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Brief Introduction

Thank you for choosing this series LED display. Through reading this manual, you could have a total understanding about LED display installation and operation, and know its perfect and advanced function and simple operation method.

Safety Notice

1. Before using the product, please read all the instruction carefully.
2. Keep in all the manual as to the future reference.
3. Do not use the attachments not recommended by the manufacturer, as it may cause danger.
4. As safety, this screen electricity power with a three-pin power plug, the third pin will be connected with the ground. If your plug cannot plug into the electricity outlet, please contact with the electrician and change to a new one. Do not let the safe function of the three pin plug disabled.
5. Please make sure power supply socket and power cable which you used can resist the sum of all rated current.
6. Carefully observe all warnings, precautions and the one described in the manual.
7. Do not overload power supply socket, since this can result in fire or electric shock.
8. Do not attempt to check and maintain the display yourself because open or move cabinets will have high voltage or other hazards. Refer all servicing to professional and qualified technician.
9. If the LED display need to be checked if LED display appear obvious abnormal conditions, first shut off electricity power and then ask professional and qualified technician to check and repair.
10. Please take care of the maintenance of display. Never let water enter into the LED display body.
11. Please take care of cooling system (such as fan, air-conditioner) and see if it runs in normal. It will produce some heat during display working and cause the LED display body temperature increase if the heat could not be emitted effectively. The too high temperature of display will decrease the lifespan of LED, and even damaged IC or LED lamp.
12. Better shut off the electricity power of LED display in thundering weather, to prevent current caused the hurt to LED display.
13. Avoid the communication cable touching or getting near to high voltage alternating current or any other interferential source which have the electromagnetic radiation. Or else it will affect the screen picture, even seriously will hurt to screen.

Notes of LED display installing and using

1. Before installing must check the frame structure have been made reasonably and make sure that the frame structure has been constructed correctly. Avoid any return work due to frame structure problem.
2. Pay highly attention to install bottom layer of cabinets. Make sure cabinets be placed flat. Or the cabinets above are hard to be installed and may return work.
3. Before debugging, make sure that power line and data line connecting is correct, reliable. Then turn on the power.
4. Pay attention to the position of the communication cable, avoid the communication cable touching or getting near to high voltage alternating current cable or any other interferential source which have the electromagnetic radiation.
5. Strictly abide by the sequence of turn on and off LED display and PC. Better do not turn on LED display electricity power until the PC monitor enter the needed pictures.
6. The turn on and off sequence of LED display:
   Turn on: Turn on the control computer until normal running, then turn on LED display
Turn off: First turn off LED display then turn off computer

7. The LED display body strictly forbide the enter in of water or other easy electricity-conductive metal objects such as iron powder

8. Please immediately shut off power if water enter in due to various reasons and do not use with electricity, and could use until the PCB of Led display body dry enough

9. Led display is combined by lots of electric components which have power consumption, although single component is low power consumption, but we could not despise the power consumption produced from lots of components working at the same time. The continuous long time using will emit heat in large quantity and prick up the attenuation of LED lamp and affect its lifetime, so please pay attention to the treatment of heat emission.

10. Do not put LED display at full brightness state for long time, it will result in temperature increase of LED display and affect its lifetime, due to the big increase of temperature will cause the picture color look not vivid.

11. Do not move the PC frequently, turn off it if not working.

12. Please turn off the LED display in case of special weather such as thunder, bolt ,etc. or the AC voltage not stable.

13. Every month check one time of 220V AC power and heat emission equipment inside LED display

14. Do not change easily the fixed technical parameter setup by manufacturer. If the parameter is not set correctly, the display quality of screen will be affected much.

15. To achieve the best display effect, please setup reasonably for screen brightness and contrast degree when display different contents.

16. Please use the spare parts which provided or permitted by manufacturer, the manufacturer will not be responsible for any loss due to use the spare parts which did not get the permission from manufacturer.

Subassembly Instruction

1. The module is smallest unit of outdoor full color LED display, modules compose to cabinets, cabinets compose the LED display with different sizes needed by customer.
2. Cabinets are the basis of LED display with different sizes which needed by customer
Above is cabinet structure of our LED display, which is our hot-selling product of outdoor full color LED display. Other outdoor full color LED display have similar structure.
Installation Instruction

1. Common Installation type

(A) Base Type

(B) Inlaid Type

(C) Hang Type

(D) Double Poles Support Type

(E) Wall mounted Type

(F) Single Pole Support Type

Above are six common installation types. Commonly, outdoor LED display could adopt type A/B/C/D/E/F, indoor LED display normally adopt type A/B/C/D.
Outside framework structure and decoration

The design of the outside framework structure is decided by the installation requirements of LED display, screen size and color of surround circumstance. With the condition of guarantee adequate installation intension, try to minimize the weight of the framework.

For indoor LED display, normally there are two kinds of material of outside framework: black aluminum alloy, aluminum alloy covered with stainless steel (Dull and Bright)
1) Black aluminum framework is simple in structure, the color is close to the background color of LED display.
2) Aluminum alloy covered with stainless steel framework is very beautiful and elegant.

For outdoor LED display, in order to make sure having enough installation intensity and strict water proof effect, outside framework should be steel structure. According to onsite circumstance and user’s requirement, normally aluminum panel with plastic coat be used for the decoration. Their advantages listed below:
1) The color for aluminum panel with plastic coat is abundant and versatile, could be selected as per different request.
2) The surface of the aluminum panel with plastic coat is high quality and smooth.
3) It could realize glue and connect in case of gaps and meet with the nice looking demand.

Check whether the structure of LED display is made in reason or not

a. The bottom layer structure should be solid
b. The width and height of the structure is correct or not, normally 5-10mm larger than LED display is proper.
c. The distance between two pillars from the bottom to the top should be strictly the same. Otherwise, it will cause gap when install the LED display cabinets. Badly, it will be difficult to install the top layers of cabinets or could not install and return work.
d. Check the passage position inside the maintenance box is suitable or not and if it will block the cabinet door, if not suitable the cabinet door could not be opened after LED display finished installation.
e. The holes for cables going through at two sides of cabinets will not be blocked
One Pole Support Type Structure Sketch

1. second floor board  
2. Connecting Plate  
3. lower Cover  
4. Movable maintenance ladder

Maintenance Passage Sketch

60 cm -- 100 cm
2) According to the number of cabinets, please install the cabinets from the bottom to the top. The connection between cabinets method is showed as following. Make sure that the bottom layer of cabinets should be very flat, and then install the upper layer cabinets. Put water-proof glue onto the joint between two cabinets. After the whole LED display finish debugging, the LED display framework around should do strict water proof treatment.

3. Connect well the electricity power line and netline according to cable layout illustration
Software Installation

Basic Configuration requirement for computer:
Operating system : Windows98/me/2000/NT/XP
Hardware system : CPU Pentium 300Mhz or above
EMS memory: 64M
# Problems and solutions

<table>
<thead>
<tr>
<th>Phenomena</th>
<th>Reason</th>
<th>Solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indicate lights of part of the driving board are not lighting</td>
<td>1) No electrical supply(220V)</td>
<td>1) Test the power supply if have electricity or not</td>
</tr>
<tr>
<td></td>
<td>2) Not proper touching of circuit</td>
<td>2) Check the switch and power supply line</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3) Power supply damaged or not</td>
</tr>
<tr>
<td>No picture displayed for screen, the green light of the sending card glint</td>
<td>1) (RJ45) head of net line not plug well</td>
<td>1) Re-insert(RJ45) head</td>
</tr>
<tr>
<td></td>
<td>2) Something wrong with output and input port of the data</td>
<td>2) Validate the port of the output and input</td>
</tr>
<tr>
<td></td>
<td>3) Receiving card without electricity supply</td>
<td>3) Check receiving card with power supply of 5V</td>
</tr>
<tr>
<td></td>
<td>4) Something wrong with the receiving card and sending card damaged</td>
<td>4) Delivered to professional staff to check and repair</td>
</tr>
<tr>
<td>No pictures displayed for screen, the green light of the sending card do not glint</td>
<td>1) DVI line not connected well</td>
<td>1) Check the DVI connection head</td>
</tr>
<tr>
<td></td>
<td>2) The setup of the display attributes are not right</td>
<td>2) Re-setup again.</td>
</tr>
<tr>
<td></td>
<td>3) Something wrong with the sending card</td>
<td>3) Delivered to professional staff to check and repair</td>
</tr>
<tr>
<td>“No big screen system found” appeared when the PC launched</td>
<td>1) Serial port and big screen system not connected</td>
<td>Validate, re-connecting</td>
</tr>
<tr>
<td></td>
<td>2) Sending card Damaged</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3) COM of the PC Damaged</td>
<td></td>
</tr>
<tr>
<td>The long bar equal to the height of 1 module do not display</td>
<td>1) Flat line disconnected or connect not well</td>
<td>1) Re-insert or change</td>
</tr>
<tr>
<td></td>
<td>2) Something wrong with input or output of front module or next module</td>
<td>2) Check, dredge</td>
</tr>
<tr>
<td>4~5 cell boards do not display</td>
<td>1) Power supply protected or damaged</td>
<td>Test, change</td>
</tr>
<tr>
<td>Problem Description</td>
<td>Cause</td>
<td>Solution</td>
</tr>
<tr>
<td>---------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td>The whole cabinet no display</td>
<td>1) 220V power supply line not connected</td>
<td>1) Check the power line</td>
</tr>
<tr>
<td></td>
<td>2) RJ45 head of netline not plugged</td>
<td>2) Plug the RJ45 head of netline well</td>
</tr>
<tr>
<td></td>
<td>3) Receiving card damaged</td>
<td>3) Change the receiving card</td>
</tr>
<tr>
<td>Whole screen disorder or has distorted pictures</td>
<td>1) Something wrong with LED Para program or do not run</td>
<td>1) Operating again</td>
</tr>
<tr>
<td></td>
<td>2) The net line sequence not right</td>
<td>2) Tidy the order of the net line</td>
</tr>
<tr>
<td></td>
<td>3) The signal of the transmission is too weak</td>
<td>3) Shorten the distance of transmission</td>
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