

# 「LR-E512」 LED Receiving Card

Datasheet

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## Foreword

Thank you very much for purchasing our product. Please read this specification sheet carefully before operation.

All pictures in this specification are for reference only, the actual product may vary.

This specification may not correspond exactly to the product or its accessories you purchased. Our company reserves the right to modify any information in this specification at any time, and will regularly update this specification in accordance with product upgrade. Updated content will be added to the new version of this specification without prior notice, please understand.

### Icon conventions

	illustrate	Necessary tips, supplements and explanations to help you understand the content described in the specification more clearly.
	Notice	Matters that must be paid attention to and followed during operation will remind you to use the equipment in a more convenient and efficient way.
	Warning	There may be potentially dangerous situations and you are warned to use the equipment safely.

## Introduction

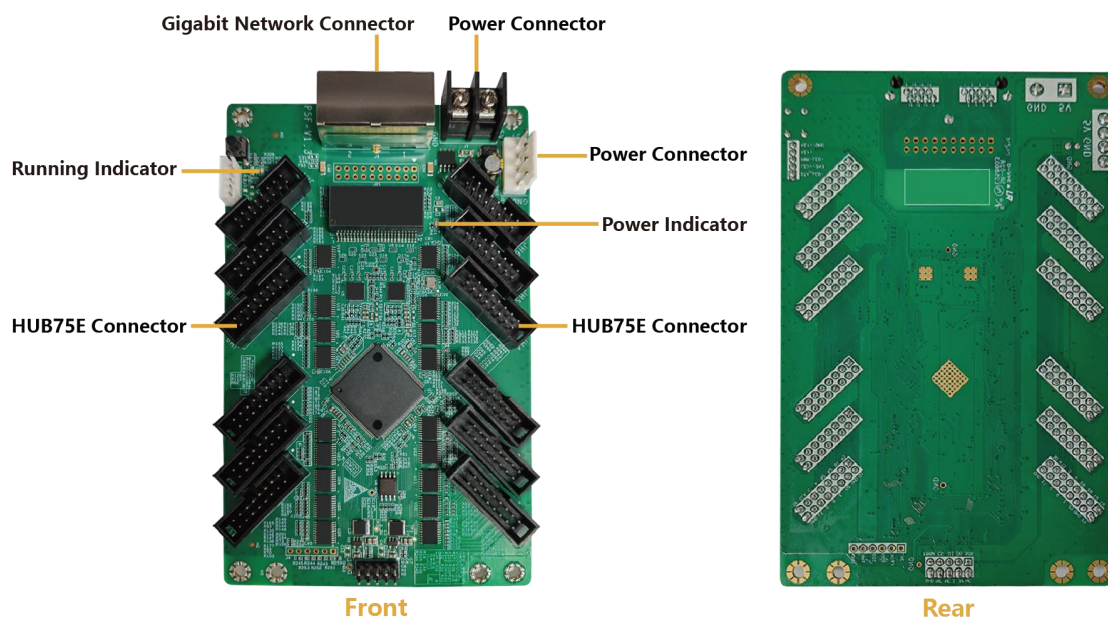
The LR series E512 LED Receiving Card is a display driving device for LED screens. The load capacity of a single card is 512 x512 pixels. It has 12x standard HUB75E ports, supports up to 24 channels of RGB parallel data, and it is easy to install.

The receiving card can adapt to different types and sizes of LED screens. Its excellent image processing capabilities can achieve perfect display on LED screens.

## Features

- Brightness calibration: Supports ultra-high-precision brightness calibration to ensure entire screen has consistent brightness.
- Edge brightness adjustment: When LED cabinets and modules are combined, uneven brightness will occur along with edges. Through simple settings and adjustments, the brightness/darkness difference between edge can be eliminated and the screen brightness can be kept consistent.
- Independent Gamma adjustment: Supports independent Gamma adjustment of R, G, and B on the LED screen, allowing for more precise color temperature adjustment and wider color gamut display.
- Color management: Unified color gamut conversion of video signals of different formats and standards, so that the LED screen can perfectly display the true colors of various video sources.
- Image Rotation: Supports rotating the image by multiples of 90°
- Pre-saved screen: Default screen will be displayed on power-on and power-off to avoid black screen due to malfunction.
- 3D function: Working with sending controller that supports 3D function will achieve 3D effect.
- Intelligent connection: With this feature, the receiving cards can get rid of the fixed installation sequence and can be arranged arbitrarily. The connection diagram will be clearly displayed in the system. Implementation and maintenance can be conducted much easier.
- Queuing function: Display the sending card number, sending card network port number, receiving card number, and receiving card network port number on the cabinet to obtain all screen layout information.
- Device Monitoring: Supports monitoring of the receiving card's temperature, voltage, and communication status, as well as abnormal alerts, enabling intelligent device operation and maintenance.
- Loopout backup: The receiving card supports hot back up through network cable loop out.
- Data backup: Two-way backup of parameters, firmware and calibration coefficients between receiving card and configuration software. One-click restoration in case of any failure.
- Program readback: Read back the firmware program and configuration parameters of the receiving card and save them locally to avoid repeated operations.

## Appearance

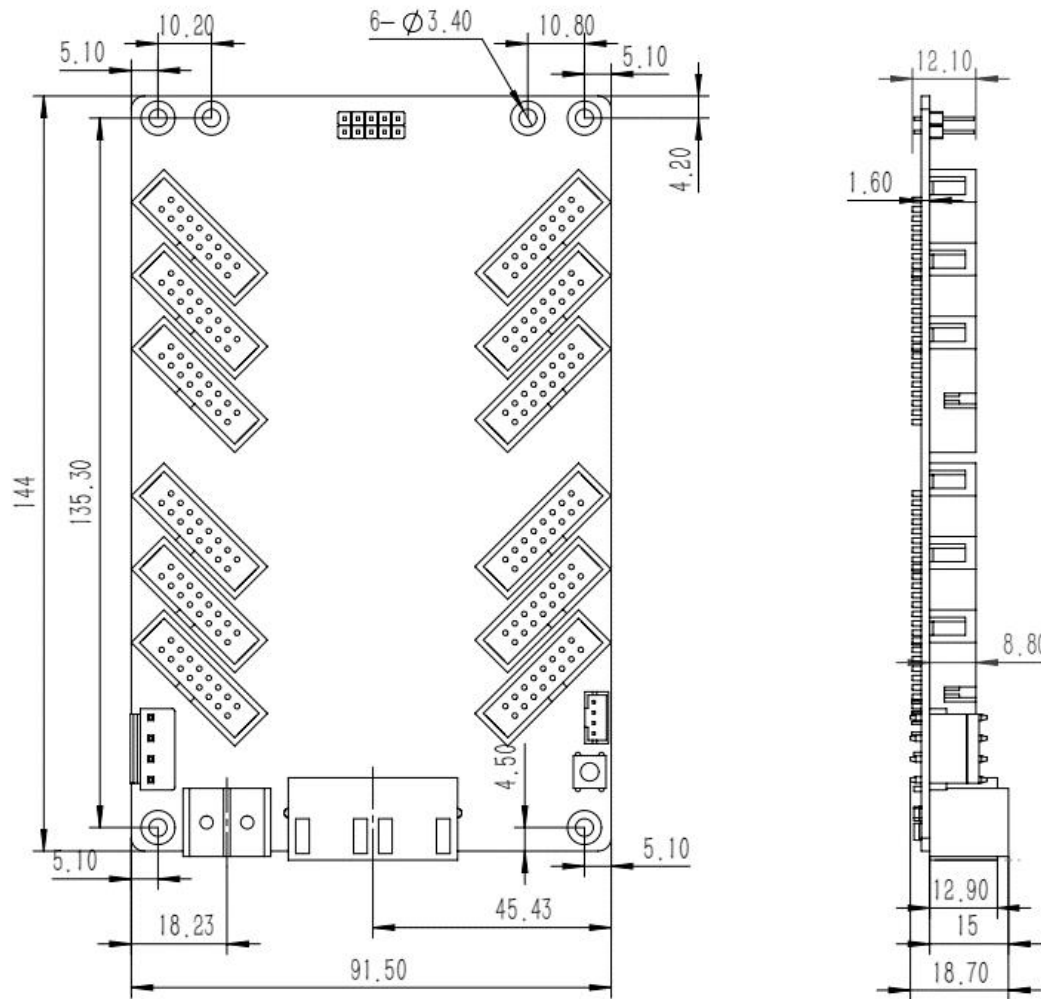


The product pictures in this document are for reference only.

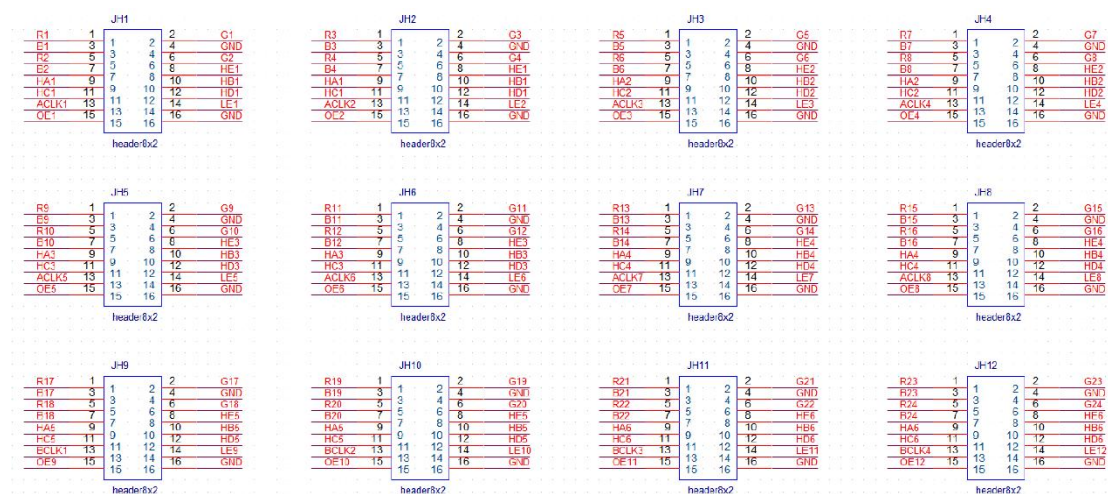
## Indicator

Indicator	Color	Status	Description
Power	Red	Steady on	Power input is normal
Running	Green	Steady on	no signal
		Flash once every 1.5s	The network cable connection is working well, port A input
		Flashes 2 times in 1.5s	The network cable connection is working well, port B input
		Flashes 3 times in 1.5 s	The network cable connection is working well, and ports A and B are in hot backup status.
		Continuous flash	Backup program working

## Product Size



## Data Interface Diagram



**Data interface definition (taking JH1 as an example)**

/	R1	1	2	G1	/
/	B1	3	4	GND	Ground
/	R2	5	6	G2	/
/	B2	7	8	HE1	Row decoding signal
Row decoding signal	HA1	9	10	HB1	Row decoding signal
Row decoding signal	HC1	11	12	HD1	Row decoding signal
Shift clock	ACLK1	13	14	LE1	Latch signal
Display enable signal	OE1	15	16	GND	Ground

## Specifications

Specification	Description	
Maximum load	512 x 512 pixels	
Electrical	Input voltage	DC 3.8V ~ 5.5V
	Rated current	0.6A
	Rated power consumption	3W
Physical	Dimension	91.5mm x 144mm x18.7mm
	Net weight	98g (single card weight)
Packaging	Board packaging method	Single card blister shell packaging
	Board packaging size	130mm x 108mm x 20mm
	Outer packaging method	Boards are packaged in blister shells, with a maximum of 100 boards per box
	Packing box size	600mm x500mm x200mm