



MG11 Series LED Screen User Manual



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CONTENTS

CAUTION	01
PREFACE	05
Chapter 1 LED Cabinet	06
1.1 Cabinet Structure	06
Chapter 2 Cabinets Connection	07
2.1 Connectors and Cabinet Mounting Holes Connection	07
2.2 Signal and Power Cable Connection	08
Chapter 3 LED Display Installation	11
3.1 MG11 Cabinet Installation	12
3.1 MG11 Cabinet Packing	15
Chapter 4 Common Errors For Led Display	17
4.1 Software Fault	17
4.2 Hardware Fault	18
Chapter 5 LED Display Maintenance	19
5.1 Indoor LED Display Maintenance	19
5.2 Outdoor LED Display Maintenance	22

CAUTION

Warning: This is a CALSS A-level product. In the living environment, this product may cause radio interference. In this case, the user may be required to take practical actions for the interference.



Caution 1:

In order to avoid any physical damage, please read carefully the User Manual before connecting the switches.

1. LED screen should only be operated by trained professionals.
2. Do not expose any part of the LED screen to naked flame/smoke.
3. Personnel operating the LED screen are advised to wear a safety helmet during operation.
4. Check all the AC power is connected before turning on the switch.
5. Turn off all switches of the LED screen, computer terminals, system box and monitors before performing any maintenance work.
6. Do not touch the power supply when the switch is turned on.

Caution 2:

Please read the installation and operation instruction manual carefully in order to make sure the normal lifespan of LED screen and avoid any damage of electronic components, device driver and loss of data.

1. Turn off all switches including LED screen, computer terminal, system box and monitor before connecting any cables.
2. Wear Anti-static ring before replacing any electronic components.
3. Do not hot plug any cables connected to computer terminals while the power is running. Ensure that all power is disconnected before unplugging any cable from the ports especially the serial line ports.
4. Avoid the cabinet work under the conditions of high organic solvent detergent (such as kerosene, rust-proof oil, etc).
5. Regular electricity testing is required for indoor LED screen if long time no use. (regular electricity testing standard: at least 2 hours in a week increase gray scale stepwise)
6. The operating/storage environment should conform to the requirements in product parameter&specification sheet, otherwise it will damage the LED screen seriously.
7. In order to ensure the safety, please check the condition of power cables every three months if rental usage, every year if fixing installation.

Caution3:

1. Making sure the LED screen should be properly grounded before working.
2. LED screen grounding resistance must be less than 1Ω .
3. If the LED screen is equipped with flight cases, the flight cases should not be exposed to rain. After each performance is completed, please pay attention to the moisture-proof treatment of the flight cases.

Caution 4:

1. Warnings regarding to the CE certification: This equipment is compliant with Class A of CISPR 32. In a residential environment this equipment may cause radio interference.
2. Warnings regarding to the FCC certification: This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired

operation.

Warning: Changes or modifications to this unit not expressly approved by the party responsible for compliance could cause the user can not to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/ TV technician for help.

Caution 5:

Pay attention to the use of floor cabinets:

1. Avoid metal sharps, shoe spikes, glass and other hard objects from scratching or hitting the floor;
2. Do not drag on the surface when moving heavy objects.
3. When the vehicle passes through the ramp pad, the speed of the vehicle should be slow and gentle, and can not accelerate rapidly.
4. When water enters between the mask of floor cabinets and the lamp surface, the mask should be removed to allow the water to dry naturally or with a fan;
5. When the cabinet maintained, if disassemble the cabinet mask, after finishing maintenance, the screw use for fasten the mask cannot higher than the brim.
6. After use, please clean the sand and water stains on the surface of the mask of floor cabinets before putting it back into the air box.

Special statement:

Our company does not compensate for the personal injury or material loss caused by the users' arbitrarily transforming or repairing this product. Please contact our company beforehand when it is needed to repair or remould the product.

Warranty period:

- ⦿ In principle, the product warranty period is based on the product warranty period specified on the quotation.
- ⦿ During the warranty period, our company will not guarantee any problems due to the following reasons.
 - Problems caused by the user's arbitrarily dismantling the product or failing to perform maintenance properly.
 - Problems caused by incorrect transport and storage.
 - Problems caused by the use of exceeding the rated parameters of the product.
 - Problems caused by improper installation.
 - Problems caused by fires, earthquakes, storms, floods, lightning and other natural disasters or riots, wars, radioactivity, etc. and other natural and man-made disasters.

Signs of restricted use of hazardous substances in electrical and electronic products:



1. The logo indicates that the environmental protection use period of electronic and electrical products is 10 years;
2. It means that the electrical and electronic products contain certain hazardous substances and can be used with confidence within the environmental protection use period. After the environmental protection period is exceeded, they should enter the recycling system.

Chapter 1 LED Cabinet

PREFACE

Magic Stage MG11 LED display series are also known as Right-angle LED display. Used as MG accessory products, it includes indoor and outdoor different pixels. MG11 has realized the display unit of Right-angle installation. Such creative installation can meet more market demands and broaden the applications. It has become an important choice for stage show/rent, exhibitions, shows and commercial advertising.

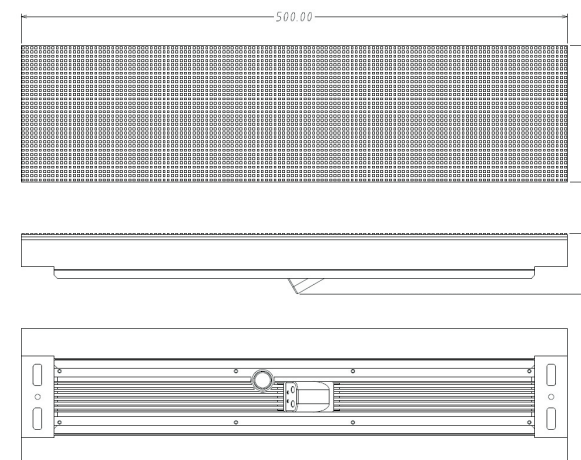
To ensure that our products are used within reasonable conditions and get your recognition, we will explain installation process, using process and cautions in details. Please read this carefully before installing and testing screen.

The LED cabinet mainly includes power supply, modules, and receiving card. The cover of power supply box can be used for fixing and protecting all accessories inside. All components inside should be neatly secured for connecting cabinets more easily.

1.1 Cabinet Structure

The cabinet structure of MG11 Series products is made of special industrial material instead of the traditional aluminum alloy die-castings or steel material, so that the cabinet weight is much lighter.

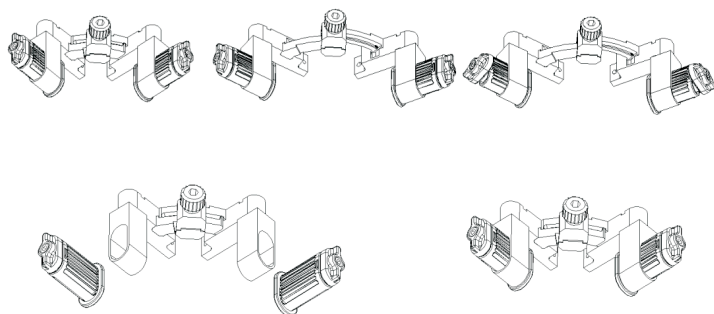
Right-angle cabinet size is 125*500*56mm. (Picture 1.1.1).



Picture 1.1.1 Right angle cabinet view from all sides

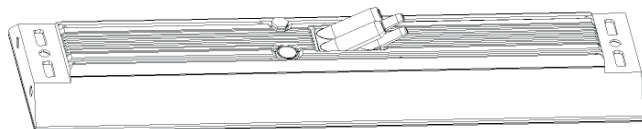
Chapter 2 Cabinet Connection

2.1 Connectors and Cabinet Mounting Holes Connection



Picture 2.1.1 Connectors for right-angle cabinet

As shown in picture 2.1.1, the connectors are for Right-angle cabinets. The connectors are used to connect the cabinets and fix the screen. After 2 cabinets are connected, they can be twisted, or stretched forth or back to form a cambered surface.

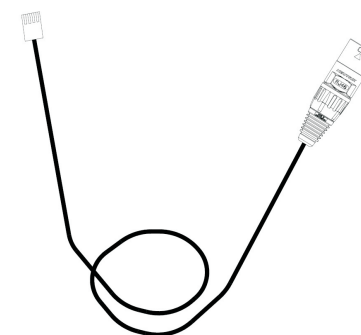


Picture 2.1.2 Mounting hole of the cabinet

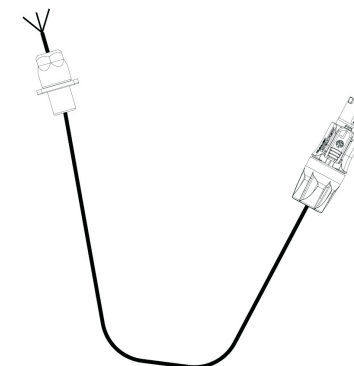
There are mounting holes on the top and bottom frame in the rear of the cabinet (picture 2.1.3). Insert the connectors and then twist tightly can connect two cabinets easily.

2.2 Signal and Power Cable Connection

Adopting Cat 5 cable (signal cable) (picture 2.2.1) and power cable (picture 2.2.2) to connect each cabinet.

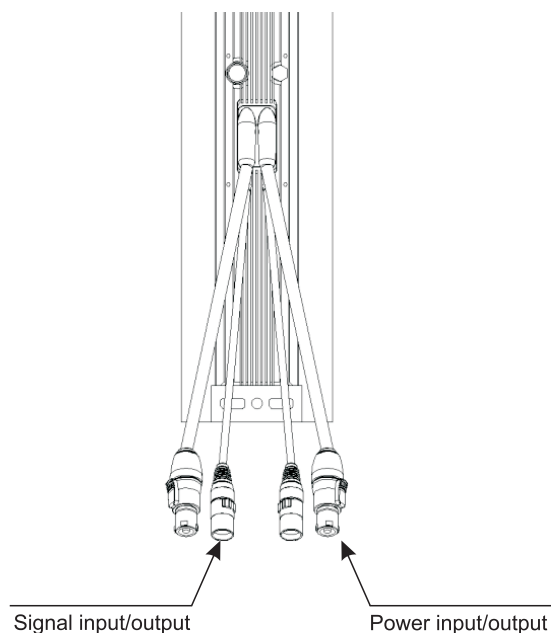


Picture 2.2.1 CAT 5 CABLE (Signal cable)



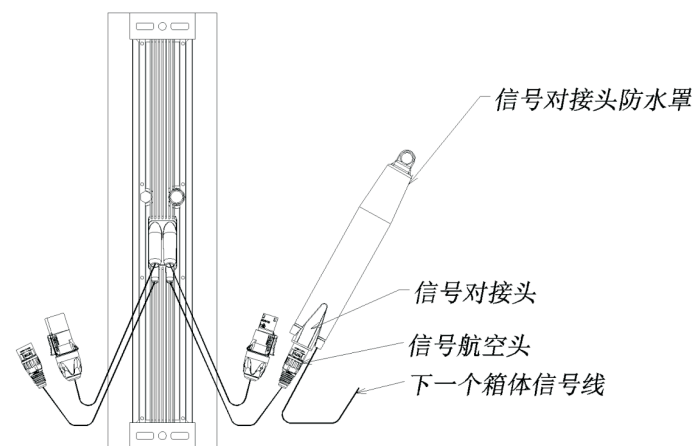
Picture 2.2.2 POWER CABLE

The connecting method of the right-angle cabinet power cable and signal cable is the same. One cabinet be connected by 2 signal cables, one port input and one port output, the input signal of the cabinet comes from the last cabinet output signal, the output signal of the cabinet connect next cabinet input signal, this connection way is as same as power cable.



Picture 2.2.3 Signal cable and power cable connection between cabinets

Both signal ports can be flexibly as input or output according to your actual operation, as shown in picture 2.2.3.

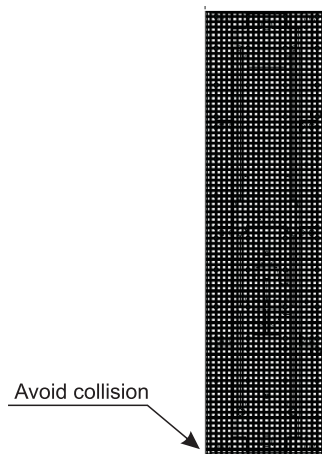


Picture 2.2.4 signal cable extensions with waterproof cover

MG11 standard cabinet using four fixed cables, when connected with other normal cabinet, using the plug to connect. When connected corner screen with corner screen. You need to use the signal cable extension devices. Outdoor corners using with signal cable extension devices, need to add a waterproof cover, waterproof cover opening facing down, like picture 2.2.4

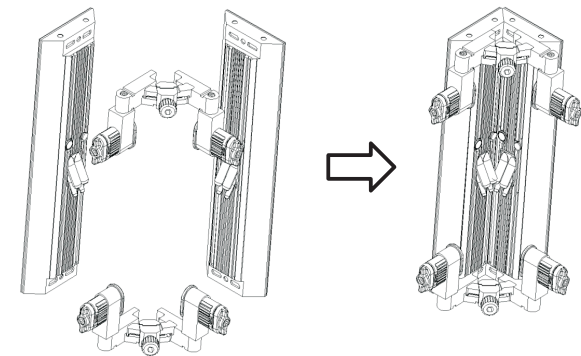
Chapter 3 LED Display Installation

All installation methods are required to avoid collision of the frontage 4 corners of the cabinet (as picture 3.1), causing unnecessary damage and affecting the normal use of the cabinet.

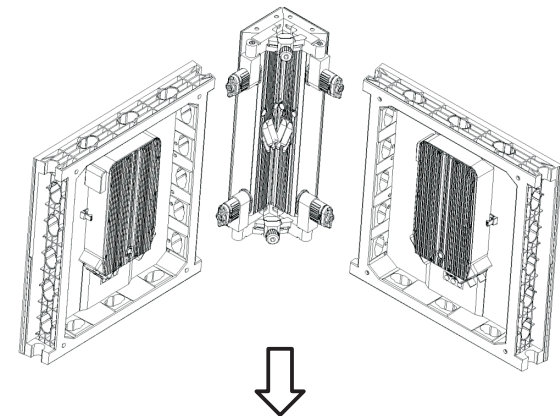


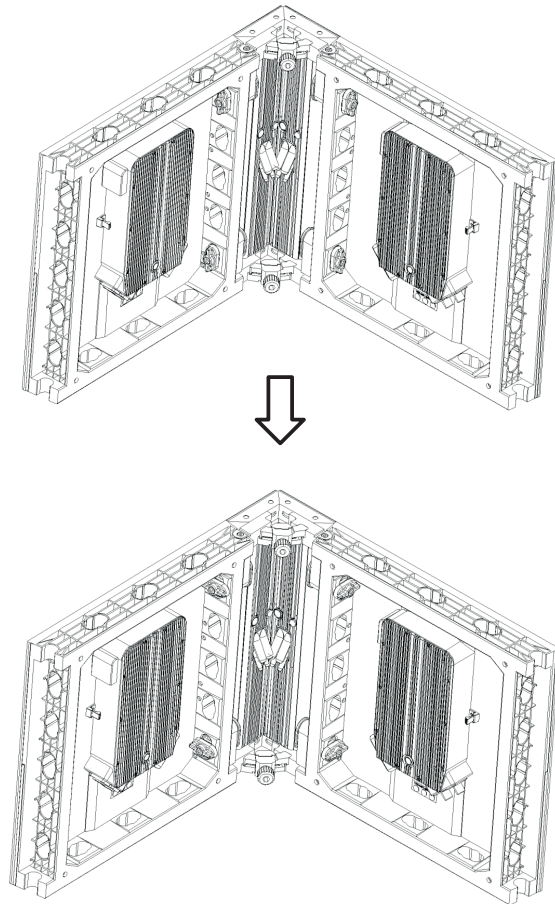
Picture 3.1 Avoid collision of the frontage 4 corners of the cabinet

3.1 Installation of Right Angle Cabinet



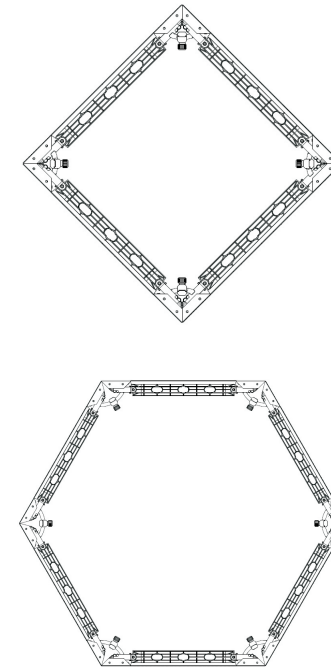
Picture 3.1.1 The connection of two right angle cabinets





Picture 3.1.2 The connection of right angle cabinet and MG7 cabinet

Using connectors to connect the cabinets, ensure the cabinet surface is smooth, twist two ends of the connector, then tighten the above hand screw. Picture 3.1.2 is a top view of quadrangle, pentagon, hexagon. Along with other frames, right-angle screen can also be as ladder screen.



Picture 3.1.3
Sketch for polygonal connection of Right-angled cabinets and MG7 cabinets

Note: Hanging installation on right-angle cabinet directly, need special accessories

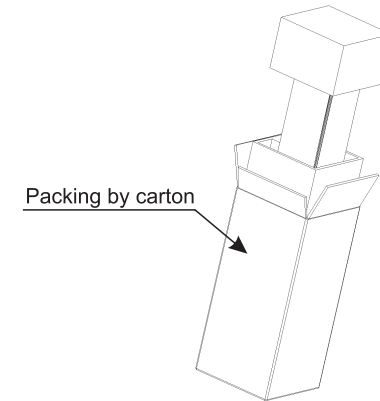
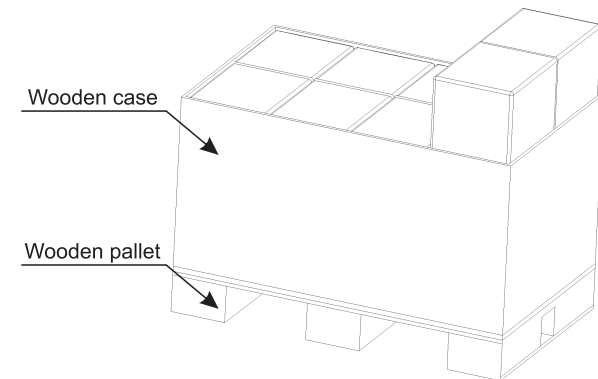
3.2 MG11 Packing

There are two types packing ways for MG11 cabinets, one is packing with 24 pieces in 1 flight case. Another is packing with 16pieces in 1 carton and then packing with wooden case. Sample like picture 3.2.1-3.2.2.

Reminder: Packing by flight case, the indoor display should be packing with drying agent by PE bag to prevent moisture. The outdoor display could pack by flight case without drying agent. But packing by cartons, no matter indoor or outdoor display, both they need packing with drying agent by PE bag firstly.



Picture: 3.2.1 MG11 Flight case



Picture: 3.2.2 MG11-Carton & Wooden case

Chapter 4 Common Faults Of LED Display

4.1 Software Faults

1.Connection interruption or prompt unable to find the control card when starting the software, or the interface of the software is not adjustable, that is,gray status, and there is no main controlling icon of the software LED control equipment list.

Solution:

- ① Change USB cable.
- ② Check the equipment connection in the equipment manager.
- ③ Ensure that the computer is no virus.
- ④ If it is the internal sending card , it is probably due to the loose slot or damaged PCI, or the interference of foreign matter. Please insert sending card again or clean PCI interface by rubber.

2. Indicator light of the output port for sending card is extinguished.

Solution:

- ① Relevant control software has not been installed, please ensure the software is successfully installed .
- ② The FPD of the graphics card is closed. Please right click "my computer" on the desktop, and then click properties-> setting-> advanced> display-> FPD.

4.2 Hardware Faults

1. There is no content on the LED screen.

Solution:

- a. Check whether the screen is powered on.
- b. Check whether the output signal is open.
- c. Check whether display area is correct.

2. The cabinet of the LED screen is blurred or not bright enough in certain cabinets.

Solution:

- a. Check whether modules and HUB card is connected.
- b. Check whether the configuration file is uploaded correctly.
- c. Check whether the calibration is open or correct.
- d. Please change the broken masks if there is.

3. The picture of the cabinet is in a wrong order.

Solution: Please check the inner connection of each LED module to see if cables are well connected.

4. Some individual LED lamps are extinguished.

Solution: Please repair these dead LEDs.

Chapter 5 The Maintenance of LED Display

How to use the LED display correctly is very important for the lifespan of the LED display and normal work. Daily maintenance of LED display must be finished carefully.

5.1 Indoor LED Display Maintenance

1. Please read the Installation and Operation Instruction of the Magic Stage Series Full Color LED Display carefully. The manufacturer do not take any legal liability to the consequence due to the incorrect, incomplete, irresponsible, or unsafe using of installation system.
2. Moving screen in gentle, no collision and strike.
3. Check the cabinet if there's any loose screw before using.
4. Please confirm the steel frame or rings are kept in place firmly before installation, for the LED display having been installed for long time, the situation of the joining and hanging part should be checked regularly. If loose part is found, adjust it timely, reinforce or change hanging parts in time.
5. Keep the cabinet frame structure away from oil, acid and other corrosive substance.
6. Pay attention to the anti-static work of the LED display, do not touch the LED face directly by hand, wearing gloves for the installation and debugging of the LED display is suggested.
7. Null line and live wire of the computer and control system can't be connected reversely; it should be connected strictly according to the original position.
8. If the power switch trips happened frequently, please check the LED display or replace the power supply switch.

9. Please open the PC first, then the LED display; After using the LED display, first, turn off the LED display, then shut off PC (If shut off PC first, high bright spot will appear, then LEDs will be burnt, leading serious consequences).

10. If there is short circuit, switch trip, wire burning, smoke and other abnormal phenomenon after removing, please don't repeat electricity test, and check the problem timely.

11. The proper way to remove a power supply: turn the cabinet back up and keep the connector upward; loosen the screws on aluminum cooling board and lift the aluminum cooling board up horizontally to 30 ~ 40mm (meanwhile observing the power supply box interior), overturn the aluminum cooling board to right slowly (Attention to prevent radiator's fan crashing other component), then start checking and repairing.

12. Master the installation method, the original data recovery, backup, and controlling parameter setting, basic data preset modification.

13. Inspect virus regularly, and remove irrelevant data.

14. Not professional person, no operating the software system.

15. Dismantle LED display after the events, please clean the water stains and dust on the front & back sides of the cabinet before putting into the flight case, which must be kept clean and dry, at the same time, too much friction should be avoided between cabinet and inner part of the flight case.

16. During installation & disassemble, please pay attention to protect the LEDs on the four sides of cabinet from damage.

17. Maintenance for connector:

A, Cleaning gun spray pot filled with liquid, DJW-618X cleaning liquid (main component: dichloroethane, trichloroethane, or ethanol), power plug plug 220V power supply;

B, Keep the cleaning gun muzzle to a 45 degree angle of about 10-15 cm distance, aiming at the dirty parts of the connectors, press the cleaning gun switch, point to clean the dirty place.

Notes on cleaning connector:

A, Cleaning gun spray is high pressure spray which should be is strictly prohibited to aim at people, put in safe place

B, beware of cleaning fluid accidentally into the eyes and mouth, wearing a mask and protective glasses to work;

C, Keep away from the fire, no fireworks;

D, need to maintain ventilation during operation or in open areas.

18. Moderately ventilate the indoor display, can speed up evaporation of water vapor which attached to the display, reduce the relative humidity of the indoor environment. However, avoid ventilating in some windless and humid weather, this will increase the indoor humidity

19. For indoor display can place desiccant in the room, use physical moisture absorption method to reduce the moisture in the air to avoid damping.

20. If air conditioning is installed in the installation space of the display, air conditioning can be turn on in humid weather for de-humidification

21. Wet and rainy time, the walls are easy to condensation, when taking cabinets out of the flight case, the cabinets should not be placed against the wall to avoid the water on the wall;

22 For the warehouse to place the product, be sure to keep the ventilation dry, cannot let the humid air in the warehouse assembly, the proposed site should be in higher places.

5.2 Outdoor LED Display Maintenance

1. Please read the Installation and Operation Instruction of the Magic Stage Series Full Color LED Display carefully. The manufacturer do not take any legal liability to the consequence due to the incorrect, incomplete, irresponsible, or unsafe using of installation system.

2. Moving screen in gentle, no collision and strike.

3. Check the cabinet if there's any loose screw before using.

4. Please confirm the steel frame or rings are kept in place firmly before installation, for the LED display having been installed for long time, the situation of the joining and hanging part should be checked regularly. If loose part is found, adjust it timely, reinforce or change hanging parts in time.

5. Keep the cabinet frame structure away from oil, acid and other corrosive substance.

6. Pay attention to the anti-static work of the LED display, do not touch the LED face directly by hand, wearing gloves for the installation and debugging of the LED display is suggested.

7. Null line and live wire of the computer and control system can't be connected reversely; it should be connected strictly according to the original position.

8. If the power switch trips happened frequently, please check the LED display or replace the power supply switch.

9. Please open the PC first, then the LED display; After using the LED display, first, turn off the LED display, then shut off PC (If shut off PC first, high bright spot will appear, then LEDs will be burnt, leading serious consequences).

10. If there is short circuit, switch trip, wire burning, smoke and other abnormal phenomenon after removing, please don't repeat electricity test, and check the problem timely.

11. The proper way to remove a power supply: Turn the cabinet back up and keep the connector upward; loosen the screws on aluminum cooling board and lift up horizontally to 30 ~ 40mm (meanwhile observing the power supply interior), overturn to right slowly (Attention to prevent radiator's fan crashing other component), then start checking and repairing.

12. Master the installation method, the original data recovery, backup, and controlling parameter setting, basic data preset modification.

13. Inspect virus regularly, and remove irrelevant data.

14. Not professional person, no operating the software system.

15. Please do not perform in the storm (rain, dust) and strong wind;

16. Dismantle LED display after the events, please clean the water stains and dust on the two sides of the cabinet before putting into the flight case, which must be kept clean and dry, at the same time, too much friction should be avoided between cabinet and inner part of the flight case.

17. During installation & disassemble, please pay attention to protect the LEDs on the four sides of cabinet from damage.

18. Maintenance for connector:

A, Cleaning gun spray pot filled with liquid, DJW-618X cleaning liquid (main component: dichloroethane, trichloroethane, or ethanol), power plug plug 220V power supply;

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Notes on cleaning connector:

A, Cleaning gun spray is high pressure spray which should be strictly prohibited to aim at people, put in safe place

B, beware of cleaning fluid accidentally into the eyes and mouth, wearing a mask and protective glasses to work;

C, Keep away from the fire, no fireworks;

D, need to maintain ventilation during operation or in open areas.

19. Outdoor screen not only need to consider the wet problem, but also to do waterproof, dust proof and other routine maintenance work; good sealed installation can help the display to reduce the risk of water go inside. Regular cleaning attached to the dust of inside and outside the display also help show Screen better heat dissipation, reduce the water vapor attached;

20. Wet and rainy time, the walls are easy to condensation, when taking cabinets out of the flight case, the cabinets should not be placed against the wall to avoid the water on the wall;

21. For the warehouse to place the product, be sure to keep the ventilation dry, cannot let the humid air in the warehouse assembly, the proposed site should be in the higher places.