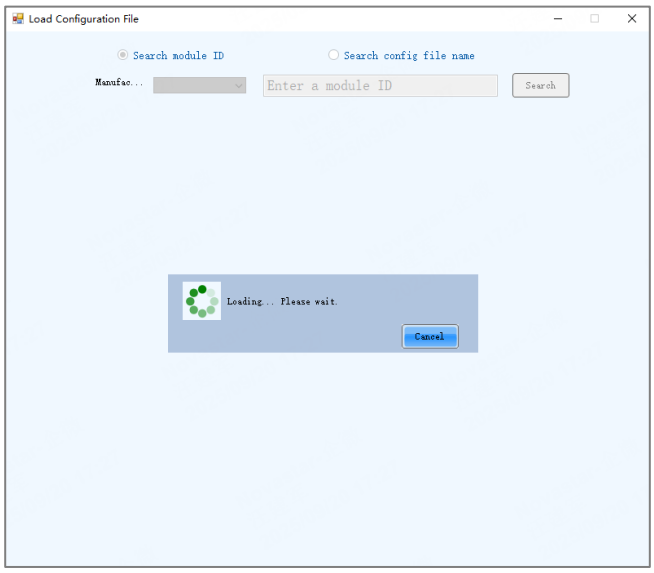


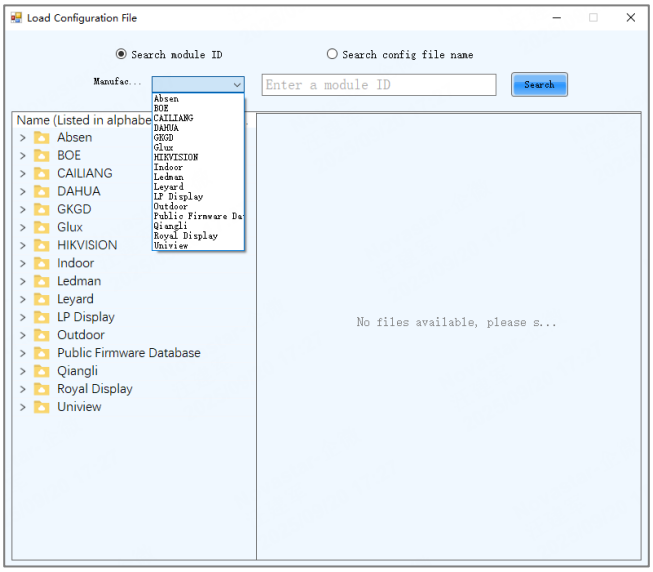
4.3 Cloud Module

Reason for Change

Enhance the cloud module file search functionality to help users quickly find the files they need.

Function

Load from Cloud	1. Add a **Cancel** button on the **Load Configuration File** interface to allow users to cancel the operation in case of mistaken actions. 

	2. Include a manufacturer selection option during searches. Entering keywords will enable fast retrieval of configuration files corresponding to the chosen manufacturer. 

4.4 Receiving Card

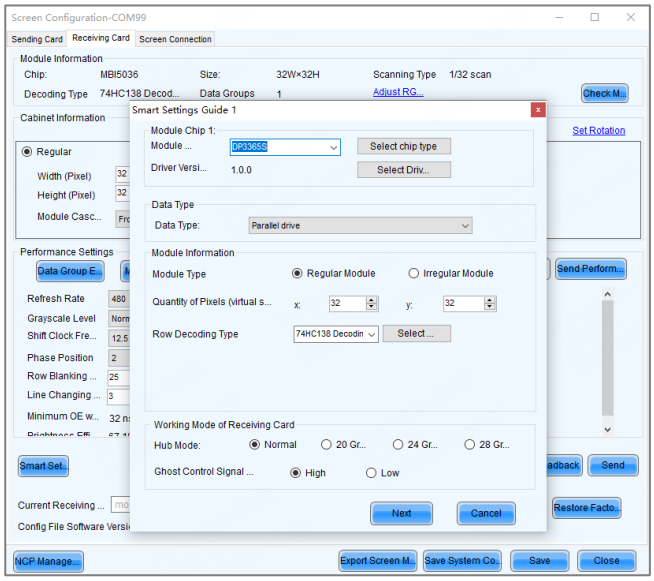
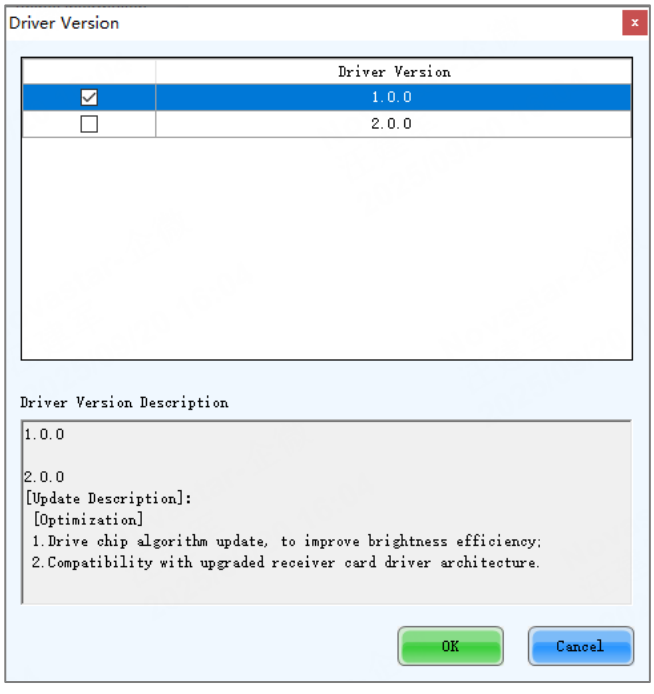
4.4.1 Receiving Card Driver Version Selection

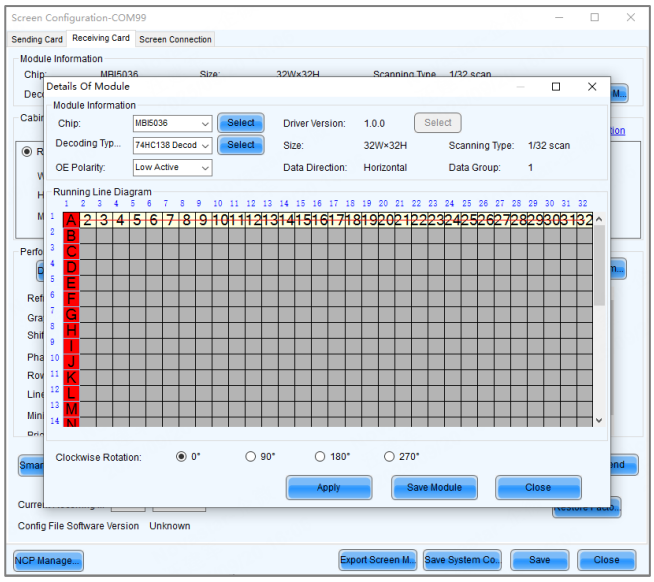
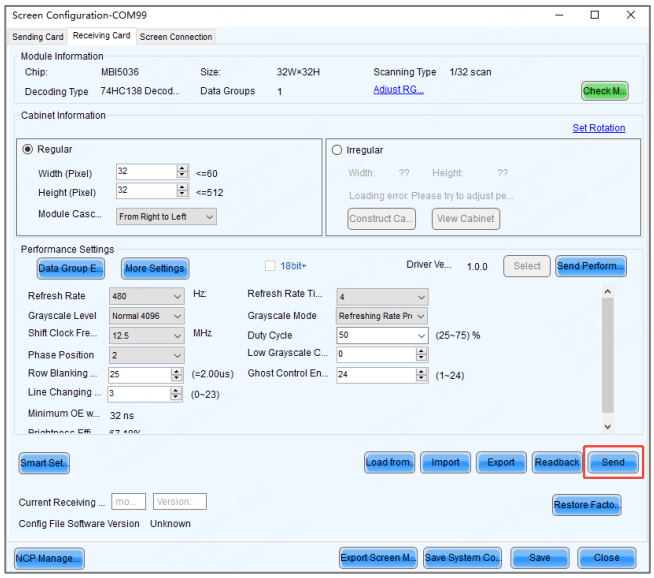
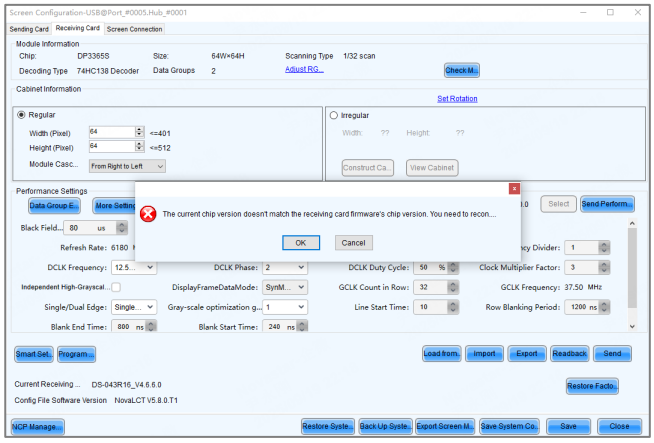
Reason for Change

- Updated firmware to support both 1.0.0 and 2.0.0 driver versions, ensuring compatibility with both new and older receiving card drivers.
- Introduced driver matching rules: Due to algorithm upgrades in version 2.0, NovaLCT will only apply version 1.0.0 if the receiving card supports it. Similarly, if a receiving card supports version 2.0.0, only that version will be applied.
- When a receiving card is connected, NovaLCT automatically matches the driver version. In demo mode, users must manually select the driver version to create a configuration file.

Function

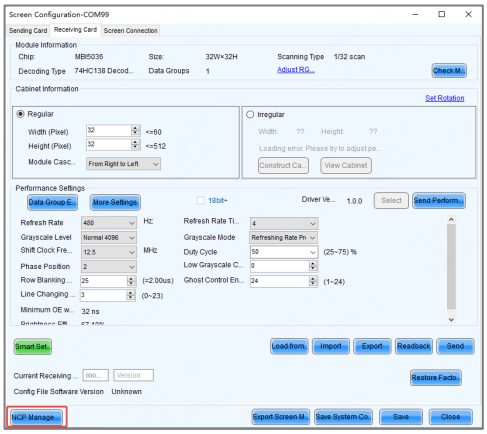
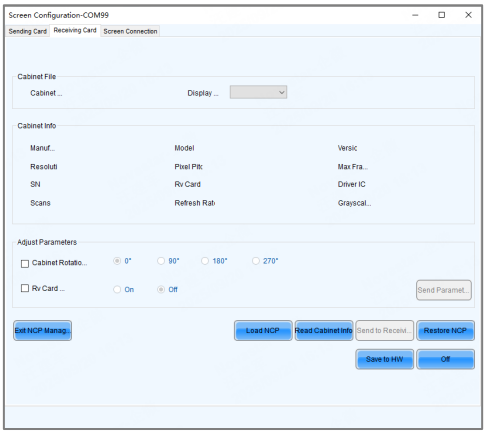
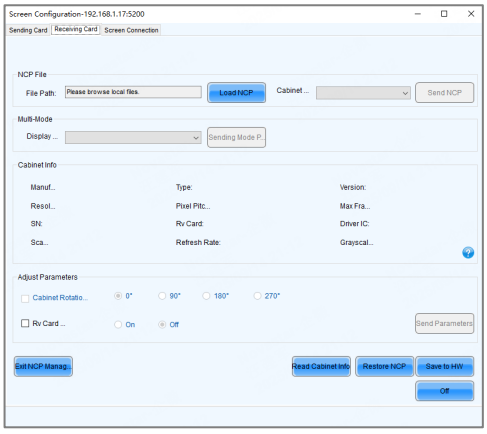
- Feature Overview

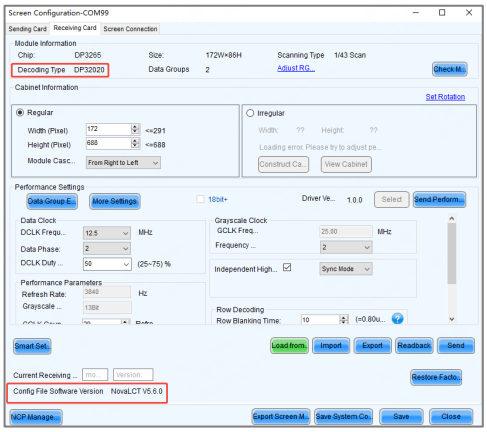
Smart settings	1. In the first step of Smart Settings, the interface shows the driver version. In demo mode, where multiple driver versions are available, it defaults to 1.0.0. Users can click **Select Driver Version** to choose. In a real environment, the software automatically matches and displays the correct version  2. Click **Select Driver Version** and choose the needed driver version.  3. After selecting a driver version, NovaLCT performs calculations based on that choice.

Module Edit	1. The module editing interface shows the driver version from the current configuration file. Users can select the version in any login mode.  2. After selecting and applying the driver version, calculations are made accordingly. 3. If the selected driver version doesn't match the connected receiving card when applying settings, the software will prompt the user, who can decide whether to proceed.   4. The driver version of the configuration file is shown on the main interface.

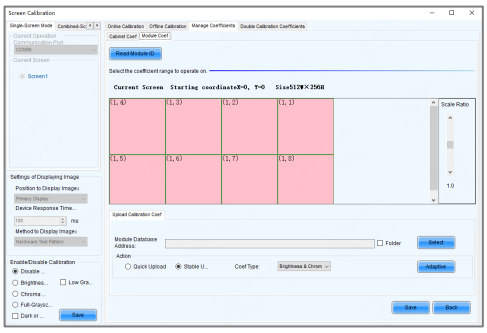
5 Improvements

5.1 NCP Management Optimization

Optimization Changes	Before	After
NCP Management Button Visibility	Button not displayed with MRV, DH series cards	Always displayed, removing the receiving card check 
NCP Loading Optimization	NCP parameters and mode sent together when selecting mode after loading NCP. 	Redesigned interface, separating NCP sending and mode. Changed "Model" to "Type". 
Visual Refresh Rate Display When Loading NCP	NCP loading did not display visual refresh rate	NCP exported with Cabinet Tool V1.1.5, when loaded in NovaLCT V5.8.0, now shows visual refresh rate.

Display Software Version Number When Loading Configuration File	/	Shows the NovaLCT version used to create the configuration file upon loading. 

5.2 Calibration

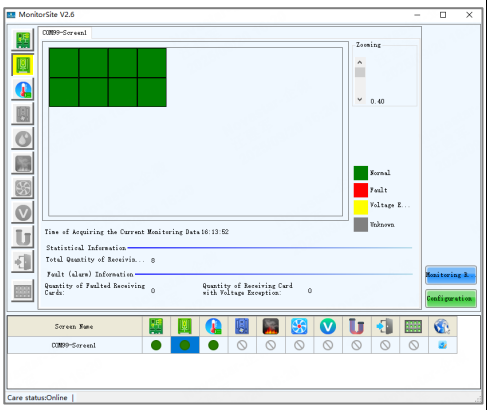
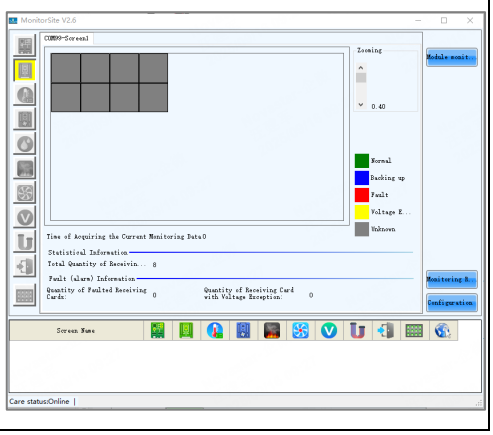
Optimization Changes	Before	After
Optimize Low-grayscale Calibration	For screens configured with Cabinet Tool and use unsupported chips by NovaLCT, low-grayscale calibration is unavailable in NovaLCT.	With properly adjusted low-grayscale parameters, NovaLCT now supports low-grayscale calibration.
Complex Combination Screen Calibration	Online calibration not supported for complex combination screens.	NovaLCT now supports calibration for complex combination screens.
Irregular Screen Calibration	Irregular screen projects configured by Cabinet Tool couldn't be calibrated with NovaLCT.	NovaLCT now supports calibration for irregular screens
Module Coefficient Upload	Unable to upload calibration coefficients if NovaLCT couldn't read module ID info.	Supports matching module ID with the database for coefficient upload.  Double-click the module to manually enter a module ID or select from the database to overwrite the existing ID for coefficient upload.

Thermal Compensation 3.0	Users could enable or disable Thermal Compensation 3.0 as needed.	When NovaLCT detects Thermal Compensation 3.0, the switch is disabled with a notice: "Thermal compensation is not supported by the current system."

5.3 Screen Configuration

Optimization Changes	Before	After
Sending Screen Connection File without Receiving Card Saving Command	Sending a screen connection file also issue the receiving card saving command. If the screen displayed incorrectly, power cycling did not restore it.	Removed the receiving card saving command, allowing screen recovery after power cycling if an issue arises.
Slow Entry to Screen Configuration	NovaLCT was slow and laggy when entering the screen configuration interface in large venues, affecting usability.	Improved speed when accessing the screen configuration interface in large setups, using the receiving card with the smallest connected port number to represent the screen's capability.
Mixed H Card Configuration Warning	H device cards with different capabilities (sub pixels, free layout, etc.) were allowed to operate together without restrictions, leading to display issues.	NovaLCT now warns users if cards with different capabilities are configured in the same screen.

5.4 Monitoring

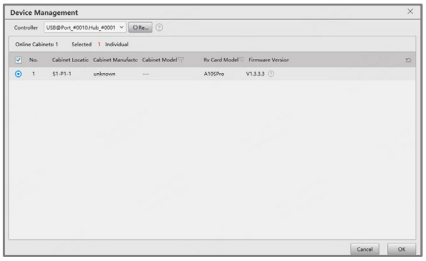
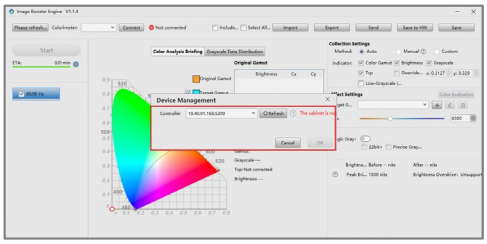
Optimization Changes	Before	After
Backup Data Readback	Receiving card on active backup port showed green. 	Non-active/standby backup port displays blue and turns green when active. 

Optimization Changes	Before	After
TBS614 Monitoring Info in VNNOX Care	Not reported	Reports temperature, voltage, and error rate.
VNNOX Care Communication Protocol	Used HTTP protocol.	Changed to HTTPS for reporting.

5.5 Program Update

Optimization Changes	Before	After
Expanded Supported File Types	Supported .zip, .rar, .img	Now supports .zip, .rar, .img, .7z
Upgrade Interface Display on Different Resolutions	The **Close** button not fully visible or clickable on 1366x768 resolution displays, preventing page closure.	Interface now fully visible and closable at this resolution.

5.6 Image Booster

Optimization Changes	Before	After
Device Discovery Speed with Multiple Devices	Image Booster discovered all devices and their receiving cards, slowing down large-scale environments. 	Now only discovers the first receiving card per device, reducing discovery time. 
Bug Fixes	Fixed an issue with Image Booster effects on Xm-Plus driver chips.	
	Fixed error in DCI-P3 color gamut coverage calculation.	
	Fixed incorrect effects with DP3265 chip 18-bit switch.	
	Fixed occasional issues when exporting image quality files as .vglcx.	

6 Bug Fixes

Item	Description
Receiving Card	Fixed an issue with unrecognized Chinese or full-width characters in data group exchange settings.
	Fixed an issue where a single LED wouldn't light in tri-mode or quad-mode configurations.
	Fixed NCP sending errors where the receiving card version check was incorrect, causing unnecessary package and configuration file sends.
Calibration	Fixed an issue where only one cabinet had coefficients after screen calibration upload.
	Fixed occasional black screen when connecting to calibration software.
System Compatibility	Fixed startup issues with NovaLCT on certain systems.
	Fixed inability to select update files on some operating systems during program updates.
	Adjusted display size for NovaLCT on certain resolution settings.
LED Error Detection	Fixed detection failures for cabinets not connected to the first Ethernet port.
	Fixed detection failure when cabinet sizes differed across ports.
Driver IC	Fixed display issues during static scan with ICND2053 and ICND2153 chips.
	Fixed gamma overexposure problems in certain situations with ICND2165, ICND2055S, ICND1069, and ICND2053 chips.
	Updated Shixin chip SDK for LS9937, LS9956, and LS9929.

7 Notices

- The 2.2 million pixel large load capacity feature requires compatible sending and receiving cards.
- If incorrect color gamut coverage issues occurs when loading an image quality file (.vglcx), reacquire the color gamut and save the image quality file.

Trademark

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