Novastar A5S PLUS

NovaStar A5s Plus LED Receiving Card User Manual

1. Introduction

This manual provides comprehensive instructions for the installation, operation, maintenance, and troubleshooting of the NovaStar A5s Plus LED Receiving Card. The A5s Plus is a high-performance component designed for managing full-color indoor and outdoor LED display modules, ensuring precision and stability in various display applications.
The NovaStar A5s Plus supports advanced features such as high pixel capacity, 12-bit color depth, ultra-low latency, and flexible data mapping, making it suitable for professional LED video walls and digital signage.

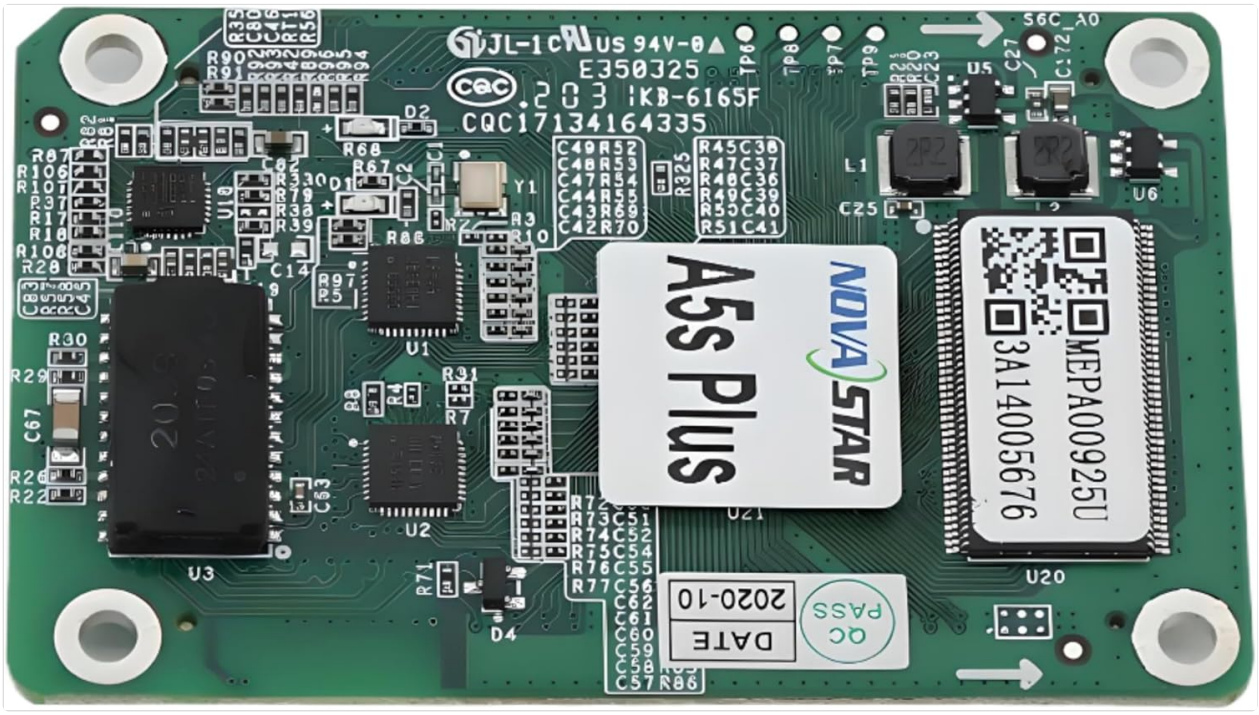

Figure 1: Top view of the NovaStar A5s Plus LED Receiving Card. The card features the NovaStar logo, 'A5s Plus' branding, and a QR code with identifier MEPA00925U3A14005676.

2. Setup

Proper setup is crucial for optimal performance of the NovaStar A5s Plus LED Receiving Card. Follow these steps for installation and connection:

1. **Physical Installation:** Securely mount the A5s Plus card within your LED display module chassis. Ensure proper ventilation around the card.
2. **Power Connection:** Connect the power supply to the card. The A5s Plus operates on a DC 3.8–5.5V input. Verify the power source meets these requirements.
3. **Data Cable Connection:** Connect the data cables from the LED modules to the 16 standard HUB75E interfaces on the A5s Plus. These interfaces simplify connections and ensure seamless integration with most LED modules.
4. **Ethernet Connection:** Connect the Ethernet cables from your sending card or previous receiving card in a cascading setup to the dual Ethernet ports on the A5s Plus. These ports ensure smooth signal distribution.

Figure 2: Back view of the NovaStar A5s Plus LED Receiving Card, highlighting the multiple HUB75E connectors for LED module data input/output.

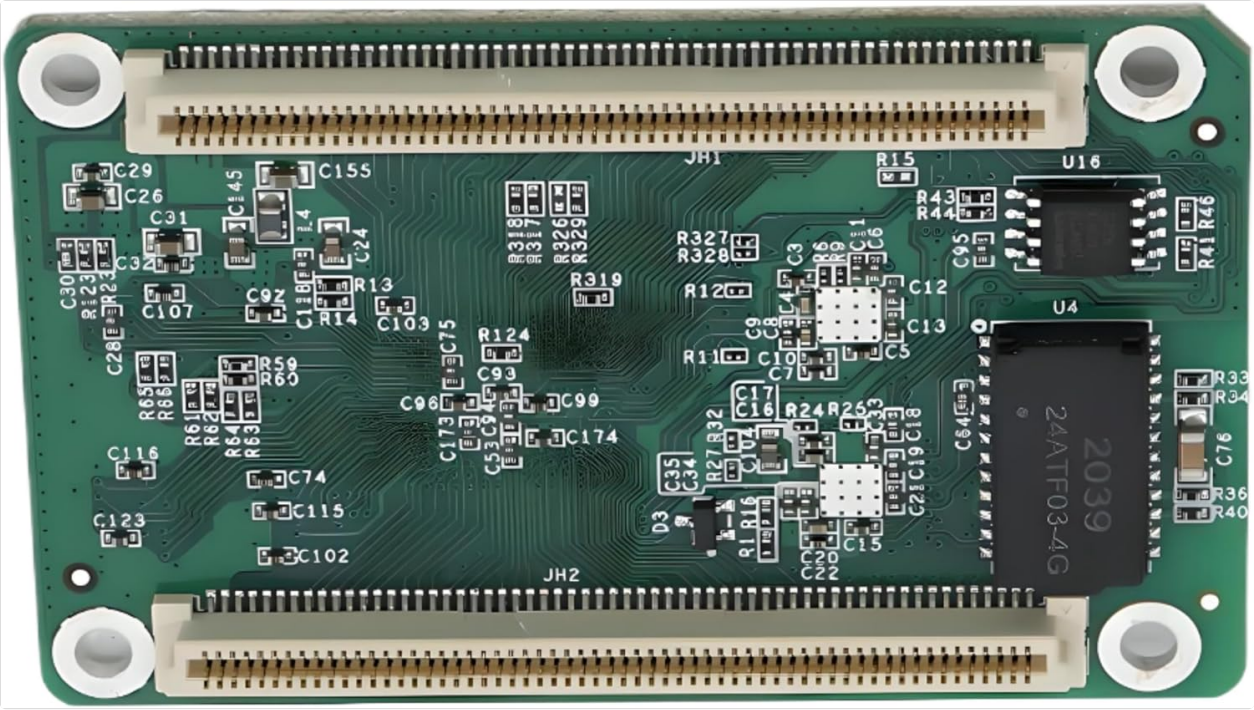

Figure 3: Bottom view of the NovaStar A5s Plus LED Receiving Card, displaying the arrangement of connectors for power and data.

3. Operating Instructions

The NovaStar A5s Plus is configured and controlled using NovaLCT software. Key operational aspects include:

- **Software Configuration:** Use NovaLCT software to configure the display parameters, including resolution, scanning type, and data mapping. The A5s Plus supports up to 512×256 pixels at 60Hz.
- **Color Management:** Adjust color depth (up to 12-bit), RGB gamma, and color temperature through NovaLCT to achieve desired visual quality.
- **Low-Latency Mode:** Activate the built-in low-latency mode for applications requiring real-time content delivery, such as live events.
- **Calibration:** Utilize NovaLCT for grayscale and brightness calibration to ensure uniform display across all modules and eliminate visual inconsistencies.
- **Brightness Adjustment:** Individual module brightness can be adjusted independently for optimal display balance in complex setups.
- **Edge Correction:** The card supports bright and dark line correction and module rotation, which is beneficial for customized LED video wall designs.

4. Maintenance

Regular maintenance helps ensure the longevity and consistent performance of your NovaStar A5s Plus LED Receiving Card:

- **Environmental Control:** Ensure the operating environment maintains a temperature between -20°C and +70°C and appropriate humidity levels to prevent damage.
- **Firmware Updates:** Periodically check for and apply firmware updates using NovaLCT software. Quick firmware updates are supported to save maintenance time.

- **Diagnostics Monitoring:** Utilize the real-time diagnostics features to monitor temperature, voltage, screen status, and runtime. This allows for proactive identification and resolution of potential issues.
- **Physical Inspection:** Regularly inspect all cable connections for secure fit and signs of wear. Keep the card free from dust and debris.

5. Troubleshooting

If you encounter issues with your NovaStar A5s Plus LED Receiving Card, consider the following troubleshooting steps:

- **No Display/Partial Display:**
  - Verify all power connections to the receiving card and LED modules.
  - Check data cable connections between the sending card, receiving card, and LED modules.
  - Ensure the correct configuration is loaded via NovaLCT software.
- **Incorrect Colors/Flickering:**
  - Recalibrate the display using NovaLCT software (grayscale and brightness calibration).
  - Check for loose data cables or damaged connectors.
  - Verify color depth and gamma settings in NovaLCT.
- **System Instability:**
  - Monitor system diagnostics for unusual temperature or voltage readings.
  - Ensure proper ventilation to prevent overheating.
  - The A5s Plus supports redundancy and bit error detection; ensure these features are correctly configured for critical applications.
- **Software Communication Issues:**
  - Confirm network connectivity between the control PC and the sending card.
  - Ensure NovaLCT software is up-to-date and compatible with the card's firmware.

6. Specifications

Feature	Specification
Model Number	A5S PLUS
Pixel Capacity	Up to 512×256 @60Hz
Color Depth	Supports 8-bit / 10-bit / 12-bit video sources
Data Groups	Up to 32 RGB
Interfaces	16 HUB75E outputs
Power Input	DC 3.8–5.5V
Max Power Consumption	2.8W
Operating Temperature	-20°C to +70°C

Product Dimensions	1.7 x 2.7 x 0.3 inches
Item Weight	0.64 ounces
Certifications	RoHS compliant, EMC Class A

7. Warranty and Support

For warranty information, please refer to the documentation provided with your purchase or contact your seller directly. NovaStar provides technical support for its products. For further assistance, please visit the official Novastar website or contact their customer service.
You can find more information about Novastar products and support at theNovastar Store.

Related Documents - A5S PLUS

	NovaStar A5s Receiving Card: Specifications, Features, and Pinouts Comprehensive technical specifications, features, improvements, reliability enhancements, and detailed pinout diagrams for the NovaStar A5s Receiving Card, designed for advanced LED display control systems.
	NovaStar A5s Plus Receiving Card Specifications Detailed specifications for the NovaStar A5s Plus Receiving Card, covering its features, improvements to display effect, maintainability, reliability, appearance, indicator status, dimensions, pin configurations for parallel RGB and serial data, and electrical parameters.
	NovaStar A5s Receiving Card Specifications Detailed specifications for the NovaStar A5s Receiving Card, covering features, improvements, reliability, appearance, indicators, dimensions, pinouts, and electrical parameters.

	NovaLCT LED Configuration Tool for Multimedia Player User Manual Comprehensive user manual for NovaLCT, NovaStar's LED configuration tool for multimedia players. Covers software installation, device connection, screen configuration, brightness and chroma adjustment, screen management, maintenance, troubleshooting, and FAQs.
	NovaStar XA50 Pro Receiving Card Specifications Comprehensive specifications document for the NovaStar XA50 Pro Receiving Card, detailing its features, certifications, pin configurations (LVDS, Parallel RGB, Serial Data), electrical parameters, operating conditions, and physical dimensions. Includes change history and product overview.
	NovaStar A7s Receiving Card Specifications V2.1.1 Detailed technical specifications for the NovaStar A7s Receiving Card (V2.1.1), covering its features, improvements in display effect, maintainability, reliability, appearance, dimensions, pinouts, and electrical parameters. This document provides comprehensive information for integrating and utilizing the A7s card in LED display systems.