NewStar
Display Solution

# CREATIVE INDOOR HIGH-END LED SOLUTION

## *E Series*


## (PIXEL PITCH 1.5/1.6/1.8/2.5/3.0)

# Product Features

## 01
### *Fast And Easy Maintenance*

- Compatible panel size with multiply pixel pitches
- Fast lock design makes installation faster and easier
- Visualized back cover design, tool-free maintenance
- Power supply & receiving card & HUB card maintenance without tool
- Module front or back service

## 02
### *Excellent Visual Performance*

- High refresh rate
- High grayscale
- Wide viewing angle
- Calibration technology available
- Intelligent Module


Seamless Panel Design

Front And Rear Service

480x480mm
480x480mm

Standard
Panel Design

Slim Line Panels

Intelligent Module

High-Contrast

High Brightness

High Refresh Rate

Light Weight

Modular design saves
on spare part

## 03
### *Various Installation Methods & Accessories*

- Flat mounting or embeddedinstallation
- Stack or back structure installation
- Kinds of universal accessories for options
- Carton packaging, environmentally friendly

## 04
### *Hot Dual Backup For Signal*

- Data input and output redundancy Design
- Current sharing backup design
- Electromagnetic compatibility and protection
- Dual receiving card design

# Easy Installation And Maintenance


## *Easy Maintenance*

- Compatible panel size with multiply pixel pitches
- Fast lock design makes installation faster and easier
- Visualized back cover design, tool-free maintenance
- Power supply & receiving card & HUB card maintenance without tool
- Module front or back service

## *Integrated HUB Three-Second Quick Release (Easy Maintenance)*

- Front or back service to power system
- 3 seconds maintenance to HUB board
- Plug in-out design to release power supply

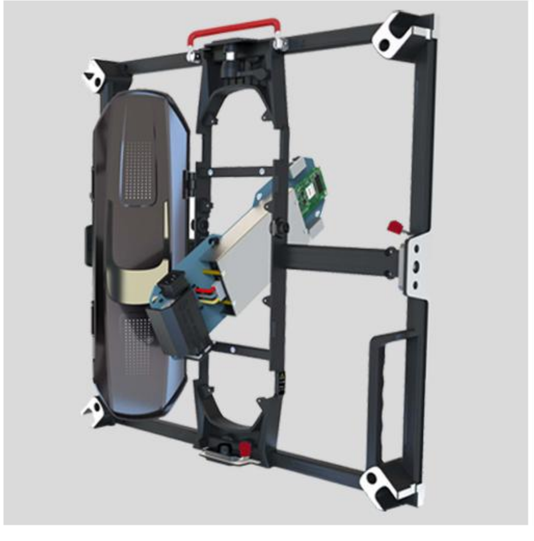
Back Service w/o Tool

Fast Lock


Visualized Back Cover

Module Font Service

Module Back Service



Integrated HUB Maintenance w/o Tool

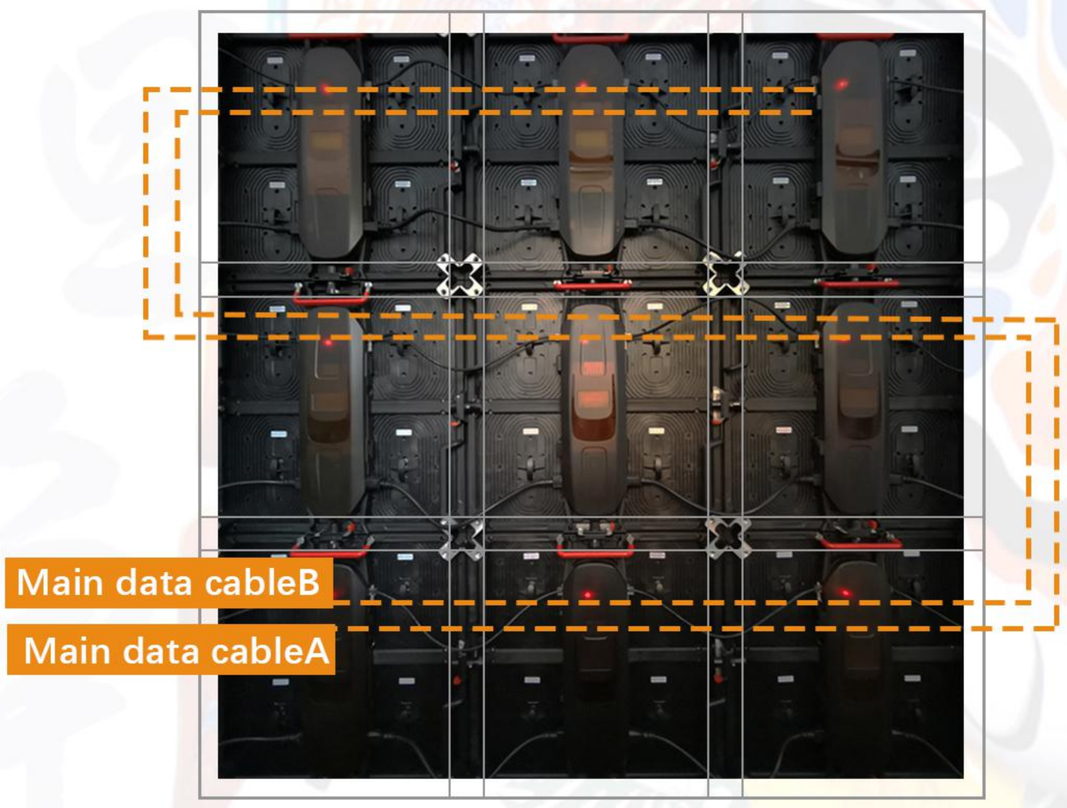
# Hot Dual Backup For Signals

## *Dual Backup Is Stable And Reliable*

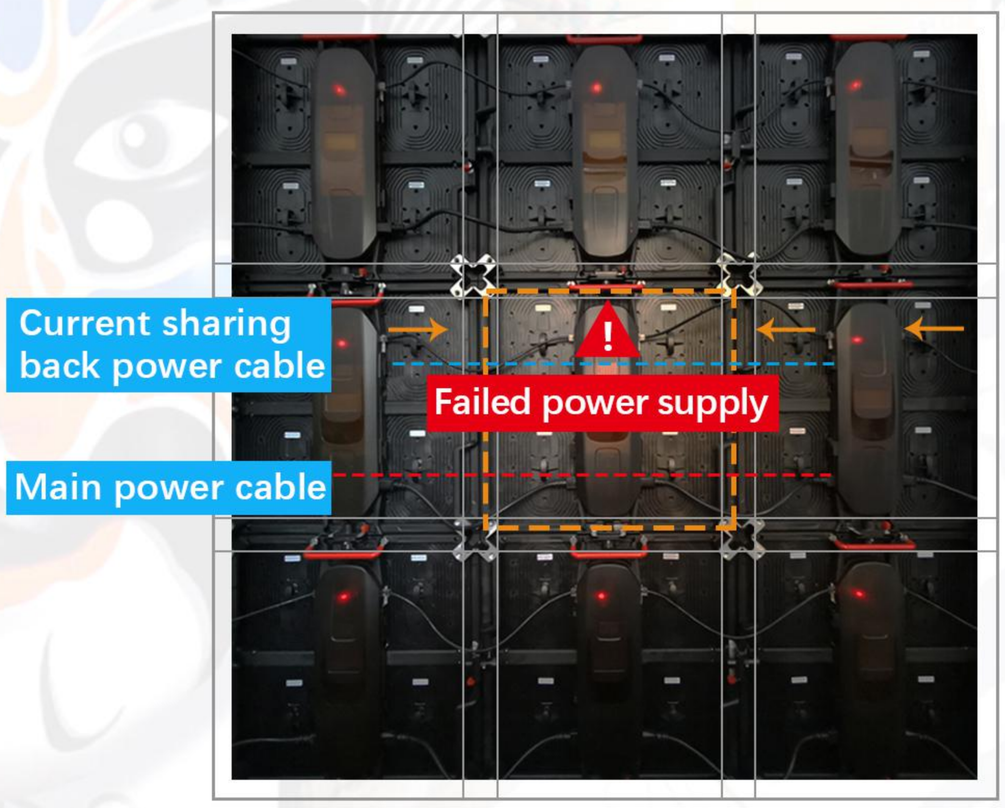
Dual Receiving Cards Design　　Data Redundancy Design

- Data input and output redundancy Design
- Current sharing backup design
- Electromagnetic compatibility and protection
- Dual receiving card design

## *Data Redundancy & Current Sharing Backup*




Data Redundancy Guaranteea No Signal Failure



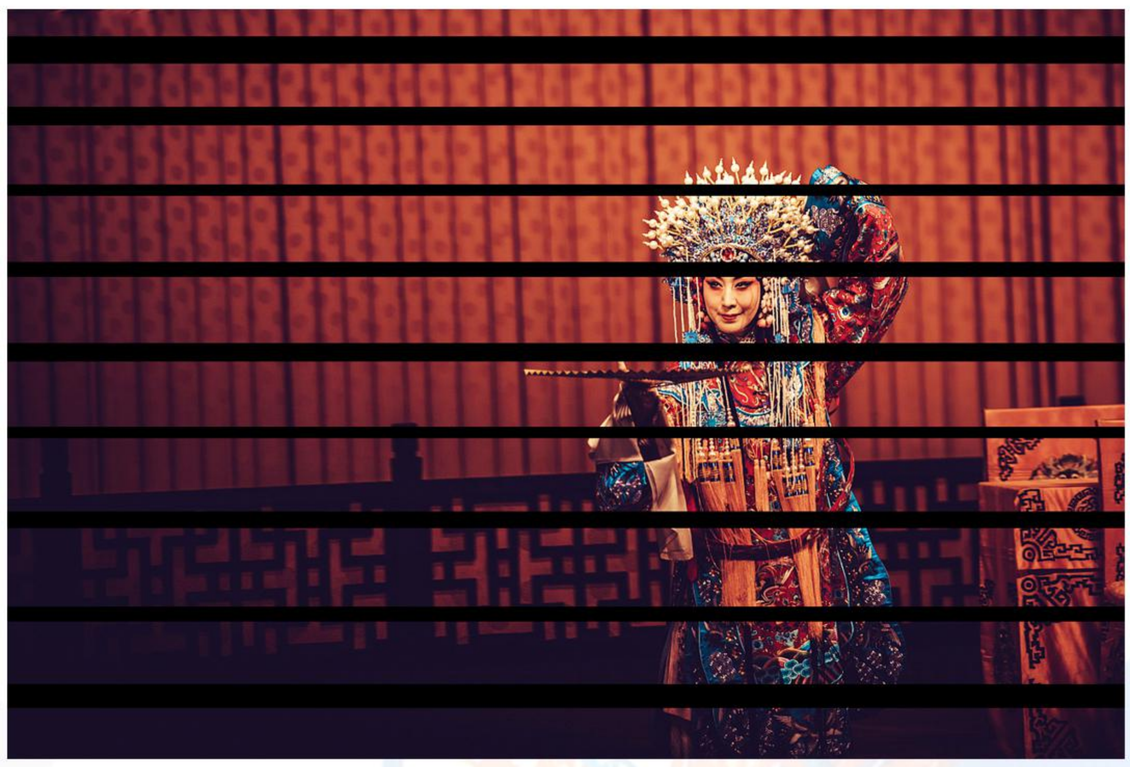

Current Sharing Consistent Power To Panel
In Case Of Any Panel Power Supply Failure

## *Electromagnetic Compatibility And Protection*

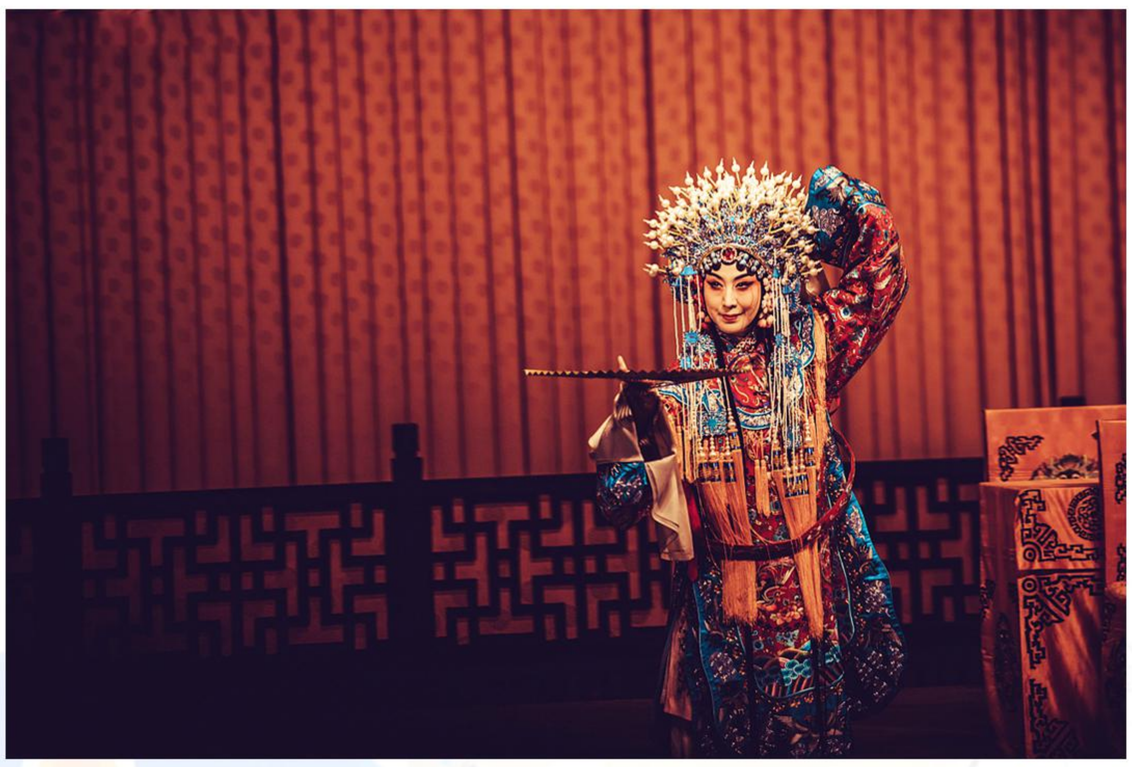

E series meets the standards of electro-magnetic compatibility such as CE, ETL, FCC, and 3C, and can effectively shield electromagnetic waves, preventing elec-tromagnetic interference to the outside environment. Meanwhile, it has capability of anti-interference against outside.

# Excellent Visual Performance

## *High Refresh Rate*



(Low Refresh Rate)



(High Refresh Rate)

As PWM IC driver was applied on E Series, it enhances visual refresh rate by reinforcing pulse wave width and dividing conducting time to numbers of shorter conducting time. Besides, GCLK frequency multiplier increases GCLK frequency to realize doubling refresh rate.

## *High Grayscale*

Not only refresh rate, E Series grayscale also benefits from PWM IC driver. Grayscale is smoother comparing with common IC driver especially at low grayscale.

Low Grayscale

High Grayscale

# Excellent Visual Performance

## Super Wide View Angle


E series* view angle is 160° Images viewed from different directions are clearer and more uniform. At the range of viewing angle, there will be no color square, modularity.

## Calibration Technology

E series supports calibration technology. After calibration, the products* bright-ness and color will perform more uniform and consistent

(Before Calibration)

(After Calibration)

## Calibration Data Storage

E Series module has memory. Calibration data can be stored in every module. When replac-ing defected modules with new module, receiving card will read back calibration data from new module. It prevents color and brightness difference after module replacement

# E Series Specifications

| ITEMS | E151 | E161 | E181 |
|---|---|---|---|
| LED Configuration | SMD1010 | SMD1010 | SMD1515 |
| Pixel Pitch（ mm） | 1.579 | 1.667 | 1.875 |
| Module Resolution(dots) | 152x152 | 144x144 | 128x128 |
| Panel Resolution(dots) | 304x304 | 288x288 | 256x256 |
| Pixel Density（ dots /m²） | 401111 | 360000 | 284444 |
| Module Size（W x H x D）/( mm) | 240x240x15 | 240x240x15 | 240x240x15 |
| Panel Dimension（W x H x D）/( mm) | 480x480x63 | 480x480x63 | 480x480x63 |
| Panel Material | Die-casting Aluminum | Die-casting Aluminum | Die-casting Aluminum |
| Panel Module Composition(W xH) | 2x2 | 2x2 | 2x2 |
| Panel Weight(Per/ kg) | 5.5 | 5.5 | 5.5 |
| Module Weight( Per/kg) | 0.58 | 0.58 | 0.58 |
| Color processing (Bit) | 14 | 14 | 14 |
| Grey Level | 65536 | 65536 | 65536 |
| Refresh Rate（Hz） | ≥1920 | ≥1920 | ≥1920 |
| Driving Mode(scan) | 1/31 | 1/24 | 1/32 |
| Brightness（ nit） | 700 | 700 | 800 |
| Viewing Angle（ H/V） | 160/160 | 160/160 | 160/160 |
| Input Voltage（V） | AC220V±10% | AC220V±10% | AC220V±10% |
| Input Power Frequency（Hz） | 50/60 | 50/60 | 50/60 |
| Max Power（W/m²） | 700 | 700 | 600 |
| Average Power（ W/m²） | 230 | 230 | 200 |
| Storage Temperature (℃） | From -10 to 50 | From -10 to 50 | From -10 to 50 |
| Operating Temperature（ ℃） | From-10 to 40 | From 0 to 40 | From 0 to 40 |
| Storage Humidity（RH） | 10%~90% | 10%~90% | 10%~90% |
| Operating Humidity（RH） | 10%~90% | 10%~90% | 10%~90% |
| IP Rating | IP3X/IP31 | IP3X/IP31 | IP3X/IP31 |
| Lifetime（hrs） | 100000 | 100000 | 100000 |
| Usage Environment | Indoor Fixed Installation | Indoor Fixed Installation | Indoor Fixed Installation |
| Panel Maintenance Method | Front /Back Maintenance | Front Maintenance | Front Maintenance |

# E Series Specifications

| ITEMS | E251 | E301 |
|---|---|---|
| LED Configuration | SMD2020 | SMD2020 |
| Pixel Pitch（ mm） | 2.5 | 3 |
| Module Resolution(dots) | 96x96 | 80x80 |
| Panel Resolution(dots) | 192x192 | 160x160 |
| Pixel Density（ dots /$m^2$） | 160000 | 111111 |
| Module Size（W x H x D）/( mm) | 240x240x15 | 240x240x15 |
| Panel Dimension（W x H x D）/( mm) | 480x480x63 | 480x480x63 |
| Panel Material | Die-casting Aluminum | Die-casting Aluminum |
| Panel Module Composition(W xH) | 2x2 | 2x2 |
| Panel Weight(Per/ kg) | 5.5 | 5.5 |
| Module Weight( Per/kg) | 0.58 | 0.58 |
| Color processing (Bit) | 14 | 14 |
| Grey Level | 65536 | 65536 |
| Refresh Rate（Hz） | ≥1920 | ≥1920 |
| Driving Mode(scan) | 1/32 | 1/20 |
| Brightness（ nit） | 1000nit | 1200nit |
| Viewing Angle（ H/V） | 160/160 | 160/160 |
| Input Voltage（V） | AC220V±10% | AC220V±10% |
| Input Power Frequency（Hz） | 50/60 | 50/60 |
| Max Power（W/$m^2$） | 520 | 600 |
| Average Power（ W/$m^2$） | 170 | 200 |
| Storage Temperature (℃) | From -10 to 50 | From -10 to 50 |
| Operating Temperature（ ℃） | From 0 to 40 | From 0 to 40 |
| Storage Humidity（RH） | 10%~90% | 10%~90% |
| Operating Humidity（RH） | 10%~90% | 10%~90% |
| IP Rating | IP3X/IP31 | IP3X/IP31 |
| Lifetime（hrs） | 100000 | 100000 |
| Usage Environment | Indoor Fixed Installation | Indoor Fixed Installation |
| Panel Maintenance Method | Front &Back Maintenance | Front &Back Maintenance |

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*SHENZHEN NEWSTAR OPTOELECTRONICS CO., LTD*

No.10, Kukeng Ave.,Tongfuyu Industry Park,
Guanlan Str. Longhua District, Shenzhen City, China

+86 131 2896 3818

info@newstar-led.com

www.newstar-led.com