

DH7512

Receiving Card

V1.1.0



Introduction

The DH7512 is a general receiving card developed by NovaStar. A single DH7512 loads up to 512×512 pixels (NovaLCT V5.3.1 or later required). Supporting color management, 18Bit+, pixel level brightness and chroma calibration, individual Gamma adjustment for RGB, and 3D functions, the DH7512 can greatly improve the display effect and user experience.

The DH7512 has 12 HUB75 output to modules. It supports up to 24 groups of parallel RGB data. The DH7512 has improved electromagnetic compatibility and is suitable to various on-site setups.

Features

Improvements to Display Effect

- Color management Switch the color gamut of the screen between multiple gamuts to enable more precise colors on the screen.
- 18Bit+ Improve the LED display grayscale by 4 times to avoid grayscale loss due to low brightness and allow for a smoother image.
- Pixel level brightness and chroma calibration Working with NovaLCT and NovaCLB, the receiving card supports brightness and chroma calibration on each LED, which can effectively remove color discrepancies and greatly improve LED display brightness and chroma consistency, allowing for better image quality.
- Quick adjustment of dark or bright lines The dark or bright lines caused by splicing of cabinets or modules can be adjusted to improve white balance offset, allowing for a more realistic image.
- Image rotation in 90° increments The display image can be set to rotate in multiples of 90° (0°/90°/180°/270°).

the visual experience. This function is easy to use and the adjustment takes effect immediately.

In NovaLCT V5.2.0 or later, the adjustment can be performed without using or changing the video source.

- 3D function Working with the independent controller which supports 3D function, the receiving card supports 3D image output.
- Individual Gamma adjustment for RGB Working with NovaLCT (V5.2.0 or later) and the independent controller which supports this function, the receiving card supports individual adjustment of red Gamma, green Gamma and blue Gamma, which can effectively control image non-uniformity under low grayscale and

Improvements to Maintainability

- Mapping function The cabinets display the receiving card number and Ethernet port information, allowing users to easily obtain the locations and connection topology of receiving cards.
- Setting of a pre-stored image in receiving card The image displayed on the screen during startup, or displayed when the Ethernet cable is disconnected or there is no video signal can be customized.
- Temperature and voltage monitoring The temperature and voltage of the receiving card can be monitored without using peripherals.
- Cabinet LCD The LCD module connected to the cabinet can display the temperature, voltage, single run time and total run time of the receiving card.
- Bit error rate monitoring The Ethernet port communication quality of the receiving card can be monitored and the number

of erroneous packets can be recorded to help troubleshoot network communication problems. NovaLCT V5.2.0 or later is required.

- Firmware program read back
 The firmware program of the receiving card can be read back and saved to the local computer.
 NovaLCT V5.2.0 or later is required.
- Configuration parameter read back The configuration parameters of the receiving card can be read back and saved to the local computer.

Improvements to Reliability

- Loop backup The receiving cards and the sending card form a loop via the main and backup line connections. If a fault occurs at a location of the lines, the screen can still display the image normally.
- Dual backup of configuration parameters
 The receiving card configuration parameters are
 stored in the application area and factory area of
 the receiving card at the same time. Users
 usually use the configuration parameters in the
 application area. If necessary, users can restore
 the configuration parameters in the factory area
 to the application area.
- Dual backup of the application program Two copies of the application program are stored in the receiving card at the factory to avoid the problem that the receiving card may get stuck due to program update exception.



Appearance

All product pictures shown in this document are for illustration purpose only. Actual product may vary.

Indicators

Indicator	Color	Status	Description
Running indicator	Green	Flashing once every 1s	The receiving card is functioning normally. Ethernet cable connection is normal, and video source input is available.
		Flashing once every 3s	Ethernet cable connection is abnormal.
		Flashing 3 times every 0.5s	Ethernet cable connection is normal, but no video source input is available.
		Flashing once every 0.2s	The receiving card failed to load the program in the application area and now is using the backup program.
		Flashing 8 times every 0.5s	A redundancy switchover occurred on the Ethernet port and the loop backup has taken effect.
Power indicator	Red	Always on	The power input is normal.

Dimensions



公差: ±0.1 单位: mm

Pins



Specifications

Maximum Loading Capacity	512 × 512 pixels	
Electrical	Input voltage	DC 3.3 V to 5.5 V
Parameters	Rated current	0.5A
	Rated power consumption	2.5 W
Operating Environment	Temperature	-20°C to +70°C
Environment	Humidity	10% RH to 90% RH, non-condensing
Storage	Temperature	-25°C to +125°C
Environment	Humidity	0% RH to 95% RH, non-condensing
Physical	Dimensions	145.7 mm ×91.5 mm ×18.4 mm
Specifications	Net weight	93.1g Note: It is the weight of a single receiving card only.
	Gross weight	12.9 kg Note: It is the total weight of the products, printed materials and packing materials packed according to the packing specifications.
Packing Information	Packing specifications	An antistatic bag and anti-collision foam are provided for each receiving card. Each packing box contains 40 receiving cards.
	Packing box dimensions	650.0 mm × 500.0 mm ×200.0 mm
Certifications	RoHS, EMC Class A	

The amount of current and power consumption may vary depending on many factors such as product settings, usage, and environment.

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