

# HC Series User Manual







Due to product improvements,your purchase of Dicolor LED display  
May be inconsistent with the description in the manual, sorry.

# Chapter One Attention

## Safety Instructions

The following safety instructions will ensure your personal safety, and prevent property damage. please read the following, to ensure proper use of the product.

Symbol	Name	Meaning
	Forbid	Can not try
	Warning	If you do not follow the instructions, may cause serious or fatal injury.
	Notice	If you do not follow the instructions, may cause personal injury or property damage.
	Instruction	Follow instructions

### (One) Electrical Safety



- Do not use damaged power cords, broken plugs, loose power outlets, may cause electric shock or fire.
- One power socket cannot power multiple products at the same time, overheating power outlet may cause fire.
- Do not touch the power plug with wet hands, otherwise, it may cause electric shock.
- Do not bend or pull the power cord forcibly, do not place the power cord under heavy objects, damaged power cord may cause fire or electric shock.
- Do not place power cords or products near heat sources, may cause fire or electric shock.



- The power plug is fully inserted, prevent looseness, insecure connections may cause fire.
- Clean all dust around the power plug or power outlet pins with a dry cloth, otherwise it may cause fire.
- Keep the power cord connections clear, in the event of an accident, must be disconnected in time.
- When disconnecting the power cord from the electrical outlet, please touch the plug insulation, otherwise, it may cause electric shock or fire.



- Do not disconnect the power cord when using the product, the product may be damaged by electric

shock.

- Connect the power cord to a grounded electrical outlet, failure to do, may result in electric shock or injury.
- Only use the power cord supplied with the Dicolor product, do not use other power cords, otherwise, it may cause fire or electric shock.
- The main power switch must be placed in a conspicuous place nearby, and clearly marked, conveniently turn off the power in the event of a failure.

## (Two) Installation Safety



- Do not install the product near a heat source, for example candles, mosquito coil, cigarette, may cause fire.
- Do not install the product in a place with poor ventilation, for example bookshelf, cabinet, increased internal temperature may cause fire.
- Do not install the product in an unstable or vibration place, For example unsafe shelf, inclined surface, vibrating places, may damage the product or cause a fire.
- Do not expose the product to direct sunlight, on hot objects such as stoves, product service life may be shortened, seriously, may cause fire.
- Do not install the product where children can reach it, the product may fall and hurt children.
- Do not touch the product's LED surface to the ground, otherwise, the LED may be damaged.
- Do not install the product in a place full of dust, mist (water droplets etc.), oil or smoke, may cause fire or electric shock.



- Install the product using professionals, installation by unqualified personnel may cause injury.
- Install the product at least 10 cm from the wall, conducive to ventilation, avoiding possible rise in internal temperature may cause fire.
- When installing, removing, and servicing this product, be sure to disconnect all power sources before performing work.
- During installation, must wear a helmet, reduce the chance of injury.
- Ensure that the center of gravity is stable when used in stacking installation, to avoid the risk of dumping.
- Please confirm the relevant load bearing, supporting, fixing and connecting mechanism before installation, ability to support equipment weight and reserve 100% redundancy.
- When installing or removing the product, please circle the construction isolation area with a clear warning sign, in order to avoid accidentally falling objects and causing injuries to unrelated people.

- Pay attention to suspended loads,prohibition of overweight suspension.
- When working under heavy load,Please be careful,reduce the chance of injury.

### (Three) Use Safety



- Do not place heavy objects or children's items (toys, candy, etc.) on top of the product,to prevent the product or heavy objects falling,cause serious injury.
- Do not use flammable sprays, humidifiers, or flammable substances near the product,otherwise,may cause explosion or fire.



- Avoid using in high acid / alkali / salt environment,keep away from flammable and explosive materials, gas, dust, etc.
- Do not touch the screen when opening the product for a long time, to avoid personal injury.
- Handle the product gently,try to avoid collision damage.



- Screen has not been used for more than 3 days,must be dehumidified before next use,white screen 30% -50% brightness preheat 4-8H,then adjust to normal 80% -100% brightness, LED display is not allowed to play the highest brightness full white picture for more than half an hour, avoid causing excessive current, Power cord is hot, LED is broken, recommend playing dynamic video mainly.
- If the product is dropped or the casing is damaged,Please turn off the power switch and unplug the power cord,continued use may cause fire or electric shock.
- If you do not plan to use the product,unplug the power cord from the power outlet.
- If the product makes an unusual sound,burning odor or smoke,disconnect the power cord immediately,otherwise, it may cause electric shock or fire.
- Before moving the product,please turn off the power switch and disconnect the power cord,and all other connected cables,damaged power cord may cause fire or electric shock.
- During heavy rain and thunderstorms , please cut off the product power and unplug the power cord,otherwise, it may cause fire or electric shock.
- Product working environment temperature range  $-10\text{ }^{\circ}\text{C} \leq t \leq 40\text{ }^{\circ}\text{C}$  , relative humidity range of working environment 10%-90% RH.
- When the screen is working,keep at least the recommended viewing distance(pixel pitch x3.3 m),avoid damage to glasses.

### (Four) Storage Safety



- Storage temperature is in the range of  $-40\text{ }^{\circ}\text{C} \leq t \leq 60\text{ }^{\circ}\text{C}$ , but after the package is opened, the LED display must be stored in an environment with a temperature of  $<30\text{ }^{\circ}\text{C}$  and a humidity of  $<60\%$ .
- According to the LED display environment ,if necessary, insecticides and rodenticides should be placed,avoid insect bites or rodents.
- Store in high temperature or high humidity environment, LED display cannot be turned off for a long time.

#### (Five) Clean Safety



- Long-term use of LED display will accumulate more dust on the screen, need to regular cleaning and maintenance, in case of it affects the viewing effect.
- To clean the module surface, gently brush with a damp cloth.
- If the LED display is accidentally exposed to light rain, it can be dried by electric fan.

# Chapter Two Product Description

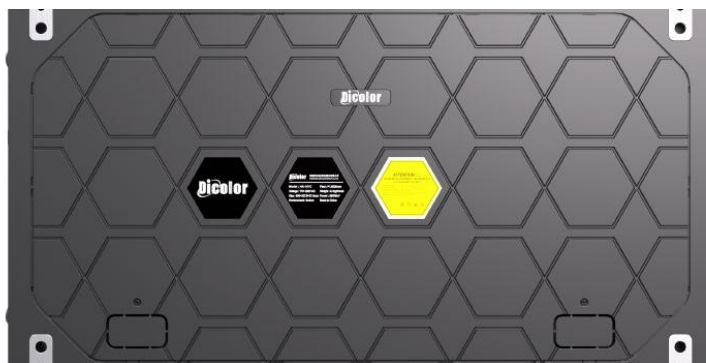
## 2.1 Overview

- HC Series are small pixel pitch products , Its main features are as follows:
- ①Flip Chip MiniCOB: Each pixel is composed of RGB full flip chip integrated package, each chip is fixed on the circuit board, accelerate heat dissipation, low temperature on the front of the screen body;
- ②Durable: Screen surface with IP65 protection grade, long-term thermal expansion and contraction test, screen surface temperature < 40° C, long service life;
- ③Convenient maintenance: The Cabinet can be installed against the wall, and the module, system card and power supply supports fully front maintained , supporting various installation solutions;
- ④High-definition seamless display: Patented surface treatment technology, ultra-high ink consistency and flatness, non-reflective display panel;
- ⑤High-gray and high-brush ultimate display: low brightness, high gray and high brush, stable dynamic display screen, no ripple, no flicker, clear image edge, more comfortable visual experience;
- ⑥Dual backup design: The Optical dual backup function design of signal and power supply makes the small pitch products work more stable and reliable;

## 2.2 Cabinets Structure

HC Series cabinet size adopts 16:9 design,cabinet size is 600mm\*337.5mm standard 27-inch design, it can perfectly replace LCD without moving the initial bezel structure, cabinet thickness 37.7mm,cabinet weight is only 4.1KG.

## 2.3 Cabinet Appearance Structure Description



Picture 2-1: 600mm\*337.5mm

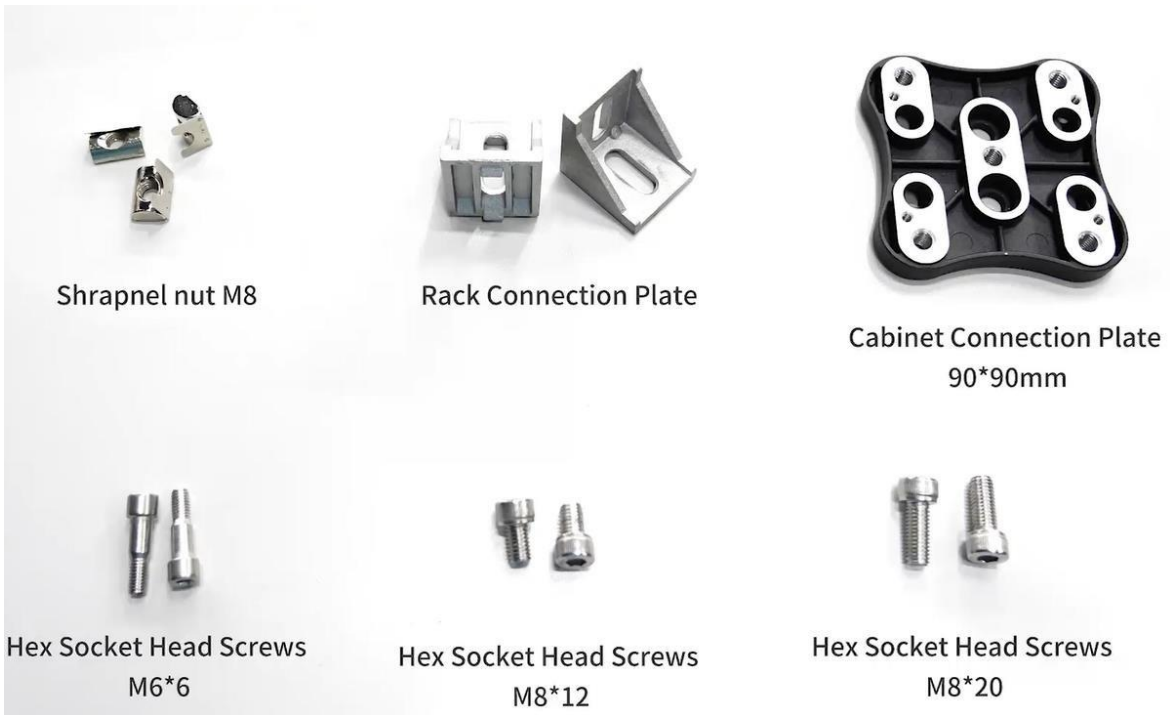
### 2.3.1 Function Of Each Part

Part Name	Function	Quantity	Unit
positioning column	positioning when the cabinet is installed	2	/pcs
positioning hole	positioning when the cabinet is installed, fits the positioning column	2	/pcs
power / signal connection male	connect power cables and signal cables between cabinets, Use with female socket	2	/pcs
power / signal connection female	connect power cables and signal cables between cabinets, use with male socket	2	/pcs
screw hole position	for fixing the connecting piece	4	/pcs
via hole	for power lines and signal lines	4	/pcs
module	cabinet display unit	8	/pcs
HUB card	mainly used to distribute the signal of the receiving card to each module	1	/pcs
power supply	convert power input to 5V / 4.6V output, power supply for the cabinet	1/2	/pcs
control card	controlling individual cabinet signals	2/4	/pcs

# Chapter Three Product Installation

## 3.1 Preparation Before Installation

### 3.1.1 Components( in package)

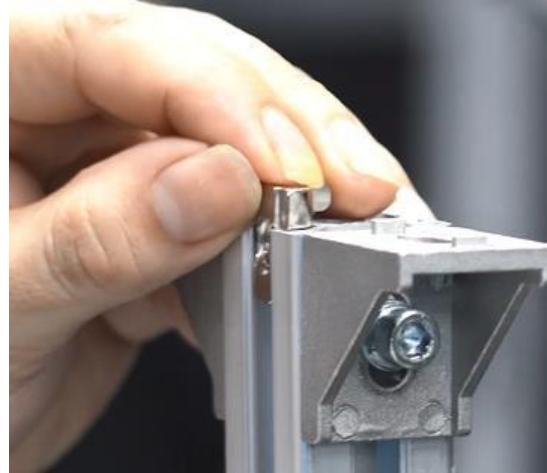


### 3.1.2 Tool (ready at local except the allen key and vacuum suction tool )



## 3.2 Install the Cabinets Frame

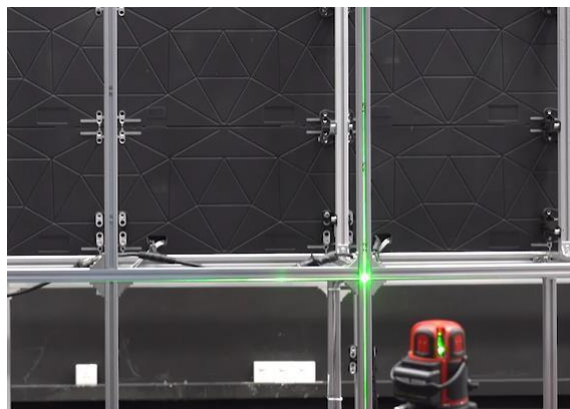
### 3.2.1 Install Shrapnel Nuts and Rack Connection Plate



Install the Shrapnel nut M8 into the support profile.

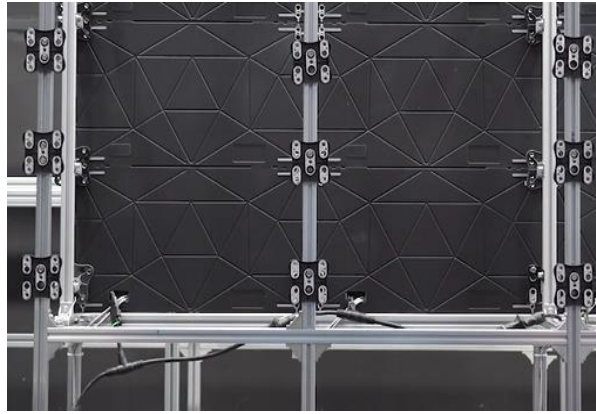


Lock the Rack Connection Plate with the Hex Socket Head Screws M8\*12.

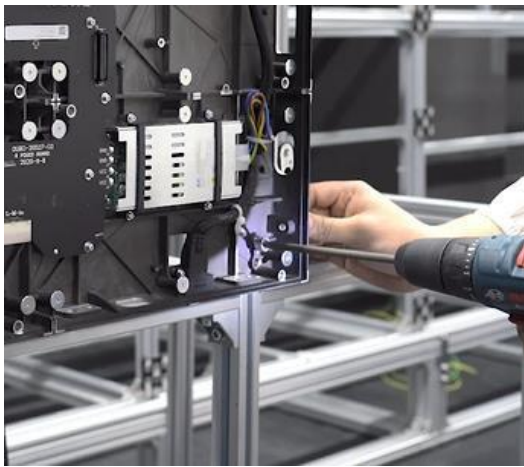


Check the horizontal and vertical of the support profile with Laser level

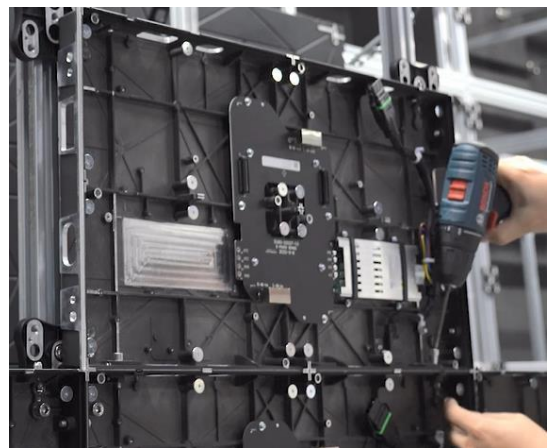
### 3.2.2 Install the Cabinet



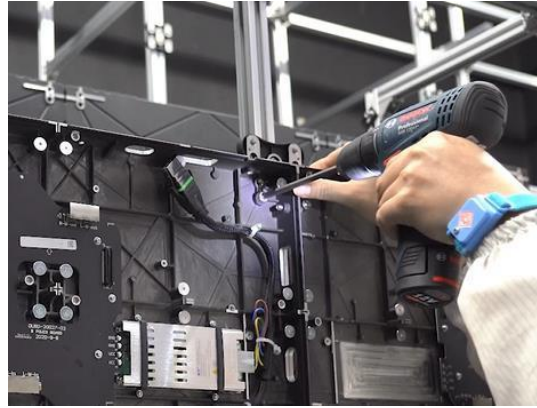
Install the Cabinet Connection Plate



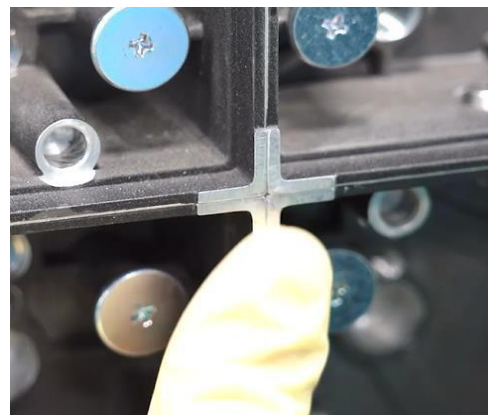
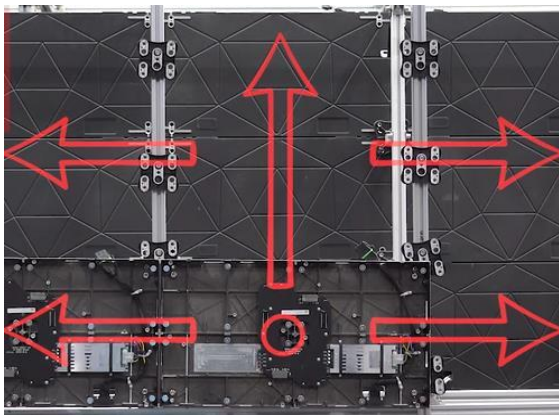
Fasten the Cabinet with the Hex Socket Head Screws M8\*20 (Ensure that the Cabinet maintain horizontal and vertical during installation)



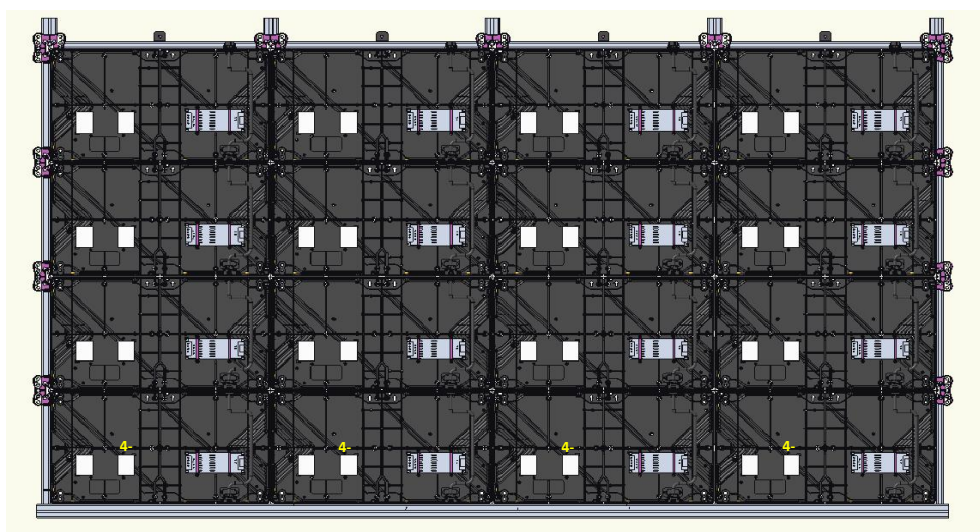
Lock between Cabinets with the Hex Socket Head Screws M6\*6.



Lock between Cabinet and Connection Plate with Hex Socket Head Screws M8\*20



Install the cabinets from bottom up, from the middle to the sides and following the number if it shows in cabinet. Ensure the horizontal of the bottom cabinets by Laser level and check the planeness of all cabinet.



3-

3-

3-

3-

Ensure that the seam and flatness between cabinets frame conform to the standard after each cabinet frame is installed.

2-

2-

2-

2-

1-

1-

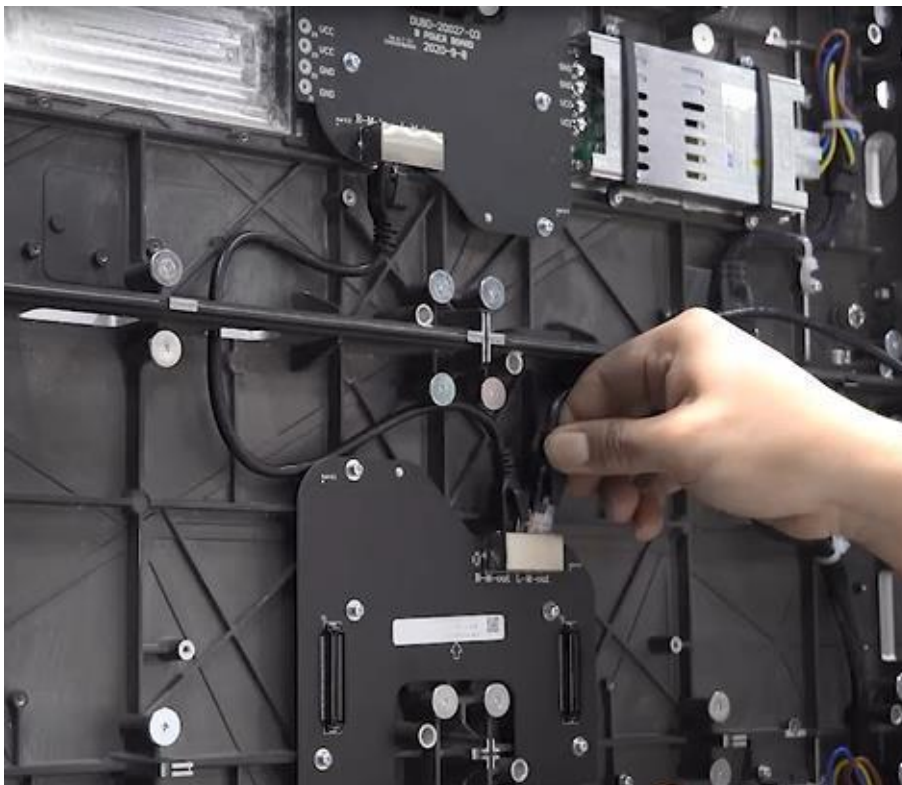
1-

1-

### 3.3 Connect the Cable

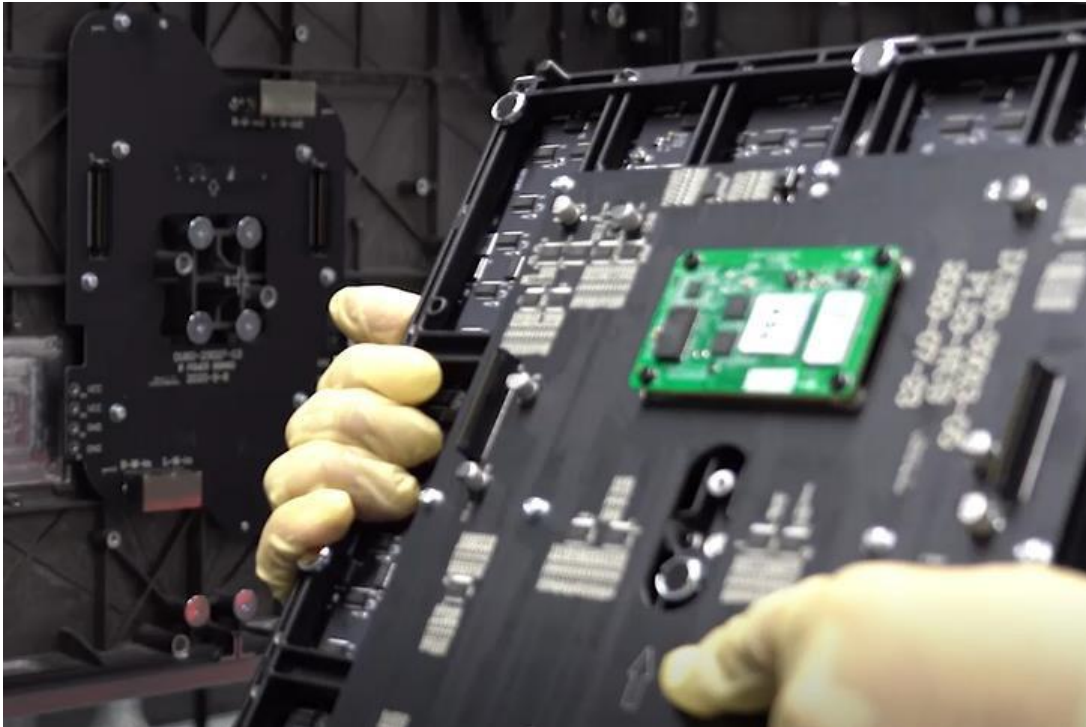


Connect the Power Cord

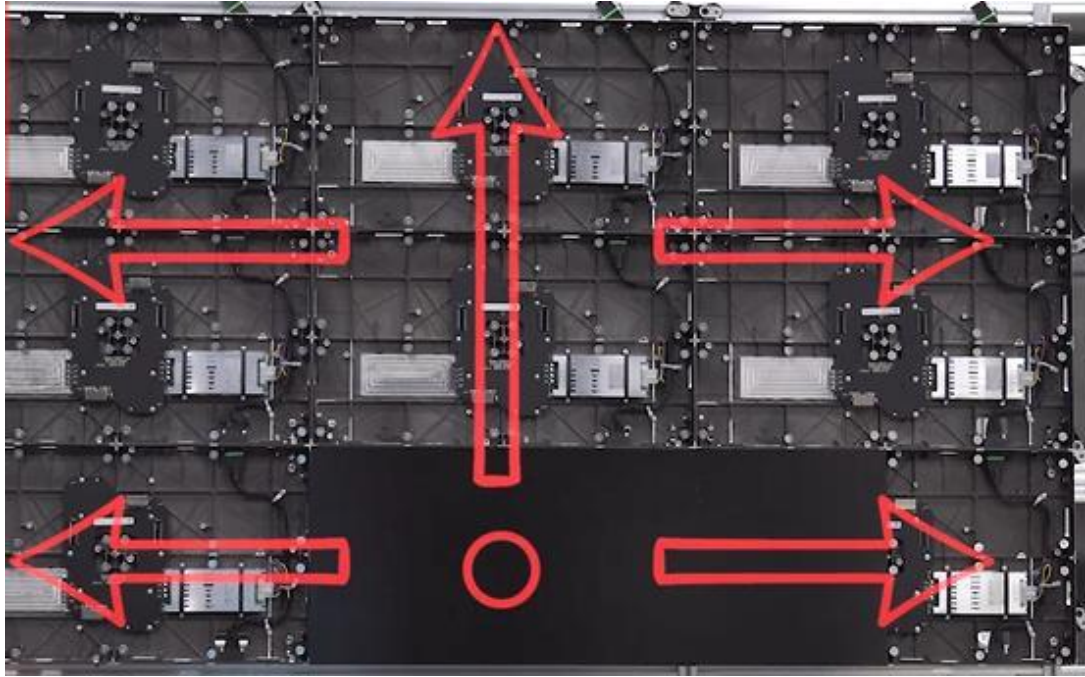


Connect the Signal Cable

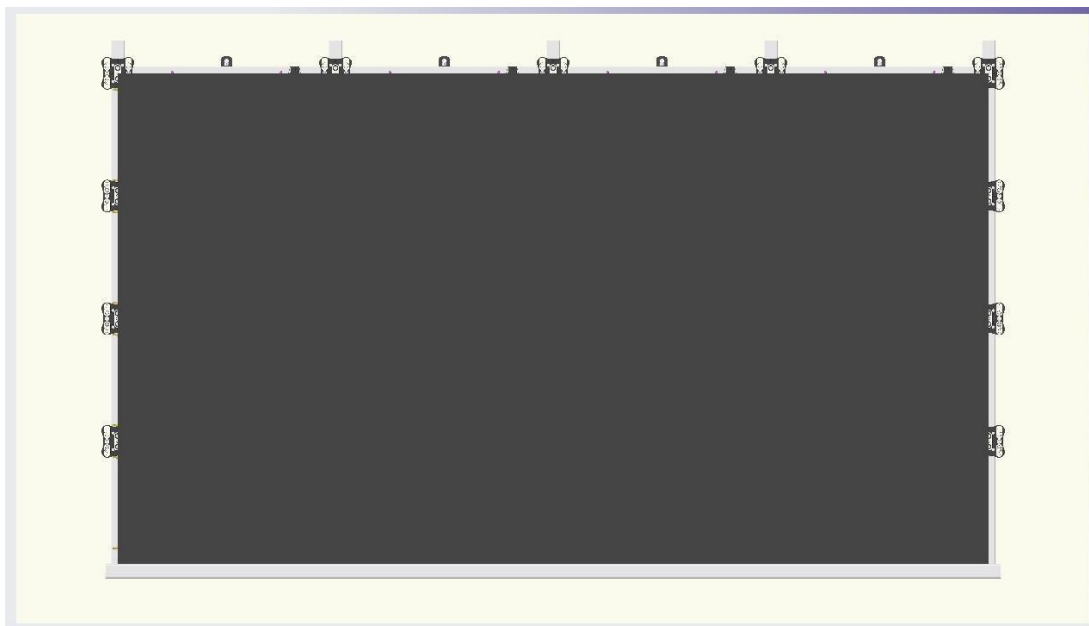
### 3.4 Install and Remove the LED display board



Please wear the latex gloves before the LED panel installation. Check the number in panel backside. The arrow direction of the panel and cabinet should be the same. Ensure the planeness of all panels



Install the panels should from bottom up, from the middle to the sides. Adjust the planeness of panels after the installation

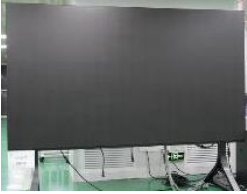

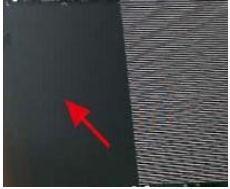


Install carefully to prevent accidents. Check the planeness of all LED panels after the installation



Please use the professional tools such as the vacuum suction tools for LED panels remove.

# Trouble Shooting

Defective Phenomena	Pictures	Common Problems	Solutions
No display or black on the entire LED display screen		The display screen is power off;	Turn on the power supply.
		The brightness is 0%;	Adjust brightness to 100%
		The connection between the sending box and display screen is broken	Connect the internet cable.
The screen has light line The gap between the cabinets is obvious		The flatness between the cabinets are not good	Adjust the gap. Using the suction tools
No display on parts of the entire LED display screen		The power cable between the cabinets isn't connected	Check the power supply if it is normal (the green indicator twinkling). If not, reconnect the cable
		The signal cable is connected wrongly	Check the receiving cards work normally, reconnect the signal cable according to the controlling system operation
The RGB display has spot color		The calibration data in the screen is missing	Install the panel and cabinet in order, the confirm if it works normally
		The installations of panel and cabinet are wrong, not mount in order	Upload the relative calibration data again
The display disorder		The connection order of the network cable is wrong;	Set up the Novastar control system, open mapping function, follow the order and reconnect the screen
		The cabinet or panel order is wrong	Change the connection.